



## Full wwPDB EM Validation Report ⓘ

Dec 31, 2024 – 11:45 AM EST

PDB ID : 8G3D  
EMDB ID : EMD-29692  
Title : 48-nm doublet microtubule from Tetrahymena thermophila strain K40R  
Authors : Black, C.S.; Kubo, S.; Yang, S.K.; Bui, K.H.  
Deposited on : 2023-02-07  
Resolution : 3.70 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

EMDB validation analysis : 0.0.1.dev113  
Mogul : 2022.3.0, CSD as543be (2022)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.40



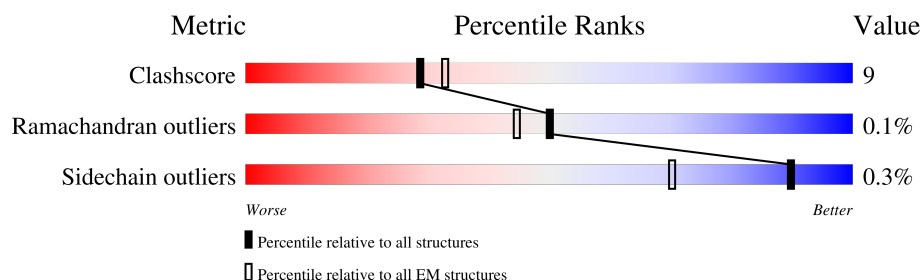
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.70 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion  $< 40\%$ ). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	0A	236	<div> <div>11%</div> <div>53%</div> <div>11%</div> <div>36%</div> </div>
1	1A	236	<div> <div>13%</div> <div>54%</div> <div>9%</div> <div>36%</div> </div>
1	2A	236	<div> <div>11%</div> <div>45%</div> <div>18%</div> <div>36%</div> </div>
1	3A	236	<div> <div>11%</div> <div>41%</div> <div>22%</div> <div>36%</div> </div>
2	0B	329	<div> <div>14%</div> <div>89%</div> <div>8%</div> <div>36%</div> </div>
3	0C	156	<div> <div>6%</div> <div>56%</div> <div>9%</div> <div>39%</div> </div>
3	1C	156	<div> <div>6%</div> <div>52%</div> <div>9%</div> <div>39%</div> </div>
4	0D	225	<div> <div>18%</div> <div>78%</div> <div>11%</div> <div>10%</div> </div>

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Mol	Chain	Length	Quality of chain
4	1D	225	
4	2D	225	
5	0E	191	
5	1E	191	
5	2E	191	
5	3E	191	
6	0F	219	
7	0G	183	
7	1G	183	
8	0H	447	
8	1H	447	
9	0N	492	
9	1N	492	
9	2N	492	
10	0Q	195	
10	1Q	195	
10	2Q	195	
10	3Q	195	
10	4Q	195	
10	5Q	195	
10	6Q	195	
11	0S	319	
11	1S	319	
11	2S	319	
11	3S	319	

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Mol	Chain	Length	Quality of chain
12	0T	298	
12	1T	298	
12	2T	298	
12	3T	298	
13	0U	656	
13	1U	656	
13	2U	656	
13	3U	656	
14	0V	269	
14	1V	269	
14	2V	269	
14	3V	269	
15	0X	142	
15	1X	142	
15	2X	142	
15	3X	142	
15	4X	142	
16	1B	498	
16	2B	498	
16	3B	498	
17	1F	173	
18	1I	263	
19	1J	422	
20	1K	489	
20	2K	489	

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Mol	Chain	Length	Quality of chain
21	1L	940	
21	2L	940	
21	3L	940	
22	1M	372	
22	2M	372	
23	1O	494	
23	2O	494	
23	3O	494	
24	1P	507	
24	2P	507	
25	1R	516	
25	2R	516	
25	3R	516	
26	1W	280	
26	2W	280	
27	2C	300	
27	3C	300	
27	4C	300	
28	2F	96	
29	2G	99	
30	2H	229	
30	3H	229	
30	4H	229	
31	2I	293	
31	3I	293	

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Mol	Chain	Length	Quality of chain
32	3D	237	
33	4F	276	
34	4R	613	
34	5R	613	
34	6R	613	
34	7R	613	
35	4S	249	
35	5S	249	
36	5A	175	
36	5B	175	
36	5C	175	
36	5D	175	
37	5E	247	
37	5F	247	
37	5G	247	
37	5H	247	
38	5I	168	
38	5J	168	
38	5K	168	
39	6F	145	
40	6G	364	
41	6H	518	
42	8L	507	
42	8N	507	
43	8P	529	

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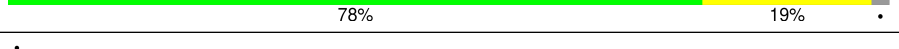
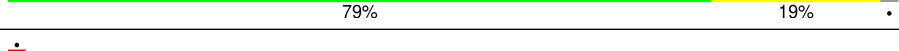
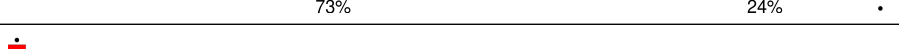
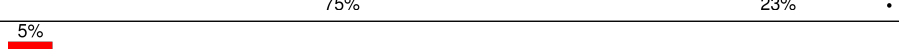
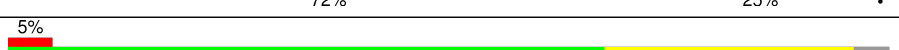

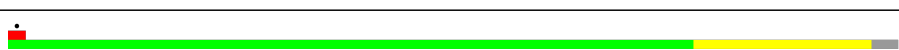

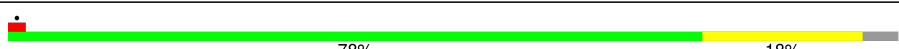





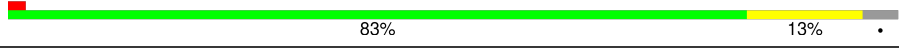
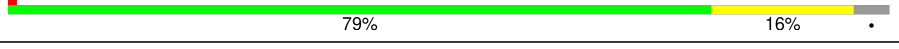



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Mol	Chain	Length	Quality of chain
44	8R	361	
45	AA	449	
45	AC	449	
45	AE	449	
45	AG	449	
45	AI	449	
45	AK	449	
45	AM	449	
45	BA	449	
45	BC	449	
45	BE	449	
45	BG	449	
45	BI	449	
45	BK	449	
45	BM	449	
45	CA	449	
45	CC	449	
45	CE	449	
45	CG	449	
45	CI	449	
45	CK	449	
45	CM	449	
45	DA	449	
45	DC	449	
45	DE	449	

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Mol	Chain	Length	Quality of chain
45	DG	449	
45	DI	449	
45	DK	449	
45	DM	449	
45	EA	449	
45	EC	449	
45	EE	449	
45	EG	449	
45	EI	449	
45	EK	449	
45	EM	449	
45	FA	449	
45	FC	449	
45	FE	449	
45	FG	449	
45	FI	449	
45	FK	449	
45	FM	449	
45	GA	449	
45	GC	449	
45	GE	449	
45	GG	449	
45	GI	449	
45	GK	449	
45	GM	449	

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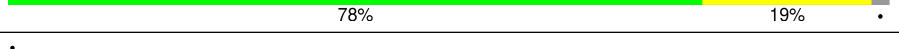
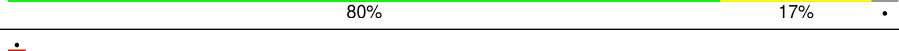
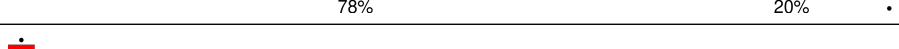
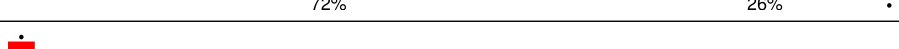
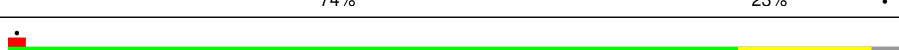

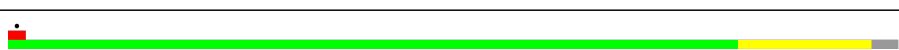

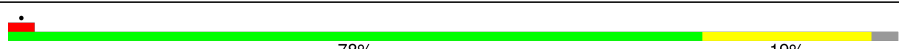





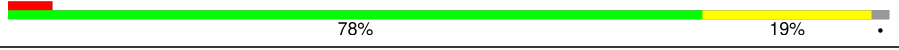
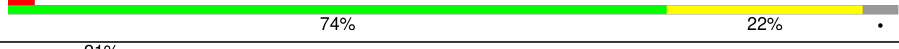



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Mol	Chain	Length	Quality of chain
45	HA	449	
45	HC	449	
45	HE	449	
45	HG	449	
45	HI	449	
45	HK	449	
45	HM	449	
45	IA	449	
45	IC	449	
45	IE	449	
45	IG	449	
45	II	449	
45	IK	449	
45	IM	449	
45	JA	449	
45	JC	449	
45	JE	449	
45	JG	449	
45	JI	449	
45	JK	449	
45	JM	449	
45	KA	449	
45	KC	449	
45	KE	449	
45	KG	449	

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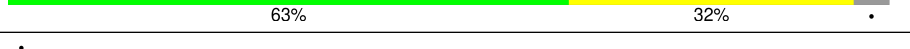
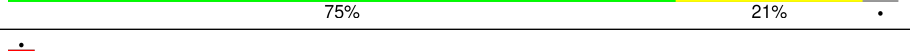
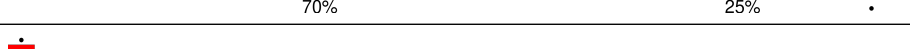
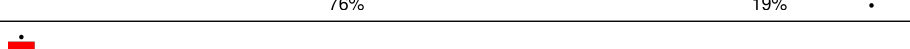
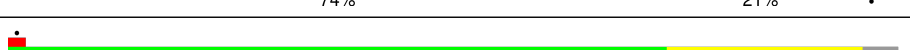



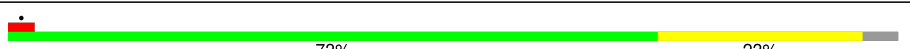





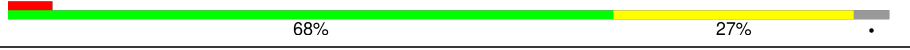
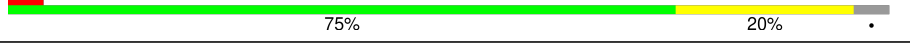



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Mol	Chain	Length	Quality of chain
45	KI	449	
45	KK	449	
45	KM	449	
45	LA	449	
45	LC	449	
45	LE	449	
45	LG	449	
45	LI	449	
45	LK	449	
45	LM	449	
45	MA	449	
45	MC	449	
45	ME	449	
45	MG	449	
45	MI	449	
45	MK	449	
45	MM	449	
45	NA	449	
45	NC	449	
45	NE	449	
45	NG	449	
45	NI	449	
45	NK	449	
45	NM	449	
45	OA	449	

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Mol	Chain	Length	Quality of chain
45	OC	449	
45	OE	449	
45	OG	449	
45	OI	449	
45	OK	449	
45	OM	449	
45	PA	449	
45	PC	449	
45	PE	449	
45	PG	449	
45	PI	449	
45	PK	449	
45	PM	449	
45	QA	449	
45	QC	449	
45	QE	449	
45	QG	449	
45	QI	449	
45	QK	449	
45	QM	449	
45	RA	449	
45	RC	449	
45	RE	449	
45	RG	449	
45	RI	449	

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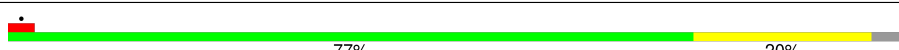
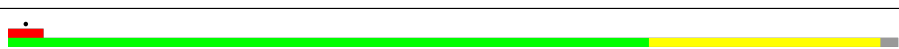

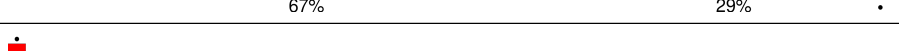
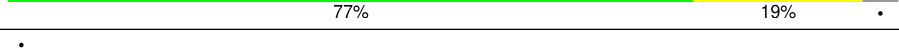





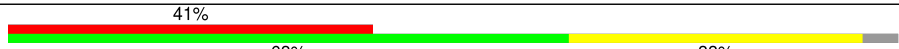


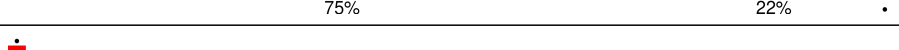








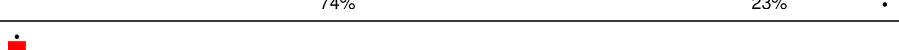
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Mol	Chain	Length	Quality of chain
45	RK	449	
45	RM	449	
45	SA	449	
45	SC	449	
45	SE	449	
45	SG	449	
45	SI	449	
45	SK	449	
45	SM	449	
45	TA	449	
45	TC	449	
45	TE	449	
45	TG	449	
45	TI	449	
45	TK	449	
45	TM	449	
45	UA	449	
45	UC	449	
45	UE	449	
45	UG	449	
45	UI	449	
45	UK	449	
45	UM	449	
45	VA	449	
45	VC	449	

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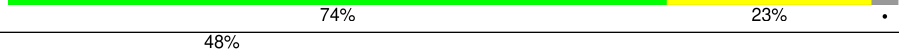
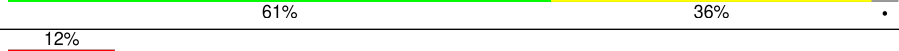
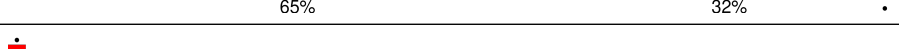
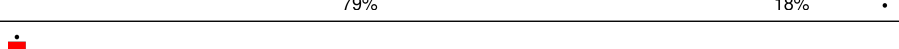
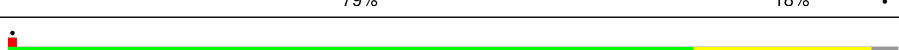

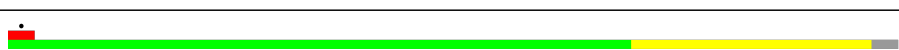

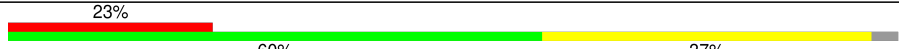





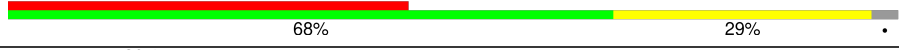
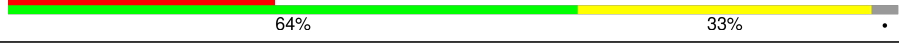



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Mol	Chain	Length	Quality of chain
45	VE	449	
45	VG	449	
45	VI	449	
45	VK	449	
45	VM	449	
45	WA	449	
45	WC	449	
45	WE	449	
45	WG	449	
45	WI	449	
45	WK	449	
45	WM	449	
46	AB	443	
46	AD	443	
46	AF	443	
46	AH	443	
46	AJ	443	
46	AL	443	
46	AN	443	
46	BB	443	
46	BD	443	
46	BF	443	
46	BH	443	
46	BJ	443	
46	BL	443	

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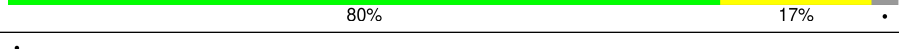
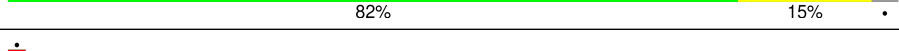
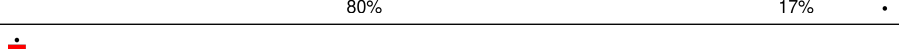
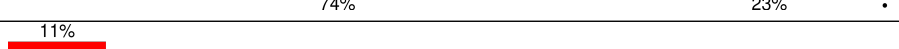
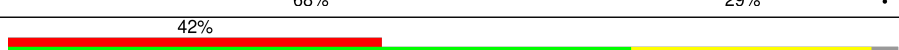

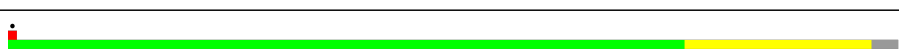

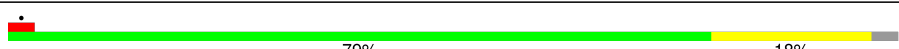





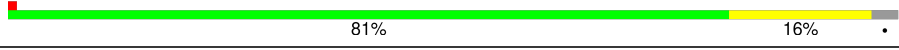
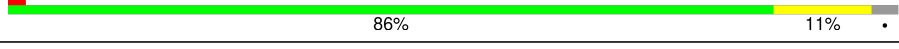



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Mol	Chain	Length	Quality of chain
46	BN	443	
46	CB	443	
46	CD	443	
46	CF	443	
46	CH	443	
46	CJ	443	
46	CL	443	
46	CN	443	
46	DB	443	
46	DD	443	
46	DF	443	
46	DH	443	
46	DJ	443	
46	DL	443	
46	DN	443	
46	EB	443	
46	ED	443	
46	EF	443	
46	EH	443	
46	EJ	443	
46	EL	443	
46	EN	443	
46	FB	443	
46	FD	443	
46	FF	443	

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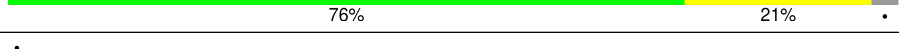
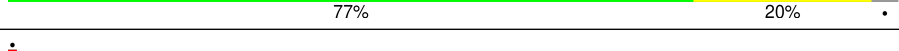
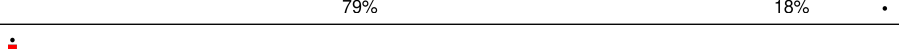
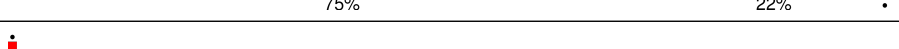
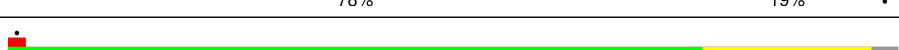

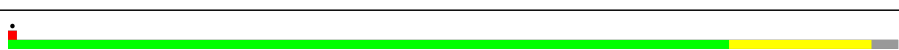

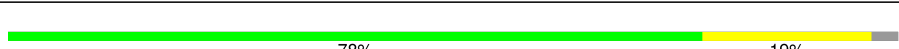





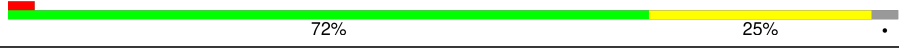
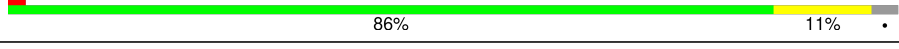



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Mol	Chain	Length	Quality of chain
46	FH	443	
46	FJ	443	
46	FL	443	
46	FN	443	
46	GB	443	
46	GD	443	
46	GF	443	
46	GH	443	
46	GJ	443	
46	GL	443	
46	GN	443	
46	HB	443	
46	HD	443	
46	HF	443	
46	HH	443	
46	HJ	443	
46	HL	443	
46	HN	443	
46	IB	443	
46	ID	443	
46	IF	443	
46	IH	443	
46	IJ	443	
46	IL	443	
46	IN	443	

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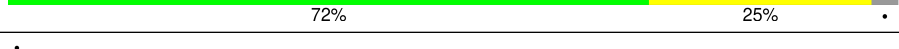
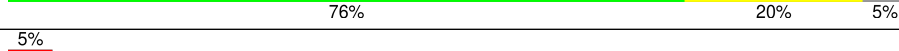
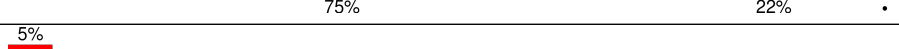
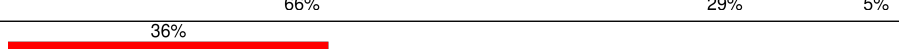
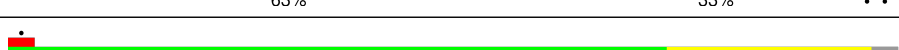

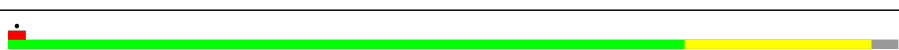

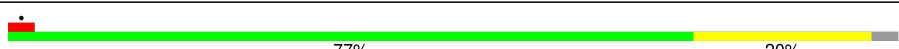





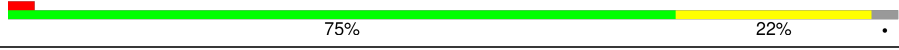
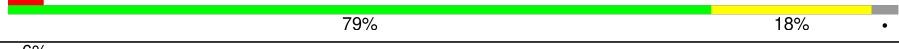



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Mol	Chain	Length	Quality of chain
46	JB	443	
46	JD	443	
46	JF	443	
46	JH	443	
46	JJ	443	
46	JL	443	
46	JN	443	
46	KB	443	
46	KD	443	
46	KF	443	
46	KH	443	
46	KJ	443	
46	KL	443	
46	KN	443	
46	LB	443	
46	LD	443	
46	LF	443	
46	LH	443	
46	LJ	443	
46	LL	443	
46	LN	443	
46	MB	443	
46	MD	443	
46	MF	443	
46	MH	443	

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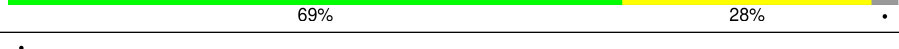
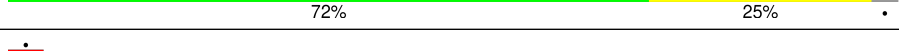
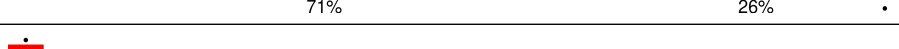
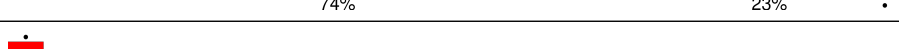
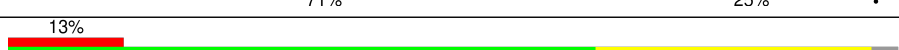

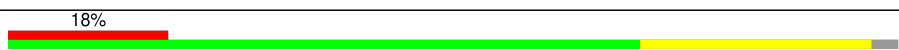

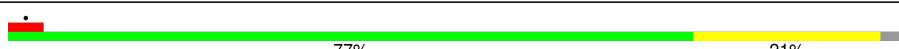





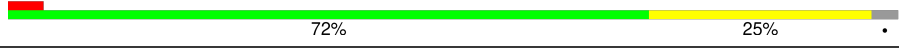
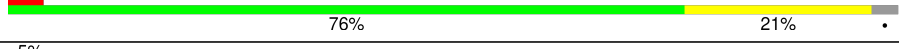



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Mol	Chain	Length	Quality of chain
46	MJ	443	
46	ML	443	
46	MN	443	
46	NB	443	
46	ND	443	
46	NF	443	
46	NH	443	
46	NJ	443	
46	NL	443	
46	NN	443	
46	OB	443	
46	OD	443	
46	OF	443	
46	OH	443	
46	OJ	443	
46	OL	443	
46	ON	443	
46	PB	443	
46	PD	443	
46	PF	443	
46	PH	443	
46	PJ	443	
46	PL	443	
46	PN	443	
46	QB	443	

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Mol	Chain	Length	Quality of chain
46	QD	443	
46	QF	443	
46	QH	443	
46	QJ	443	
46	QL	443	
46	QN	443	
46	RB	443	
46	RD	443	
46	RF	443	
46	RH	443	
46	RJ	443	
46	RL	443	
46	RN	443	
46	SB	443	
46	SD	443	
46	SF	443	
46	SH	443	
46	SJ	443	
46	SL	443	
46	SN	443	
46	TB	443	
46	TD	443	
46	TF	443	
46	TH	443	
46	TJ	443	

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Mol	Chain	Length	Quality of chain
46	TL	443	
46	TN	443	
46	UB	443	
46	UD	443	
46	UF	443	
46	UH	443	
46	UJ	443	
46	UL	443	
46	UN	443	
46	VB	443	
46	VD	443	
46	VF	443	
46	VH	443	
46	VJ	443	
46	VL	443	
46	VN	443	
46	WB	443	
46	WD	443	
46	WF	443	
46	WH	443	
46	WJ	443	
46	WL	443	
46	WN	443	



## 2 Entry composition [i](#)

There are 49 unique types of molecules in this entry. The entry contains 1324599 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called RIB27A.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	0A	152	Total	C	N	O	S	0	0
			1229	776	224	228	1		
1	1A	152	Total	C	N	O	S	0	0
			1229	776	224	228	1		
1	2A	152	Total	C	N	O	S	0	0
			1229	776	224	228	1		
1	3A	152	Total	C	N	O	S	0	0
			1229	776	224	228	1		

- Molecule 2 is a protein called RIB38.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	0B	321	Total	C	N	O	S	0	0
			2614	1633	472	503	6		

- Molecule 3 is a protein called CFAM166B.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	0C	95	Total	C	N	O	S	0	0
			747	471	131	143	2		
3	1C	95	Total	C	N	O	S	0	0
			747	471	131	143	2		

- Molecule 4 is a protein called CFAM166A.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	0D	202	Total	C	N	O	S	1	0
			1621	1019	293	307	2		
4	1D	202	Total	C	N	O	S	1	0
			1621	1019	293	307	2		
4	2D	202	Total	C	N	O	S	1	0
			1621	1019	293	307	2		



- Molecule 5 is a protein called RIB22.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	0E	189	Total	C	N	O	S	0	0
			1557	978	280	294	5		
5	1E	189	Total	C	N	O	S	0	0
			1557	978	280	294	5		
5	2E	189	Total	C	N	O	S	0	0
			1557	978	280	294	5		
5	3E	189	Total	C	N	O	S	0	0
			1557	978	280	294	5		

- Molecule 6 is a protein called CFAM166C.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	0F	206	Total	C	N	O	S	0	0
			1665	1048	300	314	3		

- Molecule 7 is a protein called CFAP107.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	0G	168	Total	C	N	O	S	0	0
			1378	872	237	265	4		
7	1G	133	Total	C	N	O	S	0	0
			1089	692	185	210	2		

- Molecule 8 is a protein called CFAP127.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	0H	116	Total	C	N	O	S	0	0
			1006	628	181	192	5		
8	1H	422	Total	C	N	O	S	0	0
			3687	2271	687	715	14		

- Molecule 9 is a protein called CFAP161A.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	0N	280	Total	C	N	O	S	0	0
			2305	1455	396	441	13		
9	1N	463	Total	C	N	O	S	0	0
			3805	2414	653	723	15		
9	2N	280	Total	C	N	O	S	0	0
			2305	1455	396	441	13		



- Molecule 10 is a protein called CFAP20.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	0Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	1Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	2Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	3Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	4Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	5Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		
10	6Q	186	Total	C	N	O	S	0	0
			1548	997	268	276	7		

- Molecule 11 is a protein called Parkin co-regulated protein PACRGA.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	0S	288	Total	C	N	O	S	0	0
			2310	1485	397	422	6		
11	1S	288	Total	C	N	O	S	0	0
			2310	1485	397	422	6		
11	2S	288	Total	C	N	O	S	0	0
			2310	1485	397	422	6		
11	3S	288	Total	C	N	O	S	0	0
			2310	1485	397	422	6		

- Molecule 12 is a protein called IJ34.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	0T	253	Total	C	N	O	S	0	0
			2056	1312	357	378	9		
12	1T	285	Total	C	N	O	S	0	0
			2321	1471	411	430	9		
12	2T	285	Total	C	N	O	S	0	0
			2321	1471	411	430	9		
12	3T	285	Total	C	N	O	S	0	0
			2321	1471	411	430	9		

- Molecule 13 is a protein called Cilia- and flagella-associated protein 52.



Mol	Chain	Residues	Atoms					AltConf	Trace
13	0U	607	Total	C	N	O	S	0	0
			4774	3025	819	906	24		
13	1U	607	Total	C	N	O	S	0	0
			4774	3025	819	906	24		
13	2U	607	Total	C	N	O	S	0	0
			4774	3025	819	906	24		
13	3U	607	Total	C	N	O	S	0	0
			4774	3025	819	906	24		

- Molecule 14 is a protein called DNA polymerase delta C4-type zinc-finger protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	0V	212	Total	C	N	O	S	0	0
			1750	1095	317	332	6		
14	1V	263	Total	C	N	O	S	0	0
			2168	1359	388	412	9		
14	2V	263	Total	C	N	O	S	0	0
			2168	1359	388	412	9		
14	3V	263	Total	C	N	O	S	0	0
			2168	1359	388	412	9		

- Molecule 15 is a protein called RIB43A protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	0X	106	Total	C	N	O	S	0	0
			903	553	170	175	5		
15	1X	141	Total	C	N	O	S	0	0
			1205	736	229	234	6		
15	2X	141	Total	C	N	O	S	0	0
			1205	736	229	234	6		
15	3X	141	Total	C	N	O	S	0	0
			1205	736	229	234	6		
15	4X	141	Total	C	N	O	S	0	0
			1205	736	229	234	6		

- Molecule 16 is a protein called RIB57.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	1B	498	Total	C	N	O	S	0	0
			4066	2598	692	768	8		
16	2B	295	Total	C	N	O	S	0	0
			2439	1553	416	464	6		

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Mol	Chain	Residues	Atoms					AltConf	Trace
16	3B	297	Total	C	N	O	S	0	0
			2449	1558	418	467	6		

- Molecule 17 is a protein called CFAP182A.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	1F	136	Total	C	N	O	S	0	0
			1093	696	184	208	5		

- Molecule 18 is a protein called CFAP143.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	1I	188	Total	C	N	O	S	0	0
			1546	951	285	306	4		

- Molecule 19 is a protein called CFAP21A.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	1J	370	Total	C	N	O	S	0	0
			3025	1901	534	579	11		

- Molecule 20 is a protein called Cilia- and flagella-associated protein 53.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	1K	273	Total	C	N	O	S	0	0
			2391	1479	447	458	7		
20	2K	284	Total	C	N	O	S	0	0
			2465	1517	455	486	7		

- Molecule 21 is a protein called CFAP115.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	1L	820	Total	C	N	O	S	0	0
			6841	4357	1186	1280	18		
21	2L	620	Total	C	N	O	S	0	0
			5181	3304	902	963	12		
21	3L	200	Total	C	N	O	S	0	0
			1660	1053	284	317	6		

- Molecule 22 is a protein called Nucleoside diphosphate kinase.



Mol	Chain	Residues	Atoms					AltConf	Trace
22	1M	369	Total	C	N	O	S	0	0
			2978	1910	501	552	15		
22	2M	369	Total	C	N	O	S	0	0
			2978	1910	501	552	15		

- Molecule 23 is a protein called Cilia- and flagella-associated protein 45.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	1O	235	Total	C	N	O	S	0	0
			1983	1235	350	386	12		
23	2O	370	Total	C	N	O	S	0	0
			3173	1948	595	617	13		
23	3O	275	Total	C	N	O	S	0	0
			2358	1447	451	456	4		

- Molecule 24 is a protein called CFAP210.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	1P	351	Total	C	N	O	S	0	0
			3026	1869	567	582	8		
24	2P	186	Total	C	N	O	S	0	0
			1594	983	299	307	5		

- Molecule 25 is a protein called RIB72B.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	1R	508	Total	C	N	O	S	0	0
			4244	2744	711	777	12		
25	2R	508	Total	C	N	O	S	0	0
			4244	2744	711	777	12		
25	3R	508	Total	C	N	O	S	0	0
			4244	2744	711	777	12		

- Molecule 26 is a protein called Protofilament ribbon protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	1W	220	Total	C	N	O	S	0	0
			1888	1143	372	364	9		
26	2W	111	Total	C	N	O	S	0	0
			949	585	183	176	5		

- Molecule 27 is a protein called RIB35.



Mol	Chain	Residues	Atoms					AltConf	Trace
27	2C	300	Total	C	N	O	S	0	0
			2467	1581	417	464	5		
27	3C	300	Total	C	N	O	S	0	0
			2467	1581	417	464	5		
27	4C	300	Total	C	N	O	S	0	0
			2467	1581	417	464	5		

- Molecule 28 is a protein called CFAP182B.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	2F	87	Total	C	N	O	S	0	0
			746	469	136	137	4		

- Molecule 29 is a protein called Flagellar FliJ protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	2G	99	Total	C	N	O	S	0	0
			848	536	153	155	4		

- Molecule 30 is a protein called RIB27B.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	2H	61	Total	C	N	O	S	0	0
			501	313	92	94	2		
30	3H	61	Total	C	N	O	S	0	0
			501	313	92	94	2		
30	4H	61	Total	C	N	O	S	0	0
			501	313	92	94	2		

- Molecule 31 is a protein called STPG2.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	2I	140	Total	C	N	O	S	0	0
			1132	726	198	207	1		
31	3I	87	Total	C	N	O	S	0	0
			712	451	130	127	4		

- Molecule 32 is a protein called RIB26.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	3D	237	Total	C	N	O	S	0	0
			1835	1174	310	340	11		



- Molecule 33 is a protein called CFAP129.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	4F	200	Total	C	N	O	S	0	0
			1623	1022	286	313	2		

- Molecule 34 is a protein called Flagellar microtubule protofilament ribbon protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	4R	609	Total	C	N	O	S	0	0
			5070	3267	847	932	24		
34	5R	609	Total	C	N	O	S	0	0
			5070	3267	847	932	24		
34	6R	609	Total	C	N	O	S	0	0
			5070	3267	847	932	24		
34	7R	609	Total	C	N	O	S	0	0
			5070	3267	847	932	24		

- Molecule 35 is a protein called Parkin co-regulated protein PACRGB.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	4S	188	Total	C	N	O	S	0	0
			1537	999	251	279	8		
35	5S	188	Total	C	N	O	S	0	0
			1537	999	251	279	8		

- Molecule 36 is a protein called OJ2.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	5A	157	Total	C	N	O	S	0	0
			1261	795	234	229	3		
36	5B	157	Total	C	N	O	S	0	0
			1261	795	234	229	3		
36	5C	157	Total	C	N	O	S	0	0
			1261	795	234	229	3		
36	5D	109	Total	C	N	O	S	0	0
			872	551	157	161	3		

- Molecule 37 is a protein called CFAP77A.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	5E	185	Total	C	N	O	S	0	0
			1543	977	278	283	5		

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Mol	Chain	Residues	Atoms					AltConf	Trace
37	5F	210	Total	C	N	O	S	0	0
			1750	1107	316	322	5		
37	5G	210	Total	C	N	O	S	0	0
			1750	1107	316	322	5		
37	5H	139	Total	C	N	O	S	0	0
			1146	725	207	210	4		

- Molecule 38 is a protein called OJ3.

Mol	Chain	Residues	Atoms				AltConf	Trace
38	5I	99	Total	C	N	O	0	0
			495	297	99	99		
38	5J	109	Total	C	N	O	0	0
			545	327	109	109		
38	5K	76	Total	C	N	O	0	0
			380	228	76	76		

- Molecule 39 is a protein called SB1.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	6F	132	Total	C	N	O	S	0	0
			1141	718	197	222	4		

- Molecule 40 is a protein called STPG1A.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	6G	216	Total	C	N	O	S	0	0
			1769	1128	303	333	5		

- Molecule 41 is a protein called Nebulin.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	6H	165	Total	C	N	O	S	0	0
			1361	856	232	267	6		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
6H	198	HIS	MET	conflict	UNP Q231B6
6H	199	MET	GLN	conflict	UNP Q231B6

- Molecule 42 is a protein called B5B6\_fMIP.



Mol	Chain	Residues	Atoms				AltConf	Trace
42	8L	385	Total	C	N	O	0	0
			1925	1155	385	385		
42	8N	358	Total	C	N	O	0	0
			1790	1074	358	358		

- Molecule 43 is a protein called CFAP112A.

Mol	Chain	Residues	Atoms				AltConf	Trace
43	8P	363	Total	C	N	O	0	0
			1815	1089	363	363		

- Molecule 44 is a protein called B2B3\_fMIP.

Mol	Chain	Residues	Atoms				AltConf	Trace
44	8R	361	Total	C	N	O	0	0
			2022	1269	361	392		

- Molecule 45 is a protein called Tubulin alpha chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	AA	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AE	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	AM	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	BA	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	BC	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	BE	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	BG	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	BI	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	BK	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	BM	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	CA	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CE	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	CM	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	DA	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	DC	436	Total	C	N	O	S	0	0
			3391	2143	578	648	22		
45	DE	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	DG	436	Total	C	N	O	S	0	0
			3391	2143	578	648	22		
45	DI	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	DK	436	Total	C	N	O	S	0	0
			3391	2143	578	648	22		
45	DM	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	EA	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	EC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	EE	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	EG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	EI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	EK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	EM	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	FA	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	FC	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	FE	434	Total	C	N	O	S	0	0
			3376	2135	573	646	22		
45	FG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	FI	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	FK	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	FM	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	GA	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	GC	431	Total	C	N	O	S	0	0
			3358	2126	570	640	22		
45	GE	431	Total	C	N	O	S	0	0
			3358	2126	570	640	22		
45	GG	431	Total	C	N	O	S	0	0
			3358	2126	570	640	22		
45	GI	431	Total	C	N	O	S	0	0
			3358	2126	570	640	22		
45	GK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	GM	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	HA	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	HC	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	HE	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	HG	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	HI	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	HK	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	HM	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	IA	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	IC	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	IE	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	IG	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	II	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	IK	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	IM	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	JA	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	JC	434	Total 3376	C 2135	N 573	O 646	S 22	0	0
45	JE	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	JG	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	JI	439	Total 3406	C 2151	N 581	O 652	S 22	0	0
45	JK	439	Total 3410	C 2155	N 581	O 652	S 22	0	0
45	JM	432	Total 3364	C 2129	N 571	O 642	S 22	0	0
45	KA	434	Total 3376	C 2135	N 573	O 646	S 22	0	0
45	KC	433	Total 3372	C 2133	N 572	O 645	S 22	0	0
45	KE	435	Total 3387	C 2141	N 577	O 647	S 22	0	0
45	KG	439	Total 3410	C 2155	N 581	O 652	S 22	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	KI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	KK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	KM	434	Total	C	N	O	S	0	0
			3376	2135	573	646	22		
45	LA	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	LC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	LE	438	Total	C	N	O	S	0	0
			3402	2149	580	651	22		
45	LG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	LI	434	Total	C	N	O	S	0	0
			3383	2139	576	646	22		
45	LK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	LM	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	MA	436	Total	C	N	O	S	0	0
			3394	2145	578	649	22		
45	MC	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	ME	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	MG	437	Total	C	N	O	S	0	0
			3402	2151	579	650	22		
45	MI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	MK	436	Total	C	N	O	S	0	0
			3384	2139	575	648	22		
45	MM	436	Total	C	N	O	S	0	0
			3394	2145	578	649	22		
45	NA	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	NC	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	NE	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	NG	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	NI	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	NK	432	Total	C	N	O	S	0	0
			3364	2129	571	642	22		
45	NM	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	OA	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OC	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OE	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OG	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OI	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OK	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	OM	433	Total	C	N	O	S	0	0
			3368	2131	572	643	22		
45	PA	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PC	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PE	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PG	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PI	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PK	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	PM	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
45	QA	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	QC	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	QE	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	QG	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	QI	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	QK	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	QM	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RA	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RC	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RE	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RG	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RI	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RK	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	RM	431	Total 3356	C 2125	N 570	O 639	S 22	0	0
45	SA	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SC	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SE	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SG	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SI	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SK	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	SM	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	TA	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	TC	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	TE	430	Total 3350	C 2122	N 569	O 637	S 22	0	0
45	TG	430	Total 3350	C 2122	N 569	O 637	S 22	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	TI	430	Total	C	N	O	S	0	0
			3350	2122	569	637	22		
45	TK	430	Total	C	N	O	S	0	0
			3350	2122	569	637	22		
45	TM	430	Total	C	N	O	S	0	0
			3350	2122	569	637	22		
45	UA	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UC	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UE	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UG	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UI	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UK	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	UM	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	VA	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	VC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	VE	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	VG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	VI	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	VK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	VM	433	Total	C	N	O	S	0	0
			3372	2133	572	645	22		
45	WA	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	WC	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	WE	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	WG	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		

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Mol	Chain	Residues	Atoms					AltConf	Trace
45	WI	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		
45	WK	439	Total	C	N	O	S	0	0
			3410	2155	581	652	22		
45	WM	431	Total	C	N	O	S	0	0
			3356	2125	570	639	22		

There are 161 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AA	40	ARG	LYS	variant	UNP P41351
AC	40	ARG	LYS	variant	UNP P41351
AE	40	ARG	LYS	variant	UNP P41351
AG	40	ARG	LYS	variant	UNP P41351
AI	40	ARG	LYS	variant	UNP P41351
AK	40	ARG	LYS	variant	UNP P41351
AM	40	ARG	LYS	variant	UNP P41351
BA	40	ARG	LYS	variant	UNP P41351
BC	40	ARG	LYS	variant	UNP P41351
BE	40	ARG	LYS	variant	UNP P41351
BG	40	ARG	LYS	variant	UNP P41351
BI	40	ARG	LYS	variant	UNP P41351
BK	40	ARG	LYS	variant	UNP P41351
BM	40	ARG	LYS	variant	UNP P41351
CA	40	ARG	LYS	variant	UNP P41351
CC	40	ARG	LYS	variant	UNP P41351
CE	40	ARG	LYS	variant	UNP P41351
CG	40	ARG	LYS	variant	UNP P41351
CI	40	ARG	LYS	variant	UNP P41351
CK	40	ARG	LYS	variant	UNP P41351
CM	40	ARG	LYS	variant	UNP P41351
DA	40	ARG	LYS	variant	UNP P41351
DC	40	ARG	LYS	variant	UNP P41351
DE	40	ARG	LYS	variant	UNP P41351
DG	40	ARG	LYS	variant	UNP P41351
DI	40	ARG	LYS	variant	UNP P41351
DK	40	ARG	LYS	variant	UNP P41351
DM	40	ARG	LYS	variant	UNP P41351
EA	40	ARG	LYS	variant	UNP P41351
EC	40	ARG	LYS	variant	UNP P41351
EE	40	ARG	LYS	variant	UNP P41351
EG	40	ARG	LYS	variant	UNP P41351

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Chain	Residue	Modelled	Actual	Comment	Reference
EI	40	ARG	LYS	variant	UNP P41351
EK	40	ARG	LYS	variant	UNP P41351
EM	40	ARG	LYS	variant	UNP P41351
FA	40	ARG	LYS	variant	UNP P41351
FC	40	ARG	LYS	variant	UNP P41351
FE	40	ARG	LYS	variant	UNP P41351
FG	40	ARG	LYS	variant	UNP P41351
FI	40	ARG	LYS	variant	UNP P41351
FK	40	ARG	LYS	variant	UNP P41351
FM	40	ARG	LYS	variant	UNP P41351
GA	40	ARG	LYS	variant	UNP P41351
GC	40	ARG	LYS	variant	UNP P41351
GE	40	ARG	LYS	variant	UNP P41351
GG	40	ARG	LYS	variant	UNP P41351
GI	40	ARG	LYS	variant	UNP P41351
GK	40	ARG	LYS	variant	UNP P41351
GM	40	ARG	LYS	variant	UNP P41351
HA	40	ARG	LYS	variant	UNP P41351
HC	40	ARG	LYS	variant	UNP P41351
HE	40	ARG	LYS	variant	UNP P41351
HG	40	ARG	LYS	variant	UNP P41351
HI	40	ARG	LYS	variant	UNP P41351
HK	40	ARG	LYS	variant	UNP P41351
HM	40	ARG	LYS	variant	UNP P41351
IA	40	ARG	LYS	variant	UNP P41351
IC	40	ARG	LYS	variant	UNP P41351
IE	40	ARG	LYS	variant	UNP P41351
IG	40	ARG	LYS	variant	UNP P41351
II	40	ARG	LYS	variant	UNP P41351
IK	40	ARG	LYS	variant	UNP P41351
IM	40	ARG	LYS	variant	UNP P41351
JA	40	ARG	LYS	variant	UNP P41351
JC	40	ARG	LYS	variant	UNP P41351
JE	40	ARG	LYS	variant	UNP P41351
JG	40	ARG	LYS	variant	UNP P41351
JI	40	ARG	LYS	variant	UNP P41351
JK	40	ARG	LYS	variant	UNP P41351
JM	40	ARG	LYS	variant	UNP P41351
KA	40	ARG	LYS	variant	UNP P41351
KC	40	ARG	LYS	variant	UNP P41351
KE	40	ARG	LYS	variant	UNP P41351
KG	40	ARG	LYS	variant	UNP P41351

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Chain	Residue	Modelled	Actual	Comment	Reference
KI	40	ARG	LYS	variant	UNP P41351
KK	40	ARG	LYS	variant	UNP P41351
KM	40	ARG	LYS	variant	UNP P41351
LA	40	ARG	LYS	variant	UNP P41351
LC	40	ARG	LYS	variant	UNP P41351
LE	40	ARG	LYS	variant	UNP P41351
LG	40	ARG	LYS	variant	UNP P41351
LI	40	ARG	LYS	variant	UNP P41351
LK	40	ARG	LYS	variant	UNP P41351
LM	40	ARG	LYS	variant	UNP P41351
MA	40	ARG	LYS	variant	UNP P41351
MC	40	ARG	LYS	variant	UNP P41351
ME	40	ARG	LYS	variant	UNP P41351
MG	40	ARG	LYS	variant	UNP P41351
MI	40	ARG	LYS	variant	UNP P41351
MK	40	ARG	LYS	variant	UNP P41351
MM	40	ARG	LYS	variant	UNP P41351
NA	40	ARG	LYS	variant	UNP P41351
NC	40	ARG	LYS	variant	UNP P41351
NE	40	ARG	LYS	variant	UNP P41351
NG	40	ARG	LYS	variant	UNP P41351
NI	40	ARG	LYS	variant	UNP P41351
NK	40	ARG	LYS	variant	UNP P41351
NM	40	ARG	LYS	variant	UNP P41351
OA	40	ARG	LYS	variant	UNP P41351
OC	40	ARG	LYS	variant	UNP P41351
OE	40	ARG	LYS	variant	UNP P41351
OG	40	ARG	LYS	variant	UNP P41351
OI	40	ARG	LYS	variant	UNP P41351
OK	40	ARG	LYS	variant	UNP P41351
OM	40	ARG	LYS	variant	UNP P41351
PA	40	ARG	LYS	variant	UNP P41351
PC	40	ARG	LYS	variant	UNP P41351
PE	40	ARG	LYS	variant	UNP P41351
PG	40	ARG	LYS	variant	UNP P41351
PI	40	ARG	LYS	variant	UNP P41351
PK	40	ARG	LYS	variant	UNP P41351
PM	40	ARG	LYS	variant	UNP P41351
QA	40	ARG	LYS	variant	UNP P41351
QC	40	ARG	LYS	variant	UNP P41351
QE	40	ARG	LYS	variant	UNP P41351
QG	40	ARG	LYS	variant	UNP P41351

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Chain	Residue	Modelled	Actual	Comment	Reference
QI	40	ARG	LYS	variant	UNP P41351
QK	40	ARG	LYS	variant	UNP P41351
QM	40	ARG	LYS	variant	UNP P41351
RA	40	ARG	LYS	variant	UNP P41351
RC	40	ARG	LYS	variant	UNP P41351
RE	40	ARG	LYS	variant	UNP P41351
RG	40	ARG	LYS	variant	UNP P41351
RI	40	ARG	LYS	variant	UNP P41351
RK	40	ARG	LYS	variant	UNP P41351
RM	40	ARG	LYS	variant	UNP P41351
SA	40	ARG	LYS	variant	UNP P41351
SC	40	ARG	LYS	variant	UNP P41351
SE	40	ARG	LYS	variant	UNP P41351
SG	40	ARG	LYS	variant	UNP P41351
SI	40	ARG	LYS	variant	UNP P41351
SK	40	ARG	LYS	variant	UNP P41351
SM	40	ARG	LYS	variant	UNP P41351
TA	40	ARG	LYS	variant	UNP P41351
TC	40	ARG	LYS	variant	UNP P41351
TE	40	ARG	LYS	variant	UNP P41351
TG	40	ARG	LYS	variant	UNP P41351
TI	40	ARG	LYS	variant	UNP P41351
TK	40	ARG	LYS	variant	UNP P41351
TM	40	ARG	LYS	variant	UNP P41351
UA	40	ARG	LYS	variant	UNP P41351
UC	40	ARG	LYS	variant	UNP P41351
UE	40	ARG	LYS	variant	UNP P41351
UG	40	ARG	LYS	variant	UNP P41351
UI	40	ARG	LYS	variant	UNP P41351
UK	40	ARG	LYS	variant	UNP P41351
UM	40	ARG	LYS	variant	UNP P41351
VA	40	ARG	LYS	variant	UNP P41351
VC	40	ARG	LYS	variant	UNP P41351
VE	40	ARG	LYS	variant	UNP P41351
VG	40	ARG	LYS	variant	UNP P41351
VI	40	ARG	LYS	variant	UNP P41351
VK	40	ARG	LYS	variant	UNP P41351
VM	40	ARG	LYS	variant	UNP P41351
WA	40	ARG	LYS	variant	UNP P41351
WC	40	ARG	LYS	variant	UNP P41351
WE	40	ARG	LYS	variant	UNP P41351
WG	40	ARG	LYS	variant	UNP P41351

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Chain	Residue	Modelled	Actual	Comment	Reference
WI	40	ARG	LYS	variant	UNP P41351
WK	40	ARG	LYS	variant	UNP P41351
WM	40	ARG	LYS	variant	UNP P41351

- Molecule 46 is a protein called Tubulin beta chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	AB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	AN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BB	423	Total	C	N	O	S	0	0
			3304	2074	564	638	28		
46	BD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	BN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	CB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	CD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	CF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	CH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	CJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	CL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	CN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	DN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	ED	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	EN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	FJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	FN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	GN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	HN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	IB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	ID	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	IF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	IH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	IJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	IL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	IN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	JN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	KN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	LB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	LD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	LF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	LH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	LJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	LL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	LN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	ML	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	MN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	NB	423	Total	C	N	O	S	0	0
			3304	2079	562	635	28		
46	ND	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	NF	423	Total	C	N	O	S	0	0
			3304	2079	562	635	28		
46	NH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	NJ	423	Total	C	N	O	S	0	0
			3304	2079	562	635	28		
46	NL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	NN	423	Total	C	N	O	S	0	0
			3304	2079	562	635	28		
46	OB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	OD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	OF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	OH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	OJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	OL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	ON	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	PN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	QN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
46	RJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	RN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	SN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TJ	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TL	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	TN	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	UB	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	UD	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	UF	430	Total 3366	C 2115	N 577	O 646	S 28	0	0
46	UH	430	Total 3366	C 2115	N 577	O 646	S 28	0	0

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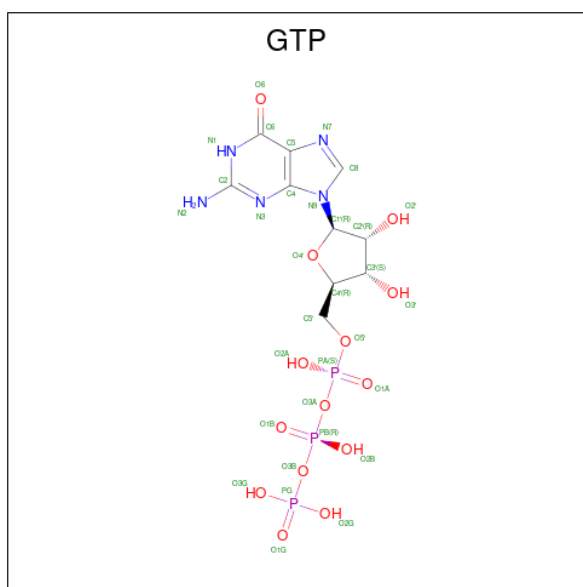


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Mol	Chain	Residues	Atoms					AltConf	Trace
46	UJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	UL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	UN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	VN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WB	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WD	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WF	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WH	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WJ	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WL	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		
46	WN	430	Total	C	N	O	S	0	0
			3366	2115	577	646	28		

- Molecule 47 is GUANOSINE-5'-TRIPHOSPHATE (three-letter code: GTP) (formula:  $C_{10}H_{16}N_5O_{14}P_3$ ) (labeled as "Ligand of Interest" by depositor).





Mol	Chain	Residues	Atoms					AltConf
47	AA	1	Total 32	C 10	N 5	O 14	P 3	0
47	AC	1	Total 32	C 10	N 5	O 14	P 3	0
47	AE	1	Total 32	C 10	N 5	O 14	P 3	0
47	AG	1	Total 32	C 10	N 5	O 14	P 3	0
47	AI	1	Total 32	C 10	N 5	O 14	P 3	0
47	AK	1	Total 32	C 10	N 5	O 14	P 3	0
47	AM	1	Total 32	C 10	N 5	O 14	P 3	0
47	BA	1	Total 32	C 10	N 5	O 14	P 3	0
47	BC	1	Total 32	C 10	N 5	O 14	P 3	0
47	BE	1	Total 32	C 10	N 5	O 14	P 3	0
47	BG	1	Total 32	C 10	N 5	O 14	P 3	0
47	BI	1	Total 32	C 10	N 5	O 14	P 3	0
47	BK	1	Total 32	C 10	N 5	O 14	P 3	0
47	BM	1	Total 32	C 10	N 5	O 14	P 3	0

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Mol	Chain	Residues	Atoms					AltConf
47	CA	1	Total 32	C 10	N 5	O 14	P 3	0
47	CC	1	Total 32	C 10	N 5	O 14	P 3	0
47	CE	1	Total 32	C 10	N 5	O 14	P 3	0
47	CG	1	Total 32	C 10	N 5	O 14	P 3	0
47	CI	1	Total 32	C 10	N 5	O 14	P 3	0
47	CK	1	Total 32	C 10	N 5	O 14	P 3	0
47	CM	1	Total 32	C 10	N 5	O 14	P 3	0
47	DA	1	Total 32	C 10	N 5	O 14	P 3	0
47	DC	1	Total 32	C 10	N 5	O 14	P 3	0
47	DE	1	Total 32	C 10	N 5	O 14	P 3	0
47	DG	1	Total 32	C 10	N 5	O 14	P 3	0
47	DI	1	Total 32	C 10	N 5	O 14	P 3	0
47	DK	1	Total 32	C 10	N 5	O 14	P 3	0
47	DM	1	Total 32	C 10	N 5	O 14	P 3	0
47	EA	1	Total 32	C 10	N 5	O 14	P 3	0
47	EC	1	Total 32	C 10	N 5	O 14	P 3	0
47	EE	1	Total 32	C 10	N 5	O 14	P 3	0
47	EG	1	Total 32	C 10	N 5	O 14	P 3	0
47	EI	1	Total 32	C 10	N 5	O 14	P 3	0
47	EK	1	Total 32	C 10	N 5	O 14	P 3	0
47	EM	1	Total 32	C 10	N 5	O 14	P 3	0

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Mol	Chain	Residues	Atoms					AltConf
47	FA	1	Total 32	C 10	N 5	O 14	P 3	0
47	FC	1	Total 32	C 10	N 5	O 14	P 3	0
47	FE	1	Total 32	C 10	N 5	O 14	P 3	0
47	FG	1	Total 32	C 10	N 5	O 14	P 3	0
47	FI	1	Total 32	C 10	N 5	O 14	P 3	0
47	FK	1	Total 32	C 10	N 5	O 14	P 3	0
47	FM	1	Total 32	C 10	N 5	O 14	P 3	0
47	GA	1	Total 32	C 10	N 5	O 14	P 3	0
47	GC	1	Total 32	C 10	N 5	O 14	P 3	0
47	GE	1	Total 32	C 10	N 5	O 14	P 3	0
47	GG	1	Total 32	C 10	N 5	O 14	P 3	0
47	GI	1	Total 32	C 10	N 5	O 14	P 3	0
47	GK	1	Total 32	C 10	N 5	O 14	P 3	0
47	GM	1	Total 32	C 10	N 5	O 14	P 3	0
47	HA	1	Total 32	C 10	N 5	O 14	P 3	0
47	HC	1	Total 32	C 10	N 5	O 14	P 3	0
47	HE	1	Total 32	C 10	N 5	O 14	P 3	0
47	HG	1	Total 32	C 10	N 5	O 14	P 3	0
47	HI	1	Total 32	C 10	N 5	O 14	P 3	0
47	HK	1	Total 32	C 10	N 5	O 14	P 3	0
47	HM	1	Total 32	C 10	N 5	O 14	P 3	0

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Mol	Chain	Residues	Atoms					AltConf
47	IA	1	Total 32	C 10	N 5	O 14	P 3	0
47	IC	1	Total 32	C 10	N 5	O 14	P 3	0
47	IE	1	Total 32	C 10	N 5	O 14	P 3	0
47	IG	1	Total 32	C 10	N 5	O 14	P 3	0
47	II	1	Total 32	C 10	N 5	O 14	P 3	0
47	IK	1	Total 32	C 10	N 5	O 14	P 3	0
47	IM	1	Total 32	C 10	N 5	O 14	P 3	0
47	JA	1	Total 32	C 10	N 5	O 14	P 3	0
47	JC	1	Total 32	C 10	N 5	O 14	P 3	0
47	JE	1	Total 32	C 10	N 5	O 14	P 3	0
47	JG	1	Total 32	C 10	N 5	O 14	P 3	0
47	JI	1	Total 32	C 10	N 5	O 14	P 3	0
47	JK	1	Total 32	C 10	N 5	O 14	P 3	0
47	JM	1	Total 32	C 10	N 5	O 14	P 3	0
47	KA	1	Total 32	C 10	N 5	O 14	P 3	0
47	KC	1	Total 32	C 10	N 5	O 14	P 3	0
47	KE	1	Total 32	C 10	N 5	O 14	P 3	0
47	KG	1	Total 32	C 10	N 5	O 14	P 3	0
47	KI	1	Total 32	C 10	N 5	O 14	P 3	0
47	KK	1	Total 32	C 10	N 5	O 14	P 3	0
47	KM	1	Total 32	C 10	N 5	O 14	P 3	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
47	LA	1	32	10	5	14	3	0
47	LC	1	32	10	5	14	3	0
47	LE	1	32	10	5	14	3	0
47	LG	1	32	10	5	14	3	0
47	LI	1	32	10	5	14	3	0
47	LK	1	32	10	5	14	3	0
47	LM	1	32	10	5	14	3	0
47	MA	1	32	10	5	14	3	0
47	MC	1	32	10	5	14	3	0
47	ME	1	32	10	5	14	3	0
47	MG	1	32	10	5	14	3	0
47	MI	1	32	10	5	14	3	0
47	MK	1	32	10	5	14	3	0
47	MM	1	32	10	5	14	3	0
47	NA	1	32	10	5	14	3	0
47	NC	1	32	10	5	14	3	0
47	NE	1	32	10	5	14	3	0
47	NG	1	32	10	5	14	3	0
47	NI	1	32	10	5	14	3	0
47	NK	1	32	10	5	14	3	0
47	NM	1	32	10	5	14	3	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
47	OA	1	32	10	5	14	3	0
47	OC	1	32	10	5	14	3	0
47	OE	1	32	10	5	14	3	0
47	OG	1	32	10	5	14	3	0
47	OI	1	32	10	5	14	3	0
47	OK	1	32	10	5	14	3	0
47	OM	1	32	10	5	14	3	0
47	PA	1	32	10	5	14	3	0
47	PC	1	32	10	5	14	3	0
47	PE	1	32	10	5	14	3	0
47	PG	1	32	10	5	14	3	0
47	PI	1	32	10	5	14	3	0
47	PK	1	32	10	5	14	3	0
47	PM	1	32	10	5	14	3	0
47	QA	1	32	10	5	14	3	0
47	QC	1	32	10	5	14	3	0
47	QE	1	32	10	5	14	3	0
47	QG	1	32	10	5	14	3	0
47	QI	1	32	10	5	14	3	0
47	QK	1	32	10	5	14	3	0
47	QM	1	32	10	5	14	3	0

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Mol	Chain	Residues	Atoms					AltConf
47	RA	1	Total 32	C 10	N 5	O 14	P 3	0
47	RC	1	Total 32	C 10	N 5	O 14	P 3	0
47	RE	1	Total 32	C 10	N 5	O 14	P 3	0
47	RG	1	Total 32	C 10	N 5	O 14	P 3	0
47	RI	1	Total 32	C 10	N 5	O 14	P 3	0
47	RK	1	Total 32	C 10	N 5	O 14	P 3	0
47	RM	1	Total 32	C 10	N 5	O 14	P 3	0
47	SA	1	Total 32	C 10	N 5	O 14	P 3	0
47	SC	1	Total 32	C 10	N 5	O 14	P 3	0
47	SE	1	Total 32	C 10	N 5	O 14	P 3	0
47	SG	1	Total 32	C 10	N 5	O 14	P 3	0
47	SI	1	Total 32	C 10	N 5	O 14	P 3	0
47	SK	1	Total 32	C 10	N 5	O 14	P 3	0
47	SM	1	Total 32	C 10	N 5	O 14	P 3	0
47	TA	1	Total 32	C 10	N 5	O 14	P 3	0
47	TC	1	Total 32	C 10	N 5	O 14	P 3	0
47	TE	1	Total 32	C 10	N 5	O 14	P 3	0
47	TG	1	Total 32	C 10	N 5	O 14	P 3	0
47	TI	1	Total 32	C 10	N 5	O 14	P 3	0
47	TK	1	Total 32	C 10	N 5	O 14	P 3	0
47	TM	1	Total 32	C 10	N 5	O 14	P 3	0

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Mol	Chain	Residues	Atoms					AltConf
47	UA	1	Total 32	C 10	N 5	O 14	P 3	0
47	UC	1	Total 32	C 10	N 5	O 14	P 3	0
47	UE	1	Total 32	C 10	N 5	O 14	P 3	0
47	UG	1	Total 32	C 10	N 5	O 14	P 3	0
47	UI	1	Total 32	C 10	N 5	O 14	P 3	0
47	UK	1	Total 32	C 10	N 5	O 14	P 3	0
47	UM	1	Total 32	C 10	N 5	O 14	P 3	0
47	VA	1	Total 32	C 10	N 5	O 14	P 3	0
47	VC	1	Total 32	C 10	N 5	O 14	P 3	0
47	VE	1	Total 32	C 10	N 5	O 14	P 3	0
47	VG	1	Total 32	C 10	N 5	O 14	P 3	0
47	VI	1	Total 32	C 10	N 5	O 14	P 3	0
47	VK	1	Total 32	C 10	N 5	O 14	P 3	0
47	VM	1	Total 32	C 10	N 5	O 14	P 3	0
47	WA	1	Total 32	C 10	N 5	O 14	P 3	0
47	WC	1	Total 32	C 10	N 5	O 14	P 3	0
47	WE	1	Total 32	C 10	N 5	O 14	P 3	0
47	WG	1	Total 32	C 10	N 5	O 14	P 3	0
47	WI	1	Total 32	C 10	N 5	O 14	P 3	0
47	WK	1	Total 32	C 10	N 5	O 14	P 3	0
47	WM	1	Total 32	C 10	N 5	O 14	P 3	0



- Molecule 48 is MAGNESIUM ION (three-letter code: MG) (formula: Mg) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		AltConf
48	AA	1	Total 1	Mg 1	0
48	AC	1	Total 1	Mg 1	0
48	AE	1	Total 1	Mg 1	0
48	AG	1	Total 1	Mg 1	0
48	AI	1	Total 1	Mg 1	0
48	AL	1	Total 1	Mg 1	0
48	AM	1	Total 1	Mg 1	0
48	BB	1	Total 1	Mg 1	0
48	BC	1	Total 1	Mg 1	0
48	BE	1	Total 1	Mg 1	0
48	BG	1	Total 1	Mg 1	0
48	BI	1	Total 1	Mg 1	0
48	BK	1	Total 1	Mg 1	0
48	BM	1	Total 1	Mg 1	0
48	CA	1	Total 1	Mg 1	0
48	CC	1	Total 1	Mg 1	0
48	CE	1	Total 1	Mg 1	0
48	CG	1	Total 1	Mg 1	0
48	CI	1	Total 1	Mg 1	0
48	CK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	CM	1	Total 1	Mg 1	0
48	DA	1	Total 1	Mg 1	0
48	DC	1	Total 1	Mg 1	0
48	DE	1	Total 1	Mg 1	0
48	DG	1	Total 1	Mg 1	0
48	DI	1	Total 1	Mg 1	0
48	DK	1	Total 1	Mg 1	0
48	DM	1	Total 1	Mg 1	0
48	EA	1	Total 1	Mg 1	0
48	EC	1	Total 1	Mg 1	0
48	EE	1	Total 1	Mg 1	0
48	EG	1	Total 1	Mg 1	0
48	EI	1	Total 1	Mg 1	0
48	EK	1	Total 1	Mg 1	0
48	EM	1	Total 1	Mg 1	0
48	FA	1	Total 1	Mg 1	0
48	FC	1	Total 1	Mg 1	0
48	FE	1	Total 1	Mg 1	0
48	FG	1	Total 1	Mg 1	0
48	FI	1	Total 1	Mg 1	0
48	FK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	FM	1	Total 1	Mg 1	0
48	GB	1	Total 1	Mg 1	0
48	GC	1	Total 1	Mg 1	0
48	GE	1	Total 1	Mg 1	0
48	GG	1	Total 1	Mg 1	0
48	GI	1	Total 1	Mg 1	0
48	GK	1	Total 1	Mg 1	0
48	GM	1	Total 1	Mg 1	0
48	HA	1	Total 1	Mg 1	0
48	HC	1	Total 1	Mg 1	0
48	HE	1	Total 1	Mg 1	0
48	HG	1	Total 1	Mg 1	0
48	HI	1	Total 1	Mg 1	0
48	HK	1	Total 1	Mg 1	0
48	HM	1	Total 1	Mg 1	0
48	IA	1	Total 1	Mg 1	0
48	IC	1	Total 1	Mg 1	0
48	IE	1	Total 1	Mg 1	0
48	IG	1	Total 1	Mg 1	0
48	II	1	Total 1	Mg 1	0
48	IK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	IM	1	Total 1	Mg 1	0
48	JA	1	Total 1	Mg 1	0
48	JC	1	Total 1	Mg 1	0
48	JE	1	Total 1	Mg 1	0
48	JG	1	Total 1	Mg 1	0
48	JI	1	Total 1	Mg 1	0
48	JK	1	Total 1	Mg 1	0
48	JM	1	Total 1	Mg 1	0
48	KA	1	Total 1	Mg 1	0
48	KC	1	Total 1	Mg 1	0
48	KE	1	Total 1	Mg 1	0
48	KG	1	Total 1	Mg 1	0
48	KI	1	Total 1	Mg 1	0
48	KK	1	Total 1	Mg 1	0
48	KM	1	Total 1	Mg 1	0
48	LA	1	Total 1	Mg 1	0
48	LC	1	Total 1	Mg 1	0
48	LE	1	Total 1	Mg 1	0
48	LG	1	Total 1	Mg 1	0
48	LI	1	Total 1	Mg 1	0
48	LK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	LM	1	Total 1	Mg 1	0
48	MA	1	Total 1	Mg 1	0
48	MC	1	Total 1	Mg 1	0
48	ME	1	Total 1	Mg 1	0
48	MG	1	Total 1	Mg 1	0
48	MI	1	Total 1	Mg 1	0
48	MK	1	Total 1	Mg 1	0
48	MM	1	Total 1	Mg 1	0
48	NB	1	Total 1	Mg 1	0
48	NC	1	Total 1	Mg 1	0
48	NE	1	Total 1	Mg 1	0
48	NG	1	Total 1	Mg 1	0
48	NI	1	Total 1	Mg 1	0
48	NK	1	Total 1	Mg 1	0
48	NM	1	Total 1	Mg 1	0
48	OA	1	Total 1	Mg 1	0
48	OC	1	Total 1	Mg 1	0
48	OE	1	Total 1	Mg 1	0
48	OG	1	Total 1	Mg 1	0
48	OI	1	Total 1	Mg 1	0
48	OK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	OM	1	Total 1	Mg 1	0
48	PA	1	Total 1	Mg 1	0
48	PC	1	Total 1	Mg 1	0
48	PE	1	Total 1	Mg 1	0
48	PG	1	Total 1	Mg 1	0
48	PI	1	Total 1	Mg 1	0
48	PK	1	Total 1	Mg 1	0
48	PM	1	Total 1	Mg 1	0
48	QA	1	Total 1	Mg 1	0
48	QC	1	Total 1	Mg 1	0
48	QE	1	Total 1	Mg 1	0
48	QG	1	Total 1	Mg 1	0
48	QI	1	Total 1	Mg 1	0
48	QK	1	Total 1	Mg 1	0
48	QM	1	Total 1	Mg 1	0
48	RA	1	Total 1	Mg 1	0
48	RC	1	Total 1	Mg 1	0
48	RE	1	Total 1	Mg 1	0
48	RF	1	Total 1	Mg 1	0
48	RI	1	Total 1	Mg 1	0
48	RK	1	Total 1	Mg 1	0

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Mol	Chain	Residues	Atoms		AltConf
48	RM	1	Total 1	Mg 1	0
48	SA	1	Total 1	Mg 1	0
48	SB	1	Total 1	Mg 1	0
48	SE	1	Total 1	Mg 1	0
48	SG	1	Total 1	Mg 1	0
48	SI	1	Total 1	Mg 1	0
48	SK	1	Total 1	Mg 1	0
48	SM	1	Total 1	Mg 1	0
48	TA	1	Total 1	Mg 1	0
48	TC	1	Total 1	Mg 1	0
48	TE	1	Total 1	Mg 1	0
48	TG	1	Total 1	Mg 1	0
48	TI	1	Total 1	Mg 1	0
48	TK	1	Total 1	Mg 1	0
48	TM	1	Total 1	Mg 1	0
48	UA	1	Total 1	Mg 1	0
48	UC	1	Total 1	Mg 1	0
48	UE	1	Total 1	Mg 1	0
48	UG	1	Total 1	Mg 1	0
48	UI	1	Total 1	Mg 1	0
48	UK	1	Total 1	Mg 1	0

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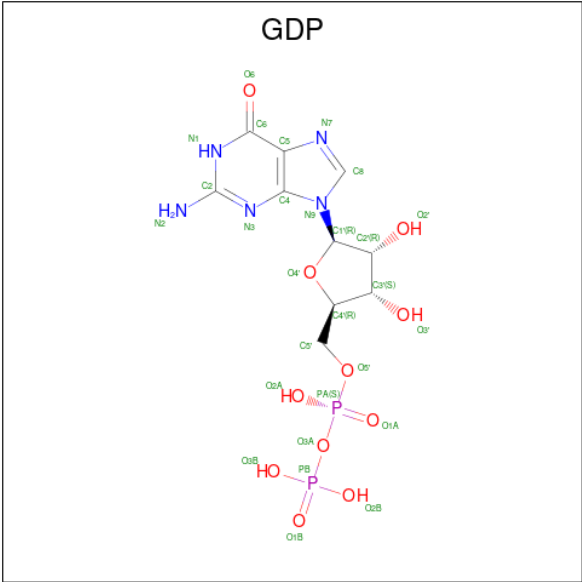


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Mol	Chain	Residues	Atoms		AltConf
48	UM	1	Total 1	Mg 1	0
48	VA	1	Total 1	Mg 1	0
48	VC	1	Total 1	Mg 1	0
48	VE	1	Total 1	Mg 1	0
48	VG	1	Total 1	Mg 1	0
48	VI	1	Total 1	Mg 1	0
48	VK	1	Total 1	Mg 1	0
48	VM	1	Total 1	Mg 1	0
48	WA	1	Total 1	Mg 1	0
48	WC	1	Total 1	Mg 1	0
48	WE	1	Total 1	Mg 1	0
48	WG	1	Total 1	Mg 1	0
48	WI	1	Total 1	Mg 1	0
48	WK	1	Total 1	Mg 1	0
48	WM	1	Total 1	Mg 1	0

- Molecule 49 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula:  $C_{10}H_{15}N_5O_{11}P_2$ ) (labeled as "Ligand of Interest" by depositor).





Mol	Chain	Residues	Atoms					AltConf
49	AB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	AN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	BN	1	Total	C	N	O	P	0
			28	10	5	11	2	

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
49	CB	1	28	10	5	11	2	0
49	CD	1	28	10	5	11	2	0
49	CF	1	28	10	5	11	2	0
49	CH	1	28	10	5	11	2	0
49	CJ	1	28	10	5	11	2	0
49	CL	1	28	10	5	11	2	0
49	CN	1	28	10	5	11	2	0
49	DB	1	28	10	5	11	2	0
49	DD	1	28	10	5	11	2	0
49	DF	1	28	10	5	11	2	0
49	DH	1	28	10	5	11	2	0
49	DJ	1	28	10	5	11	2	0
49	DL	1	28	10	5	11	2	0
49	DN	1	28	10	5	11	2	0
49	EB	1	28	10	5	11	2	0
49	ED	1	28	10	5	11	2	0
49	EF	1	28	10	5	11	2	0
49	EH	1	28	10	5	11	2	0
49	EJ	1	28	10	5	11	2	0
49	EL	1	28	10	5	11	2	0
49	EN	1	28	10	5	11	2	0

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Mol	Chain	Residues	Atoms					AltConf
49	FB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	FN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	GN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	HN	1	Total	C	N	O	P	0
			28	10	5	11	2	

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Mol	Chain	Residues	Atoms					AltConf
49	IB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	ID	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	IF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	IH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	IJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	IL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	IN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	JN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	KN	1	Total	C	N	O	P	0
			28	10	5	11	2	

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
49	LB	1	28	10	5	11	2	0
49	LD	1	28	10	5	11	2	0
49	LF	1	28	10	5	11	2	0
49	LH	1	28	10	5	11	2	0
49	LJ	1	28	10	5	11	2	0
49	LL	1	28	10	5	11	2	0
49	LN	1	28	10	5	11	2	0
49	MB	1	28	10	5	11	2	0
49	MD	1	28	10	5	11	2	0
49	MF	1	28	10	5	11	2	0
49	MH	1	28	10	5	11	2	0
49	MJ	1	28	10	5	11	2	0
49	ML	1	28	10	5	11	2	0
49	MN	1	28	10	5	11	2	0
49	NB	1	28	10	5	11	2	0
49	ND	1	28	10	5	11	2	0
49	NF	1	28	10	5	11	2	0
49	NH	1	28	10	5	11	2	0
49	NJ	1	28	10	5	11	2	0
49	NL	1	28	10	5	11	2	0
49	NN	1	28	10	5	11	2	0

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Mol	Chain	Residues	Atoms					AltConf
49	OB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	OD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	OF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	OH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	OJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	OL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	ON	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	PN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	QN	1	Total	C	N	O	P	0
			28	10	5	11	2	

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Mol	Chain	Residues	Atoms					AltConf
49	RB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	RN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	SN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	TN	1	Total	C	N	O	P	0
			28	10	5	11	2	

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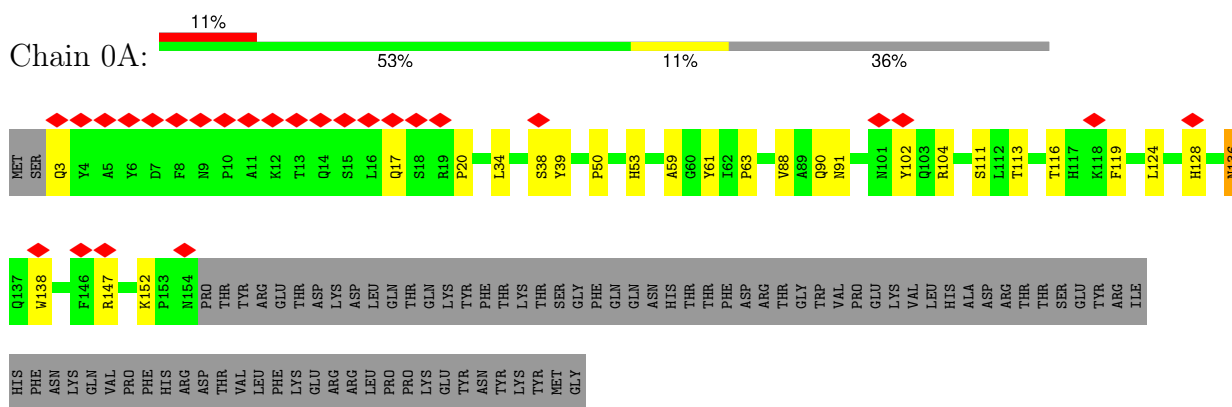
Mol	Chain	Residues	Atoms					AltConf
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49	UD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	UF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	UH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	UJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	UL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	UN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	VN	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WB	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WD	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WF	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WH	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WJ	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WL	1	Total	C	N	O	P	0
			28	10	5	11	2	
49	WN	1	Total	C	N	O	P	0
			28	10	5	11	2	



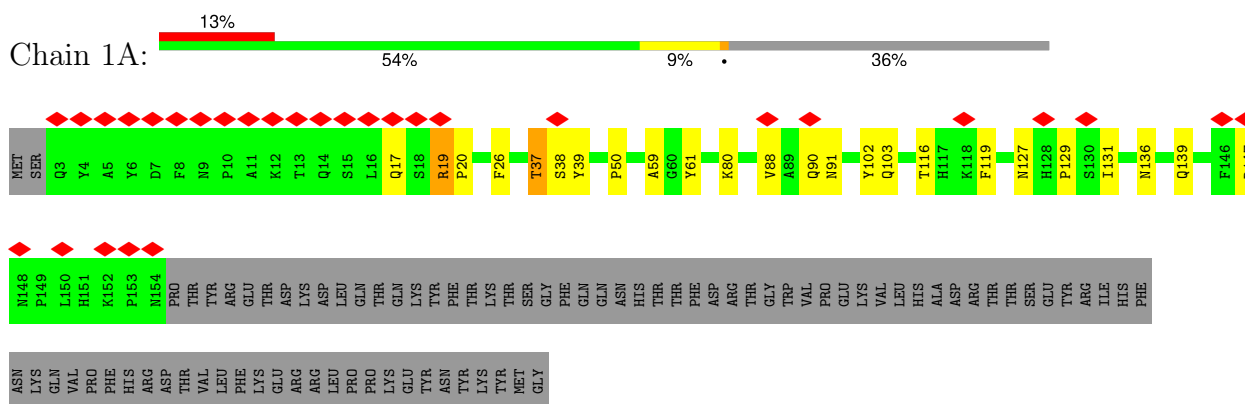
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

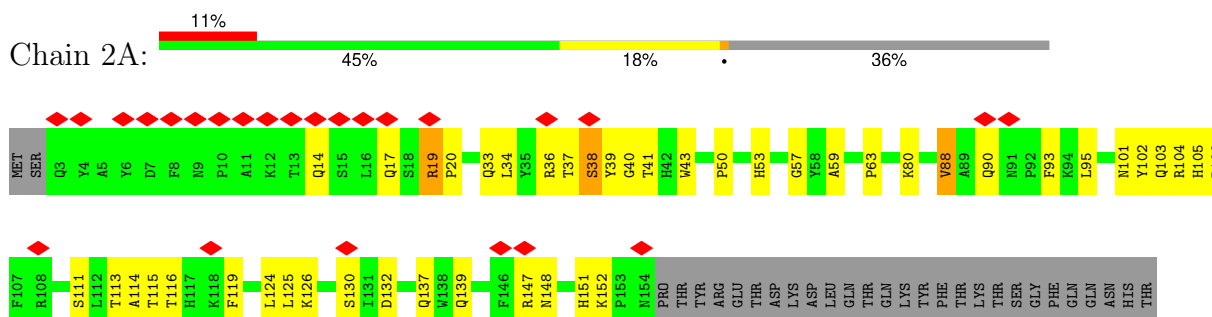
#### • Molecule 1: RIB27A



#### • Molecule 1: RIB27A



#### • Molecule 1: RIB27A

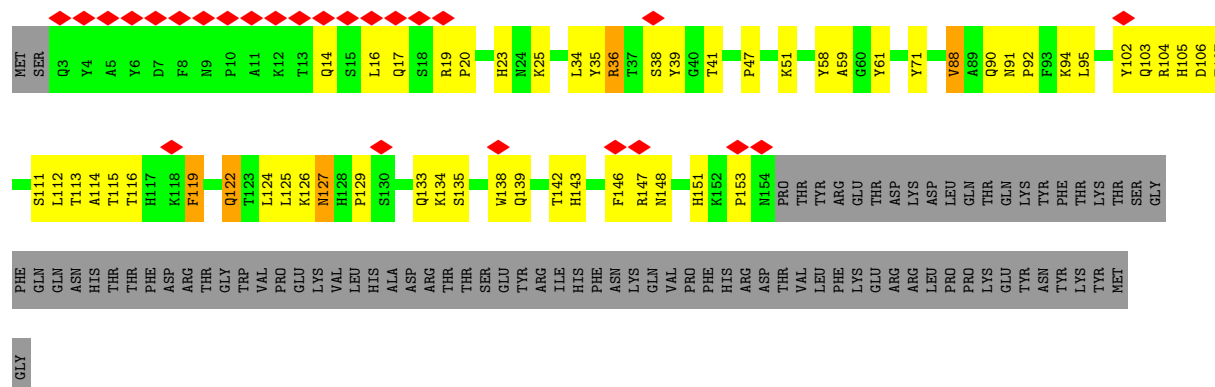




THR PHE ASP ARG THR GLY TER VAL PRO GLY LYS VAL LEU HIS ALA ASP ARG THR THR SER GLU ARG THR ILE PHE ASN LYS GLN VAL PRO PHE HIS ASP THR VAL LEU PHE LYS ARG ARG LEU PRO PRO LYS GLU TYR ASN TYR LYS MET GLY

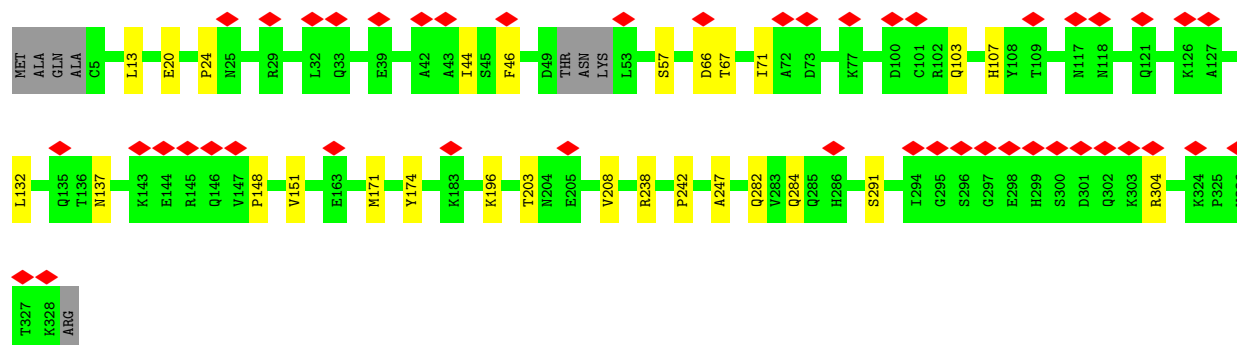
• Molecule 1: RIB27A

Chain 3A: 11% 41% 22% 36%



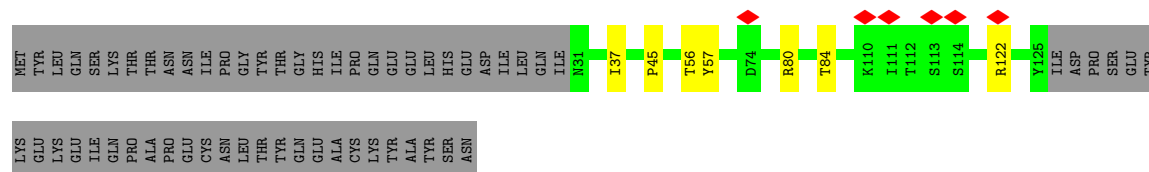
• Molecule 2: RIB38

Chain 0B: 14% 89% 8%



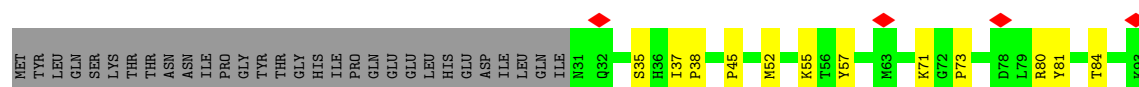
• Molecule 3: CFAM166B

Chain 0C: 56% 39%

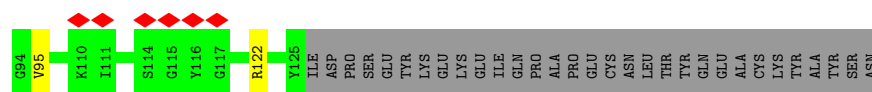


• Molecule 3: CFAM166B

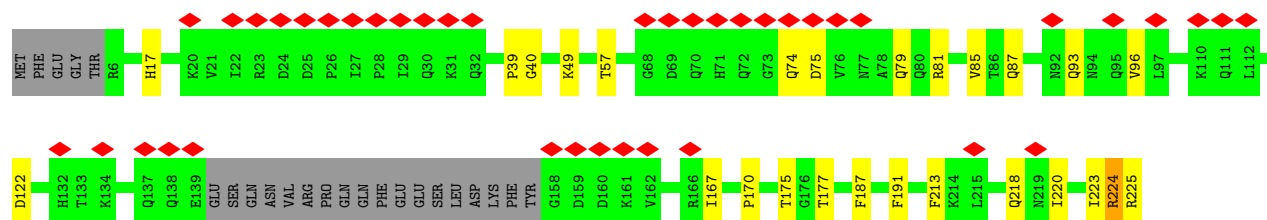
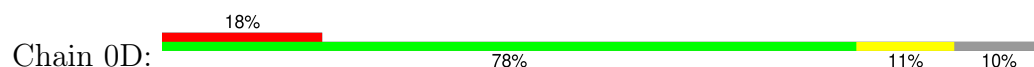
Chain 1C: 6% 52% 9% 39%



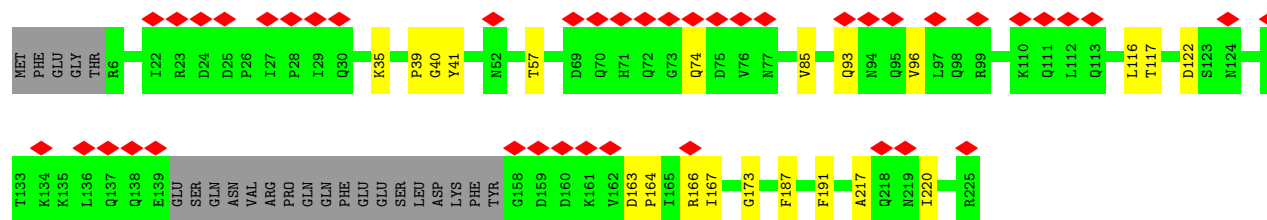
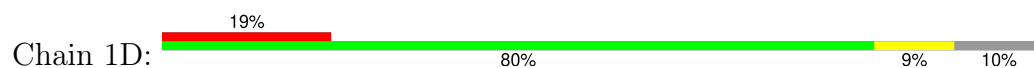




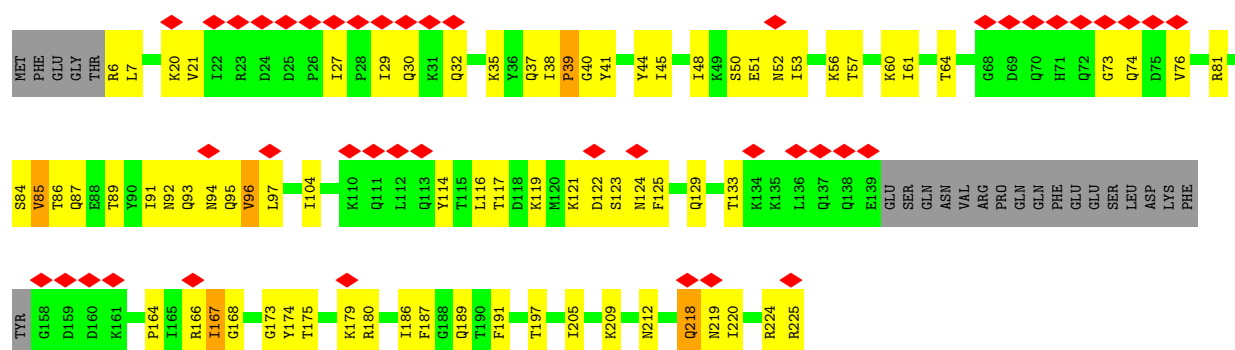
• Molecule 4: CFAM166A



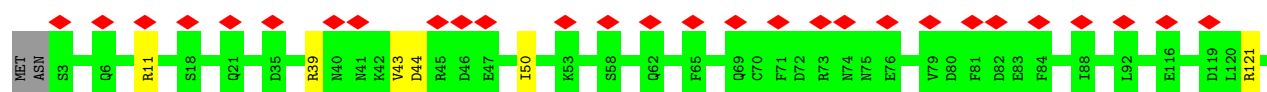
• Molecule 4: CFAM166A



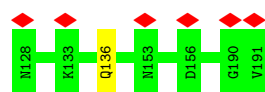
• Molecule 4: CFAM166A



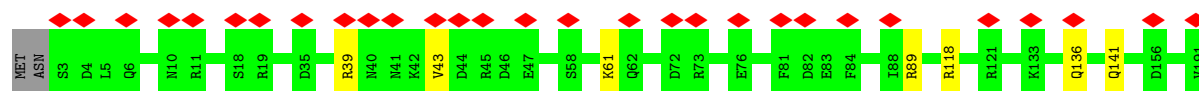
• Molecule 5: RIB22



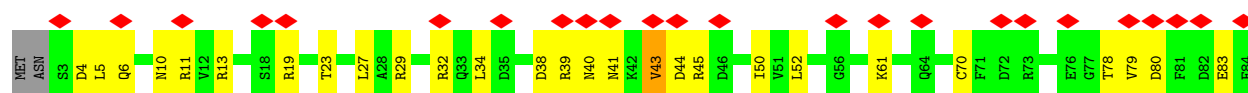




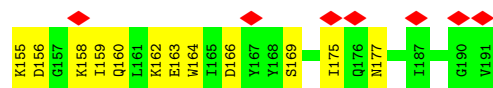
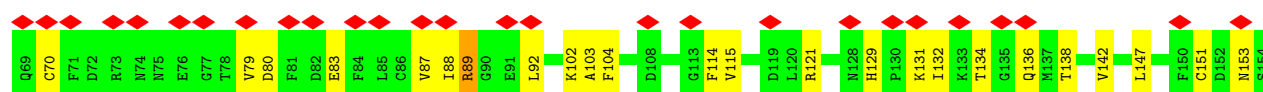
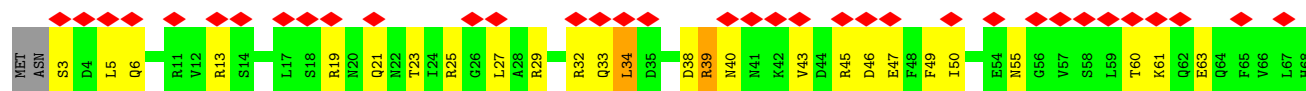
• Molecule 5: RIB22



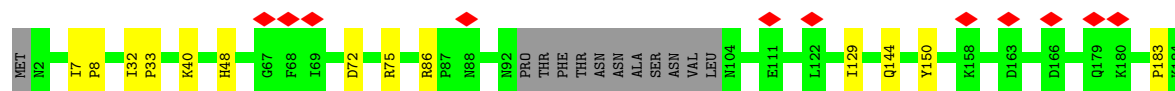
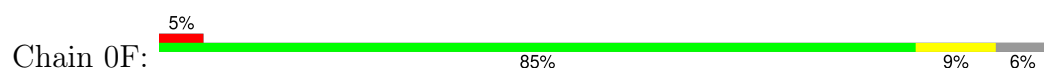
• Molecule 5: RIB22



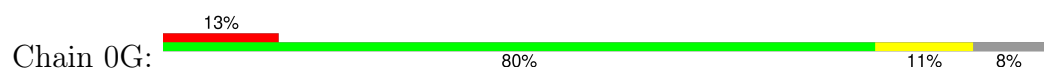
• Molecule 5: RIB22



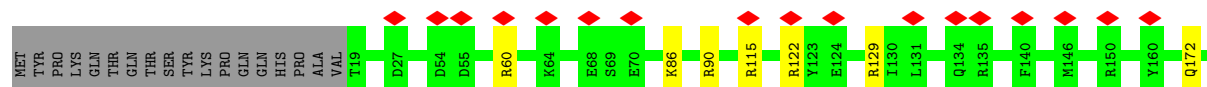
• Molecule 6: CFAM166C



• Molecule 7: CFAP107



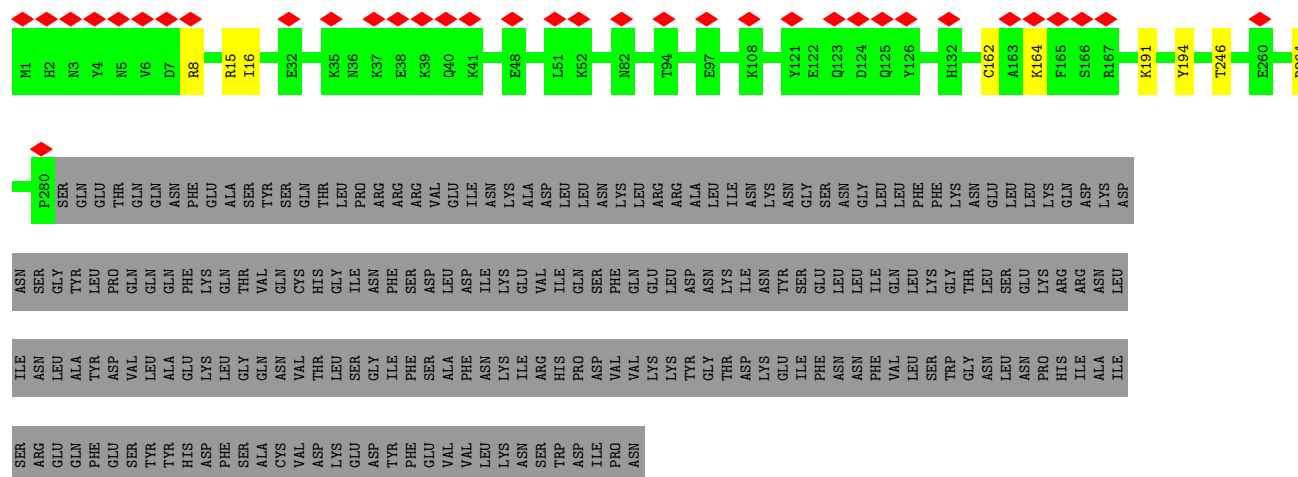




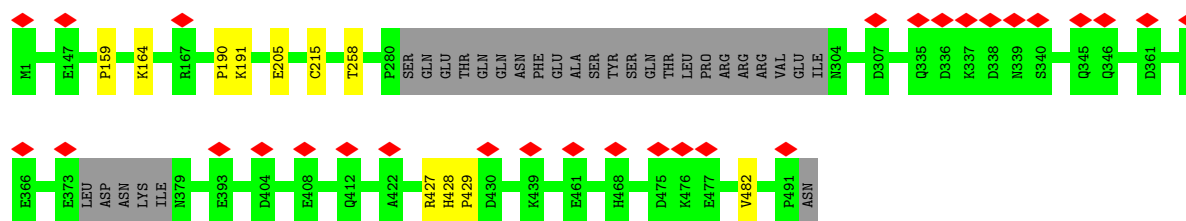




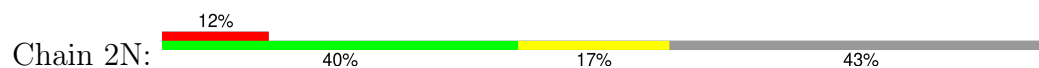
• Molecule 9: CFAP161A



• Molecule 9: CFAP161A



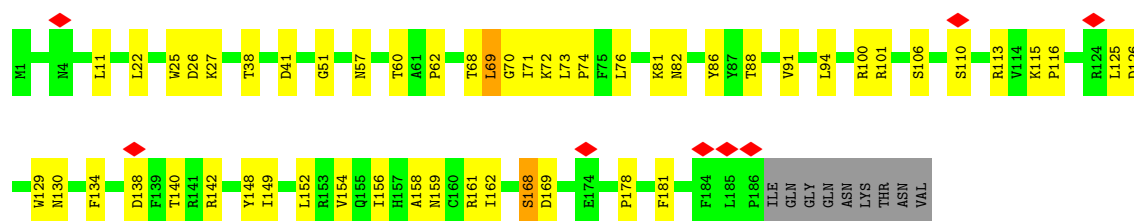
• Molecule 9: CFAP161A



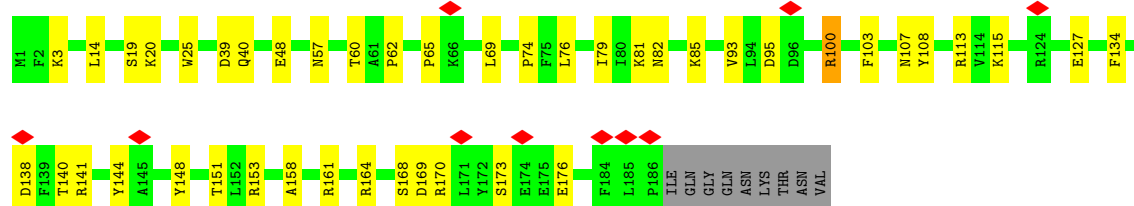
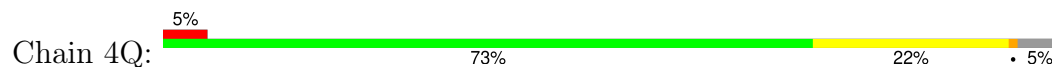




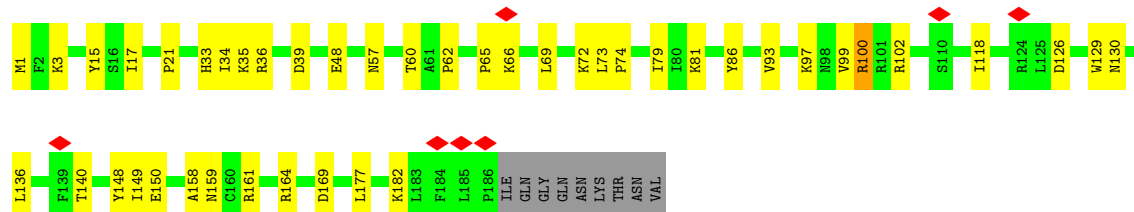




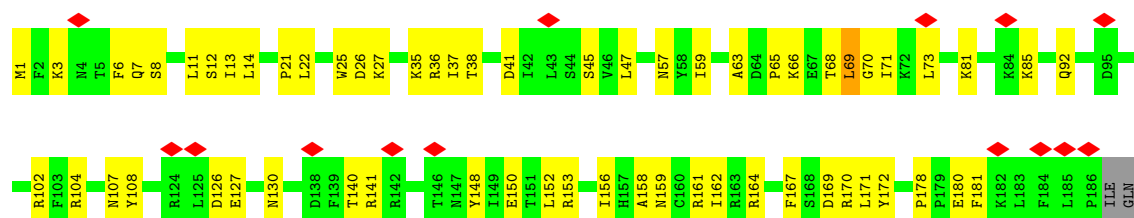
- Molecule 10: CFAP20



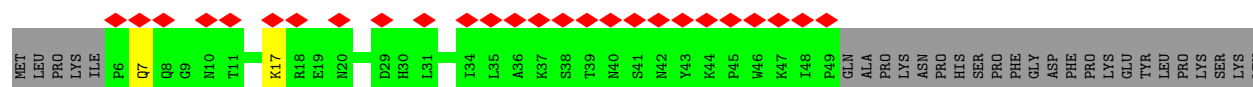
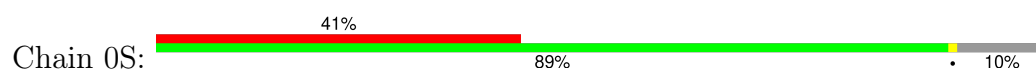
- Molecule 10: CFAP20



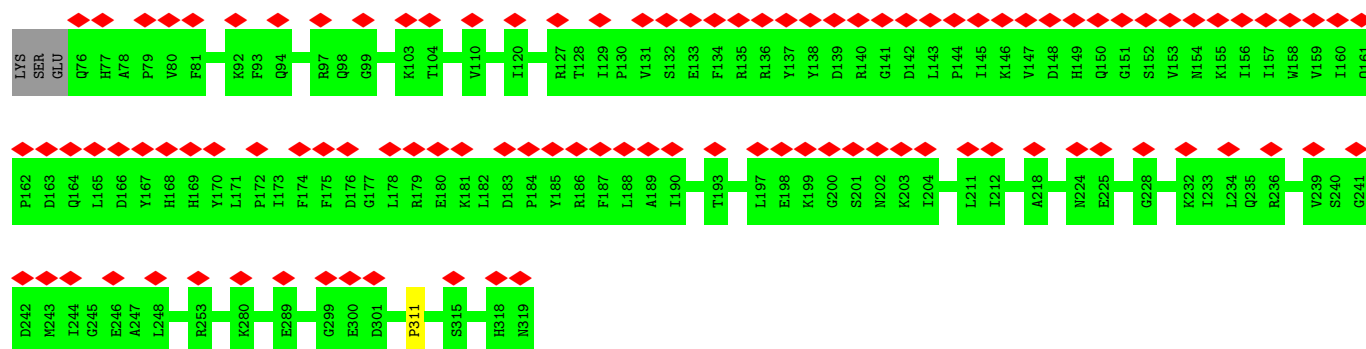
- Molecule 10: CFAP20



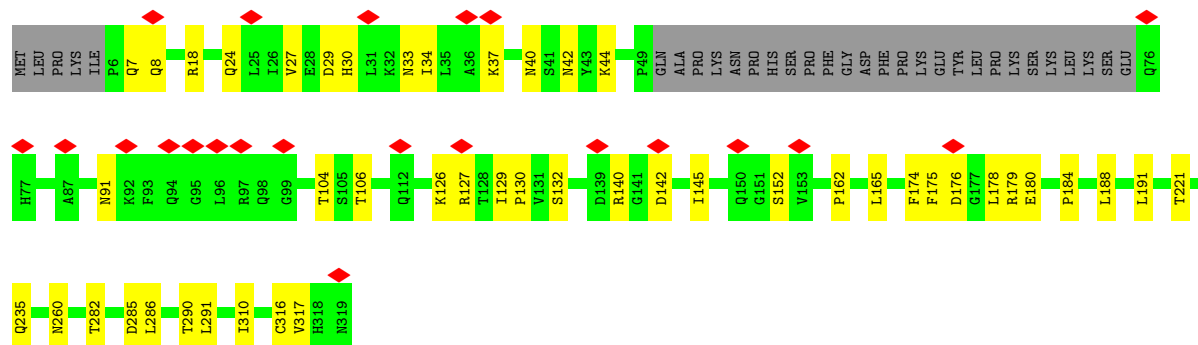
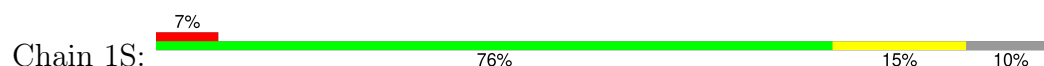
- Molecule 11: Parkin co-regulated protein PACRGA



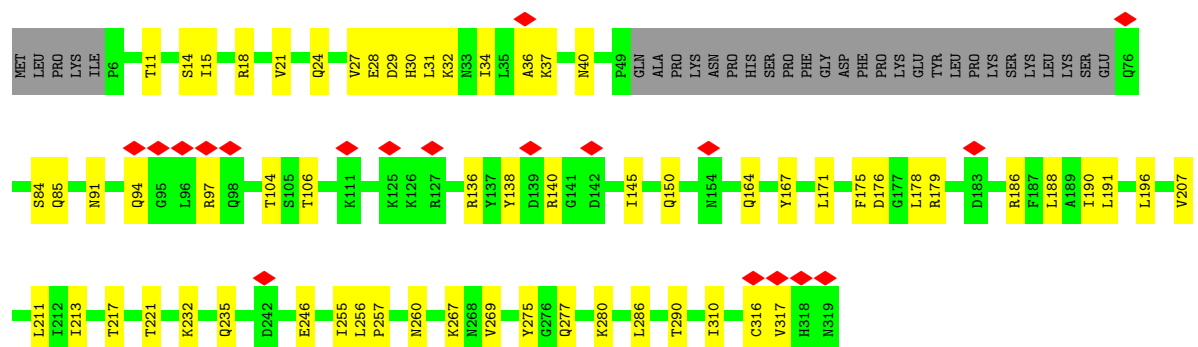




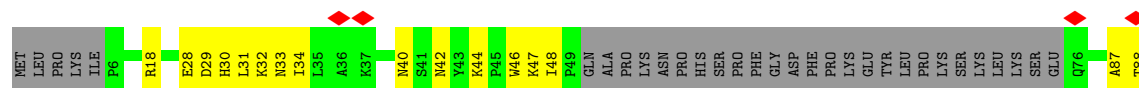
• Molecule 11: Parkin co-regulated protein PACRGA



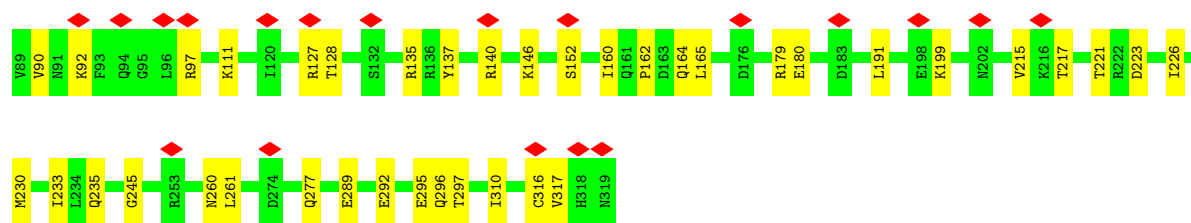
• Molecule 11: Parkin co-regulated protein PACRGA



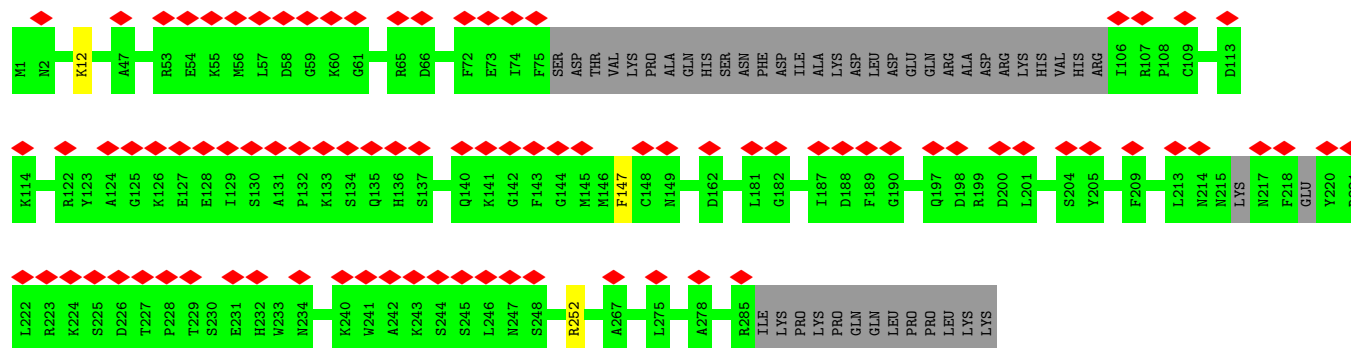
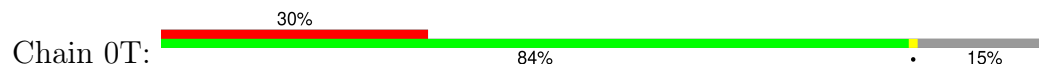
• Molecule 11: Parkin co-regulated protein PACRGA



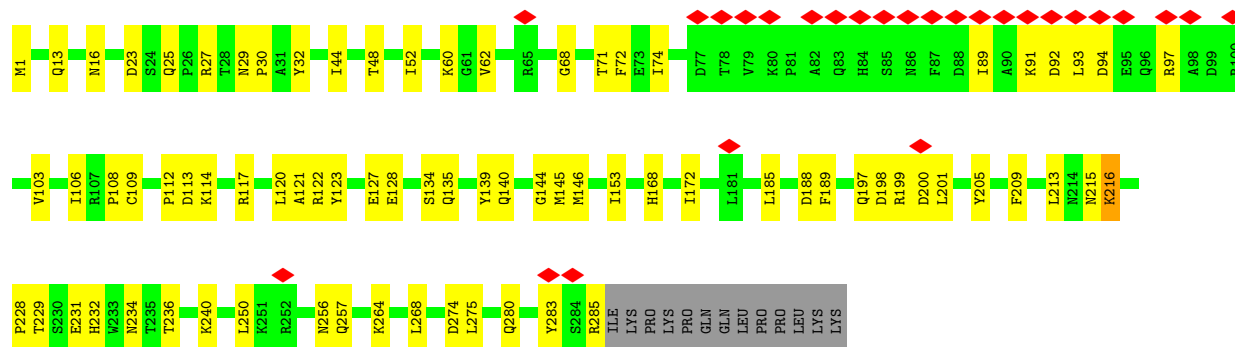




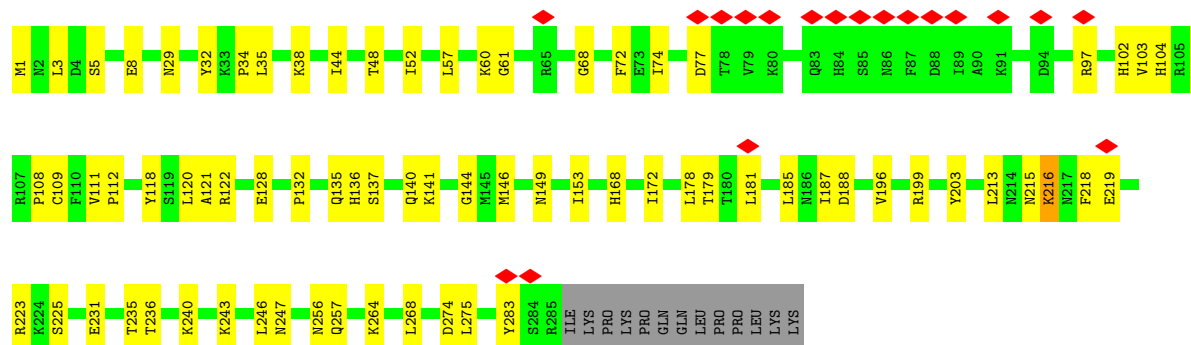
• Molecule 12: IJ34



• Molecule 12: IJ34



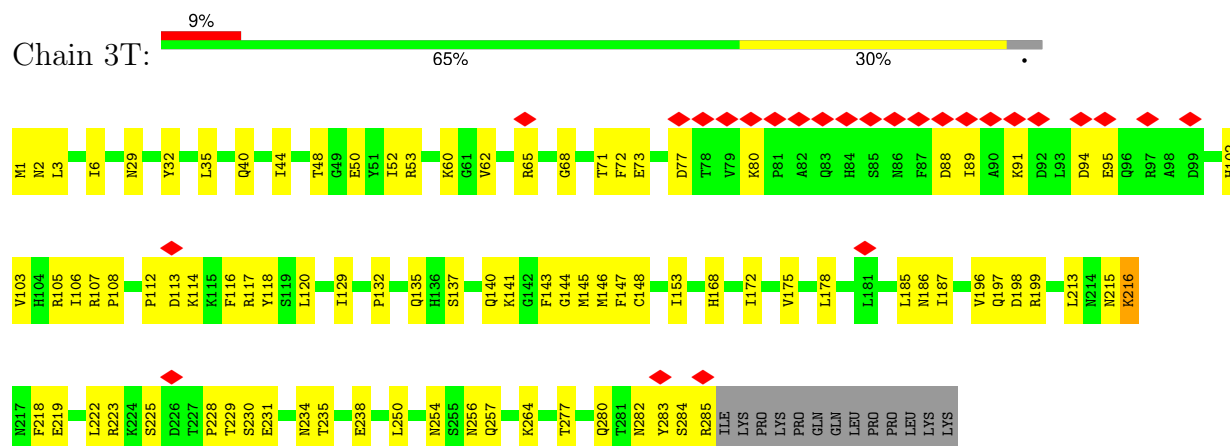
• Molecule 12: IJ34



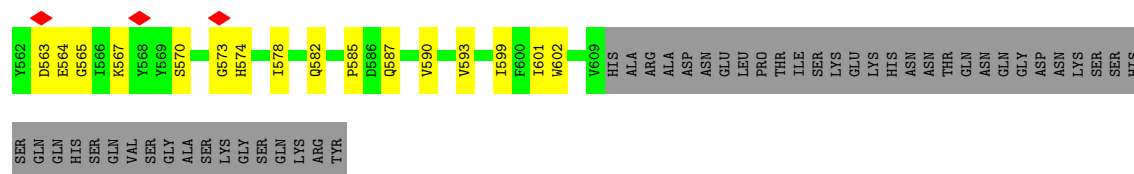


- Molecule 12: IJ34

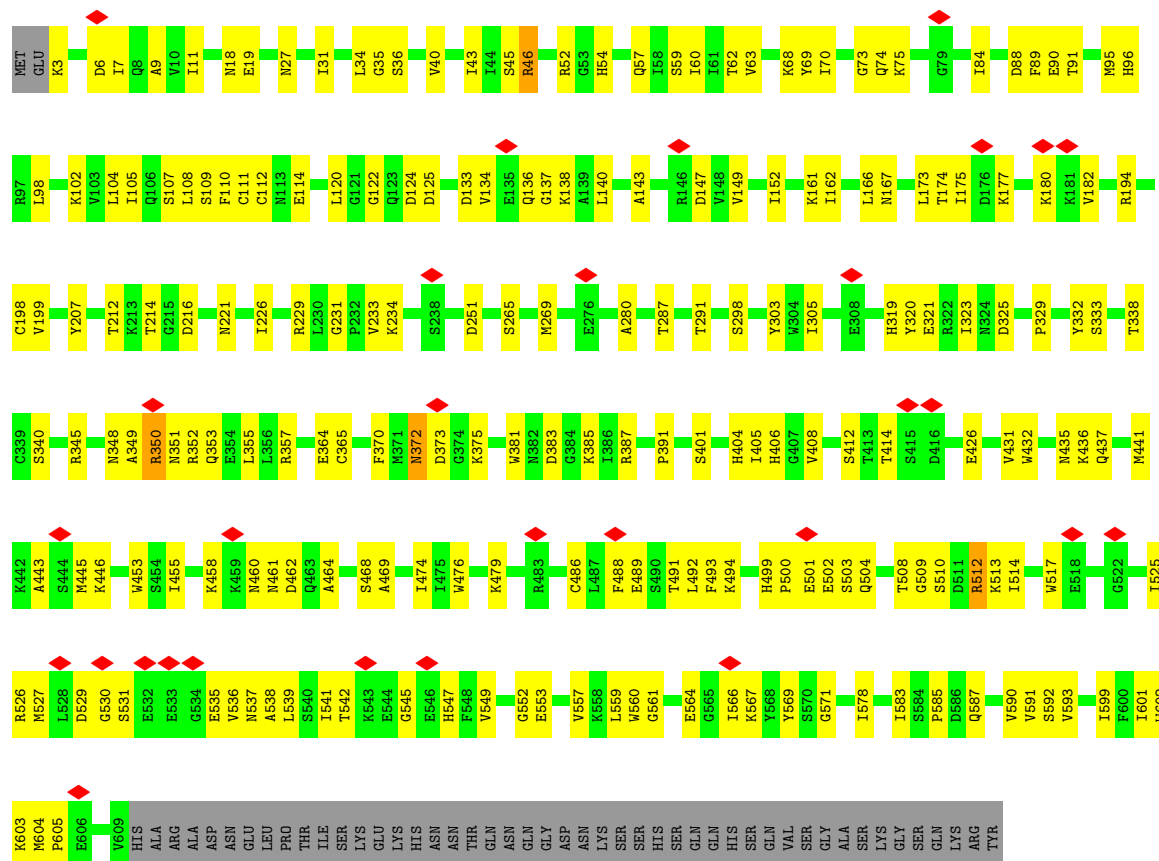
Chain 3T:



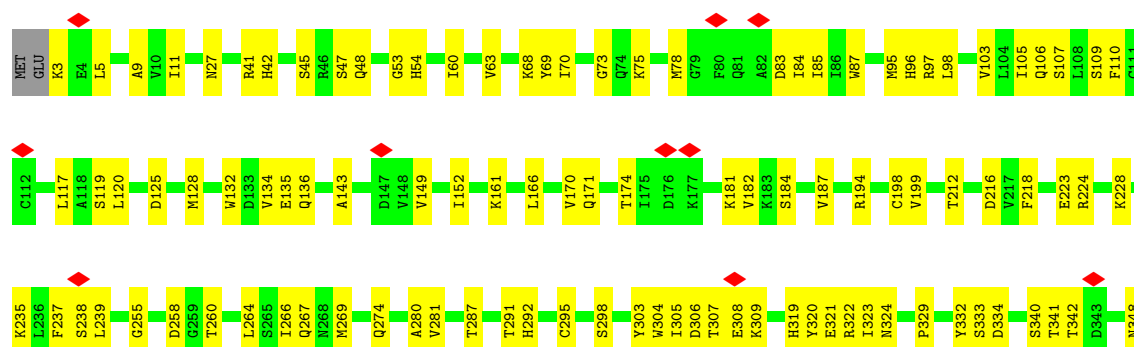




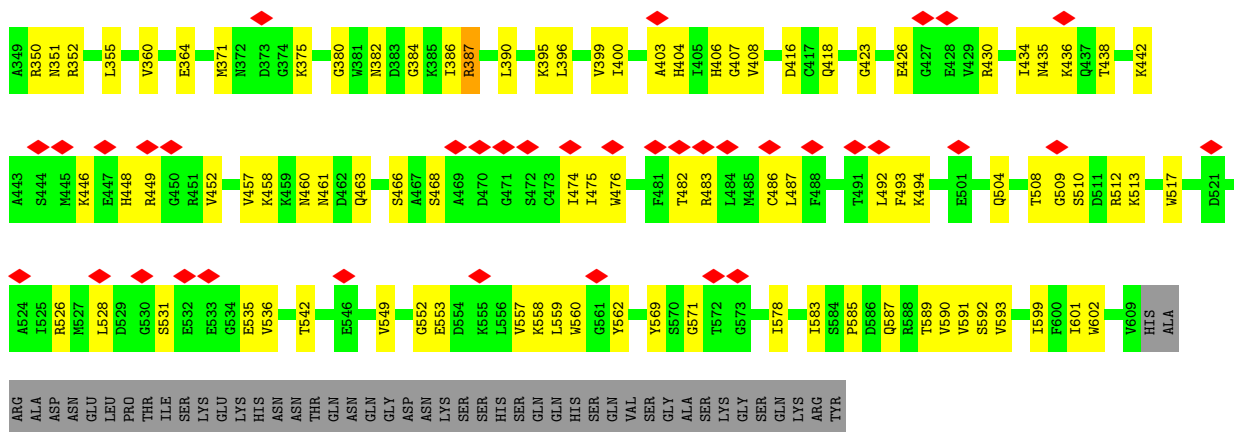
• Molecule 13: Cilia- and flagella-associated protein 52



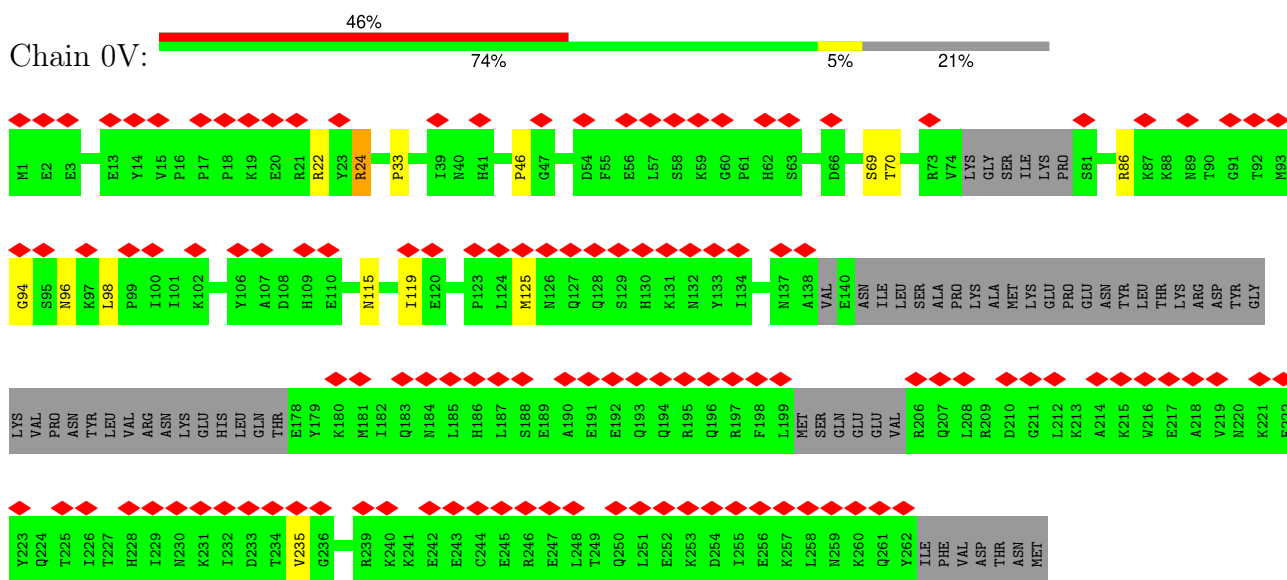
• Molecule 13: Cilia- and flagella-associated protein 52



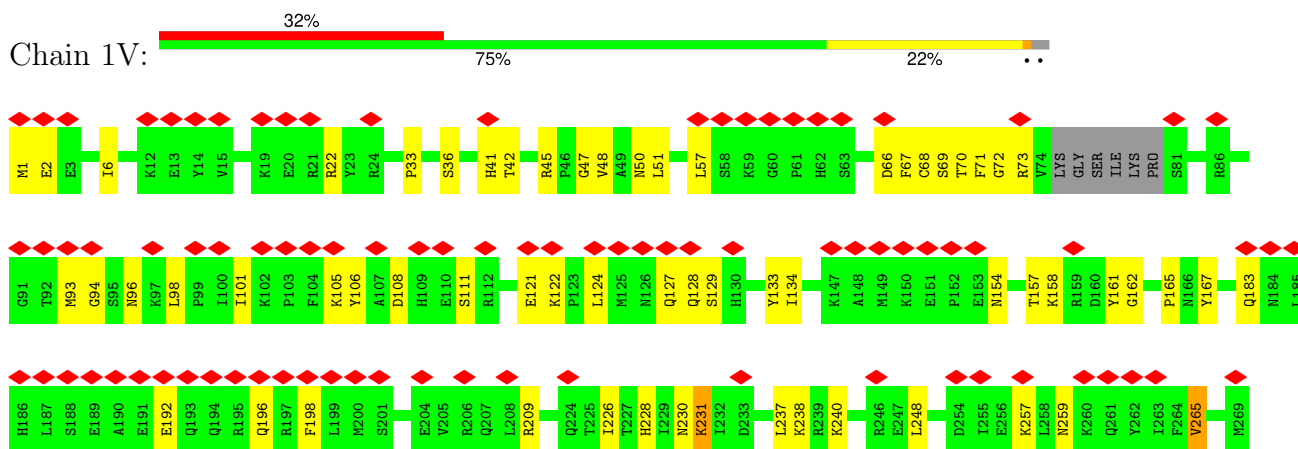




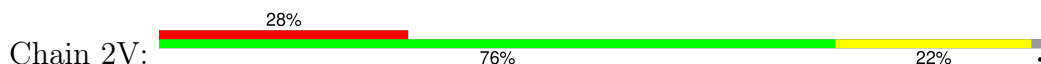
- Molecule 14: DNA polymerase delta C4-type zinc-finger protein



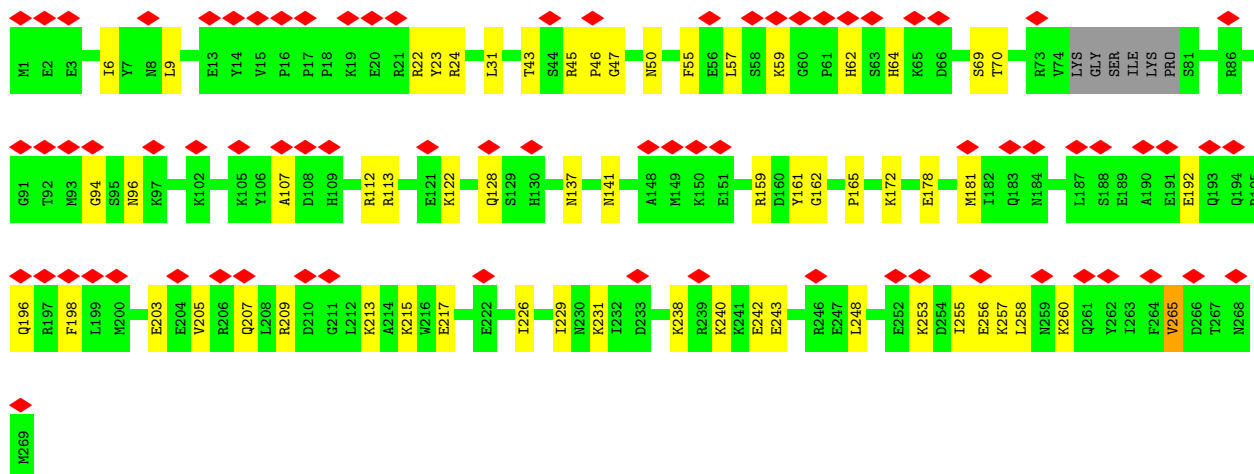
- Molecule 14: DNA polymerase delta C4-type zinc-finger protein



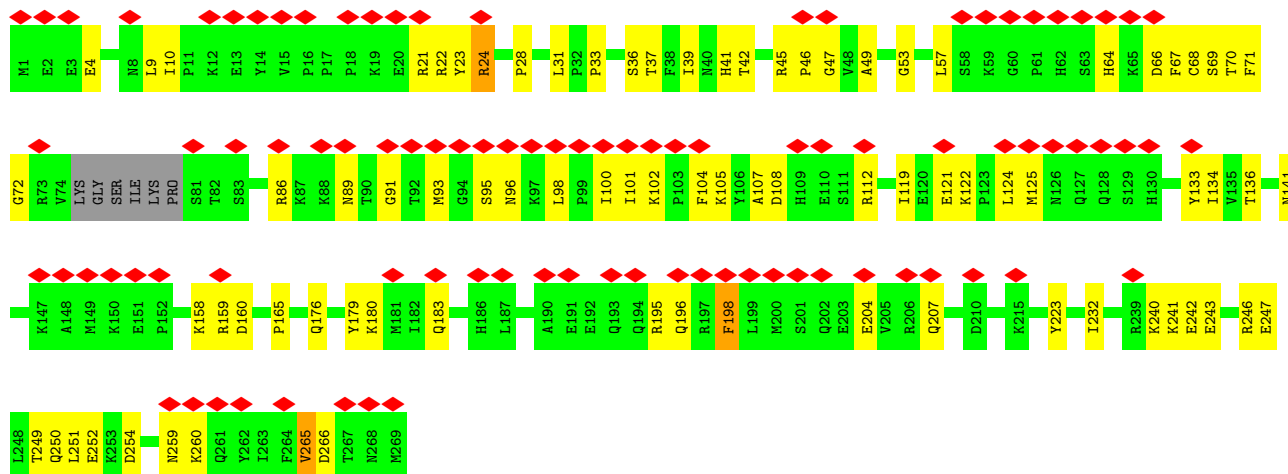
- Molecule 14: DNA polymerase delta C4-type zinc-finger protein



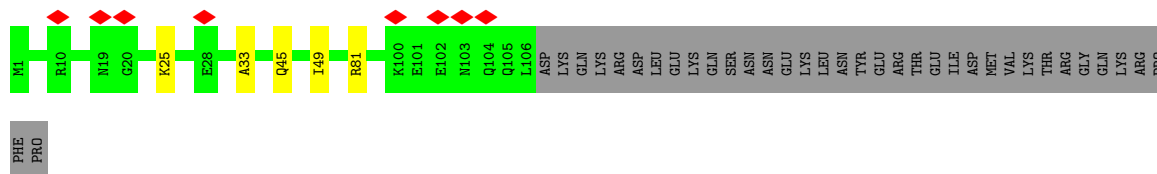
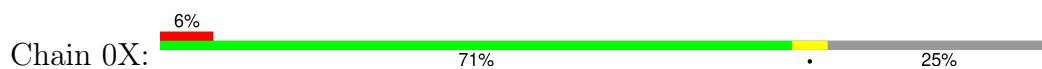




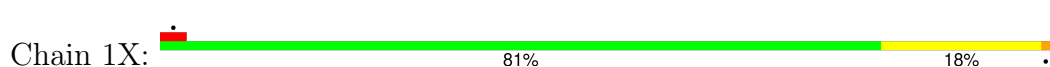
- Molecule 14: DNA polymerase delta C4-type zinc-finger protein



- Molecule 15: RIB43A protein

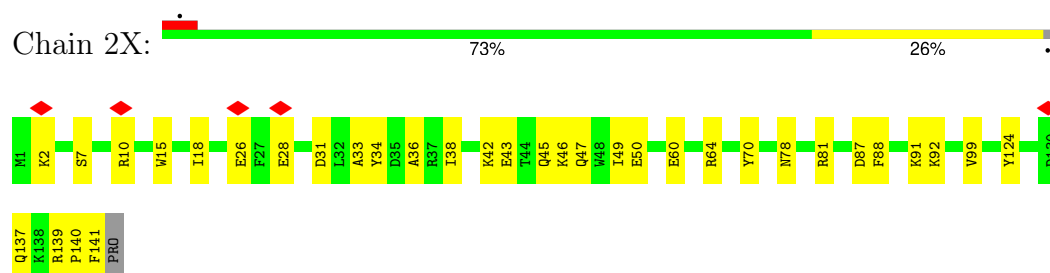


- Molecule 15: RIB43A protein

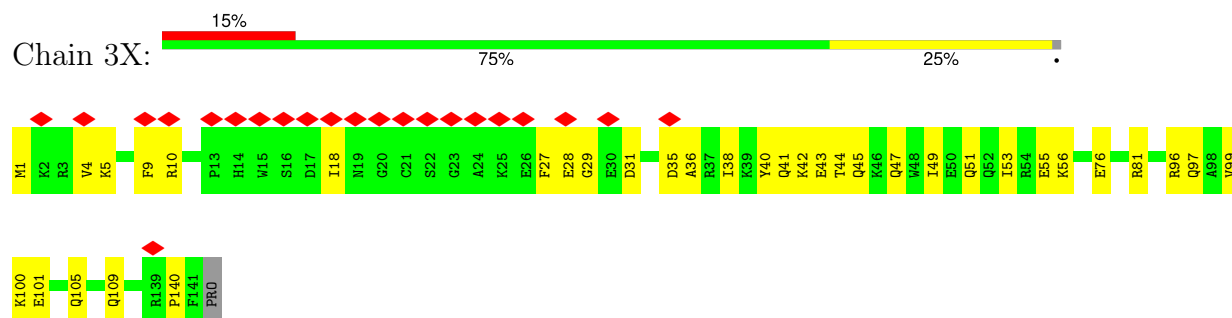




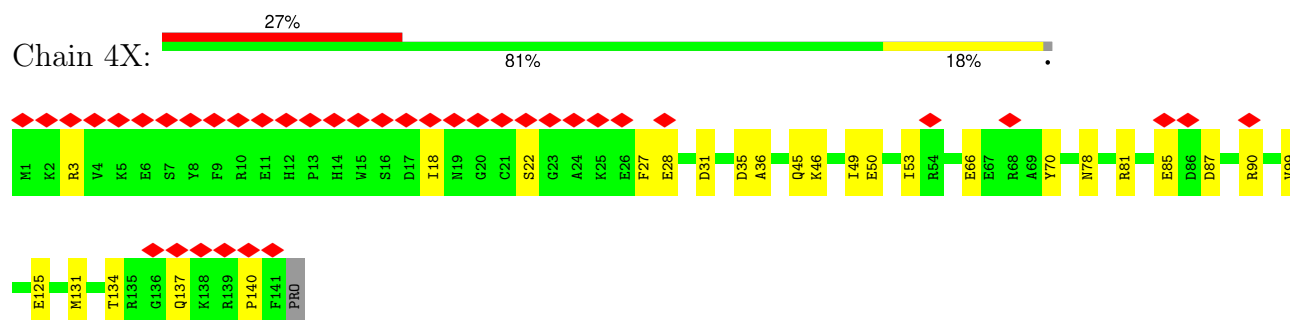
## • Molecule 15: RIB43A protein



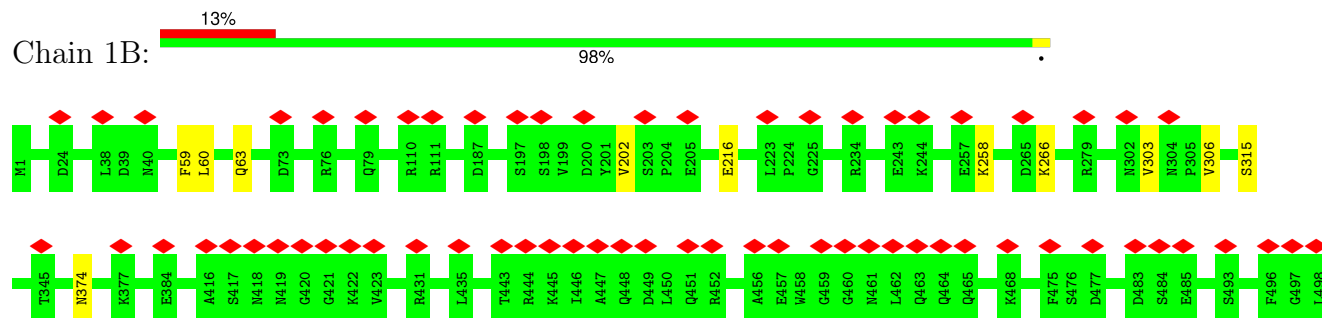
## • Molecule 15: RIB43A protein



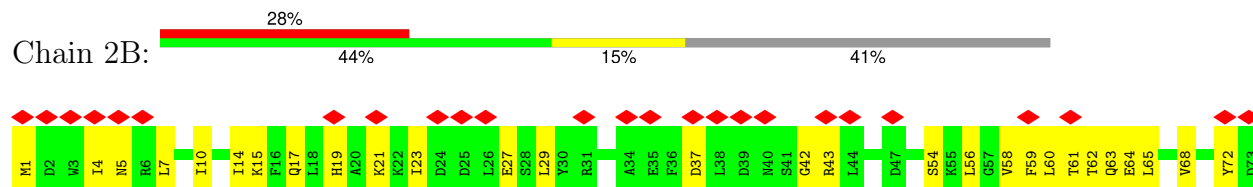
## • Molecule 15: RIB43A protein



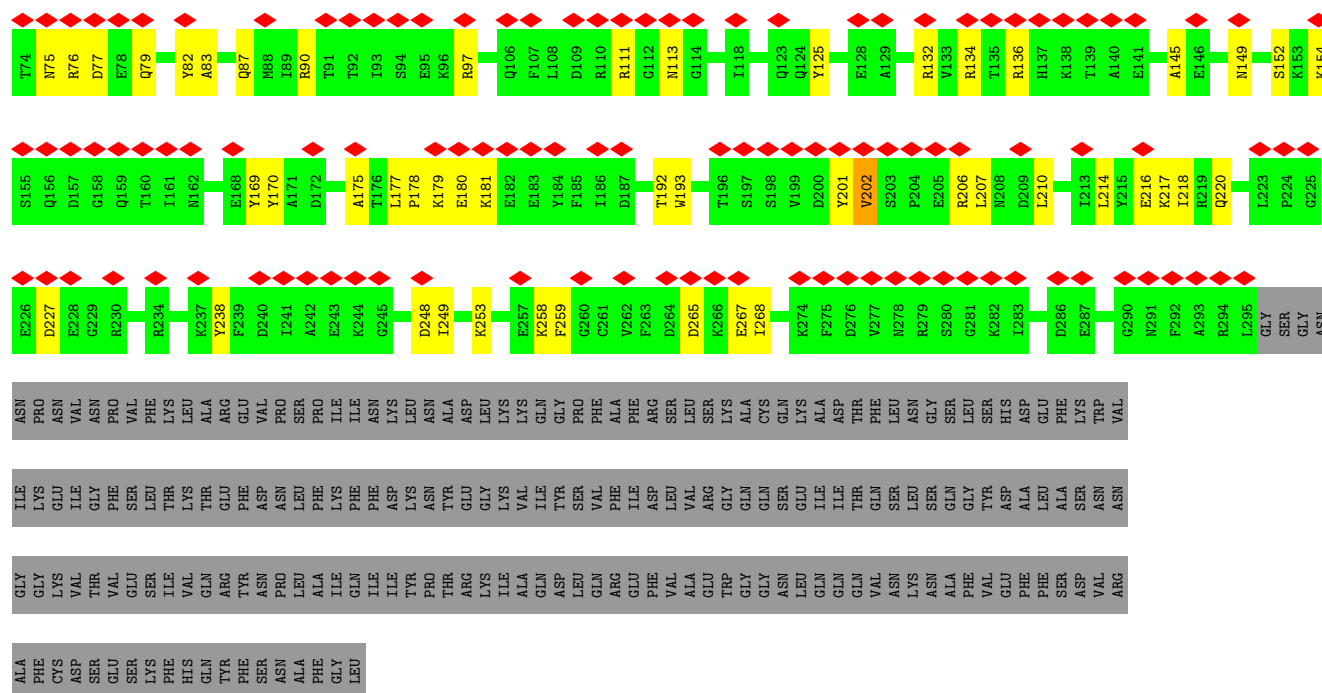
## • Molecule 16: RIB57



## • Molecule 16: RIB57

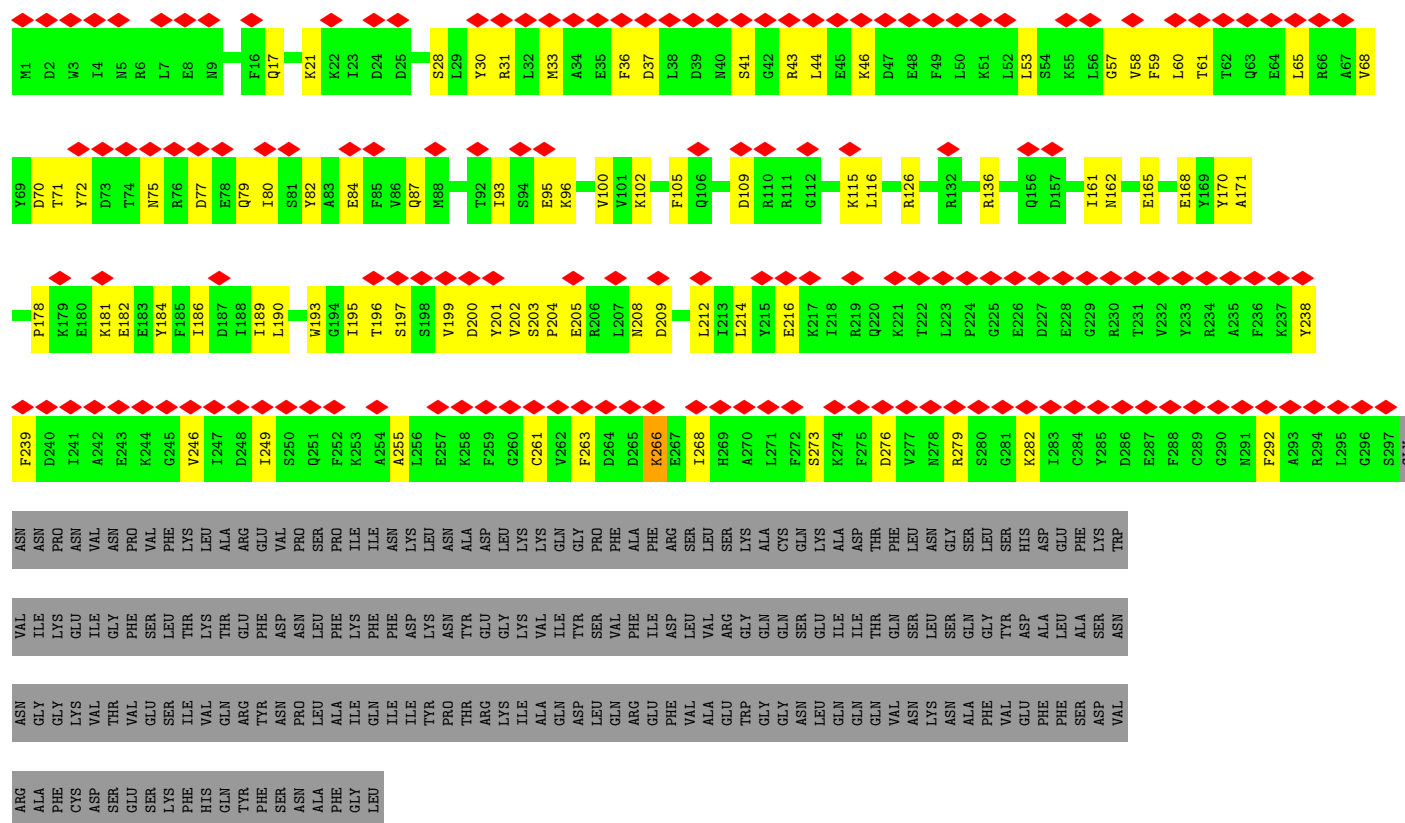






• Molecule 16: RIB57

Chain 3B:

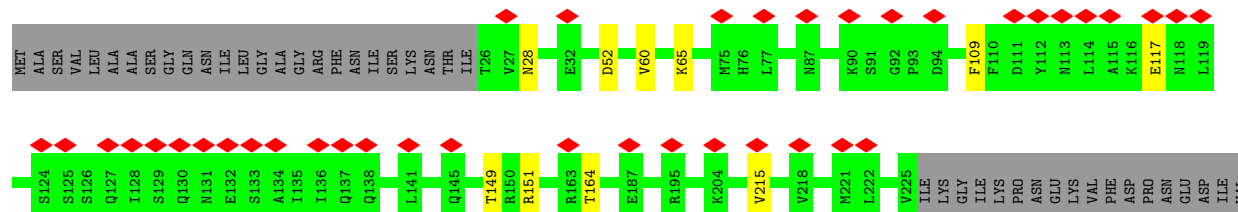


• Molecule 17: CFAP182A

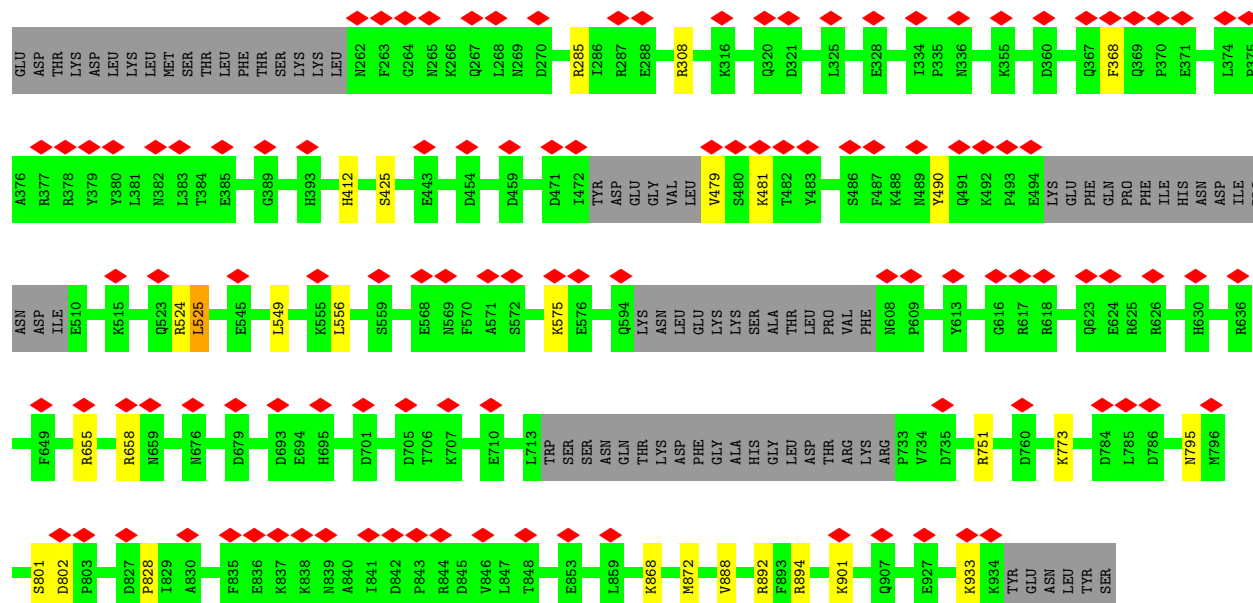




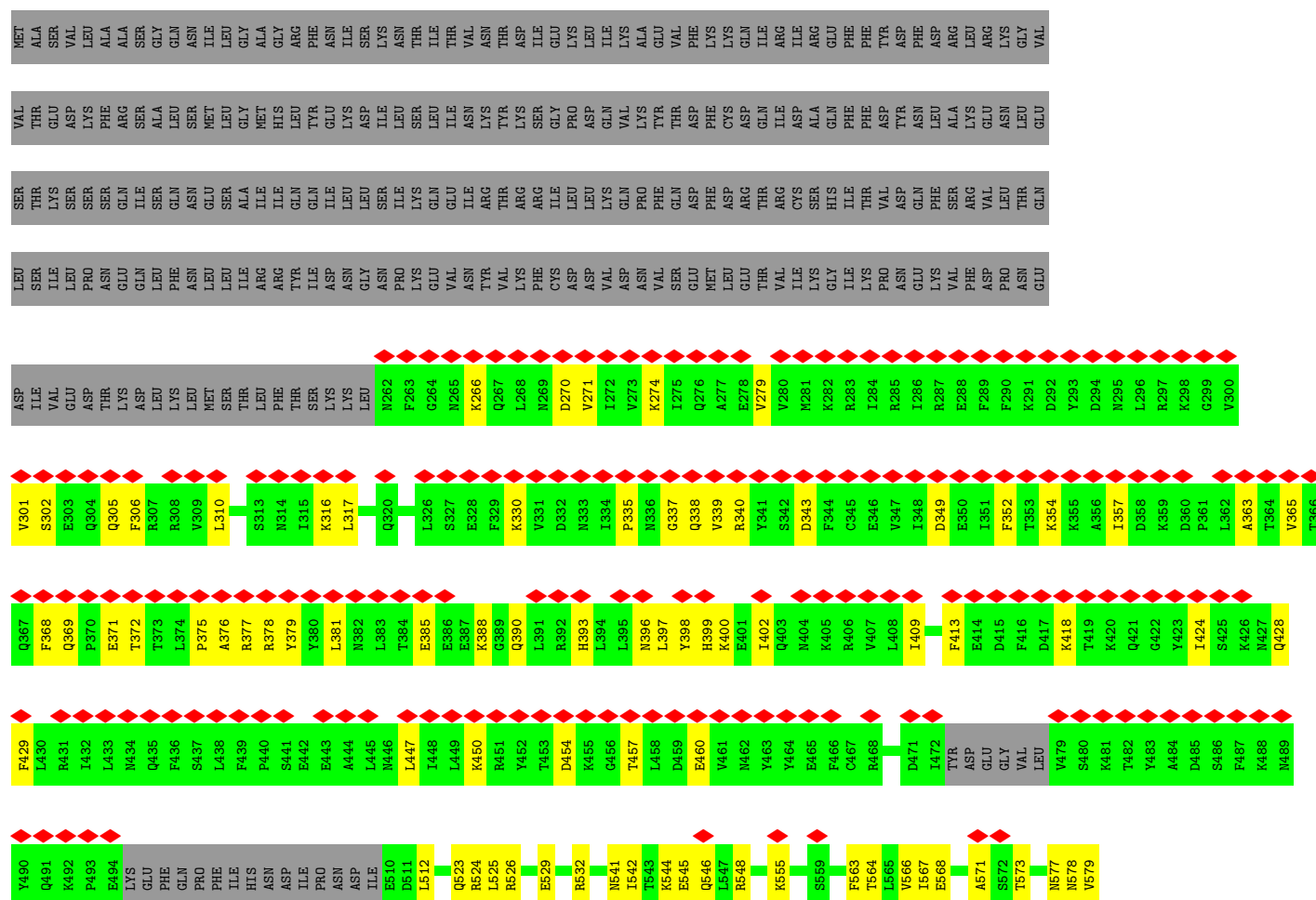






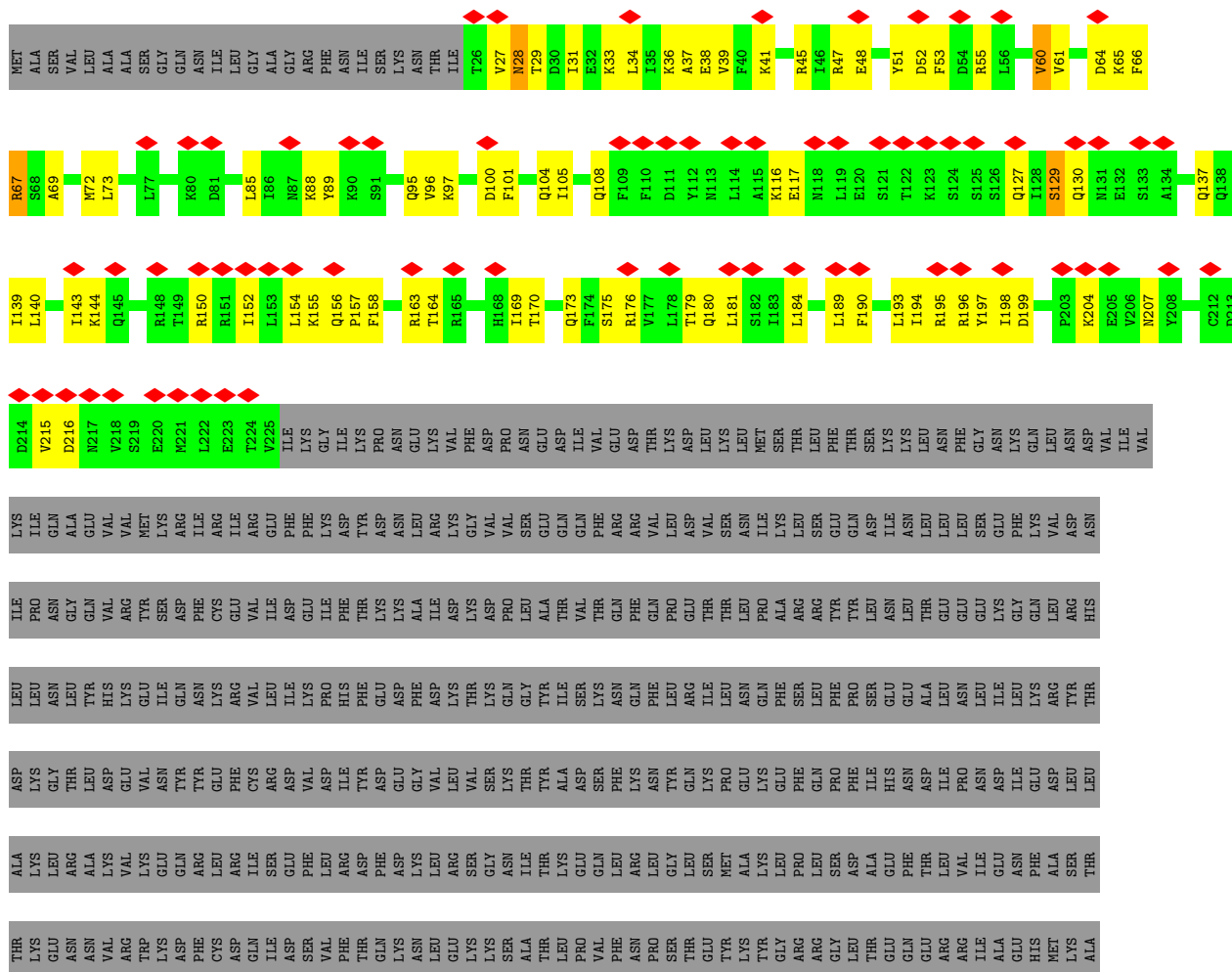


# Molecule 21: CFAP115





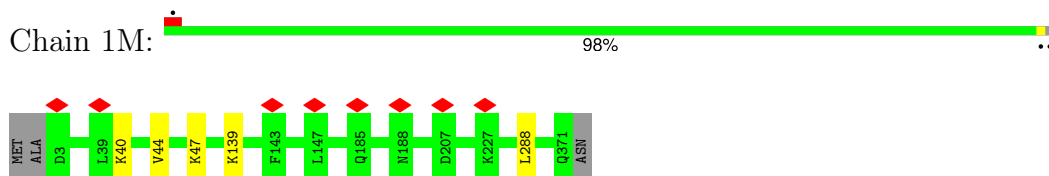
- Molecule 21: CFAP115



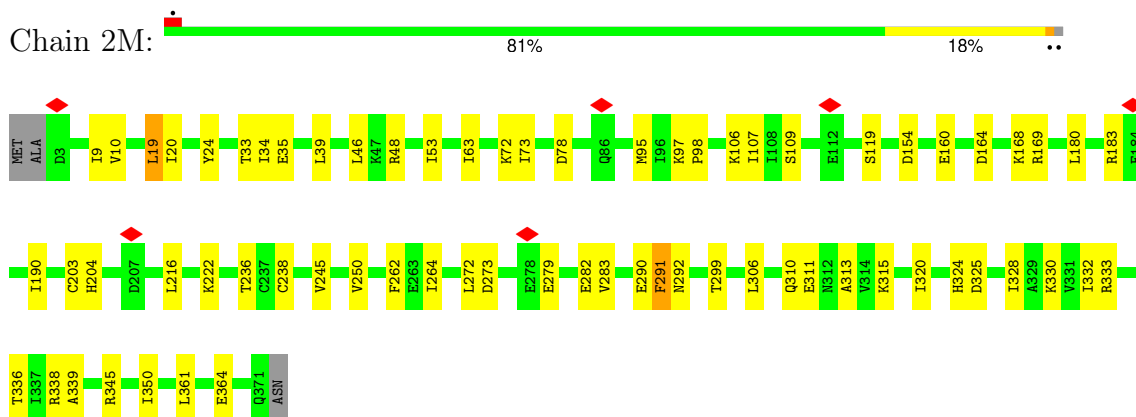


[illegible]

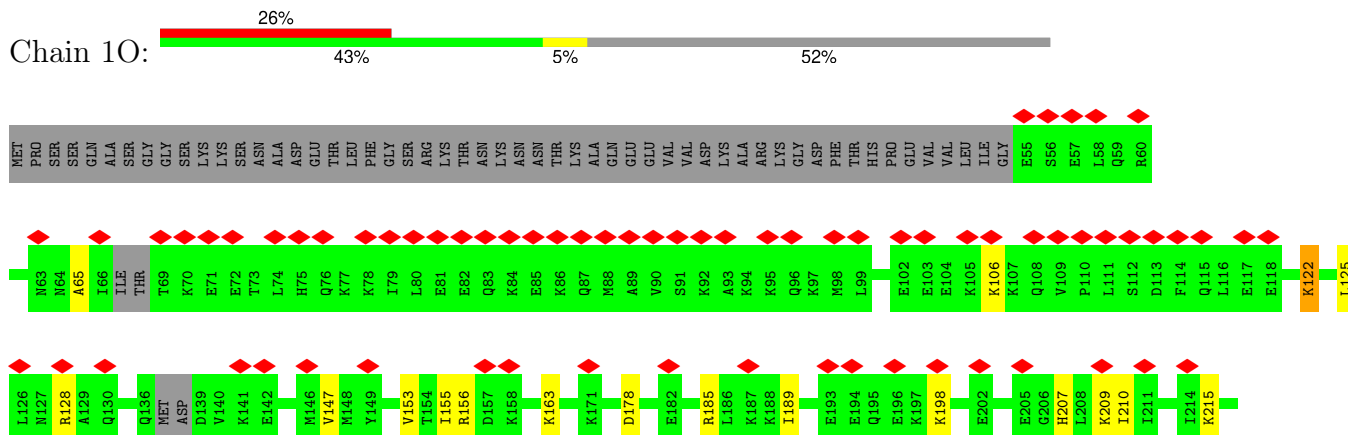
- Molecule 22: Nucleoside diphosphate kinase



- Molecule 22: Nucleoside diphosphate kinase



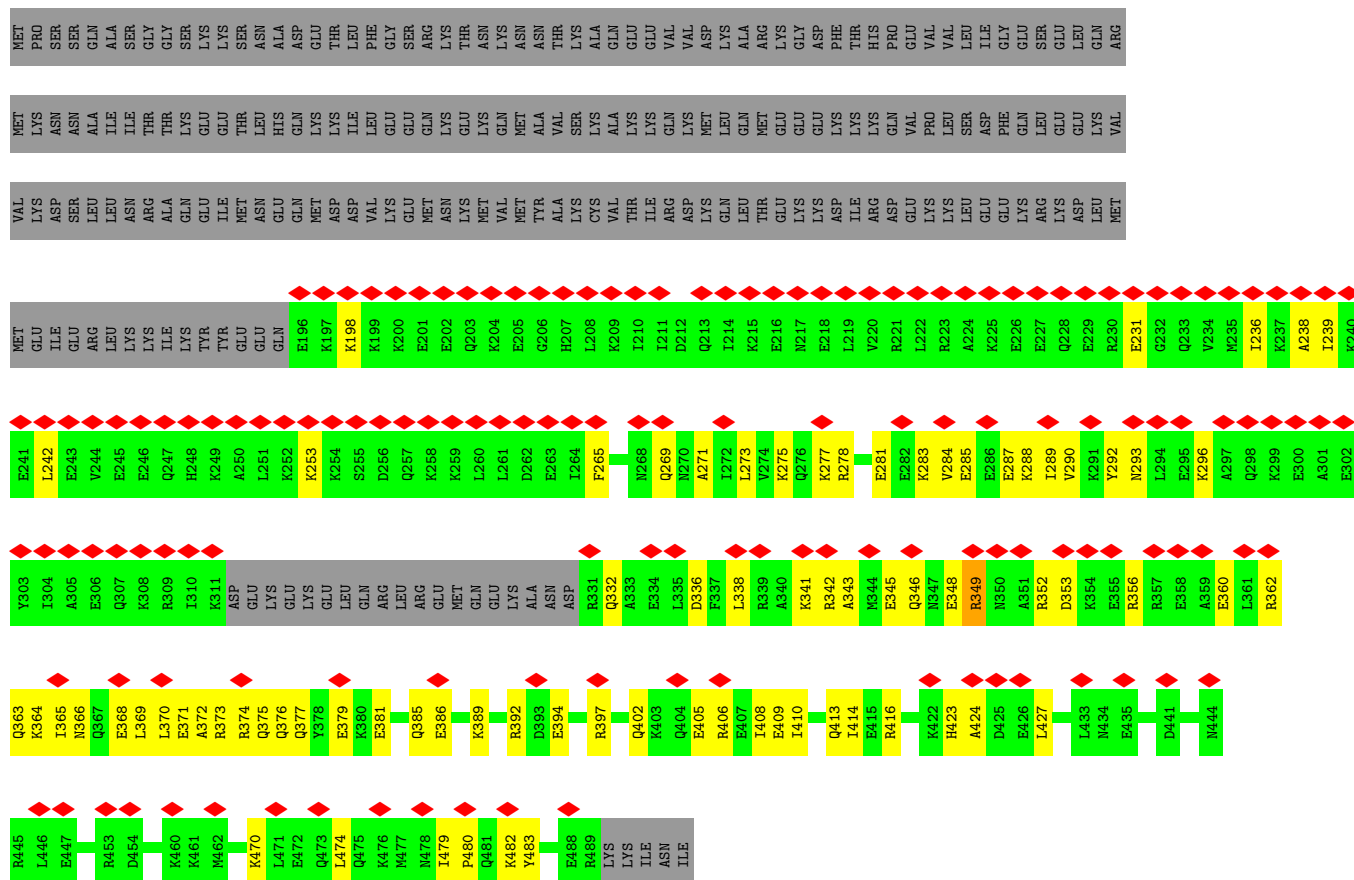
- Molecule 23: Cilia- and flagella-associated protein 45



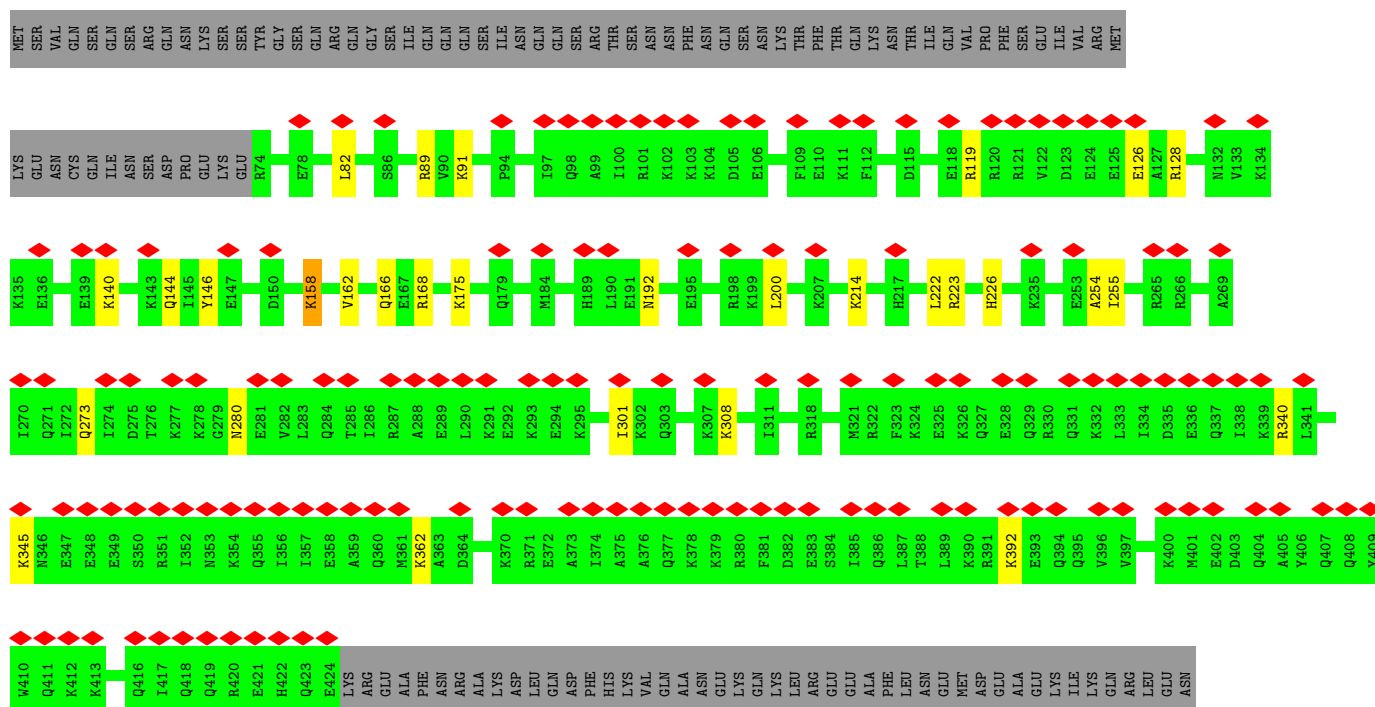




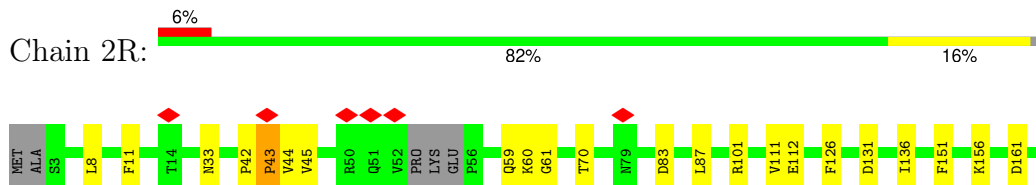




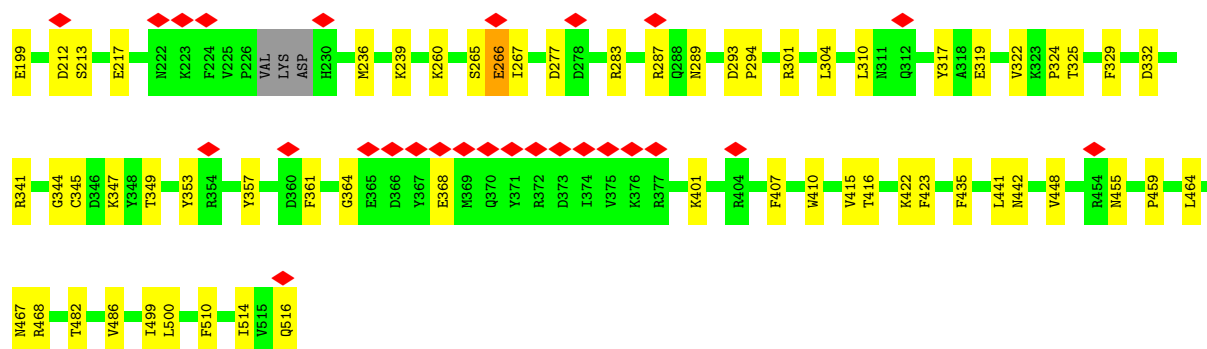
### • Molecule 24: CFAP210



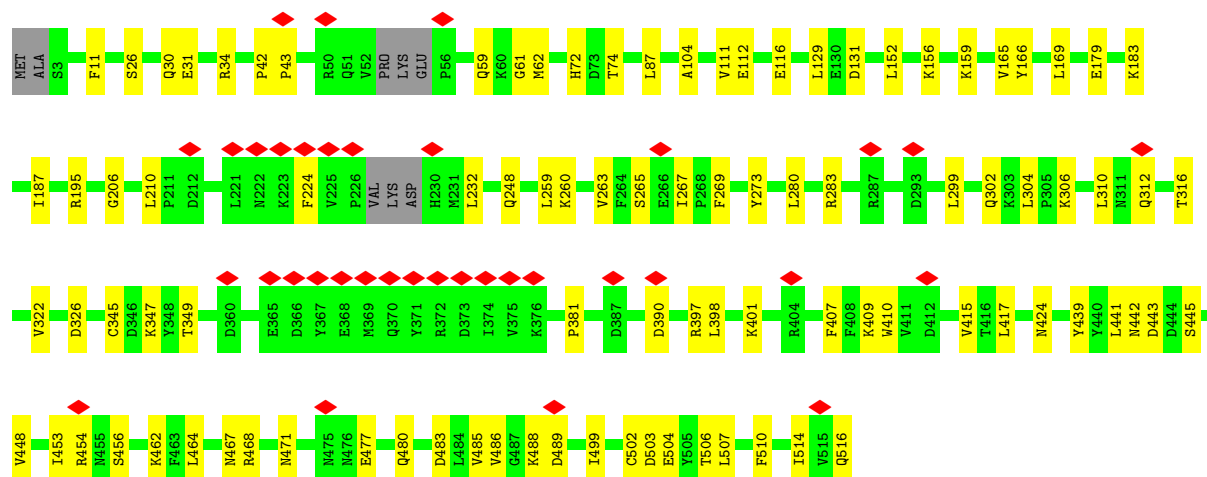
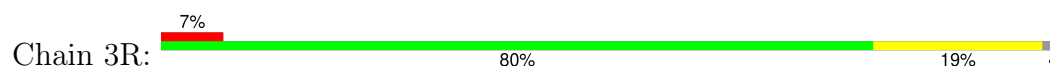




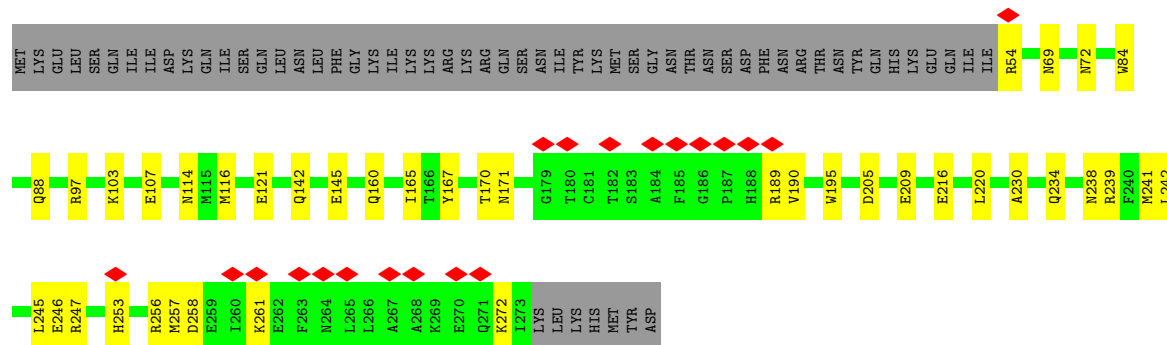




• Molecule 25: RIB72B



• Molecule 26: Protofilament ribbon protein

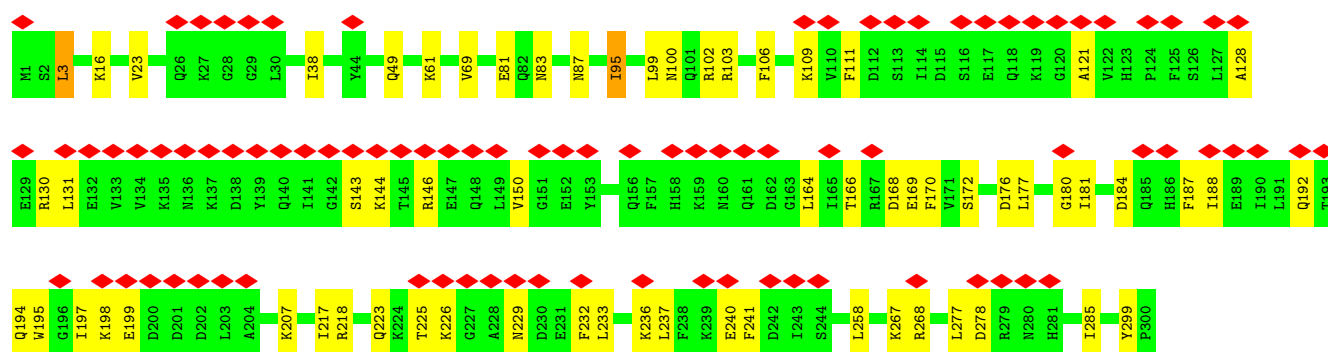
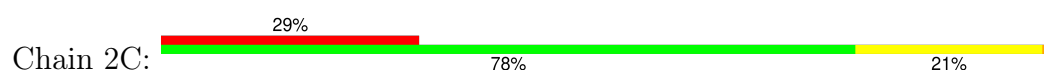


• Molecule 26: Protofilament ribbon protein

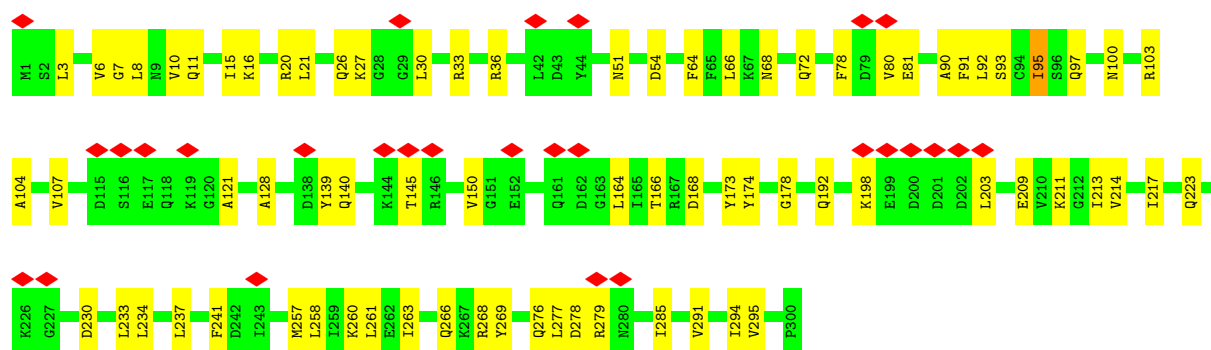
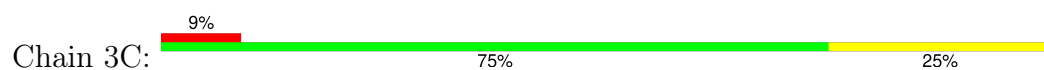




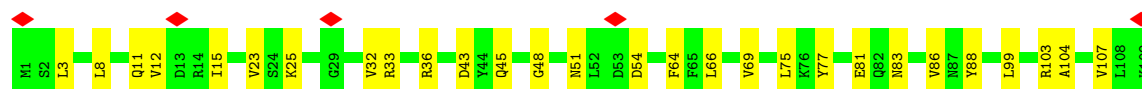
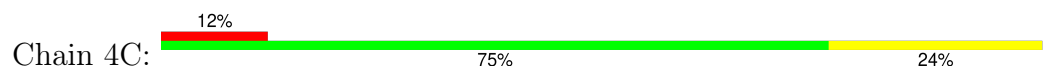
- Molecule 27: RIB35



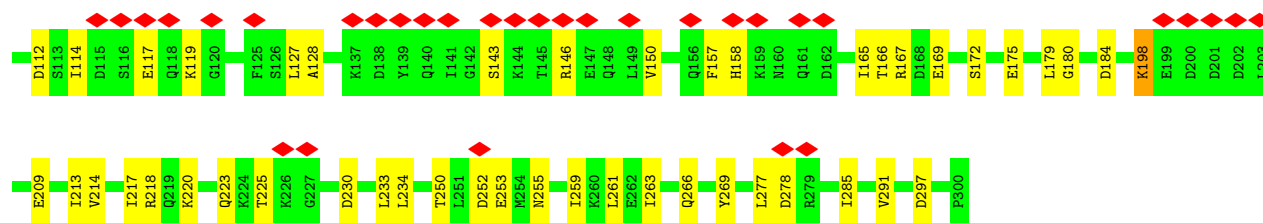
- Molecule 27: RIB35



- Molecule 27: RIB35



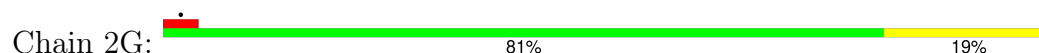




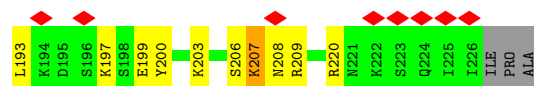
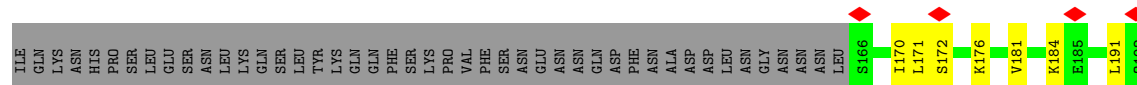
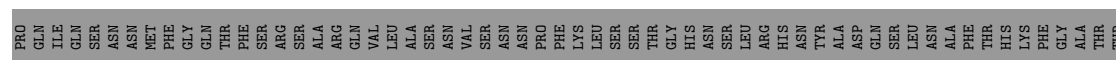
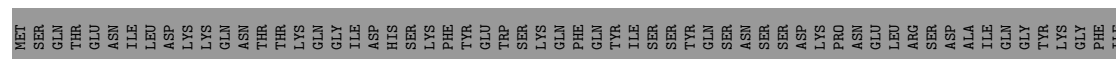
- Molecule 28: CFAP182B



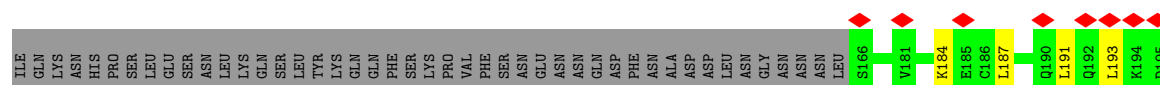
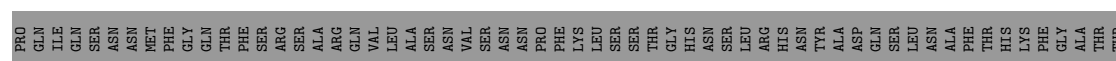
- Molecule 29: Flagellar FliJ protein



- Molecule 30: RIB27B



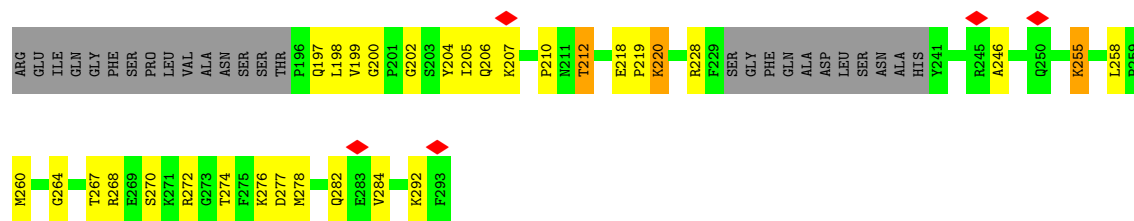
- Molecule 30: RIB27B



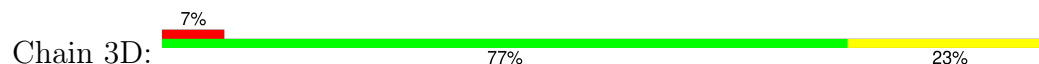




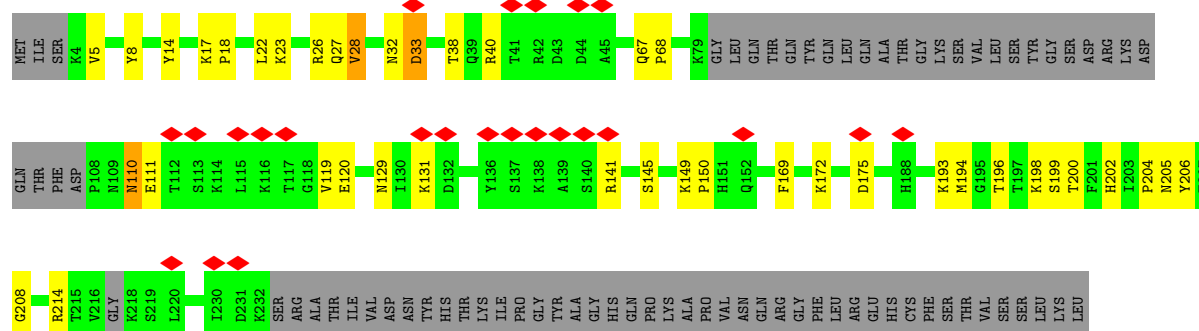




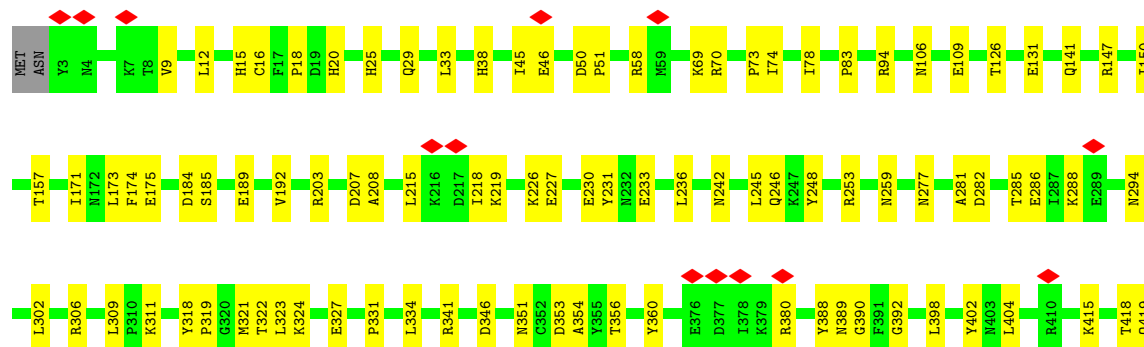
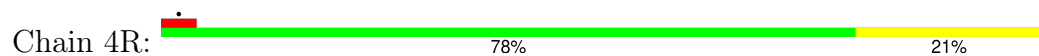
• Molecule 32: RIB26



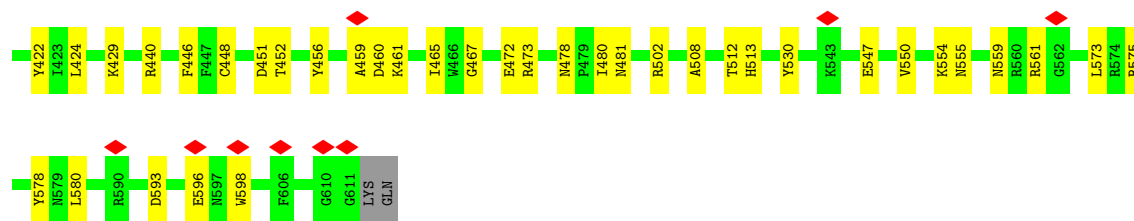
• Molecule 33: CFAP129



• Molecule 34: Flagellar microtubule protofilament ribbon protein

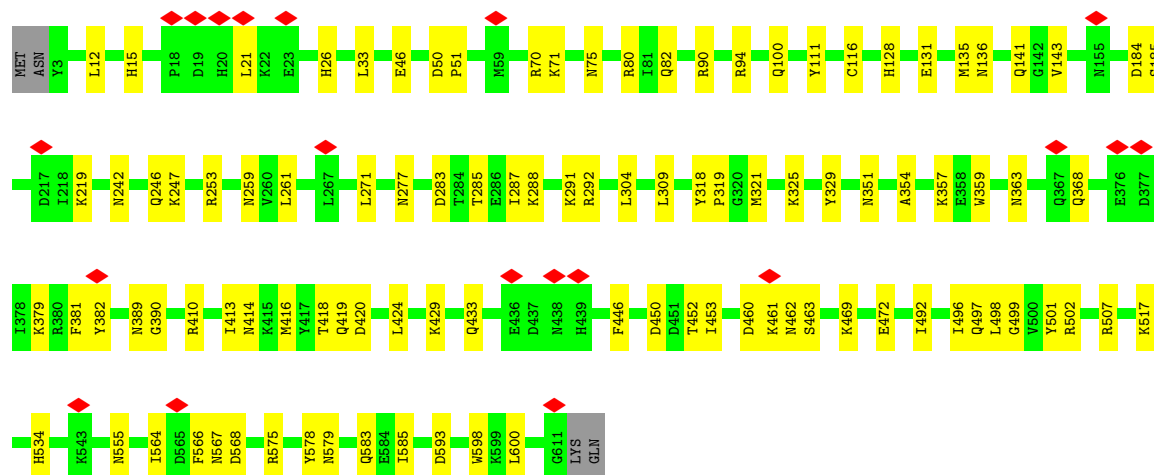






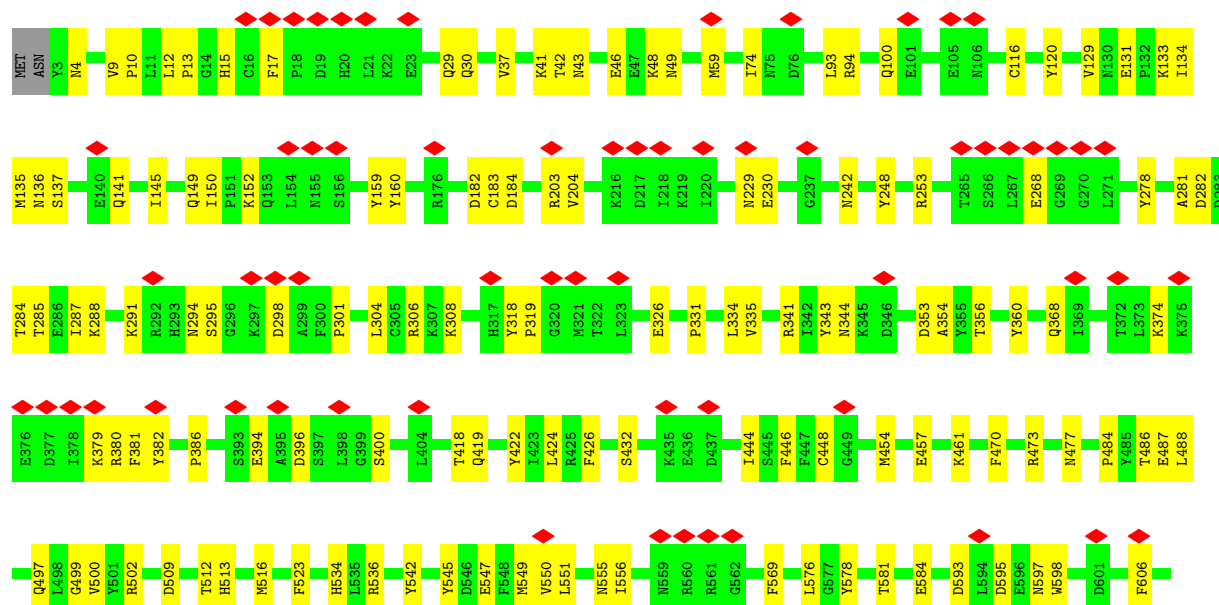
• Molecule 34: Flagellar microtugule protofilament ribbon protein

Chain 5R: 83% 17%

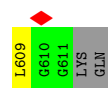


• Molecule 34: Flagellar microtugule protofilament ribbon protein

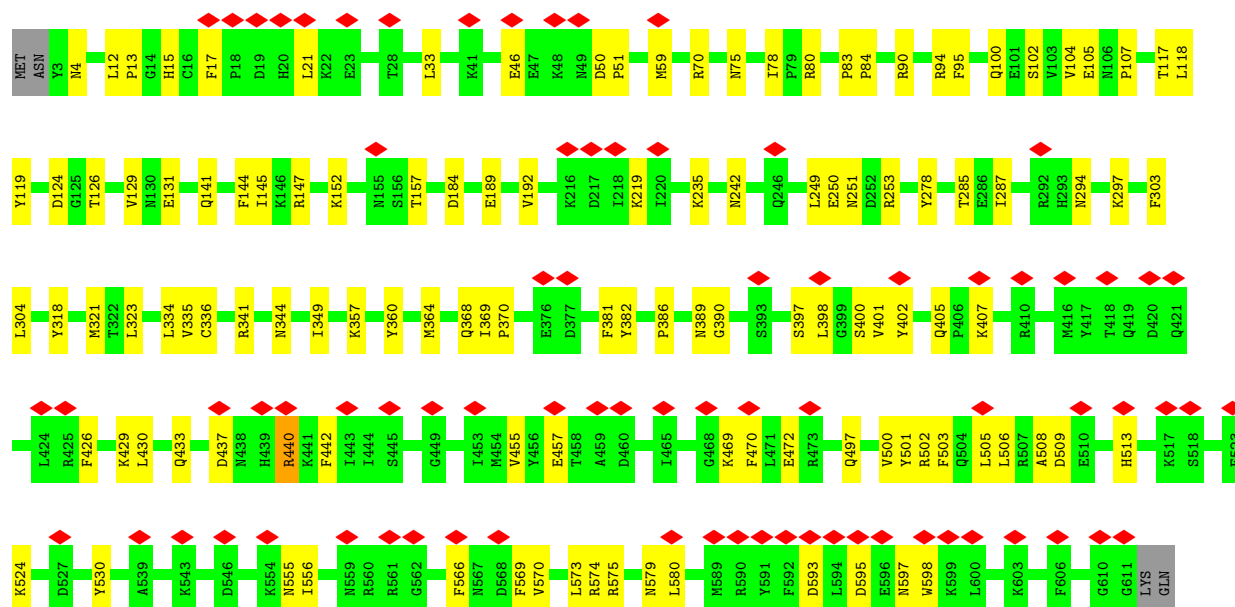
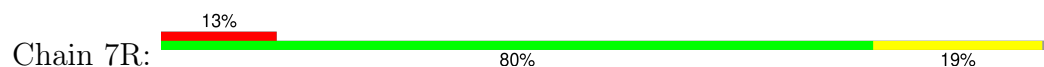
Chain 6R: 10% 77% 22%



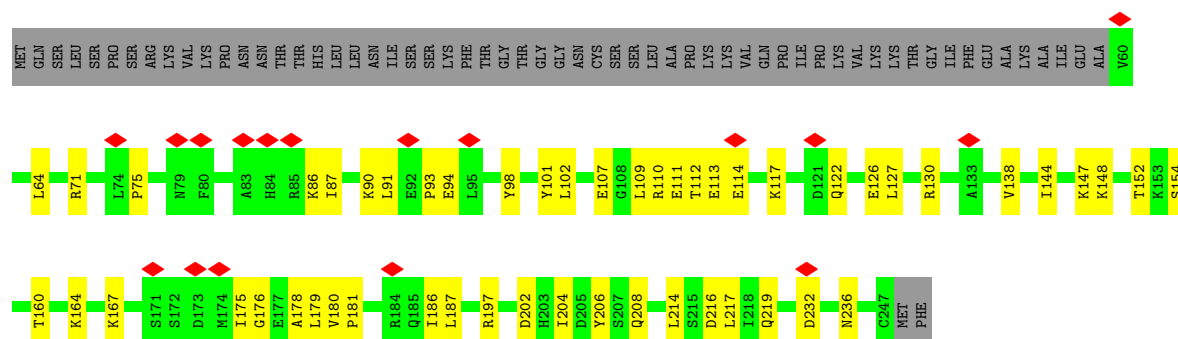




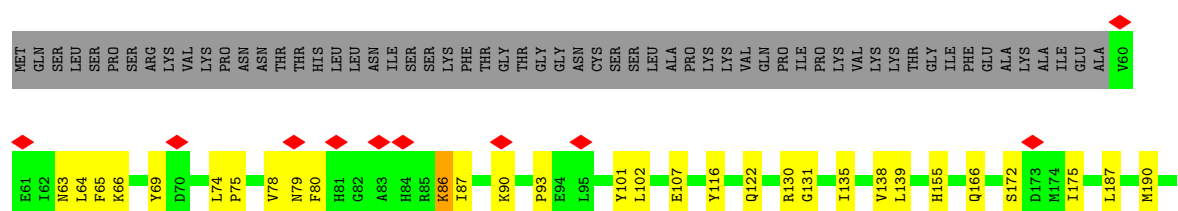
• Molecule 34: Flagellar microtubule protofilament ribbon protein



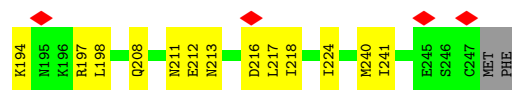
• Molecule 35: Parkin co-regulated protein PACRGB



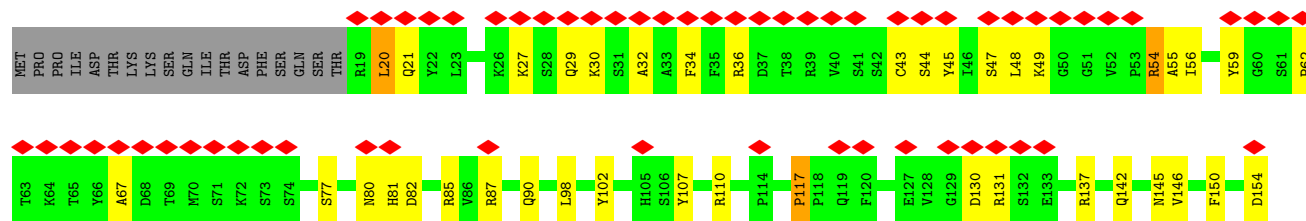
• Molecule 35: Parkin co-regulated protein PACRGB



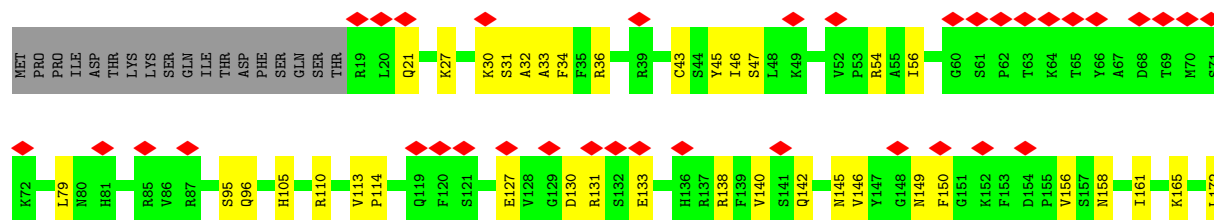




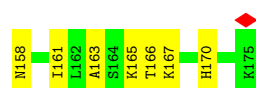
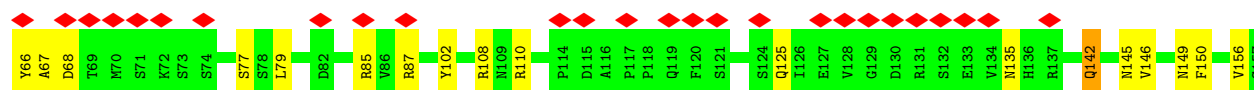
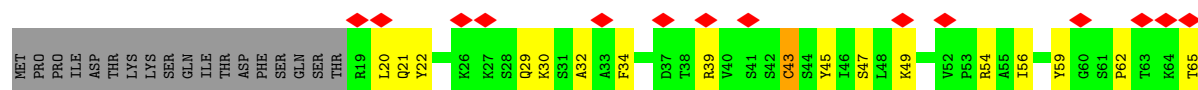
• Molecule 36: OJ2



• Molecule 36: OJ2

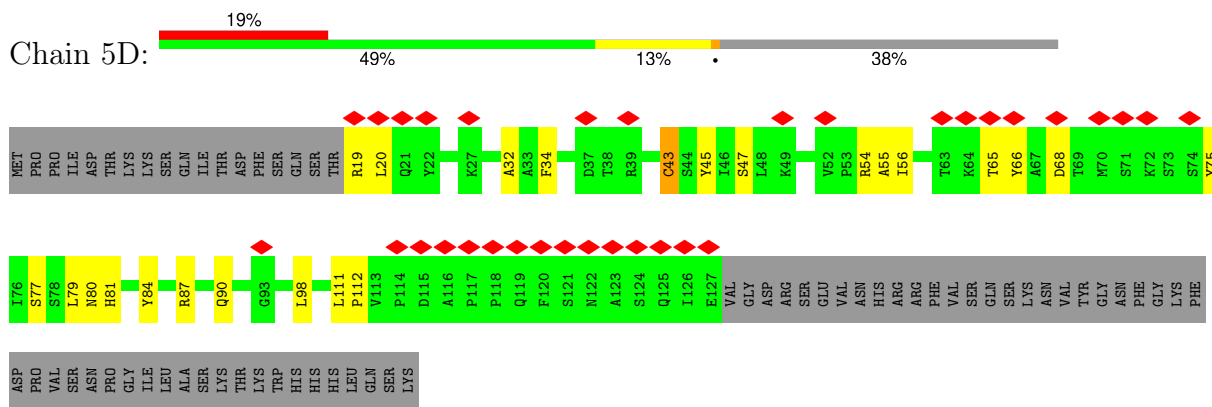


• Molecule 36: OJ2

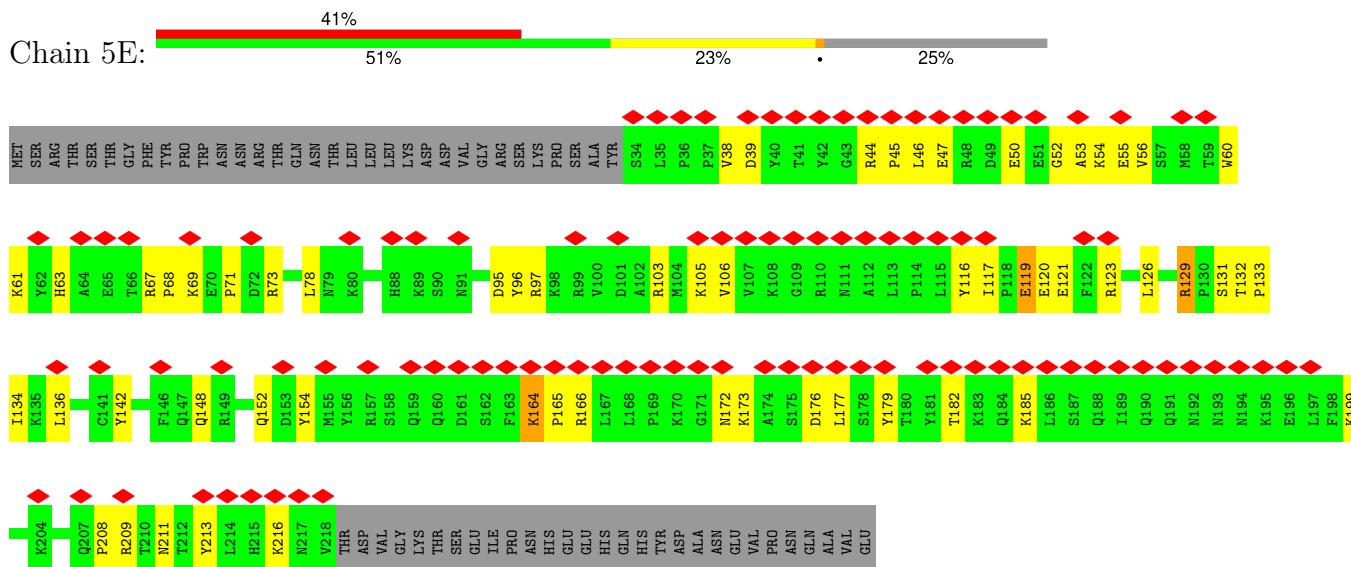


• Molecule 36: OJ2

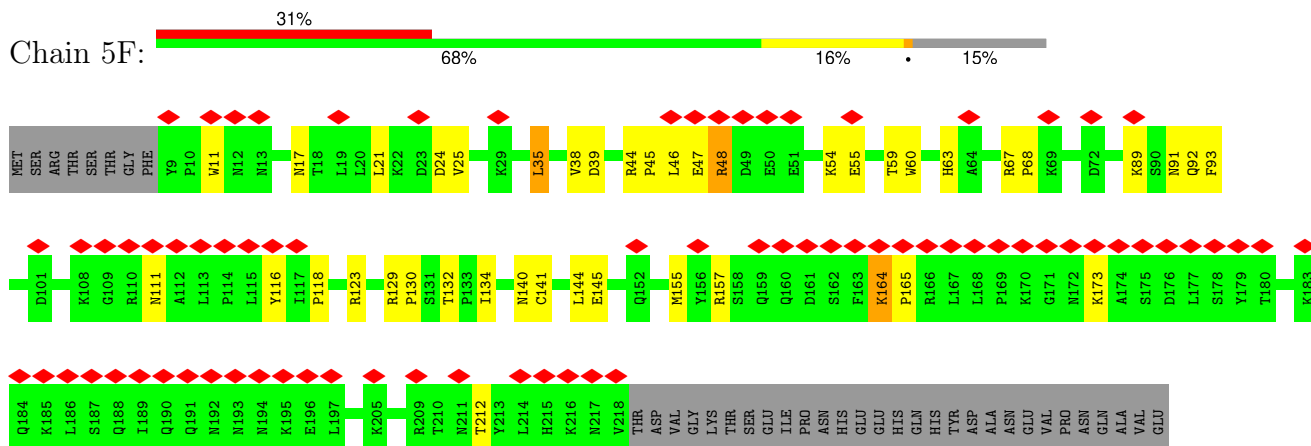




- Molecule 37: CFAP77A



- Molecule 37: CFAP77A

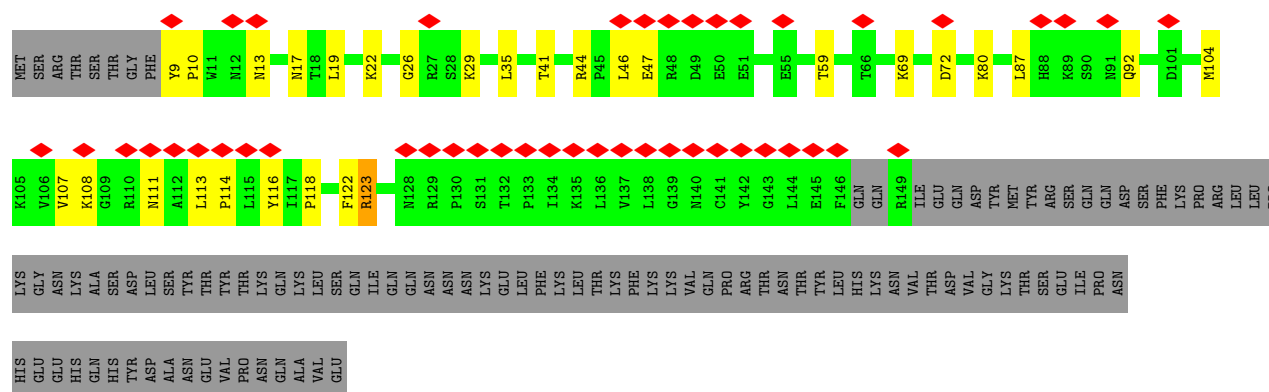


- Molecule 37: CFAP77A

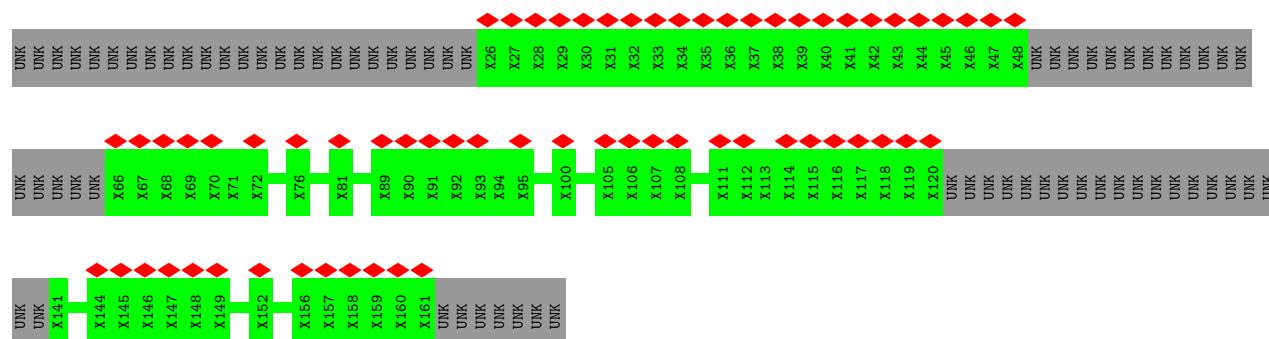
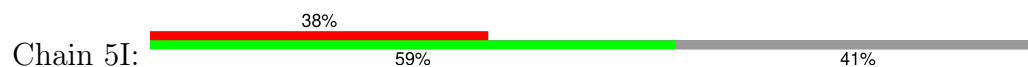




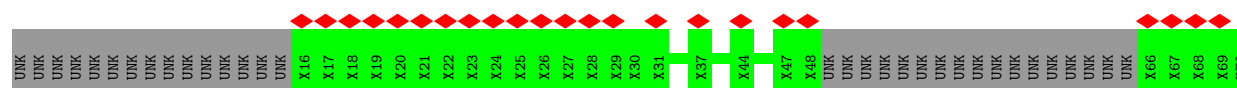
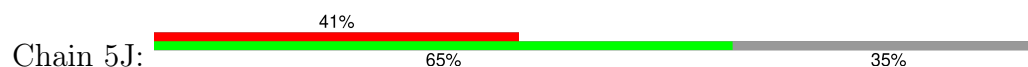
- Molecule 37: CFAP77A



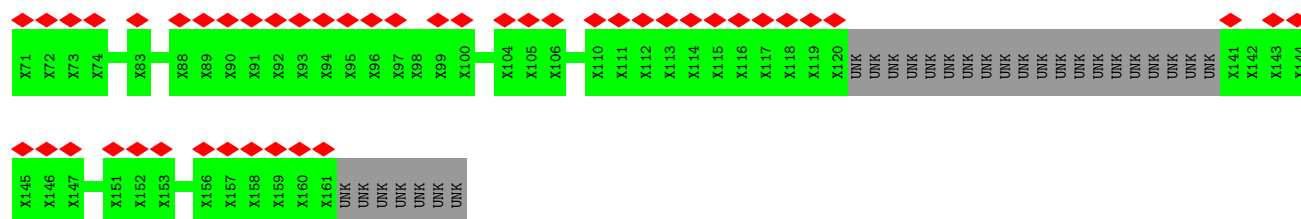
- Molecule 38: OJ3



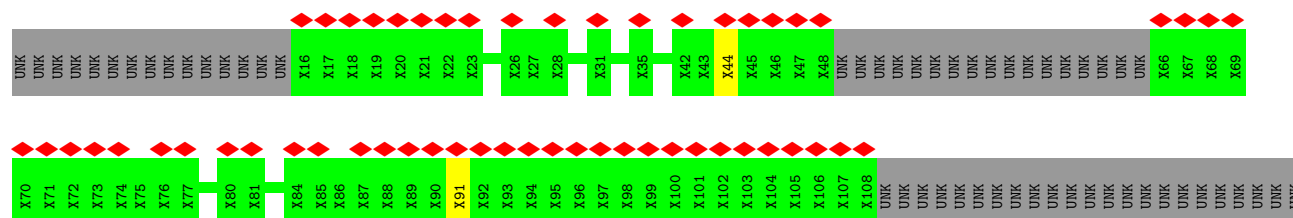
- Molecule 38: OJ3



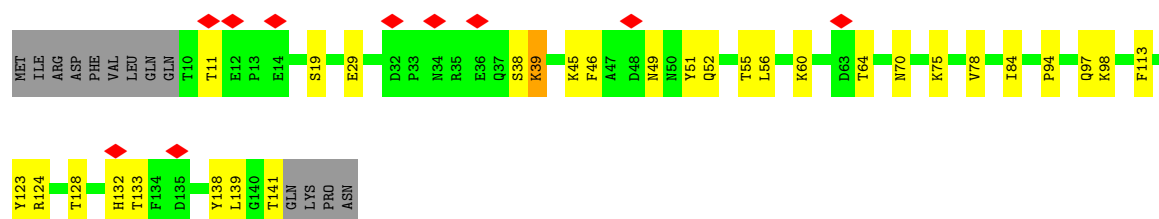




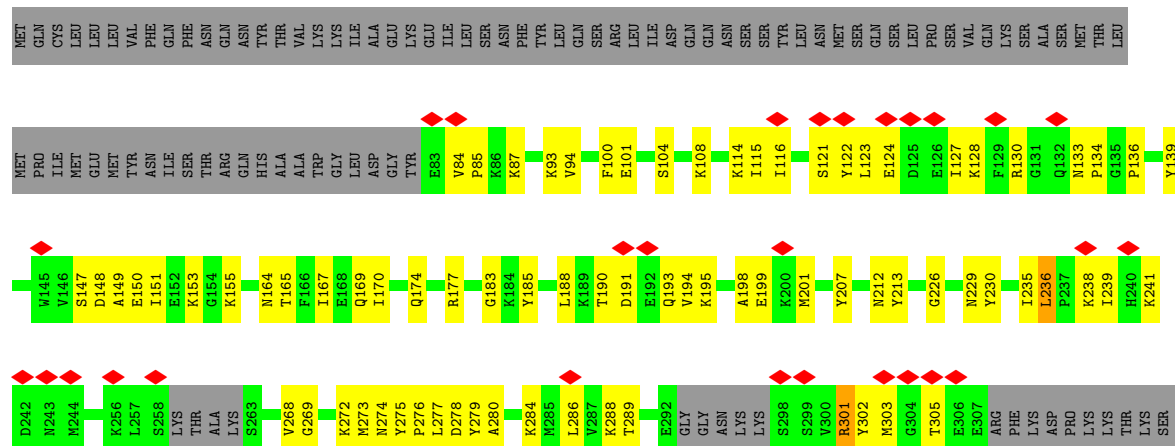
• Molecule 38: OJ3



• Molecule 39: SB1



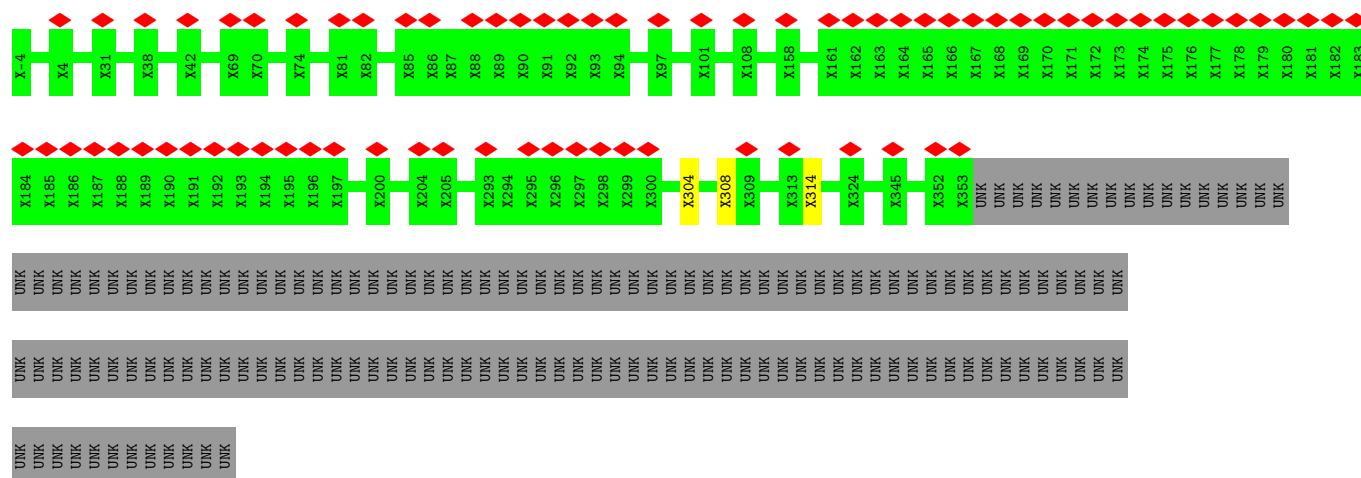
• Molecule 40: STPG1A



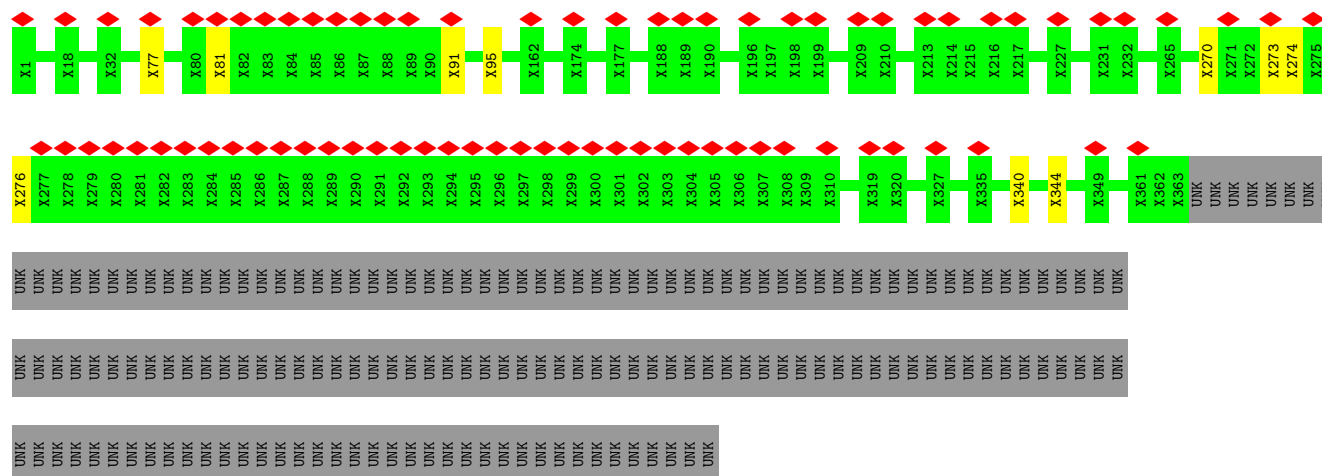




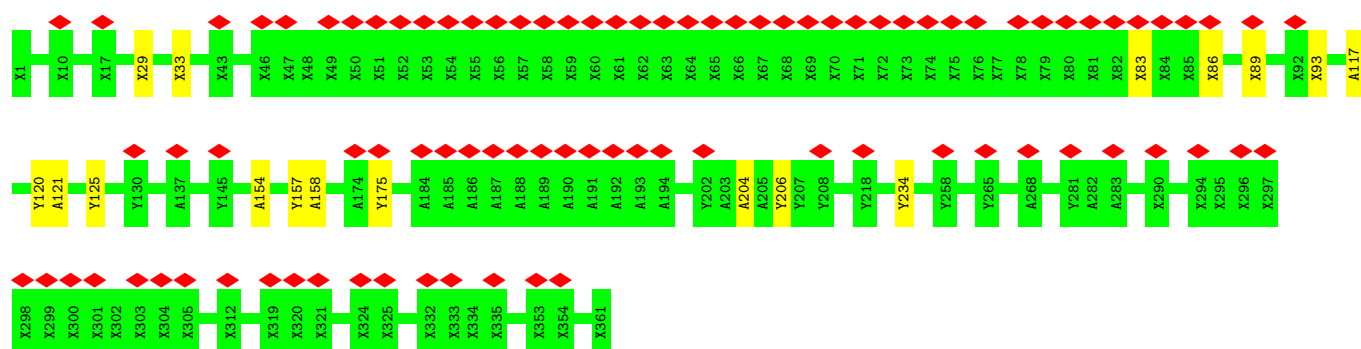




- Molecule 43: CFAP112A

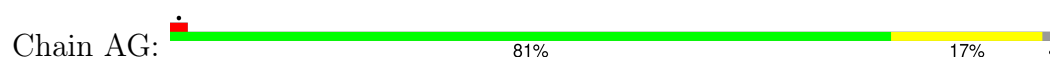


- Molecule 44: B2B3\_fMIP

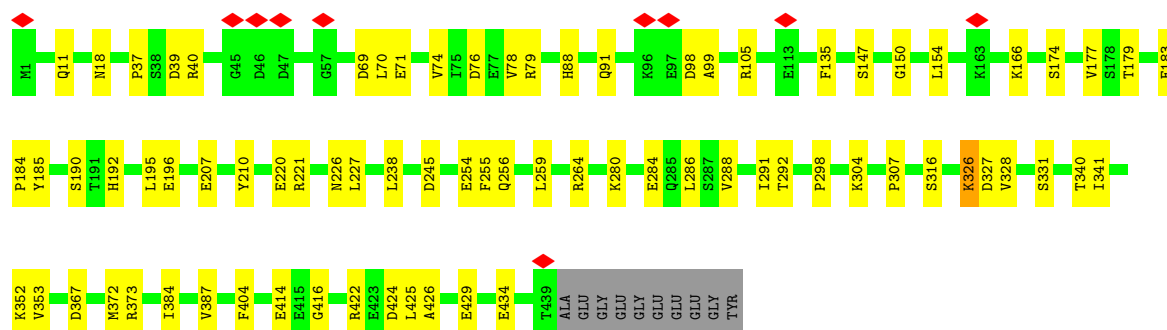


- Molecule 45: Tubulin alpha chain



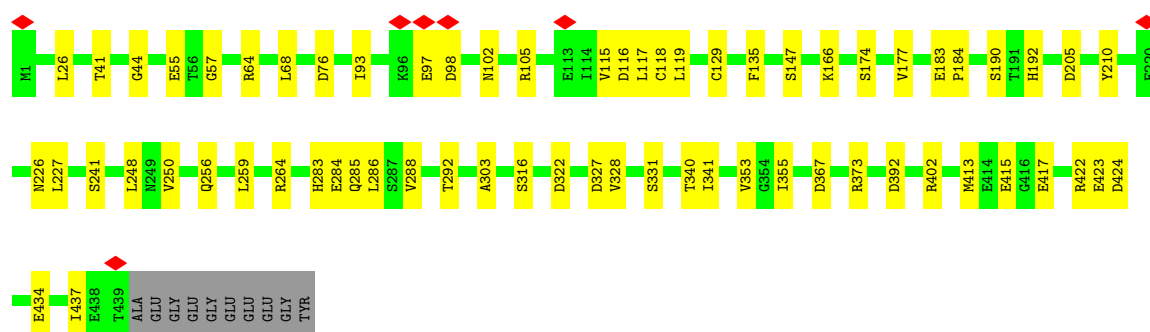






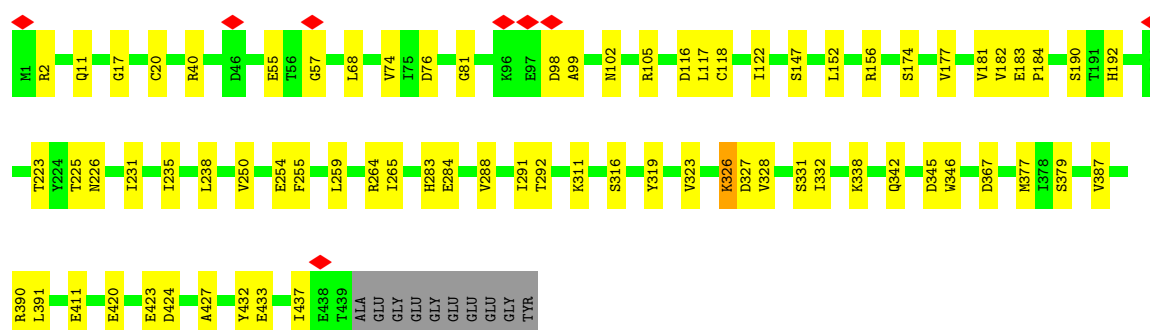
• Molecule 45: Tubulin alpha chain

Chain AI: 83% 15%



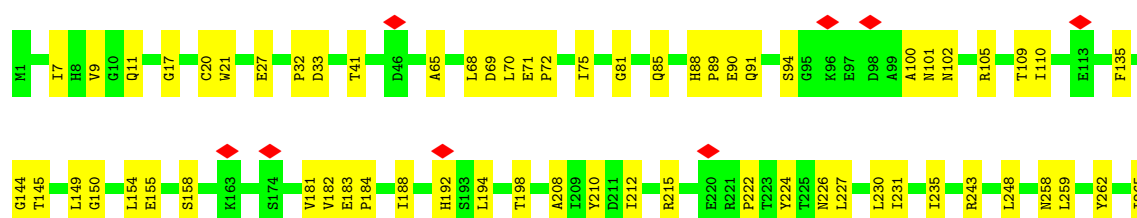
• Molecule 45: Tubulin alpha chain

Chain AK: 81% 16%

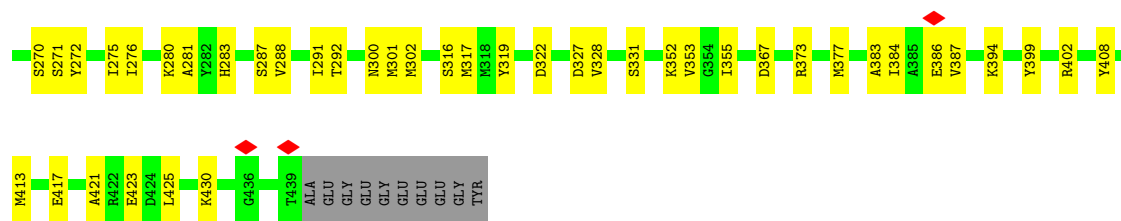


• Molecule 45: Tubulin alpha chain

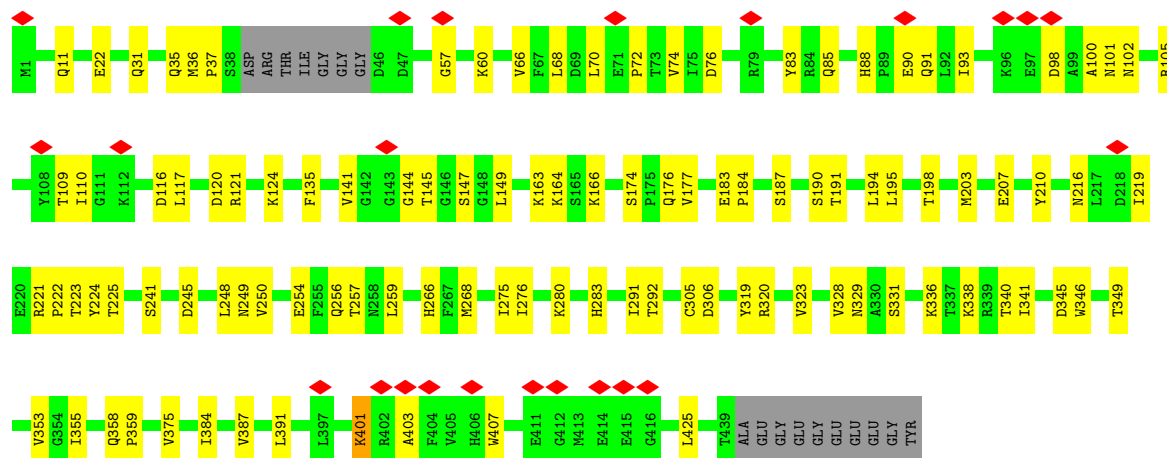
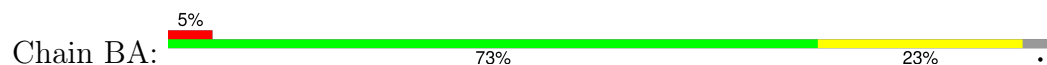
Chain AM: 74% 23%



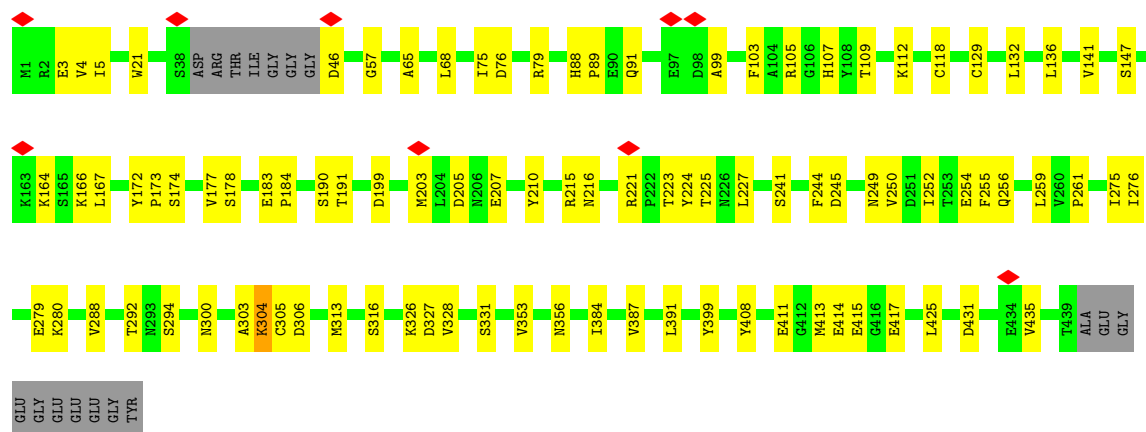
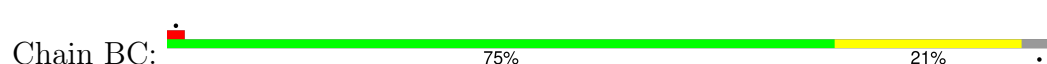




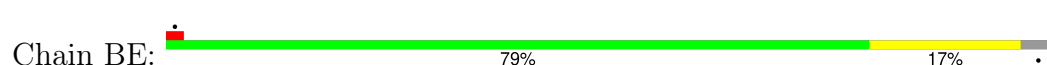
• Molecule 45: Tubulin alpha chain



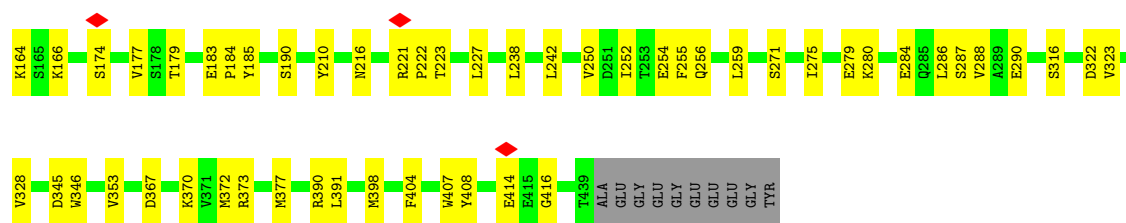
• Molecule 45: Tubulin alpha chain



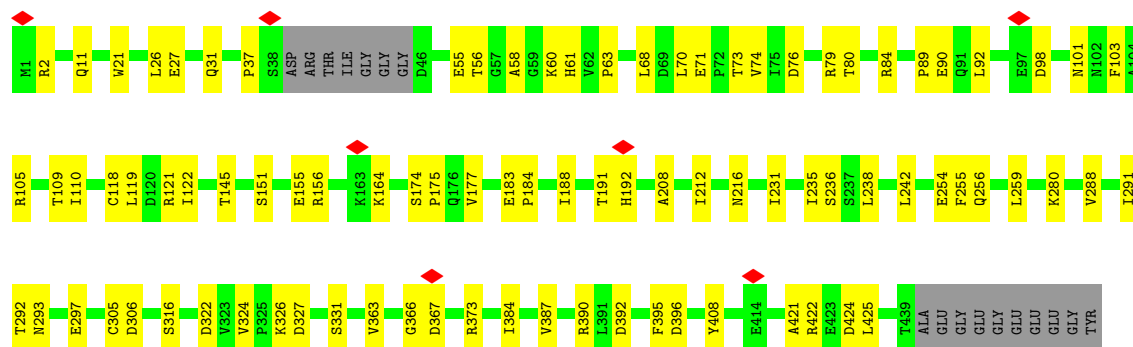
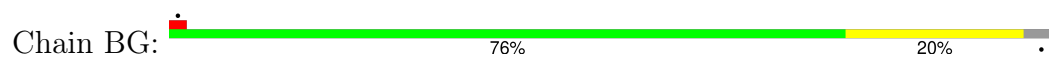
• Molecule 45: Tubulin alpha chain



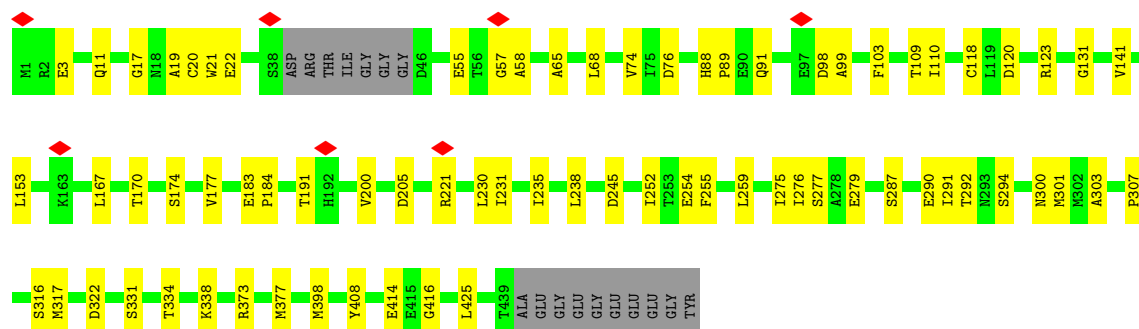
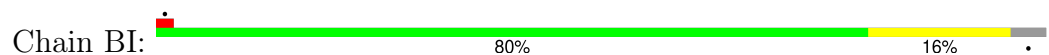




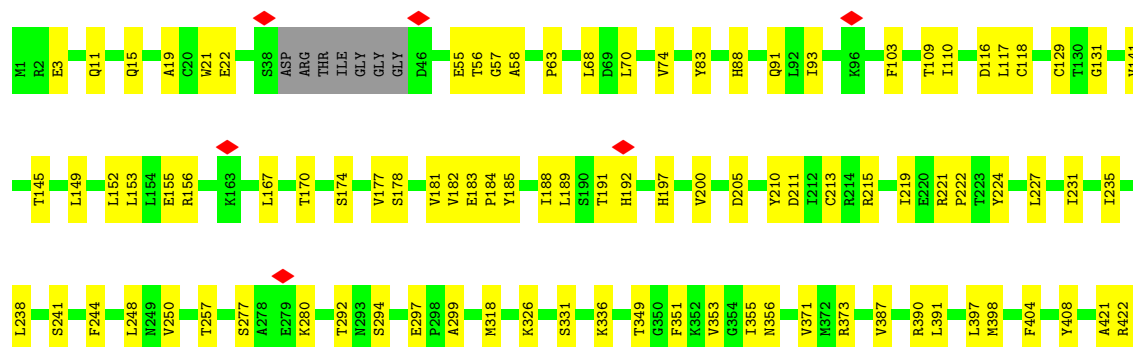
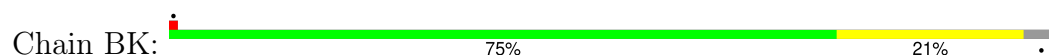
• Molecule 45: Tubulin alpha chain



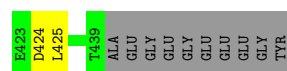
• Molecule 45: Tubulin alpha chain



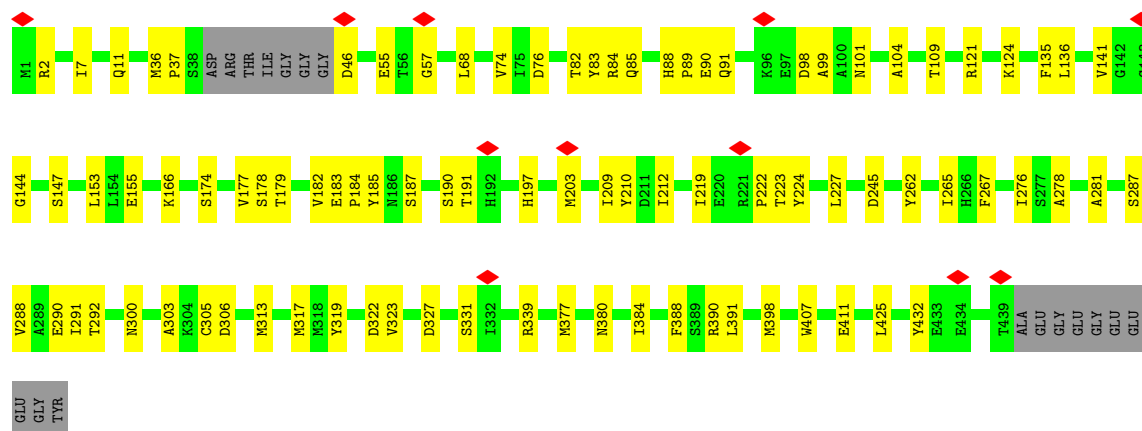
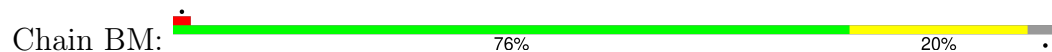
• Molecule 45: Tubulin alpha chain



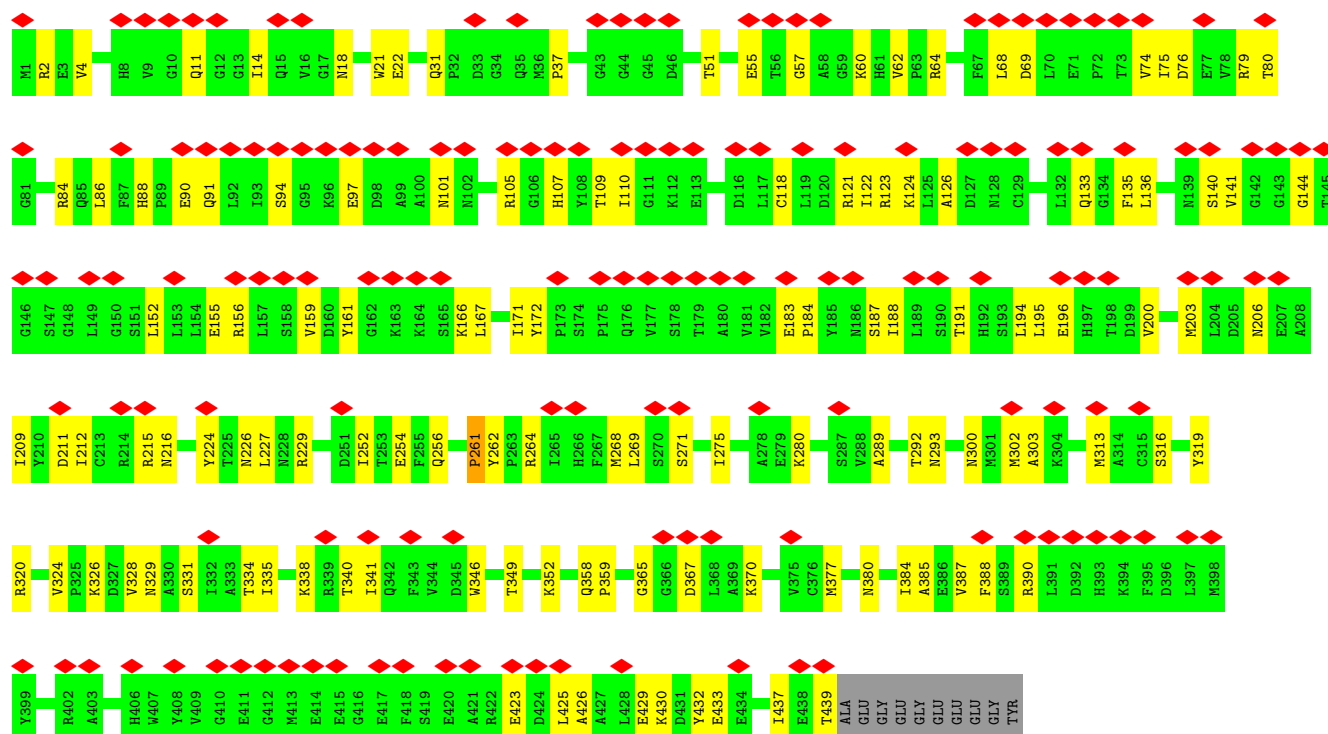




- Molecule 45: Tubulin alpha chain



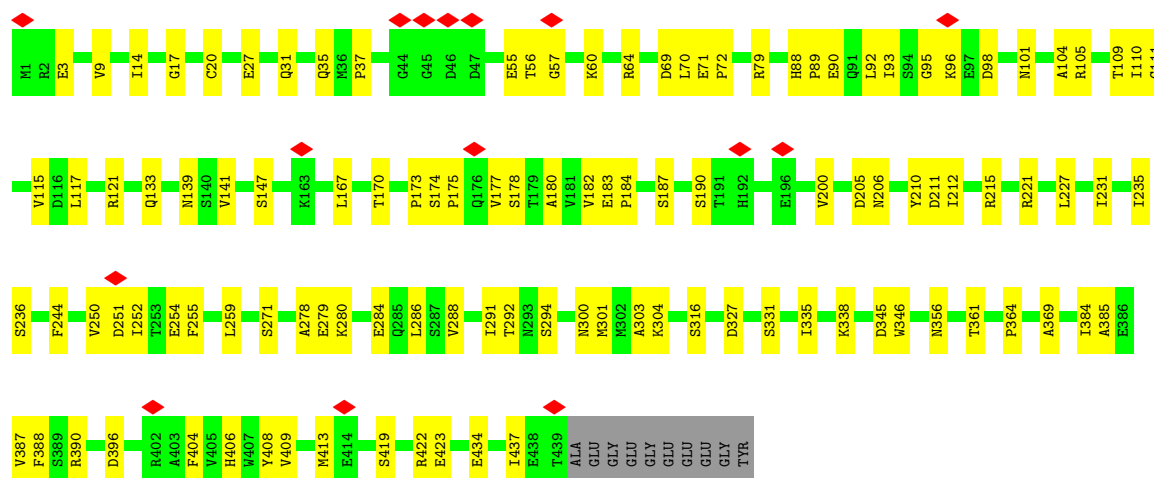
- Molecule 45: Tubulin alpha chain



- Molecule 45: Tubulin alpha chain

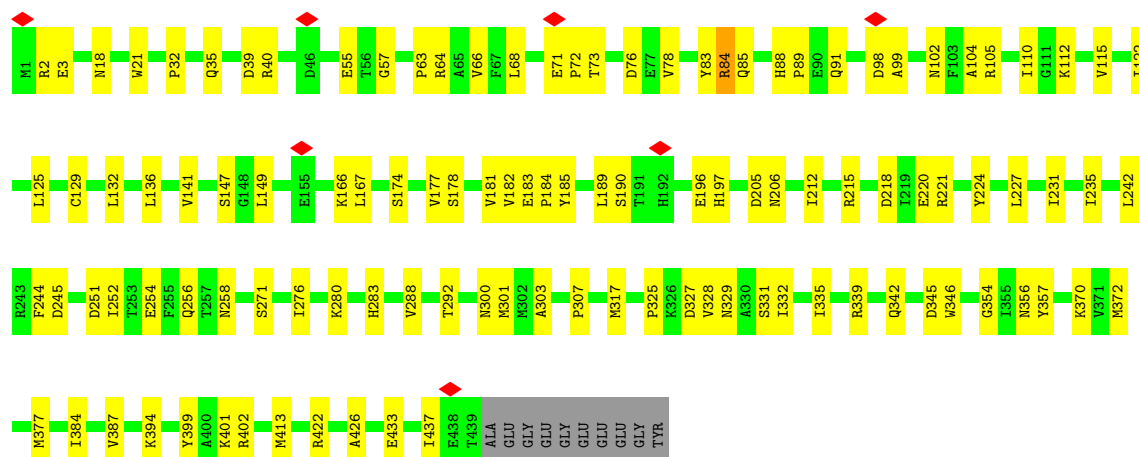






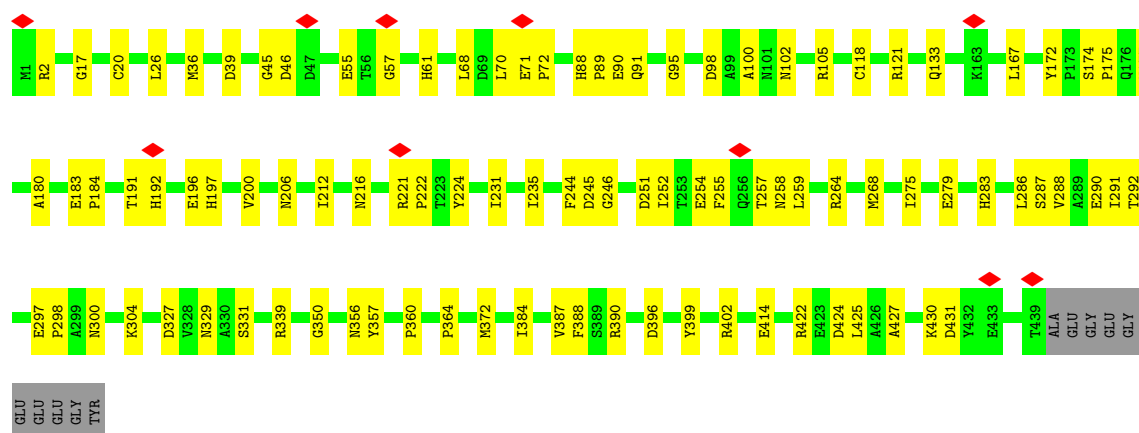
• Molecule 45: Tubulin alpha chain

Chain CE: 73% 25%



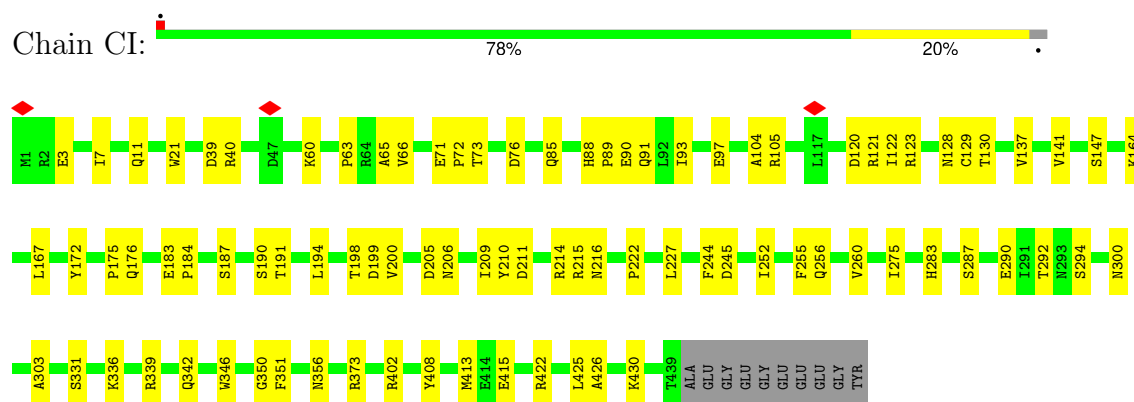
• Molecule 45: Tubulin alpha chain

Chain CG: 76% 22%

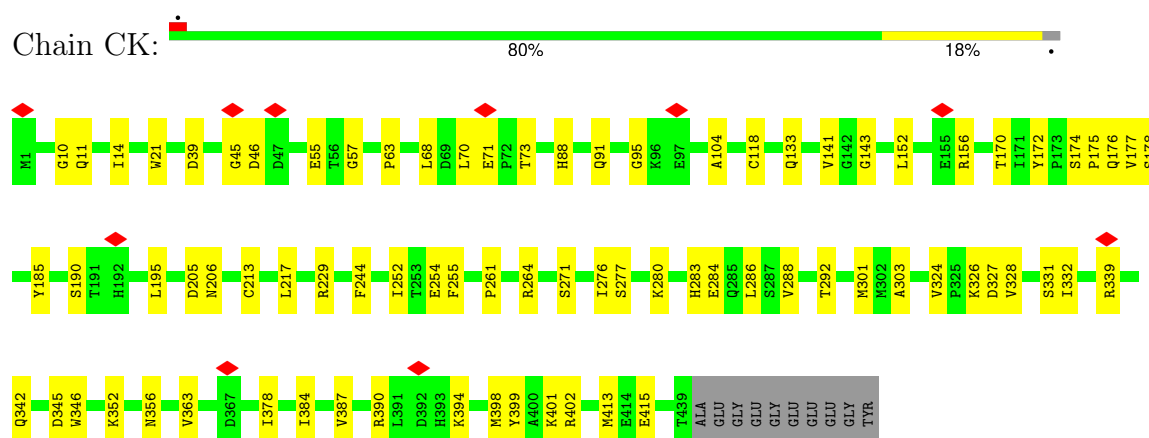




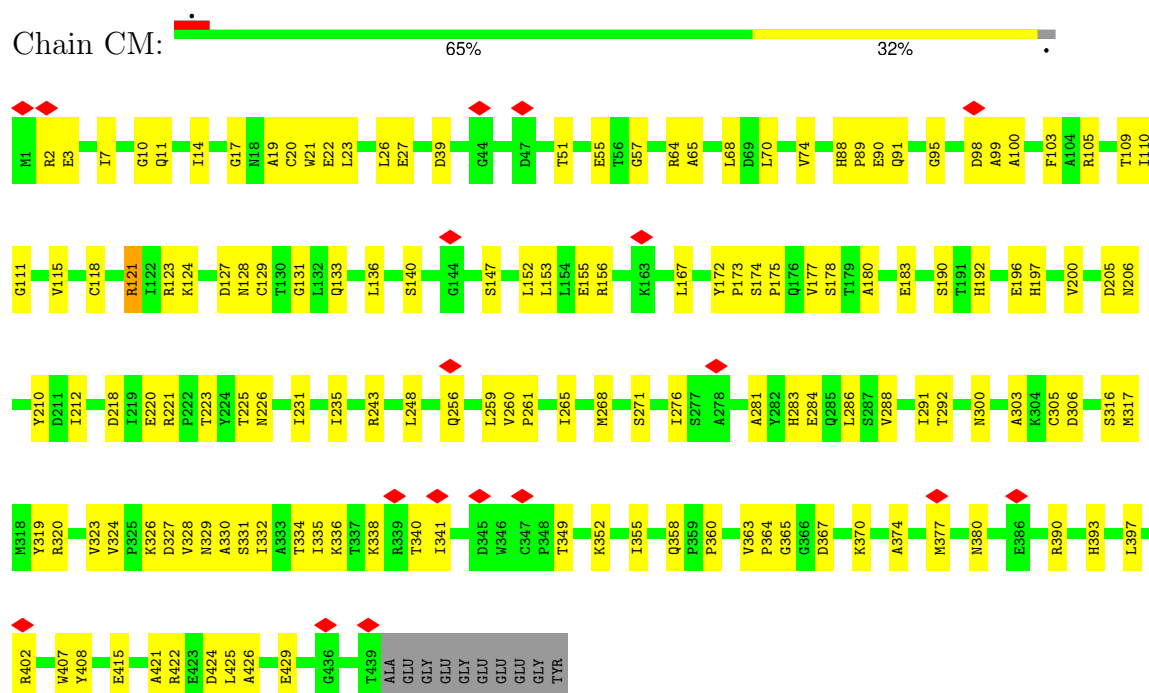
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain



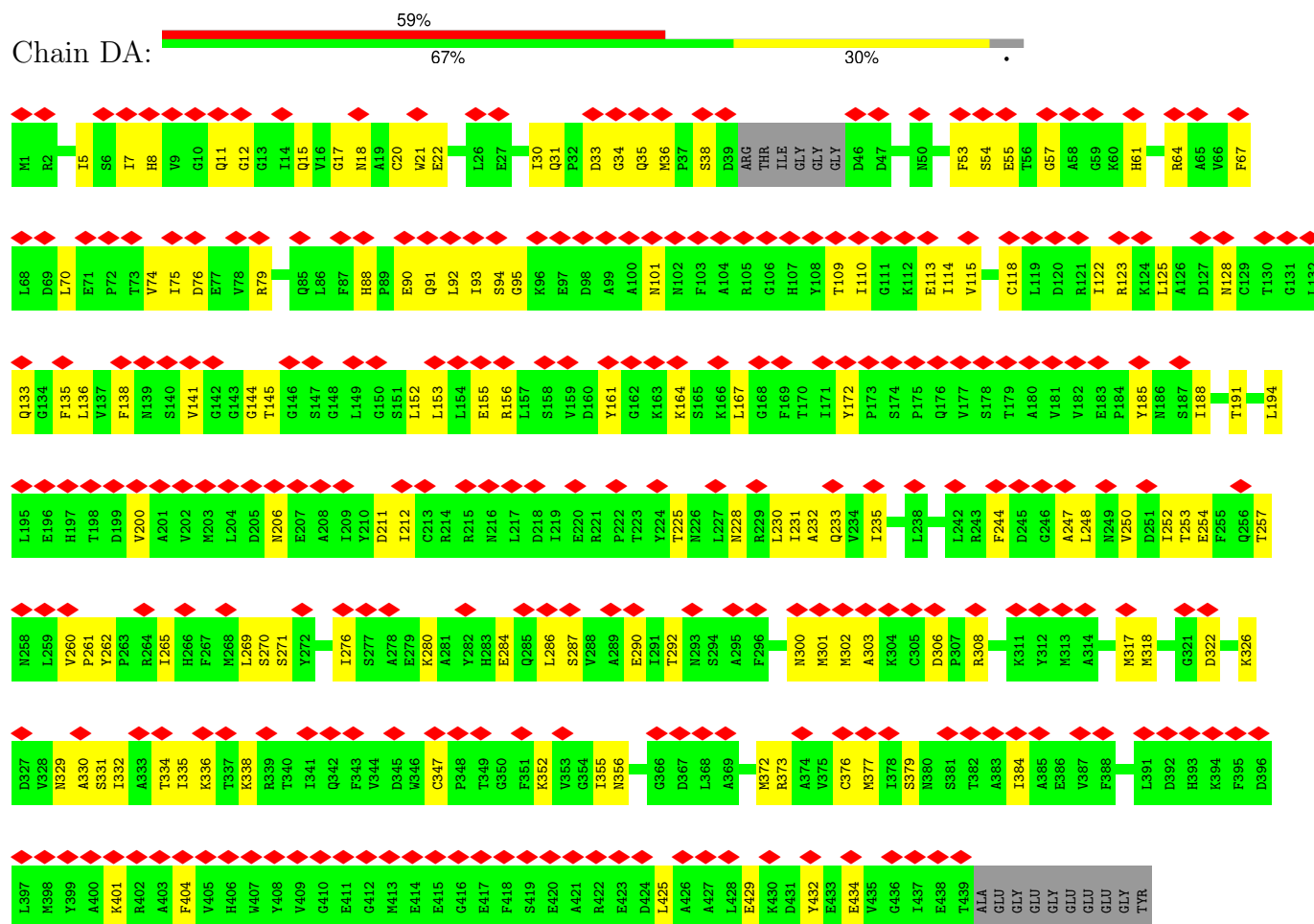
• Molecule 45: Tubulin alpha chain





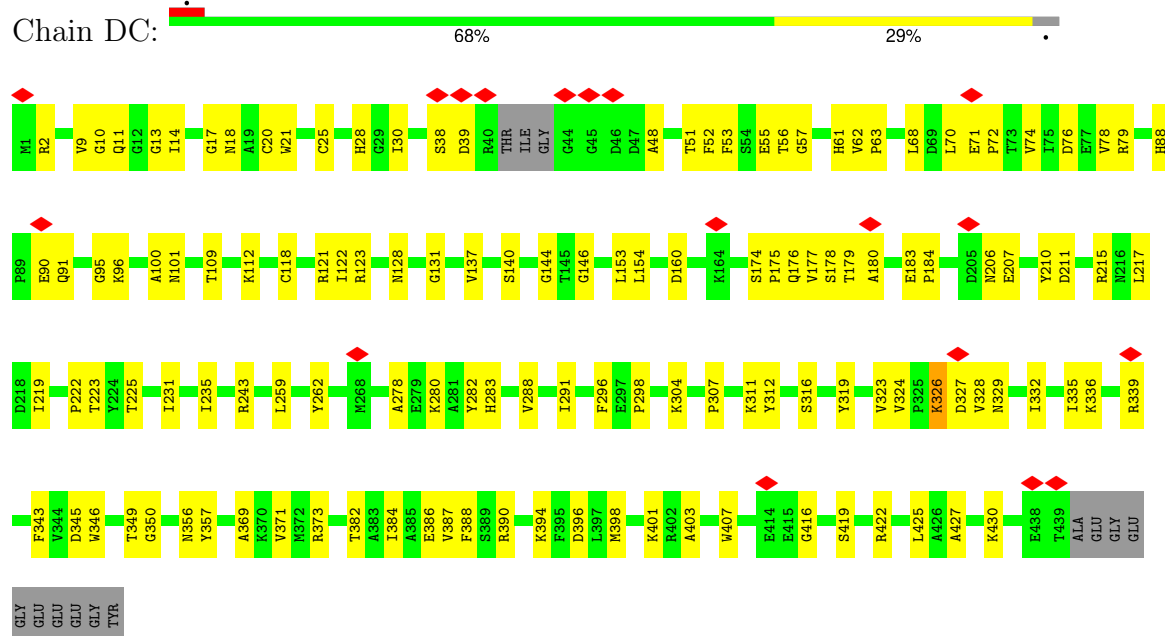
- Molecule 45: Tubulin alpha chain

Chain DA:



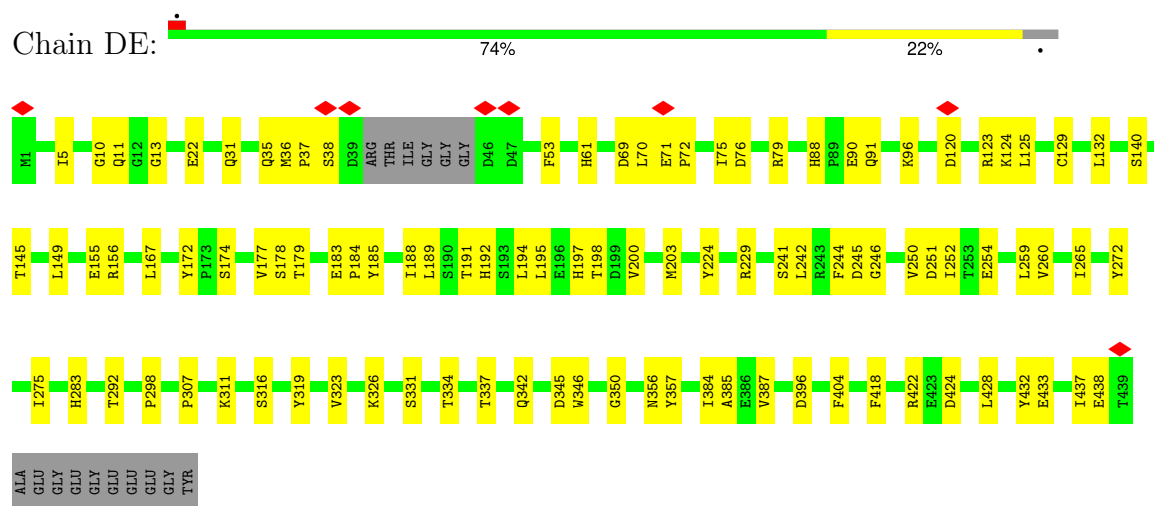
- Molecule 45: Tubulin alpha chain

Chain DC:

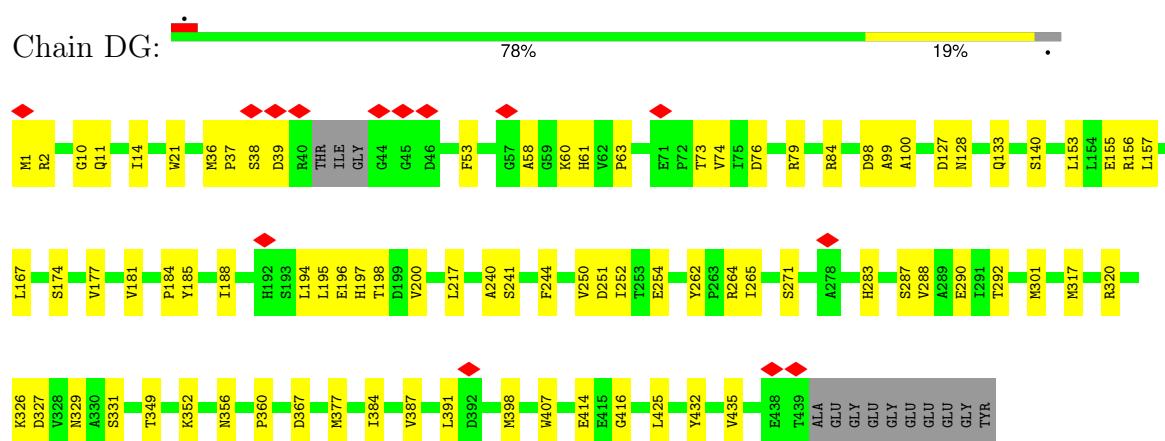




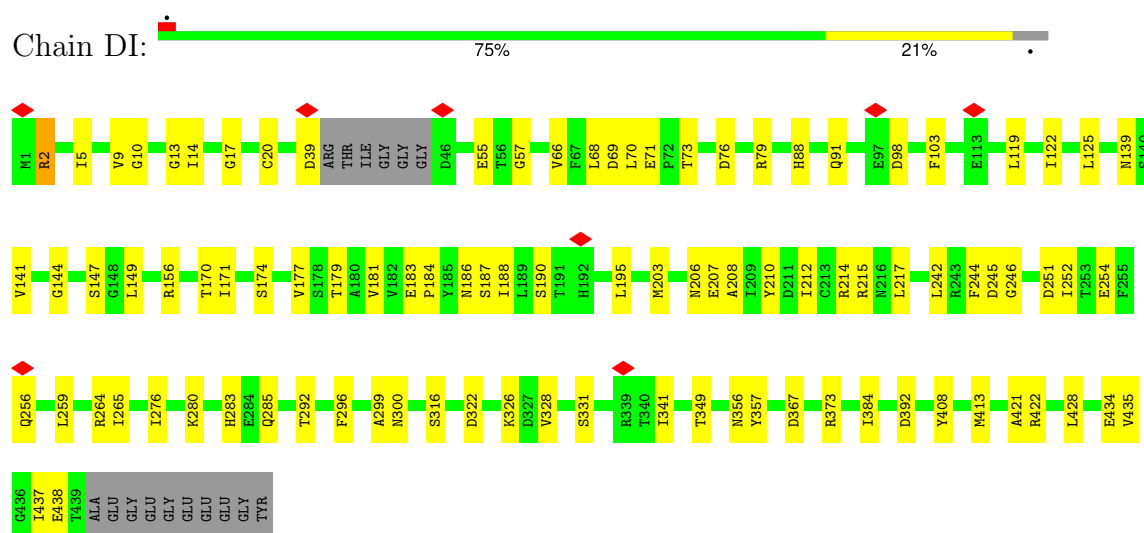
- Molecule 45: Tubulin alpha chain



- Molecule 45: Tubulin alpha chain

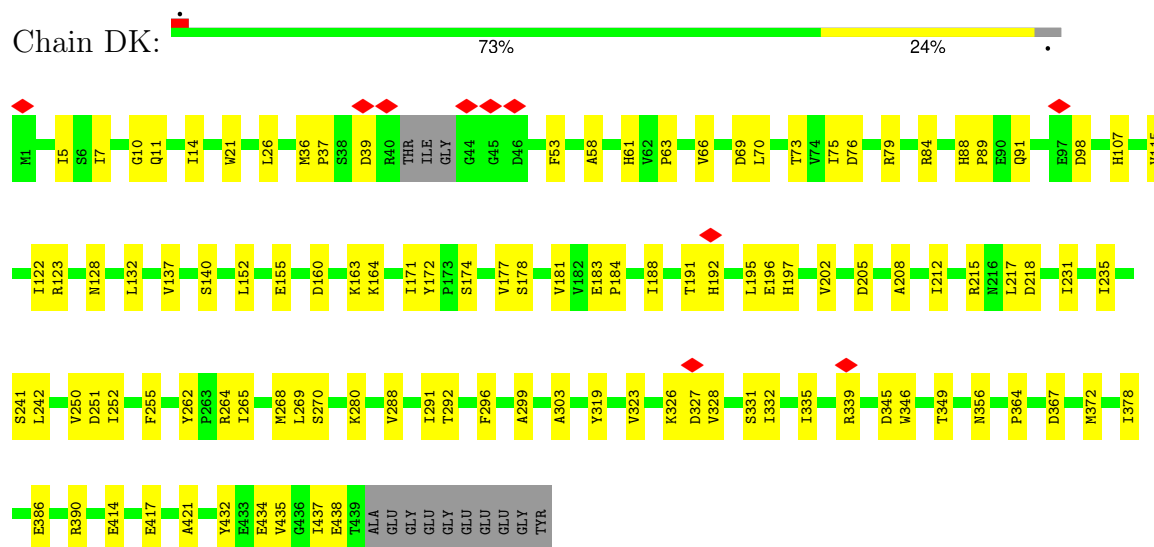


- Molecule 45: Tubulin alpha chain

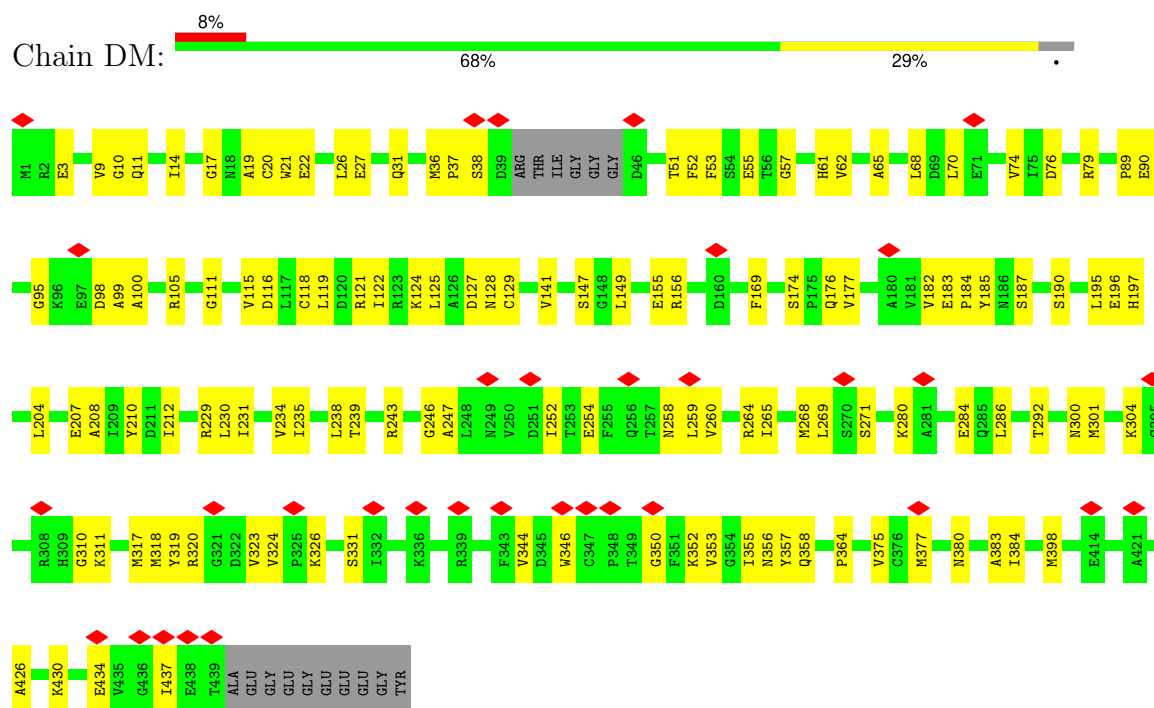


- Molecule 45: Tubulin alpha chain

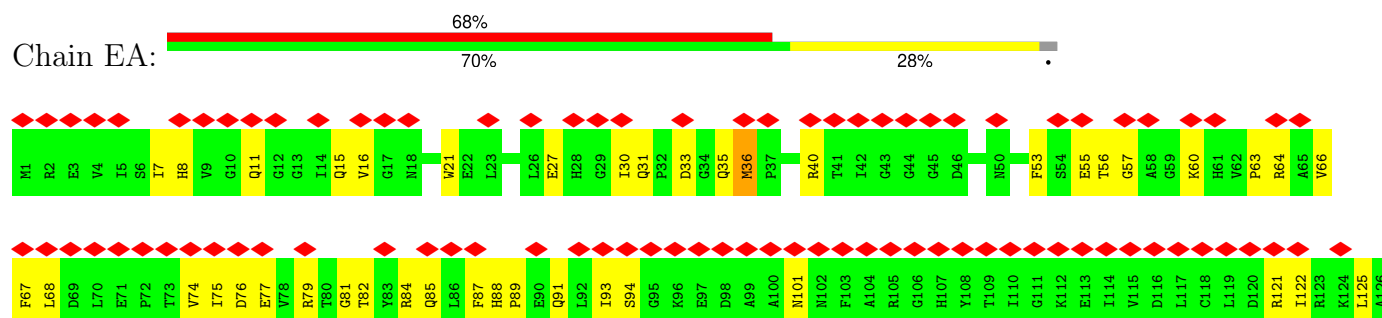




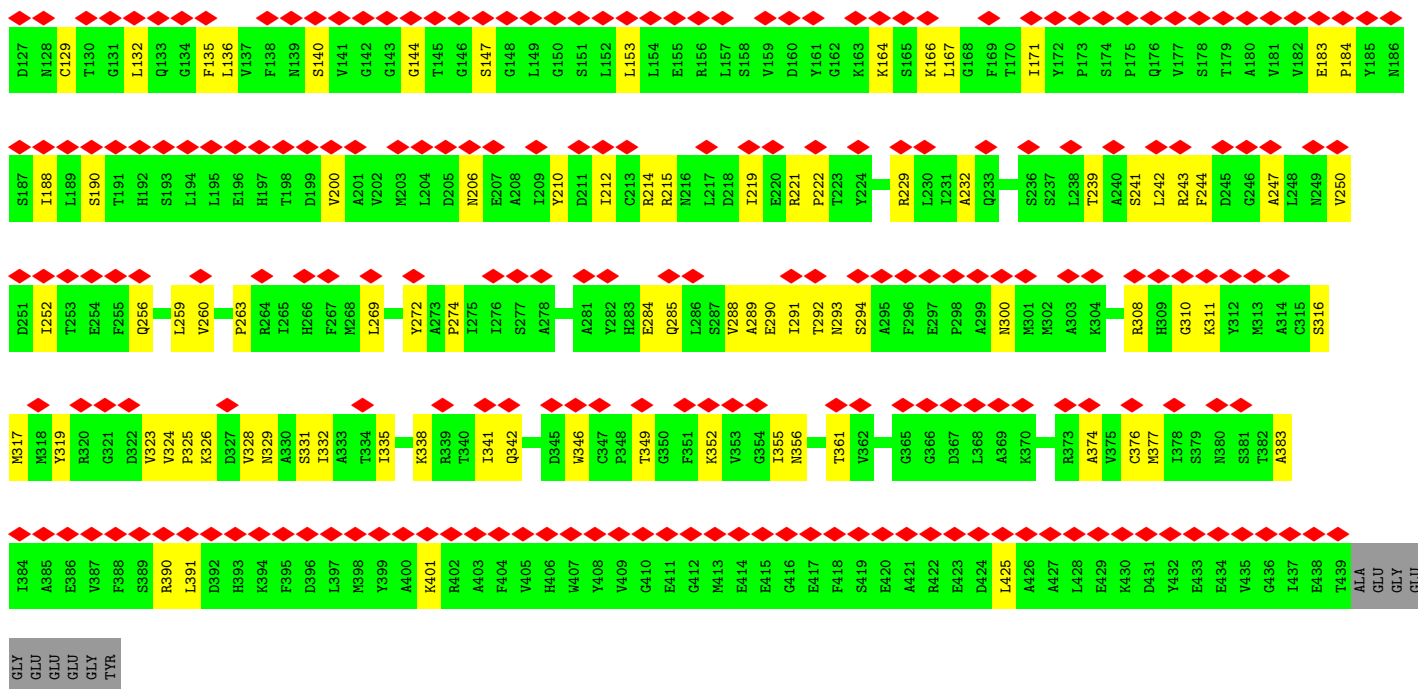
• Molecule 45: Tubulin alpha chain



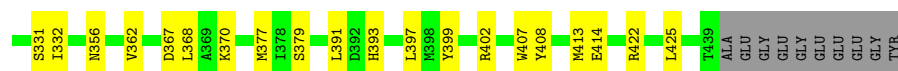
• Molecule 45: Tubulin alpha chain



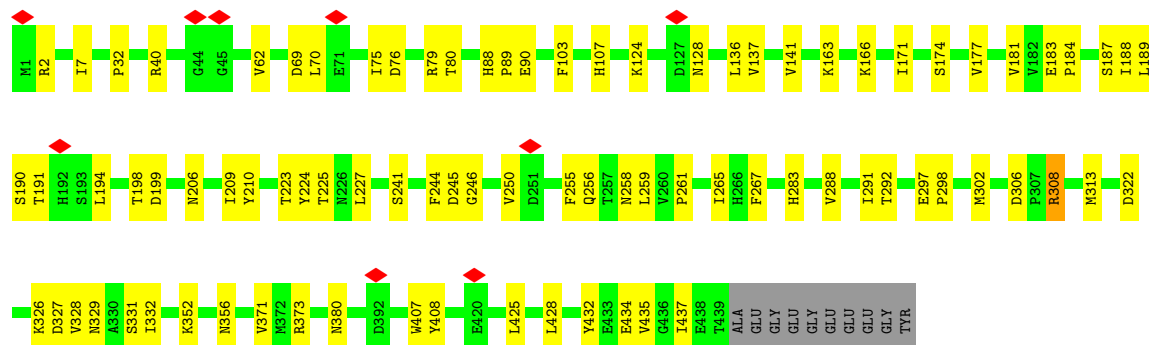
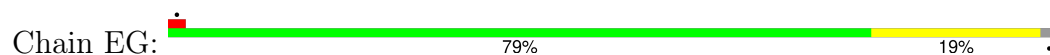




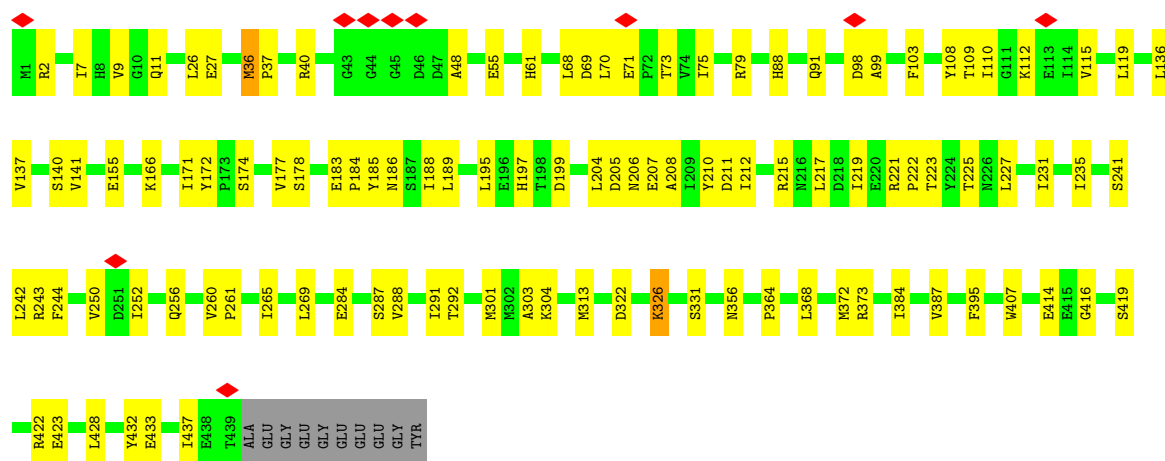




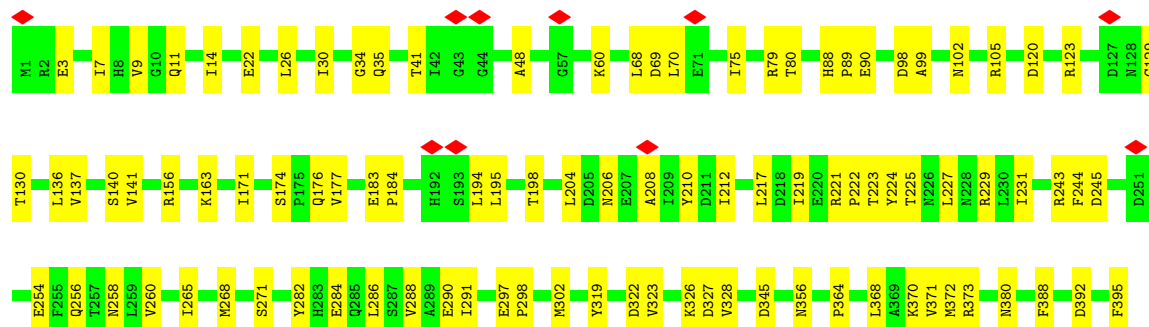
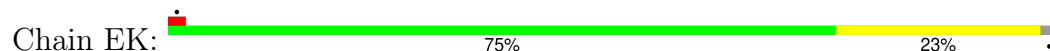
• Molecule 45: Tubulin alpha chain



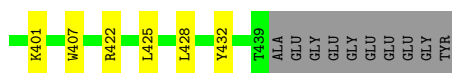
• Molecule 45: Tubulin alpha chain



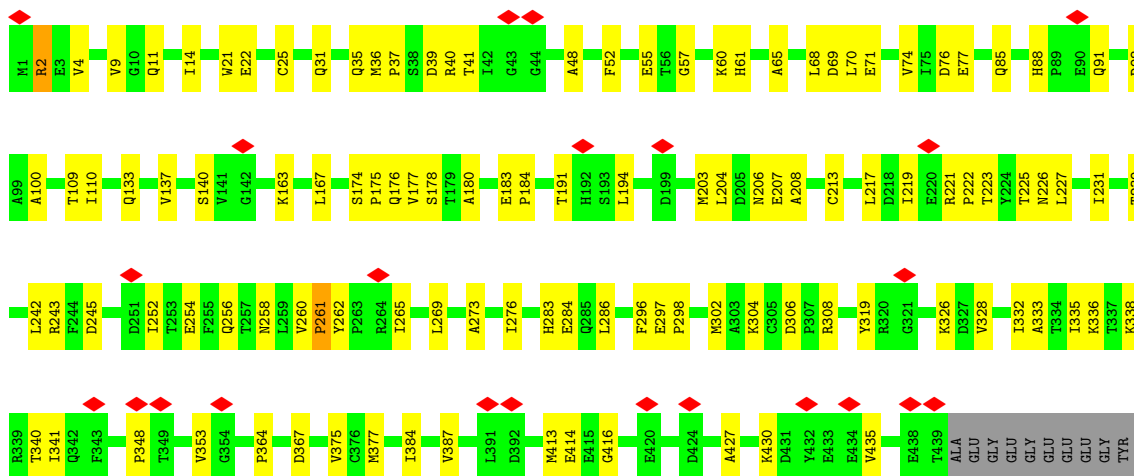
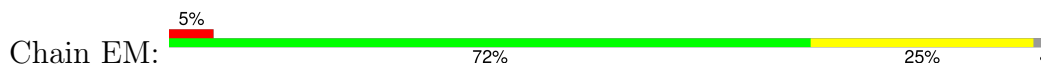
• Molecule 45: Tubulin alpha chain



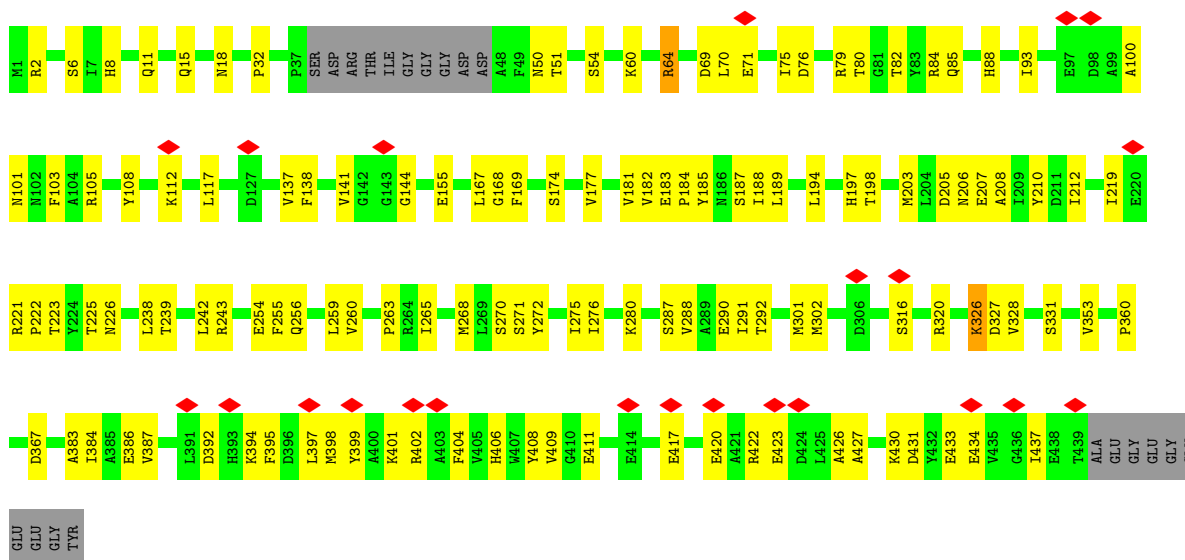




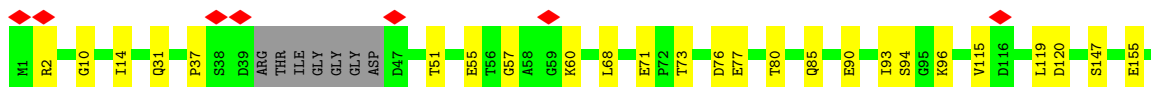
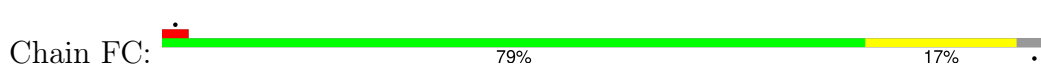
• Molecule 45: Tubulin alpha chain



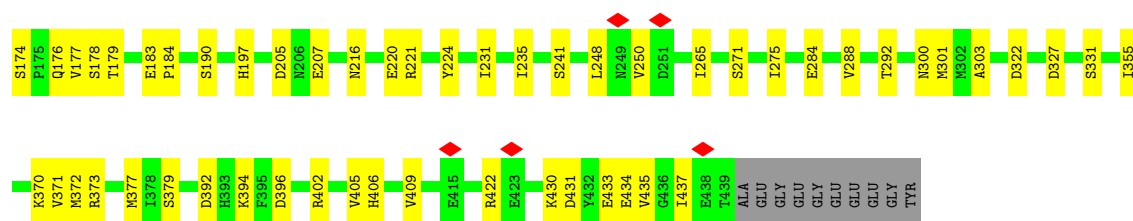
• Molecule 45: Tubulin alpha chain



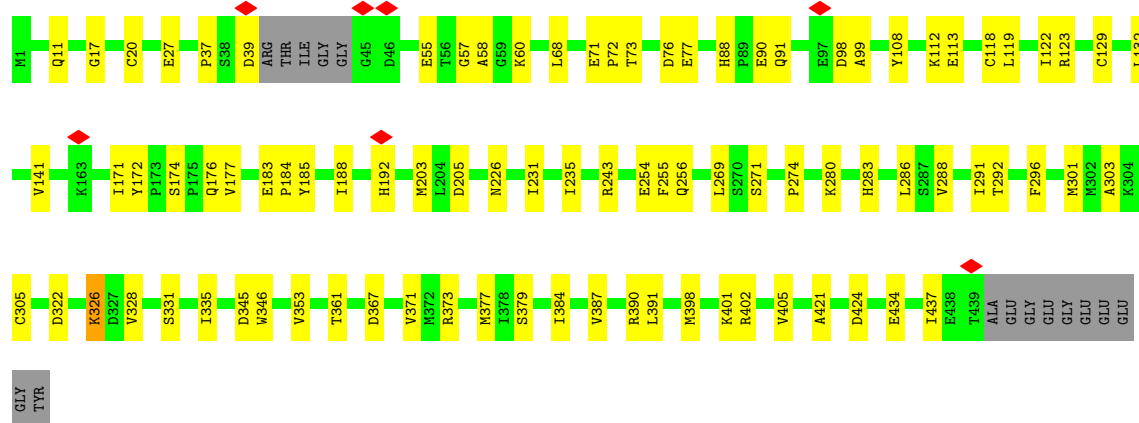
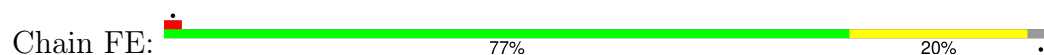
• Molecule 45: Tubulin alpha chain



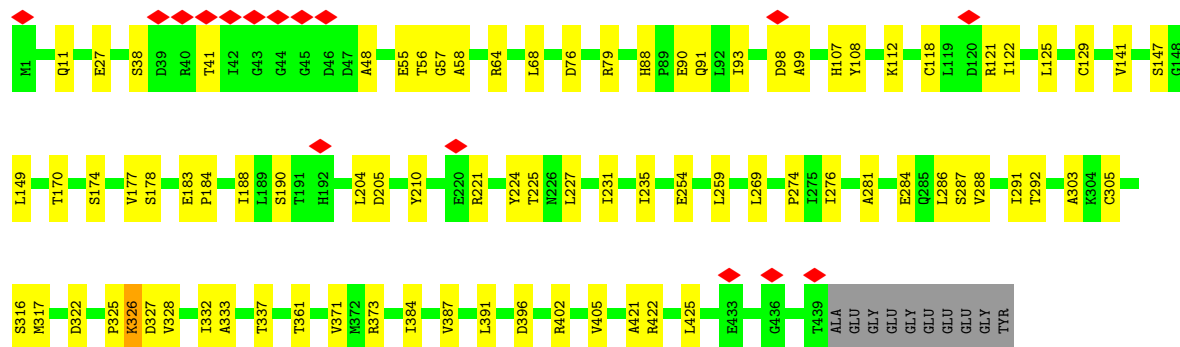
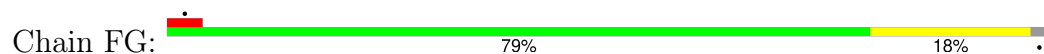




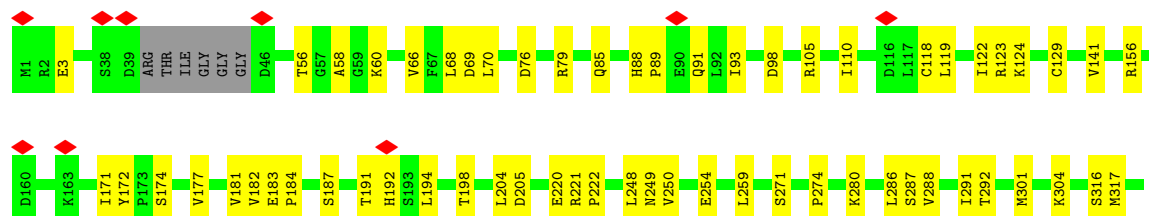
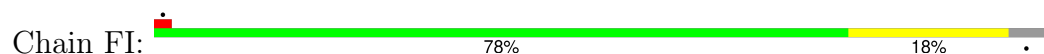
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

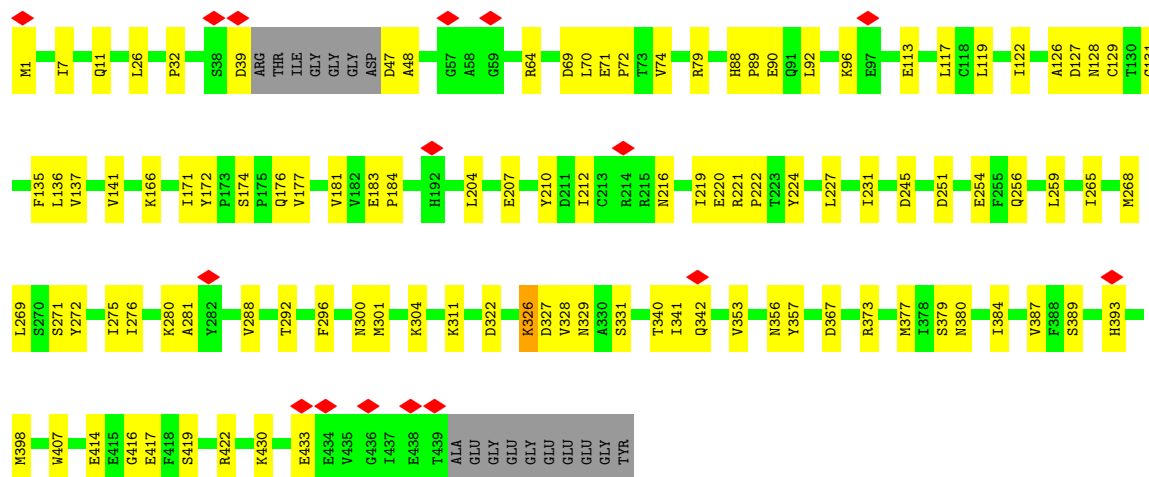






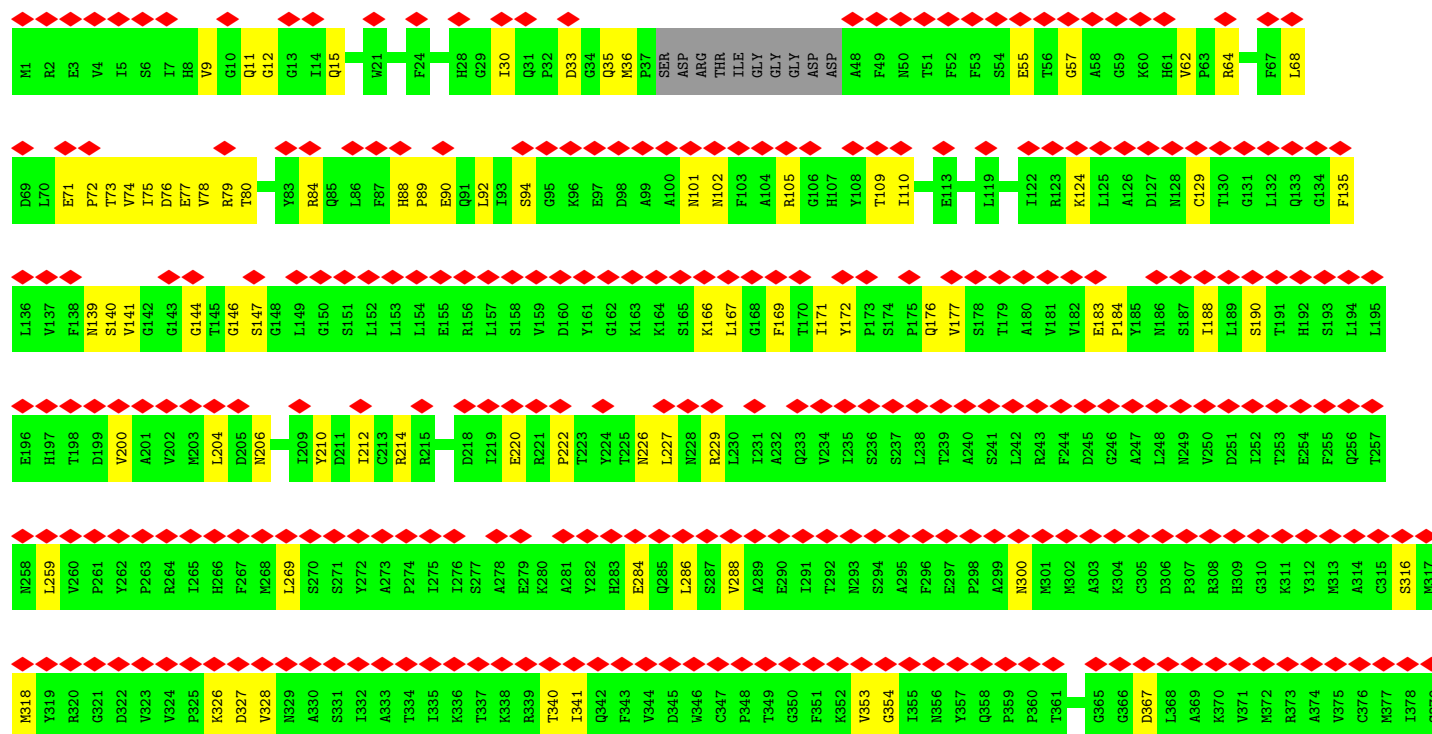
• Molecule 45: Tubulin alpha chain

Chain FK: 73% 23% .

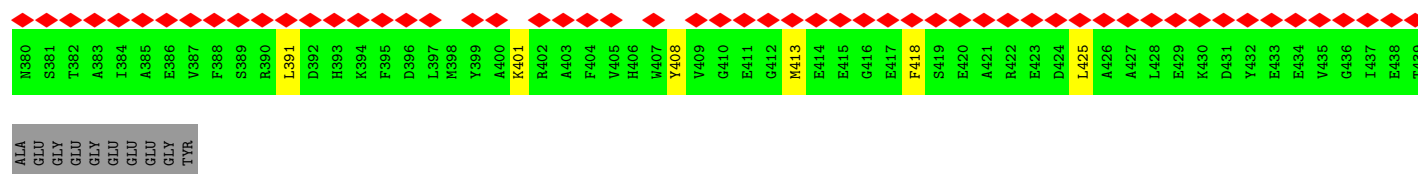


• Molecule 45: Tubulin alpha chain

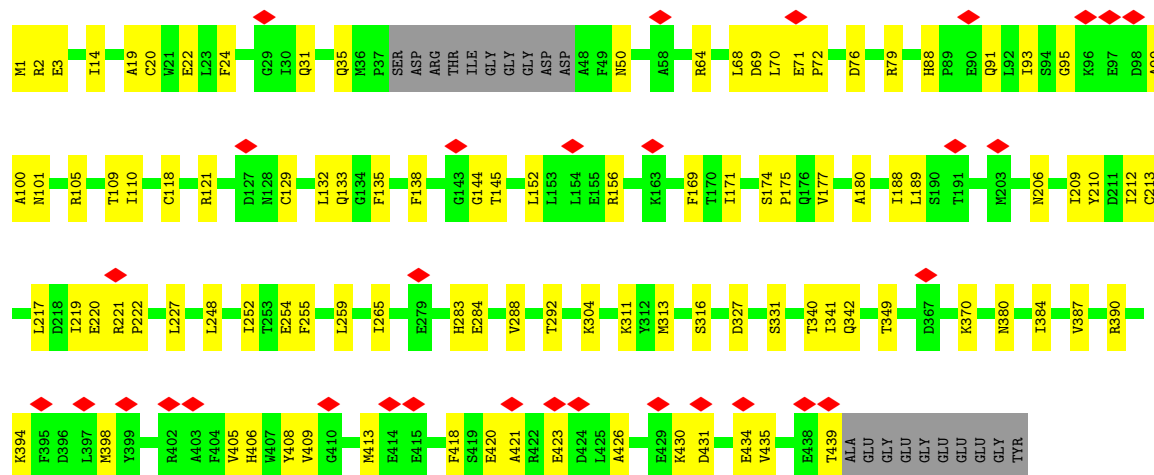
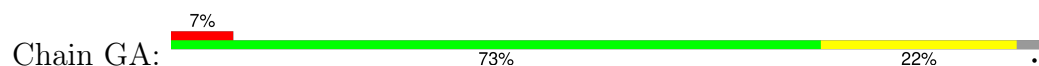
Chain FM: 77% 76% 19% .



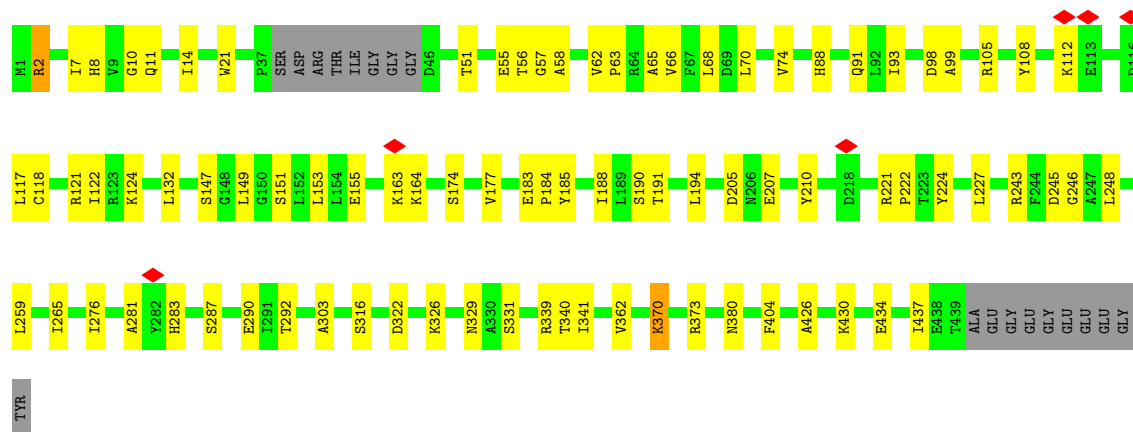
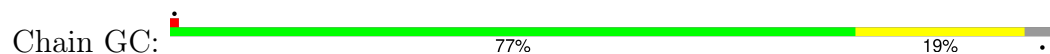




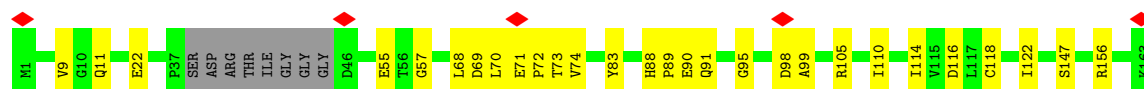
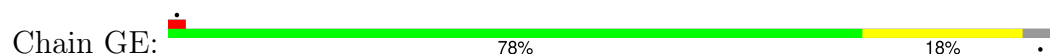
• Molecule 45: Tubulin alpha chain



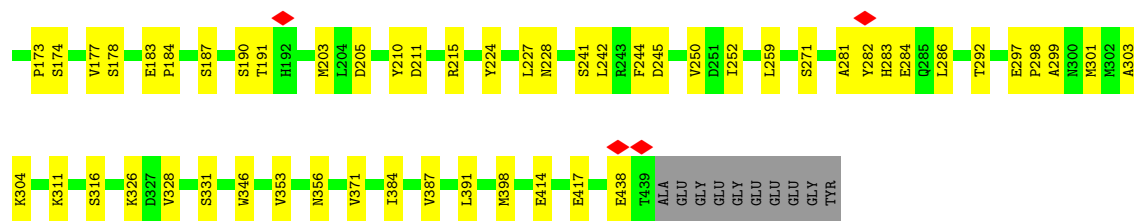
• Molecule 45: Tubulin alpha chain



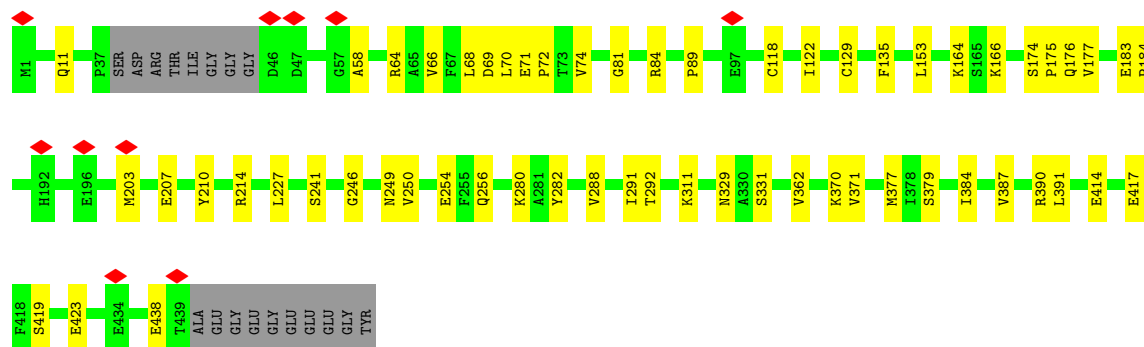
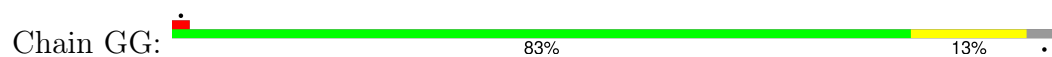
• Molecule 45: Tubulin alpha chain



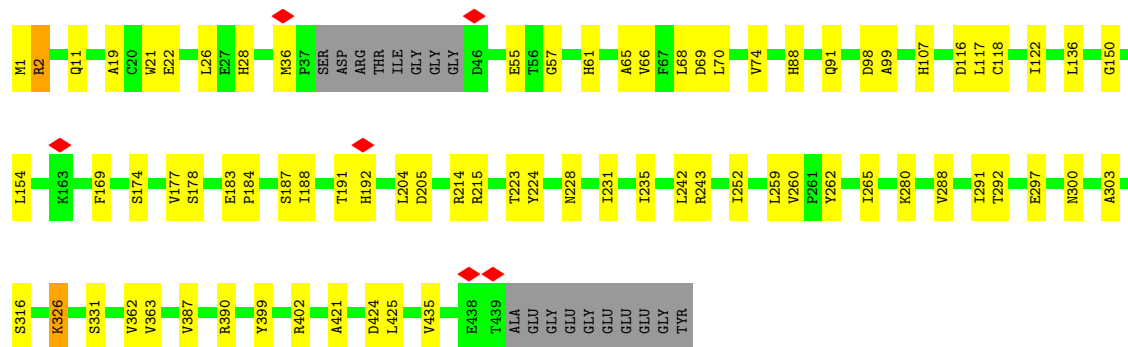
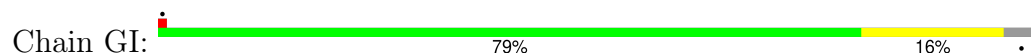




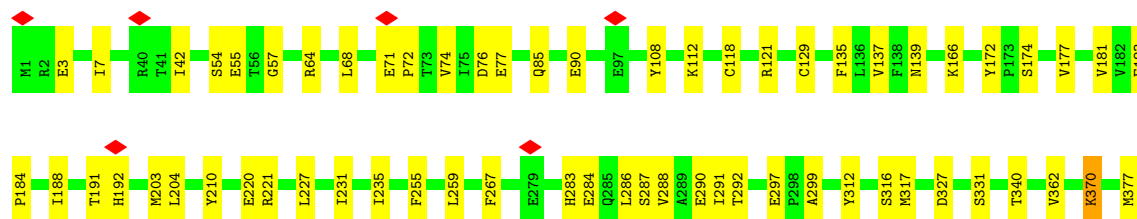
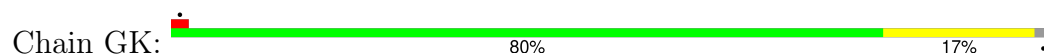
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain



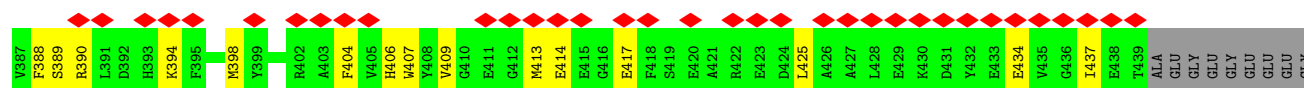
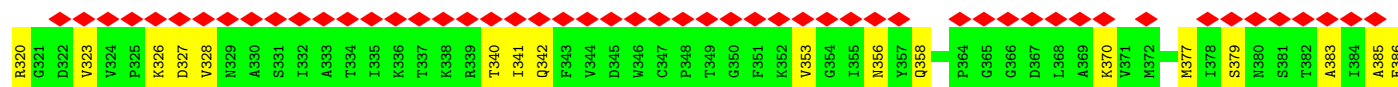
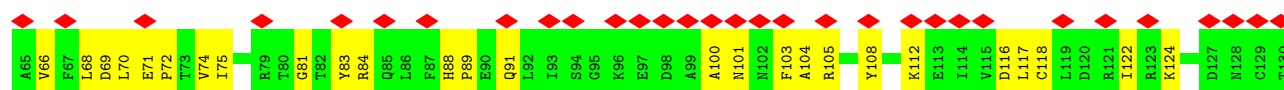
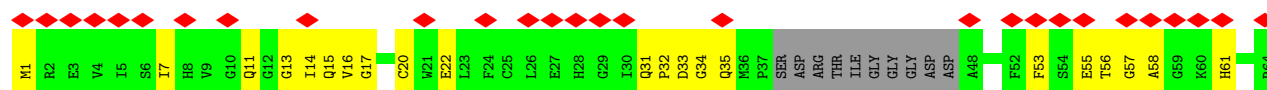
• Molecule 45: Tubulin alpha chain





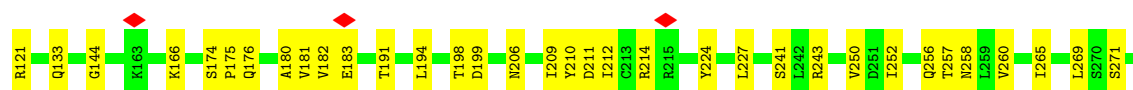
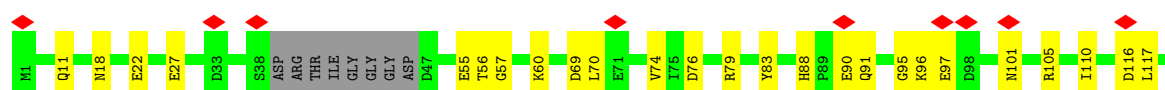
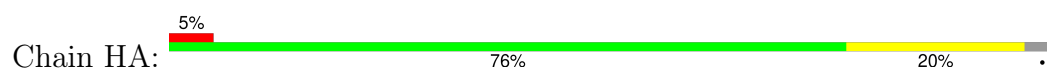


• Molecule 45: Tubulin alpha chain

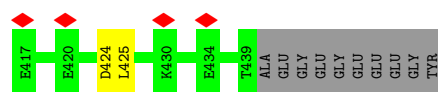


TYR

• Molecule 45: Tubulin alpha chain







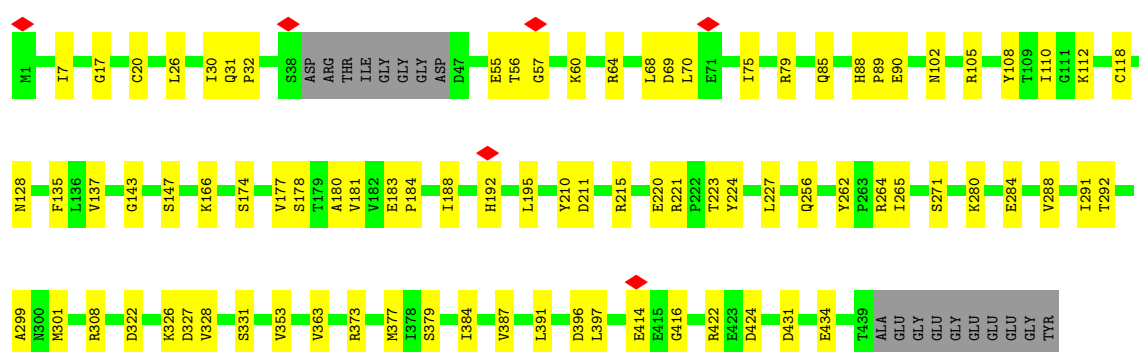
• Molecule 45: Tubulin alpha chain

Chain HC: 78% 18%



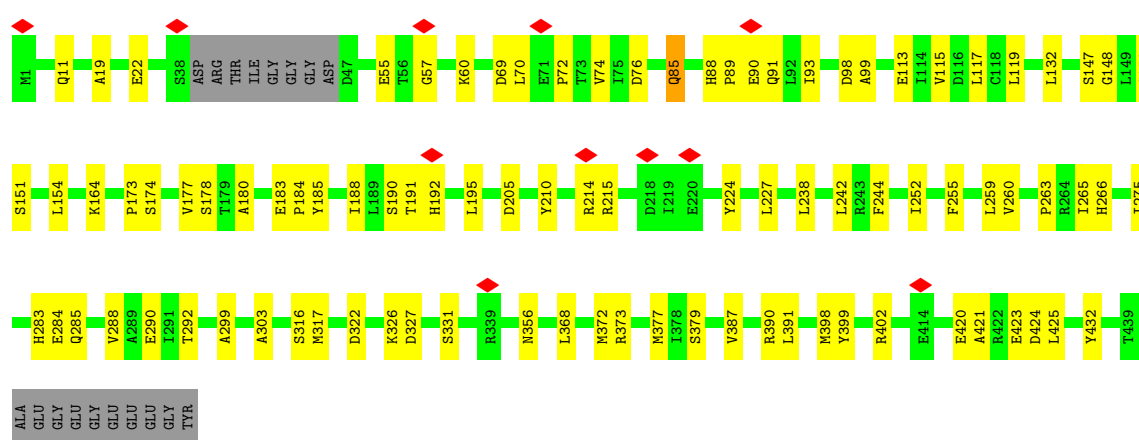
• Molecule 45: Tubulin alpha chain

Chain HE: 77% 19%



• Molecule 45: Tubulin alpha chain

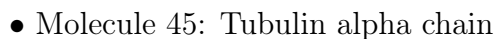
Chain HG: 76% 20%



• Molecule 45: Tubulin alpha chain



Response	Percentage
Doing a good job	81%
Not doing a good job	15%
Don't know	4%



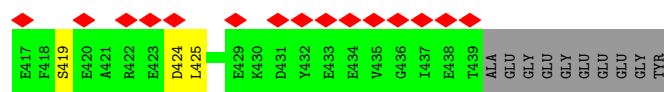
Frequency	Percentage
Daily	77%
Weekly	19%
Monthly	4%



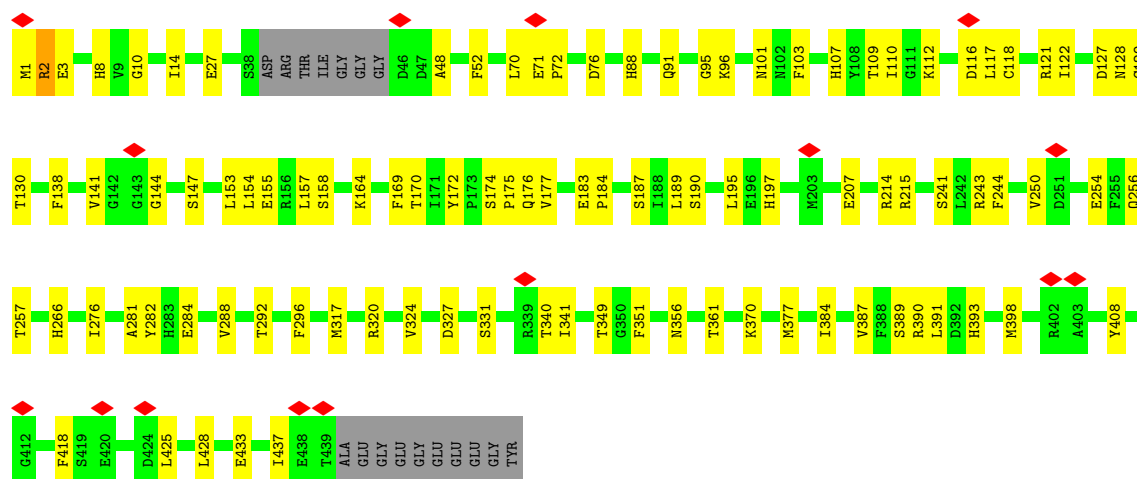
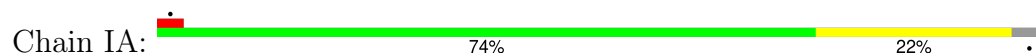
Response	Percentage
Good job	32%
Not doing a good job	73%
Don't know	23%



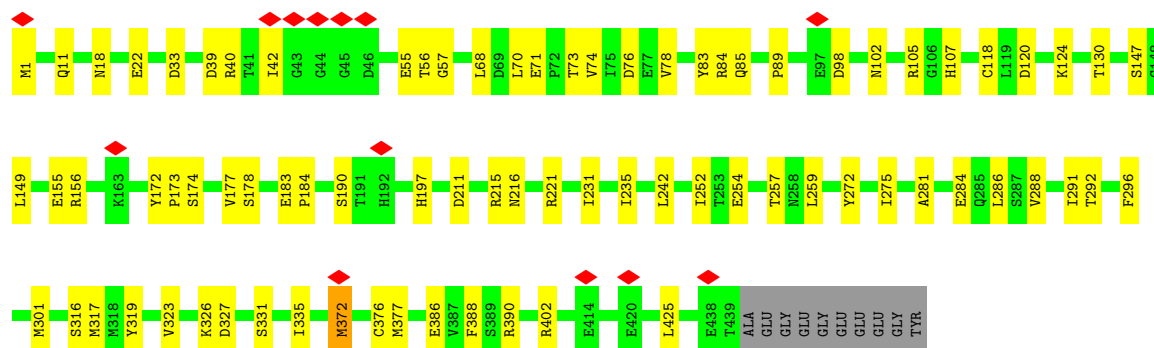
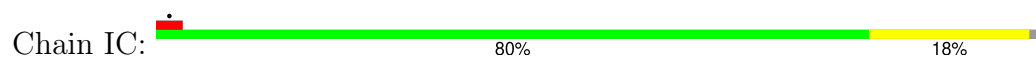




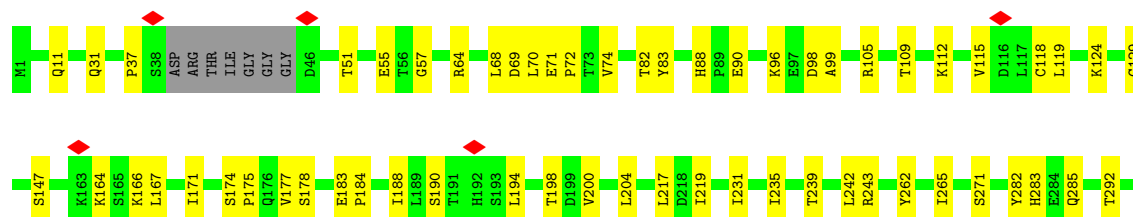
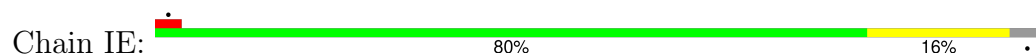
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

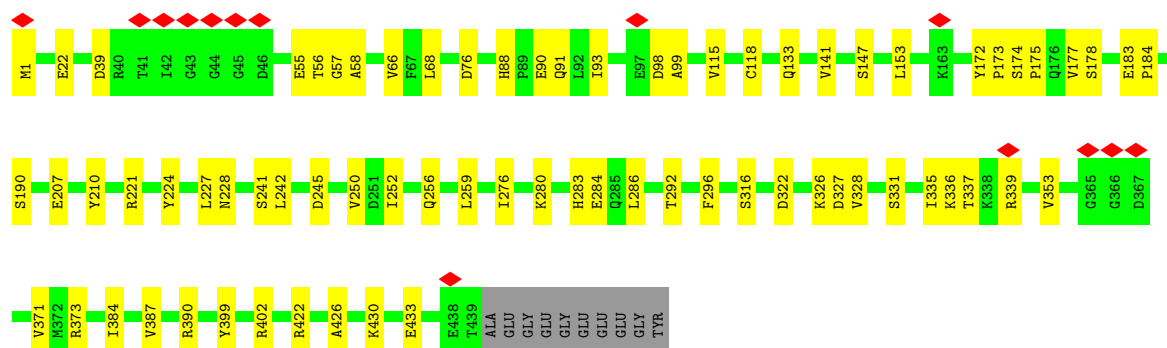






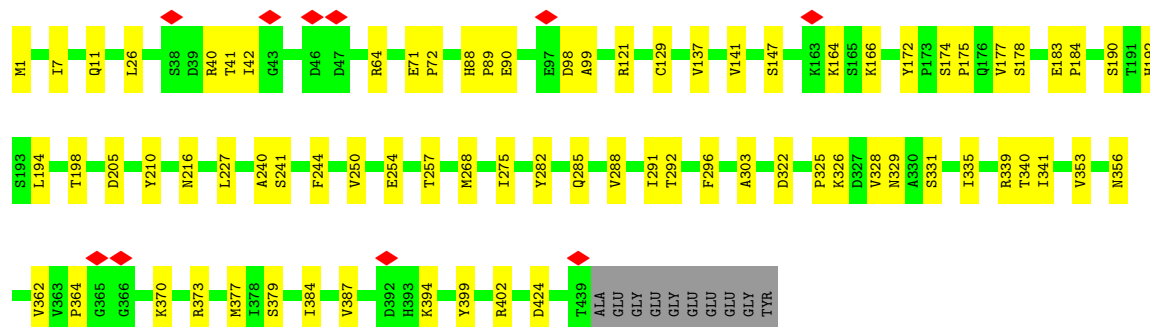
- Molecule 45: Tubulin alpha chain

Chain IG: 82% 16%



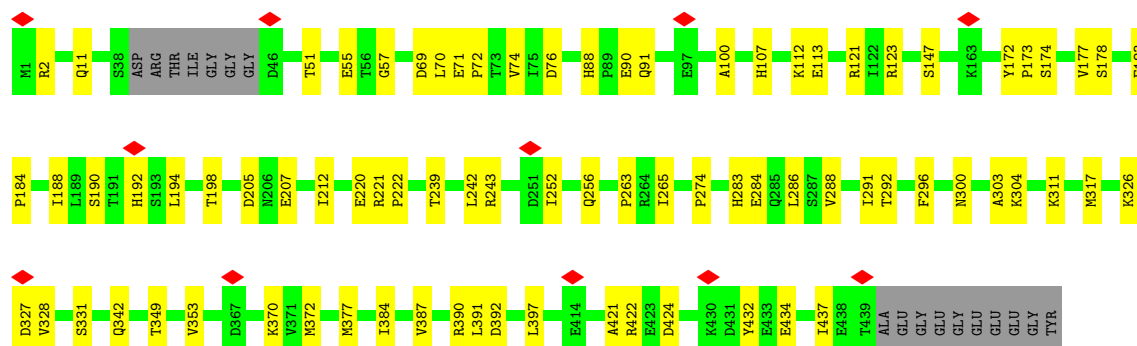
- Molecule 45: Tubulin alpha chain

Chain II: 81% 17%



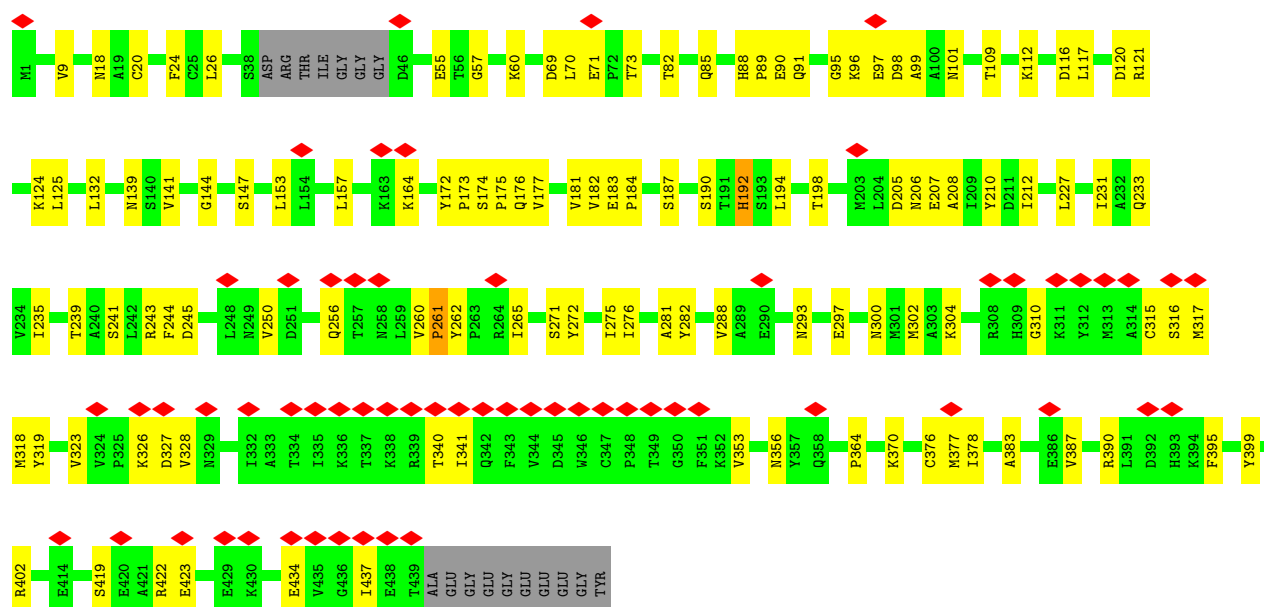
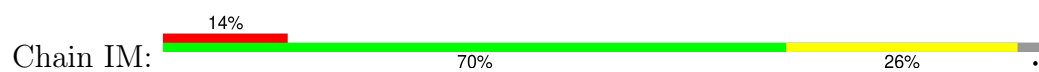
- Molecule 45: Tubulin alpha chain

Chain IK: 78% 18%

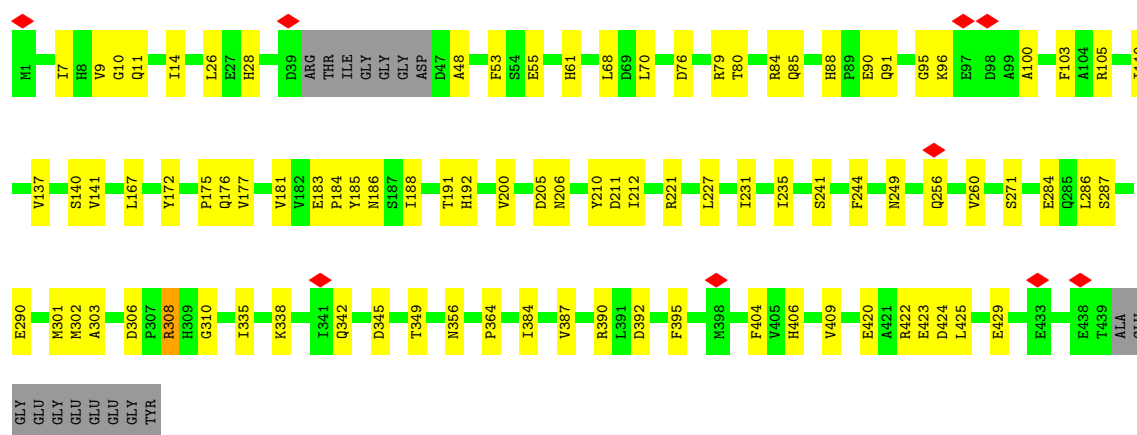
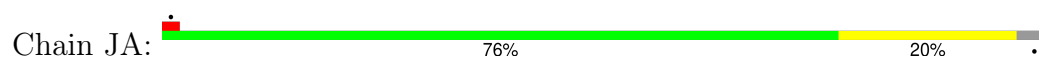


- Molecule 45: Tubulin alpha chain

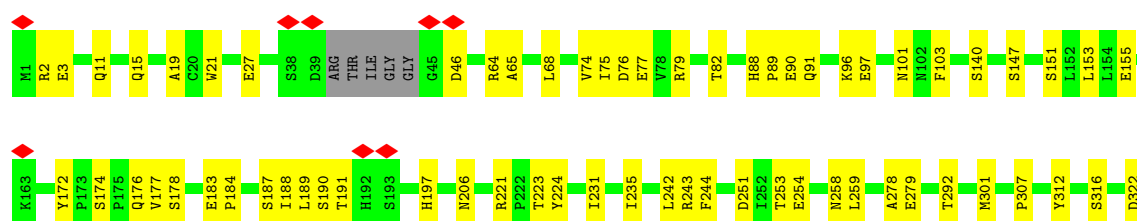
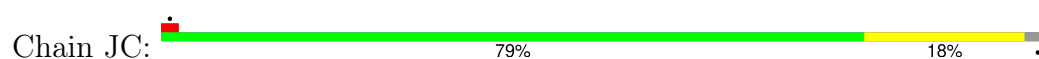




• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain







• Molecule 45: Tubulin alpha chain

Chain JE: 84% 14%



• Molecule 45: Tubulin alpha chain

Chain JG: 78% 19%




• Molecule 45: Tubulin alpha chain

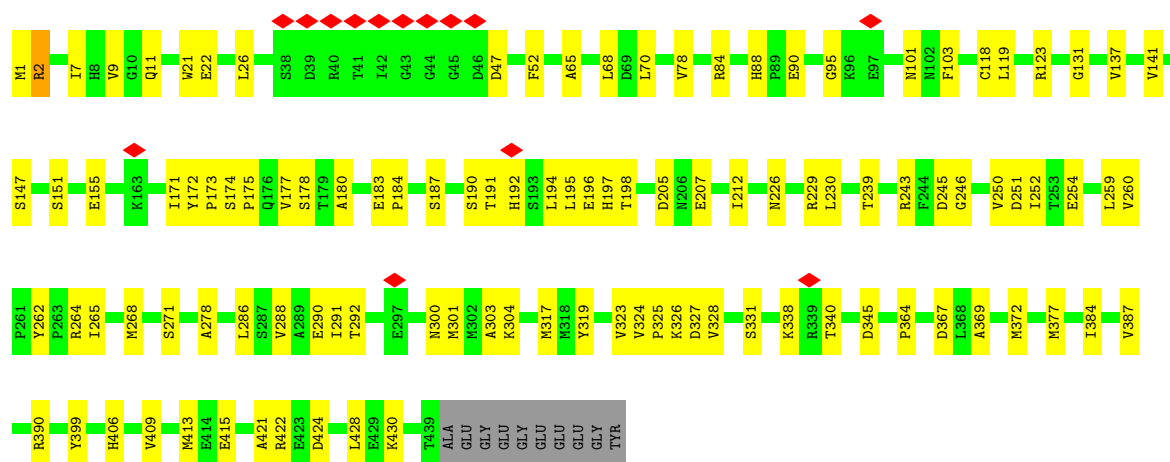
Chain JI: 78% 20%




• Molecule 45: Tubulin alpha chain

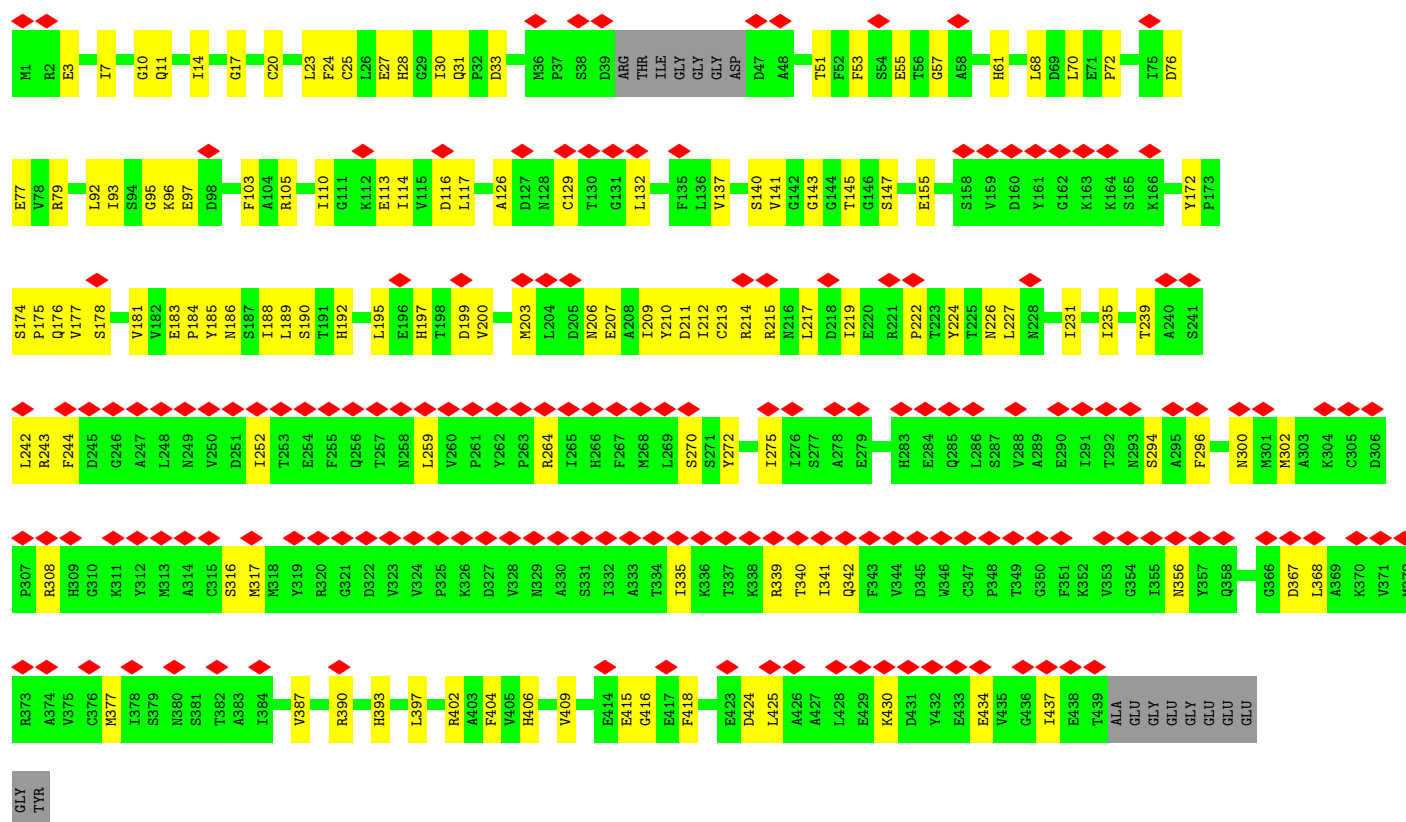


Chain JK: 




• Molecule 45: Tubulin alpha chain

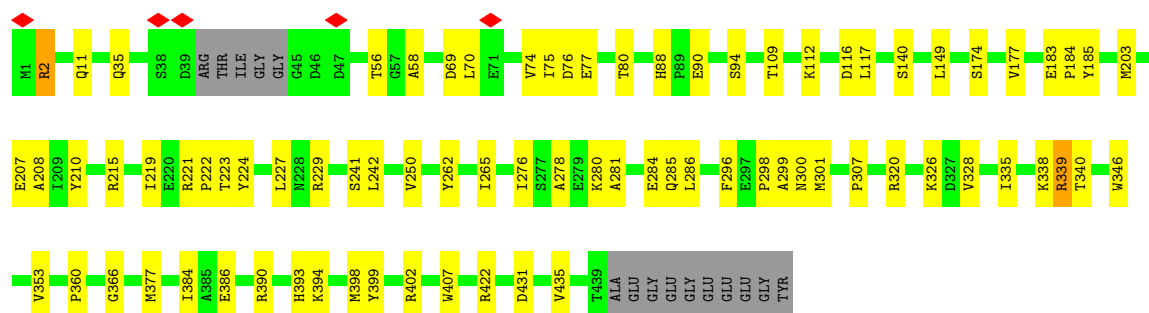
Chain JM: 



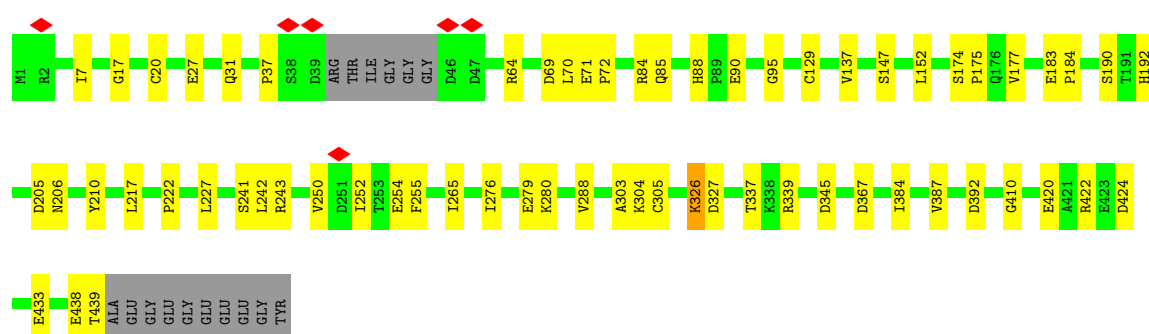
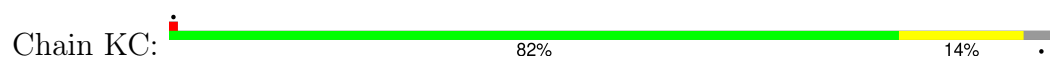
• Molecule 45: Tubulin alpha chain

Chain KA: 

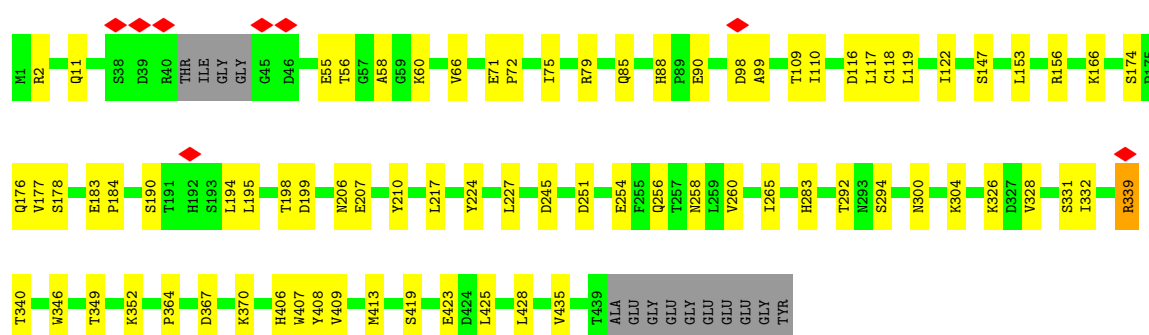
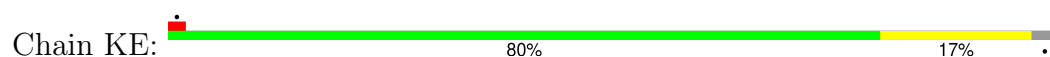




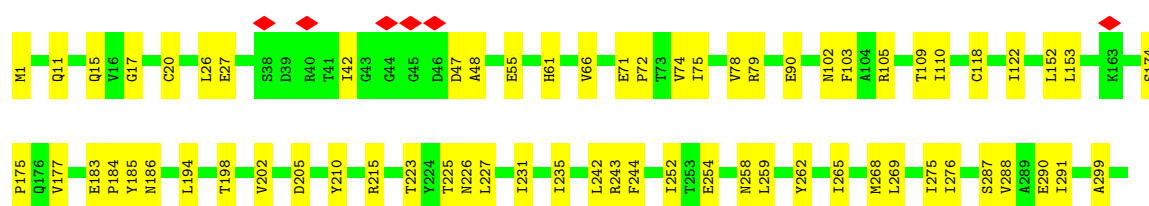
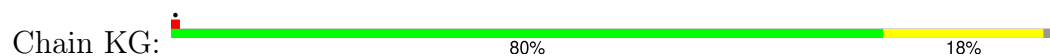
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain



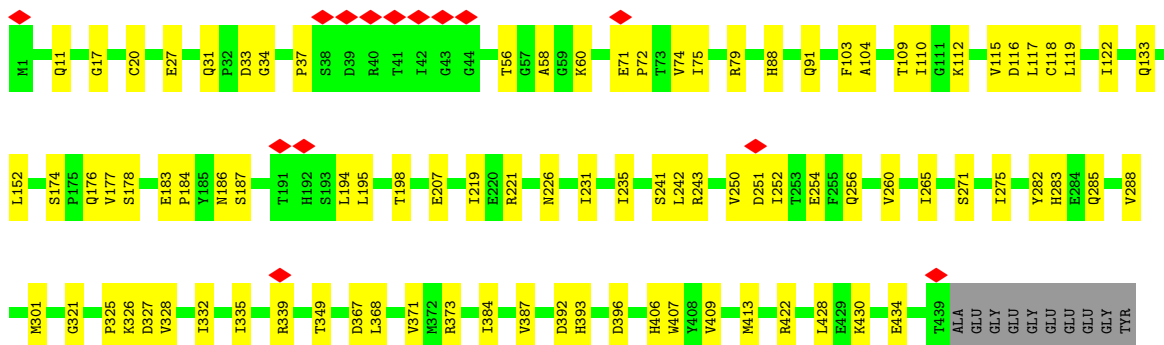
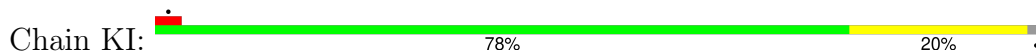
• Molecule 45: Tubulin alpha chain



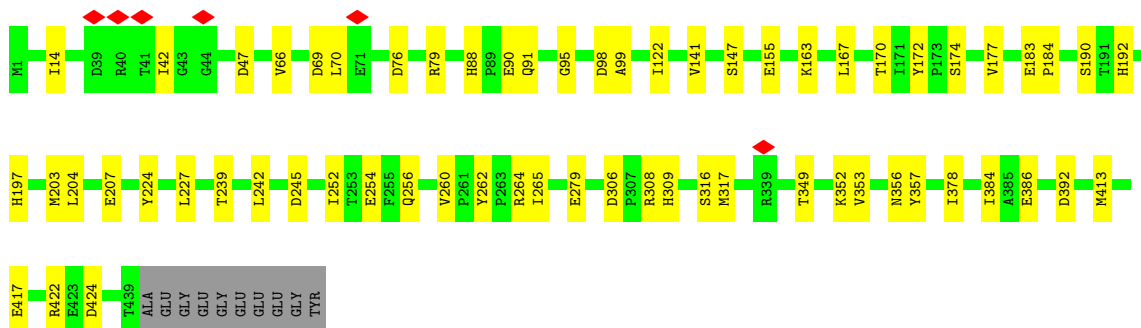
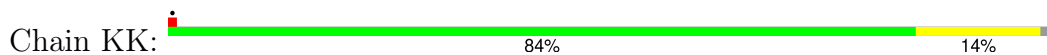




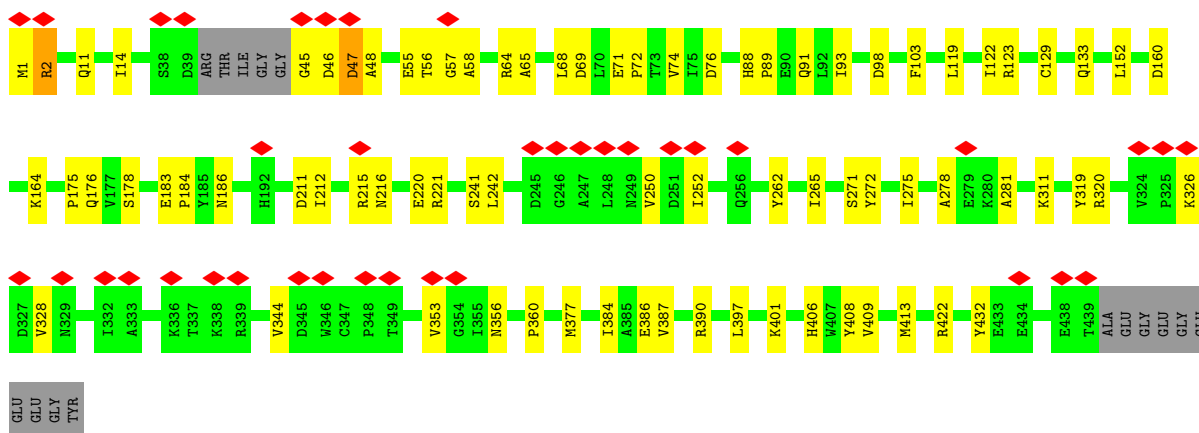
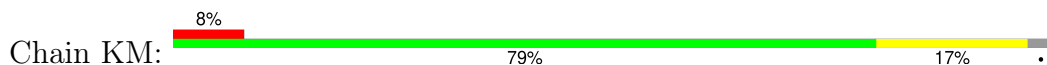
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

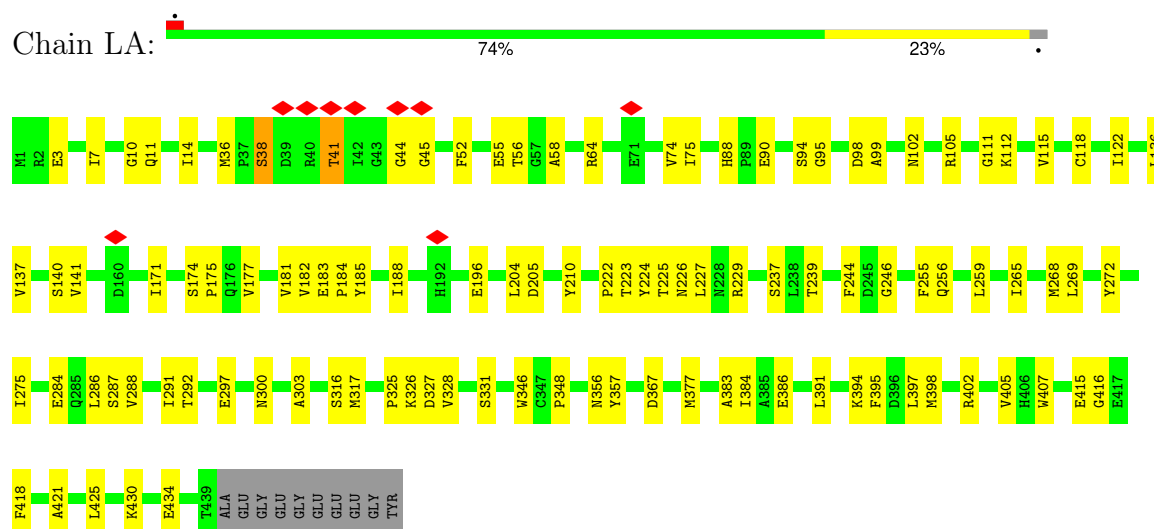


• Molecule 45: Tubulin alpha chain

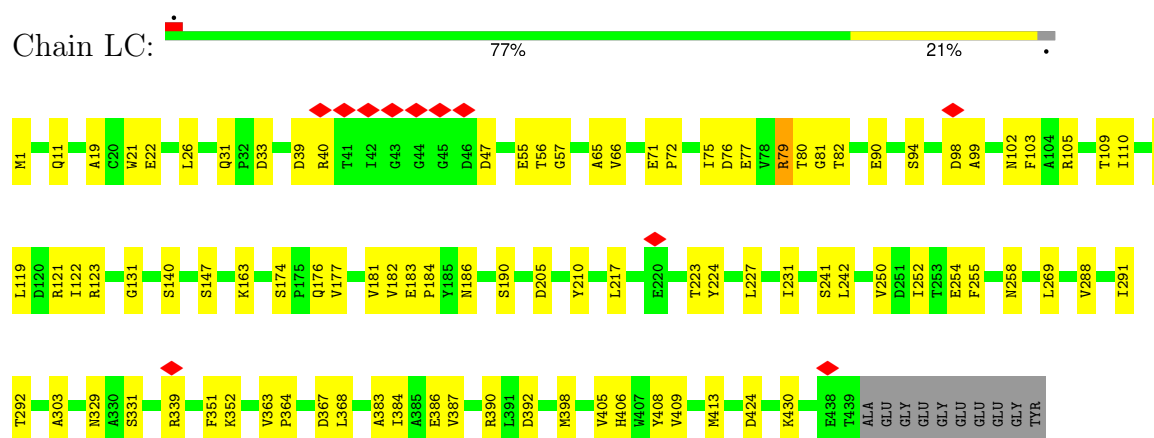


• Molecule 45: Tubulin alpha chain

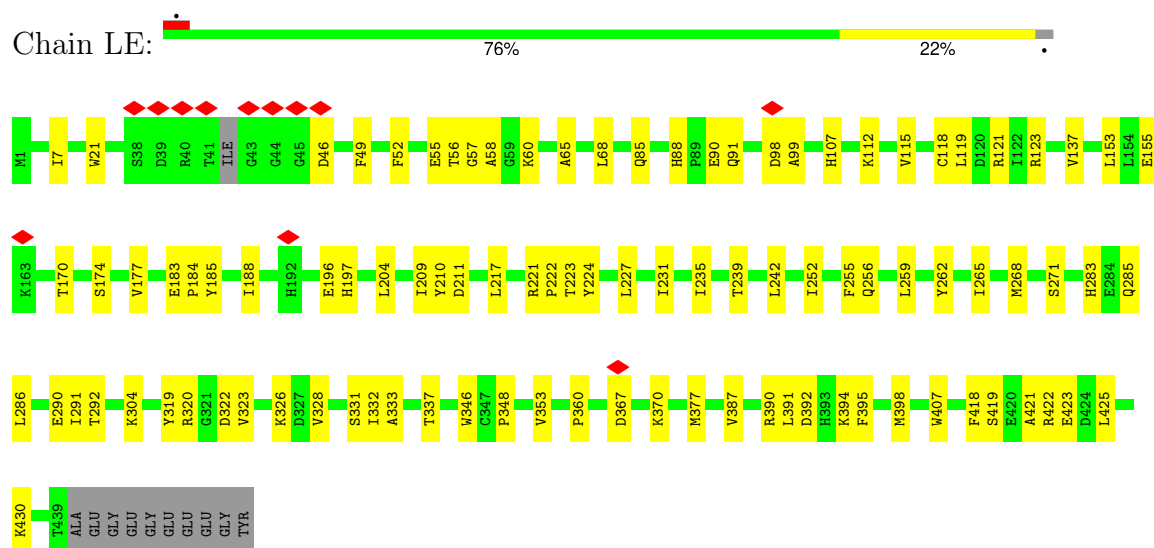




• Molecule 45: Tubulin alpha chain

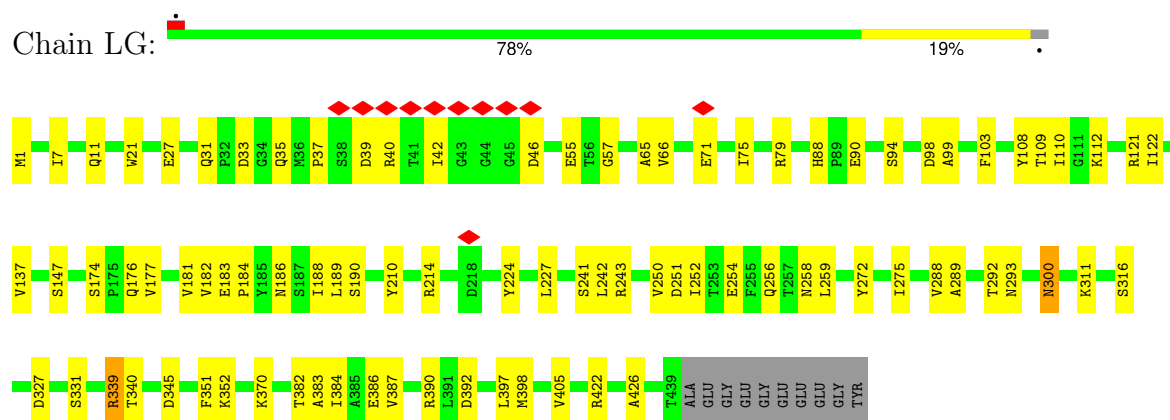


• Molecule 45: Tubulin alpha chain

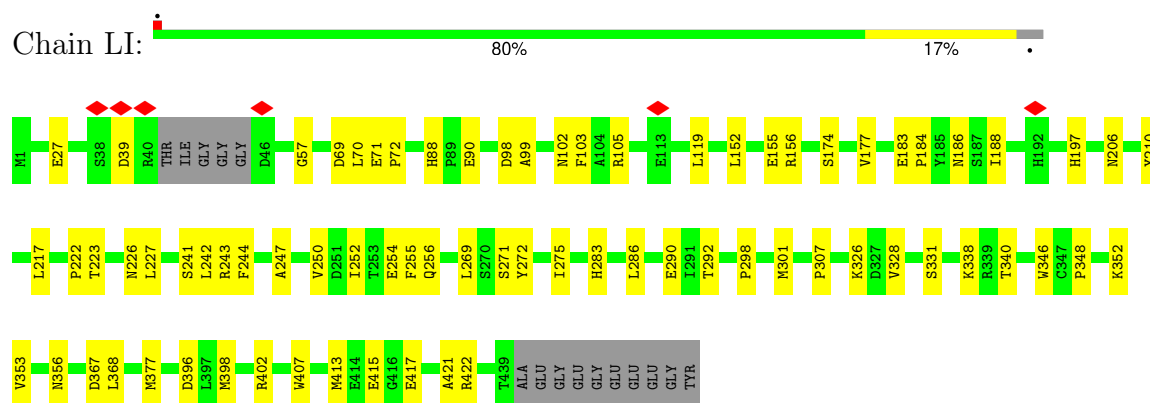


• Molecule 45: Tubulin alpha chain





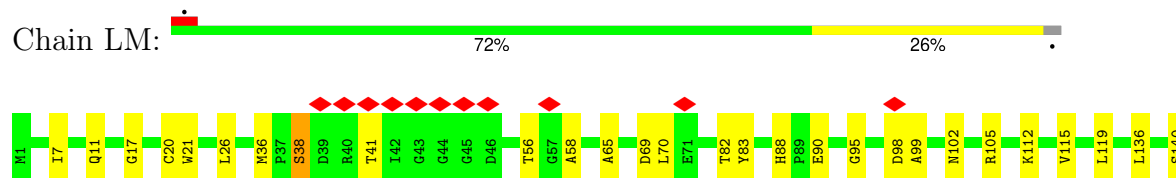
• Molecule 45: Tubulin alpha chain



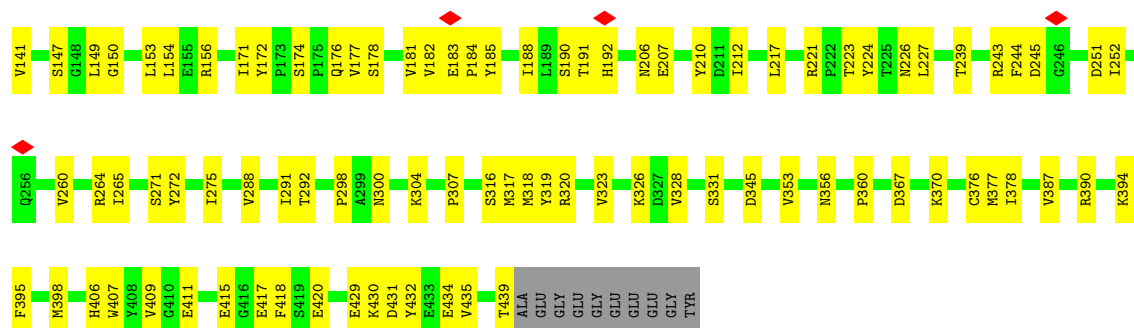
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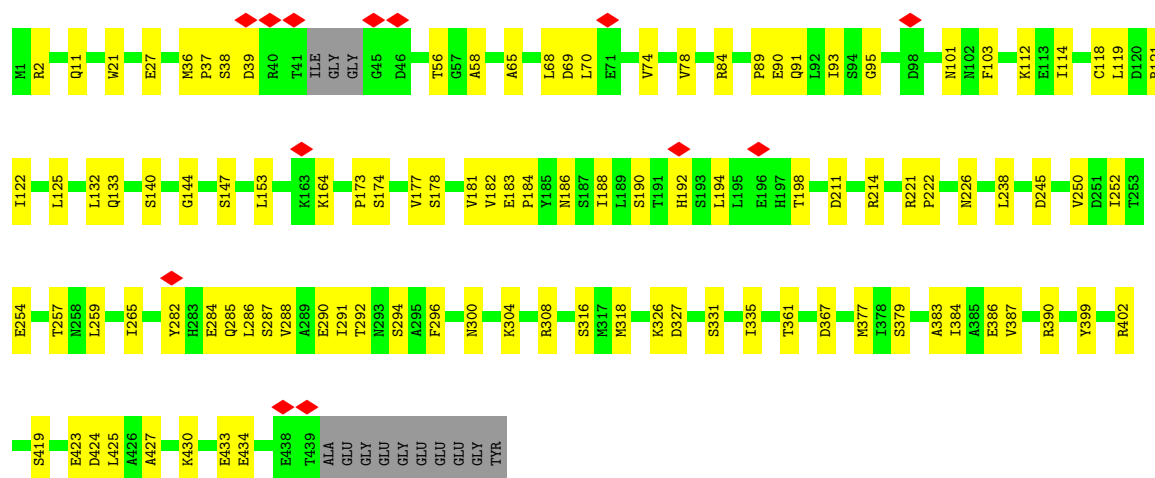
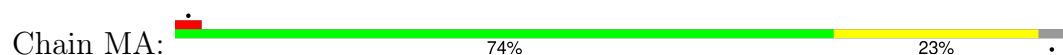
• Molecule 45: Tubulin alpha chain



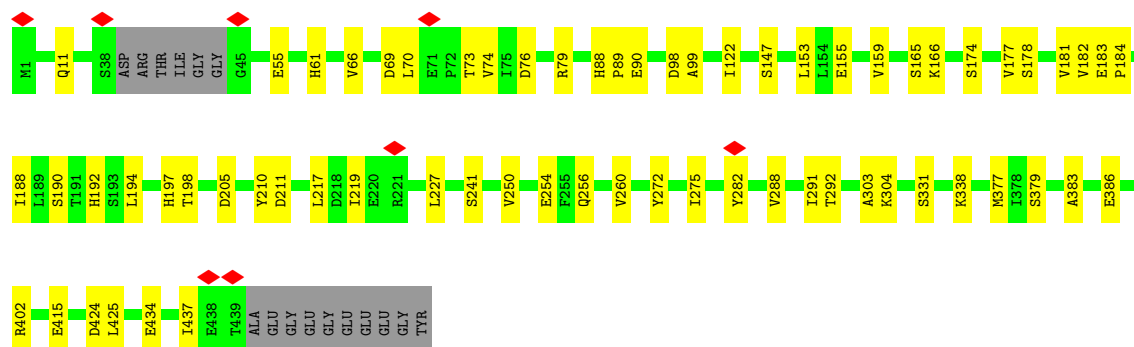
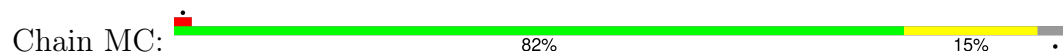




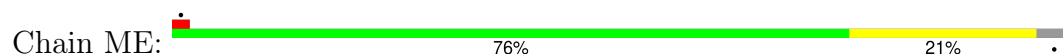
• Molecule 45: Tubulin alpha chain



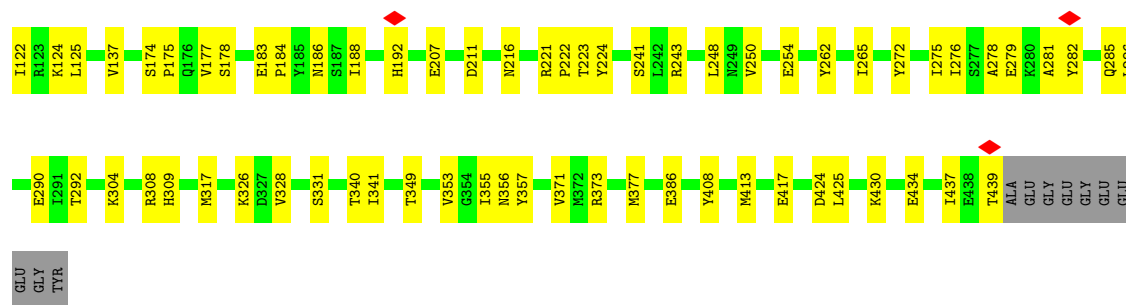
• Molecule 45: Tubulin alpha chain



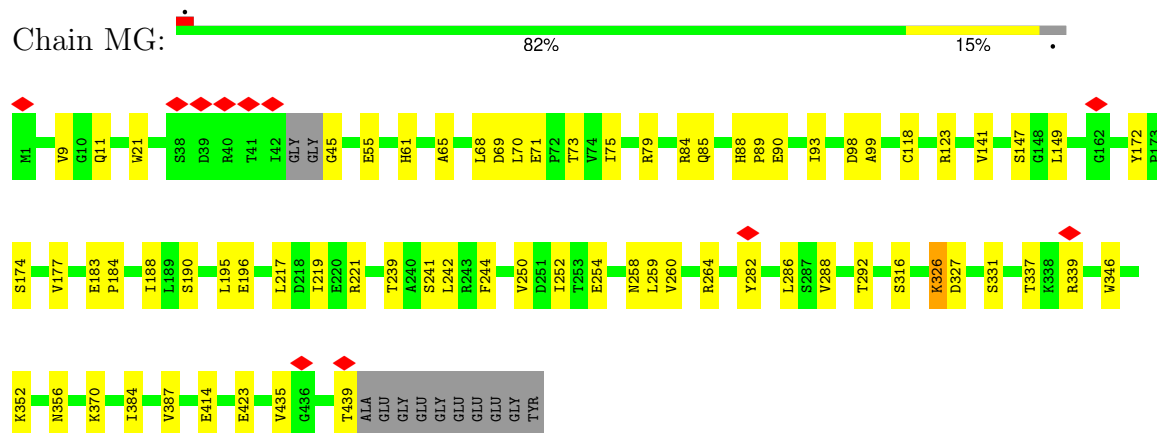
• Molecule 45: Tubulin alpha chain



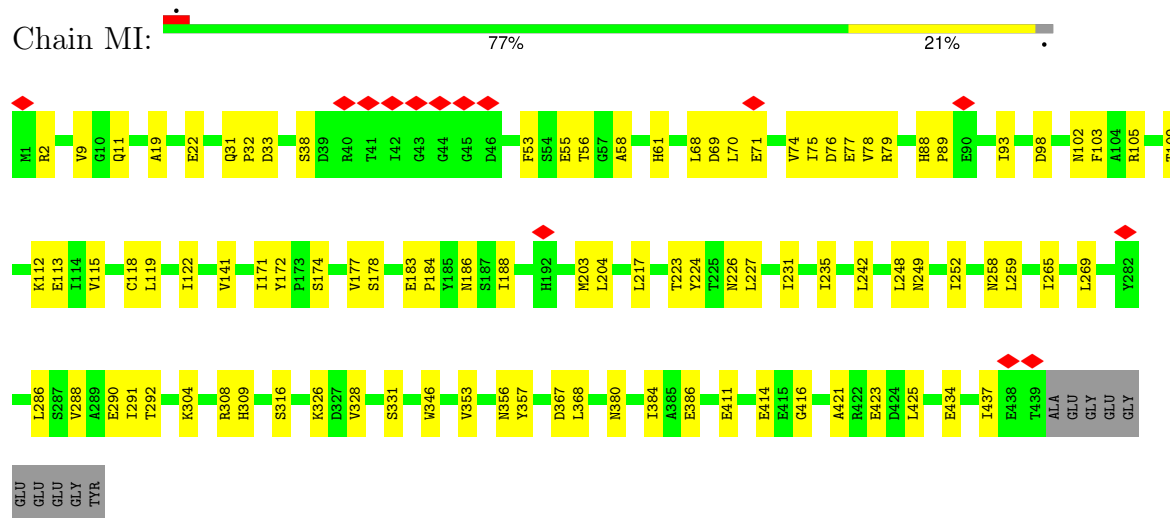




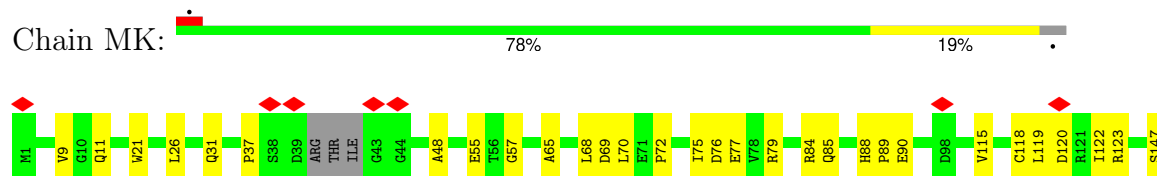
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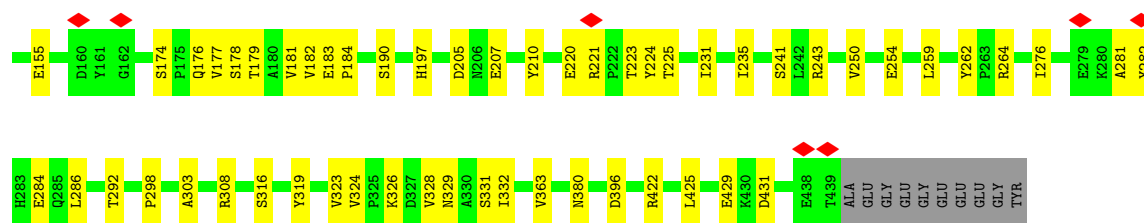
• Molecule 45: Tubulin alpha chain



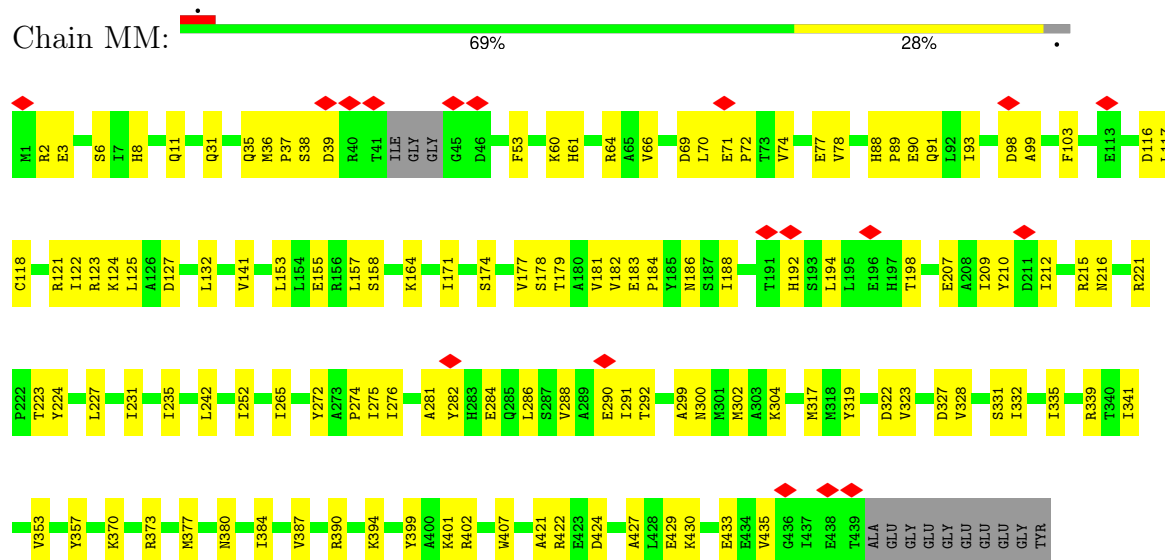
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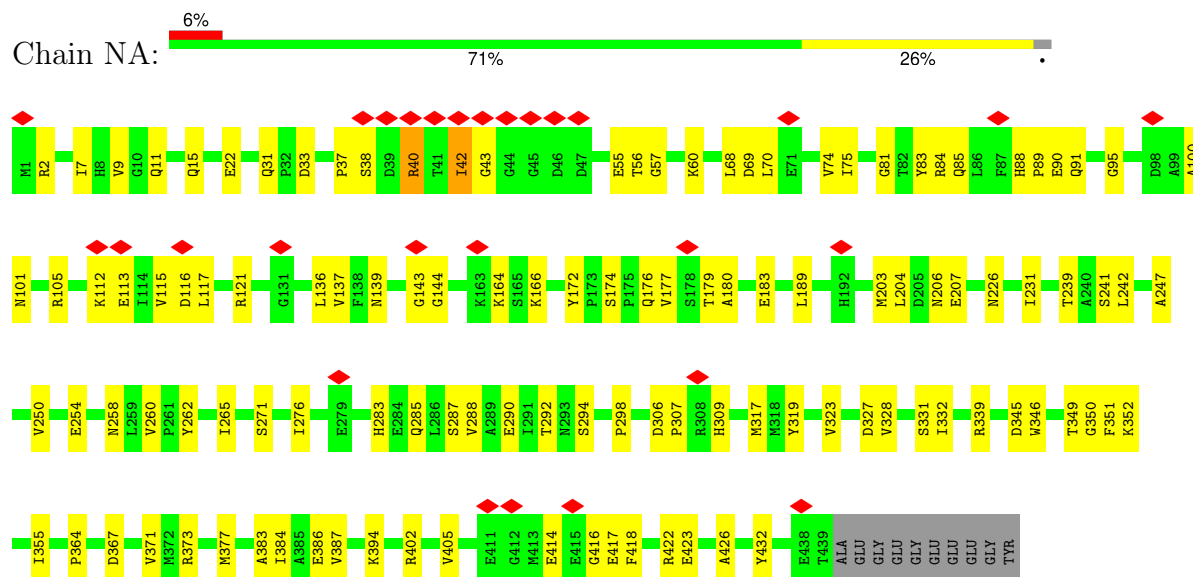




• Molecule 45: Tubulin alpha chain

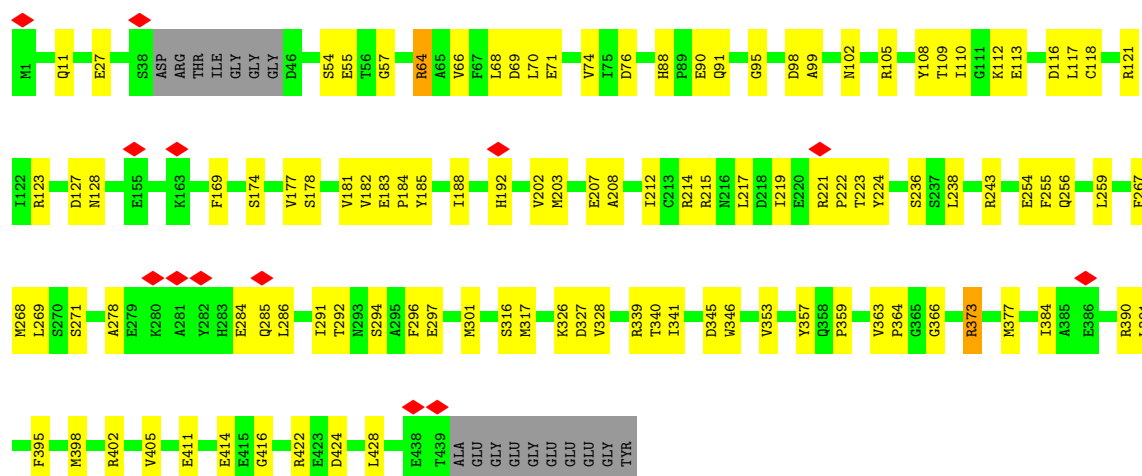


• Molecule 45: Tubulin alpha chain



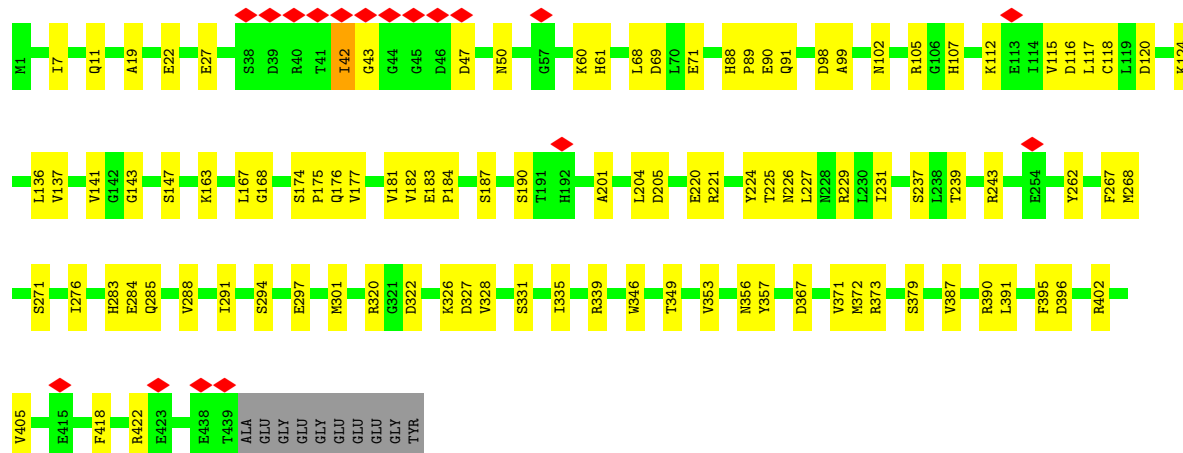
• Molecule 45: Tubulin alpha chain





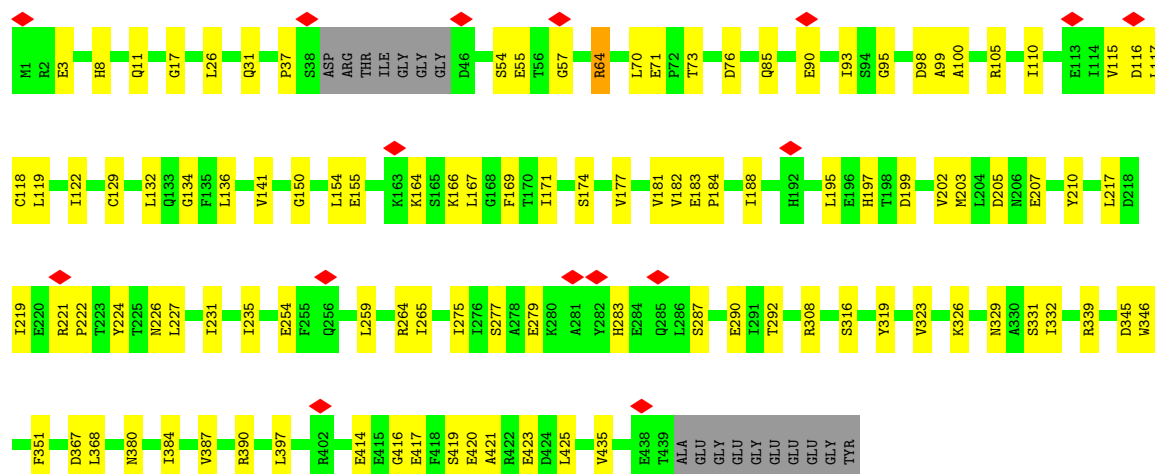
• Molecule 45: Tubulin alpha chain

Chain NE: 75% 22% .



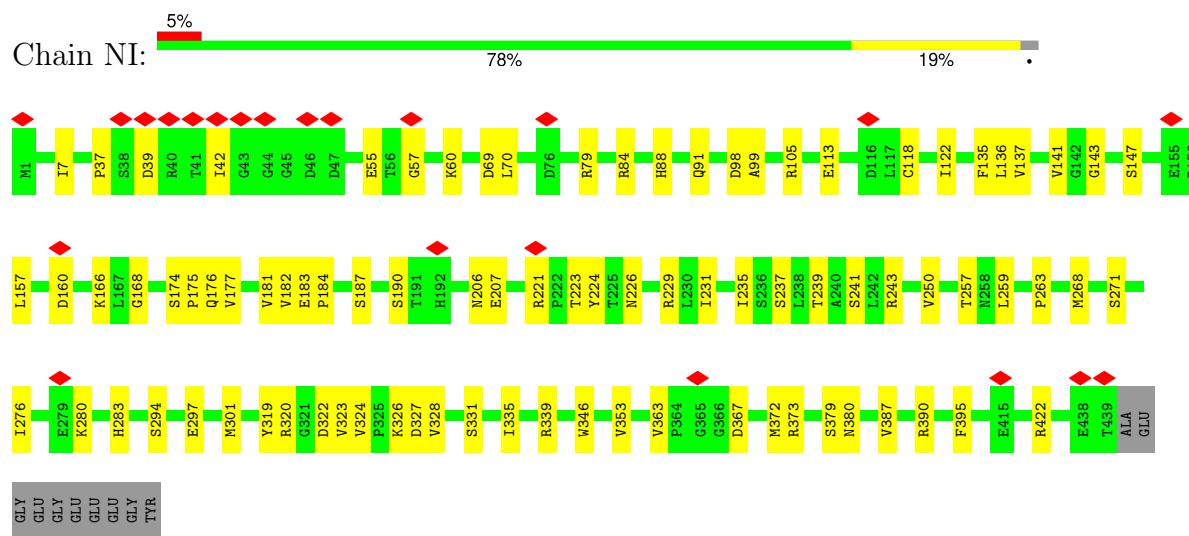
• Molecule 45: Tubulin alpha chain

Chain NG: 73% 23% .

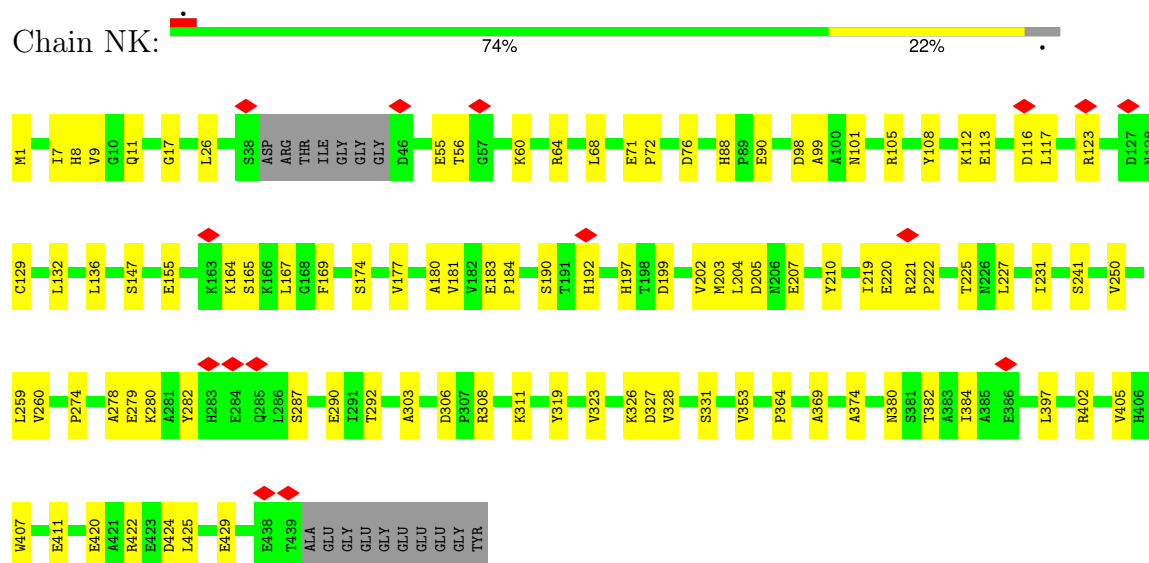




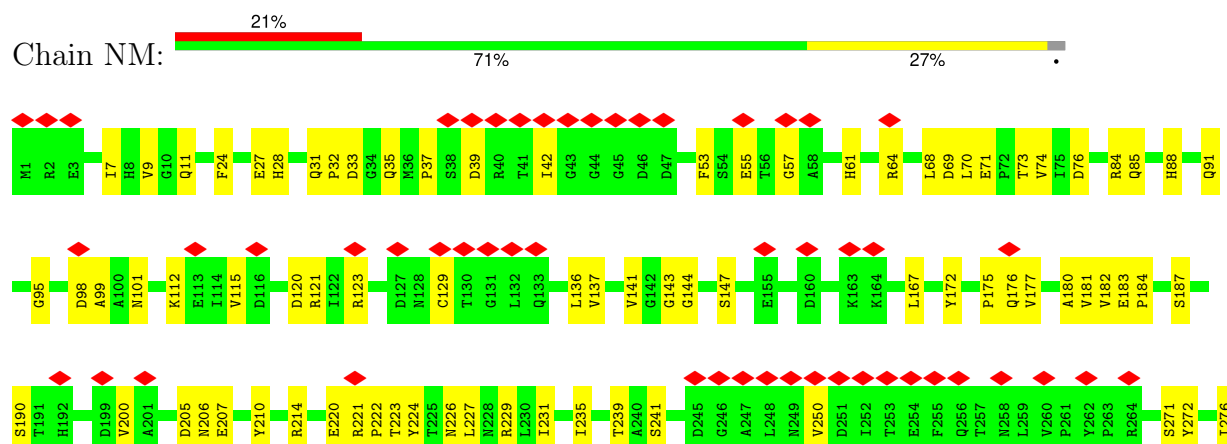
- Molecule 45: Tubulin alpha chain



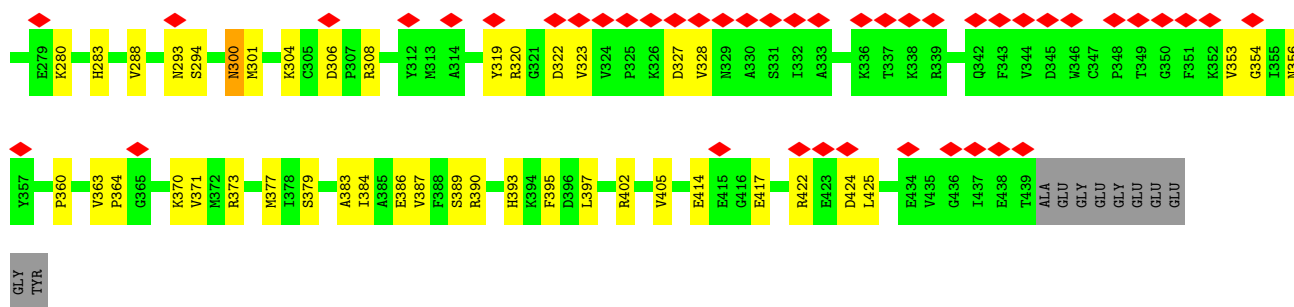
- Molecule 45: Tubulin alpha chain



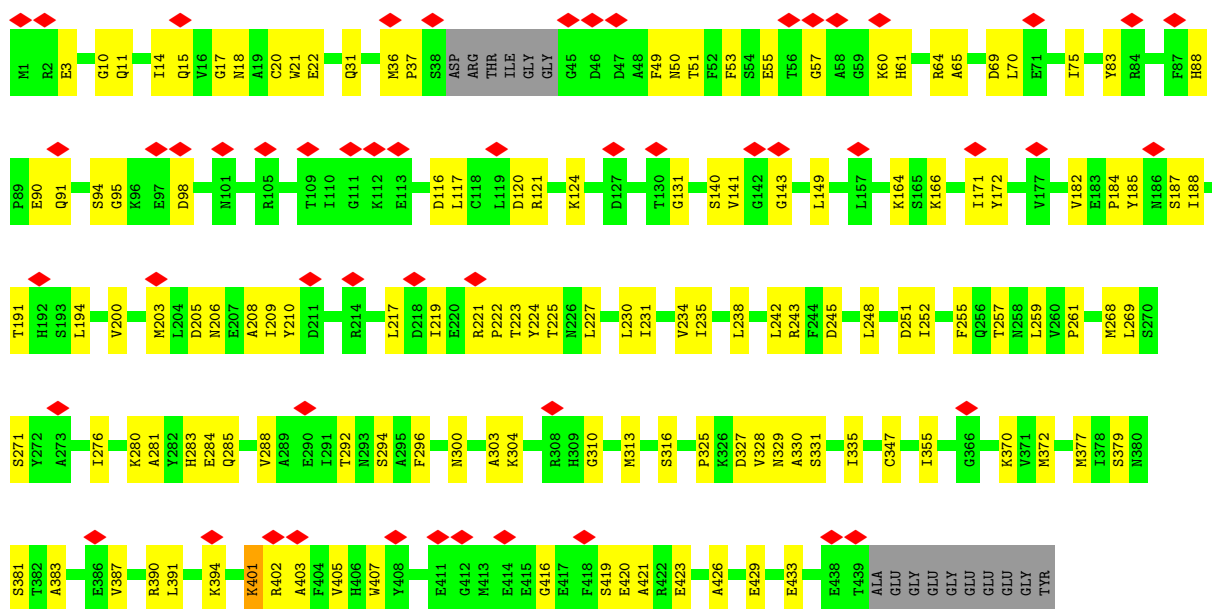
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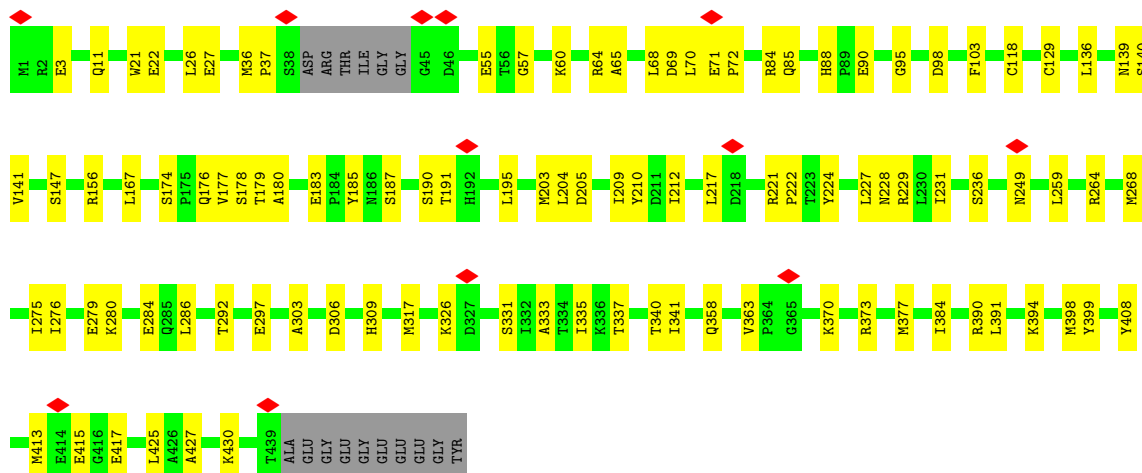




• Molecule 45: Tubulin alpha chain

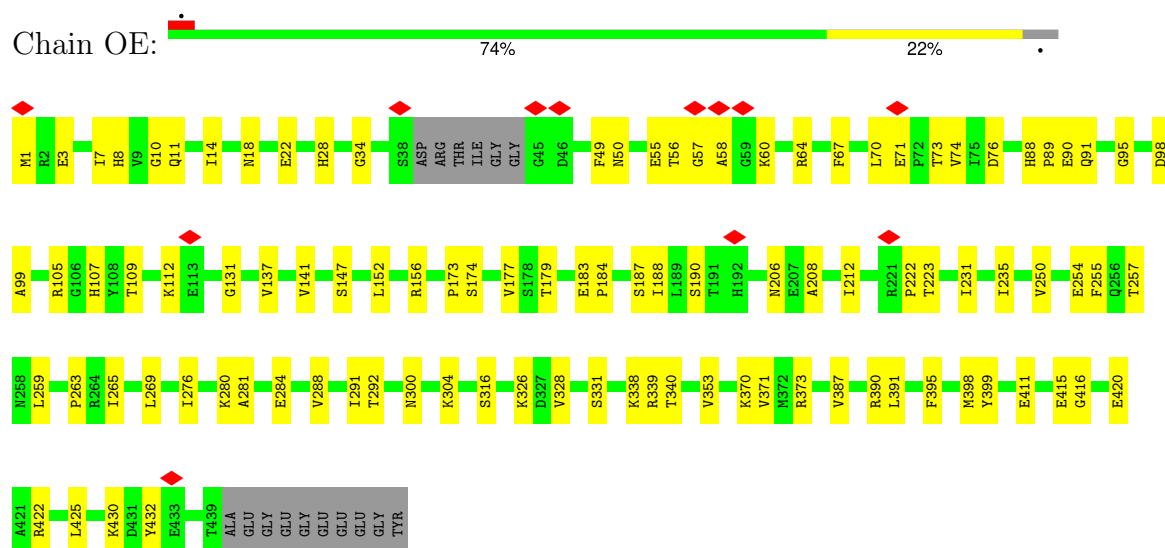


• Molecule 45: Tubulin alpha chain

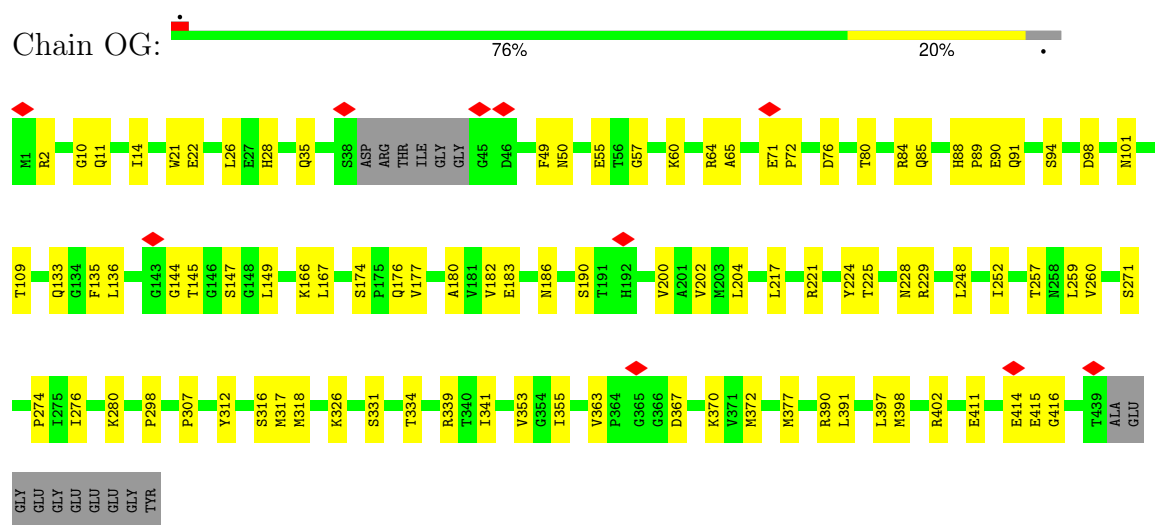




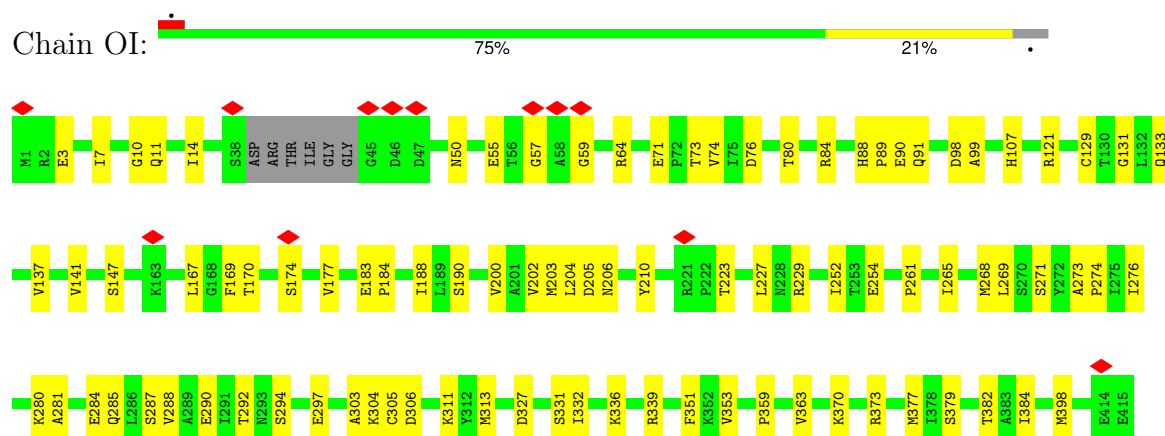
- Molecule 45: Tubulin alpha chain



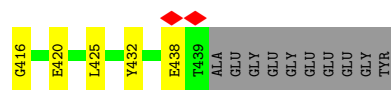
- Molecule 45: Tubulin alpha chain



- Molecule 45: Tubulin alpha chain

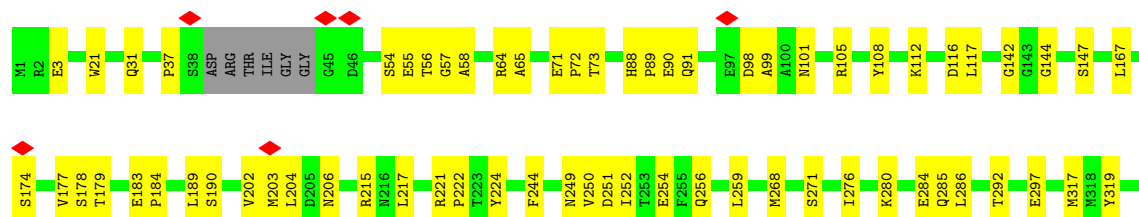






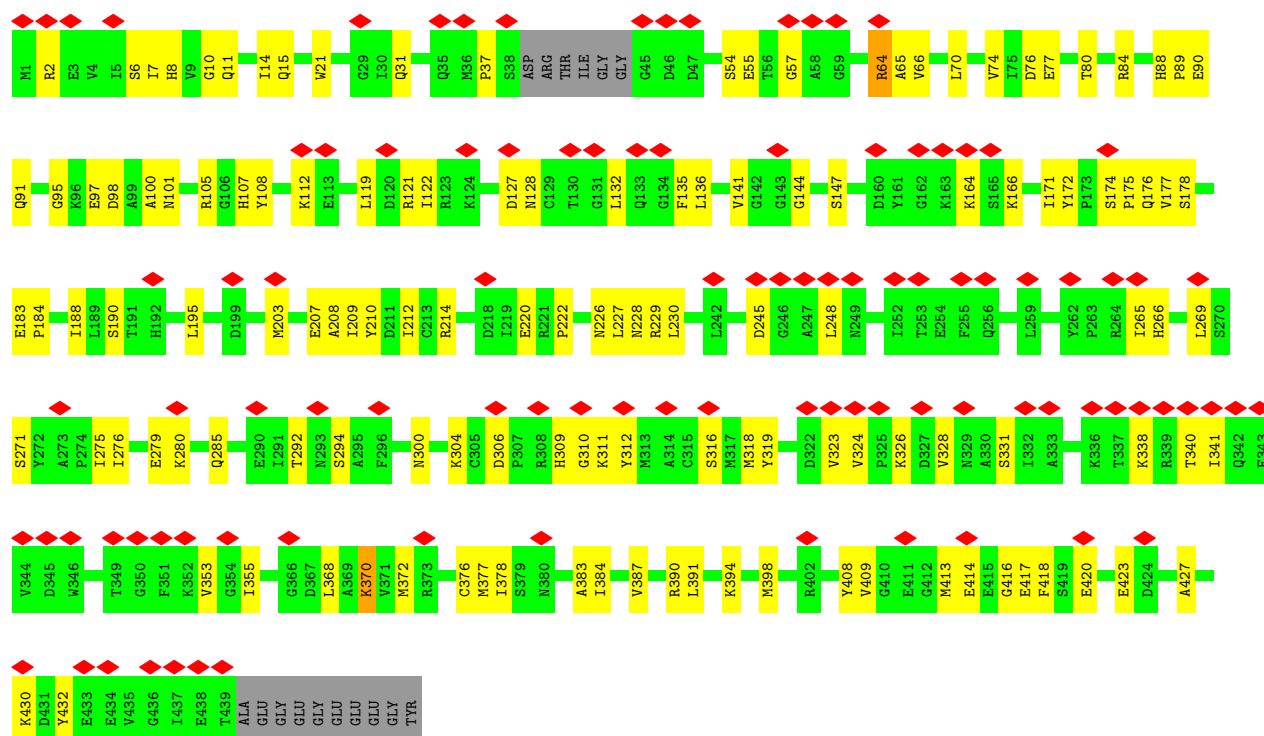
• Molecule 45: Tubulin alpha chain

Chain OK: 77% 20%



• Molecule 45: Tubulin alpha chain

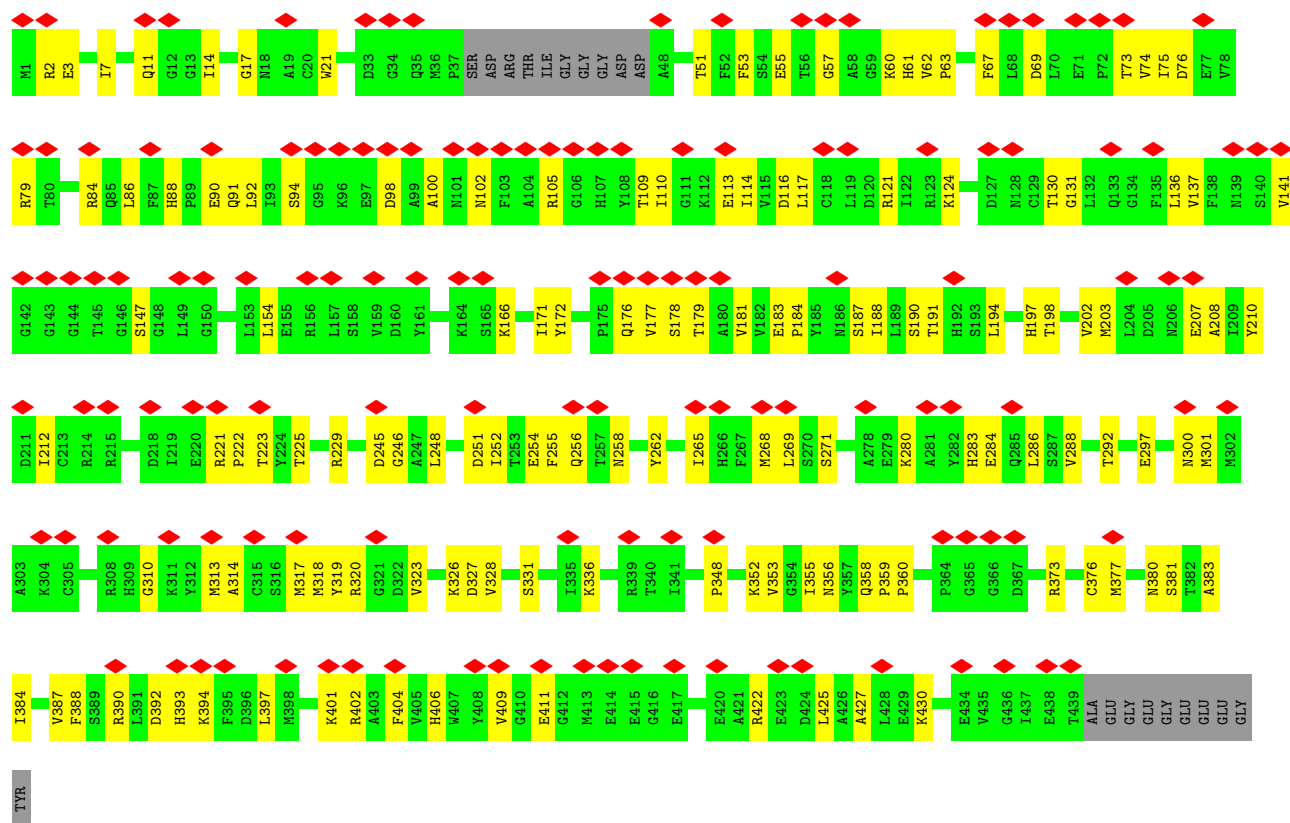
Chain OM: 22% 67% 29%



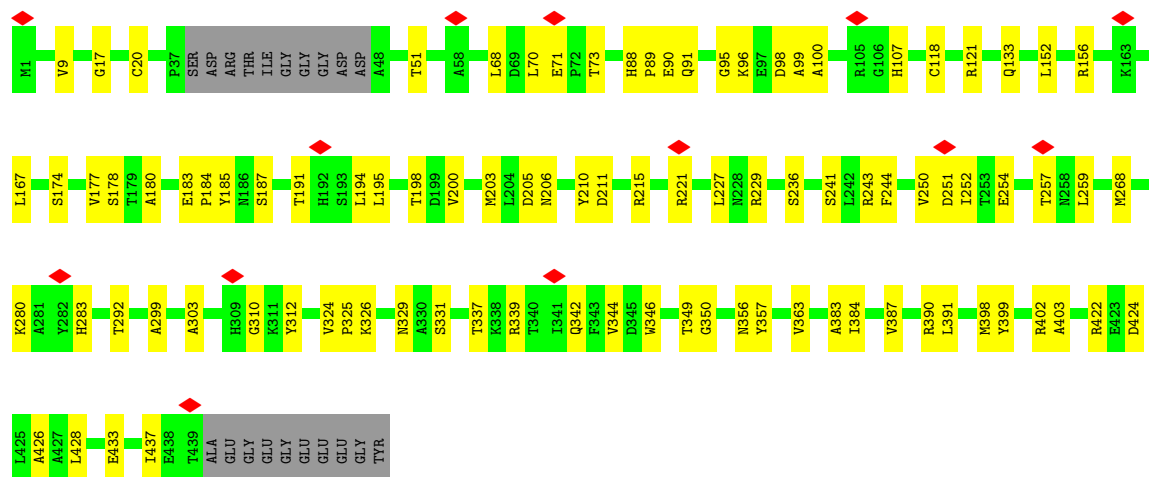
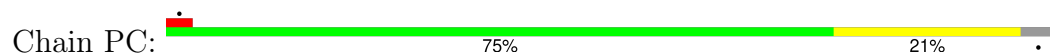
• Molecule 45: Tubulin alpha chain

Chain PA: 31% 63% 32%

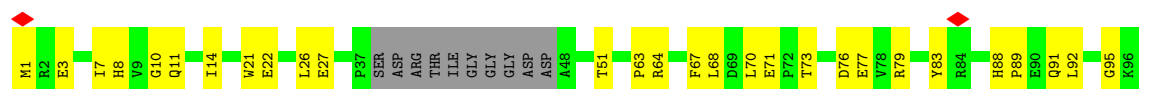




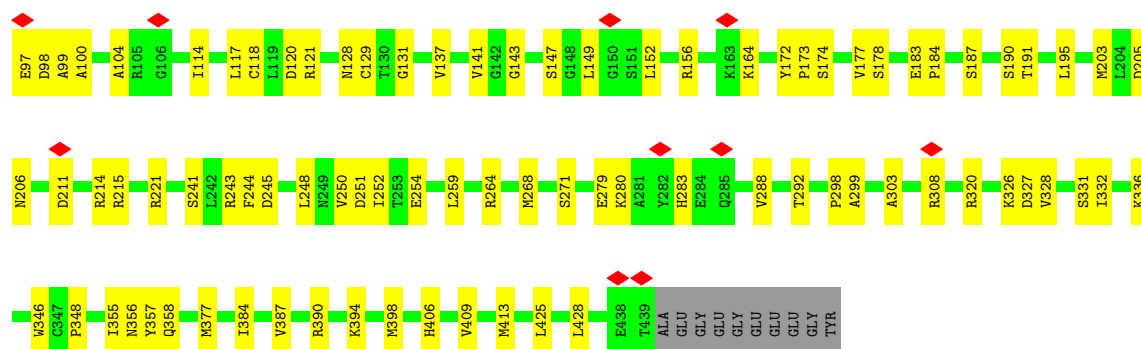
• Molecule 45: Tubulin alpha chain



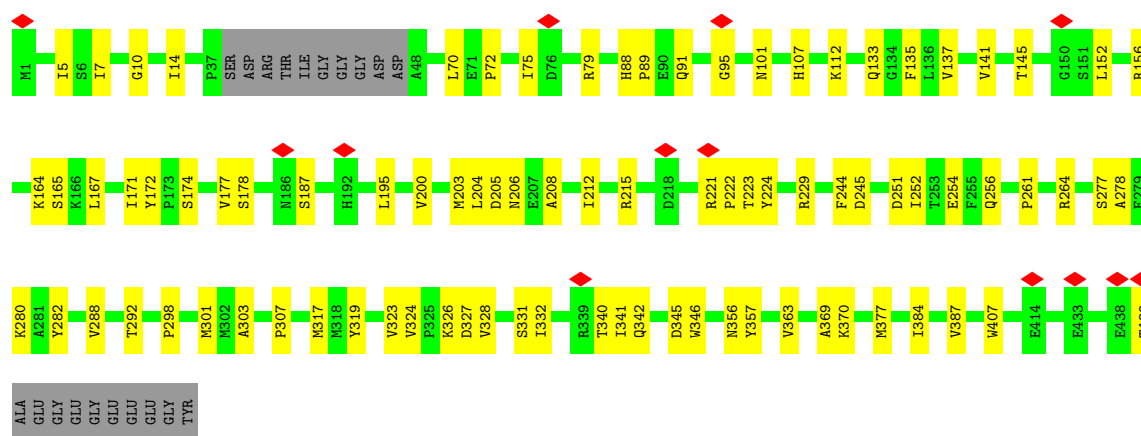
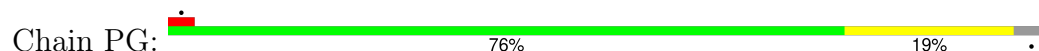
• Molecule 45: Tubulin alpha chain



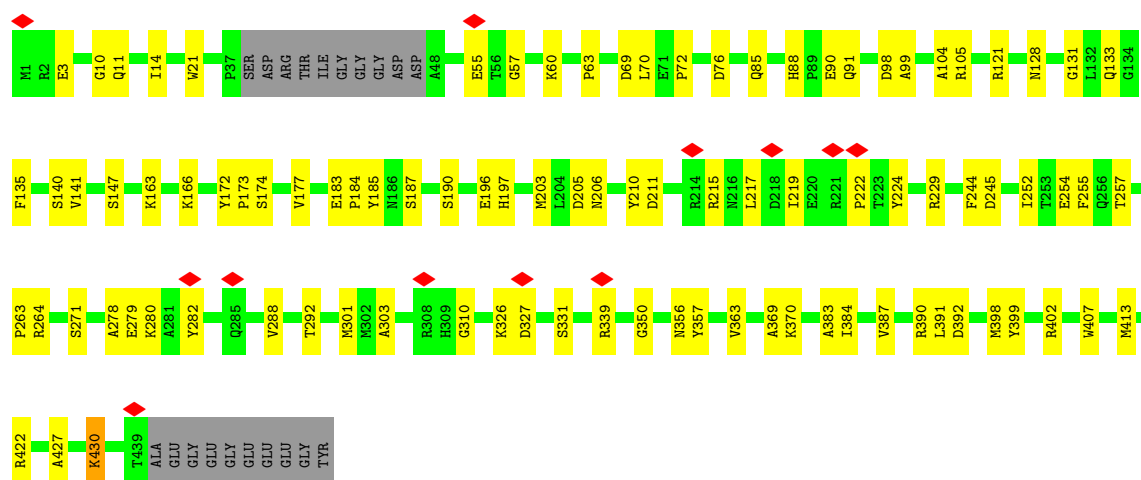
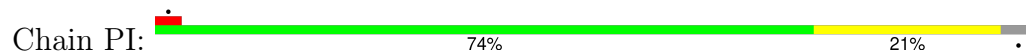




• Molecule 45: Tubulin alpha chain



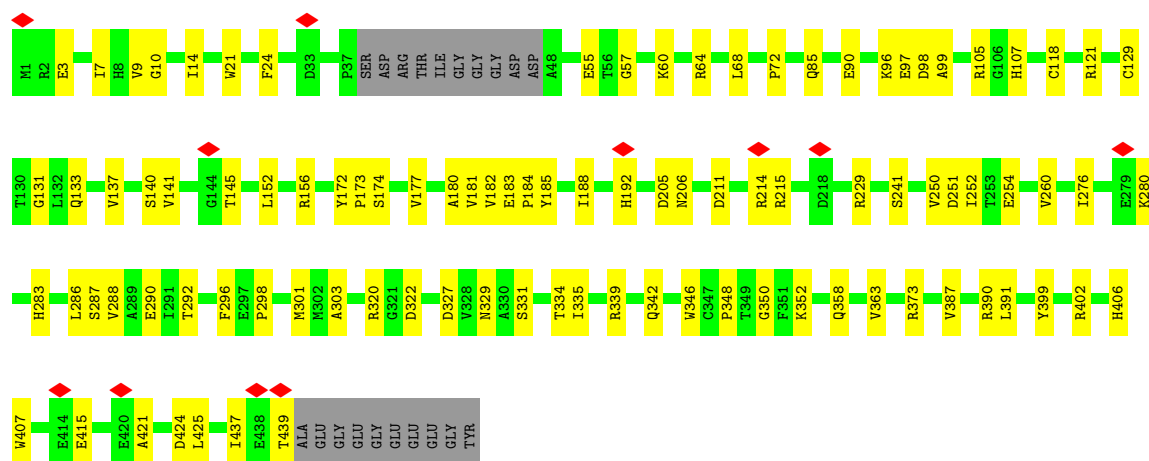
• Molecule 45: Tubulin alpha chain



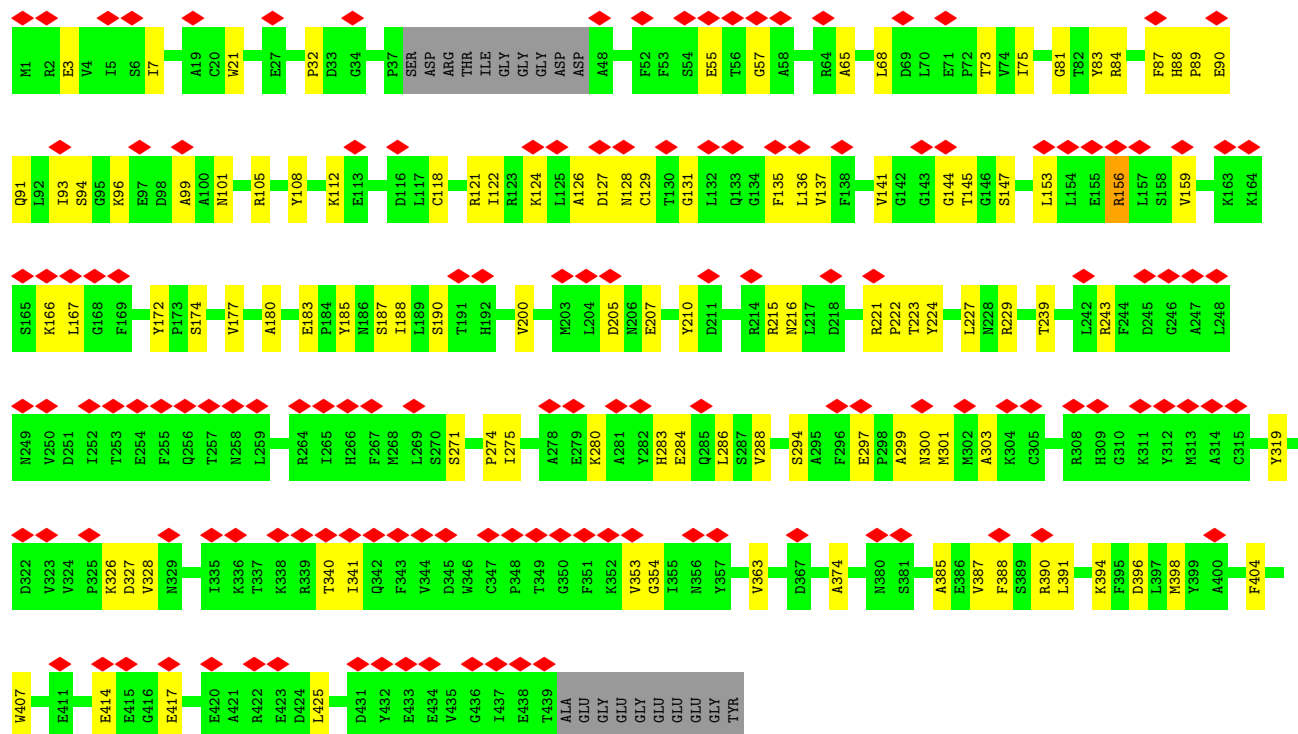
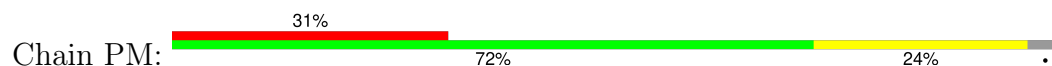
• Molecule 45: Tubulin alpha chain



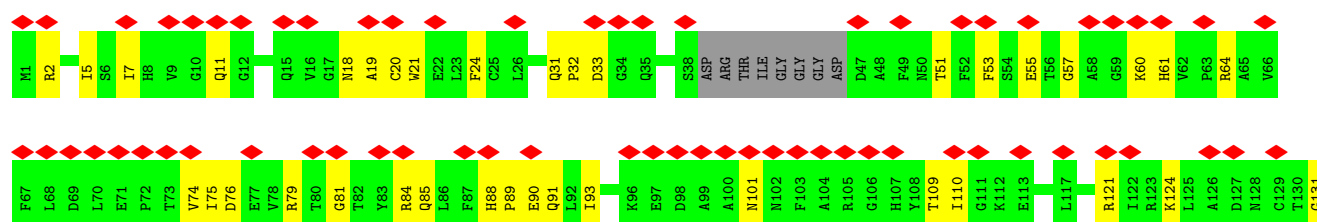




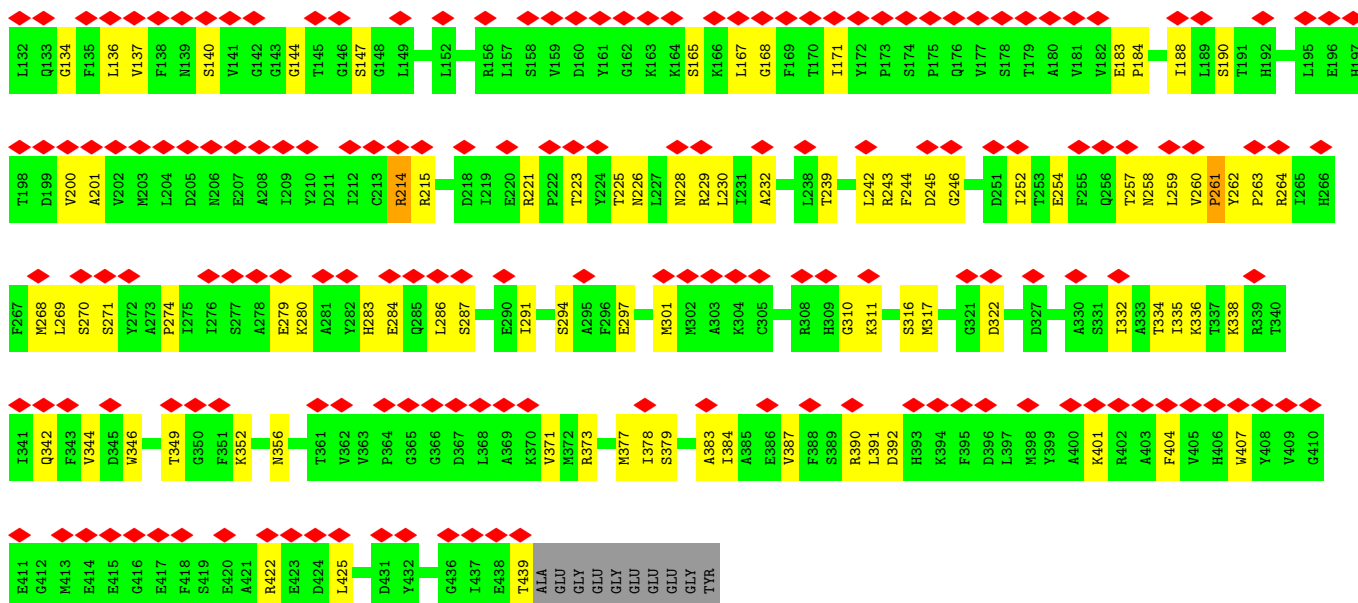
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

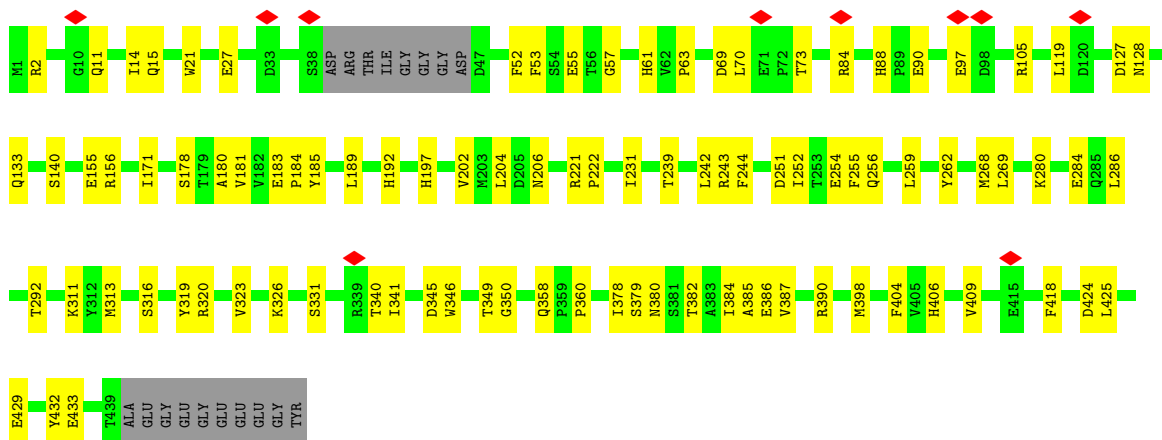






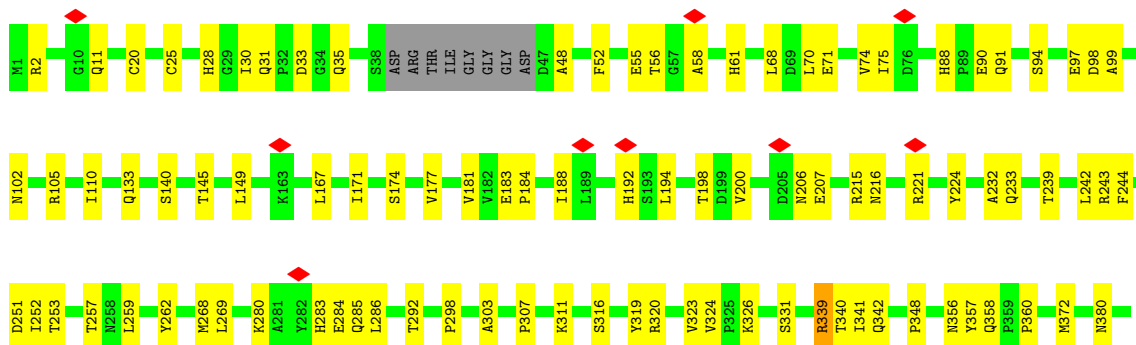
• Molecule 45: Tubulin alpha chain

Chain QC: 75% 21%

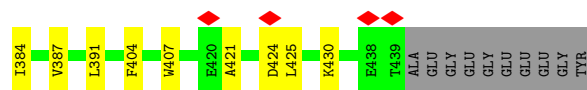


• Molecule 45: Tubulin alpha chain

Chain QE: 73% 23%

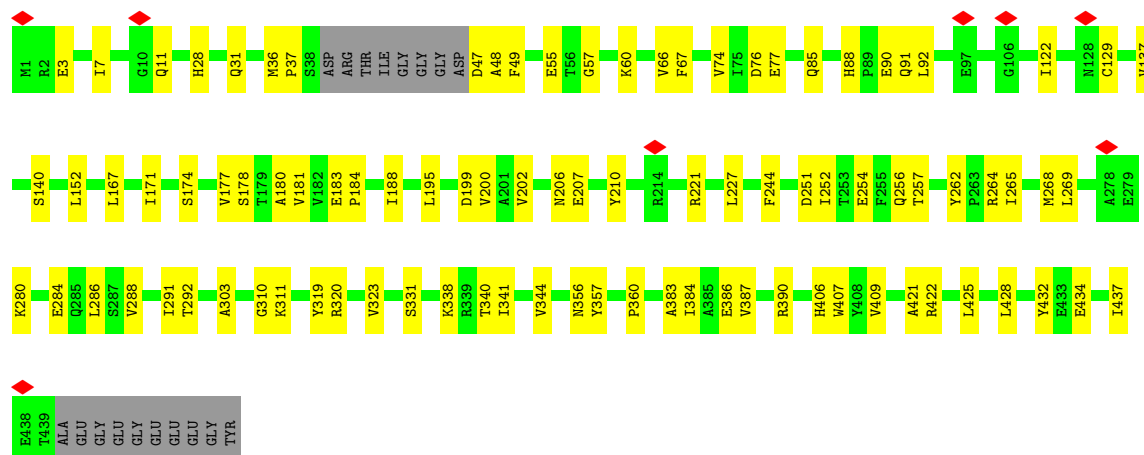






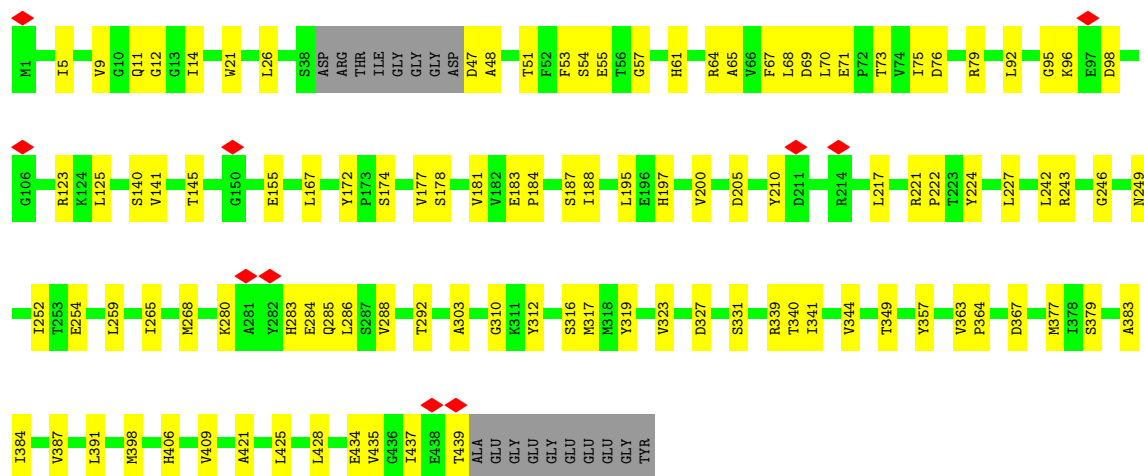
• Molecule 45: Tubulin alpha chain

Chain QG: 75% 21% .



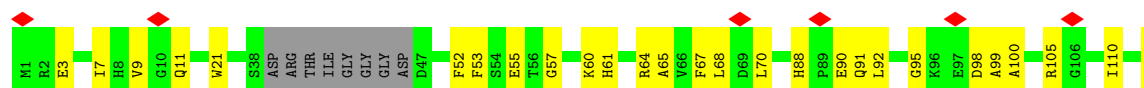
• Molecule 45: Tubulin alpha chain

Chain QI: 72% 24% .

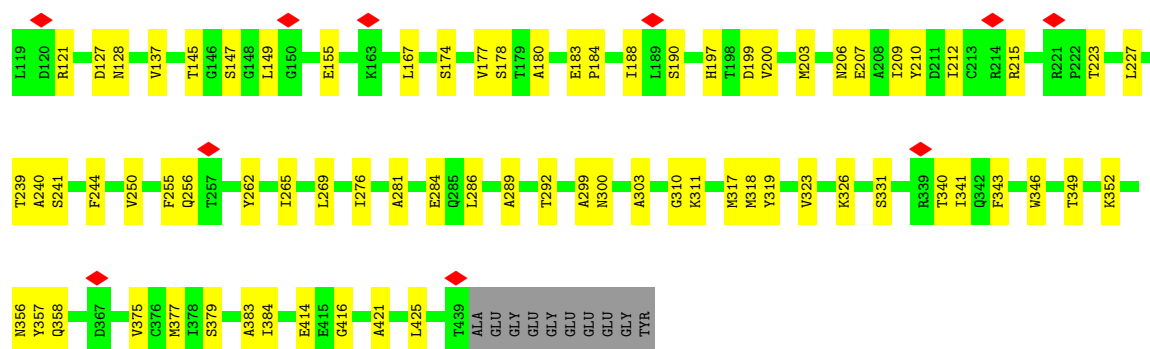


• Molecule 45: Tubulin alpha chain

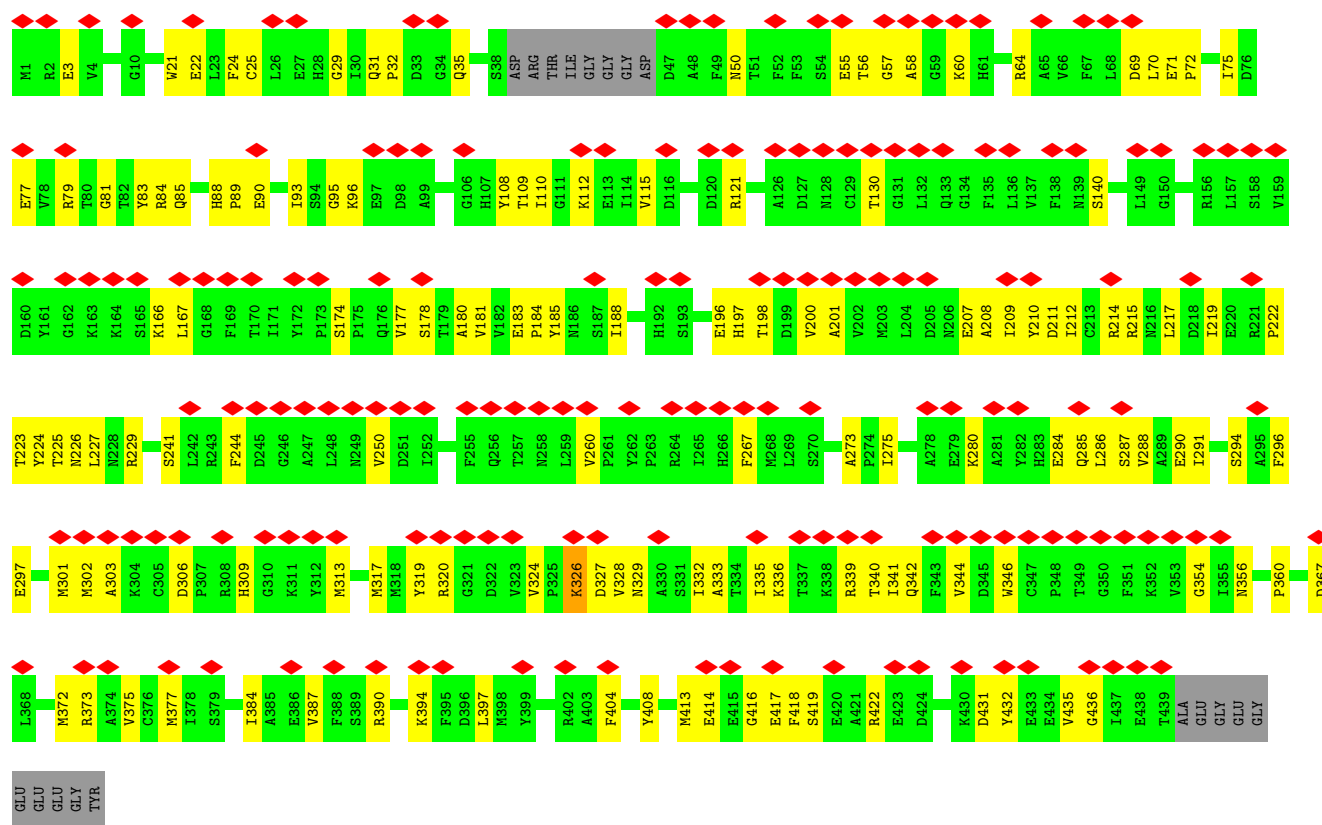
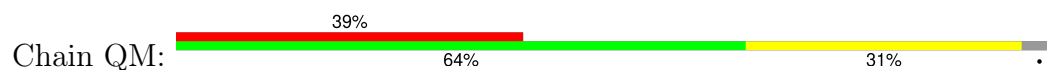
Chain QK: 73% 22% .



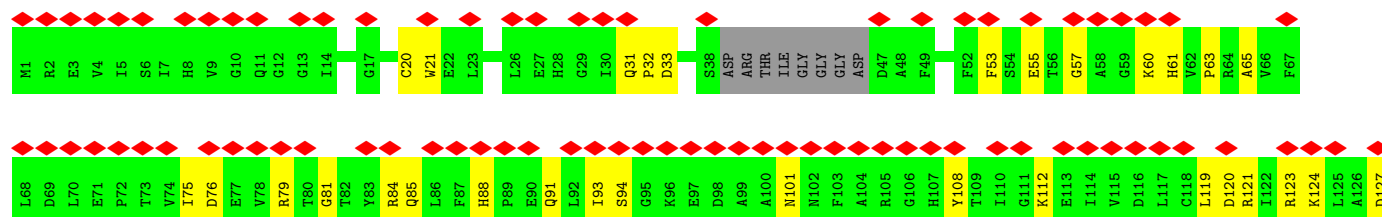
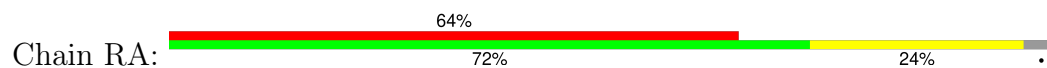




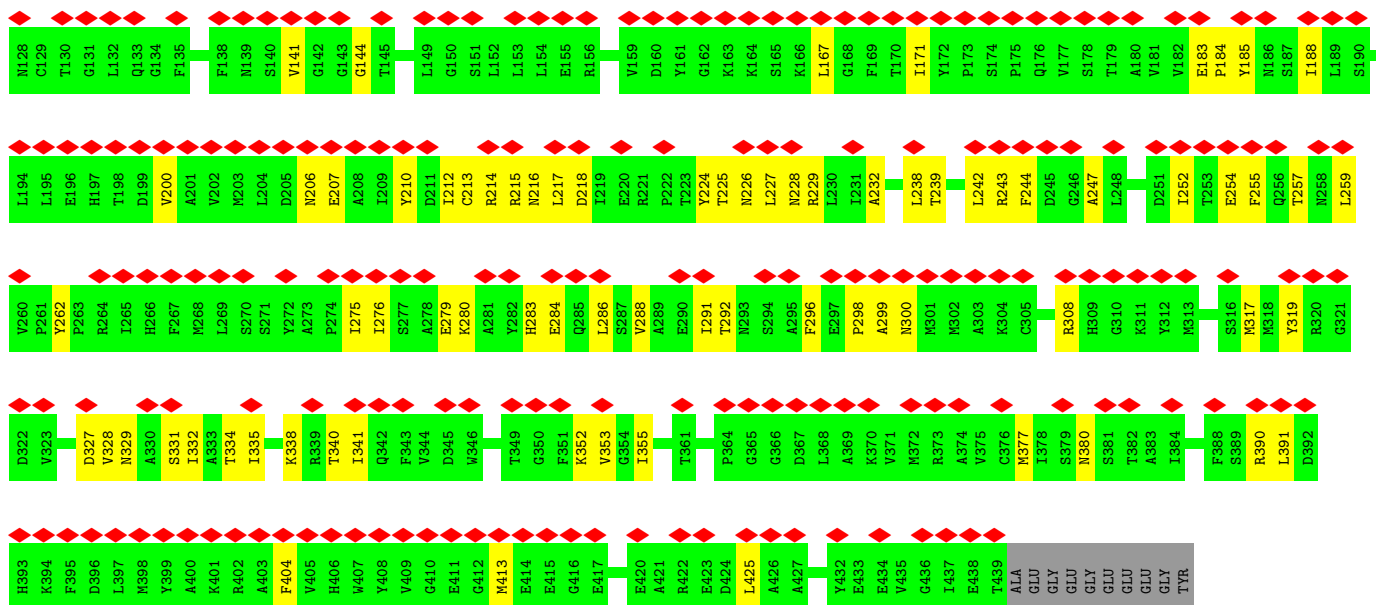
• Molecule 45: Tubulin alpha chain



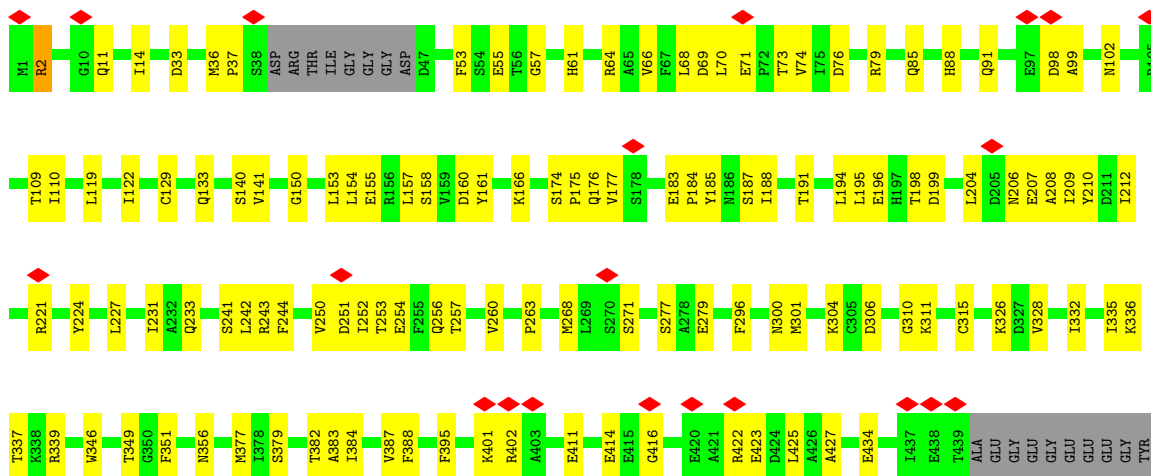
• Molecule 45: Tubulin alpha chain



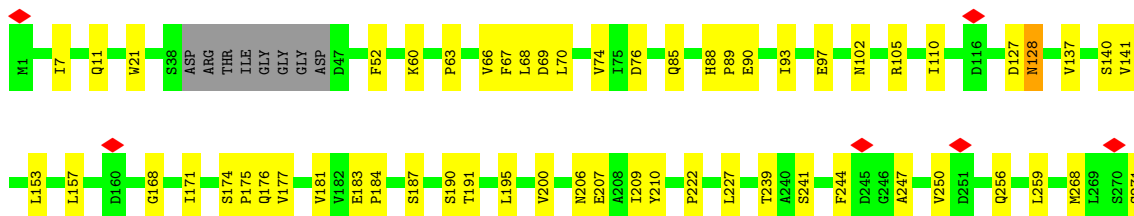
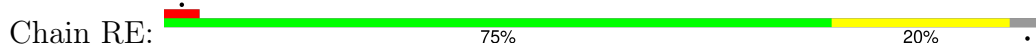




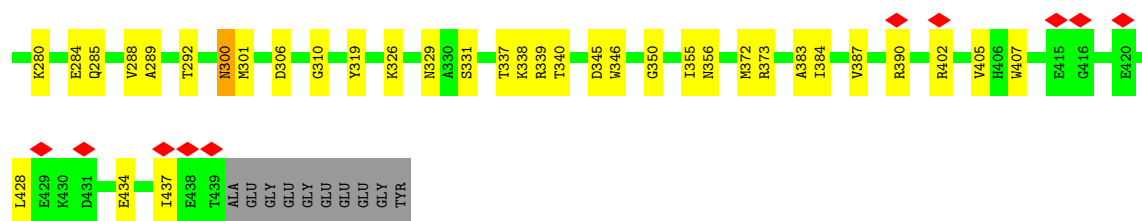
- Molecule 45: Tubulin alpha chain



- Molecule 45: Tubulin alpha chain

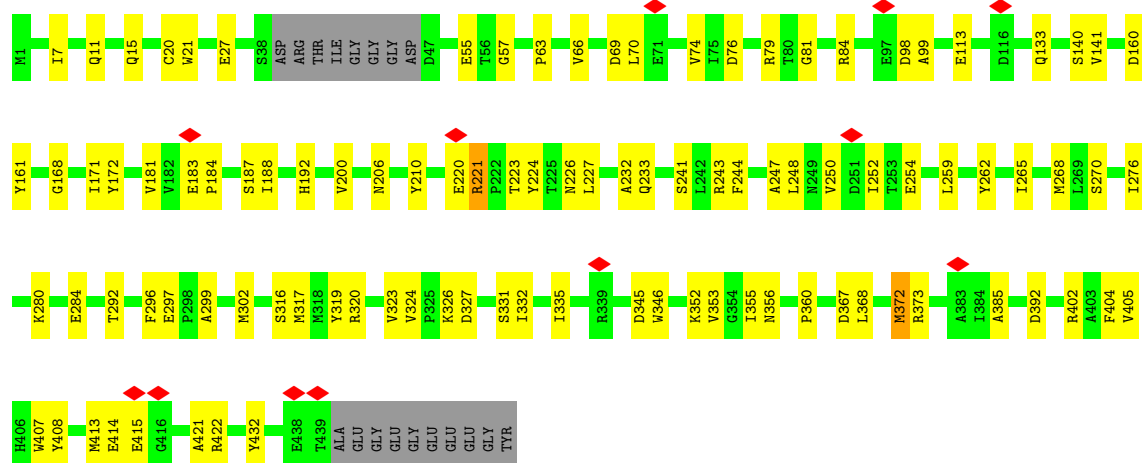






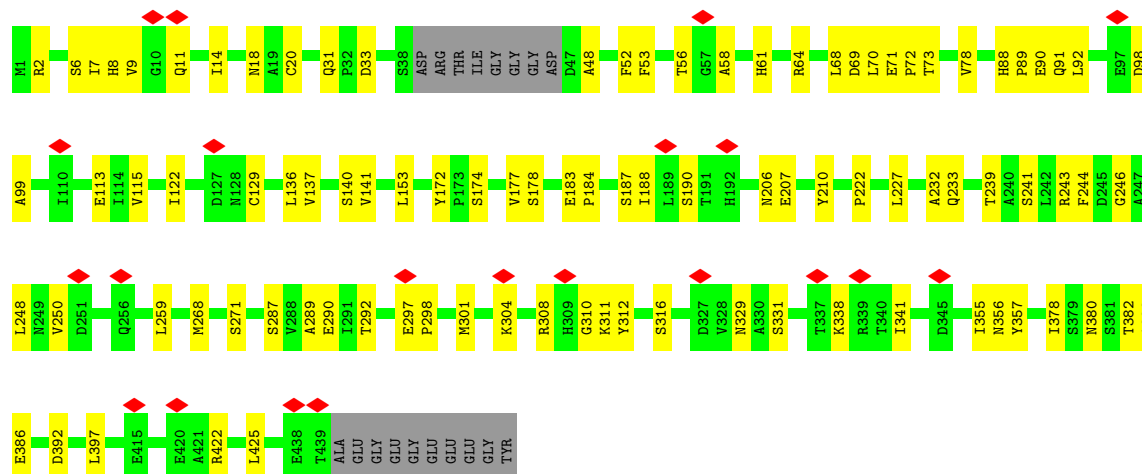
• Molecule 45: Tubulin alpha chain

Chain RG: 73% 22% .



• Molecule 45: Tubulin alpha chain

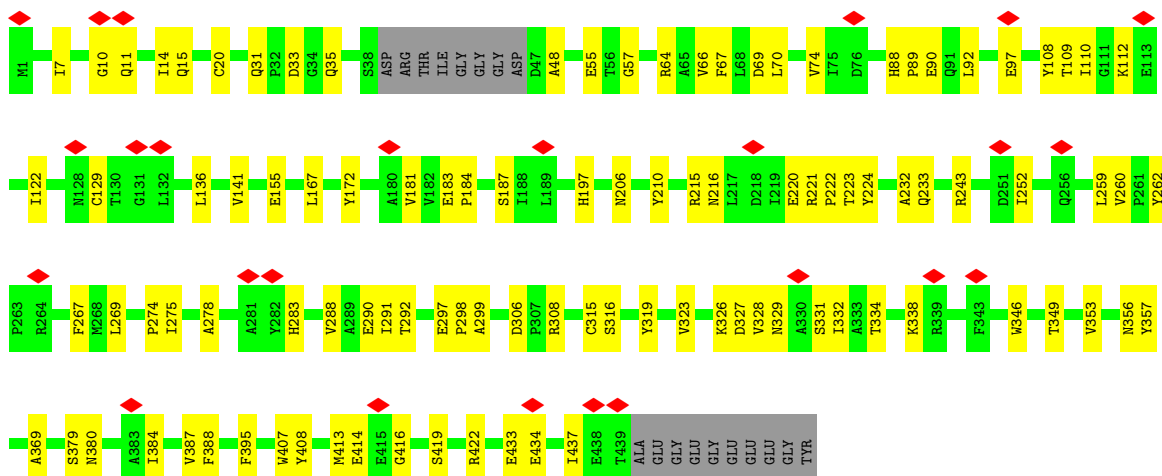
Chain RI: 5% 75% 21% .



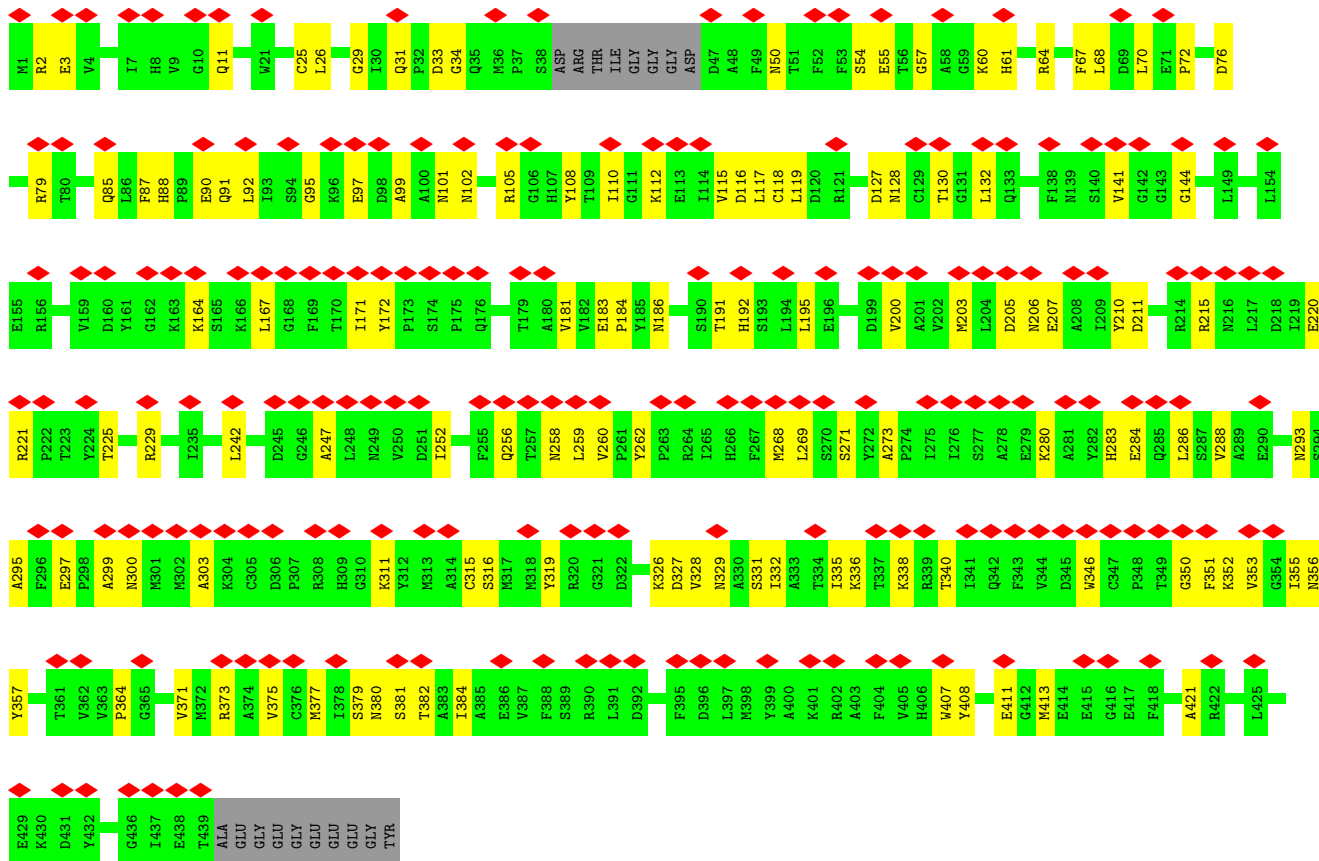
• Molecule 45: Tubulin alpha chain

Chain RK: 6% 73% 23% .

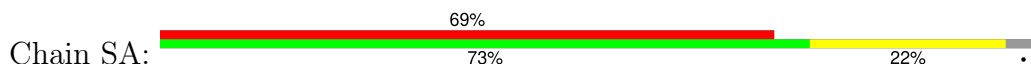




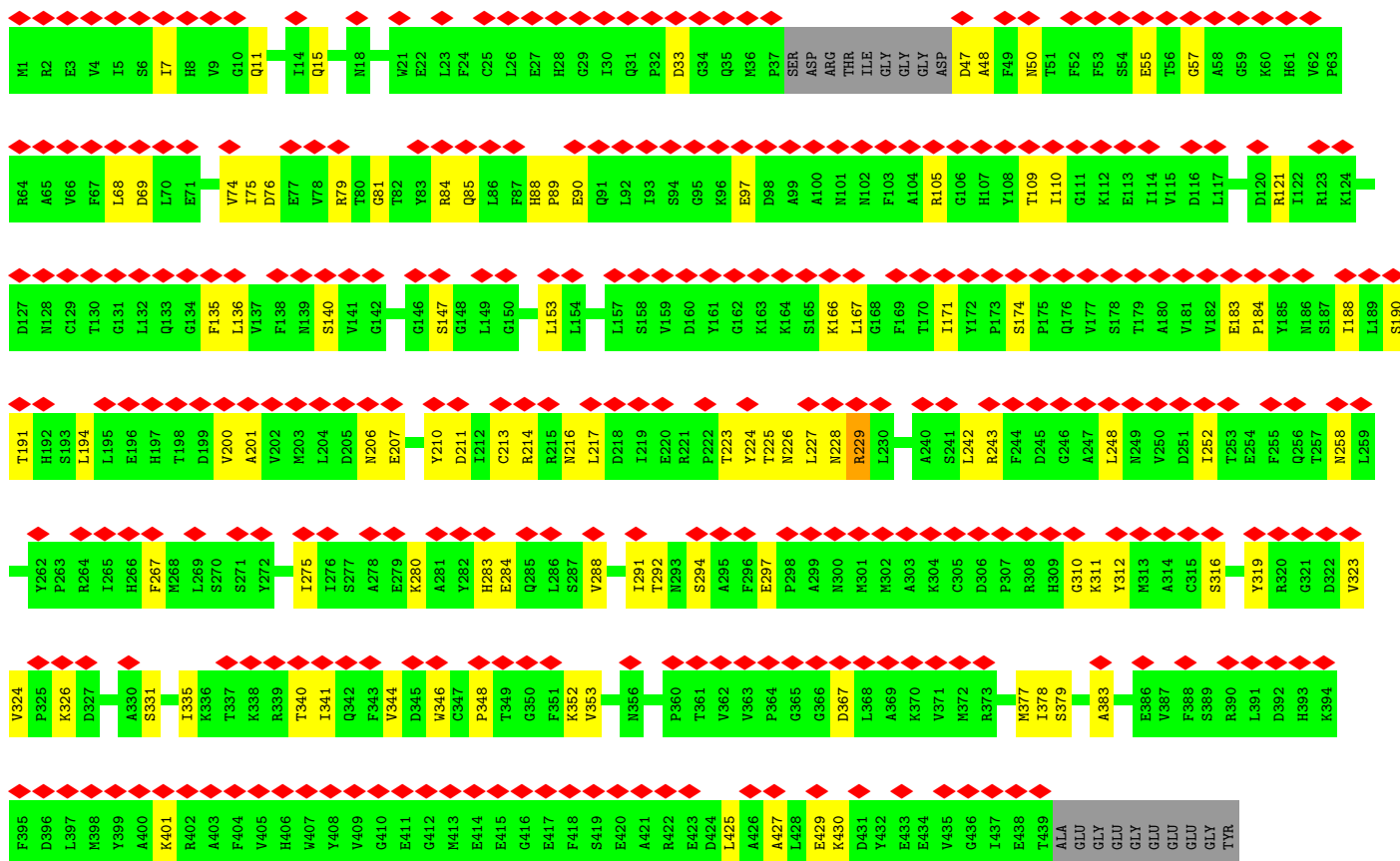
• Molecule 45: Tubulin alpha chain



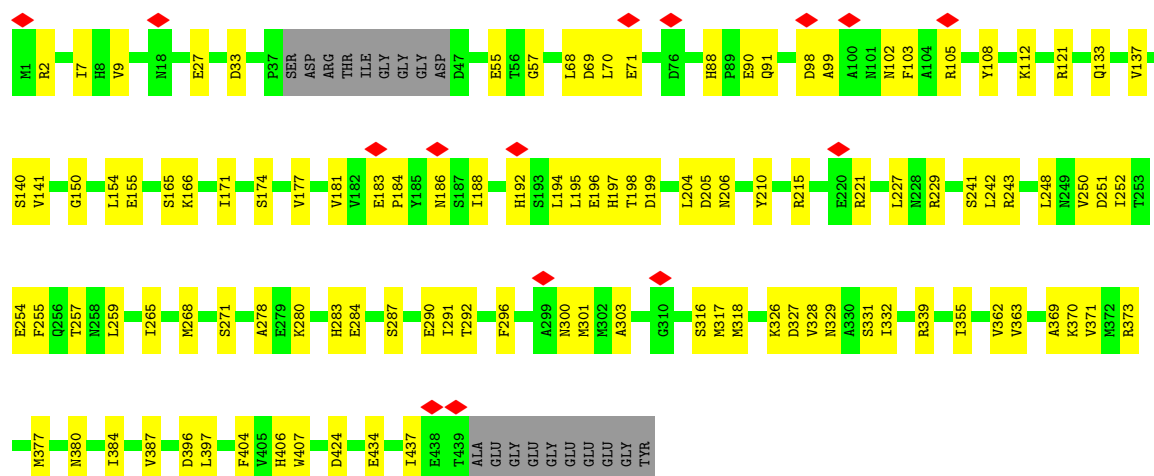
• Molecule 45: Tubulin alpha chain



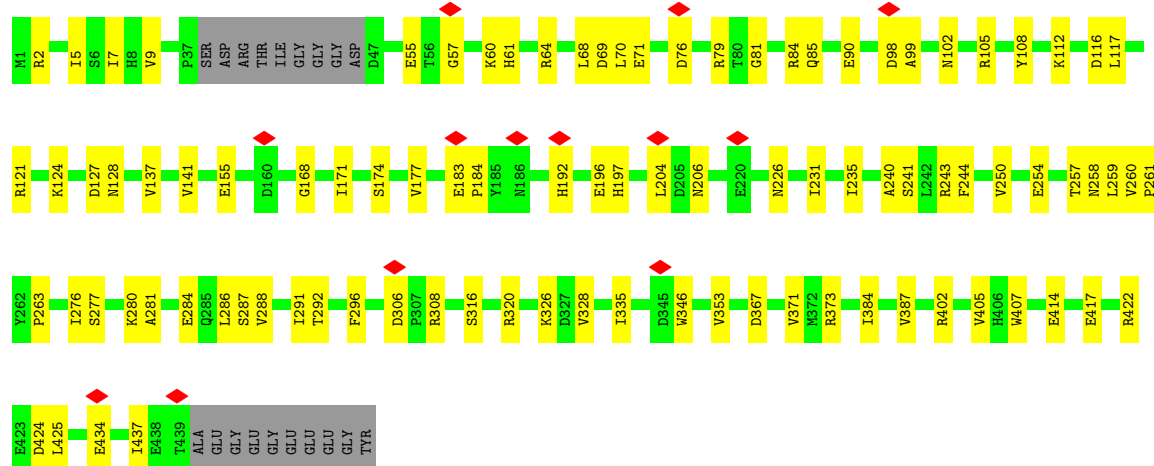
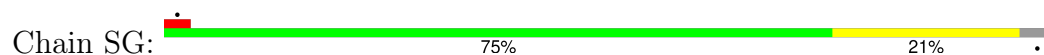




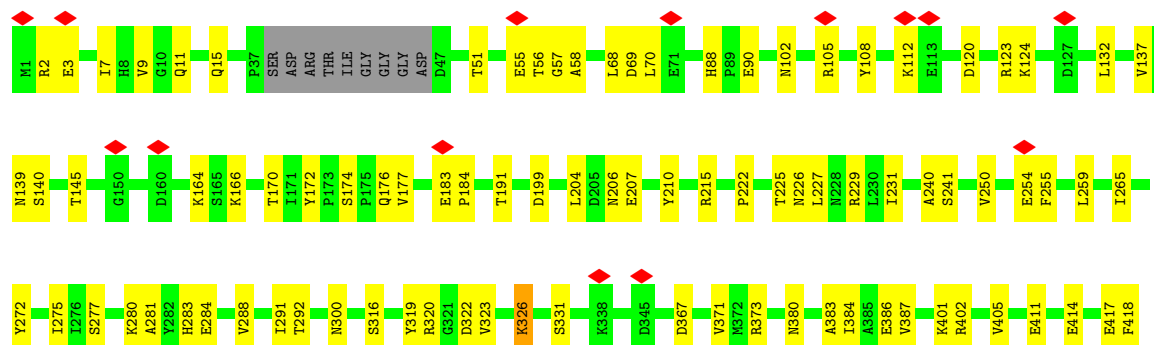
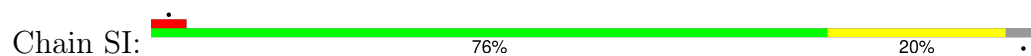




• Molecule 45: Tubulin alpha chain



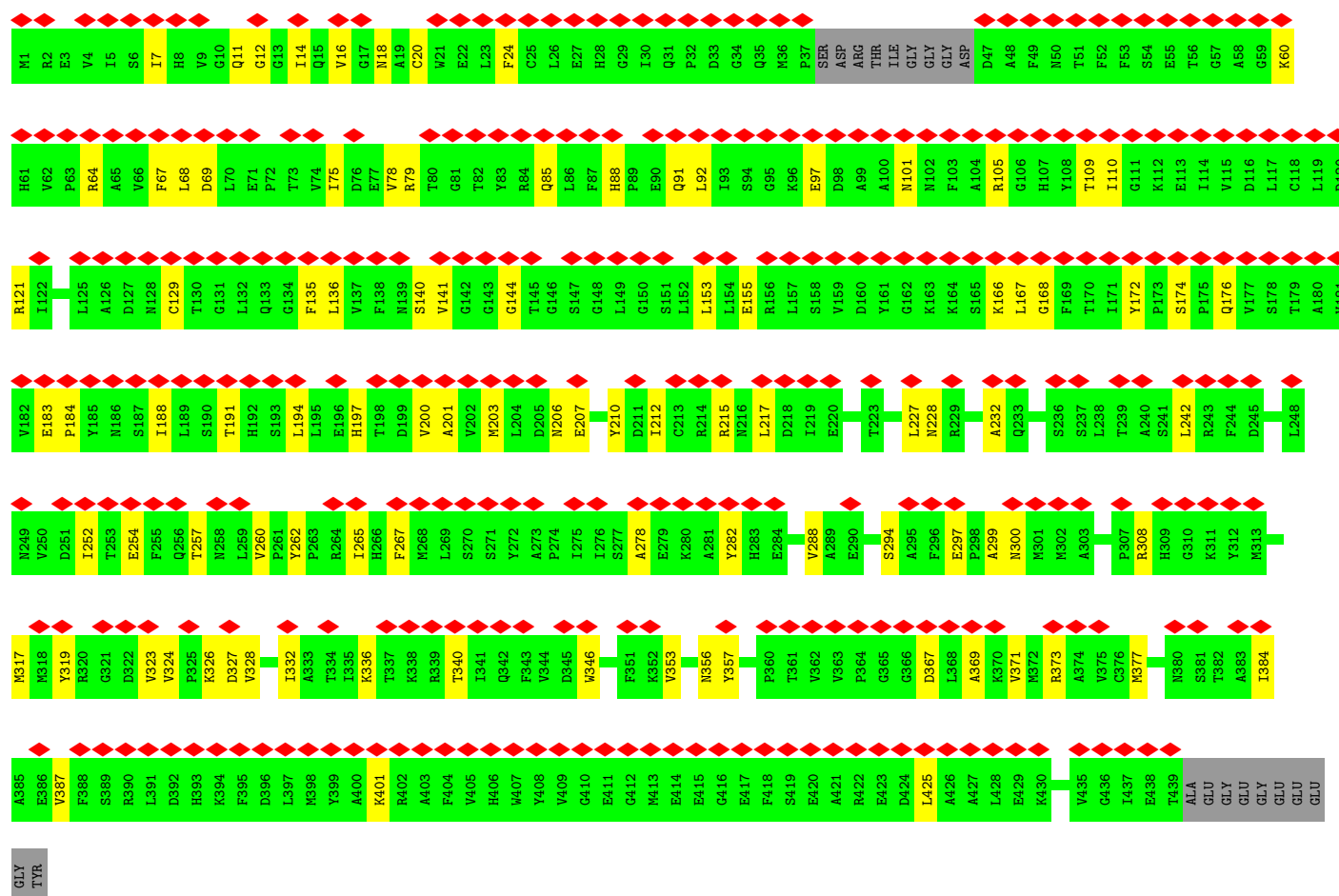
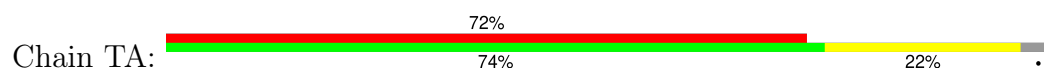
• Molecule 45: Tubulin alpha chain



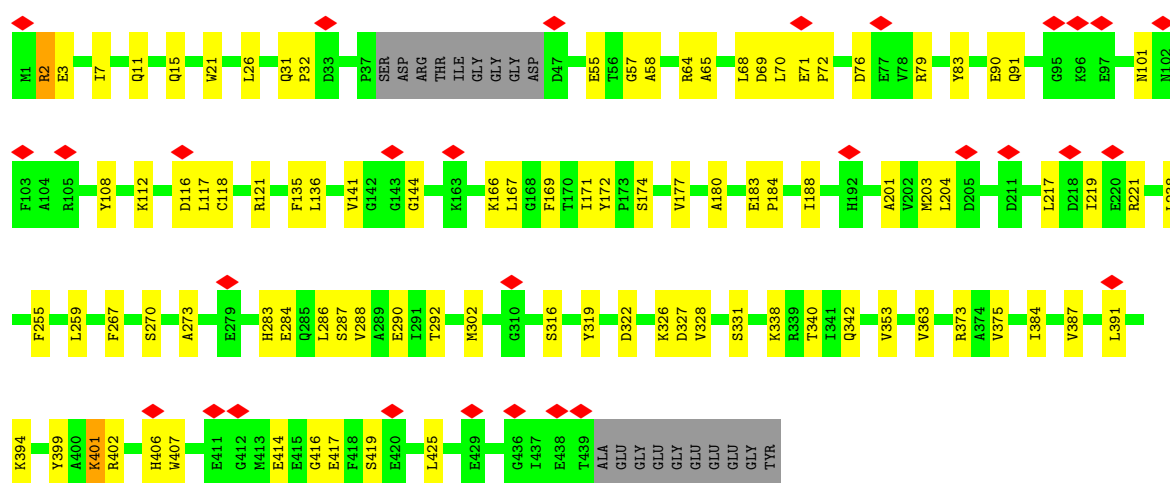
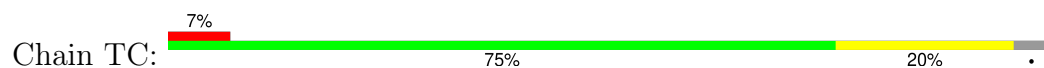






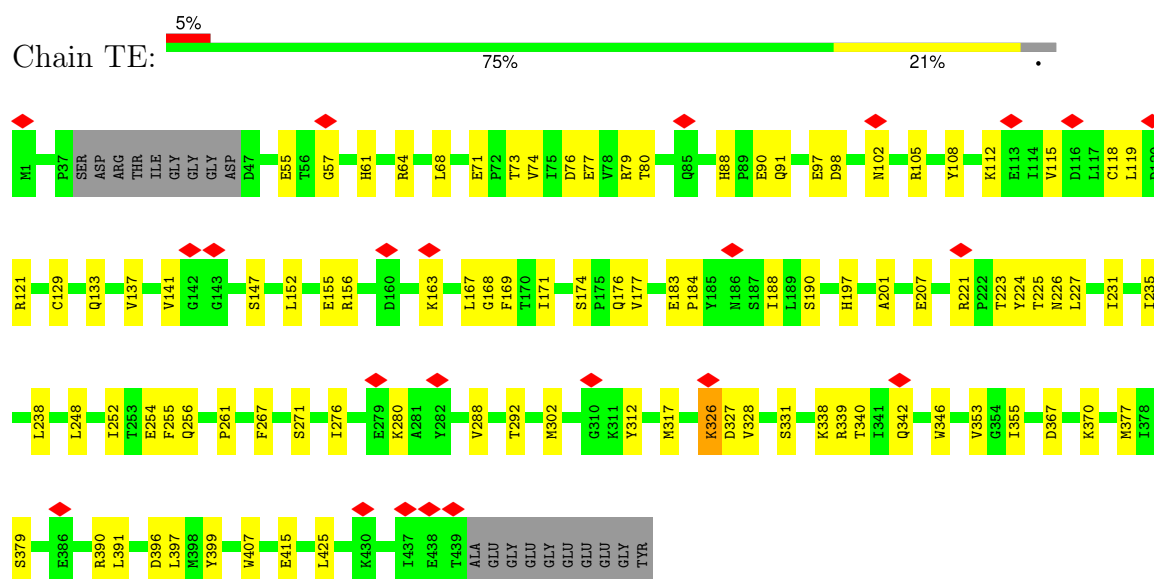


• Molecule 45: Tubulin alpha chain

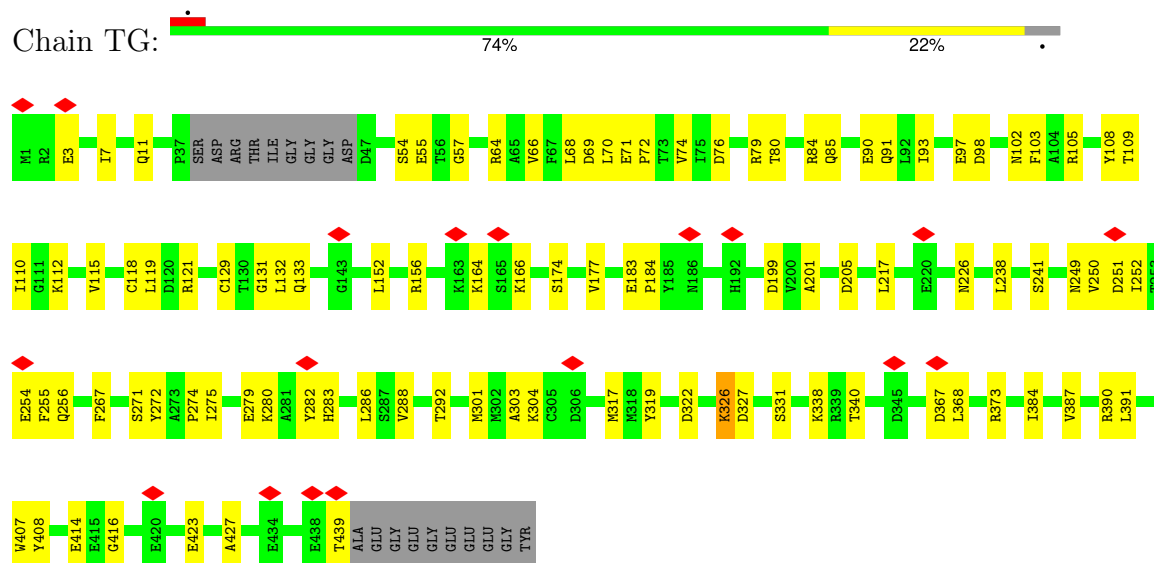


• Molecule 45: Tubulin alpha chain

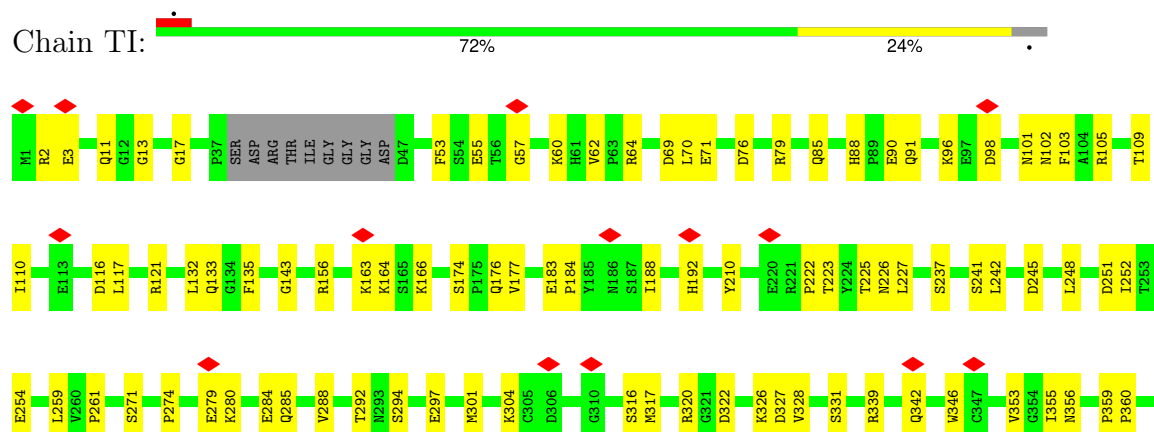




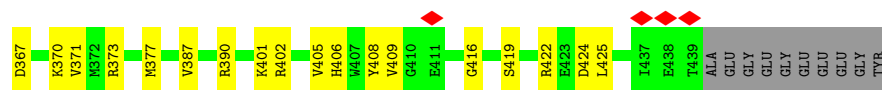
• Molecule 45: Tubulin alpha chain



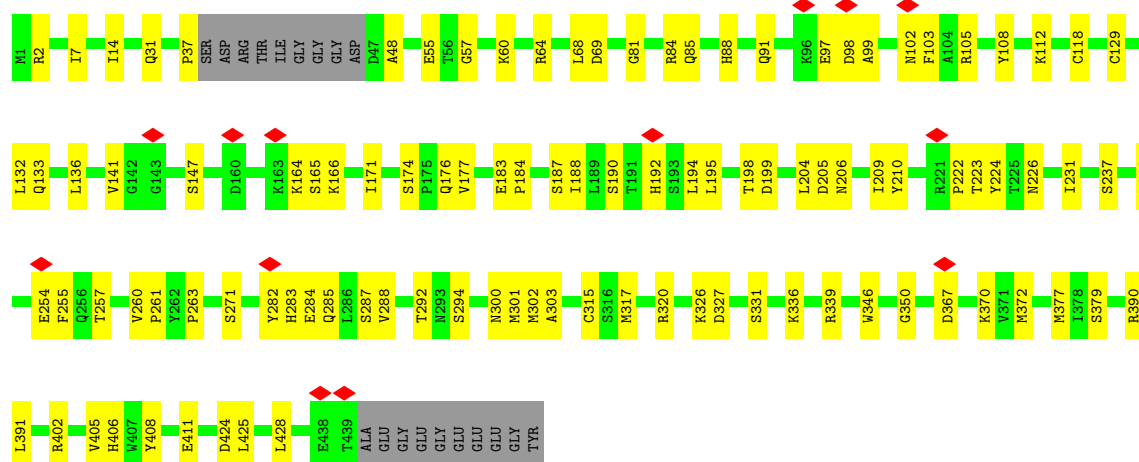
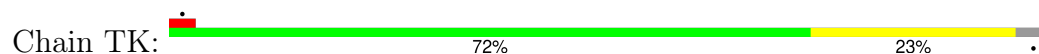
• Molecule 45: Tubulin alpha chain



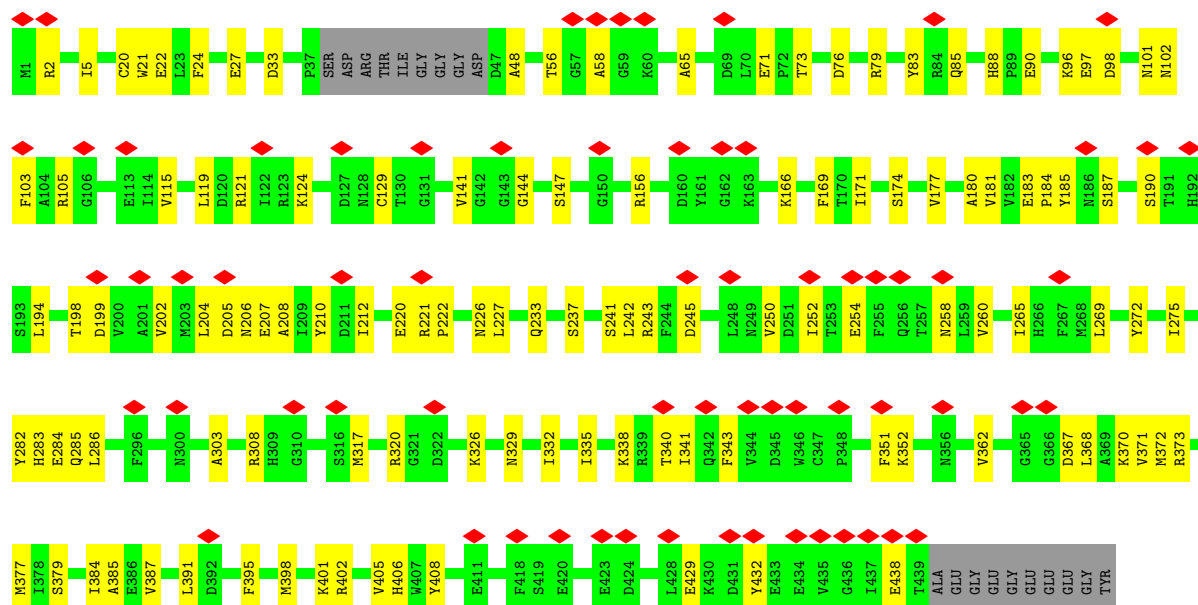
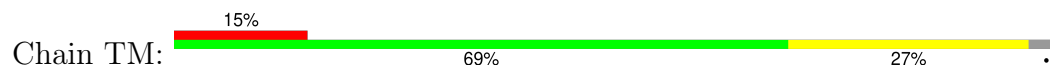




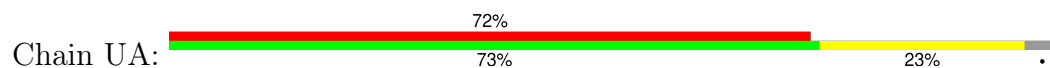
• Molecule 45: Tubulin alpha chain



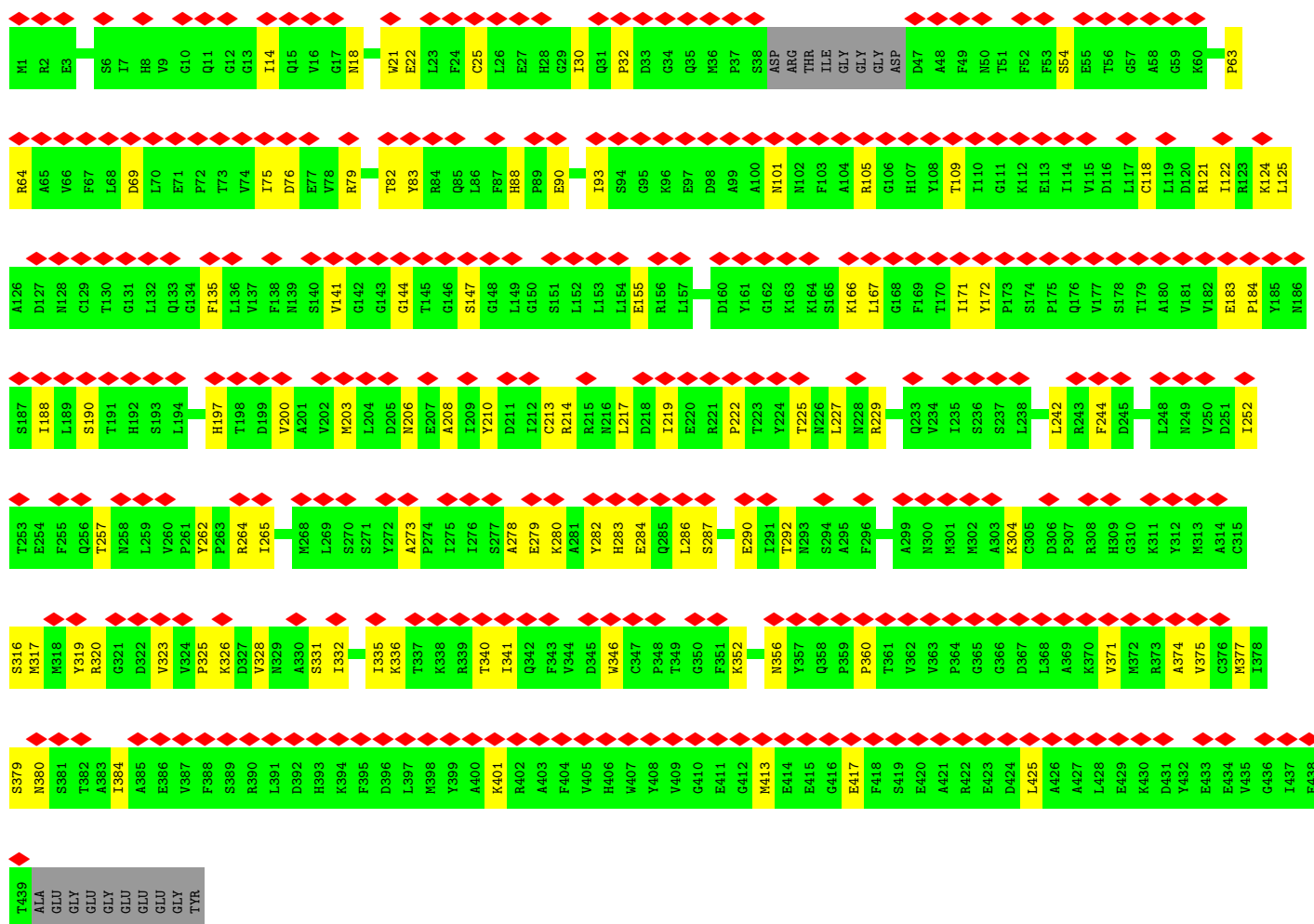
• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

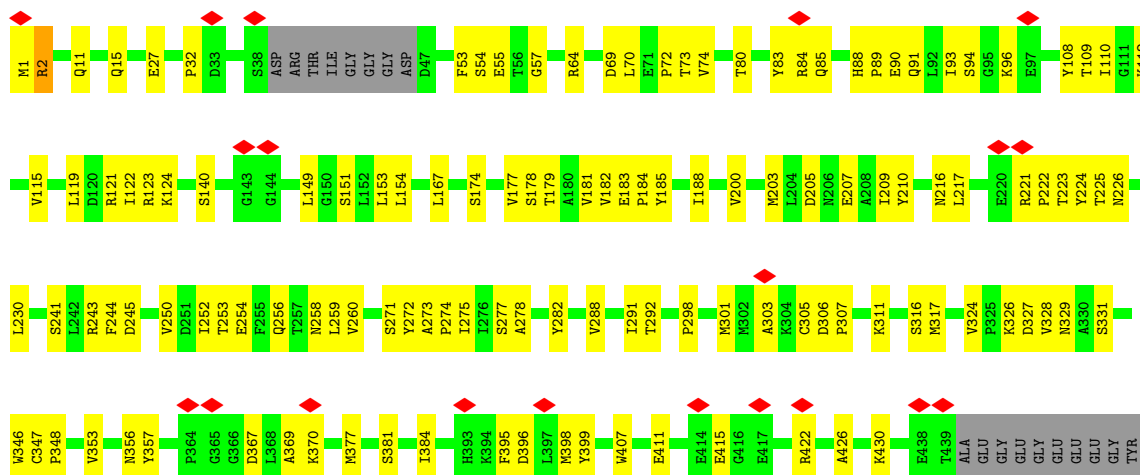






• Molecule 45: Tubulin alpha chain

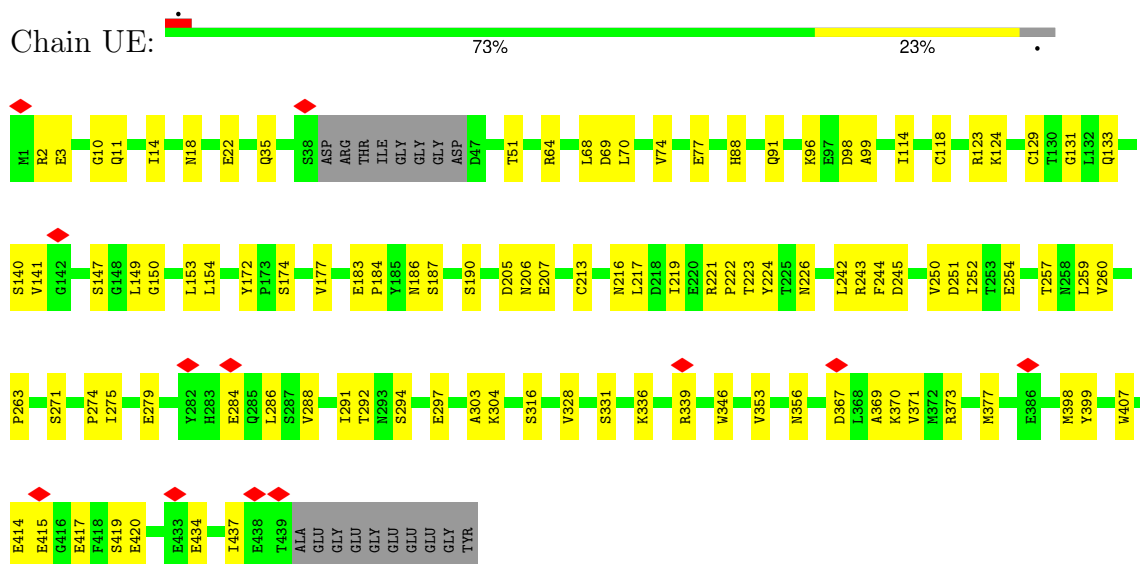
Chain UC: 67% 28%



• Molecule 45: Tubulin alpha chain

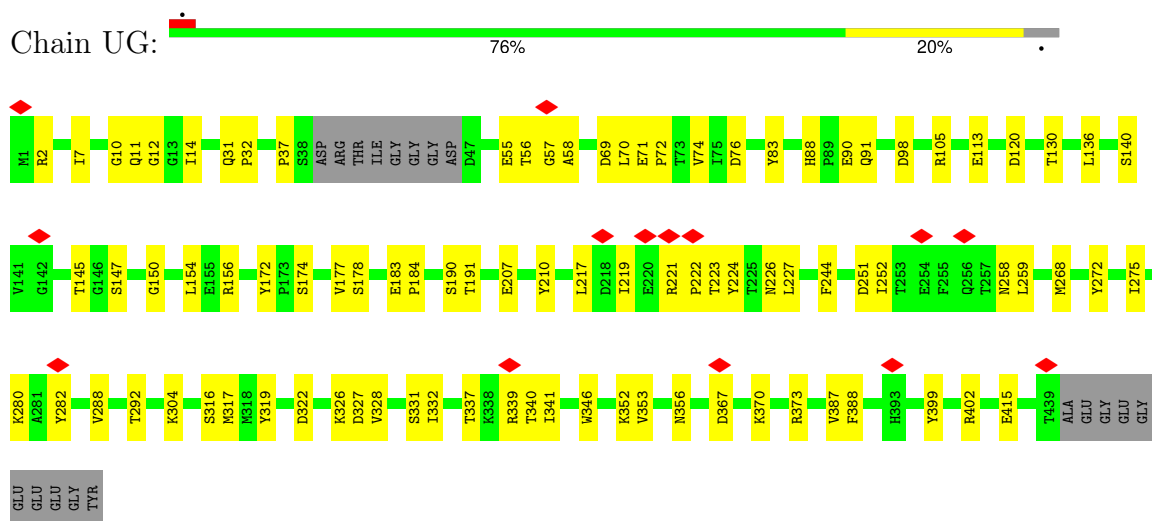


Chain UE:



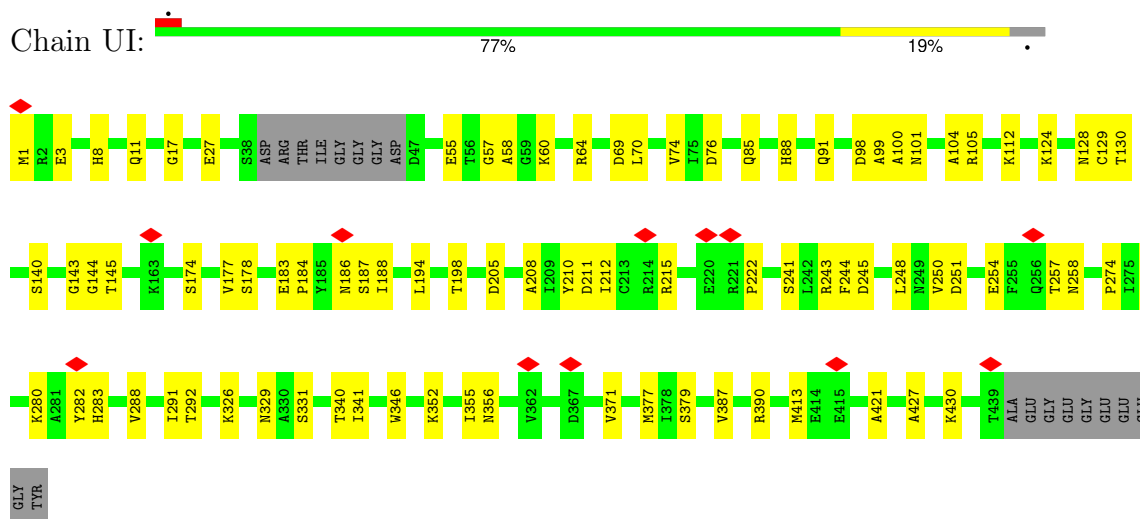
- Molecule 45: Tubulin alpha chain

Chain UG:



- Molecule 45: Tubulin alpha chain

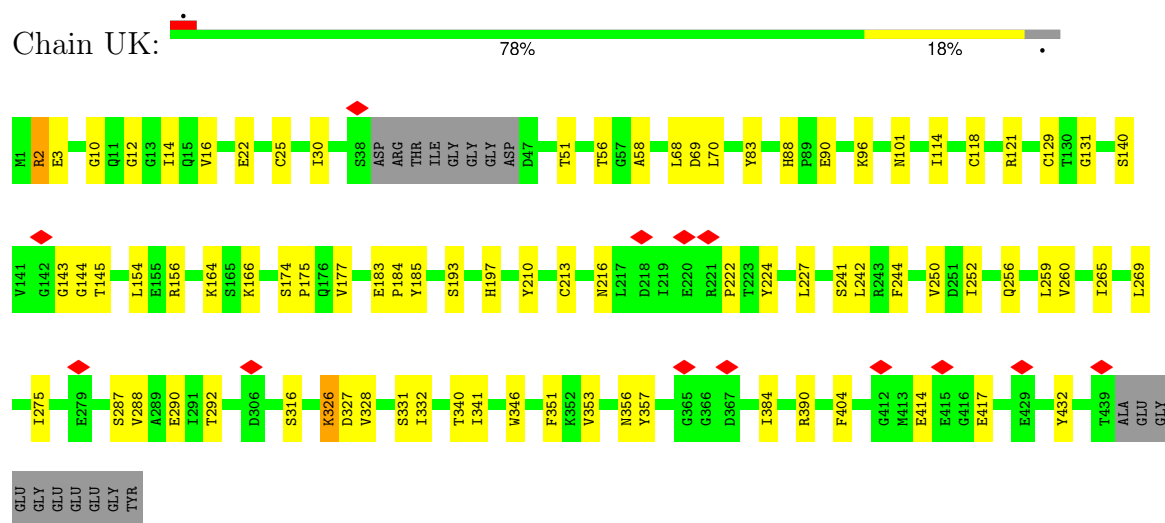
Chain UI:





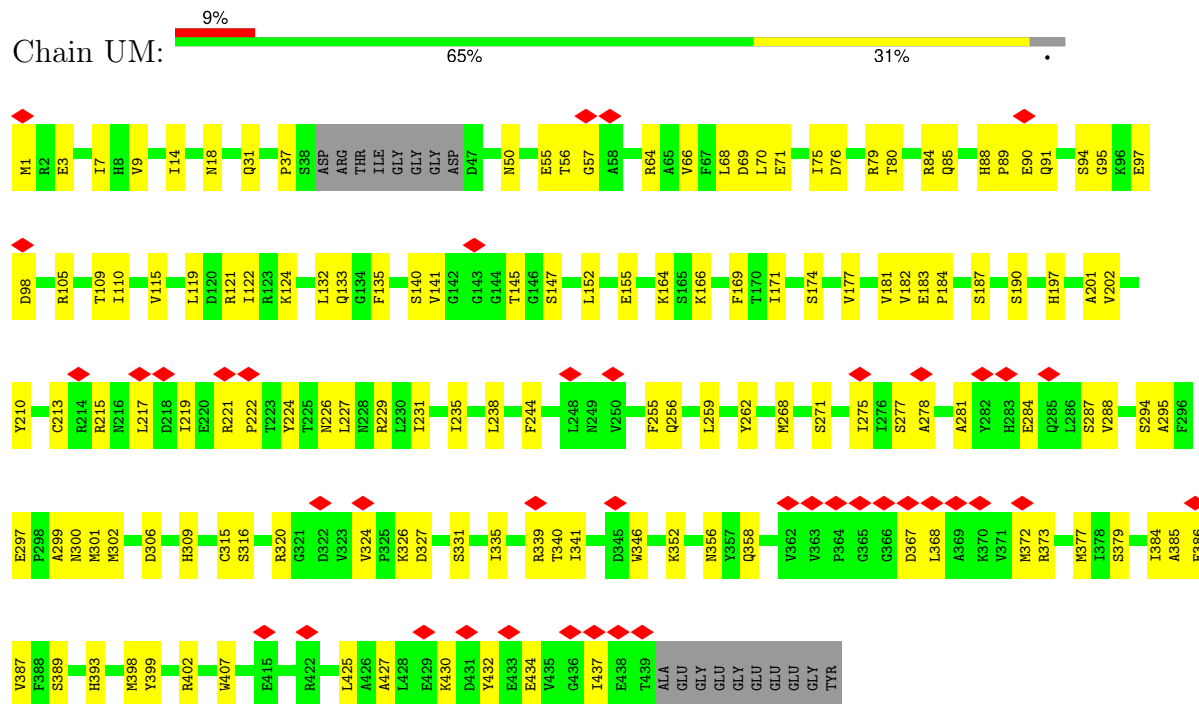
- Molecule 45: Tubulin alpha chain

Chain UK:



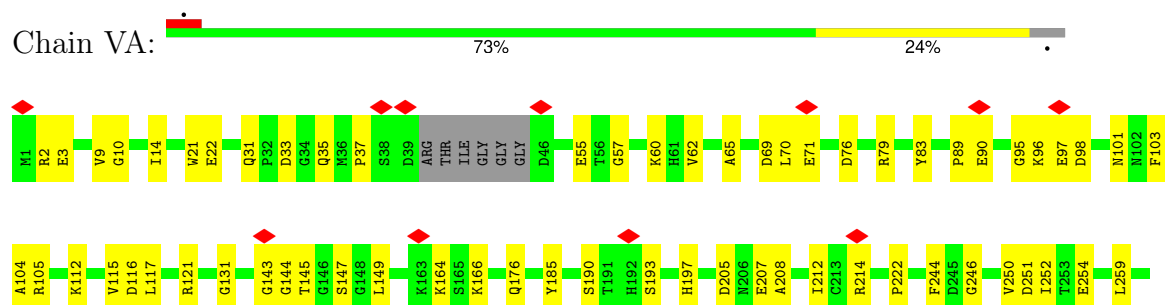
- Molecule 45: Tubulin alpha chain

Chain UM:

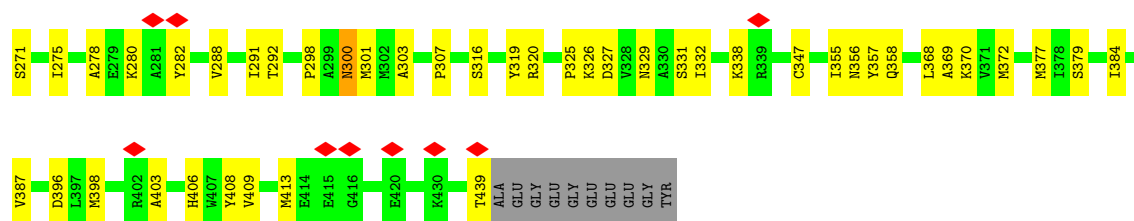


- Molecule 45: Tubulin alpha chain

Chain VA:

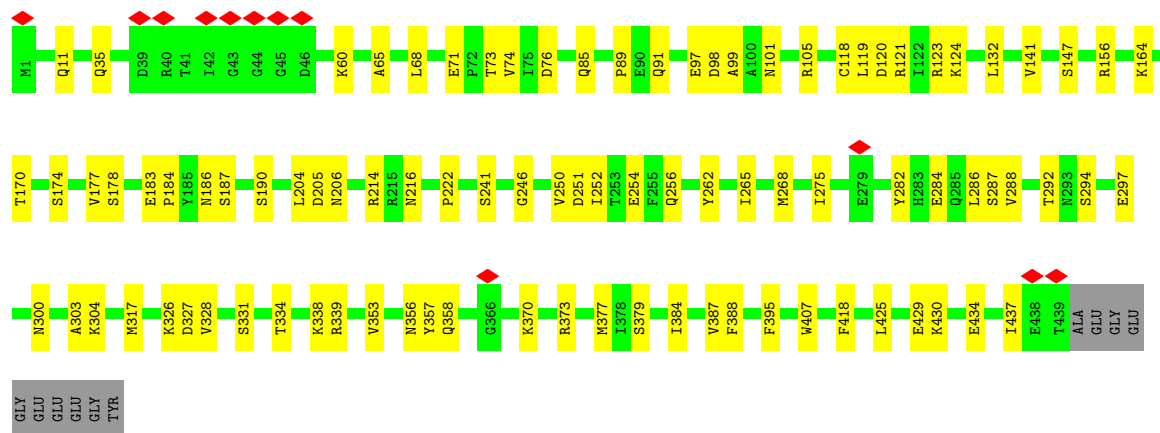






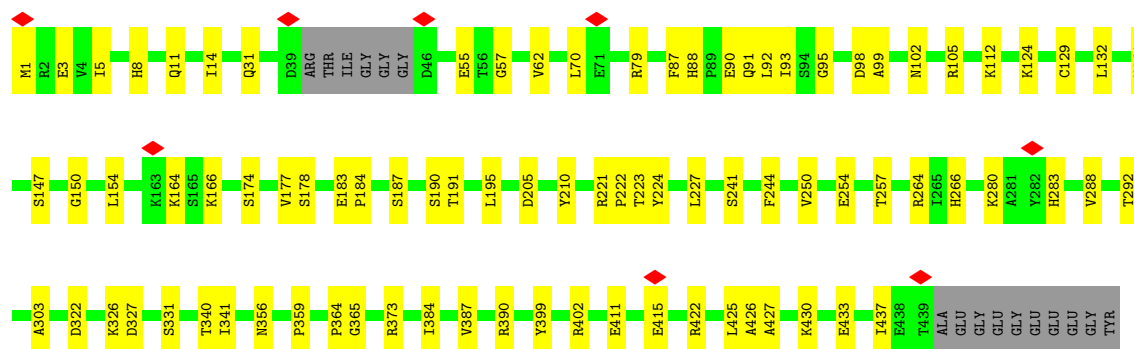
• Molecule 45: Tubulin alpha chain

Chain VC: 77% 20%



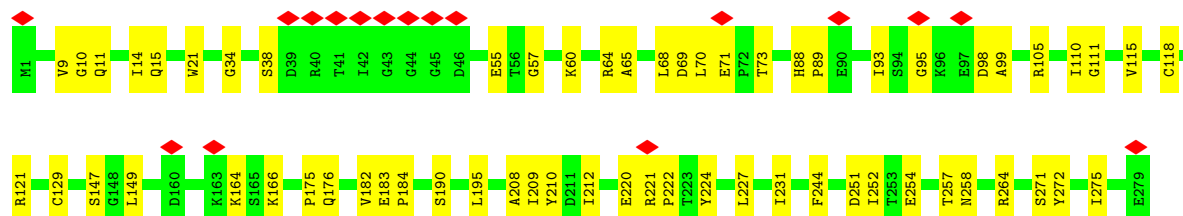
• Molecule 45: Tubulin alpha chain

Chain VE: 77% 19%

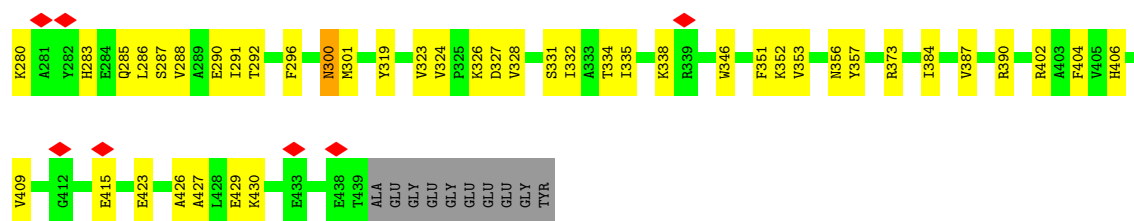


• Molecule 45: Tubulin alpha chain

Chain VG: 5% 74% 23%

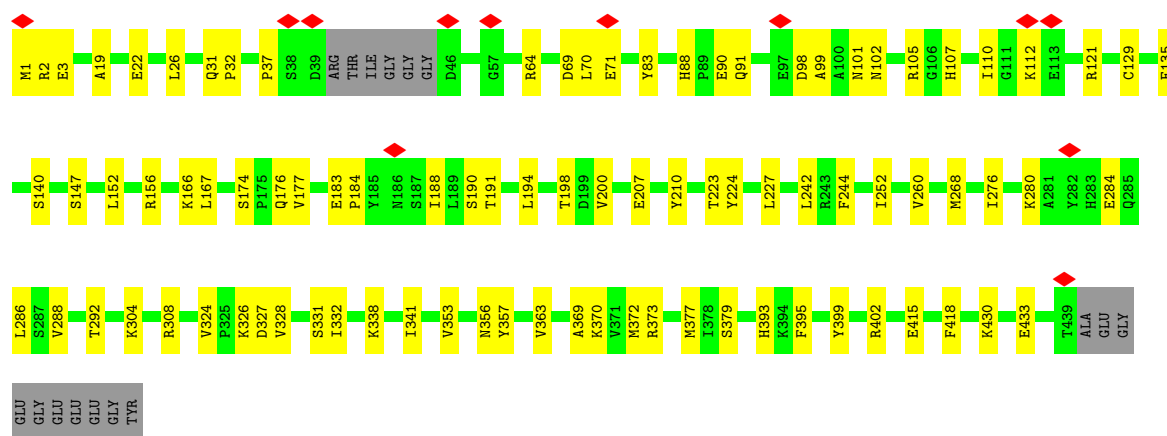






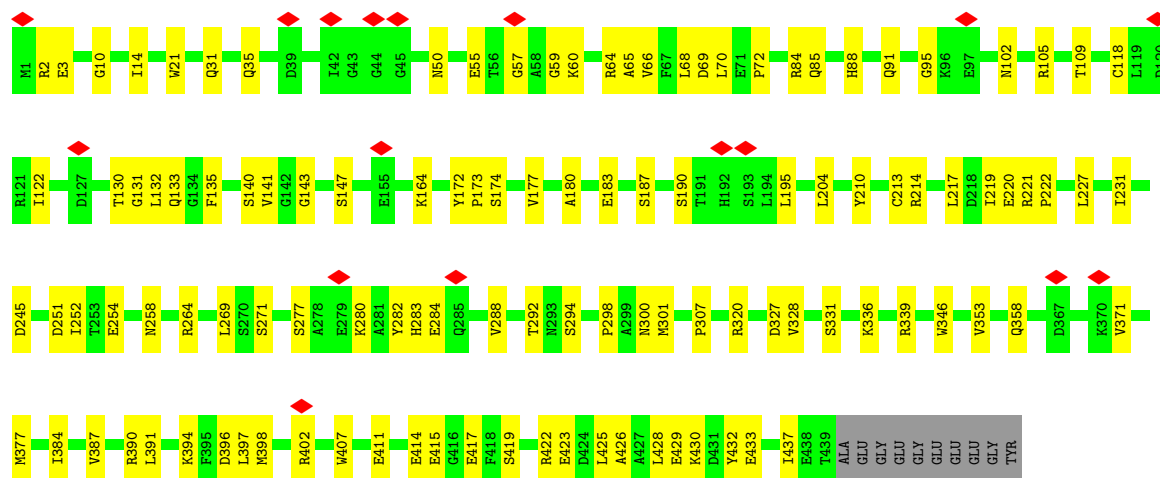
• Molecule 45: Tubulin alpha chain

Chain VI: 77% 20% .



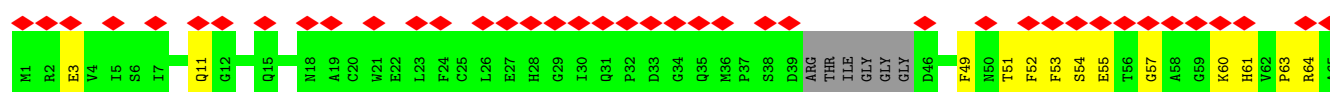
• Molecule 45: Tubulin alpha chain

Chain VK: 72% 26% .

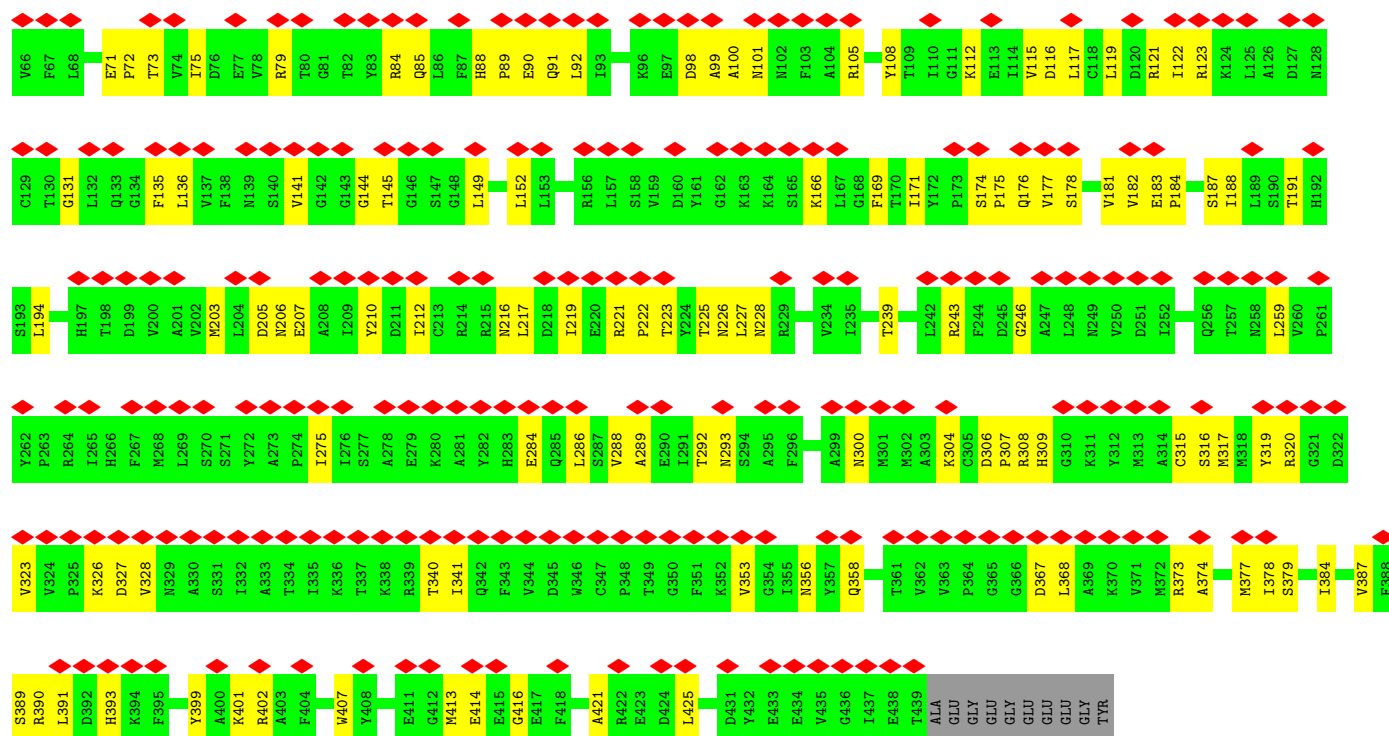


• Molecule 45: Tubulin alpha chain

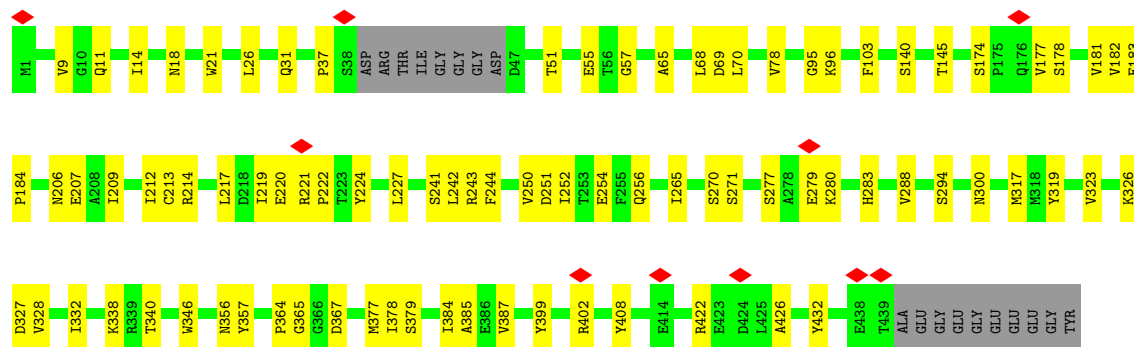
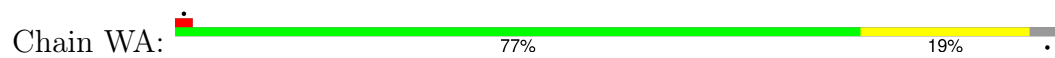
Chain VM: 60% 67% 29% .



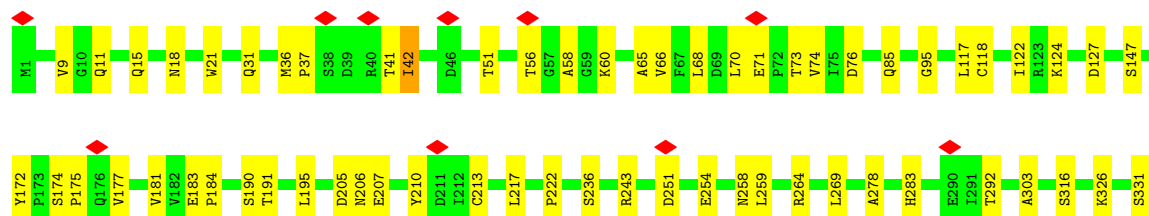
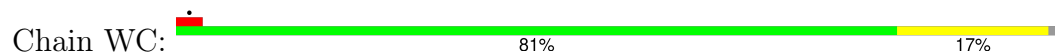




• Molecule 45: Tubulin alpha chain



• Molecule 45: Tubulin alpha chain

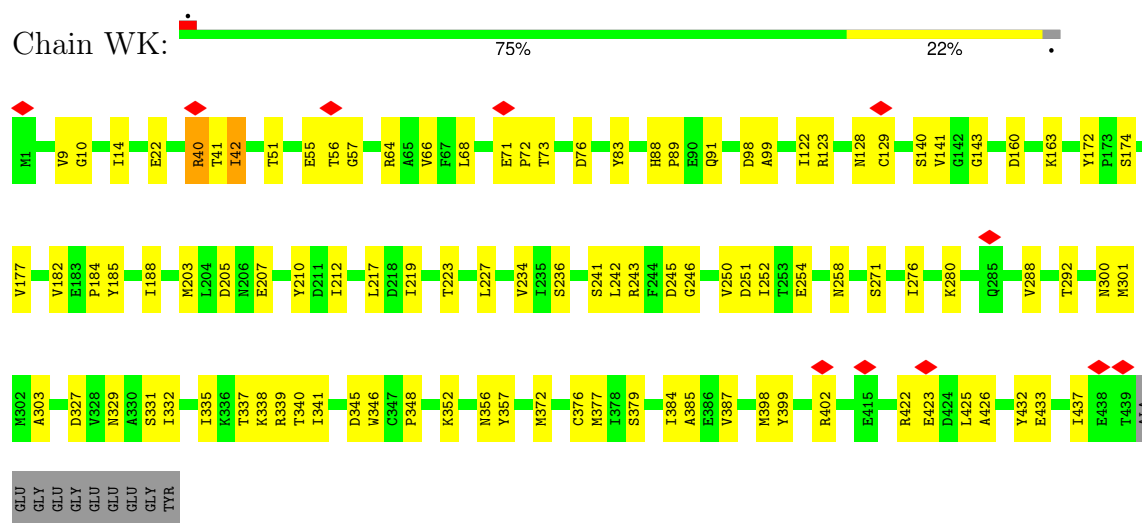




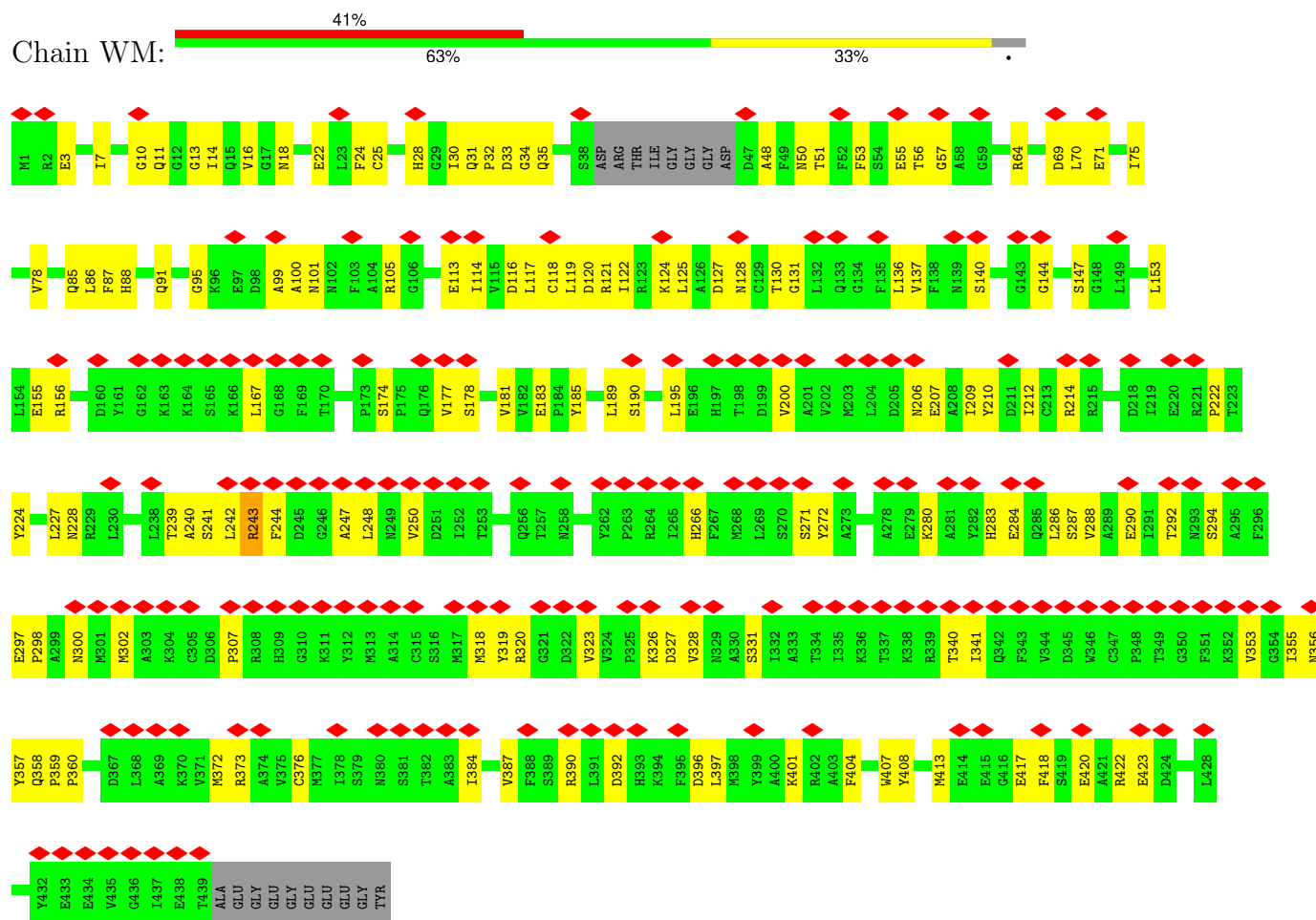




- Molecule 45: Tubulin alpha chain



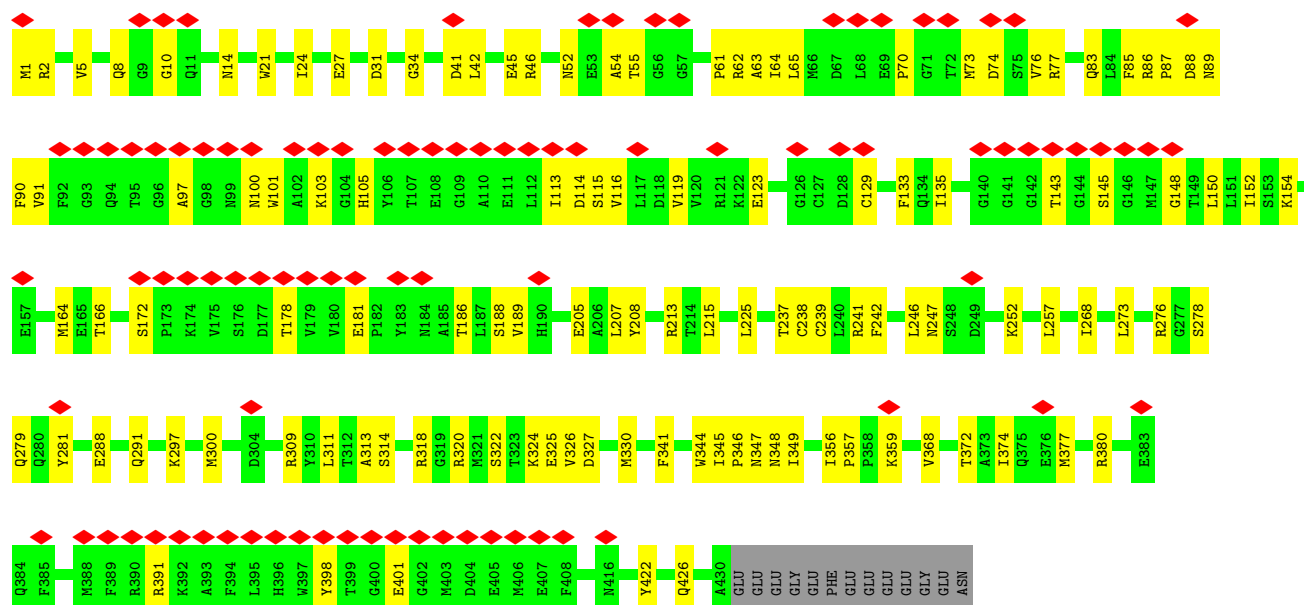
- Molecule 45: Tubulin alpha chain



- Molecule 46: Tubulin beta chain

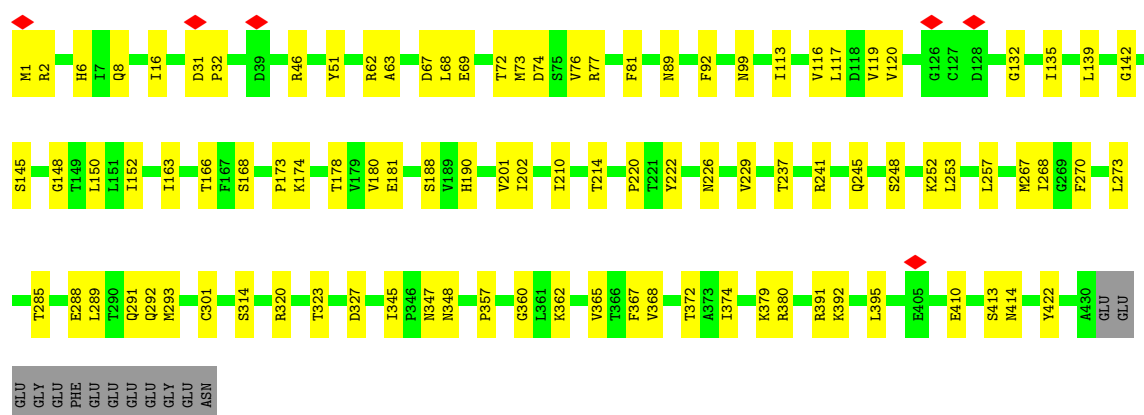






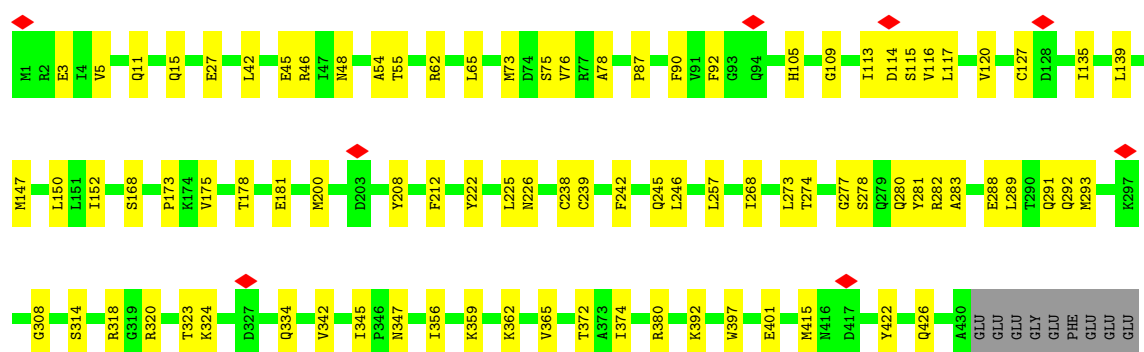
• Molecule 46: Tubulin beta chain

Chain AD: 75% 22%



• Molecule 46: Tubulin beta chain

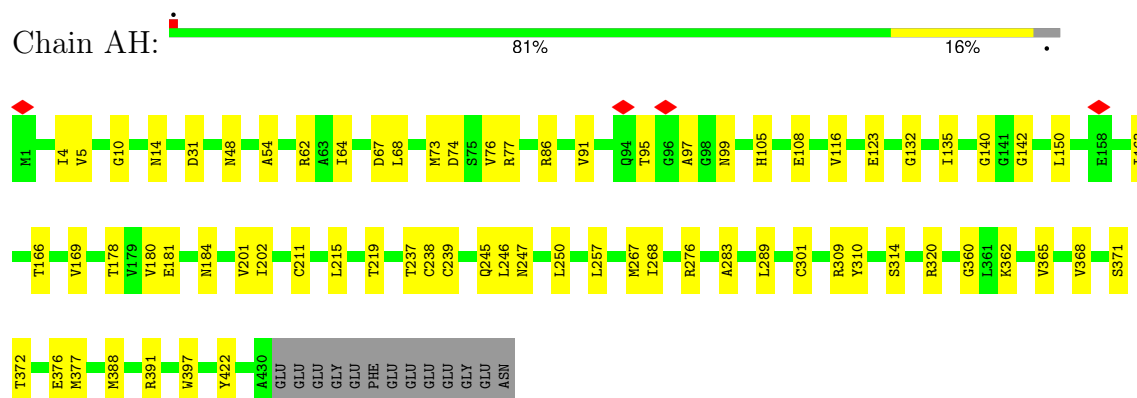
Chain AF: 77% 20%



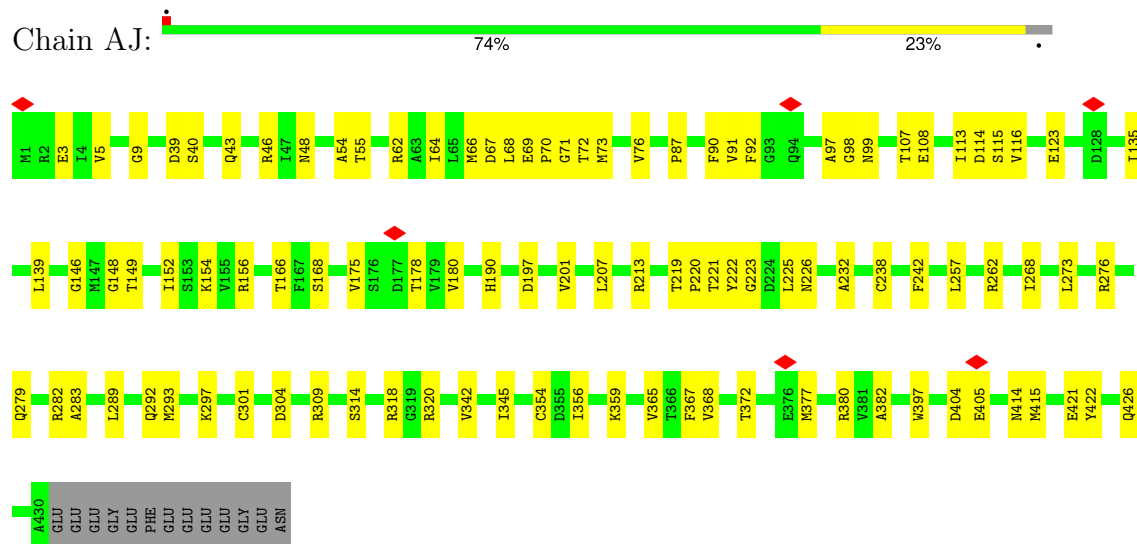


GLU  
GLY  
GLU  
ASN

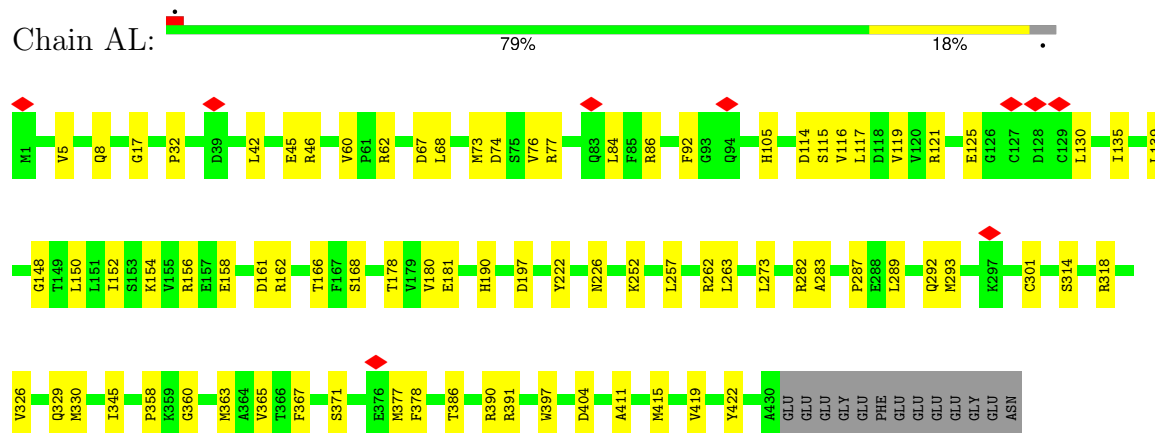
• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain




• Molecule 46: Tubulin beta chain




• Molecule 46: Tubulin beta chain

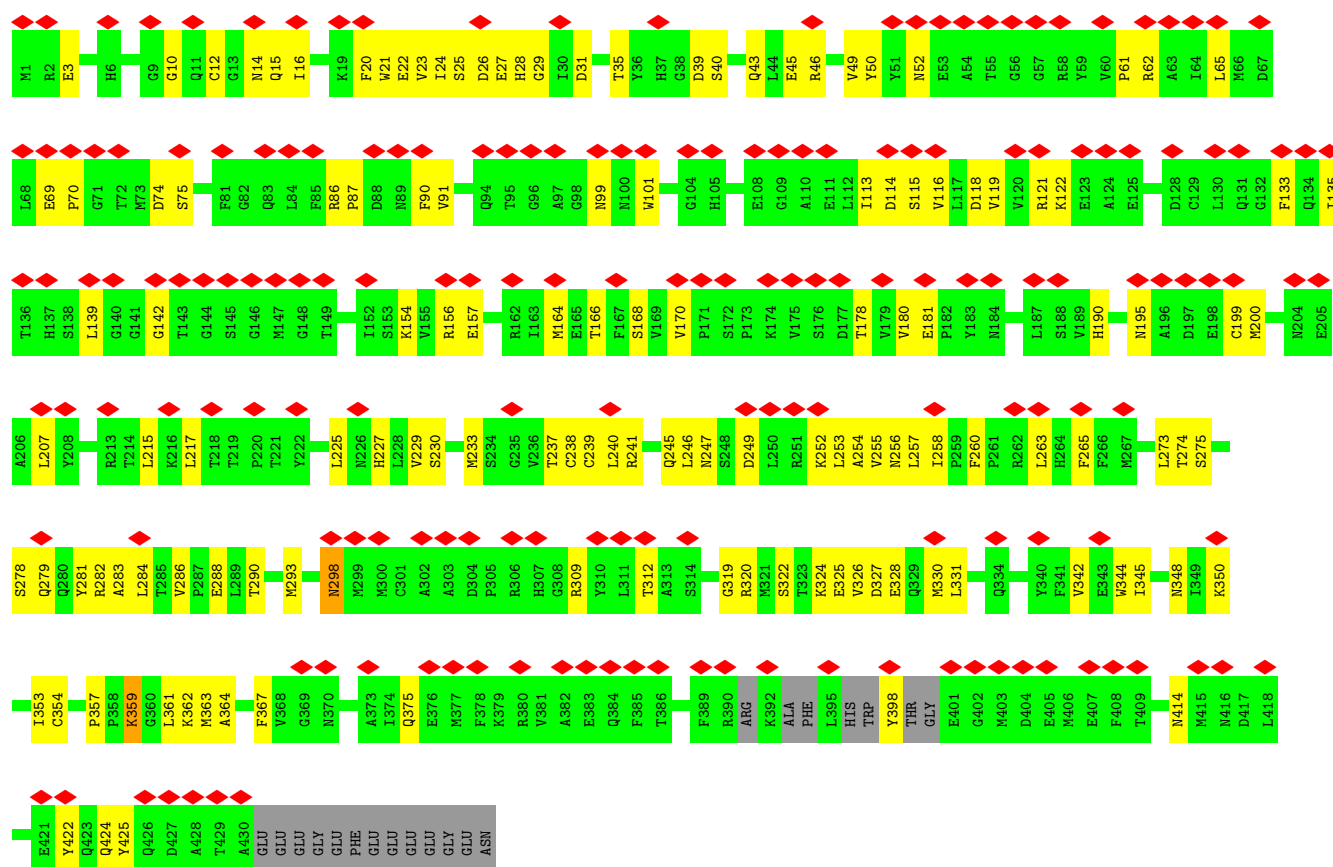


Chain AN: 




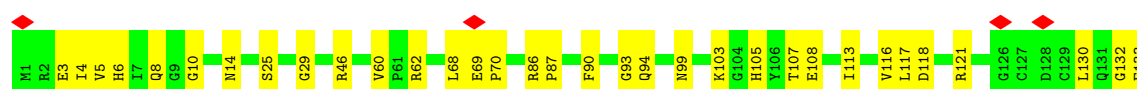
• Molecule 46: Tubulin beta chain

Chain BB: 

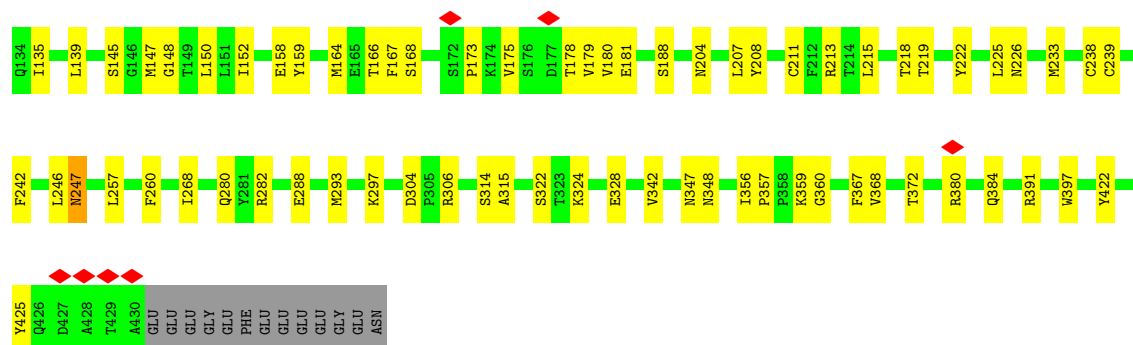


• Molecule 46: Tubulin beta chain

Chain BD: 

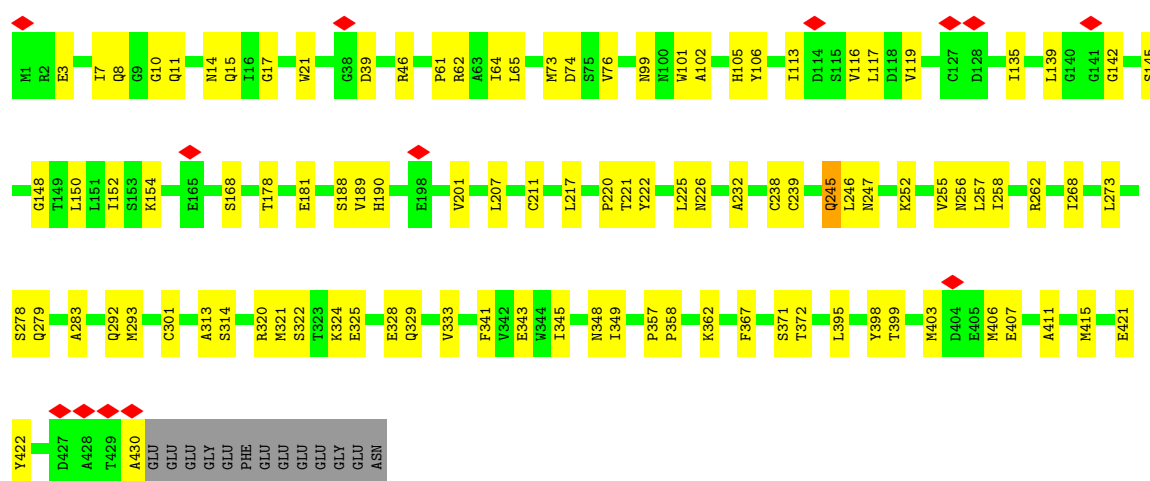






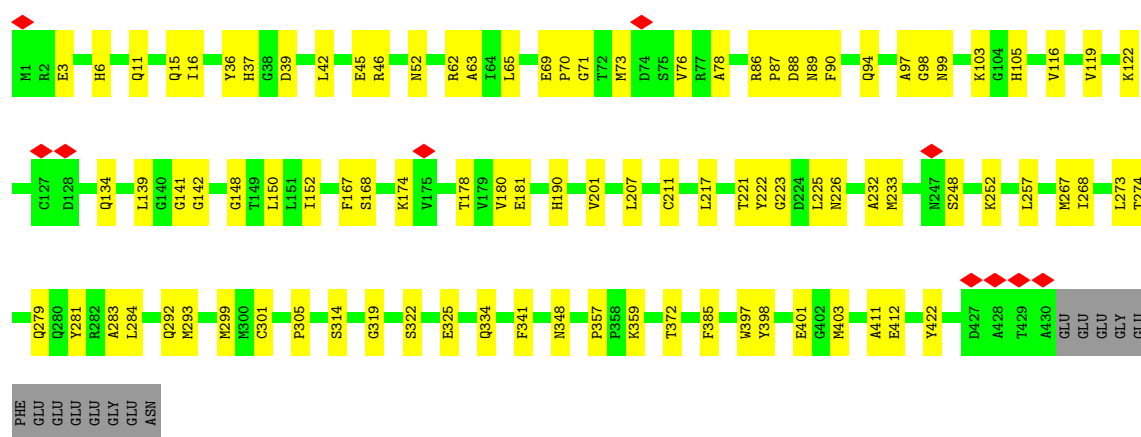
• Molecule 46: Tubulin beta chain

Chain BF: 74% 23% .



• Molecule 46: Tubulin beta chain

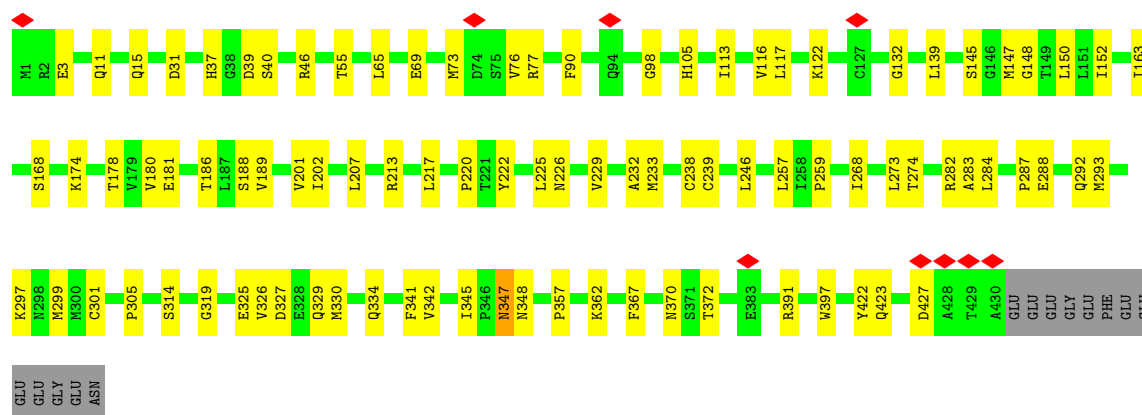
Chain BH: 76% 21% .



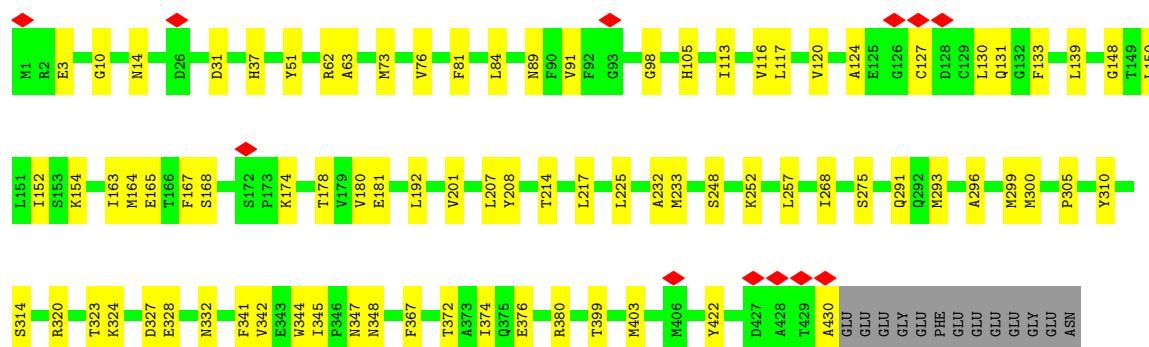
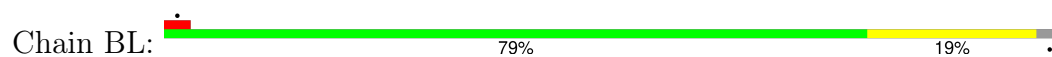
• Molecule 46: Tubulin beta chain

Chain BJ: 77% 20% .

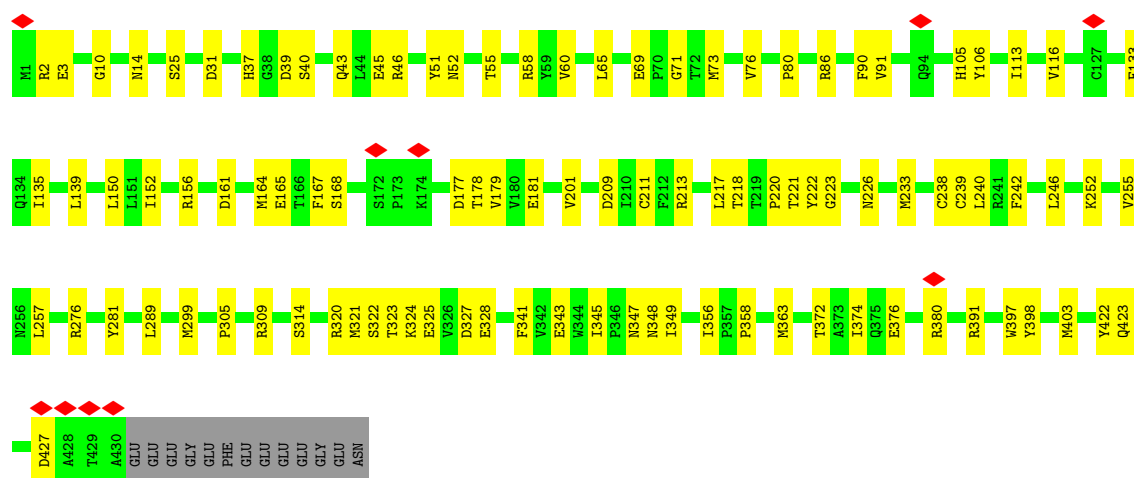
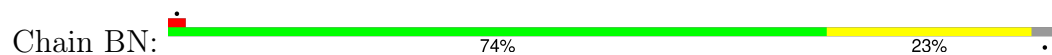




- Molecule 46: Tubulin beta chain



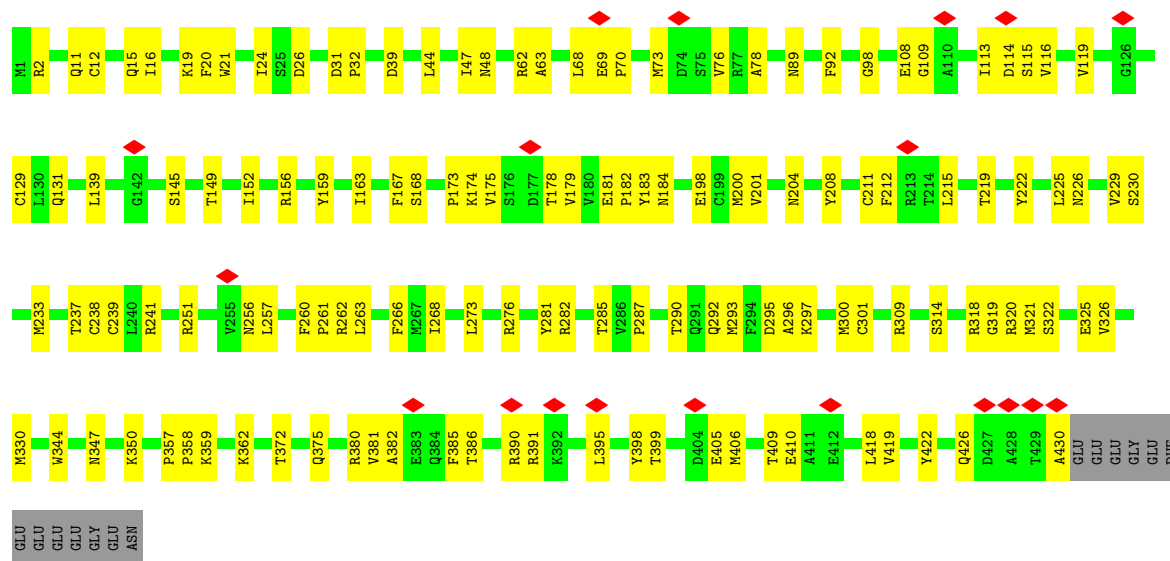
- Molecule 46: Tubulin beta chain



- Molecule 46: Tubulin beta chain

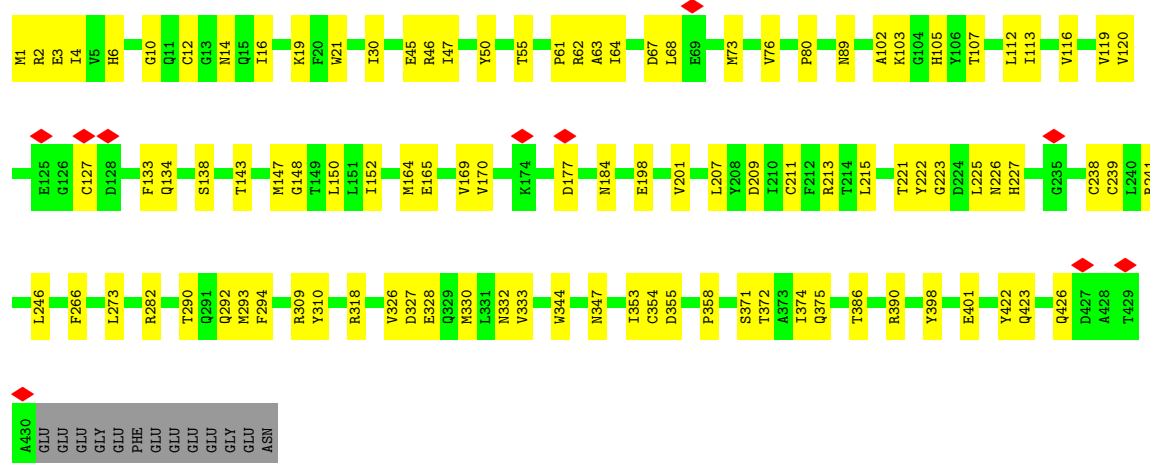






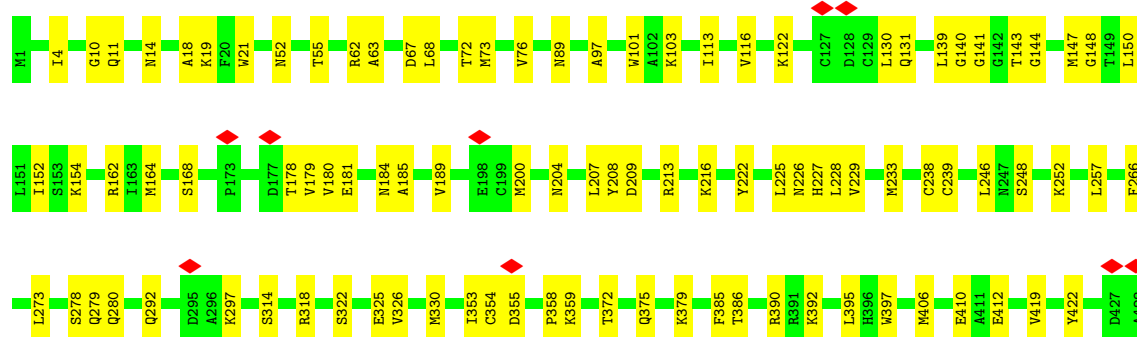
• Molecule 46: Tubulin beta chain

Chain CD: 74% 23%

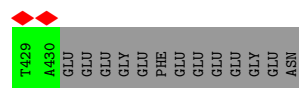


• Molecule 46: Tubulin beta chain

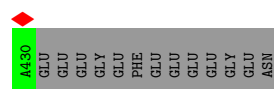
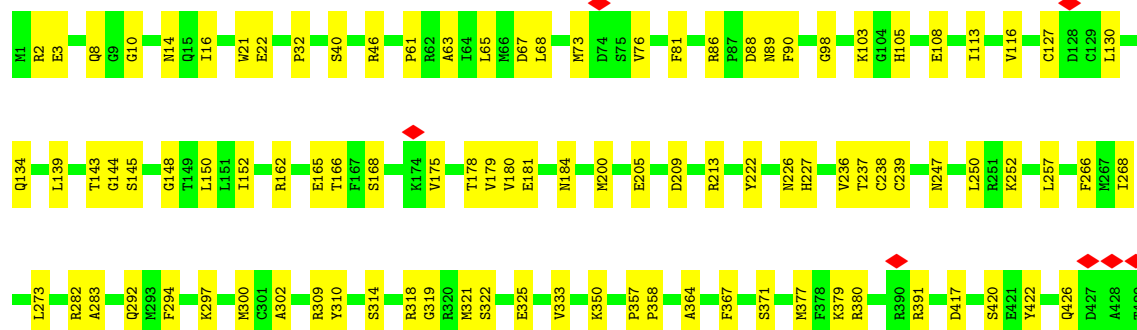
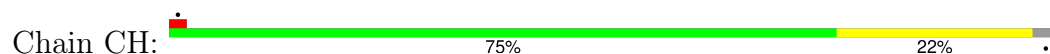
Chain CF: 75% 22%



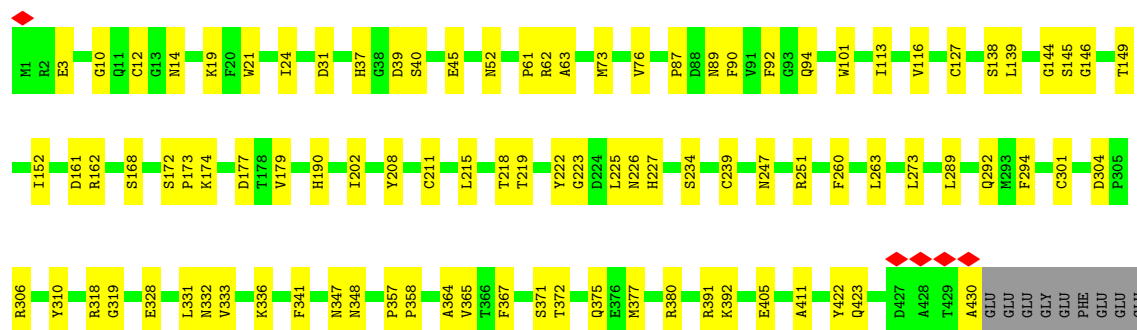
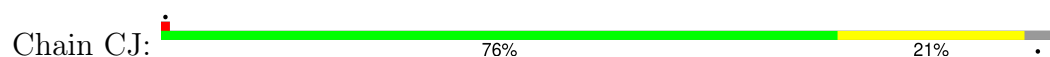




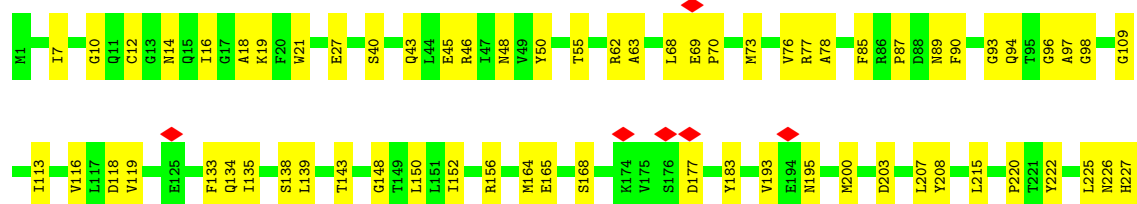
• Molecule 46: Tubulin beta chain



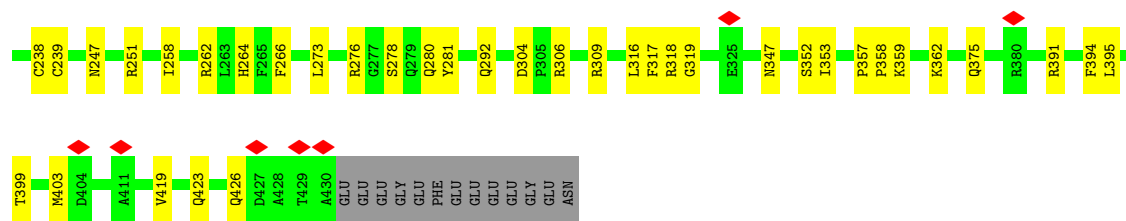
• Molecule 46: Tubulin beta chain



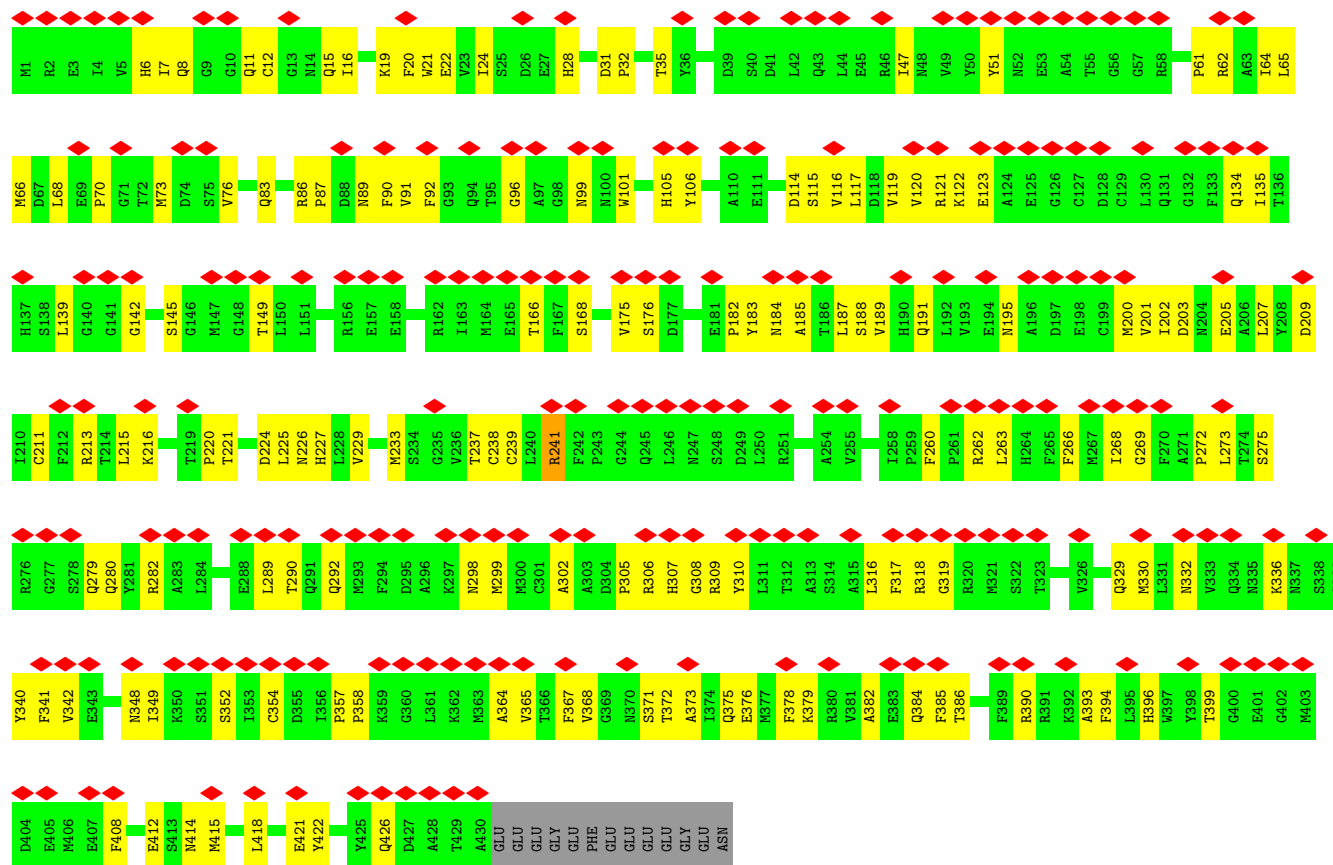
• Molecule 46: Tubulin beta chain



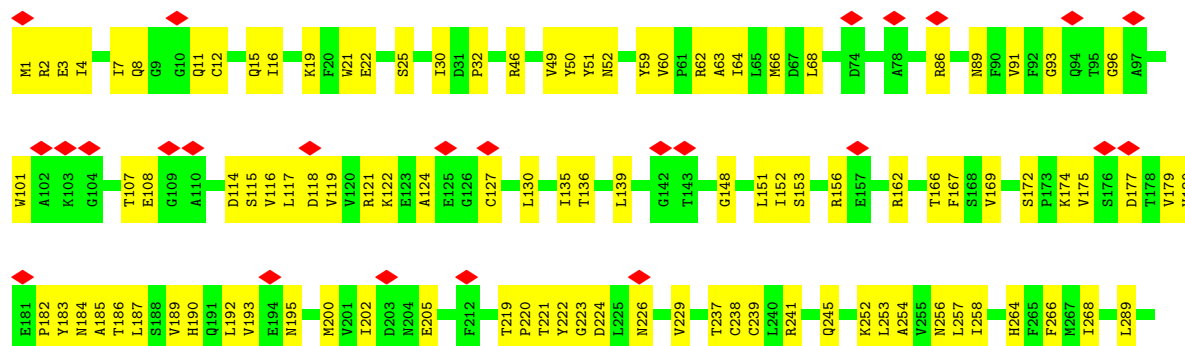




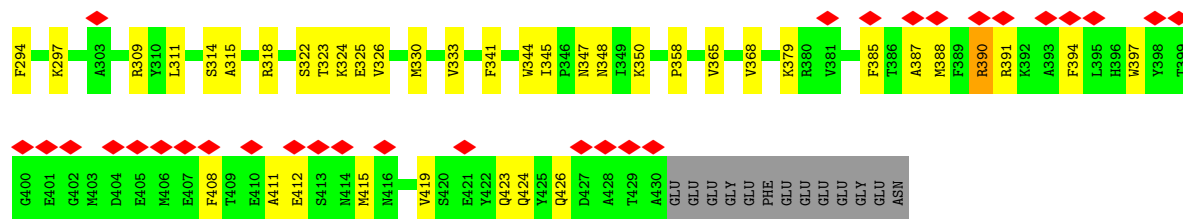
• Molecule 46: Tubulin beta chain



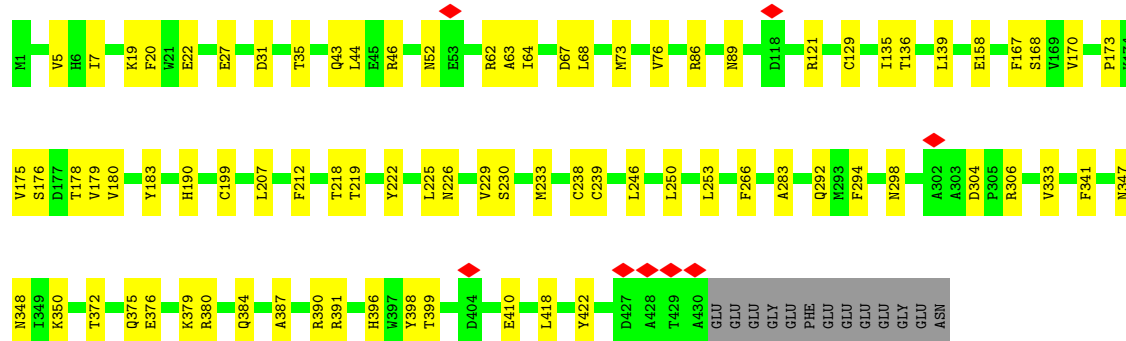
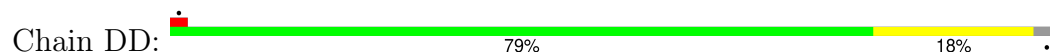
• Molecule 46: Tubulin beta chain



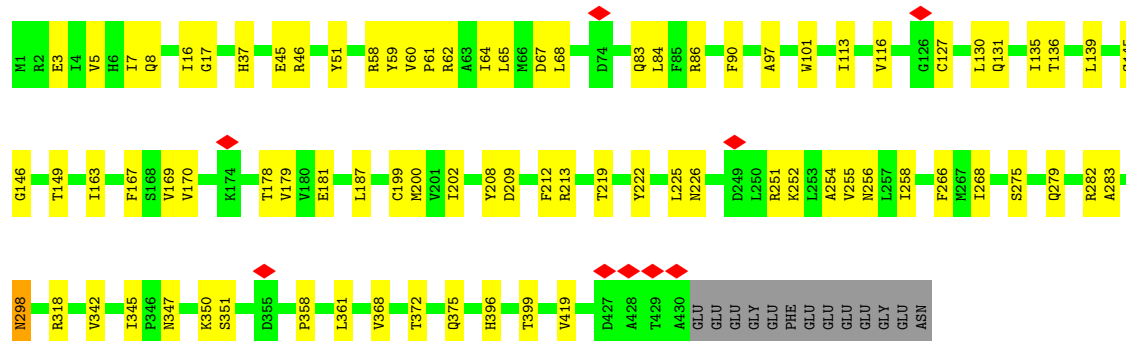
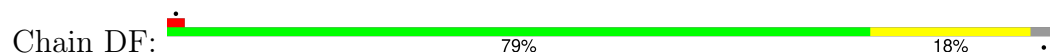




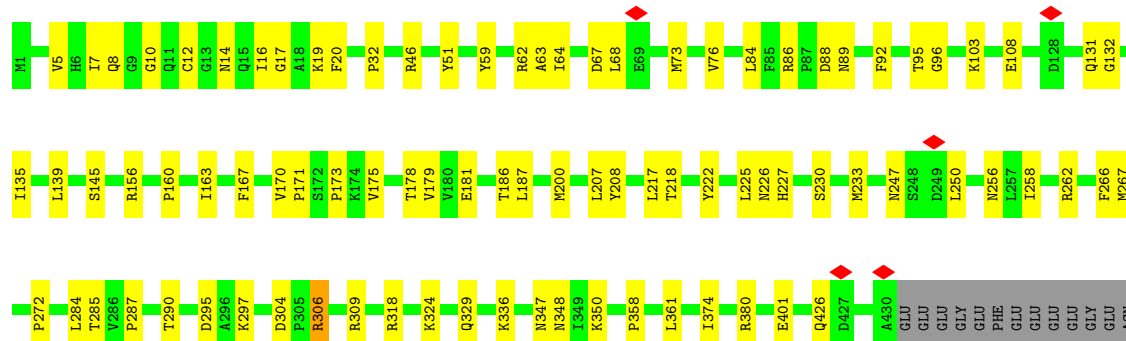
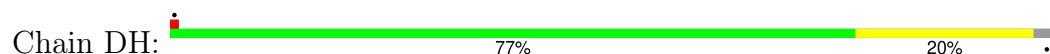
• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain

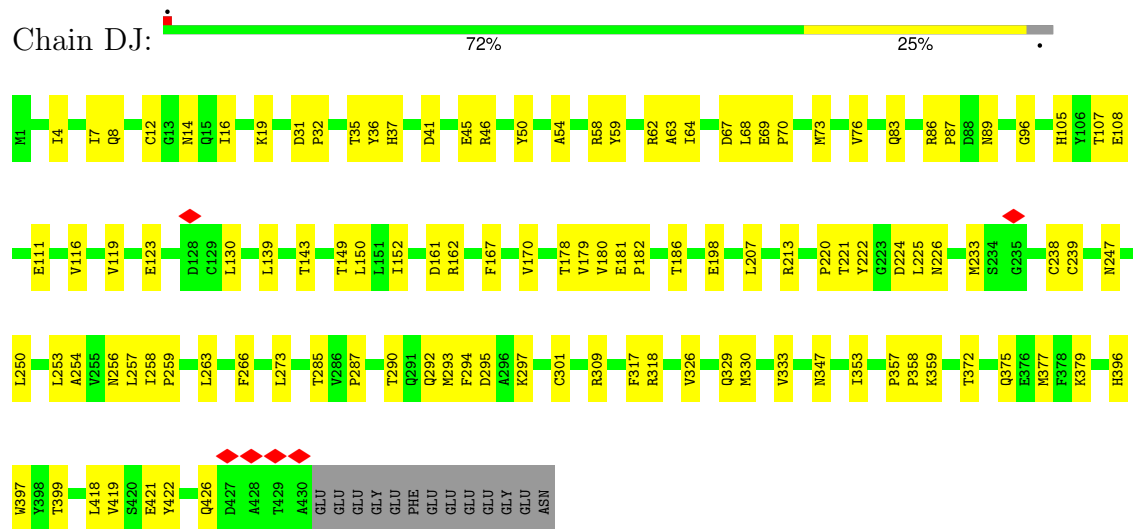


• Molecule 46: Tubulin beta chain

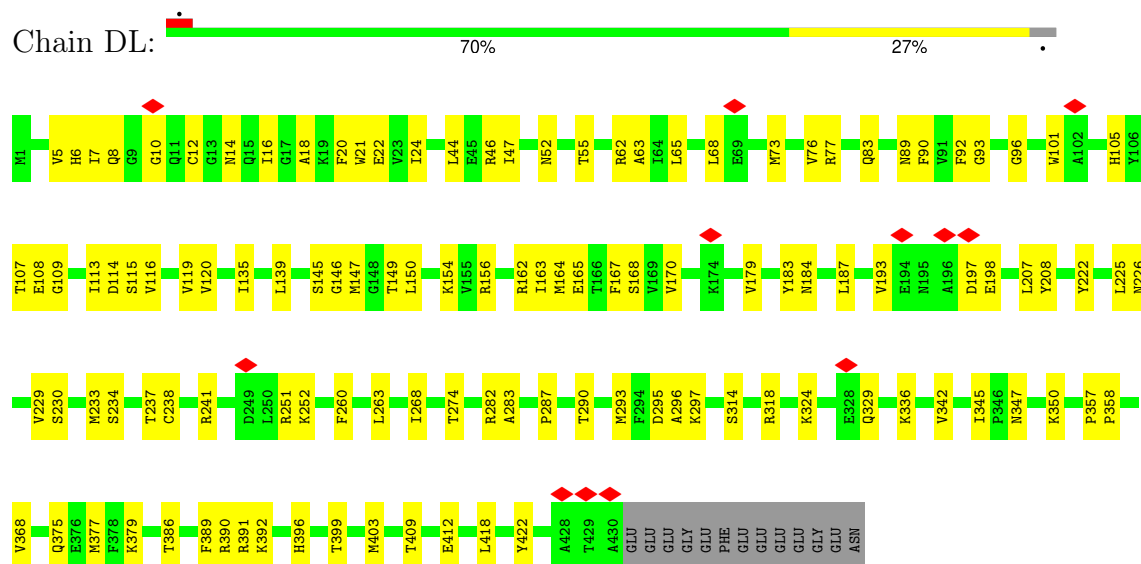




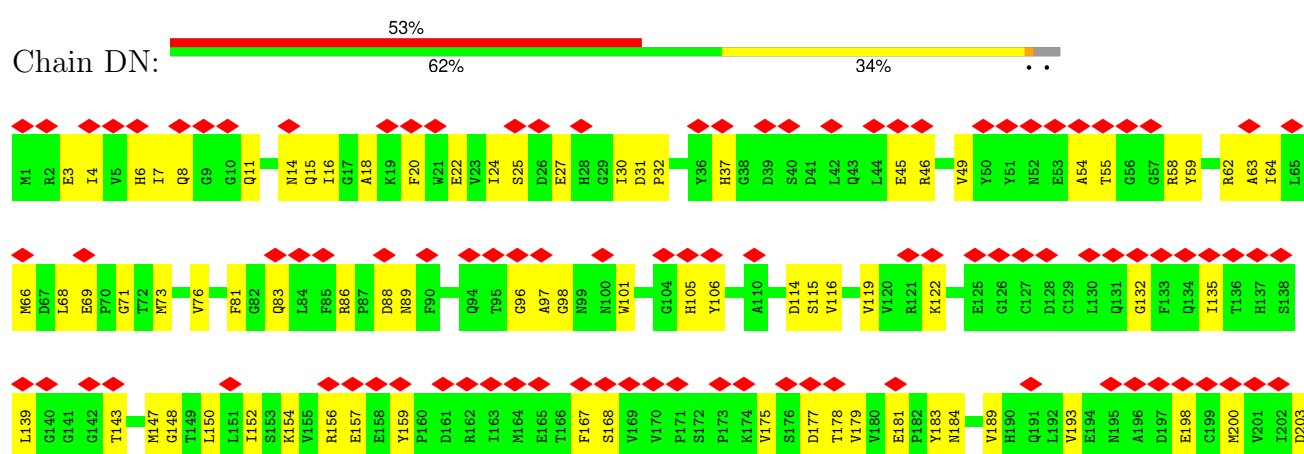
- Molecule 46: Tubulin beta chain



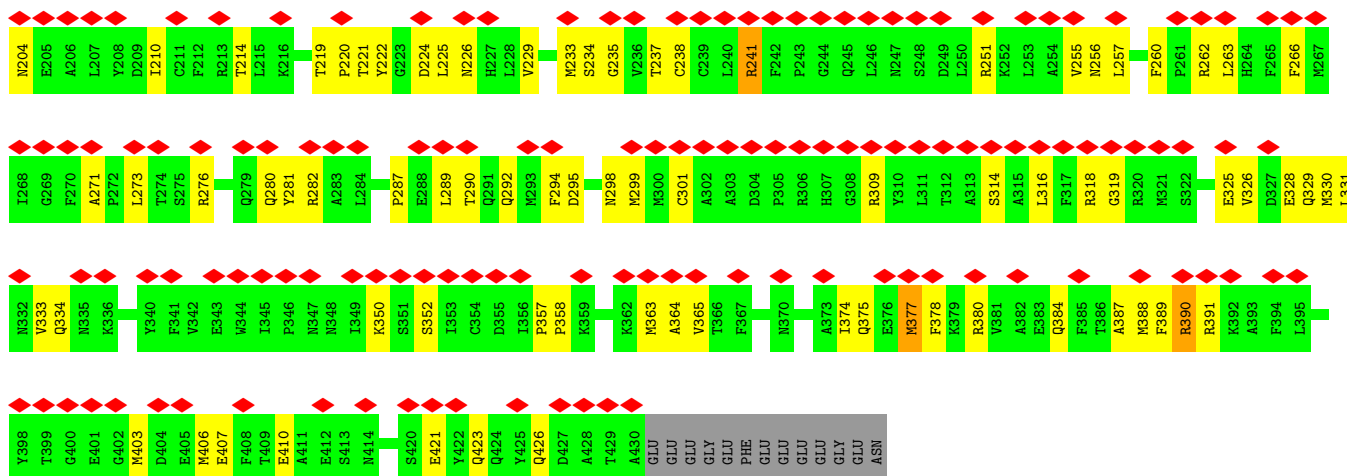
- Molecule 46: Tubulin beta chain



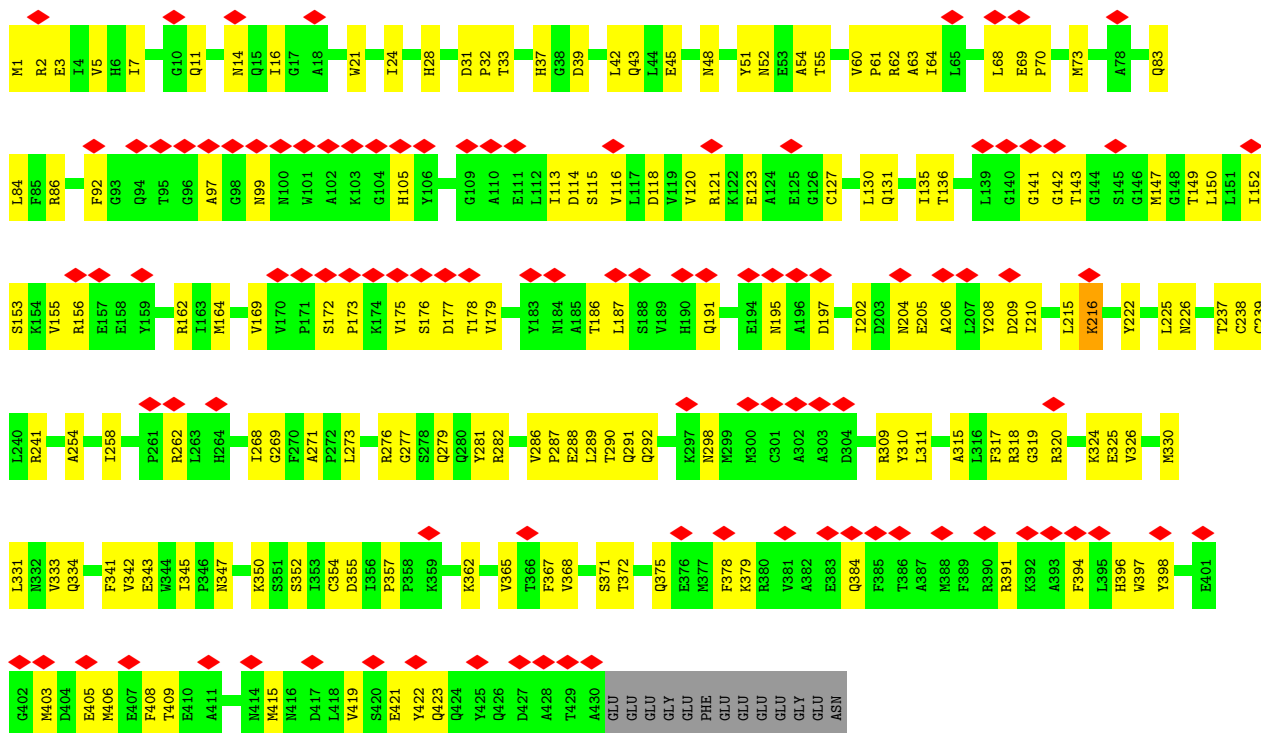
- Molecule 46: Tubulin beta chain



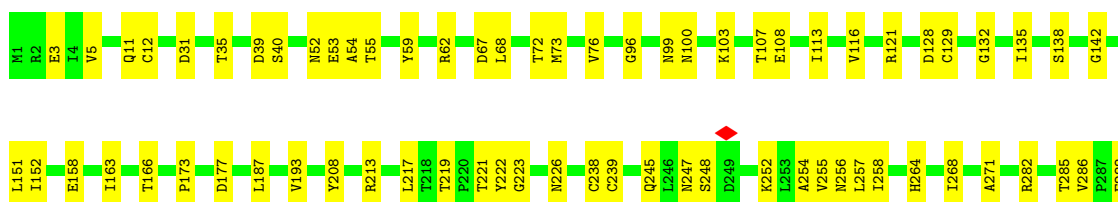
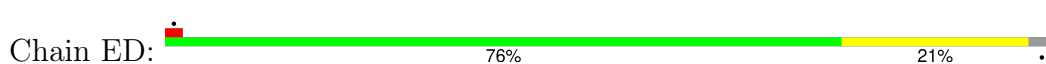




• Molecule 46: Tubulin beta chain



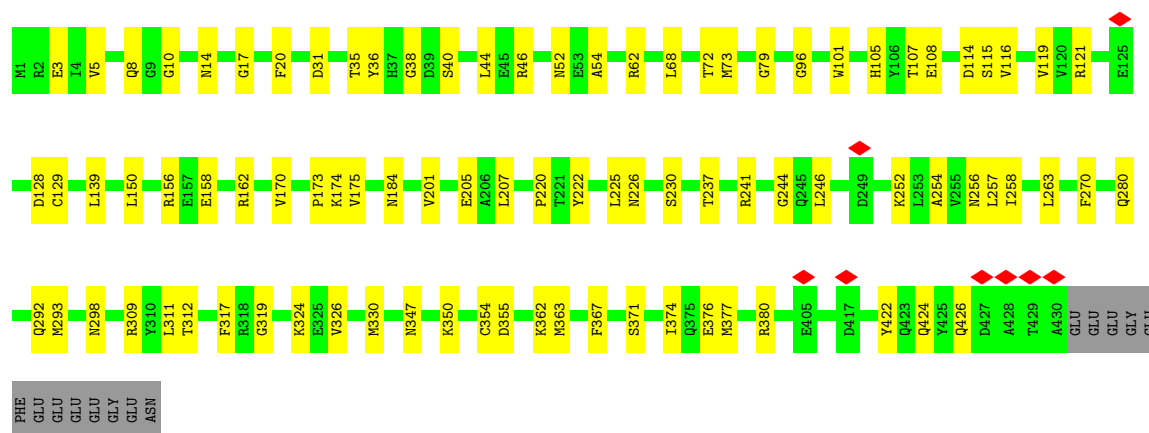
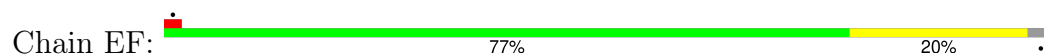
• Molecule 46: Tubulin beta chain



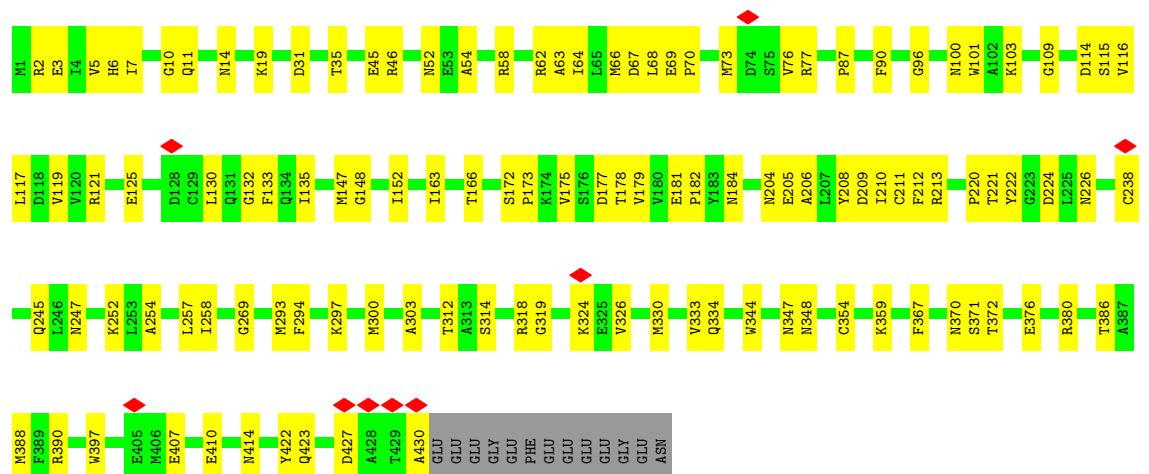




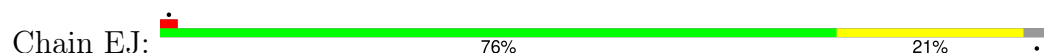
• Molecule 46: Tubulin beta chain



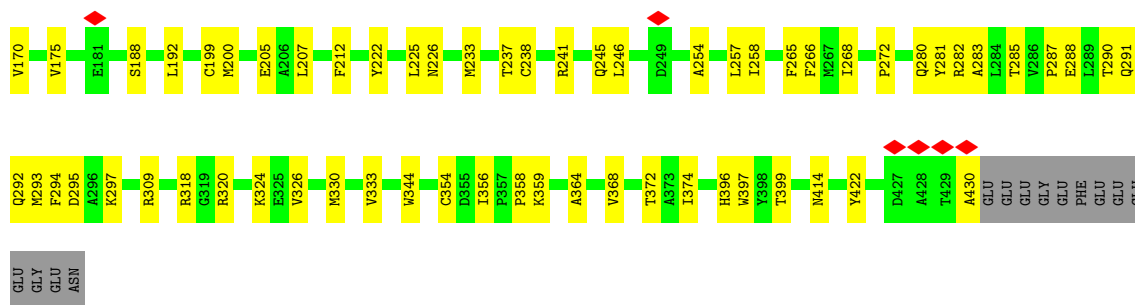
• Molecule 46: Tubulin beta chain



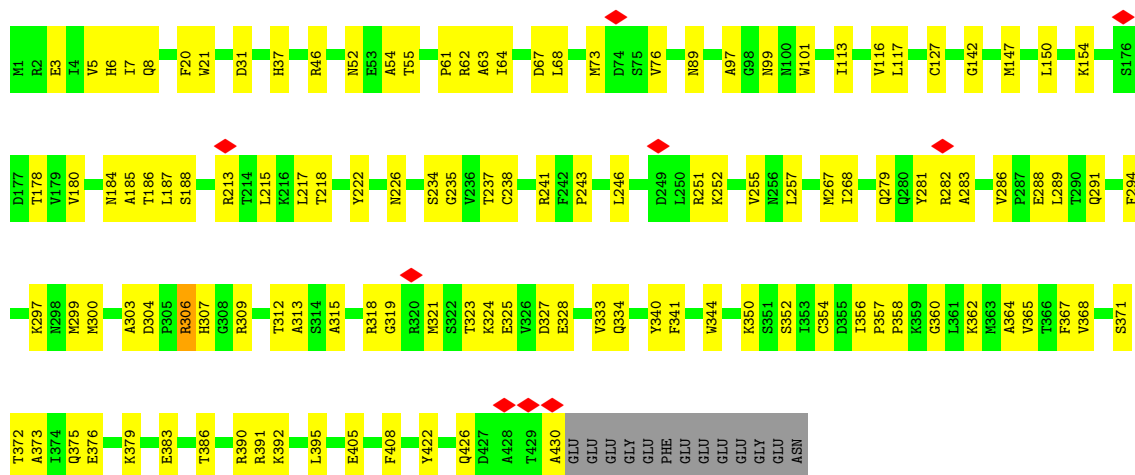
• Molecule 46: Tubulin beta chain



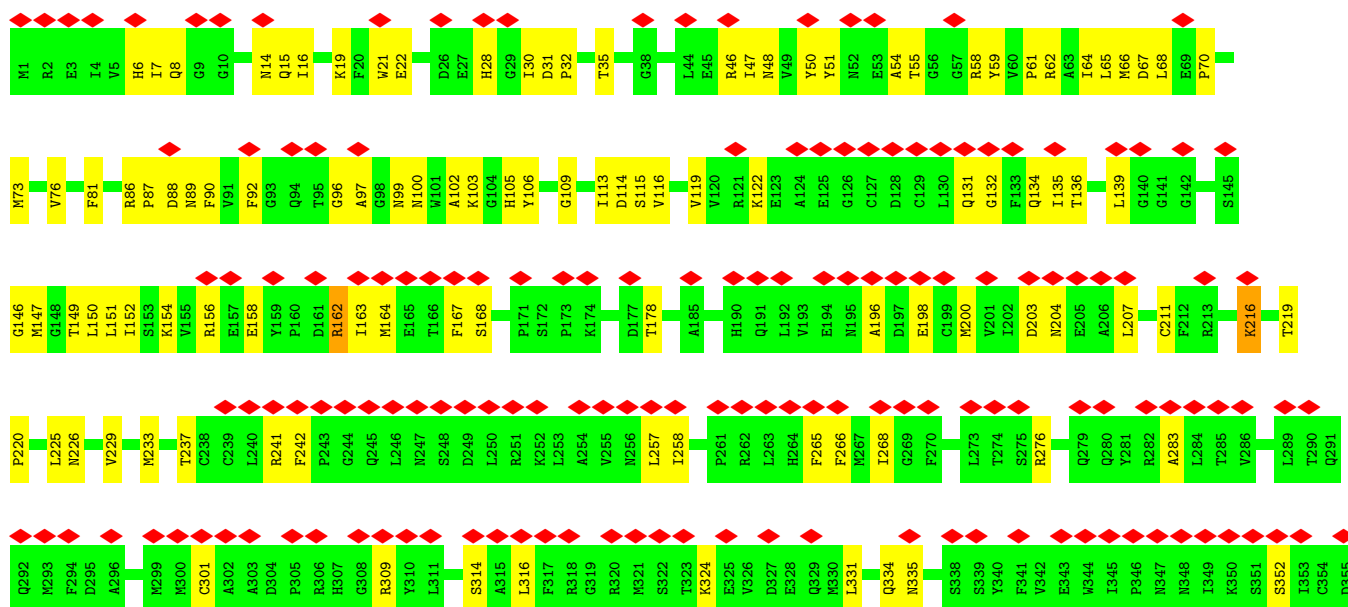




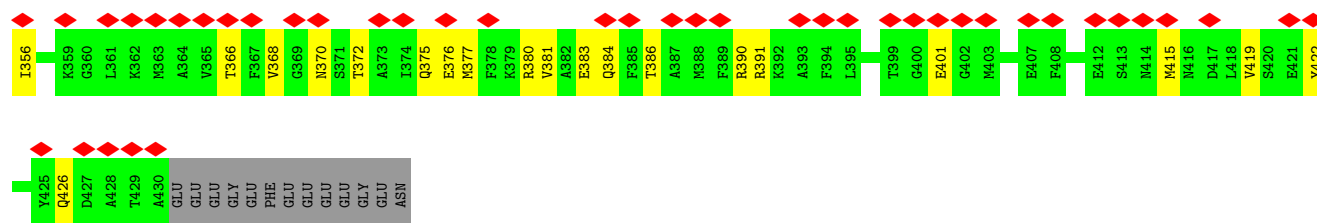
• Molecule 46: Tubulin beta chain



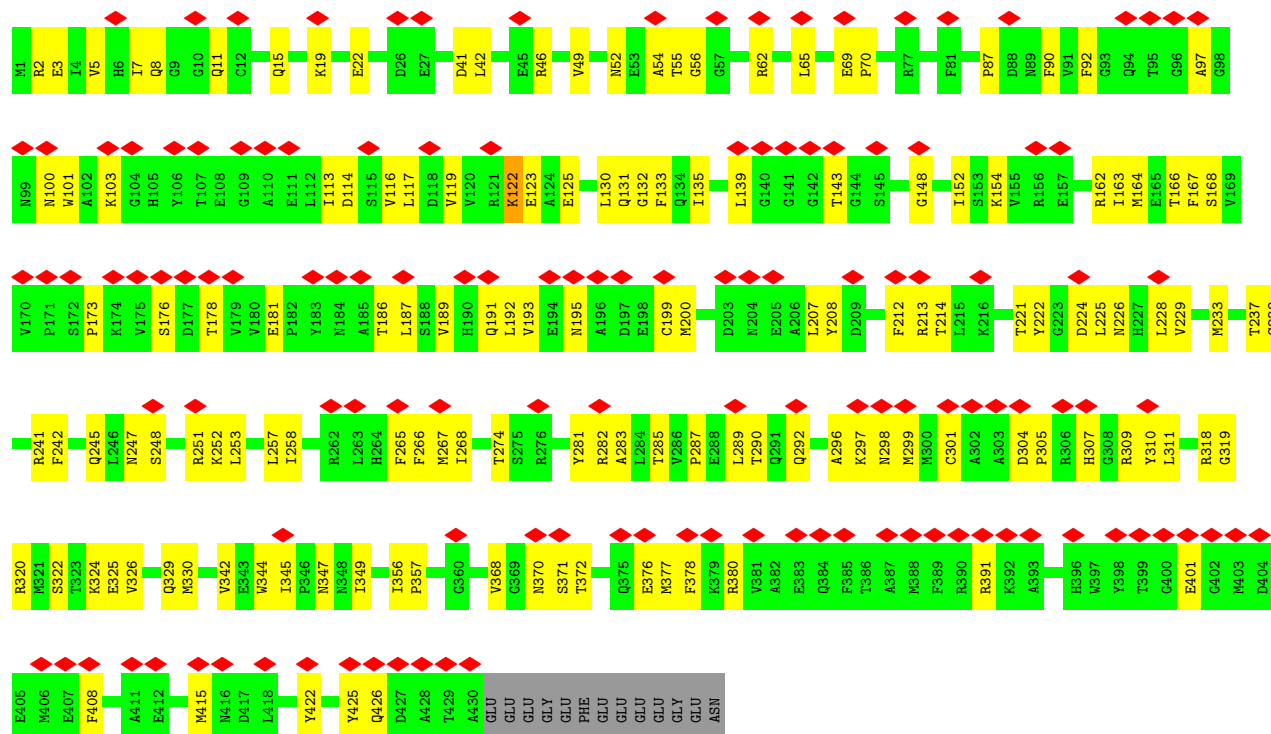
• Molecule 46: Tubulin beta chain



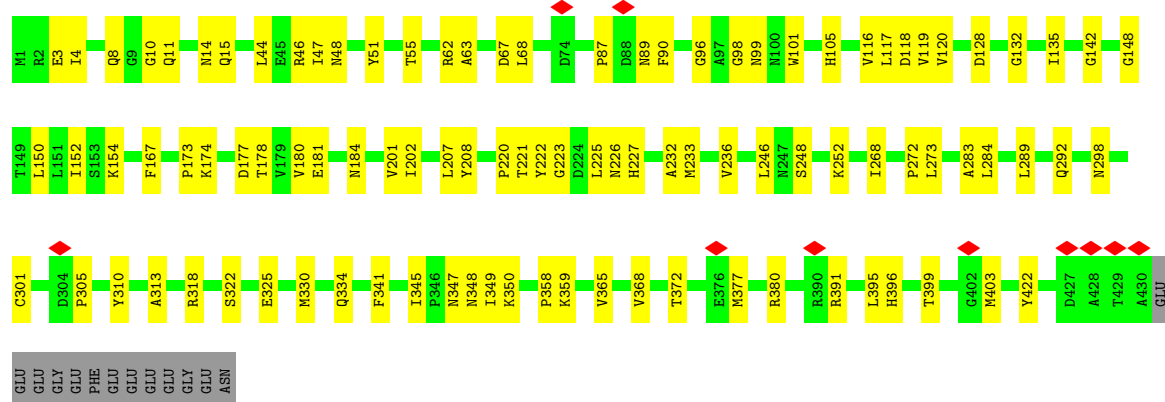
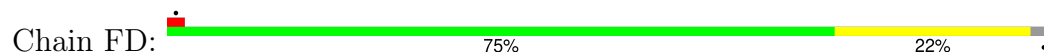




• Molecule 46: Tubulin beta chain

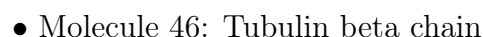


• Molecule 46: Tubulin beta chain

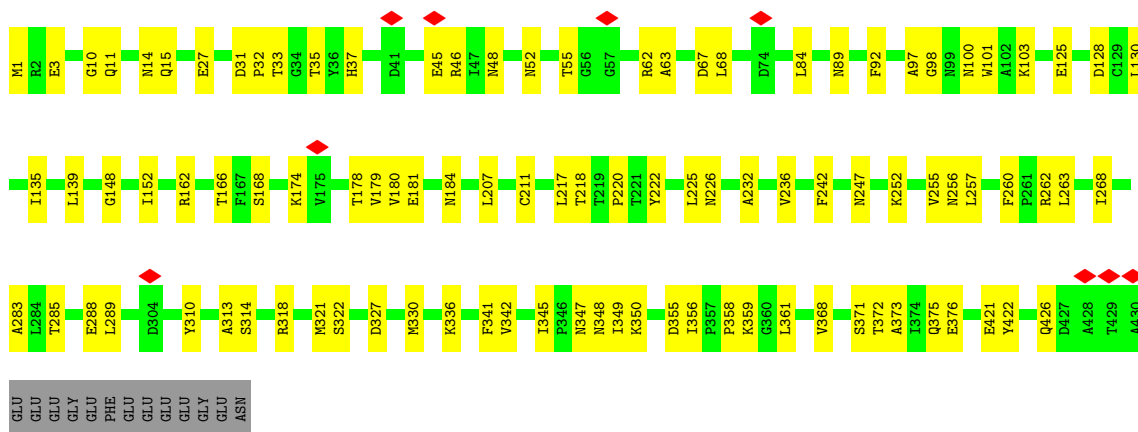


• Molecule 46: Tubulin beta chain

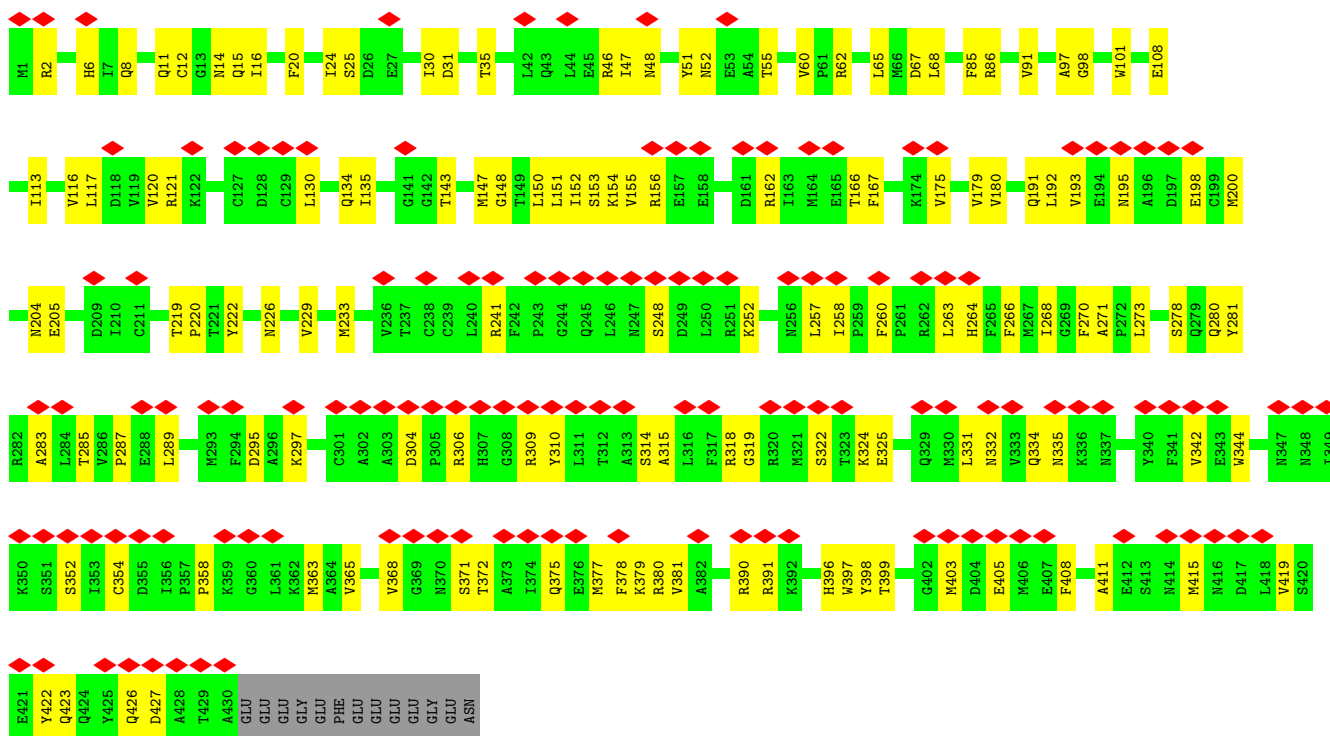




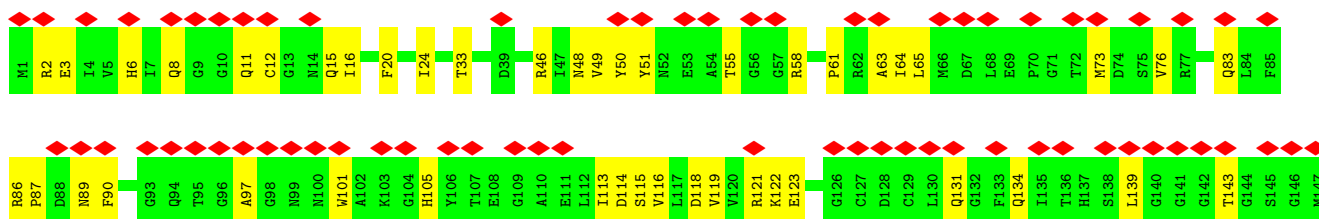
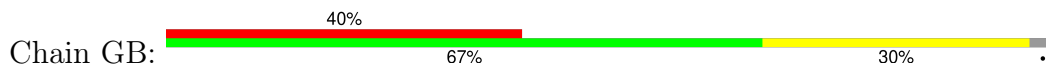




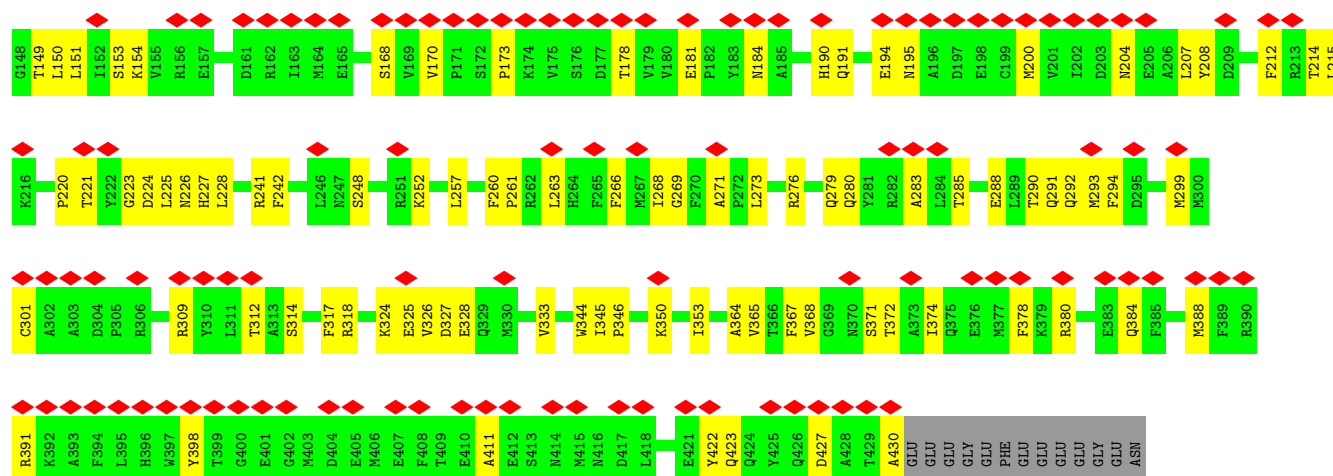
● Molecule 46: Tubulin beta chain



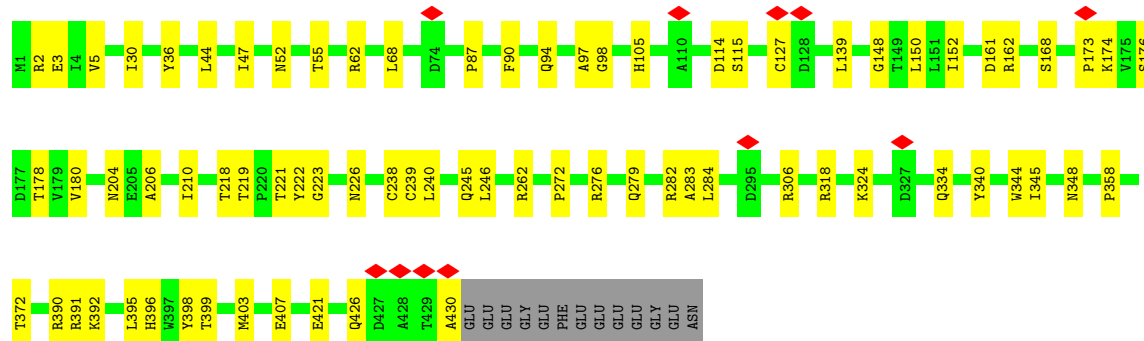
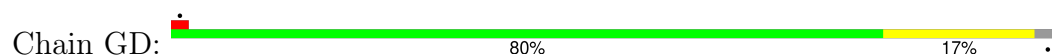
● Molecule 46: Tubulin beta chain



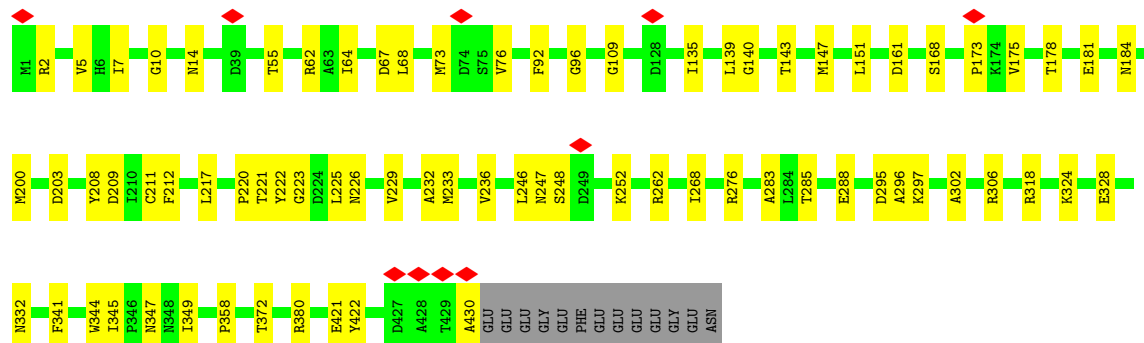
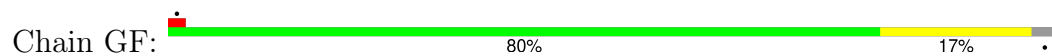




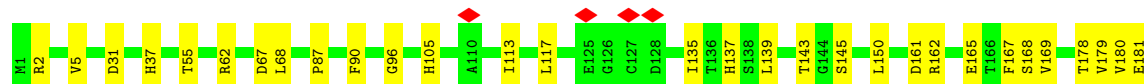
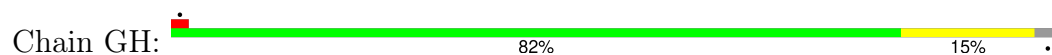
• Molecule 46: Tubulin beta chain



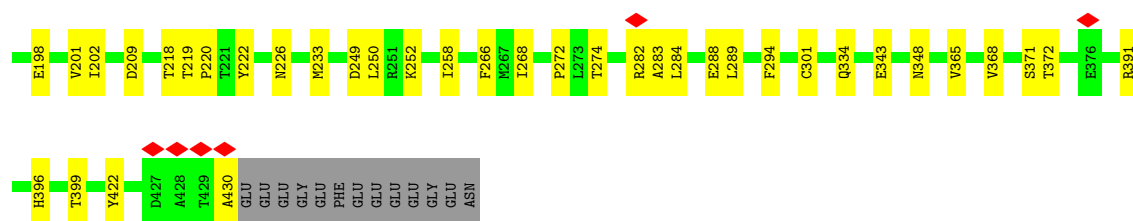
• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain

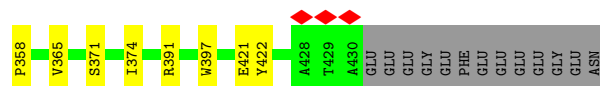
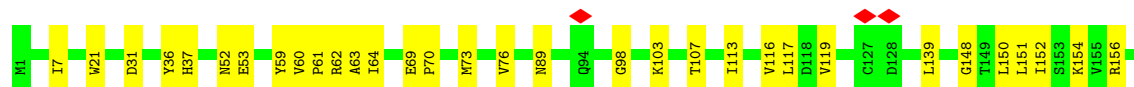






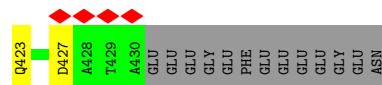
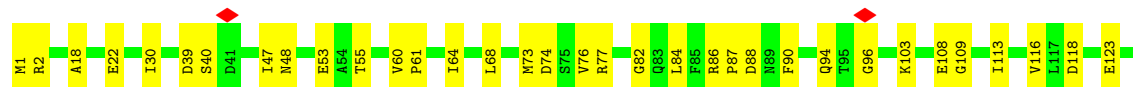
- Molecule 46: Tubulin beta chain

Chain GJ: 80% 17%



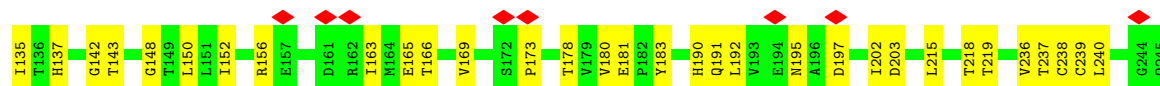
- Molecule 46: Tubulin beta chain

Chain GL: 74% 23%

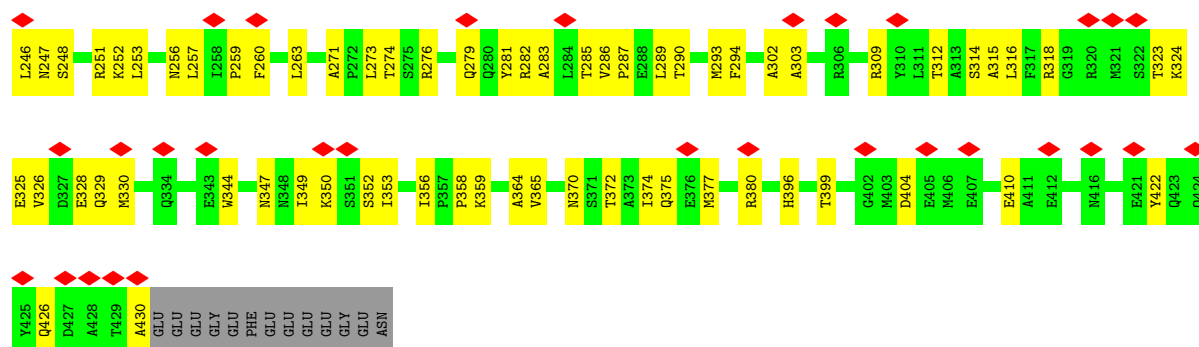


- Molecule 46: Tubulin beta chain

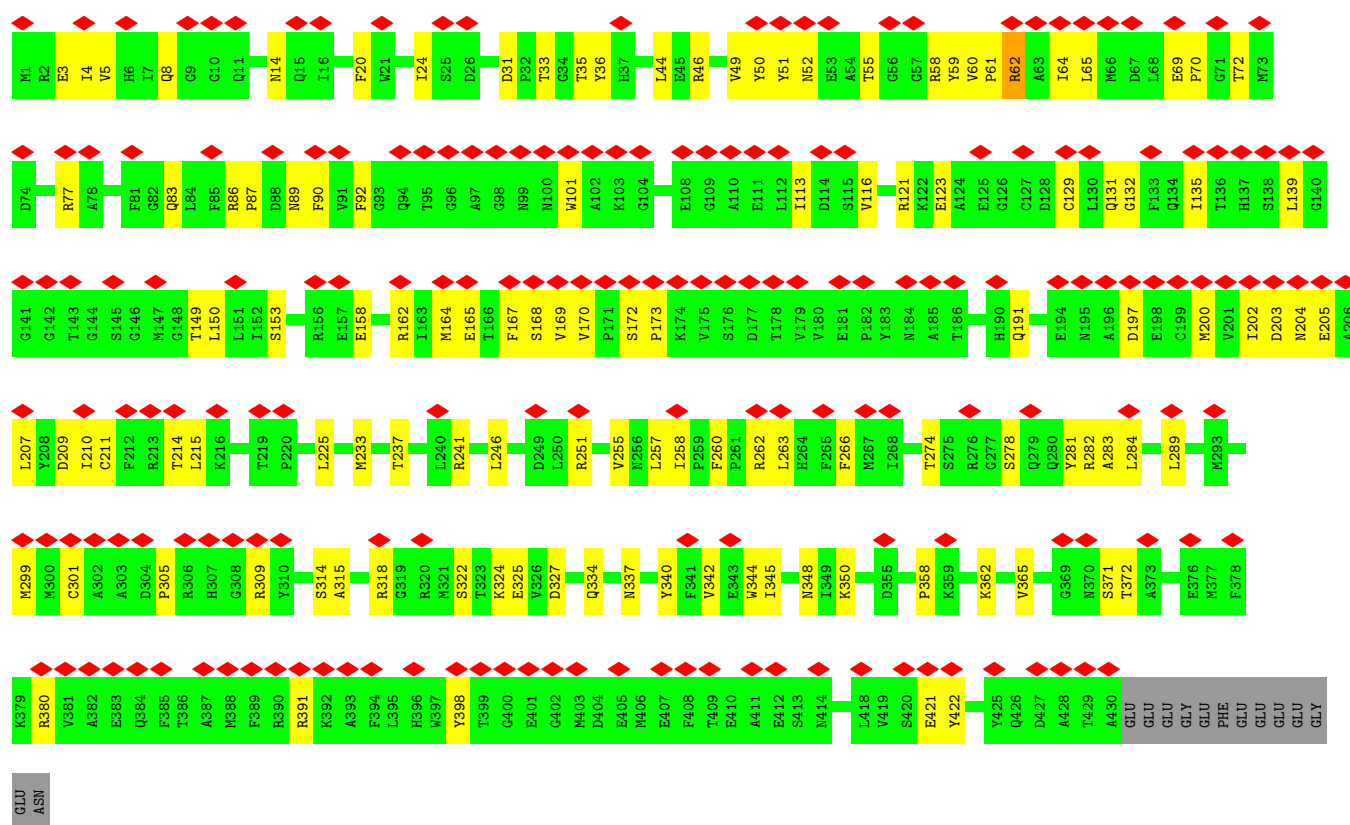
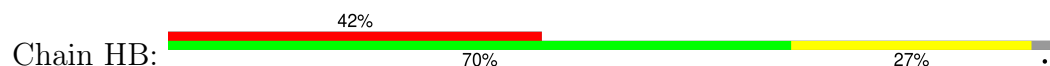
Chain GN: 11% 68% 29%



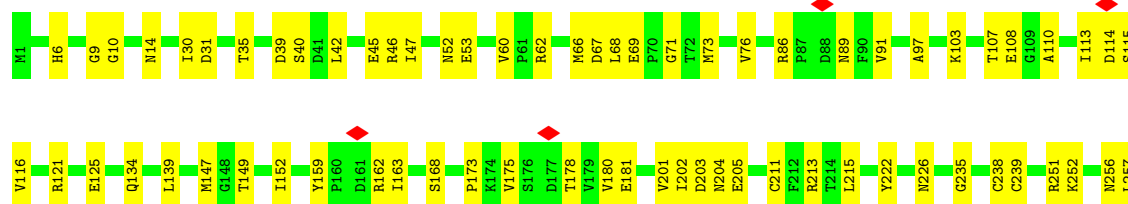
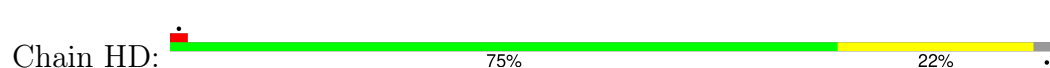




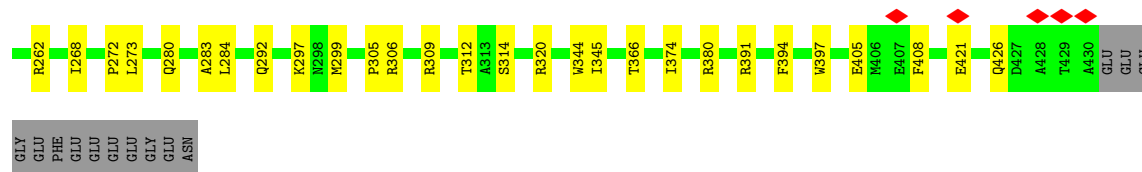
• Molecule 46: Tubulin beta chain



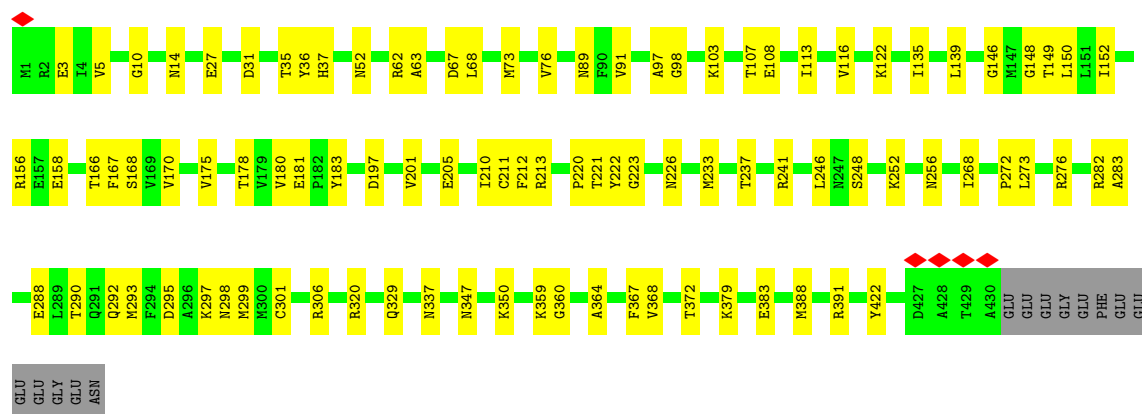
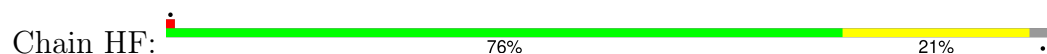
• Molecule 46: Tubulin beta chain



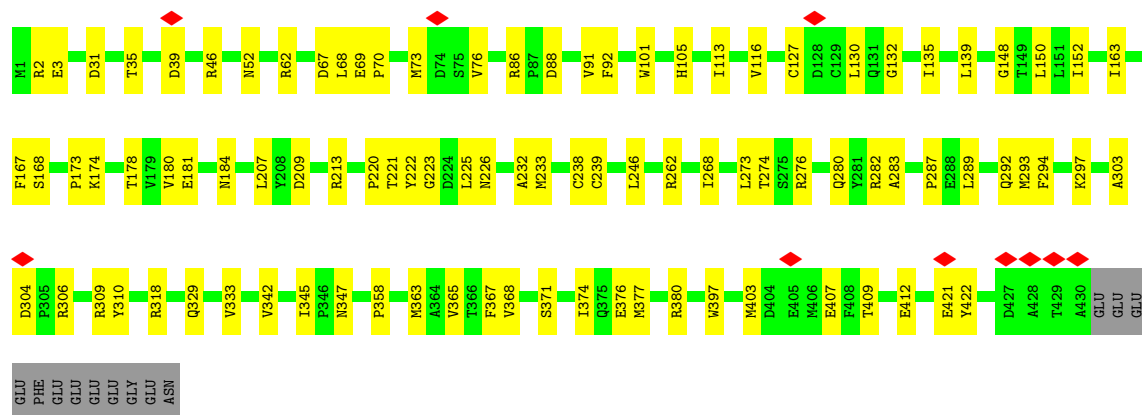
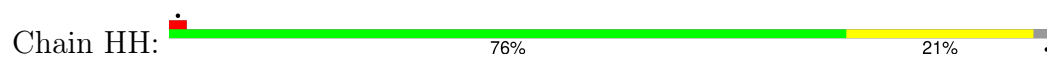




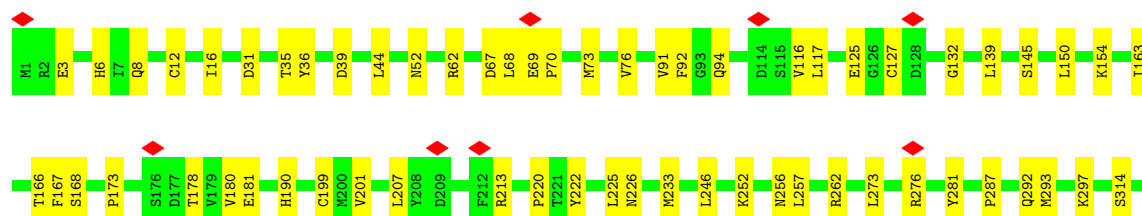
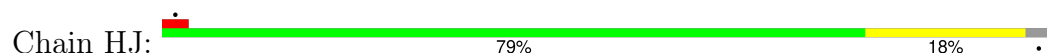
• Molecule 46: Tubulin beta chain



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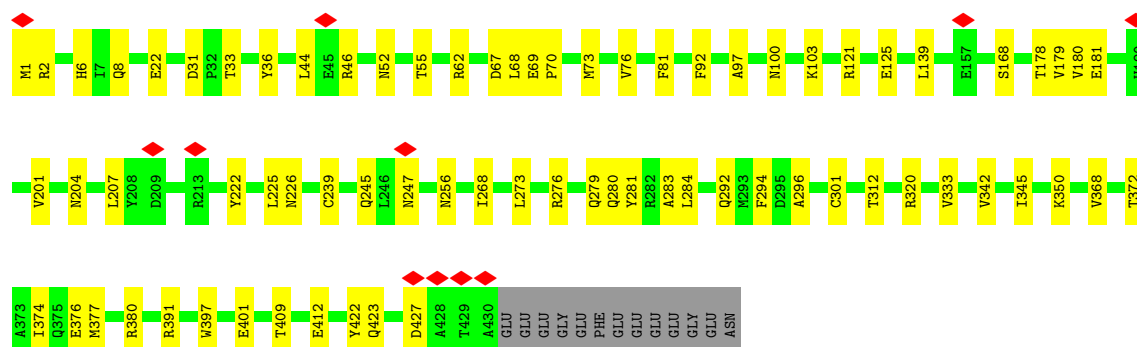
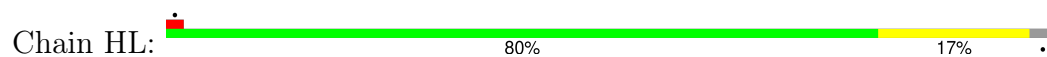
• Molecule 46: Tubulin beta chain



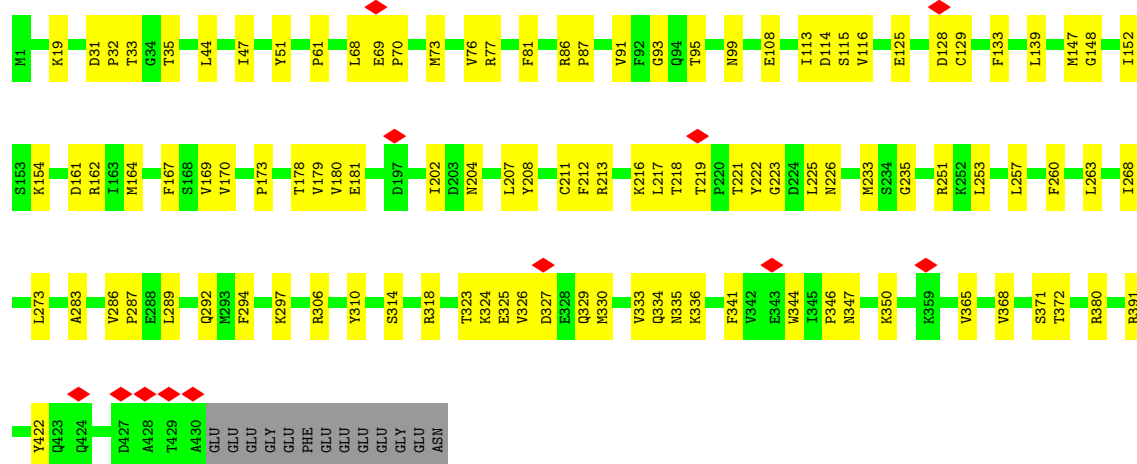
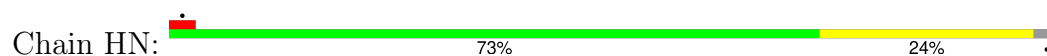




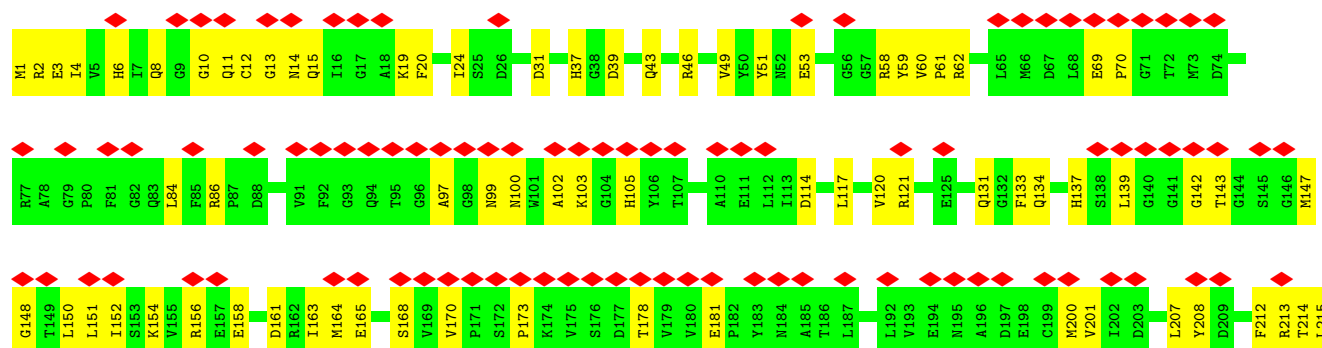
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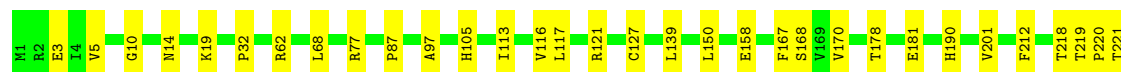
• Molecule 46: Tubulin beta chain



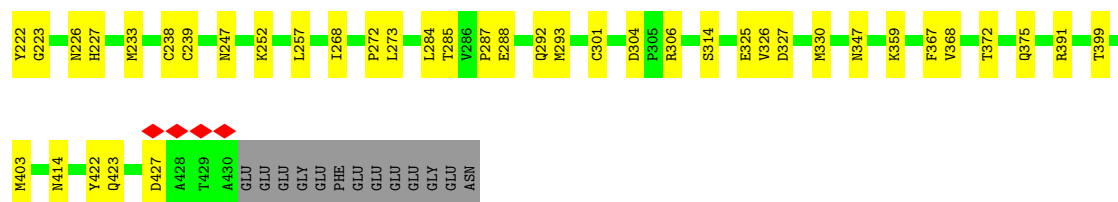
• Molecule 46: Tubulin beta chain



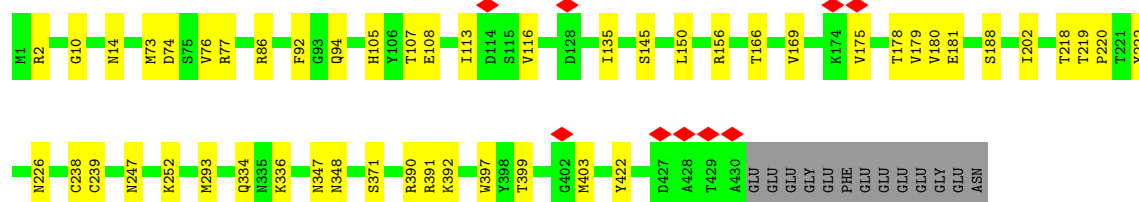
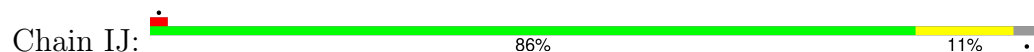




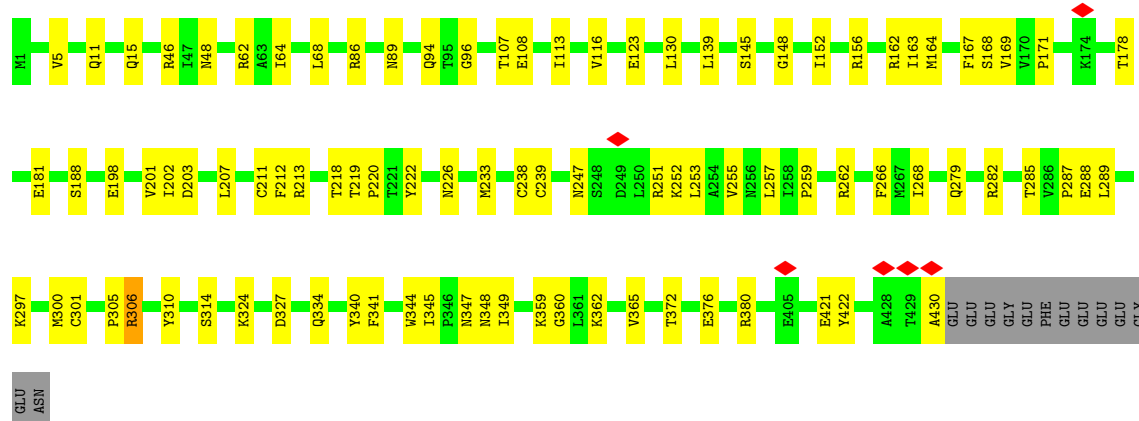
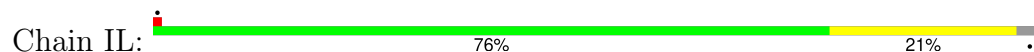




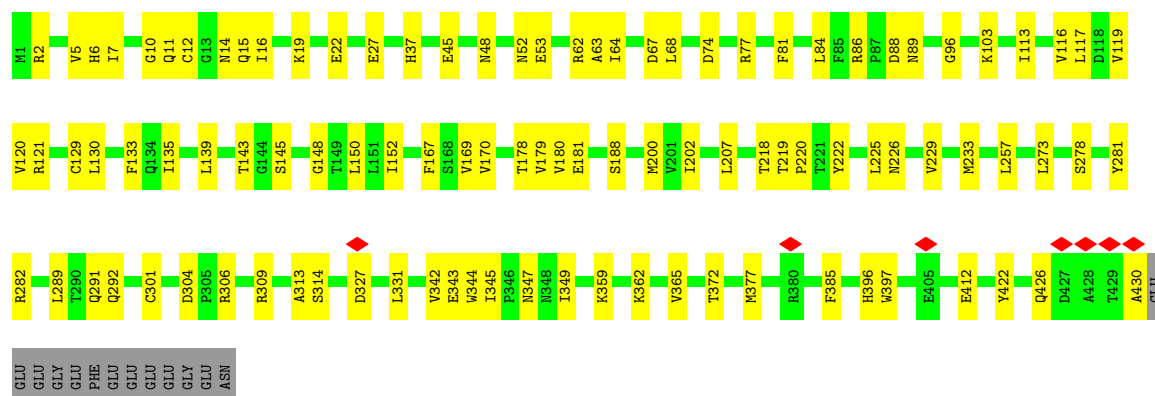
• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain

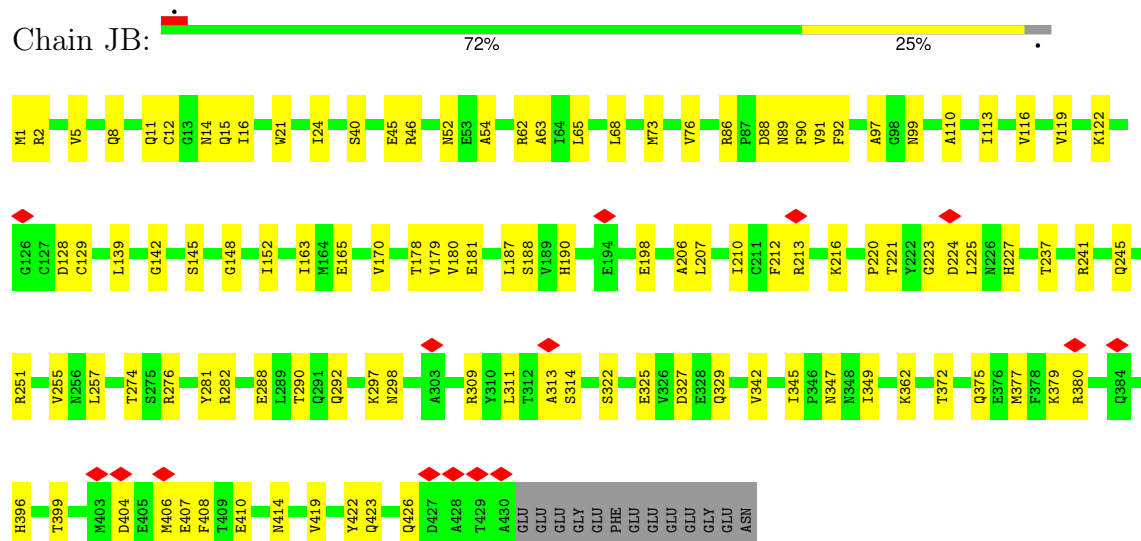


• Molecule 46: Tubulin beta chain

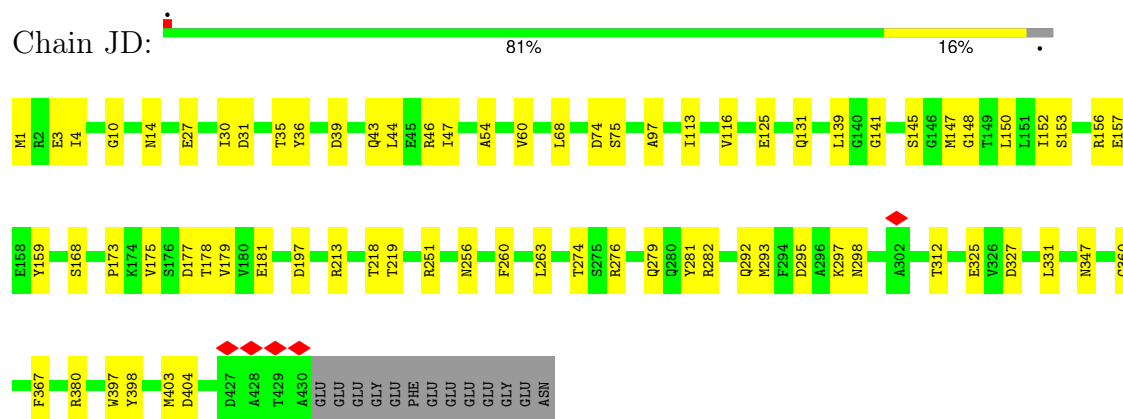




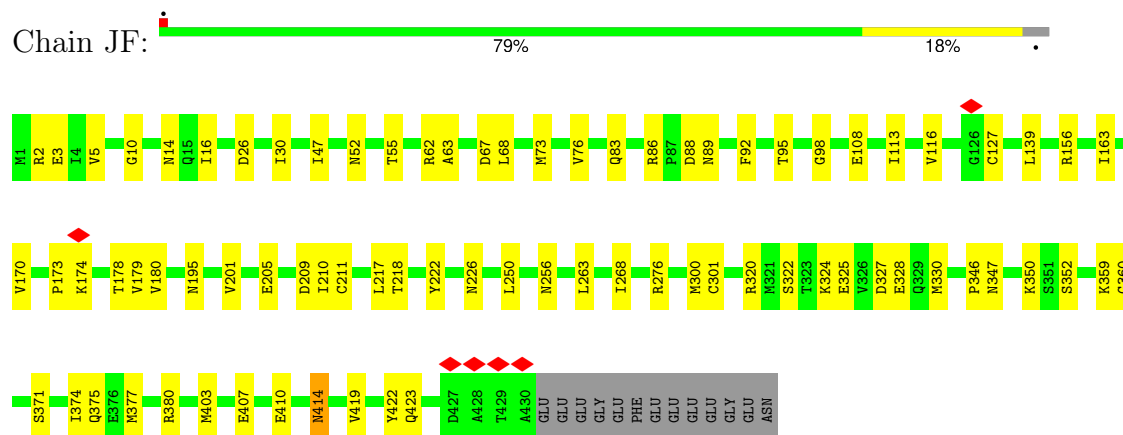
- Molecule 46: Tubulin beta chain



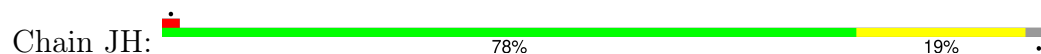
- Molecule 46: Tubulin beta chain



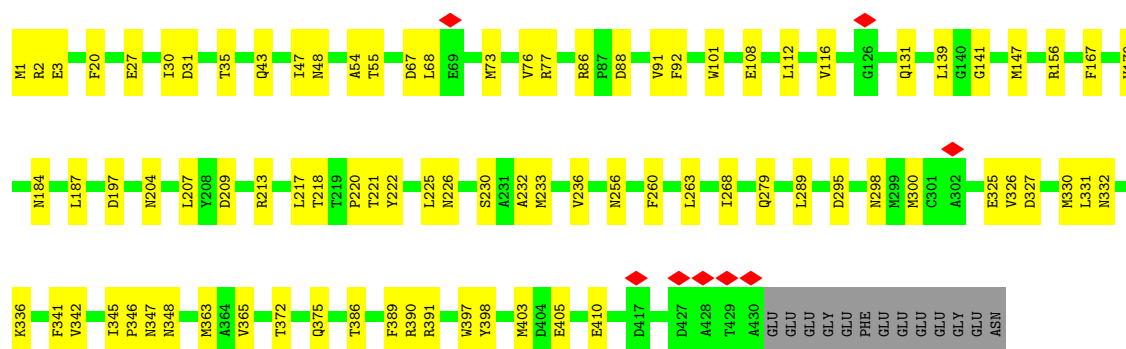
- Molecule 46: Tubulin beta chain



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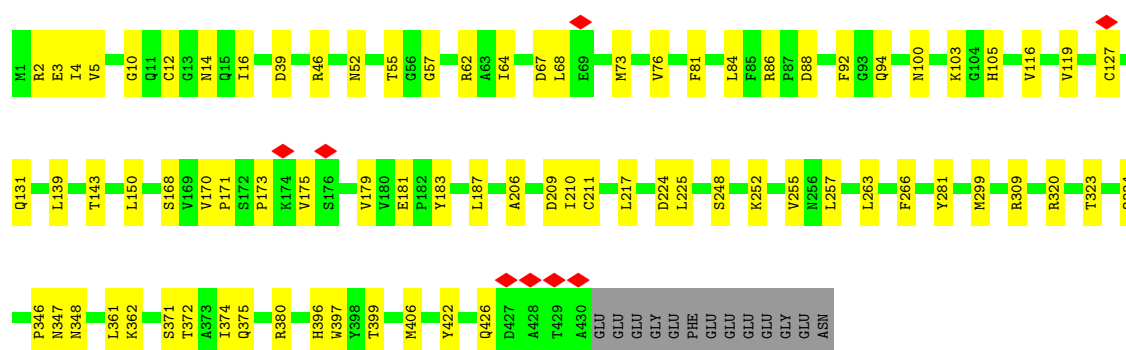






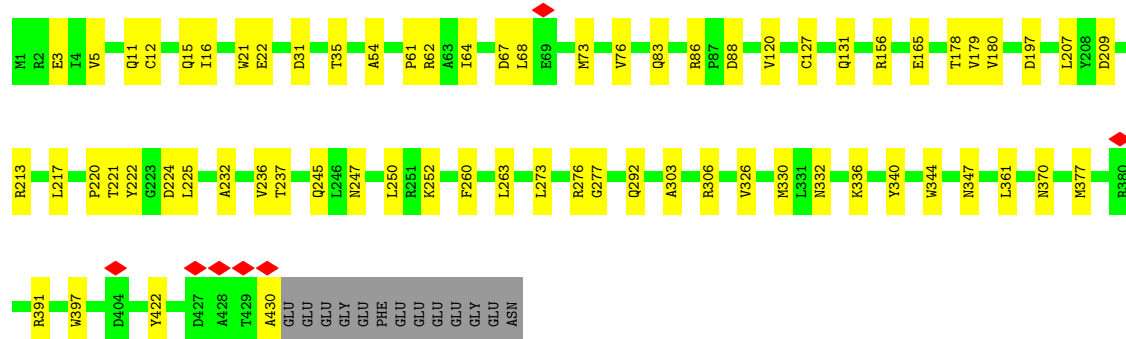
• Molecule 46: Tubulin beta chain

Chain JJ: 79% 18%



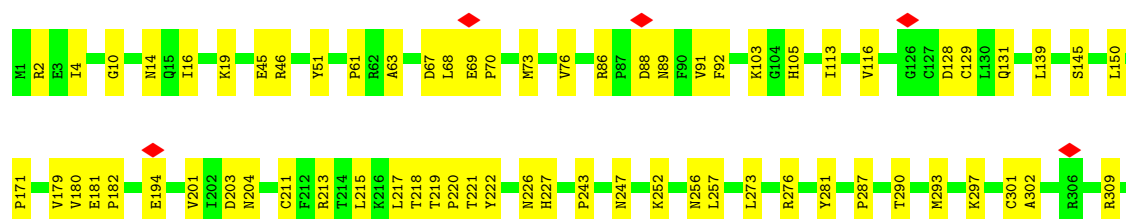
• Molecule 46: Tubulin beta chain

Chain JL: 82% 15%

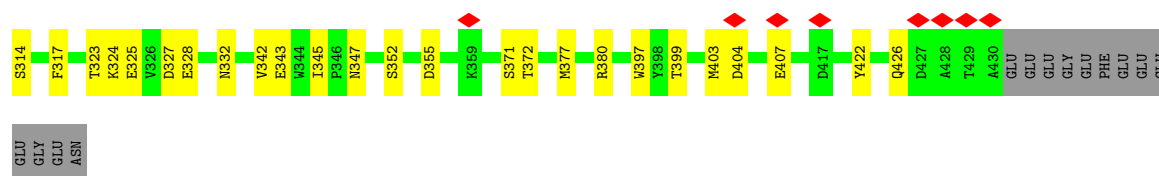


• Molecule 46: Tubulin beta chain

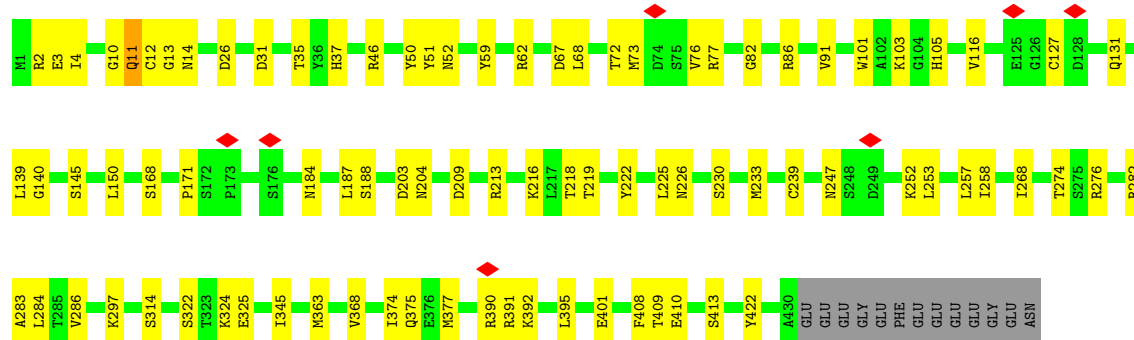
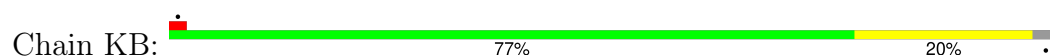
Chain JN: 76% 21%



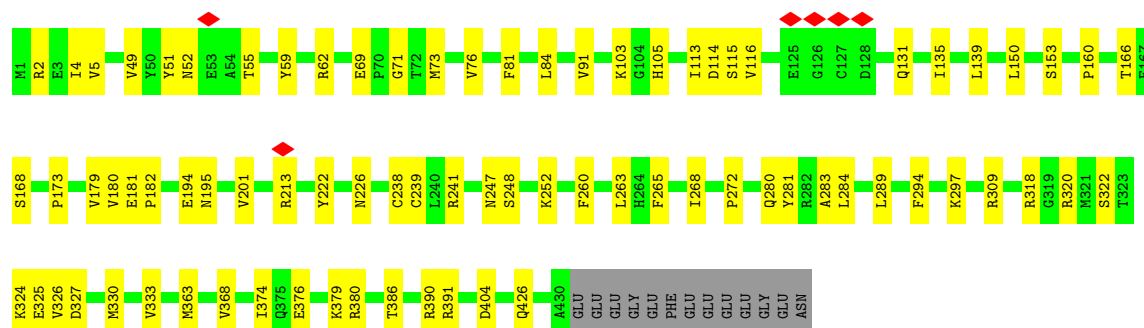
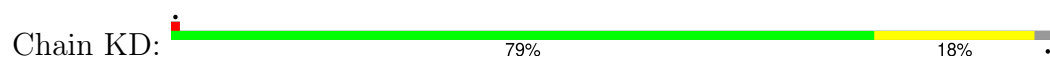




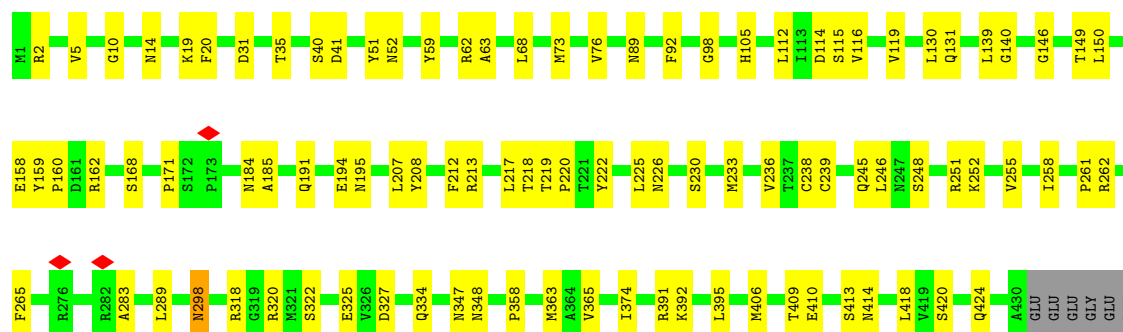
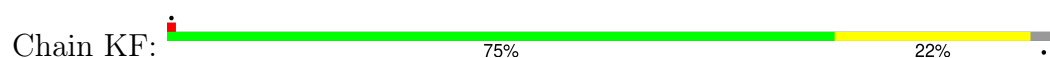
• Molecule 46: Tubulin beta chain



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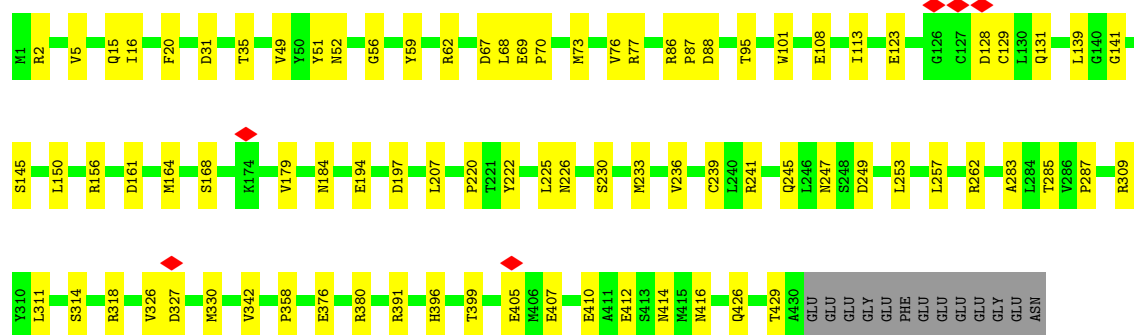





GLU  
GLU  
GLU  
GLU  
GLU  
GLU  
ASN

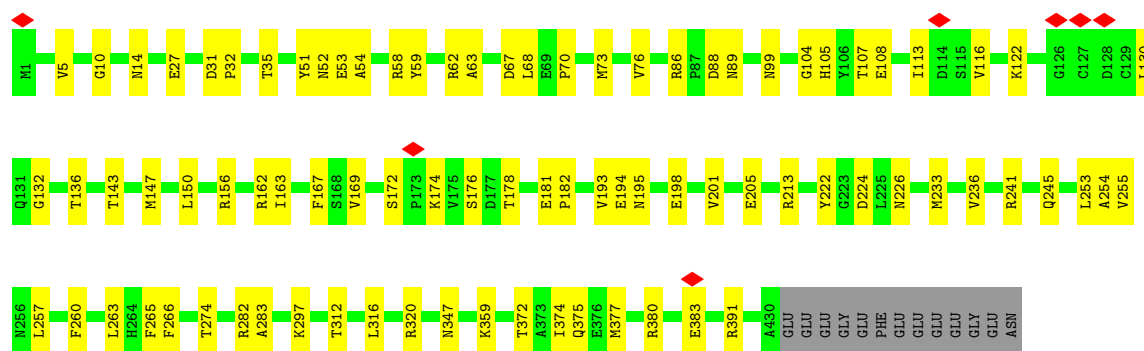
• Molecule 46: Tubulin beta chain

Chain KH:  78% 19%




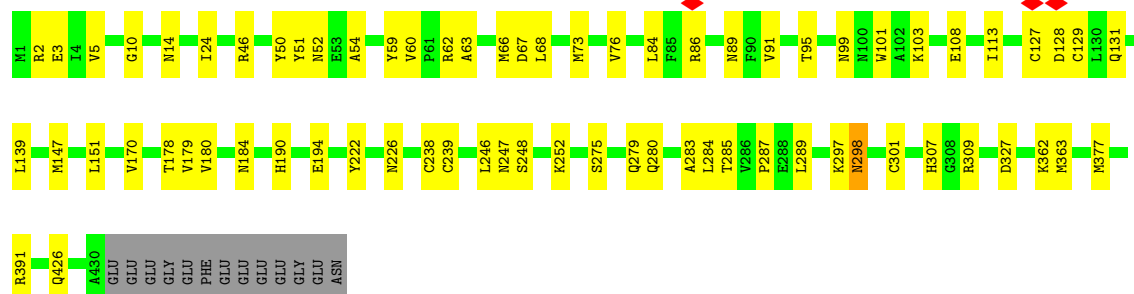
• Molecule 46: Tubulin beta chain

Chain KJ:  78% 19%




• Molecule 46: Tubulin beta chain

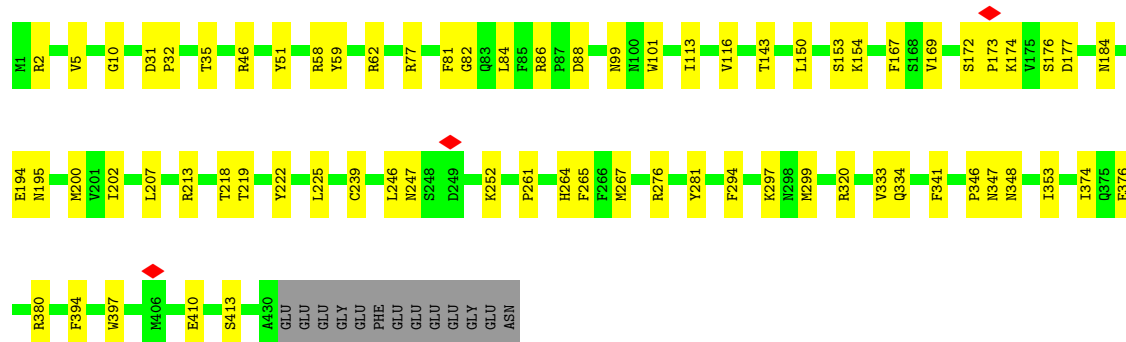
Chain KL:  81% 16%



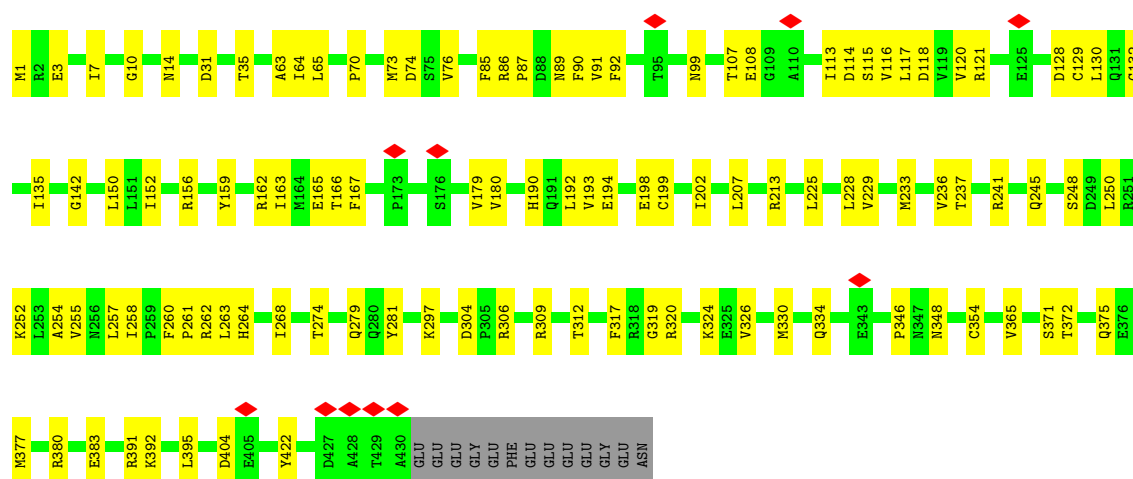
• Molecule 46: Tubulin beta chain

Chain KN:  81% 16%

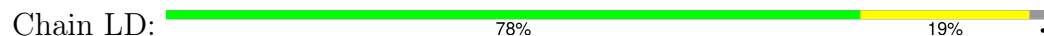




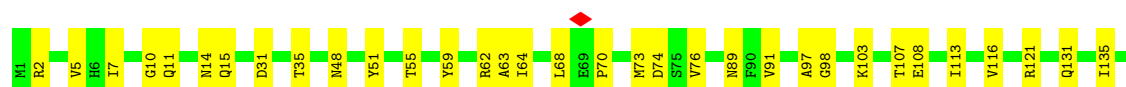
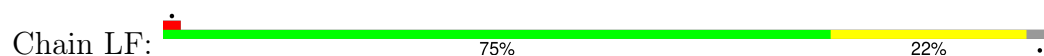
• Molecule 46: Tubulin beta chain



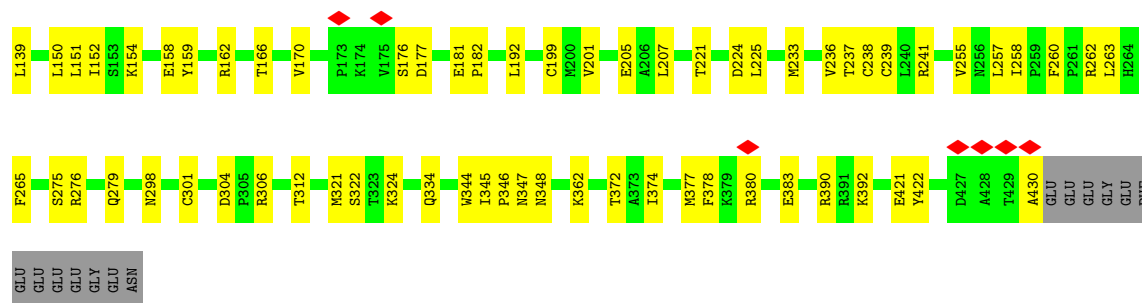
• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain

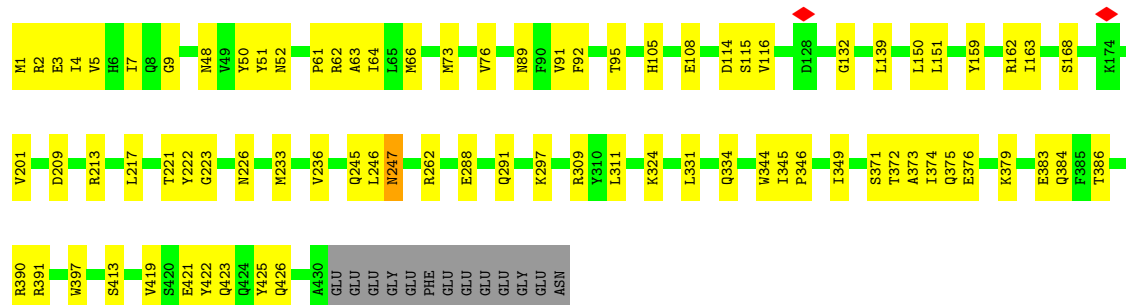






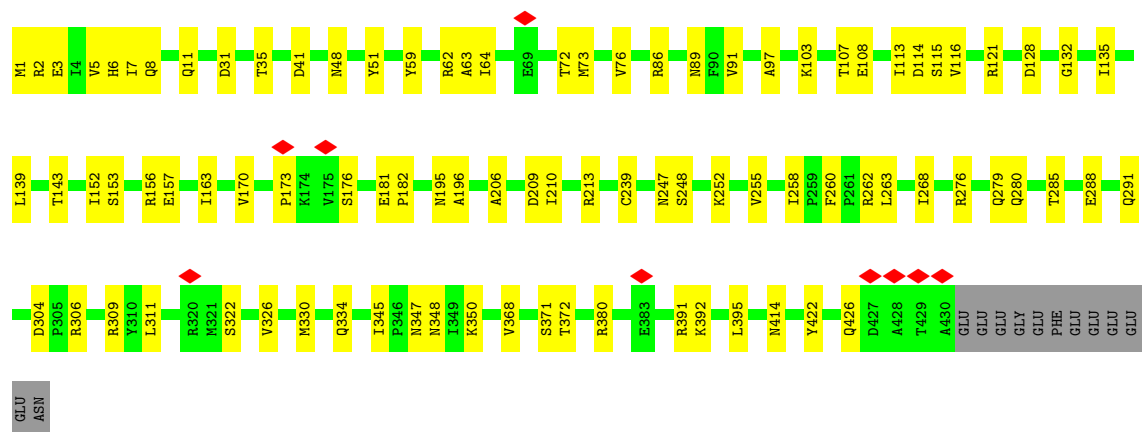
• Molecule 46: Tubulin beta chain

Chain LH: 79% 18% .



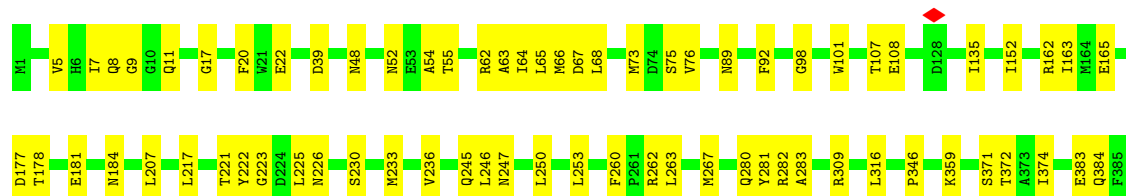
• Molecule 46: Tubulin beta chain

Chain LJ: 77% 21% .



• Molecule 46: Tubulin beta chain

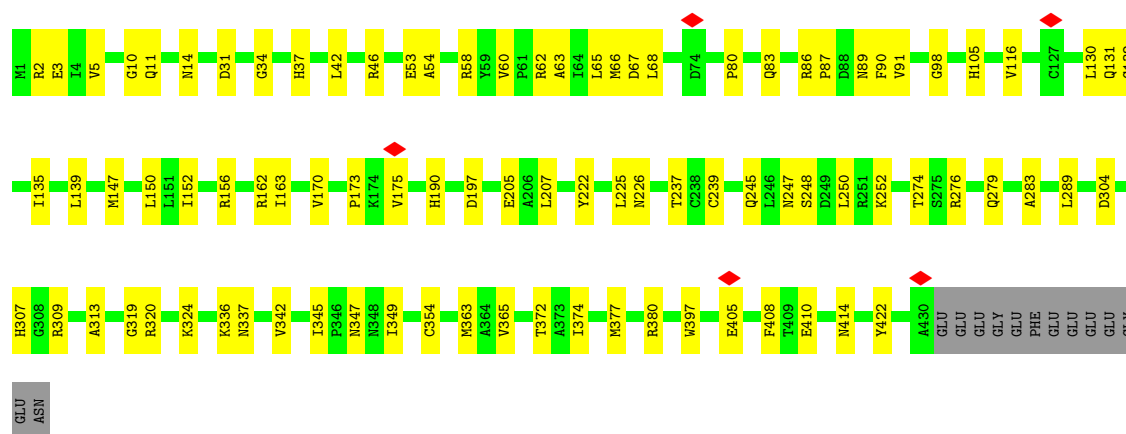
Chain LL: 79% 18% .





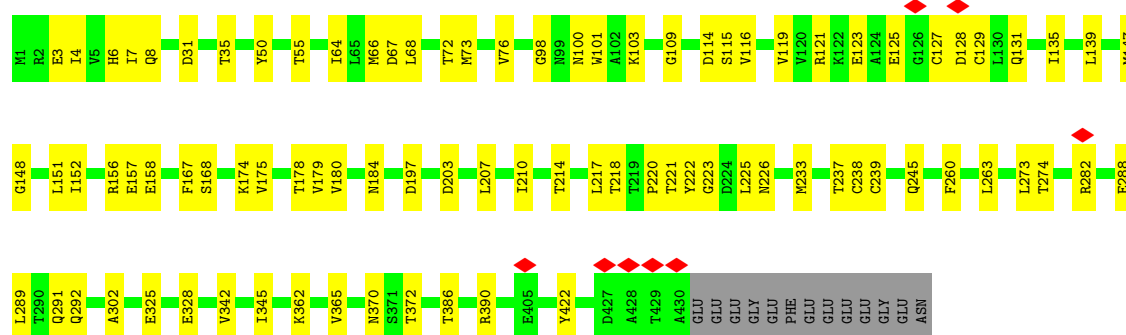






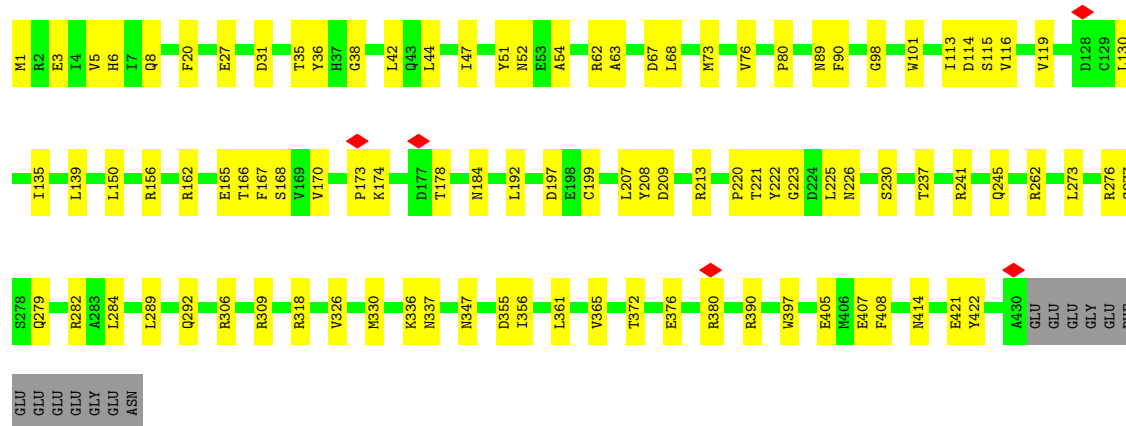
• Molecule 46: Tubulin beta chain

Chain MH: 77% 20%



• Molecule 46: Tubulin beta chain

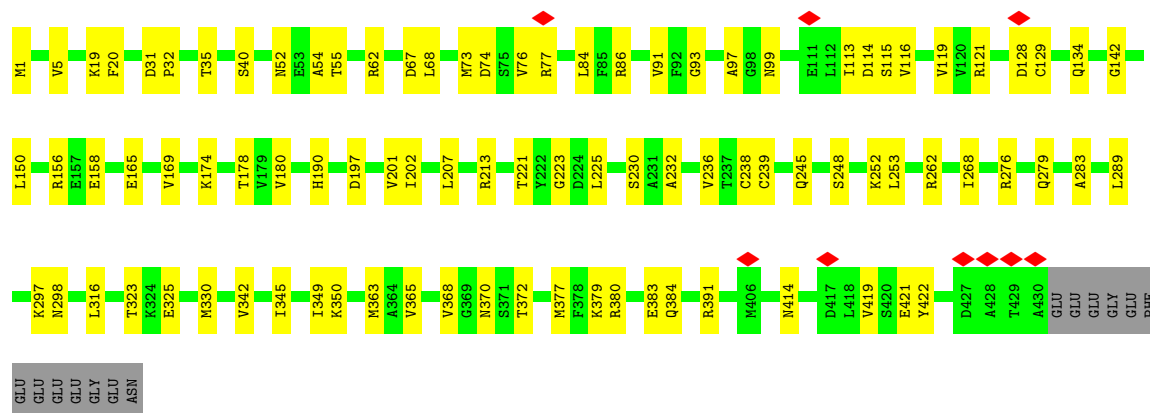
Chain MJ: 75% 22%



• Molecule 46: Tubulin beta chain

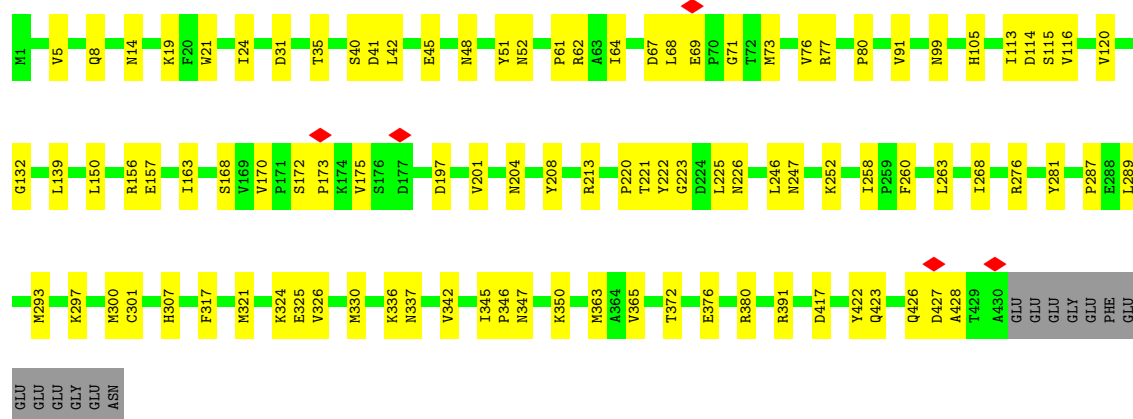
Chain ML: 77% 21%





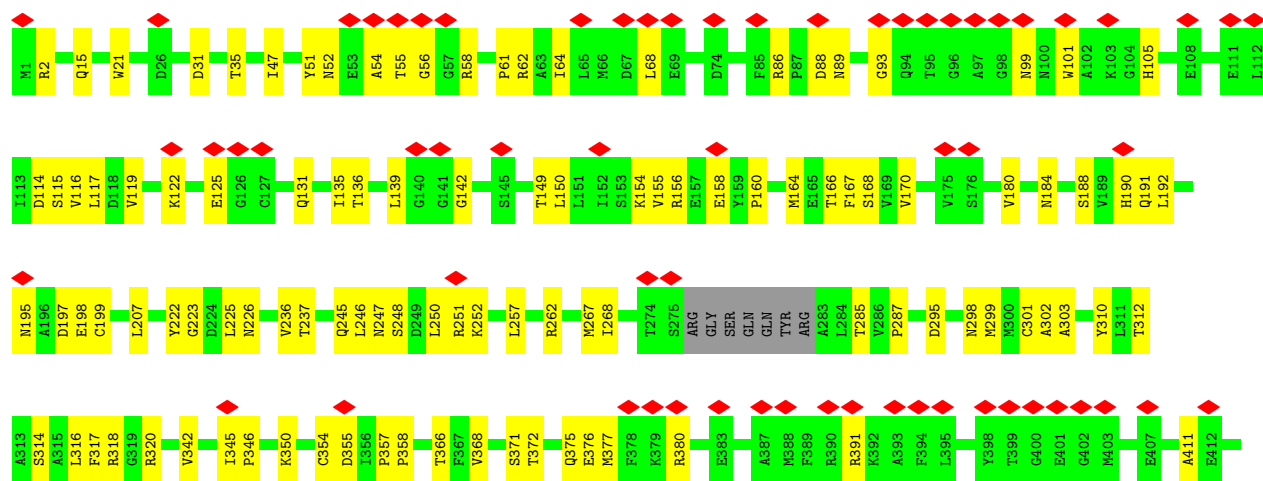
• Molecule 46: Tubulin beta chain

Chain MN: 75% 22%

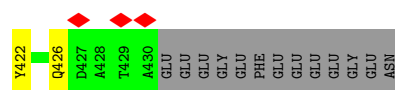


• Molecule 46: Tubulin beta chain

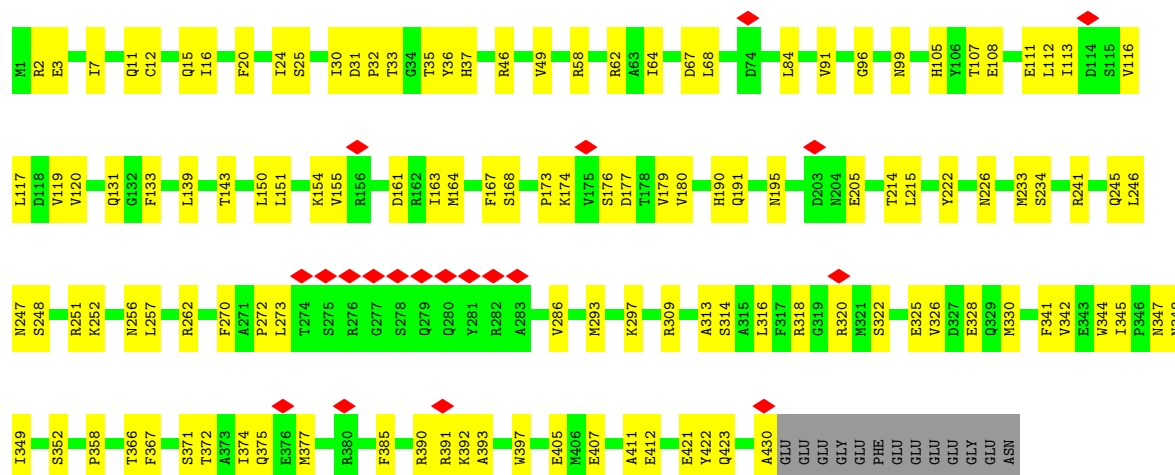
Chain NB: 15% 71% 25% 5%



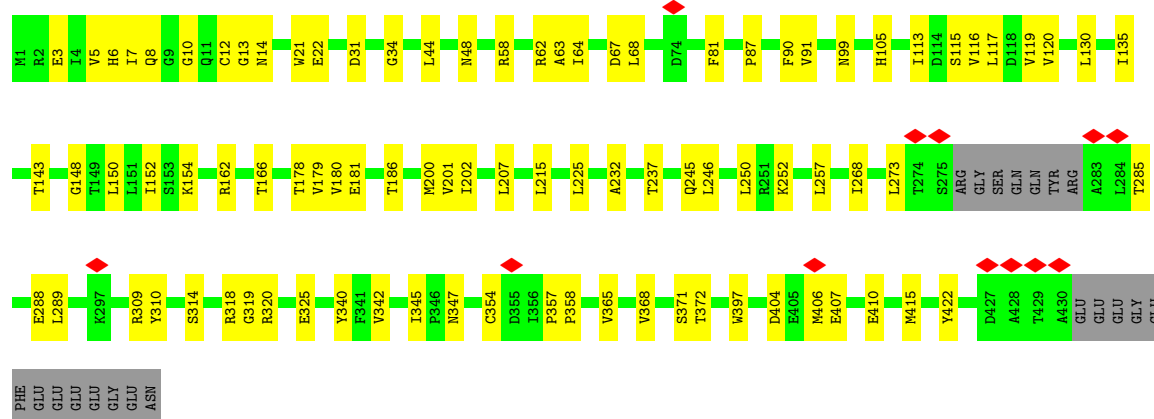
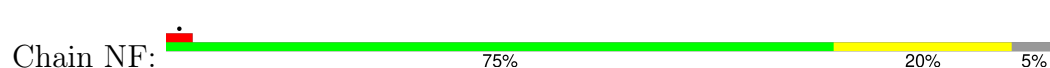




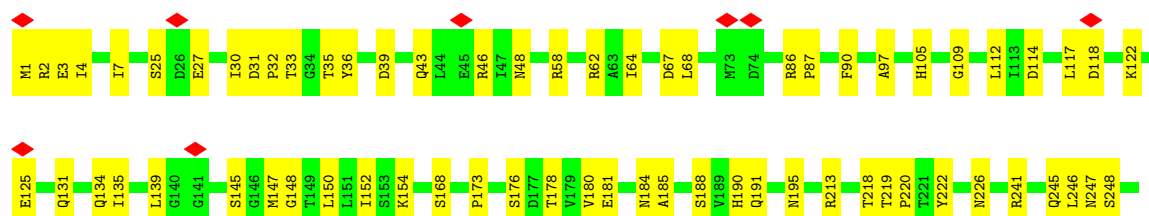
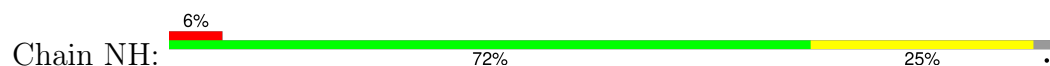
- Molecule 46: Tubulin beta chain



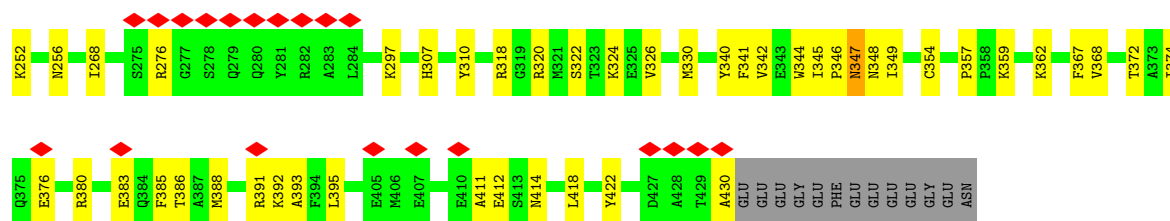
- Molecule 46: Tubulin beta chain



- Molecule 46: Tubulin beta chain

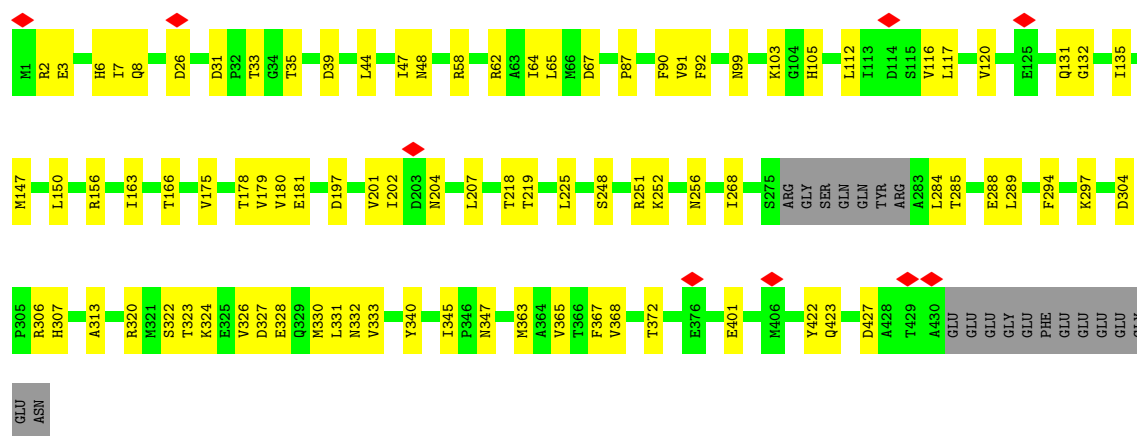






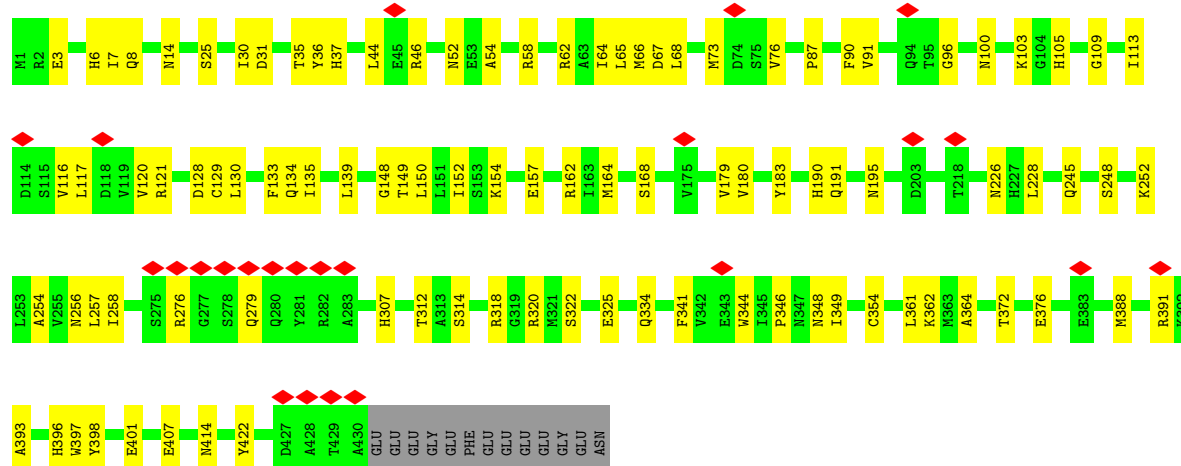
• Molecule 46: Tubulin beta chain

Chain NJ: 76% 20% 5%



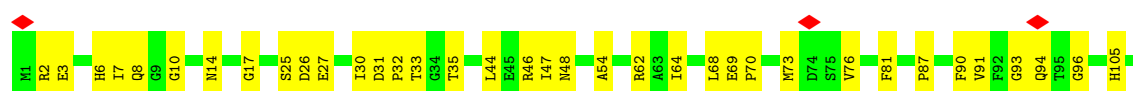
• Molecule 46: Tubulin beta chain

Chain NL: 5% 75% 22%

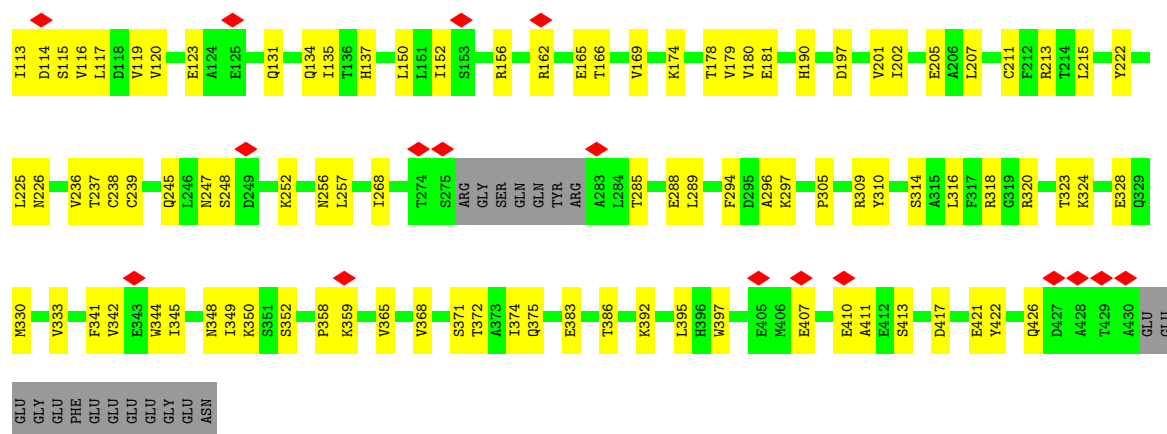


• Molecule 46: Tubulin beta chain

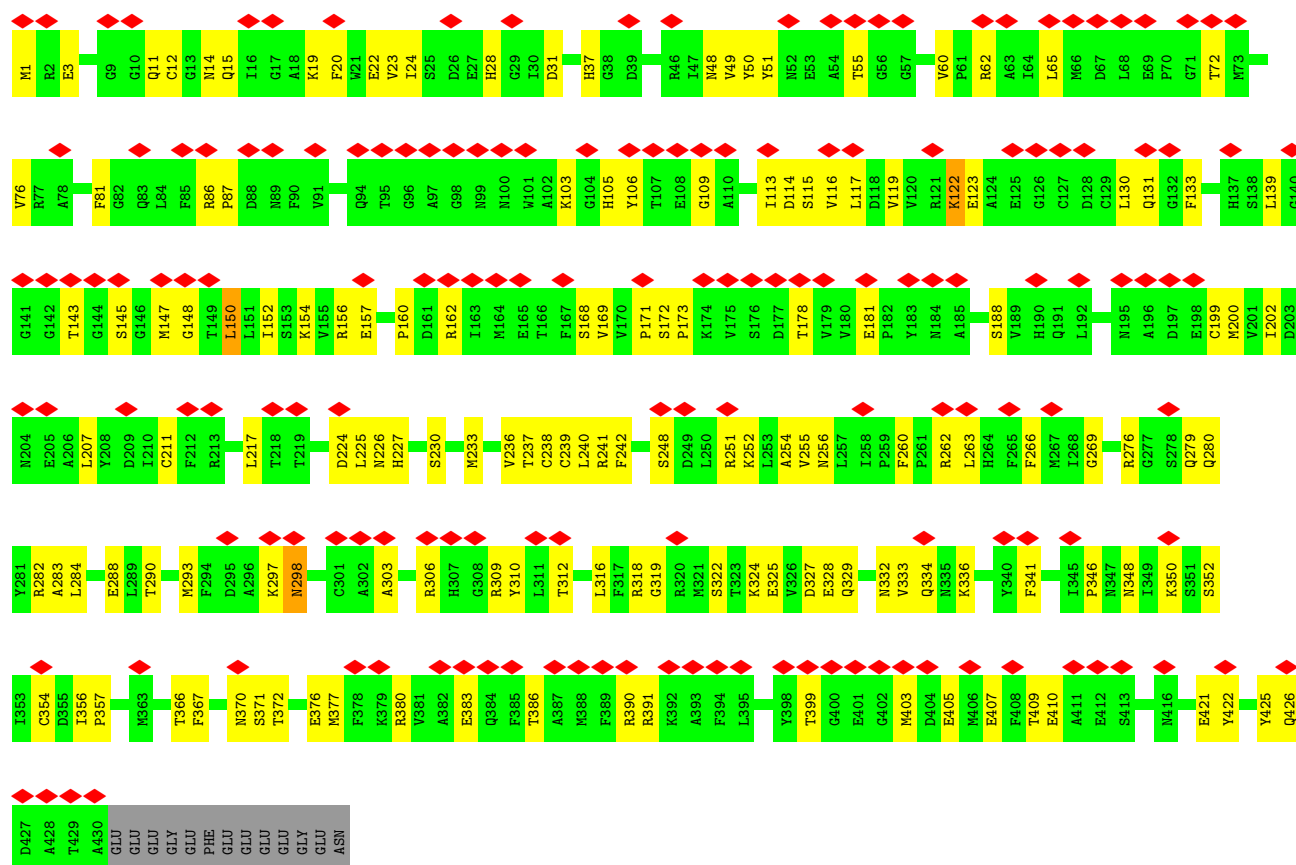
Chain NN: 5% 66% 29% 5%



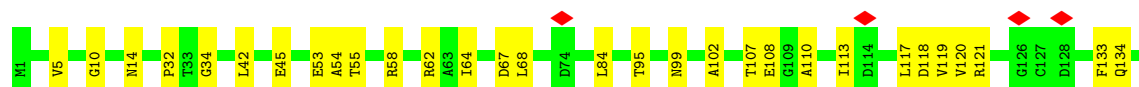
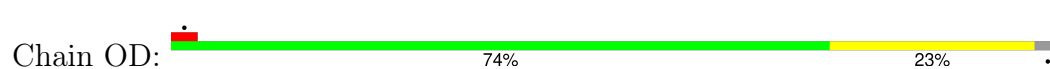




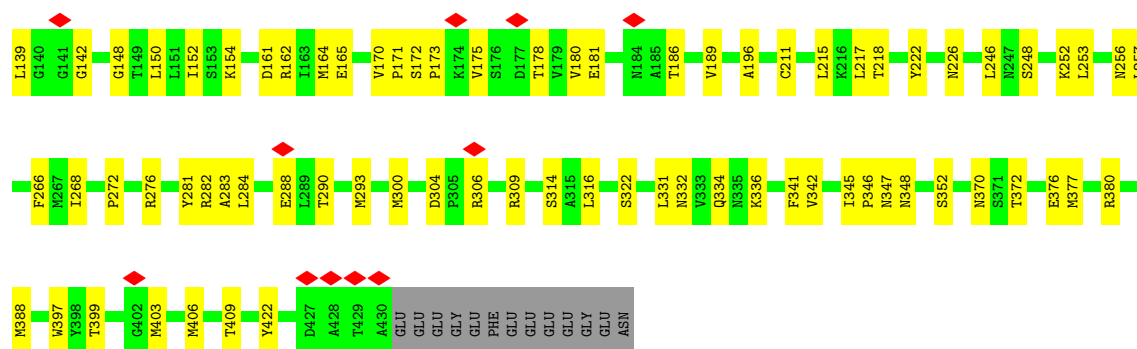
• Molecule 46: Tubulin beta chain



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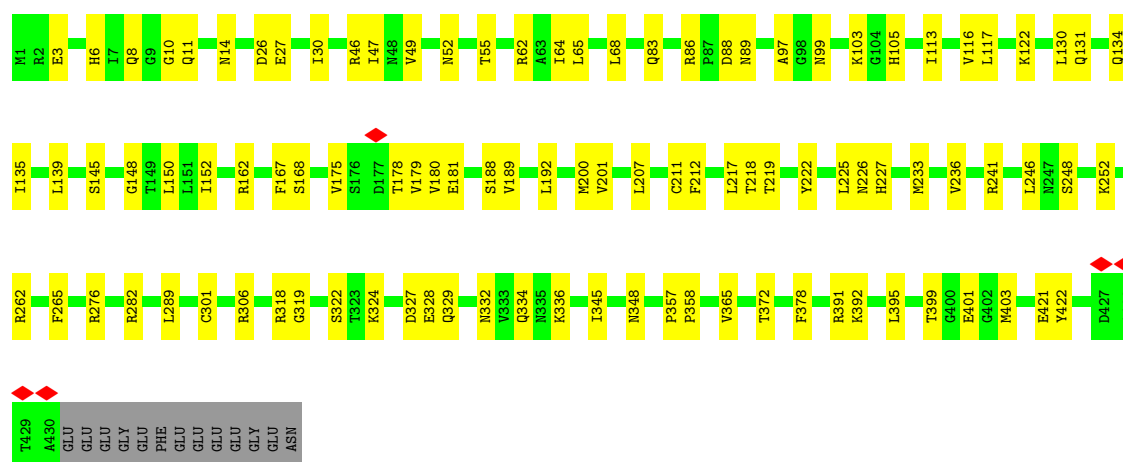






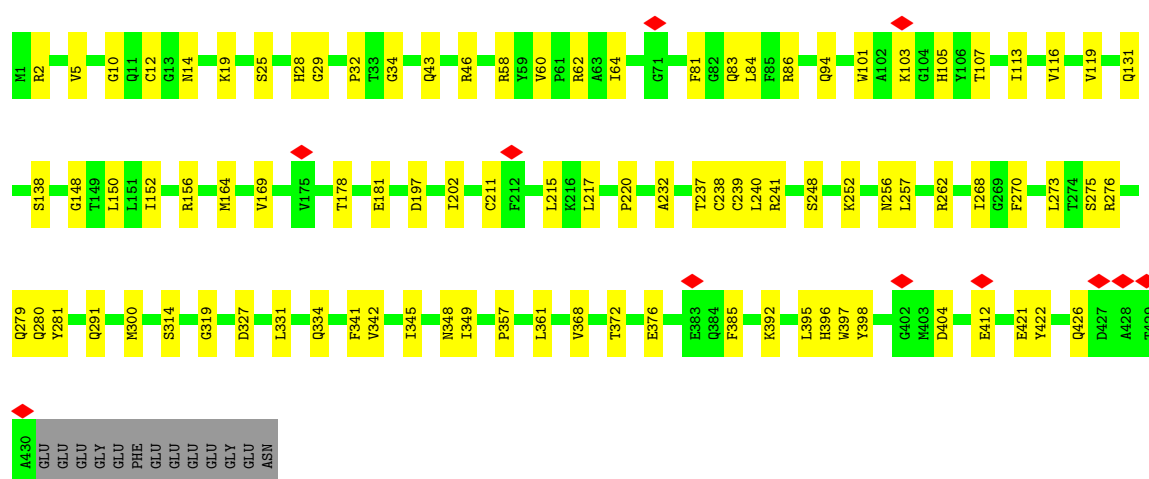
• Molecule 46: Tubulin beta chain

Chain OF: 74% 23% .



• Molecule 46: Tubulin beta chain

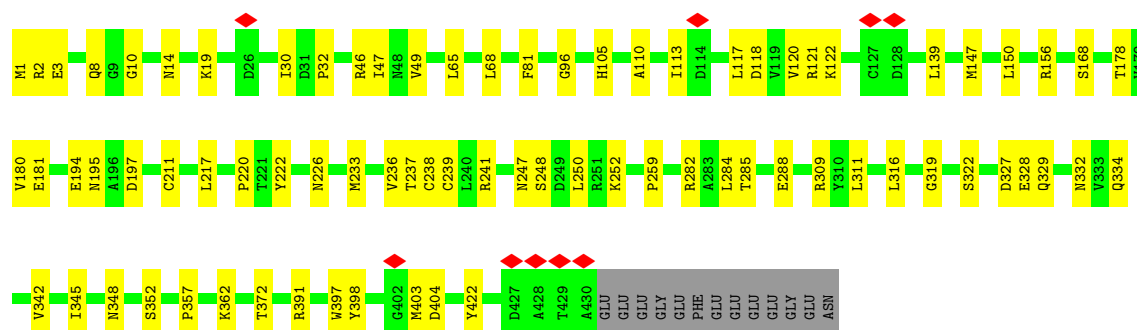
Chain OH: 76% 21% .



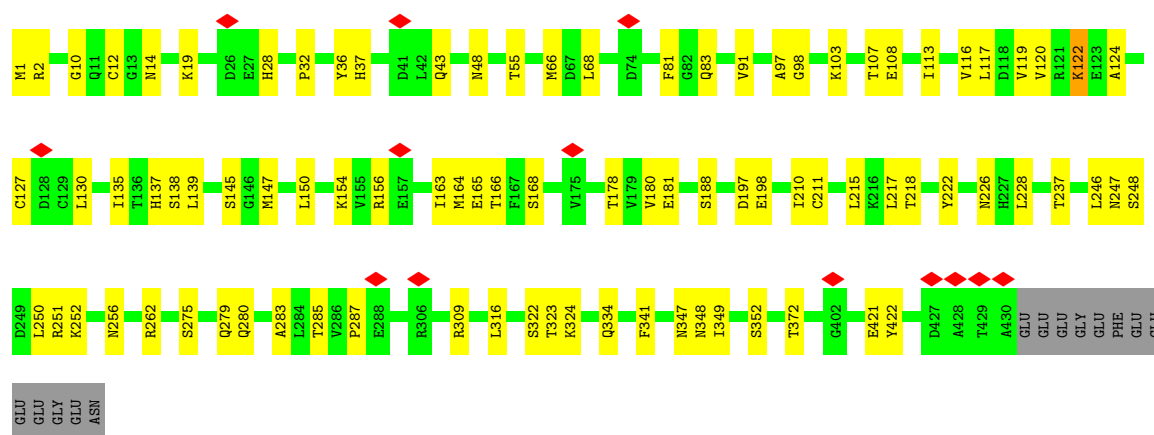
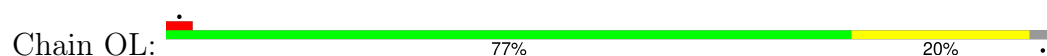
• Molecule 46: Tubulin beta chain

Chain OJ: 79% 18% .

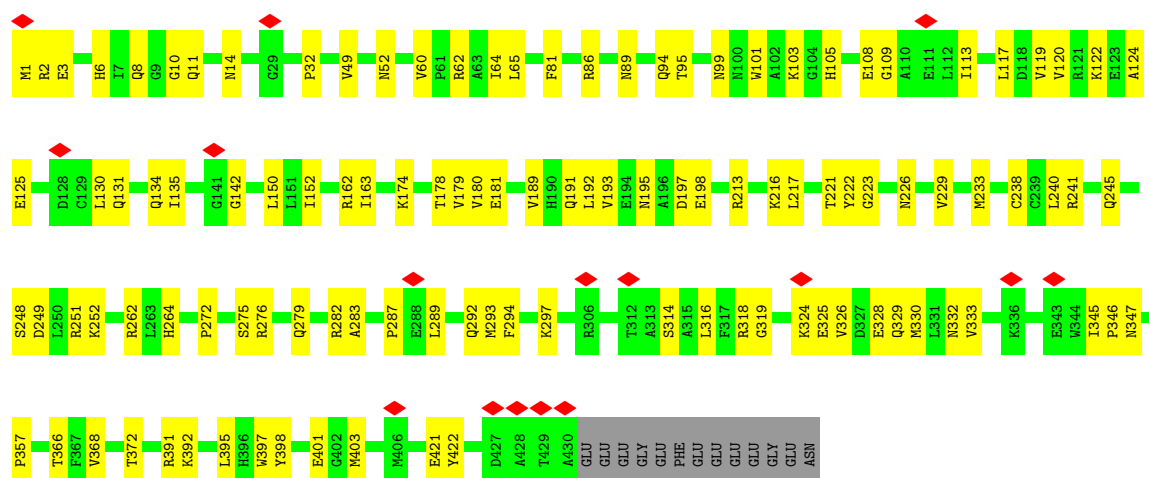




• Molecule 46: Tubulin beta chain



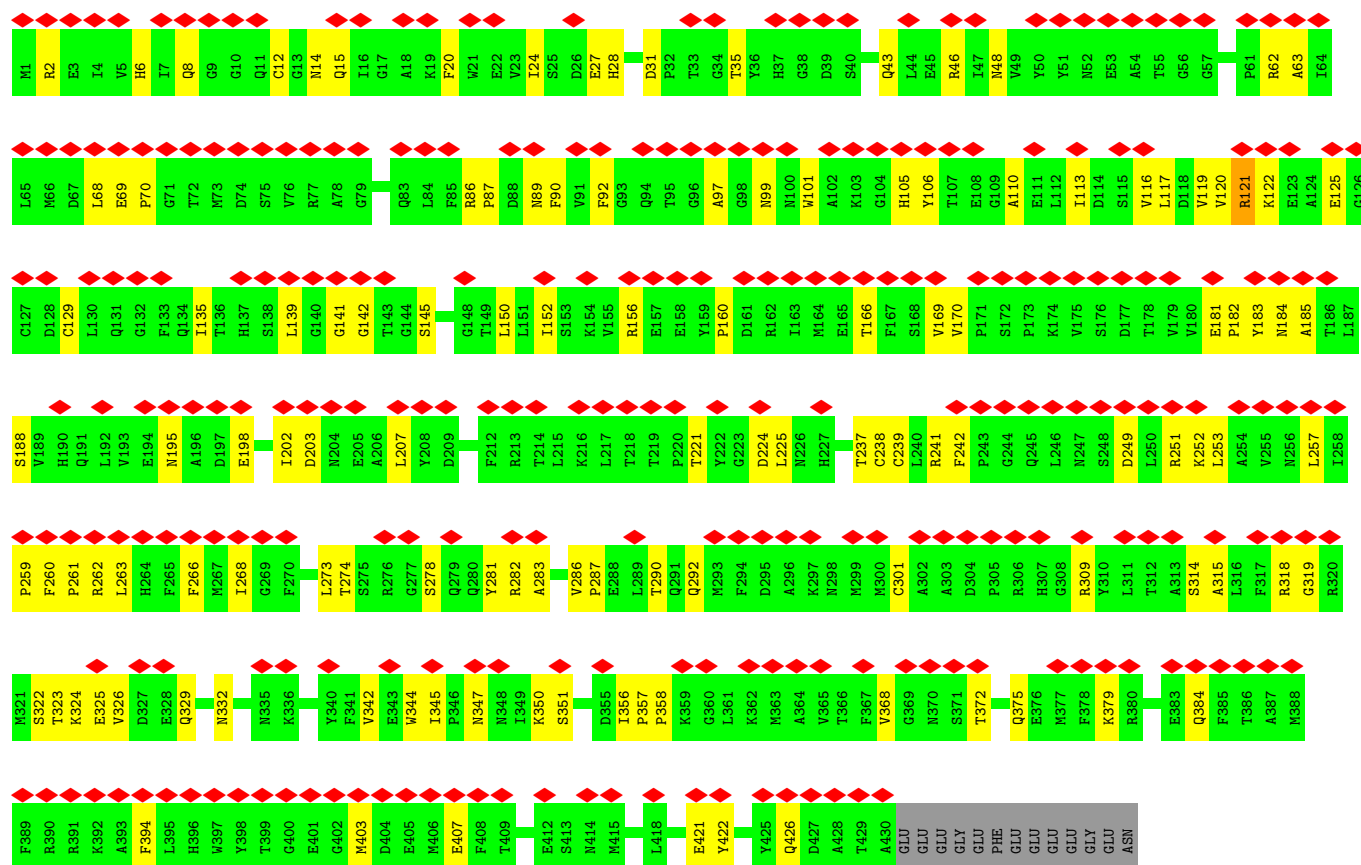
• Molecule 46: Tubulin beta chain



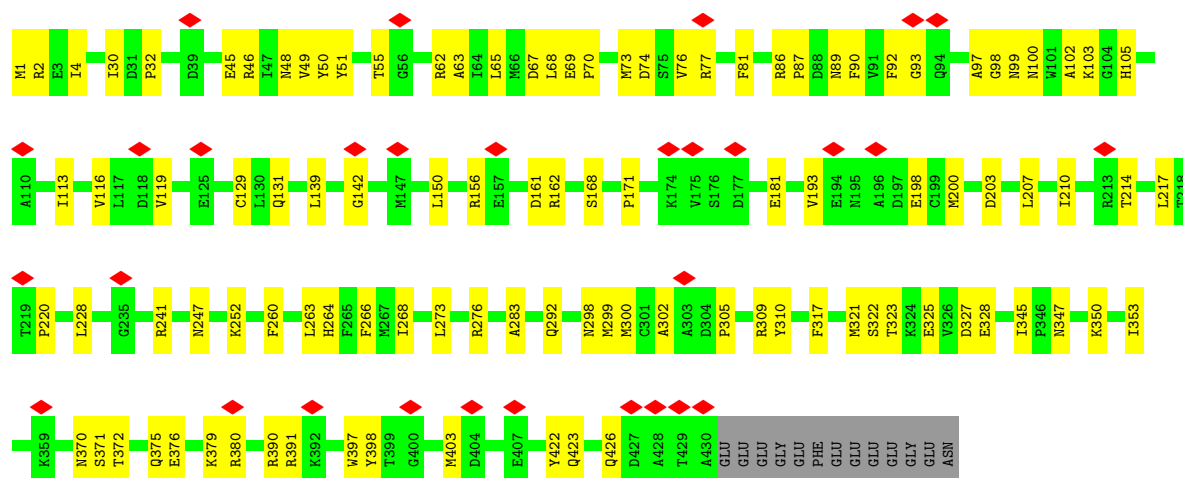
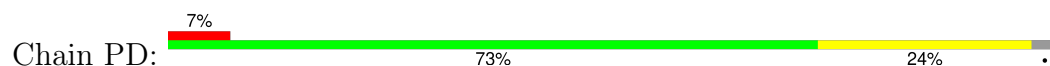
• Molecule 46: Tubulin beta chain



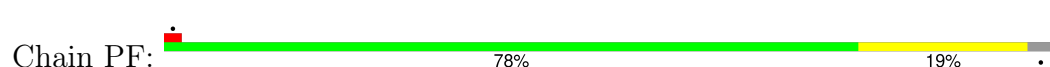




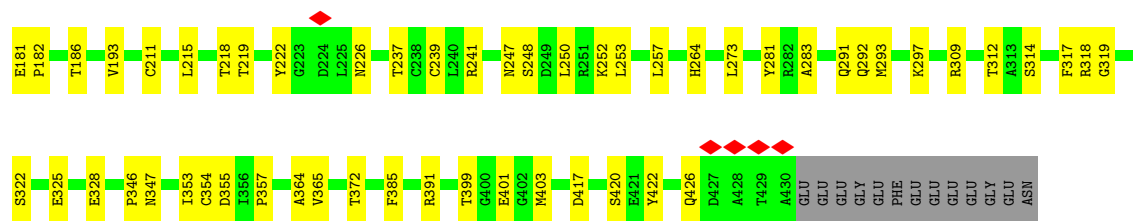
• Molecule 46: Tubulin beta chain



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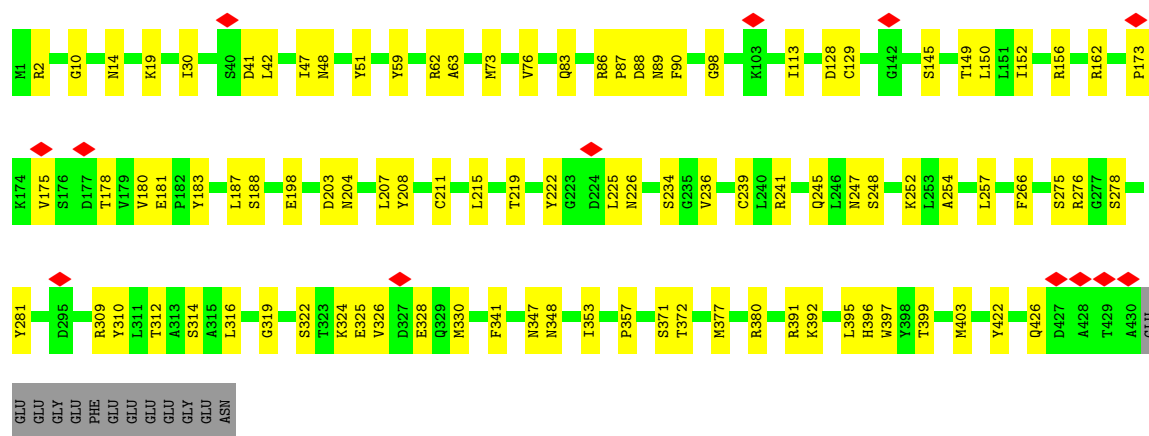






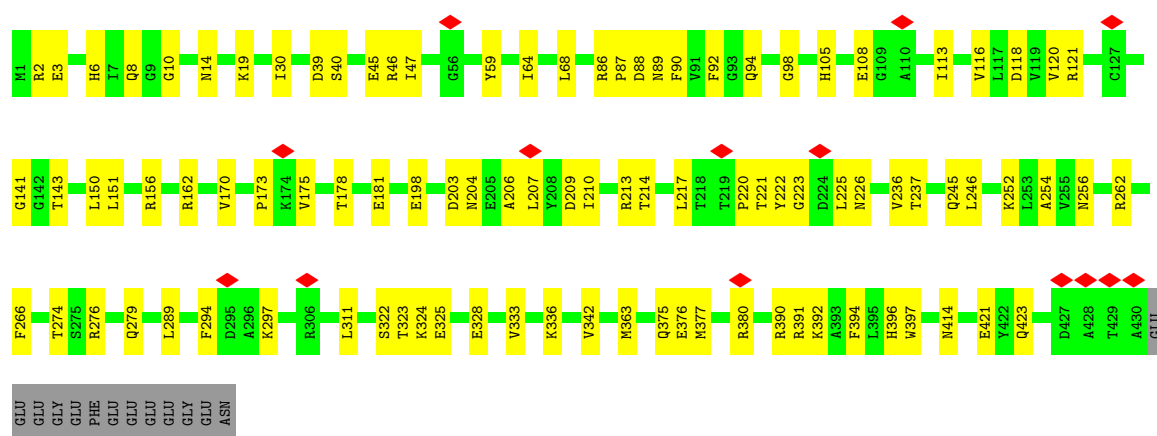
• Molecule 46: Tubulin beta chain

Chain PH: 76% 21% .



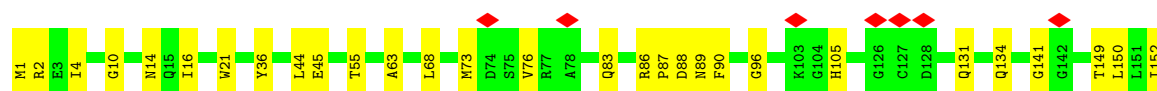
• Molecule 46: Tubulin beta chain

Chain PJ: 75% 22% .

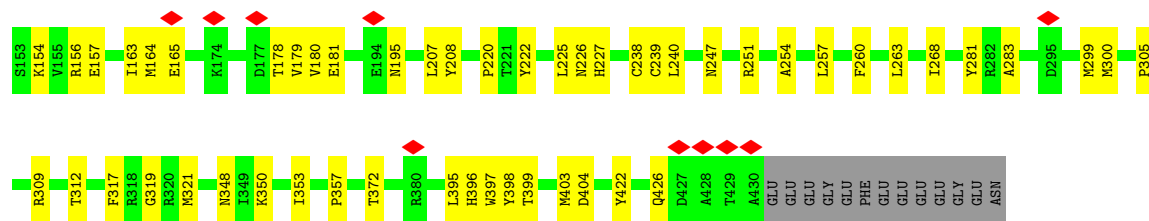


• Molecule 46: Tubulin beta chain

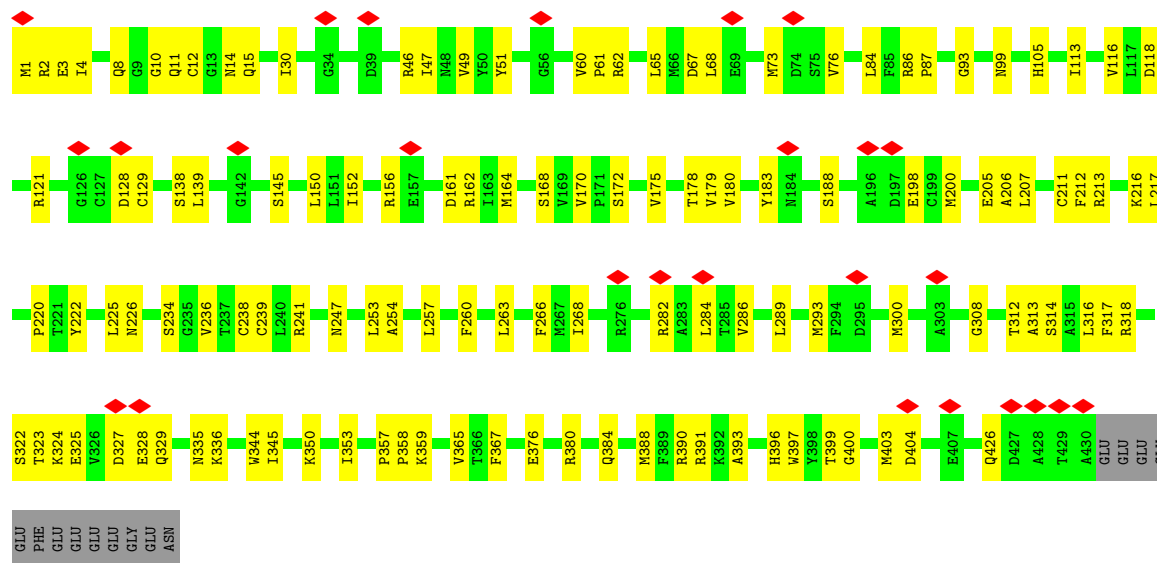
Chain PL: 79% 18% .



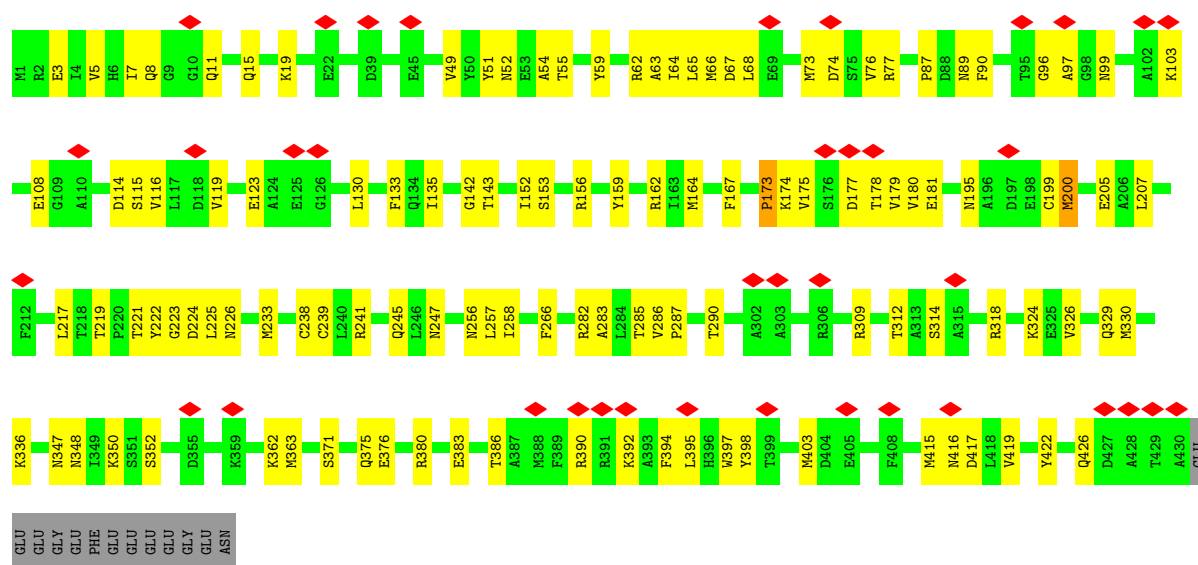




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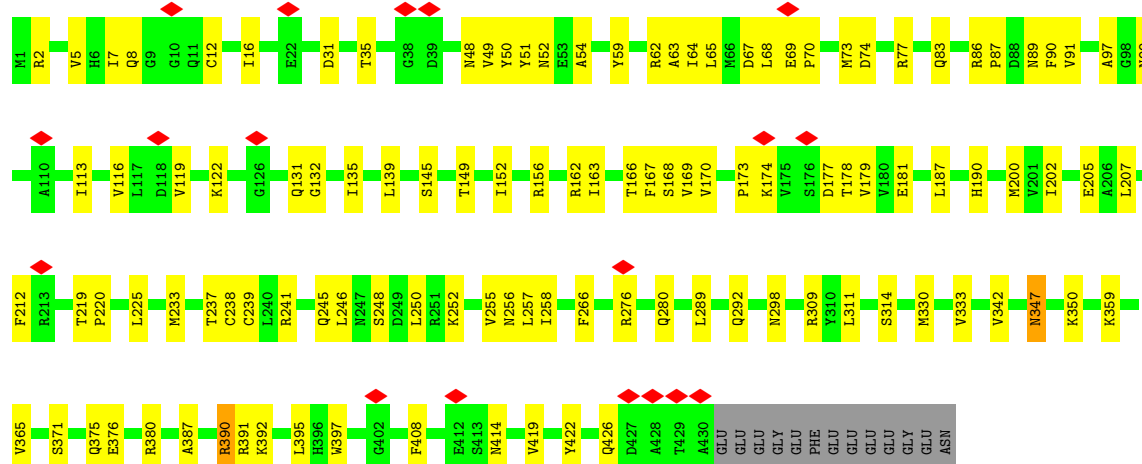
• Molecule 46: Tubulin beta chain




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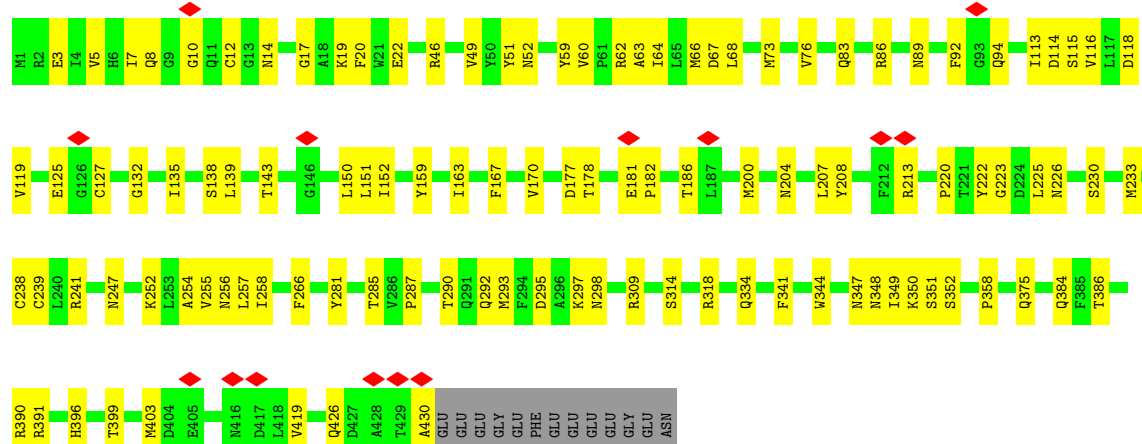


Chain QD:  71% 25%




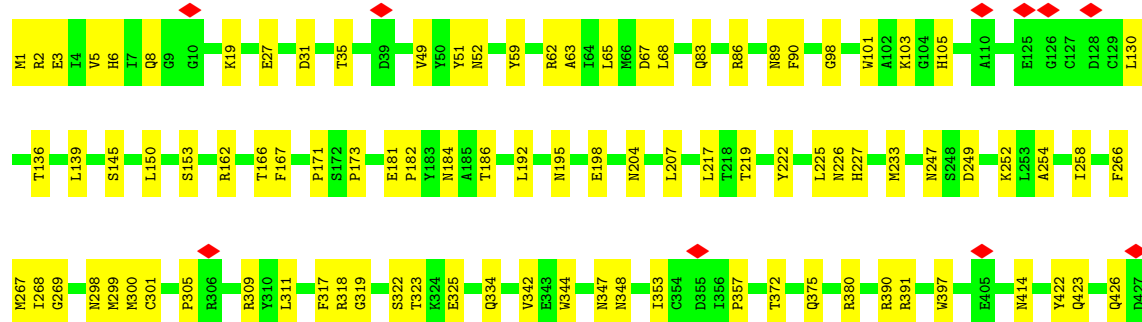
• Molecule 46: Tubulin beta chain

Chain QF:  72% 25%

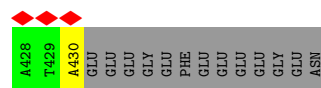


• Molecule 46: Tubulin beta chain

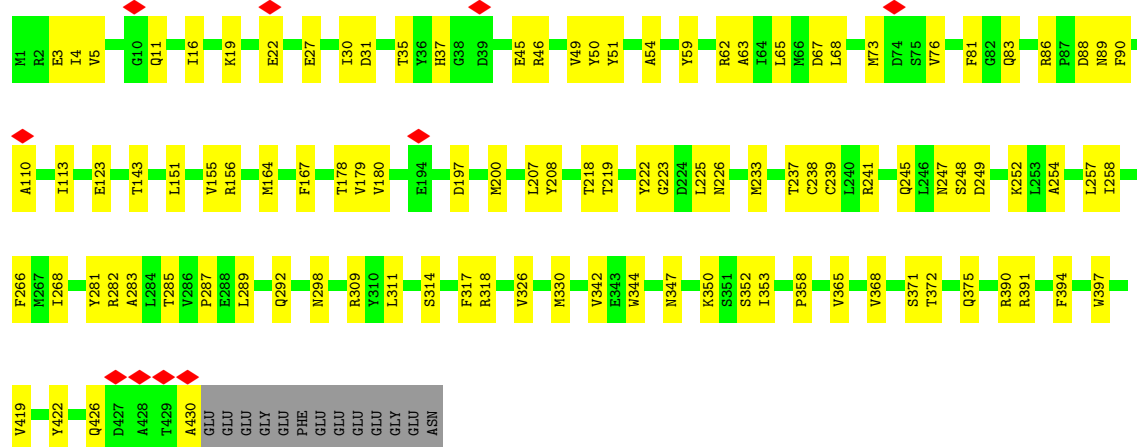
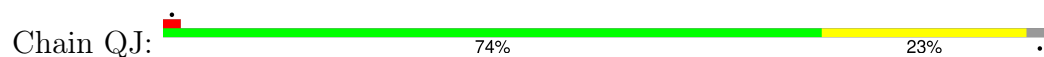
Chain QH:  76% 21%



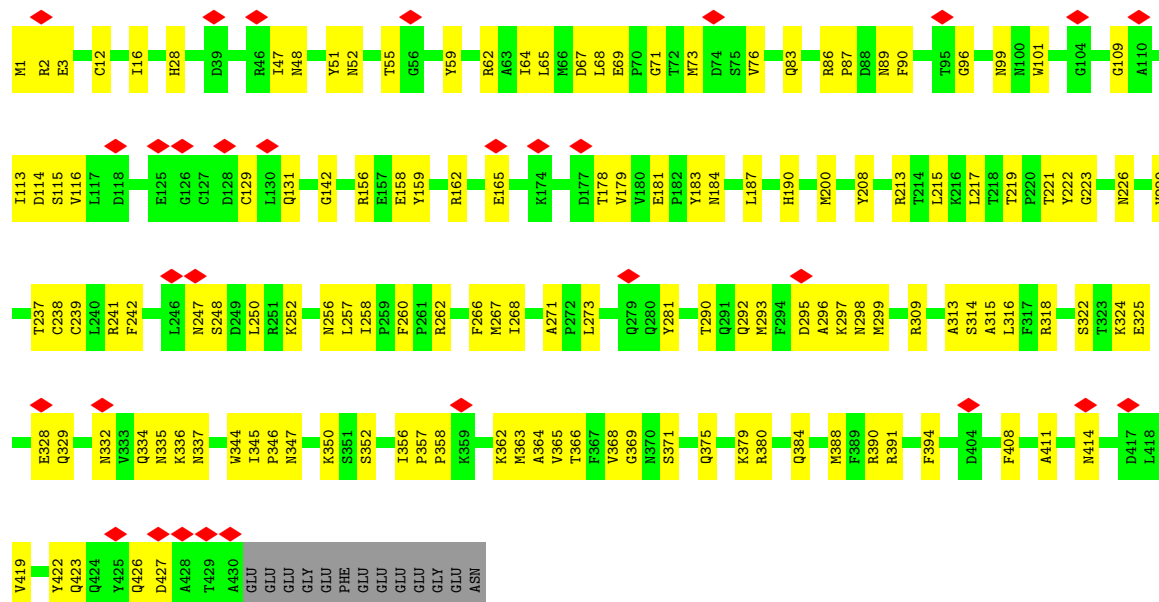




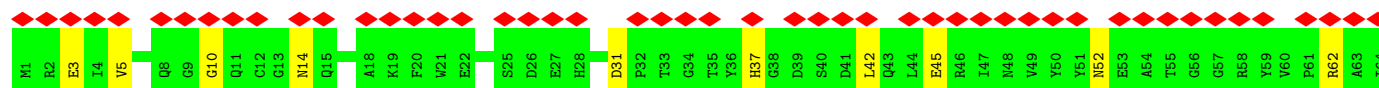
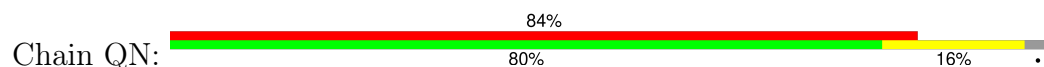
• Molecule 46: Tubulin beta chain



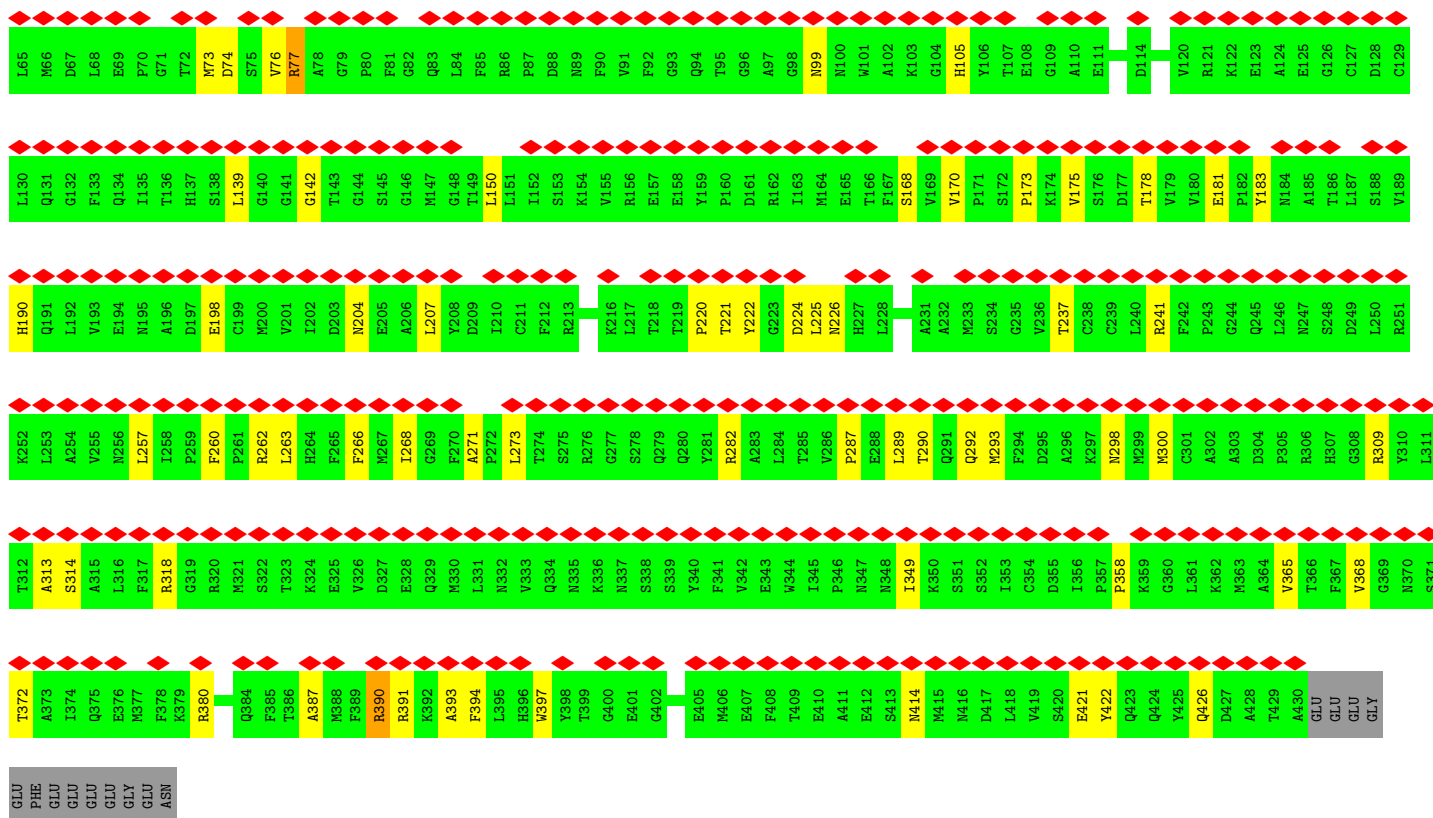
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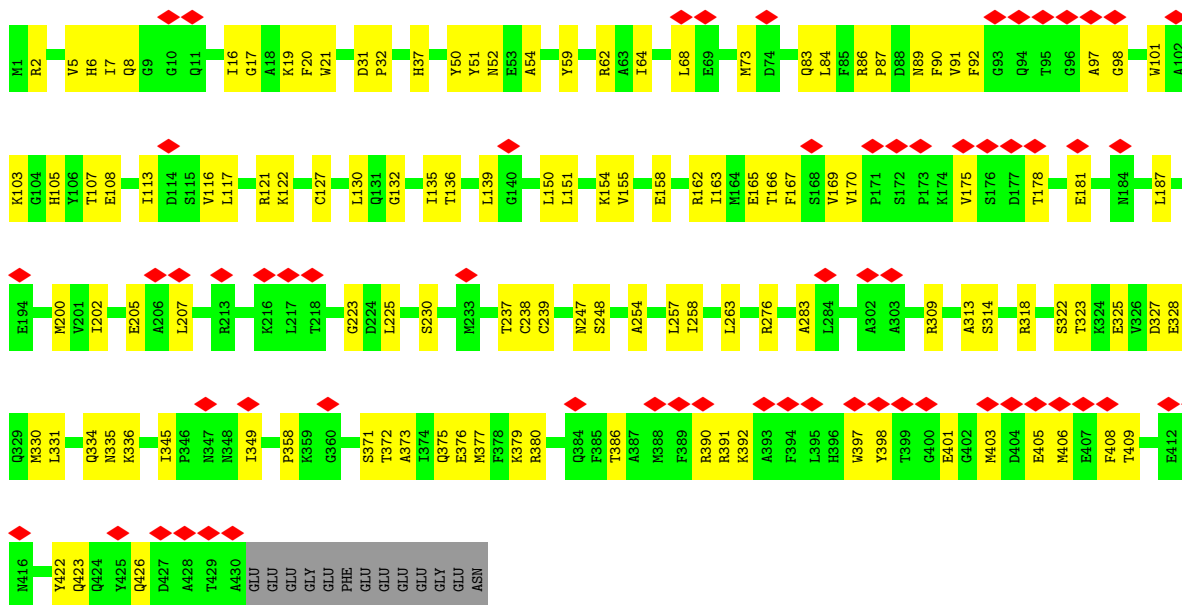
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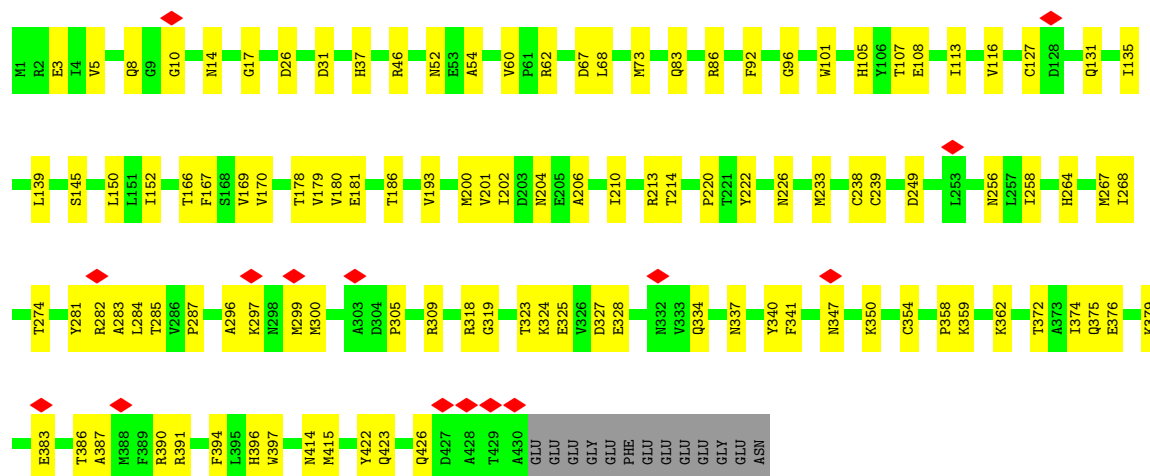
• Molecule 46: Tubulin beta chain



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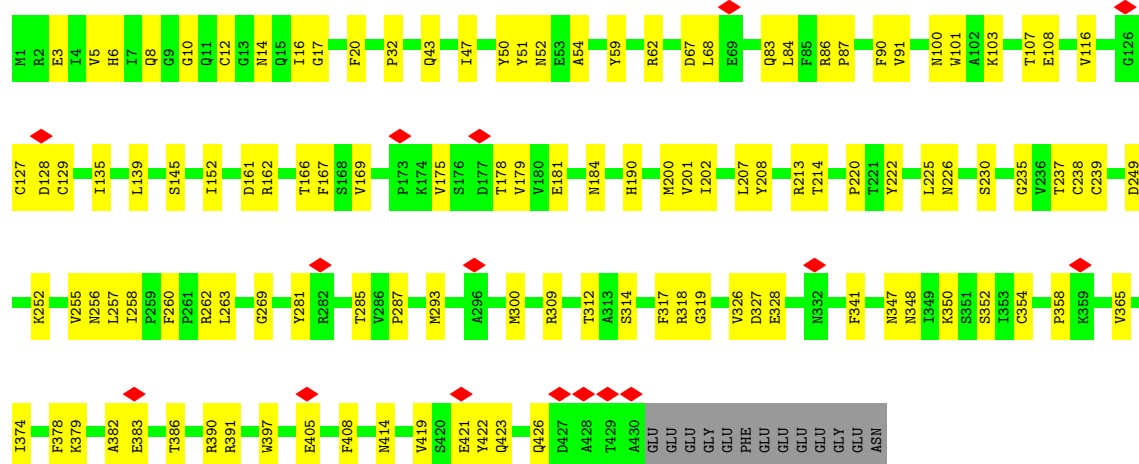






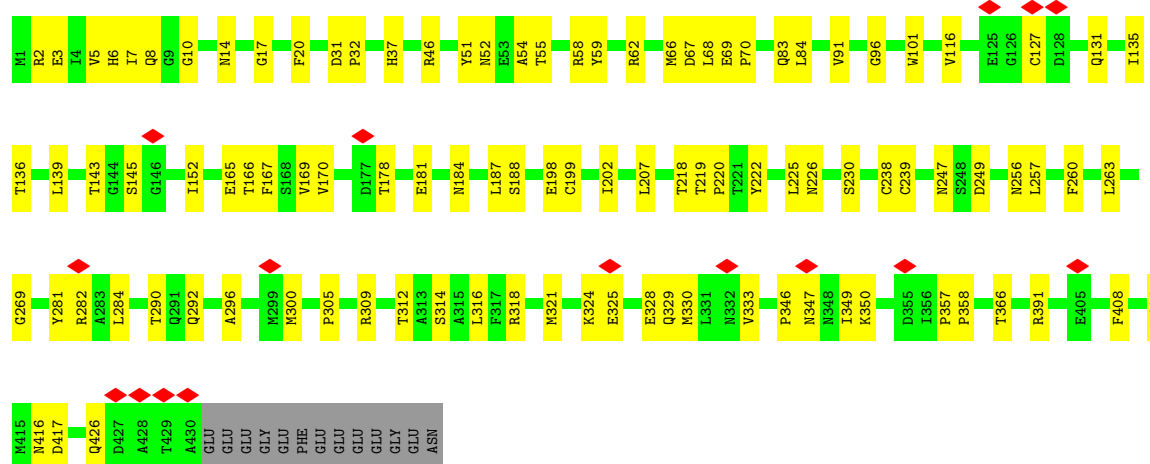
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Chain RF: 71% 26%



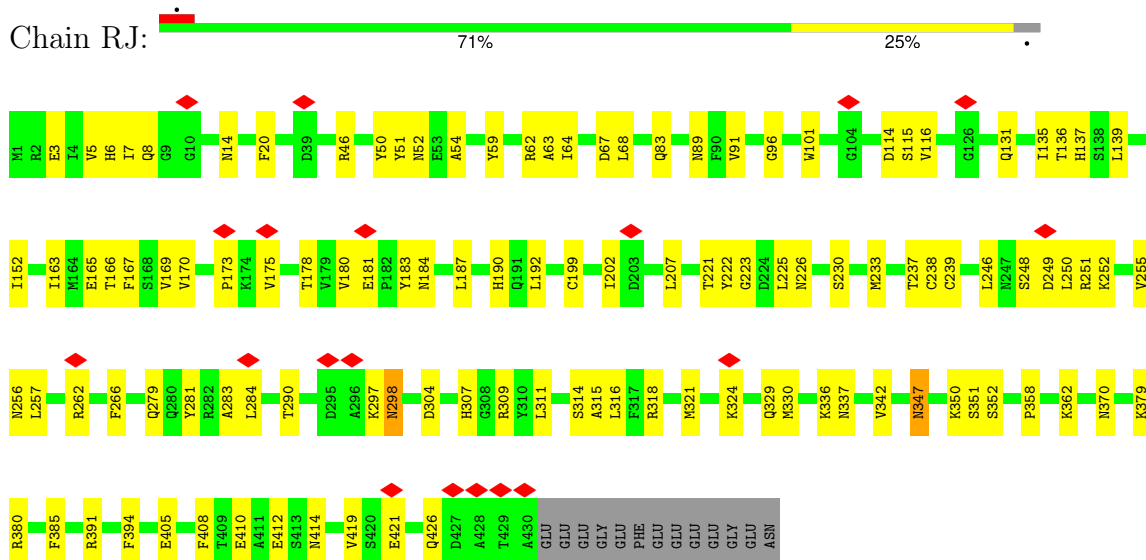
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Chain RH: 74% 23%

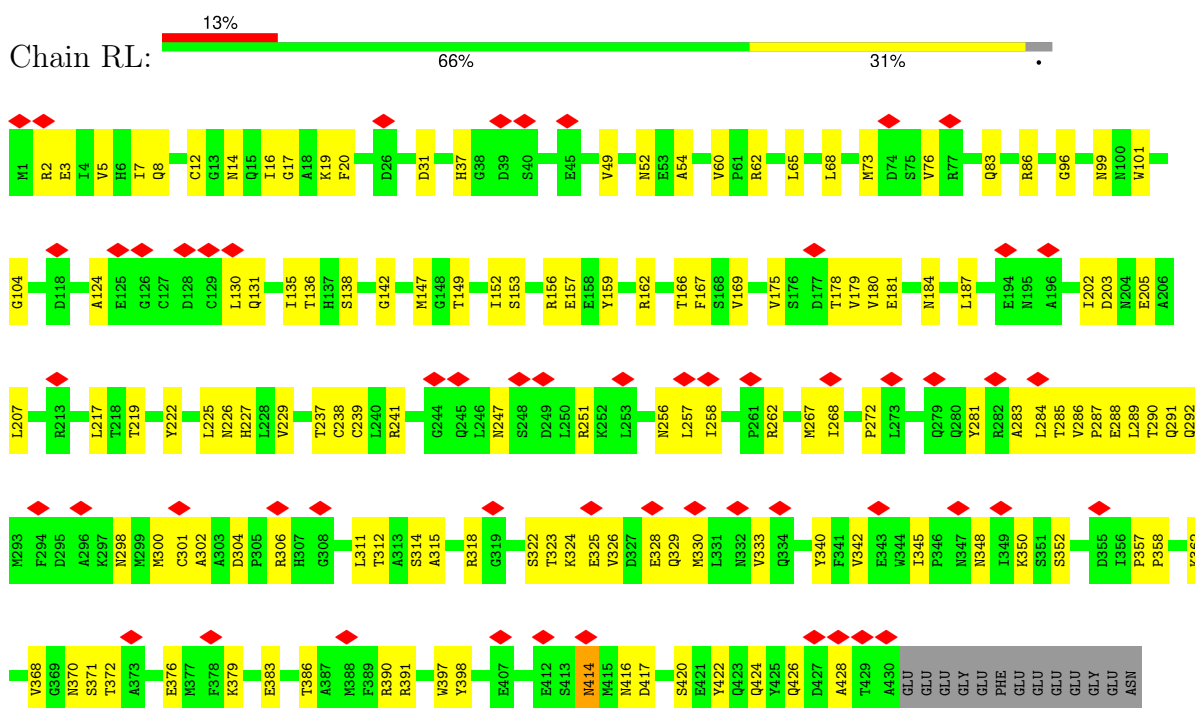




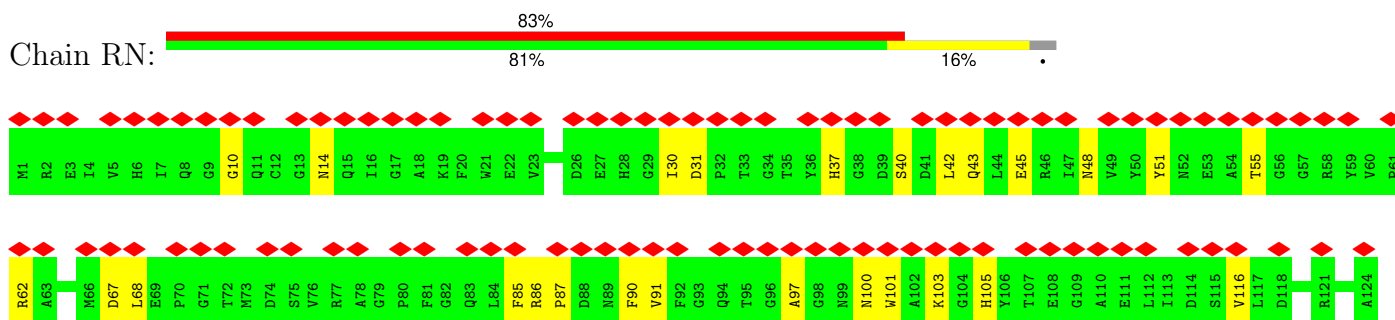
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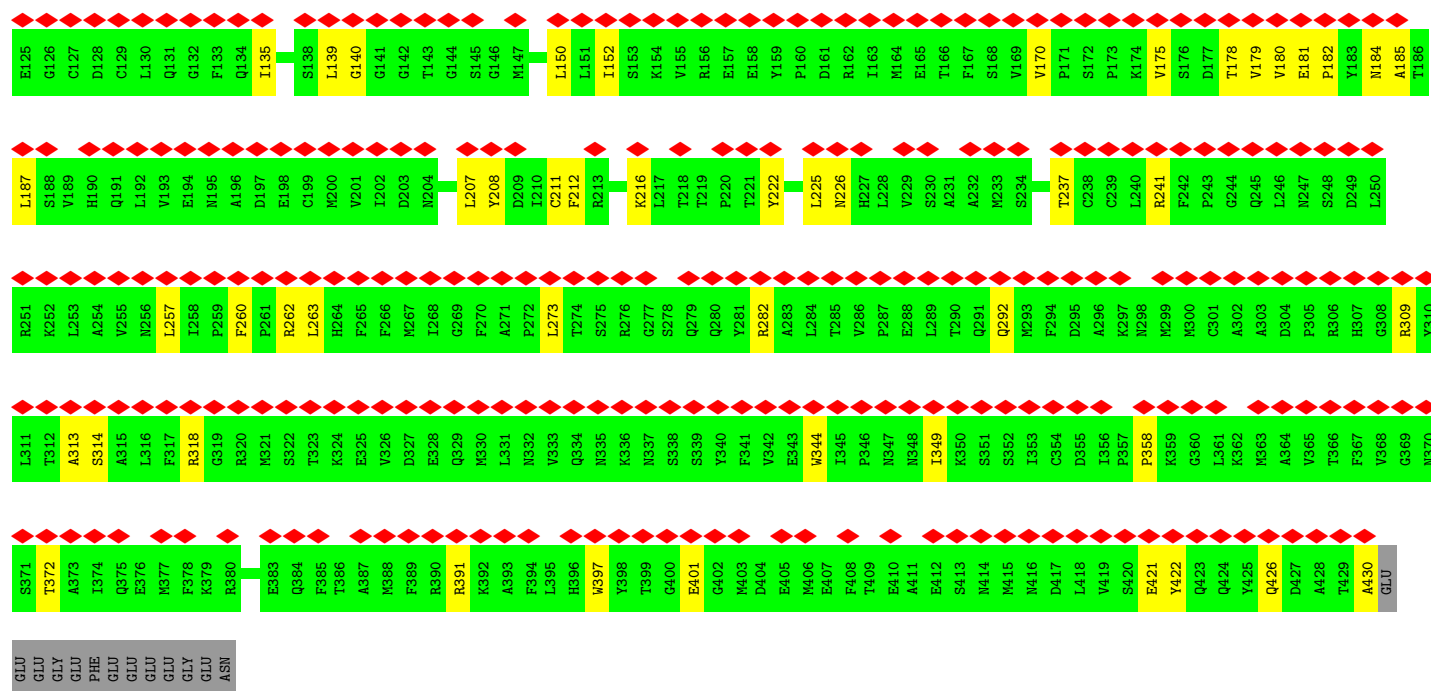
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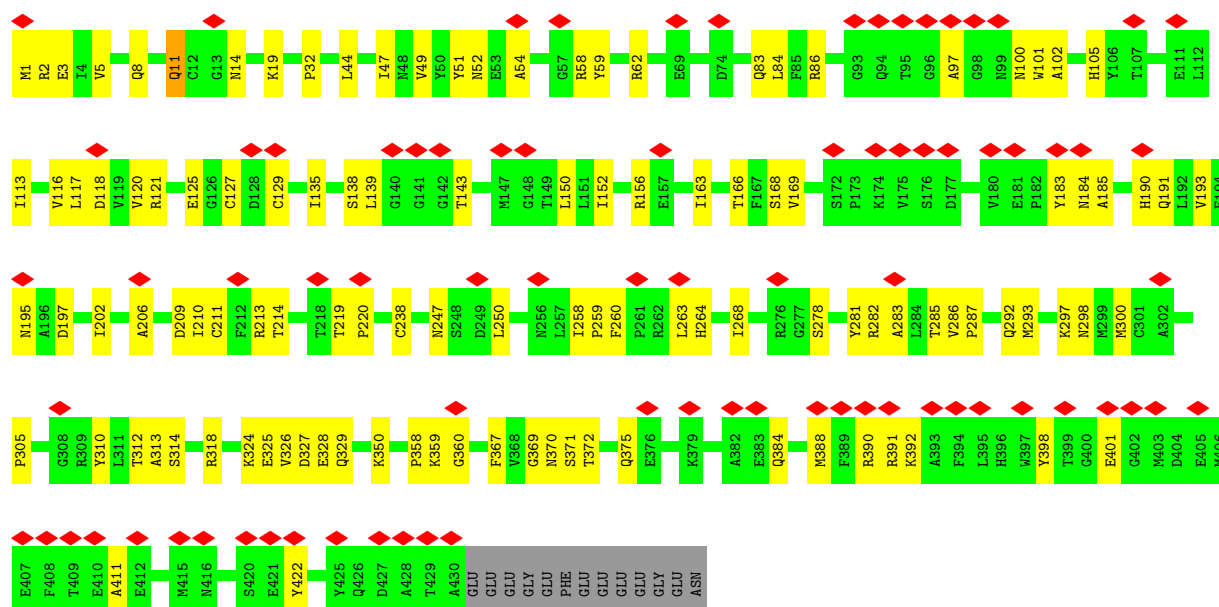
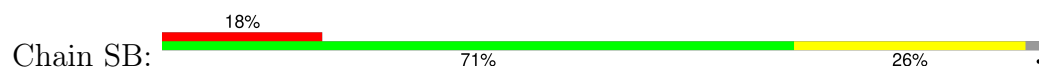
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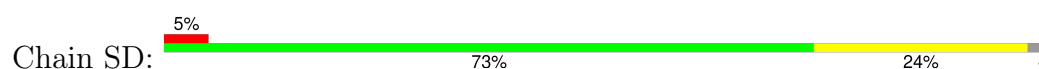




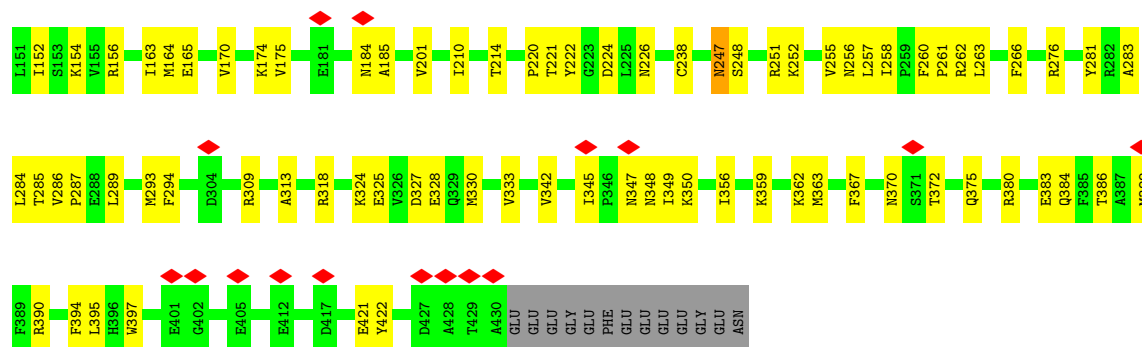
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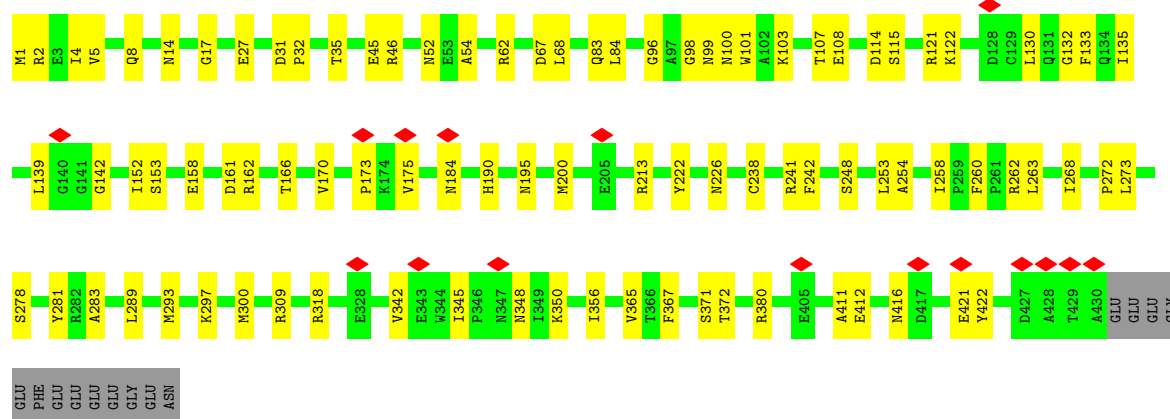
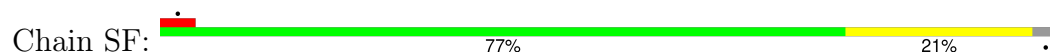
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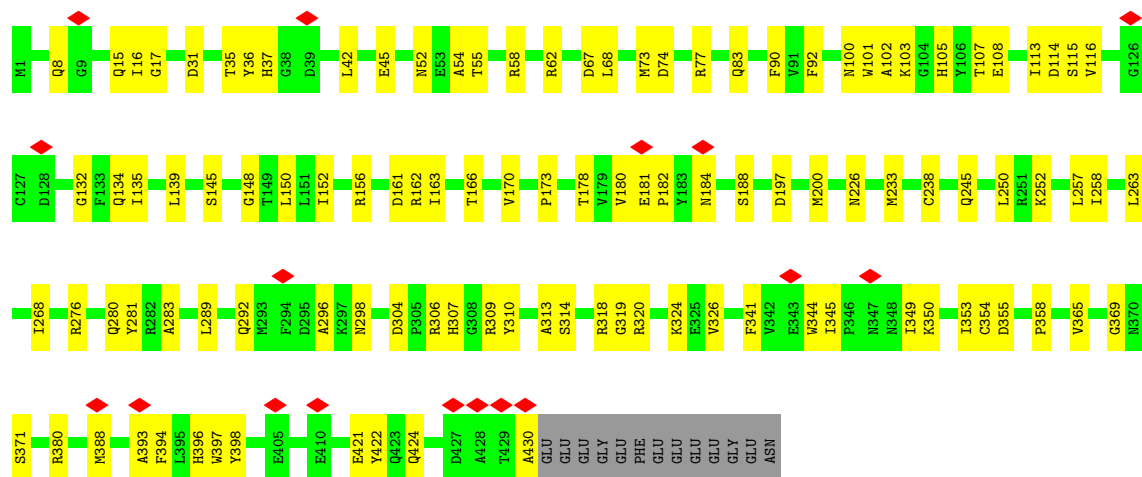




• Molecule 46: Tubulin beta chain



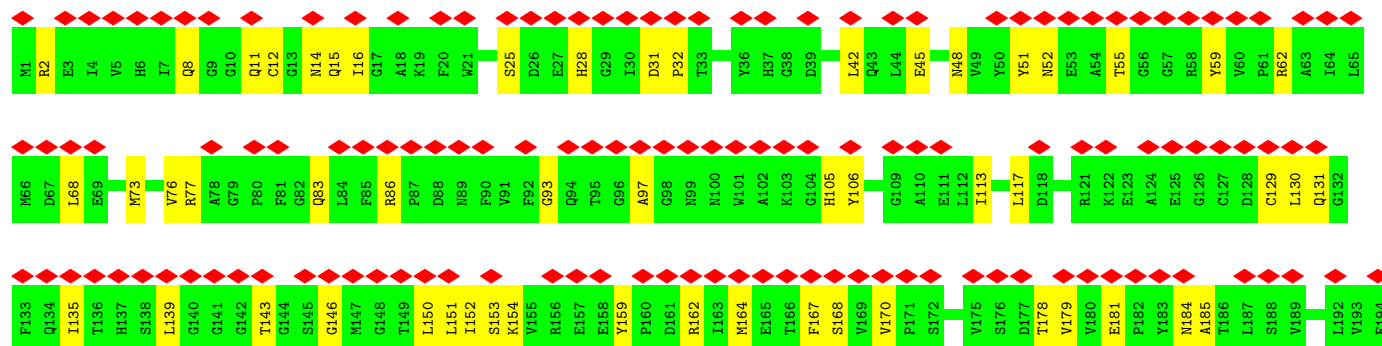
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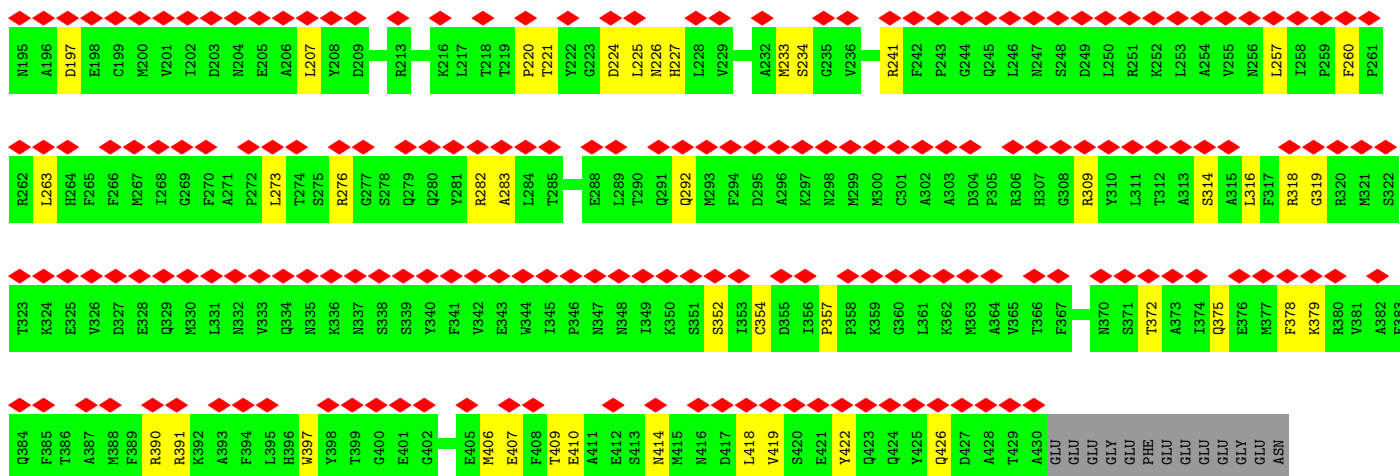
• Molecule 46: Tubulin beta chain



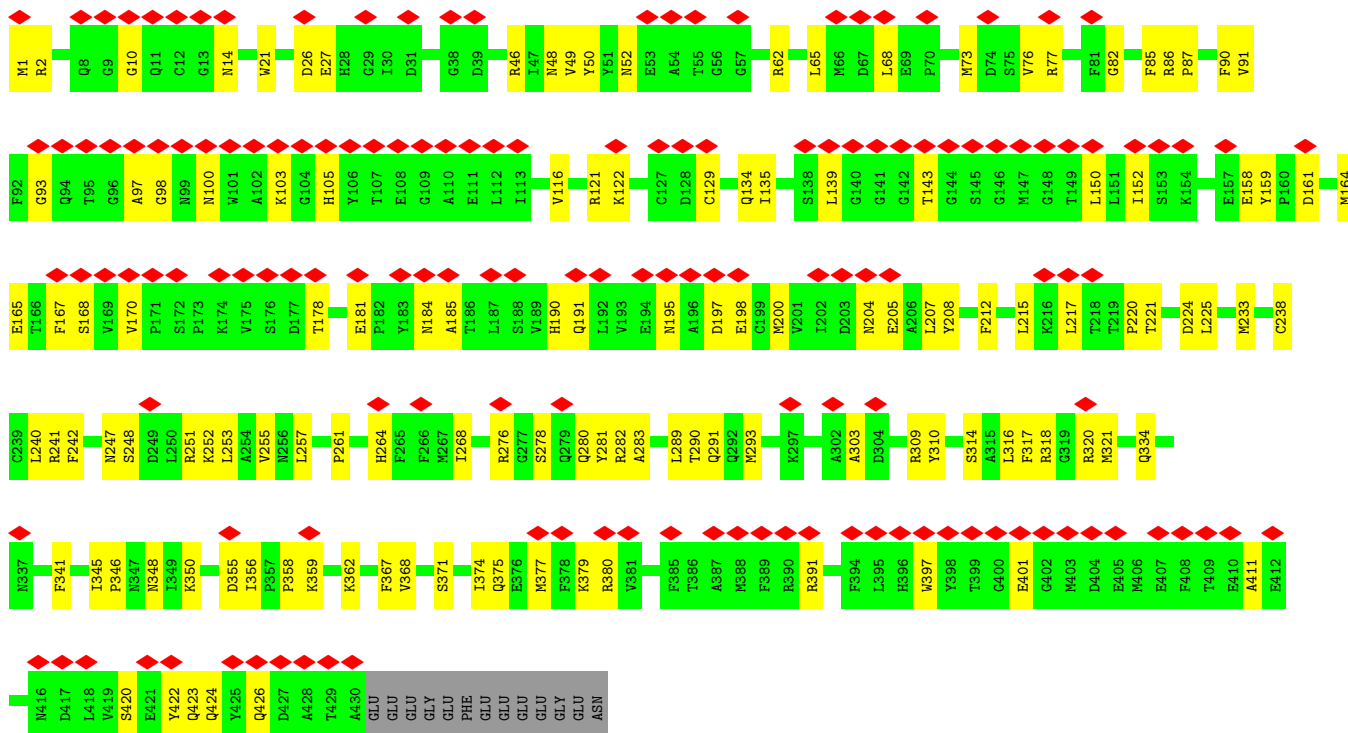




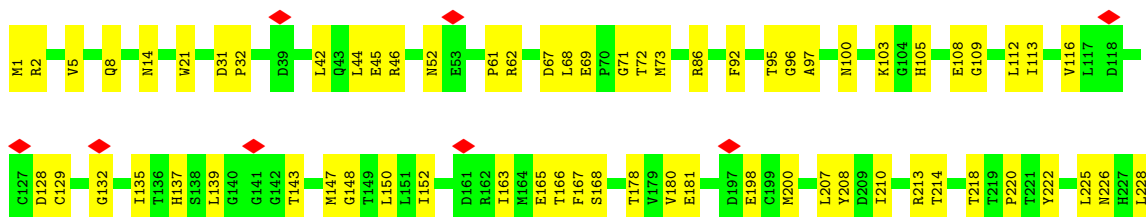




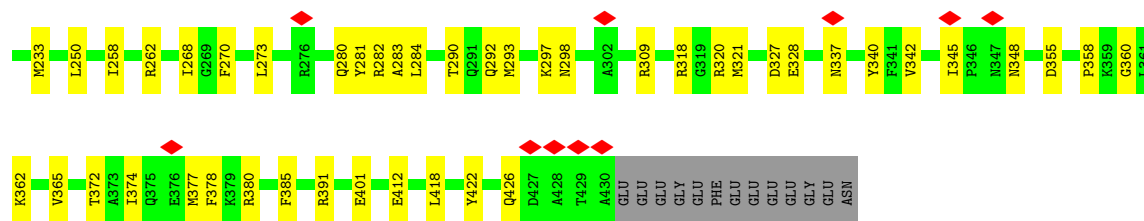
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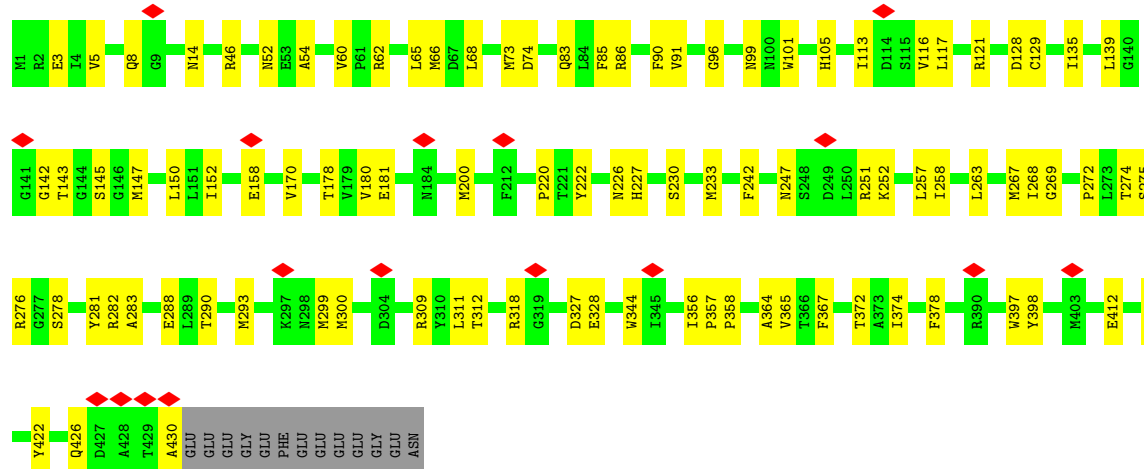
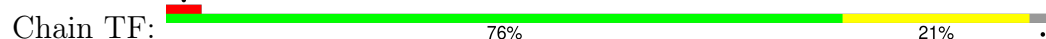
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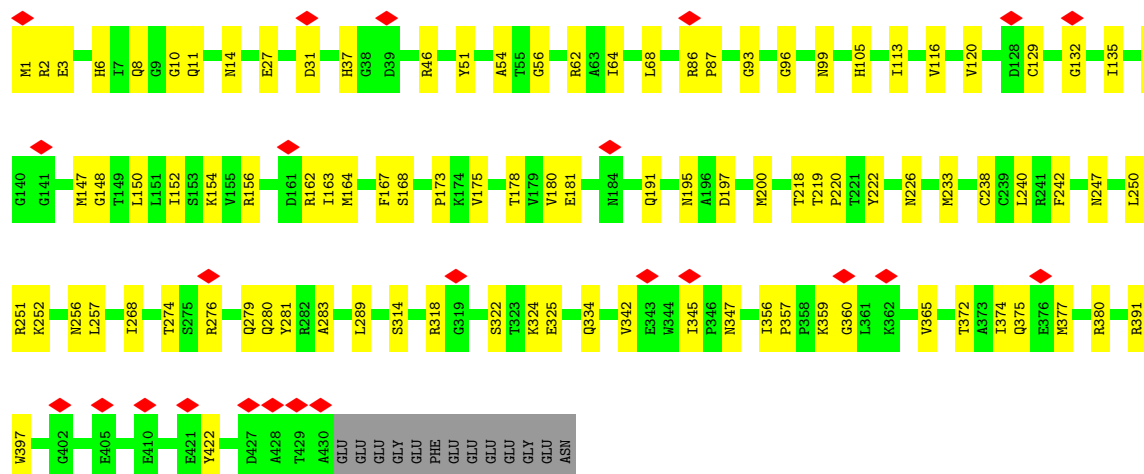
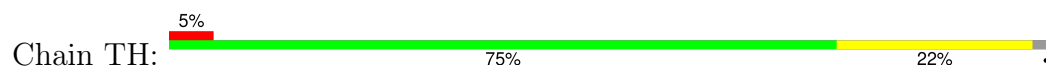




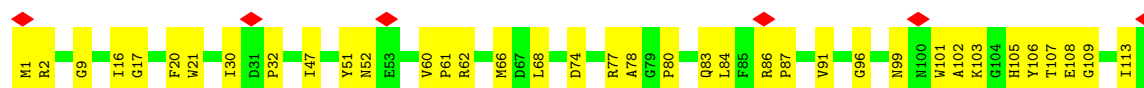
• Molecule 46: Tubulin beta chain



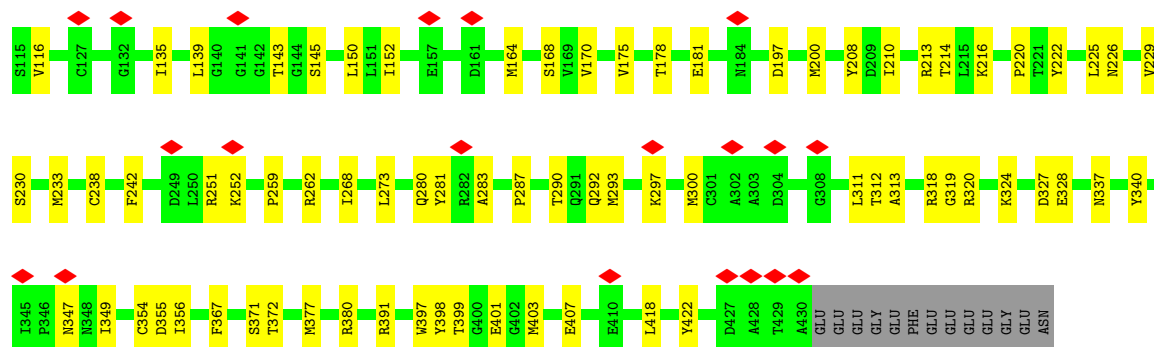
• Molecule 46: Tubulin beta chain



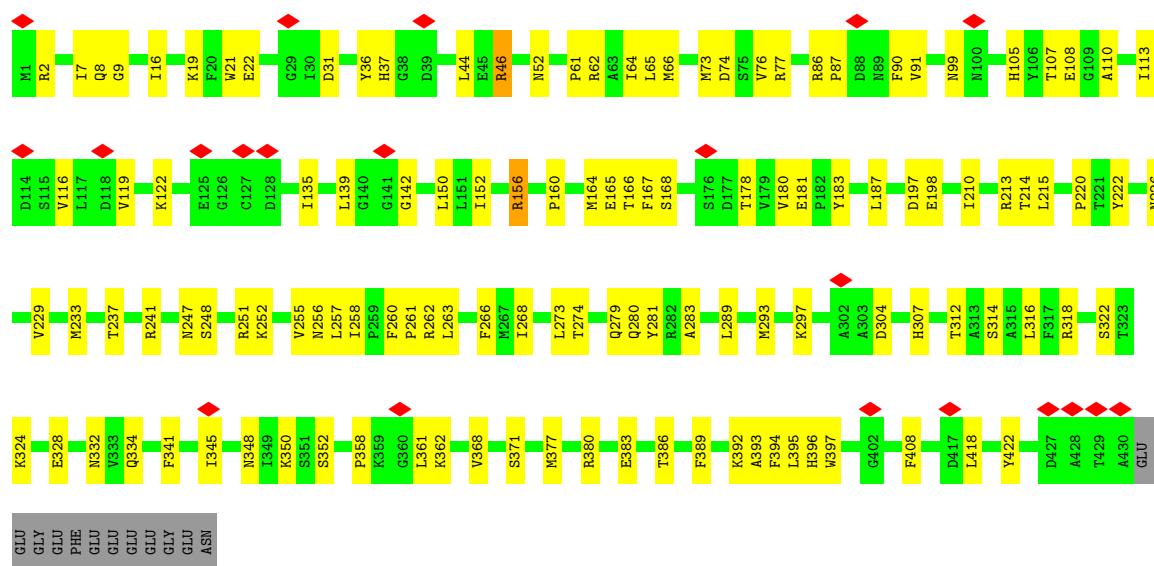
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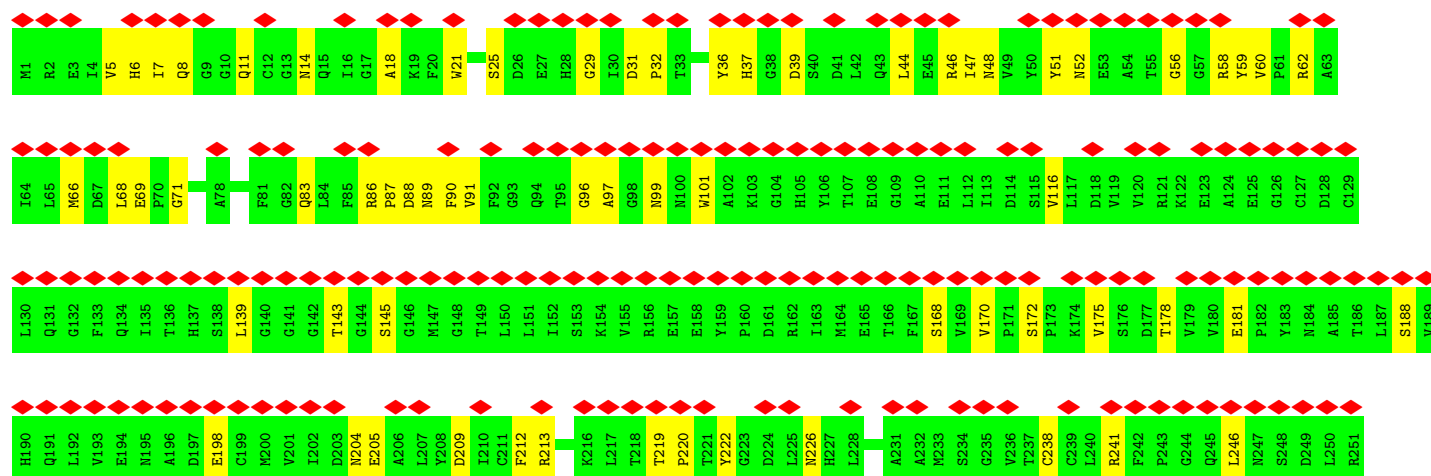
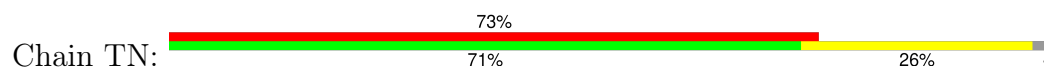




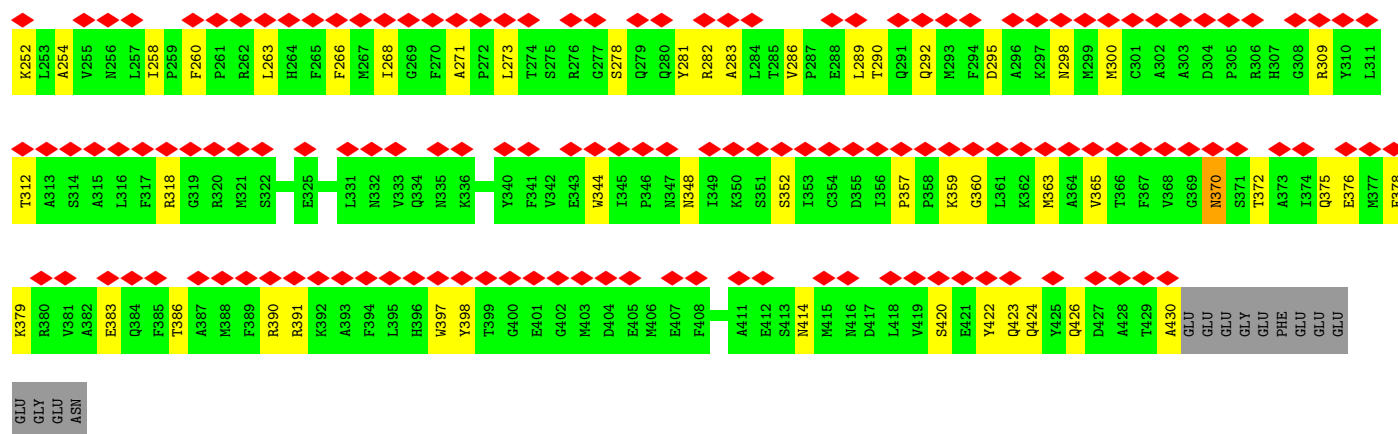
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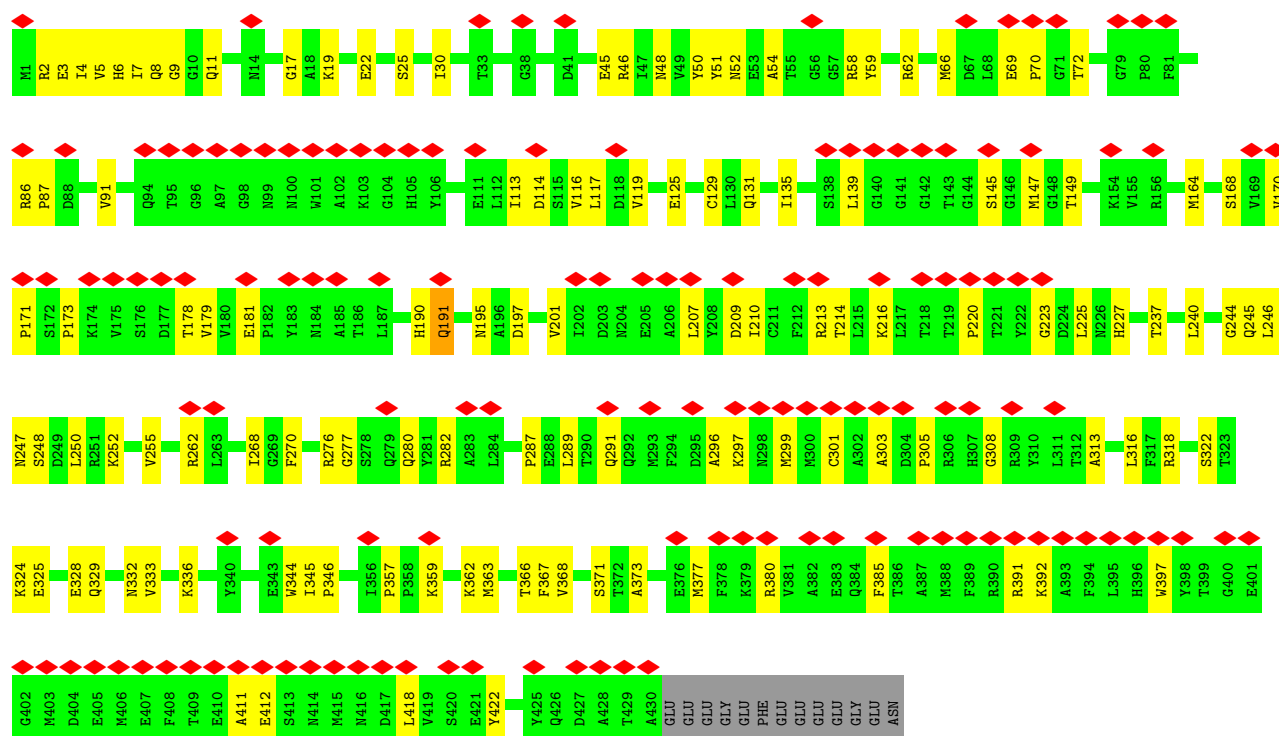
• Molecule 46: Tubulin beta chain



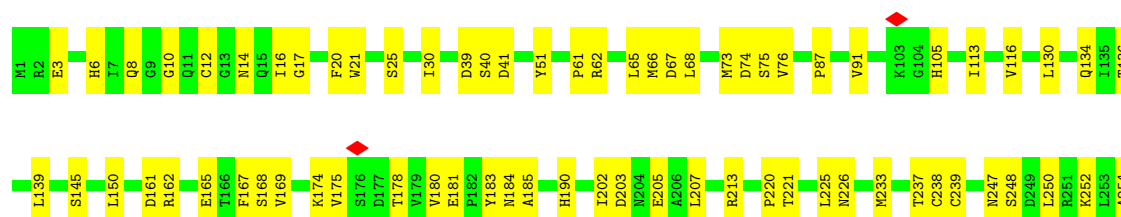
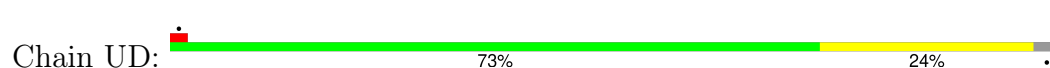




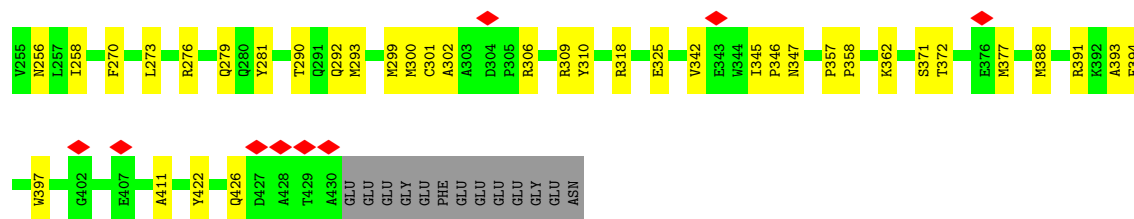
• Molecule 46: Tubulin beta chain



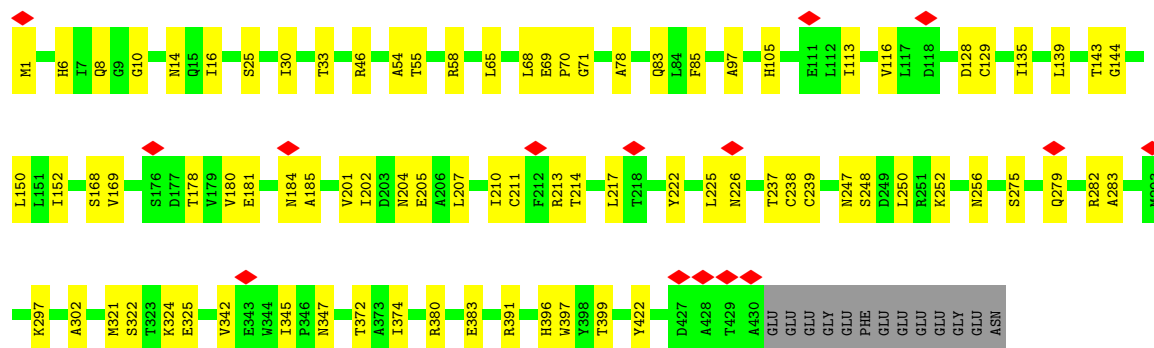
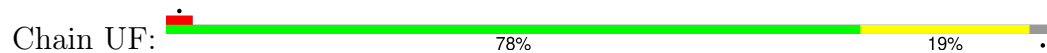
• Molecule 46: Tubulin beta chain



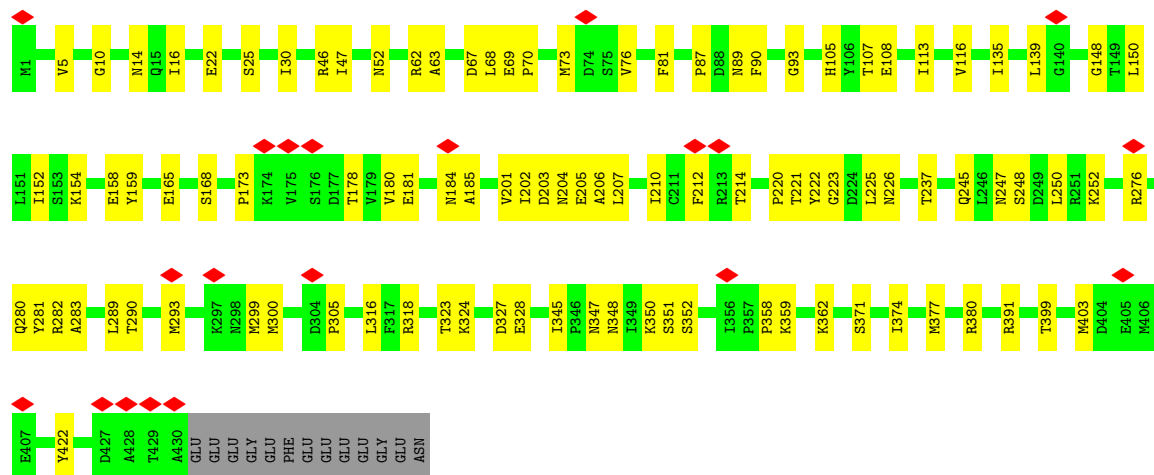
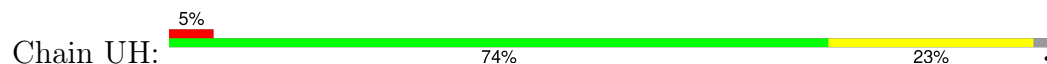




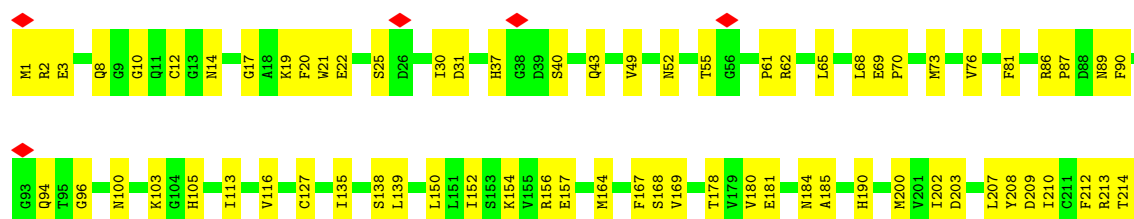
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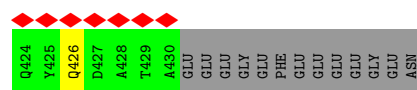
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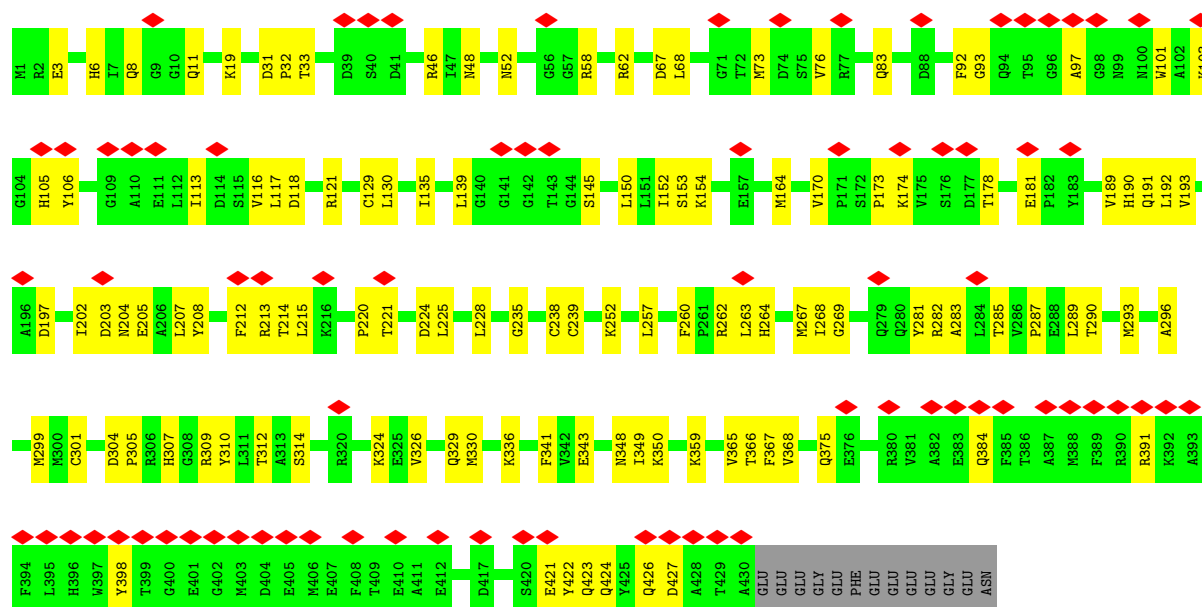
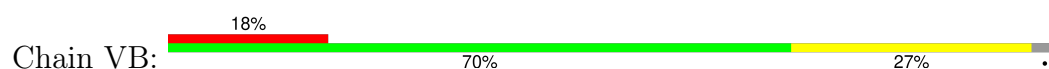




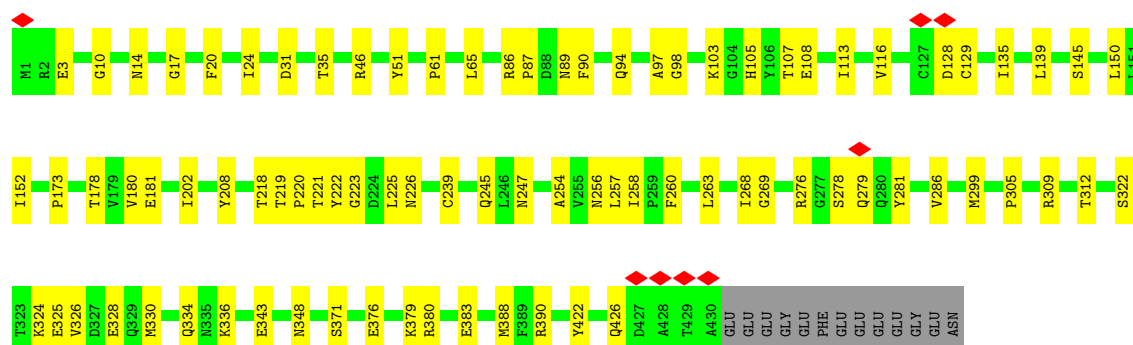
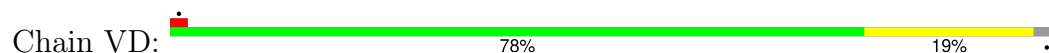




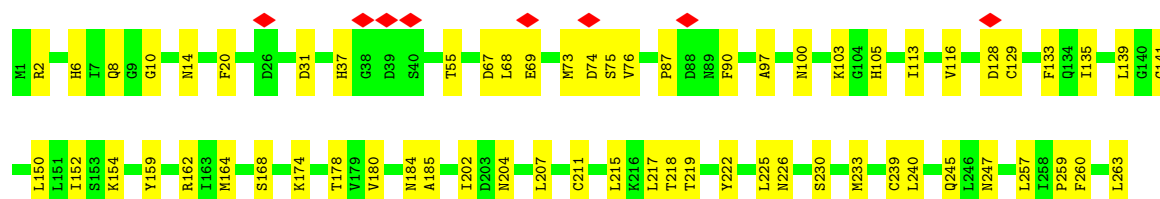
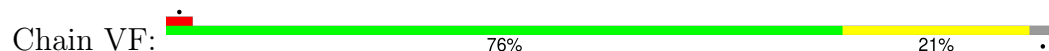
• Molecule 46: Tubulin beta chain



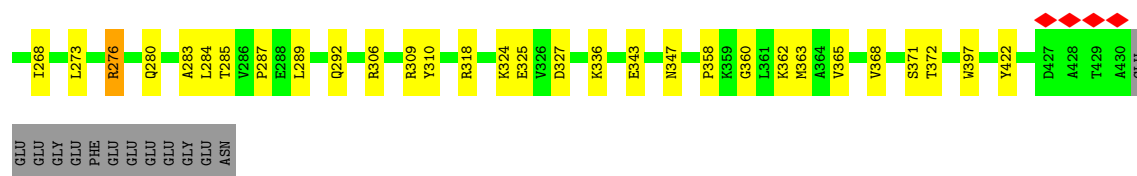
• Molecule 46: Tubulin beta chain



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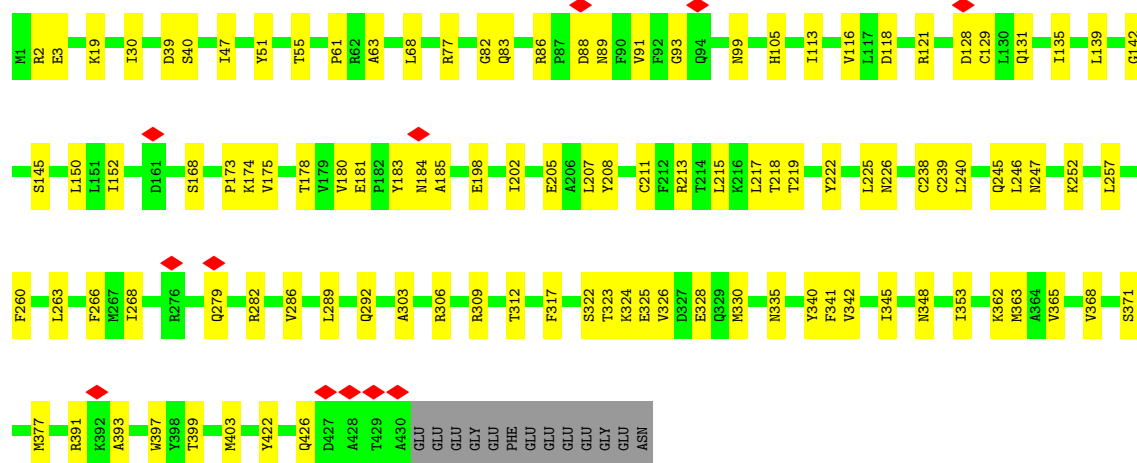






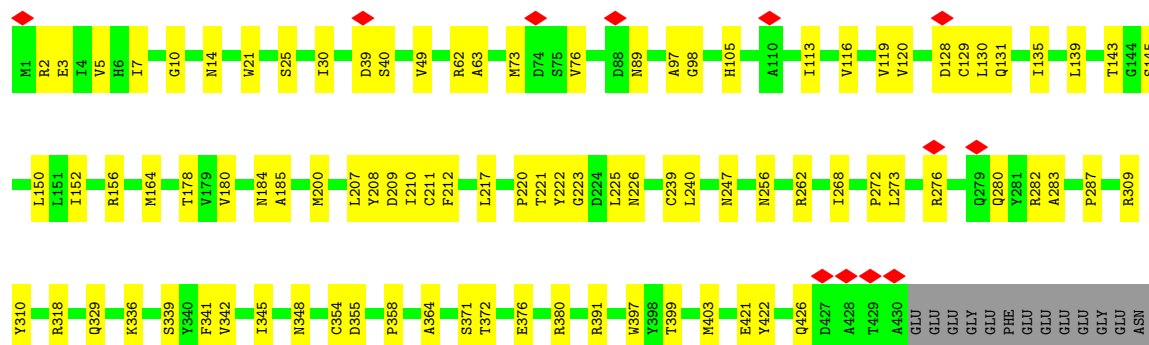
• Molecule 46: Tubulin beta chain

Chain VH: 73% 24%



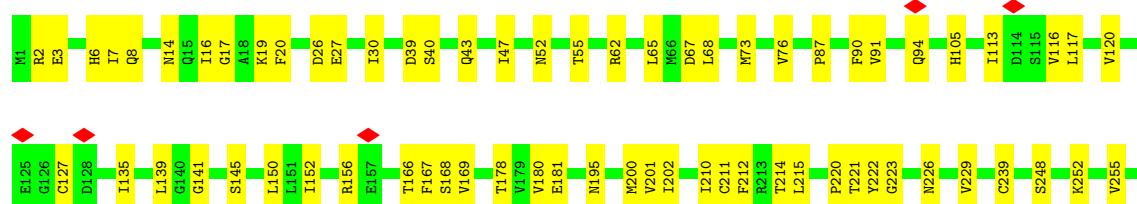
• Molecule 46: Tubulin beta chain

Chain VJ: 76% 21%

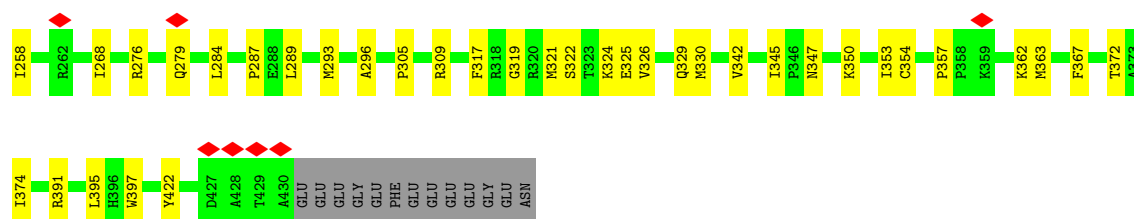


• Molecule 46: Tubulin beta chain

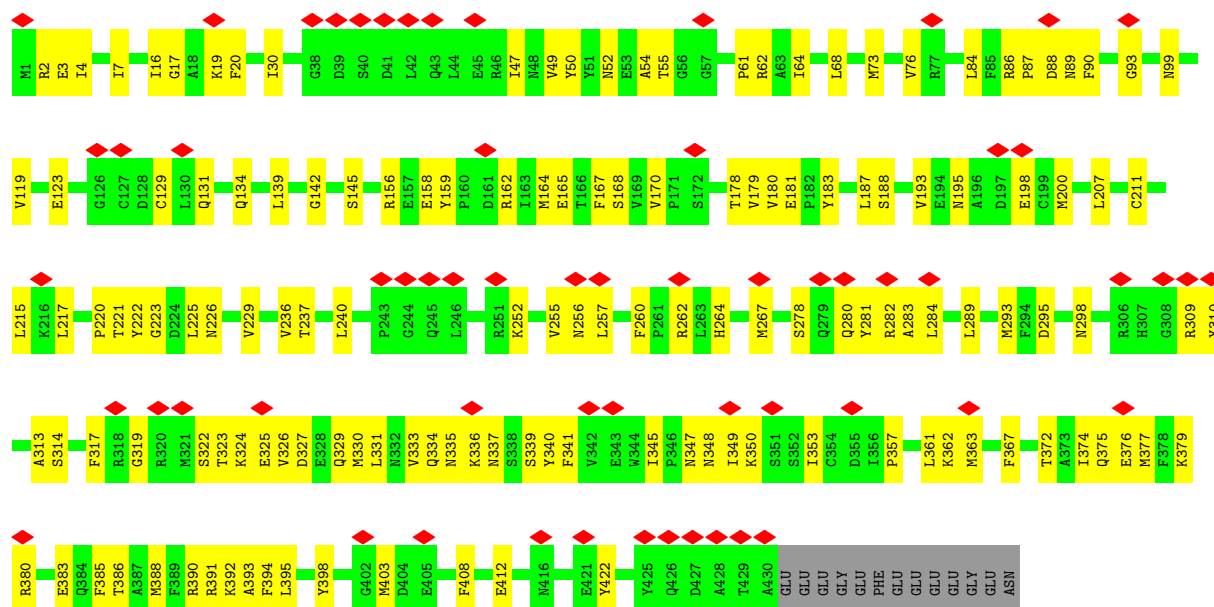
Chain VL: 74% 23%



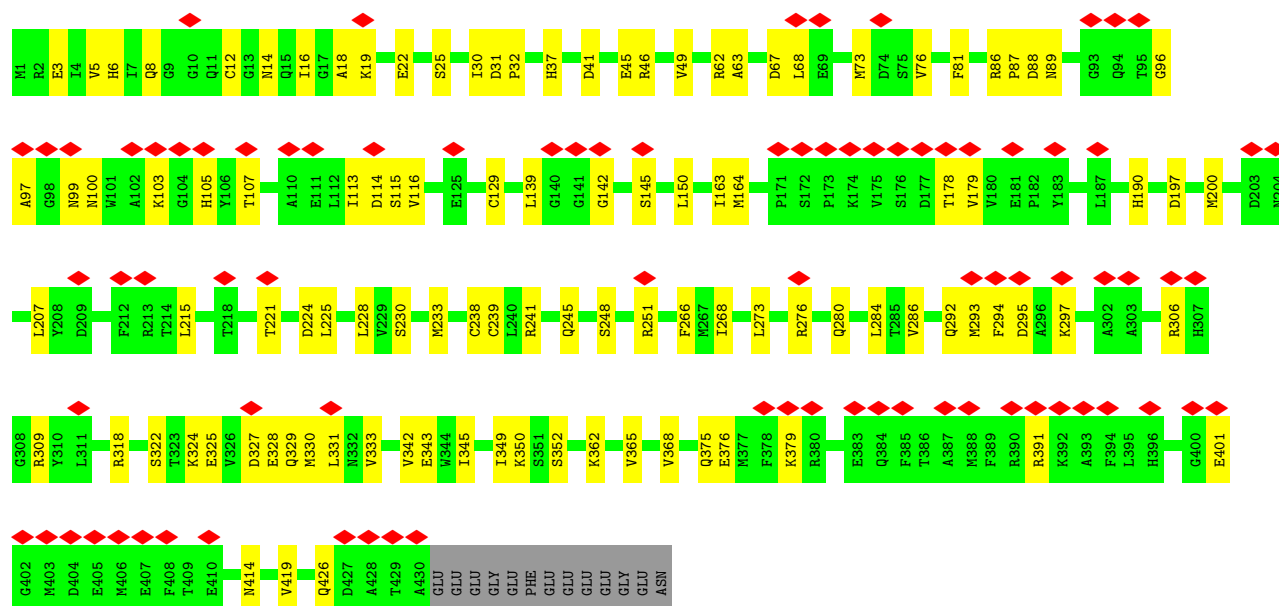
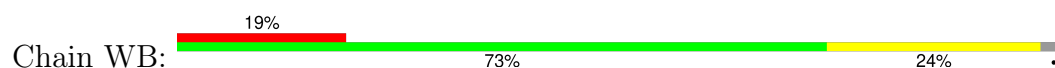




• Molecule 46: Tubulin beta chain

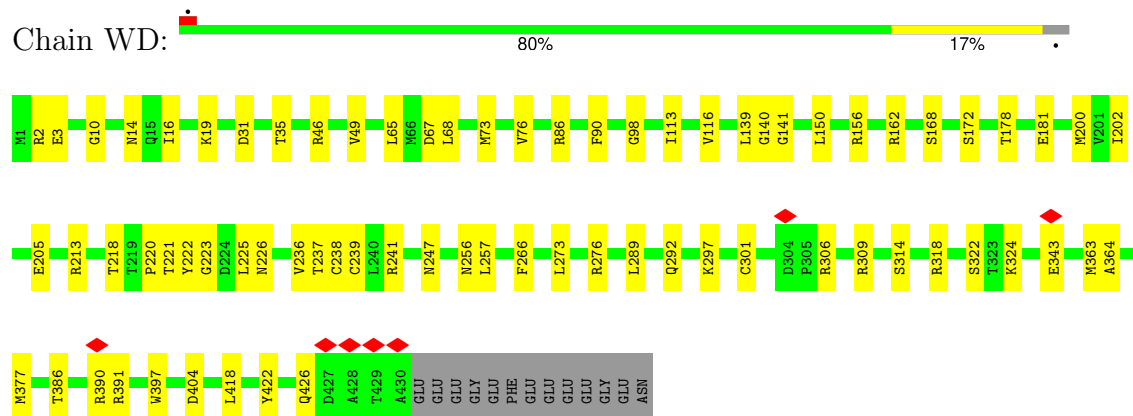


• Molecule 46: Tubulin beta chain

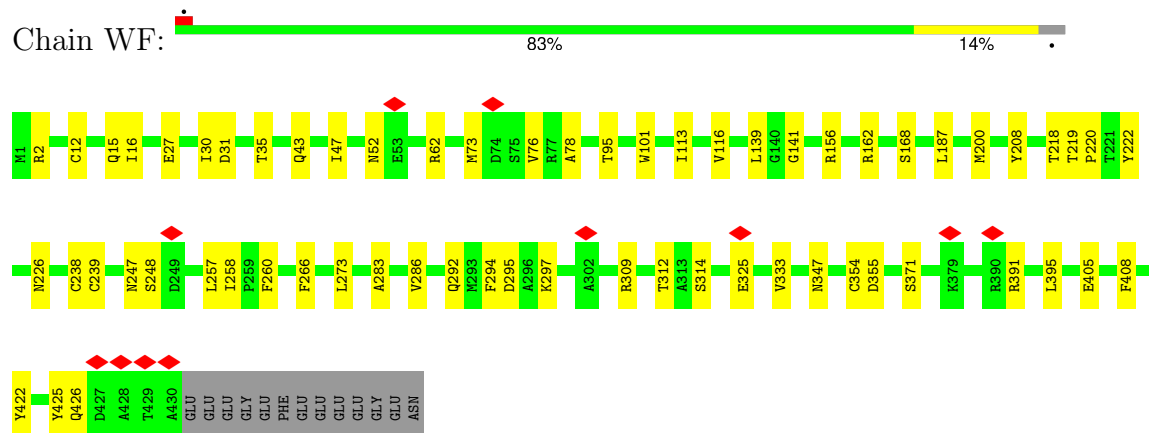




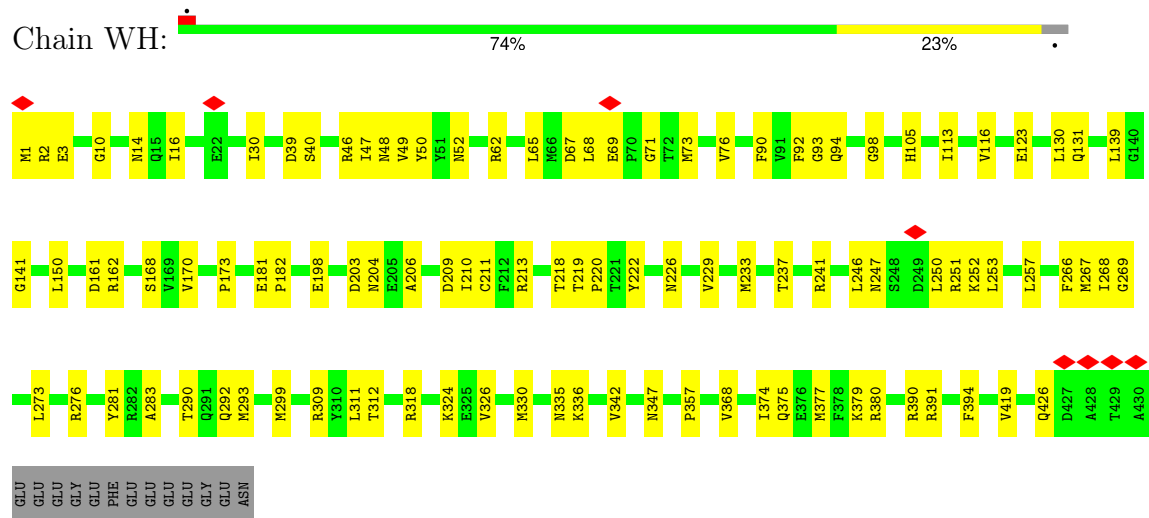
- Molecule 46: Tubulin beta chain



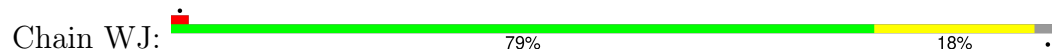
- Molecule 46: Tubulin beta chain



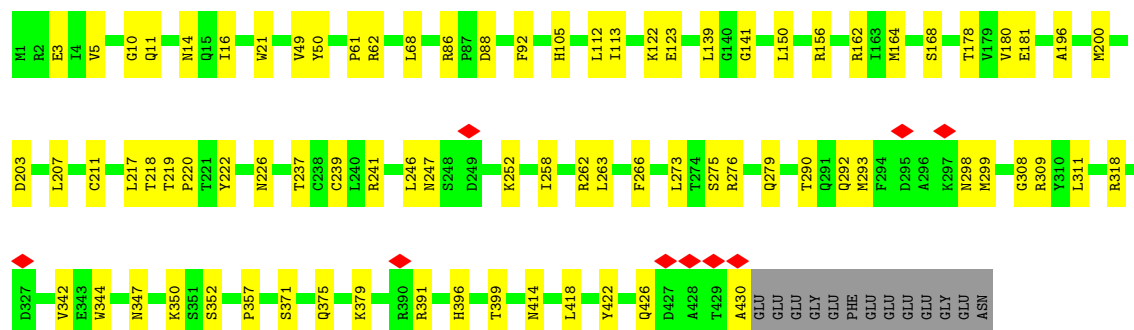
- Molecule 46: Tubulin beta chain



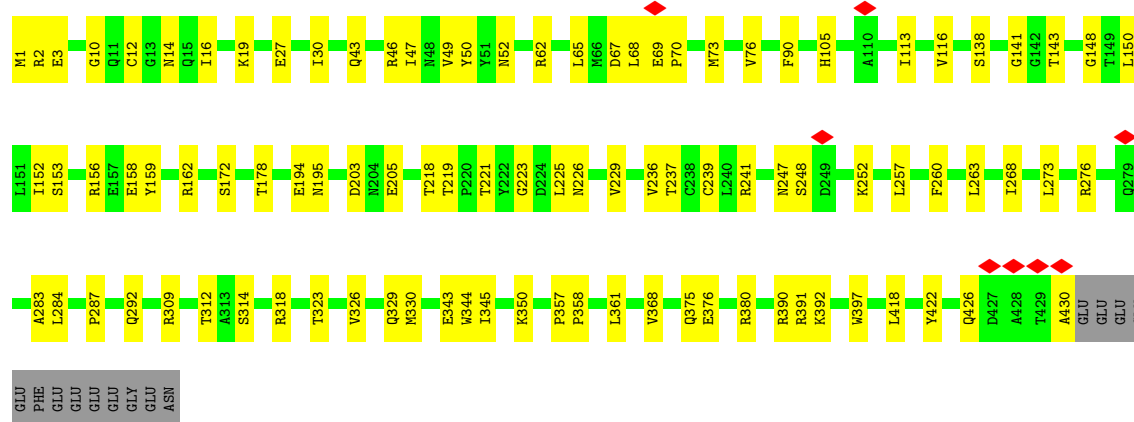
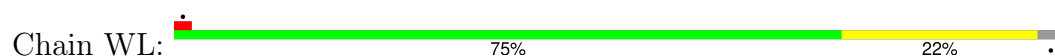
- Molecule 46: Tubulin beta chain



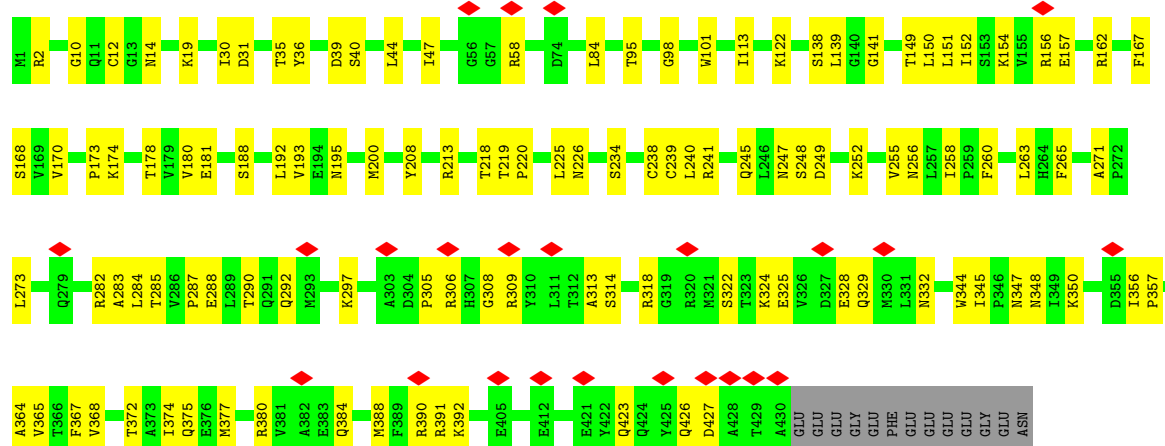
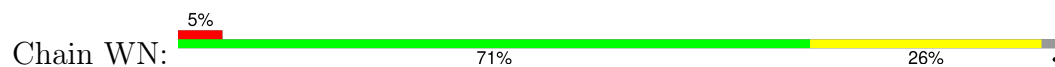




• Molecule 46: Tubulin beta chain



• Molecule 46: Tubulin beta chain





## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	182355	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	45	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	2.387	Depositor
Minimum map value	-0.003	Depositor
Average map value	0.010	Depositor
Map value standard deviation	0.074	Depositor
Recommended contour level	0.12	Depositor
Map size ( $\text{\AA}$ )	701.44, 701.44, 701.44	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Pixel spacing ( $\text{\AA}$ )	1.37, 1.37, 1.37	Depositor



## 5 Model quality

### 5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: GDP, MG, GTP

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 5$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z  > 5$	RMSZ	# $ Z  > 5$
1	0A	0.26	0/1273	0.54	0/1733
1	1A	0.27	0/1273	0.59	1/1733 (0.1%)
1	2A	0.26	0/1273	0.57	0/1733
1	3A	0.27	0/1273	0.55	0/1733
2	0B	0.25	0/2673	0.53	0/3619
3	0C	0.27	0/764	0.56	0/1029
3	1C	0.28	0/764	0.60	1/1029 (0.1%)
4	0D	0.27	0/1655	0.56	0/2241
4	1D	0.27	0/1655	0.58	0/2241
4	2D	0.26	0/1655	0.55	0/2241
5	0E	0.25	0/1584	0.49	0/2133
5	1E	0.26	0/1584	0.50	0/2133
5	2E	0.26	0/1584	0.54	1/2133 (0.0%)
5	3E	0.26	0/1584	0.57	1/2133 (0.0%)
6	0F	0.25	0/1699	0.58	0/2294
7	0G	0.27	0/1410	0.57	0/1899
7	1G	0.26	0/1117	0.56	0/1508
8	0H	0.25	0/1019	0.60	0/1351
8	1H	0.25	0/3722	0.56	1/4929 (0.0%)
9	0N	0.26	0/2355	0.49	0/3181
9	1N	0.25	0/3884	0.47	0/5240
9	2N	0.25	0/2355	0.50	0/3181
10	0Q	0.25	0/1583	0.57	0/2138
10	1Q	0.26	0/1583	0.59	2/2138 (0.1%)
10	2Q	0.26	0/1583	0.58	2/2138 (0.1%)
10	3Q	0.26	0/1583	0.60	2/2138 (0.1%)
10	4Q	0.25	0/1583	0.56	0/2138
10	5Q	0.25	0/1583	0.58	0/2138
10	6Q	0.25	0/1583	0.58	1/2138 (0.0%)
11	0S	0.24	0/2361	0.48	0/3199
11	1S	0.25	0/2361	0.49	0/3199
11	2S	0.25	0/2361	0.50	0/3199



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
11	3S	0.25	0/2361	0.49	0/3199
12	0T	0.25	0/2106	0.48	0/2838
12	1T	0.25	0/2379	0.48	0/3209
12	2T	0.25	0/2379	0.49	0/3209
12	3T	0.25	0/2379	0.48	0/3209
13	0U	0.25	0/4866	0.54	0/6583
13	1U	0.25	0/4866	0.54	0/6583
13	2U	0.26	0/4866	0.55	0/6583
13	3U	0.25	0/4866	0.55	0/6583
14	0V	0.24	0/1784	0.51	0/2393
14	1V	0.25	0/2213	0.52	0/2978
14	2V	0.25	0/2213	0.52	0/2978
14	3V	0.26	0/2213	0.53	0/2978
15	0X	0.31	0/916	0.60	0/1218
15	1X	0.30	0/1221	0.52	0/1622
15	2X	0.29	0/1221	0.54	0/1622
15	3X	0.28	0/1221	0.55	0/1622
15	4X	0.29	0/1221	0.55	0/1622
16	1B	0.26	0/4148	0.48	0/5587
16	2B	0.25	0/2483	0.52	0/3339
16	3B	0.25	0/2493	0.50	0/3352
17	1F	0.26	0/1119	0.52	0/1513
18	1I	0.25	0/1574	0.54	0/2125
19	1J	0.26	0/3090	0.53	0/4148
20	1K	0.24	0/2420	0.49	0/3215
20	2K	0.24	0/2485	0.47	0/3293
21	1L	0.26	0/6960	0.55	3/9358 (0.0%)
21	2L	0.25	0/5275	0.53	1/7092 (0.0%)
21	3L	0.30	0/1685	0.65	1/2266 (0.0%)
22	1M	0.25	0/3041	0.52	0/4100
22	2M	0.25	0/3041	0.50	1/4100 (0.0%)
23	1O	0.26	0/1990	0.51	0/2623
23	2O	0.28	0/3186	0.59	0/4207
23	3O	0.23	0/2367	0.46	0/3126
24	1P	0.26	0/3046	0.54	0/4025
24	2P	0.26	0/1610	0.53	0/2136
25	1R	0.26	0/4366	0.49	0/5904
25	2R	0.26	0/4366	0.49	0/5904
25	3R	0.26	0/4366	0.48	0/5904
26	1W	0.24	0/1915	0.49	0/2558
26	2W	0.27	0/966	0.57	0/1291
27	2C	0.25	0/2511	0.50	1/3378 (0.0%)
27	3C	0.25	0/2511	0.48	0/3378



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
27	4C	0.25	0/2511	0.48	0/3378
28	2F	0.30	0/767	0.62	1/1028 (0.1%)
29	2G	0.25	0/861	0.45	0/1146
30	2H	0.25	0/507	0.52	0/672
30	3H	0.26	0/507	0.51	0/672
30	4H	0.26	0/507	0.51	0/672
31	2I	0.27	0/1160	0.59	1/1560 (0.1%)
31	3I	0.25	0/729	0.59	0/975
32	3D	0.25	0/1878	0.45	0/2538
33	4F	0.27	0/1669	0.52	1/2258 (0.0%)
34	4R	0.26	0/5205	0.49	0/7042
34	5R	0.26	0/5205	0.48	0/7042
34	6R	0.25	0/5205	0.48	0/7042
34	7R	0.25	0/5205	0.49	0/7042
35	4S	0.25	0/1572	0.47	0/2122
35	5S	0.25	0/1572	0.48	0/2122
36	5A	0.28	0/1299	0.66	2/1757 (0.1%)
36	5B	0.26	0/1299	0.57	0/1757
36	5C	0.25	0/1299	0.55	0/1757
36	5D	0.27	0/898	0.59	0/1217
37	5E	0.26	0/1579	0.54	0/2124
37	5F	0.26	0/1792	0.55	0/2415
37	5G	0.25	0/1792	0.55	0/2415
37	5H	0.26	0/1175	0.59	1/1586 (0.1%)
39	6F	0.27	0/1171	0.52	0/1573
40	6G	0.27	0/1809	0.55	1/2426 (0.0%)
41	6H	0.27	0/1389	0.58	1/1855 (0.1%)
44	8R	0.26	0/1137	0.33	0/1584
45	AA	0.26	0/3482	0.51	0/4719
45	AC	0.26	0/3482	0.50	0/4719
45	AE	0.25	0/3482	0.49	0/4719
45	AG	0.25	0/3482	0.48	0/4719
45	AI	0.25	0/3482	0.49	0/4719
45	AK	0.26	0/3482	0.51	0/4719
45	AM	0.25	0/3482	0.50	0/4719
45	BA	0.25	0/3435	0.49	0/4655
45	BC	0.25	0/3435	0.48	0/4655
45	BE	0.25	0/3435	0.49	0/4655
45	BG	0.25	0/3435	0.49	0/4655
45	BI	0.26	0/3435	0.49	0/4655
45	BK	0.25	0/3435	0.49	0/4655
45	BM	0.25	0/3435	0.48	0/4655
45	CA	0.27	0/3482	0.55	2/4719 (0.0%)



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
45	CC	0.25	0/3482	0.51	0/4719
45	CE	0.25	0/3482	0.50	0/4719
45	CG	0.26	0/3482	0.50	0/4719
45	CI	0.25	0/3482	0.49	0/4719
45	CK	0.25	0/3482	0.48	0/4719
45	CM	0.25	0/3482	0.51	0/4719
45	DA	0.25	0/3443	0.52	0/4666
45	DC	0.26	0/3462	0.51	0/4690
45	DE	0.25	0/3443	0.50	0/4666
45	DG	0.25	0/3462	0.47	0/4690
45	DI	0.25	0/3443	0.50	0/4666
45	DK	0.25	0/3462	0.49	0/4690
45	DM	0.25	0/3443	0.50	0/4666
45	EA	0.25	0/3482	0.50	0/4719
45	EC	0.25	0/3482	0.51	1/4719 (0.0%)
45	EE	0.25	0/3482	0.50	0/4719
45	EG	0.26	0/3482	0.50	0/4719
45	EI	0.25	0/3482	0.50	0/4719
45	EK	0.25	0/3482	0.49	0/4719
45	EM	0.27	0/3482	0.54	2/4719 (0.0%)
45	FA	0.25	0/3413	0.49	0/4625
45	FC	0.25	0/3435	0.49	0/4655
45	FE	0.25	0/3447	0.49	0/4671
45	FG	0.26	0/3482	0.49	0/4719
45	FI	0.25	0/3443	0.49	0/4666
45	FK	0.25	0/3435	0.48	0/4655
45	FM	0.24	0/3413	0.47	0/4625
45	GA	0.25	0/3413	0.49	0/4625
45	GC	0.25	0/3429	0.49	0/4647
45	GE	0.25	0/3429	0.48	0/4647
45	GG	0.25	0/3429	0.48	0/4647
45	GI	0.25	0/3429	0.49	0/4647
45	GK	0.26	0/3482	0.51	0/4719
45	GM	0.25	0/3413	0.52	0/4625
45	HA	0.25	0/3427	0.48	0/4644
45	HC	0.25	0/3427	0.48	0/4644
45	HE	0.25	0/3427	0.47	0/4644
45	HG	0.25	0/3427	0.49	0/4644
45	HI	0.25	0/3427	0.48	0/4644
45	HK	0.25	0/3427	0.48	0/4644
45	HM	0.25	0/3427	0.50	0/4644
45	IA	0.25	0/3435	0.49	0/4655
45	IC	0.26	0/3482	0.50	0/4719



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
45	IE	0.26	0/3435	0.50	0/4655
45	IG	0.25	0/3482	0.48	0/4719
45	II	0.25	0/3482	0.49	0/4719
45	IK	0.25	0/3435	0.48	0/4655
45	IM	0.26	0/3435	0.52	1/4655 (0.0%)
45	JA	0.25	0/3435	0.49	0/4655
45	JC	0.25	0/3447	0.49	0/4671
45	JE	0.25	0/3482	0.49	0/4719
45	JG	0.25	0/3482	0.49	0/4719
45	JI	0.26	0/3478	0.50	0/4713
45	JK	0.26	0/3482	0.50	0/4719
45	JM	0.25	0/3435	0.51	0/4655
45	KA	0.25	0/3447	0.48	0/4671
45	KC	0.25	0/3443	0.47	0/4666
45	KE	0.26	0/3458	0.50	0/4685
45	KG	0.26	0/3482	0.49	0/4719
45	KI	0.26	0/3482	0.49	0/4719
45	KK	0.25	0/3482	0.48	0/4719
45	KM	0.25	0/3447	0.50	0/4671
45	LA	0.26	0/3482	0.50	0/4719
45	LC	0.25	0/3482	0.50	1/4719 (0.0%)
45	LE	0.25	0/3473	0.50	0/4705
45	LG	0.25	0/3482	0.48	0/4719
45	LI	0.25	0/3454	0.48	0/4680
45	LK	0.25	0/3482	0.48	0/4719
45	LM	0.26	0/3482	0.51	0/4719
45	MA	0.25	0/3465	0.50	0/4695
45	MC	0.25	0/3439	0.47	0/4660
45	ME	0.26	0/3443	0.50	0/4666
45	MG	0.25	0/3473	0.49	0/4706
45	MI	0.26	0/3482	0.51	0/4719
45	MK	0.26	0/3455	0.49	0/4681
45	MM	0.25	0/3465	0.50	0/4695
45	NA	0.25	0/3482	0.50	0/4719
45	NC	0.25	0/3435	0.50	0/4655
45	NE	0.26	0/3482	0.51	0/4719
45	NG	0.25	0/3435	0.50	0/4655
45	NI	0.25	0/3482	0.49	0/4719
45	NK	0.25	0/3435	0.50	0/4655
45	NM	0.25	0/3482	0.50	0/4719
45	OA	0.26	0/3439	0.53	0/4660
45	OC	0.25	0/3439	0.50	0/4660
45	OE	0.25	0/3439	0.50	0/4660



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
45	OG	0.25	0/3439	0.49	0/4660
45	OI	0.25	0/3439	0.49	0/4660
45	OK	0.25	0/3439	0.50	0/4660
45	OM	0.25	0/3439	0.50	0/4660
45	PA	0.25	0/3413	0.51	0/4625
45	PC	0.25	0/3413	0.50	0/4625
45	PE	0.25	0/3413	0.50	0/4625
45	PG	0.25	0/3413	0.49	0/4625
45	PI	0.25	0/3413	0.50	0/4625
45	PK	0.25	0/3413	0.49	0/4625
45	PM	0.25	0/3413	0.50	0/4625
45	QA	0.30	1/3427 (0.0%)	0.55	3/4644 (0.1%)
45	QC	0.25	0/3427	0.49	0/4644
45	QE	0.25	0/3427	0.48	0/4644
45	QG	0.25	0/3427	0.49	0/4644
45	QI	0.25	0/3427	0.50	0/4644
45	QK	0.25	0/3427	0.49	0/4644
45	QM	0.25	0/3427	0.51	0/4644
45	RA	0.24	0/3427	0.48	0/4644
45	RC	0.25	0/3427	0.50	0/4644
45	RE	0.25	0/3427	0.49	0/4644
45	RG	0.25	0/3427	0.49	0/4644
45	RI	0.25	0/3427	0.50	0/4644
45	RK	0.25	0/3427	0.49	0/4644
45	RM	0.26	0/3427	0.50	0/4644
45	SA	0.24	0/3421	0.49	0/4636
45	SC	0.25	0/3421	0.50	0/4636
45	SE	0.25	0/3421	0.49	0/4636
45	SG	0.25	0/3421	0.49	0/4636
45	SI	0.25	0/3421	0.48	0/4636
45	SK	0.25	0/3421	0.49	0/4636
45	SM	0.25	0/3421	0.51	0/4636
45	TA	0.24	0/3421	0.47	0/4636
45	TC	0.25	0/3421	0.50	0/4636
45	TE	0.25	0/3421	0.49	0/4636
45	TG	0.25	0/3421	0.48	0/4636
45	TI	0.25	0/3421	0.50	0/4636
45	TK	0.25	0/3421	0.49	0/4636
45	TM	0.25	0/3421	0.49	0/4636
45	UA	0.24	0/3427	0.49	0/4644
45	UC	0.25	0/3427	0.50	0/4644
45	UE	0.25	0/3427	0.48	0/4644
45	UG	0.25	0/3427	0.48	0/4644



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
45	UI	0.25	0/3427	0.48	0/4644
45	UK	0.25	0/3427	0.49	0/4644
45	UM	0.25	0/3427	0.48	0/4644
45	VA	0.25	0/3443	0.49	0/4666
45	VC	0.25	0/3482	0.48	0/4719
45	VE	0.25	0/3443	0.48	0/4666
45	VG	0.25	0/3482	0.48	0/4719
45	VI	0.26	0/3443	0.51	0/4666
45	VK	0.26	0/3482	0.51	0/4719
45	VM	0.25	0/3443	0.50	0/4666
45	WA	0.25	0/3427	0.49	0/4644
45	WC	0.25	0/3482	0.50	0/4719
45	WE	0.25	0/3427	0.48	0/4644
45	WG	0.25	0/3482	0.50	0/4719
45	WI	0.25	0/3427	0.48	0/4644
45	WK	0.25	0/3482	0.49	0/4719
45	WM	0.25	0/3427	0.51	0/4644
46	AB	0.25	0/3439	0.51	0/4655
46	AD	0.26	0/3439	0.51	0/4655
46	AF	0.26	0/3439	0.50	0/4655
46	AH	0.25	0/3439	0.48	0/4655
46	AJ	0.26	0/3439	0.50	0/4655
46	AL	0.26	0/3439	0.50	0/4655
46	AN	0.26	0/3439	0.49	0/4655
46	BB	0.25	0/3369	0.51	0/4553
46	BD	0.25	0/3439	0.50	0/4655
46	BF	0.26	0/3439	0.50	0/4655
46	BH	0.26	0/3439	0.49	0/4655
46	BJ	0.26	0/3439	0.50	0/4655
46	BL	0.25	0/3439	0.50	0/4655
46	BN	0.25	0/3439	0.49	0/4655
46	CB	0.26	0/3439	0.53	0/4655
46	CD	0.26	0/3439	0.50	0/4655
46	CF	0.26	0/3439	0.50	0/4655
46	CH	0.25	0/3439	0.50	0/4655
46	CJ	0.26	0/3439	0.49	0/4655
46	CL	0.25	0/3439	0.50	0/4655
46	CN	0.26	0/3439	0.56	0/4655
46	DB	0.26	0/3439	0.53	0/4655
46	DD	0.25	0/3439	0.50	0/4655
46	DF	0.25	0/3439	0.50	0/4655
46	DH	0.25	0/3439	0.48	0/4655
46	DJ	0.26	0/3439	0.51	1/4655 (0.0%)



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
46	DL	0.25	0/3439	0.51	0/4655
46	DN	0.27	0/3439	0.54	0/4655
46	EB	0.25	0/3439	0.50	0/4655
46	ED	0.25	0/3439	0.49	0/4655
46	EF	0.26	0/3439	0.51	0/4655
46	EH	0.26	0/3439	0.51	0/4655
46	EJ	0.26	0/3439	0.51	0/4655
46	EL	0.25	0/3439	0.49	0/4655
46	EN	0.25	0/3439	0.52	0/4655
46	FB	0.27	0/3439	0.55	0/4655
46	FD	0.26	0/3439	0.49	0/4655
46	FF	0.26	0/3439	0.52	0/4655
46	FH	0.25	0/3439	0.49	1/4655 (0.0%)
46	FJ	0.25	0/3439	0.49	0/4655
46	FL	0.25	0/3439	0.48	0/4655
46	FN	0.25	0/3439	0.52	0/4655
46	GB	0.26	0/3439	0.53	0/4655
46	GD	0.25	0/3439	0.49	0/4655
46	GF	0.25	0/3439	0.48	0/4655
46	GH	0.25	0/3439	0.47	0/4655
46	GJ	0.26	0/3439	0.50	0/4655
46	GL	0.26	0/3439	0.50	0/4655
46	GN	0.25	0/3439	0.49	0/4655
46	HB	0.26	0/3439	0.51	0/4655
46	HD	0.25	0/3439	0.48	0/4655
46	HF	0.26	0/3439	0.50	0/4655
46	HH	0.26	0/3439	0.49	0/4655
46	HJ	0.26	0/3439	0.49	0/4655
46	HL	0.25	0/3439	0.50	0/4655
46	HN	0.25	0/3439	0.49	0/4655
46	IB	0.25	0/3439	0.52	0/4655
46	ID	0.26	0/3439	0.50	0/4655
46	IF	0.26	0/3439	0.49	0/4655
46	IH	0.25	0/3439	0.47	0/4655
46	IJ	0.25	0/3439	0.47	0/4655
46	IL	0.26	0/3439	0.49	0/4655
46	IN	0.26	0/3439	0.50	0/4655
46	JB	0.26	0/3439	0.50	0/4655
46	JD	0.26	0/3439	0.49	0/4655
46	JF	0.25	0/3439	0.48	0/4655
46	JH	0.26	0/3439	0.50	0/4655
46	JJ	0.26	0/3439	0.50	0/4655
46	JL	0.26	0/3439	0.49	0/4655



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
46	JN	0.25	0/3439	0.50	0/4655
46	KB	0.25	0/3439	0.48	0/4655
46	KD	0.25	0/3439	0.48	0/4655
46	KF	0.26	0/3439	0.50	0/4655
46	KH	0.26	0/3439	0.48	0/4655
46	KJ	0.25	0/3439	0.49	0/4655
46	KL	0.25	0/3439	0.48	0/4655
46	KN	0.25	0/3439	0.48	0/4655
46	LB	0.25	0/3439	0.51	0/4655
46	LD	0.26	0/3439	0.49	0/4655
46	LF	0.26	0/3439	0.50	0/4655
46	LH	0.26	0/3439	0.49	0/4655
46	LJ	0.25	0/3439	0.49	0/4655
46	LL	0.26	0/3439	0.50	0/4655
46	LN	0.26	0/3439	0.51	0/4655
46	MB	0.25	0/3439	0.49	0/4655
46	MD	0.25	0/3439	0.49	0/4655
46	MF	0.25	0/3439	0.49	0/4655
46	MH	0.25	0/3439	0.49	0/4655
46	MJ	0.26	0/3439	0.50	0/4655
46	ML	0.26	0/3439	0.50	0/4655
46	MN	0.25	0/3439	0.49	0/4655
46	NB	0.25	0/3375	0.50	0/4569
46	ND	0.26	0/3439	0.51	0/4655
46	NF	0.26	0/3375	0.50	0/4569
46	NH	0.26	0/3439	0.50	0/4655
46	NJ	0.25	0/3375	0.49	0/4569
46	NL	0.25	0/3439	0.50	0/4655
46	NN	0.25	0/3375	0.50	0/4569
46	OB	0.26	0/3439	0.53	1/4655 (0.0%)
46	OD	0.26	0/3439	0.51	0/4655
46	OF	0.24	0/3439	0.49	0/4655
46	OH	0.25	0/3439	0.50	0/4655
46	OJ	0.25	0/3439	0.48	0/4655
46	OL	0.24	0/3439	0.48	0/4655
46	ON	0.25	0/3439	0.48	0/4655
46	PB	0.25	0/3439	0.49	0/4655
46	PD	0.26	0/3439	0.51	0/4655
46	PF	0.25	0/3439	0.50	0/4655
46	PH	0.25	0/3439	0.49	0/4655
46	PJ	0.25	0/3439	0.50	0/4655
46	PL	0.25	0/3439	0.50	1/4655 (0.0%)
46	PN	0.25	0/3439	0.51	0/4655



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
46	QB	0.26	0/3439	0.52	1/4655 (0.0%)
46	QD	0.25	0/3439	0.50	0/4655
46	QF	0.25	0/3439	0.49	0/4655
46	QH	0.25	0/3439	0.49	0/4655
46	QJ	0.25	0/3439	0.51	0/4655
46	QL	0.25	0/3439	0.51	0/4655
46	QN	0.24	0/3439	0.47	0/4655
46	RB	0.25	0/3439	0.50	0/4655
46	RD	0.25	0/3439	0.49	0/4655
46	RF	0.25	0/3439	0.50	0/4655
46	RH	0.25	0/3439	0.51	0/4655
46	RJ	0.25	0/3439	0.49	0/4655
46	RL	0.25	0/3439	0.51	0/4655
46	RN	0.24	0/3439	0.47	0/4655
46	SB	0.25	0/3439	0.50	0/4655
46	SD	0.25	0/3439	0.51	1/4655 (0.0%)
46	SF	0.25	0/3439	0.50	0/4655
46	SH	0.25	0/3439	0.50	0/4655
46	SJ	0.26	0/3439	0.51	0/4655
46	SL	0.25	0/3439	0.50	0/4655
46	SN	0.24	0/3439	0.47	0/4655
46	TB	0.25	0/3439	0.49	0/4655
46	TD	0.25	0/3439	0.50	0/4655
46	TF	0.25	0/3439	0.50	0/4655
46	TH	0.25	0/3439	0.49	0/4655
46	TJ	0.25	0/3439	0.50	0/4655
46	TL	0.26	0/3439	0.51	0/4655
46	TN	0.24	0/3439	0.49	0/4655
46	UB	0.25	0/3439	0.50	0/4655
46	UD	0.26	0/3439	0.49	0/4655
46	UF	0.25	0/3439	0.49	0/4655
46	UH	0.25	0/3439	0.50	0/4655
46	UJ	0.25	0/3439	0.49	0/4655
46	UL	0.25	0/3439	0.50	0/4655
46	UN	0.25	0/3439	0.53	0/4655
46	VB	0.25	0/3439	0.51	0/4655
46	VD	0.26	0/3439	0.51	0/4655
46	VF	0.25	0/3439	0.49	0/4655
46	VH	0.26	0/3439	0.49	0/4655
46	VJ	0.25	0/3439	0.49	0/4655
46	VL	0.25	0/3439	0.49	0/4655
46	VN	0.26	0/3439	0.52	0/4655
46	WB	0.25	0/3439	0.49	0/4655



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
46	WD	0.25	0/3439	0.49	0/4655
46	WF	0.25	0/3439	0.48	0/4655
46	WH	0.25	0/3439	0.49	0/4655
46	WJ	0.25	0/3439	0.49	0/4655
46	WL	0.25	0/3439	0.49	0/4655
46	WN	0.25	0/3439	0.52	0/4655
All	All	0.25	1/1334739 (0.0%)	0.50	43/1805944 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	0A	0	1
1	1A	0	3
1	2A	0	2
1	3A	0	1
4	0D	0	1
4	1D	0	1
6	0F	0	1
25	1R	0	1
25	2R	0	1
25	3R	0	1
27	3C	0	1
31	2I	0	1
45	BA	0	1
45	EA	0	1
45	EE	0	1
45	EI	0	1
45	EM	0	1
All	All	0	20

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	QA	261	PRO	CG-CD	-9.16	1.20	1.50

All (43) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	QA	261	PRO	CA-N-CD	-10.43	96.90	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	EM	261	PRO	CA-N-CD	-10.24	97.17	111.50
45	QA	261	PRO	N-CD-CG	-9.91	88.33	103.20
45	CA	261	PRO	CA-N-CD	-9.37	98.38	111.50
36	5A	20	LEU	CA-CB-CG	7.18	131.83	115.30
36	5A	117	PRO	CA-N-CD	-6.67	102.16	111.50
40	6G	236	LEU	CA-CB-CG	6.50	130.24	115.30
45	EM	261	PRO	N-CD-CG	-6.43	93.56	103.20
1	1A	19	ARG	C-N-CD	-6.34	106.64	120.60
45	IM	261	PRO	CA-N-CD	-6.28	102.71	111.50
10	1Q	168	SER	C-N-CA	6.08	136.90	121.70
45	CA	261	PRO	N-CD-CG	-6.07	94.09	103.20
10	3Q	168	SER	C-N-CA	6.05	136.82	121.70
10	2Q	168	SER	C-N-CA	5.98	136.65	121.70
45	EC	261	PRO	CA-N-CD	-5.96	103.16	111.50
8	1H	419	LEU	CA-CB-CG	5.90	128.87	115.30
37	5H	123	ARG	CA-CB-CG	5.74	126.04	113.40
10	6Q	69	LEU	CA-CB-CG	5.70	128.40	115.30
10	3Q	69	LEU	CA-CB-CG	5.66	128.31	115.30
45	LC	47	ASP	CB-CG-OD2	5.58	123.32	118.30
45	QA	261	PRO	CA-CB-CG	-5.49	93.57	104.00
21	1L	525	LEU	CA-CB-CG	-5.48	102.70	115.30
5	3E	34	LEU	C-N-CA	5.48	135.40	121.70
21	2L	801	SER	C-N-CA	5.46	135.35	121.70
5	2E	34	LEU	C-N-CA	5.44	135.29	121.70
41	6H	248	LEU	CA-CB-CG	5.44	127.80	115.30
21	1L	801	SER	C-N-CA	5.43	135.28	121.70
46	OB	150	LEU	CA-CB-CG	5.40	127.72	115.30
21	1L	556	LEU	CA-CB-CG	5.35	127.61	115.30
46	SD	44	LEU	CA-CB-CG	5.31	127.51	115.30
31	2I	75	SER	C-N-CD	-5.27	109.00	120.60
10	2Q	69	LEU	CA-CB-CG	5.20	127.25	115.30
27	2C	3	LEU	CA-CB-CG	5.20	127.25	115.30
46	QB	173	PRO	CA-N-CD	-5.14	104.30	111.50
46	DJ	41	ASP	CB-CG-OD1	5.13	122.92	118.30
46	FH	44	LEU	CA-CB-CG	5.11	127.06	115.30
22	2M	19	LEU	CA-CB-CG	5.11	127.05	115.30
3	1C	52	MET	CA-CB-CG	5.11	121.98	113.30
21	3L	67	ARG	CA-CB-CG	5.08	124.58	113.40
33	4F	33	ASP	CB-CG-OD1	5.08	122.87	118.30
28	2F	30	ALA	C-N-CA	5.02	134.24	121.70
46	PL	395	LEU	CA-CB-CG	5.00	126.81	115.30
10	1Q	69	LEU	CA-CB-CG	5.00	126.81	115.30



There are no chirality outliers.

All (20) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	0A	38	SER	Peptide
4	0D	79	GLN	Peptide
6	0F	7	ILE	Peptide
1	1A	19	ARG	Peptide
1	1A	37	THR	Peptide
1	1A	38	SER	Peptide
4	1D	217	ALA	Peptide
25	1R	42	PRO	Peptide
1	2A	19	ARG	Peptide
1	2A	38	SER	Peptide
31	2I	75	SER	Peptide
25	2R	42	PRO	Peptide
1	3A	38	SER	Peptide
27	3C	241	PHE	Peptide
25	3R	42	PRO	Peptide
45	BA	256	GLN	Peptide
45	EA	36	MET	Peptide
45	EE	36	MET	Peptide
45	EI	36	MET	Peptide
45	EM	36	MET	Peptide

## 5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	0A	1229	0	1157	19	0
1	1A	1229	0	1157	15	0
1	2A	1229	0	1157	36	0
1	3A	1229	0	1157	56	0
2	0B	2614	0	2537	24	0
3	0C	747	0	746	3	0
3	1C	747	0	746	8	0
4	0D	1621	0	1610	18	0
4	1D	1621	0	1610	14	0
4	2D	1621	0	1610	67	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	0E	1557	0	1513	3	0
5	1E	1557	0	1513	4	0
5	2E	1557	0	1513	45	0
5	3E	1557	0	1513	45	0
6	0F	1665	0	1658	14	0
7	0G	1378	0	1335	16	0
7	1G	1089	0	1056	9	0
8	0H	1006	0	1010	2	0
8	1H	3687	0	3703	26	0
9	0N	2305	0	2251	9	0
9	1N	3805	0	3734	10	0
9	2N	2305	0	2251	60	0
10	0Q	1548	0	1575	4	0
10	1Q	1548	0	1575	10	0
10	2Q	1548	0	1575	30	0
10	3Q	1548	0	1575	41	0
10	4Q	1548	0	1575	29	0
10	5Q	1548	0	1575	37	0
10	6Q	1548	0	1575	49	0
11	0S	2310	0	2349	2	0
11	1S	2310	0	2349	36	0
11	2S	2310	0	2349	57	0
11	3S	2310	0	2349	49	0
12	0T	2056	0	2010	2	0
12	1T	2321	0	2267	53	0
12	2T	2321	0	2267	57	0
12	3T	2321	0	2267	62	0
13	0U	4774	0	4750	3	0
13	1U	4774	0	4750	134	0
13	2U	4774	0	4750	144	0
13	3U	4774	0	4750	127	0
14	0V	1750	0	1740	19	0
14	1V	2168	0	2164	51	0
14	2V	2168	0	2164	47	0
14	3V	2168	0	2164	78	0
15	0X	903	0	878	7	0
15	1X	1205	0	1184	23	0
15	2X	1205	0	1184	32	0
15	3X	1205	0	1184	30	0
15	4X	1205	0	1184	27	0
16	1B	4066	0	4014	7	0
16	2B	2439	0	2418	62	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
16	3B	2449	0	2426	56	0
17	1F	1093	0	1080	10	0
18	1I	1546	0	1485	18	0
19	1J	3025	0	2938	34	0
20	1K	2391	0	2398	14	0
20	2K	2465	0	2499	58	0
21	1L	6841	0	6886	35	0
21	2L	5181	0	5214	139	0
21	3L	1660	0	1672	69	0
22	1M	2978	0	2957	6	0
22	2M	2978	0	2957	45	0
23	1O	1983	0	2096	26	0
23	2O	3173	0	3303	158	0
23	3O	2358	0	2454	67	0
24	1P	3026	0	3144	30	0
24	2P	1594	0	1605	55	0
25	1R	4244	0	4119	16	0
25	2R	4244	0	4119	67	0
25	3R	4244	0	4119	76	0
26	1W	1888	0	1823	38	0
26	2W	949	0	929	43	0
27	2C	2467	0	2457	47	0
27	3C	2467	0	2457	45	0
27	4C	2467	0	2457	49	0
28	2F	746	0	703	23	0
29	2G	848	0	871	24	0
30	2H	501	0	513	25	0
30	3H	501	0	513	20	0
30	4H	501	0	513	11	0
31	2I	1132	0	1131	40	0
31	3I	712	0	722	24	0
32	3D	1835	0	1817	32	0
33	4F	1623	0	1559	29	0
34	4R	5070	0	4976	100	0
34	5R	5070	0	4976	78	0
34	6R	5070	0	4976	93	0
34	7R	5070	0	4976	99	0
35	4S	1537	0	1565	38	0
35	5S	1537	0	1565	27	0
36	5A	1261	0	1230	41	0
36	5B	1261	0	1230	30	0
36	5C	1261	0	1230	38	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	5D	872	0	852	22	0
37	5E	1543	0	1551	54	0
37	5F	1750	0	1753	35	0
37	5G	1750	0	1753	49	0
37	5H	1146	0	1136	30	0
38	5I	495	0	105	0	0
38	5J	545	0	115	0	0
38	5K	380	0	80	2	0
39	6F	1141	0	1077	26	0
40	6G	1769	0	1772	73	0
41	6H	1361	0	1280	40	0
42	8L	1925	0	391	2	0
42	8N	1790	0	362	2	0
43	8P	1815	0	369	6	0
44	8R	2022	0	1200	14	0
45	AA	3410	0	3347	83	0
45	AC	3410	0	3347	62	0
45	AE	3410	0	3347	50	0
45	AG	3410	0	3347	54	0
45	AI	3410	0	3347	45	0
45	AK	3410	0	3347	52	0
45	AM	3410	0	3347	69	0
45	BA	3364	0	3302	79	0
45	BC	3364	0	3302	62	0
45	BE	3364	0	3302	62	0
45	BG	3364	0	3302	63	0
45	BI	3364	0	3302	48	0
45	BK	3364	0	3302	65	0
45	BM	3364	0	3302	59	0
45	CA	3410	0	3347	100	0
45	CC	3410	0	3347	84	0
45	CE	3410	0	3347	78	0
45	CG	3410	0	3347	75	0
45	CI	3410	0	3347	61	0
45	CK	3410	0	3346	58	0
45	CM	3410	0	3347	104	0
45	DA	3372	0	3306	91	0
45	DC	3391	0	3325	102	0
45	DE	3372	0	3306	62	0
45	DG	3391	0	3325	58	0
45	DI	3372	0	3306	68	0
45	DK	3391	0	3325	79	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	DM	3372	0	3306	99	0
45	EA	3410	0	3347	90	0
45	EC	3410	0	3346	94	0
45	EE	3410	0	3347	54	0
45	EG	3410	0	3347	62	0
45	EI	3410	0	3347	69	0
45	EK	3410	0	3347	71	0
45	EM	3410	0	3347	89	0
45	FA	3342	0	3289	95	0
45	FC	3364	0	3302	57	0
45	FE	3376	0	3309	65	0
45	FG	3410	0	3347	55	0
45	FI	3372	0	3306	52	0
45	FK	3364	0	3302	72	0
45	FM	3342	0	3289	57	0
45	GA	3342	0	3289	82	0
45	GC	3358	0	3297	56	0
45	GE	3358	0	3297	63	0
45	GG	3358	0	3297	38	0
45	GI	3358	0	3297	49	0
45	GK	3410	0	3347	54	0
45	GM	3342	0	3289	99	0
45	HA	3356	0	3298	70	0
45	HC	3356	0	3298	51	0
45	HE	3356	0	3298	55	0
45	HG	3356	0	3298	61	0
45	HI	3356	0	3298	42	0
45	HK	3356	0	3298	63	0
45	HM	3356	0	3298	74	0
45	IA	3364	0	3302	64	0
45	IC	3410	0	3347	57	0
45	IE	3364	0	3302	50	0
45	IG	3410	0	3347	48	0
45	II	3410	0	3347	48	0
45	IK	3364	0	3302	66	0
45	IM	3364	0	3302	75	0
45	JA	3364	0	3302	64	0
45	JC	3376	0	3309	57	0
45	JE	3410	0	3347	47	0
45	JG	3410	0	3347	59	0
45	JI	3406	0	3337	71	0
45	JK	3410	0	3347	68	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	JM	3364	0	3302	88	0
45	KA	3376	0	3309	63	0
45	KC	3372	0	3306	47	0
45	KE	3387	0	3322	53	0
45	KG	3410	0	3347	55	0
45	KI	3410	0	3347	63	0
45	KK	3410	0	3347	48	0
45	KM	3376	0	3309	55	0
45	LA	3410	0	3347	78	0
45	LC	3410	0	3347	65	0
45	LE	3402	0	3335	70	0
45	LG	3410	0	3347	57	0
45	LI	3383	0	3319	55	0
45	LK	3410	0	3347	65	0
45	LM	3410	0	3347	79	0
45	MA	3394	0	3329	87	0
45	MC	3368	0	3305	40	0
45	ME	3372	0	3306	66	0
45	MG	3402	0	3340	53	0
45	MI	3410	0	3347	71	0
45	MK	3384	0	3315	64	0
45	MM	3394	0	3329	93	0
45	NA	3410	0	3347	93	0
45	NC	3364	0	3302	81	0
45	NE	3410	0	3347	72	0
45	NG	3364	0	3302	80	0
45	NI	3410	0	3347	59	0
45	NK	3364	0	3302	69	0
45	NM	3410	0	3347	90	0
45	OA	3368	0	3305	99	0
45	OC	3368	0	3305	64	0
45	OE	3368	0	3305	69	0
45	OG	3368	0	3305	59	0
45	OI	3368	0	3305	68	0
45	OK	3368	0	3305	66	0
45	OM	3368	0	3305	93	0
45	PA	3342	0	3289	120	0
45	PC	3342	0	3289	70	0
45	PE	3342	0	3289	76	0
45	PG	3342	0	3289	59	0
45	PI	3342	0	3289	71	0
45	PK	3342	0	3289	73	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	PM	3342	0	3289	75	0
45	QA	3356	0	3298	92	0
45	QC	3356	0	3298	63	0
45	QE	3356	0	3298	75	0
45	QG	3356	0	3298	69	0
45	QI	3356	0	3298	72	0
45	QK	3356	0	3298	70	0
45	QM	3356	0	3298	101	0
45	RA	3356	0	3298	76	0
45	RC	3356	0	3298	84	0
45	RE	3356	0	3298	70	0
45	RG	3356	0	3298	69	0
45	RI	3356	0	3298	65	0
45	RK	3356	0	3298	72	0
45	RM	3356	0	3298	94	0
45	SA	3350	0	3293	73	0
45	SC	3350	0	3293	71	0
45	SE	3350	0	3293	81	0
45	SG	3350	0	3293	62	0
45	SI	3350	0	3293	59	0
45	SK	3350	0	3293	66	0
45	SM	3350	0	3293	111	0
45	TA	3350	0	3293	64	0
45	TC	3350	0	3293	70	0
45	TE	3350	0	3293	65	0
45	TG	3350	0	3293	68	0
45	TI	3350	0	3293	78	0
45	TK	3350	0	3293	72	0
45	TM	3350	0	3293	92	0
45	UA	3356	0	3298	77	0
45	UC	3356	0	3298	99	0
45	UE	3356	0	3298	73	0
45	UG	3356	0	3298	67	0
45	UI	3356	0	3298	62	0
45	UK	3356	0	3298	55	0
45	UM	3356	0	3298	102	0
45	VA	3372	0	3306	78	0
45	VC	3410	0	3347	63	0
45	VE	3372	0	3306	61	0
45	VG	3410	0	3347	73	0
45	VI	3372	0	3306	61	0
45	VK	3410	0	3347	90	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	VM	3372	0	3305	111	0
45	WA	3356	0	3298	72	0
45	WC	3410	0	3347	59	0
45	WE	3356	0	3298	64	0
45	WG	3410	0	3347	63	0
45	WI	3356	0	3298	48	0
45	WK	3410	0	3347	71	0
45	WM	3356	0	3298	111	0
46	AB	3366	0	3257	93	0
46	AD	3366	0	3257	69	0
46	AF	3366	0	3257	69	0
46	AH	3366	0	3257	52	0
46	AJ	3366	0	3257	78	0
46	AL	3366	0	3257	51	0
46	AN	3366	0	3257	64	0
46	BB	3304	0	3199	102	0
46	BD	3366	0	3257	67	0
46	BF	3366	0	3257	79	0
46	BH	3366	0	3257	64	0
46	BJ	3366	0	3257	68	0
46	BL	3366	0	3257	51	0
46	BN	3366	0	3257	88	0
46	CB	3366	0	3257	98	0
46	CD	3366	0	3257	69	0
46	CF	3366	0	3257	72	0
46	CH	3366	0	3257	78	0
46	CJ	3366	0	3257	60	0
46	CL	3366	0	3257	83	0
46	CN	3366	0	3257	112	0
46	DB	3366	0	3255	117	0
46	DD	3366	0	3257	51	0
46	DF	3366	0	3257	62	0
46	DH	3366	0	3257	64	0
46	DJ	3366	0	3257	79	0
46	DL	3366	0	3257	82	0
46	DN	3366	0	3257	117	0
46	EB	3366	0	3257	124	0
46	ED	3366	0	3257	67	0
46	EF	3366	0	3257	59	0
46	EH	3366	0	3257	82	0
46	EJ	3366	0	3257	74	0
46	EL	3366	0	3257	86	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	EN	3366	0	3257	105	0
46	FB	3366	0	3257	120	0
46	FD	3366	0	3257	73	0
46	FF	3366	0	3257	75	0
46	FH	3366	0	3257	70	0
46	FJ	3366	0	3257	54	0
46	FL	3366	0	3257	76	0
46	FN	3366	0	3257	108	0
46	GB	3366	0	3257	118	0
46	GD	3366	0	3257	53	0
46	GF	3366	0	3257	52	0
46	GH	3366	0	3257	51	0
46	GJ	3366	0	3257	50	0
46	GL	3366	0	3257	76	0
46	GN	3366	0	3257	102	0
46	HB	3366	0	3257	92	0
46	HD	3366	0	3257	60	0
46	HF	3366	0	3257	75	0
46	HH	3366	0	3257	63	0
46	HJ	3366	0	3257	57	0
46	HL	3366	0	3257	54	0
46	HN	3366	0	3257	76	0
46	IB	3366	0	3257	98	0
46	ID	3366	0	3257	65	0
46	IF	3366	0	3257	50	0
46	IH	3366	0	3257	46	0
46	IJ	3366	0	3257	35	0
46	IL	3366	0	3257	64	0
46	IN	3366	0	3257	69	0
46	JB	3366	0	3257	77	0
46	JD	3366	0	3257	51	0
46	JF	3366	0	3257	56	0
46	JH	3366	0	3257	59	0
46	JJ	3366	0	3257	56	0
46	JL	3366	0	3257	47	0
46	JN	3366	0	3257	70	0
46	KB	3366	0	3257	68	0
46	KD	3366	0	3257	50	0
46	KF	3366	0	3257	67	0
46	KH	3366	0	3257	54	0
46	KJ	3366	0	3257	56	0
46	KL	3366	0	3257	47	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	KN	3366	0	3257	53	0
46	LB	3366	0	3257	85	0
46	LD	3366	0	3257	63	0
46	LF	3366	0	3257	64	0
46	LH	3366	0	3257	56	0
46	LJ	3366	0	3257	62	0
46	LL	3366	0	3257	68	0
46	LN	3366	0	3257	74	0
46	MB	3366	0	3257	84	0
46	MD	3366	0	3257	31	0
46	MF	3366	0	3257	71	0
46	MH	3366	0	3257	56	0
46	MJ	3366	0	3257	76	0
46	ML	3366	0	3257	64	0
46	MN	3366	0	3257	76	0
46	NB	3304	0	3197	86	0
46	ND	3366	0	3257	97	0
46	NF	3304	0	3197	65	0
46	NH	3366	0	3257	100	0
46	NJ	3304	0	3197	59	0
46	NL	3366	0	3257	75	0
46	NN	3304	0	3197	103	0
46	OB	3366	0	3257	123	0
46	OD	3366	0	3257	70	0
46	OF	3366	0	3257	72	0
46	OH	3366	0	3257	66	0
46	OJ	3366	0	3257	56	0
46	OL	3366	0	3257	70	0
46	ON	3366	0	3257	79	0
46	PB	3366	0	3257	106	0
46	PD	3366	0	3257	77	0
46	PF	3366	0	3257	57	0
46	PH	3366	0	3257	62	0
46	PJ	3366	0	3257	73	0
46	PL	3366	0	3257	54	0
46	PN	3366	0	3257	98	0
46	QB	3366	0	3257	86	0
46	QD	3366	0	3257	84	0
46	QF	3366	0	3257	75	0
46	QH	3366	0	3257	66	0
46	QJ	3366	0	3257	75	0
46	QL	3366	0	3257	100	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	QN	3366	0	3257	44	0
46	RB	3366	0	3257	103	0
46	RD	3366	0	3257	85	0
46	RF	3366	0	3257	89	0
46	RH	3366	0	3257	73	0
46	RJ	3366	0	3257	83	0
46	RL	3366	0	3257	99	0
46	RN	3366	0	3257	49	0
46	SB	3366	0	3257	90	0
46	SD	3366	0	3257	82	0
46	SF	3366	0	3257	66	0
46	SH	3366	0	3257	75	0
46	SJ	3366	0	3257	85	0
46	SL	3366	0	3257	99	0
46	SN	3366	0	3257	70	0
46	TB	3366	0	3257	100	0
46	TD	3366	0	3257	77	0
46	TF	3366	0	3257	76	0
46	TH	3366	0	3257	77	0
46	TJ	3366	0	3257	81	0
46	TL	3366	0	3257	97	0
46	TN	3366	0	3257	88	0
46	UB	3366	0	3257	102	0
46	UD	3366	0	3257	77	0
46	UF	3366	0	3257	65	0
46	UH	3366	0	3257	77	0
46	UJ	3366	0	3257	88	0
46	UL	3366	0	3257	69	0
46	UN	3366	0	3257	117	0
46	VB	3366	0	3257	84	0
46	VD	3366	0	3257	70	0
46	VF	3366	0	3257	66	0
46	VH	3366	0	3257	77	0
46	VJ	3366	0	3257	63	0
46	VL	3366	0	3257	91	0
46	VN	3366	0	3257	116	0
46	WB	3366	0	3257	77	0
46	WD	3366	0	3257	60	0
46	WF	3366	0	3257	45	0
46	WH	3366	0	3257	73	0
46	WJ	3366	0	3257	57	0
46	WL	3366	0	3257	66	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
46	WN	3366	0	3257	91	0
47	AA	32	0	12	2	0
47	AC	32	0	12	1	0
47	AE	32	0	12	0	0
47	AG	32	0	12	0	0
47	AI	32	0	12	0	0
47	AK	32	0	12	1	0
47	AM	32	0	12	2	0
47	BA	32	0	12	2	0
47	BC	32	0	12	0	0
47	BE	32	0	12	2	0
47	BG	32	0	12	0	0
47	BI	32	0	12	0	0
47	BK	32	0	12	2	0
47	BM	32	0	12	1	0
47	CA	32	0	12	4	0
47	CC	32	0	12	1	0
47	CE	32	0	12	2	0
47	CG	32	0	12	2	0
47	CI	32	0	12	3	0
47	CK	32	0	12	2	0
47	CM	32	0	12	1	0
47	DA	32	0	12	2	0
47	DC	32	0	12	1	0
47	DE	32	0	12	2	0
47	DG	32	0	12	1	0
47	DI	32	0	12	2	0
47	DK	32	0	12	2	0
47	DM	32	0	12	1	0
47	EA	32	0	12	3	0
47	EC	32	0	12	2	0
47	EE	32	0	12	1	0
47	EG	32	0	12	2	0
47	EI	32	0	12	2	0
47	EK	32	0	12	2	0
47	EM	32	0	12	2	0
47	FA	32	0	12	0	0
47	FC	32	0	12	1	0
47	FE	32	0	12	1	0
47	FG	32	0	12	0	0
47	FI	32	0	12	0	0
47	FK	32	0	12	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
47	FM	32	0	12	5	0
47	GA	32	0	12	3	0
47	GC	32	0	12	0	0
47	GE	32	0	12	0	0
47	GG	32	0	12	1	0
47	GI	32	0	12	0	0
47	GK	32	0	12	0	0
47	GM	32	0	12	3	0
47	HA	32	0	12	0	0
47	HC	32	0	12	2	0
47	HE	32	0	12	0	0
47	HG	32	0	12	0	0
47	HI	32	0	12	1	0
47	HK	32	0	12	1	0
47	HM	32	0	12	1	0
47	IA	32	0	12	0	0
47	IC	32	0	12	0	0
47	IE	32	0	12	0	0
47	IG	32	0	12	1	0
47	II	32	0	12	1	0
47	IK	32	0	12	0	0
47	IM	32	0	12	0	0
47	JA	32	0	12	2	0
47	JC	32	0	12	2	0
47	JE	32	0	12	0	0
47	JG	32	0	12	1	0
47	JI	32	0	12	2	0
47	JK	32	0	12	0	0
47	JM	32	0	12	5	0
47	KA	32	0	12	1	0
47	KC	32	0	12	0	0
47	KE	32	0	12	1	0
47	KG	32	0	12	1	0
47	KI	32	0	12	0	0
47	KK	32	0	12	0	0
47	KM	32	0	12	0	0
47	LA	32	0	12	3	0
47	LC	32	0	12	2	0
47	LE	32	0	12	0	0
47	LG	32	0	12	0	0
47	LI	32	0	12	2	0
47	LK	32	0	12	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
47	LM	32	0	12	2	0
47	MA	32	0	12	1	0
47	MC	32	0	12	0	0
47	ME	32	0	12	0	0
47	MG	32	0	12	0	0
47	MI	32	0	12	0	0
47	MK	32	0	12	0	0
47	MM	32	0	12	0	0
47	NA	32	0	12	2	0
47	NC	32	0	12	0	0
47	NE	32	0	12	2	0
47	NG	32	0	12	0	0
47	NI	32	0	12	3	0
47	NK	32	0	12	0	0
47	NM	32	0	12	1	0
47	OA	32	0	12	4	0
47	OC	32	0	12	0	0
47	OE	32	0	12	2	0
47	OG	32	0	12	1	0
47	OI	32	0	12	1	0
47	OK	32	0	12	1	0
47	OM	32	0	12	3	0
47	PA	32	0	12	3	0
47	PC	32	0	12	1	0
47	PE	32	0	12	3	0
47	PG	32	0	12	3	0
47	PI	32	0	12	4	0
47	PK	32	0	12	3	0
47	PM	32	0	12	1	0
47	QA	32	0	12	2	0
47	QC	32	0	12	3	0
47	QE	32	0	12	2	0
47	QG	32	0	12	2	0
47	QI	32	0	12	3	0
47	QK	32	0	12	2	0
47	QM	32	0	12	2	0
47	RA	32	0	12	1	0
47	RC	32	0	12	2	0
47	RE	32	0	12	2	0
47	RG	32	0	12	3	0
47	RI	32	0	12	3	0
47	RK	32	0	12	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
47	RM	32	0	12	0	0
47	SA	32	0	12	5	0
47	SC	32	0	12	1	0
47	SE	32	0	12	3	0
47	SG	32	0	12	1	0
47	SI	32	0	12	2	0
47	SK	32	0	12	1	0
47	SM	32	0	12	1	0
47	TA	32	0	12	1	0
47	TC	32	0	12	0	0
47	TE	32	0	12	0	0
47	TG	32	0	12	1	0
47	TI	32	0	12	1	0
47	TK	32	0	12	1	0
47	TM	32	0	12	0	0
47	UA	32	0	12	2	0
47	UC	32	0	12	2	0
47	UE	32	0	12	2	0
47	UG	32	0	12	2	0
47	UI	32	0	12	3	0
47	UK	32	0	12	4	0
47	UM	32	0	12	3	0
47	VA	32	0	12	2	0
47	VC	32	0	12	1	0
47	VE	32	0	12	0	0
47	VG	32	0	12	0	0
47	VI	32	0	12	1	0
47	VK	32	0	12	2	0
47	VM	32	0	12	3	0
47	WA	32	0	12	3	0
47	WC	32	0	12	0	0
47	WE	32	0	12	1	0
47	WG	32	0	12	1	0
47	WI	32	0	12	1	0
47	WK	32	0	12	2	0
47	WM	32	0	12	3	0
48	AA	1	0	0	0	0
48	AC	1	0	0	0	0
48	AE	1	0	0	0	0
48	AG	1	0	0	0	0
48	AI	1	0	0	0	0
48	AL	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	AM	1	0	0	0	0
48	BB	1	0	0	0	0
48	BC	1	0	0	0	0
48	BE	1	0	0	0	0
48	BG	1	0	0	0	0
48	BI	1	0	0	0	0
48	BK	1	0	0	0	0
48	BM	1	0	0	0	0
48	CA	1	0	0	0	0
48	CC	1	0	0	0	0
48	CE	1	0	0	0	0
48	CG	1	0	0	0	0
48	CI	1	0	0	0	0
48	CK	1	0	0	0	0
48	CM	1	0	0	0	0
48	DA	1	0	0	0	0
48	DC	1	0	0	0	0
48	DE	1	0	0	0	0
48	DG	1	0	0	0	0
48	DI	1	0	0	0	0
48	DK	1	0	0	0	0
48	DM	1	0	0	0	0
48	EA	1	0	0	0	0
48	EC	1	0	0	0	0
48	EE	1	0	0	0	0
48	EG	1	0	0	0	0
48	EI	1	0	0	0	0
48	EK	1	0	0	0	0
48	EM	1	0	0	0	0
48	FA	1	0	0	0	0
48	FC	1	0	0	0	0
48	FE	1	0	0	0	0
48	FG	1	0	0	0	0
48	FI	1	0	0	0	0
48	FK	1	0	0	0	0
48	FM	1	0	0	0	0
48	GB	1	0	0	0	0
48	GC	1	0	0	0	0
48	GE	1	0	0	0	0
48	GG	1	0	0	0	0
48	GI	1	0	0	0	0
48	GK	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	GM	1	0	0	0	0
48	HA	1	0	0	0	0
48	HC	1	0	0	0	0
48	HE	1	0	0	0	0
48	HG	1	0	0	0	0
48	HI	1	0	0	0	0
48	HK	1	0	0	0	0
48	HM	1	0	0	0	0
48	IA	1	0	0	0	0
48	IC	1	0	0	0	0
48	IE	1	0	0	0	0
48	IG	1	0	0	0	0
48	II	1	0	0	0	0
48	IK	1	0	0	0	0
48	IM	1	0	0	0	0
48	JA	1	0	0	0	0
48	JC	1	0	0	0	0
48	JE	1	0	0	0	0
48	JG	1	0	0	0	0
48	JI	1	0	0	0	0
48	JK	1	0	0	0	0
48	JM	1	0	0	0	0
48	KA	1	0	0	0	0
48	KC	1	0	0	0	0
48	KE	1	0	0	0	0
48	KG	1	0	0	0	0
48	KI	1	0	0	0	0
48	KK	1	0	0	0	0
48	KM	1	0	0	0	0
48	LA	1	0	0	0	0
48	LC	1	0	0	0	0
48	LE	1	0	0	0	0
48	LG	1	0	0	0	0
48	LI	1	0	0	0	0
48	LK	1	0	0	0	0
48	LM	1	0	0	0	0
48	MA	1	0	0	0	0
48	MC	1	0	0	0	0
48	ME	1	0	0	0	0
48	MG	1	0	0	0	0
48	MI	1	0	0	0	0
48	MK	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	MM	1	0	0	0	0
48	NB	1	0	0	0	0
48	NC	1	0	0	0	0
48	NE	1	0	0	0	0
48	NG	1	0	0	0	0
48	NI	1	0	0	0	0
48	NK	1	0	0	0	0
48	NM	1	0	0	0	0
48	OA	1	0	0	0	0
48	OC	1	0	0	0	0
48	OE	1	0	0	0	0
48	OG	1	0	0	0	0
48	OI	1	0	0	0	0
48	OK	1	0	0	0	0
48	OM	1	0	0	0	0
48	PA	1	0	0	0	0
48	PC	1	0	0	0	0
48	PE	1	0	0	0	0
48	PG	1	0	0	0	0
48	PI	1	0	0	0	0
48	PK	1	0	0	0	0
48	PM	1	0	0	0	0
48	QA	1	0	0	0	0
48	QC	1	0	0	0	0
48	QE	1	0	0	0	0
48	QG	1	0	0	0	0
48	QI	1	0	0	0	0
48	QK	1	0	0	0	0
48	QM	1	0	0	0	0
48	RA	1	0	0	0	0
48	RC	1	0	0	0	0
48	RE	1	0	0	0	0
48	RF	1	0	0	0	0
48	RI	1	0	0	0	0
48	RK	1	0	0	0	0
48	RM	1	0	0	0	0
48	SA	1	0	0	0	0
48	SB	1	0	0	0	0
48	SE	1	0	0	0	0
48	SG	1	0	0	0	0
48	SI	1	0	0	0	0
48	SK	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	SM	1	0	0	0	0
48	TA	1	0	0	0	0
48	TC	1	0	0	0	0
48	TE	1	0	0	0	0
48	TG	1	0	0	0	0
48	TI	1	0	0	0	0
48	TK	1	0	0	0	0
48	TM	1	0	0	0	0
48	UA	1	0	0	0	0
48	UC	1	0	0	0	0
48	UE	1	0	0	0	0
48	UG	1	0	0	0	0
48	UI	1	0	0	0	0
48	UK	1	0	0	0	0
48	UM	1	0	0	0	0
48	VA	1	0	0	0	0
48	VC	1	0	0	0	0
48	VE	1	0	0	0	0
48	VG	1	0	0	0	0
48	VI	1	0	0	0	0
48	VK	1	0	0	0	0
48	VM	1	0	0	0	0
48	WA	1	0	0	0	0
48	WC	1	0	0	0	0
48	WE	1	0	0	0	0
48	WG	1	0	0	0	0
48	WI	1	0	0	0	0
48	WK	1	0	0	0	0
48	WM	1	0	0	0	0
49	AB	28	0	12	0	0
49	AD	28	0	12	1	0
49	AF	28	0	12	1	0
49	AH	28	0	12	0	0
49	AJ	28	0	12	1	0
49	AL	28	0	12	0	0
49	AN	28	0	12	0	0
49	BB	28	0	12	0	0
49	BD	28	0	12	1	0
49	BF	28	0	12	2	0
49	BH	28	0	12	1	0
49	BJ	28	0	12	1	0
49	BL	28	0	12	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	BN	28	0	12	1	0
49	CB	28	0	12	3	0
49	CD	28	0	12	1	0
49	CF	28	0	12	5	0
49	CH	28	0	12	1	0
49	CJ	28	0	12	1	0
49	CL	28	0	12	1	0
49	CN	28	0	12	1	0
49	DB	28	0	12	1	0
49	DD	28	0	12	0	0
49	DF	28	0	12	0	0
49	DH	28	0	12	0	0
49	DJ	28	0	12	1	0
49	DL	28	0	12	0	0
49	DN	28	0	12	1	0
49	EB	28	0	12	2	0
49	ED	28	0	12	1	0
49	EF	28	0	12	0	0
49	EH	28	0	12	2	0
49	EJ	28	0	12	0	0
49	EL	28	0	12	0	0
49	EN	28	0	12	0	0
49	FB	28	0	12	0	0
49	FD	28	0	12	2	0
49	FF	28	0	12	0	0
49	FH	28	0	12	2	0
49	FJ	28	0	12	0	0
49	FL	28	0	12	0	0
49	FN	28	0	12	1	0
49	GB	28	0	12	0	0
49	GD	28	0	12	2	0
49	GF	28	0	12	2	0
49	GH	28	0	12	2	0
49	GJ	28	0	12	1	0
49	GL	28	0	12	1	0
49	GN	28	0	12	0	0
49	HB	28	0	12	0	0
49	HD	28	0	12	2	0
49	HF	28	0	12	1	0
49	HH	28	0	12	1	0
49	HJ	28	0	12	0	0
49	HL	28	0	12	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	HN	28	0	12	2	0
49	IB	28	0	12	0	0
49	ID	28	0	12	1	0
49	IF	28	0	12	1	0
49	IH	28	0	12	0	0
49	IJ	28	0	12	0	0
49	IL	28	0	12	0	0
49	IN	28	0	12	0	0
49	JB	28	0	12	0	0
49	JD	28	0	12	0	0
49	JF	28	0	12	2	0
49	JH	28	0	12	3	0
49	JJ	28	0	12	0	0
49	JL	28	0	12	0	0
49	JN	28	0	12	2	0
49	KB	28	0	12	0	0
49	KD	28	0	12	0	0
49	KF	28	0	12	0	0
49	KH	28	0	12	0	0
49	KJ	28	0	12	0	0
49	KL	28	0	12	0	0
49	KN	28	0	12	0	0
49	LB	28	0	12	0	0
49	LD	28	0	12	0	0
49	LF	28	0	12	1	0
49	LH	28	0	12	0	0
49	LJ	28	0	12	0	0
49	LL	28	0	12	0	0
49	LN	28	0	12	2	0
49	MB	28	0	12	0	0
49	MD	28	0	12	0	0
49	MF	28	0	12	1	0
49	MH	28	0	12	0	0
49	MJ	28	0	12	0	0
49	ML	28	0	12	0	0
49	MN	28	0	12	0	0
49	NB	28	0	12	1	0
49	ND	28	0	12	0	0
49	NF	28	0	12	0	0
49	NH	28	0	12	0	0
49	NJ	28	0	12	1	0
49	NL	28	0	12	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	NN	28	0	12	0	0
49	OB	28	0	12	2	0
49	OD	28	0	12	0	0
49	OF	28	0	12	1	0
49	OH	28	0	12	0	0
49	OJ	28	0	12	1	0
49	OL	28	0	12	1	0
49	ON	28	0	12	1	0
49	PB	28	0	12	1	0
49	PD	28	0	12	0	0
49	PF	28	0	12	1	0
49	PH	28	0	12	0	0
49	PJ	28	0	12	4	0
49	PL	28	0	12	1	0
49	PN	28	0	12	2	0
49	QB	28	0	12	2	0
49	QD	28	0	12	0	0
49	QF	28	0	12	3	0
49	QH	28	0	12	1	0
49	QJ	28	0	12	1	0
49	QL	28	0	12	0	0
49	QN	28	0	12	0	0
49	RB	28	0	12	0	0
49	RD	28	0	12	1	0
49	RF	28	0	12	0	0
49	RH	28	0	12	0	0
49	RJ	28	0	12	0	0
49	RL	28	0	12	0	0
49	RN	28	0	12	0	0
49	SB	28	0	12	0	0
49	SD	28	0	12	0	0
49	SF	28	0	12	0	0
49	SH	28	0	12	0	0
49	SJ	28	0	12	0	0
49	SL	28	0	12	0	0
49	SN	28	0	12	2	0
49	TB	28	0	12	0	0
49	TD	28	0	12	1	0
49	TF	28	0	12	1	0
49	TH	28	0	12	1	0
49	TJ	28	0	12	0	0
49	TL	28	0	12	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
49	TN	28	0	12	1	0
49	UB	28	0	12	0	0
49	UD	28	0	12	0	0
49	UF	28	0	12	3	0
49	UH	28	0	12	2	0
49	UJ	28	0	12	1	0
49	UL	28	0	12	0	0
49	UN	28	0	12	0	0
49	VB	28	0	12	1	0
49	VD	28	0	12	2	0
49	VF	28	0	12	4	0
49	VH	28	0	12	2	0
49	VJ	28	0	12	1	0
49	VL	28	0	12	3	0
49	VN	28	0	12	0	0
49	WB	28	0	12	0	0
49	WD	28	0	12	1	0
49	WF	28	0	12	1	0
49	WH	28	0	12	1	0
49	WJ	28	0	12	2	0
49	WL	28	0	12	2	0
49	WN	28	0	12	1	0
All	All	1324599	0	1283181	24051	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 9.

All (24051) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1V:122:LYS:HE2	46:LL:390:ARG:HH12	1.30	0.97
15:3X:49:ILE:HD11	45:MM:282:TYR:HD2	1.30	0.95
46:NH:391:ARG:HE	46:NH:393:ALA:HB3	1.33	0.94
21:2L:544:LYS:HA	21:2L:578:ASN:HD22	1.33	0.94
45:CA:261:PRO:HD2	45:CA:262:TYR:H	1.32	0.94
16:2B:17:GLN:HE22	16:2B:60:LEU:HD12	1.33	0.93
36:5A:20:LEU:HD12	36:5A:21:GLN:H	1.34	0.92
4:0D:81:ARG:HH12	46:EB:357:PRO:HD2	1.13	0.92
46:EN:200:MET:HG2	46:EN:266:PHE:HB2	1.52	0.91
19:1J:54:ASN:HA	45:IC:221:ARG:HH21	1.35	0.91
46:ND:391:ARG:HE	46:ND:393:ALA:HB3	1.34	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:IM:261:PRO:HD2	45:IM:262:TYR:H	1.37	0.90
46:CN:200:MET:HG2	46:CN:266:PHE:HB2	1.54	0.89
21:3L:45:ARG:HG3	46:BB:362:LYS:HE3	1.52	0.89
46:CD:207:LEU:HB3	46:CD:225:LEU:HD22	1.54	0.89
45:BA:88:HIS:HB3	45:BA:91:GLN:HE22	1.35	0.89
46:NB:164:MET:HB2	46:NB:197:ASP:H	1.37	0.89
46:DJ:285:THR:HG22	46:DJ:287:PRO:HD2	1.55	0.88
45:VA:89:PRO:HD3	45:WA:280:LYS:HD2	1.55	0.88
45:UM:89:PRO:HD3	45:VK:280:LYS:HE3	1.56	0.87
16:2B:75:ASN:H	16:2B:79:GLN:HE22	1.18	0.87
46:OB:207:LEU:HB3	46:OB:225:LEU:HD22	1.56	0.87
46:NL:391:ARG:HE	46:NL:393:ALA:HB3	1.38	0.87
11:2S:97:ARG:HH21	46:MJ:262:ARG:HE	1.21	0.86
11:3S:47:LYS:HG3	11:3S:48:ILE:HD12	1.56	0.86
36:5D:87:ARG:HH12	45:NM:363:VAL:HG22	1.39	0.86
45:NK:279:GLU:HG2	45:NK:280:LYS:H	1.40	0.86
13:2U:536:VAL:HA	13:2U:552:GLY:HA2	1.56	0.86
16:2B:170:TYR:HH	16:2B:193:TRP:HE1	1.22	0.85
14:3V:37:THR:HG23	45:MA:214:ARG:HH21	1.41	0.85
45:WM:155:GLU:HG3	45:WM:156:ARG:HE	1.42	0.85
46:CF:325:GLU:OE2	45:CG:221:ARG:NH1	2.10	0.85
46:NH:3:GLU:HG3	46:NH:62:ARG:HH12	1.41	0.85
45:RM:2:ARG:NH1	45:RM:3:GLU:O	2.09	0.85
36:5A:142:GLN:HE22	46:ND:320:ARG:HD2	1.42	0.84
14:2V:45:ARG:O	14:2V:47:GLY:N	2.11	0.84
46:DH:285:THR:HG22	46:DH:287:PRO:HD2	1.59	0.84
46:JN:217:LEU:HG	46:JN:220:PRO:HD3	1.58	0.84
45:RM:99:ALA:HA	45:RM:105:ARG:HE	1.41	0.84
46:CN:119:VAL:HG23	46:CN:122:LYS:HE3	1.60	0.84
45:PA:427:ALA:HA	45:PA:430:LYS:HE3	1.60	0.84
45:QA:311:LYS:HD2	45:QA:342:GLN:HE22	1.42	0.84
45:QK:352:LYS:HZ3	46:QL:179:VAL:HG22	1.43	0.84
24:2P:387:LEU:HG	24:2P:391:ARG:NH1	1.93	0.84
46:OH:319:GLY:HA2	46:OH:357:PRO:HD3	1.59	0.84
46:EJ:73:MET:HE1	46:EJ:92:PHE:HB3	1.59	0.83
45:FK:254:GLU:HG2	46:FN:98:GLY:HA2	1.60	0.83
46:OH:248:SER:HA	46:OH:252:LYS:HD3	1.58	0.83
21:1L:308:ARG:HH12	45:BG:367:ASP:HA	1.40	0.83
46:AB:10:GLY:O	46:AB:14:ASN:ND2	2.12	0.83
45:PK:288:VAL:HG11	45:PK:327:ASP:HB3	1.58	0.83
46:UL:2:ARG:HH22	45:UM:71:GLU:HG2	1.44	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2T:74:ILE:HD11	12:2T:104:HIS:HD2	1.43	0.83
45:CA:316:SER:HA	45:CA:352:LYS:HB2	1.61	0.83
46:QJ:285:THR:HG22	46:QJ:287:PRO:HD2	1.61	0.83
46:SL:163:ILE:HD12	46:SL:250:LEU:HD22	1.61	0.83
45:TM:258:ASN:HB3	45:TM:352:LYS:HE2	1.58	0.83
10:5Q:60:THR:HG22	10:5Q:62:PRO:HD2	1.59	0.83
45:TG:280:LYS:HA	45:TG:283:HIS:HD2	1.44	0.83
4:0D:81:ARG:NH1	46:EB:357:PRO:HD2	1.92	0.82
46:CD:273:LEU:H	46:CD:292:GLN:HE22	1.27	0.82
45:IG:326:LYS:HD3	46:IJ:220:PRO:HD2	1.59	0.82
10:0Q:72:LYS:NZ	35:4S:71:ARG:O	2.11	0.82
14:2V:198:PHE:HB3	14:2V:265:VAL:HG13	1.62	0.82
45:CE:292:THR:HG21	45:CE:331:SER:HB3	1.61	0.82
45:HK:326:LYS:HE3	46:HN:212:PHE:HE2	1.43	0.82
46:IB:207:LEU:HB3	46:IB:225:LEU:HD22	1.61	0.82
24:2P:410:TRP:HE1	46:TL:279:GLN:HB3	1.44	0.82
45:CA:268:MET:HG3	45:CA:380:ASN:HB3	1.59	0.82
46:CB:285:THR:HG22	46:CB:287:PRO:HD2	1.60	0.82
37:5E:123:ARG:HG3	45:OA:372:MET:HE1	1.62	0.82
45:QM:285:GLN:HE22	45:QM:287:SER:HB3	1.43	0.82
19:1J:263:PHE:HD2	45:II:282:TYR:HD1	1.24	0.82
45:GK:220:GLU:HG2	45:GK:221:ARG:HG3	1.60	0.82
23:2O:356:ARG:HH21	23:2O:357:ARG:HH11	1.28	0.82
46:DH:178:THR:HB	46:DH:181:GLU:HG3	1.60	0.81
46:FB:299:MET:HG3	46:FB:301:CYS:H	1.44	0.81
46:UF:324:LYS:HE3	45:UG:222:PRO:HG2	1.62	0.81
23:2O:128:ARG:HA	23:2O:131:GLU:HG3	1.61	0.81
1:3A:104:ARG:HG3	34:6R:59:MET:H	1.46	0.81
26:2W:218:GLU:HA	26:2W:221:LYS:HE2	1.61	0.81
46:VJ:217:LEU:HG	46:VJ:220:PRO:HD3	1.62	0.81
45:QA:261:PRO:HD2	45:QA:262:TYR:H	1.44	0.81
46:WJ:276:ARG:HA	46:WJ:279:GLN:HE22	1.44	0.81
1:3A:138:TRP:HZ3	45:AM:81:GLY:HA2	1.46	0.81
45:PG:89:PRO:HG3	45:QG:280:LYS:HE3	1.61	0.81
46:TL:324:LYS:HE2	45:TM:222:PRO:HG2	1.63	0.81
3:1C:80:ARG:HH22	46:EL:360:GLY:H	1.28	0.81
46:QD:376:GLU:HB3	46:QD:380:ARG:HH22	1.46	0.81
22:2M:63:ILE:HG22	22:2M:72:LYS:HB2	1.61	0.80
46:BB:284:LEU:HD12	46:BB:363:MET:HB2	1.63	0.80
45:FG:396:ASP:OD1	45:FG:422:ARG:NH1	2.14	0.80
46:UN:178:THR:HG22	46:UN:180:VAL:H	1.45	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VG:210:TYR:HH	46:VH:323:THR:HG1	1.26	0.80
46:AD:67:ASP:OD1	46:AD:68:LEU:N	2.14	0.80
30:2H:193:LEU:HD11	46:AD:362:LYS:HD3	1.63	0.80
45:HA:340:THR:HG23	45:HA:341:ILE:HD12	1.61	0.80
16:2B:60:LEU:HD22	45:LK:82:THR:HB	1.63	0.80
5:2E:168:TYR:HH	5:2E:189:TRP:HE1	1.26	0.80
45:AE:11:GLN:HG3	45:AE:74:VAL:HG11	1.62	0.80
45:KI:251:ASP:H	45:KI:254:GLU:HB2	1.44	0.80
10:1Q:72:LYS:NZ	11:1S:140:ARG:O	2.15	0.80
45:KK:392:ASP:OD1	45:KK:422:ARG:NH1	2.15	0.80
13:1U:536:VAL:HA	13:1U:552:GLY:HA2	1.62	0.80
45:CM:226:ASN:ND2	45:CM:367:ASP:OD1	2.15	0.80
46:DN:63:ALA:O	46:DN:89:ASN:ND2	2.15	0.80
45:GK:288:VAL:HG11	45:GK:327:ASP:HB3	1.62	0.80
46:OJ:226:ASN:HD21	49:OJ:501:GDP:HN1	1.30	0.80
45:UG:288:VAL:HG11	45:UG:327:ASP:HB3	1.64	0.80
4:1D:164:PRO:HD2	46:EF:40:SER:HA	1.64	0.80
45:VM:75:ILE:HG12	45:VM:79:ARG:HH12	1.46	0.80
46:UB:164:MET:HB3	46:UB:197:ASP:H	1.47	0.79
46:VJ:207:LEU:HB3	46:VJ:225:LEU:HD22	1.61	0.79
15:1X:49:ILE:HD11	45:ME:282:TYR:HB2	1.63	0.79
45:EM:338:LYS:NZ	45:EM:340:THR:OG1	2.15	0.79
14:1V:50:ASN:HB3	14:1V:57:LEU:HD13	1.64	0.79
45:FI:271:SER:OG	45:FI:301:MET:SD	2.41	0.79
45:JE:89:PRO:HD3	45:KE:283:HIS:HD1	1.47	0.79
46:CB:386:THR:OG1	46:CB:390:ARG:NH1	2.16	0.79
46:NH:372:THR:HA	46:NH:422:TYR:HE2	1.46	0.79
46:RD:8:GLN:HE22	46:RD:17:GLY:HA3	1.47	0.79
46:UD:130:LEU:HB3	46:UD:162:ARG:HE	1.47	0.79
46:VD:128:ASP:OD1	46:VD:129:CYS:N	2.16	0.79
46:BF:226:ASN:HD21	49:BF:501:GDP:HN1	1.27	0.79
46:DN:273:LEU:H	46:DN:292:GLN:HE22	1.30	0.79
45:KK:174:SER:OG	45:KK:207:GLU:OE1	2.01	0.79
46:UJ:86:ARG:HD3	46:UJ:87:PRO:HD2	1.64	0.79
46:SH:200:MET:HE2	46:SH:268:ILE:HD13	1.64	0.79
37:5E:172:ASN:HB3	37:5E:176:ASP:HB3	1.63	0.79
45:DM:326:LYS:NZ	46:DN:220:PRO:O	2.15	0.79
46:EL:309:ARG:NH1	46:EL:426:GLN:O	2.16	0.79
45:GM:69:ASP:HB3	45:GM:75:ILE:HD11	1.65	0.79
45:OM:55:GLU:HG3	45:OM:57:GLY:H	1.48	0.79
45:QA:55:GLU:HG3	45:QA:57:GLY:H	1.46	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TK:326:LYS:HD3	46:TL:220:PRO:HD2	1.65	0.79
46:RD:285:THR:HG22	46:RD:287:PRO:HD2	1.66	0.78
46:BB:156:ARG:NH1	46:BB:195:ASN:O	2.16	0.78
46:HJ:324:LYS:NZ	46:HJ:328:GLU:OE1	2.17	0.78
46:HJ:371:SER:O	46:HJ:422:TYR:OH	2.00	0.78
46:OB:86:ARG:HD2	46:PB:282:ARG:HH22	1.46	0.78
4:2D:164:PRO:HD2	46:EJ:40:SER:HA	1.65	0.78
45:AC:188:ILE:HD12	45:AC:425:LEU:HD11	1.64	0.78
45:OI:398:MET:HG2	46:OJ:345:ILE:HG22	1.65	0.78
45:PG:222:PRO:O	46:PH:324:LYS:NZ	2.17	0.78
46:LD:73:MET:HA	46:LD:76:VAL:HG12	1.64	0.78
46:QL:347:ASN:ND2	45:QM:178:SER:OG	2.17	0.78
25:3R:424:ASN:ND2	25:3R:489:ASP:OD2	2.16	0.78
10:5Q:74:PRO:HD2	10:5Q:169:ASP:HA	1.66	0.78
45:EM:254:GLU:OE2	46:EN:99:ASN:ND2	2.16	0.78
46:OB:156:ARG:HH12	46:OB:160:PRO:HA	1.49	0.78
45:PA:288:VAL:HG21	45:PA:327:ASP:HB3	1.65	0.78
46:BD:207:LEU:HB3	46:BD:225:LEU:HD22	1.64	0.78
46:EN:64:ILE:HG13	46:EN:89:ASN:HD22	1.48	0.78
45:HA:288:VAL:HG21	45:HA:327:ASP:HB3	1.65	0.78
45:TG:55:GLU:HG3	45:TG:57:GLY:H	1.48	0.78
46:WL:314:SER:HA	46:WL:350:LYS:HB3	1.64	0.78
46:DD:129:CYS:SG	45:DE:96:LYS:NZ	2.57	0.78
16:2B:201:TYR:O	16:2B:202:VAL:HG13	1.84	0.77
31:3I:198:LEU:O	31:3I:200:GLY:N	2.15	0.77
45:BA:100:ALA:HA	46:BB:252:LYS:HD2	1.67	0.77
46:NB:117:LEU:HD21	46:NB:154:LYS:HE2	1.66	0.77
46:PD:200:MET:HG2	46:PD:266:PHE:HB2	1.66	0.77
46:PJ:226:ASN:HD21	49:PJ:501:GDP:HN1	1.30	0.77
46:RB:64:ILE:HG22	46:RB:89:ASN:HD22	1.48	0.77
13:3U:73:GLY:HA3	13:3U:105:ILE:HD11	1.63	0.77
45:BG:11:GLN:HG3	45:BG:74:VAL:HG11	1.64	0.77
46:LJ:7:ILE:HG22	46:LJ:64:ILE:HB	1.67	0.77
45:VK:288:VAL:HG21	45:VK:327:ASP:HB3	1.65	0.77
46:PH:248:SER:HA	46:PH:252:LYS:HD3	1.65	0.77
46:QB:347:ASN:ND2	45:QC:178:SER:OG	2.18	0.77
46:RB:139:LEU:HD22	46:RB:170:VAL:HG12	1.66	0.77
46:RD:394:PHE:HA	46:RD:397:TRP:CD1	2.18	0.77
45:WA:222:PRO:HD2	46:WB:324:LYS:HZ2	1.49	0.77
13:3U:319:HIS:HE2	13:3U:340:SER:HG	1.26	0.77
13:3U:536:VAL:HA	13:3U:552:GLY:HA2	1.64	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BJ:287:PRO:HA	46:BJ:329:GLN:HE22	1.47	0.77
45:LG:258:ASN:HD22	45:LG:352:LYS:HD2	1.47	0.77
24:2P:382:ASP:O	24:2P:386:GLN:NE2	2.16	0.77
45:FC:55:GLU:HG3	45:FC:57:GLY:H	1.48	0.77
14:0V:24:ARG:HH22	45:MM:430:LYS:HA	1.49	0.77
28:2F:12:GLN:HE22	28:2F:16:LYS:HE3	1.48	0.77
21:2L:668:GLN:NE2	45:CM:367:ASP:OD2	2.18	0.77
45:EM:242:LEU:HD11	45:EM:252:ILE:HD11	1.66	0.77
45:HK:89:PRO:HD3	45:IK:283:HIS:HD1	1.49	0.77
45:PE:178:SER:OG	46:PF:347:ASN:ND2	2.17	0.77
26:1W:69:ASN:HD22	15:4X:140:PRO:HG3	1.50	0.77
46:CH:213:ARG:HH22	46:CH:297:LYS:HB3	1.49	0.77
46:SH:100:ASN:HD22	46:SH:103:LYS:HE2	1.50	0.77
46:WN:314:SER:HA	46:WN:350:LYS:HB2	1.65	0.77
12:2T:132:PRO:HB3	45:MG:123:ARG:HH21	1.50	0.77
13:1U:42:HIS:HD2	13:1U:45:SER:HB3	1.50	0.77
23:3O:239:ILE:HD11	46:UN:279:GLN:H	1.49	0.77
46:LB:70:PRO:O	46:LB:74:ASP:HB2	1.83	0.77
45:NA:90:GLU:HG2	45:NA:121:ARG:HH12	1.48	0.77
45:OI:89:PRO:HD2	45:PI:280:LYS:HZ3	1.50	0.77
46:AN:73:MET:HE1	46:AN:92:PHE:HB3	1.67	0.76
46:FB:238:CYS:SG	46:FB:318:ARG:NH1	2.58	0.76
46:FH:371:SER:O	46:FH:422:TYR:OH	2.02	0.76
46:IJ:371:SER:O	46:IJ:422:TYR:OH	2.03	0.76
46:SL:242:PHE:HB3	46:SL:356:ILE:HD13	1.67	0.76
45:DM:352:LYS:HZ1	46:DN:179:VAL:H	1.33	0.76
45:PE:89:PRO:HD3	45:QE:280:LYS:HE3	1.67	0.76
45:WC:251:ASP:H	45:WC:254:GLU:HB2	1.50	0.76
7:1G:142:LYS:HG2	45:JA:85:GLN:HE21	1.51	0.76
46:AB:242:PHE:HB3	46:AB:356:ILE:HD13	1.67	0.76
46:AN:91:VAL:HG21	46:AN:116:VAL:HG12	1.67	0.76
45:EI:37:PRO:HG2	45:EI:40:ARG:H	1.50	0.76
46:GN:238:CYS:SG	46:GN:239:CYS:N	2.59	0.76
27:2C:218:ARG:HD3	46:KJ:320:ARG:HH11	1.50	0.76
23:2O:214:ILE:HG23	40:6G:87:LYS:HZ3	1.50	0.76
45:CC:292:THR:HG21	45:CC:331:SER:HB2	1.65	0.76
46:ND:3:GLU:HG3	46:ND:62:ARG:HH12	1.50	0.76
46:RJ:324:LYS:HG2	45:RK:222:PRO:HD2	1.66	0.76
2:0B:137:ASN:ND2	22:2M:364:GLU:OE2	2.16	0.76
11:1S:18:ARG:HH12	11:1S:27:VAL:HG21	1.49	0.76
12:1T:128:GLU:HA	45:AC:339:ARG:HH12	1.49	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:5E:211:ASN:HD21	37:5E:216:LYS:HE2	1.50	0.76
45:JG:178:SER:OG	46:JH:347:ASN:ND2	2.18	0.76
45:PM:55:GLU:HG3	45:PM:57:GLY:H	1.49	0.76
45:WC:41:THR:HG22	45:WC:42:ILE:H	1.51	0.76
4:2D:119:LYS:NZ	25:3R:483:ASP:OD1	2.19	0.76
46:DN:150:LEU:HB2	46:DN:154:LYS:HZ3	1.51	0.76
46:TH:242:PHE:HB3	46:TH:356:ILE:HD13	1.67	0.76
45:AK:288:VAL:HG11	45:AK:327:ASP:HB3	1.67	0.76
46:IL:372:THR:HA	46:IL:422:TYR:HE2	1.50	0.76
46:JB:207:LEU:HB3	46:JB:225:LEU:HD22	1.67	0.76
45:PA:55:GLU:HG3	45:PA:57:GLY:H	1.51	0.76
45:QA:2:ARG:NH2	45:QA:131:GLY:O	2.19	0.76
46:SH:252:LYS:HG2	46:SH:350:LYS:HZ2	1.51	0.76
46:VD:218:THR:HG23	46:VD:219:THR:HG23	1.65	0.76
10:2Q:74:PRO:HD2	10:2Q:169:ASP:HA	1.66	0.76
46:CN:299:MET:HG3	46:CN:305:PRO:HG3	1.67	0.76
46:HH:67:ASP:OD1	46:HH:68:LEU:N	2.19	0.76
45:BM:91:GLN:HG2	45:BM:121:ARG:HD2	1.66	0.76
46:DN:387:ALA:HA	46:DN:390:ARG:HH11	1.51	0.76
45:LM:36:MET:HG2	45:LM:38:SER:H	1.51	0.76
45:WE:254:GLU:HG2	46:WH:98:GLY:HA2	1.66	0.76
15:1X:6:GLU:OE1	15:1X:10:ARG:NH1	2.19	0.76
24:2P:391:ARG:HA	24:2P:394:GLN:HE21	1.50	0.76
36:5B:27:LYS:HZ1	36:5B:30:LYS:HG2	1.50	0.76
45:SM:337:THR:O	45:SM:339:ARG:NH1	2.19	0.76
23:2O:193:GLU:OE2	23:2O:197:LYS:NZ	2.20	0.75
45:GM:81:GLY:O	45:GM:84:ARG:NE	2.18	0.75
45:OM:66:VAL:HG23	45:OM:91:GLN:HB2	1.66	0.75
23:2O:381:GLU:O	23:2O:385:GLN:NE2	2.18	0.75
45:AA:31:GLN:HE22	45:AA:37:PRO:HG3	1.50	0.75
45:BC:288:VAL:HG11	45:BC:327:ASP:HB3	1.66	0.75
46:DL:396:HIS:HA	46:DL:399:THR:HG22	1.65	0.75
46:EF:263:LEU:HD22	46:EF:422:TYR:HD1	1.49	0.75
46:EL:117:LEU:HD22	46:EL:154:LYS:HD3	1.69	0.75
46:QD:200:MET:HG2	46:QD:266:PHE:HB2	1.67	0.75
46:TB:242:PHE:HB3	46:TB:356:ILE:HD13	1.69	0.75
12:3T:197:GLN:HG3	12:3T:198:ASP:H	1.52	0.75
23:1O:275:LYS:HD3	45:UA:279:GLU:HB2	1.68	0.75
45:GM:222:PRO:HD2	46:GN:324:LYS:HZ3	1.51	0.75
46:IL:222:TYR:O	46:IL:226:ASN:ND2	2.19	0.75
45:PA:210:TYR:HE2	46:PB:324:LYS:HG3	1.52	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QL:314:SER:HA	46:QL:350:LYS:HB3	1.67	0.75
31:2I:77:GLY:O	31:2I:79:ALA:N	2.18	0.75
36:5D:54:ARG:NH1	36:5D:55:ALA:O	2.18	0.75
46:DN:32:PRO:O	46:DN:83:GLN:NE2	2.19	0.75
46:PN:222:TYR:O	46:PN:226:ASN:ND2	2.20	0.75
46:VF:135:ILE:HG13	46:VF:152:ILE:HD11	1.68	0.75
45:WG:178:SER:OG	46:WH:347:ASN:ND2	2.19	0.75
25:1R:60:LYS:HZ1	30:2H:220:ARG:H	1.35	0.75
46:IN:222:TYR:O	46:IN:226:ASN:ND2	2.20	0.75
45:QE:311:LYS:HG2	45:QE:342:GLN:HE22	1.51	0.75
46:RD:5:VAL:HG12	46:RD:62:ARG:HD3	1.68	0.75
45:SM:326:LYS:HG3	46:SN:220:PRO:HD2	1.69	0.75
45:VE:178:SER:OG	46:VF:347:ASN:ND2	2.19	0.75
26:1W:170:THR:HG22	26:1W:171:ASN:H	1.50	0.75
21:3L:179:THR:HG21	45:CA:365:GLY:HA3	1.67	0.75
46:DH:200:MET:HG2	46:DH:266:PHE:HB2	1.69	0.75
45:DM:31:GLN:HE22	45:DM:37:PRO:HB3	1.51	0.75
46:DN:325:GLU:O	46:DN:329:GLN:NE2	2.20	0.75
46:EN:132:GLY:HA3	46:EN:162:ARG:HH21	1.52	0.75
45:JE:423:GLU:OE1	45:NE:339:ARG:NH2	2.20	0.75
46:TN:46:ARG:NH2	46:TN:48:ASN:OD1	2.17	0.75
45:UM:3:GLU:HB3	45:UM:132:LEU:HA	1.68	0.75
46:UN:32:PRO:O	46:UN:83:GLN:NE2	2.20	0.75
45:VA:254:GLU:HG2	46:VD:98:GLY:HA2	1.67	0.75
46:WL:376:GLU:HB3	46:WL:380:ARG:HH12	1.50	0.75
15:4X:125:GLU:OE1	46:KH:56:GLY:N	2.19	0.75
45:MA:178:SER:OG	46:MB:347:ASN:ND2	2.20	0.75
46:NF:407:GLU:HA	46:NF:410:GLU:HG2	1.67	0.75
46:PF:325:GLU:HA	46:PF:328:GLU:HB3	1.69	0.75
45:QA:261:PRO:HD2	45:QA:262:TYR:N	2.02	0.75
1:1A:39:TYR:HE2	45:ME:78:VAL:HA	1.51	0.75
46:EN:86:ARG:HD3	46:EN:87:PRO:HD2	1.68	0.75
46:FL:242:PHE:HB3	46:FL:356:ILE:HD13	1.69	0.75
46:MH:156:ARG:NH2	46:MH:197:ASP:OD1	2.17	0.75
45:PA:207:GLU:HA	45:PA:210:TYR:HB2	1.68	0.75
45:RG:220:GLU:HB2	45:RG:221:ARG:HH11	1.52	0.75
46:SH:54:ALA:HA	46:TH:283:ALA:HB2	1.69	0.75
20:2K:220:LEU:HA	20:2K:223:ASN:HD22	1.51	0.74
46:BD:60:VAL:HG21	46:BD:86:ARG:HG3	1.69	0.74
45:GC:174:SER:HB3	45:GC:207:GLU:HG3	1.68	0.74
46:TJ:242:PHE:HB3	46:TJ:356:ILE:HD13	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UJ:209:ASP:OD1	46:UJ:213:ARG:NH1	2.19	0.74
46:VH:371:SER:O	46:VH:422:TYR:OH	2.05	0.74
25:2R:410:TRP:HA	25:2R:442:ASN:HB2	1.69	0.74
46:CB:222:TYR:O	46:CB:226:ASN:ND2	2.20	0.74
45:HK:288:VAL:HG11	45:HK:327:ASP:HB3	1.69	0.74
45:KE:178:SER:OG	46:KF:347:ASN:ND2	2.20	0.74
45:OA:98:ASP:O	46:OB:251:ARG:NH2	2.20	0.74
45:PI:292:THR:HG21	45:PI:331:SER:HB3	1.69	0.74
46:SD:238:CYS:SG	46:SD:318:ARG:NH1	2.60	0.74
46:FF:377:MET:SD	46:FF:380:ARG:NH2	2.60	0.74
46:KF:207:LEU:HB3	46:KF:225:LEU:HD22	1.69	0.74
45:LG:55:GLU:HG3	45:LG:57:GLY:H	1.50	0.74
45:PC:178:SER:OG	46:PD:347:ASN:ND2	2.21	0.74
45:QM:69:ASP:HB3	45:QM:75:ILE:HD11	1.68	0.74
45:RM:259:LEU:O	45:RM:380:ASN:ND2	2.20	0.74
45:VC:328:VAL:HG11	45:VC:353:VAL:HG21	1.68	0.74
10:3Q:115:LYS:HG2	10:3Q:116:PRO:HD2	1.69	0.74
45:BM:178:SER:OG	46:BN:347:ASN:ND2	2.20	0.74
45:EM:261:PRO:HD2	45:EM:262:TYR:H	1.49	0.74
45:MG:260:VAL:HB	46:MJ:397:TRP:HH2	1.52	0.74
46:NN:48:ASN:O	46:NN:62:ARG:NH2	2.21	0.74
46:PB:182:PRO:HB3	46:PB:384:GLN:HE22	1.52	0.74
45:PK:173:PRO:O	45:PK:390:ARG:NH2	2.19	0.74
45:QA:75:ILE:HG12	45:QA:79:ARG:HH12	1.50	0.74
46:RD:213:ARG:HH22	46:RD:297:LYS:HB3	1.50	0.74
46:VB:282:ARG:HE	46:VB:283:ALA:H	1.33	0.74
27:2C:225:THR:HG21	27:2C:229:ASN:HD22	1.53	0.74
46:GN:257:LEU:HD11	46:GN:314:SER:HB2	1.68	0.74
46:RB:322:SER:OG	45:RC:221:ARG:NH1	2.20	0.74
46:TJ:213:ARG:HD2	46:TJ:297:LYS:HD2	1.70	0.74
36:5A:167:LYS:NZ	45:NC:278:ALA:O	2.20	0.74
46:IH:222:TYR:O	46:IH:226:ASN:ND2	2.17	0.74
46:LD:222:TYR:O	46:LD:226:ASN:ND2	2.19	0.74
46:ON:248:SER:HA	46:ON:252:LYS:HD2	1.70	0.74
45:DA:54:SER:HB3	45:DA:64:ARG:HH12	1.53	0.74
46:FB:242:PHE:HB3	46:FB:356:ILE:HD13	1.70	0.74
45:HE:178:SER:OG	46:HF:347:ASN:ND2	2.20	0.74
46:LB:135:ILE:HG13	46:LB:152:ILE:HD11	1.69	0.74
46:LF:7:ILE:HG22	46:LF:64:ILE:HB	1.69	0.74
23:3O:362:ARG:O	23:3O:366:ASN:ND2	2.21	0.74
37:5G:172:ASN:HB2	37:5G:176:ASP:HB2	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BI:11:GLN:HG3	45:BI:74:VAL:HG11	1.69	0.74
46:CN:99:ASN:HA	46:CN:142:GLY:H	1.52	0.74
45:DM:98:ASP:O	45:DM:105:ARG:NH1	2.21	0.74
45:GG:89:PRO:HD3	45:HG:283:HIS:HD1	1.53	0.74
46:GJ:222:TYR:O	46:GJ:226:ASN:ND2	2.17	0.74
45:OC:55:GLU:HG3	45:OC:57:GLY:H	1.52	0.74
46:QB:51:TYR:HB3	46:QB:59:TYR:HB3	1.69	0.74
45:WG:41:THR:HG22	45:WG:42:ILE:H	1.53	0.74
46:CJ:371:SER:O	46:CJ:422:TYR:OH	2.06	0.74
46:NN:91:VAL:HG21	46:NN:116:VAL:HG12	1.70	0.74
46:WJ:200:MET:HG2	46:WJ:266:PHE:HB2	1.69	0.74
45:EK:89:PRO:HG2	45:FI:280:LYS:HG2	1.70	0.74
45:FA:69:ASP:HB3	45:FA:75:ILE:HD11	1.70	0.74
45:FA:221:ARG:NH2	46:FB:322:SER:OG	2.21	0.74
45:FE:71:GLU:OE1	46:FF:247:ASN:ND2	2.20	0.74
45:HG:288:VAL:HG11	45:HG:327:ASP:HB3	1.68	0.74
45:NA:91:GLN:HG2	45:NA:121:ARG:HH11	1.52	0.74
45:PG:178:SER:OG	46:PH:347:ASN:ND2	2.20	0.74
45:QM:108:TYR:O	45:QM:112:LYS:NZ	2.21	0.74
36:5A:59:TYR:O	46:KB:390:ARG:NH2	2.21	0.73
46:CB:347:ASN:ND2	45:CC:178:SER:OG	2.21	0.73
45:EE:55:GLU:HG3	45:EE:57:GLY:H	1.52	0.73
46:MN:372:THR:HG21	46:MN:426:GLN:HB2	1.69	0.73
46:PN:207:LEU:HB3	46:PN:225:LEU:HD12	1.69	0.73
46:SL:97:ALA:HB3	46:SL:143:THR:HB	1.70	0.73
46:TD:318:ARG:HD3	46:TD:358:PRO:HG3	1.69	0.73
46:VD:371:SER:O	46:VD:422:TYR:OH	2.05	0.73
23:2O:399:ILE:HG22	23:2O:403:LYS:HE3	1.70	0.73
45:EK:254:GLU:OE2	46:EL:99:ASN:ND2	2.20	0.73
46:GF:7:ILE:HG22	46:GF:64:ILE:HB	1.71	0.73
45:IA:101:ASN:HA	45:IA:144:GLY:H	1.52	0.73
45:JC:259:LEU:HD21	45:JC:316:SER:HB2	1.68	0.73
46:RD:68:LEU:HB3	46:RD:96:GLY:HA2	1.69	0.73
46:SD:163:ILE:HD11	46:SD:251:ARG:HH11	1.53	0.73
46:SH:371:SER:O	46:SH:422:TYR:OH	2.05	0.73
45:VA:288:VAL:HG11	45:VA:327:ASP:HB3	1.70	0.73
46:VN:375:GLN:HB3	46:VN:422:TYR:HE2	1.51	0.73
45:WE:9:VAL:HG12	45:WE:68:LEU:HB2	1.70	0.73
45:EC:288:VAL:HG11	45:EC:327:ASP:HB3	1.71	0.73
46:GD:222:TYR:O	46:GD:226:ASN:ND2	2.20	0.73
45:GI:11:GLN:HG3	45:GI:74:VAL:HG11	1.71	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:JB:221:THR:HG23	46:JB:223:GLY:H	1.52	0.73
45:JM:214:ARG:NH2	46:JN:328:GLU:OE2	2.22	0.73
45:LA:36:MET:HG2	45:LA:38:SER:H	1.53	0.73
45:NA:288:VAL:HG21	45:NA:327:ASP:HB3	1.68	0.73
45:PA:320:ARG:NH2	45:PA:358:GLN:OE1	2.17	0.73
45:QE:292:THR:HG21	45:QE:331:SER:HB2	1.69	0.73
45:WC:60:LYS:NZ	45:WC:85:GLN:O	2.20	0.73
45:CC:175:PRO:HG3	45:CC:390:ARG:HH12	1.54	0.73
46:CJ:347:ASN:ND2	45:CK:178:SER:OG	2.21	0.73
45:EE:37:PRO:HG2	45:EE:40:ARG:H	1.52	0.73
45:PK:280:LYS:HZ3	45:PK:283:HIS:HB2	1.52	0.73
46:QF:347:ASN:ND2	45:QG:178:SER:OG	2.21	0.73
45:WI:288:VAL:HG11	45:WI:327:ASP:HB3	1.67	0.73
46:DB:60:VAL:HG21	46:DB:86:ARG:HG2	1.70	0.73
46:DL:207:LEU:HB3	46:DL:225:LEU:HD22	1.71	0.73
45:EA:66:VAL:HA	45:EA:91:GLN:HE22	1.54	0.73
45:HG:55:GLU:HG3	45:HG:57:GLY:H	1.53	0.73
46:IF:222:TYR:O	46:IF:226:ASN:ND2	2.17	0.73
46:NJ:372:THR:HA	46:NJ:422:TYR:HE2	1.51	0.73
46:QB:68:LEU:HB3	46:QB:96:GLY:HA2	1.68	0.73
45:RG:259:LEU:HD21	45:RG:316:SER:HB2	1.68	0.73
26:1W:121:GLU:OE1	46:LF:276:ARG:NH1	2.22	0.73
34:7R:397:SER:OG	46:EB:276:ARG:NH1	2.21	0.73
45:BC:326:LYS:HD2	46:BF:220:PRO:HD2	1.69	0.73
46:HF:27:GLU:OE2	46:HF:241:ARG:NH1	2.21	0.73
46:IN:273:LEU:H	46:IN:292:GLN:HE22	1.36	0.73
45:JK:292:THR:HG21	45:JK:331:SER:HB2	1.71	0.73
46:PN:128:ASP:OD1	46:PN:129:CYS:N	2.21	0.73
46:UB:324:LYS:HE3	45:UC:222:PRO:HG2	1.71	0.73
46:CL:19:LYS:NZ	46:CL:227:HIS:HA	2.04	0.73
45:DC:386:GLU:HG2	45:DC:390:ARG:HH12	1.53	0.73
45:EC:261:PRO:HD2	45:EC:262:TYR:H	1.52	0.73
46:GB:260:PHE:HB2	46:GB:263:LEU:HD13	1.71	0.73
46:ML:73:MET:HA	46:ML:76:VAL:HG12	1.70	0.73
45:RI:88:HIS:NE2	45:SI:284:GLU:OE2	2.22	0.73
46:UD:16:ILE:HD13	46:UD:226:ASN:HD22	1.53	0.73
16:2B:17:GLN:NE2	16:2B:60:LEU:HD12	2.03	0.73
25:3R:59:GLN:HG2	25:3R:61:GLY:H	1.52	0.73
45:II:1:MET:SD	46:IL:94:GLN:NE2	2.62	0.73
46:LH:222:TYR:O	46:LH:226:ASN:ND2	2.20	0.73
46:UH:347:ASN:ND2	45:UI:178:SER:OG	2.21	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VJ:222:TYR:O	46:VJ:226:ASN:ND2	2.21	0.73
9:0N:8:ARG:NH2	46:IN:53:GLU:O	2.20	0.73
7:1G:163:ARG:HG2	45:KA:2:ARG:HH22	1.52	0.73
23:2O:396:GLN:HA	23:2O:399:ILE:HD12	1.69	0.73
21:3L:27:VAL:O	21:3L:29:THR:N	2.22	0.73
10:4Q:57:ASN:HB2	10:4Q:158:ALA:HB2	1.70	0.73
46:BJ:222:TYR:O	46:BJ:226:ASN:ND2	2.20	0.73
46:EL:324:LYS:NZ	45:EM:222:PRO:O	2.21	0.73
46:HN:207:LEU:HD23	46:HN:225:LEU:HB3	1.71	0.73
45:IK:326:LYS:NZ	46:IN:218:THR:O	2.21	0.73
46:OJ:222:TYR:O	46:OJ:226:ASN:ND2	2.21	0.73
45:QM:414:GLU:HB2	45:QM:417:GLU:HG2	1.71	0.73
46:TJ:238:CYS:HB2	46:TJ:318:ARG:HH21	1.54	0.73
46:UN:209:ASP:OD1	46:UN:213:ARG:NH1	2.22	0.73
46:VL:19:LYS:NZ	46:VL:223:GLY:O	2.22	0.73
45:WK:41:THR:HG22	45:WK:42:ILE:H	1.54	0.73
26:1W:234:GLN:O	26:1W:238:ASN:ND2	2.22	0.73
10:3Q:60:THR:HG22	10:3Q:62:PRO:HD2	1.69	0.73
45:HA:401:LYS:NZ	46:HB:344:TRP:O	2.22	0.73
45:KC:326:LYS:HG2	46:KF:220:PRO:HD2	1.69	0.73
46:NJ:135:ILE:HB	46:NJ:166:THR:HG22	1.68	0.73
45:PE:292:THR:HG21	45:PE:331:SER:HB3	1.71	0.73
46:QL:242:PHE:HB3	46:QL:356:ILE:HD13	1.70	0.73
45:QM:209:ILE:HG12	45:QM:302:MET:HB2	1.71	0.73
46:SF:1:MET:SD	46:SF:2:ARG:N	2.62	0.73
45:AA:226:ASN:ND2	45:AA:367:ASP:OD2	2.22	0.72
46:GH:222:TYR:O	46:GH:226:ASN:ND2	2.14	0.72
46:KN:10:GLY:HA2	46:KN:143:THR:HG23	1.69	0.72
46:LH:371:SER:O	46:LH:422:TYR:OH	2.07	0.72
46:LL:371:SER:O	46:LL:422:TYR:OH	2.05	0.72
45:ME:178:SER:OG	46:MF:347:ASN:ND2	2.21	0.72
45:MI:226:ASN:ND2	45:MI:367:ASP:OD2	2.22	0.72
46:OF:222:TYR:O	46:OF:226:ASN:ND2	2.21	0.72
45:PG:165:SER:HB2	45:PG:256:GLN:HE22	1.53	0.72
46:SF:130:LEU:HB3	46:SF:162:ARG:HE	1.54	0.72
46:TB:255:VAL:HA	45:TC:407:TRP:HZ3	1.54	0.72
46:VB:202:ILE:HD11	46:VB:268:ILE:HD11	1.71	0.72
45:WI:244:PHE:HB2	45:WI:356:ASN:HD21	1.54	0.72
10:0Q:115:LYS:HE2	45:AA:264:ARG:HD3	1.71	0.72
23:1O:147:VAL:HG21	23:3O:470:LYS:HD3	1.71	0.72
23:2O:359:ALA:O	23:2O:363:GLN:NE2	2.21	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AE:90:GLU:OE2	45:AE:121:ARG:NH2	2.22	0.72
45:EE:220:GLU:HG2	45:EE:221:ARG:HG2	1.71	0.72
46:OL:248:SER:HA	46:OL:252:LYS:HD3	1.70	0.72
46:SN:164:MET:HB2	46:SN:197:ASP:H	1.54	0.72
45:UC:288:VAL:HG21	45:UC:327:ASP:HB3	1.72	0.72
22:1M:40:LYS:NZ	45:JC:279:GLU:OE2	2.19	0.72
45:BK:326:LYS:NZ	46:BN:218:THR:O	2.22	0.72
46:GD:226:ASN:HD21	49:GD:501:GDP:HN1	1.37	0.72
46:HB:200:MET:HG2	46:HB:266:PHE:HB2	1.71	0.72
45:KI:226:ASN:ND2	45:KI:367:ASP:OD2	2.23	0.72
45:OA:271:SER:HB2	45:OA:377:MET:HB3	1.69	0.72
46:VD:222:TYR:O	46:VD:226:ASN:ND2	2.20	0.72
45:VM:188:ILE:HG12	45:VM:425:LEU:HD11	1.72	0.72
46:WH:49:VAL:HG13	46:WH:50:TYR:HD1	1.52	0.72
45:BG:89:PRO:HD3	45:CG:283:HIS:HD1	1.53	0.72
45:CC:89:PRO:HD3	45:DC:280:LYS:HZ2	1.54	0.72
45:FM:214:ARG:HH12	45:FM:220:GLU:HA	1.55	0.72
46:HH:371:SER:O	46:HH:422:TYR:OH	2.05	0.72
45:IA:72:PRO:HG2	46:IB:1:MET:HE1	1.70	0.72
45:KE:55:GLU:O	45:LE:285:GLN:NE2	2.23	0.72
45:MK:76:ASP:OD1	45:MK:79:ARG:NH2	2.23	0.72
45:PE:398:MET:HE1	46:PF:346:PRO:HD2	1.71	0.72
46:SH:263:LEU:HD22	46:SH:422:TYR:HD1	1.54	0.72
46:SL:156:ARG:HH21	46:SL:164:MET:HB2	1.54	0.72
46:UN:318:ARG:HG2	46:UN:354:CYS:HB3	1.71	0.72
45:VM:55:GLU:HG3	45:VM:57:GLY:H	1.54	0.72
13:1U:53:GLY:H	13:1U:87:TRP:HH2	1.38	0.72
27:2C:121:ALA:HB1	27:2C:164:LEU:HB3	1.71	0.72
46:AJ:222:TYR:O	46:AJ:226:ASN:ND2	2.20	0.72
46:CL:113:ILE:HG13	46:CL:150:LEU:HD22	1.70	0.72
45:GA:220:GLU:HG2	45:GA:221:ARG:HG2	1.70	0.72
46:UB:207:LEU:HB3	46:UB:225:LEU:HD22	1.71	0.72
45:VM:221:ARG:NH1	46:VN:322:SER:OG	2.23	0.72
10:5Q:149:ILE:HG22	10:5Q:150:GLU:HG2	1.72	0.72
34:7R:570:VAL:HB	34:7R:574:ARG:HH21	1.53	0.72
46:BF:178:THR:HB	46:BF:181:GLU:HG3	1.70	0.72
45:HC:292:THR:HG21	45:HC:331:SER:HB2	1.71	0.72
45:JC:178:SER:OG	46:JD:347:ASN:ND2	2.23	0.72
46:LJ:392:LYS:HD2	46:LJ:395:LEU:HD22	1.72	0.72
45:MA:192:HIS:ND1	45:MA:424:ASP:OD2	2.22	0.72
46:PD:260:PHE:HB2	46:PD:263:LEU:HD13	1.70	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QA:263:PRO:HG2	45:QA:264:ARG:HH12	1.54	0.72
46:UL:287:PRO:O	46:UL:291:GLN:NE2	2.23	0.72
45:VE:288:VAL:HG21	45:VE:327:ASP:HB3	1.71	0.72
45:VM:222:PRO:HG2	46:VN:324:LYS:HE3	1.71	0.72
23:2O:167:ARG:HA	23:2O:170:LYS:HG2	1.72	0.72
10:4Q:74:PRO:HD2	10:4Q:169:ASP:HA	1.72	0.72
46:AJ:3:GLU:HG3	46:AJ:62:ARG:HH12	1.54	0.72
45:CK:254:GLU:HG2	46:CL:98:GLY:HA2	1.72	0.72
45:DA:33:ASP:OD2	45:DA:35:GLN:NE2	2.23	0.72
46:FJ:95:THR:OG1	46:FJ:108:GLU:OE2	2.06	0.72
45:GC:11:GLN:HG3	45:GC:74:VAL:HG11	1.72	0.72
46:HH:91:VAL:HG21	46:HH:116:VAL:HG12	1.72	0.72
45:TE:71:GLU:HG2	45:TE:73:THR:HG22	1.70	0.72
11:1S:176:ASP:OD1	11:1S:179:ARG:NH2	2.23	0.72
1:2A:124:LEU:HD22	46:AJ:279:GLN:HE22	1.53	0.72
27:3C:128:ALA:HB1	27:3C:150:VAL:HG12	1.70	0.72
46:CD:347:ASN:ND2	45:CE:178:SER:OG	2.22	0.72
46:DJ:396:HIS:HA	46:DJ:399:THR:HG22	1.69	0.72
46:EJ:285:THR:HG22	46:EJ:287:PRO:HD2	1.70	0.72
45:GE:328:VAL:HG11	45:GE:353:VAL:HG21	1.71	0.72
46:HH:262:ARG:NH1	46:HH:421:GLU:OE1	2.23	0.72
46:KH:73:MET:HA	46:KH:76:VAL:HG12	1.72	0.72
45:NG:99:ALA:HA	45:NG:105:ARG:HD2	1.70	0.72
46:PF:293:MET:HG2	46:PF:365:VAL:HG11	1.72	0.72
45:PM:153:LEU:HA	45:PM:156:ARG:NH1	2.04	0.72
45:QE:97:GLU:OE1	45:QE:105:ARG:NH2	2.23	0.72
46:RH:31:ASP:OD1	46:RH:37:HIS:ND1	2.23	0.72
12:1T:283:TYR:O	13:1U:52:ARG:NH1	2.22	0.72
4:2D:48:ILE:HA	4:2D:53:ILE:HD11	1.70	0.72
23:3O:402:GLN:HE22	23:3O:406:ARG:HH21	1.35	0.72
34:4R:418:THR:HG23	34:4R:419:GLN:HG3	1.72	0.72
46:BF:222:TYR:O	46:BF:226:ASN:ND2	2.17	0.72
45:FM:55:GLU:HG3	45:FM:57:GLY:H	1.54	0.72
46:LJ:86:ARG:HH22	46:MJ:282:ARG:HG2	1.55	0.72
46:ND:191:GLN:O	46:ND:195:ASN:ND2	2.23	0.72
46:RH:347:ASN:ND2	45:RI:178:SER:OG	2.23	0.72
45:SA:326:LYS:NZ	46:SB:220:PRO:O	2.19	0.72
45:SM:213:CYS:HA	45:SM:217:LEU:HD13	1.72	0.72
46:UN:376:GLU:HA	46:UN:379:LYS:HE2	1.70	0.72
31:2I:139:ARG:HH12	46:GD:340:TYR:HB2	1.52	0.72
13:2U:453:TRP:HE1	13:2U:469:ALA:HB2	1.55	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:3R:116:GLU:OE2	46:BN:276:ARG:NH1	2.23	0.72
25:3R:299:LEU:HD21	25:3R:302:GLN:HE21	1.55	0.72
34:7R:90:ARG:NH2	45:AA:26:LEU:O	2.23	0.72
45:AC:178:SER:OG	46:AD:347:ASN:ND2	2.22	0.72
46:EH:257:LEU:HD11	46:EH:314:SER:HB2	1.72	0.72
45:NE:11:GLN:NE2	46:NF:245:GLN:O	2.22	0.72
46:UL:52:ASN:OD1	46:UL:62:ARG:NH2	2.23	0.72
45:AC:76:ASP:OD2	46:AD:46:ARG:NH2	2.23	0.71
46:DB:135:ILE:HG13	46:DB:152:ILE:HD11	1.72	0.71
45:DG:195:LEU:HD21	45:DG:264:ARG:HH21	1.55	0.71
45:EA:214:ARG:NH2	45:EA:219:ILE:O	2.22	0.71
45:MA:222:PRO:HD2	46:MB:324:LYS:HG2	1.70	0.71
45:OA:222:PRO:HD2	46:OB:324:LYS:HE3	1.70	0.71
46:OF:226:ASN:HD21	49:OF:501:GDP:HN1	1.38	0.71
45:SE:271:SER:OG	45:SE:301:MET:SD	2.48	0.71
46:SL:169:VAL:HG12	46:SL:202:ILE:HB	1.72	0.71
45:SM:33:ASP:HA	45:SM:85:GLN:HE21	1.55	0.71
45:SM:220:GLU:HG2	45:SM:221:ARG:HG3	1.72	0.71
45:WM:320:ARG:NH2	45:WM:358:GLN:OE1	2.23	0.71
23:2O:181:MET:SD	46:VL:279:GLN:NE2	2.63	0.71
46:AH:371:SER:O	46:AH:422:TYR:OH	2.05	0.71
45:EA:91:GLN:HE21	45:EA:121:ARG:HD3	1.54	0.71
46:EF:371:SER:O	46:EF:422:TYR:OH	2.07	0.71
45:IM:55:GLU:HG3	45:IM:57:GLY:H	1.55	0.71
46:KL:67:ASP:OD2	46:KL:68:LEU:N	2.24	0.71
46:LN:135:ILE:HG13	46:LN:152:ILE:HD11	1.72	0.71
46:NB:267:MET:HB2	46:NB:299:MET:HE2	1.71	0.71
46:RJ:290:THR:HG21	46:RJ:329:GLN:HG2	1.71	0.71
46:SJ:135:ILE:HB	46:SJ:166:THR:HA	1.71	0.71
24:1P:340:ARG:HH22	45:TC:31:GLN:HA	1.55	0.71
12:2T:268:LEU:HG	13:2U:43:ILE:HG21	1.70	0.71
14:3V:33:PRO:HB2	14:3V:36:SER:HB3	1.71	0.71
43:8P:273:UNK:O	46:QD:276:ARG:NH1	2.22	0.71
45:CA:55:GLU:HG3	45:CA:57:GLY:H	1.53	0.71
45:GI:1:MET:SD	46:GL:94:GLN:NE2	2.64	0.71
45:KA:76:ASP:OD1	46:KB:46:ARG:NH2	2.22	0.71
45:NG:90:GLU:HB2	45:OG:280:LYS:HZ2	1.54	0.71
45:VE:222:PRO:O	46:VF:324:LYS:NZ	2.23	0.71
16:3B:161:ILE:HG23	16:3B:165:GLU:HB2	1.72	0.71
36:5A:82:ASP:OD1	36:5A:85:ARG:NH2	2.23	0.71
36:5C:145:ASN:O	36:5C:149:ASN:ND2	2.23	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CE:339:ARG:O	45:CE:342:GLN:NE2	2.22	0.71
46:HL:52:ASN:OD1	46:HL:62:ARG:NH2	2.24	0.71
46:KF:218:THR:HG23	46:KF:219:THR:HG23	1.72	0.71
45:LA:348:PRO:HB2	46:LD:384:GLN:HE21	1.54	0.71
46:NF:48:ASN:O	46:NF:62:ARG:NH2	2.24	0.71
45:OE:328:VAL:HG11	45:OE:353:VAL:HG21	1.71	0.71
45:QK:9:VAL:HG12	45:QK:68:LEU:HB2	1.71	0.71
46:SB:118:ASP:HA	46:SB:121:ARG:HE	1.55	0.71
46:TD:68:LEU:HB3	46:TD:96:GLY:HA2	1.71	0.71
45:VA:377:MET:SD	45:VA:379:SER:OG	2.48	0.71
45:WG:27:GLU:OE2	45:WG:243:ARG:NH1	2.23	0.71
41:6H:295:GLN:NE2	46:FH:361:LEU:O	2.23	0.71
46:DD:5:VAL:HG12	46:DD:62:ARG:HD3	1.72	0.71
45:EM:261:PRO:HD2	45:EM:262:TYR:N	2.06	0.71
45:FA:221:ARG:NH2	45:FA:222:PRO:O	2.23	0.71
46:GB:273:LEU:O	46:GB:292:GLN:NE2	2.22	0.71
45:LK:9:VAL:HG12	45:LK:68:LEU:HB2	1.72	0.71
45:LM:317:MET:HB2	45:LM:353:VAL:HA	1.72	0.71
46:NH:58:ARG:NH2	46:OH:280:GLN:O	2.23	0.71
46:NN:10:GLY:O	46:NN:14:ASN:ND2	2.23	0.71
46:NN:54:ALA:HA	46:ON:283:ALA:HB2	1.73	0.71
46:OB:1:MET:N	46:OB:3:GLU:OE1	2.23	0.71
46:ON:6:HIS:HB2	46:ON:134:GLN:HE21	1.56	0.71
45:PA:221:ARG:NH1	46:PB:322:SER:OG	2.24	0.71
1:0A:104:ARG:HG3	34:7R:59:MET:H	1.53	0.71
46:CB:237:THR:HG23	46:CB:241:ARG:HE	1.53	0.71
46:GJ:117:LEU:HD11	46:GJ:154:LYS:HD3	1.72	0.71
46:JN:91:VAL:HG21	46:JN:116:VAL:HG12	1.71	0.71
46:LB:73:MET:HA	46:LB:76:VAL:HG12	1.73	0.71
45:MI:31:GLN:HG3	45:MI:32:PRO:HD2	1.73	0.71
45:OE:55:GLU:HG3	45:OE:57:GLY:H	1.55	0.71
46:UN:58:ARG:HH21	46:VN:280:GLN:HG2	1.54	0.71
46:BL:341:PHE:HB3	46:BL:348:ASN:HD21	1.56	0.71
45:FA:392:ASP:OD1	45:FA:422:ARG:NH1	2.23	0.71
45:SG:402:ARG:HD3	45:SG:405:VAL:HG21	1.72	0.71
45:TC:55:GLU:HG3	45:TC:57:GLY:H	1.56	0.71
45:TI:91:GLN:HG2	45:TI:121:ARG:HD2	1.73	0.71
45:BE:407:TRP:HH2	46:BF:258:ILE:HB	1.54	0.71
45:DM:90:GLU:OE1	45:DM:121:ARG:NH1	2.23	0.71
46:EL:324:LYS:HZ1	45:EM:222:PRO:HG2	1.55	0.71
45:FK:71:GLU:OE1	46:FL:247:ASN:ND2	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GN:178:THR:HB	46:GN:181:GLU:HG3	1.72	0.71
46:JF:322:SER:OG	46:JF:325:GLU:OE1	2.09	0.71
46:JH:73:MET:HA	46:JH:76:VAL:HG12	1.72	0.71
45:JI:326:LYS:NZ	46:JL:220:PRO:O	2.24	0.71
46:LB:113:ILE:HG21	46:LB:150:LEU:HD11	1.73	0.71
46:LB:377:MET:SD	46:LB:380:ARG:NH2	2.63	0.71
46:MJ:222:TYR:O	46:MJ:226:ASN:ND2	2.24	0.71
45:SM:254:GLU:OE2	45:SM:258:ASN:ND2	2.24	0.71
45:WA:288:VAL:HG11	45:WA:327:ASP:HB3	1.71	0.71
25:3R:283:ARG:HE	45:CK:45:GLY:HA2	1.56	0.71
45:GA:50:ASN:OD1	45:GA:64:ARG:NH2	2.24	0.71
45:GE:11:GLN:HG3	45:GE:74:VAL:HG11	1.71	0.71
46:HL:222:TYR:O	46:HL:226:ASN:ND2	2.21	0.71
46:LL:372:THR:HG21	46:LL:426:GLN:HB2	1.73	0.71
46:QF:46:ARG:NH2	45:QG:76:ASP:OD2	2.23	0.71
46:RJ:330:MET:SD	46:RJ:351:SER:OG	2.48	0.71
46:SB:5:VAL:HG12	46:SB:62:ARG:HD3	1.71	0.71
46:TL:8:GLN:HE21	46:TL:65:LEU:HG	1.54	0.71
23:2O:339:ARG:HH22	23:2O:342:ARG:HH21	1.38	0.71
46:AL:222:TYR:O	46:AL:226:ASN:ND2	2.23	0.71
45:BE:398:MET:HG2	46:BF:345:ILE:HG22	1.72	0.71
46:CL:200:MET:HG2	46:CL:266:PHE:HB2	1.72	0.71
45:FG:55:GLU:HG3	45:FG:57:GLY:H	1.54	0.71
46:HN:68:LEU:HD12	46:HN:93:GLY:HA3	1.73	0.71
46:LL:207:LEU:HB3	46:LL:225:LEU:HD22	1.73	0.71
45:PG:107:HIS:HA	45:PG:152:LEU:HD11	1.71	0.71
46:QJ:167:PHE:HE2	46:QJ:233:MET:HG3	1.55	0.71
16:1B:60:LEU:HD22	45:LC:82:THR:HB	1.73	0.70
27:2C:192:GLN:NE2	27:2C:197:ILE:O	2.23	0.70
30:2H:203:LYS:HD3	45:AC:229:ARG:HH21	1.54	0.70
45:CM:316:SER:HA	45:CM:352:LYS:HB3	1.73	0.70
46:DJ:273:LEU:H	46:DJ:292:GLN:HE22	1.39	0.70
46:FJ:242:PHE:HB3	46:FJ:356:ILE:HD13	1.72	0.70
46:FL:1:MET:N	46:FL:48:ASN:OD1	2.24	0.70
45:JG:424:ASP:OD1	45:NG:339:ARG:NH2	2.24	0.70
45:LA:395:PHE:HZ	45:LA:418:PHE:HB3	1.55	0.70
45:NM:73:THR:OG1	46:NN:2:ARG:NH2	2.24	0.70
45:PA:75:ILE:HG21	45:PA:94:SER:HB2	1.73	0.70
45:PK:90:GLU:OE1	45:PK:121:ARG:NH1	2.24	0.70
45:RC:388:PHE:HB3	45:RC:425:LEU:HD11	1.73	0.70
46:RF:262:ARG:NH2	46:RF:421:GLU:OE1	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SK:345:ASP:OD1	45:SK:346:TRP:N	2.23	0.70
46:UF:322:SER:OG	45:UG:221:ARG:NH1	2.24	0.70
46:UN:207:LEU:HD21	46:UN:225:LEU:HB3	1.73	0.70
13:1U:103:VAL:HG13	13:1U:104:LEU:HD23	1.72	0.70
23:2O:373:ARG:HH12	45:VC:282:TYR:HB2	1.56	0.70
12:2T:68:GLY:HA2	12:2T:112:PRO:HA	1.73	0.70
13:3U:449:ARG:HH22	45:VM:84:ARG:HD2	1.56	0.70
36:5B:27:LYS:NZ	36:5B:30:LYS:HG2	2.05	0.70
45:AA:326:LYS:HD3	46:AD:220:PRO:HD2	1.73	0.70
46:BJ:73:MET:HA	46:BJ:76:VAL:HG12	1.72	0.70
46:DL:16:ILE:HD12	46:DL:229:VAL:HG21	1.73	0.70
45:DM:311:LYS:HE3	45:DM:344:VAL:HA	1.72	0.70
46:FN:167:PHE:HE1	46:FN:233:MET:HG2	1.56	0.70
46:GL:371:SER:O	46:GL:422:TYR:OH	2.08	0.70
46:JB:322:SER:OG	46:JB:325:GLU:OE1	2.08	0.70
46:NJ:48:ASN:O	46:NJ:62:ARG:NH2	2.23	0.70
46:NL:52:ASN:OD1	46:NL:62:ARG:NH1	2.24	0.70
46:SD:54:ALA:HA	46:TD:283:ALA:HB2	1.72	0.70
45:UG:207:GLU:HA	45:UG:210:TYR:HD1	1.56	0.70
45:WM:181:VAL:H	46:WN:350:LYS:HZ3	1.39	0.70
4:2D:93:GLN:OE1	4:2D:94:ASN:ND2	2.23	0.70
34:4R:246:GLN:HG2	45:BE:58:ALA:HB1	1.74	0.70
46:EB:31:ASP:OD2	46:EB:37:HIS:ND1	2.24	0.70
46:FN:375:GLN:HE21	46:FN:419:VAL:HB	1.56	0.70
46:HN:139:LEU:HD12	46:HN:170:VAL:HG12	1.73	0.70
45:NE:285:GLN:NE2	45:NE:372:MET:SD	2.64	0.70
45:QG:88:HIS:NE2	45:RG:284:GLU:OE2	2.24	0.70
46:SF:54:ALA:HA	46:TF:283:ALA:HB2	1.73	0.70
46:SJ:313:ALA:HB3	46:SJ:349:ILE:HG12	1.74	0.70
46:TH:129:CYS:SG	45:TI:96:LYS:NZ	2.63	0.70
45:UC:253:THR:O	45:UC:256:GLN:NE2	2.24	0.70
45:WK:207:GLU:HA	45:WK:210:TYR:HD2	1.56	0.70
16:2B:181:LYS:HD2	26:2W:272:LYS:HZ3	1.55	0.70
37:5E:63:HIS:NE2	46:NB:55:THR:O	2.24	0.70
46:AD:73:MET:HA	46:AD:76:VAL:HG12	1.73	0.70
46:CH:222:TYR:O	46:CH:226:ASN:ND2	2.21	0.70
46:LF:5:VAL:HG12	46:LF:62:ARG:HD3	1.73	0.70
46:NB:299:MET:HG3	46:NB:301:CYS:H	1.56	0.70
45:RK:64:ARG:NH1	45:RK:129:CYS:SG	2.65	0.70
46:SD:3:GLU:HG3	46:SD:62:ARG:HH12	1.54	0.70
46:SJ:54:ALA:HA	46:TJ:283:ALA:HB2	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UB:299:MET:HG3	46:UB:305:PRO:HG3	1.74	0.70
45:UE:274:PRO:HD2	45:UE:371:VAL:HG21	1.72	0.70
24:2P:355:GLN:HE22	46:TN:359:LYS:HG2	1.55	0.70
30:3H:191:LEU:HG	46:AH:360:GLY:HA2	1.72	0.70
40:6G:279:TYR:OH	45:UC:94:SER:O	2.08	0.70
10:6Q:81:LYS:HD3	10:6Q:161:ARG:HD2	1.73	0.70
45:AI:292:THR:HG21	45:AI:331:SER:HB3	1.74	0.70
46:EH:269:GLY:HA2	46:EH:300:MET:HG3	1.71	0.70
45:GA:76:ASP:OD2	46:GB:46:ARG:NH2	2.24	0.70
46:GN:238:CYS:HB2	46:GN:318:ARG:HH21	1.56	0.70
45:IE:326:LYS:HZ3	46:IH:219:THR:HG22	1.57	0.70
45:OM:54:SER:HB3	45:OM:64:ARG:HE	1.56	0.70
46:PF:248:SER:HA	46:PF:252:LYS:HD3	1.73	0.70
45:PK:292:THR:HG21	45:PK:331:SER:HB3	1.73	0.70
46:QH:167:PHE:HE2	46:QH:233:MET:HG3	1.55	0.70
46:RB:257:LEU:HD11	46:RB:314:SER:HB2	1.72	0.70
46:TB:423:GLN:NE2	46:TB:424:GLN:OE1	2.24	0.70
32:3D:156:VAL:HG11	32:3D:185:LEU:HD11	1.74	0.70
46:BB:91:VAL:HG21	46:BB:116:VAL:HB	1.73	0.70
46:CN:375:GLN:HA	46:CN:378:PHE:HD2	1.56	0.70
46:EB:97:ALA:HB3	46:EB:143:THR:HB	1.74	0.70
45:HK:292:THR:HG21	45:HK:331:SER:HB3	1.73	0.70
45:IM:317:MET:HB2	45:IM:353:VAL:HA	1.73	0.70
46:LL:73:MET:HA	46:LL:76:VAL:HG12	1.74	0.70
45:WK:398:MET:HE1	46:WL:345:ILE:HA	1.74	0.70
46:AL:125:GLU:OE2	46:BL:291:GLN:NE2	2.24	0.70
46:BJ:178:THR:HB	46:BJ:181:GLU:HG3	1.72	0.70
46:IJ:222:TYR:O	46:IJ:226:ASN:ND2	2.19	0.70
46:QH:1:MET:SD	45:QI:96:LYS:NZ	2.64	0.70
46:QJ:22:GLU:HG2	46:QJ:81:PHE:HD1	1.57	0.70
45:RA:210:TYR:HB3	45:RA:214:ARG:HH12	1.56	0.70
46:RL:322:SER:OG	45:RM:221:ARG:NH2	2.25	0.70
45:SE:241:SER:OG	45:SE:250:VAL:O	2.10	0.70
46:TF:247:ASN:OD1	45:TG:11:GLN:NE2	2.25	0.70
46:TN:86:ARG:HE	46:TN:87:PRO:HD2	1.57	0.70
21:1L:751:ARG:HH12	46:BD:359:LYS:HA	1.54	0.70
14:3V:86:ARG:NH2	46:LB:190:HIS:O	2.17	0.70
27:4C:128:ALA:HB1	27:4C:150:VAL:HG12	1.74	0.70
45:AG:292:THR:HG21	45:AG:331:SER:HB3	1.72	0.70
46:AH:54:ALA:HA	46:BH:283:ALA:HB2	1.73	0.70
46:CF:248:SER:HA	46:CF:252:LYS:HD3	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CK:195:LEU:HD21	45:CK:264:ARG:HH21	1.57	0.70
46:DN:49:VAL:O	46:DN:62:ARG:NH2	2.24	0.70
46:ED:54:ALA:HA	46:FD:283:ALA:HB2	1.74	0.70
45:GE:98:ASP:OD1	45:GE:99:ALA:N	2.24	0.70
46:MF:222:TYR:O	46:MF:226:ASN:ND2	2.21	0.70
46:ND:390:ARG:O	46:ND:392:LYS:NZ	2.23	0.70
45:NI:226:ASN:ND2	45:NI:367:ASP:OD2	2.25	0.70
46:PN:49:VAL:O	46:PN:62:ARG:NH2	2.24	0.70
46:VD:135:ILE:HG13	46:VD:152:ILE:HD11	1.73	0.70
46:WD:273:LEU:H	46:WD:292:GLN:HE22	1.39	0.70
31:2I:95:LYS:HB3	46:GF:332:ASN:HD21	1.57	0.70
12:3T:284:SER:O	12:3T:285:ARG:NH1	2.25	0.70
46:AB:372:THR:HA	46:AB:422:TYR:HE2	1.57	0.70
45:BM:11:GLN:HG3	45:BM:74:VAL:HG11	1.74	0.70
46:EL:268:ILE:HG22	46:EL:368:VAL:HG22	1.74	0.70
46:EN:331:LEU:O	46:EN:335:ASN:ND2	2.23	0.70
45:FA:101:ASN:HA	45:FA:144:GLY:H	1.57	0.70
45:HE:195:LEU:HD21	45:HE:264:ARG:HH21	1.55	0.70
46:NF:207:LEU:HD23	46:NF:225:LEU:HB3	1.74	0.70
45:SG:284:GLU:HG2	45:SG:286:LEU:HD22	1.74	0.70
46:SL:222:TYR:O	46:SL:226:ASN:ND2	2.25	0.70
45:TI:2:ARG:HB2	45:TI:133:GLN:HE22	1.57	0.70
46:VH:326:VAL:HG21	46:VH:353:ILE:HD11	1.74	0.70
45:VM:239:THR:HB	45:VM:243:ARG:HH12	1.56	0.70
45:WK:399:TYR:O	45:WK:402:ARG:NH1	2.25	0.70
5:3E:129:HIS:HB3	5:3E:132:ILE:HG12	1.74	0.70
46:EB:324:LYS:HG3	45:EC:221:ARG:HA	1.73	0.70
45:GA:288:VAL:HG21	45:GA:327:ASP:HB3	1.71	0.70
45:GI:11:GLN:NE2	46:GJ:247:ASN:OD1	2.25	0.70
46:HJ:222:TYR:O	46:HJ:226:ASN:ND2	2.18	0.70
45:LA:175:PRO:O	45:LA:394:LYS:NZ	2.25	0.70
46:PF:319:GLY:HA2	46:PF:357:PRO:HG3	1.73	0.70
45:SK:241:SER:OG	45:SK:250:VAL:O	2.10	0.70
45:UC:254:GLU:O	45:UC:258:ASN:ND2	2.25	0.70
45:WM:396:ASP:HA	45:WM:422:ARG:HH22	1.57	0.70
24:1P:223:ARG:HH21	45:TG:282:TYR:HB2	1.55	0.69
26:2W:247:ARG:NH2	26:2W:248:GLN:OE1	2.23	0.69
45:AA:406:HIS:HA	45:AA:409:VAL:HG12	1.74	0.69
46:AL:135:ILE:HG13	46:AL:152:ILE:HD11	1.74	0.69
46:AN:242:PHE:HB3	46:AN:356:ILE:HD13	1.74	0.69
46:BF:8:GLN:HE21	46:BF:65:LEU:HG	1.56	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CD:222:TYR:O	46:CD:226:ASN:ND2	2.23	0.69
45:DK:76:ASP:HA	45:DK:79:ARG:HD2	1.74	0.69
46:ED:5:VAL:HG12	46:ED:62:ARG:HD3	1.73	0.69
46:EH:68:LEU:HB3	46:EH:96:GLY:HA2	1.73	0.69
46:EL:54:ALA:HA	46:FL:283:ALA:HB2	1.72	0.69
45:EM:203:MET:HB2	45:EM:269:LEU:HD13	1.74	0.69
45:FC:220:GLU:HG2	45:FC:221:ARG:HG3	1.73	0.69
46:FJ:178:THR:HB	46:FJ:181:GLU:HG3	1.73	0.69
46:FJ:372:THR:HA	46:FJ:422:TYR:HE2	1.55	0.69
45:LK:254:GLU:HG2	46:LN:98:GLY:HA2	1.74	0.69
46:MH:73:MET:HA	46:MH:76:VAL:HG12	1.73	0.69
45:NM:180:ALA:HA	46:NN:350:LYS:HZ3	1.57	0.69
45:PE:211:ASP:HB3	45:PE:215:ARG:HH12	1.56	0.69
46:RB:377:MET:SD	46:RB:380:ARG:NH2	2.64	0.69
45:RE:60:LYS:NZ	45:RE:85:GLN:O	2.25	0.69
46:RJ:135:ILE:HD13	46:RJ:152:ILE:HD11	1.73	0.69
45:SA:316:SER:HB3	45:SA:378:ILE:HB	1.74	0.69
45:TK:55:GLU:HG3	45:TK:57:GLY:H	1.57	0.69
45:WC:9:VAL:HG12	45:WC:68:LEU:HB2	1.74	0.69
46:WJ:311:LEU:HD23	46:WJ:342:VAL:HG21	1.73	0.69
16:1B:374:ASN:ND2	46:JD:39:ASP:OD1	2.26	0.69
12:1T:68:GLY:HA2	12:1T:112:PRO:HA	1.74	0.69
16:2B:136:ARG:HG3	26:2W:261:LYS:HZ3	1.57	0.69
31:2I:118:LYS:NZ	45:GC:339:ARG:O	2.25	0.69
22:2M:290:GLU:O	22:2M:292:ASN:N	2.25	0.69
45:AA:288:VAL:HG11	45:AA:327:ASP:HB3	1.74	0.69
46:AL:73:MET:HA	46:AL:76:VAL:HG12	1.72	0.69
45:HG:60:LYS:NZ	45:HG:85:GLN:O	2.25	0.69
46:NN:6:HIS:NE2	46:NN:8:GLN:OE1	2.23	0.69
45:PC:9:VAL:HG12	45:PC:68:LEU:HB2	1.75	0.69
45:SE:362:VAL:H	45:SE:370:LYS:HZ2	1.40	0.69
45:WM:91:GLN:HB3	45:WM:121:ARG:HH21	1.57	0.69
20:1K:15:ASN:HD21	45:NC:359:PRO:HD3	1.57	0.69
37:5F:59:THR:OG1	46:OF:276:ARG:NH2	2.25	0.69
34:7R:287:ILE:HG23	34:7R:303:PHE:HB3	1.74	0.69
46:GH:5:VAL:HG12	46:GH:62:ARG:HD3	1.75	0.69
45:II:362:VAL:HB	45:II:370:LYS:HB3	1.74	0.69
45:IM:176:GLN:HG2	45:IM:177:VAL:HG23	1.73	0.69
45:MG:239:THR:HG22	45:MG:252:ILE:HD11	1.74	0.69
46:QL:256:ASN:HD22	45:QM:181:VAL:HG22	1.57	0.69
45:RG:247:ALA:HB3	45:RG:355:ILE:HD11	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SB:135:ILE:HG13	46:SB:152:ILE:HD11	1.73	0.69
45:SI:55:GLU:O	45:TI:285:GLN:NE2	2.25	0.69
46:SN:55:THR:HG23	46:TN:283:ALA:HA	1.73	0.69
26:1W:116:MET:HB3	34:4R:9:VAL:HG22	1.74	0.69
28:2F:36:THR:HG22	28:2F:38:TYR:H	1.57	0.69
41:6H:346:LYS:HE2	46:FJ:320:ARG:HH22	1.56	0.69
46:AF:281:TYR:HB3	46:MF:60:VAL:HG21	1.74	0.69
45:BK:15:GLN:NE2	47:BK:501:GTP:O6	2.25	0.69
45:BK:178:SER:OG	46:BL:347:ASN:ND2	2.25	0.69
45:CA:206:ASN:OD1	47:CA:501:GTP:N2	2.26	0.69
45:DM:271:SER:HB2	45:DM:377:MET:HB3	1.73	0.69
45:FA:54:SER:HB3	45:FA:64:ARG:HE	1.55	0.69
45:FA:71:GLU:OE1	46:FB:247:ASN:ND2	2.25	0.69
45:KM:64:ARG:NH1	45:KM:129:CYS:SG	2.66	0.69
45:LC:1:MET:HB3	45:LC:131:GLY:HA3	1.72	0.69
45:MI:292:THR:HG21	45:MI:331:SER:HB3	1.72	0.69
46:NF:371:SER:O	46:NF:422:TYR:OH	2.10	0.69
45:PG:141:VAL:HG11	45:PG:172:TYR:HD1	1.56	0.69
46:TN:423:GLN:NE2	46:TN:424:GLN:OE1	2.25	0.69
7:0G:86:LEU:HA	46:JN:227:HIS:HE1	1.57	0.69
46:AH:178:THR:HB	46:AH:181:GLU:HG3	1.74	0.69
46:BN:133:PHE:HB2	46:BN:164:MET:HG3	1.74	0.69
45:EA:64:ARG:NH1	45:EA:129:CYS:SG	2.65	0.69
46:FN:304:ASP:OD1	46:FN:306:ARG:NH1	2.26	0.69
46:IF:178:THR:HB	46:IF:181:GLU:HG3	1.74	0.69
46:NF:91:VAL:HG21	46:NF:116:VAL:HG12	1.74	0.69
46:PB:242:PHE:HB3	46:PB:356:ILE:HD13	1.74	0.69
46:PN:3:GLU:HB2	46:PN:62:ARG:HH22	1.57	0.69
46:RF:309:ARG:HH22	46:RF:426:GLN:HA	1.55	0.69
46:TD:222:TYR:O	46:TD:226:ASN:ND2	2.25	0.69
46:UF:207:LEU:HD13	46:UF:225:LEU:HB3	1.73	0.69
45:WK:9:VAL:HG12	45:WK:68:LEU:HB2	1.73	0.69
45:WK:292:THR:HG21	45:WK:331:SER:HB3	1.75	0.69
4:2D:175:THR:OG1	46:EJ:1:MET:SD	2.50	0.69
46:AB:86:ARG:NH1	46:BB:281:TYR:HB2	2.07	0.69
45:FM:15:GLN:NE2	47:FM:501:GTP:O6	2.25	0.69
46:FN:322:SER:OG	46:FN:325:GLU:OE2	2.11	0.69
45:NC:99:ALA:HA	45:NC:105:ARG:HD2	1.74	0.69
46:OB:322:SER:OG	46:OB:324:LYS:NZ	2.23	0.69
46:ON:222:TYR:O	46:ON:226:ASN:ND2	2.22	0.69
45:PK:339:ARG:O	45:PK:342:GLN:NE2	2.24	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QB:392:LYS:HA	46:QB:395:LEU:HD12	1.73	0.69
45:QI:70:LEU:HD13	45:QI:95:GLY:HA3	1.75	0.69
46:RH:324:LYS:HG3	45:RI:222:PRO:HD2	1.75	0.69
46:SF:68:LEU:HB3	46:SF:96:GLY:HA2	1.75	0.69
45:SM:352:LYS:HZ1	46:SN:179:VAL:H	1.40	0.69
46:TL:377:MET:SD	46:TL:380:ARG:NH2	2.63	0.69
46:UH:207:LEU:HB3	46:UH:225:LEU:HD22	1.74	0.69
45:WC:387:VAL:HA	45:WC:390:ARG:HD3	1.75	0.69
32:3D:39:LYS:NZ	32:3D:233:GLN:OE1	2.25	0.69
13:3U:396:LEU:HD21	13:3U:399:VAL:HG23	1.74	0.69
13:3U:482:THR:HG22	13:3U:483:ARG:H	1.58	0.69
14:3V:232:ILE:HD12	46:WD:218:THR:HG22	1.75	0.69
34:5R:261:LEU:HD11	34:5R:271:LEU:HD12	1.75	0.69
46:BL:113:ILE:HD13	46:BL:150:LEU:HD22	1.74	0.69
46:EJ:73:MET:HA	46:EJ:76:VAL:HG12	1.75	0.69
46:FN:200:MET:HG2	46:FN:266:PHE:HB2	1.74	0.69
45:JA:9:VAL:HG12	45:JA:68:LEU:HB2	1.75	0.69
45:NA:276:ILE:HG21	45:NA:283:HIS:HD2	1.57	0.69
45:PK:402:ARG:NH2	45:PK:415:GLU:OE2	2.24	0.69
46:RH:5:VAL:HG12	46:RH:62:ARG:HD3	1.74	0.69
45:SK:261:PRO:HB3	45:SK:346:TRP:HH2	1.58	0.69
45:SM:316:SER:HB2	45:SM:378:ILE:HB	1.73	0.69
45:TC:288:VAL:HG11	45:TC:327:ASP:HB3	1.74	0.69
46:TJ:222:TYR:O	46:TJ:226:ASN:ND2	2.26	0.69
1:2A:17:GLN:NE2	34:5R:46:GLU:O	2.26	0.69
24:2P:410:TRP:NE1	46:TL:279:GLN:HB3	2.06	0.69
13:2U:319:HIS:HE2	13:2U:340:SER:HG	1.40	0.69
21:3L:100:ASP:O	21:3L:104:GLN:NE2	2.26	0.69
15:3X:105:GLN:O	15:3X:109:GLN:NE2	2.26	0.69
37:5H:123:ARG:HH12	45:OM:372:MET:HA	1.56	0.69
45:AA:292:THR:HG21	45:AA:331:SER:HB3	1.73	0.69
46:AD:285:THR:OG1	46:AD:288:GLU:OE1	2.10	0.69
46:AF:48:ASN:O	46:AF:62:ARG:NH2	2.25	0.69
45:BE:11:GLN:HG3	45:BE:74:VAL:HG11	1.74	0.69
46:BN:226:ASN:HD21	49:BN:501:GDP:HN1	1.38	0.69
46:CD:73:MET:HA	46:CD:76:VAL:HG12	1.74	0.69
45:CE:288:VAL:HG11	45:CE:327:ASP:HB3	1.75	0.69
45:EM:55:GLU:HG3	45:EM:57:GLY:H	1.58	0.69
46:FB:113:ILE:HG12	46:FB:117:LEU:HG	1.75	0.69
45:GM:188:ILE:HG12	45:GM:425:LEU:HD11	1.75	0.69
45:HM:322:ASP:H	45:HM:373:ARG:HH22	1.41	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MG:241:SER:OG	45:MG:250:VAL:O	2.10	0.69
45:NC:54:SER:HB2	45:NC:64:ARG:HE	1.57	0.69
46:NL:388:MET:HA	46:NL:391:ARG:HD3	1.74	0.69
46:PN:217:LEU:HG	46:PN:220:PRO:HD3	1.75	0.69
46:QJ:4:ILE:O	46:QJ:62:ARG:NH2	2.26	0.69
46:SF:222:TYR:O	46:SF:226:ASN:ND2	2.26	0.69
46:SN:135:ILE:HG13	46:SN:152:ILE:HD11	1.75	0.69
46:TB:164:MET:HB2	46:TB:197:ASP:H	1.57	0.69
45:TC:188:ILE:HD12	45:TC:425:LEU:HD11	1.74	0.69
46:TL:135:ILE:HB	46:TL:166:THR:HG22	1.73	0.69
46:UB:289:LEU:HD11	46:UB:363:MET:HB3	1.75	0.69
46:VB:11:GLN:NE2	49:VB:501:GDP:O1A	2.25	0.69
46:VN:68:LEU:HD12	46:VN:93:GLY:HA3	1.74	0.69
34:6R:386:PRO:O	46:EN:276:ARG:NH1	2.24	0.69
46:DH:304:ASP:OD1	46:DH:306:ARG:NH1	2.26	0.69
46:ED:285:THR:OG1	46:ED:288:GLU:OE1	2.09	0.69
46:EF:222:TYR:O	46:EF:226:ASN:ND2	2.24	0.69
46:GH:218:THR:HG23	46:GH:219:THR:HG23	1.73	0.69
46:HH:222:TYR:O	46:HH:226:ASN:ND2	2.21	0.69
45:JM:210:TYR:HB3	45:JM:214:ARG:HH12	1.58	0.69
46:NL:226:ASN:HD21	49:NL:501:GDP:HN1	1.41	0.69
45:OM:108:TYR:O	45:OM:112:LYS:NZ	2.25	0.69
45:WE:210:TYR:HE1	45:WE:227:LEU:HD11	1.58	0.69
21:2L:274:LYS:HB2	21:2L:378:ARG:HH12	1.56	0.69
21:2L:542:ILE:O	21:2L:578:ASN:N	2.23	0.69
13:2U:75:LYS:HB3	13:2U:104:LEU:HD13	1.74	0.69
13:2U:514:ILE:HD11	13:2U:536:VAL:HG21	1.74	0.69
10:5Q:126:ASP:OD1	10:5Q:130:ASN:ND2	2.26	0.69
46:AJ:372:THR:HA	46:AJ:422:TYR:HE2	1.56	0.69
45:CA:152:LEU:HB3	45:CA:156:ARG:HH22	1.58	0.69
46:DN:256:ASN:HD22	46:DN:350:LYS:HD2	1.56	0.69
45:LA:223:THR:HG22	45:LA:224:TYR:H	1.58	0.69
45:MC:260:VAL:HB	46:MF:397:TRP:HH2	1.57	0.69
46:ML:5:VAL:HG12	46:ML:62:ARG:HD3	1.74	0.69
45:PE:254:GLU:HG2	46:PH:98:GLY:HA2	1.75	0.69
45:PI:173:PRO:O	45:PI:390:ARG:NH2	2.26	0.69
46:SL:135:ILE:HG13	46:SL:152:ILE:HD11	1.75	0.69
45:SM:108:TYR:O	45:SM:112:LYS:NZ	2.25	0.69
45:UG:226:ASN:ND2	45:UG:367:ASP:OD2	2.26	0.69
45:VM:176:GLN:O	46:VN:347:ASN:ND2	2.26	0.69
46:WD:309:ARG:NH2	46:WD:426:GLN:O	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:1J:234:GLU:HB2	29:2G:94:ILE:HD12	1.74	0.68
10:2Q:60:THR:HG22	10:2Q:62:PRO:HD2	1.75	0.68
5:3E:29:ARG:HA	5:3E:32:ARG:HE	1.58	0.68
15:4X:3:ARG:HH12	46:LL:222:TYR:HD2	1.41	0.68
45:DI:9:VAL:HG12	45:DI:68:LEU:HB2	1.73	0.68
45:FC:31:GLN:HE21	45:FC:37:PRO:HB3	1.57	0.68
45:FM:75:ILE:HG22	45:FM:79:ARG:HH12	1.58	0.68
46:FN:331:LEU:O	46:FN:335:ASN:ND2	2.26	0.68
46:NB:377:MET:HA	46:NB:380:ARG:HE	1.57	0.68
45:OK:31:GLN:HE21	45:OK:37:PRO:HB3	1.56	0.68
45:UK:288:VAL:HG11	45:UK:327:ASP:HB3	1.75	0.68
45:VK:402:ARG:NH2	45:VK:415:GLU:OE2	2.26	0.68
26:1W:230:ALA:HB1	27:3C:6:VAL:HG11	1.74	0.68
14:3V:86:ARG:NH1	46:LB:194:GLU:HB2	2.07	0.68
34:5R:461:LYS:NZ	46:FJ:218:THR:OG1	2.26	0.68
46:AF:283:ALA:HB2	46:MF:54:ALA:HA	1.74	0.68
46:EB:99:ASN:HA	46:EB:142:GLY:H	1.58	0.68
45:GG:11:GLN:HG3	45:GG:74:VAL:HG11	1.74	0.68
46:ID:178:THR:HB	46:ID:181:GLU:HG3	1.74	0.68
46:LB:165:GLU:HA	46:LB:198:GLU:HB2	1.73	0.68
45:PI:399:TYR:O	45:PI:402:ARG:NH1	2.27	0.68
46:TB:282:ARG:HE	46:TB:283:ALA:H	1.41	0.68
45:UA:76:ASP:OD1	45:UA:79:ARG:NH2	2.26	0.68
14:0V:33:PRO:HB3	45:MM:304:LYS:HD2	1.76	0.68
21:1L:308:ARG:NH2	45:BG:367:ASP:O	2.24	0.68
22:2M:310:GLN:HG3	22:2M:311:GLU:H	1.59	0.68
23:3O:346:GLN:OE1	23:3O:349:ARG:NH2	2.26	0.68
45:AC:259:LEU:HD11	45:AC:316:SER:HB2	1.75	0.68
45:CA:352:LYS:HZ3	46:CB:178:THR:HA	1.58	0.68
46:CN:207:LEU:HB3	46:CN:225:LEU:HD22	1.75	0.68
46:DB:379:LYS:HE3	46:DB:419:VAL:HG11	1.76	0.68
45:DI:195:LEU:HD21	45:DI:264:ARG:HH21	1.59	0.68
45:FA:328:VAL:HG11	45:FA:353:VAL:HG21	1.74	0.68
46:GF:178:THR:HB	46:GF:181:GLU:HG3	1.73	0.68
46:HL:226:ASN:HD21	49:HL:501:GDP:HN1	1.42	0.68
46:HN:202:ILE:HD11	46:HN:268:ILE:HD11	1.74	0.68
46:IF:207:LEU:HB3	46:IF:225:LEU:HD22	1.75	0.68
45:JK:141:VAL:HG11	45:JK:172:TYR:HD1	1.57	0.68
46:KF:262:ARG:NH2	46:KF:414:ASN:OD1	2.26	0.68
45:NC:328:VAL:HG11	45:NC:353:VAL:HG21	1.75	0.68
46:OD:95:THR:HG21	46:OD:108:GLU:HG2	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PB:207:LEU:HB3	46:PB:225:LEU:HD22	1.76	0.68
45:PG:206:ASN:OD1	47:PG:501:GTP:N2	2.24	0.68
47:PI:501:GTP:O1G	46:PJ:252:LYS:NZ	2.25	0.68
45:RG:326:LYS:NZ	46:RH:218:THR:O	2.27	0.68
46:SF:107:THR:OG1	46:SF:108:GLU:OE1	2.10	0.68
46:SJ:156:ARG:NH1	46:SJ:197:ASP:OD1	2.26	0.68
46:UJ:324:LYS:HD3	45:UK:222:PRO:HD2	1.74	0.68
12:1T:127:GLU:O	45:AC:339:ARG:NH1	2.27	0.68
12:1T:135:GLN:HG3	12:1T:140:GLN:HB3	1.76	0.68
21:3L:195:ARG:HH21	21:3L:198:ILE:HG21	1.57	0.68
46:CL:273:LEU:H	46:CL:292:GLN:HE22	1.42	0.68
45:CM:268:MET:HG3	45:CM:380:ASN:HB3	1.74	0.68
46:CN:318:ARG:NH1	46:CN:354:CYS:SG	2.67	0.68
46:EL:324:LYS:O	46:EL:328:GLU:N	2.24	0.68
46:HH:73:MET:HA	46:HH:76:VAL:HG12	1.75	0.68
46:IB:223:GLY:O	46:IB:227:HIS:ND1	2.26	0.68
45:IE:178:SER:OG	46:IF:347:ASN:ND2	2.25	0.68
45:KM:71:GLU:OE2	46:KN:2:ARG:NH2	2.27	0.68
45:PA:98:ASP:O	45:PA:105:ARG:NH2	2.24	0.68
45:SM:280:LYS:HA	45:SM:283:HIS:HD2	1.59	0.68
45:TG:119:LEU:HD11	45:TG:156:ARG:HD3	1.75	0.68
46:UN:139:LEU:HD11	46:UN:168:SER:HB3	1.72	0.68
1:3A:17:GLN:NE2	34:6R:46:GLU:O	2.26	0.68
46:BB:238:CYS:HA	46:BB:241:ARG:HH21	1.58	0.68
45:CM:123:ARG:HH22	45:CM:127:ASP:HB3	1.57	0.68
45:EA:289:ALA:O	45:EA:293:ASN:ND2	2.26	0.68
45:EK:244:PHE:HB2	45:EK:356:ASN:HD21	1.59	0.68
46:GL:30:ILE:HD11	46:GL:47:ILE:HD11	1.74	0.68
46:HN:268:ILE:HG22	46:HN:368:VAL:HG12	1.74	0.68
46:JL:217:LEU:HG	46:JL:220:PRO:HD3	1.75	0.68
45:NE:221:ARG:NH1	46:NF:325:GLU:OE2	2.25	0.68
45:NK:1:MET:SD	46:NN:94:GLN:NE2	2.67	0.68
45:NM:360:PRO:O	45:NM:370:LYS:NZ	2.26	0.68
45:OK:250:VAL:HG13	45:OK:254:GLU:HB2	1.75	0.68
45:PI:288:VAL:HG21	45:PI:327:ASP:HB3	1.76	0.68
45:QM:60:LYS:NZ	45:QM:85:GLN:O	2.27	0.68
46:WB:31:ASP:OD2	46:WB:37:HIS:ND1	2.26	0.68
45:WC:269:LEU:HD22	45:WC:384:ILE:HD11	1.75	0.68
5:1E:136:GLN:O	34:4R:502:ARG:NH2	2.26	0.68
46:AJ:73:MET:HA	46:AJ:76:VAL:HG12	1.75	0.68
45:BC:224:TYR:HE2	46:BD:246:LEU:HD11	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FN:6:HIS:NE2	46:FN:8:GLN:OE1	2.22	0.68
46:GB:314:SER:HA	46:GB:350:LYS:HB2	1.74	0.68
46:IB:139:LEU:HD22	46:IB:170:VAL:HG12	1.76	0.68
45:JG:27:GLU:OE1	45:JG:243:ARG:NH1	2.27	0.68
45:ME:371:VAL:HG12	45:ME:373:ARG:H	1.58	0.68
45:MG:292:THR:HG21	45:MG:331:SER:HB3	1.75	0.68
45:OA:55:GLU:HG3	45:OA:57:GLY:H	1.57	0.68
45:OE:147:SER:HB2	45:OE:190:SER:HB2	1.75	0.68
45:PA:292:THR:HG21	45:PA:331:SER:HB3	1.74	0.68
45:PA:313:MET:SD	45:PA:380:ASN:ND2	2.67	0.68
46:RD:135:ILE:HG13	46:RD:152:ILE:HD11	1.76	0.68
46:TB:207:LEU:HB3	46:TB:225:LEU:HD22	1.75	0.68
45:VK:221:ARG:HH22	46:VL:325:GLU:H	1.42	0.68
46:VL:284:LEU:HD13	46:VL:362:LYS:HB2	1.76	0.68
45:AM:292:THR:HG21	45:AM:331:SER:HB3	1.75	0.68
46:BH:372:THR:HA	46:BH:422:TYR:HE2	1.56	0.68
46:CN:273:LEU:H	46:CN:292:GLN:HE22	1.42	0.68
45:JI:244:PHE:HB2	45:JI:356:ASN:HD21	1.58	0.68
45:OM:338:LYS:HG2	45:OM:340:THR:HG22	1.76	0.68
46:QD:387:ALA:O	46:QD:390:ARG:NH1	2.27	0.68
46:UN:135:ILE:HG13	46:UN:152:ILE:HD11	1.76	0.68
45:VG:55:GLU:HG3	45:VG:57:GLY:H	1.58	0.68
46:VJ:309:ARG:NH1	46:VJ:426:GLN:O	2.24	0.68
46:VN:383:GLU:HA	46:VN:386:THR:HG22	1.75	0.68
45:WA:55:GLU:HG3	45:WA:57:GLY:H	1.56	0.68
21:3L:140:LEU:HB3	21:3L:144:LYS:NZ	2.09	0.68
46:AB:73:MET:HA	46:AB:76:VAL:HG22	1.74	0.68
45:AC:175:PRO:O	45:AC:394:LYS:NZ	2.25	0.68
46:CF:222:TYR:O	46:CF:226:ASN:ND2	2.20	0.68
46:CH:2:ARG:HH21	45:CI:72:PRO:HD2	1.58	0.68
46:FB:213:ARG:HH21	46:FB:214:THR:HB	1.57	0.68
46:FN:116:VAL:O	46:FN:120:VAL:HG23	1.94	0.68
46:HD:235:GLY:HA3	46:HD:366:THR:HG21	1.76	0.68
45:IC:178:SER:OG	46:ID:347:ASN:ND2	2.27	0.68
46:KB:286:VAL:HG21	46:KB:325:GLU:HG3	1.75	0.68
45:LA:292:THR:HG21	45:LA:331:SER:HB3	1.74	0.68
45:LG:98:ASP:OD2	45:LG:99:ALA:N	2.27	0.68
45:NK:64:ARG:NH1	45:NK:129:CYS:SG	2.67	0.68
46:OB:282:ARG:HH22	46:OB:284:LEU:HA	1.59	0.68
45:PK:64:ARG:NH1	45:PK:129:CYS:SG	2.67	0.68
45:QA:311:LYS:HE3	45:QA:344:VAL:HA	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QH:207:LEU:HD13	46:QH:225:LEU:HB3	1.76	0.68
46:RB:325:GLU:OE1	45:RC:221:ARG:NH1	2.26	0.68
46:RD:372:THR:HA	46:RD:422:TYR:HE2	1.59	0.68
46:SL:54:ALA:HA	46:TL:283:ALA:HB2	1.74	0.68
45:WA:254:GLU:HG2	46:WD:98:GLY:HA2	1.76	0.68
46:WB:276:ARG:O	46:WB:276:ARG:NH1	2.27	0.68
45:WG:311:LYS:HZ2	45:WG:342:GLN:HB3	1.59	0.68
45:WM:392:ASP:OD1	45:WM:422:ARG:NH1	2.27	0.68
30:2H:176:LYS:NZ	45:AA:322:ASP:O	2.26	0.68
26:2W:211:ASP:HA	26:2W:214:ARG:HH12	1.59	0.68
36:5B:149:ASN:OD1	36:5B:173:GLN:NE2	2.26	0.68
46:AJ:54:ALA:HA	46:BJ:283:ALA:HB2	1.76	0.68
46:FJ:31:ASP:OD1	46:FJ:35:THR:N	2.26	0.68
46:FN:191:GLN:O	46:FN:195:ASN:ND2	2.27	0.68
45:HE:128:ASN:OD1	45:IE:285:GLN:NE2	2.27	0.68
45:HM:252:ILE:HA	45:HM:255:PHE:HE2	1.59	0.68
46:PB:6:HIS:HE1	46:PB:8:GLN:HB3	1.59	0.68
46:PL:222:TYR:O	46:PL:226:ASN:ND2	2.26	0.68
46:TB:257:LEU:HD21	46:TB:314:SER:HB3	1.75	0.68
46:VN:295:ASP:HB3	46:VN:298:ASN:HB2	1.74	0.68
46:WB:68:LEU:HB3	46:WB:96:GLY:HA2	1.74	0.68
45:BG:2:ARG:NH2	46:BJ:69:GLU:OE1	2.25	0.68
46:BN:222:TYR:O	46:BN:226:ASN:ND2	2.18	0.68
46:CF:11:GLN:NE2	49:CF:501:GDP:O1A	2.26	0.68
45:CM:212:ILE:HD11	45:CM:300:ASN:HA	1.76	0.68
46:CN:272:PRO:HD3	46:CN:364:ALA:HA	1.76	0.68
46:JF:222:TYR:O	46:JF:226:ASN:ND2	2.25	0.68
45:MA:221:ARG:NH1	46:MB:322:SER:OG	2.27	0.68
45:NM:288:VAL:HG21	45:NM:327:ASP:HB3	1.76	0.68
46:RL:386:THR:OG1	46:RL:390:ARG:NH1	2.27	0.68
45:VA:193:SER:O	45:VA:197:HIS:ND1	2.25	0.68
45:VK:254:GLU:OE2	45:VK:258:ASN:ND2	2.27	0.68
16:2B:83:ALA:O	16:2B:87:GLN:NE2	2.27	0.67
27:2C:106:PHE:HE2	27:2C:188:ILE:HG12	1.59	0.67
21:2L:390:GLN:HE21	21:2L:447:LEU:HD11	1.58	0.67
23:2O:436:GLU:HG2	23:2O:440:GLN:HE22	1.59	0.67
16:3B:202:VAL:HG22	16:3B:204:PRO:HD3	1.74	0.67
38:5K:91:UNK:HA	45:JM:430:LYS:HE3	1.76	0.67
46:AD:372:THR:HA	46:AD:422:TYR:HE2	1.57	0.67
45:AE:211:ASP:OD2	45:AE:215:ARG:NH1	2.28	0.67
45:GG:362:VAL:HB	45:GG:370:LYS:HB3	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:HN:213:ARG:HD2	46:HN:297:LYS:HB3	1.76	0.67
46:HN:253:LEU:HD12	46:HN:257:LEU:HD13	1.75	0.67
45:IM:205:ASP:OD1	45:IM:206:ASN:N	2.27	0.67
45:JM:212:ILE:HD13	45:JM:215:ARG:HH22	1.59	0.67
46:KN:218:THR:HG23	46:KN:219:THR:HG23	1.76	0.67
45:OC:64:ARG:NH1	45:OC:129:CYS:SG	2.67	0.67
45:QA:33:ASP:HA	45:QA:85:GLN:HE21	1.60	0.67
45:QG:210:TYR:HE1	45:QG:227:LEU:HD21	1.59	0.67
45:RG:244:PHE:HB2	45:RG:356:ASN:HD21	1.58	0.67
45:UM:288:VAL:HG11	45:UM:327:ASP:HB3	1.75	0.67
45:UM:372:MET:SD	45:UM:373:ARG:NH1	2.68	0.67
45:WM:288:VAL:HG11	45:WM:327:ASP:HB3	1.75	0.67
18:1I:142:GLN:HG2	46:KF:320:ARG:HH12	1.58	0.67
27:3C:36:ARG:HG2	27:3C:92:LEU:HD13	1.75	0.67
25:3R:131:ASP:O	25:3R:156:LYS:NZ	2.27	0.67
45:BA:98:ASP:O	45:BA:105:ARG:NH2	2.27	0.67
45:CC:406:HIS:HA	45:CC:409:VAL:HG12	1.76	0.67
46:EJ:6:HIS:NE2	46:EJ:8:GLN:OE1	2.26	0.67
45:FE:11:GLN:NE2	46:FF:247:ASN:OD1	2.27	0.67
46:FF:173:PRO:HG2	46:FF:380:ARG:HD2	1.75	0.67
46:FF:371:SER:O	46:FF:422:TYR:OH	2.12	0.67
46:HB:86:ARG:HH22	46:IB:278:SER:HA	1.59	0.67
46:HN:222:TYR:O	46:HN:226:ASN:ND2	2.27	0.67
45:IA:70:LEU:HD13	45:IA:95:GLY:HA3	1.75	0.67
45:MK:31:GLN:HE21	45:MK:37:PRO:HG3	1.59	0.67
46:ND:107:THR:OG1	46:ND:108:GLU:OE1	2.13	0.67
46:NH:122:LYS:HE3	46:NH:122:LYS:HA	1.75	0.67
46:OJ:30:ILE:HD11	46:OJ:47:ILE:HD11	1.76	0.67
45:QK:70:LEU:HD13	45:QK:95:GLY:HA3	1.77	0.67
46:SD:325:GLU:OE2	45:SE:221:ARG:NH2	2.27	0.67
45:WE:399:TYR:O	45:WE:402:ARG:NH1	2.28	0.67
45:WK:71:GLU:OE2	46:WL:2:ARG:NH2	2.25	0.67
23:2O:455:GLN:O	23:2O:459:GLN:NE2	2.27	0.67
45:AC:90:GLU:OE2	45:AC:121:ARG:NH2	2.25	0.67
45:BA:328:VAL:HG11	45:BA:353:VAL:HG21	1.75	0.67
46:BB:26:ASP:HB3	46:BB:359:LYS:HE2	1.75	0.67
46:DB:114:ASP:OD1	46:DB:115:SER:N	2.28	0.67
45:FK:377:MET:SD	45:FK:379:SER:OG	2.49	0.67
46:GF:222:TYR:O	46:GF:226:ASN:ND2	2.19	0.67
46:IB:168:SER:HB2	46:IB:201:VAL:HG12	1.75	0.67
46:RD:135:ILE:HB	46:RD:166:THR:HG22	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RG:392:ASP:OD1	45:RG:422:ARG:NH2	2.28	0.67
45:SG:241:SER:OG	45:SG:250:VAL:O	2.11	0.67
12:1T:71:THR:OG1	12:1T:109:CYS:SG	2.52	0.67
13:1U:117:LEU:HB3	13:1U:132:TRP:HB2	1.76	0.67
12:3T:137:SER:OG	12:3T:140:GLN:OE1	2.13	0.67
46:BD:218:THR:HG23	46:BD:219:THR:HG23	1.76	0.67
46:FF:68:LEU:HB3	46:FF:96:GLY:HA2	1.76	0.67
46:FF:73:MET:HA	46:FF:76:VAL:HG22	1.76	0.67
45:FG:254:GLU:HG2	46:FJ:98:GLY:HA2	1.75	0.67
45:HC:192:HIS:ND1	45:HC:424:ASP:OD2	2.22	0.67
46:JB:223:GLY:O	46:JB:227:HIS:ND1	2.27	0.67
46:KF:194:GLU:OE2	46:KF:414:ASN:ND2	2.27	0.67
46:NB:54:ALA:HA	46:OB:283:ALA:HB2	1.76	0.67
45:RA:101:ASN:HA	45:RA:144:GLY:H	1.59	0.67
46:RF:285:THR:HG22	46:RF:287:PRO:HD2	1.76	0.67
45:TK:97:GLU:HG2	45:TK:105:ARG:HH22	1.60	0.67
45:UA:206:ASN:OD1	47:UA:501:GTP:N2	2.27	0.67
45:UC:272:TYR:HB3	45:UC:275:ILE:HD11	1.76	0.67
45:WK:288:VAL:HG11	45:WK:327:ASP:HB3	1.75	0.67
13:1U:563:ASP:OD1	13:1U:564:GLU:N	2.28	0.67
12:2T:181:LEU:HG	12:2T:199:ARG:HH12	1.59	0.67
14:3V:242:GLU:OE2	46:WD:218:THR:OG1	2.13	0.67
34:7R:249:LEU:HA	45:CA:370:LYS:HE3	1.76	0.67
34:7R:556:ILE:HD11	34:7R:569:PHE:HA	1.76	0.67
45:AM:328:VAL:HG11	45:AM:353:VAL:HG21	1.77	0.67
45:EA:30:ILE:HA	45:EA:36:MET:HA	1.77	0.67
45:GI:326:LYS:HD3	46:GL:212:PHE:HZ	1.59	0.67
45:KI:254:GLU:OE1	46:KL:99:ASN:ND2	2.27	0.67
46:MN:213:ARG:HD2	46:MN:297:LYS:HD2	1.75	0.67
46:NB:285:THR:HG23	46:NB:287:PRO:HD2	1.74	0.67
45:NC:271:SER:OG	45:NC:301:MET:SD	2.51	0.67
46:NF:10:GLY:O	46:NF:14:ASN:ND2	2.28	0.67
45:PG:195:LEU:HD21	45:PG:264:ARG:HH21	1.60	0.67
45:QC:15:GLN:NE2	47:QC:501:GTP:O6	2.28	0.67
46:SH:313:ALA:HB3	46:SH:349:ILE:HG12	1.75	0.67
46:SJ:58:ARG:NH2	46:TJ:280:GLN:O	2.26	0.67
46:TL:371:SER:O	46:TL:422:TYR:OH	2.13	0.67
16:2B:181:LYS:HD2	26:2W:272:LYS:NZ	2.09	0.67
27:2C:131:LEU:HG	27:2C:194:GLN:HE22	1.60	0.67
10:2Q:48:GLU:HG3	10:2Q:161:ARG:HG2	1.76	0.67
13:3U:11:ILE:HB	13:3U:599:ILE:HB	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AN:178:THR:HB	46:AN:181:GLU:HG3	1.75	0.67
46:BN:58:ARG:NH2	46:CL:281:TYR:OH	2.27	0.67
46:CB:309:ARG:NH2	46:CB:426:GLN:O	2.26	0.67
46:CH:294:PHE:HE2	46:CH:333:VAL:HG11	1.59	0.67
46:FD:178:THR:HG22	46:FD:180:VAL:H	1.59	0.67
46:FN:16:ILE:HD12	46:FN:229:VAL:HG11	1.77	0.67
45:HK:254:GLU:OE2	46:HN:99:ASN:ND2	2.27	0.67
45:JA:310:GLY:O	45:JA:342:GLN:NE2	2.28	0.67
45:LA:259:LEU:HD21	45:LA:316:SER:HB2	1.77	0.67
46:MB:73:MET:HA	46:MB:76:VAL:HG12	1.76	0.67
45:OK:89:PRO:HD2	45:PK:280:LYS:HE2	1.77	0.67
45:QA:11:GLN:HG3	45:QA:74:VAL:HG11	1.77	0.67
46:QL:257:LEU:HD21	46:QL:314:SER:HB2	1.77	0.67
46:RB:376:GLU:HA	46:RB:379:LYS:HE3	1.76	0.67
45:SA:316:SER:HA	45:SA:352:LYS:HB2	1.77	0.67
46:SL:345:ILE:HG12	46:SL:348:ASN:HB3	1.75	0.67
46:TB:247:ASN:OD1	45:TC:11:GLN:NE2	2.27	0.67
46:UH:237:THR:HG22	46:UH:250:LEU:HD21	1.75	0.67
46:WJ:273:LEU:H	46:WJ:292:GLN:HE22	1.43	0.67
45:WK:276:ILE:HD11	45:WK:280:LYS:HE2	1.76	0.67
21:1L:655:ARG:NH2	45:CE:218:ASP:OD2	2.27	0.67
31:2I:78:PRO:HB3	45:GE:298:PRO:HD3	1.76	0.67
16:3B:136:ARG:NH1	15:4X:87:ASP:OD2	2.26	0.67
37:5F:173:LYS:HE2	46:KH:194:GLU:HA	1.77	0.67
45:BA:31:GLN:HE22	45:BA:37:PRO:HB3	1.58	0.67
45:DK:386:GLU:HB3	45:DK:390:ARG:HH12	1.59	0.67
45:EM:2:ARG:NH2	45:EM:242:LEU:O	2.27	0.67
46:FF:257:LEU:HD11	46:FF:314:SER:HB2	1.76	0.67
46:FL:371:SER:O	46:FL:422:TYR:OH	2.12	0.67
46:GB:86:ARG:HH22	46:HB:278:SER:HA	1.60	0.67
45:HE:60:LYS:NZ	45:HE:85:GLN:O	2.28	0.67
45:LG:241:SER:OG	45:LG:250:VAL:O	2.12	0.67
46:LJ:5:VAL:HG12	46:LJ:62:ARG:HD3	1.76	0.67
46:OB:171:PRO:O	46:OB:380:ARG:NH2	2.26	0.67
45:OK:147:SER:HB2	45:OK:190:SER:HB2	1.77	0.67
45:OM:214:ARG:NH1	45:OM:214:ARG:O	2.28	0.67
46:QJ:31:ASP:OD2	46:QJ:37:HIS:HE1	1.78	0.67
46:RB:318:ARG:HE	46:RB:358:PRO:HG3	1.59	0.67
45:RI:141:VAL:HG11	45:RI:172:TYR:HD1	1.59	0.67
46:SB:125:GLU:OE1	46:TB:291:GLN:NE2	2.28	0.67
46:TB:2:ARG:H	46:TB:129:CYS:HB2	1.60	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TH:324:LYS:HD2	45:TI:222:PRO:HD2	1.76	0.67
46:TL:226:ASN:HD21	49:TL:501:GDP:HN1	1.42	0.67
45:UG:2:ARG:NH2	46:UH:69:GLU:OE2	2.27	0.67
46:UJ:222:TYR:O	46:UJ:226:ASN:ND2	2.25	0.67
45:VM:207:GLU:HA	45:VM:210:TYR:HD2	1.58	0.67
46:VN:19:LYS:NZ	46:VN:223:GLY:O	2.28	0.67
46:WB:309:ARG:NH1	46:WB:343:GLU:OE1	2.28	0.67
23:2O:322:ARG:HG2	45:VE:365:GLY:H	1.59	0.67
14:3V:33:PRO:HB3	45:MA:304:LYS:HD2	1.77	0.67
37:5G:197:LEU:HD12	45:LK:393:HIS:HB2	1.77	0.67
46:BL:174:LYS:HA	46:BL:174:LYS:HE3	1.77	0.67
46:EF:252:LYS:NZ	47:EG:501:GTP:O1G	2.26	0.67
46:EL:282:ARG:HE	46:EL:283:ALA:H	1.43	0.67
45:EM:348:PRO:HG2	46:EN:384:GLN:HE22	1.60	0.67
45:FA:60:LYS:NZ	45:FA:85:GLN:O	2.26	0.67
46:FB:229:VAL:O	46:FB:233:MET:HG3	1.93	0.67
46:GF:285:THR:OG1	46:GF:288:GLU:OE1	2.12	0.67
46:MB:42:LEU:HA	46:MB:45:GLU:HG3	1.77	0.67
45:MC:402:ARG:NH1	45:MC:415:GLU:OE2	2.28	0.67
45:OI:311:LYS:NZ	45:OI:438:GLU:OE2	2.28	0.67
46:PD:376:GLU:HB3	46:PD:380:ARG:HH12	1.59	0.67
45:SG:259:LEU:HD21	45:SG:316:SER:HB2	1.76	0.67
46:VB:48:ASN:O	46:VB:62:ARG:NH1	2.28	0.67
45:VM:289:ALA:O	45:VM:293:ASN:ND2	2.28	0.67
46:WH:173:PRO:HG2	46:WH:380:ARG:HD2	1.75	0.67
25:2R:11:PHE:HA	15:2X:81:ARG:HD3	1.77	0.67
37:5H:41:THR:HG21	45:OK:372:MET:HG3	1.76	0.67
45:CG:288:VAL:HG11	45:CG:327:ASP:HB3	1.76	0.67
45:CI:292:THR:HG21	45:CI:331:SER:HB3	1.76	0.67
46:DF:84:LEU:O	46:DF:86:ARG:NH1	2.28	0.67
45:DG:188:ILE:HD12	45:DG:425:LEU:HD11	1.77	0.67
46:DL:207:LEU:HD23	46:DL:225:LEU:HB3	1.75	0.67
45:EC:259:LEU:HD21	45:EC:316:SER:HB3	1.77	0.67
46:EH:222:TYR:O	46:EH:226:ASN:ND2	2.23	0.67
46:FB:207:LEU:HD22	46:FB:228:LEU:HD11	1.76	0.67
46:FL:262:ARG:NH2	46:FL:421:GLU:OE1	2.28	0.67
45:GE:326:LYS:NZ	46:GH:219:THR:HA	2.09	0.67
45:HM:271:SER:HB2	45:HM:377:MET:HB3	1.77	0.67
45:IA:276:ILE:HD12	45:IA:281:ALA:HA	1.77	0.67
46:JN:215:LEU:HD21	46:JN:273:LEU:HD12	1.76	0.67
45:NC:55:GLU:HG3	45:NC:57:GLY:H	1.58	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PC:206:ASN:OD1	47:PC:501:GTP:N2	2.26	0.67
46:SD:262:ARG:NH2	46:SD:421:GLU:OE1	2.28	0.67
46:TH:191:GLN:HG3	46:TH:195:ASN:HD21	1.60	0.67
46:UL:324:LYS:HE2	45:UM:222:PRO:HD2	1.74	0.67
45:UM:98:ASP:O	45:UM:105:ARG:NH2	2.28	0.67
46:UN:99:ASN:HA	46:UN:142:GLY:H	1.60	0.67
9:2N:179:ILE:HG13	46:KB:37:HIS:HB3	1.77	0.67
13:2U:212:THR:HG22	13:2U:214:THR:H	1.60	0.67
36:5C:77:SER:O	46:NJ:320:ARG:NH2	2.27	0.67
45:CI:11:GLN:NE2	47:CI:501:GTP:O3A	2.28	0.67
46:GD:334:GLN:NE2	46:GD:348:ASN:OD1	2.28	0.67
46:HD:213:ARG:HH22	46:HD:297:LYS:HB3	1.58	0.67
46:IB:208:TYR:O	46:IB:212:PHE:HD2	1.78	0.67
45:IC:317:MET:HB3	45:IC:377:MET:HG3	1.76	0.67
45:JC:244:PHE:HB2	45:JC:356:ASN:HD21	1.60	0.67
45:MM:288:VAL:HG11	45:MM:327:ASP:HB3	1.75	0.67
45:NC:76:ASP:OD2	46:ND:46:ARG:NH2	2.28	0.67
45:NG:76:ASP:OD2	46:NH:46:ARG:NH2	2.27	0.67
46:NJ:91:VAL:HG21	46:NJ:116:VAL:HG12	1.76	0.67
45:OG:180:ALA:HB3	45:OG:183:GLU:HG3	1.77	0.67
46:PB:309:ARG:HH11	46:PB:342:VAL:HA	1.60	0.67
45:PC:96:LYS:NZ	46:PD:1:MET:SD	2.67	0.67
45:QA:244:PHE:HB2	45:QA:356:ASN:HD21	1.60	0.67
46:QN:74:ASP:O	46:QN:77:ARG:NH1	2.23	0.67
46:RL:376:GLU:HA	46:RL:379:LYS:HB2	1.77	0.67
45:SG:306:ASP:OD1	45:SG:308:ARG:NH2	2.28	0.67
46:UF:248:SER:HA	46:UF:252:LYS:HD2	1.76	0.67
46:VF:207:LEU:HB3	46:VF:225:LEU:HD22	1.77	0.67
12:1T:285:ARG:HH22	13:1U:52:ARG:H	1.41	0.66
1:2A:113:THR:OG1	1:2A:114:ALA:N	2.25	0.66
26:2W:189:ARG:HB2	45:KM:46:ASP:CG	2.16	0.66
36:5A:77:SER:O	46:NB:320:ARG:NH2	2.28	0.66
45:AG:326:LYS:HE2	46:AJ:220:PRO:HD2	1.78	0.66
45:BK:292:THR:HG21	45:BK:331:SER:HB3	1.77	0.66
46:BL:372:THR:HA	46:BL:422:TYR:HE2	1.60	0.66
45:CC:133:GLN:HB3	45:CC:252:ILE:HD11	1.77	0.66
46:CJ:222:TYR:O	46:CJ:226:ASN:ND2	2.27	0.66
46:DN:377:MET:HA	46:DN:380:ARG:HG2	1.77	0.66
46:FN:318:ARG:HE	46:FN:358:PRO:HG3	1.60	0.66
45:JE:27:GLU:OE1	45:JE:243:ARG:NH1	2.25	0.66
45:LC:398:MET:HG2	46:LD:345:ILE:HG22	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LG:292:THR:HG21	45:LG:331:SER:HB2	1.77	0.66
46:LL:101:TRP:HB2	46:LL:184:ASN:HB3	1.78	0.66
45:QE:269:LEU:HD12	45:QE:303:ALA:HB3	1.76	0.66
46:RF:54:ALA:HA	46:SF:283:ALA:HB2	1.76	0.66
46:RF:350:LYS:NZ	46:RF:352:SER:OG	2.28	0.66
46:SL:60:VAL:HG21	46:SL:86:ARG:HG2	1.76	0.66
45:UG:55:GLU:HG3	45:UG:57:GLY:H	1.60	0.66
45:VE:223:THR:HG22	45:VE:224:TYR:H	1.60	0.66
46:WL:27:GLU:O	46:WL:43:GLN:NE2	2.27	0.66
14:OV:96:ASN:HD22	46:LN:261:PRO:HG2	1.60	0.66
20:1K:194:LYS:NZ	46:GD:279:GLN:OE1	2.24	0.66
27:2C:268:ARG:NH1	27:2C:268:ARG:HA	2.10	0.66
12:2T:137:SER:OG	12:2T:140:GLN:OE1	2.13	0.66
13:3U:387:ARG:HG3	13:3U:399:VAL:HG22	1.78	0.66
36:5A:21:GLN:NE2	46:KB:409:THR:O	2.27	0.66
36:5C:66:TYR:OH	46:NJ:26:ASP:OD1	2.13	0.66
46:AN:288:GLU:OE1	46:AN:291:GLN:NE2	2.27	0.66
45:CC:141:VAL:HG12	45:CC:187:SER:HA	1.77	0.66
45:CG:55:GLU:HG3	45:CG:57:GLY:H	1.60	0.66
46:CN:11:GLN:O	46:CN:15:GLN:NE2	2.28	0.66
46:DH:309:ARG:NH2	46:DH:426:GLN:O	2.26	0.66
46:EJ:139:LEU:HD22	46:EJ:170:VAL:HG12	1.77	0.66
45:FG:11:GLN:NE2	46:FH:245:GLN:O	2.28	0.66
46:GH:68:LEU:HB3	46:GH:96:GLY:HA2	1.78	0.66
46:GN:293:MET:HG3	46:GN:294:PHE:HD1	1.59	0.66
45:HC:399:TYR:O	45:HC:402:ARG:NH1	2.28	0.66
46:HH:135:ILE:HG13	46:HH:152:ILE:HD11	1.78	0.66
46:IB:299:MET:HG3	46:IB:305:PRO:HG3	1.76	0.66
45:RK:220:GLU:OE2	45:RK:221:ARG:NH1	2.29	0.66
45:TC:328:VAL:HG11	45:TC:353:VAL:HG21	1.76	0.66
45:TG:217:LEU:HD21	45:TG:368:LEU:HD23	1.77	0.66
46:UF:222:TYR:O	46:UF:226:ASN:ND2	2.25	0.66
46:UJ:100:ASN:HD22	46:UJ:103:LYS:HB2	1.61	0.66
46:VF:6:HIS:NE2	46:VF:8:GLN:OE1	2.28	0.66
21:1L:481:LYS:HA	46:CF:280:GLN:HE22	1.60	0.66
30:2H:171:LEU:HD11	30:2H:176:LYS:HD2	1.76	0.66
10:3Q:140:THR:HG21	10:3Q:148:TYR:HB3	1.77	0.66
45:AA:326:LYS:NZ	45:AA:327:ASP:OD1	2.26	0.66
46:AB:135:ILE:HG13	46:AB:152:ILE:HD11	1.77	0.66
45:CK:271:SER:OG	45:CK:301:MET:SD	2.53	0.66
45:DM:9:VAL:HG12	45:DM:68:LEU:HB2	1.75	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GL:222:TYR:O	46:GL:226:ASN:ND2	2.17	0.66
46:HB:322:SER:OG	46:HB:325:GLU:OE1	2.13	0.66
46:HD:114:ASP:OD1	46:HD:115:SER:N	2.28	0.66
46:HD:222:TYR:O	46:HD:226:ASN:ND2	2.22	0.66
46:JJ:396:HIS:HA	46:JJ:399:THR:HG22	1.77	0.66
45:LA:222:PRO:HG2	46:LB:324:LYS:HZ1	1.60	0.66
45:MK:9:VAL:HG12	45:MK:68:LEU:HB2	1.77	0.66
46:OB:11:GLN:O	46:OB:15:GLN:NE2	2.28	0.66
45:QA:81:GLY:O	45:QA:84:ARG:NH1	2.28	0.66
46:QF:200:MET:HG2	46:QF:266:PHE:HB2	1.77	0.66
46:QL:156:ARG:NH1	46:QL:162:ARG:O	2.28	0.66
45:SI:241:SER:OG	45:SI:250:VAL:O	2.14	0.66
46:UD:51:TYR:O	46:UD:62:ARG:NH2	2.28	0.66
45:UG:282:TYR:OH	45:UG:370:LYS:O	2.11	0.66
45:UI:3:GLU:OE1	45:UI:64:ARG:NH1	2.28	0.66
46:UN:324:LYS:HD2	46:UN:324:LYS:H	1.59	0.66
45:VG:222:PRO:HD2	46:VH:324:LYS:NZ	2.10	0.66
45:VI:326:LYS:HE2	46:VL:220:PRO:HG2	1.77	0.66
46:VN:20:PHE:HZ	46:VN:50:TYR:HE1	1.44	0.66
16:1B:216:GLU:OE1	46:KD:320:ARG:NH2	2.27	0.66
14:2V:159:ARG:NH1	14:2V:159:ARG:HA	2.10	0.66
15:3X:105:GLN:HG3	15:3X:109:GLN:HE22	1.58	0.66
10:4Q:95:ASP:HA	10:4Q:148:TYR:HA	1.76	0.66
46:AL:371:SER:O	46:AL:422:TYR:OH	2.12	0.66
45:BA:241:SER:OG	45:BA:250:VAL:O	2.13	0.66
46:CJ:149:THR:HA	46:CJ:152:ILE:HD12	1.76	0.66
46:ED:135:ILE:HG13	46:ED:152:ILE:HD11	1.76	0.66
46:FB:19:LYS:HA	46:FB:22:GLU:HB2	1.78	0.66
46:FL:313:ALA:HB3	46:FL:349:ILE:HG12	1.75	0.66
46:HD:178:THR:HB	46:HD:181:GLU:HG3	1.77	0.66
46:KH:156:ARG:HH11	46:KH:164:MET:HG3	1.61	0.66
45:LM:119:LEU:HD11	45:LM:156:ARG:HG2	1.78	0.66
45:LM:292:THR:HG21	45:LM:331:SER:HB3	1.77	0.66
45:LM:407:TRP:CZ3	46:LN:255:VAL:HA	2.31	0.66
46:ND:133:PHE:HB2	46:ND:164:MET:HG3	1.78	0.66
45:QA:101:ASN:HA	45:QA:144:GLY:H	1.61	0.66
45:QI:75:ILE:HG22	45:QI:79:ARG:HE	1.61	0.66
46:QJ:237:THR:HG23	46:QJ:241:ARG:HH21	1.61	0.66
45:SK:298:PRO:HG3	45:SK:308:ARG:HD2	1.77	0.66
46:UB:213:ARG:HE	46:UB:297:LYS:HE3	1.60	0.66
45:UC:259:LEU:HD11	45:UC:316:SER:HB3	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VM:88:HIS:HA	45:WM:280:LYS:NZ	2.11	0.66
45:WM:206:ASN:HD21	45:WM:227:LEU:HD13	1.61	0.66
36:5C:110:ARG:NH1	45:NI:280:LYS:O	2.28	0.66
46:GJ:178:THR:HB	46:GJ:181:GLU:HG3	1.76	0.66
46:HB:129:CYS:SG	46:HB:131:GLN:NE2	2.69	0.66
45:HC:55:GLU:HG3	45:HC:57:GLY:H	1.60	0.66
46:HJ:91:VAL:HG21	46:HJ:116:VAL:HG12	1.76	0.66
45:IC:326:LYS:HD2	46:IF:220:PRO:HD2	1.78	0.66
46:JB:257:LEU:HD21	46:JB:314:SER:HB3	1.76	0.66
46:JF:256:ASN:HD22	46:JF:350:LYS:HD2	1.61	0.66
45:LG:397:LEU:HD23	46:LH:346:PRO:HD3	1.77	0.66
45:MA:226:ASN:ND2	45:MA:367:ASP:OD2	2.28	0.66
45:NK:402:ARG:HD3	45:NK:405:VAL:HG21	1.77	0.66
45:QK:352:LYS:HZ3	46:QL:179:VAL:H	1.44	0.66
45:SK:22:GLU:OE2	45:SK:229:ARG:NH1	2.29	0.66
46:SN:32:PRO:O	46:SN:83:GLN:NE2	2.25	0.66
46:TL:107:THR:OG1	46:TL:108:GLU:OE1	2.12	0.66
16:2B:178:PRO:HD2	16:2B:181:LYS:HD3	1.76	0.66
1:3A:134:LYS:NZ	1:3A:135:SER:O	2.29	0.66
31:3I:260:MET:HG2	46:GJ:332:ASN:HD21	1.60	0.66
25:3R:87:LEU:HA	45:MK:85:GLN:HE22	1.58	0.66
45:DA:347:CYS:HA	46:DB:388:MET:HE2	1.76	0.66
45:DG:271:SER:OG	45:DG:301:MET:SD	2.54	0.66
46:DJ:83:GLN:O	46:EJ:281:TYR:OH	2.14	0.66
46:EB:282:ARG:HH22	46:EB:288:GLU:HB3	1.59	0.66
46:ED:99:ASN:HA	46:ED:142:GLY:H	1.60	0.66
45:EK:176:GLN:HG2	45:EK:177:VAL:HG23	1.77	0.66
45:JA:140:SER:OG	47:JA:501:GTP:O2B	2.14	0.66
45:JK:192:HIS:NE2	45:JK:424:ASP:OD2	2.27	0.66
45:JM:140:SER:OG	47:JM:501:GTP:O2B	2.10	0.66
45:KA:174:SER:HB3	45:KA:207:GLU:HG3	1.78	0.66
46:KJ:172:SER:OG	46:KJ:205:GLU:OE1	2.14	0.66
46:LF:177:ASP:OD2	49:LF:501:GDP:O3'	2.08	0.66
45:MA:288:VAL:HG11	45:MA:327:ASP:HB3	1.78	0.66
45:MI:103:PHE:HB2	45:MI:186:ASN:HB3	1.78	0.66
45:MM:212:ILE:HD11	45:MM:300:ASN:HA	1.77	0.66
46:MN:5:VAL:HG12	46:MN:62:ARG:HD3	1.77	0.66
46:RB:263:LEU:HD22	46:RB:422:TYR:HD1	1.61	0.66
46:SF:242:PHE:HB3	46:SF:356:ILE:HD13	1.75	0.66
46:SJ:200:MET:HG3	46:SJ:266:PHE:HB2	1.77	0.66
45:TA:69:ASP:HB3	45:TA:75:ILE:HD11	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TH:191:GLN:O	46:TH:195:ASN:ND2	2.29	0.66
46:WN:273:LEU:H	46:WN:292:GLN:HE22	1.43	0.66
18:1I:79:GLY:HA3	46:JD:279:GLN:HE22	1.58	0.66
23:1O:163:LYS:NZ	45:UE:279:GLU:OE2	2.28	0.66
12:1T:231:GLU:HA	12:1T:234:ASN:HB2	1.76	0.66
12:3T:50:GLU:OE1	12:3T:53:ARG:NH2	2.28	0.66
45:AM:413:MET:HG2	45:AM:417:GLU:HG3	1.78	0.66
45:BA:90:GLU:HG2	45:CA:280:LYS:HZ1	1.61	0.66
45:BE:407:TRP:CZ3	46:BF:255:VAL:HA	2.30	0.66
45:BK:185:TYR:HE2	45:BK:404:PHE:HB2	1.60	0.66
45:CC:271:SER:OG	45:CC:301:MET:SD	2.53	0.66
45:DE:88:HIS:HB3	45:DE:91:GLN:HG2	1.77	0.66
45:FA:221:ARG:CZ	46:FB:324:LYS:HB2	2.25	0.66
45:GE:211:ASP:OD2	45:GE:215:ARG:NH1	2.29	0.66
46:JN:213:ARG:HD2	46:JN:297:LYS:HE3	1.78	0.66
46:KH:51:TYR:HB3	46:KH:59:TYR:HB3	1.77	0.66
45:LM:181:VAL:HG23	45:LM:182:VAL:HG13	1.78	0.66
45:NG:181:VAL:HG12	46:NH:256:ASN:HD22	1.60	0.66
46:NH:178:THR:HG22	46:NH:180:VAL:H	1.60	0.66
45:OE:292:THR:HG21	45:OE:331:SER:HB3	1.77	0.66
45:OM:310:GLY:HA3	45:OM:383:ALA:HB2	1.78	0.66
46:RF:5:VAL:HG12	46:RF:62:ARG:HD3	1.77	0.66
46:SJ:5:VAL:HG12	46:SJ:62:ARG:HD3	1.76	0.66
45:TG:326:LYS:HG2	46:TH:220:PRO:HD2	1.76	0.66
46:TH:322:SER:OG	46:TH:325:GLU:OE1	2.13	0.66
46:UN:86:ARG:HH22	46:VN:278:SER:HA	1.59	0.66
46:VB:174:LYS:HB3	46:VB:205:GLU:HG2	1.77	0.66
46:VF:222:TYR:O	46:VF:226:ASN:ND2	2.20	0.66
46:WF:309:ARG:NH2	46:WF:426:GLN:O	2.29	0.66
2:0B:132:LEU:HD21	22:2M:361:LEU:HD21	1.77	0.66
18:1I:90:ASN:ND2	45:JC:77:GLU:OE2	2.28	0.66
25:2R:283:ARG:HE	45:CG:45:GLY:HA2	1.61	0.66
13:3U:403:ALA:O	13:3U:430:ARG:NH1	2.29	0.66
45:AA:259:LEU:HD11	45:AA:316:SER:HB2	1.78	0.66
46:AB:64:ILE:HD11	46:AB:123:GLU:HG3	1.78	0.66
46:BH:178:THR:HB	46:BH:181:GLU:HG3	1.76	0.66
45:BM:317:MET:HB3	45:BM:377:MET:HG3	1.78	0.66
46:DB:19:LYS:NZ	46:DB:223:GLY:O	2.28	0.66
45:DG:11:GLN:HG3	45:DG:74:VAL:HG11	1.77	0.66
46:DL:113:ILE:HG21	46:DL:150:LEU:HD11	1.78	0.66
45:JI:335:ILE:HD13	45:JI:338:LYS:HZ1	1.59	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JM:11:GLN:NE2	47:JM:501:GTP:O3A	2.29	0.66
45:MI:102:ASN:HD22	45:MI:105:ARG:HG3	1.58	0.66
46:NJ:178:THR:HB	46:NJ:181:GLU:HG3	1.77	0.66
45:OK:101:ASN:HA	45:OK:144:GLY:H	1.59	0.66
45:PK:241:SER:OG	45:PK:250:VAL:O	2.13	0.66
46:QL:129:CYS:SG	45:QM:96:LYS:NZ	2.62	0.66
46:RD:337:ASN:HB2	46:RD:340:TYR:HD2	1.60	0.66
46:SB:129:CYS:SG	45:SC:96:LYS:NZ	2.66	0.66
45:UE:254:GLU:HA	45:UE:257:THR:HG22	1.78	0.66
46:UN:113:ILE:HD11	46:UN:151:LEU:HB2	1.78	0.66
45:VE:88:HIS:HB3	45:VE:91:GLN:HE22	1.60	0.66
25:2R:131:ASP:O	25:2R:156:LYS:NZ	2.28	0.66
15:2X:33:ALA:HB1	15:3X:140:PRO:HG3	1.78	0.66
10:5Q:57:ASN:HB2	10:5Q:158:ALA:HB2	1.77	0.66
46:CL:222:TYR:O	46:CL:226:ASN:ND2	2.20	0.66
46:DL:290:THR:HA	46:DL:293:MET:HG2	1.78	0.66
46:FN:55:THR:HG23	46:GN:283:ALA:HA	1.78	0.66
45:IC:292:THR:HG21	45:IC:331:SER:HB3	1.75	0.66
46:KH:222:TYR:O	46:KH:226:ASN:ND2	2.21	0.66
46:LB:334:GLN:NE2	46:LB:348:ASN:OD1	2.29	0.66
45:LE:395:PHE:HZ	45:LE:418:PHE:HB3	1.61	0.66
46:OJ:372:THR:HA	46:OJ:422:TYR:HE2	1.60	0.66
46:PL:156:ARG:NH1	46:PL:195:ASN:O	2.27	0.66
45:PM:221:ARG:NH1	46:PN:322:SER:OG	2.29	0.66
45:QK:292:THR:HG21	45:QK:331:SER:HB2	1.77	0.66
45:RE:338:LYS:HG2	45:RE:340:THR:HG22	1.77	0.66
46:RJ:350:LYS:NZ	46:RJ:352:SER:OG	2.29	0.66
46:SF:46:ARG:NH2	45:SG:76:ASP:OD2	2.28	0.66
45:UA:213:CYS:HB3	45:UA:219:ILE:HB	1.78	0.66
46:UD:161:ASP:OD1	46:UD:162:ARG:NH1	2.28	0.66
46:UN:260:PHE:HB2	46:UN:263:LEU:HD13	1.77	0.66
46:WF:52:ASN:OD1	46:WF:62:ARG:NH2	2.28	0.66
14:0V:235:VAL:HG11	45:VM:57:GLY:HA2	1.78	0.66
14:1V:128:GLN:NE2	14:1V:129:SER:O	2.29	0.66
25:2R:345:CYS:HB3	25:2R:361:PHE:HE2	1.60	0.66
37:5E:61:LYS:O	46:OB:279:GLN:NE2	2.27	0.66
47:AM:501:GTP:O1G	46:AN:252:LYS:NZ	2.29	0.66
46:BN:39:ASP:OD2	46:BN:43:GLN:NE2	2.29	0.66
46:BN:322:SER:OG	46:BN:325:GLU:OE1	2.14	0.66
46:DB:68:LEU:HD12	46:DB:93:GLY:HA3	1.78	0.66
46:DN:135:ILE:HG13	46:DN:152:ILE:HD11	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EB:222:TYR:O	46:EB:226:ASN:ND2	2.29	0.66
45:EC:140:SER:OG	47:EC:501:GTP:O2B	2.13	0.66
46:FB:166:THR:HG21	46:FB:192:LEU:HD11	1.77	0.66
45:GC:11:GLN:NE2	46:GD:245:GLN:O	2.28	0.66
46:IB:3:GLU:HB3	46:IB:62:ARG:HH22	1.61	0.66
45:JC:292:THR:HG21	45:JC:331:SER:HB2	1.77	0.66
45:OE:398:MET:HG2	46:OF:345:ILE:HG22	1.78	0.66
45:PK:206:ASN:OD1	47:PK:501:GTP:N2	2.27	0.66
45:SK:434:GLU:O	46:SL:391:ARG:NH2	2.29	0.66
45:TG:11:GLN:HG3	45:TG:74:VAL:HG11	1.78	0.66
46:UN:153:SER:HB2	46:UN:191:GLN:HE21	1.61	0.66
46:VD:226:ASN:HD21	49:VD:501:GDP:HN1	1.44	0.66
45:VE:427:ALA:HA	45:VE:430:LYS:HE3	1.78	0.66
46:WL:375:GLN:HE21	46:WL:422:TYR:HD2	1.44	0.66
13:1U:492:LEU:HB2	13:1U:510:SER:HB2	1.78	0.65
12:2T:3:LEU:HD13	12:2T:187:ILE:HG23	1.77	0.65
27:3C:68:ASN:O	27:3C:72:GLN:NE2	2.29	0.65
10:4Q:173:SER:OG	10:4Q:176:GLU:OE1	2.14	0.65
41:6H:380:ASP:OD1	41:6H:381:GLN:N	2.29	0.65
46:AF:54:ALA:HA	46:BF:283:ALA:HB2	1.77	0.65
45:AK:292:THR:HG21	45:AK:331:SER:HB3	1.77	0.65
46:CF:200:MET:HG2	46:CF:266:PHE:HB2	1.78	0.65
46:DB:118:ASP:OD1	46:DB:121:ARG:NH2	2.28	0.65
45:DI:256:GLN:HE21	46:DJ:397:TRP:HH2	1.42	0.65
46:DJ:222:TYR:O	46:DJ:226:ASN:ND2	2.26	0.65
45:DK:140:SER:OG	47:DK:501:GTP:O2B	2.13	0.65
45:EC:247:ALA:HB3	45:EC:355:ILE:HD11	1.78	0.65
45:FC:402:ARG:HG3	45:FC:405:VAL:HG11	1.78	0.65
45:FM:76:ASP:OD2	46:FN:46:ARG:NH2	2.28	0.65
45:HK:238:LEU:HD12	45:HK:318:MET:HE1	1.78	0.65
46:JB:274:THR:HB	46:JB:282:ARG:HH11	1.61	0.65
45:KM:123:ARG:NH2	45:KM:160:ASP:OD1	2.28	0.65
45:LK:109:THR:HG23	45:LK:110:ILE:HG23	1.78	0.65
45:OC:147:SER:HB2	45:OC:190:SER:HB2	1.77	0.65
46:ON:174:LYS:HE3	46:ON:174:LYS:HA	1.78	0.65
45:PE:298:PRO:HG3	45:PE:308:ARG:HH21	1.60	0.65
46:QB:371:SER:O	46:QB:422:TYR:OH	2.12	0.65
45:SC:241:SER:OG	45:SC:250:VAL:O	2.10	0.65
46:TB:10:GLY:O	46:TB:14:ASN:ND2	2.28	0.65
46:TF:128:ASP:OD1	46:TF:129:CYS:N	2.28	0.65
46:WN:19:LYS:HD3	46:WN:226:ASN:HB2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3T:129:ILE:HD11	12:3T:141:LYS:HB3	1.78	0.65
46:AJ:91:VAL:HG21	46:AJ:116:VAL:HG12	1.78	0.65
45:BG:292:THR:HG21	45:BG:331:SER:HB3	1.76	0.65
45:DC:140:SER:OG	47:DC:501:GTP:O2B	2.13	0.65
45:EM:258:ASN:ND2	46:EN:178:THR:OG1	2.28	0.65
46:FD:377:MET:SD	46:FD:380:ARG:NH2	2.70	0.65
46:HF:91:VAL:HG21	46:HF:116:VAL:HG12	1.78	0.65
46:JJ:12:CYS:O	46:JJ:16:ILE:HG12	1.96	0.65
45:KG:439:THR:HB	46:KJ:391:ARG:HH11	1.60	0.65
45:NC:174:SER:HB3	45:NC:207:GLU:HG3	1.78	0.65
46:NH:148:GLY:O	46:NH:152:ILE:HD12	1.97	0.65
45:NK:155:GLU:OE1	45:NK:197:HIS:NE2	2.28	0.65
45:OI:71:GLU:OE1	45:OI:73:THR:OG1	2.13	0.65
46:PN:282:ARG:HH12	46:PN:284:LEU:HD13	1.59	0.65
45:QE:206:ASN:OD1	47:QE:501:GTP:N2	2.29	0.65
46:RL:290:THR:HG21	46:RL:329:GLN:HG2	1.77	0.65
46:SD:222:TYR:O	46:SD:226:ASN:ND2	2.26	0.65
45:TC:326:LYS:NZ	46:TD:218:THR:O	2.29	0.65
45:TE:55:GLU:HG3	45:TE:57:GLY:H	1.61	0.65
45:UC:241:SER:OG	45:UC:250:VAL:O	2.13	0.65
46:UJ:55:THR:OG1	46:VJ:280:GLN:O	2.14	0.65
45:VM:320:ARG:NH1	45:VM:358:GLN:O	2.28	0.65
4:2D:166:ARG:HG2	4:2D:167:ILE:H	1.61	0.65
11:2S:138:TYR:OH	45:WG:127:ASP:OD2	2.15	0.65
13:2U:333:SER:HB3	13:2U:585:PRO:HD2	1.78	0.65
16:3B:205:GLU:OE1	16:3B:208:ASN:ND2	2.29	0.65
27:3C:234:LEU:HD23	27:3C:291:VAL:HG22	1.78	0.65
30:3H:187:LEU:HG	46:AH:276:ARG:HH11	1.62	0.65
46:AJ:135:ILE:HG13	46:AJ:152:ILE:HD11	1.78	0.65
46:AJ:377:MET:SD	46:AJ:380:ARG:NH2	2.69	0.65
46:BL:178:THR:HB	46:BL:181:GLU:HG3	1.78	0.65
46:CH:73:MET:HA	46:CH:76:VAL:HG12	1.77	0.65
45:EM:176:GLN:HG2	45:EM:177:VAL:HG23	1.78	0.65
45:GM:89:PRO:HD2	45:HM:280:LYS:HZ3	1.61	0.65
46:GN:325:GLU:HA	46:GN:328:GLU:HG2	1.77	0.65
46:JN:221:THR:HG22	46:JN:222:TYR:H	1.61	0.65
46:LH:91:VAL:HG21	46:LH:116:VAL:HG22	1.78	0.65
46:LH:309:ARG:NH1	46:LH:426:GLN:O	2.29	0.65
46:LJ:262:ARG:NH2	46:LJ:414:ASN:OD1	2.29	0.65
46:NN:178:THR:HB	46:NN:181:GLU:HG3	1.77	0.65
45:OK:221:ARG:O	45:OK:221:ARG:HD2	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OL:262:ARG:NH1	46:OL:421:GLU:OE1	2.28	0.65
46:PH:175:VAL:HG11	46:PH:204:ASN:HB2	1.79	0.65
45:SM:259:LEU:O	45:SM:380:ASN:ND2	2.29	0.65
46:TD:46:ARG:NH2	45:TE:76:ASP:OD2	2.30	0.65
45:UM:66:VAL:HG23	45:UM:91:GLN:HB2	1.78	0.65
1:0A:34:LEU:HD13	46:MB:40:SER:HB3	1.77	0.65
30:3H:193:LEU:HD22	46:AH:320:ARG:HH21	1.61	0.65
14:3V:122:LYS:NZ	46:LD:390:ARG:O	2.23	0.65
37:5G:123:ARG:HA	45:OI:370:LYS:HE2	1.78	0.65
46:AB:322:SER:OG	46:AB:325:GLU:OE1	2.15	0.65
45:BK:257:THR:HG22	46:BN:397:TRP:HZ3	1.61	0.65
46:CD:211:CYS:HA	46:CD:215:LEU:HD12	1.78	0.65
46:DJ:12:CYS:O	46:DJ:16:ILE:HG12	1.96	0.65
46:EB:362:LYS:HA	46:EB:362:LYS:HE3	1.79	0.65
45:MC:11:GLN:NE2	46:MD:245:GLN:O	2.30	0.65
45:MC:292:THR:HG21	45:MC:331:SER:HB3	1.77	0.65
45:NA:55:GLU:HG3	45:NA:57:GLY:H	1.61	0.65
45:NK:123:ARG:NH2	45:OK:297:GLU:OE2	2.29	0.65
45:PM:280:LYS:HA	45:PM:283:HIS:HD2	1.61	0.65
46:RB:54:ALA:HA	46:SB:283:ALA:HB2	1.78	0.65
46:RD:274:THR:HB	46:RD:282:ARG:HH12	1.61	0.65
45:RM:76:ASP:OD1	45:RM:79:ARG:NH2	2.29	0.65
45:SM:88:HIS:NE2	45:TM:284:GLU:OE2	2.29	0.65
46:TH:222:TYR:O	46:TH:226:ASN:ND2	2.21	0.65
45:TI:55:GLU:HG3	45:TI:57:GLY:H	1.61	0.65
45:UC:292:THR:HG21	45:UC:331:SER:HB3	1.78	0.65
46:VB:375:GLN:HE21	46:VB:422:TYR:HD2	1.45	0.65
46:VD:309:ARG:NH1	46:VD:343:GLU:OE1	2.29	0.65
46:WD:49:VAL:HG11	46:WD:241:ARG:HG2	1.77	0.65
14:0V:69:SER:OG	46:MN:337:ASN:OD1	2.15	0.65
14:0V:96:ASN:HD21	46:LN:262:ARG:H	1.41	0.65
9:2N:50:ARG:HH11	9:2N:229:PHE:HE1	1.45	0.65
25:2R:459:PRO:HB2	46:EH:77:ARG:HH12	1.62	0.65
21:3L:105:ILE:O	21:3L:108:GLN:NE2	2.30	0.65
13:3U:371:MET:HG3	13:3U:375:LYS:HB2	1.77	0.65
45:BC:292:THR:HG21	45:BC:331:SER:HB3	1.76	0.65
46:DD:222:TYR:O	46:DD:226:ASN:ND2	2.26	0.65
45:DI:326:LYS:HD2	46:DJ:220:PRO:HD2	1.77	0.65
45:EI:244:PHE:HB2	45:EI:356:ASN:HD21	1.61	0.65
46:EL:46:ARG:NH2	45:EM:76:ASP:OD2	2.28	0.65
45:FA:288:VAL:HG11	45:FA:327:ASP:HB3	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FH:191:GLN:OE1	46:FH:195:ASN:ND2	2.28	0.65
46:FJ:289:LEU:HD23	46:FJ:365:VAL:HG23	1.77	0.65
45:GA:221:ARG:NH2	46:GB:325:GLU:OE1	2.29	0.65
45:HK:296:PHE:HE2	45:HK:335:ILE:HG21	1.62	0.65
45:IM:181:VAL:HG13	45:IM:182:VAL:HG13	1.77	0.65
46:JB:309:ARG:HE	46:JB:342:VAL:HA	1.62	0.65
45:JI:178:SER:OG	46:JJ:347:ASN:ND2	2.30	0.65
46:MJ:52:ASN:OD1	46:MJ:62:ARG:NH2	2.29	0.65
46:PD:390:ARG:HH12	46:PD:391:ARG:HE	1.45	0.65
46:PL:83:GLN:O	46:QJ:281:TYR:OH	2.14	0.65
46:RF:419:VAL:O	46:RF:423:GLN:N	2.27	0.65
46:RJ:7:ILE:HG22	46:RJ:64:ILE:HB	1.78	0.65
46:TB:314:SER:HA	46:TB:350:LYS:HB2	1.79	0.65
46:TL:258:ILE:HG13	46:TL:266:PHE:HZ	1.61	0.65
45:UK:259:LEU:HD21	45:UK:316:SER:HB3	1.79	0.65
45:VG:254:GLU:HG2	46:VJ:98:GLY:HA2	1.77	0.65
13:1U:319:HIS:CE1	13:1U:340:SER:HG	2.15	0.65
14:3V:133:TYR:HA	14:3V:136:THR:HB	1.79	0.65
33:4F:193:LYS:HE2	33:4F:198:LYS:HD2	1.78	0.65
34:5R:462:ASN:ND2	46:FJ:219:THR:OG1	2.30	0.65
34:5R:469:LYS:HE2	34:5R:472:GLU:HA	1.76	0.65
46:CF:209:ASP:OD1	46:CF:213:ARG:NE	2.16	0.65
45:DC:350:GLY:HA2	46:DD:179:VAL:HG23	1.78	0.65
46:EF:54:ALA:HA	46:FF:283:ALA:HB2	1.78	0.65
46:IH:178:THR:HB	46:IH:181:GLU:HG3	1.77	0.65
45:JA:192:HIS:ND1	45:JA:424:ASP:OD2	2.21	0.65
45:JA:287:SER:OG	45:JA:290:GLU:OE1	2.14	0.65
46:LJ:11:GLN:HA	46:LJ:72:THR:HG21	1.79	0.65
45:ME:188:ILE:HD12	45:ME:425:LEU:HD11	1.78	0.65
46:MJ:130:LEU:HB3	46:MJ:162:ARG:HE	1.62	0.65
45:NA:271:SER:HB2	45:NA:377:MET:HB3	1.77	0.65
45:NI:328:VAL:HG11	45:NI:353:VAL:HG21	1.78	0.65
46:NJ:3:GLU:HG3	46:NJ:62:ARG:HH12	1.60	0.65
45:NM:222:PRO:HD2	46:NN:324:LYS:HE2	1.77	0.65
46:PB:139:LEU:HD22	46:PB:170:VAL:HG12	1.78	0.65
45:PC:422:ARG:O	45:PC:422:ARG:NH1	2.29	0.65
45:QI:76:ASP:HA	45:QI:79:ARG:HD2	1.76	0.65
45:QK:65:ALA:O	45:QK:91:GLN:NE2	2.24	0.65
45:RI:271:SER:OG	45:RI:301:MET:SD	2.54	0.65
46:VF:202:ILE:HD11	46:VF:268:ILE:HD11	1.79	0.65
46:VF:336:LYS:HA	46:VF:336:LYS:HE3	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1H:86:LYS:HG3	45:HK:370:LYS:HD3	1.76	0.65
13:1U:341:THR:HG23	13:1U:342:THR:HG23	1.78	0.65
14:3V:24:ARG:HH21	45:MA:434:GLU:HG2	1.62	0.65
10:6Q:156:ILE:HG21	10:6Q:162:ILE:HD11	1.79	0.65
46:AD:257:LEU:HD11	46:AD:314:SER:HB3	1.77	0.65
45:AM:317:MET:HB2	45:AM:353:VAL:HA	1.77	0.65
45:CI:211:ASP:OD1	45:CI:215:ARG:NE	2.28	0.65
46:DH:139:LEU:HD12	46:DH:170:VAL:HG12	1.79	0.65
45:DM:324:VAL:HG11	45:DM:326:LYS:HE2	1.79	0.65
46:FD:178:THR:HB	46:FD:181:GLU:HG3	1.78	0.65
45:GI:55:GLU:HG3	45:GI:57:GLY:H	1.62	0.65
46:HB:58:ARG:HH12	46:HB:60:VAL:HB	1.60	0.65
45:HI:215:ARG:NH2	45:HI:299:ALA:O	2.30	0.65
45:IA:76:ASP:OD2	46:IB:46:ARG:NH2	2.30	0.65
46:IB:163:ILE:HD11	46:IB:251:ARG:HD3	1.77	0.65
46:IB:235:GLY:HA3	46:IB:366:THR:HG21	1.79	0.65
45:IK:256:GLN:OE1	46:IN:397:TRP:NE1	2.27	0.65
46:QB:143:THR:OG1	49:QB:501:GDP:O1B	2.15	0.65
46:QB:375:GLN:HE22	46:QB:419:VAL:HG22	1.60	0.65
46:QD:167:PHE:HE1	46:QD:233:MET:HG3	1.62	0.65
46:QL:215:LEU:HD21	46:QL:273:LEU:HD12	1.78	0.65
46:TD:178:THR:HG22	46:TD:180:VAL:H	1.61	0.65
46:TF:46:ARG:NH2	45:TG:76:ASP:OD2	2.29	0.65
46:UF:6:HIS:NE2	46:UF:8:GLN:OE1	2.30	0.65
45:UG:326:LYS:NZ	46:UH:220:PRO:O	2.27	0.65
2:0B:151:VAL:HG21	33:4F:68:PRO:HB3	1.79	0.65
1:1A:37:THR:HG22	46:MF:320:ARG:HG2	1.77	0.65
8:1H:115:ARG:HH12	46:HL:280:GLN:HG3	1.61	0.65
21:1L:308:ARG:NH1	45:BG:367:ASP:HA	2.10	0.65
4:2D:81:ARG:HH22	46:EJ:359:LYS:HA	1.62	0.65
20:2K:250:GLU:OE1	20:2K:254:LYS:NZ	2.21	0.65
25:2R:486:VAL:HA	25:2R:499:ILE:HB	1.78	0.65
21:3L:37:ALA:O	21:3L:41:LYS:HB2	1.95	0.65
25:3R:410:TRP:HA	25:3R:442:ASN:HB2	1.77	0.65
12:3T:77:ASP:HB3	12:3T:103:VAL:HB	1.78	0.65
13:3U:333:SER:HB3	13:3U:585:PRO:HD2	1.79	0.65
15:3X:49:ILE:HD11	45:MM:282:TYR:CD2	2.22	0.65
46:DB:257:LEU:HD11	46:DB:314:SER:HB2	1.79	0.65
45:EI:141:VAL:HG11	45:EI:172:TYR:HD1	1.62	0.65
46:EJ:122:LYS:NZ	46:FJ:291:GLN:OE1	2.27	0.65
46:EL:62:ARG:HH12	46:EL:127:CYS:HB3	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EN:386:THR:OG1	46:EN:390:ARG:NH1	2.30	0.65
46:GF:372:THR:HA	46:GF:422:TYR:HE2	1.59	0.65
45:GK:284:GLU:HG2	45:GK:286:LEU:HD22	1.79	0.65
46:IJ:135:ILE:HB	46:IJ:166:THR:HG22	1.79	0.65
45:JK:9:VAL:HG12	45:JK:68:LEU:HB2	1.77	0.65
46:KF:73:MET:HA	46:KF:76:VAL:HG12	1.79	0.65
46:MB:5:VAL:HG12	46:MB:62:ARG:HD3	1.77	0.65
45:OI:147:SER:HB2	45:OI:190:SER:HB2	1.79	0.65
46:ON:52:ASN:OD1	46:ON:62:ARG:NH2	2.30	0.65
45:QE:326:LYS:NZ	46:QF:220:PRO:O	2.30	0.65
46:QL:83:GLN:O	46:RL:281:TYR:OH	2.13	0.65
45:RA:292:THR:HG21	45:RA:331:SER:HB2	1.78	0.65
45:RA:296:PHE:HE1	45:RA:377:MET:HG3	1.61	0.65
46:SJ:262:ARG:NH1	46:SJ:421:GLU:OE1	2.30	0.65
46:UB:237:THR:HG22	46:UB:250:LEU:HD11	1.78	0.65
45:UE:292:THR:HG21	45:UE:331:SER:HB3	1.77	0.65
45:UM:119:LEU:HD13	45:UM:122:ILE:HD11	1.79	0.65
46:VD:178:THR:HB	46:VD:181:GLU:HG3	1.78	0.65
46:VN:309:ARG:NH1	46:VN:339:SER:O	2.30	0.65
45:WE:269:LEU:HD22	45:WE:384:ILE:HD11	1.79	0.65
45:WM:294:SER:O	45:WM:300:ASN:ND2	2.25	0.65
25:2R:325:THR:HG22	25:2R:357:TYR:HE2	1.62	0.65
46:DB:189:VAL:HA	46:DB:192:LEU:HB3	1.79	0.65
46:EJ:245:GLN:O	45:EK:11:GLN:NE2	2.30	0.65
46:EL:375:GLN:HG3	46:EL:379:LYS:NZ	2.11	0.65
45:EM:252:ILE:H	45:EM:252:ILE:HD12	1.62	0.65
45:EM:326:LYS:NZ	46:EN:219:THR:HA	2.10	0.65
46:IJ:178:THR:HB	46:IJ:181:GLU:HG3	1.78	0.65
46:LD:5:VAL:HG12	46:LD:62:ARG:HD3	1.78	0.65
45:LI:241:SER:OG	45:LI:250:VAL:O	2.15	0.65
46:LN:218:THR:HG23	46:LN:219:THR:HG23	1.77	0.65
45:NG:329:ASN:HD22	46:NJ:175:VAL:HG12	1.61	0.65
46:ON:319:GLY:HA2	46:ON:357:PRO:HG3	1.79	0.65
46:PB:48:ASN:O	46:PB:62:ARG:NH2	2.30	0.65
46:PH:207:LEU:HB3	46:PH:225:LEU:HD22	1.78	0.65
46:QH:27:GLU:OE2	46:QH:318:ARG:NH2	2.30	0.65
45:QK:352:LYS:NZ	46:QL:179:VAL:HG22	2.12	0.65
45:RA:279:GLU:O	45:RA:283:HIS:NE2	2.29	0.65
46:RL:257:LEU:HD11	46:RL:314:SER:HB2	1.78	0.65
45:SA:280:LYS:HA	45:SA:283:HIS:HD2	1.62	0.65
45:VA:326:LYS:HE2	46:VD:220:PRO:HG2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1W:247:ARG:NH2	9:2N:195:GLU:OE2	2.29	0.65
1:3A:127:ASN:HD22	1:3A:127:ASN:C	2.00	0.65
37:5H:26:GLY:HA2	45:OK:221:ARG:NH2	2.11	0.65
34:7R:357:LYS:NZ	34:7R:368:GLN:O	2.30	0.65
34:7R:429:LYS:H	34:7R:506:LEU:HD23	1.61	0.65
46:AL:5:VAL:HG12	46:AL:62:ARG:HD3	1.77	0.65
46:AN:156:ARG:HH22	46:AN:197:ASP:HB2	1.62	0.65
45:DA:247:ALA:HB3	45:DA:355:ILE:HD11	1.79	0.65
46:EL:257:LEU:HD12	46:EL:312:THR:HG23	1.78	0.65
46:FN:396:HIS:HA	46:FN:399:THR:HG22	1.78	0.65
45:HI:71:GLU:HG3	45:HI:98:ASP:HB2	1.79	0.65
46:IH:372:THR:HA	46:IH:422:TYR:HE2	1.62	0.65
45:LE:292:THR:HG21	45:LE:331:SER:HB3	1.79	0.65
46:MB:113:ILE:HG12	46:MB:117:LEU:HD23	1.79	0.65
45:NG:203:MET:HG3	45:NG:384:ILE:HD11	1.79	0.65
45:PM:239:THR:O	45:PM:243:ARG:NH1	2.30	0.65
46:QB:257:LEU:HD21	46:QB:314:SER:HB2	1.78	0.65
46:QJ:49:VAL:O	46:QJ:62:ARG:NH2	2.27	0.65
45:SG:64:ARG:HH12	45:SG:128:ASN:HD22	1.44	0.65
45:UC:15:GLN:NE2	47:UC:501:GTP:O6	2.30	0.65
46:UF:207:LEU:HB3	46:UF:225:LEU:HD22	1.79	0.65
46:VB:235:GLY:HA3	46:VB:366:THR:HG21	1.77	0.65
46:VF:268:ILE:HG22	46:VF:368:VAL:HG22	1.79	0.65
46:WH:309:ARG:NH2	46:WH:426:GLN:O	2.29	0.65
5:0E:136:GLN:O	34:7R:502:ARG:NH2	2.30	0.64
11:1S:106:THR:HG21	45:ME:109:THR:HG21	1.78	0.64
13:3U:223:GLU:HG2	13:3U:224:ARG:HG2	1.79	0.64
45:CA:133:GLN:HB3	45:CA:252:ILE:HG21	1.78	0.64
45:CG:292:THR:HG21	45:CG:331:SER:HB3	1.78	0.64
46:FN:6:HIS:HA	46:FN:134:GLN:HE21	1.61	0.64
46:JB:313:ALA:HB3	46:JB:349:ILE:HG22	1.78	0.64
45:JK:26:LEU:HD11	45:JK:364:PRO:HD2	1.79	0.64
45:MI:242:LEU:HD11	45:MI:252:ILE:HG12	1.79	0.64
45:OK:101:ASN:OD1	46:OL:252:LYS:NZ	2.30	0.64
46:QB:178:THR:HB	46:QB:181:GLU:HG3	1.79	0.64
46:QD:207:LEU:HD13	46:QD:225:LEU:HB3	1.79	0.64
45:RA:60:LYS:NZ	45:RA:85:GLN:O	2.31	0.64
46:SF:260:PHE:HB2	46:SF:263:LEU:HD13	1.78	0.64
46:UN:375:GLN:HA	46:UN:378:PHE:HD2	1.62	0.64
45:VG:280:LYS:HD2	45:VG:283:HIS:HB2	1.79	0.64
45:WA:222:PRO:HD2	46:WB:324:LYS:NZ	2.11	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WF:200:MET:HG2	46:WF:266:PHE:HB2	1.78	0.64
21:2L:662:THR:OG1	21:2L:665:GLN:OE1	2.09	0.64
9:2N:69:LYS:HD2	9:2N:129:ASP:HB3	1.78	0.64
11:2S:40:ASN:O	45:WG:56:THR:OG1	2.14	0.64
1:3A:36:ARG:HD2	46:MN:42:LEU:HD21	1.78	0.64
46:AD:67:ASP:OD2	46:AD:72:THR:OG1	2.14	0.64
45:AI:285:GLN:NE2	45:MI:55:GLU:O	2.25	0.64
45:BI:292:THR:HG21	45:BI:331:SER:HB3	1.78	0.64
45:CC:89:PRO:HG3	45:DC:280:LYS:HD3	1.79	0.64
45:CK:55:GLU:HG3	45:CK:57:GLY:H	1.61	0.64
46:DF:375:GLN:HB2	46:DF:419:VAL:HG23	1.80	0.64
46:FF:121:ARG:O	46:FF:125:GLU:HG3	1.97	0.64
46:HJ:73:MET:HA	46:HJ:76:VAL:HG12	1.79	0.64
45:JG:116:ASP:OD2	45:JG:117:LEU:N	2.30	0.64
46:JH:30:ILE:HD11	46:JH:47:ILE:HD11	1.79	0.64
45:NM:53:PHE:HB3	45:NM:61:HIS:HB3	1.78	0.64
46:PH:207:LEU:HD13	46:PH:225:LEU:HB3	1.79	0.64
46:PN:200:MET:HG3	46:PN:266:PHE:HB2	1.79	0.64
46:QB:63:ALA:O	46:QB:89:ASN:ND2	2.30	0.64
46:QN:175:VAL:HG21	46:QN:204:ASN:HB2	1.79	0.64
46:RD:186:THR:OG1	46:RD:415:MET:SD	2.55	0.64
46:RF:86:ARG:HH21	46:RF:87:PRO:HG2	1.63	0.64
45:SA:206:ASN:OD1	47:SA:501:GTP:N2	2.31	0.64
46:SH:245:GLN:O	45:SI:11:GLN:NE2	2.31	0.64
46:TF:311:LEU:HD23	46:TF:312:THR:HG23	1.77	0.64
46:TL:99:ASN:HA	46:TL:142:GLY:H	1.60	0.64
46:WF:273:LEU:H	46:WF:292:GLN:HE22	1.43	0.64
21:2L:274:LYS:HE2	21:2L:378:ARG:HH12	1.61	0.64
16:3B:276:ASP:O	16:3B:279:ARG:NH2	2.30	0.64
36:5A:90:GLN:HE22	36:5A:98:LEU:H	1.44	0.64
41:6H:300:GLU:OE2	46:FH:320:ARG:NH1	2.28	0.64
45:AA:31:GLN:NE2	45:AA:37:PRO:HG3	2.12	0.64
46:AH:135:ILE:HB	46:AH:166:THR:HG22	1.78	0.64
46:AJ:48:ASN:O	46:AJ:62:ARG:NH2	2.30	0.64
45:HM:101:ASN:HA	45:HM:144:GLY:H	1.63	0.64
46:IB:309:ARG:NH2	46:IB:426:GLN:O	2.29	0.64
45:IC:71:GLU:OE1	45:IC:73:THR:OG1	2.15	0.64
45:IE:271:SER:OG	45:IE:301:MET:SD	2.56	0.64
45:IE:292:THR:HG21	45:IE:331:SER:HB3	1.79	0.64
46:IF:273:LEU:H	46:IF:292:GLN:HE22	1.45	0.64
46:JN:45:GLU:HG2	46:JN:46:ARG:HG2	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:KB:390:ARG:HA	46:KB:390:ARG:HE	1.62	0.64
46:LB:371:SER:O	46:LB:422:TYR:OH	2.10	0.64
46:LF:334:GLN:HE22	46:LF:348:ASN:H	1.46	0.64
45:MK:55:GLU:HG3	45:MK:57:GLY:H	1.61	0.64
45:NG:275:ILE:HD12	45:NG:368:LEU:HD11	1.79	0.64
46:NH:7:ILE:HG22	46:NH:64:ILE:HB	1.79	0.64
45:NK:407:TRP:HZ2	46:NL:258:ILE:HD11	1.63	0.64
45:OA:88:HIS:NE2	45:PA:284:GLU:OE2	2.29	0.64
45:OI:11:GLN:HG3	45:OI:74:VAL:HG11	1.79	0.64
45:PA:212:ILE:HD11	45:PA:300:ASN:HA	1.78	0.64
46:RF:86:ARG:HH22	46:SF:278:SER:HA	1.62	0.64
46:TB:122:LYS:NZ	46:UB:291:GLN:OE1	2.29	0.64
45:UC:27:GLU:OE2	45:UC:243:ARG:NH1	2.27	0.64
45:WG:326:LYS:NZ	46:WJ:220:PRO:O	2.27	0.64
46:WH:181:GLU:HG2	46:WH:182:PRO:HD3	1.79	0.64
4:2D:212:ASN:ND2	34:5R:433:GLN:O	2.30	0.64
23:2O:426:GLU:OE1	45:VA:370:LYS:NZ	2.27	0.64
24:2P:387:LEU:HG	24:2P:391:ARG:HH11	1.61	0.64
21:3L:137:GLN:HA	21:3L:140:LEU:HB2	1.78	0.64
12:3T:73:GLU:OE1	12:3T:107:ARG:NH1	2.30	0.64
45:AI:76:ASP:OD2	46:AJ:46:ARG:NH2	2.30	0.64
46:BF:262:ARG:NH1	46:BF:421:GLU:OE1	2.30	0.64
46:CL:152:ILE:HG23	46:CL:164:MET:HE1	1.79	0.64
45:DE:259:LEU:HD21	45:DE:316:SER:HB2	1.79	0.64
45:GM:100:ALA:HA	46:GN:252:LYS:HE2	1.80	0.64
45:GM:220:GLU:O	46:GN:324:LYS:NZ	2.30	0.64
46:HB:149:THR:HG21	46:HB:191:GLN:HE21	1.61	0.64
45:IA:288:VAL:HG21	45:IA:327:ASP:HB3	1.80	0.64
46:JJ:73:MET:HA	46:JJ:76:VAL:HG12	1.80	0.64
46:KL:222:TYR:O	46:KL:226:ASN:ND2	2.23	0.64
46:MN:222:TYR:O	46:MN:226:ASN:ND2	2.21	0.64
45:NK:278:ALA:HB2	45:NK:369:ALA:HB2	1.79	0.64
46:NN:64:ILE:HD11	46:NN:123:GLU:HG3	1.78	0.64
45:PA:271:SER:HB2	45:PA:377:MET:HB3	1.78	0.64
45:QA:76:ASP:OD1	45:QA:79:ARG:NH2	2.31	0.64
46:RJ:139:LEU:HD22	46:RJ:170:VAL:HG12	1.78	0.64
45:SM:276:ILE:HD12	45:SM:281:ALA:HA	1.80	0.64
46:TB:346:PRO:HG2	45:TC:394:LYS:NZ	2.13	0.64
46:UF:247:ASN:OD1	45:UG:11:GLN:NE2	2.29	0.64
46:VH:222:TYR:O	46:VH:226:ASN:ND2	2.23	0.64
46:WJ:10:GLY:O	46:WJ:14:ASN:ND2	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:0F:144:GLN:OE1	31:2I:132:ARG:NH2	2.29	0.64
21:2L:654:ASP:OD2	21:2L:699:TYR:OH	2.15	0.64
36:5A:54:ARG:NH1	36:5A:55:ALA:O	2.30	0.64
45:AK:76:ASP:OD2	46:AL:46:ARG:NH2	2.30	0.64
46:AN:73:MET:HA	46:AN:76:VAL:HG12	1.80	0.64
45:CE:325:PRO:O	45:CE:329:ASN:ND2	2.31	0.64
46:EJ:372:THR:HA	46:EJ:422:TYR:HE2	1.60	0.64
45:FI:220:GLU:HG2	45:FI:221:ARG:HG2	1.80	0.64
45:FM:73:THR:OG1	46:FN:2:ARG:NH2	2.30	0.64
46:HB:64:ILE:HA	46:HB:89:ASN:HB3	1.78	0.64
46:IN:169:VAL:HG12	46:IN:202:ILE:HB	1.78	0.64
46:JH:86:ARG:HG2	46:JH:88:ASP:H	1.62	0.64
46:LF:334:GLN:NE2	46:LF:348:ASN:OD1	2.30	0.64
45:LK:397:LEU:HD23	46:LL:346:PRO:HD3	1.80	0.64
45:NE:328:VAL:HG11	45:NE:353:VAL:HG21	1.79	0.64
46:NL:91:VAL:HG21	46:NL:116:VAL:HG12	1.80	0.64
46:PD:273:LEU:H	46:PD:292:GLN:HE22	1.44	0.64
45:PE:141:VAL:HG22	45:PE:187:SER:HA	1.80	0.64
46:QH:67:ASP:OD1	46:QH:68:LEU:N	2.30	0.64
45:RA:33:ASP:HA	45:RA:85:GLN:HE21	1.61	0.64
45:UE:274:PRO:HG2	45:UE:371:VAL:HG11	1.78	0.64
45:VA:69:ASP:OD1	45:VA:70:LEU:N	2.31	0.64
45:VI:402:ARG:NH2	45:VI:415:GLU:OE2	2.30	0.64
45:WG:269:LEU:HD22	45:WG:384:ILE:HD11	1.79	0.64
23:2O:210:ILE:O	23:2O:214:ILE:HG12	1.98	0.64
46:AL:161:ASP:OD1	46:AL:162:ARG:NH1	2.31	0.64
46:CD:246:LEU:HD11	45:CE:224:TYR:HE2	1.61	0.64
45:DA:145:THR:OG1	47:DA:501:GTP:O1B	2.16	0.64
46:DH:290:THR:HG21	46:DH:329:GLN:HG2	1.79	0.64
45:EA:31:GLN:HG2	45:EA:35:GLN:O	1.98	0.64
46:FD:222:TYR:O	46:FD:226:ASN:ND2	2.27	0.64
46:GN:303:ALA:HB2	46:GN:377:MET:HE1	1.78	0.64
45:HG:76:ASP:OD2	46:HH:46:ARG:NH2	2.30	0.64
46:HN:178:THR:HB	46:HN:181:GLU:HG3	1.79	0.64
46:JH:221:THR:HG22	46:JH:222:TYR:H	1.62	0.64
45:JK:212:ILE:HD11	45:JK:300:ASN:HA	1.79	0.64
46:JL:54:ALA:HA	46:KL:283:ALA:HB2	1.79	0.64
46:LF:372:THR:HA	46:LF:422:TYR:HE1	1.62	0.64
45:LK:90:GLU:OE2	45:LK:121:ARG:NH1	2.31	0.64
45:NG:54:SER:HB3	45:NG:64:ARG:HE	1.61	0.64
46:NH:48:ASN:O	46:NH:62:ARG:NH2	2.30	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QE:319:TYR:HB3	45:QE:323:VAL:HG11	1.80	0.64
46:QJ:11:GLN:HE22	49:QJ:501:GDP:H8	1.44	0.64
46:RB:86:ARG:NH2	46:SB:278:SER:OG	2.31	0.64
46:RF:51:TYR:HB3	46:RF:59:TYR:HB3	1.77	0.64
46:RL:251:ARG:NE	45:RM:97:GLU:OE2	2.27	0.64
46:SF:262:ARG:NH1	46:SF:421:GLU:OE1	2.29	0.64
46:SJ:52:ASN:OD1	46:SJ:62:ARG:NH2	2.30	0.64
45:SM:2:ARG:HH12	45:SM:4:VAL:HG13	1.62	0.64
45:TG:251:ASP:OD1	45:TG:252:ILE:N	2.31	0.64
46:UB:191:GLN:O	46:UB:195:ASN:ND2	2.31	0.64
46:VB:207:LEU:HB3	46:VB:225:LEU:HD22	1.79	0.64
46:VF:273:LEU:H	46:VF:292:GLN:HE22	1.45	0.64
45:VG:402:ARG:NH2	45:VG:415:GLU:OE2	2.31	0.64
12:1T:72:PHE:HA	12:1T:108:PRO:HA	1.80	0.64
16:2B:136:ARG:HG3	26:2W:261:LYS:NZ	2.13	0.64
21:3L:36:LYS:HA	21:3L:39:VAL:HG12	1.80	0.64
27:4C:25:LYS:HE2	45:LM:26:LEU:HD11	1.79	0.64
46:AL:156:ARG:HH22	46:AL:197:ASP:HB2	1.63	0.64
46:BH:148:GLY:O	46:BH:152:ILE:HG12	1.97	0.64
46:DB:347:ASN:ND2	45:DC:178:SER:OG	2.31	0.64
45:EM:69:ASP:OD1	45:EM:70:LEU:N	2.31	0.64
45:GA:222:PRO:HG2	46:GB:324:LYS:HE3	1.79	0.64
46:HL:100:ASN:ND2	46:HL:401:GLU:OE1	2.31	0.64
45:IA:241:SER:OG	45:IA:250:VAL:O	2.13	0.64
46:ID:207:LEU:HB3	46:ID:225:LEU:HD22	1.78	0.64
47:IG:501:GTP:O1G	46:IH:252:LYS:NZ	2.27	0.64
45:LC:329:ASN:ND2	46:LF:205:GLU:OE2	2.30	0.64
46:LD:309:ARG:NH1	46:LD:426:GLN:O	2.30	0.64
46:LL:222:TYR:O	46:LL:226:ASN:ND2	2.29	0.64
45:NC:395:PHE:HD2	45:NC:422:ARG:HH21	1.43	0.64
45:NK:98:ASP:OD1	45:NK:99:ALA:N	2.29	0.64
46:RF:319:GLY:N	46:RF:354:CYS:O	2.28	0.64
45:RK:278:ALA:HA	45:RK:369:ALA:HB2	1.79	0.64
45:SI:140:SER:OG	47:SI:501:GTP:O2B	2.14	0.64
46:SL:62:ARG:HH22	46:SL:127:CYS:HB3	1.63	0.64
45:TA:12:GLY:HA3	45:TA:140:SER:HB3	1.79	0.64
46:TD:128:ASP:OD1	46:TD:129:CYS:N	2.30	0.64
46:TD:226:ASN:HD21	49:TD:501:GDP:HN1	1.45	0.64
46:TF:178:THR:HB	46:TF:181:GLU:HG3	1.79	0.64
46:UF:55:THR:HG23	46:VF:283:ALA:HA	1.79	0.64
46:WJ:139:LEU:HD13	46:WJ:168:SER:HB3	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:1N:205:GLU:OE2	16:3B:126:ARG:NH1	2.31	0.64
10:2Q:57:ASN:HB2	10:2Q:158:ALA:HB2	1.79	0.64
13:2U:431:VAL:H	13:2U:443:ALA:HB2	1.62	0.64
45:BA:90:GLU:HG3	45:BA:121:ARG:HH12	1.62	0.64
45:BC:191:THR:HG21	45:BC:425:LEU:HD21	1.80	0.64
46:BH:248:SER:HA	46:BH:252:LYS:HD3	1.79	0.64
45:CE:206:ASN:OD1	47:CE:501:GTP:N2	2.30	0.64
46:CL:251:ARG:HH22	45:CM:105:ARG:HD2	1.62	0.64
46:CL:258:ILE:HB	45:CM:407:TRP:HE1	1.63	0.64
45:DG:317:MET:HB3	45:DG:377:MET:HG3	1.80	0.64
46:DN:260:PHE:HB2	46:DN:263:LEU:HD13	1.80	0.64
45:FK:265:ILE:HG22	45:FK:380:ASN:HD21	1.62	0.64
45:FK:326:LYS:HE2	46:FN:219:THR:HA	1.78	0.64
46:FN:289:LEU:HD11	46:FN:363:MET:HG2	1.80	0.64
45:GA:408:TYR:HB3	45:GA:413:MET:HG3	1.80	0.64
46:GN:215:LEU:HD21	46:GN:273:LEU:HD12	1.79	0.64
45:JC:254:GLU:HG3	46:JF:98:GLY:HA2	1.78	0.64
46:KB:284:LEU:HD21	46:KB:363:MET:HB2	1.80	0.64
46:KD:222:TYR:O	46:KD:226:ASN:ND2	2.26	0.64
46:KJ:122:LYS:NZ	46:LJ:291:GLN:OE1	2.31	0.64
45:LC:102:ASN:HB3	45:LC:105:ARG:HB2	1.79	0.64
46:NJ:328:GLU:O	46:NJ:332:ASN:N	2.28	0.64
46:OB:55:THR:HG23	46:PB:283:ALA:HA	1.79	0.64
45:RA:288:VAL:HG11	45:RA:327:ASP:HB3	1.78	0.64
45:UC:178:SER:OG	45:UC:183:GLU:OE2	2.14	0.64
46:VH:135:ILE:HG13	46:VH:152:ILE:HD11	1.80	0.64
46:WD:3:GLU:HA	46:WD:49:VAL:HG23	1.79	0.64
19:1J:142:VAL:HB	45:IE:285:GLN:HB2	1.80	0.64
4:2D:187:PHE:HB2	46:FJ:322:SER:HB3	1.79	0.64
23:3O:265:PHE:O	23:3O:269:GLN:NE2	2.30	0.64
15:3X:5:LYS:HE3	45:MM:357:TYR:HD2	1.62	0.64
46:AD:148:GLY:O	46:AD:152:ILE:HG12	1.97	0.64
46:BJ:226:ASN:HD21	49:BJ:501:GDP:HN1	1.45	0.64
46:BN:178:THR:HB	46:BN:181:GLU:HG3	1.80	0.64
46:CF:375:GLN:HB2	46:CF:419:VAL:HG23	1.80	0.64
45:DG:292:THR:HG21	45:DG:331:SER:HB2	1.78	0.64
46:EJ:324:LYS:HG3	45:EK:221:ARG:HA	1.80	0.64
45:HC:258:ASN:HD22	45:HC:352:LYS:HD2	1.62	0.64
46:HD:139:LEU:HD13	46:HD:168:SER:HB2	1.80	0.64
46:JB:45:GLU:HG2	46:JB:46:ARG:HG2	1.80	0.64
45:KI:328:VAL:O	45:KI:332:ILE:HG12	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LB:31:ASP:OD1	46:LB:35:THR:N	2.28	0.64
45:LK:11:GLN:NE2	46:LL:245:GLN:O	2.31	0.64
45:NA:265:ILE:HG23	45:NA:432:TYR:HE1	1.63	0.64
46:NB:156:ARG:NH1	46:NB:195:ASN:O	2.31	0.64
45:NG:221:ARG:HD2	46:NH:322:SER:HB2	1.78	0.64
45:PM:121:ARG:HH12	45:PM:124:LYS:HE3	1.61	0.64
45:QI:340:THR:HG23	45:QI:341:ILE:HG12	1.79	0.64
45:RC:241:SER:OG	45:RC:250:VAL:O	2.15	0.64
46:RD:387:ALA:HA	46:RD:390:ARG:HE	1.62	0.64
46:RL:207:LEU:HB3	46:RL:225:LEU:HD22	1.79	0.64
45:SA:33:ASP:OD1	45:SA:85:GLN:NE2	2.31	0.64
45:SC:258:ASN:HD21	45:SC:352:LYS:HD3	1.61	0.64
45:TI:402:ARG:HH22	45:TI:406:HIS:HB3	1.63	0.64
46:VB:58:ARG:NH2	46:VB:83:GLN:OE1	2.31	0.64
45:VM:320:ARG:HH12	45:VM:358:GLN:HB3	1.61	0.64
46:VN:309:ARG:H	46:VN:372:THR:HG1	1.46	0.64
45:WI:271:SER:HB2	45:WI:377:MET:HB3	1.80	0.64
22:1M:288:LEU:HD22	39:6F:56:LEU:H	1.62	0.64
31:2I:101:GLU:O	46:GF:306:ARG:NH2	2.31	0.64
23:2O:341:LYS:HE3	23:2O:342:ARG:HH11	1.62	0.64
12:2T:106:ILE:HG21	12:2T:213:LEU:HD12	1.79	0.64
45:AA:76:ASP:OD2	46:AB:46:ARG:NH2	2.32	0.64
45:AM:248:LEU:HD13	45:AM:355:ILE:HD12	1.80	0.64
45:BG:188:ILE:HG12	45:BG:421:ALA:HB1	1.80	0.64
46:CJ:304:ASP:OD1	46:CJ:306:ARG:NH1	2.31	0.64
45:DK:218:ASP:OD2	45:DK:280:LYS:NZ	2.31	0.64
45:EK:9:VAL:HG12	45:EK:68:LEU:HB2	1.80	0.64
45:FA:326:LYS:HG2	46:FD:220:PRO:HD2	1.80	0.64
45:FE:271:SER:OG	45:FE:301:MET:SD	2.55	0.64
46:FH:276:ARG:HA	46:FH:279:GLN:HB2	1.79	0.64
46:IF:293:MET:HG3	46:IF:367:PHE:HB2	1.78	0.64
45:IG:147:SER:HB2	45:IG:190:SER:HB2	1.80	0.64
45:IK:220:GLU:HG2	45:IK:221:ARG:HG3	1.79	0.64
45:IM:70:LEU:HA	45:IM:95:GLY:HA3	1.80	0.64
45:LA:188:ILE:HD12	45:LA:425:LEU:HD11	1.80	0.64
45:LA:244:PHE:HB2	45:LA:356:ASN:HD21	1.63	0.64
45:MK:276:ILE:HD12	45:MK:281:ALA:HA	1.80	0.64
45:MM:36:MET:SD	45:MM:37:PRO:HD2	2.38	0.64
45:NI:259:LEU:O	45:NI:380:ASN:ND2	2.31	0.64
45:NM:223:THR:HG22	45:NM:224:TYR:H	1.63	0.64
45:OG:71:GLU:HB2	45:OG:98:ASP:HB3	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ON:316:LEU:HB2	46:ON:366:THR:HB	1.78	0.64
45:PA:88:HIS:HB3	45:PA:91:GLN:HG2	1.80	0.64
45:PA:210:TYR:CE2	46:PB:324:LYS:HG3	2.33	0.64
46:PB:326:VAL:HA	46:PB:329:GLN:HE21	1.63	0.64
46:PF:218:THR:HG23	46:PF:219:THR:HG23	1.80	0.64
46:PF:222:TYR:O	46:PF:226:ASN:ND2	2.28	0.64
46:RH:257:LEU:HD11	46:RH:314:SER:HB2	1.79	0.64
46:UF:252:LYS:O	46:UF:256:ASN:ND2	2.30	0.64
45:VA:292:THR:HG21	45:VA:331:SER:HB3	1.80	0.64
46:VF:226:ASN:HD21	49:VF:501:GDP:HN1	1.46	0.64
45:VM:308:ARG:NH1	45:VM:340:THR:O	2.30	0.64
46:WJ:49:VAL:HG11	46:WJ:241:ARG:HG2	1.79	0.64
23:2O:440:GLN:HA	23:2O:443:ARG:HG2	1.80	0.63
10:2Q:115:LYS:HG2	10:2Q:116:PRO:HD2	1.78	0.63
26:2W:188:HIS:N	45:KM:46:ASP:O	2.30	0.63
1:3A:124:LEU:HD22	46:AN:279:GLN:HE22	1.63	0.63
41:6H:324:ARG:HE	41:6H:325:SER:H	1.46	0.63
46:AB:100:ASN:ND2	46:AB:401:GLU:OE1	2.32	0.63
45:GE:292:THR:HG21	45:GE:331:SER:HB3	1.79	0.63
45:GM:68:LEU:HD22	45:GM:153:LEU:HD11	1.80	0.63
46:JD:295:ASP:OD2	46:JD:297:LYS:NZ	2.30	0.63
46:KD:49:VAL:HG11	46:KD:241:ARG:HG2	1.80	0.63
45:KE:407:TRP:HH2	46:KF:258:ILE:HB	1.63	0.63
45:LC:292:THR:HG21	45:LC:331:SER:HB2	1.80	0.63
46:LD:375:GLN:HB2	46:LD:419:VAL:HG13	1.80	0.63
45:ME:98:ASP:OD1	45:ME:99:ALA:N	2.30	0.63
45:OA:259:LEU:HD11	45:OA:316:SER:HB3	1.80	0.63
46:ON:226:ASN:HD21	49:ON:501:GDP:HN1	1.45	0.63
46:PF:273:LEU:H	46:PF:292:GLN:HE22	1.47	0.63
46:QD:371:SER:O	46:QD:422:TYR:OH	2.14	0.63
46:QL:371:SER:O	46:QL:422:TYR:OH	2.16	0.63
45:QM:287:SER:OG	45:QM:290:GLU:OE1	2.16	0.63
46:RB:16:ILE:HG21	46:RB:136:THR:HG21	1.79	0.63
46:RB:247:ASN:ND2	45:RC:71:GLU:OE2	2.31	0.63
46:SB:100:ASN:ND2	46:SB:401:GLU:OE1	2.31	0.63
46:TB:420:SER:O	46:TB:424:GLN:NE2	2.31	0.63
46:UN:392:LYS:HA	46:UN:395:LEU:HD12	1.79	0.63
46:VB:203:ASP:HB3	46:VB:301:CYS:HA	1.79	0.63
45:VG:222:PRO:HD2	46:VH:324:LYS:HZ3	1.62	0.63
45:WA:9:VAL:HG12	45:WA:68:LEU:HB2	1.80	0.63
46:WJ:49:VAL:HG13	46:WJ:50:TYR:HD2	1.62	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WN:248:SER:HA	46:WN:252:LYS:HG3	1.80	0.63
13:1U:512:ARG:NH1	13:1U:531:SER:O	2.31	0.63
25:3R:280:LEU:HD21	25:3R:304:LEU:HB2	1.79	0.63
12:3T:283:TYR:OH	13:3U:5:LEU:O	2.12	0.63
36:5A:156:VAL:HG23	45:KC:433:GLU:HG3	1.81	0.63
39:6F:138:TYR:HD2	39:6F:141:THR:H	1.46	0.63
45:AA:71:GLU:OE1	46:AB:247:ASN:ND2	2.32	0.63
45:BI:221:ARG:NH1	46:BJ:325:GLU:OE2	2.31	0.63
46:BJ:326:VAL:O	46:BJ:330:MET:HG2	1.97	0.63
46:DD:67:ASP:OD1	46:DD:68:LEU:N	2.31	0.63
46:EB:292:GLN:O	46:EB:298:ASN:ND2	2.31	0.63
46:GB:101:TRP:HB3	46:GB:398:TYR:HE2	1.64	0.63
45:GC:276:ILE:HD12	45:GC:281:ALA:HA	1.80	0.63
45:GE:311:LYS:NZ	45:GE:438:GLU:OE2	2.32	0.63
46:HF:237:THR:HG23	46:HF:241:ARG:HE	1.62	0.63
46:IF:371:SER:O	46:IF:422:TYR:OH	2.13	0.63
46:JJ:406:MET:HG2	46:NJ:306:ARG:HH11	1.63	0.63
45:JM:178:SER:HB3	46:JN:347:ASN:HD21	1.63	0.63
46:KH:207:LEU:HB3	46:KH:225:LEU:HD22	1.79	0.63
46:LN:371:SER:O	46:LN:422:TYR:OH	2.16	0.63
45:PA:109:THR:HG22	45:PA:110:ILE:HG23	1.80	0.63
45:PA:176:GLN:HG2	45:PA:177:VAL:HG23	1.78	0.63
46:PB:31:ASP:OD1	46:PB:35:THR:N	2.27	0.63
46:QF:83:GLN:O	46:RF:281:TYR:OH	2.15	0.63
45:QM:317:MET:HA	45:QM:377:MET:HA	1.79	0.63
45:RA:242:LEU:HD11	45:RA:252:ILE:HG13	1.80	0.63
45:RG:15:GLN:OE1	47:RG:501:GTP:N7	2.31	0.63
46:RJ:324:LYS:HZ3	45:RK:210:TYR:HD2	1.47	0.63
46:SB:97:ALA:HB3	46:SB:143:THR:HB	1.80	0.63
46:SH:135:ILE:HB	46:SH:166:THR:HG22	1.79	0.63
46:TJ:377:MET:HA	46:TJ:380:ARG:HG2	1.80	0.63
46:TL:165:GLU:HA	46:TL:198:GLU:HB3	1.79	0.63
30:2H:197:LYS:O	46:AD:320:ARG:NH2	2.30	0.63
23:2O:186:LEU:O	23:2O:190:LYS:HG2	1.98	0.63
27:3C:16:LYS:HE2	27:3C:95:ILE:HA	1.80	0.63
21:3L:52:ASP:HA	21:3L:55:ARG:HH12	1.63	0.63
14:3V:198:PHE:HB3	14:3V:265:VAL:HG13	1.80	0.63
36:5B:47:SER:HB2	36:5B:54:ARG:HB3	1.80	0.63
46:EB:172:SER:OG	46:EB:205:GLU:OE2	2.16	0.63
46:EJ:222:TYR:O	46:EJ:226:ASN:ND2	2.27	0.63
45:FC:221:ARG:NE	46:FD:325:GLU:OE2	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FM:139:ASN:ND2	45:FM:146:GLY:O	2.29	0.63
46:FN:31:ASP:OD1	46:FN:35:THR:N	2.30	0.63
46:GB:350:LYS:HA	46:GB:350:LYS:HE3	1.80	0.63
46:GD:2:ARG:HH21	46:GD:240:LEU:HG	1.63	0.63
46:JB:237:THR:HG23	46:JB:241:ARG:HE	1.63	0.63
46:JF:324:LYS:NZ	46:JF:328:GLU:OE1	2.32	0.63
46:KH:326:VAL:O	46:KH:330:MET:HG2	1.98	0.63
45:ME:76:ASP:OD1	45:ME:79:ARG:NH1	2.31	0.63
46:OB:31:ASP:OD2	46:OB:37:HIS:ND1	2.30	0.63
45:OE:71:GLU:OE1	45:OE:73:THR:OG1	2.15	0.63
46:RB:52:ASN:OD1	46:RB:62:ARG:NH2	2.31	0.63
46:SH:134:GLN:NE2	46:SH:233:MET:SD	2.70	0.63
46:VF:133:PHE:HB2	46:VF:164:MET:HG3	1.80	0.63
45:VM:320:ARG:HB3	45:VM:374:ALA:HB3	1.81	0.63
45:WE:385:ALA:HB2	45:WE:432:TYR:HD2	1.64	0.63
1:0A:17:GLN:NE2	34:7R:46:GLU:O	2.31	0.63
8:1H:267:ILE:HD13	46:HF:320:ARG:HH22	1.62	0.63
13:1U:385:LYS:HG2	13:1U:401:SER:HA	1.80	0.63
23:2O:162:GLU:O	23:2O:166:ILE:N	2.19	0.63
5:3E:155:LYS:HD3	5:3E:156:ASP:N	2.13	0.63
10:4Q:81:LYS:HD3	10:4Q:161:ARG:HD2	1.81	0.63
45:AI:102:ASN:HD22	45:AI:105:ARG:HG3	1.64	0.63
45:CM:288:VAL:HG11	45:CM:327:ASP:HB3	1.78	0.63
45:DM:319:TYR:HB3	45:DM:323:VAL:HG11	1.80	0.63
46:EJ:238:CYS:HB2	46:EJ:318:ARG:HH21	1.62	0.63
45:FA:399:TYR:O	45:FA:402:ARG:NH2	2.31	0.63
45:GA:145:THR:OG1	47:GA:501:GTP:O1B	2.17	0.63
46:GB:33:THR:O	46:GB:58:ARG:NE	2.30	0.63
45:JI:279:GLU:HG3	45:JI:280:LYS:HG3	1.80	0.63
46:KH:318:ARG:HE	46:KH:358:PRO:HG3	1.63	0.63
45:MC:178:SER:OG	46:MD:347:ASN:OD1	2.15	0.63
45:NK:99:ALA:HA	45:NK:105:ARG:HD2	1.79	0.63
45:OG:398:MET:HG2	46:OH:345:ILE:HG22	1.81	0.63
46:OH:156:ARG:NH2	46:OH:197:ASP:OD1	2.32	0.63
46:OH:262:ARG:NH2	46:OH:421:GLU:OE2	2.30	0.63
46:QD:309:ARG:NH2	46:QD:426:GLN:O	2.31	0.63
46:RJ:91:VAL:HG21	46:RJ:116:VAL:HG22	1.81	0.63
46:RL:52:ASN:OD1	46:RL:62:ARG:NH2	2.31	0.63
46:SF:371:SER:O	46:SF:422:TYR:OH	2.14	0.63
45:TE:288:VAL:HG11	45:TE:327:ASP:HB3	1.79	0.63
45:TI:359:PRO:HB2	45:TI:370:LYS:HZ1	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UG:217:LEU:HB3	45:UG:219:ILE:HG12	1.80	0.63
46:UJ:62:ARG:NH1	46:UJ:127:CYS:SG	2.70	0.63
45:UM:76:ASP:OD1	45:UM:79:ARG:NH2	2.31	0.63
45:VK:88:HIS:HB3	45:VK:91:GLN:HG3	1.80	0.63
46:WH:311:LEU:HD23	46:WH:342:VAL:HG21	1.80	0.63
24:1P:280:ASN:OD1	45:TE:370:LYS:NZ	2.32	0.63
11:1S:30:HIS:HA	11:1S:34:ILE:HG21	1.81	0.63
16:2B:217:LYS:NZ	16:2B:259:PHE:O	2.30	0.63
31:2I:99:GLY:O	46:GF:306:ARG:NH1	2.30	0.63
45:DC:118:CYS:O	45:DC:122:ILE:HG12	1.98	0.63
46:EF:46:ARG:NH2	45:EG:76:ASP:OD2	2.32	0.63
46:EN:55:THR:HG23	46:FN:283:ALA:HA	1.81	0.63
45:FG:108:TYR:HA	45:FG:112:LYS:HE3	1.81	0.63
46:FJ:156:ARG:NH1	46:FJ:195:ASN:O	2.32	0.63
46:IB:20:PHE:CZ	46:IB:24:ILE:HD11	2.33	0.63
45:MG:11:GLN:NE2	46:MH:245:GLN:O	2.31	0.63
46:ML:213:ARG:HH12	46:ML:297:LYS:HD2	1.63	0.63
46:NB:267:MET:HB2	46:NB:299:MET:CE	2.28	0.63
45:NE:7:ILE:HB	45:NE:137:VAL:HG12	1.80	0.63
45:OG:147:SER:HB2	45:OG:190:SER:HB2	1.79	0.63
46:RD:54:ALA:HA	46:SD:283:ALA:HB2	1.81	0.63
46:RJ:257:LEU:HD11	46:RJ:314:SER:HB2	1.79	0.63
46:SB:371:SER:O	46:SB:422:TYR:OH	2.15	0.63
46:SF:52:ASN:OD1	46:SF:62:ARG:NH2	2.30	0.63
46:TB:371:SER:O	46:TB:422:TYR:OH	2.15	0.63
45:TC:31:GLN:OE1	45:TC:32:PRO:HD2	1.98	0.63
45:TK:60:LYS:NZ	45:TK:85:GLN:O	2.27	0.63
46:UB:276:ARG:NH2	46:UB:277:GLY:HA2	2.14	0.63
46:UH:222:TYR:O	46:UH:226:ASN:ND2	2.25	0.63
23:1O:246:GLU:HB2	46:UB:276:ARG:CZ	2.29	0.63
33:4F:205:ASN:O	45:HM:79:ARG:NH1	2.31	0.63
46:AD:273:LEU:H	46:AD:292:GLN:HE22	1.47	0.63
45:CE:102:ASN:HB3	45:CE:105:ARG:HB2	1.80	0.63
46:CF:204:ASN:OD1	49:CF:501:GDP:N2	2.31	0.63
46:CJ:211:CYS:HA	46:CJ:215:LEU:HD12	1.81	0.63
46:CL:19:LYS:HZ3	46:CL:227:HIS:HA	1.63	0.63
45:CM:147:SER:HB2	45:CM:190:SER:HB3	1.80	0.63
46:DB:66:MET:SD	46:DB:116:VAL:HG21	2.39	0.63
46:DB:324:LYS:HE3	45:DC:222:PRO:HD2	1.80	0.63
45:DM:258:ASN:HB3	45:DM:352:LYS:HE2	1.80	0.63
46:EH:52:ASN:OD1	46:EH:62:ARG:NH2	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FB:130:LEU:O	46:FB:162:ARG:NH1	2.31	0.63
46:GH:178:THR:HB	46:GH:181:GLU:HG3	1.80	0.63
46:GN:113:ILE:HD13	46:GN:150:LEU:HD22	1.81	0.63
45:IM:399:TYR:O	45:IM:402:ARG:NH1	2.31	0.63
46:JN:222:TYR:O	46:JN:226:ASN:ND2	2.26	0.63
45:NE:60:LYS:NZ	45:NE:61:HIS:O	2.32	0.63
46:OB:11:GLN:NE2	46:OB:12:CYS:SG	2.72	0.63
46:OH:237:THR:HG23	46:OH:240:LEU:HD23	1.79	0.63
46:ON:275:SER:O	46:ON:279:GLN:NE2	2.28	0.63
45:RG:206:ASN:OD1	47:RG:501:GTP:N2	2.31	0.63
45:RI:140:SER:OG	47:RI:501:GTP:O2B	2.16	0.63
45:SA:319:TYR:HB3	45:SA:323:VAL:HG11	1.79	0.63
46:TD:132:GLY:HA3	46:TD:163:ILE:HG22	1.81	0.63
46:TN:420:SER:O	46:TN:424:GLN:NE2	2.32	0.63
46:UF:58:ARG:NH2	46:VF:280:GLN:OE1	2.31	0.63
45:UG:399:TYR:O	45:UG:402:ARG:NH1	2.31	0.63
46:WB:100:ASN:ND2	46:WB:401:GLU:OE1	2.31	0.63
46:WD:156:ARG:NH1	46:WD:162:ARG:O	2.32	0.63
46:WH:139:LEU:HD22	46:WH:170:VAL:HG12	1.80	0.63
34:4R:109:GLU:HG3	34:4R:208:ALA:HB3	1.81	0.63
10:6Q:170:ARG:HB3	10:6Q:172:TYR:HE2	1.63	0.63
45:AE:11:GLN:NE2	46:AF:245:GLN:O	2.24	0.63
45:BK:88:HIS:HA	45:CK:283:HIS:HD1	1.62	0.63
45:CI:194:LEU:O	45:CI:198:THR:OG1	2.15	0.63
46:CN:83:GLN:O	46:DN:281:TYR:OH	2.15	0.63
46:CN:117:LEU:HD13	46:CN:121:ARG:HH22	1.64	0.63
45:EM:37:PRO:HG3	45:EM:40:ARG:HG3	1.81	0.63
45:EM:326:LYS:HZ3	46:EN:219:THR:HA	1.63	0.63
46:EN:162:ARG:HD3	46:EN:163:ILE:O	1.98	0.63
46:FB:267:MET:HB3	46:FB:299:MET:CE	2.29	0.63
46:FL:130:LEU:O	46:FL:162:ARG:NH1	2.31	0.63
46:GB:6:HIS:HA	46:GB:134:GLN:HE21	1.62	0.63
47:GM:501:GTP:O1G	46:GN:252:LYS:NZ	2.31	0.63
45:JC:101:ASN:HD22	46:JD:256:ASN:HD21	1.47	0.63
45:KK:349:THR:HG1	46:KN:176:SER:HG	1.40	0.63
46:LL:5:VAL:HG12	46:LL:62:ARG:HD3	1.80	0.63
46:LN:268:ILE:HG22	46:LN:368:VAL:HG22	1.81	0.63
46:MF:156:ARG:NH2	46:MF:197:ASP:OD1	2.31	0.63
45:MI:11:GLN:NE2	46:MJ:245:GLN:O	2.31	0.63
45:MM:153:LEU:O	45:MM:157:LEU:HG	1.99	0.63
45:NC:222:PRO:O	46:ND:322:SER:OG	2.17	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OB:199:CYS:O	46:OB:266:PHE:N	2.32	0.63
46:QJ:200:MET:HB3	46:QJ:266:PHE:HB2	1.79	0.63
45:SC:55:GLU:HG3	45:SC:57:GLY:H	1.63	0.63
46:UD:237:THR:HG22	46:UD:250:LEU:HD11	1.79	0.63
21:1L:65:LYS:NZ	45:BI:279:GLU:OE1	2.21	0.63
26:1W:256:ARG:HG3	34:7R:21:LEU:HD12	1.79	0.63
23:2O:156:ARG:HH12	45:VK:277:SER:HB3	1.64	0.63
46:DB:86:ARG:NH2	46:EB:281:TYR:O	2.31	0.63
46:FB:52:ASN:OD1	46:FB:62:ARG:NH2	2.32	0.63
46:FB:148:GLY:O	46:FB:152:ILE:HG12	1.98	0.63
46:GB:271:ALA:HB3	46:GB:365:VAL:HB	1.80	0.63
46:GD:204:ASN:ND2	49:GD:501:GDP:O2'	2.31	0.63
46:HF:256:ASN:ND2	46:HF:350:LYS:HD3	2.14	0.63
45:HM:321:GLY:N	45:HM:356:ASN:O	2.24	0.63
45:IE:324:VAL:HG12	45:IE:326:LYS:H	1.64	0.63
46:IL:262:ARG:NH1	46:IL:421:GLU:OE1	2.31	0.63
46:JF:301:CYS:HB3	46:JF:377:MET:HE1	1.80	0.63
46:JL:73:MET:HA	46:JL:76:VAL:HG12	1.80	0.63
45:JM:213:CYS:HA	45:JM:217:LEU:HB2	1.81	0.63
46:NL:68:LEU:HB3	46:NL:96:GLY:HA2	1.81	0.63
45:OK:203:MET:HG3	45:OK:384:ILE:HD11	1.81	0.63
46:PJ:262:ARG:NH1	46:PJ:421:GLU:OE1	2.31	0.63
45:RC:244:PHE:HB2	45:RC:356:ASN:HD21	1.63	0.63
45:RI:244:PHE:HB2	45:RI:356:ASN:HD21	1.64	0.63
45:RM:105:ARG:HH12	45:RM:110:ILE:HG12	1.64	0.63
46:SB:135:ILE:HB	46:SB:166:THR:HG22	1.79	0.63
45:TA:60:LYS:NZ	45:TA:85:GLN:O	2.31	0.63
46:UB:48:ASN:O	46:UB:62:ARG:NH1	2.29	0.63
45:UG:31:GLN:HG3	45:UG:37:PRO:HG3	1.79	0.63
46:WH:139:LEU:HD13	46:WH:168:SER:HB3	1.80	0.63
1:1A:17:GLN:NE2	34:4R:46:GLU:O	2.31	0.63
20:1K:15:ASN:ND2	45:NC:357:TYR:O	2.32	0.63
27:2C:192:GLN:HE21	27:2C:198:LYS:HA	1.64	0.63
37:5E:78:LEU:HD13	37:5E:97:ARG:HD2	1.79	0.63
40:6G:94:VAL:HB	45:UK:96:LYS:HE2	1.81	0.63
45:BG:326:LYS:HZ1	46:BJ:220:PRO:HG2	1.64	0.63
45:CM:109:THR:HG22	45:CM:110:ILE:HG23	1.81	0.63
45:DC:53:PHE:HB3	45:DC:61:HIS:HB3	1.79	0.63
46:ED:222:TYR:O	46:ED:226:ASN:ND2	2.27	0.63
46:EN:334:GLN:NE2	46:EN:335:ASN:OD1	2.32	0.63
46:FD:226:ASN:HD21	49:FD:501:GDP:HN1	1.45	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FK:288:VAL:HG11	45:FK:327:ASP:HB3	1.81	0.63
45:HA:174:SER:OG	45:HA:206:ASN:OD1	2.16	0.63
46:HD:178:THR:HG22	46:HD:180:VAL:H	1.63	0.63
47:II:501:GTP:O1G	46:IJ:252:LYS:NZ	2.28	0.63
45:JA:53:PHE:HB3	45:JA:61:HIS:HB3	1.80	0.63
47:LC:501:GTP:O1G	46:LD:252:LYS:NZ	2.32	0.63
45:LI:119:LEU:HD11	45:LI:156:ARG:HG2	1.80	0.63
45:NK:279:GLU:HG2	45:NK:280:LYS:N	2.13	0.63
45:NM:181:VAL:HG12	46:NN:256:ASN:HD22	1.64	0.63
45:OE:371:VAL:HG12	45:OE:373:ARG:H	1.64	0.63
45:QC:206:ASN:OD1	47:QC:501:GTP:N2	2.31	0.63
46:QJ:218:THR:HG23	46:QJ:219:THR:HG23	1.81	0.63
45:QM:55:GLU:HG3	45:QM:57:GLY:H	1.63	0.63
45:RA:55:GLU:HG3	45:RA:57:GLY:H	1.64	0.63
45:TA:91:GLN:HB3	45:TA:121:ARG:HH21	1.64	0.63
46:VJ:128:ASP:OD1	46:VJ:129:CYS:N	2.29	0.63
46:VL:52:ASN:OD1	46:VL:62:ARG:NH2	2.32	0.63
45:VM:53:PHE:HB3	45:VM:61:HIS:HB3	1.81	0.63
46:WB:309:ARG:NH2	46:WB:426:GLN:O	2.31	0.63
46:WD:200:MET:HG2	46:WD:266:PHE:HB2	1.81	0.63
2:OB:171:MET:O	46:JJ:320:ARG:NH1	2.31	0.62
13:1U:162:ILE:HD11	13:1U:173:LEU:HD12	1.81	0.62
14:1V:98:LEU:HD23	45:LI:402:ARG:HH21	1.63	0.62
13:2U:102:LYS:HB2	13:2U:125:ASP:HB3	1.79	0.62
1:3A:129:PRO:HD3	46:AN:362:LYS:HG2	1.80	0.62
11:3S:40:ASN:O	45:WK:56:THR:OG1	2.10	0.62
37:5H:13:ASN:ND2	37:5H:22:LYS:O	2.32	0.62
34:7R:131:GLU:OE2	34:7R:141:GLN:NE2	2.29	0.62
45:CC:109:THR:HG22	45:CC:110:ILE:HG23	1.79	0.62
45:EI:242:LEU:HD11	45:EI:252:ILE:HD11	1.81	0.62
46:FB:100:ASN:ND2	46:FB:401:GLU:OE1	2.32	0.62
46:FH:222:TYR:O	46:FH:226:ASN:ND2	2.24	0.62
46:GD:334:GLN:HE22	46:GD:348:ASN:H	1.46	0.62
45:GM:222:PRO:HD2	46:GN:324:LYS:NZ	2.13	0.62
45:HE:292:THR:HG21	45:HE:331:SER:HB3	1.78	0.62
46:IB:268:ILE:HG13	46:IB:300:MET:HG3	1.81	0.62
45:KI:56:THR:OG1	45:LI:283:HIS:O	2.17	0.62
45:MM:274:PRO:HD3	45:MM:291:ILE:HD11	1.79	0.62
45:NE:396:ASP:HB2	45:NE:422:ARG:HH21	1.64	0.62
45:OA:294:SER:O	45:OA:300:ASN:ND2	2.28	0.62
46:OJ:117:LEU:HA	46:OJ:120:VAL:HG12	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QJ:247:ASN:O	46:QJ:252:LYS:NZ	2.26	0.62
46:RL:292:GLN:O	46:RL:298:ASN:ND2	2.30	0.62
45:SE:251:ASP:H	45:SE:254:GLU:HG3	1.63	0.62
46:SF:135:ILE:HG13	46:SF:152:ILE:HD11	1.80	0.62
46:SL:162:ARG:HE	46:SL:163:ILE:H	1.47	0.62
45:UG:328:VAL:HG11	45:UG:353:VAL:HG21	1.80	0.62
45:VG:271:SER:OG	45:VG:301:MET:SD	2.57	0.62
45:WK:241:SER:OG	45:WK:250:VAL:O	2.16	0.62
25:1R:153:LYS:NZ	46:AF:75:SER:O	2.31	0.62
21:2L:567:ILE:HA	21:2L:579:VAL:HG21	1.81	0.62
27:3C:26:GLN:HG3	27:3C:30:LEU:HD22	1.80	0.62
36:5B:140:VAL:O	46:NH:320:ARG:NH2	2.31	0.62
46:AF:27:GLU:HA	46:AF:359:LYS:HD2	1.81	0.62
45:BA:292:THR:HG21	45:BA:331:SER:HB3	1.81	0.62
46:BB:200:MET:SD	46:BB:200:MET:N	2.71	0.62
45:BE:322:ASP:OD1	45:BE:373:ARG:NH1	2.32	0.62
46:DF:3:GLU:OE2	46:DF:127:CYS:HB2	1.99	0.62
45:DM:269:LEU:HD11	45:DM:384:ILE:HD13	1.81	0.62
46:FF:113:ILE:HD13	46:FF:150:LEU:HD22	1.80	0.62
46:FJ:268:ILE:HG22	46:FJ:368:VAL:HG22	1.81	0.62
46:HB:87:PRO:HA	46:HB:90:PHE:HD2	1.64	0.62
46:IB:324:LYS:NZ	46:IB:328:GLU:OE1	2.32	0.62
46:IB:390:ARG:O	46:IB:392:LYS:NZ	2.32	0.62
46:JF:139:LEU:HD12	46:JF:170:VAL:HG12	1.81	0.62
46:KB:52:ASN:OD1	46:KB:62:ARG:NH2	2.32	0.62
45:KE:339:ARG:NH1	45:KE:340:THR:OG1	2.31	0.62
46:MF:237:THR:HG22	46:MF:250:LEU:HD21	1.81	0.62
46:MJ:273:LEU:H	46:MJ:292:GLN:HE22	1.46	0.62
46:NH:326:VAL:O	46:NH:330:MET:HG2	2.00	0.62
45:NM:76:ASP:OD2	46:NN:46:ARG:NH2	2.30	0.62
46:OB:242:PHE:HB3	46:OB:356:ILE:HD13	1.79	0.62
45:OE:223:THR:HG22	46:OF:322:SER:HA	1.81	0.62
46:OJ:8:GLN:HE21	46:OJ:65:LEU:HG	1.63	0.62
46:PF:66:MET:HE1	46:PF:151:LEU:HD13	1.80	0.62
45:SI:226:ASN:ND2	45:SI:367:ASP:OD2	2.33	0.62
45:TG:292:THR:HG21	45:TG:331:SER:HB3	1.80	0.62
46:UN:87:PRO:HA	46:UN:90:PHE:HD2	1.64	0.62
45:VC:256:GLN:HB3	46:VF:397:TRP:CZ2	2.35	0.62
45:VG:221:ARG:NH2	46:VH:325:GLU:OE1	2.32	0.62
46:WB:114:ASP:OD1	46:WB:115:SER:N	2.32	0.62
45:WK:140:SER:OG	47:WK:501:GTP:O2B	2.16	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WM:119:LEU:HD13	45:WM:122:ILE:HD11	1.81	0.62
45:WM:140:SER:OG	47:WM:501:GTP:O2B	2.17	0.62
22:2M:34:ILE:HG13	22:2M:53:ILE:HD12	1.81	0.62
22:2M:164:ASP:O	22:2M:169:ARG:NH2	2.32	0.62
22:2M:330:LYS:NZ	22:2M:339:ALA:O	2.32	0.62
23:2O:346:GLN:HA	23:2O:349:ARG:HG2	1.79	0.62
13:3U:329:PRO:HG2	13:3U:332:TYR:HB3	1.80	0.62
14:3V:37:THR:HG23	45:MA:214:ARG:NH2	2.13	0.62
30:4H:220:ARG:HB3	45:MK:84:ARG:HE	1.64	0.62
34:4R:277:ASN:OD1	34:4R:288:LYS:NZ	2.32	0.62
40:6G:280:ALA:H	45:VA:214:ARG:HH12	1.48	0.62
44:8R:158:ALA:HB2	46:PJ:276:ARG:HH22	1.63	0.62
46:DF:200:MET:HG2	46:DF:266:PHE:HB2	1.80	0.62
46:EF:326:VAL:O	46:EF:330:MET:HG2	1.99	0.62
46:EL:5:VAL:HG12	46:EL:62:ARG:HD3	1.81	0.62
46:FN:48:ASN:O	46:FN:62:ARG:NH1	2.29	0.62
46:GJ:139:LEU:HD13	46:GJ:168:SER:HB2	1.82	0.62
46:HF:222:TYR:O	46:HF:226:ASN:ND2	2.22	0.62
45:IM:98:ASP:OD1	45:IM:99:ALA:N	2.32	0.62
46:IN:167:PHE:HA	46:IN:200:MET:HB2	1.81	0.62
45:JC:27:GLU:OE1	45:JC:243:ARG:NH1	2.24	0.62
45:JI:62:VAL:HG11	45:KI:283:HIS:HB3	1.81	0.62
45:LM:226:ASN:ND2	45:LM:367:ASP:OD2	2.32	0.62
45:NM:101:ASN:HA	45:NM:144:GLY:H	1.63	0.62
46:NN:131:GLN:HA	46:NN:162:ARG:HH21	1.63	0.62
46:OF:262:ARG:NH1	46:OF:421:GLU:OE1	2.33	0.62
45:OG:109:THR:OG1	45:OG:411:GLU:OE2	2.14	0.62
46:PB:309:ARG:NH2	46:PB:426:GLN:O	2.32	0.62
45:PG:222:PRO:HG2	46:PH:324:LYS:HZ2	1.64	0.62
45:PI:224:TYR:HE2	46:PJ:246:LEU:HD21	1.64	0.62
45:TE:91:GLN:HG3	45:TE:121:ARG:HD2	1.80	0.62
45:UA:326:LYS:HE2	46:UB:220:PRO:HD2	1.79	0.62
12:0T:147:PHE:HZ	46:MB:107:THR:HB	1.64	0.62
1:1A:91:ASN:OD1	46:MF:37:HIS:NE2	2.32	0.62
11:2S:175:PHE:HA	11:2S:178:LEU:HD23	1.81	0.62
11:3S:277:GLN:HB2	10:6Q:37:ILE:HD11	1.81	0.62
34:4R:478:ASN:ND2	34:4R:481:ASN:OD1	2.32	0.62
41:6H:381:GLN:HE22	45:FK:32:PRO:HG2	1.64	0.62
45:BI:254:GLU:HG2	46:BL:98:GLY:HA2	1.82	0.62
45:FG:328:VAL:O	45:FG:332:ILE:HG12	1.99	0.62
45:FK:11:GLN:HG3	45:FK:74:VAL:HG11	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IB:316:LEU:HG	46:IB:352:SER:HB2	1.81	0.62
46:ID:218:THR:HG23	46:ID:219:THR:HG23	1.81	0.62
46:IN:113:ILE:HD13	46:IN:150:LEU:HD22	1.80	0.62
45:JA:55:GLU:O	45:KA:285:GLN:NE2	2.30	0.62
46:JH:289:LEU:HD11	46:JH:363:MET:HB3	1.82	0.62
45:JI:260:VAL:HB	46:JL:397:TRP:HZ2	1.63	0.62
46:LH:7:ILE:HG22	46:LH:64:ILE:HB	1.81	0.62
45:NC:181:VAL:HG12	46:ND:256:ASN:HD22	1.63	0.62
45:NE:88:HIS:NE2	45:OE:284:GLU:OE2	2.32	0.62
46:NF:113:ILE:HG12	46:NF:117:LEU:HD23	1.81	0.62
45:OK:71:GLU:OE1	45:OK:73:THR:OG1	2.14	0.62
45:PK:140:SER:OG	47:PK:501:GTP:O2B	2.16	0.62
45:PK:214:ARG:HD2	45:PK:215:ARG:HH11	1.63	0.62
46:PN:293:MET:HG2	46:PN:365:VAL:HG11	1.81	0.62
46:TB:375:GLN:HB2	46:TB:379:LYS:NZ	2.15	0.62
46:TJ:68:LEU:HB3	46:TJ:96:GLY:HA2	1.79	0.62
45:UI:1:MET:SD	46:UJ:94:GLN:NE2	2.69	0.62
45:VE:88:HIS:CE1	45:VE:90:GLU:HG3	2.34	0.62
46:VH:77:ARG:NH1	46:VH:82:GLY:O	2.33	0.62
45:VK:50:ASN:O	45:VK:64:ARG:NH1	2.32	0.62
45:WE:242:LEU:HD11	45:WE:252:ILE:HG12	1.81	0.62
46:WH:93:GLY:O	46:WH:94:GLN:NE2	2.31	0.62
13:1U:448:HIS:NE2	13:1U:472:SER:OG	2.29	0.62
9:2N:121:TYR:HD1	9:2N:138:LYS:HD2	1.65	0.62
1:3A:34:LEU:HD13	46:MN:40:SER:HB2	1.80	0.62
25:3R:453:ILE:HB	25:3R:456:SER:HB3	1.80	0.62
11:3S:44:LYS:NZ	10:5Q:3:LYS:O	2.29	0.62
30:4H:191:LEU:HG	46:AL:360:GLY:HA2	1.80	0.62
40:6G:122:TYR:CE1	46:VJ:209:ASP:HA	2.34	0.62
46:AH:48:ASN:O	46:AH:62:ARG:NH2	2.27	0.62
46:AN:222:TYR:O	46:AN:226:ASN:ND2	2.21	0.62
45:CC:385:ALA:HA	45:CC:388:PHE:HD2	1.65	0.62
45:CE:71:GLU:OE1	45:CE:73:THR:OG1	2.16	0.62
46:EB:288:GLU:O	46:EB:291:GLN:NE2	2.33	0.62
45:FA:76:ASP:OD2	46:FB:46:ARG:NH2	2.32	0.62
46:FB:119:VAL:O	46:FB:122:LYS:HG3	1.99	0.62
46:FD:372:THR:HA	46:FD:422:TYR:HE2	1.62	0.62
46:FF:262:ARG:NH1	46:FF:421:GLU:OE1	2.33	0.62
45:FK:271:SER:OG	45:FK:301:MET:SD	2.58	0.62
45:FM:101:ASN:HA	45:FM:144:GLY:H	1.63	0.62
45:HC:254:GLU:HG2	46:HF:98:GLY:HA2	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:JF:86:ARG:HG2	46:JF:88:ASP:H	1.63	0.62
46:KH:49:VAL:HG11	46:KH:241:ARG:HG2	1.81	0.62
46:LF:31:ASP:OD1	46:LF:35:THR:N	2.29	0.62
45:LM:172:TYR:HH	45:LM:191:THR:HG1	1.42	0.62
45:MI:141:VAL:HG11	45:MI:172:TYR:HD1	1.63	0.62
46:NF:148:GLY:O	46:NF:152:ILE:HG12	1.99	0.62
45:NM:7:ILE:HB	45:NM:137:VAL:HG12	1.81	0.62
46:OB:103:LYS:HA	46:OB:103:LYS:HE3	1.80	0.62
45:OC:399:TYR:OH	45:OC:415:GLU:OE2	2.18	0.62
46:PF:211:CYS:HA	46:PF:215:LEU:HD12	1.80	0.62
46:QD:48:ASN:O	46:QD:62:ARG:NH1	2.32	0.62
45:UI:244:PHE:HB2	45:UI:356:ASN:HD21	1.63	0.62
45:VE:164:LYS:O	45:VE:166:LYS:NZ	2.33	0.62
45:VG:328:VAL:HG11	45:VG:353:VAL:HG21	1.81	0.62
45:WA:145:THR:OG1	47:WA:501:GTP:O1B	2.17	0.62
1:OA:53:HIS:O	45:MA:84:ARG:NH1	2.31	0.62
12:1T:256:ASN:OD1	12:1T:257:GLN:N	2.33	0.62
13:1U:483:ARG:NH1	13:1U:485:MET:SD	2.72	0.62
23:2O:239:ILE:HD13	46:VJ:276:ARG:HH12	1.65	0.62
41:6H:182:SER:HB3	45:FA:82:THR:HG21	1.80	0.62
41:6H:304:LYS:NZ	45:FG:225:THR:OG1	2.31	0.62
34:7R:189:GLU:HA	34:7R:192:VAL:HG12	1.81	0.62
46:CJ:73:MET:HA	46:CJ:76:VAL:HG12	1.80	0.62
46:CN:11:GLN:NE2	49:CN:501:GDP:O1A	2.32	0.62
46:DB:297:LYS:HA	46:DB:297:LYS:HE3	1.81	0.62
46:EN:8:GLN:HE21	46:EN:14:ASN:HA	1.64	0.62
45:FE:55:GLU:HG3	45:FE:57:GLY:H	1.64	0.62
46:FN:423:GLN:NE2	46:FN:427:ASP:OD2	2.29	0.62
46:GJ:325:GLU:HA	46:GJ:328:GLU:HG2	1.81	0.62
46:KJ:136:THR:HG22	46:KJ:167:PHE:HB2	1.80	0.62
45:LK:188:ILE:HG12	45:LK:425:LEU:HD22	1.80	0.62
46:MN:317:PHE:HB3	46:MN:321:MET:HE1	1.81	0.62
45:OA:49:PHE:HB2	45:OA:53:PHE:HD2	1.64	0.62
46:OB:236:VAL:HA	46:OB:316:LEU:HG	1.81	0.62
45:RC:206:ASN:HB3	45:RC:210:TYR:CZ	2.34	0.62
45:RK:206:ASN:OD1	47:RK:501:GTP:N2	2.33	0.62
45:SA:69:ASP:HB3	45:SA:75:ILE:HD11	1.82	0.62
45:SG:206:ASN:OD1	47:SG:501:GTP:N2	2.33	0.62
45:SM:135:PHE:HB2	45:SM:166:LYS:HE3	1.82	0.62
46:TF:86:ARG:HE	46:UF:282:ARG:HH21	1.47	0.62
45:UE:260:VAL:HB	46:UF:397:TRP:CZ2	2.35	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VD:257:LEU:HA	46:VD:312:THR:HG21	1.82	0.62
14:1V:230:ASN:OD1	14:1V:231:LYS:N	2.33	0.62
5:2E:4:ASP:OD2	5:2E:5:LEU:N	2.33	0.62
29:2G:14:TYR:HD1	45:KG:339:ARG:HE	1.48	0.62
20:2K:208:LYS:HB3	20:2K:212:ARG:HH12	1.64	0.62
23:2O:279:VAL:O	23:2O:283:LYS:NZ	2.32	0.62
25:3R:381:PRO:O	46:EL:279:GLN:NE2	2.30	0.62
45:AA:402:ARG:HG3	45:AA:405:VAL:HG11	1.80	0.62
46:AJ:242:PHE:HB3	46:AJ:356:ILE:HD13	1.82	0.62
46:BJ:148:GLY:O	46:BJ:152:ILE:HG12	1.99	0.62
45:DC:11:GLN:HB2	45:DC:74:VAL:HG11	1.82	0.62
45:DC:319:TYR:HB3	45:DC:323:VAL:HG11	1.81	0.62
45:FM:64:ARG:NH1	45:FM:129:CYS:SG	2.73	0.62
46:FN:101:TRP:HZ2	46:FN:191:GLN:HE22	1.47	0.62
45:GI:292:THR:HG21	45:GI:331:SER:HB3	1.80	0.62
45:HK:271:SER:OG	45:HK:301:MET:SD	2.57	0.62
46:HL:372:THR:HA	46:HL:422:TYR:HE2	1.63	0.62
45:JA:284:GLU:HG3	45:JA:286:LEU:HG	1.80	0.62
45:JI:88:HIS:HD2	45:JI:90:GLU:H	1.45	0.62
45:KI:288:VAL:HG11	45:KI:327:ASP:HB3	1.82	0.62
46:KN:51:TYR:HB3	46:KN:59:TYR:HB3	1.82	0.62
45:LC:387:VAL:HG12	45:LC:390:ARG:HH22	1.65	0.62
45:LE:255:PHE:O	45:LE:259:LEU:HB2	2.00	0.62
45:OI:223:THR:HG22	46:OJ:322:SER:HA	1.82	0.62
46:OL:124:ALA:HB1	46:OL:130:LEU:HD11	1.81	0.62
45:PK:287:SER:N	45:PK:290:GLU:OE2	2.33	0.62
46:SB:2:ARG:H	46:SB:129:CYS:HB2	1.64	0.62
45:SM:260:VAL:HB	46:SN:397:TRP:HZ2	1.64	0.62
45:UA:320:ARG:HH22	45:UA:360:PRO:HG3	1.65	0.62
45:UC:91:GLN:HB3	45:UC:121:ARG:HH21	1.63	0.62
46:UN:65:LEU:HD22	46:UN:90:PHE:HE1	1.64	0.62
46:VL:65:LEU:HD22	46:VL:90:PHE:HE1	1.63	0.62
46:WL:49:VAL:HG11	46:WL:241:ARG:HG2	1.82	0.62
14:0V:70:THR:HG1	46:MN:337:ASN:HD21	1.46	0.62
14:1V:198:PHE:HB3	14:1V:265:VAL:HG13	1.82	0.62
27:2C:81:GLU:OE2	27:2C:83:ASN:ND2	2.32	0.62
13:2U:120:LEU:HD11	13:2U:149:VAL:HG21	1.82	0.62
37:5E:133:PRO:HB2	37:5E:136:LEU:HB2	1.80	0.62
35:5S:93:PRO:HG2	35:5S:130:ARG:HD2	1.79	0.62
40:6G:278:ASP:OD1	45:VA:214:ARG:NH1	2.32	0.62
46:AL:257:LEU:HD11	46:AL:314:SER:HB2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CB:273:LEU:H	46:CB:292:GLN:HE22	1.45	0.62
45:CC:206:ASN:OD1	47:CC:501:GTP:N2	2.33	0.62
46:CJ:139:LEU:HA	46:CJ:145:SER:HB3	1.80	0.62
46:CN:183:TYR:OH	46:CN:393:ALA:O	2.10	0.62
45:DC:326:LYS:HD3	46:DD:212:PHE:HZ	1.65	0.62
45:DM:284:GLU:HG2	45:DM:286:LEU:HD22	1.81	0.62
46:EB:271:ALA:HB3	46:EB:365:VAL:HB	1.81	0.62
45:FE:292:THR:HG21	45:FE:331:SER:HB3	1.79	0.62
45:FG:326:LYS:HG2	46:FJ:220:PRO:HD2	1.80	0.62
46:FN:135:ILE:HG13	46:FN:152:ILE:HD11	1.82	0.62
46:HD:163:ILE:HD11	46:HD:251:ARG:HG2	1.82	0.62
45:IA:96:LYS:O	46:IB:2:ARG:NH2	2.33	0.62
46:JF:63:ALA:O	46:JF:89:ASN:ND2	2.31	0.62
45:JM:339:ARG:HH21	45:JM:342:GLN:HG2	1.63	0.62
45:NK:26:LEU:HD21	45:NK:364:PRO:HD2	1.81	0.62
46:NN:87:PRO:HA	46:NN:90:PHE:HD2	1.65	0.62
46:PF:318:ARG:HB2	46:PF:364:ALA:HB3	1.82	0.62
46:PH:113:ILE:HD13	46:PH:150:LEU:HD22	1.82	0.62
45:PI:60:LYS:NZ	45:PI:85:GLN:O	2.27	0.62
45:QC:14:ILE:HD11	45:QC:69:ASP:HB2	1.81	0.62
46:QJ:63:ALA:O	46:QJ:89:ASN:ND2	2.30	0.62
46:RL:3:GLU:HA	46:RL:49:VAL:HG13	1.81	0.62
46:TH:274:THR:OG1	46:TH:279:GLN:OE1	2.16	0.62
46:UB:86:ARG:HD3	46:UB:87:PRO:HD2	1.80	0.62
46:VL:372:THR:HA	46:VL:422:TYR:HE2	1.64	0.62
10:2Q:173:SER:OG	10:2Q:176:GLU:OE1	2.16	0.62
10:5Q:118:ILE:HD12	45:AK:264:ARG:HH12	1.65	0.62
39:6F:132:HIS:CE1	46:IH:359:LYS:HE2	2.35	0.62
45:AA:76:ASP:OD1	45:AA:79:ARG:NH2	2.33	0.62
46:AF:372:THR:HA	46:AF:422:TYR:HE2	1.63	0.62
45:CG:206:ASN:OD1	47:CG:501:GTP:N2	2.33	0.62
46:CH:130:LEU:HB3	46:CH:162:ARG:HE	1.64	0.62
46:CJ:430:ALA:HB2	45:CK:401:LYS:HZ1	1.65	0.62
45:DI:71:GLU:HB3	45:DI:98:ASP:HB3	1.82	0.62
46:DN:289:LEU:HD11	46:DN:363:MET:HB3	1.80	0.62
45:EC:296:PHE:HE1	45:EC:377:MET:HG3	1.64	0.62
45:EG:210:TYR:CZ	45:EG:227:LEU:HD11	2.35	0.62
46:EL:7:ILE:HG22	46:EL:64:ILE:HB	1.80	0.62
45:GK:292:THR:HG21	45:GK:331:SER:HB3	1.82	0.62
46:GN:67:ASP:OD1	46:GN:68:LEU:N	2.33	0.62
46:KD:309:ARG:NH1	46:KD:426:GLN:O	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LI:398:MET:HG3	46:LJ:345:ILE:HG22	1.82	0.62
46:MB:207:LEU:HB3	46:MB:225:LEU:HD22	1.82	0.62
45:MC:11:GLN:HG3	45:MC:74:VAL:HG11	1.81	0.62
45:ME:11:GLN:HG3	45:ME:74:VAL:HG11	1.82	0.62
45:OI:90:GLU:OE2	45:OI:121:ARG:NH1	2.32	0.62
46:PJ:30:ILE:HD11	46:PJ:47:ILE:HD11	1.82	0.62
45:QG:319:TYR:HB3	45:QG:323:VAL:HG11	1.80	0.62
45:RK:141:VAL:HG11	45:RK:172:TYR:HD1	1.65	0.62
46:SF:200:MET:HE2	46:SF:268:ILE:HD13	1.80	0.62
45:SI:56:THR:HA	45:TI:285:GLN:HE22	1.64	0.62
46:SN:2:ARG:H	46:SN:129:CYS:HB3	1.64	0.62
45:TC:91:GLN:HG2	45:TC:121:ARG:HD2	1.82	0.62
45:TE:90:GLU:OE2	45:TE:91:GLN:NE2	2.32	0.62
45:UE:336:LYS:O	45:UE:339:ARG:NH2	2.31	0.62
45:UM:164:LYS:O	45:UM:166:LYS:NZ	2.33	0.62
45:VA:271:SER:OG	45:VA:301:MET:SD	2.58	0.62
46:VJ:341:PHE:HB3	46:VJ:348:ASN:HD21	1.65	0.62
46:VL:222:TYR:O	46:VL:226:ASN:ND2	2.23	0.62
45:VM:328:VAL:HG11	45:VM:353:VAL:HG21	1.82	0.62
45:WM:121:ARG:HD2	45:WM:124:LYS:HZ1	1.62	0.62
1:1A:129:PRO:HD3	46:AF:362:LYS:HG2	1.82	0.62
5:2E:105:GLN:NE2	5:2E:108:ASP:O	2.33	0.62
28:2F:83:ARG:NH2	46:GF:161:ASP:OD2	2.33	0.62
29:2G:2:ILE:HA	29:2G:5:GLN:HE22	1.65	0.62
29:2G:94:ILE:HG23	29:2G:95:TYR:H	1.64	0.62
9:2N:162:CYS:SG	46:KB:276:ARG:NH1	2.66	0.62
11:2S:18:ARG:NH2	11:2S:29:ASP:OD1	2.33	0.62
5:3E:147:LEU:HB3	5:3E:153:ASN:HA	1.81	0.62
21:3L:193:LEU:HD11	21:3L:196:ARG:HH21	1.65	0.62
10:3Q:113:ARG:NH1	45:AG:196:GLU:OE2	2.33	0.62
37:5G:116:TYR:OH	45:NI:60:LYS:NZ	2.32	0.62
46:BD:173:PRO:HD2	46:BD:380:ARG:NH2	2.15	0.62
46:BL:293:MET:HG3	46:BL:367:PHE:HB2	1.82	0.62
45:CK:133:GLN:HB3	45:CK:252:ILE:HD11	1.82	0.62
46:DH:256:ASN:HD22	46:DH:350:LYS:HD2	1.65	0.62
45:EE:326:LYS:HG2	46:EF:220:PRO:HD2	1.81	0.62
45:EM:206:ASN:OD1	47:EM:501:GTP:N2	2.33	0.62
45:FA:434:GLU:O	46:FD:391:ARG:NH2	2.33	0.62
46:HF:113:ILE:HD13	46:HF:150:LEU:HD22	1.80	0.62
46:HN:173:PRO:HG2	46:HN:380:ARG:HE	1.64	0.62
45:IK:288:VAL:HG11	45:IK:327:ASP:HB3	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JA:424:ASP:OD1	45:JA:425:LEU:N	2.33	0.62
45:MK:69:ASP:OD1	45:MK:70:LEU:N	2.33	0.62
45:PK:437:ILE:O	46:PN:391:ARG:NH2	2.32	0.62
46:QL:332:ASN:OD1	46:QL:336:LYS:NZ	2.31	0.62
46:RL:268:ILE:HG22	46:RL:368:VAL:HG22	1.81	0.62
45:SG:60:LYS:NZ	45:SG:85:GLN:O	2.33	0.62
45:SM:284:GLU:HG2	45:SM:286:LEU:HD22	1.82	0.62
46:TJ:91:VAL:HG21	46:TJ:116:VAL:HG12	1.81	0.62
45:TK:263:PRO:HD3	46:TL:396:HIS:CE1	2.34	0.62
45:WI:195:LEU:HD21	45:WI:264:ARG:HH21	1.65	0.62
5:2E:87:VAL:HG13	5:2E:88:ILE:HG12	1.82	0.61
21:3L:33:LYS:NZ	21:3L:116:LYS:O	2.33	0.61
13:3U:238:SER:OG	13:3U:258:ASP:OD2	2.18	0.61
40:6G:272:LYS:HB3	40:6G:274:ASN:OD1	1.99	0.61
46:AB:113:ILE:HD13	46:AB:150:LEU:HD22	1.79	0.61
45:DA:206:ASN:OD1	47:DA:501:GTP:N2	2.32	0.61
46:EL:315:ALA:N	46:EL:350:LYS:O	2.31	0.61
46:EN:372:THR:OG1	46:EN:426:GLN:NE2	2.32	0.61
45:GA:398:MET:HG3	46:GB:345:ILE:HG22	1.81	0.61
45:GE:271:SER:OG	45:GE:301:MET:SD	2.58	0.61
45:GG:241:SER:OG	45:GG:250:VAL:O	2.18	0.61
45:HM:98:ASP:OD1	45:HM:99:ALA:N	2.33	0.61
46:JJ:10:GLY:O	46:JJ:14:ASN:ND2	2.32	0.61
45:JM:206:ASN:OD1	47:JM:501:GTP:N2	2.33	0.61
45:KE:116:ASP:OD1	45:KE:117:LEU:N	2.33	0.61
46:KH:156:ARG:NH1	46:KH:197:ASP:OD2	2.32	0.61
45:KM:103:PHE:HB2	45:KM:186:ASN:HB3	1.82	0.61
45:LE:98:ASP:OD1	45:LE:99:ALA:N	2.33	0.61
45:LG:288:VAL:HG11	45:LG:327:ASP:HB3	1.81	0.61
45:LM:11:GLN:NE2	46:LN:245:GLN:O	2.33	0.61
46:LN:6:HIS:NE2	46:LN:8:GLN:OE1	2.31	0.61
46:MD:5:VAL:HG12	46:MD:62:ARG:HD3	1.82	0.61
45:NC:123:ARG:NH2	45:OC:297:GLU:OE2	2.33	0.61
46:QD:131:GLN:HE22	46:QD:250:LEU:HB2	1.64	0.61
46:QF:309:ARG:NH2	46:QF:426:GLN:O	2.31	0.61
46:QH:51:TYR:HB3	46:QH:59:TYR:HB3	1.81	0.61
45:RA:224:TYR:O	45:RA:228:ASN:ND2	2.34	0.61
45:RE:176:GLN:NE2	45:RE:207:GLU:OE2	2.33	0.61
46:RF:128:ASP:OD1	46:RF:129:CYS:N	2.33	0.61
46:RH:218:THR:HG23	46:RH:219:THR:HG23	1.82	0.61
46:RJ:256:ASN:OD1	45:RK:181:VAL:HG22	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RK:414:GLU:HG3	45:RK:416:GLY:H	1.66	0.61
46:TB:1:MET:N	46:TB:48:ASN:OD1	2.33	0.61
46:UD:371:SER:O	46:UD:422:TYR:OH	2.15	0.61
45:VK:221:ARG:HA	46:VL:324:LYS:HZ1	1.65	0.61
45:WI:206:ASN:OD1	47:WI:501:GTP:N2	2.33	0.61
46:WN:318:ARG:HB2	46:WN:364:ALA:HB3	1.80	0.61
6:OF:194:PHE:HE2	46:ED:59:TYR:HE2	1.47	0.61
11:1S:162:PRO:HA	11:1S:165:LEU:HD12	1.81	0.61
13:1U:453:TRP:HE1	13:1U:469:ALA:HB2	1.65	0.61
14:1V:22:ARG:NH1	45:MI:423:GLU:OE2	2.32	0.61
14:1V:96:ASN:HD21	46:LJ:262:ARG:HB2	1.65	0.61
4:2D:114:TYR:O	25:3R:516:GLN:NE2	2.24	0.61
1:3A:134:LYS:NZ	1:3A:138:TRP:HB2	2.15	0.61
23:3O:253:LYS:NZ	46:UN:218:THR:OG1	2.33	0.61
36:5B:175:LYS:NZ	46:KH:429:THR:OG1	2.31	0.61
46:AF:242:PHE:HB3	46:AF:356:ILE:HD13	1.81	0.61
46:AL:67:ASP:OD1	46:AL:68:LEU:N	2.31	0.61
46:BL:117:LEU:HA	46:BL:120:VAL:HB	1.82	0.61
46:CH:63:ALA:O	46:CH:89:ASN:ND2	2.33	0.61
46:DD:27:GLU:O	46:DD:43:GLN:NE2	2.33	0.61
46:DH:63:ALA:O	46:DH:89:ASN:ND2	2.32	0.61
45:DM:280:LYS:NZ	45:DM:284:GLU:OE1	2.33	0.61
46:DN:150:LEU:HB2	46:DN:154:LYS:NZ	2.14	0.61
46:DN:156:ARG:NH1	46:DN:159:TYR:O	2.32	0.61
46:EB:324:LYS:HZ1	45:EC:210:TYR:HD2	1.45	0.61
46:EF:256:ASN:OD1	45:EG:181:VAL:HG22	2.00	0.61
45:EG:288:VAL:HA	45:EG:291:ILE:HG12	1.82	0.61
46:GB:87:PRO:HA	46:GB:90:PHE:HD2	1.65	0.61
46:GB:257:LEU:HD12	46:GB:312:THR:HG23	1.81	0.61
46:HF:379:LYS:O	46:HF:383:GLU:HG2	2.01	0.61
45:HI:140:SER:OG	47:HI:501:GTP:O2B	2.18	0.61
45:HM:69:ASP:OD1	45:HM:70:LEU:N	2.33	0.61
46:JD:54:ALA:HA	46:KD:283:ALA:HB2	1.82	0.61
46:KD:51:TYR:HB3	46:KD:59:TYR:HB3	1.82	0.61
45:KE:207:GLU:OE2	45:KE:304:LYS:NZ	2.32	0.61
45:KE:407:TRP:CZ3	46:KF:255:VAL:HA	2.34	0.61
46:LD:282:ARG:NH1	46:LD:288:GLU:OE2	2.33	0.61
45:NG:319:TYR:HB3	45:NG:323:VAL:HG21	1.82	0.61
45:QI:55:GLU:HG3	45:QI:57:GLY:H	1.65	0.61
45:RA:254:GLU:HG2	46:RB:98:GLY:HA2	1.83	0.61
45:RC:2:ARG:HH21	45:RC:243:ARG:HA	1.64	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RL:372:THR:HG21	46:RL:426:GLN:HB2	1.81	0.61
46:RN:222:TYR:O	46:RN:226:ASN:ND2	2.33	0.61
46:RN:273:LEU:H	46:RN:292:GLN:HE22	1.46	0.61
45:TE:292:THR:HG21	45:TE:331:SER:HB3	1.81	0.61
45:TG:76:ASP:OD1	45:TG:79:ARG:NH2	2.31	0.61
45:UI:145:THR:OG1	47:UI:501:GTP:O1B	2.18	0.61
45:UK:145:THR:OG1	47:UK:501:GTP:O1B	2.18	0.61
46:VH:341:PHE:HB3	46:VH:348:ASN:HD21	1.64	0.61
46:VN:178:THR:HB	46:VN:181:GLU:HG3	1.81	0.61
5:2E:61:LYS:NZ	46:DJ:37:HIS:O	2.30	0.61
30:4H:210:ILE:HD13	45:AK:40:ARG:HD2	1.82	0.61
34:4R:189:GLU:HA	34:4R:192:VAL:HG12	1.81	0.61
37:5F:44:ARG:O	45:OC:373:ARG:NH2	2.31	0.61
45:AG:288:VAL:HG11	45:AG:327:ASP:HB3	1.81	0.61
46:BD:211:CYS:HA	46:BD:215:LEU:HD12	1.82	0.61
45:EA:242:LEU:HD11	45:EA:252:ILE:HG13	1.81	0.61
46:EB:269:GLY:N	46:EB:367:PHE:O	2.33	0.61
46:EH:245:GLN:O	45:EI:11:GLN:NE2	2.33	0.61
46:FF:5:VAL:HG12	46:FF:62:ARG:HD3	1.81	0.61
45:GA:406:HIS:HA	45:GA:409:VAL:HG22	1.83	0.61
45:HG:185:TYR:HE1	45:HG:398:MET:HB3	1.65	0.61
45:HG:260:VAL:HB	46:HJ:397:TRP:CZ2	2.35	0.61
45:HM:372:MET:HG2	45:HM:373:ARG:HG2	1.83	0.61
45:JK:406:HIS:HA	45:JK:409:VAL:HG12	1.83	0.61
46:KJ:130:LEU:HB2	46:KJ:162:ARG:HE	1.65	0.61
46:LF:73:MET:HA	46:LF:76:VAL:HG12	1.82	0.61
46:LL:52:ASN:OD1	46:LL:62:ARG:NH2	2.34	0.61
45:MA:140:SER:OG	47:MA:501:GTP:O2B	2.18	0.61
45:ME:413:MET:HG3	45:ME:417:GLU:HG3	1.82	0.61
45:OI:55:GLU:HG3	45:OI:57:GLY:H	1.65	0.61
45:PA:73:THR:OG1	46:PB:2:ARG:NH2	2.34	0.61
45:PG:101:ASN:OD1	46:PH:252:LYS:NZ	2.33	0.61
45:QC:185:TYR:HE2	45:QC:404:PHE:HB2	1.64	0.61
45:QG:338:LYS:HA	45:QG:338:LYS:HE3	1.82	0.61
45:QK:269:LEU:HD12	45:QK:303:ALA:HB3	1.83	0.61
45:RE:319:TYR:HB2	45:RE:355:ILE:HG22	1.82	0.61
45:RM:54:SER:OG	45:RM:64:ARG:NH1	2.34	0.61
45:SA:48:ALA:HB1	45:SA:243:ARG:HB2	1.82	0.61
45:SG:90:GLU:OE2	45:SG:121:ARG:NH2	2.34	0.61
45:SK:138:PHE:HZ	45:SK:235:ILE:HD12	1.64	0.61
46:UD:325:GLU:OE1	45:UE:221:ARG:NH1	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VM:73:THR:HG23	46:VN:2:ARG:HH12	1.64	0.61
46:WH:49:VAL:HG13	46:WH:50:TYR:CD1	2.33	0.61
45:WM:185:TYR:HE2	45:WM:404:PHE:HB2	1.65	0.61
21:1L:425:SER:OG	45:CG:279:GLU:OE1	2.17	0.61
23:1O:156:ARG:NH2	45:UE:370:LYS:HG2	2.16	0.61
24:2P:385:ILE:HG23	45:TM:370:LYS:HE2	1.81	0.61
12:2T:283:TYR:O	13:2U:52:ARG:NH1	2.33	0.61
10:3Q:101:ARG:NH1	10:3Q:116:PRO:O	2.34	0.61
25:3R:480:GLN:N	25:3R:483:ASP:OD2	2.29	0.61
45:AA:283:HIS:HD1	45:MA:89:PRO:HD3	1.64	0.61
45:AC:398:MET:HG2	46:AD:345:ILE:HG22	1.82	0.61
46:AL:74:ASP:OD1	46:AL:77:ARG:NH2	2.33	0.61
46:BL:257:LEU:HD11	46:BL:314:SER:HB2	1.81	0.61
45:CI:71:GLU:OE2	45:CI:73:THR:OG1	2.18	0.61
46:DH:207:LEU:HB3	46:DH:225:LEU:HD22	1.82	0.61
46:DN:294:PHE:HD2	46:DN:333:VAL:HG11	1.65	0.61
45:EC:109:THR:HG22	45:EC:110:ILE:HG23	1.80	0.61
45:EC:284:GLU:HG2	45:EC:286:LEU:HD22	1.83	0.61
45:EE:206:ASN:OD1	47:EE:501:GTP:N2	2.33	0.61
46:GB:86:ARG:HH21	46:GB:87:PRO:HG2	1.64	0.61
46:GB:113:ILE:HD11	46:GB:151:LEU:HB2	1.82	0.61
45:IK:71:GLU:OE1	46:IL:247:ASN:ND2	2.32	0.61
45:JE:73:THR:OG1	46:JF:2:ARG:NH2	2.34	0.61
45:JK:251:ASP:OD1	45:JK:252:ILE:N	2.34	0.61
46:KF:334:GLN:HE22	46:KF:348:ASN:H	1.47	0.61
46:LB:167:PHE:CZ	46:LB:233:MET:HG2	2.35	0.61
46:LF:121:ARG:NH2	46:LF:158:GLU:OE2	2.32	0.61
46:MJ:372:THR:HA	46:MJ:422:TYR:HE2	1.65	0.61
45:NA:15:GLN:NE2	47:NA:501:GTP:O6	2.34	0.61
45:NG:11:GLN:NE2	46:NH:245:GLN:O	2.33	0.61
45:OK:54:SER:HB3	45:OK:64:ARG:HE	1.65	0.61
46:QB:167:PHE:HE2	46:QB:233:MET:HG3	1.66	0.61
45:QI:280:LYS:HD3	45:QI:283:HIS:HB2	1.83	0.61
46:RB:372:THR:HG21	46:RB:426:GLN:HB2	1.81	0.61
46:RD:52:ASN:OD1	46:RD:62:ARG:NH2	2.32	0.61
45:SC:101:ASN:HA	45:SC:144:GLY:H	1.64	0.61
45:SI:88:HIS:NE2	45:TI:284:GLU:OE2	2.34	0.61
46:SL:31:ASP:OD1	46:SL:35:THR:N	2.32	0.61
46:SL:99:ASN:HA	46:SL:142:GLY:H	1.65	0.61
46:SL:107:THR:OG1	46:SL:108:GLU:OE1	2.19	0.61
46:TB:200:MET:HB3	46:TB:268:ILE:HD11	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UB:25:SER:OG	46:UB:30:ILE:O	2.18	0.61
45:WM:222:PRO:HG2	46:WN:324:LYS:HG2	1.83	0.61
15:1X:91:LYS:O	15:1X:95:ILE:HD12	2.01	0.61
1:3A:138:TRP:CZ3	45:AM:81:GLY:HA2	2.34	0.61
16:3B:41:SER:OG	16:3B:43:ARG:NH1	2.31	0.61
23:3O:342:ARG:O	23:3O:346:GLN:NE2	2.33	0.61
27:4C:143:SER:HB3	27:4C:146:ARG:HB3	1.81	0.61
34:4R:555:ASN:O	34:4R:575:ARG:NH2	2.33	0.61
37:5F:123:ARG:HA	45:OE:370:LYS:HG3	1.81	0.61
34:7R:469:LYS:HE2	34:7R:472:GLU:HA	1.82	0.61
45:AE:292:THR:HG21	45:AE:331:SER:HB3	1.82	0.61
46:AH:211:CYS:HA	46:AH:215:LEU:HD12	1.82	0.61
45:BE:271:SER:HB2	45:BE:377:MET:HB3	1.82	0.61
46:BF:341:PHE:HB3	46:BF:348:ASN:HD21	1.65	0.61
45:BM:55:GLU:HG3	45:BM:57:GLY:H	1.65	0.61
46:CH:322:SER:OG	45:CI:222:PRO:O	2.18	0.61
45:CI:287:SER:N	45:CI:290:GLU:OE2	2.33	0.61
46:DB:309:ARG:NH2	46:DB:426:GLN:O	2.33	0.61
46:DN:114:ASP:OD1	46:DN:115:SER:N	2.32	0.61
45:EC:270:SER:OG	45:EC:302:MET:SD	2.58	0.61
46:FN:271:ALA:HB3	46:FN:365:VAL:HB	1.81	0.61
45:IG:1:MET:SD	46:IJ:94:GLN:NE2	2.73	0.61
46:LH:73:MET:HA	46:LH:76:VAL:HG12	1.83	0.61
46:LN:31:ASP:OD1	46:LN:35:THR:N	2.31	0.61
46:LN:132:GLY:HA3	46:LN:163:ILE:HG22	1.83	0.61
46:NB:371:SER:O	46:NB:422:TYR:OH	2.19	0.61
46:ND:167:PHE:CZ	46:ND:233:MET:HG3	2.36	0.61
46:NN:294:PHE:HD2	46:NN:333:VAL:HG11	1.65	0.61
45:OC:60:LYS:NZ	45:OC:85:GLN:O	2.32	0.61
45:OG:72:PRO:HB3	45:OG:94:SER:HB2	1.82	0.61
45:PA:401:LYS:HG2	46:PB:344:TRP:HH2	1.63	0.61
45:PI:222:PRO:HG2	46:PJ:324:LYS:HZ1	1.66	0.61
46:QB:135:ILE:HG13	46:QB:152:ILE:HD11	1.81	0.61
45:QC:268:MET:HE2	45:QC:378:ILE:HG22	1.82	0.61
45:RE:244:PHE:HB2	45:RE:356:ASN:HD21	1.63	0.61
46:SJ:138:SER:HA	46:SJ:169:VAL:HB	1.81	0.61
46:SN:207:LEU:HD13	46:SN:225:LEU:HB3	1.81	0.61
45:TM:226:ASN:ND2	45:TM:367:ASP:OD2	2.34	0.61
46:UF:211:CYS:HB3	46:UF:217:LEU:HD21	1.82	0.61
46:UF:347:ASN:OD1	45:UG:178:SER:OG	2.19	0.61
46:WB:49:VAL:HG11	46:WB:241:ARG:HG2	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WJ:275:SER:O	46:WJ:279:GLN:NE2	2.33	0.61
4:1D:173:GLY:O	45:EG:79:ARG:NH1	2.34	0.61
8:1H:115:ARG:NH1	46:HL:280:GLN:HG3	2.16	0.61
14:3V:89:ASN:HB3	14:3V:95:SER:HB3	1.83	0.61
15:3X:35:ASP:OD1	15:3X:36:ALA:N	2.33	0.61
46:AB:54:ALA:HA	46:BB:283:ALA:HB2	1.80	0.61
46:AB:86:ARG:HH21	46:AB:87:PRO:HG2	1.66	0.61
46:AD:132:GLY:HA3	46:AD:163:ILE:HG22	1.83	0.61
46:BL:214:THR:O	46:BL:275:SER:OG	2.16	0.61
45:CA:224:TYR:HD1	45:CA:227:LEU:HD12	1.65	0.61
46:CB:319:GLY:HA2	46:CB:357:PRO:HG3	1.81	0.61
45:CK:292:THR:HG21	45:CK:331:SER:HB3	1.81	0.61
46:EN:31:ASP:OD1	46:EN:35:THR:N	2.33	0.61
46:FB:274:THR:HG21	46:FB:282:ARG:HG3	1.82	0.61
46:FL:31:ASP:OD1	46:FL:35:THR:N	2.32	0.61
46:FN:278:SER:HA	46:FN:281:TYR:HD2	1.65	0.61
46:GJ:31:ASP:OD2	46:GJ:37:HIS:ND1	2.33	0.61
46:GL:257:LEU:HD11	46:GL:314:SER:HB2	1.81	0.61
46:HB:31:ASP:OD1	46:HB:35:THR:N	2.29	0.61
45:HM:298:PRO:HB3	45:HM:307:PRO:HD2	1.83	0.61
45:IC:55:GLU:HG3	45:IC:57:GLY:H	1.65	0.61
45:IM:147:SER:HB2	45:IM:190:SER:HB3	1.82	0.61
46:KB:51:TYR:HB3	46:KB:59:TYR:HB3	1.82	0.61
46:KH:31:ASP:OD1	46:KH:35:THR:N	2.30	0.61
45:PC:70:LEU:HD13	45:PC:95:GLY:HA3	1.83	0.61
45:RA:328:VAL:HG11	45:RA:353:VAL:HG21	1.82	0.61
46:RL:383:GLU:HA	46:RL:386:THR:HG22	1.83	0.61
45:TC:11:GLN:HG2	45:TC:15:GLN:HE22	1.66	0.61
46:TL:237:THR:HG23	46:TL:241:ARG:HH21	1.66	0.61
46:UL:48:ASN:O	46:UL:62:ARG:NH1	2.33	0.61
45:UM:217:LEU:HD11	45:UM:367:ASP:HB3	1.83	0.61
46:VF:260:PHE:HB2	46:VF:263:LEU:HD13	1.83	0.61
45:VG:292:THR:HG21	45:VG:331:SER:HB2	1.82	0.61
12:1T:23:ASP:OD1	12:1T:25:GLN:NE2	2.33	0.61
14:1V:238:LYS:NZ	46:WL:218:THR:OG1	2.33	0.61
11:2S:176:ASP:OD1	11:2S:179:ARG:NH2	2.34	0.61
14:2V:45:ARG:HH12	14:2V:59:LYS:HZ3	1.46	0.61
1:3A:127:ASN:O	1:3A:127:ASN:ND2	2.23	0.61
5:3E:32:ARG:HD2	5:3E:151:CYS:HB2	1.83	0.61
23:3O:424:ALA:HA	23:3O:427:LEU:HD12	1.82	0.61
25:3R:510:PHE:HD1	25:3R:514:ILE:HG13	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:3S:18:ARG:NH2	11:3S:29:ASP:OD1	2.33	0.61
37:5G:44:ARG:HH22	45:NG:55:GLU:HB3	1.65	0.61
35:5S:166:GLN:HG3	35:5S:224:ILE:HG21	1.81	0.61
34:7R:102:SER:O	46:BD:280:GLN:NE2	2.28	0.61
46:AB:55:THR:HG23	46:BB:283:ALA:HA	1.81	0.61
46:AN:257:LEU:HD11	46:AN:314:SER:HB2	1.81	0.61
45:CA:101:ASN:HA	45:CA:144:GLY:H	1.65	0.61
46:CB:256:ASN:HD21	45:CC:101:ASN:HD22	1.48	0.61
46:DB:156:ARG:NH1	46:DB:162:ARG:O	2.32	0.61
45:DM:115:VAL:HG21	45:DM:156:ARG:HH21	1.64	0.61
45:EC:174:SER:OG	45:EC:206:ASN:OD1	2.18	0.61
45:FC:292:THR:HG21	45:FC:331:SER:HB3	1.80	0.61
46:FH:107:THR:HG23	46:FH:108:GLU:HG3	1.82	0.61
46:GJ:257:LEU:HD11	46:GJ:314:SER:HB2	1.83	0.61
46:HL:6:HIS:NE2	46:HL:8:GLN:OE1	2.30	0.61
45:IM:132:LEU:HD22	45:IM:164:LYS:HE2	1.83	0.61
45:JI:188:ILE:HD12	45:JI:425:LEU:HD11	1.83	0.61
46:MB:371:SER:O	46:MB:422:TYR:OH	2.16	0.61
45:NC:221:ARG:NH1	46:ND:325:GLU:OE1	2.34	0.61
46:OB:178:THR:HB	46:OB:181:GLU:HG3	1.83	0.61
46:ON:8:GLN:HE21	46:ON:65:LEU:HG	1.65	0.61
45:PE:51:THR:HG21	45:PE:243:ARG:HB3	1.82	0.61
45:PI:128:ASN:OD1	45:QI:285:GLN:NE2	2.32	0.61
46:QD:63:ALA:O	46:QD:89:ASN:ND2	2.32	0.61
45:RK:434:GLU:HA	45:RK:437:ILE:HG12	1.81	0.61
45:RM:3:GLU:OE2	45:RM:130:THR:N	2.26	0.61
45:SI:55:GLU:HG3	45:SI:57:GLY:H	1.66	0.61
46:UB:171:PRO:O	46:UB:380:ARG:NH1	2.33	0.61
45:UM:294:SER:O	45:UM:300:ASN:ND2	2.31	0.61
46:VB:118:ASP:OD1	46:VB:121:ARG:NH2	2.34	0.61
46:WH:10:GLY:O	46:WH:14:ASN:ND2	2.34	0.61
45:WI:217:LEU:HD21	45:WI:275:ILE:HG22	1.81	0.61
9:0N:16:ILE:HG22	46:IN:48:ASN:HD22	1.65	0.61
27:2C:267:LYS:HA	27:2C:267:LYS:HE3	1.82	0.61
21:2L:904:LEU:HD22	21:2L:908:GLN:HE21	1.65	0.61
13:2U:124:ASP:OD2	13:2U:125:ASP:N	2.33	0.61
14:3V:21:ARG:HE	14:3V:22:ARG:H	1.48	0.61
45:AG:298:PRO:HB3	45:AG:307:PRO:HD2	1.83	0.61
45:AI:322:ASP:OD1	45:AI:373:ARG:NH1	2.34	0.61
46:BH:122:LYS:HA	46:BH:122:LYS:HE3	1.82	0.61
46:BJ:347:ASN:C	46:BJ:347:ASN:HD22	2.04	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CG:88:HIS:HB3	45:CG:91:GLN:HG3	1.83	0.61
45:DC:339:ARG:NH1	45:DC:339:ARG:HA	2.16	0.61
46:EB:7:ILE:HA	46:EB:64:ILE:HG22	1.83	0.61
46:EB:324:LYS:HD2	45:EC:222:PRO:HD2	1.82	0.61
45:FA:11:GLN:NE2	46:FB:245:GLN:O	2.34	0.61
46:FB:319:GLY:HA2	46:FB:357:PRO:HB3	1.83	0.61
45:FC:2:ARG:HH21	46:FF:70:PRO:HD2	1.66	0.61
45:FI:222:PRO:HD2	46:FJ:324:LYS:HD3	1.83	0.61
46:FN:371:SER:O	46:FN:422:TYR:OH	2.17	0.61
46:GL:55:THR:HG23	46:HL:283:ALA:HA	1.81	0.61
46:GN:163:ILE:HG13	46:GN:251:ARG:HB2	1.81	0.61
46:IH:113:ILE:HA	46:IH:116:VAL:HG12	1.82	0.61
45:KA:210:TYR:HB3	46:KB:324:LYS:NZ	2.15	0.61
45:KE:60:LYS:NZ	45:KE:85:GLN:O	2.32	0.61
46:KJ:10:GLY:O	46:KJ:14:ASN:ND2	2.33	0.61
46:MH:128:ASP:OD1	46:MH:129:CYS:N	2.33	0.61
46:NB:68:LEU:HD12	46:NB:93:GLY:HA3	1.82	0.61
45:OE:70:LEU:HD13	45:OE:95:GLY:HA3	1.83	0.61
45:PA:188:ILE:HB	45:PA:425:LEU:HD11	1.81	0.61
45:QA:21:TRP:HA	45:QA:24:PHE:HB2	1.82	0.61
45:QE:192:HIS:ND1	45:QE:424:ASP:OD2	2.33	0.61
46:RL:247:ASN:OD1	45:RM:11:GLN:NE2	2.33	0.61
45:SA:316:SER:N	45:SA:378:ILE:O	2.27	0.61
45:SC:140:SER:OG	47:SC:501:GTP:O2B	2.19	0.61
45:SE:27:GLU:OE2	45:SE:243:ARG:NH1	2.33	0.61
46:SL:8:GLN:HE22	46:SL:17:GLY:HA3	1.66	0.61
45:TG:98:ASP:O	45:TG:105:ARG:NH1	2.33	0.61
45:TG:226:ASN:ND2	45:TG:367:ASP:OD2	2.33	0.61
46:TJ:273:LEU:H	46:TJ:292:GLN:HE22	1.47	0.61
46:TL:86:ARG:HD3	46:TL:87:PRO:HD2	1.81	0.61
46:UB:328:GLU:O	46:UB:332:ASN:N	2.33	0.61
45:VG:221:ARG:HH21	46:VH:322:SER:HB3	1.66	0.61
45:WA:220:GLU:O	46:WB:324:LYS:NZ	2.34	0.61
6:OF:204:PHE:HA	45:FC:221:ARG:HD3	1.81	0.61
15:OX:33:ALA:HB1	15:IX:140:PRO:HG3	1.81	0.61
5:2E:44:ASP:HA	5:2E:78:THR:HG21	1.82	0.61
23:2O:352:ARG:HG3	46:VF:276:ARG:HH21	1.66	0.61
13:3U:83:ASP:OD2	13:3U:97:ARG:NH1	2.34	0.61
34:6R:353:ASP:OD1	34:6R:356:THR:OG1	2.18	0.61
46:CB:321:MET:HB2	45:CC:221:ARG:HH21	1.66	0.61
45:CK:206:ASN:OD1	47:CK:501:GTP:N2	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DF:46:ARG:HH22	45:DG:73:THR:HA	1.66	0.61
45:DK:184:PRO:O	45:DK:188:ILE:HG12	2.01	0.61
46:DL:55:THR:HG23	46:EL:283:ALA:HA	1.82	0.61
46:EL:52:ASN:OD1	46:EL:62:ARG:NH2	2.33	0.61
46:FF:178:THR:HB	46:FF:181:GLU:HG3	1.83	0.61
46:FF:222:TYR:O	46:FF:226:ASN:ND2	2.23	0.61
45:GA:313:MET:HB2	45:GA:380:ASN:HB3	1.82	0.61
46:JN:204:ASN:ND2	49:JN:501:GDP:O2'	2.33	0.61
45:KG:254:GLU:OE1	46:KJ:99:ASN:ND2	2.34	0.61
45:NM:11:GLN:NE2	46:NN:245:GLN:O	2.34	0.61
45:NM:64:ARG:NH1	45:NM:129:CYS:SG	2.74	0.61
45:NM:320:ARG:HG2	45:NM:356:ASN:HB3	1.83	0.61
46:RN:100:ASN:ND2	46:RN:401:GLU:OE1	2.33	0.61
45:SE:215:ARG:NH2	45:SE:300:ASN:OD1	2.34	0.61
45:SM:316:SER:N	45:SM:378:ILE:O	2.31	0.61
46:TB:100:ASN:ND2	46:TB:401:GLU:OE1	2.34	0.61
45:TI:322:ASP:OD1	45:TI:373:ARG:NH1	2.33	0.61
46:TJ:311:LEU:HD23	46:TJ:312:THR:HG23	1.82	0.61
45:TM:241:SER:OG	45:TM:250:VAL:O	2.17	0.61
46:WD:222:TYR:O	46:WD:226:ASN:ND2	2.21	0.61
45:WM:121:ARG:HH11	45:WM:121:ARG:HA	1.66	0.61
11:OS:311:PRO:HB2	45:AA:402:ARG:HB3	1.82	0.61
31:2I:103:ARG:NH1	46:GF:209:ASP:OD2	2.34	0.61
21:2L:525:LEU:HD13	46:BN:320:ARG:HB2	1.82	0.61
14:3V:24:ARG:CZ	45:MA:430:LYS:HA	2.31	0.61
37:5H:123:ARG:HB2	45:OM:370:LYS:NZ	2.16	0.61
45:AI:328:VAL:HG11	45:AI:353:VAL:HG21	1.83	0.61
46:AJ:5:VAL:HG12	46:AJ:62:ARG:HD2	1.81	0.61
45:CE:84:ARG:HG3	45:CE:85:GLN:NE2	2.16	0.61
46:CL:45:GLU:HG2	46:CL:46:ARG:HG2	1.83	0.61
46:DB:294:PHE:HE2	46:DB:333:VAL:HG11	1.65	0.61
45:DG:1:MET:SD	45:DG:2:ARG:NH2	2.74	0.61
45:EA:311:LYS:NZ	45:EA:342:GLN:HG3	2.15	0.61
46:EB:5:VAL:HG12	46:EB:62:ARG:HD3	1.83	0.61
46:IL:86:ARG:NH1	45:JI:284:GLU:OE2	2.33	0.61
45:JG:206:ASN:OD1	47:JG:501:GTP:N2	2.33	0.61
46:JN:309:ARG:NH1	46:JN:343:GLU:OE1	2.34	0.61
46:ML:262:ARG:NH1	46:ML:421:GLU:OE1	2.33	0.61
45:NC:202:VAL:HG12	45:NC:268:MET:HB2	1.83	0.61
46:NF:113:ILE:HD13	46:NF:150:LEU:HD22	1.83	0.61
46:OD:186:THR:HA	46:OD:189:VAL:HG12	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OG:50:ASN:O	45:OG:64:ARG:NH1	2.29	0.61
46:PB:27:GLU:O	46:PB:43:GLN:NE2	2.33	0.61
45:RE:241:SER:OG	45:RE:250:VAL:O	2.18	0.61
46:RF:87:PRO:HA	46:RF:90:PHE:HD2	1.64	0.61
45:RM:102:ASN:ND2	45:RM:411:GLU:OE2	2.27	0.61
45:SA:33:ASP:HA	45:SA:85:GLN:HE21	1.65	0.61
46:SD:260:PHE:HB2	46:SD:263:LEU:HD13	1.82	0.61
46:SD:324:LYS:NZ	45:SE:210:TYR:HB3	2.15	0.61
45:SE:108:TYR:HA	45:SE:112:LYS:HE3	1.83	0.61
45:UM:215:ARG:NH2	45:UM:299:ALA:O	2.34	0.61
46:UN:375:GLN:HE21	46:UN:422:TYR:HD2	1.48	0.61
45:VA:33:ASP:HB2	45:VA:35:GLN:HE22	1.66	0.61
46:WB:99:ASN:HA	46:WB:142:GLY:H	1.65	0.61
19:1J:229:VAL:H	29:2G:94:ILE:HG21	1.65	0.60
20:2K:295:MET:HA	20:2K:298:ARG:HD3	1.82	0.60
24:2P:387:LEU:HA	24:2P:390:LYS:HG2	1.83	0.60
14:2V:137:ASN:ND2	46:LH:425:TYR:OH	2.33	0.60
30:3H:197:LYS:O	46:AH:320:ARG:NH1	2.33	0.60
21:3L:36:LYS:HE2	21:3L:117:GLU:OE2	2.01	0.60
37:5H:41:THR:OG1	45:OK:370:LYS:NZ	2.29	0.60
37:5H:80:LYS:HE2	45:KM:401:LYS:HA	1.81	0.60
45:BA:222:PRO:O	46:BB:324:LYS:NZ	2.33	0.60
46:CJ:31:ASP:OD2	46:CJ:37:HIS:ND1	2.24	0.60
46:CN:269:GLY:N	46:CN:367:PHE:O	2.34	0.60
46:DB:63:ALA:O	46:DB:89:ASN:ND2	2.33	0.60
46:DD:218:THR:HG23	46:DD:219:THR:HG23	1.82	0.60
46:DJ:290:THR:HA	46:DJ:293:MET:HG2	1.83	0.60
46:DN:148:GLY:O	46:DN:152:ILE:HG12	2.00	0.60
45:EI:206:ASN:OD1	47:EI:501:GTP:N2	2.31	0.60
46:FN:86:ARG:NH2	46:GN:281:TYR:O	2.33	0.60
45:GK:90:GLU:OE1	45:GK:121:ARG:NH2	2.34	0.60
45:HE:220:GLU:HG2	45:HE:221:ARG:HG2	1.82	0.60
45:IK:328:VAL:HG11	45:IK:353:VAL:HG21	1.81	0.60
46:IN:86:ARG:HD2	46:IN:88:ASP:H	1.66	0.60
46:JF:67:ASP:OD1	46:JF:68:LEU:N	2.33	0.60
45:KC:241:SER:OG	45:KC:250:VAL:O	2.16	0.60
45:LM:184:PRO:HG2	45:LM:398:MET:HE1	1.83	0.60
45:NG:222:PRO:HG2	46:NH:324:LYS:HD3	1.83	0.60
46:QB:19:LYS:NZ	46:QB:223:GLY:O	2.33	0.60
46:QD:139:LEU:HD13	46:QD:168:SER:HB3	1.83	0.60
46:RF:207:LEU:HB3	46:RF:225:LEU:HD22	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RG:270:SER:OG	45:RG:302:MET:SD	2.59	0.60
46:TF:222:TYR:O	46:TF:226:ASN:ND2	2.28	0.60
45:TM:220:GLU:HG2	45:TM:221:ARG:HG2	1.84	0.60
46:UB:19:LYS:NZ	46:UB:223:GLY:O	2.33	0.60
45:UM:155:GLU:OE2	45:UM:197:HIS:NE2	2.34	0.60
45:VK:88:HIS:HE1	45:WK:280:LYS:HE3	1.66	0.60
47:VM:501:GTP:O1G	46:VN:252:LYS:NZ	2.34	0.60
45:WI:175:PRO:HG3	45:WI:390:ARG:HH12	1.66	0.60
7:OG:88:GLY:O	46:JN:276:ARG:NH1	2.34	0.60
13:1U:473:CYS:HB3	13:1U:487:LEU:HB2	1.81	0.60
27:2C:103:ARG:NH1	27:2C:184:ASP:OD1	2.34	0.60
14:2V:50:ASN:HB3	14:2V:57:LEU:HD13	1.82	0.60
21:3L:173:GLN:HA	21:3L:176:ARG:HB2	1.82	0.60
45:AI:259:LEU:HD11	45:AI:316:SER:HB2	1.83	0.60
45:BC:76:ASP:OD1	45:BC:79:ARG:NH2	2.30	0.60
45:BC:328:VAL:HG11	45:BC:353:VAL:HG21	1.83	0.60
46:BH:207:LEU:HB3	46:BH:225:LEU:HD22	1.83	0.60
45:CG:90:GLU:OE1	45:CG:121:ARG:NH1	2.34	0.60
46:DB:130:LEU:O	46:DB:162:ARG:NH1	2.34	0.60
45:EC:338:LYS:HE3	45:EC:340:THR:H	1.66	0.60
45:EG:206:ASN:OD1	47:EG:501:GTP:N2	2.34	0.60
46:FB:292:GLN:NE2	46:FB:298:ASN:OD1	2.31	0.60
46:FD:313:ALA:HB3	46:FD:349:ILE:HG12	1.83	0.60
45:GC:362:VAL:HB	45:GC:370:LYS:HB3	1.83	0.60
45:GE:9:VAL:HG12	45:GE:68:LEU:HB2	1.82	0.60
46:GJ:371:SER:O	46:GJ:422:TYR:OH	2.15	0.60
45:HA:398:MET:HA	45:HA:401:LYS:HE2	1.83	0.60
46:HD:309:ARG:NH2	46:HD:426:GLN:O	2.33	0.60
45:IG:337:THR:O	45:IG:339:ARG:NH1	2.34	0.60
46:JB:396:HIS:HA	46:JB:399:THR:HG22	1.82	0.60
46:MD:73:MET:HA	46:MD:76:VAL:HG12	1.82	0.60
46:ND:3:GLU:HB2	46:ND:62:ARG:HH22	1.67	0.60
46:OL:113:ILE:HA	46:OL:116:VAL:HG12	1.83	0.60
46:OL:178:THR:HB	46:OL:181:GLU:HG3	1.82	0.60
45:OM:328:VAL:HG11	45:OM:353:VAL:HG21	1.83	0.60
45:PE:79:ARG:NH2	45:PE:92:LEU:O	2.34	0.60
45:PG:223:THR:HG22	45:PG:224:TYR:H	1.66	0.60
46:QB:5:VAL:HG12	46:QB:62:ARG:HD3	1.82	0.60
46:RL:131:GLN:O	46:RL:251:ARG:NH1	2.33	0.60
46:RL:311:LEU:HD23	46:RL:342:VAL:HG21	1.82	0.60
46:RN:55:THR:HG23	46:SN:283:ALA:HA	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SC:328:VAL:HG11	45:SC:353:VAL:HG21	1.80	0.60
45:SG:192:HIS:ND1	45:SG:424:ASP:OD2	2.33	0.60
46:SL:309:ARG:HD3	46:SL:342:VAL:HB	1.83	0.60
45:SM:91:GLN:HG2	45:SM:121:ARG:HE	1.66	0.60
45:SM:264:ARG:NH1	45:SM:431:ASP:OD2	2.33	0.60
46:TN:375:GLN:HA	46:TN:378:PHE:HD2	1.66	0.60
45:UG:292:THR:HG21	45:UG:331:SER:HB3	1.84	0.60
45:UK:70:LEU:HD12	45:UK:145:THR:HG22	1.83	0.60
45:VK:222:PRO:O	46:VL:324:LYS:NZ	2.31	0.60
14:1V:122:LYS:HE2	46:LL:390:ARG:NH1	2.10	0.60
21:2L:658:ARG:HH12	46:BN:45:GLU:HA	1.65	0.60
31:3I:277:ASP:O	31:3I:282:GLN:NE2	2.34	0.60
23:3O:336:ASP:O	46:UJ:362:LYS:NZ	2.34	0.60
34:4R:424:LEU:HD22	34:4R:512:THR:HG23	1.82	0.60
34:6R:534:HIS:ND1	34:6R:578:TYR:OH	2.34	0.60
46:BF:139:LEU:HD13	46:BF:168:SER:HB3	1.84	0.60
46:CN:273:LEU:H	46:CN:292:GLN:NE2	1.99	0.60
45:FA:76:ASP:OD1	45:FA:79:ARG:NH2	2.34	0.60
45:FC:147:SER:HB2	45:FC:190:SER:HB3	1.82	0.60
45:HA:271:SER:OG	45:HA:301:MET:SD	2.57	0.60
45:HK:210:TYR:HE1	45:HK:227:LEU:HD21	1.65	0.60
46:HL:268:ILE:HG22	46:HL:368:VAL:HG22	1.83	0.60
46:KF:31:ASP:OD1	46:KF:35:THR:N	2.34	0.60
46:LL:8:GLN:OE1	46:LL:17:GLY:HA3	2.02	0.60
45:NM:175:PRO:HG2	45:NM:304:LYS:HD2	1.83	0.60
45:OA:116:ASP:OD1	45:OA:117:LEU:N	2.33	0.60
45:OM:226:ASN:HA	45:OM:229:ARG:HD2	1.83	0.60
46:PH:222:TYR:O	46:PH:226:ASN:ND2	2.25	0.60
45:PI:263:PRO:HD3	46:PL:396:HIS:CE1	2.36	0.60
45:PK:9:VAL:HG12	45:PK:68:LEU:HB2	1.82	0.60
45:PK:145:THR:OG1	47:PK:501:GTP:O1B	2.19	0.60
45:RA:259:LEU:O	45:RA:380:ASN:ND2	2.33	0.60
45:RG:372:MET:HG2	45:RG:373:ARG:HG3	1.82	0.60
45:SG:69:ASP:OD1	45:SG:70:LEU:N	2.34	0.60
46:TH:178:THR:HG22	46:TH:180:VAL:H	1.66	0.60
45:TM:101:ASN:HA	45:TM:144:GLY:H	1.66	0.60
46:UF:54:ALA:HA	46:VF:283:ALA:HB2	1.83	0.60
46:UN:31:ASP:OD2	46:UN:37:HIS:ND1	2.35	0.60
46:VH:178:THR:HB	46:VH:181:GLU:HG3	1.81	0.60
45:VM:212:ILE:HD11	45:VM:300:ASN:HA	1.83	0.60
46:WB:63:ALA:O	46:WB:89:ASN:ND2	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WL:309:ARG:NH1	46:WL:343:GLU:OE1	2.34	0.60
46:WN:218:THR:HG23	46:WN:219:THR:HG23	1.83	0.60
2:0B:174:TYR:HE2	45:JI:18:ASN:HD21	1.49	0.60
21:2L:752:LEU:HD22	46:BL:320:ARG:HG3	1.83	0.60
25:3R:442:ASN:OD1	25:3R:443:ASP:N	2.35	0.60
13:3U:198:CYS:SG	13:3U:199:VAL:N	2.74	0.60
46:BB:249:ASP:OD1	46:BB:252:LYS:N	2.33	0.60
45:CG:399:TYR:O	45:CG:402:ARG:NH1	2.33	0.60
45:DM:259:LEU:HD13	45:DM:268:MET:HE2	1.84	0.60
45:EI:140:SER:OG	47:EI:501:GTP:O2B	2.18	0.60
46:FD:330:MET:HE2	46:FD:349:ILE:HG21	1.83	0.60
45:FK:141:VAL:HG11	45:FK:172:TYR:HD1	1.66	0.60
45:HC:147:SER:HB2	45:HC:190:SER:HB2	1.83	0.60
45:IM:210:TYR:HE1	45:IM:227:LEU:HD21	1.66	0.60
45:JM:53:PHE:HB3	45:JM:61:HIS:HB3	1.83	0.60
46:KH:412:GLU:O	46:KH:416:ASN:ND2	2.34	0.60
46:LN:113:ILE:HD11	46:LN:151:LEU:HB2	1.83	0.60
46:ND:113:ILE:HG13	46:ND:117:LEU:HD23	1.84	0.60
45:NI:221:ARG:HG3	46:NJ:322:SER:HB3	1.82	0.60
45:OA:288:VAL:HG11	45:OA:327:ASP:HB3	1.83	0.60
46:OJ:178:THR:HB	46:OJ:181:GLU:HG3	1.81	0.60
46:OL:252:LYS:O	46:OL:256:ASN:ND2	2.33	0.60
46:PL:10:GLY:O	46:PL:14:ASN:ND2	2.34	0.60
46:QH:83:GLN:O	46:RH:281:TYR:OH	2.17	0.60
45:QM:50:ASN:O	45:QM:64:ARG:NH1	2.33	0.60
45:TE:339:ARG:O	45:TE:342:GLN:NE2	2.34	0.60
46:TN:51:TYR:HB3	46:TN:59:TYR:HB3	1.84	0.60
45:VA:275:ILE:HG23	45:VA:368:LEU:HD11	1.82	0.60
45:WM:70:LEU:O	46:WN:2:ARG:NH2	2.33	0.60
13:1U:124:ASP:OD2	13:1U:125:ASP:N	2.35	0.60
21:3L:28:ASN:OD1	21:3L:29:THR:N	2.33	0.60
13:3U:307:THR:O	13:3U:308:GLU:HG3	2.01	0.60
14:3V:91:GLY:HA3	46:LB:194:GLU:HB3	1.83	0.60
15:3X:27:PHE:O	15:3X:28:GLU:HG3	2.01	0.60
37:5G:123:ARG:HH21	45:OI:359:PRO:HB2	1.66	0.60
34:6R:556:ILE:HD11	34:6R:569:PHE:HA	1.83	0.60
46:BB:290:THR:HA	46:BB:293:MET:HG3	1.83	0.60
45:DM:26:LEU:HD11	45:DM:364:PRO:HD2	1.83	0.60
45:EI:9:VAL:HG12	45:EI:68:LEU:HB2	1.84	0.60
45:EI:69:ASP:OD1	45:EI:70:LEU:N	2.34	0.60
45:FE:328:VAL:HG11	45:FE:353:VAL:HG21	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GD:178:THR:HG22	46:GD:180:VAL:H	1.67	0.60
46:GF:5:VAL:HG12	46:GF:62:ARG:HD3	1.82	0.60
45:HC:69:ASP:OD1	45:HC:70:LEU:N	2.35	0.60
46:HJ:257:LEU:HD11	46:HJ:314:SER:HB2	1.82	0.60
46:KB:77:ARG:NH1	46:KB:82:GLY:O	2.34	0.60
45:KE:88:HIS:CD2	45:KE:90:GLU:HG2	2.36	0.60
46:LF:135:ILE:HG13	46:LF:152:ILE:HD11	1.82	0.60
46:MD:31:ASP:OD1	46:MD:35:THR:N	2.34	0.60
45:ME:11:GLN:NE2	46:MF:245:GLN:O	2.34	0.60
45:ME:192:HIS:ND1	45:ME:424:ASP:OD2	2.31	0.60
45:MK:147:SER:HB2	45:MK:190:SER:HB3	1.82	0.60
45:PC:387:VAL:HA	45:PC:390:ARG:HD3	1.82	0.60
46:QD:173:PRO:HG3	46:QD:380:ARG:HD2	1.81	0.60
46:RJ:311:LEU:HD23	46:RJ:342:VAL:HG11	1.82	0.60
45:RM:186:ASN:OD1	45:RM:408:TYR:OH	2.19	0.60
45:SA:377:MET:SD	45:SA:379:SER:OG	2.56	0.60
46:UB:262:ARG:HH12	46:UB:418:LEU:HA	1.66	0.60
46:VB:139:LEU:HD22	46:VB:170:VAL:HG12	1.83	0.60
45:VK:407:TRP:HH2	46:VL:258:ILE:HB	1.66	0.60
46:VN:256:ASN:ND2	46:VN:350:LYS:HG2	2.17	0.60
46:WJ:86:ARG:NH2	46:WJ:123:GLU:OE2	2.34	0.60
2:0B:291:SER:OG	46:KL:279:GLN:NE2	2.35	0.60
19:1J:228:ILE:HA	29:2G:94:ILE:HG21	1.82	0.60
13:1U:333:SER:HB3	13:1U:585:PRO:HD2	1.82	0.60
24:2P:400:LYS:O	24:2P:404:GLN:NE2	2.34	0.60
12:2T:264:LYS:HD3	13:2U:27:ASN:HB2	1.83	0.60
13:2U:492:LEU:HB2	13:2U:510:SER:HB3	1.84	0.60
26:2W:217:ARG:HA	26:2W:220:LEU:HD13	1.82	0.60
5:3E:29:ARG:HE	5:3E:151:CYS:HA	1.65	0.60
23:3O:360:GLU:OE1	23:3O:363:GLN:NE2	2.34	0.60
37:5G:212:THR:HG22	46:LN:391:ARG:HE	1.67	0.60
45:AC:184:PRO:O	45:AC:188:ILE:HG12	2.02	0.60
45:AC:215:ARG:NH2	45:AC:300:ASN:OD1	2.34	0.60
45:AM:11:GLN:NE2	46:AN:247:ASN:OD1	2.33	0.60
46:BJ:274:THR:HG22	46:BJ:282:ARG:HH11	1.66	0.60
45:CC:3:GLU:OE1	45:CC:64:ARG:NE	2.35	0.60
46:CH:309:ARG:NH2	46:CH:426:GLN:O	2.35	0.60
46:DB:423:GLN:NE2	46:DB:424:GLN:OE1	2.35	0.60
46:DL:237:THR:HG23	46:DL:241:ARG:HE	1.66	0.60
46:EF:173:PRO:HG2	46:EF:380:ARG:HD3	1.83	0.60
46:EJ:5:VAL:HG12	46:EJ:62:ARG:HD3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:FC:501:GTP:O1G	46:FD:252:LYS:NZ	2.30	0.60
46:GN:396:HIS:HA	46:GN:399:THR:HG22	1.83	0.60
46:HD:257:LEU:HD11	46:HD:314:SER:HB3	1.84	0.60
46:HF:273:LEU:H	46:HF:292:GLN:HE22	1.48	0.60
46:IB:148:GLY:O	46:IB:152:ILE:HG12	2.01	0.60
46:JB:91:VAL:HG11	46:JB:116:VAL:HG12	1.82	0.60
46:KB:392:LYS:HE3	46:KB:395:LEU:HD23	1.83	0.60
46:KL:5:VAL:HG12	46:KL:62:ARG:HD3	1.83	0.60
46:LJ:132:GLY:HA3	46:LJ:163:ILE:HG22	1.84	0.60
46:LL:63:ALA:O	46:LL:89:ASN:ND2	2.33	0.60
45:MG:258:ASN:HD22	45:MG:352:LYS:HD2	1.66	0.60
46:OD:268:ILE:HG13	46:OD:300:MET:HG3	1.83	0.60
45:OI:206:ASN:OD1	47:OI:501:GTP:O2'	2.19	0.60
45:PM:108:TYR:O	45:PM:112:LYS:NZ	2.33	0.60
46:QH:267:MET:HE3	46:QH:301:CYS:HB2	1.82	0.60
45:SK:69:ASP:OD1	45:SK:70:LEU:N	2.34	0.60
46:SL:208:TYR:HE1	46:SL:225:LEU:HD11	1.66	0.60
46:TF:113:ILE:HG21	46:TF:150:LEU:HD22	1.83	0.60
46:TH:178:THR:HB	46:TH:181:GLU:HG3	1.82	0.60
46:TN:68:LEU:HB3	46:TN:96:GLY:HA2	1.84	0.60
46:UD:8:GLN:HE21	46:UD:65:LEU:HG	1.66	0.60
45:UM:88:HIS:CD2	45:UM:90:GLU:HG2	2.37	0.60
45:VA:326:LYS:NZ	46:VD:220:PRO:O	2.34	0.60
45:VK:292:THR:HG21	45:VK:331:SER:HB3	1.83	0.60
46:VL:135:ILE:HB	46:VL:166:THR:HG22	1.84	0.60
46:WB:6:HIS:NE2	46:WB:8:GLN:OE1	2.33	0.60
46:WJ:309:ARG:NH2	46:WJ:426:GLN:O	2.27	0.60
45:WM:297:GLU:OE2	45:WM:300:ASN:ND2	2.34	0.60
2:OB:238:ARG:NH1	46:JL:224:ASP:OD1	2.34	0.60
1:1A:103:GLN:HE22	34:4R:58:ARG:H	1.47	0.60
17:1F:45:VAL:HG22	45:GK:85:GLN:HG3	1.83	0.60
14:2V:231:LYS:NZ	45:VE:1:MET:SD	2.69	0.60
16:3B:72:TYR:HE1	16:3B:79:GLN:HB3	1.66	0.60
21:3L:156:GLN:HG2	21:3L:157:PRO:HD3	1.83	0.60
34:4R:415:LYS:NZ	34:4R:451:ASP:OD2	2.34	0.60
36:5B:21:GLN:NE2	46:KF:413:SER:HB2	2.17	0.60
37:5E:60:TRP:HE1	46:OB:284:LEU:HD22	1.65	0.60
45:AA:192:HIS:ND1	45:AA:424:ASP:OD2	2.31	0.60
46:AB:64:ILE:HD13	46:AB:119:VAL:HG13	1.82	0.60
45:AG:11:GLN:HG3	45:AG:74:VAL:HG11	1.83	0.60
45:AI:283:HIS:HD1	45:MI:89:PRO:HD3	1.65	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BG:71:GLU:OE2	45:BG:73:THR:OG1	2.19	0.60
46:BJ:287:PRO:HA	46:BJ:329:GLN:NE2	2.16	0.60
45:CA:209:ILE:HD11	45:CA:302:MET:HG3	1.84	0.60
46:CJ:10:GLY:O	46:CJ:14:ASN:ND2	2.35	0.60
46:DJ:73:MET:HA	46:DJ:76:VAL:HG12	1.84	0.60
45:EG:265:ILE:HG12	45:EG:432:TYR:HE1	1.67	0.60
46:EH:132:GLY:HA3	46:EH:163:ILE:HG22	1.83	0.60
46:EH:371:SER:O	46:EH:422:TYR:OH	2.18	0.60
46:FB:213:ARG:HH12	46:FB:297:LYS:HB2	1.66	0.60
46:FF:167:PHE:CE1	46:FF:233:MET:HG2	2.37	0.60
45:FI:292:THR:HG21	45:FI:331:SER:HB3	1.81	0.60
45:JK:192:HIS:CD2	45:JK:421:ALA:HA	2.37	0.60
46:JL:131:GLN:HE22	46:JL:250:LEU:HB2	1.66	0.60
45:KI:407:TRP:CZ3	46:KJ:255:VAL:HA	2.36	0.60
45:LC:39:ASP:OD1	45:LC:40:ARG:N	2.32	0.60
45:MA:119:LEU:HA	45:MA:122:ILE:HG22	1.83	0.60
46:MJ:5:VAL:HG12	46:MJ:62:ARG:HD3	1.83	0.60
45:MM:399:TYR:O	45:MM:402:ARG:NH1	2.35	0.60
46:ND:25:SER:OG	46:ND:30:ILE:O	2.19	0.60
46:OB:318:ARG:HB3	46:OB:357:PRO:HA	1.84	0.60
46:PH:257:LEU:HD21	46:PH:314:SER:HB2	1.83	0.60
45:RA:88:HIS:NE2	45:SA:284:GLU:OE2	2.33	0.60
45:VI:140:SER:OG	47:VI:501:GTP:O2B	2.18	0.60
46:WB:273:LEU:H	46:WB:292:GLN:HE22	1.48	0.60
46:WD:309:ARG:NH1	46:WD:343:GLU:OE1	2.35	0.60
5:2E:6:GLN:NE2	5:2E:10:ASN:OD1	2.35	0.60
31:2I:198:LEU:O	31:2I:200:GLY:N	2.32	0.60
13:2U:95:MET:HG2	13:2U:96:HIS:ND1	2.16	0.60
15:3X:1:MET:SD	45:MM:2:ARG:NH1	2.75	0.60
45:AC:76:ASP:OD1	45:AC:79:ARG:NH2	2.33	0.60
46:AJ:283:ALA:HB2	46:MJ:54:ALA:HA	1.83	0.60
45:CG:71:GLU:HB2	45:CG:98:ASP:HB3	1.82	0.60
46:CH:302:ALA:HB3	46:CH:380:ARG:HH12	1.67	0.60
46:CN:292:GLN:O	46:CN:298:ASN:ND2	2.33	0.60
46:DB:167:PHE:HA	46:DB:200:MET:HB2	1.84	0.60
45:DK:241:SER:OG	45:DK:250:VAL:O	2.16	0.60
45:EI:288:VAL:HA	45:EI:291:ILE:HG12	1.81	0.60
46:EJ:326:VAL:O	46:EJ:330:MET:HG2	2.02	0.60
46:FB:8:GLN:HE21	46:FB:65:LEU:HG	1.67	0.60
46:FH:103:LYS:HA	46:FH:107:THR:HG22	1.84	0.60
45:HK:76:ASP:OD1	46:HL:46:ARG:NH2	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:HL:67:ASP:OD1	46:HL:68:LEU:N	2.35	0.60
45:IK:212:ILE:HD11	45:IK:300:ASN:HA	1.84	0.60
46:JF:375:GLN:HB2	46:JF:419:VAL:HG13	1.83	0.60
46:KB:218:THR:HG23	46:KB:219:THR:HG23	1.84	0.60
45:LE:211:ASP:OD2	45:LE:304:LYS:NZ	2.33	0.60
45:NG:226:ASN:ND2	45:NG:367:ASP:OD2	2.34	0.60
46:NJ:103:LYS:NZ	46:NJ:401:GLU:OE2	2.30	0.60
45:OA:70:LEU:HD13	45:OA:95:GLY:HA3	1.82	0.60
45:PC:221:ARG:NH2	46:PD:325:GLU:OE1	2.34	0.60
45:PC:236:SER:OG	45:PC:243:ARG:NH2	2.35	0.60
46:PF:257:LEU:HD11	46:PF:314:SER:HB2	1.84	0.60
45:QA:121:ARG:HE	45:QA:124:LYS:HZ3	1.49	0.60
45:SM:60:LYS:NZ	45:TM:282:TYR:O	2.34	0.60
46:TF:178:THR:HG22	46:TF:180:VAL:H	1.66	0.60
46:TJ:208:TYR:HE1	46:TJ:225:LEU:HD11	1.67	0.60
45:VE:322:ASP:OD2	45:VE:373:ARG:NH1	2.33	0.60
45:VI:88:HIS:NE2	45:WI:284:GLU:OE2	2.25	0.60
45:VK:298:PRO:HB3	45:VK:307:PRO:HD2	1.83	0.60
45:WC:207:GLU:HA	45:WC:210:TYR:CD2	2.37	0.60
45:WK:271:SER:OG	45:WK:301:MET:SD	2.59	0.60
13:1U:494:LYS:HB2	13:1U:508:THR:HG23	1.83	0.60
16:2B:37:ASP:OD2	16:2B:82:TYR:OH	2.16	0.60
23:2O:251:LEU:HA	23:2O:254:LYS:HD2	1.84	0.60
25:3R:462:LYS:NZ	45:EK:245:ASP:OD2	2.35	0.60
35:4S:216:ASP:OD1	35:4S:217:LEU:N	2.34	0.60
37:5H:59:THR:OG1	46:ON:276:ARG:NH2	2.33	0.60
10:6Q:126:ASP:OD1	10:6Q:130:ASN:ND2	2.34	0.60
34:6R:94:ARG:HH11	45:AM:41:THR:HG21	1.67	0.60
34:6R:396:ASP:OD2	46:EN:219:THR:OG1	2.19	0.60
34:6R:418:THR:HG23	34:6R:419:GLN:HG3	1.84	0.60
45:BC:76:ASP:OD2	46:BD:46:ARG:NH2	2.35	0.60
46:CB:405:GLU:O	46:CB:409:THR:HG23	2.02	0.60
46:CN:101:TRP:CE3	46:CN:187:LEU:HD13	2.37	0.60
46:DF:169:VAL:HG12	46:DF:202:ILE:HB	1.83	0.60
46:DJ:287:PRO:HG3	46:DJ:329:GLN:HE21	1.66	0.60
46:FL:67:ASP:OD1	46:FL:68:LEU:N	2.34	0.60
46:GN:68:LEU:HA	46:GN:93:GLY:H	1.67	0.60
45:HG:188:ILE:HG22	45:HG:421:ALA:HB1	1.83	0.60
46:HN:371:SER:O	46:HN:422:TYR:OH	2.12	0.60
46:JD:36:TYR:CZ	46:JD:44:LEU:HD11	2.36	0.60
46:JF:350:LYS:NZ	46:JF:352:SER:OG	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KA:88:HIS:NE2	45:KA:90:GLU:OE2	2.35	0.60
46:LB:248:SER:HA	46:LB:252:LYS:HD2	1.84	0.60
45:OC:276:ILE:HG23	45:OC:280:LYS:HB3	1.84	0.60
46:OF:3:GLU:HA	46:OF:49:VAL:HG23	1.83	0.60
46:PB:318:ARG:HE	46:PB:358:PRO:HG3	1.66	0.60
46:QF:139:LEU:HD12	46:QF:170:VAL:HG12	1.84	0.60
46:QN:387:ALA:O	46:QN:390:ARG:NH1	2.34	0.60
46:RH:136:THR:HG22	46:RH:167:PHE:HB2	1.82	0.60
45:RI:392:ASP:HB2	45:RI:425:LEU:HD21	1.84	0.60
46:SB:54:ALA:HA	46:TB:283:ALA:HB2	1.84	0.60
46:SN:207:LEU:HB3	46:SN:225:LEU:HD22	1.84	0.60
45:TM:33:ASP:HA	45:TM:85:GLN:HE21	1.65	0.60
45:VE:88:HIS:HE1	45:VE:90:GLU:HG3	1.66	0.60
46:VF:371:SER:O	46:VF:422:TYR:OH	2.19	0.60
46:WL:309:ARG:NH2	46:WL:426:GLN:O	2.25	0.60
11:1S:282:THR:HG23	11:1S:285:ASP:HB3	1.84	0.60
13:1U:448:HIS:CE1	13:1U:468:SER:HB2	2.37	0.60
9:2N:75:MET:HB2	9:2N:275:VAL:HB	1.84	0.60
25:2R:407:PHE:HB3	45:DG:58:ALA:HB3	1.82	0.60
1:3A:133:GLN:OE1	46:AN:359:LYS:NZ	2.35	0.60
10:3Q:73:LEU:HD22	10:3Q:169:ASP:HB3	1.82	0.60
25:3R:409:LYS:HG2	25:3R:410:TRP:H	1.67	0.60
12:3T:60:LYS:HA	12:3T:144:GLY:HA3	1.83	0.60
34:4R:253:ARG:O	45:CE:40:ARG:NH2	2.34	0.60
45:BI:68:LEU:HD21	45:BI:118:CYS:HB2	1.84	0.60
46:CN:168:SER:O	46:CN:202:ILE:N	2.35	0.60
46:DH:295:ASP:OD1	46:DH:297:LYS:NZ	2.32	0.60
45:DM:174:SER:HB3	45:DM:177:VAL:O	2.02	0.60
45:EG:265:ILE:HG22	45:EG:380:ASN:HD21	1.67	0.60
46:EJ:114:ASP:OD1	46:EJ:115:SER:N	2.35	0.60
46:FH:334:GLN:HE22	46:FH:347:ASN:HA	1.67	0.60
45:IM:90:GLU:OE2	45:IM:121:ARG:NH1	2.34	0.60
45:KC:27:GLU:OE2	45:KC:243:ARG:NH1	2.28	0.60
45:LC:406:HIS:HA	45:LC:409:VAL:HG12	1.83	0.60
46:LH:334:GLN:HE21	46:LH:349:ILE:HG12	1.67	0.60
45:OA:221:ARG:NH1	46:OB:322:SER:OG	2.35	0.60
45:OM:15:GLN:NE2	47:OM:501:GTP:O6	2.35	0.60
46:PH:83:GLN:O	46:QF:281:TYR:OH	2.18	0.60
45:UM:226:ASN:ND2	45:UM:367:ASP:OD2	2.35	0.60
46:VF:211:CYS:HA	46:VF:215:LEU:HD12	1.83	0.60
45:VM:401:LYS:HZ1	46:VN:260:PHE:HZ	1.48	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WC:269:LEU:HD12	45:WC:303:ALA:HB3	1.84	0.60
46:WF:222:TYR:O	46:WF:226:ASN:ND2	2.25	0.60
45:WK:223:THR:HA	46:WL:323:THR:HG22	1.84	0.60
3:1C:55:LYS:O	45:EM:219:ILE:HD13	2.02	0.59
23:1O:147:VAL:HG13	23:3O:474:LEU:HD12	1.83	0.59
22:2M:24:TYR:CE1	22:2M:39:LEU:HD21	2.37	0.59
13:3U:583:ILE:HG12	13:3U:590:VAL:HG22	1.83	0.59
14:3V:70:THR:HG22	46:MB:337:ASN:HD21	1.66	0.59
34:4R:341:ARG:NH1	34:4R:346:ASP:OD1	2.35	0.59
35:4S:93:PRO:HD2	35:4S:130:ARG:NH2	2.17	0.59
36:5B:79:LEU:HD21	46:NF:320:ARG:HG2	1.83	0.59
40:6G:226:GLY:O	45:UE:123:ARG:NH1	2.35	0.59
45:AA:294:SER:HA	45:AA:297:GLU:HG3	1.84	0.59
46:BB:31:ASP:OD2	46:BB:35:THR:OG1	2.19	0.59
45:BE:284:GLU:HG3	45:BE:286:LEU:HD22	1.83	0.59
46:CF:11:GLN:NE2	49:CF:501:GDP:O3B	2.34	0.59
46:EL:215:LEU:HB3	46:EL:217:LEU:HD13	1.82	0.59
45:EM:217:LEU:HD12	45:EM:367:ASP:HB3	1.84	0.59
46:EN:149:THR:HA	46:EN:152:ILE:HB	1.84	0.59
45:FA:219:ILE:HG13	45:FA:221:ARG:H	1.67	0.59
46:FB:11:GLN:O	46:FB:15:GLN:HG2	2.00	0.59
45:FC:396:ASP:OD1	45:FC:422:ARG:NH1	2.34	0.59
45:GA:101:ASN:HA	45:GA:144:GLY:H	1.67	0.59
45:GC:55:GLU:HG3	45:GC:57:GLY:H	1.67	0.59
46:GJ:156:ARG:NH2	46:GJ:197:ASP:OD1	2.35	0.59
46:GJ:229:VAL:O	46:GJ:233:MET:HG3	2.02	0.59
45:GM:88:HIS:NE2	45:HM:284:GLU:OE1	2.34	0.59
46:HB:86:ARG:HE	46:HB:87:PRO:HD2	1.67	0.59
45:HC:180:ALA:HB3	45:HC:183:GLU:HG3	1.84	0.59
45:HI:69:ASP:OD1	45:HI:70:LEU:N	2.34	0.59
46:IJ:218:THR:HG23	46:IJ:219:THR:HG23	1.84	0.59
45:JM:210:TYR:CD1	46:JN:324:LYS:HD3	2.37	0.59
45:LC:258:ASN:HD22	45:LC:352:LYS:HD2	1.66	0.59
46:LJ:181:GLU:HG2	46:LJ:182:PRO:HD3	1.83	0.59
45:ME:276:ILE:HD12	45:ME:281:ALA:HA	1.84	0.59
45:NA:7:ILE:HB	45:NA:137:VAL:HG12	1.83	0.59
46:NB:314:SER:HA	46:NB:350:LYS:HB3	1.83	0.59
46:OD:148:GLY:O	46:OD:152:ILE:HG12	2.02	0.59
45:OK:276:ILE:HG23	45:OK:280:LYS:HE2	1.83	0.59
45:PM:88:HIS:CD2	45:PM:90:GLU:HG2	2.37	0.59
46:PN:268:ILE:HG13	46:PN:300:MET:HG3	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RD:46:ARG:NH2	45:RE:76:ASP:OD2	2.35	0.59
46:RL:5:VAL:HG12	46:RL:62:ARG:HD3	1.84	0.59
45:SI:326:LYS:HG2	46:SJ:220:PRO:HD2	1.84	0.59
46:SL:191:GLN:O	46:SL:195:ASN:ND2	2.34	0.59
45:UC:298:PRO:HB3	45:UC:307:PRO:HD2	1.84	0.59
46:UF:237:THR:HG22	46:UF:250:LEU:HD11	1.84	0.59
45:VI:107:HIS:O	45:VI:112:LYS:NZ	2.35	0.59
45:VK:271:SER:OG	45:VK:301:MET:SD	2.59	0.59
45:VM:11:GLN:NE2	47:VM:501:GTP:O3A	2.35	0.59
45:VM:176:GLN:HG2	45:VM:177:VAL:HG23	1.82	0.59
46:VN:17:GLY:HA2	46:VN:20:PHE:HB3	1.84	0.59
27:2C:69:VAL:HG12	46:LJ:41:ASP:HB3	1.83	0.59
27:3C:8:LEU:HB2	34:7R:4:ASN:HD21	1.67	0.59
10:3Q:68:THR:HG22	10:3Q:70:GLY:H	1.65	0.59
34:4R:440:ARG:HH11	34:4R:465:ILE:HD11	1.67	0.59
37:5G:9:TYR:HD2	37:5G:15:THR:HG21	1.66	0.59
10:5Q:100:ARG:HH22	45:AK:437:ILE:HD11	1.67	0.59
10:6Q:6:PHE:HE1	10:6Q:8:SER:HB3	1.66	0.59
46:AH:67:ASP:OD1	46:AH:68:LEU:N	2.35	0.59
46:AL:178:THR:HB	46:AL:181:GLU:HG3	1.83	0.59
46:AL:326:VAL:O	46:AL:330:MET:HG2	2.02	0.59
46:BH:341:PHE:HB3	46:BH:348:ASN:HD21	1.66	0.59
45:DM:292:THR:HG21	45:DM:331:SER:HB3	1.83	0.59
46:DN:16:ILE:HG13	46:DN:226:ASN:HD22	1.67	0.59
46:EB:11:GLN:NE2	49:EB:501:GDP:O1A	2.34	0.59
46:EH:334:GLN:NE2	46:EH:348:ASN:OD1	2.35	0.59
45:FA:259:LEU:HD11	45:FA:316:SER:HB2	1.83	0.59
46:GF:173:PRO:HG2	46:GF:380:ARG:HD2	1.84	0.59
46:GJ:218:THR:HG23	46:GJ:219:THR:HG23	1.83	0.59
46:HB:314:SER:HA	46:HB:350:LYS:HB3	1.84	0.59
45:HC:167:LEU:HD22	45:HC:200:VAL:HB	1.84	0.59
45:HI:224:TYR:HE2	46:HJ:246:LEU:HD11	1.67	0.59
46:IB:276:ARG:NH2	46:IB:279:GLN:OE1	2.34	0.59
45:JI:88:HIS:CD2	45:JI:90:GLU:HG2	2.38	0.59
46:LB:7:ILE:HG22	46:LB:64:ILE:HB	1.84	0.59
45:LI:348:PRO:HB2	46:LL:384:GLN:HE21	1.66	0.59
46:OH:385:PHE:HE2	46:OH:412:GLU:HB3	1.67	0.59
45:OK:337:THR:O	45:OK:339:ARG:NH1	2.35	0.59
45:OM:100:ALA:HA	46:ON:252:LYS:HG2	1.84	0.59
45:PC:88:HIS:CD2	45:PC:90:GLU:HG2	2.36	0.59
46:QH:334:GLN:NE2	46:QH:348:ASN:OD1	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SA:229:ARG:HH21	45:SA:367:ASP:HB2	1.65	0.59
45:SE:248:LEU:HD13	45:SE:355:ILE:HD12	1.84	0.59
45:SI:69:ASP:OD1	45:SI:70:LEU:N	2.36	0.59
45:SM:69:ASP:OD1	45:SM:70:LEU:N	2.35	0.59
45:SM:185:TYR:HA	45:SM:395:PHE:HE2	1.67	0.59
45:TA:67:PHE:HB2	45:TA:92:LEU:HG	1.85	0.59
46:TH:156:ARG:NE	46:TH:195:ASN:OD1	2.32	0.59
45:UA:332:ILE:HG22	45:UA:336:LYS:HZ1	1.66	0.59
45:UG:140:SER:OG	47:UG:501:GTP:O2B	2.20	0.59
45:VI:288:VAL:HG11	45:VI:327:ASP:HB3	1.83	0.59
26:1W:209:GLU:OE1	27:3C:27:LYS:NZ	2.35	0.59
16:2B:202:VAL:HG11	16:2B:267:GLU:HG2	1.84	0.59
27:3C:166:THR:HG22	27:3C:168:ASP:H	1.67	0.59
34:6R:284:THR:HG22	34:6R:308:LYS:HG3	1.84	0.59
45:CA:352:LYS:HZ1	46:CB:179:VAL:HG12	1.68	0.59
45:DA:18:ASN:HA	45:DA:21:TRP:HD1	1.67	0.59
45:DC:211:ASP:O	45:DC:215:ARG:HG3	2.02	0.59
45:DG:265:ILE:HD11	45:DG:435:VAL:HG21	1.83	0.59
46:DL:150:LEU:O	46:DL:154:LYS:HG2	2.02	0.59
45:EC:213:CYS:SG	45:EC:222:PRO:HG3	2.43	0.59
46:EF:207:LEU:HB3	46:EF:225:LEU:HD22	1.84	0.59
46:FL:52:ASN:OD1	46:FL:62:ARG:NH2	2.35	0.59
45:GI:26:LEU:HD23	45:GI:363:VAL:HG12	1.84	0.59
45:IG:292:THR:HG21	45:IG:331:SER:HB3	1.84	0.59
46:JH:73:MET:HE1	46:JH:92:PHE:HB3	1.84	0.59
46:KD:213:ARG:HH12	46:KD:297:LYS:HD2	1.67	0.59
46:KJ:213:ARG:HG3	46:KJ:297:LYS:HD3	1.84	0.59
45:LE:90:GLU:OE2	45:LE:121:ARG:NH2	2.35	0.59
46:LN:5:VAL:HG12	46:LN:62:ARG:HD3	1.83	0.59
46:NF:117:LEU:HG	46:NF:154:LYS:HD2	1.84	0.59
45:NK:221:ARG:NH1	46:NL:325:GLU:OE2	2.34	0.59
46:NN:371:SER:O	46:NN:422:TYR:OH	2.19	0.59
45:OG:167:LEU:HD13	45:OG:200:VAL:HG21	1.84	0.59
46:OJ:3:GLU:HA	46:OJ:49:VAL:HG23	1.83	0.59
45:OK:221:ARG:HD3	46:OL:322:SER:HB3	1.85	0.59
45:OM:90:GLU:O	45:OM:121:ARG:NH1	2.34	0.59
46:QB:394:PHE:HA	46:QB:397:TRP:NE1	2.17	0.59
46:QD:8:GLN:HE21	46:QD:65:LEU:HG	1.67	0.59
45:QE:188:ILE:HD12	45:QE:425:LEU:HD11	1.84	0.59
46:QH:63:ALA:O	46:QH:89:ASN:ND2	2.35	0.59
46:QN:273:LEU:H	46:QN:292:GLN:HE22	1.50	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RF:167:PHE:HA	46:RF:200:MET:HB2	1.84	0.59
45:RK:306:ASP:OD1	45:RK:308:ARG:NH2	2.35	0.59
45:RM:326:LYS:HG2	46:RN:212:PHE:HE2	1.66	0.59
45:SC:64:ARG:NH1	45:SC:129:CYS:SG	2.75	0.59
46:SH:139:LEU:HD22	46:SH:170:VAL:HG12	1.85	0.59
45:SM:32:PRO:O	45:SM:85:GLN:NE2	2.35	0.59
45:TA:254:GLU:HG2	46:TB:98:GLY:HA2	1.84	0.59
45:TM:88:HIS:NE2	45:UM:284:GLU:OE2	2.30	0.59
45:TM:121:ARG:HA	45:TM:124:LYS:HZ3	1.67	0.59
46:UB:2:ARG:HB2	46:UB:131:GLN:HE21	1.66	0.59
46:UJ:252:LYS:O	46:UJ:256:ASN:ND2	2.35	0.59
46:VB:32:PRO:O	46:VB:83:GLN:NE2	2.25	0.59
45:VC:60:LYS:NZ	45:VC:85:GLN:O	2.33	0.59
45:VM:340:THR:HG23	45:VM:341:ILE:HG13	1.83	0.59
12:1T:268:LEU:HG	13:1U:43:ILE:HG21	1.84	0.59
1:2A:57:GLY:O	45:MI:79:ARG:NH1	2.35	0.59
20:2K:477:LYS:HA	20:2K:480:LEU:HD12	1.83	0.59
24:2P:435:LEU:O	45:TK:282:TYR:OH	2.20	0.59
11:2S:213:ILE:H	11:2S:213:ILE:HD12	1.67	0.59
5:3E:5:LEU:HD11	5:3E:70:CYS:HB2	1.84	0.59
27:4C:234:LEU:HD23	27:4C:291:VAL:HG12	1.83	0.59
36:5D:87:ARG:NH1	45:NM:364:PRO:O	2.34	0.59
37:5F:212:THR:HG22	46:LJ:391:ARG:HE	1.68	0.59
46:AB:87:PRO:HA	46:AB:90:PHE:HD2	1.67	0.59
45:BE:287:SER:N	45:BE:290:GLU:OE2	2.35	0.59
46:BJ:207:LEU:HB3	46:BJ:225:LEU:HD22	1.83	0.59
45:CK:399:TYR:O	45:CK:402:ARG:NH1	2.35	0.59
46:CN:211:CYS:HA	46:CN:215:LEU:HD23	1.83	0.59
46:ED:73:MET:HA	46:ED:76:VAL:HG12	1.84	0.59
45:EE:98:ASP:OD1	45:EE:99:ALA:N	2.34	0.59
46:EF:114:ASP:OD1	46:EF:115:SER:N	2.35	0.59
46:EL:68:LEU:HG	46:EL:147:MET:HE1	1.82	0.59
45:HC:271:SER:OG	45:HC:301:MET:SD	2.61	0.59
45:IC:11:GLN:HG3	45:IC:74:VAL:HG11	1.85	0.59
45:IE:147:SER:HB2	45:IE:190:SER:HB3	1.84	0.59
45:KA:210:TYR:HE1	45:KA:227:LEU:HD11	1.65	0.59
45:MK:328:VAL:O	45:MK:332:ILE:HG12	2.01	0.59
46:NH:31:ASP:OD1	46:NH:35:THR:N	2.26	0.59
45:OA:285:GLN:O	45:OA:285:GLN:NE2	2.35	0.59
46:ON:103:LYS:NZ	46:ON:401:GLU:OE2	2.35	0.59
45:PA:3:GLU:OE2	45:PA:131:GLY:N	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PF:63:ALA:O	46:PF:89:ASN:ND2	2.34	0.59
45:QC:52:PHE:HZ	45:QC:239:THR:HG21	1.68	0.59
46:RF:8:GLN:HE22	46:RF:17:GLY:HA3	1.66	0.59
46:RH:54:ALA:HA	46:SH:283:ALA:HB2	1.83	0.59
45:RI:241:SER:OG	45:RI:250:VAL:O	2.19	0.59
46:SF:238:CYS:SG	46:SF:318:ARG:NE	2.75	0.59
45:SG:328:VAL:HG11	45:SG:353:VAL:HG21	1.83	0.59
45:TI:248:LEU:HD13	45:TI:355:ILE:HD12	1.84	0.59
45:TK:226:ASN:ND2	45:TK:367:ASP:OD2	2.35	0.59
46:UB:46:ARG:HH22	45:UC:72:PRO:HB2	1.67	0.59
45:UE:219:ILE:HD12	45:UE:222:PRO:HB3	1.83	0.59
46:UL:256:ASN:HD22	46:UL:350:LYS:HD2	1.67	0.59
45:VM:284:GLU:HG3	45:VM:286:LEU:HD22	1.84	0.59
45:WG:76:ASP:OD2	46:WH:46:ARG:NH2	2.35	0.59
14:OV:119:ILE:HD11	45:LM:439:THR:HG22	1.84	0.59
24:1P:144:GLN:HB3	46:TJ:80:PRO:HG3	1.83	0.59
29:2G:29:ARG:HD3	46:JJ:94:GLN:HG3	1.84	0.59
9:2N:158:THR:HG22	9:2N:160:GLN:H	1.66	0.59
23:2O:254:LYS:HA	45:UI:58:ALA:HB1	1.85	0.59
10:2Q:82:ASN:ND2	10:2Q:126:ASP:O	2.36	0.59
13:3U:110:PHE:CE1	13:3U:117:LEU:HD13	2.37	0.59
36:5A:145:ASN:OD1	36:5A:146:VAL:N	2.34	0.59
37:5G:209:ARG:NH1	45:LK:424:ASP:OD1	2.35	0.59
35:5S:64:LEU:HB3	35:5S:107:GLU:HG2	1.84	0.59
40:6G:301:ARG:NH1	40:6G:303:MET:HB2	2.17	0.59
41:6H:249:GLY:HA3	46:FF:279:GLN:HE22	1.68	0.59
34:6R:242:ASN:HB2	45:BM:57:GLY:HA3	1.83	0.59
46:AL:139:LEU:HD13	46:AL:168:SER:HB2	1.82	0.59
46:BD:257:LEU:HD11	46:BD:314:SER:HB2	1.85	0.59
45:CG:339:ARG:O	45:CG:339:ARG:NH1	2.36	0.59
46:DB:387:ALA:O	46:DB:390:ARG:NH1	2.34	0.59
46:DN:105:HIS:CE1	46:DN:150:LEU:HB3	2.37	0.59
46:FD:208:TYR:HE1	46:FD:225:LEU:HD11	1.66	0.59
46:GB:207:LEU:HB3	46:GB:225:LEU:HD22	1.84	0.59
46:IB:290:THR:HA	46:IB:293:MET:HG2	1.85	0.59
45:IE:55:GLU:HG3	45:IE:57:GLY:H	1.67	0.59
45:JA:206:ASN:OD1	47:JA:501:GTP:N2	2.34	0.59
46:JD:1:MET:N	46:JD:3:GLU:OE1	2.26	0.59
45:JM:210:TYR:HD1	46:JN:324:LYS:HD3	1.67	0.59
45:KA:298:PRO:HB3	45:KA:307:PRO:HD2	1.84	0.59
45:KI:56:THR:HG21	45:KI:60:LYS:HG2	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KM:311:LYS:HD2	45:KM:344:VAL:HA	1.83	0.59
46:LD:418:LEU:O	46:LD:422:TYR:CB	2.51	0.59
45:LM:316:SER:HB3	45:LM:378:ILE:HB	1.82	0.59
45:MM:265:ILE:HG22	45:MM:380:ASN:HD21	1.68	0.59
45:MM:292:THR:HG21	45:MM:331:SER:HB3	1.84	0.59
46:MN:268:ILE:HG13	46:MN:300:MET:HG3	1.85	0.59
45:NA:319:TYR:HB3	45:NA:323:VAL:HG21	1.84	0.59
46:NF:67:ASP:OD1	46:NF:68:LEU:N	2.34	0.59
46:NH:347:ASN:HD22	46:NH:347:ASN:C	2.04	0.59
45:NM:31:GLN:NE2	45:NM:35:GLN:O	2.36	0.59
46:NN:3:GLU:HG3	46:NN:62:ARG:HH12	1.68	0.59
46:OD:99:ASN:OD1	46:OD:142:GLY:N	2.35	0.59
46:OF:8:GLN:HE21	46:OF:65:LEU:HG	1.66	0.59
46:ON:178:THR:HB	46:ON:181:GLU:HG3	1.82	0.59
45:PA:397:LEU:O	46:PB:344:TRP:NE1	2.26	0.59
45:PG:292:THR:HG21	45:PG:331:SER:HB3	1.84	0.59
45:RM:88:HIS:HE1	45:RM:90:GLU:HB3	1.66	0.59
45:SC:155:GLU:OE1	45:SC:197:HIS:NE2	2.35	0.59
46:SD:318:ARG:NH2	46:SD:356:ILE:O	2.36	0.59
45:UG:145:THR:OG1	47:UG:501:GTP:O1B	2.20	0.59
46:UH:371:SER:O	46:UH:422:TYR:OH	2.20	0.59
46:VB:309:ARG:NH1	46:VB:343:GLU:OE1	2.35	0.59
45:WA:221:ARG:NH2	46:WB:322:SER:OG	2.36	0.59
46:WB:45:GLU:O	46:WB:46:ARG:NH1	2.35	0.59
10:1Q:37:ILE:HB	35:4S:208:GLN:HE22	1.68	0.59
13:1U:448:HIS:HE2	13:1U:472:SER:HG	1.50	0.59
28:2F:85:MET:O	28:2F:88:SER:OG	2.20	0.59
20:2K:212:ARG:HD2	45:GM:370:LYS:HE3	1.85	0.59
9:2N:3:ASN:OD1	45:IA:96:LYS:NZ	2.35	0.59
11:3S:260:ASN:HB2	11:3S:310:ILE:HG22	1.84	0.59
13:3U:504:GLN:OE1	13:3U:562:TYR:OH	2.20	0.59
36:5D:47:SER:HB2	36:5D:54:ARG:HB3	1.83	0.59
45:AA:36:MET:HG3	45:AA:61:HIS:CE1	2.38	0.59
46:BN:324:LYS:O	46:BN:328:GLU:HG2	2.03	0.59
45:CE:224:TYR:HD1	45:CE:227:LEU:HD12	1.68	0.59
45:CK:288:VAL:HG11	45:CK:327:ASP:HB3	1.83	0.59
46:DN:257:LEU:HD11	46:DN:314:SER:HB2	1.84	0.59
46:EB:334:GLN:HA	46:EB:341:PHE:CE2	2.37	0.59
46:GF:139:LEU:HD13	46:GF:168:SER:HB3	1.84	0.59
45:HA:292:THR:HG21	45:HA:331:SER:HB3	1.83	0.59
45:IA:398:MET:HE3	46:IB:345:ILE:HA	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IN:67:ASP:OD1	46:IN:68:LEU:N	2.36	0.59
45:KE:407:TRP:CH2	46:KF:258:ILE:HB	2.37	0.59
45:LA:210:TYR:CE2	46:LB:324:LYS:HG2	2.38	0.59
45:MA:296:PHE:HE1	45:MA:377:MET:HG3	1.68	0.59
45:MG:260:VAL:HB	46:MJ:397:TRP:CH2	2.35	0.59
45:MM:407:TRP:HZ2	46:MN:258:ILE:HD11	1.67	0.59
45:NG:222:PRO:O	46:NH:322:SER:OG	2.20	0.59
46:NL:128:ASP:OD1	46:NL:129:CYS:N	2.35	0.59
45:NM:206:ASN:OD1	45:NM:207:GLU:N	2.35	0.59
45:PC:422:ARG:HH12	45:PC:426:ALA:HB2	1.68	0.59
46:PN:86:ARG:HA	46:PN:86:ARG:HE	1.67	0.59
45:SM:346:TRP:HB3	46:SN:391:ARG:HD3	1.83	0.59
46:SN:52:ASN:OD1	46:SN:62:ARG:NH2	2.34	0.59
46:TL:215:LEU:HD21	46:TL:273:LEU:HD12	1.85	0.59
46:UN:97:ALA:HA	46:UN:103:LYS:HG2	1.84	0.59
45:VK:328:VAL:HG11	45:VK:353:VAL:HG21	1.84	0.59
46:VN:86:ARG:NH1	46:VN:89:ASN:OD1	2.36	0.59
45:WI:51:THR:HG21	45:WI:243:ARG:HB3	1.85	0.59
45:WK:242:LEU:HD11	45:WK:252:ILE:HG12	1.83	0.59
7:1G:135:HIS:HB3	27:3C:260:LYS:HZ2	1.67	0.59
13:1U:45:SER:OG	13:1U:46:ARG:N	2.36	0.59
5:2E:136:GLN:O	34:5R:502:ARG:NH2	2.35	0.59
21:3L:176:ARG:HH12	45:CA:367:ASP:HA	1.67	0.59
10:3Q:38:THR:OG1	35:5S:208:GLN:NE2	2.36	0.59
12:3T:229:THR:OG1	45:MK:431:ASP:OD1	2.16	0.59
14:3V:9:LEU:HB3	14:3V:10:ILE:HD12	1.85	0.59
45:AC:98:ASP:O	45:AC:105:ARG:NH1	2.36	0.59
45:AI:248:LEU:HD13	45:AI:355:ILE:HD12	1.85	0.59
46:AL:273:LEU:H	46:AL:292:GLN:HE22	1.51	0.59
46:BH:73:MET:HA	46:BH:76:VAL:HG12	1.84	0.59
46:BN:309:ARG:NH1	46:BN:343:GLU:OE1	2.36	0.59
45:DM:36:MET:HG3	45:DM:38:SER:H	1.68	0.59
45:EC:265:ILE:HG23	45:EC:432:TYR:HE1	1.67	0.59
46:EN:132:GLY:HA3	46:EN:162:ARG:NH2	2.17	0.59
46:FB:238:CYS:SG	46:FB:241:ARG:NH2	2.76	0.59
46:FN:152:ILE:O	46:FN:156:ARG:HG2	2.02	0.59
45:GM:55:GLU:HG3	45:GM:57:GLY:H	1.67	0.59
46:GN:218:THR:HG23	46:GN:219:THR:HG23	1.84	0.59
46:HB:4:ILE:O	46:HB:62:ARG:NH2	2.36	0.59
45:HE:181:VAL:HG22	46:HF:256:ASN:OD1	2.02	0.59
46:HJ:213:ARG:HH12	46:HJ:297:LYS:HE2	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HK:123:ARG:NH1	45:HK:127:ASP:OD2	2.36	0.59
45:HK:326:LYS:HE3	46:HN:212:PHE:CE2	2.32	0.59
46:IB:215:LEU:HB3	46:IB:217:LEU:HG	1.84	0.59
45:IC:71:GLU:HB3	45:IC:98:ASP:HB3	1.85	0.59
46:IH:10:GLY:O	46:IH:14:ASN:ND2	2.36	0.59
45:IK:292:THR:HG21	45:IK:331:SER:HB3	1.84	0.59
45:LG:40:ARG:HH12	45:LG:42:ILE:HG12	1.67	0.59
45:MA:27:GLU:HB2	45:MA:361:THR:HG21	1.84	0.59
46:MF:372:THR:HA	46:MF:422:TYR:HE2	1.67	0.59
46:MH:67:ASP:OD1	46:MH:68:LEU:N	2.31	0.59
45:NA:226:ASN:ND2	45:NA:367:ASP:OD2	2.36	0.59
46:NB:31:ASP:OD1	46:NB:35:THR:N	2.35	0.59
46:NF:318:ARG:HD3	46:NF:358:PRO:HD3	1.84	0.59
45:OE:179:THR:HG21	46:OF:246:LEU:HD11	1.85	0.59
45:TG:108:TYR:O	45:TG:112:LYS:NZ	2.35	0.59
45:TK:64:ARG:NH1	45:TK:129:CYS:SG	2.76	0.59
45:UA:188:ILE:HD12	45:UA:425:LEU:HD11	1.85	0.59
46:UL:178:THR:HB	46:UL:181:GLU:HG3	1.84	0.59
45:UM:324:VAL:HG12	45:UM:326:LYS:HG2	1.85	0.59
46:VB:309:ARG:NH2	46:VB:426:GLN:O	2.35	0.59
45:WG:356:ASN:OD1	45:WG:357:TYR:N	2.36	0.59
4:2D:125:PHE:HD1	25:3R:486:VAL:HG12	1.67	0.59
24:2P:436:GLN:HA	45:TK:282:TYR:CZ	2.38	0.59
11:2S:267:LYS:HE2	11:2S:269:VAL:HB	1.85	0.59
13:2U:351:ASN:OD1	13:2U:353:GLN:NE2	2.29	0.59
23:3O:239:ILE:HA	23:3O:242:LEU:HB2	1.85	0.59
12:3T:280:GLN:NE2	12:3T:282:ASN:OD1	2.34	0.59
14:3V:112:ARG:HH21	45:LA:196:GLU:HG2	1.68	0.59
45:AK:102:ASN:HB3	45:AK:105:ARG:HB2	1.82	0.59
46:BD:118:ASP:OD1	46:BD:121:ARG:NH2	2.36	0.59
45:BM:287:SER:N	45:BM:290:GLU:OE2	2.36	0.59
45:CC:90:GLU:OE1	45:CC:121:ARG:NH1	2.35	0.59
46:CF:73:MET:HA	46:CF:76:VAL:HG12	1.83	0.59
46:CN:396:HIS:HA	46:CN:399:THR:HG22	1.83	0.59
45:DG:133:GLN:HG2	45:DG:252:ILE:HB	1.85	0.59
45:EE:399:TYR:O	45:EE:402:ARG:NH1	2.35	0.59
46:FB:371:SER:O	46:FB:422:TYR:OH	2.20	0.59
46:FH:55:THR:HG23	46:GH:283:ALA:HA	1.84	0.59
46:FN:222:TYR:O	46:FN:226:ASN:ND2	2.21	0.59
46:GB:299:MET:HG3	46:GB:301:CYS:H	1.67	0.59
45:GK:7:ILE:HB	45:GK:137:VAL:HG12	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GL:113:ILE:HG21	46:GL:150:LEU:HD22	1.85	0.59
46:HJ:252:LYS:O	46:HJ:256:ASN:ND2	2.35	0.59
46:ID:179:VAL:HG13	46:ID:180:VAL:HG13	1.85	0.59
45:JI:76:ASP:OD2	46:JJ:46:ARG:NH2	2.35	0.59
45:JI:180:ALA:O	46:JJ:347:ASN:ND2	2.35	0.59
45:KA:407:TRP:HZ2	46:KB:258:ILE:HD11	1.68	0.59
45:KK:317:MET:HB2	45:KK:353:VAL:HA	1.83	0.59
46:LB:309:ARG:H	46:LB:372:THR:HG22	1.67	0.59
45:LE:188:ILE:HG22	45:LE:421:ALA:HB1	1.84	0.59
46:OD:248:SER:HA	46:OD:252:LYS:HD3	1.84	0.59
45:OE:76:ASP:OD2	46:OF:46:ARG:NH2	2.36	0.59
45:OE:257:THR:HA	46:OH:397:TRP:HZ3	1.68	0.59
46:OH:392:LYS:HG3	46:OH:395:LEU:HD13	1.84	0.59
46:OL:372:THR:HA	46:OL:422:TYR:HE1	1.67	0.59
46:PD:74:ASP:HA	46:PD:77:ARG:HE	1.68	0.59
46:QD:248:SER:HA	46:QD:252:LYS:HD2	1.84	0.59
45:QI:9:VAL:HG12	45:QI:68:LEU:HB2	1.84	0.59
45:QK:180:ALA:HB3	45:QK:183:GLU:HG3	1.85	0.59
45:QK:319:TYR:HB3	45:QK:323:VAL:HG11	1.83	0.59
45:QM:294:SER:HA	45:QM:297:GLU:HG3	1.85	0.59
46:RD:178:THR:HB	46:RD:181:GLU:HG3	1.84	0.59
46:RF:32:PRO:HA	46:RF:84:LEU:HD11	1.85	0.59
45:RG:133:GLN:HB3	45:RG:252:ILE:HG21	1.84	0.59
46:RH:256:ASN:HD22	46:RH:350:LYS:HG3	1.67	0.59
46:UD:310:TYR:HD1	46:UD:371:SER:HB2	1.68	0.59
45:UI:60:LYS:NZ	45:UI:85:GLN:O	2.35	0.59
45:UK:269:LEU:HD23	45:UK:384:ILE:HD13	1.84	0.59
46:UL:46:ARG:NH2	45:UM:76:ASP:OD2	2.35	0.59
45:VA:408:TYR:HB3	45:VA:413:MET:HG3	1.84	0.59
45:WM:195:LEU:HD12	45:WM:266:HIS:HE1	1.68	0.59
4:OD:175:THR:OG1	46:EB:1:MET:SD	2.61	0.59
21:1L:164:THR:HG21	45:BI:76:ASP:HB3	1.85	0.59
15:1X:41:GLN:HA	15:1X:44:THR:HG22	1.82	0.59
30:2H:170:ILE:HG22	34:7R:84:PRO:HG2	1.83	0.59
9:2N:227:ASN:ND2	9:2N:232:GLU:OE2	2.36	0.59
1:3A:91:ASN:HB3	1:3A:94:LYS:HA	1.84	0.59
16:3B:246:VAL:HB	16:3B:282:LYS:HB2	1.84	0.59
27:3C:261:LEU:O	27:3C:263:ILE:HG13	2.03	0.59
30:4H:197:LYS:HE2	30:4H:197:LYS:HA	1.85	0.59
36:5D:80:ASN:OD1	36:5D:81:HIS:N	2.36	0.59
34:6R:319:PRO:HD3	46:CN:227:HIS:HD2	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:6R:394:GLU:OE2	46:EN:276:ARG:NH2	2.32	0.59
45:AA:204:LEU:HD13	45:AA:231:ILE:HD12	1.85	0.59
46:AF:178:THR:HB	46:AF:181:GLU:HG3	1.85	0.59
45:AM:33:ASP:HA	45:AM:85:GLN:HE21	1.67	0.59
45:BA:276:ILE:HD11	45:BA:280:LYS:HG3	1.85	0.59
45:BC:68:LEU:HD21	45:BC:118:CYS:HB2	1.84	0.59
45:CI:206:ASN:OD1	47:CI:501:GTP:N2	2.33	0.59
46:CN:318:ARG:HG3	46:CN:357:PRO:HA	1.84	0.59
45:DC:90:GLU:OE2	45:DC:121:ARG:NH1	2.35	0.59
46:EF:5:VAL:HG12	46:EF:62:ARG:HD3	1.83	0.59
46:EF:292:GLN:NE2	46:EF:298:ASN:OD1	2.34	0.59
45:EG:89:PRO:HG2	45:FE:280:LYS:HB3	1.84	0.59
46:EL:63:ALA:O	46:EL:89:ASN:ND2	2.32	0.59
45:FC:394:LYS:NZ	46:FD:347:ASN:OD1	2.36	0.59
46:HD:10:GLY:O	46:HD:14:ASN:ND2	2.35	0.59
46:IF:207:LEU:HD13	46:IF:225:LEU:HB3	1.85	0.59
46:IH:139:LEU:HD13	46:IH:168:SER:HB3	1.85	0.59
45:IK:55:GLU:HG3	45:IK:57:GLY:H	1.67	0.59
46:JH:156:ARG:NH2	46:JH:197:ASP:OD1	2.36	0.59
45:KA:184:PRO:HB3	45:KA:394:LYS:HB3	1.85	0.59
46:LF:344:TRP:HB3	46:LF:430:ALA:HB2	1.83	0.59
46:MJ:405:GLU:HA	46:MJ:408:PHE:HD1	1.68	0.59
45:MM:223:THR:HG22	45:MM:224:TYR:H	1.68	0.59
46:MN:307:HIS:ND1	46:MN:376:GLU:OE2	2.34	0.59
45:NA:11:GLN:NE2	46:NB:245:GLN:O	2.35	0.59
46:NB:257:LEU:HA	46:NB:312:THR:HG21	1.84	0.59
46:ND:385:PHE:HE2	46:ND:412:GLU:HB3	1.67	0.59
45:NI:241:SER:OG	45:NI:250:VAL:O	2.20	0.59
45:NI:319:TYR:HB3	45:NI:323:VAL:HG21	1.85	0.59
45:NK:108:TYR:O	45:NK:112:LYS:NZ	2.36	0.59
45:NK:292:THR:HG21	45:NK:331:SER:HB3	1.85	0.59
45:OE:56:THR:HG23	45:OE:58:ALA:H	1.68	0.59
46:PH:63:ALA:O	46:PH:89:ASN:ND2	2.35	0.59
46:PH:145:SER:HB3	46:PH:188:SER:HB3	1.84	0.59
46:QD:256:ASN:ND2	46:QD:350:LYS:HG3	2.18	0.59
46:QH:31:ASP:OD1	46:QH:35:THR:N	2.32	0.59
46:QL:213:ARG:HH11	46:QL:297:LYS:HG2	1.67	0.59
45:QM:31:GLN:NE2	45:QM:35:GLN:O	2.36	0.59
46:RD:60:VAL:HG21	46:RD:86:ARG:HG3	1.83	0.59
45:SA:292:THR:HG21	45:SA:331:SER:HB2	1.84	0.59
46:UJ:22:GLU:HG2	46:UJ:81:PHE:HD2	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UL:156:ARG:NH1	46:UL:195:ASN:O	2.36	0.59
45:VG:288:VAL:HG11	45:VG:327:ASP:HB3	1.85	0.59
45:VI:292:THR:HG21	45:VI:331:SER:HB3	1.85	0.59
46:VJ:39:ASP:OD1	46:VJ:40:SER:N	2.36	0.59
8:0H:359:VAL:HG21	45:HM:282:TYR:HE2	1.67	0.59
9:1N:164:LYS:O	29:2G:39:LYS:NZ	2.22	0.59
13:1U:403:ALA:O	13:1U:430:ARG:NH1	2.36	0.59
20:2K:429:HIS:O	20:2K:432:SER:OG	2.20	0.59
21:2L:316:LYS:NZ	21:2L:317:LEU:O	2.31	0.59
21:2L:524:ARG:NH1	46:BN:358:PRO:O	2.36	0.59
11:2S:97:ARG:NH1	46:MJ:414:ASN:OD1	2.35	0.59
13:2U:512:ARG:NH1	13:2U:531:SER:O	2.35	0.59
27:3C:277:LEU:HD22	27:3C:285:ILE:HD13	1.85	0.59
11:3S:215:VAL:HG23	11:3S:230:MET:HE2	1.85	0.59
30:4H:171:LEU:HD13	30:4H:176:LYS:HZ1	1.67	0.59
45:AC:64:ARG:HH12	45:AC:128:ASN:HD22	1.51	0.59
45:AI:98:ASP:O	45:AI:105:ARG:NH1	2.36	0.59
46:BF:371:SER:O	46:BF:422:TYR:OH	2.14	0.59
45:BK:11:GLN:HG3	45:BK:74:VAL:HG11	1.85	0.59
45:CA:167:LEU:HD22	45:CA:200:VAL:HB	1.85	0.59
45:EA:55:GLU:HG3	45:EA:57:GLY:H	1.67	0.59
45:EA:188:ILE:HD12	45:EA:425:LEU:HD11	1.83	0.59
46:EF:257:LEU:HD12	46:EF:312:THR:HG23	1.84	0.59
45:FM:340:THR:HG23	45:FM:341:ILE:HG13	1.85	0.59
45:FM:408:TYR:HB3	45:FM:413:MET:HG3	1.85	0.59
46:FN:60:VAL:HG21	46:FN:86:ARG:HD3	1.84	0.59
45:HA:335:ILE:HA	45:HA:338:LYS:HE3	1.84	0.59
45:HG:88:HIS:CD2	45:HG:90:GLU:HG2	2.37	0.59
46:HL:100:ASN:HD22	46:HL:103:LYS:HB2	1.68	0.59
46:IB:317:PHE:HE2	46:IB:326:VAL:HG13	1.68	0.59
45:KM:211:ASP:OD1	45:KM:212:ILE:N	2.35	0.59
45:LA:102:ASN:HB3	45:LA:105:ARG:HB2	1.83	0.59
46:LB:114:ASP:OD1	46:LB:115:SER:N	2.36	0.59
45:LI:292:THR:HG21	45:LI:331:SER:HB3	1.84	0.59
46:MB:103:LYS:HA	46:MB:107:THR:HG22	1.85	0.59
45:MK:292:THR:HG21	45:MK:331:SER:HB2	1.85	0.59
45:NA:69:ASP:HB3	45:NA:75:ILE:HD11	1.84	0.59
46:ND:222:TYR:O	46:ND:226:ASN:ND2	2.24	0.59
46:NJ:248:SER:HA	46:NJ:252:LYS:HD3	1.85	0.59
46:NL:130:LEU:O	46:NL:162:ARG:NH2	2.31	0.59
45:OA:172:TYR:CE2	45:OA:203:MET:HA	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OB:316:LEU:HB2	46:OB:366:THR:HB	1.84	0.59
45:QE:68:LEU:HD23	45:QE:149:LEU:HD21	1.85	0.59
46:QF:49:VAL:HG21	46:QF:241:ARG:HG2	1.85	0.59
46:SB:52:ASN:OD1	46:SB:62:ARG:NH2	2.36	0.59
46:SF:258:ILE:HD11	45:SG:407:TRP:HZ2	1.67	0.59
45:SI:215:ARG:NH2	45:SI:300:ASN:OD1	2.36	0.59
46:SN:77:ARG:O	46:SN:77:ARG:NH1	2.35	0.59
46:TD:86:ARG:NH1	46:UD:281:TYR:HB3	2.18	0.59
46:TL:86:ARG:HH11	46:TL:87:PRO:HD2	1.68	0.59
45:UG:272:TYR:HD2	45:UG:275:ILE:HD11	1.67	0.59
45:UI:11:GLN:HG3	45:UI:74:VAL:HG11	1.85	0.59
45:VC:119:LEU:HD11	45:VC:156:ARG:HB3	1.85	0.59
45:VM:226:ASN:ND2	45:VM:367:ASP:OD2	2.36	0.59
46:VN:284:LEU:HD22	46:VN:363:MET:HB2	1.84	0.59
45:WA:221:ARG:HA	46:WB:324:LYS:HZ3	1.68	0.59
46:WJ:292:GLN:HG2	46:WJ:298:ASN:HD22	1.68	0.59
45:WM:127:ASP:OD1	45:WM:128:ASN:N	2.36	0.59
3:1C:37:ILE:HD11	45:DM:79:ARG:HE	1.67	0.58
20:2K:224:GLN:HA	20:2K:227:ARG:HH21	1.68	0.58
25:2R:289:ASN:HB2	46:DH:217:LEU:HB2	1.85	0.58
13:2U:383:ASP:OD2	13:2U:387:ARG:NH2	2.36	0.58
34:4R:126:THR:HG21	34:4R:147:ARG:HE	1.68	0.58
36:5A:130:ASP:OD1	36:5A:131:ARG:N	2.36	0.58
34:6R:134:ILE:HG23	34:6R:137:SER:HB2	1.85	0.58
34:6R:294:ASN:OD1	46:DN:219:THR:OG1	2.15	0.58
45:AM:259:LEU:HD11	45:AM:316:SER:HB3	1.84	0.58
46:DB:172:SER:OG	46:DB:205:GLU:OE1	2.19	0.58
46:EL:73:MET:HA	46:EL:76:VAL:HG12	1.85	0.58
45:FA:207:GLU:HA	45:FA:210:TYR:HB2	1.85	0.58
45:FA:222:PRO:HD2	46:FB:324:LYS:HG3	1.85	0.58
45:FM:77:GLU:HA	45:FM:80:THR:HG22	1.85	0.58
46:HJ:117:LEU:HD11	46:HJ:154:LYS:HD3	1.85	0.58
46:IB:178:THR:HB	46:IB:181:GLU:HG3	1.85	0.58
46:IL:257:LEU:HD11	46:IL:314:SER:HB2	1.84	0.58
45:JG:195:LEU:HD21	45:JG:264:ARG:HH21	1.68	0.58
45:JG:256:GLN:HB3	46:JJ:397:TRP:CZ2	2.38	0.58
45:KA:241:SER:OG	45:KA:250:VAL:O	2.17	0.58
46:LJ:107:THR:HG23	46:LJ:108:GLU:HG2	1.85	0.58
46:OB:86:ARG:HD3	46:OB:87:PRO:HD2	1.83	0.58
45:PC:310:GLY:HA3	45:PC:383:ALA:HB2	1.85	0.58
45:PE:71:GLU:OE2	46:PF:2:ARG:NH2	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QD:52:ASN:OD1	46:QD:62:ARG:NH2	2.35	0.58
46:QD:178:THR:HB	46:QD:181:GLU:HG3	1.84	0.58
45:SM:241:SER:OG	45:SM:250:VAL:O	2.21	0.58
46:TB:27:GLU:OE1	46:TB:241:ARG:NH1	2.33	0.58
45:TE:226:ASN:ND2	45:TE:367:ASP:OD2	2.36	0.58
46:TH:51:TYR:O	46:TH:62:ARG:NH2	2.32	0.58
45:TI:360:PRO:O	45:TI:370:LYS:NZ	2.35	0.58
46:TJ:210:ILE:O	46:TJ:214:THR:OG1	2.14	0.58
46:TL:65:LEU:HB3	46:TL:73:MET:HE1	1.83	0.58
45:VC:183:GLU:HA	45:VC:186:ASN:HD22	1.67	0.58
46:VN:193:VAL:HG22	46:VN:262:ARG:HH22	1.68	0.58
45:WC:292:THR:HG21	45:WC:331:SER:HB3	1.83	0.58
46:WH:48:ASN:O	46:WH:62:ARG:NH1	2.36	0.58
13:1U:432:TRP:CE3	13:1U:441:MET:HB3	2.38	0.58
16:2B:21:LYS:HG2	16:2B:21:LYS:O	2.03	0.58
16:2B:134:ARG:HG2	26:2W:264:ASN:HD21	1.68	0.58
13:2U:319:HIS:CE1	13:2U:340:SER:HG	2.21	0.58
14:2V:128:GLN:HG2	46:LH:413:SER:HB2	1.84	0.58
12:3T:231:GLU:HB2	12:3T:235:THR:HG23	1.85	0.58
44:8R:125:TYR:CE1	45:PI:279:GLU:HA	2.37	0.58
44:8R:234:TYR:OH	45:PE:279:GLU:O	2.19	0.58
45:AC:288:VAL:HG11	45:AC:327:ASP:HB3	1.85	0.58
45:AG:259:LEU:HD11	45:AG:316:SER:HB2	1.85	0.58
46:AL:32:PRO:HA	46:AL:84:LEU:HD11	1.85	0.58
45:BC:305:CYS:SG	45:BC:306:ASP:N	2.77	0.58
45:BM:109:THR:OG1	45:BM:411:GLU:OE1	2.21	0.58
46:CB:129:CYS:SG	45:CC:96:LYS:NZ	2.66	0.58
46:CH:10:GLY:O	46:CH:14:ASN:ND2	2.37	0.58
45:CM:317:MET:N	45:CM:352:LYS:O	2.36	0.58
46:DD:207:LEU:HD23	46:DD:225:LEU:HB3	1.86	0.58
45:DK:75:ILE:HG22	45:DK:79:ARG:HE	1.68	0.58
45:EC:261:PRO:HD2	45:EC:262:TYR:N	2.18	0.58
45:EM:60:LYS:NZ	45:EM:85:GLN:O	2.36	0.58
46:EN:105:HIS:ND1	46:EN:146:GLY:O	2.29	0.58
45:GM:406:HIS:HA	45:GM:409:VAL:HG12	1.84	0.58
45:HG:192:HIS:ND1	45:HG:424:ASP:OD2	2.36	0.58
45:IA:425:LEU:HA	45:IA:428:LEU:HD12	1.84	0.58
45:IC:76:ASP:OD2	46:ID:46:ARG:NH2	2.36	0.58
46:ID:257:LEU:HD11	46:ID:314:SER:HB2	1.85	0.58
46:IF:139:LEU:HD13	46:IF:168:SER:HB3	1.85	0.58
45:II:296:PHE:HE2	45:II:335:ILE:HG21	1.69	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:JD:260:PHE:HB2	46:JD:263:LEU:HD13	1.85	0.58
46:JF:10:GLY:O	46:JF:14:ASN:ND2	2.34	0.58
45:JK:226:ASN:ND2	45:JK:367:ASP:OD2	2.36	0.58
46:MH:114:ASP:OD1	46:MH:115:SER:N	2.37	0.58
46:ML:114:ASP:OD1	46:ML:115:SER:N	2.36	0.58
45:NK:11:GLN:NE2	46:NL:245:GLN:O	2.35	0.58
45:OG:88:HIS:NE2	45:OG:90:GLU:OE1	2.36	0.58
45:OM:420:GLU:HA	45:OM:423:GLU:HG3	1.85	0.58
46:ON:64:ILE:HD13	46:ON:119:VAL:HG13	1.85	0.58
45:PA:286:LEU:O	45:PA:373:ARG:NH2	2.33	0.58
45:PK:251:ASP:OD1	45:PK:252:ILE:N	2.37	0.58
46:PN:118:ASP:OD1	46:PN:121:ARG:NH1	2.36	0.58
46:QN:271:ALA:HB3	46:QN:365:VAL:HB	1.84	0.58
46:RJ:379:LYS:HE3	46:RJ:419:VAL:HG11	1.83	0.58
46:RL:159:TYR:HB3	46:RL:162:ARG:HG3	1.84	0.58
45:RM:273:ALA:HB2	45:RM:300:ASN:HD21	1.68	0.58
45:SK:88:HIS:HB3	45:SK:91:GLN:HG2	1.85	0.58
46:TJ:293:MET:HG2	46:TJ:367:PHE:HB2	1.85	0.58
46:TL:318:ARG:HE	46:TL:358:PRO:HG3	1.68	0.58
46:TN:31:ASP:OD2	46:TN:37:HIS:ND1	2.36	0.58
46:UF:213:ARG:HD2	46:UF:297:LYS:HD2	1.84	0.58
45:UM:434:GLU:HA	45:UM:437:ILE:HG12	1.84	0.58
45:VC:292:THR:HG21	45:VC:331:SER:HB3	1.84	0.58
46:VL:211:CYS:HA	46:VL:215:LEU:HD12	1.85	0.58
45:WM:24:PHE:O	45:WM:28:HIS:ND1	2.28	0.58
13:1U:73:GLY:HA3	13:1U:105:ILE:HD11	1.85	0.58
1:2A:115:THR:O	1:2A:116:THR:HG22	2.03	0.58
4:2D:56:LYS:O	4:2D:57:THR:OG1	2.19	0.58
23:2O:204:LYS:HA	23:2O:207:HIS:HD2	1.67	0.58
25:2R:448:VAL:HB	25:2R:464:LEU:HB2	1.86	0.58
13:2U:3:LYS:HG3	13:2U:569:TYR:HA	1.85	0.58
16:3B:30:TYR:HA	16:3B:33:MET:HG3	1.84	0.58
21:3L:52:ASP:OD1	21:3L:53:PHE:N	2.35	0.58
35:4S:232:ASP:OD1	35:4S:236:ASN:ND2	2.36	0.58
39:6F:70:ASN:HB2	46:JF:360:GLY:HA3	1.84	0.58
46:AH:132:GLY:HA3	46:AH:163:ILE:HG22	1.85	0.58
45:DA:70:LEU:HA	45:DA:95:GLY:HA3	1.85	0.58
45:DA:271:SER:OG	45:DA:301:MET:SD	2.61	0.58
46:DF:222:TYR:O	46:DF:226:ASN:ND2	2.22	0.58
45:EC:317:MET:HA	45:EC:377:MET:HA	1.85	0.58
46:FB:268:ILE:HG22	46:FB:368:VAL:HG22	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FD:67:ASP:OD1	46:FD:68:LEU:N	2.36	0.58
46:FD:135:ILE:HG13	46:FD:152:ILE:HD11	1.86	0.58
46:HJ:6:HIS:NE2	46:HJ:8:GLN:OE1	2.35	0.58
45:HK:203:MET:HG3	45:HK:384:ILE:HD11	1.85	0.58
46:HL:73:MET:HE1	46:HL:92:PHE:HB3	1.84	0.58
46:IL:5:VAL:HG12	46:IL:62:ARG:HD3	1.85	0.58
45:JK:11:GLN:NE2	46:JL:245:GLN:O	2.36	0.58
46:KF:114:ASP:OD1	46:KF:115:SER:N	2.37	0.58
45:LM:102:ASN:HB3	45:LM:105:ARG:HB2	1.85	0.58
46:MB:257:LEU:HD11	46:MB:314:SER:HB3	1.86	0.58
45:NA:81:GLY:O	45:NA:84:ARG:NH1	2.36	0.58
45:NE:47:ASP:HB3	45:NE:50:ASN:HB2	1.84	0.58
45:OA:224:TYR:HA	45:OA:227:LEU:HD13	1.85	0.58
46:OL:156:ARG:NH2	46:OL:197:ASP:OD1	2.36	0.58
45:QC:127:ASP:OD1	45:QC:128:ASN:N	2.36	0.58
46:RJ:114:ASP:OD1	46:RJ:115:SER:N	2.36	0.58
46:SH:31:ASP:OD1	46:SH:35:THR:N	2.34	0.58
45:SI:204:LEU:HD13	45:SI:231:ILE:HD12	1.85	0.58
46:SJ:67:ASP:OD2	46:SJ:72:THR:OG1	2.20	0.58
46:TD:100:ASN:ND2	46:TD:401:GLU:OE1	2.35	0.58
45:VI:101:ASN:HD22	46:VJ:256:ASN:HD21	1.50	0.58
45:VI:207:GLU:OE1	45:VI:304:LYS:NZ	2.36	0.58
45:WE:326:LYS:HZ1	46:WH:219:THR:HA	1.67	0.58
46:WL:52:ASN:OD1	46:WL:62:ARG:NH2	2.36	0.58
46:WN:10:GLY:O	46:WN:14:ASN:ND2	2.36	0.58
9:1N:429:PRO:HA	45:II:40:ARG:HH21	1.67	0.58
20:2K:469:LEU:HB3	20:2K:473:LYS:HZ2	1.67	0.58
21:2L:354:LYS:HB3	21:2L:365:VAL:HG12	1.84	0.58
21:2L:748:LYS:HD2	21:2L:818:VAL:HG21	1.86	0.58
13:2U:11:ILE:HB	13:2U:599:ILE:HB	1.84	0.58
13:2U:591:VAL:HG23	13:2U:601:ILE:HG22	1.85	0.58
13:3U:535:GLU:O	13:3U:553:GLU:N	2.36	0.58
34:4R:388:TYR:OH	34:4R:392:GLY:O	2.21	0.58
36:5A:20:LEU:HA	36:5A:62:PRO:HG3	1.86	0.58
45:BE:185:TYR:HE2	45:BE:404:PHE:HB2	1.69	0.58
45:BE:345:ASP:OD1	45:BE:346:TRP:N	2.37	0.58
45:BM:98:ASP:OD1	45:BM:99:ALA:N	2.35	0.58
45:CC:288:VAL:HG11	45:CC:327:ASP:HB3	1.86	0.58
45:CI:104:ALA:HB2	45:CI:413:MET:HG2	1.84	0.58
45:CI:336:LYS:HD3	45:CI:351:PHE:HE2	1.68	0.58
46:CN:114:ASP:OD1	46:CN:115:SER:N	2.35	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DA:271:SER:HA	45:DA:302:MET:HG2	1.85	0.58
45:DA:429:GLU:HA	45:DA:432:TYR:HD2	1.69	0.58
45:DC:128:ASN:ND2	45:EC:290:GLU:OE2	2.36	0.58
46:DN:375:GLN:HA	46:DN:378:PHE:HD2	1.68	0.58
46:EH:326:VAL:O	46:EH:330:MET:HG2	2.03	0.58
46:FB:87:PRO:HA	46:FB:90:PHE:HD2	1.69	0.58
45:FK:11:GLN:NE2	46:FL:247:ASN:OD1	2.35	0.58
46:HB:4:ILE:HD11	46:HB:131:GLN:HB2	1.85	0.58
45:IA:27:GLU:HG2	45:IA:361:THR:HG21	1.84	0.58
46:JF:5:VAL:HG12	46:JF:62:ARG:HD3	1.85	0.58
46:JL:178:THR:HG22	46:JL:180:VAL:H	1.68	0.58
46:JL:207:LEU:HB3	46:JL:225:LEU:HD22	1.84	0.58
46:KN:31:ASP:OD1	46:KN:35:THR:N	2.35	0.58
46:LH:221:THR:HG23	46:LH:223:GLY:H	1.68	0.58
45:MC:98:ASP:OD1	45:MC:99:ALA:N	2.35	0.58
45:NK:192:HIS:ND1	45:NK:424:ASP:OD2	2.37	0.58
45:NM:176:GLN:HG2	45:NM:177:VAL:HG13	1.85	0.58
45:OA:210:TYR:HE2	46:OB:324:LYS:HB3	1.68	0.58
45:OE:1:MET:SD	46:OH:94:GLN:NE2	2.76	0.58
46:PB:203:ASP:HB2	46:PB:301:CYS:HA	1.85	0.58
46:PD:309:ARG:NH2	46:PD:426:GLN:O	2.31	0.58
45:PI:206:ASN:OD1	47:PI:501:GTP:N2	2.28	0.58
46:QJ:245:GLN:OE1	45:QK:223:THR:OG1	2.19	0.58
46:RB:51:TYR:HB3	46:RB:59:TYR:HB3	1.86	0.58
45:TM:76:ASP:OD1	45:TM:79:ARG:NH2	2.35	0.58
45:UI:211:ASP:OD2	45:UI:215:ARG:NH1	2.36	0.58
45:UK:326:LYS:HG2	46:UL:220:PRO:HD2	1.86	0.58
45:VE:98:ASP:OD1	45:VE:99:ALA:N	2.37	0.58
45:WE:251:ASP:OD1	45:WE:252:ILE:N	2.35	0.58
11:1S:130:PRO:HG2	11:1S:179:ARG:HH11	1.69	0.58
13:1U:69:TYR:OH	13:1U:114:GLU:O	2.19	0.58
4:2D:218:GLN:HG2	4:2D:219:ASN:H	1.68	0.58
24:2P:391:ARG:CA	24:2P:394:GLN:HE21	2.15	0.58
12:2T:48:THR:HG22	12:2T:153:ILE:HD13	1.85	0.58
30:3H:200:TYR:HE2	45:AG:18:ASN:HD21	1.50	0.58
23:3O:348:GLU:OE1	23:3O:352:ARG:NH2	2.37	0.58
23:3O:375:GLN:NE2	23:3O:376:GLN:HG3	2.18	0.58
25:3R:195:ARG:NH2	25:3R:206:GLY:O	2.34	0.58
13:3U:557:VAL:O	13:3U:571:GLY:N	2.37	0.58
27:4C:112:ASP:OD1	27:4C:167:ARG:NH2	2.36	0.58
27:4C:198:LYS:O	27:4C:198:LYS:HD2	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:4R:131:GLU:OE2	34:4R:141:GLN:NE2	2.35	0.58
34:6R:29:GLN:OE1	45:LK:1:MET:N	2.36	0.58
34:6R:477:ASN:HA	34:6R:484:PRO:HA	1.85	0.58
34:6R:536:ARG:NH1	34:6R:545:TYR:OH	2.36	0.58
45:AC:147:SER:HB2	45:AC:190:SER:HB2	1.84	0.58
46:AL:130:LEU:HB3	46:AL:162:ARG:HE	1.68	0.58
45:CM:259:LEU:O	45:CM:380:ASN:ND2	2.35	0.58
45:DM:239:THR:HG23	45:DM:243:ARG:HE	1.69	0.58
46:EB:262:ARG:NH1	46:EB:421:GLU:OE1	2.35	0.58
45:EM:37:PRO:HG2	45:EM:40:ARG:H	1.68	0.58
46:EN:51:TYR:HB3	46:EN:59:TYR:HB3	1.84	0.58
46:FD:10:GLY:O	46:FD:14:ASN:ND2	2.36	0.58
45:FG:76:ASP:OD2	46:FH:46:ARG:NH2	2.36	0.58
45:FG:147:SER:HB2	45:FG:190:SER:OG	2.03	0.58
45:FK:181:VAL:HG22	46:FL:256:ASN:OD1	2.02	0.58
46:FN:117:LEU:HD13	46:FN:121:ARG:HH12	1.68	0.58
46:FN:331:LEU:HD12	46:FN:334:GLN:HE21	1.69	0.58
45:GM:108:TYR:O	45:GM:112:LYS:NZ	2.27	0.58
45:HE:135:PHE:HB2	45:HE:166:LYS:HG2	1.85	0.58
46:HL:256:ASN:HD22	46:HL:350:LYS:HD2	1.68	0.58
45:IM:261:PRO:HD2	45:IM:262:TYR:N	2.10	0.58
46:JN:86:ARG:HD3	46:JN:88:ASP:HB2	1.85	0.58
46:JN:113:ILE:HD13	46:JN:150:LEU:HD22	1.84	0.58
46:KN:172:SER:HB2	46:KN:174:LYS:HZ1	1.68	0.58
45:LG:398:MET:HG2	46:LH:345:ILE:HG22	1.86	0.58
46:MB:48:ASN:O	46:MB:62:ARG:NH1	2.35	0.58
45:MI:188:ILE:HD12	45:MI:425:LEU:HD22	1.84	0.58
46:MJ:318:ARG:NH1	46:MJ:356:ILE:O	2.36	0.58
46:NB:164:MET:H	46:NB:197:ASP:HB2	1.69	0.58
46:OB:114:ASP:OD1	46:OB:115:SER:N	2.37	0.58
45:OG:55:GLU:HG3	45:OG:57:GLY:H	1.69	0.58
45:OG:259:LEU:HD11	45:OG:316:SER:HB2	1.84	0.58
45:PA:271:SER:OG	45:PA:301:MET:HA	2.04	0.58
46:PN:260:PHE:HB2	46:PN:263:LEU:HD13	1.85	0.58
46:QF:113:ILE:HD11	46:QF:151:LEU:HB2	1.84	0.58
46:QH:139:LEU:HA	46:QH:145:SER:HB3	1.86	0.58
46:QL:295:ASP:OD1	46:QL:296:ALA:N	2.36	0.58
46:RD:376:GLU:HA	46:RD:379:LYS:HB2	1.83	0.58
46:SD:345:ILE:HG23	46:SD:348:ASN:HD22	1.69	0.58
46:TJ:252:LYS:NZ	47:TK:501:GTP:O1G	2.30	0.58
46:UB:209:ASP:O	46:UB:297:LYS:NZ	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VA:298:PRO:HB3	45:VA:307:PRO:HD2	1.86	0.58
45:WC:207:GLU:HA	45:WC:210:TYR:HD2	1.67	0.58
19:1J:80:LYS:NZ	45:IC:372:MET:SD	2.65	0.58
24:1P:214:LYS:NZ	45:TG:322:ASP:OD2	2.35	0.58
4:2D:179:LYS:HG3	4:2D:180:ARG:H	1.68	0.58
23:3O:278:ARG:NH2	23:3O:281:GLU:OE1	2.36	0.58
45:BK:145:THR:OG1	47:BK:501:GTP:O1B	2.22	0.58
45:BK:336:LYS:HD3	45:BK:351:PHE:HE1	1.68	0.58
45:DA:284:GLU:HG2	45:DA:286:LEU:HD22	1.84	0.58
45:DC:174:SER:HB3	45:DC:177:VAL:O	2.03	0.58
45:DI:328:VAL:O	45:DI:331:SER:OG	2.17	0.58
45:EC:213:CYS:HA	45:EC:217:LEU:HB2	1.84	0.58
46:ED:268:ILE:HG22	46:ED:368:VAL:HG22	1.85	0.58
45:EM:55:GLU:OE1	45:EM:61:HIS:NE2	2.36	0.58
46:GL:178:THR:HB	46:GL:181:GLU:HG3	1.85	0.58
45:GM:14:ILE:HD11	45:GM:69:ASP:HB2	1.86	0.58
45:HA:294:SER:O	45:HA:300:ASN:ND2	2.30	0.58
46:HF:67:ASP:OD1	46:HF:68:LEU:N	2.36	0.58
46:HH:31:ASP:OD1	46:HH:35:THR:N	2.33	0.58
45:IK:326:LYS:HD3	46:IN:220:PRO:HD2	1.86	0.58
45:JM:402:ARG:NH2	45:JM:415:GLU:OE2	2.37	0.58
45:KE:176:GLN:NE2	45:KE:207:GLU:OE2	2.37	0.58
45:LC:98:ASP:OD1	45:LC:99:ALA:N	2.37	0.58
45:LE:328:VAL:HG11	45:LE:353:VAL:HG21	1.85	0.58
45:MM:328:VAL:HG11	45:MM:353:VAL:HG21	1.86	0.58
46:NH:68:LEU:HD12	46:NH:97:ALA:HB2	1.86	0.58
45:NK:76:ASP:OD2	46:NL:46:ARG:NH2	2.35	0.58
45:NK:397:LEU:HD22	46:NL:346:PRO:HD3	1.84	0.58
46:OJ:194:GLU:OE2	46:OJ:195:ASN:ND2	2.36	0.58
46:OJ:328:GLU:O	46:OJ:332:ASN:ND2	2.37	0.58
45:PA:319:TYR:CD2	45:PA:328:VAL:HG22	2.39	0.58
46:PB:314:SER:HA	46:PB:350:LYS:HB3	1.86	0.58
45:PC:399:TYR:O	45:PC:402:ARG:NH2	2.36	0.58
46:PN:61:PRO:HD3	46:PN:84:LEU:HD12	1.86	0.58
45:QG:292:THR:HG21	45:QG:331:SER:HB2	1.85	0.58
46:RB:238:CYS:SG	46:RB:318:ARG:NH1	2.76	0.58
46:RF:6:HIS:NE2	46:RF:8:GLN:OE1	2.35	0.58
45:SI:206:ASN:OD1	47:SI:501:GTP:N2	2.36	0.58
45:SK:296:PHE:HE1	45:SK:377:MET:HG3	1.69	0.58
46:SL:285:THR:HG22	46:SL:287:PRO:HD2	1.84	0.58
45:SM:340:THR:HG23	45:SM:341:ILE:HG13	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TC:326:LYS:HD3	46:TD:220:PRO:HD2	1.85	0.58
46:TF:318:ARG:HD3	46:TF:358:PRO:HD3	1.84	0.58
46:UN:58:ARG:HH22	46:VN:281:TYR:HD2	1.51	0.58
45:VC:288:VAL:HG11	45:VC:327:ASP:HB3	1.85	0.58
45:VM:145:THR:OG1	47:VM:501:GTP:O1B	2.22	0.58
45:WE:215:ARG:HH22	45:WE:299:ALA:HB1	1.68	0.58
45:WE:422:ARG:HH12	45:WE:426:ALA:HB2	1.67	0.58
46:WF:295:ASP:OD2	46:WF:297:LYS:NZ	2.37	0.58
14:1V:128:GLN:HG3	46:LL:417:ASP:HB2	1.84	0.58
23:2O:168:ASP:HA	23:2O:171:LYS:HG2	1.86	0.58
14:2V:96:ASN:HD21	46:LF:262:ARG:HB2	1.68	0.58
25:3R:111:VAL:HG13	25:3R:112:GLU:HG2	1.85	0.58
12:3T:48:THR:HG22	12:3T:153:ILE:HD13	1.85	0.58
40:6G:195:LYS:NZ	40:6G:199:GLU:OE2	2.36	0.58
34:6R:129:VAL:HB	34:6R:145:ILE:HB	1.86	0.58
45:AE:76:ASP:OD2	46:AF:46:ARG:NH2	2.37	0.58
46:AJ:114:ASP:OD1	46:AJ:115:SER:N	2.37	0.58
46:BB:361:LEU:HD22	46:BB:364:ALA:HB2	1.86	0.58
45:BC:203:MET:HG3	45:BC:384:ILE:HD11	1.86	0.58
46:BF:145:SER:HB2	46:BF:188:SER:HB2	1.85	0.58
45:CA:171:ILE:HG21	47:CA:501:GTP:HN22	1.68	0.58
45:DA:161:TYR:HB3	45:DA:164:LYS:HE2	1.85	0.58
45:DE:203:MET:HA	45:DE:203:MET:HE3	1.86	0.58
45:DG:53:PHE:HB3	45:DG:61:HIS:HB3	1.85	0.58
45:DM:207:GLU:OE1	45:DM:304:LYS:NZ	2.35	0.58
46:DN:68:LEU:HB3	46:DN:96:GLY:HA2	1.86	0.58
46:ED:371:SER:O	46:ED:422:TYR:OH	2.22	0.58
45:EK:22:GLU:OE1	45:EK:229:ARG:NH1	2.37	0.58
45:EK:120:ASP:OD1	45:EK:123:ARG:NH2	2.32	0.58
46:EL:344:TRP:HB3	46:EL:430:ALA:HB2	1.84	0.58
45:FC:271:SER:OG	45:FC:301:MET:SD	2.61	0.58
45:FG:38:SER:O	45:FG:41:THR:OG1	2.20	0.58
46:GL:86:ARG:HD3	46:GL:88:ASP:HB3	1.86	0.58
46:HH:178:THR:HB	46:HH:181:GLU:HG3	1.86	0.58
46:HJ:207:LEU:HB3	46:HJ:225:LEU:HD22	1.84	0.58
46:IH:257:LEU:HD11	46:IH:314:SER:HB2	1.86	0.58
45:JC:345:ASP:OD1	45:JC:346:TRP:N	2.37	0.58
45:KI:242:LEU:HD11	45:KI:252:ILE:HD11	1.86	0.58
46:KJ:257:LEU:O	46:KJ:312:THR:OG1	2.17	0.58
45:LE:407:TRP:CZ3	46:LF:255:VAL:HA	2.38	0.58
45:MG:254:GLU:HB3	45:MG:352:LYS:HE2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ML:207:LEU:HB3	46:ML:225:LEU:HD22	1.86	0.58
45:NG:292:THR:HG21	45:NG:331:SER:HB3	1.86	0.58
45:NI:7:ILE:HB	45:NI:137:VAL:HG12	1.84	0.58
45:OA:90:GLU:OE2	45:OA:121:ARG:NH1	2.37	0.58
46:OH:103:LYS:O	46:OH:107:THR:OG1	2.21	0.58
45:OK:88:HIS:HB3	45:OK:91:GLN:HE22	1.68	0.58
45:PE:206:ASN:OD1	47:PE:501:GTP:N2	2.32	0.58
45:QA:53:PHE:HB3	45:QA:61:HIS:HB3	1.84	0.58
46:QB:52:ASN:OD1	46:QB:62:ARG:NH2	2.36	0.58
45:QC:69:ASP:OD1	45:QC:70:LEU:N	2.37	0.58
46:QN:237:THR:HG23	46:QN:241:ARG:HH21	1.69	0.58
46:RD:372:THR:O	46:RD:375:GLN:NE2	2.34	0.58
45:RK:319:TYR:HB3	45:RK:323:VAL:HG11	1.84	0.58
46:RL:8:GLN:HE21	46:RL:65:LEU:HG	1.68	0.58
46:SB:163:ILE:HD12	46:SB:250:LEU:HD22	1.86	0.58
46:TB:261:PRO:HD3	45:TC:406:HIS:HE2	1.68	0.58
46:TN:318:ARG:HB3	46:TN:357:PRO:HA	1.84	0.58
45:UM:145:THR:OG1	47:UM:501:GTP:O1B	2.20	0.58
45:WI:292:THR:HG21	45:WI:331:SER:HB3	1.85	0.58
21:2L:620:LEU:HD11	21:2L:687:ARG:HE	1.69	0.58
27:3C:266:GLN:HB3	27:3C:269:TYR:HD2	1.69	0.58
11:3S:230:MET:HA	11:3S:233:ILE:HG12	1.85	0.58
10:4Q:138:ASP:OD1	10:4Q:141:ARG:NH2	2.37	0.58
46:AB:281:TYR:HA	46:MB:86:ARG:HH21	1.68	0.58
46:AN:114:ASP:OD1	46:AN:115:SER:N	2.37	0.58
46:BB:260:PHE:HB2	46:BB:263:LEU:HD13	1.85	0.58
45:BG:363:VAL:HG23	45:BG:366:GLY:HA3	1.84	0.58
45:CI:60:LYS:NZ	45:CI:85:GLN:O	2.36	0.58
45:CK:71:GLU:OE2	45:CK:73:THR:OG1	2.22	0.58
45:DA:11:GLN:HG3	45:DA:74:VAL:HG11	1.86	0.58
45:EE:11:GLN:HG3	45:EE:74:VAL:HG11	1.85	0.58
45:EK:129:CYS:SG	45:EK:130:THR:N	2.76	0.58
46:HF:178:THR:HB	46:HF:181:GLU:HG3	1.85	0.58
46:HH:213:ARG:HH12	46:HH:297:LYS:HB3	1.68	0.58
46:HH:310:TYR:CD1	46:HH:371:SER:HB2	2.39	0.58
45:HK:259:LEU:HD11	45:HK:316:SER:HB3	1.84	0.58
46:HN:125:GLU:OE2	46:IN:291:GLN:NE2	2.35	0.58
46:IB:51:TYR:HE1	46:IB:61:PRO:HG3	1.67	0.58
45:IM:176:GLN:O	46:IN:347:ASN:ND2	2.26	0.58
45:JG:300:ASN:ND2	45:JG:300:ASN:O	2.36	0.58
45:KE:265:ILE:HD11	45:KE:435:VAL:HG21	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KI:325:PRO:HA	45:KI:328:VAL:HG12	1.86	0.58
46:LJ:334:GLN:HE22	46:LJ:348:ASN:H	1.52	0.58
45:OI:89:PRO:HD2	45:PI:280:LYS:NZ	2.18	0.58
45:OK:55:GLU:HG3	45:OK:57:GLY:H	1.68	0.58
45:QG:174:SER:OG	45:QG:207:GLU:OE1	2.22	0.58
45:QI:349:THR:HG23	46:QJ:179:VAL:HA	1.86	0.58
46:QL:290:THR:HG21	46:QL:329:GLN:HG2	1.85	0.58
45:RC:271:SER:OG	45:RC:301:MET:SD	2.61	0.58
45:RE:105:ARG:HH21	45:RE:110:ILE:HD13	1.67	0.58
46:RL:178:THR:HB	46:RL:181:GLU:HG3	1.85	0.58
45:SC:97:GLU:OE2	45:SC:105:ARG:NH2	2.37	0.58
46:TB:97:ALA:HB3	46:TB:143:THR:HB	1.86	0.58
46:TH:139:LEU:HD13	46:TH:168:SER:HB3	1.86	0.58
45:VE:79:ARG:NH2	45:VE:92:LEU:O	2.36	0.58
9:0N:246:THR:HG22	45:KK:47:ASP:HA	1.84	0.58
8:1H:60:ARG:HH12	46:HN:32:PRO:HB2	1.69	0.58
23:1O:128:ARG:NH1	46:UF:78:ALA:O	2.35	0.58
12:1T:264:LYS:HD3	13:1U:27:ASN:HB2	1.85	0.58
13:1U:52:ARG:HH21	13:1U:573:GLY:HA2	1.68	0.58
13:1U:63:VAL:HG12	13:1U:70:ILE:HG23	1.84	0.58
31:2I:73:LYS:HZ1	45:FE:132:LEU:H	1.51	0.58
32:3D:44:LEU:HD11	32:3D:119:ILE:HD11	1.86	0.58
14:3V:28:PRO:HD2	14:3V:31:LEU:HD21	1.86	0.58
10:4Q:48:GLU:HG3	10:4Q:161:ARG:HG2	1.86	0.58
46:AB:52:ASN:OD1	46:AB:62:ARG:NH2	2.37	0.58
46:CF:257:LEU:HD11	46:CF:314:SER:HB2	1.86	0.58
45:CG:251:ASP:OD1	45:CG:252:ILE:N	2.36	0.58
46:EF:201:VAL:HG21	46:EF:374:ILE:HD11	1.86	0.58
45:EG:187:SER:O	45:EG:191:THR:HG23	2.04	0.58
46:FB:248:SER:HA	46:FB:252:LYS:HD2	1.86	0.58
46:GF:73:MET:HA	46:GF:76:VAL:HG12	1.86	0.58
45:HG:322:ASP:OD1	45:HG:373:ARG:NH1	2.37	0.58
45:HM:176:GLN:HG2	45:HM:177:VAL:HG23	1.86	0.58
46:IB:100:ASN:ND2	46:IB:401:GLU:OE1	2.36	0.58
45:IE:98:ASP:OD1	45:IE:99:ALA:N	2.36	0.58
45:JM:272:TYR:HD2	45:JM:275:ILE:HD11	1.68	0.58
46:MB:268:ILE:HG13	46:MB:300:MET:HG3	1.86	0.58
46:MF:139:LEU:HD22	46:MF:170:VAL:HG12	1.86	0.58
45:NG:287:SER:N	45:NG:290:GLU:OE2	2.37	0.58
45:OA:292:THR:HG21	45:OA:331:SER:HB3	1.86	0.58
45:OK:395:PHE:HD2	45:OK:422:ARG:HH21	1.52	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OM:97:GLU:OE1	45:OM:105:ARG:NH2	2.36	0.58
45:PI:11:GLN:NE2	46:PJ:245:GLN:O	2.37	0.58
46:QB:350:LYS:NZ	46:QB:352:SER:OG	2.29	0.58
46:QL:158:GLU:HG3	46:QL:159:TYR:CD1	2.39	0.58
45:RG:296:PHE:HE2	45:RG:335:ILE:HD12	1.67	0.58
46:SF:248:SER:OG	46:SF:350:LYS:NZ	2.37	0.58
46:SL:114:ASP:OD1	46:SL:115:SER:N	2.36	0.58
46:SN:178:THR:HB	46:SN:181:GLU:HG3	1.86	0.58
46:TB:190:HIS:HD2	46:TB:411:ALA:HA	1.69	0.58
45:TE:108:TYR:HA	45:TE:112:LYS:HE3	1.85	0.58
45:UC:55:GLU:HG3	45:UC:57:GLY:H	1.69	0.58
46:UL:207:LEU:HD22	46:UL:228:LEU:HD11	1.85	0.58
46:UN:107:THR:OG1	46:UN:108:GLU:OE1	2.17	0.58
45:VM:320:ARG:O	45:VM:374:ALA:N	2.36	0.58
46:WD:257:LEU:HD11	46:WD:314:SER:HB2	1.86	0.58
5:2E:19:ARG:NH1	5:2E:23:THR:OG1	2.37	0.58
21:2L:330:LYS:HD3	21:2L:339:VAL:HG22	1.85	0.58
9:2N:248:ASN:OD1	9:2N:249:LEU:HD12	2.03	0.58
10:2Q:2:PHE:O	10:2Q:7:GLN:NE2	2.36	0.58
13:2U:109:SER:OG	13:2U:152:ILE:O	2.21	0.58
14:2V:24:ARG:HH12	45:ME:430:LYS:HG3	1.69	0.58
10:3Q:178:PRO:HG2	10:3Q:181:PHE:HD2	1.69	0.58
13:3U:513:LYS:HD2	13:3U:526:ARG:HB3	1.84	0.58
10:4Q:113:ARG:HH21	10:4Q:115:LYS:HD2	1.69	0.58
15:4X:3:ARG:NH2	45:LI:247:ALA:O	2.37	0.58
36:5B:127:GLU:HB3	46:NH:276:ARG:HH12	1.68	0.58
10:6Q:22:LEU:HB2	10:6Q:25:TRP:HB2	1.84	0.58
34:6R:593:ASP:OD2	34:6R:598:TRP:N	2.37	0.58
45:AG:179:THR:HG21	46:AH:246:LEU:HD22	1.85	0.58
45:AK:226:ASN:ND2	45:AK:367:ASP:OD2	2.37	0.58
46:BB:25:SER:O	46:BB:29:GLY:N	2.37	0.58
45:BE:70:LEU:HD12	45:BE:145:THR:HG22	1.86	0.58
45:CE:18:ASN:HD21	45:CE:78:VAL:HG22	1.69	0.58
46:CF:213:ARG:HH22	46:CF:297:LYS:HB3	1.68	0.58
46:DB:222:TYR:O	46:DB:226:ASN:ND2	2.29	0.58
45:EA:76:ASP:OD1	45:EA:79:ARG:NH2	2.36	0.58
46:EN:132:GLY:HA3	46:EN:162:ARG:HE	1.69	0.58
46:GN:134:GLN:HA	46:GN:165:GLU:HB3	1.85	0.58
45:HM:175:PRO:HG2	45:HM:304:LYS:HD2	1.85	0.58
45:II:98:ASP:OD1	45:II:99:ALA:N	2.37	0.58
46:JF:211:CYS:HB3	46:JF:217:LEU:HD21	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KA:11:GLN:HG3	45:KA:74:VAL:HG11	1.85	0.58
46:KB:222:TYR:HA	46:KB:225:LEU:HD12	1.85	0.58
45:LE:184:PRO:O	45:LE:188:ILE:HG12	2.04	0.58
45:LK:195:LEU:HD23	45:LK:196:GLU:HG3	1.86	0.58
45:MM:174:SER:OG	45:MM:207:GLU:OE1	2.22	0.58
45:OC:292:THR:HG21	45:OC:331:SER:HB3	1.85	0.58
45:OE:387:VAL:HA	45:OE:390:ARG:HG2	1.86	0.58
46:OF:122:LYS:NZ	46:PF:291:GLN:HB3	2.19	0.58
45:OG:390:ARG:HG3	45:OG:391:LEU:HD12	1.86	0.58
46:OH:334:GLN:HE22	46:OH:348:ASN:H	1.51	0.58
46:QH:204:ASN:OD1	49:QH:501:GDP:N2	2.36	0.58
45:QK:88:HIS:CE1	45:QK:90:GLU:HB2	2.38	0.58
46:RD:204:ASN:ND2	49:RD:501:GDP:N3	2.48	0.58
45:RK:108:TYR:O	45:RK:112:LYS:NZ	2.37	0.58
46:RL:60:VAL:HG21	46:RL:86:ARG:HG3	1.86	0.58
46:TD:210:ILE:O	46:TD:214:THR:OG1	2.17	0.58
45:TK:402:ARG:NH1	45:TK:405:VAL:HB	2.19	0.58
45:UE:64:ARG:NH1	45:UE:129:CYS:SG	2.76	0.58
45:VK:55:GLU:HG3	45:VK:57:GLY:H	1.69	0.58
46:VN:2:ARG:H	46:VN:129:CYS:HB3	1.68	0.58
46:WH:269:GLY:HA3	46:WH:299:MET:HE2	1.86	0.58
16:1B:303:VAL:HG23	46:KD:280:GLN:HG2	1.85	0.57
26:1W:142:GLN:HA	26:1W:145:GLU:HG3	1.86	0.57
16:2B:177:LEU:HD22	16:2B:181:LYS:HG2	1.86	0.57
4:2D:50:SER:OG	4:2D:51:GLU:OE1	2.21	0.57
10:2Q:141:ARG:NH1	10:2Q:147:ASN:OD1	2.36	0.57
12:2T:223:ARG:NH1	45:MG:196:GLU:OE2	2.37	0.57
37:5E:209:ARG:NH2	45:LC:424:ASP:OD1	2.36	0.57
46:BB:215:LEU:HD21	46:BB:273:LEU:HD12	1.86	0.57
46:BF:7:ILE:HB	46:BF:135:ILE:HG12	1.86	0.57
46:BH:52:ASN:OD1	46:BH:62:ARG:NH2	2.37	0.57
46:BN:52:ASN:O	46:BN:60:VAL:N	2.37	0.57
46:CB:73:MET:HA	46:CB:76:VAL:HG12	1.84	0.57
46:CB:156:ARG:NH1	46:CB:159:TYR:O	2.37	0.57
45:CC:88:HIS:HA	45:DC:280:LYS:HZ2	1.69	0.57
46:DB:245:GLN:NE2	45:DC:223:THR:OG1	2.37	0.57
46:DD:139:LEU:HD13	46:DD:168:SER:HB3	1.86	0.57
46:DJ:250:LEU:HA	46:DJ:253:LEU:HD12	1.86	0.57
46:DL:52:ASN:OD1	46:DL:62:ARG:NH2	2.37	0.57
45:DM:207:GLU:HA	45:DM:210:TYR:HB2	1.86	0.57
45:EA:11:GLN:HG3	45:EA:74:VAL:HG11	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EH:324:LYS:HG3	45:EI:221:ARG:HA	1.86	0.57
46:FD:44:LEU:HD12	46:FD:47:ILE:HD12	1.85	0.57
45:FE:322:ASP:OD1	45:FE:373:ARG:NH1	2.37	0.57
46:FJ:58:ARG:NH1	46:GJ:280:GLN:OE1	2.37	0.57
45:FM:188:ILE:HD12	45:FM:425:LEU:HD11	1.86	0.57
45:HK:90:GLU:OE2	45:HK:121:ARG:NH1	2.37	0.57
46:JF:371:SER:O	46:JF:422:TYR:OH	2.16	0.57
46:KD:326:VAL:O	46:KD:330:MET:HG2	2.04	0.57
46:KL:309:ARG:NH1	46:KL:426:GLN:O	2.37	0.57
46:LB:193:VAL:O	46:LB:264:HIS:NE2	2.30	0.57
46:LF:275:SER:OG	46:LF:276:ARG:N	2.37	0.57
45:NG:210:TYR:HE1	45:NG:227:LEU:HD21	1.67	0.57
45:OM:174:SER:HB3	45:OM:207:GLU:OE2	2.04	0.57
46:ON:221:THR:HG23	46:ON:223:GLY:H	1.69	0.57
46:PB:169:VAL:HG22	46:PB:202:ILE:HB	1.86	0.57
46:PJ:19:LYS:NZ	46:PJ:223:GLY:O	2.33	0.57
46:QB:207:LEU:HB3	46:QB:225:LEU:HD22	1.86	0.57
46:QJ:350:LYS:NZ	46:QJ:352:SER:OG	2.32	0.57
45:RG:140:SER:OG	47:RG:501:GTP:O2B	2.19	0.57
46:RL:237:THR:HG23	46:RL:241:ARG:HH21	1.69	0.57
46:TJ:200:MET:SD	46:TJ:268:ILE:HD13	2.44	0.57
45:UA:320:ARG:HG3	45:UA:356:ASN:HB3	1.86	0.57
45:UM:140:SER:OG	47:UM:501:GTP:O2B	2.21	0.57
46:UN:309:ARG:NH2	46:UN:426:GLN:O	2.32	0.57
45:VA:116:ASP:OD1	45:VA:117:LEU:N	2.37	0.57
45:VM:112:LYS:HA	45:VM:115:VAL:HG12	1.85	0.57
45:VM:399:TYR:O	45:VM:402:ARG:NH1	2.35	0.57
46:WB:164:MET:HB3	46:WB:197:ASP:H	1.69	0.57
1:1A:136:ASN:HD22	46:AF:245:GLN:HE22	1.50	0.57
12:1T:93:LEU:HD21	12:1T:97:ARG:HH22	1.69	0.57
1:2A:36:ARG:NH1	46:MJ:355:ASP:OD1	2.37	0.57
21:2L:778:ILE:HG23	21:2L:785:LEU:HD11	1.86	0.57
5:3E:61:LYS:HE3	46:DN:37:HIS:HB2	1.85	0.57
10:3Q:57:ASN:HB2	10:3Q:158:ALA:HB2	1.86	0.57
13:3U:448:HIS:NE2	13:3U:468:SER:HB2	2.19	0.57
34:4R:106:ASN:OD1	46:BH:279:GLN:NE2	2.35	0.57
34:4R:184:ASP:OD2	34:4R:185:SER:N	2.37	0.57
37:5F:91:ASN:OD1	37:5F:92:GLN:N	2.37	0.57
10:6Q:71:ILE:HG21	10:6Q:167:PHE:HE2	1.69	0.57
45:BE:223:THR:HG22	46:BF:322:SER:HB2	1.86	0.57
46:BF:64:ILE:HD13	46:BF:119:VAL:HG13	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BH:6:HIS:HD2	46:BH:134:GLN:HG3	1.69	0.57
45:BM:135:PHE:HB2	45:BM:166:LYS:HG3	1.85	0.57
46:CF:10:GLY:O	46:CF:14:ASN:ND2	2.37	0.57
45:CG:258:ASN:HD21	46:CH:178:THR:HG23	1.69	0.57
46:DB:3:GLU:HG3	46:DB:62:ARG:NH1	2.19	0.57
45:EA:135:PHE:HB2	45:EA:166:LYS:HG2	1.86	0.57
46:ED:245:GLN:O	45:EE:11:GLN:NE2	2.37	0.57
46:EH:73:MET:HA	46:EH:76:VAL:HG12	1.85	0.57
45:FG:288:VAL:HG11	45:FG:327:ASP:HB3	1.86	0.57
45:FK:292:THR:HG21	45:FK:331:SER:HB3	1.86	0.57
46:GN:330:MET:HB3	46:GN:349:ILE:HG21	1.86	0.57
45:HM:271:SER:HA	45:HM:302:MET:HG2	1.86	0.57
46:IL:238:CYS:SG	46:IL:239:CYS:N	2.78	0.57
46:IN:257:LEU:HD11	46:IN:314:SER:HB2	1.86	0.57
45:JE:244:PHE:HB2	45:JE:356:ASN:HD21	1.68	0.57
45:JM:224:TYR:HA	45:JM:227:LEU:HD13	1.85	0.57
46:KH:86:ARG:HD2	46:KH:88:ASP:HB2	1.86	0.57
46:KJ:274:THR:HG21	46:KJ:282:ARG:HD2	1.85	0.57
45:LA:112:LYS:HA	45:LA:115:VAL:HG22	1.86	0.57
45:LK:71:GLU:HG3	46:LL:247:ASN:HD21	1.69	0.57
46:PJ:10:GLY:O	46:PJ:14:ASN:ND2	2.37	0.57
46:QJ:375:GLN:HE22	46:QJ:419:VAL:HA	1.70	0.57
46:SD:27:GLU:HA	46:SD:359:LYS:HD2	1.85	0.57
45:SM:242:LEU:HD11	45:SM:252:ILE:HG13	1.86	0.57
45:TI:226:ASN:ND2	45:TI:367:ASP:OD2	2.36	0.57
46:UH:350:LYS:NZ	46:UH:351:SER:O	2.32	0.57
45:VA:70:LEU:HB3	45:VA:97:GLU:O	2.04	0.57
46:VB:207:LEU:HD22	46:VB:228:LEU:HD11	1.85	0.57
46:WB:207:LEU:HD22	46:WB:228:LEU:HD11	1.87	0.57
46:WH:130:LEU:HG	46:WH:162:ARG:HD2	1.86	0.57
45:WM:121:ARG:HH22	45:WM:125:LEU:HD21	1.67	0.57
5:0E:121:ARG:O	34:7R:579:ASN:ND2	2.34	0.57
13:1U:84:ILE:HG12	13:1U:105:ILE:HD13	1.86	0.57
13:1U:150:ASN:ND2	13:1U:196:TYR:O	2.37	0.57
14:2V:113:ARG:N	45:LE:196:GLU:OE2	2.33	0.57
5:3E:103:ALA:HB3	5:3E:164:TRP:HH2	1.68	0.57
12:3T:94:ASP:OD1	12:3T:95:GLU:N	2.38	0.57
13:3U:53:GLY:H	13:3U:87:TRP:HH2	1.52	0.57
37:5F:46:LEU:HG	37:5F:47:GLU:H	1.70	0.57
10:5Q:102:ARG:HD2	10:5Q:118:ILE:HG12	1.86	0.57
46:AB:135:ILE:HB	46:AB:166:THR:HG22	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AD:293:MET:HG3	46:AD:367:PHE:HB2	1.85	0.57
45:BK:188:ILE:HG12	45:BK:421:ALA:HB1	1.86	0.57
45:CA:121:ARG:CZ	45:CA:124:LYS:HE2	2.35	0.57
45:CA:349:THR:HG23	46:CB:179:VAL:HA	1.85	0.57
45:CC:70:LEU:HA	45:CC:95:GLY:HA3	1.86	0.57
45:CM:349:THR:OG1	46:CN:176:SER:OG	2.18	0.57
46:DB:186:THR:HA	46:DB:189:VAL:HG12	1.85	0.57
46:DL:318:ARG:HE	46:DL:358:PRO:HG3	1.70	0.57
46:ED:238:CYS:SG	46:ED:239:CYS:N	2.76	0.57
45:GA:213:CYS:HA	45:GA:217:LEU:HD23	1.85	0.57
45:IC:288:VAL:HG11	45:IC:327:ASP:HB3	1.86	0.57
45:IK:317:MET:HB3	45:IK:377:MET:HG3	1.86	0.57
45:KE:75:ILE:HG22	45:KE:79:ARG:HE	1.68	0.57
45:KE:328:VAL:O	45:KE:332:ILE:HG12	2.04	0.57
45:LE:286:LEU:N	45:LE:290:GLU:OE2	2.33	0.57
45:LE:348:PRO:HB2	46:LH:384:GLN:HE21	1.69	0.57
45:LG:289:ALA:O	45:LG:293:ASN:ND2	2.33	0.57
45:LI:413:MET:HG3	45:LI:417:GLU:HG3	1.85	0.57
45:MK:11:GLN:NE2	46:ML:245:GLN:O	2.38	0.57
45:MM:38:SER:OG	45:MM:39:ASP:N	2.36	0.57
46:ND:371:SER:O	46:ND:422:TYR:OH	2.23	0.57
45:NM:11:GLN:HG3	45:NM:74:VAL:HG11	1.86	0.57
45:OA:3:GLU:OE2	45:OA:131:GLY:N	2.36	0.57
46:OB:148:GLY:O	46:OB:152:ILE:HG12	2.05	0.57
45:OG:101:ASN:HA	45:OG:144:GLY:H	1.69	0.57
45:PC:241:SER:OG	45:PC:250:VAL:O	2.23	0.57
45:PE:203:MET:HG3	45:PE:384:ILE:HD11	1.86	0.57
45:QC:88:HIS:CE1	45:QC:90:GLU:HG2	2.38	0.57
45:QI:140:SER:OG	47:QI:501:GTP:O2B	2.22	0.57
45:QM:226:ASN:OD1	45:QM:227:LEU:N	2.37	0.57
46:RF:257:LEU:HD11	46:RF:314:SER:HB2	1.87	0.57
46:TF:200:MET:HE3	46:TF:268:ILE:HD13	1.87	0.57
46:TL:345:ILE:HA	45:TM:398:MET:HE1	1.85	0.57
46:VB:193:VAL:O	46:VB:264:HIS:NE2	2.33	0.57
46:VF:178:THR:HG22	46:VF:180:VAL:H	1.68	0.57
3:1C:73:PRO:HA	46:EL:362:LYS:HE3	1.87	0.57
21:1L:888:VAL:HG21	45:CC:279:GLU:HG2	1.86	0.57
21:2L:377:ARG:NH2	21:2L:454:ASP:OD2	2.37	0.57
21:2L:526:ARG:NH1	21:2L:529:GLU:OE2	2.34	0.57
12:2T:8:GLU:OE2	12:2T:38:LYS:NZ	2.36	0.57
16:3B:93:ILE:HD11	16:3B:171:ALA:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:4Q:60:THR:HG22	10:4Q:62:PRO:HD2	1.85	0.57
40:6G:165:THR:O	40:6G:169:GLN:NE2	2.37	0.57
45:BM:288:VAL:HG11	45:BM:327:ASP:HB3	1.85	0.57
46:BN:242:PHE:HB3	46:BN:356:ILE:HD13	1.86	0.57
46:DB:16:ILE:HD12	46:DB:229:VAL:HG21	1.86	0.57
46:GH:55:THR:HG23	46:HH:283:ALA:HA	1.86	0.57
45:HE:89:PRO:HD3	45:IE:283:HIS:ND1	2.19	0.57
45:HG:292:THR:HG21	45:HG:331:SER:HB3	1.86	0.57
45:IC:259:LEU:HD11	45:IC:316:SER:HB2	1.85	0.57
46:IF:68:LEU:HD12	46:IF:97:ALA:HB2	1.86	0.57
45:IM:120:ASP:O	45:IM:124:LYS:HG2	2.05	0.57
46:JH:1:MET:N	46:JH:3:GLU:OE2	2.32	0.57
46:KH:95:THR:OG1	46:KH:108:GLU:OE1	2.21	0.57
45:LG:11:GLN:NE2	46:LH:245:GLN:O	2.36	0.57
45:MC:165:SER:HB2	45:MC:256:GLN:HE22	1.68	0.57
45:ME:328:VAL:HG11	45:ME:353:VAL:HG21	1.86	0.57
46:NH:178:THR:HB	46:NH:181:GLU:HG3	1.86	0.57
46:NJ:284:LEU:HD13	46:NJ:289:LEU:HD11	1.85	0.57
46:NN:64:ILE:HD13	46:NN:119:VAL:HG13	1.87	0.57
46:OB:48:ASN:O	46:OB:62:ARG:NH2	2.37	0.57
46:OJ:49:VAL:HG11	46:OJ:241:ARG:HG2	1.86	0.57
46:OJ:309:ARG:HH21	46:OJ:342:VAL:HA	1.70	0.57
46:ON:6:HIS:HE1	46:ON:8:GLN:HB3	1.67	0.57
46:ON:193:VAL:O	46:ON:264:HIS:NE2	2.25	0.57
45:PC:398:MET:HE1	46:PD:345:ILE:HA	1.86	0.57
46:QF:285:THR:HG22	46:QF:287:PRO:HD2	1.85	0.57
46:RF:62:ARG:HH12	46:RF:127:CYS:HB3	1.69	0.57
46:RJ:136:THR:HG22	46:RJ:167:PHE:HB2	1.86	0.57
45:SG:240:ALA:HB1	45:SG:320:ARG:HH21	1.67	0.57
46:SL:207:LEU:HB3	46:SL:225:LEU:HD22	1.86	0.57
45:TC:116:ASP:OD1	45:TC:117:LEU:N	2.37	0.57
46:TD:31:ASP:OD1	46:TD:32:PRO:HD2	2.04	0.57
46:TL:213:ARG:HE	46:TL:297:LYS:HZ2	1.52	0.57
45:UE:399:TYR:OH	45:UE:415:GLU:OE2	2.21	0.57
46:UN:86:ARG:NH1	46:VN:281:TYR:HB2	2.20	0.57
45:VK:407:TRP:CZ3	46:VL:255:VAL:HA	2.39	0.57
46:VL:67:ASP:OD1	46:VL:68:LEU:N	2.37	0.57
45:VM:216:ASN:ND2	45:VM:275:ILE:O	2.29	0.57
45:WI:242:LEU:HD11	45:WI:252:ILE:HG12	1.86	0.57
1:0A:39:TYR:HE1	45:MA:78:VAL:HG22	1.69	0.57
4:0D:81:ARG:NH2	46:EB:357:PRO:O	2.36	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:1J:330:LYS:O	46:HN:77:ARG:NH2	2.36	0.57
5:2E:182:GLU:HG3	5:2E:186:LYS:HZ2	1.69	0.57
9:2N:44:SER:O	9:2N:47:LYS:HG2	2.05	0.57
9:2N:65:GLU:O	9:2N:202:ARG:NH2	2.37	0.57
12:2T:256:ASN:OD1	12:2T:257:GLN:N	2.37	0.57
31:3I:274:THR:HG23	46:FJ:94:GLN:HE22	1.69	0.57
10:3Q:100:ARG:NH2	45:AG:434:GLU:OE2	2.38	0.57
41:6H:251:ASP:H	46:FF:360:GLY:HA2	1.70	0.57
10:6Q:12:SER:OG	10:6Q:164:ARG:NH1	2.36	0.57
45:AE:283:HIS:HD1	45:ME:89:PRO:HD3	1.69	0.57
45:AK:377:MET:HE2	45:AK:379:SER:HB3	1.86	0.57
46:AN:213:ARG:HE	46:AN:297:LYS:HD3	1.70	0.57
46:BB:178:THR:HG22	46:BB:180:VAL:H	1.70	0.57
46:DF:136:THR:HG22	46:DF:167:PHE:HB2	1.87	0.57
45:DK:132:LEU:HD23	45:DK:164:LYS:HZ3	1.69	0.57
46:FL:135:ILE:HB	46:FL:166:THR:HG22	1.85	0.57
45:GE:398:MET:HG2	46:GF:345:ILE:HG22	1.87	0.57
45:HA:407:TRP:HH2	46:HB:258:ILE:HB	1.68	0.57
46:HN:273:LEU:H	46:HN:292:GLN:HE22	1.52	0.57
45:II:26:LEU:HD21	45:II:364:PRO:HD2	1.86	0.57
45:KA:2:ARG:NH2	45:KA:242:LEU:O	2.37	0.57
45:KC:439:THR:HG23	46:KF:391:ARG:HD3	1.86	0.57
45:KI:56:THR:HG23	45:KI:58:ALA:H	1.69	0.57
46:LL:260:PHE:HB2	46:LL:263:LEU:HD13	1.86	0.57
46:ND:91:VAL:HG21	46:ND:116:VAL:HG12	1.85	0.57
46:NL:58:ARG:NH2	46:OL:280:GLN:O	2.37	0.57
45:NM:271:SER:OG	45:NM:301:MET:SD	2.63	0.57
45:PA:336:LYS:NZ	45:PA:348:PRO:O	2.37	0.57
46:QF:114:ASP:OD1	46:QF:115:SER:N	2.38	0.57
46:QF:125:GLU:OE2	46:QF:159:TYR:OH	2.22	0.57
45:RA:329:ASN:HA	45:RA:332:ILE:HG12	1.87	0.57
46:RD:222:TYR:O	46:RD:226:ASN:ND2	2.37	0.57
46:RJ:309:ARG:NH2	46:RJ:426:GLN:O	2.37	0.57
45:SA:211:ASP:OD1	45:SA:214:ARG:NH2	2.37	0.57
45:SA:346:TRP:CH2	46:SB:390:ARG:HG2	2.39	0.57
46:SH:55:THR:HG23	46:TH:283:ALA:HA	1.85	0.57
46:SN:164:MET:H	46:SN:197:ASP:HB2	1.68	0.57
46:TB:49:VAL:HG21	46:TB:241:ARG:HG2	1.86	0.57
46:TB:345:ILE:HG22	46:TB:348:ASN:HB3	1.86	0.57
46:TJ:86:ARG:HH12	46:UJ:281:TYR:HB3	1.70	0.57
45:TK:81:GLY:O	45:TK:84:ARG:NH1	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TN:222:TYR:O	46:TN:226:ASN:ND2	2.37	0.57
46:UD:252:LYS:O	46:UD:256:ASN:ND2	2.38	0.57
45:UG:69:ASP:OD1	45:UG:70:LEU:N	2.37	0.57
45:UM:69:ASP:OD1	45:UM:70:LEU:N	2.38	0.57
45:WA:399:TYR:O	45:WA:402:ARG:NH2	2.37	0.57
46:WB:294:PHE:HE2	46:WB:333:VAL:HG11	1.69	0.57
9:0N:264:ARG:NH1	45:KK:245:ASP:OD2	2.37	0.57
10:1Q:6:PHE:HD2	45:WC:117:LEU:HD23	1.68	0.57
16:2B:149:ASN:O	16:2B:152:SER:OG	2.20	0.57
5:3E:46:ASP:OD1	5:3E:47:GLU:N	2.38	0.57
13:3U:68:LYS:HG3	13:3U:69:TYR:H	1.68	0.57
34:4R:230:GLU:HA	34:4R:233:GLU:HG2	1.87	0.57
36:5C:102:TYR:HD1	45:KI:393:HIS:HD2	1.52	0.57
37:5E:120:GLU:HG3	37:5E:121:GLU:HG2	1.86	0.57
34:7R:126:THR:HG21	34:7R:147:ARG:HE	1.70	0.57
46:BH:69:GLU:HG2	46:BH:71:GLY:H	1.69	0.57
46:CH:113:ILE:HD13	46:CH:150:LEU:HD22	1.87	0.57
45:CM:91:GLN:HA	45:CM:121:ARG:HD3	1.87	0.57
46:DB:107:THR:HG23	46:DB:108:GLU:OE1	2.05	0.57
46:DD:31:ASP:OD1	46:DD:35:THR:N	2.31	0.57
46:DD:52:ASN:OD1	46:DD:62:ARG:NH2	2.37	0.57
46:DD:73:MET:HA	46:DD:76:VAL:HG12	1.85	0.57
46:EJ:294:PHE:CD2	46:EJ:333:VAL:HG21	2.39	0.57
45:FM:284:GLU:HG3	45:FM:286:LEU:HD22	1.86	0.57
45:GA:31:GLN:NE2	45:GA:35:GLN:O	2.37	0.57
45:GI:204:LEU:HD13	45:GI:231:ILE:HD12	1.86	0.57
45:GK:192:HIS:ND1	45:GK:424:ASP:OD2	2.38	0.57
45:IA:48:ALA:HB1	45:IA:243:ARG:HB2	1.86	0.57
45:IE:64:ARG:NH1	45:IE:129:CYS:SG	2.78	0.57
46:IF:148:GLY:O	46:IF:152:ILE:HG12	2.05	0.57
46:IL:171:PRO:HB3	46:IL:181:GLU:OE2	2.04	0.57
46:LB:334:GLN:HE22	46:LB:348:ASN:H	1.53	0.57
45:LC:147:SER:HB2	45:LC:190:SER:HB3	1.87	0.57
45:LK:278:ALA:HA	45:LK:281:ALA:HB3	1.85	0.57
46:NB:139:LEU:HD11	46:NB:168:SER:HB3	1.86	0.57
45:NG:132:LEU:HB3	45:NG:164:LYS:HE3	1.87	0.57
46:NH:1:MET:N	46:NH:48:ASN:OD1	2.38	0.57
45:NI:69:ASP:OD1	45:NI:70:LEU:N	2.35	0.57
45:NI:346:TRP:O	46:NL:391:ARG:NH1	2.38	0.57
45:OA:208:ALA:HA	45:OA:304:LYS:HE3	1.87	0.57
46:OF:328:GLU:O	46:OF:332:ASN:ND2	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PE:71:GLU:OE1	45:PE:73:THR:OG1	2.23	0.57
45:PI:211:ASP:OD1	45:PI:215:ARG:NE	2.37	0.57
46:QH:322:SER:O	45:QI:221:ARG:NH2	2.32	0.57
45:QI:26:LEU:HD13	45:QI:363:VAL:HG12	1.86	0.57
45:QI:188:ILE:HD12	45:QI:425:LEU:HD11	1.85	0.57
45:RK:69:ASP:OD1	45:RK:70:LEU:N	2.38	0.57
45:RM:205:ASP:HB3	45:RM:303:ALA:HA	1.86	0.57
46:SB:260:PHE:HB2	46:SB:263:LEU:HD23	1.84	0.57
46:SJ:130:LEU:O	46:SJ:162:ARG:NH2	2.37	0.57
46:SJ:135:ILE:HG13	46:SJ:152:ILE:HD11	1.87	0.57
46:SJ:372:THR:HA	46:SJ:422:TYR:HE1	1.69	0.57
45:SM:210:TYR:CZ	45:SM:227:LEU:HD11	2.38	0.57
45:SM:316:SER:HA	45:SM:352:LYS:HB2	1.86	0.57
45:SM:360:PRO:O	45:SM:370:LYS:NZ	2.33	0.57
45:TM:260:VAL:HG13	46:TN:397:TRP:HZ2	1.69	0.57
45:VE:55:GLU:HG3	45:VE:57:GLY:H	1.70	0.57
45:VK:3:GLU:OE2	45:VK:131:GLY:N	2.36	0.57
46:WH:247:ASN:O	46:WH:252:LYS:NZ	2.35	0.57
45:WK:76:ASP:OD2	46:WL:46:ARG:NH2	2.37	0.57
46:WN:113:ILE:HD13	46:WN:150:LEU:HD22	1.87	0.57
14:OV:94:GLY:HA2	46:LN:262:ARG:HG3	1.87	0.57
9:2N:188:MET:C	9:2N:193:ARG:HH12	2.07	0.57
13:3U:42:HIS:HD2	13:3U:45:SER:H	1.53	0.57
39:6F:84:ILE:O	46:JF:320:ARG:NH1	2.37	0.57
40:6G:183:GLY:O	40:6G:185:TYR:N	2.38	0.57
45:AA:284:GLU:HG2	45:AA:286:LEU:HD22	1.85	0.57
46:AB:268:ILE:HG22	46:AB:368:VAL:HG22	1.84	0.57
46:AF:278:SER:HA	46:MF:86:ARG:CZ	2.35	0.57
45:BA:164:LYS:O	45:BA:166:LYS:NZ	2.38	0.57
46:BF:148:GLY:O	46:BF:152:ILE:HG12	2.03	0.57
45:BG:80:THR:O	45:BG:84:ARG:NH2	2.36	0.57
45:CM:256:GLN:O	45:CM:260:VAL:HG12	2.04	0.57
46:DB:323:THR:HA	46:DB:326:VAL:HB	1.87	0.57
45:DE:174:SER:HB3	45:DE:177:VAL:O	2.03	0.57
45:DE:241:SER:OG	45:DE:250:VAL:O	2.16	0.57
46:DF:67:ASP:OD1	46:DF:68:LEU:N	2.37	0.57
45:EK:69:ASP:OD1	45:EK:70:LEU:N	2.37	0.57
45:GK:387:VAL:HA	45:GK:390:ARG:HG2	1.86	0.57
46:JB:86:ARG:HG2	46:JB:88:ASP:H	1.70	0.57
46:JD:156:ARG:NH2	46:JD:197:ASP:OD1	2.38	0.57
46:KN:207:LEU:HB3	46:KN:225:LEU:HD22	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LF:68:LEU:HD12	46:LF:97:ALA:HB2	1.85	0.57
45:LK:206:ASN:OD1	47:LK:501:GTP:N2	2.37	0.57
45:MA:68:LEU:HD22	45:MA:153:LEU:HD11	1.87	0.57
46:MF:342:VAL:HG13	46:MF:345:ILE:HG22	1.86	0.57
45:MI:309:HIS:ND1	45:MI:386:GLU:OE2	2.30	0.57
45:NC:254:GLU:OE1	46:NF:99:ASN:ND2	2.37	0.57
46:NN:7:ILE:HG23	46:NN:135:ILE:HG12	1.85	0.57
46:OB:109:GLY:O	46:OB:113:ILE:HB	2.05	0.57
45:PE:68:LEU:HD21	45:PE:118:CYS:HB2	1.85	0.57
46:RB:117:LEU:HD21	46:RB:121:ARG:HH22	1.68	0.57
46:RB:386:THR:OG1	46:RB:390:ARG:NH1	2.38	0.57
45:SA:210:TYR:HE1	45:SA:227:LEU:HD11	1.69	0.57
45:SE:206:ASN:OD1	47:SE:501:GTP:N2	2.37	0.57
45:SG:7:ILE:HB	45:SG:137:VAL:HG12	1.87	0.57
46:SL:68:LEU:HB2	46:SL:147:MET:HE1	1.86	0.57
46:TB:134:GLN:HA	46:TB:165:GLU:HB3	1.86	0.57
46:TD:372:THR:HA	46:TD:422:TYR:HE1	1.70	0.57
46:TF:54:ALA:HA	46:UF:283:ALA:HB2	1.87	0.57
45:TI:116:ASP:OD1	45:TI:117:LEU:N	2.38	0.57
45:TM:286:LEU:HD13	45:TM:371:VAL:HG23	1.87	0.57
46:UN:45:GLU:HB3	46:UN:46:ARG:HH11	1.69	0.57
45:VA:71:GLU:HB3	45:VA:98:ASP:HB3	1.86	0.57
46:VD:10:GLY:O	46:VD:14:ASN:ND2	2.38	0.57
46:WJ:5:VAL:HG12	46:WJ:62:ARG:HD3	1.87	0.57
46:WL:287:PRO:HA	46:WL:329:GLN:HE22	1.69	0.57
16:2B:258:LYS:HG2	45:KK:279:GLU:HB3	1.86	0.57
25:2R:347:LYS:HB3	45:CG:39:ASP:HB2	1.86	0.57
21:3L:139:ILE:HD12	21:3L:189:LEU:HD13	1.85	0.57
34:4R:354:ALA:HB3	45:CE:39:ASP:HB2	1.86	0.57
36:5C:125:GLN:O	46:NL:276:ARG:NH1	2.37	0.57
41:6H:182:SER:HB2	45:FA:32:PRO:HG3	1.86	0.57
34:7R:242:ASN:HB2	45:BA:57:GLY:HA3	1.87	0.57
45:AM:271:SER:HB2	45:AM:377:MET:HB3	1.87	0.57
46:BD:173:PRO:HD2	46:BD:380:ARG:HH22	1.70	0.57
45:CA:51:THR:O	45:CA:64:ARG:NH2	2.30	0.57
46:CD:2:ARG:NH2	45:CE:71:GLU:OE2	2.36	0.57
45:DC:51:THR:HG21	45:DC:243:ARG:HB3	1.87	0.57
45:DC:175:PRO:HG3	45:DC:390:ARG:HH21	1.70	0.57
45:EA:7:ILE:N	45:EA:136:LEU:O	2.32	0.57
46:ED:11:GLN:HB3	46:ED:72:THR:HG21	1.87	0.57
45:GA:133:GLN:HB3	45:GA:252:ILE:HG21	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GB:317:PHE:HE2	46:GB:326:VAL:HG13	1.70	0.57
46:GL:285:THR:OG1	46:GL:288:GLU:OE1	2.22	0.57
45:HA:287:SER:N	45:HA:290:GLU:OE2	2.38	0.57
45:HI:322:ASP:OD1	45:HI:373:ARG:NH1	2.35	0.57
45:HM:133:GLN:HG3	45:HM:252:ILE:HD12	1.87	0.57
45:IC:18:ASN:O	45:IC:22:GLU:HG3	2.05	0.57
46:IN:5:VAL:HG12	46:IN:62:ARG:HD3	1.86	0.57
46:JB:73:MET:HE3	46:JB:92:PHE:HB3	1.86	0.57
45:JI:406:HIS:HA	45:JI:409:VAL:HG12	1.87	0.57
46:JL:12:CYS:O	46:JL:16:ILE:HG12	2.05	0.57
46:KF:5:VAL:HG12	46:KF:62:ARG:HD3	1.87	0.57
45:KK:316:SER:HB3	45:KK:378:ILE:HB	1.86	0.57
45:LA:184:PRO:O	45:LA:188:ILE:HG12	2.04	0.57
46:LD:221:THR:HG23	46:LD:223:GLY:H	1.68	0.57
46:LF:91:VAL:HG21	46:LF:116:VAL:HB	1.86	0.57
46:MN:64:ILE:HG13	46:MN:120:VAL:HG12	1.87	0.57
45:NE:163:LYS:HE3	45:NE:163:LYS:HA	1.85	0.57
46:OB:11:GLN:NE2	49:OB:501:GDP:O1A	2.37	0.57
46:PB:68:LEU:HD23	46:PB:97:ALA:HB2	1.87	0.57
45:QA:263:PRO:HG2	45:QA:264:ARG:NH1	2.19	0.57
45:QA:346:TRP:HZ2	45:QA:439:THR:HB	1.68	0.57
45:QM:140:SER:OG	47:QM:501:GTP:O2B	2.21	0.57
45:RA:284:GLU:HG3	45:RA:286:LEU:HD22	1.86	0.57
45:RA:352:LYS:HZ1	46:RB:178:THR:HG23	1.70	0.57
46:RB:6:HIS:NE2	46:RB:8:GLN:OE1	2.36	0.57
46:SN:319:GLY:N	46:SN:354:CYS:O	2.37	0.57
45:TC:69:ASP:OD1	45:TC:70:LEU:N	2.38	0.57
46:TD:139:LEU:HD13	46:TD:168:SER:HB3	1.87	0.57
45:UE:226:ASN:ND2	45:UE:367:ASP:OD2	2.38	0.57
46:UH:178:THR:HB	46:UH:181:GLU:HG3	1.86	0.57
46:UN:186:THR:HA	46:UN:189:VAL:HB	1.86	0.57
45:WG:280:LYS:HE3	45:WG:283:HIS:CE1	2.40	0.57
46:WL:30:ILE:HD11	46:WL:47:ILE:HD11	1.87	0.57
24:1P:192:ASN:HB3	46:TH:360:GLY:HA2	1.85	0.57
10:1Q:36:ARG:HB2	35:4S:204:ILE:HG22	1.87	0.57
11:1S:104:THR:HB	46:MF:156:ARG:HH22	1.70	0.57
13:1U:194:ARG:NH2	46:WF:78:ALA:O	2.35	0.57
23:3O:370:LEU:HB3	23:3O:374:ARG:HH21	1.69	0.57
25:3R:415:VAL:HB	25:3R:441:LEU:HD12	1.85	0.57
36:5B:138:ARG:NH2	46:NH:357:PRO:O	2.38	0.57
34:7R:369:ILE:HD12	34:7R:370:PRO:HD2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:7R:509:ASP:OD2	45:EA:40:ARG:NH2	2.33	0.57
46:AF:135:ILE:HG13	46:AF:152:ILE:HD11	1.87	0.57
46:BF:252:LYS:O	46:BF:256:ASN:ND2	2.38	0.57
45:BG:76:ASP:OD2	46:BH:46:ARG:NH2	2.37	0.57
45:DA:101:ASN:HA	45:DA:144:GLY:H	1.70	0.57
45:DA:269:LEU:HD13	45:DA:384:ILE:HD13	1.86	0.57
46:DB:116:VAL:HA	46:DB:119:VAL:HG22	1.87	0.57
45:DC:396:ASP:OD1	45:DC:422:ARG:NH1	2.38	0.57
45:DM:127:ASP:OD1	45:DM:128:ASN:N	2.38	0.57
45:EA:206:ASN:OD1	47:EA:501:GTP:N2	2.38	0.57
46:EL:186:THR:HG23	46:EL:187:LEU:HD12	1.86	0.57
45:GA:439:THR:OG1	46:GD:390:ARG:NH2	2.38	0.57
45:GE:242:LEU:HD11	45:GE:252:ILE:HG12	1.85	0.57
45:GI:326:LYS:HE2	46:GL:220:PRO:HD2	1.86	0.57
45:HE:326:LYS:HD2	46:HH:220:PRO:HD2	1.86	0.57
45:IG:88:HIS:CE1	45:IG:90:GLU:HG2	2.40	0.57
45:KG:226:ASN:ND2	45:KG:367:ASP:OD2	2.37	0.57
46:KH:309:ARG:NH2	46:KH:426:GLN:O	2.38	0.57
46:LB:1:MET:N	46:LB:3:GLU:OE1	2.31	0.57
46:LD:114:ASP:OD1	46:LD:115:SER:N	2.38	0.57
45:MA:133:GLN:HB3	45:MA:252:ILE:HG21	1.87	0.57
45:MC:76:ASP:OD1	45:MC:79:ARG:NH2	2.27	0.57
45:MC:260:VAL:HB	46:MF:397:TRP:CH2	2.39	0.57
46:NH:27:GLU:OE2	46:NH:241:ARG:NH1	2.36	0.57
46:NJ:156:ARG:HH12	46:NJ:197:ASP:HB2	1.69	0.57
45:OA:238:LEU:HG	45:OA:255:PHE:HE2	1.70	0.57
46:OF:30:ILE:HD11	46:OF:47:ILE:HD11	1.87	0.57
45:OM:319:TYR:HB3	45:OM:323:VAL:HG21	1.87	0.57
46:PB:344:TRP:HB3	46:PB:345:ILE:HD12	1.85	0.57
46:PD:48:ASN:O	46:PD:62:ARG:NH1	2.35	0.57
45:QK:3:GLU:OE1	45:QK:64:ARG:NE	2.38	0.57
46:RB:5:VAL:HG12	46:RB:62:ARG:HD3	1.86	0.57
46:SH:8:GLN:HE22	46:SH:17:GLY:HA3	1.70	0.57
46:SH:58:ARG:NH1	46:TH:280:GLN:OE1	2.38	0.57
45:TA:242:LEU:HD11	45:TA:252:ILE:HG13	1.86	0.57
45:TK:188:ILE:HD12	45:TK:425:LEU:HD11	1.87	0.57
46:TL:248:SER:HA	46:TL:252:LYS:HD2	1.86	0.57
46:UD:248:SER:HA	46:UD:252:LYS:HD2	1.87	0.57
45:VE:195:LEU:HD21	45:VE:264:ARG:HH21	1.70	0.57
46:VJ:309:ARG:HH21	46:VJ:342:VAL:HG23	1.70	0.57
45:VK:69:ASP:OD1	45:VK:70:LEU:N	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:1C:38:PRO:HD2	45:DM:89:PRO:HB3	1.86	0.57
5:1E:118:ARG:NH1	34:4R:530:TYR:OH	2.35	0.57
26:1W:114:ASN:HD22	46:LF:279:GLN:HE21	1.50	0.57
27:2C:143:SER:HB3	27:2C:146:ARG:HB3	1.87	0.57
20:2K:219:GLN:O	20:2K:223:ASN:ND2	2.37	0.57
22:2M:325:ASP:HB3	22:2M:328:ILE:HG12	1.86	0.57
13:2U:436:LYS:NZ	13:2U:437:GLN:OE1	2.30	0.57
1:3A:115:THR:O	1:3A:116:THR:HG22	2.04	0.57
25:3R:410:TRP:CZ3	45:EK:372:MET:HG2	2.40	0.57
13:3U:260:THR:HG23	13:3U:274:GLN:HE21	1.68	0.57
34:5R:354:ALA:HB3	45:CI:39:ASP:HB2	1.85	0.57
34:5R:357:LYS:NZ	34:5R:368:GLN:O	2.36	0.57
45:AA:254:GLU:OE2	46:AD:99:ASN:ND2	2.37	0.57
45:BI:55:GLU:HG3	45:BI:57:GLY:H	1.70	0.57
45:BM:155:GLU:OE1	45:BM:197:HIS:NE2	2.38	0.57
46:CB:181:GLU:HG3	46:CB:182:PRO:HD3	1.86	0.57
46:CD:1:MET:N	46:CD:3:GLU:OE2	2.38	0.57
46:CF:238:CYS:SG	46:CF:239:CYS:N	2.78	0.57
46:DJ:372:THR:HG21	46:DJ:426:GLN:HB2	1.85	0.57
45:EA:272:TYR:HD1	45:EA:376:CYS:HB2	1.68	0.57
45:EG:7:ILE:HB	45:EG:137:VAL:HG12	1.87	0.57
46:GD:392:LYS:HA	46:GD:395:LEU:HD12	1.85	0.57
45:GM:15:GLN:NE2	47:GM:501:GTP:O6	2.37	0.57
45:HA:116:ASP:OD1	45:HA:117:LEU:N	2.38	0.57
45:HC:251:ASP:OD1	45:HC:252:ILE:N	2.37	0.57
45:HE:102:ASN:HB3	45:HE:105:ARG:HG3	1.86	0.57
45:HK:88:HIS:CD2	45:HK:90:GLU:HG2	2.40	0.57
45:JC:422:ARG:O	45:JC:422:ARG:NH1	2.38	0.57
45:JG:272:TYR:HD2	45:JG:275:ILE:HD11	1.70	0.57
45:JK:195:LEU:HD21	45:JK:264:ARG:HH21	1.70	0.57
46:JL:260:PHE:HB2	46:JL:263:LEU:HD13	1.87	0.57
45:JM:192:HIS:ND1	45:JM:424:ASP:OD2	2.38	0.57
45:KC:276:ILE:HD11	45:KC:280:LYS:HD2	1.85	0.57
45:KE:11:GLN:NE2	46:KF:245:GLN:O	2.37	0.57
45:KK:242:LEU:HD11	45:KK:252:ILE:HG12	1.87	0.57
46:KL:51:TYR:HB3	46:KL:59:TYR:HB3	1.87	0.57
46:MH:207:LEU:HB3	46:MH:225:LEU:HD22	1.87	0.57
46:MN:52:ASN:OD1	46:MN:62:ARG:NH2	2.38	0.57
46:NN:294:PHE:CD2	46:NN:333:VAL:HG11	2.40	0.57
45:PA:262:TYR:HB2	45:PA:265:ILE:HG22	1.85	0.57
45:PC:280:LYS:HD2	45:PC:283:HIS:HB2	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PM:215:ARG:NH2	45:PM:300:ASN:OD1	2.38	0.57
45:PM:297:GLU:OE2	45:PM:300:ASN:ND2	2.38	0.57
45:QC:262:TYR:OH	46:QD:391:ARG:O	2.22	0.57
45:QE:262:TYR:OH	46:QF:391:ARG:O	2.23	0.57
46:QL:332:ASN:O	46:QL:336:LYS:NZ	2.34	0.57
46:RJ:169:VAL:HG12	46:RJ:202:ILE:HB	1.87	0.57
45:SG:98:ASP:OD1	45:SG:99:ALA:N	2.38	0.57
45:SM:326:LYS:HE2	46:SN:220:PRO:HB2	1.86	0.57
46:TF:86:ARG:HH21	46:UF:282:ARG:CZ	2.18	0.57
46:VF:10:GLY:O	46:VF:14:ASN:ND2	2.37	0.57
45:WI:174:SER:HB2	45:WI:177:VAL:O	2.04	0.57
16:1B:59:PHE:CE2	45:LC:33:ASP:HB3	2.39	0.56
9:2N:154:SER:OG	9:2N:169:GLN:OE1	2.21	0.56
25:2R:260:LYS:H	25:2R:349:THR:HG21	1.70	0.56
11:2S:145:ILE:HD12	11:2S:188:LEU:HD22	1.87	0.56
15:2X:137:GLN:HB3	15:2X:139:ARG:HH11	1.68	0.56
27:3C:203:LEU:O	27:3C:268:ARG:NH2	2.37	0.56
21:3L:140:LEU:HD21	21:3L:196:ARG:HH22	1.70	0.56
46:AB:237:THR:HG23	46:AB:241:ARG:HE	1.70	0.56
46:AF:113:ILE:HA	46:AF:116:VAL:HG12	1.86	0.56
45:AM:226:ASN:O	45:AM:230:LEU:HG	2.05	0.56
45:CA:79:ARG:O	45:CA:84:ARG:NH1	2.38	0.56
45:DA:434:GLU:OE2	46:DB:391:ARG:NH2	2.38	0.56
46:DN:189:VAL:O	46:DN:193:VAL:HG13	2.05	0.56
46:FB:267:MET:HB3	46:FB:299:MET:HE1	1.87	0.56
45:GA:88:HIS:HB3	45:GA:91:GLN:HG3	1.87	0.56
46:GB:290:THR:HA	46:GB:293:MET:HG2	1.87	0.56
45:GI:116:ASP:OD1	45:GI:117:LEU:N	2.37	0.56
45:HE:192:HIS:ND1	45:HE:424:ASP:OD2	2.37	0.56
46:HF:256:ASN:HD22	46:HF:350:LYS:HD3	1.69	0.56
46:HL:139:LEU:HD13	46:HL:168:SER:HB3	1.86	0.56
45:IA:282:TYR:OH	45:IA:370:LYS:NZ	2.29	0.56
46:IB:3:GLU:HB3	46:IB:62:ARG:HH12	1.70	0.56
46:IB:289:LEU:HD11	46:IB:363:MET:HB3	1.87	0.56
45:JK:147:SER:HB2	45:JK:190:SER:HB2	1.86	0.56
46:JN:181:GLU:HG2	46:JN:182:PRO:HD3	1.86	0.56
45:KE:195:LEU:HD13	45:KE:428:LEU:HD12	1.85	0.56
46:KF:289:LEU:HD13	46:KF:365:VAL:HG23	1.86	0.56
45:LC:351:PHE:HB2	46:LF:176:SER:OG	2.05	0.56
46:MB:204:ASN:OD1	46:MB:205:GLU:N	2.38	0.56
46:MN:289:LEU:HD13	46:MN:365:VAL:HG23	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NA:260:VAL:HB	46:ND:397:TRP:HH2	1.68	0.56
45:NA:349:THR:OG1	46:ND:176:SER:OG	2.22	0.56
45:NG:222:PRO:HD2	46:NH:324:LYS:NZ	2.20	0.56
45:NI:271:SER:OG	45:NI:301:MET:SD	2.62	0.56
45:OG:271:SER:HB2	45:OG:377:MET:HB3	1.87	0.56
45:PC:107:HIS:HA	45:PC:152:LEU:HD11	1.87	0.56
45:PC:221:ARG:NH2	46:PD:322:SER:O	2.38	0.56
45:PM:280:LYS:HD2	45:PM:283:HIS:HB2	1.87	0.56
46:RJ:54:ALA:HA	46:SJ:283:ALA:HB2	1.86	0.56
46:SJ:67:ASP:OD1	46:SJ:68:LEU:N	2.38	0.56
46:VB:257:LEU:HA	46:VB:312:THR:HG21	1.87	0.56
45:VC:251:ASP:OD1	45:VC:252:ILE:N	2.37	0.56
45:VE:387:VAL:HG12	45:VE:390:ARG:HH21	1.70	0.56
45:VM:206:ASN:HB2	45:VM:210:TYR:CE2	2.40	0.56
2:0B:103:GLN:HG2	22:2M:63:ILE:HG21	1.86	0.56
14:1V:45:ARG:O	14:1V:47:GLY:N	2.31	0.56
16:2B:97:ARG:NH2	16:2B:181:LYS:O	2.37	0.56
29:2G:83:TRP:HA	29:2G:86:GLU:HG3	1.87	0.56
20:2K:212:ARG:HG2	45:GM:282:TYR:OH	2.05	0.56
10:6Q:65:PRO:HA	10:6Q:153:ARG:HH22	1.70	0.56
46:AD:63:ALA:O	46:AD:89:ASN:ND2	2.37	0.56
45:BA:11:GLN:HG3	45:BA:74:VAL:HG11	1.86	0.56
46:BB:207:LEU:HB3	46:BB:225:LEU:HD22	1.85	0.56
46:BF:150:LEU:HD11	46:BF:154:LYS:HE2	1.87	0.56
45:CA:261:PRO:HD2	45:CA:262:TYR:N	2.02	0.56
46:CN:268:ILE:HG22	46:CN:368:VAL:HG12	1.87	0.56
45:DK:123:ARG:NH2	45:DK:160:ASP:OD1	2.38	0.56
46:EF:319:GLY:N	46:EF:354:CYS:O	2.34	0.56
46:FF:390:ARG:O	46:FF:392:LYS:NZ	2.38	0.56
46:GB:318:ARG:HB2	46:GB:364:ALA:HB3	1.86	0.56
45:GC:98:ASP:O	45:GC:105:ARG:NH1	2.38	0.56
45:GM:71:GLU:OE2	46:GN:2:ARG:NH2	2.38	0.56
46:HB:3:GLU:HB2	46:HB:62:ARG:HH22	1.70	0.56
46:HF:31:ASP:OD1	46:HF:35:THR:N	2.36	0.56
46:JB:73:MET:HA	46:JB:76:VAL:HG12	1.86	0.56
45:JI:398:MET:HE2	46:JJ:346:PRO:HD2	1.87	0.56
45:JK:7:ILE:HB	45:JK:137:VAL:HG12	1.86	0.56
45:KI:11:GLN:NE2	46:KJ:245:GLN:O	2.37	0.56
46:KL:66:MET:HE1	46:KL:147:MET:HG2	1.87	0.56
45:LM:192:HIS:NE2	45:LM:420:GLU:OE1	2.38	0.56
45:MA:292:THR:HG21	45:MA:331:SER:HB3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MB:114:ASP:OD1	46:MB:115:SER:N	2.38	0.56
46:MB:299:MET:HG3	46:MB:305:PRO:HG3	1.86	0.56
46:MD:32:PRO:HA	46:MD:84:LEU:HD11	1.86	0.56
45:NA:204:LEU:HD13	45:NA:231:ILE:HD12	1.87	0.56
46:NH:318:ARG:HD2	46:NH:354:CYS:HB3	1.87	0.56
45:OC:249:ASN:ND2	46:OF:11:GLN:OE1	2.38	0.56
45:OK:390:ARG:HG3	45:OK:391:LEU:HD12	1.87	0.56
46:PF:5:VAL:HG12	46:PF:62:ARG:HD3	1.86	0.56
45:QC:319:TYR:HB3	45:QC:323:VAL:HG11	1.86	0.56
46:QJ:67:ASP:OD2	46:QJ:68:LEU:N	2.38	0.56
45:QK:203:MET:HG2	45:QK:384:ILE:HD11	1.87	0.56
46:RJ:68:LEU:HB3	46:RJ:96:GLY:HA2	1.86	0.56
46:SF:114:ASP:OD1	46:SF:115:SER:N	2.38	0.56
46:SN:273:LEU:H	46:SN:292:GLN:HE22	1.53	0.56
45:TA:319:TYR:HB3	45:TA:323:VAL:HG11	1.86	0.56
46:TL:210:ILE:O	46:TL:214:THR:OG1	2.19	0.56
46:UL:345:ILE:HA	45:UM:398:MET:HE1	1.87	0.56
45:VA:9:VAL:HG21	45:VA:149:LEU:HD22	1.86	0.56
46:VB:105:HIS:HD2	46:VB:106:TYR:CE2	2.23	0.56
46:VH:55:THR:HG23	46:WH:283:ALA:HA	1.86	0.56
45:VK:147:SER:HB2	45:VK:190:SER:HB3	1.87	0.56
45:VM:221:ARG:NH2	46:VN:322:SER:H	2.02	0.56
46:WB:350:LYS:NZ	46:WB:352:SER:OG	2.30	0.56
45:WM:22:GLU:HA	45:WM:25:CYS:SG	2.44	0.56
6:OF:40:LYS:HD2	46:DD:44:LEU:HD21	1.87	0.56
21:1L:751:ARG:NH2	46:BD:357:PRO:O	2.38	0.56
12:1T:215:ASN:O	12:1T:216:LYS:HG3	2.04	0.56
26:1W:205:ASP:O	26:1W:209:GLU:HG2	2.05	0.56
27:2C:277:LEU:HD22	27:2C:285:ILE:HD13	1.88	0.56
21:2L:658:ARG:NH1	46:BN:45:GLU:HA	2.21	0.56
24:2P:367:GLU:HG2	24:2P:370:LYS:HE3	1.87	0.56
25:2R:111:VAL:HG23	25:2R:112:GLU:HG2	1.88	0.56
13:2U:54:HIS:NE2	13:2U:74:GLN:HB3	2.19	0.56
1:3A:148:ASN:HB3	1:3A:151:HIS:HB2	1.86	0.56
21:3L:140:LEU:HB3	21:3L:144:LYS:HZ1	1.68	0.56
21:3L:176:ARG:HH22	45:CA:367:ASP:HA	1.70	0.56
23:3O:271:ALA:HB1	23:3O:275:LYS:HZ2	1.71	0.56
23:3O:386:GLU:HA	23:3O:389:LYS:HE2	1.87	0.56
15:4X:3:ARG:NH2	46:LL:11:GLN:OE1	2.38	0.56
15:4X:27:PHE:O	15:4X:28:GLU:HG2	2.05	0.56
15:4X:35:ASP:OD1	15:4X:36:ALA:N	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BD:113:ILE:HA	46:BD:116:VAL:HG12	1.86	0.56
46:BJ:3:GLU:OE1	46:BJ:3:GLU:N	2.25	0.56
45:BK:191:THR:HG21	45:BK:425:LEU:HD21	1.87	0.56
46:BL:344:TRP:HB3	46:BL:430:ALA:HB2	1.87	0.56
45:BM:339:ARG:HA	45:BM:339:ARG:NH1	2.20	0.56
46:CB:375:GLN:HG3	46:CB:419:VAL:HG13	1.87	0.56
46:CL:309:ARG:NH2	46:CL:426:GLN:O	2.35	0.56
46:CN:262:ARG:NH1	46:CN:421:GLU:OE1	2.38	0.56
45:DA:76:ASP:OD1	45:DA:79:ARG:NH2	2.37	0.56
46:DD:396:HIS:HA	46:DD:399:THR:HG22	1.87	0.56
46:DN:294:PHE:CD2	46:DN:333:VAL:HG11	2.40	0.56
46:DN:318:ARG:HB2	46:DN:364:ALA:HB3	1.86	0.56
45:EA:294:SER:O	45:EA:300:ASN:ND2	2.28	0.56
45:EE:174:SER:HB3	45:EE:177:VAL:O	2.04	0.56
45:FA:417:GLU:HA	45:FA:420:GLU:HG2	1.87	0.56
46:FB:287:PRO:O	46:FB:290:THR:HG22	2.04	0.56
45:FC:248:LEU:HD13	45:FC:355:ILE:HD12	1.86	0.56
46:FL:148:GLY:O	46:FL:152:ILE:HG12	2.05	0.56
46:FN:24:ILE:HD12	46:FN:241:ARG:HH22	1.71	0.56
46:GB:200:MET:HG2	46:GB:266:PHE:HB2	1.88	0.56
45:GI:260:VAL:HB	46:GL:397:TRP:HH2	1.69	0.56
45:GK:71:GLU:OE2	46:GL:2:ARG:NH2	2.38	0.56
45:HG:69:ASP:OD1	45:HG:70:LEU:N	2.37	0.56
46:HH:178:THR:HG22	46:HH:180:VAL:H	1.69	0.56
45:HM:222:PRO:HD2	46:HN:324:LYS:HE2	1.86	0.56
46:IH:221:THR:HG23	46:IH:223:GLY:H	1.69	0.56
46:IN:282:ARG:NH2	46:IN:292:GLN:OE1	2.37	0.56
45:JE:254:GLU:HA	45:JE:257:THR:HG22	1.87	0.56
46:JH:68:LEU:HD22	46:JH:108:GLU:HG3	1.87	0.56
45:JI:419:SER:O	45:JI:423:GLU:HG3	2.04	0.56
45:JM:275:ILE:HG23	45:JM:368:LEU:HD21	1.87	0.56
46:KH:396:HIS:HA	46:KH:399:THR:HG22	1.88	0.56
45:KI:75:ILE:HG22	45:KI:79:ARG:HE	1.70	0.56
45:KI:109:THR:O	45:KI:112:LYS:NZ	2.39	0.56
46:KL:52:ASN:OD1	46:KL:62:ARG:NH2	2.38	0.56
46:KL:139:LEU:HD22	46:KL:170:VAL:HG12	1.87	0.56
45:KM:65:ALA:O	45:KM:91:GLN:NE2	2.38	0.56
46:LB:99:ASN:HA	46:LB:142:GLY:H	1.70	0.56
46:LH:5:VAL:HG12	46:LH:62:ARG:HD3	1.87	0.56
46:LJ:135:ILE:HG13	46:LJ:152:ILE:HD11	1.86	0.56
46:LL:221:THR:HG23	46:LL:223:GLY:H	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LM:251:ASP:OD1	45:LM:252:ILE:N	2.37	0.56
46:MH:148:GLY:O	46:MH:152:ILE:HG12	2.05	0.56
46:MJ:1:MET:N	46:MJ:3:GLU:OE2	2.38	0.56
46:ML:380:ARG:HA	46:ML:383:GLU:HG2	1.87	0.56
45:MM:174:SER:HB3	45:MM:177:VAL:O	2.05	0.56
45:NA:241:SER:OG	45:NA:250:VAL:O	2.22	0.56
46:NF:3:GLU:HB2	46:NF:62:ARG:HH12	1.70	0.56
45:NG:73:THR:OG1	46:NH:2:ARG:NH2	2.38	0.56
45:NI:322:ASP:OD1	45:NI:373:ARG:NH1	2.39	0.56
45:NK:328:VAL:HG11	45:NK:353:VAL:HG21	1.87	0.56
45:NK:397:LEU:HD21	46:NL:344:TRP:HA	1.86	0.56
45:OC:180:ALA:HB3	45:OC:183:GLU:HG3	1.87	0.56
46:OF:178:THR:HB	46:OF:181:GLU:HG3	1.87	0.56
45:OI:88:HIS:O	45:OI:91:GLN:HG2	2.04	0.56
45:PC:51:THR:HG21	45:PC:243:ARG:HB3	1.87	0.56
45:PE:251:ASP:OD1	45:PE:252:ILE:N	2.38	0.56
46:PF:237:THR:HG23	46:PF:241:ARG:HH21	1.70	0.56
46:PJ:294:PHE:HE2	46:PJ:333:VAL:HG11	1.70	0.56
46:QB:67:ASP:OD1	46:QB:68:LEU:N	2.37	0.56
46:QL:252:LYS:NZ	47:QM:501:GTP:O1G	2.39	0.56
46:RB:207:LEU:HB3	46:RB:225:LEU:HD22	1.87	0.56
46:RJ:5:VAL:HG12	46:RJ:62:ARG:HD3	1.87	0.56
45:RM:101:ASN:HA	45:RM:144:GLY:H	1.70	0.56
46:SH:114:ASP:OD1	46:SH:115:SER:N	2.38	0.56
45:SK:211:ASP:OD2	45:SK:304:LYS:NZ	2.37	0.56
46:SL:238:CYS:SG	46:SL:318:ARG:NE	2.78	0.56
45:SM:6:SER:OG	45:SM:8:HIS:NE2	2.38	0.56
45:TA:326:LYS:HB3	46:TB:208:TYR:HE1	1.69	0.56
46:TD:67:ASP:OD1	46:TD:68:LEU:N	2.36	0.56
45:TK:147:SER:HB2	45:TK:190:SER:HB3	1.87	0.56
45:UA:155:GLU:OE2	45:UA:197:HIS:NE2	2.38	0.56
46:UH:139:LEU:HD13	46:UH:168:SER:HB3	1.87	0.56
46:UJ:55:THR:HG23	46:VJ:283:ALA:HA	1.87	0.56
46:UJ:226:ASN:HD21	49:UJ:501:GDP:HN1	1.53	0.56
46:UN:389:PHE:HD2	46:UN:390:ARG:HH22	1.54	0.56
45:VG:64:ARG:NH1	45:VG:129:CYS:SG	2.78	0.56
46:VJ:10:GLY:O	46:VJ:14:ASN:ND2	2.37	0.56
45:VM:60:LYS:NZ	45:VM:85:GLN:O	2.39	0.56
46:VN:2:ARG:HH21	46:VN:240:LEU:HG	1.69	0.56
46:WB:190:HIS:CE1	46:WB:414:ASN:HD22	2.23	0.56
45:WM:210:TYR:HE1	45:WM:227:LEU:HD11	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2A:148:ASN:HB3	1:2A:151:HIS:HB2	1.86	0.56
23:2O:433:LEU:HB3	23:2O:437:LYS:NZ	2.21	0.56
25:3R:390:ASP:OD1	46:EL:218:THR:OG1	2.23	0.56
34:4R:20:HIS:O	34:4R:25:HIS:NE2	2.38	0.56
34:4R:248:TYR:HE2	45:CE:370:LYS:HZ1	1.53	0.56
39:6F:19:SER:HB2	39:6F:29:GLU:OE1	2.06	0.56
46:AD:190:HIS:NE2	46:AD:410:GLU:OE1	2.38	0.56
45:AE:11:GLN:NE2	45:AE:15:GLN:OE1	2.33	0.56
45:AE:147:SER:HB2	45:AE:190:SER:HB3	1.87	0.56
46:BL:10:GLY:O	46:BL:14:ASN:ND2	2.36	0.56
46:CB:173:PRO:HG2	46:CB:174:LYS:NZ	2.20	0.56
46:CH:139:LEU:HA	46:CH:145:SER:HB3	1.87	0.56
46:DL:139:LEU:HD12	46:DL:170:VAL:HG12	1.86	0.56
46:DN:139:LEU:HD13	46:DN:168:SER:HB3	1.87	0.56
45:FA:6:SER:OG	45:FA:8:HIS:NE2	2.34	0.56
45:FK:326:LYS:HG2	46:FN:220:PRO:HD2	1.87	0.56
45:FM:222:PRO:HD2	46:FN:324:LYS:HE3	1.87	0.56
46:GB:223:GLY:O	46:GB:227:HIS:ND1	2.39	0.56
46:GL:68:LEU:HB3	46:GL:96:GLY:HA2	1.86	0.56
45:HA:11:GLN:HG3	45:HA:74:VAL:HG11	1.88	0.56
45:HA:180:ALA:HB3	45:HA:183:GLU:HG3	1.87	0.56
46:HB:289:LEU:HD13	46:HB:365:VAL:HG23	1.88	0.56
45:HC:76:ASP:OD2	46:HD:46:ARG:NH2	2.38	0.56
46:HF:139:LEU:HD13	46:HF:168:SER:HB3	1.87	0.56
45:HK:11:GLN:NE2	46:HL:245:GLN:O	2.38	0.56
46:HN:204:ASN:OD1	49:HN:501:GDP:O2'	2.22	0.56
46:JH:222:TYR:O	46:JH:226:ASN:ND2	2.26	0.56
46:JJ:334:GLN:HE22	46:JJ:348:ASN:H	1.53	0.56
45:JK:141:VAL:HG22	45:JK:187:SER:HA	1.86	0.56
45:JM:147:SER:HB2	45:JM:190:SER:HB3	1.86	0.56
46:JN:203:ASP:OD2	46:JN:302:ALA:N	2.32	0.56
45:KK:308:ARG:HG3	45:NK:282:TYR:CE1	2.41	0.56
45:KK:349:THR:OG1	46:KN:176:SER:OG	2.17	0.56
46:LF:10:GLY:O	46:LF:14:ASN:ND2	2.39	0.56
46:LJ:31:ASP:OD1	46:LJ:35:THR:N	2.36	0.56
45:MI:69:ASP:OD1	45:MI:70:LEU:N	2.38	0.56
46:ML:330:MET:HE2	46:ML:349:ILE:HG21	1.88	0.56
45:NA:112:LYS:HA	45:NA:115:VAL:HG12	1.88	0.56
46:NB:156:ARG:HD2	46:NB:160:PRO:HA	1.86	0.56
45:NM:322:ASP:OD2	45:NM:373:ARG:NH1	2.39	0.56
45:OM:89:PRO:HD3	45:PM:280:LYS:HE3	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PA:202:VAL:HG12	45:PA:268:MET:HB2	1.87	0.56
47:PA:501:GTP:O1G	46:PB:252:LYS:NZ	2.36	0.56
45:PK:348:PRO:HD3	46:PN:388:MET:HE1	1.87	0.56
46:PL:319:GLY:HA2	46:PL:357:PRO:HD3	1.87	0.56
46:PN:183:TYR:OH	46:PN:393:ALA:O	2.15	0.56
46:QL:222:TYR:O	46:QL:226:ASN:ND2	2.28	0.56
46:QN:222:TYR:O	46:QN:226:ASN:ND2	2.35	0.56
46:RH:222:TYR:O	46:RH:226:ASN:ND2	2.31	0.56
46:SD:294:PHE:HE2	46:SD:333:VAL:HG11	1.68	0.56
45:SG:55:GLU:HG3	45:SG:57:GLY:H	1.70	0.56
46:SJ:114:ASP:OD1	46:SJ:115:SER:N	2.38	0.56
46:TB:46:ARG:NH2	45:TC:76:ASP:OD2	2.39	0.56
45:TG:7:ILE:HD11	45:TG:68:LEU:HD23	1.87	0.56
46:UL:263:LEU:HD22	46:UL:422:TYR:HD1	1.71	0.56
46:VF:309:ARG:NH1	46:VF:343:GLU:OE1	2.38	0.56
45:VM:223:THR:HA	46:VN:324:LYS:HZ1	1.68	0.56
45:WA:31:GLN:HE22	45:WA:37:PRO:HG3	1.69	0.56
46:WD:10:GLY:O	46:WD:14:ASN:ND2	2.39	0.56
45:WE:98:ASP:OD1	45:WE:99:ALA:N	2.38	0.56
45:WE:306:ASP:OD1	45:WE:308:ARG:NH2	2.38	0.56
46:WF:156:ARG:NH1	46:WF:162:ARG:O	2.35	0.56
45:WM:181:VAL:N	46:WN:350:LYS:HZ3	2.02	0.56
12:1T:139:TYR:HA	12:1T:145:MET:HG3	1.87	0.56
13:1U:329:PRO:HG2	13:1U:332:TYR:HB3	1.87	0.56
23:2O:418:GLN:O	23:2O:422:LYS:HG2	2.06	0.56
13:2U:226:ILE:HG23	45:WG:43:GLY:HA2	1.86	0.56
13:2U:474:ILE:HG12	13:2U:486:CYS:HB3	1.88	0.56
12:3T:113:ASP:OD2	12:3T:114:LYS:N	2.37	0.56
34:4R:259:ASN:HB2	34:4R:351:ASN:HB2	1.87	0.56
37:5E:179:TYR:HD1	45:KC:410:GLY:HA2	1.70	0.56
37:5H:10:PRO:HB3	37:5H:17:ASN:HD21	1.68	0.56
37:5H:107:VAL:HG23	37:5H:108:LYS:H	1.71	0.56
45:AA:27:GLU:OE2	45:AA:243:ARG:NH1	2.32	0.56
45:AC:26:LEU:HD23	45:AC:363:VAL:HG12	1.87	0.56
46:AF:73:MET:HA	46:AF:76:VAL:HG22	1.88	0.56
45:AI:116:ASP:OD1	45:AI:117:LEU:N	2.38	0.56
46:AL:114:ASP:OD1	46:AL:115:SER:N	2.39	0.56
46:BD:178:THR:HB	46:BD:181:GLU:HG3	1.88	0.56
45:BE:222:PRO:O	46:BF:322:SER:OG	2.23	0.56
45:BK:353:VAL:HG22	46:BN:177:ASP:HB2	1.87	0.56
46:DN:54:ALA:HA	46:EN:283:ALA:HB2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EF:121:ARG:NH2	46:EF:158:GLU:OE2	2.34	0.56
45:FK:69:ASP:OD1	45:FK:70:LEU:N	2.39	0.56
46:FL:179:VAL:HG13	46:FL:180:VAL:HG13	1.88	0.56
45:GM:386:GLU:HB2	45:GM:390:ARG:HH12	1.71	0.56
46:GN:318:ARG:HD2	46:GN:358:PRO:HD3	1.88	0.56
46:HH:374:ILE:HG22	46:HH:422:TYR:CE2	2.40	0.56
46:HL:178:THR:HB	46:HL:181:GLU:HG3	1.88	0.56
45:HM:424:ASP:OD1	45:HM:425:LEU:N	2.38	0.56
45:II:147:SER:HB2	45:II:190:SER:HB2	1.86	0.56
45:IM:116:ASP:OD1	45:IM:117:LEU:N	2.37	0.56
46:JL:209:ASP:OD1	46:JL:213:ARG:HD2	2.06	0.56
46:JN:10:GLY:O	46:JN:14:ASN:ND2	2.39	0.56
46:KB:209:ASP:OD1	46:KB:297:LYS:NZ	2.39	0.56
45:LA:398:MET:HE2	46:LB:346:PRO:HD2	1.88	0.56
46:LB:118:ASP:OD1	46:LB:121:ARG:NH2	2.39	0.56
46:LL:135:ILE:HG13	46:LL:152:ILE:HD11	1.85	0.56
45:LM:210:TYR:HB3	46:LN:324:LYS:NZ	2.20	0.56
45:MC:55:GLU:OE2	45:MC:61:HIS:NE2	2.38	0.56
45:MI:109:THR:O	45:MI:112:LYS:NZ	2.34	0.56
46:NB:105:HIS:CE1	46:NB:150:LEU:HD12	2.41	0.56
46:NL:113:ILE:HA	46:NL:116:VAL:HG22	1.86	0.56
46:PN:73:MET:HA	46:PN:76:VAL:HG12	1.88	0.56
45:QA:317:MET:HG3	45:QA:377:MET:HB3	1.87	0.56
45:QC:292:THR:HG21	45:QC:331:SER:HB2	1.87	0.56
45:QI:141:VAL:HG11	45:QI:172:TYR:HD1	1.69	0.56
45:QM:185:TYR:HE2	45:QM:404:PHE:HB2	1.70	0.56
46:SB:44:LEU:HA	46:SB:47:ILE:HB	1.87	0.56
46:TD:95:THR:OG1	46:TD:108:GLU:OE1	2.23	0.56
46:TF:247:ASN:ND2	45:TG:71:GLU:OE1	2.38	0.56
45:TG:271:SER:OG	45:TG:301:MET:SD	2.63	0.56
45:UA:225:THR:OG1	45:UA:229:ARG:NH2	2.39	0.56
46:UF:178:THR:HB	46:UF:181:GLU:HG3	1.86	0.56
45:VM:72:PRO:HA	45:VM:75:ILE:HG22	1.87	0.56
46:VN:4:ILE:HG13	46:VN:131:GLN:HB3	1.88	0.56
45:WI:98:ASP:OD1	45:WI:99:ALA:N	2.39	0.56
46:WL:236:VAL:HG13	46:WL:237:THR:HG23	1.87	0.56
15:0X:81:ARG:HG2	46:MB:276:ARG:HE	1.71	0.56
19:1J:76:VAL:HG11	45:IC:372:MET:SD	2.45	0.56
19:1J:287:GLU:HG3	46:HL:55:THR:HG22	1.86	0.56
15:1X:53:ILE:HD11	45:ME:279:GLU:HA	1.87	0.56
27:2C:232:PHE:CE1	46:JJ:57:GLY:HA2	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:2D:20:LYS:HG3	4:2D:21:VAL:H	1.69	0.56
23:2O:147:VAL:O	23:2O:151:LYS:HG3	2.05	0.56
24:2P:381:PHE:HA	45:TM:370:LYS:HD2	1.87	0.56
13:2U:147:ASP:HB2	13:2U:166:LEU:HD11	1.85	0.56
26:2W:186:GLY:O	45:KM:45:GLY:N	2.39	0.56
15:3X:4:VAL:HG23	15:3X:5:LYS:HG3	1.87	0.56
34:4R:248:TYR:CD1	34:4R:281:ALA:HB1	2.41	0.56
35:4S:94:GLU:CD	35:4S:130:ARG:HH21	2.09	0.56
34:5R:253:ARG:O	45:CI:40:ARG:NH2	2.35	0.56
34:6R:145:ILE:HG21	34:6R:150:ILE:HD11	1.86	0.56
45:BM:265:ILE:HG22	45:BM:432:TYR:HE1	1.69	0.56
46:CD:10:GLY:O	46:CD:14:ASN:ND2	2.38	0.56
46:CH:273:LEU:H	46:CH:292:GLN:HE22	1.54	0.56
45:DA:332:ILE:HA	45:DA:335:ILE:HG12	1.88	0.56
46:DD:173:PRO:HG2	46:DD:380:ARG:HE	1.70	0.56
46:EN:86:ARG:HH11	46:EN:86:ARG:HA	1.70	0.56
46:EN:377:MET:HA	46:EN:380:ARG:HH11	1.71	0.56
45:GC:222:PRO:HD2	46:GD:324:LYS:HD3	1.87	0.56
46:GF:344:TRP:HB3	46:GF:430:ALA:HB2	1.87	0.56
45:GM:223:THR:HG23	45:GM:225:THR:H	1.71	0.56
46:HF:107:THR:OG1	46:HF:108:GLU:OE1	2.24	0.56
45:HK:89:PRO:HD3	45:IK:283:HIS:ND1	2.18	0.56
45:HK:119:LEU:HD11	45:HK:156:ARG:HB3	1.88	0.56
45:HK:288:VAL:HA	45:HK:291:ILE:HG12	1.87	0.56
45:IA:317:MET:HB3	45:IA:377:MET:HG3	1.87	0.56
45:IE:71:GLU:OE2	46:IF:2:ARG:NH2	2.38	0.56
46:JB:290:THR:HG21	46:JB:329:GLN:HB3	1.88	0.56
45:JG:81:GLY:O	45:JG:84:ARG:NH1	2.38	0.56
46:JJ:139:LEU:HD13	46:JJ:168:SER:HB3	1.87	0.56
45:JK:68:LEU:HD21	45:JK:118:CYS:HB2	1.86	0.56
46:JN:218:THR:HG22	46:JN:219:THR:HG23	1.86	0.56
45:KG:26:LEU:HD13	45:KG:363:VAL:HG23	1.87	0.56
46:LF:107:THR:HG23	46:LF:108:GLU:HG2	1.87	0.56
45:LI:206:ASN:OD1	47:LI:501:GTP:N2	2.38	0.56
45:MC:241:SER:OG	45:MC:250:VAL:O	2.17	0.56
46:NH:222:TYR:O	46:NH:226:ASN:ND2	2.38	0.56
45:OG:60:LYS:NZ	45:OG:85:GLN:O	2.34	0.56
45:OM:318:MET:HB2	45:OM:376:CYS:HB3	1.87	0.56
45:QA:88:HIS:HB3	45:QA:91:GLN:HE22	1.70	0.56
46:QJ:311:LEU:HD23	46:QJ:342:VAL:HG21	1.87	0.56
46:RF:86:ARG:NH1	46:SF:278:SER:OG	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RH:135:ILE:HG12	46:RH:166:THR:HG22	1.87	0.56
46:RJ:135:ILE:HD11	46:RJ:166:THR:HG22	1.87	0.56
46:RL:54:ALA:HA	46:SL:283:ALA:HB2	1.87	0.56
46:SD:394:PHE:O	46:SD:397:TRP:HB2	2.05	0.56
46:SF:309:ARG:H	46:SF:372:THR:HG22	1.70	0.56
46:SN:68:LEU:HD12	46:SN:93:GLY:HA3	1.87	0.56
46:UB:3:GLU:N	46:UB:129:CYS:O	2.36	0.56
45:UG:251:ASP:OD1	45:UG:252:ILE:N	2.38	0.56
45:VA:222:PRO:O	46:VB:324:LYS:NZ	2.36	0.56
46:VH:226:ASN:HD21	49:VH:501:GDP:HN1	1.53	0.56
46:WF:294:PHE:HE2	46:WF:333:VAL:HG11	1.71	0.56
1:0A:91:ASN:OD1	46:MB:37:HIS:NE2	2.38	0.56
9:1N:190:PRO:HG2	45:KG:42:ILE:HG12	1.86	0.56
13:1U:348:ASN:HB2	13:1U:355:LEU:HD21	1.87	0.56
16:2B:54:SER:HA	16:2B:59:PHE:HB2	1.86	0.56
4:2D:86:THR:HA	4:2D:89:THR:HB	1.88	0.56
23:2O:235:MET:O	23:2O:239:ILE:HG12	2.06	0.56
25:2R:345:CYS:HB3	25:2R:361:PHE:CE2	2.41	0.56
13:2U:329:PRO:HG2	13:2U:332:TYR:HB3	1.88	0.56
23:3O:332:GLN:HG2	46:UJ:320:ARG:HH12	1.71	0.56
14:3V:41:HIS:ND1	14:3V:42:THR:HG23	2.21	0.56
34:4R:318:TYR:HD2	34:4R:321:MET:HG2	1.71	0.56
45:AA:224:TYR:HE2	46:AB:246:LEU:HD11	1.70	0.56
45:AG:195:LEU:HD21	45:AG:264:ARG:HE	1.69	0.56
46:AL:282:ARG:HG3	46:ML:86:ARG:HH12	1.71	0.56
45:CC:98:ASP:O	45:CC:105:ARG:NH1	2.39	0.56
46:DB:254:ALA:O	46:DB:258:ILE:HG12	2.05	0.56
46:DL:375:GLN:OE1	46:DL:379:LYS:NZ	2.38	0.56
46:EL:55:THR:HG23	46:FL:283:ALA:HA	1.88	0.56
46:EL:324:LYS:NZ	45:EM:222:PRO:HG2	2.20	0.56
46:FF:135:ILE:HG13	46:FF:152:ILE:HD11	1.87	0.56
45:FG:227:LEU:O	45:FG:231:ILE:HG13	2.06	0.56
45:FI:402:ARG:HG2	45:FI:405:VAL:HG11	1.86	0.56
46:FL:330:MET:HE2	46:FL:349:ILE:HG21	1.88	0.56
46:GB:139:LEU:HD22	46:GB:170:VAL:HG12	1.88	0.56
45:GI:188:ILE:HG22	45:GI:421:ALA:HB1	1.88	0.56
45:GI:399:TYR:O	45:GI:402:ARG:NH2	2.38	0.56
46:IJ:10:GLY:O	46:IJ:14:ASN:ND2	2.38	0.56
45:IM:340:THR:HG23	45:IM:341:ILE:HG13	1.88	0.56
46:JH:207:LEU:HB3	46:JH:225:LEU:HD22	1.87	0.56
46:KN:261:PRO:O	46:KN:264:HIS:ND1	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LF:70:PRO:O	46:LF:74:ASP:HB2	2.05	0.56
46:LH:1:MET:N	46:LH:3:GLU:OE2	2.34	0.56
45:MG:221:ARG:NH2	46:MH:325:GLU:OE1	2.27	0.56
45:NC:27:GLU:OE2	45:NC:236:SER:OG	2.16	0.56
45:NC:185:TYR:HE1	45:NC:398:MET:HB3	1.69	0.56
46:NF:6:HIS:NE2	46:NF:8:GLN:OE1	2.38	0.56
45:PC:211:ASP:HB3	45:PC:215:ARG:HH12	1.71	0.56
45:QA:89:PRO:HD2	45:RA:280:LYS:HZ3	1.71	0.56
46:QD:5:VAL:HG12	46:QD:62:ARG:HD3	1.86	0.56
46:RB:178:THR:HB	46:RB:181:GLU:HG3	1.87	0.56
45:RM:258:ASN:HD21	46:RN:178:THR:HG23	1.71	0.56
45:SA:340:THR:HG23	45:SA:341:ILE:HG13	1.88	0.56
46:SD:55:THR:HG23	46:TD:283:ALA:HA	1.86	0.56
45:SE:90:GLU:OE2	45:TE:280:LYS:NZ	2.39	0.56
46:SJ:58:ARG:NH2	46:TJ:280:GLN:OE1	2.39	0.56
45:SM:352:LYS:HZ1	46:SN:179:VAL:N	2.03	0.56
45:TI:69:ASP:OD1	45:TI:70:LEU:N	2.38	0.56
46:TL:164:MET:HB3	46:TL:197:ASP:H	1.70	0.56
46:TN:86:ARG:NE	46:TN:87:PRO:HD2	2.21	0.56
46:TN:386:THR:O	46:TN:390:ARG:NH1	2.36	0.56
45:UG:11:GLN:HG3	45:UG:74:VAL:HG11	1.88	0.56
46:UJ:100:ASN:ND2	46:UJ:401:GLU:OE1	2.38	0.56
46:VB:213:ARG:NH1	46:VB:213:ARG:HB2	2.20	0.56
45:WC:326:LYS:HD3	46:WF:208:TYR:CZ	2.41	0.56
8:1H:90:ARG:NH2	45:HK:278:ALA:O	2.37	0.56
5:2E:13:ARG:HG3	5:2E:89:ARG:HH21	1.70	0.56
13:2U:372:ASN:HD22	13:2U:372:ASN:C	2.09	0.56
14:3V:259:ASN:OD1	14:3V:260:LYS:N	2.38	0.56
10:4Q:65:PRO:HA	10:4Q:153:ARG:HH22	1.71	0.56
34:6R:42:THR:OG1	46:MN:276:ARG:NH2	2.38	0.56
45:AI:55:GLU:HG3	45:AI:57:GLY:H	1.71	0.56
45:AK:147:SER:HB2	45:AK:190:SER:HB3	1.87	0.56
46:AN:113:ILE:HG13	46:AN:117:LEU:HD23	1.88	0.56
45:BC:147:SER:HB2	45:BC:190:SER:HB2	1.88	0.56
45:BI:76:ASP:OD2	46:BJ:46:ARG:NH2	2.39	0.56
45:DA:225:THR:HA	45:DA:228:ASN:ND2	2.21	0.56
45:DC:176:GLN:HG2	45:DC:177:VAL:HG23	1.88	0.56
45:DK:270:SER:HB3	45:DK:378:ILE:HG12	1.88	0.56
46:FD:63:ALA:O	46:FD:89:ASN:ND2	2.36	0.56
46:FD:268:ILE:HG22	46:FD:368:VAL:HG22	1.87	0.56
45:FG:231:ILE:O	45:FG:235:ILE:HG12	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FN:278:SER:HA	46:FN:281:TYR:CD2	2.41	0.56
46:GF:341:PHE:HE2	46:GF:349:ILE:HD11	1.70	0.56
45:IC:388:PHE:HB3	45:IC:425:LEU:HD11	1.86	0.56
45:IG:174:SER:HB3	45:IG:207:GLU:HG2	1.88	0.56
45:IK:147:SER:HB2	45:IK:190:SER:HB3	1.87	0.56
45:IM:69:ASP:OD1	45:IM:70:LEU:N	2.37	0.56
46:IN:7:ILE:HG22	46:IN:64:ILE:HB	1.87	0.56
45:JA:76:ASP:OD2	46:JB:46:ARG:NH2	2.36	0.56
45:JC:68:LEU:HD22	45:JC:153:LEU:HD11	1.87	0.56
45:JG:9:VAL:HG12	45:JG:68:LEU:HB2	1.86	0.56
45:JK:271:SER:OG	45:JK:301:MET:SD	2.64	0.56
45:KM:88:HIS:HB3	45:KM:91:GLN:HB2	1.87	0.56
46:LD:135:ILE:HG13	46:LD:152:ILE:HD11	1.87	0.56
46:LH:262:ARG:HD2	46:LH:421:GLU:OE2	2.04	0.56
45:MK:68:LEU:HD11	45:MK:118:CYS:SG	2.46	0.56
46:ML:253:LEU:HD21	46:ML:316:LEU:HD11	1.88	0.56
46:NF:215:LEU:HD11	46:NF:273:LEU:HD12	1.86	0.56
45:NI:147:SER:HB2	45:NI:190:SER:OG	2.06	0.56
46:NN:190:HIS:CD2	46:NN:411:ALA:HA	2.41	0.56
45:OI:7:ILE:HB	45:OI:137:VAL:HG12	1.87	0.56
46:ON:262:ARG:NH1	46:ON:421:GLU:OE1	2.38	0.56
45:PC:244:PHE:HB2	45:PC:356:ASN:HD21	1.71	0.56
46:PF:181:GLU:OE2	46:PF:182:PRO:HD3	2.05	0.56
46:PJ:118:ASP:OD1	46:PJ:121:ARG:NH1	2.38	0.56
46:RJ:135:ILE:HD12	46:RJ:137:HIS:HD2	1.70	0.56
45:RM:284:GLU:HG3	45:RM:286:LEU:HD22	1.87	0.56
46:SH:309:ARG:NH2	46:SH:341:PHE:O	2.39	0.56
46:SN:139:LEU:HD22	46:SN:170:VAL:HG12	1.87	0.56
46:TN:212:PHE:HB3	46:TN:213:ARG:CZ	2.35	0.56
45:UC:328:VAL:HG11	45:UC:353:VAL:HG21	1.88	0.56
46:VH:39:ASP:OD1	46:VH:40:SER:N	2.39	0.56
46:VL:239:CYS:SG	46:VL:248:SER:N	2.71	0.56
4:0D:49:LYS:HA	45:EC:221:ARG:HH22	1.71	0.56
7:0G:19:ILE:HD12	46:IL:48:ASN:HD22	1.68	0.56
7:1G:101:TYR:CZ	46:JB:40:SER:HB3	2.41	0.56
16:2B:75:ASN:N	16:2B:79:GLN:HE22	1.98	0.56
22:2M:332:ILE:HG13	22:2M:333:ARG:HG2	1.88	0.56
25:2R:345:CYS:SG	25:2R:349:THR:OG1	2.58	0.56
26:2W:225:ARG:NH1	26:2W:226:ASP:OD1	2.39	0.56
25:3R:306:LYS:NZ	25:3R:326:ASP:OD2	2.36	0.56
25:3R:486:VAL:HA	25:3R:499:ILE:HB	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:3U:406:HIS:ND1	13:3U:426:GLU:OE1	2.38	0.56
13:3U:458:LYS:NZ	13:3U:460:ASN:HB3	2.20	0.56
15:3X:97:GLN:O	15:3X:101:GLU:HG2	2.06	0.56
34:6R:497:GLN:NE2	34:6R:499:GLY:O	2.35	0.56
45:AC:248:LEU:HD13	45:AC:355:ILE:HD12	1.86	0.56
45:AI:284:GLU:OE2	45:MI:88:HIS:NE2	2.37	0.56
45:BA:76:ASP:OD2	46:BB:46:ARG:NH2	2.38	0.56
45:BC:164:LYS:O	45:BC:166:LYS:NZ	2.39	0.56
46:CF:246:LEU:HD11	45:CG:224:TYR:HE2	1.69	0.56
46:DB:268:ILE:HG22	46:DB:368:VAL:HG12	1.87	0.56
46:DH:5:VAL:HG12	46:DH:62:ARG:HD3	1.88	0.56
45:DI:119:LEU:HD11	45:DI:156:ARG:HD3	1.86	0.56
45:DI:276:ILE:HD11	45:DI:280:LYS:HG3	1.88	0.56
45:DI:292:THR:HG21	45:DI:331:SER:HB2	1.87	0.56
46:DN:403:MET:HB3	46:DN:407:GLU:OE2	2.06	0.56
46:FL:256:ASN:ND2	46:FL:350:LYS:HD2	2.20	0.56
45:HA:76:ASP:OD2	46:HB:46:ARG:NH2	2.39	0.56
46:IB:49:VAL:O	46:IB:62:ARG:NH2	2.34	0.56
46:ID:174:LYS:HB2	46:ID:205:GLU:OE2	2.05	0.56
45:IM:241:SER:OG	45:IM:250:VAL:O	2.16	0.56
45:KE:419:SER:O	45:KE:423:GLU:HG2	2.06	0.56
46:KF:222:TYR:O	46:KF:226:ASN:ND2	2.39	0.56
46:MD:45:GLU:HG2	46:MD:46:ARG:HG2	1.86	0.56
45:OC:141:VAL:HG22	45:OC:187:SER:HA	1.87	0.56
45:PM:216:ASN:ND2	45:PM:275:ILE:O	2.38	0.56
46:QF:344:TRP:HB3	46:QF:430:ALA:HB2	1.88	0.56
45:QM:166:LYS:HD2	45:QM:198:THR:HA	1.87	0.56
46:QN:309:ARG:NH2	46:QN:426:GLN:O	2.36	0.56
46:RF:260:PHE:HB2	46:RF:263:LEU:HD13	1.86	0.56
46:RH:166:THR:OG1	46:RH:199:CYS:SG	2.63	0.56
45:RM:328:VAL:HG11	45:RM:353:VAL:HG21	1.88	0.56
45:SA:171:ILE:HG21	47:SA:501:GTP:HN22	1.71	0.56
46:SF:27:GLU:OE2	46:SF:241:ARG:NH2	2.39	0.56
45:SG:171:ILE:O	45:SG:171:ILE:HG13	2.06	0.56
45:SG:171:ILE:HG22	45:SG:204:LEU:HB2	1.87	0.56
45:SG:288:VAL:HA	45:SG:291:ILE:HG12	1.86	0.56
45:SI:90:GLU:OE2	45:TI:280:LYS:NZ	2.34	0.56
46:TB:91:VAL:HG21	46:TB:116:VAL:HB	1.86	0.56
45:TI:192:HIS:ND1	45:TI:424:ASP:OD2	2.37	0.56
45:TI:416:GLY:O	45:TI:419:SER:OG	2.19	0.56
45:TK:205:ASP:OD1	45:TK:303:ALA:HA	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UJ:178:THR:HB	46:UJ:181:GLU:HG3	1.87	0.56
45:UK:185:TYR:HE2	45:UK:404:PHE:HB2	1.71	0.56
46:UN:164:MET:HB3	46:UN:197:ASP:H	1.71	0.56
45:VC:11:GLN:NE2	46:VD:245:GLN:O	2.39	0.56
45:VC:91:GLN:HB3	45:VC:121:ARG:HH21	1.71	0.56
45:VG:220:GLU:O	46:VH:324:LYS:NZ	2.32	0.56
45:VK:31:GLN:NE2	45:VK:35:GLN:O	2.38	0.56
46:WB:97:ALA:HA	46:WB:103:LYS:HD2	1.88	0.56
45:WE:292:THR:HG21	45:WE:331:SER:HB3	1.87	0.56
7:0G:103:THR:HG21	46:JN:243:PRO:HB2	1.86	0.56
9:1N:191:LYS:HE3	45:KG:42:ILE:HG13	1.86	0.56
24:1P:166:GLN:HB2	24:2P:491:LYS:HE2	1.88	0.56
12:1T:113:ASP:OD1	12:1T:114:LYS:N	2.39	0.56
26:1W:72:ASN:HD22	15:4X:140:PRO:HD2	1.70	0.56
26:1W:170:THR:HG22	26:1W:171:ASN:N	2.20	0.56
16:2B:7:LEU:HA	16:2B:10:ILE:HB	1.87	0.56
21:2L:743:ILE:HA	21:2L:746:ILE:HD12	1.88	0.56
23:2O:207:HIS:O	23:2O:211:ILE:HG12	2.06	0.56
13:2U:508:THR:HG23	13:2U:536:VAL:HG13	1.87	0.56
12:3T:132:PRO:HB3	45:MK:123:ARG:HH21	1.71	0.56
14:3V:158:LYS:HG2	14:3V:159:ARG:HG2	1.87	0.56
10:4Q:168:SER:OG	10:4Q:170:ARG:O	2.22	0.56
40:6G:148:ASP:OD1	40:6G:149:ALA:N	2.39	0.56
41:6H:350:GLU:HG2	45:FI:364:PRO:HG2	1.88	0.56
46:AJ:64:ILE:HD11	46:AJ:123:GLU:HG3	1.88	0.56
45:BC:4:VAL:HG11	45:BC:136:LEU:HG	1.88	0.56
46:CB:173:PRO:HG2	46:CB:174:LYS:HZ2	1.71	0.56
45:DE:69:ASP:OD1	45:DE:70:LEU:N	2.39	0.56
45:DG:288:VAL:HG11	45:DG:327:ASP:HB3	1.87	0.56
46:DJ:207:LEU:HB3	46:DJ:225:LEU:HD22	1.88	0.56
46:EN:257:LEU:HD11	46:EN:314:SER:HB2	1.88	0.56
46:FB:178:THR:HB	46:FB:181:GLU:HG3	1.87	0.56
46:FL:27:GLU:HA	46:FL:359:LYS:HD2	1.88	0.56
46:GH:161:ASP:OD1	46:GH:162:ARG:NH1	2.38	0.56
46:GN:190:HIS:NE2	46:GN:410:GLU:OE1	2.39	0.56
46:HB:139:LEU:HD22	46:HB:170:VAL:HG12	1.87	0.56
46:IF:294:PHE:CD2	46:IF:333:VAL:HG11	2.41	0.56
45:JI:206:ASN:OD1	47:JI:501:GTP:N2	2.39	0.56
45:JM:31:GLN:HG3	45:JM:33:ASP:OD1	2.06	0.56
45:KC:222:PRO:HD2	46:KD:324:LYS:HG3	1.87	0.56
45:KM:175:PRO:HB3	45:KM:390:ARG:NH1	2.21	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LA:140:SER:OG	47:LA:501:GTP:O2B	2.24	0.56
46:MF:87:PRO:HA	46:MF:90:PHE:HD2	1.70	0.56
45:NA:317:MET:HG3	45:NA:377:MET:HG2	1.87	0.56
45:NI:294:SER:HA	45:NI:297:GLU:HG3	1.87	0.56
45:NM:9:VAL:HG12	45:NM:68:LEU:HB2	1.87	0.56
46:OD:172:SER:HA	46:OD:380:ARG:HH12	1.71	0.56
45:OE:206:ASN:OD1	47:OE:501:GTP:O2'	2.24	0.56
46:OL:237:THR:HG22	46:OL:250:LEU:HD11	1.88	0.56
45:OM:88:HIS:HB3	45:OM:91:GLN:HE22	1.71	0.56
45:PA:75:ILE:HG22	45:PA:79:ARG:HH22	1.70	0.56
45:PI:76:ASP:OD2	46:PJ:46:ARG:NH2	2.39	0.56
46:PN:198:GLU:HG2	46:PN:266:PHE:HE2	1.70	0.56
46:QB:386:THR:OG1	46:QB:390:ARG:NH1	2.39	0.56
46:QF:10:GLY:O	46:QF:14:ASN:ND2	2.38	0.56
45:QM:332:ILE:HG22	45:QM:336:LYS:HZ3	1.70	0.56
46:RH:187:LEU:HD11	46:RH:408:PHE:HE1	1.70	0.56
46:RH:330:MET:HB2	46:RH:349:ILE:HD13	1.87	0.56
45:RK:267:PHE:O	45:RK:380:ASN:ND2	2.39	0.56
45:RM:329:ASN:HA	45:RM:332:ILE:HG22	1.88	0.56
46:RN:237:THR:HG23	46:RN:241:ARG:HH21	1.71	0.56
45:SA:135:PHE:HB2	45:SA:166:LYS:HG2	1.88	0.56
46:SB:3:GLU:OE1	46:SB:49:VAL:HA	2.06	0.56
46:UB:129:CYS:HB2	45:UC:96:LYS:HE2	1.88	0.56
46:VD:322:SER:OG	46:VD:325:GLU:OE1	2.17	0.56
46:VF:128:ASP:OD1	46:VF:129:CYS:N	2.39	0.56
45:VI:326:LYS:NZ	46:VL:220:PRO:O	2.38	0.56
45:VM:317:MET:HA	45:VM:377:MET:HA	1.89	0.56
46:VN:87:PRO:HA	46:VN:90:PHE:HD2	1.71	0.56
46:VN:183:TYR:HE2	46:VN:394:PHE:HB2	1.70	0.56
45:WI:178:SER:OG	46:WJ:347:ASN:OD1	2.23	0.56
45:WM:48:ALA:HB1	45:WM:243:ARG:HB2	1.88	0.56
45:WM:340:THR:HG23	45:WM:341:ILE:HG13	1.88	0.56
18:1I:94:GLY:HA3	45:JC:82:THR:HG21	1.89	0.55
25:1R:113:SER:OG	46:BF:279:GLN:OE1	2.23	0.55
13:1U:527:MET:HE1	13:1U:565:GLY:HA3	1.87	0.55
31:2I:55:LYS:NZ	46:FH:114:ASP:OD2	2.34	0.55
9:2N:150:LEU:HD12	9:2N:173:ILE:HG22	1.88	0.55
25:2R:310:LEU:HD21	46:CH:227:HIS:HE1	1.71	0.55
13:2U:348:ASN:HB2	13:2U:355:LEU:HD21	1.88	0.55
16:3B:170:TYR:OH	16:3B:193:TRP:NE1	2.38	0.55
25:3R:407:PHE:HB3	45:DK:58:ALA:HB3	1.86	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5A:102:TYR:CE1	45:KA:394:LYS:HE3	2.40	0.55
45:AA:9:VAL:HG12	45:AA:68:LEU:HB2	1.88	0.55
45:BA:88:HIS:CE1	45:BA:90:GLU:HG2	2.41	0.55
45:DC:288:VAL:HG11	45:DC:327:ASP:HB3	1.88	0.55
46:DH:222:TYR:O	46:DH:226:ASN:ND2	2.28	0.55
46:DJ:375:GLN:HG3	46:DJ:419:VAL:HG13	1.88	0.55
46:DN:55:THR:HG23	46:EN:283:ALA:HA	1.88	0.55
46:EB:268:ILE:HG22	46:EB:368:VAL:HG22	1.87	0.55
46:EN:113:ILE:HD11	46:EN:151:LEU:HB2	1.89	0.55
46:GB:49:VAL:HG13	46:GB:50:TYR:HD1	1.70	0.55
46:GB:83:GLN:O	46:HB:281:TYR:OH	2.22	0.55
45:GC:287:SER:N	45:GC:290:GLU:OE2	2.39	0.55
46:HF:268:ILE:HG22	46:HF:368:VAL:HG22	1.87	0.55
45:HI:287:SER:N	45:HI:290:GLU:OE2	2.39	0.55
46:HN:73:MET:HA	46:HN:76:VAL:HG12	1.88	0.55
46:JF:256:ASN:ND2	46:JF:350:LYS:HD2	2.21	0.55
45:JM:96:LYS:HE2	46:JN:129:CYS:HB2	1.86	0.55
45:KE:88:HIS:HD2	45:KE:90:GLU:H	1.52	0.55
46:KF:298:ASN:ND2	46:KF:298:ASN:O	2.39	0.55
46:KN:173:PRO:HD2	46:KN:174:LYS:HZ3	1.71	0.55
45:LI:102:ASN:HB3	45:LI:105:ARG:HB2	1.88	0.55
46:MJ:67:ASP:OD1	46:MJ:68:LEU:N	2.39	0.55
45:NC:267:PHE:HE2	45:NC:428:LEU:HD21	1.70	0.55
45:NE:271:SER:OG	45:NE:301:MET:SD	2.62	0.55
45:NM:306:ASP:OD1	45:NM:308:ARG:NH2	2.39	0.55
46:NN:31:ASP:OD1	46:NN:35:THR:N	2.37	0.55
46:NN:309:ARG:HE	46:NN:342:VAL:HG12	1.69	0.55
46:QB:73:MET:HA	46:QB:76:VAL:HG12	1.88	0.55
45:QI:205:ASP:HB3	45:QI:303:ALA:HA	1.87	0.55
46:QL:237:THR:HG23	46:QL:241:ARG:HH12	1.72	0.55
46:QL:328:GLU:O	46:QL:332:ASN:N	2.39	0.55
45:QM:301:MET:HG3	45:QM:303:ALA:H	1.71	0.55
45:RA:390:ARG:HG3	45:RA:391:LEU:HD12	1.89	0.55
46:SJ:31:ASP:OD1	46:SJ:35:THR:N	2.39	0.55
46:TB:139:LEU:HD22	46:TB:170:VAL:HG12	1.87	0.55
45:TE:64:ARG:NH1	45:TE:129:CYS:SG	2.79	0.55
45:TK:204:LEU:HD13	45:TK:231:ILE:HD12	1.87	0.55
46:UH:10:GLY:O	46:UH:14:ASN:ND2	2.39	0.55
45:UI:292:THR:HG21	45:UI:331:SER:HB3	1.86	0.55
46:VB:73:MET:HA	46:VB:76:VAL:HG12	1.87	0.55
46:VH:247:ASN:O	46:VH:252:LYS:NZ	2.35	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VK:141:VAL:HG11	45:VK:172:TYR:HD1	1.70	0.55
45:VK:173:PRO:O	45:VK:390:ARG:NH2	2.39	0.55
45:WE:356:ASN:OD1	45:WE:357:TYR:N	2.39	0.55
45:WM:420:GLU:HA	45:WM:423:GLU:HG2	1.87	0.55
7:1G:87:PHE:O	46:JB:276:ARG:NH1	2.39	0.55
20:1K:153:PHE:HA	20:2K:480:LEU:HD21	1.87	0.55
12:1T:27:ARG:HH11	12:1T:32:TYR:HB3	1.71	0.55
15:2X:45:GLN:O	15:2X:49:ILE:HG12	2.06	0.55
16:3B:178:PRO:HG2	16:3B:181:LYS:HG2	1.87	0.55
27:3C:121:ALA:HB1	27:3C:164:LEU:HB3	1.88	0.55
25:3R:345:CYS:SG	25:3R:349:THR:OG1	2.64	0.55
36:5B:145:ASN:OD1	36:5B:146:VAL:N	2.39	0.55
10:5Q:118:ILE:HD13	45:AK:427:ALA:HB1	1.89	0.55
40:6G:167:ILE:HD13	46:VH:174:LYS:HB3	1.88	0.55
41:6H:367:ARG:HB2	46:FL:361:LEU:HD21	1.89	0.55
45:AA:222:PRO:HD2	46:AB:324:LYS:HE2	1.88	0.55
46:AD:248:SER:HA	46:AD:252:LYS:HD2	1.88	0.55
46:AF:222:TYR:O	46:AF:226:ASN:ND2	2.25	0.55
45:AI:64:ARG:NH1	45:AI:129:CYS:SG	2.79	0.55
46:BD:293:MET:HE1	46:BD:315:ALA:HB2	1.87	0.55
45:BK:371:VAL:HG12	45:BK:373:ARG:H	1.72	0.55
46:CN:386:THR:O	46:CN:390:ARG:HG2	2.07	0.55
46:DB:46:ARG:NH2	45:DC:76:ASP:OD2	2.39	0.55
45:DI:217:LEU:HD23	45:DI:367:ASP:HB3	1.88	0.55
46:ED:380:ARG:O	46:ED:383:GLU:HG3	2.06	0.55
45:FA:221:ARG:NH1	46:FB:325:GLU:H	2.03	0.55
46:FB:5:VAL:HA	46:FB:62:ARG:HD3	1.88	0.55
46:FD:148:GLY:O	46:FD:152:ILE:HG12	2.06	0.55
45:FG:259:LEU:HD11	45:FG:316:SER:HB2	1.87	0.55
46:FH:68:LEU:HB3	46:FH:96:GLY:HA2	1.89	0.55
45:GG:329:ASN:HB3	46:GJ:175:VAL:HG12	1.87	0.55
45:HA:181:VAL:HG23	45:HA:182:VAL:HG13	1.88	0.55
45:HK:140:SER:OG	47:HK:501:GTP:O2B	2.24	0.55
45:HM:188:ILE:HG13	45:HM:189:LEU:HD12	1.88	0.55
45:IG:259:LEU:HD11	45:IG:316:SER:HB2	1.86	0.55
45:JI:265:ILE:HD11	45:JI:435:VAL:HG21	1.89	0.55
46:KF:10:GLY:O	46:KF:14:ASN:ND2	2.39	0.55
45:LE:188:ILE:HD11	45:LE:391:LEU:HB3	1.88	0.55
45:LI:155:GLU:OE1	45:LI:197:HIS:NE2	2.40	0.55
46:MD:3:GLU:OE2	46:MD:127:CYS:HB2	2.06	0.55
45:MK:324:VAL:HG12	45:MK:326:LYS:H	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MN:173:PRO:HG2	46:MN:380:ARG:HE	1.71	0.55
45:NA:70:LEU:HA	45:NA:95:GLY:HA3	1.87	0.55
45:NC:284:GLU:HG2	45:NC:286:LEU:H	1.70	0.55
46:NN:289:LEU:HD13	46:NN:365:VAL:HG23	1.89	0.55
46:OB:3:GLU:HA	46:OB:49:VAL:HG13	1.88	0.55
46:OB:386:THR:O	46:OB:390:ARG:HG3	2.06	0.55
45:OC:71:GLU:HB2	45:OC:98:ASP:HB3	1.88	0.55
46:OD:253:LEU:O	46:OD:257:LEU:HB2	2.07	0.55
46:OH:372:THR:HA	46:OH:422:TYR:HE2	1.71	0.55
45:PA:7:ILE:HB	45:PA:137:VAL:HA	1.88	0.55
45:PK:96:LYS:NZ	46:PL:1:MET:SD	2.80	0.55
45:PM:3:GLU:OE2	45:PM:131:GLY:N	2.36	0.55
45:PM:156:ARG:HA	45:PM:159:VAL:HG22	1.89	0.55
45:QA:228:ASN:OD1	45:QA:229:ARG:HD3	2.06	0.55
46:QF:7:ILE:HG22	46:QF:64:ILE:HD13	1.87	0.55
46:QJ:167:PHE:CE2	46:QJ:233:MET:HG3	2.38	0.55
46:QN:178:THR:HB	46:QN:181:GLU:HG3	1.88	0.55
46:RD:256:ASN:HD21	46:RD:350:LYS:HG3	1.71	0.55
45:RE:97:GLU:HG2	45:RE:105:ARG:HH22	1.71	0.55
46:RF:135:ILE:HG13	46:RF:152:ILE:HD11	1.88	0.55
45:RI:6:SER:OG	45:RI:8:HIS:NE2	2.37	0.55
46:RJ:207:LEU:HB3	46:RJ:225:LEU:HD22	1.87	0.55
45:RK:292:THR:HG21	45:RK:331:SER:HB2	1.87	0.55
45:RM:295:ALA:HA	45:RM:300:ASN:HD22	1.71	0.55
46:SF:31:ASP:OD1	46:SF:35:THR:N	2.34	0.55
45:TC:32:PRO:HB3	45:TC:83:TYR:CE1	2.41	0.55
45:TI:251:ASP:OD1	45:TI:252:ILE:N	2.39	0.55
45:TK:292:THR:HG21	45:TK:331:SER:HB3	1.87	0.55
45:UA:135:PHE:HB2	45:UA:166:LYS:HG2	1.88	0.55
45:UA:340:THR:HG23	45:UA:341:ILE:HG13	1.87	0.55
46:UH:323:THR:OG1	45:UI:210:TYR:OH	2.18	0.55
45:VA:70:LEU:HD23	45:VA:145:THR:HG23	1.87	0.55
45:VK:195:LEU:O	45:VK:264:ARG:NH2	2.25	0.55
46:VN:262:ARG:HA	46:VN:262:ARG:NH1	2.20	0.55
46:VN:374:ILE:HG22	46:VN:422:TYR:OH	2.06	0.55
45:WA:319:TYR:HB3	45:WA:323:VAL:HG21	1.87	0.55
45:WE:73:THR:HG21	46:WF:247:ASN:HD21	1.72	0.55
46:WJ:247:ASN:O	46:WJ:252:LYS:NZ	2.36	0.55
46:WL:19:LYS:NZ	46:WL:223:GLY:O	2.36	0.55
6:OF:194:PHE:HZ	46:ED:53:GLU:HB2	1.70	0.55
24:2P:439:HIS:CE1	45:TK:370:LYS:H	2.24	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2U:111:CYS:SG	13:2U:112:CYS:N	2.79	0.55
25:3R:74:THR:HG21	45:MK:225:THR:HG21	1.88	0.55
11:3S:140:ARG:HD2	10:5Q:72:LYS:NZ	2.21	0.55
27:4C:277:LEU:HD22	27:4C:285:ILE:HD13	1.89	0.55
10:4Q:79:ILE:HD12	10:4Q:164:ARG:HB3	1.88	0.55
10:4Q:115:LYS:NZ	45:AI:264:ARG:HE	2.03	0.55
36:5A:85:ARG:HG3	36:5A:87:ARG:HH12	1.71	0.55
10:5Q:39:ASP:OD2	10:5Q:129:TRP:NE1	2.35	0.55
34:5R:128:HIS:HD2	45:AI:44:GLY:HA3	1.70	0.55
34:7R:107:PRO:HB3	46:BD:360:GLY:HA3	1.87	0.55
45:AE:251:ASP:OD1	45:AE:252:ILE:N	2.38	0.55
46:AF:277:GLY:O	46:MF:86:ARG:NH1	2.40	0.55
45:AG:98:ASP:O	45:AG:105:ARG:NH1	2.39	0.55
46:AN:25:SER:OG	46:AN:30:ILE:O	2.25	0.55
46:AN:67:ASP:OD1	46:AN:69:GLU:N	2.36	0.55
46:BB:114:ASP:OD1	46:BB:115:SER:N	2.40	0.55
46:BH:257:LEU:HD11	46:BH:314:SER:HB2	1.88	0.55
46:BJ:178:THR:HG22	46:BJ:180:VAL:H	1.70	0.55
46:BL:73:MET:HA	46:BL:76:VAL:HG12	1.88	0.55
45:CA:75:ILE:HG21	45:CA:94:SER:HB2	1.88	0.55
45:DK:252:ILE:HA	45:DK:255:PHE:HD1	1.71	0.55
46:DN:20:PHE:CE2	46:DN:24:ILE:HD11	2.41	0.55
46:DN:200:MET:HG2	46:DN:266:PHE:HB2	1.87	0.55
46:EB:178:THR:HG22	46:EB:179:VAL:H	1.71	0.55
46:EH:238:CYS:CB	46:EH:318:ARG:HE	2.20	0.55
46:EN:309:ARG:NH2	46:EN:426:GLN:O	2.39	0.55
45:FE:68:LEU:HD11	45:FE:118:CYS:SG	2.47	0.55
46:FN:342:VAL:HG22	46:FN:344:TRP:H	1.70	0.55
46:HH:148:GLY:O	46:HH:152:ILE:HG12	2.05	0.55
45:II:194:LEU:O	45:II:198:THR:OG1	2.24	0.55
45:IM:282:TYR:OH	45:IM:370:LYS:NZ	2.35	0.55
45:JK:260:VAL:HG23	46:JN:397:TRP:HE1	1.71	0.55
46:JL:5:VAL:HG12	46:JL:62:ARG:HD3	1.88	0.55
46:JL:273:LEU:H	46:JL:292:GLN:HE22	1.54	0.55
45:KA:174:SER:HB2	45:KA:177:VAL:O	2.06	0.55
45:KC:254:GLU:HG2	46:KF:98:GLY:HA2	1.87	0.55
46:KH:139:LEU:HD13	46:KH:168:SER:HB3	1.87	0.55
45:KI:174:SER:HB3	45:KI:177:VAL:O	2.06	0.55
45:MG:98:ASP:OD1	45:MG:99:ALA:N	2.40	0.55
47:OA:501:GTP:O2G	46:OB:252:LYS:NZ	2.37	0.55
45:PM:390:ARG:HG3	45:PM:391:LEU:HD12	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QC:184:PRO:HG2	45:QC:398:MET:HE1	1.89	0.55
45:QC:251:ASP:OD1	45:QC:252:ILE:N	2.38	0.55
45:QE:242:LEU:HD11	45:QE:252:ILE:HG13	1.88	0.55
46:QF:52:ASN:OD1	46:QF:62:ARG:NH2	2.40	0.55
45:RA:225:THR:HA	45:RA:228:ASN:HD22	1.72	0.55
45:RG:326:LYS:HE2	46:RH:220:PRO:HD2	1.88	0.55
45:SA:242:LEU:HD11	45:SA:252:ILE:HG13	1.87	0.55
46:SH:324:LYS:HG3	45:SI:222:PRO:HD2	1.87	0.55
46:TD:207:LEU:HD22	46:TD:228:LEU:HD11	1.87	0.55
45:UA:54:SER:HB3	45:UA:64:ARG:NE	2.21	0.55
45:UK:140:SER:OG	47:UK:501:GTP:O2B	2.24	0.55
45:UM:226:ASN:HA	45:UM:229:ARG:HD2	1.89	0.55
46:VB:262:ARG:HH12	46:VB:421:GLU:HG2	1.72	0.55
46:VD:279:GLN:OE1	46:VD:279:GLN:N	2.37	0.55
45:VK:414:GLU:OE1	45:VK:417:GLU:N	2.40	0.55
15:0X:45:GLN:NE2	45:MA:282:TYR:CG	2.70	0.55
13:1U:256:ALA:HB3	13:1U:260:THR:HB	1.89	0.55
26:1W:88:GLN:HE22	45:LE:370:LYS:H	1.54	0.55
20:2K:300:ILE:HD11	46:GL:276:ARG:HD3	1.87	0.55
21:2L:409:ILE:HG12	21:2L:413:PHE:HE2	1.71	0.55
25:2R:83:ASP:OD2	30:3H:220:ARG:NH1	2.33	0.55
13:2U:303:TYR:HB3	13:2U:305:ILE:HD11	1.87	0.55
16:3B:43:ARG:HE	16:3B:79:GLN:HE21	1.52	0.55
21:3L:179:THR:HA	21:3L:184:LEU:HD11	1.88	0.55
35:5S:69:TYR:HA	35:5S:74:LEU:HD23	1.89	0.55
46:BB:139:LEU:HD22	46:BB:170:VAL:HG12	1.87	0.55
46:BD:10:GLY:O	46:BD:14:ASN:ND2	2.38	0.55
46:BJ:334:GLN:NE2	46:BJ:348:ASN:OD1	2.39	0.55
46:BN:2:ARG:HH12	46:BN:240:LEU:HG	1.71	0.55
46:DD:139:LEU:HD22	46:DD:170:VAL:HG12	1.88	0.55
45:DK:208:ALA:O	45:DK:212:ILE:HG12	2.06	0.55
46:FB:173:PRO:HA	46:FB:176:SER:HB3	1.87	0.55
46:FL:101:TRP:HB2	46:FL:184:ASN:HB3	1.87	0.55
45:FM:89:PRO:HG2	45:GM:280:LYS:HG3	1.87	0.55
46:GD:30:ILE:HD11	46:GD:47:ILE:HD11	1.88	0.55
45:GK:68:LEU:HD21	45:GK:118:CYS:SG	2.46	0.55
45:HG:215:ARG:NH2	45:HG:299:ALA:O	2.39	0.55
46:KD:179:VAL:HG13	46:KD:180:VAL:HG13	1.88	0.55
45:LA:284:GLU:HG2	45:LA:286:LEU:HD22	1.88	0.55
45:LC:217:LEU:HD11	45:LC:368:LEU:HD23	1.88	0.55
45:LI:407:TRP:CH2	46:LJ:258:ILE:HB	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LK:326:LYS:HE2	46:LN:220:PRO:HG2	1.89	0.55
45:LM:212:ILE:HD11	45:LM:300:ASN:HA	1.88	0.55
45:MI:118:CYS:O	45:MI:122:ILE:HG12	2.06	0.55
45:NE:68:LEU:HD11	45:NE:118:CYS:SG	2.47	0.55
45:OC:11:GLN:NE2	45:OC:69:ASP:OD2	2.38	0.55
45:PE:184:PRO:HB3	45:PE:394:LYS:HD2	1.87	0.55
45:QE:251:ASP:OD1	45:QE:252:ILE:N	2.38	0.55
46:QF:92:PHE:HD1	46:QF:94:GLN:HE22	1.54	0.55
46:QJ:45:GLU:HG2	46:QJ:46:ARG:HG2	1.88	0.55
46:QL:52:ASN:OD1	46:QL:62:ARG:NH2	2.39	0.55
45:RG:171:ILE:O	45:RG:171:ILE:HG13	2.06	0.55
45:RI:64:ARG:NH1	45:RI:129:CYS:SG	2.79	0.55
45:RM:55:GLU:HG3	45:RM:57:GLY:H	1.70	0.55
45:RM:288:VAL:HG11	45:RM:327:ASP:HB3	1.87	0.55
46:SD:261:PRO:HD3	45:SE:406:HIS:CE1	2.42	0.55
45:SE:255:PHE:HA	45:SE:259:LEU:HD23	1.88	0.55
45:SG:81:GLY:O	45:SG:84:ARG:NH1	2.40	0.55
45:TA:262:TYR:OH	46:TB:391:ARG:O	2.25	0.55
45:TE:390:ARG:HG3	45:TE:391:LEU:HD12	1.88	0.55
46:TF:290:THR:HA	46:TF:293:MET:HB2	1.88	0.55
46:TH:135:ILE:HG13	46:TH:152:ILE:HD11	1.88	0.55
45:TI:132:LEU:O	45:TI:164:LYS:NZ	2.30	0.55
45:UI:140:SER:OG	47:UI:501:GTP:O2B	2.23	0.55
46:UJ:328:GLU:HA	46:UJ:331:LEU:HB3	1.88	0.55
46:UN:73:MET:HG3	46:UN:77:ARG:HH21	1.70	0.55
45:VC:120:ASP:OD1	45:VC:123:ARG:NH1	2.39	0.55
46:VH:218:THR:HG23	46:VH:219:THR:HG23	1.87	0.55
45:VI:3:GLU:N	45:VI:3:GLU:OE1	2.39	0.55
46:WB:286:VAL:HG21	46:WB:325:GLU:HG3	1.89	0.55
4:0D:93:GLN:HE22	45:EC:31:GLN:HB3	1.69	0.55
7:0G:114:LYS:NZ	45:JM:367:ASP:OD1	2.40	0.55
11:0S:17:LYS:NZ	46:WB:87:PRO:O	2.39	0.55
21:1L:549:LEU:HD21	45:BE:367:ASP:HA	1.88	0.55
21:2L:890:PHE:HA	21:2L:893:PHE:HB3	1.88	0.55
24:2P:347:GLU:HG2	46:TN:39:ASP:HB3	1.88	0.55
5:3E:92:LEU:HD23	5:3E:169:SER:HA	1.88	0.55
21:3L:64:ASP:OD1	21:3L:65:LYS:N	2.35	0.55
14:3V:22:ARG:NH1	45:MA:423:GLU:OE2	2.38	0.55
35:4S:75:PRO:HD3	35:4S:101:TYR:HE2	1.72	0.55
37:5E:63:HIS:HE1	46:NB:58:ARG:HG2	1.71	0.55
34:5R:555:ASN:O	34:5R:575:ARG:NH2	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:6G:269:GLY:HA2	45:UC:123:ARG:HD2	1.89	0.55
10:6Q:92:GLN:HE22	10:6Q:102:ARG:HE	1.55	0.55
45:AI:392:ASP:OD1	45:AI:422:ARG:NH1	2.39	0.55
45:BA:144:GLY:N	47:BA:501:GTP:O2G	2.40	0.55
45:BI:98:ASP:OD1	45:BI:99:ALA:N	2.39	0.55
45:BI:287:SER:N	45:BI:290:GLU:OE1	2.35	0.55
45:BM:210:TYR:HH	46:BN:323:THR:HG1	1.54	0.55
45:CA:123:ARG:NH2	45:CA:161:TYR:OH	2.26	0.55
46:CB:12:CYS:O	46:CB:16:ILE:HG12	2.06	0.55
45:CK:175:PRO:HG3	45:CK:390:ARG:NH1	2.21	0.55
45:DC:2:ARG:HD2	45:DC:131:GLY:O	2.07	0.55
46:DF:7:ILE:HG22	46:DF:64:ILE:HB	1.87	0.55
46:DH:186:THR:HG23	46:DH:187:LEU:HD12	1.88	0.55
46:DL:73:MET:HA	46:DL:76:VAL:HG12	1.89	0.55
45:DM:230:LEU:O	45:DM:234:VAL:HG23	2.05	0.55
46:EB:289:LEU:HD13	46:EB:365:VAL:HG23	1.87	0.55
45:EC:258:ASN:HD22	45:EC:352:LYS:HD3	1.71	0.55
45:EI:217:LEU:HD21	45:EI:368:LEU:HD23	1.89	0.55
46:EN:54:ALA:HA	46:FN:283:ALA:HB2	1.88	0.55
45:GE:326:LYS:HZ1	46:GH:219:THR:HA	1.71	0.55
45:HK:185:TYR:HE2	45:HK:404:PHE:HB2	1.70	0.55
46:HN:91:VAL:HG21	46:HN:116:VAL:HG12	1.89	0.55
45:IK:172:TYR:HD1	45:IK:173:PRO:HD2	1.71	0.55
45:JM:7:ILE:HB	45:JM:137:VAL:HG12	1.89	0.55
46:KB:247:ASN:O	46:KB:252:LYS:NZ	2.37	0.55
45:KM:320:ARG:HD3	45:KM:360:PRO:HG3	1.89	0.55
45:LG:392:ASP:OD1	45:LG:422:ARG:NE	2.39	0.55
46:LH:52:ASN:OD1	46:LH:62:ARG:NH2	2.40	0.55
45:LM:140:SER:OG	47:LM:501:GTP:O2B	2.24	0.55
45:LM:407:TRP:HH2	46:LN:258:ILE:HB	1.71	0.55
46:ND:49:VAL:O	46:ND:62:ARG:NH2	2.40	0.55
45:NE:220:GLU:HG2	45:NE:221:ARG:HG2	1.87	0.55
46:NF:87:PRO:HA	46:NF:90:PHE:HD2	1.71	0.55
45:NG:224:TYR:HE2	46:NH:246:LEU:HD11	1.71	0.55
46:NJ:207:LEU:HD23	46:NJ:225:LEU:HB3	1.89	0.55
45:PA:7:ILE:N	45:PA:136:LEU:O	2.39	0.55
46:PB:372:THR:HA	46:PB:422:TYR:HE1	1.71	0.55
46:PH:48:ASN:O	46:PH:62:ARG:NH1	2.37	0.55
46:PJ:113:ILE:HD11	46:PJ:151:LEU:HD12	1.89	0.55
46:QF:295:ASP:OD2	46:QF:297:LYS:NZ	2.37	0.55
45:QI:292:THR:HG21	45:QI:331:SER:HB2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QL:190:HIS:ND1	46:QL:411:ALA:HA	2.21	0.55
46:RB:31:ASP:OD2	46:RB:37:HIS:ND1	2.40	0.55
46:RB:132:GLY:HA2	46:RB:162:ARG:HB3	1.87	0.55
45:RC:140:SER:OG	47:RC:501:GTP:O2B	2.23	0.55
45:UI:250:VAL:HG13	45:UI:254:GLU:HG3	1.88	0.55
45:VA:439:THR:OG1	46:VD:390:ARG:NH2	2.38	0.55
46:VB:290:THR:HA	46:VB:293:MET:HG3	1.89	0.55
46:VJ:25:SER:OG	46:VJ:30:ILE:O	2.24	0.55
46:VL:326:VAL:O	46:VL:330:MET:HG2	2.07	0.55
45:VM:225:THR:HA	45:VM:228:ASN:OD1	2.06	0.55
45:WC:258:ASN:OD1	45:WC:352:LYS:NZ	2.39	0.55
45:WK:352:LYS:HZ1	46:WN:178:THR:HG23	1.71	0.55
13:1U:68:LYS:HG3	13:1U:69:TYR:H	1.70	0.55
14:1V:70:THR:HB	46:MJ:337:ASN:HD21	1.72	0.55
15:1X:33:ALA:HB1	15:2X:140:PRO:HG3	1.89	0.55
23:2O:270:ASN:OD1	23:2O:271:ALA:N	2.39	0.55
13:2U:198:CYS:SG	13:2U:199:VAL:N	2.79	0.55
13:3U:120:LEU:HD11	13:3U:149:VAL:HG21	1.88	0.55
36:5B:133:GLU:OE2	46:NH:362:LYS:NZ	2.37	0.55
37:5E:176:ASP:OD1	37:5E:177:LEU:N	2.39	0.55
45:BA:102:ASN:HB3	45:BA:105:ARG:HB2	1.88	0.55
45:BG:68:LEU:HD21	45:BG:118:CYS:HB2	1.88	0.55
46:BJ:139:LEU:HD13	46:BJ:168:SER:HB3	1.88	0.55
46:BN:60:VAL:HG22	46:CL:281:TYR:CD1	2.42	0.55
46:BN:113:ILE:HA	46:BN:116:VAL:HG12	1.87	0.55
45:CG:89:PRO:HD3	45:DG:283:HIS:ND1	2.21	0.55
45:CG:360:PRO:HD2	45:CG:372:MET:HA	1.88	0.55
46:CL:73:MET:HA	46:CL:76:VAL:HG12	1.88	0.55
46:CN:20:PHE:CE2	46:CN:24:ILE:HD11	2.42	0.55
46:DJ:67:ASP:OD1	46:DJ:68:LEU:N	2.35	0.55
46:DN:11:GLN:HE22	49:DN:501:GDP:PB	2.29	0.55
46:EB:52:ASN:OD1	46:EB:62:ARG:NH2	2.40	0.55
46:FD:68:LEU:HB3	46:FD:96:GLY:HA2	1.87	0.55
45:FG:276:ILE:HD12	45:FG:281:ALA:HA	1.88	0.55
45:GA:72:PRO:HD2	46:GB:2:ARG:HH12	1.70	0.55
45:GA:221:ARG:HH12	46:GB:325:GLU:HB3	1.71	0.55
46:GN:344:TRP:HB3	46:GN:430:ALA:HB2	1.89	0.55
45:HA:70:LEU:HA	45:HA:95:GLY:HA3	1.88	0.55
45:HK:287:SER:N	45:HK:290:GLU:OE2	2.38	0.55
45:IG:172:TYR:HD1	45:IG:173:PRO:HD2	1.70	0.55
45:JE:326:LYS:NZ	46:JH:220:PRO:O	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:KD:153:SER:HA	46:KD:195:ASN:HD22	1.72	0.55
46:KH:2:ARG:HB2	46:KH:131:GLN:HG3	1.88	0.55
45:LA:326:LYS:HE2	46:LD:219:THR:HA	1.88	0.55
45:LA:395:PHE:CZ	45:LA:418:PHE:HB3	2.40	0.55
46:LD:148:GLY:O	46:LD:152:ILE:HG12	2.06	0.55
45:LE:407:TRP:HH2	46:LF:258:ILE:HB	1.71	0.55
46:LH:132:GLY:HA3	46:LH:163:ILE:HG22	1.88	0.55
45:LK:298:PRO:HB3	45:LK:307:PRO:HD2	1.89	0.55
45:MK:241:SER:OG	45:MK:250:VAL:O	2.17	0.55
45:NC:203:MET:HG3	45:NC:384:ILE:HD11	1.87	0.55
46:NJ:6:HIS:NE2	46:NJ:8:GLN:OE1	2.39	0.55
46:OB:328:GLU:O	46:OB:332:ASN:ND2	2.40	0.55
45:OE:98:ASP:OD1	45:OE:99:ALA:N	2.39	0.55
46:OF:392:LYS:HA	46:OF:395:LEU:HD12	1.89	0.55
46:PF:309:ARG:NH2	46:PF:426:GLN:O	2.39	0.55
45:PI:356:ASN:OD1	45:PI:357:TYR:N	2.40	0.55
46:PJ:217:LEU:HG	46:PJ:220:PRO:HD3	1.88	0.55
46:QB:221:THR:HG23	46:QB:224:ASP:H	1.70	0.55
45:QC:192:HIS:ND1	45:QC:424:ASP:OD2	2.30	0.55
46:QD:145:SER:O	46:QD:149:THR:OG1	2.18	0.55
46:QF:63:ALA:O	46:QF:89:ASN:ND2	2.38	0.55
46:QF:204:ASN:ND2	49:QF:501:GDP:O2'	2.39	0.55
46:QJ:344:TRP:HB3	46:QJ:430:ALA:HB2	1.89	0.55
45:RM:247:ALA:HB3	45:RM:355:ILE:HD11	1.88	0.55
46:SD:3:GLU:HG3	46:SD:62:ARG:NH1	2.22	0.55
46:SJ:285:THR:HG22	46:SJ:287:PRO:HD2	1.87	0.55
45:SM:7:ILE:HB	45:SM:137:VAL:HG12	1.87	0.55
46:SN:375:GLN:HE21	46:SN:379:LYS:HG3	1.70	0.55
45:TI:339:ARG:O	45:TI:342:GLN:NE2	2.32	0.55
46:TN:14:ASN:O	46:TN:18:ALA:N	2.36	0.55
45:UG:337:THR:O	45:UG:339:ARG:NH1	2.40	0.55
46:UJ:73:MET:HA	46:UJ:76:VAL:HG12	1.88	0.55
45:VA:244:PHE:HB2	45:VA:356:ASN:HD21	1.70	0.55
46:VL:326:VAL:HG11	46:VL:353:ILE:HD11	1.88	0.55
45:WG:72:PRO:HD2	46:WH:2:ARG:HH21	1.71	0.55
45:WG:222:PRO:HG2	46:WH:324:LYS:HZ2	1.70	0.55
45:WG:271:SER:OG	45:WG:301:MET:SD	2.64	0.55
2:OB:148:PRO:HB3	29:2G:70:VAL:HG11	1.87	0.55
15:OX:49:ILE:HD11	45:MA:282:TYR:HD2	1.71	0.55
14:1V:33:PRO:HB3	45:MI:304:LYS:HD2	1.88	0.55
14:1V:48:VAL:HG11	14:1V:51:LEU:HD12	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2L:588:ILE:O	21:2L:591:VAL:HG12	2.07	0.55
21:2L:888:VAL:HG11	21:2L:892:ARG:HD2	1.89	0.55
9:2N:206:PRO:HA	9:2N:273:ARG:HE	1.72	0.55
11:2S:136:ARG:HH22	10:3Q:149:ILE:HD12	1.70	0.55
11:2S:235:GLN:NE2	11:2S:290:THR:OG1	2.29	0.55
13:2U:89:PHE:O	13:2U:90:GLU:HG2	2.07	0.55
15:2X:60:GLU:OE2	15:2X:64:ARG:NH2	2.39	0.55
21:3L:31:ILE:HA	21:3L:34:LEU:HG	1.87	0.55
14:3V:96:ASN:HD21	46:LB:262:ARG:HB2	1.72	0.55
34:4R:175:GLU:OE2	46:AH:31:ASP:HB3	2.07	0.55
45:AE:224:TYR:HE2	46:AF:246:LEU:HD11	1.71	0.55
45:AK:284:GLU:OE1	45:MK:88:HIS:NE2	2.37	0.55
46:BB:178:THR:HB	46:BB:181:GLU:HG3	1.89	0.55
46:BB:309:ARG:HE	46:BB:342:VAL:HA	1.72	0.55
46:BB:309:ARG:HH21	46:BB:342:VAL:HA	1.72	0.55
45:CC:251:ASP:N	45:CC:254:GLU:OE2	2.36	0.55
45:CE:212:ILE:HD11	45:CE:300:ASN:HA	1.89	0.55
45:CK:88:HIS:HB3	45:CK:91:GLN:HG2	1.87	0.55
46:DB:344:TRP:CE3	46:DB:345:ILE:HG23	2.42	0.55
45:DI:244:PHE:HB2	45:DI:356:ASN:HD21	1.72	0.55
46:ED:258:ILE:HD11	45:EE:407:TRP:HZ2	1.71	0.55
46:EL:222:TYR:O	46:EL:226:ASN:ND2	2.37	0.55
45:FA:71:GLU:OE2	46:FB:2:ARG:NH2	2.40	0.55
45:FA:88:HIS:NE2	45:GA:284:GLU:OE2	2.32	0.55
45:FI:192:HIS:ND1	45:FI:424:ASP:OD2	2.35	0.55
46:FL:268:ILE:HG22	46:FL:368:VAL:HG22	1.88	0.55
45:GA:210:TYR:HE1	45:GA:227:LEU:HD11	1.70	0.55
45:GG:71:GLU:OE2	46:GH:2:ARG:NH2	2.39	0.55
46:GL:64:ILE:HD11	46:GL:123:GLU:HG3	1.88	0.55
45:GM:340:THR:HG23	45:GM:341:ILE:HG13	1.88	0.55
46:GN:148:GLY:O	46:GN:152:ILE:HG12	2.06	0.55
45:HE:26:LEU:HD13	45:HE:363:VAL:HG12	1.88	0.55
45:HM:185:TYR:HE2	45:HM:404:PHE:HB2	1.71	0.55
46:IJ:334:GLN:NE2	46:IJ:348:ASN:OD1	2.40	0.55
45:IK:69:ASP:OD1	45:IK:70:LEU:N	2.40	0.55
46:KB:11:GLN:HA	46:KB:14:ASN:HD22	1.70	0.55
46:KH:67:ASP:OD1	46:KH:68:LEU:N	2.39	0.55
46:LH:95:THR:OG1	46:LH:108:GLU:OE1	2.15	0.55
46:LH:114:ASP:OD1	46:LH:115:SER:N	2.40	0.55
45:LI:272:TYR:HD2	45:LI:275:ILE:HD11	1.71	0.55
46:ML:32:PRO:HA	46:ML:84:LEU:HD11	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NA:164:LYS:O	45:NA:166:LYS:NZ	2.40	0.55
45:NE:226:ASN:ND2	45:NE:367:ASP:OD1	2.36	0.55
46:OD:332:ASN:O	46:OD:336:LYS:HG3	2.07	0.55
45:OK:217:LEU:HD11	45:OK:367:ASP:HB3	1.89	0.55
45:PA:252:ILE:HA	45:PA:255:PHE:CE2	2.42	0.55
46:PD:203:ASP:OD2	46:PD:302:ALA:N	2.33	0.55
45:QI:439:THR:OG1	46:QJ:390:ARG:NH1	2.40	0.55
45:QM:56:THR:HG23	45:QM:58:ALA:H	1.72	0.55
46:QN:139:LEU:HD22	46:QN:170:VAL:HG12	1.87	0.55
46:RH:6:HIS:NE2	46:RH:8:GLN:OE1	2.40	0.55
46:RH:7:ILE:HB	46:RH:135:ILE:HG22	1.89	0.55
46:SB:210:ILE:O	46:SB:214:THR:OG1	2.16	0.55
45:SE:317:MET:HB3	45:SE:377:MET:HG2	1.87	0.55
45:SI:176:GLN:NE2	45:SI:207:GLU:OE2	2.40	0.55
46:SL:166:THR:OG1	46:SL:199:CYS:SG	2.55	0.55
46:TD:178:THR:HB	46:TD:181:GLU:HG3	1.88	0.55
46:TN:278:SER:HA	46:TN:281:TYR:HD2	1.72	0.55
45:UA:360:PRO:HD2	45:UA:371:VAL:O	2.07	0.55
45:UE:251:ASP:H	45:UE:254:GLU:HG3	1.72	0.55
46:UH:210:ILE:O	46:UH:214:THR:OG1	2.20	0.55
45:WK:123:ARG:NH2	45:WK:160:ASP:OD2	2.38	0.55
45:WM:224:TYR:HD2	46:WN:245:GLN:HE21	1.53	0.55
14:1V:167:TYR:OH	45:MK:396:ASP:OD1	2.25	0.55
16:2B:253:LYS:HG2	16:2B:268:ILE:HG21	1.89	0.55
23:3O:285:GLU:O	23:3O:289:ILE:HG12	2.07	0.55
34:4R:282:ASP:OD2	34:4R:306:ARG:NH2	2.39	0.55
36:5D:90:GLN:HE22	36:5D:98:LEU:H	1.54	0.55
37:5G:9:TYR:CG	37:5G:10:PRO:HD3	2.42	0.55
37:5G:140:ASN:OD1	46:OL:279:GLN:NE2	2.40	0.55
39:6F:45:LYS:HG2	39:6F:46:PHE:H	1.70	0.55
46:AL:121:ARG:NH1	46:AL:158:GLU:OE2	2.40	0.55
45:BA:320:ARG:NH2	45:BA:358:GLN:OE1	2.39	0.55
45:BC:141:VAL:HG21	45:BC:172:TYR:HE1	1.72	0.55
46:BD:113:ILE:HG12	46:BD:117:LEU:HG	1.89	0.55
45:BE:68:LEU:HD11	45:BE:118:CYS:SG	2.47	0.55
46:BL:299:MET:HG3	46:BL:305:PRO:HG3	1.88	0.55
46:BN:372:THR:HA	46:BN:422:TYR:HE2	1.72	0.55
45:CK:326:LYS:HZ3	46:CL:220:PRO:HD2	1.71	0.55
46:CN:226:ASN:HA	46:CN:229:VAL:HG12	1.89	0.55
45:DA:225:THR:HA	45:DA:228:ASN:HD22	1.72	0.55
45:EA:349:THR:OG1	46:EB:176:SER:OG	2.15	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EB:2:ARG:HA	46:EB:131:GLN:HB2	1.88	0.55
45:EI:292:THR:HG21	45:EI:331:SER:HB2	1.88	0.55
46:EL:289:LEU:HB3	46:EL:365:VAL:HG21	1.88	0.55
45:GA:217:LEU:HB3	45:GA:219:ILE:HG12	1.87	0.55
47:GA:501:GTP:O1G	46:GB:252:LYS:NZ	2.27	0.55
45:GM:224:TYR:HE2	46:GN:246:LEU:HD11	1.70	0.55
45:HA:88:HIS:HB3	45:HA:91:GLN:HG2	1.89	0.55
45:JE:188:ILE:HG22	45:JE:421:ALA:HB1	1.88	0.55
45:JM:239:THR:HG23	45:JM:243:ARG:HE	1.72	0.55
45:KE:174:SER:HB3	45:KE:177:VAL:O	2.06	0.55
45:KG:17:GLY:HA2	45:KG:20:CYS:SG	2.47	0.55
46:KJ:5:VAL:HG12	46:KJ:62:ARG:HD3	1.89	0.55
45:LG:251:ASP:HB2	45:LG:254:GLU:HG2	1.88	0.55
45:LG:259:LEU:HD11	45:LG:316:SER:HB3	1.89	0.55
45:NC:402:ARG:HD3	45:NC:405:VAL:HG21	1.88	0.55
46:NL:191:GLN:O	46:NL:195:ASN:ND2	2.34	0.55
45:OA:221:ARG:HD2	46:OB:324:LYS:HZ1	1.72	0.55
45:OE:88:HIS:CD2	45:OE:90:GLU:HG3	2.42	0.55
45:OG:88:HIS:ND1	45:OG:89:PRO:HD2	2.22	0.55
45:OI:3:GLU:OE2	45:OI:131:GLY:N	2.38	0.55
46:PB:99:ASN:ND2	49:PB:501:GDP:O2A	2.32	0.55
46:PH:392:LYS:HG3	46:PH:395:LEU:HD13	1.88	0.55
46:QD:31:ASP:OD1	46:QD:35:THR:N	2.30	0.55
45:QI:312:TYR:O	45:QI:344:VAL:HG23	2.07	0.55
45:QM:188:ILE:HG21	45:QM:422:ARG:HH22	1.72	0.55
46:RB:327:ASP:OD2	46:RB:328:GLU:N	2.40	0.55
45:RK:346:TRP:CD1	46:RL:391:ARG:HG3	2.42	0.55
45:RM:326:LYS:HD3	46:RN:208:TYR:HB3	1.89	0.55
45:SA:326:LYS:HZ2	46:SB:219:THR:HA	1.72	0.55
46:SJ:156:ARG:NH1	46:SJ:195:ASN:O	2.40	0.55
46:TF:309:ARG:NH2	46:TF:426:GLN:O	2.36	0.55
46:TF:372:THR:HA	46:TF:422:TYR:HE2	1.72	0.55
46:TL:74:ASP:OD1	46:TL:77:ARG:NH2	2.38	0.55
45:UE:328:VAL:HG11	45:UE:353:VAL:HG21	1.87	0.55
45:UI:346:TRP:CD1	46:UJ:391:ARG:HG3	2.42	0.55
46:UJ:246:LEU:HD11	45:UK:224:TYR:HE2	1.70	0.55
46:VB:268:ILE:HG22	46:VB:368:VAL:HG22	1.88	0.55
46:VB:326:VAL:O	46:VB:330:MET:HG2	2.06	0.55
46:VN:334:GLN:HA	46:VN:341:PHE:HE2	1.72	0.55
46:WH:273:LEU:H	46:WH:292:GLN:HE22	1.52	0.55
45:WM:292:THR:HG21	45:WM:331:SER:HB3	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:1O:125:LEU:HD21	46:UF:83:GLN:HG3	1.89	0.55
14:1V:192:GLU:O	14:1V:196:GLN:HG2	2.07	0.55
21:2L:748:LYS:NZ	21:2L:836:GLU:O	2.36	0.55
9:2N:211:HIS:CD2	9:2N:213:PRO:HD2	2.42	0.55
9:2N:221:ASP:OD1	9:2N:222:ASN:N	2.40	0.55
23:2O:198:LYS:NZ	45:VI:372:MET:HG3	2.21	0.55
23:2O:402:GLN:HG2	23:2O:406:ARG:HH11	1.72	0.55
12:3T:3:LEU:HD12	12:3T:187:ILE:HG23	1.88	0.55
10:6Q:108:TYR:OH	45:AM:423:GLU:OE2	2.16	0.55
34:7R:593:ASP:OD2	34:7R:598:TRP:N	2.23	0.55
45:BA:338:LYS:HG2	45:BA:340:THR:HG22	1.89	0.55
45:BE:89:PRO:HD3	45:CE:283:HIS:ND1	2.22	0.55
46:CH:257:LEU:HD11	46:CH:314:SER:HB2	1.89	0.55
45:CI:339:ARG:NH1	45:CI:342:GLN:OE1	2.40	0.55
45:CK:339:ARG:O	45:CK:342:GLN:NE2	2.38	0.55
46:CN:238:CYS:SG	46:CN:239:CYS:N	2.80	0.55
46:CN:330:MET:HB3	46:CN:349:ILE:HD12	1.88	0.55
46:DL:107:THR:OG1	46:DL:108:GLU:OE1	2.20	0.55
46:DL:109:GLY:O	46:DL:113:ILE:HG23	2.07	0.55
45:EA:30:ILE:HG21	45:EA:53:PHE:HE2	1.72	0.55
46:EF:10:GLY:O	46:EF:14:ASN:ND2	2.40	0.55
46:EH:5:VAL:HG12	46:EH:62:ARG:HD3	1.87	0.55
46:EN:50:TYR:HA	46:EN:62:ARG:HH12	1.72	0.55
46:EN:131:GLN:O	46:EN:162:ARG:NH2	2.39	0.55
46:GB:114:ASP:OD1	46:GB:115:SER:N	2.40	0.55
46:GF:140:GLY:O	46:GF:184:ASN:ND2	2.40	0.55
45:GM:53:PHE:HB3	45:GM:61:HIS:HB3	1.88	0.55
46:GN:156:ARG:NH2	46:GN:197:ASP:OD1	2.40	0.55
45:HA:407:TRP:HZ3	46:HB:255:VAL:HA	1.72	0.55
45:HM:105:ARG:HD2	46:HN:251:ARG:HH21	1.71	0.55
46:HN:287:PRO:HG3	46:HN:329:GLN:HE22	1.70	0.55
45:JA:260:VAL:HG23	46:JD:397:TRP:HZ2	1.72	0.55
45:JA:423:GLU:OE1	45:NA:339:ARG:NH2	2.40	0.55
46:JJ:86:ARG:HG2	46:JJ:88:ASP:H	1.70	0.55
45:JM:10:GLY:O	45:JM:14:ILE:HG12	2.06	0.55
45:JM:55:GLU:HG3	45:JM:57:GLY:H	1.72	0.55
46:JN:86:ARG:NH2	46:KN:281:TYR:O	2.40	0.55
45:KG:288:VAL:HA	45:KG:291:ILE:HG12	1.87	0.55
46:KJ:260:PHE:HB2	46:KJ:263:LEU:HD13	1.87	0.55
46:KN:32:PRO:HA	46:KN:84:LEU:HD11	1.88	0.55
46:LB:107:THR:HG23	46:LB:108:GLU:HG2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LF:237:THR:HG23	46:LF:241:ARG:HH21	1.71	0.55
45:LI:328:VAL:HG11	45:LI:353:VAL:HG21	1.88	0.55
46:NB:320:ARG:NH1	46:NB:355:ASP:O	2.40	0.55
45:NC:390:ARG:HG3	45:NC:391:LEU:HD12	1.89	0.55
46:OB:139:LEU:HD13	46:OB:168:SER:HB3	1.88	0.55
46:OF:49:VAL:HG11	46:OF:241:ARG:HG2	1.88	0.55
45:PI:98:ASP:O	45:PI:105:ARG:NH1	2.40	0.55
45:PK:192:HIS:ND1	45:PK:424:ASP:OD2	2.32	0.55
45:QG:60:LYS:NZ	45:QG:85:GLN:O	2.40	0.55
45:QG:88:HIS:HB3	45:QG:91:GLN:HG2	1.89	0.55
46:RF:52:ASN:OD1	46:RF:62:ARG:NH2	2.37	0.55
46:RN:67:ASP:OD1	46:RN:68:LEU:N	2.40	0.55
46:RN:139:LEU:HD22	46:RN:170:VAL:HG12	1.88	0.55
46:RN:140:GLY:HA2	46:RN:181:GLU:HG2	1.89	0.55
46:UH:73:MET:HA	46:UH:76:VAL:HG12	1.89	0.55
46:UL:139:LEU:HD13	46:UL:168:SER:HB3	1.89	0.55
45:UM:3:GLU:OE2	45:UM:64:ARG:HD3	2.06	0.55
45:WA:346:TRP:CD1	46:WD:391:ARG:HG3	2.42	0.55
45:WK:188:ILE:HD12	45:WK:425:LEU:HD11	1.89	0.55
19:1J:314:VAL:CG1	45:IK:372:MET:HG3	2.36	0.55
12:1T:48:THR:HG22	12:1T:153:ILE:HD13	1.89	0.55
13:2U:494:LYS:NZ	13:2U:537:ASN:OD1	2.31	0.55
15:2X:78:ASN:OD1	46:MJ:279:GLN:NE2	2.36	0.55
1:3A:16:LEU:HA	1:3A:19:ARG:HB2	1.88	0.55
32:3D:47:TRP:CD1	32:3D:85:ALA:HB1	2.42	0.55
21:3L:41:LYS:NZ	46:BB:40:SER:HA	2.22	0.55
21:3L:101:PHE:O	21:3L:105:ILE:HG12	2.07	0.55
12:3T:65:ARG:HH21	12:3T:147:PHE:HZ	1.54	0.55
13:3U:380:GLY:HA3	13:3U:408:VAL:HB	1.88	0.55
13:3U:578:ILE:HD11	13:3U:592:SER:HB2	1.88	0.55
46:AB:148:GLY:O	46:AB:152:ILE:HG12	2.07	0.55
46:BB:215:LEU:HB3	46:BB:217:LEU:HD23	1.89	0.55
45:BE:76:ASP:OD1	45:BE:79:ARG:NH2	2.40	0.55
46:BL:399:THR:HA	46:BL:403:MET:O	2.07	0.55
45:DC:262:TYR:OH	46:DD:391:ARG:O	2.22	0.55
46:DJ:181:GLU:HG2	46:DJ:182:PRO:HD3	1.89	0.55
46:DL:7:ILE:HB	46:DL:135:ILE:HG13	1.89	0.55
46:EB:150:LEU:O	46:EB:153:SER:OG	2.23	0.55
46:EF:107:THR:OG1	46:EF:108:GLU:OE1	2.22	0.55
46:EH:294:PHE:HE2	46:EH:333:VAL:HG11	1.72	0.55
45:EK:326:LYS:NZ	45:EK:327:ASP:OD1	2.32	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EL:268:ILE:HG13	46:EL:300:MET:HG3	1.88	0.55
46:FL:178:THR:HB	46:FL:181:GLU:HG3	1.89	0.55
46:FN:309:ARG:NH2	46:FN:426:GLN:O	2.36	0.55
46:GH:272:PRO:HG3	46:GH:284:LEU:HD11	1.89	0.55
46:HD:66:MET:HE1	46:HD:147:MET:HG2	1.89	0.55
46:IF:101:TRP:HB2	46:IF:184:ASN:HB3	1.88	0.55
45:II:244:PHE:HB2	45:II:356:ASN:HD21	1.71	0.55
46:IL:178:THR:HB	46:IL:181:GLU:HB2	1.89	0.55
45:IM:88:HIS:HB3	45:IM:91:GLN:HG2	1.88	0.55
45:JG:70:LEU:HA	45:JG:95:GLY:HA3	1.88	0.55
45:JI:188:ILE:HG23	45:JI:425:LEU:HD11	1.89	0.55
45:KM:2:ARG:HG2	45:KM:242:LEU:HD12	1.88	0.55
45:LC:223:THR:HG22	45:LC:224:TYR:H	1.71	0.55
46:MH:7:ILE:HG22	46:MH:64:ILE:HB	1.89	0.55
46:MJ:173:PRO:HD2	46:MJ:174:LYS:NZ	2.22	0.55
45:NE:27:GLU:OE2	45:NE:243:ARG:NH1	2.36	0.55
46:NJ:252:LYS:O	46:NJ:256:ASN:ND2	2.39	0.55
46:OB:262:ARG:NH1	46:OB:421:GLU:OE1	2.40	0.55
45:OM:11:GLN:N	47:OM:501:GTP:O1B	2.38	0.55
45:PG:70:LEU:HD13	45:PG:95:GLY:HA3	1.89	0.55
46:QB:8:GLN:HE21	46:QB:65:LEU:HD13	1.71	0.55
46:QF:256:ASN:OD1	45:QG:181:VAL:HG22	2.06	0.55
46:QJ:222:TYR:O	46:QJ:226:ASN:ND2	2.29	0.55
46:QL:268:ILE:HG22	46:QL:368:VAL:HG12	1.88	0.55
46:QN:292:GLN:O	46:QN:298:ASN:ND2	2.38	0.55
46:RB:107:THR:OG1	46:RB:108:GLU:OE1	2.25	0.55
45:RE:7:ILE:HD11	45:RE:137:VAL:HG12	1.89	0.55
45:RE:174:SER:HB2	45:RE:177:VAL:O	2.07	0.55
46:RH:309:ARG:NH1	46:RH:426:GLN:O	2.40	0.55
46:RJ:262:ARG:NH1	46:RJ:421:GLU:OE1	2.41	0.55
45:SA:140:SER:OG	47:SA:501:GTP:O2B	2.25	0.55
46:SD:135:ILE:HG13	46:SD:152:ILE:HD11	1.88	0.55
45:TA:188:ILE:HD12	45:TA:425:LEU:HD11	1.88	0.55
46:TL:257:LEU:HD12	46:TL:312:THR:HG23	1.89	0.55
46:TN:46:ARG:HG2	46:TN:241:ARG:HA	1.89	0.55
45:UA:320:ARG:NH2	45:UA:360:PRO:HG3	2.21	0.55
46:UD:67:ASP:OD1	46:UD:68:LEU:N	2.36	0.55
46:UN:238:CYS:SG	46:UN:318:ARG:HG3	2.47	0.55
46:UN:363:MET:SD	46:UN:364:ALA:N	2.79	0.55
46:VB:164:MET:HB3	46:VB:197:ASP:H	1.72	0.55
46:VF:87:PRO:HA	46:VF:90:PHE:HD2	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VG:244:PHE:HB2	45:VG:356:ASN:HD21	1.72	0.55
46:WB:113:ILE:HG21	46:WB:150:LEU:HD11	1.88	0.55
45:WC:76:ASP:OD2	46:WD:46:ARG:NH2	2.40	0.55
45:WI:356:ASN:OD1	45:WI:357:TYR:N	2.40	0.55
21:1L:525:LEU:HD21	46:BF:357:PRO:HG3	1.89	0.54
12:1T:74:ILE:HD12	45:MC:159:VAL:HG13	1.88	0.54
14:1V:124:LEU:HB3	14:1V:127:GLN:HE21	1.71	0.54
15:1X:98:ALA:O	15:1X:102:GLU:HG2	2.06	0.54
21:2L:887:LYS:HB2	21:2L:925:TYR:CD1	2.42	0.54
9:2N:62:TYR:HA	9:2N:277:ALA:HB3	1.89	0.54
12:2T:118:TYR:OH	46:AJ:304:ASP:OD2	2.25	0.54
14:2V:24:ARG:HH22	45:ME:430:LYS:HG3	1.72	0.54
31:3I:210:PRO:HG2	45:FK:117:LEU:HB2	1.87	0.54
13:3U:280:ALA:O	13:3U:298:SER:N	2.36	0.54
10:6Q:41:ASP:OD2	10:6Q:81:LYS:NZ	2.35	0.54
45:AK:118:CYS:O	45:AK:122:ILE:HG12	2.06	0.54
45:BE:256:GLN:HE22	46:BH:397:TRP:HH2	1.55	0.54
45:BG:89:PRO:HD3	45:CG:283:HIS:ND1	2.20	0.54
46:BL:91:VAL:HG21	46:BL:116:VAL:HG12	1.89	0.54
46:CD:309:ARG:NH2	46:CD:426:GLN:O	2.40	0.54
45:CG:288:VAL:HA	45:CG:291:ILE:HG12	1.88	0.54
46:CJ:328:GLU:OE2	46:CJ:332:ASN:ND2	2.39	0.54
46:DD:375:GLN:OE1	46:DD:379:LYS:NZ	2.39	0.54
46:DF:139:LEU:HA	46:DF:145:SER:HB3	1.90	0.54
46:EB:309:ARG:HH21	46:EB:342:VAL:HA	1.72	0.54
46:EH:334:GLN:HE22	46:EH:348:ASN:H	1.53	0.54
46:EN:64:ILE:HA	46:EN:89:ASN:HB3	1.88	0.54
45:FA:69:ASP:OD1	45:FA:70:LEU:N	2.39	0.54
46:FB:5:VAL:HG23	46:FB:62:ARG:HB2	1.88	0.54
45:GA:265:ILE:HD11	45:GA:435:VAL:HG21	1.89	0.54
45:GI:242:LEU:HD11	45:GI:252:ILE:HG12	1.89	0.54
45:GK:362:VAL:HB	45:GK:370:LYS:HB3	1.89	0.54
46:GL:139:LEU:HD13	46:GL:168:SER:HB2	1.89	0.54
45:HG:88:HIS:HB3	45:HG:91:GLN:HG2	1.89	0.54
45:II:399:TYR:O	45:II:402:ARG:NH1	2.40	0.54
45:IM:71:GLU:OE2	45:IM:73:THR:HG23	2.07	0.54
45:JE:11:GLN:HG3	45:JE:74:VAL:HG11	1.89	0.54
45:JE:279:GLU:N	45:JE:279:GLU:OE1	2.40	0.54
45:JG:406:HIS:HA	45:JG:409:VAL:HG12	1.90	0.54
46:KF:139:LEU:HD13	46:KF:168:SER:HB3	1.88	0.54
46:KL:73:MET:HA	46:KL:76:VAL:HG12	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LD:421:GLU:HA	46:LD:424:GLN:HG3	1.89	0.54
45:LM:210:TYR:OH	46:LN:323:THR:OG1	2.20	0.54
46:MJ:289:LEU:HD13	46:MJ:365:VAL:HG23	1.89	0.54
45:NK:129:CYS:HB2	45:NK:132:LEU:HD23	1.88	0.54
45:PE:128:ASN:OD1	45:QE:285:GLN:NE2	2.40	0.54
46:PN:86:ARG:HE	46:PN:87:PRO:HD2	1.73	0.54
46:QF:204:ASN:OD1	49:QF:501:GDP:N2	2.39	0.54
46:QF:222:TYR:O	46:QF:226:ASN:ND2	2.33	0.54
45:QM:210:TYR:HE1	45:QM:227:LEU:HD11	1.72	0.54
45:QM:241:SER:OG	45:QM:250:VAL:O	2.21	0.54
45:RC:55:GLU:HG3	45:RC:57:GLY:H	1.71	0.54
45:RC:336:LYS:O	45:RC:339:ARG:NH2	2.39	0.54
45:RK:20:CYS:HA	45:RK:232:ALA:HB1	1.87	0.54
45:RK:315:CYS:SG	45:RK:379:SER:OG	2.62	0.54
46:SD:210:ILE:O	46:SD:214:THR:OG1	2.22	0.54
46:SD:286:VAL:HG23	46:SD:287:PRO:HD3	1.88	0.54
46:SF:412:GLU:O	46:SF:416:ASN:N	2.32	0.54
46:SL:67:ASP:OD1	46:SL:68:LEU:N	2.40	0.54
46:TJ:113:ILE:HG21	46:TJ:150:LEU:HD22	1.88	0.54
46:TL:222:TYR:O	46:TL:226:ASN:ND2	2.30	0.54
45:UA:284:GLU:HG3	45:UA:286:LEU:HD22	1.90	0.54
46:UL:330:MET:HB3	46:UL:349:ILE:HD12	1.87	0.54
45:VK:269:LEU:HD22	45:VK:384:ILE:HD11	1.87	0.54
45:WA:317:MET:HG2	45:WA:377:MET:HG2	1.88	0.54
46:WL:257:LEU:HD11	46:WL:314:SER:HB2	1.89	0.54
16:1B:258:LYS:HG3	45:KC:279:GLU:HB3	1.89	0.54
19:1J:56:PRO:HG2	46:ID:320:ARG:NH1	2.21	0.54
12:1T:188:ASP:OD1	12:1T:189:PHE:N	2.36	0.54
14:1V:209:ARG:HE	14:1V:259:ASN:HD21	1.55	0.54
4:2D:189:GLN:HE21	4:2D:197:THR:HG21	1.72	0.54
31:2I:124:PRO:HB3	45:FC:120:ASP:OD1	2.07	0.54
20:2K:242:LYS:HA	20:2K:245:TRP:HD1	1.72	0.54
21:2L:545:GLU:OE1	45:BM:278:ALA:HB3	2.06	0.54
16:3B:72:TYR:OH	16:3B:77:ASP:N	2.40	0.54
25:3R:445:SER:HB3	25:3R:468:ARG:HG2	1.89	0.54
12:3T:213:LEU:HA	12:3T:218:PHE:CE2	2.41	0.54
45:AA:288:VAL:HA	45:AA:291:ILE:HG12	1.89	0.54
45:AA:397:LEU:HD21	46:AB:344:TRP:HA	1.89	0.54
46:AB:213:ARG:HH22	46:AB:297:LYS:HD3	1.72	0.54
45:AC:192:HIS:NE2	45:AC:424:ASP:OD2	2.40	0.54
46:AJ:135:ILE:HB	46:AJ:166:THR:HG22	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CF:52:ASN:OD1	46:CF:62:ARG:NH2	2.40	0.54
45:DA:36:MET:HG3	45:DA:38:SER:H	1.73	0.54
46:DB:238:CYS:SG	46:DB:239:CYS:N	2.81	0.54
45:DK:292:THR:HG21	45:DK:331:SER:HB2	1.89	0.54
45:EG:255:PHE:O	45:EG:259:LEU:HB3	2.07	0.54
46:EL:6:HIS:ND1	46:EL:8:GLN:OE1	2.40	0.54
45:FC:2:ARG:HH22	46:FF:69:GLU:HB2	1.72	0.54
46:FN:390:ARG:O	46:FN:390:ARG:NH1	2.34	0.54
46:GB:269:GLY:N	46:GB:367:PHE:O	2.30	0.54
46:GB:327:ASP:OD1	46:GB:328:GLU:N	2.39	0.54
45:HE:188:ILE:HD11	45:HE:422:ARG:HA	1.89	0.54
46:HF:63:ALA:O	46:HF:89:ASN:ND2	2.39	0.54
46:HJ:178:THR:HB	46:HJ:181:GLU:HG3	1.88	0.54
45:IE:326:LYS:NZ	46:IH:218:THR:O	2.28	0.54
46:JB:52:ASN:OD1	46:JB:62:ARG:NH2	2.40	0.54
45:KE:109:THR:HG22	45:KE:110:ILE:HG23	1.89	0.54
46:LD:215:LEU:HD21	46:LD:273:LEU:HD22	1.89	0.54
46:LF:113:ILE:HD11	46:LF:151:LEU:HB2	1.89	0.54
45:LK:384:ILE:O	45:LK:387:VAL:HG12	2.07	0.54
46:MF:5:VAL:HG12	46:MF:62:ARG:HD3	1.88	0.54
45:MG:69:ASP:OD1	45:MG:70:LEU:N	2.39	0.54
45:NA:298:PRO:HB3	45:NA:307:PRO:HD2	1.90	0.54
45:NC:224:TYR:HE2	46:ND:246:LEU:HD11	1.72	0.54
46:ND:64:ILE:HD13	46:ND:119:VAL:HG13	1.89	0.54
45:NE:89:PRO:HG2	45:OE:280:LYS:HZ3	1.71	0.54
46:NN:296:ALA:HB1	46:NN:305:PRO:HD2	1.88	0.54
45:OC:390:ARG:HG3	45:OC:391:LEU:HD12	1.88	0.54
45:OM:427:ALA:HA	45:OM:430:LYS:HE2	1.89	0.54
45:PA:258:ASN:HD22	45:PA:352:LYS:HE3	1.72	0.54
45:PA:318:MET:SD	45:PA:320:ARG:HB2	2.48	0.54
45:PE:100:ALA:HA	46:PF:252:LYS:HG2	1.88	0.54
45:PE:221:ARG:NH1	46:PF:322:SER:OG	2.40	0.54
46:PF:156:ARG:NH1	46:PF:162:ARG:O	2.38	0.54
46:PJ:87:PRO:HA	46:PJ:90:PHE:HD2	1.73	0.54
45:PM:180:ALA:HB3	45:PM:183:GLU:HG3	1.89	0.54
46:RD:10:GLY:O	46:RD:14:ASN:ND2	2.41	0.54
45:SK:155:GLU:O	45:SK:158:SER:OG	2.24	0.54
45:SM:316:SER:O	45:SM:378:ILE:N	2.36	0.54
45:UI:98:ASP:OD1	45:UI:99:ALA:N	2.40	0.54
46:UJ:139:LEU:HD13	46:UJ:168:SER:HB3	1.88	0.54
45:VA:55:GLU:HG3	45:VA:57:GLY:H	1.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VE:384:ILE:O	45:VE:387:VAL:HG22	2.07	0.54
45:VI:194:LEU:O	45:VI:198:THR:HG22	2.07	0.54
45:WC:430:LYS:NZ	45:WC:431:ASP:OD1	2.40	0.54
22:1M:288:LEU:HD13	39:6F:55:THR:HG22	1.89	0.54
11:1S:132:SER:OG	11:1S:180:GLU:OE2	2.25	0.54
13:1U:593:VAL:HG12	13:1U:599:ILE:HG12	1.89	0.54
23:2O:223:ARG:O	23:2O:226:GLU:HG3	2.07	0.54
11:2S:34:ILE:O	11:2S:34:ILE:HG13	2.07	0.54
11:2S:140:ARG:HG2	10:3Q:72:LYS:HD3	1.89	0.54
5:3E:23:THR:O	5:3E:27:LEU:N	2.40	0.54
25:3R:104:ALA:HB2	25:3R:187:ILE:HG22	1.89	0.54
13:3U:106:GLN:HB2	13:3U:120:LEU:HD23	1.88	0.54
40:6G:124:GLU:HA	40:6G:128:LYS:HB2	1.89	0.54
10:6Q:14:LEU:HD21	10:6Q:47:LEU:HD12	1.88	0.54
46:AD:178:THR:HG22	46:AD:180:VAL:H	1.71	0.54
46:AF:105:HIS:CE1	46:AF:150:LEU:HD12	2.43	0.54
45:AG:256:GLN:HB3	46:AJ:397:TRP:CZ2	2.42	0.54
46:BL:51:TYR:O	46:BL:62:ARG:NH2	2.40	0.54
47:FE:501:GTP:O1G	46:FF:252:LYS:NZ	2.33	0.54
46:FJ:267:MET:HE1	46:FJ:303:ALA:HB3	1.88	0.54
46:FN:68:LEU:HD13	46:FN:147:MET:HE1	1.88	0.54
46:GL:295:ASP:OD2	46:GL:297:LYS:HG2	2.07	0.54
45:HM:340:THR:HG23	45:HM:341:ILE:HG13	1.89	0.54
45:IG:98:ASP:OD1	45:IG:99:ALA:N	2.40	0.54
45:IM:318:MET:HB2	45:IM:376:CYS:HB3	1.89	0.54
46:JF:263:LEU:HD22	46:JF:422:TYR:HD1	1.71	0.54
46:JH:217:LEU:HG	46:JH:220:PRO:HD3	1.90	0.54
46:JJ:371:SER:O	46:JJ:422:TYR:OH	2.13	0.54
45:KE:406:HIS:HA	45:KE:409:VAL:HG12	1.90	0.54
45:KG:177:VAL:HG21	46:KH:327:ASP:HB3	1.88	0.54
45:ME:439:THR:HG21	46:MH:390:ARG:HH12	1.72	0.54
46:MF:132:GLY:HA3	46:MF:163:ILE:HG22	1.89	0.54
45:MG:147:SER:HB2	45:MG:190:SER:HB3	1.90	0.54
46:MN:221:THR:HG23	46:MN:223:GLY:H	1.72	0.54
45:NK:222:PRO:O	46:NL:322:SER:OG	2.24	0.54
45:NK:306:ASP:OD1	45:NK:308:ARG:NH2	2.41	0.54
46:NL:391:ARG:HG3	46:NL:393:ALA:H	1.73	0.54
45:NM:377:MET:SD	45:NM:379:SER:OG	2.58	0.54
46:OB:256:ASN:HD22	46:OB:350:LYS:HD2	1.73	0.54
45:OI:167:LEU:HD13	45:OI:200:VAL:HB	1.89	0.54
45:OM:11:GLN:NE2	46:ON:245:GLN:O	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QC:251:ASP:H	45:QC:254:GLU:HB2	1.71	0.54
46:QJ:27:GLU:OE2	46:QJ:241:ARG:NH1	2.40	0.54
46:RF:201:VAL:HG21	46:RF:374:ILE:HD11	1.89	0.54
46:RF:222:TYR:O	46:RF:226:ASN:ND2	2.32	0.54
45:RG:262:TYR:OH	46:RH:391:ARG:O	2.26	0.54
45:RI:298:PRO:HG3	45:RI:308:ARG:HH12	1.71	0.54
46:RL:184:ASN:OD1	46:RL:398:TYR:OH	2.24	0.54
45:RM:2:ARG:HH21	45:RM:252:ILE:HD12	1.71	0.54
45:SC:81:GLY:O	45:SC:84:ARG:HD3	2.07	0.54
46:TB:238:CYS:SG	46:TB:241:ARG:NH2	2.81	0.54
46:TB:309:ARG:NH2	46:TB:426:GLN:O	2.38	0.54
46:TD:135:ILE:HG13	46:TD:152:ILE:HD11	1.89	0.54
45:TI:53:PHE:O	45:TI:64:ARG:NH1	2.39	0.54
45:TI:109:THR:HG22	45:TI:110:ILE:HG23	1.89	0.54
45:UA:292:THR:HG21	45:UA:331:SER:HB3	1.88	0.54
46:UD:6:HIS:HE1	46:UD:136:THR:HG23	1.72	0.54
45:UE:69:ASP:OD1	45:UE:70:LEU:N	2.39	0.54
46:UH:282:ARG:HD3	46:UH:283:ALA:H	1.71	0.54
45:UM:262:TYR:OH	46:UN:391:ARG:O	2.23	0.54
46:VN:156:ARG:NH1	46:VN:195:ASN:O	2.41	0.54
46:VN:236:VAL:HG23	46:VN:237:THR:HG23	1.88	0.54
45:WC:339:ARG:HD3	45:WC:339:ARG:H	1.72	0.54
46:WF:354:CYS:SG	46:WF:355:ASP:N	2.80	0.54
23:1O:156:ARG:HH12	45:UE:370:LYS:H	1.55	0.54
10:1Q:38:THR:OG1	35:4S:208:GLN:OE1	2.18	0.54
4:2D:166:ARG:O	4:2D:167:ILE:HG12	2.07	0.54
26:2W:270:GLU:OE2	45:LK:279:GLU:N	2.40	0.54
10:3Q:22:LEU:HB2	10:3Q:25:TRP:HB2	1.88	0.54
10:3Q:26:ASP:OD1	10:3Q:27:LYS:N	2.41	0.54
13:3U:558:LYS:HE2	13:3U:560:TRP:HZ2	1.73	0.54
27:4C:166:THR:HG23	27:4C:169:GLU:H	1.71	0.54
37:5E:54:LYS:NZ	46:OB:224:ASP:OD1	2.36	0.54
46:AD:202:ILE:HD11	46:AD:268:ILE:HD11	1.89	0.54
45:AE:88:HIS:CE1	45:AE:90:GLU:HG2	2.41	0.54
45:AG:207:GLU:OE1	45:AG:304:LYS:NZ	2.35	0.54
46:AH:74:ASP:OD1	46:AH:77:ARG:NH2	2.41	0.54
46:AL:289:LEU:HD13	46:AL:365:VAL:HG23	1.89	0.54
46:BJ:257:LEU:HD11	46:BJ:314:SER:HB2	1.89	0.54
45:CA:11:GLN:HG3	45:CA:74:VAL:HG11	1.89	0.54
46:CF:354:CYS:SG	46:CF:355:ASP:N	2.81	0.54
46:CJ:392:LYS:NZ	46:CJ:405:GLU:OE2	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CL:215:LEU:HD11	46:CL:228:LEU:HD11	1.89	0.54
45:CM:7:ILE:N	45:CM:136:LEU:O	2.34	0.54
46:CN:7:ILE:HB	46:CN:135:ILE:HD13	1.89	0.54
46:DF:83:GLN:O	46:DF:86:ARG:NH2	2.41	0.54
45:DI:17:GLY:HA2	45:DI:20:CYS:SG	2.47	0.54
46:DJ:139:LEU:HD12	46:DJ:170:VAL:HG12	1.90	0.54
46:EB:60:VAL:HG11	46:EB:86:ARG:HH21	1.70	0.54
45:EC:120:ASP:OD1	45:EC:123:ARG:NH2	2.40	0.54
45:EG:265:ILE:HD11	45:EG:435:VAL:HG21	1.88	0.54
46:EH:66:MET:HE1	46:EH:147:MET:HG2	1.90	0.54
46:EH:221:THR:HG23	46:EH:224:ASP:H	1.72	0.54
45:EM:9:VAL:HG12	45:EM:68:LEU:HB2	1.89	0.54
46:FB:3:GLU:HG3	46:FB:49:VAL:HA	1.90	0.54
45:GG:81:GLY:O	45:GG:84:ARG:NH1	2.40	0.54
46:ID:31:ASP:OD2	46:ID:37:HIS:ND1	2.28	0.54
45:IE:175:PRO:HG3	45:IE:390:ARG:CZ	2.38	0.54
46:JB:406:MET:O	46:JB:410:GLU:HG3	2.07	0.54
45:KA:56:THR:HG23	45:KA:58:ALA:H	1.73	0.54
45:KC:339:ARG:CZ	45:KC:339:ARG:HA	2.37	0.54
46:KD:135:ILE:HB	46:KD:166:THR:HG22	1.89	0.54
45:KM:272:TYR:HD2	45:KM:275:ILE:HD11	1.72	0.54
46:LF:238:CYS:SG	46:LF:239:CYS:N	2.80	0.54
45:LI:27:GLU:OE1	45:LI:243:ARG:NH1	2.38	0.54
45:LI:338:LYS:HE3	45:LI:340:THR:H	1.72	0.54
46:NF:135:ILE:HB	46:NF:166:THR:HG22	1.90	0.54
45:NI:7:ILE:N	45:NI:136:LEU:O	2.36	0.54
45:NI:118:CYS:O	45:NI:122:ILE:HG12	2.07	0.54
45:NM:328:VAL:HG11	45:NM:353:VAL:HG21	1.89	0.54
46:NN:114:ASP:OD1	46:NN:115:SER:N	2.41	0.54
46:NN:174:LYS:H	46:NN:174:LYS:HD2	1.72	0.54
46:NN:201:VAL:HG21	46:NN:374:ILE:HD11	1.90	0.54
45:OA:276:ILE:HD11	45:OA:280:LYS:HG2	1.88	0.54
46:OL:341:PHE:HB3	46:OL:348:ASN:HD21	1.73	0.54
46:PD:268:ILE:HG13	46:PD:300:MET:HG3	1.88	0.54
45:PM:210:TYR:CE1	46:PN:324:LYS:HG2	2.43	0.54
45:PM:288:VAL:HG11	45:PM:327:ASP:HB3	1.88	0.54
45:QA:254:GLU:HA	45:QA:257:THR:HG22	1.89	0.54
46:QF:350:LYS:NZ	46:QF:352:SER:OG	2.40	0.54
45:RI:69:ASP:OD1	45:RI:70:LEU:N	2.41	0.54
46:RN:48:ASN:O	46:RN:62:ARG:NH1	2.39	0.54
45:SE:102:ASN:HD22	45:SE:105:ARG:HG3	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SF:190:HIS:HD1	46:SF:411:ALA:HA	1.73	0.54
45:SM:329:ASN:OD1	45:SM:330:ALA:N	2.41	0.54
46:SN:48:ASN:O	46:SN:62:ARG:NH1	2.36	0.54
46:TL:52:ASN:OD1	46:TL:62:ARG:NH2	2.40	0.54
46:TL:350:LYS:HZ1	45:TM:181:VAL:HG22	1.72	0.54
46:UL:6:HIS:NE2	46:UL:8:GLN:OE1	2.32	0.54
46:UN:390:ARG:O	46:UN:392:LYS:NZ	2.41	0.54
45:VG:147:SER:HB2	45:VG:190:SER:HB3	1.88	0.54
45:VI:430:LYS:HA	45:VI:433:GLU:HG3	1.89	0.54
8:1H:274:LEU:HD11	46:HF:359:LYS:NZ	2.23	0.54
12:1T:122:ARG:H	12:1T:199:ARG:HB3	1.72	0.54
14:1V:157:THR:O	14:1V:158:LYS:HD3	2.07	0.54
23:2O:356:ARG:NH1	23:2O:360:GLU:OE1	2.40	0.54
10:2Q:96:ASP:OD2	10:2Q:147:ASN:ND2	2.40	0.54
25:2R:317:TYR:OH	25:2R:319:GLU:OE2	2.25	0.54
14:3V:105:LYS:HE3	14:3V:107:ALA:HB3	1.89	0.54
27:4C:51:ASN:ND2	27:4C:54:ASP:OD2	2.41	0.54
47:BE:501:GTP:O1G	46:BF:252:LYS:NZ	2.37	0.54
45:CI:65:ALA:O	45:CI:91:GLN:NE2	2.40	0.54
46:CL:118:ASP:OD1	46:CL:119:VAL:N	2.40	0.54
45:DA:118:CYS:O	45:DA:122:ILE:HG12	2.07	0.54
45:DC:390:ARG:HG2	45:DC:394:LYS:NZ	2.22	0.54
46:DF:256:ASN:OD1	45:DG:181:VAL:HG12	2.07	0.54
46:DL:83:GLN:O	46:EL:281:TYR:OH	2.25	0.54
45:EI:26:LEU:HD21	45:EI:364:PRO:HD2	1.89	0.54
45:EI:265:ILE:HG23	45:EI:432:TYR:CZ	2.43	0.54
45:EM:435:VAL:HA	46:EN:391:ARG:HH22	1.71	0.54
46:FD:3:GLU:OE2	46:FD:128:ASP:N	2.40	0.54
45:GA:175:PRO:HG2	45:GA:304:LYS:HD3	1.90	0.54
46:GH:226:ASN:HD21	49:GH:501:GDP:HN1	1.55	0.54
46:JD:293:MET:HE2	46:JD:367:PHE:HB2	1.89	0.54
45:JG:96:LYS:HE2	45:JG:96:LYS:HA	1.88	0.54
45:KK:98:ASP:OD1	45:KK:99:ALA:N	2.41	0.54
45:KK:254:GLU:OE2	46:KN:99:ASN:ND2	2.40	0.54
46:KN:246:LEU:HD13	46:KN:353:ILE:HD13	1.90	0.54
46:LJ:103:LYS:HA	46:LJ:107:THR:HG22	1.88	0.54
45:ME:292:THR:HG21	45:ME:331:SER:HB2	1.89	0.54
45:NG:222:PRO:HD2	46:NH:324:LYS:HZ1	1.73	0.54
46:NN:342:VAL:HG23	46:NN:345:ILE:HG22	1.89	0.54
45:OK:179:THR:HG21	46:OL:246:LEU:HD13	1.90	0.54
46:PH:198:GLU:HG2	46:PH:266:PHE:HE1	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PI:3:GLU:OE2	45:PI:131:GLY:N	2.40	0.54
45:PK:55:GLU:HG3	45:PK:57:GLY:H	1.73	0.54
45:QE:284:GLU:HG3	45:QE:286:LEU:HD22	1.89	0.54
46:QH:52:ASN:OD1	46:QH:62:ARG:NH2	2.41	0.54
46:QH:325:GLU:H	45:QI:221:ARG:NH1	2.05	0.54
45:QM:390:ARG:O	45:QM:394:LYS:N	2.35	0.54
46:RB:167:PHE:HA	46:RB:200:MET:HB2	1.90	0.54
45:RG:385:ALA:HB2	45:RG:432:TYR:HD2	1.72	0.54
45:RI:9:VAL:HG12	45:RI:68:LEU:HB2	1.89	0.54
45:TE:167:LEU:HB3	45:TE:169:PHE:CE1	2.43	0.54
46:TH:6:HIS:HE2	46:TH:8:GLN:HB3	1.73	0.54
46:TN:172:SER:OG	46:TN:205:GLU:OE2	2.19	0.54
45:UG:207:GLU:OE1	45:UG:304:LYS:NZ	2.23	0.54
46:UJ:86:ARG:HH11	46:UJ:87:PRO:HD2	1.72	0.54
46:UN:386:THR:OG1	46:UN:390:ARG:NH1	2.40	0.54
45:VE:88:HIS:CD2	45:WE:283:HIS:HB3	2.42	0.54
45:VE:147:SER:HB2	45:VE:190:SER:HB2	1.90	0.54
45:VE:250:VAL:HG13	45:VE:254:GLU:HB2	1.89	0.54
45:VE:422:ARG:O	45:VE:422:ARG:NH1	2.35	0.54
46:VH:257:LEU:HA	46:VH:312:THR:HG21	1.89	0.54
45:VM:407:TRP:CH2	46:VN:255:VAL:HA	2.42	0.54
45:WA:70:LEU:HD12	45:WA:145:THR:HG22	1.89	0.54
45:WC:70:LEU:HA	45:WC:95:GLY:HA3	1.88	0.54
46:WF:139:LEU:HD13	46:WF:168:SER:HB3	1.89	0.54
46:WN:305:PRO:HD2	46:WN:306:ARG:HH12	1.72	0.54
10:1Q:108:TYR:OH	45:AC:423:GLU:OE2	2.16	0.54
12:1T:168:HIS:O	12:1T:172:ILE:HG12	2.08	0.54
14:1V:6:ILE:H	14:1V:6:ILE:HD12	1.71	0.54
28:2F:28:LYS:HE2	28:2F:28:LYS:HA	1.90	0.54
21:2L:545:GLU:HA	21:2L:548:ARG:HG2	1.90	0.54
23:2O:394:GLU:O	23:2O:398:ILE:HD12	2.07	0.54
23:2O:417:GLU:HB3	23:2O:421:LYS:HZ1	1.72	0.54
23:3O:275:LYS:HZ3	45:UM:277:SER:HB2	1.72	0.54
25:3R:504:GLU:HA	25:3R:507:LEU:HB2	1.90	0.54
37:5E:54:LYS:HG3	46:OB:227:HIS:CE1	2.43	0.54
34:5R:50:ASP:OD1	34:5R:51:PRO:HD2	2.08	0.54
10:6Q:26:ASP:HB2	10:6Q:63:ALA:HA	1.90	0.54
34:6R:133:LYS:NZ	34:6R:141:GLN:O	2.35	0.54
46:AB:178:THR:HB	46:AB:181:GLU:HG3	1.89	0.54
46:AJ:87:PRO:HA	46:AJ:90:PHE:HD2	1.72	0.54
45:AK:259:LEU:HD11	45:AK:316:SER:HB2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BG:56:THR:HG23	45:BG:58:ALA:H	1.72	0.54
45:BK:294:SER:HA	45:BK:297:GLU:HG3	1.90	0.54
46:CH:294:PHE:HD2	46:CH:333:VAL:HG21	1.72	0.54
45:DG:241:SER:OG	45:DG:250:VAL:O	2.25	0.54
46:DL:287:PRO:HG3	46:DL:329:GLN:HE22	1.71	0.54
46:ED:128:ASP:OD1	46:ED:129:CYS:N	2.41	0.54
46:EJ:318:ARG:NH1	46:EJ:356:ILE:O	2.40	0.54
45:GC:329:ASN:HB3	46:GF:175:VAL:HG12	1.90	0.54
45:GG:254:GLU:HG2	46:GJ:98:GLY:HA2	1.90	0.54
45:HG:148:GLY:O	45:HG:151:SER:OG	2.24	0.54
45:JC:140:SER:OG	47:JC:501:GTP:O2B	2.22	0.54
45:JC:251:ASP:OD2	45:JC:253:THR:HG22	2.07	0.54
45:JE:31:GLN:HG3	45:JE:32:PRO:HD2	1.90	0.54
45:JI:326:LYS:HE2	46:JL:220:PRO:HD2	1.89	0.54
45:KC:326:LYS:HD3	46:KF:212:PHE:HZ	1.72	0.54
45:LC:76:ASP:OD2	46:LD:46:ARG:NH2	2.40	0.54
46:LD:420:SER:O	46:LD:423:GLN:HG3	2.07	0.54
46:LL:107:THR:OG1	46:LL:108:GLU:OE1	2.23	0.54
45:MK:259:LEU:HD11	45:MK:316:SER:HB3	1.88	0.54
45:NA:174:SER:OG	45:NA:206:ASN:OD1	2.25	0.54
46:OB:309:ARG:NH1	46:OB:341:PHE:O	2.41	0.54
46:PB:145:SER:HB3	46:PB:188:SER:HB3	1.89	0.54
45:PE:326:LYS:HZ2	46:PH:219:THR:HA	1.73	0.54
45:QA:88:HIS:CE1	45:QA:90:GLU:HG2	2.42	0.54
46:QD:187:LEU:HD21	46:QD:408:PHE:HE2	1.72	0.54
46:RH:290:THR:HG21	46:RH:329:GLN:HG2	1.89	0.54
45:RM:271:SER:HB2	45:RM:377:MET:HB3	1.89	0.54
45:SA:15:GLN:NE2	47:SA:501:GTP:O6	2.41	0.54
45:SA:324:VAL:HG21	45:SA:326:LYS:HE2	1.89	0.54
46:SB:209:ASP:OD2	46:SB:297:LYS:NZ	2.33	0.54
46:SH:394:PHE:HB3	46:SH:397:TRP:CD2	2.42	0.54
45:TA:308:ARG:NH1	45:TA:340:THR:O	2.40	0.54
46:TF:318:ARG:HB3	46:TF:357:PRO:HA	1.89	0.54
46:TN:238:CYS:HA	46:TN:241:ARG:HG2	1.88	0.54
46:UL:31:ASP:OD2	46:UL:37:HIS:ND1	2.41	0.54
45:VG:251:ASP:OD1	45:VG:252:ILE:N	2.40	0.54
45:VG:334:THR:O	45:VG:338:LYS:HG2	2.07	0.54
45:VI:174:SER:HB2	45:VI:177:VAL:O	2.08	0.54
46:WL:273:LEU:H	46:WL:292:GLN:HE22	1.56	0.54
1:0A:138:TRP:CZ3	45:AA:81:GLY:HA2	2.43	0.54
15:0X:49:ILE:HD11	45:MA:282:TYR:CD2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1L:525:LEU:HD13	46:BF:320:ARG:HB2	1.88	0.54
11:1S:175:PHE:HA	11:1S:178:LEU:HD23	1.90	0.54
13:1U:261:VAL:HG23	13:1U:310:LEU:HD23	1.90	0.54
33:4F:196:THR:O	33:4F:199:SER:OG	2.22	0.54
44:8R:154:ALA:HA	44:8R:157:TYR:CE1	2.43	0.54
46:AB:207:LEU:HB3	46:AB:225:LEU:HD22	1.89	0.54
45:AE:396:ASP:OD2	45:AE:422:ARG:NH2	2.33	0.54
46:AN:42:LEU:HA	46:AN:45:GLU:HG3	1.90	0.54
46:CJ:113:ILE:HA	46:CJ:116:VAL:HG12	1.88	0.54
46:CL:139:LEU:HD13	46:CL:168:SER:HB3	1.90	0.54
46:DB:135:ILE:HB	46:DB:166:THR:HA	1.89	0.54
45:DC:296:PHE:HE2	45:DC:335:ILE:HG13	1.72	0.54
46:DH:51:TYR:HB3	46:DH:59:TYR:HB3	1.90	0.54
45:EA:338:LYS:HD2	45:EA:341:ILE:HD12	1.89	0.54
46:EB:286:VAL:HG11	46:EB:325:GLU:HB3	1.89	0.54
45:EC:271:SER:HB3	45:EC:301:MET:SD	2.47	0.54
46:FH:121:ARG:NH2	46:FH:158:GLU:OE2	2.40	0.54
46:FH:178:THR:HB	46:FH:181:GLU:HG3	1.88	0.54
45:GC:2:ARG:HD3	45:GC:2:ARG:H	1.72	0.54
45:GG:282:TYR:OH	45:GG:370:LYS:O	2.26	0.54
45:HA:101:ASN:HA	45:HA:144:GLY:H	1.73	0.54
46:HD:67:ASP:OD1	46:HD:68:LEU:N	2.41	0.54
45:IA:175:PRO:HB2	45:IA:176:GLN:OE1	2.08	0.54
46:IB:133:PHE:HB2	46:IB:164:MET:SD	2.48	0.54
45:IC:211:ASP:OD2	45:IC:215:ARG:NH1	2.41	0.54
46:IL:198:GLU:HG2	46:IL:266:PHE:HE2	1.73	0.54
45:IM:121:ARG:HH21	45:IM:125:LEU:HD21	1.73	0.54
45:JE:155:GLU:OE1	45:JE:197:HIS:NE2	2.41	0.54
45:KA:140:SER:OG	47:KA:501:GTP:O2B	2.26	0.54
45:KI:271:SER:OG	45:KI:301:MET:SD	2.66	0.54
46:KJ:107:THR:OG1	46:KJ:108:GLU:OE1	2.21	0.54
45:MM:69:ASP:OD1	45:MM:70:LEU:N	2.40	0.54
45:MM:192:HIS:ND1	45:MM:424:ASP:OD2	2.41	0.54
46:NH:122:LYS:NZ	46:NH:125:GLU:OE2	2.35	0.54
45:NI:237:SER:HA	45:NI:320:ARG:HH11	1.71	0.54
45:NK:241:SER:OG	45:NK:250:VAL:O	2.23	0.54
46:OB:60:VAL:HG11	46:OB:86:ARG:NH2	2.23	0.54
45:OC:217:LEU:HD21	45:OC:275:ILE:HG22	1.90	0.54
45:OM:127:ASP:OD1	45:OM:128:ASN:N	2.41	0.54
45:OM:208:ALA:O	45:OM:212:ILE:HG12	2.08	0.54
45:PA:223:THR:HA	46:PB:324:LYS:HZ1	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PC:167:LEU:HG	45:PC:200:VAL:HB	1.90	0.54
46:PD:55:THR:HG23	46:QB:283:ALA:HA	1.89	0.54
45:PK:188:ILE:HD11	45:PK:391:LEU:HB3	1.90	0.54
46:PL:207:LEU:HB3	46:PL:225:LEU:HD22	1.90	0.54
45:PM:101:ASN:HA	45:PM:144:GLY:H	1.72	0.54
45:QA:7:ILE:N	45:QA:136:LEU:O	2.33	0.54
46:QB:398:TYR:HB3	46:QB:403:MET:HG3	1.89	0.54
45:QC:386:GLU:OE2	45:QC:390:ARG:NH2	2.41	0.54
46:QF:67:ASP:OD1	46:QF:68:LEU:N	2.37	0.54
45:QK:352:LYS:NZ	46:QL:179:VAL:H	2.04	0.54
46:RD:26:ASP:OD1	46:RD:359:LYS:NZ	2.37	0.54
46:SD:284:LEU:HD21	46:SD:363:MET:HB3	1.88	0.54
45:SI:7:ILE:HB	45:SI:137:VAL:HG12	1.89	0.54
45:SK:329:ASN:HD21	46:SL:175:VAL:HG12	1.73	0.54
45:SM:164:LYS:HA	45:SM:164:LYS:HE2	1.89	0.54
45:TA:91:GLN:HG3	45:TA:92:LEU:HD12	1.89	0.54
46:TB:135:ILE:HG13	46:TB:152:ILE:HD11	1.89	0.54
46:TJ:32:PRO:HA	46:TJ:84:LEU:HD11	1.90	0.54
46:UL:256:ASN:ND2	46:UL:350:LYS:HD2	2.22	0.54
45:VE:244:PHE:HB2	45:VE:356:ASN:HD21	1.72	0.54
46:VH:268:ILE:HG22	46:VH:368:VAL:HG22	1.90	0.54
45:VI:64:ARG:NH1	45:VI:129:CYS:SG	2.81	0.54
45:VI:98:ASP:OD1	45:VI:99:ALA:N	2.41	0.54
46:VL:293:MET:HE2	46:VL:367:PHE:HB2	1.90	0.54
46:WH:2:ARG:HB2	46:WH:131:GLN:HG3	1.89	0.54
18:1I:216:PRO:HB3	26:1W:84:TRP:HH2	1.71	0.54
23:1O:156:ARG:NH1	45:UE:369:ALA:HB1	2.23	0.54
27:2C:223:GLN:HB3	45:KI:219:ILE:HG23	1.89	0.54
23:2O:145:LYS:HZ1	45:VK:371:VAL:HA	1.73	0.54
16:3B:249:ILE:HD11	16:3B:268:ILE:HG22	1.89	0.54
25:3R:260:LYS:H	25:3R:349:THR:HG21	1.72	0.54
27:4C:157:PHE:O	27:4C:158:HIS:ND1	2.41	0.54
34:4R:33:LEU:H	45:LC:1:MET:CE	2.20	0.54
34:5R:424:LEU:HD12	34:5R:446:PHE:HD2	1.71	0.54
34:6R:486:THR:HG23	34:6R:488:LEU:H	1.73	0.54
46:AJ:148:GLY:O	46:AJ:152:ILE:HG12	2.07	0.54
45:BC:99:ALA:HA	45:BC:105:ARG:HD3	1.89	0.54
46:BL:139:LEU:HD13	46:BL:168:SER:HB3	1.89	0.54
46:BL:167:PHE:CE1	46:BL:233:MET:HG2	2.43	0.54
46:BN:31:ASP:OD2	46:BN:37:HIS:ND1	2.39	0.54
46:BN:257:LEU:HD11	46:BN:314:SER:HB3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CC:251:ASP:OD1	45:CC:252:ILE:N	2.41	0.54
46:CD:55:THR:HG23	46:DD:283:ALA:HA	1.89	0.54
46:CF:386:THR:O	46:CF:390:ARG:HG3	2.07	0.54
46:CL:316:LEU:HD13	46:CL:352:SER:HB2	1.90	0.54
45:CM:192:HIS:NE2	45:CM:424:ASP:OD2	2.41	0.54
45:DA:88:HIS:NE2	45:EA:284:GLU:OE2	2.40	0.54
46:DB:25:SER:HB2	46:DB:30:ILE:HB	1.90	0.54
45:DE:345:ASP:OD1	45:DE:346:TRP:N	2.41	0.54
45:DG:262:TYR:HD2	45:DG:265:ILE:HD12	1.72	0.54
46:EF:31:ASP:OD1	46:EF:35:THR:N	2.41	0.54
46:EH:204:ASN:OD1	49:EH:501:GDP:O2'	2.23	0.54
46:FB:70:PRO:HG3	46:FB:92:PHE:CD2	2.43	0.54
46:FN:52:ASN:OD1	46:FN:62:ARG:NH2	2.40	0.54
46:GH:178:THR:HG22	46:GH:180:VAL:H	1.72	0.54
45:GI:188:ILE:HD12	45:GI:425:LEU:HD11	1.89	0.54
45:GM:11:GLN:NE2	47:GM:501:GTP:O3A	2.41	0.54
45:HC:215:ARG:NH2	45:HC:299:ALA:O	2.41	0.54
45:HG:399:TYR:OH	45:HG:402:ARG:NH2	2.40	0.54
45:II:178:SER:HB2	46:IJ:347:ASN:HD22	1.72	0.54
45:IK:11:GLN:HG3	45:IK:74:VAL:HG11	1.90	0.54
45:IM:109:THR:O	45:IM:112:LYS:NZ	2.40	0.54
45:IM:121:ARG:HE	45:IM:125:LEU:HG	1.72	0.54
45:JK:288:VAL:HG11	45:JK:327:ASP:HB3	1.90	0.54
45:JM:70:LEU:HA	45:JM:95:GLY:HA3	1.89	0.54
45:JM:126:ALA:HA	45:JM:129:CYS:HB3	1.89	0.54
45:KC:242:LEU:HD11	45:KC:252:ILE:HG12	1.89	0.54
46:KH:239:CYS:SG	46:KH:247:ASN:HA	2.48	0.54
45:LK:268:MET:HE2	45:LK:380:ASN:HB2	1.89	0.54
46:MJ:208:TYR:CE1	46:MJ:225:LEU:HD21	2.43	0.54
45:NG:55:GLU:HG3	45:NG:57:GLY:H	1.72	0.54
46:PL:4:ILE:HG22	46:PL:131:GLN:HB3	1.88	0.54
45:SE:69:ASP:OD1	45:SE:70:LEU:N	2.41	0.54
46:SH:421:GLU:O	46:SH:424:GLN:HG2	2.08	0.54
45:SI:322:ASP:OD1	45:SI:373:ARG:NH1	2.40	0.54
45:TC:7:ILE:N	45:TC:136:LEU:O	2.37	0.54
45:TC:287:SER:N	45:TC:290:GLU:OE2	2.40	0.54
46:TD:97:ALA:HB3	46:TD:143:THR:HB	1.89	0.54
46:TH:46:ARG:NH2	45:TI:76:ASP:OD2	2.41	0.54
45:TI:292:THR:HG21	45:TI:331:SER:HB3	1.90	0.54
46:TJ:337:ASN:HB3	46:TJ:340:TYR:HD2	1.73	0.54
45:TK:209:ILE:HG12	45:TK:302:MET:HB2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UH:245:GLN:O	45:UI:11:GLN:NE2	2.41	0.54
45:UK:164:LYS:O	45:UK:166:LYS:NZ	2.41	0.54
46:UL:67:ASP:OD1	46:UL:68:LEU:N	2.38	0.54
46:VB:189:VAL:HA	46:VB:192:LEU:HB3	1.90	0.54
46:VB:267:MET:HE2	46:VB:299:MET:HB3	1.90	0.54
45:WA:280:LYS:HD3	45:WA:283:HIS:CE1	2.43	0.54
45:WE:71:GLU:OE2	46:WF:2:ARG:NH2	2.41	0.54
46:WJ:371:SER:O	46:WJ:422:TYR:OH	2.17	0.54
45:WM:212:ILE:HD11	45:WM:300:ASN:HA	1.89	0.54
11:1S:145:ILE:HG21	11:1S:188:LEU:HD22	1.89	0.54
12:1T:200:ASP:OD1	12:1T:201:LEU:N	2.41	0.54
22:2M:264:ILE:HD11	22:2M:306:LEU:HD22	1.90	0.54
24:2P:469:GLU:O	24:2P:473:LYS:HG2	2.08	0.54
12:2T:103:VAL:O	12:2T:104:HIS:ND1	2.41	0.54
13:2U:143:ALA:HB2	13:2U:182:VAL:HG21	1.90	0.54
14:3V:22:ARG:HG3	14:3V:23:TYR:HD1	1.71	0.54
36:5C:156:VAL:HG12	36:5C:158:ASN:H	1.71	0.54
40:6G:212:ASN:HD22	46:VF:174:LYS:HE2	1.72	0.54
45:AA:71:GLU:OE2	46:AB:2:ARG:NH2	2.41	0.54
46:AF:226:ASN:HD21	49:AF:501:GDP:HN1	1.56	0.54
46:AJ:39:ASP:OD1	46:AJ:43:GLN:NE2	2.41	0.54
46:AL:135:ILE:HB	46:AL:166:THR:HG22	1.90	0.54
45:AM:181:VAL:HG23	45:AM:182:VAL:HG13	1.90	0.54
45:BC:89:PRO:HG2	45:CC:280:LYS:HB3	1.90	0.54
45:BM:141:VAL:HG22	45:BM:187:SER:HA	1.90	0.54
46:CL:27:GLU:O	46:CL:43:GLN:NE2	2.40	0.54
46:DL:222:TYR:O	46:DL:226:ASN:ND2	2.30	0.54
46:EF:175:VAL:HG22	46:EF:205:GLU:HG2	1.90	0.54
46:EH:247:ASN:ND2	45:EI:73:THR:OG1	2.41	0.54
46:EH:254:ALA:O	46:EH:258:ILE:HG12	2.08	0.54
46:EL:185:ALA:O	46:EL:188:SER:OG	2.22	0.54
46:GJ:63:ALA:O	46:GJ:89:ASN:ND2	2.41	0.54
45:GM:284:GLU:HG3	45:GM:286:LEU:HD22	1.90	0.54
45:HA:415:GLU:OE1	45:HA:415:GLU:N	2.37	0.54
46:HB:14:ASN:ND2	46:HB:72:THR:OG1	2.40	0.54
46:HL:273:LEU:H	46:HL:292:GLN:HE22	1.56	0.54
45:IC:242:LEU:HD11	45:IC:252:ILE:HG12	1.89	0.54
45:JA:26:LEU:HD21	45:JA:364:PRO:HD2	1.90	0.54
45:JM:210:TYR:HB3	45:JM:214:ARG:NH1	2.22	0.54
45:JM:393:HIS:HE1	45:JM:397:LEU:HD12	1.73	0.54
46:KB:203:ASP:OD1	46:KB:204:ASN:N	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:KH:285:THR:HB	46:KH:287:PRO:HD2	1.89	0.54
46:KL:86:ARG:HE	46:LL:281:TYR:HD2	1.56	0.54
45:KM:397:LEU:HD22	46:KN:346:PRO:HD3	1.90	0.54
45:LM:318:MET:HB2	45:LM:376:CYS:HB3	1.88	0.54
46:MH:273:LEU:H	46:MH:292:GLN:HE22	1.55	0.54
45:MK:205:ASP:OD1	45:MK:205:ASP:N	2.41	0.54
45:NA:116:ASP:OD1	45:NA:117:LEU:N	2.41	0.54
46:ND:31:ASP:HB3	46:ND:37:HIS:CD2	2.42	0.54
45:NE:402:ARG:HG3	45:NE:405:VAL:HG11	1.90	0.54
46:NJ:326:VAL:O	46:NJ:330:MET:HG2	2.08	0.54
45:NM:88:HIS:HD2	45:NM:91:GLN:HG3	1.71	0.54
45:OA:387:VAL:HA	45:OA:390:ARG:HG2	1.90	0.54
46:OJ:105:HIS:CD2	46:OJ:150:LEU:HB2	2.43	0.54
46:PB:262:ARG:NH1	46:PB:421:GLU:OE1	2.41	0.54
46:PJ:178:THR:HB	46:PJ:181:GLU:HG2	1.90	0.54
45:QE:280:LYS:HA	45:QE:283:HIS:HD2	1.73	0.54
46:QH:375:GLN:HE22	46:QH:423:GLN:HG2	1.71	0.54
45:QI:53:PHE:HB3	45:QI:61:HIS:HB3	1.90	0.54
45:QK:52:PHE:HZ	45:QK:239:THR:HG21	1.73	0.54
46:QL:55:THR:HG23	46:RL:283:ALA:HA	1.90	0.54
46:RF:207:LEU:HD23	46:RF:225:LEU:HB3	1.90	0.54
46:RH:131:GLN:HE22	46:RH:249:ASP:HB2	1.73	0.54
46:RL:162:ARG:HH21	46:RL:251:ARG:NH2	2.06	0.54
46:SB:259:PRO:HA	45:SC:404:PHE:HE1	1.73	0.54
46:SL:3:GLU:HA	46:SL:49:VAL:HG13	1.90	0.54
46:TD:309:ARG:NH2	46:TD:426:GLN:O	2.38	0.54
46:UD:207:LEU:HB3	46:UD:225:LEU:HD23	1.89	0.54
46:UH:135:ILE:N	46:UH:165:GLU:O	2.40	0.54
46:UJ:68:LEU:HB3	46:UJ:96:GLY:HA2	1.90	0.54
45:VA:250:VAL:HG13	45:VA:254:GLU:HB2	1.89	0.54
46:VH:68:LEU:HD13	46:VH:93:GLY:HA3	1.90	0.54
46:VH:139:LEU:HA	46:VH:145:SER:HB3	1.90	0.54
46:WF:31:ASP:OD1	46:WF:35:THR:N	2.39	0.54
45:WG:288:VAL:HG11	45:WG:327:ASP:HB3	1.90	0.54
1:0A:147:ARG:HH22	34:7R:75:ASN:H	1.54	0.54
10:1Q:4:ASN:ND2	11:1S:44:LYS:HB2	2.22	0.54
26:1W:190:VAL:HG21	26:1W:195:TRP:CD1	2.42	0.54
27:2C:299:TYR:OH	46:KJ:359:LYS:NZ	2.40	0.54
4:2D:116:LEU:HB3	4:2D:121:LYS:HZ1	1.73	0.54
32:3D:141:CYS:HB3	32:3D:235:LEU:HD23	1.90	0.54
25:3R:347:LYS:HB2	45:CK:39:ASP:HB2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:3U:350:ARG:O	13:3U:352:ARG:NH1	2.42	0.54
45:AE:98:ASP:O	45:AE:105:ARG:NH1	2.41	0.54
45:AK:288:VAL:HA	45:AK:291:ILE:HG12	1.89	0.54
45:DG:188:ILE:HD11	45:DG:391:LEU:HG	1.89	0.54
45:DM:11:GLN:NE2	47:DM:501:GTP:O1A	2.41	0.54
46:DN:11:GLN:CD	46:DN:11:GLN:H	2.11	0.54
46:EL:324:LYS:O	46:EL:328:GLU:HG3	2.07	0.54
45:FA:221:ARG:HH22	46:FB:324:LYS:H	1.56	0.54
46:FD:289:LEU:HD13	46:FD:365:VAL:HG23	1.88	0.54
46:FF:135:ILE:HB	46:FF:166:THR:HG22	1.90	0.54
45:FG:288:VAL:HA	45:FG:291:ILE:HG12	1.89	0.54
46:GF:10:GLY:O	46:GF:14:ASN:ND2	2.41	0.54
46:HH:274:THR:HG21	46:HH:282:ARG:HD2	1.90	0.54
46:HH:342:VAL:HG13	46:HH:345:ILE:HG22	1.90	0.54
45:HI:260:VAL:HB	46:HL:397:TRP:HH2	1.73	0.54
46:HN:128:ASP:OD1	46:HN:129:CYS:N	2.41	0.54
46:IB:213:ARG:NH1	46:IB:214:THR:OG1	2.41	0.54
46:IL:279:GLN:OE1	46:IL:282:ARG:NH2	2.41	0.54
45:JC:76:ASP:OD2	46:JD:46:ARG:NH2	2.40	0.54
46:JD:30:ILE:HD11	46:JD:47:ILE:HD11	1.90	0.54
46:KD:52:ASN:OD1	46:KD:62:ARG:NH2	2.41	0.54
45:KE:56:THR:HG23	45:KE:58:ALA:H	1.72	0.54
47:LA:501:GTP:O1G	46:LB:252:LYS:NZ	2.25	0.54
45:LG:387:VAL:HG23	45:LG:390:ARG:HH12	1.72	0.54
46:MB:213:ARG:HD2	46:MB:297:LYS:HE3	1.90	0.54
46:MB:222:TYR:O	46:MB:226:ASN:ND2	2.24	0.54
46:MJ:192:LEU:HD21	46:MJ:199:CYS:SG	2.48	0.54
45:MM:155:GLU:O	45:MM:158:SER:OG	2.24	0.54
46:OF:372:THR:HA	46:OF:422:TYR:HE2	1.73	0.54
46:ON:10:GLY:O	46:ON:14:ASN:ND2	2.41	0.54
46:QB:54:ALA:HA	46:RB:283:ALA:HB2	1.89	0.54
46:QF:252:LYS:O	46:QF:256:ASN:HB2	2.08	0.54
45:QG:55:GLU:HG3	45:QG:57:GLY:H	1.73	0.54
46:QH:3:GLU:HG3	46:QH:62:ARG:NH1	2.23	0.54
45:QI:167:LEU:HG	45:QI:200:VAL:HB	1.89	0.54
45:RM:259:LEU:HD22	45:RM:268:MET:HE3	1.90	0.54
45:SA:258:ASN:HB3	45:SA:352:LYS:CE	2.38	0.54
46:SJ:268:ILE:HG22	46:SJ:368:VAL:HG22	1.89	0.54
46:SL:163:ILE:HG21	46:SL:251:ARG:HD2	1.88	0.54
45:SM:5:ILE:HB	45:SM:135:PHE:CD2	2.42	0.54
45:SM:121:ARG:HD2	45:SM:124:LYS:HD3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TC:76:ASP:OD1	45:TC:79:ARG:NH2	2.41	0.54
45:TI:328:VAL:HG11	45:TI:353:VAL:HG21	1.90	0.54
46:TJ:371:SER:O	46:TJ:422:TYR:OH	2.21	0.54
45:TM:147:SER:HB2	45:TM:190:SER:HB3	1.89	0.54
46:UJ:221:THR:HG23	46:UJ:223:GLY:H	1.71	0.54
45:UK:90:GLU:OE2	45:UK:121:ARG:NH1	2.41	0.54
45:VI:328:VAL:HG11	45:VI:353:VAL:HG21	1.89	0.54
45:WC:222:PRO:HG2	46:WD:324:LYS:NZ	2.22	0.54
19:1J:54:ASN:OD1	45:IC:221:ARG:NH2	2.40	0.53
14:1V:71:PHE:HD2	46:MJ:306:ARG:HG2	1.73	0.53
27:2C:49:GLN:OE1	27:2C:87:ASN:ND2	2.39	0.53
9:2N:88:ASN:ND2	9:2N:228:GLU:OE1	2.41	0.53
23:2O:338:LEU:HD22	23:2O:342:ARG:HH12	1.73	0.53
23:2O:418:GLN:HA	23:2O:421:LYS:HE2	1.90	0.53
24:2P:493:ILE:HA	24:2P:496:LEU:HD13	1.89	0.53
13:2U:319:HIS:NE2	13:2U:340:SER:OG	2.31	0.53
14:2V:94:GLY:HA2	46:LF:262:ARG:HG2	1.89	0.53
10:3Q:76:LEU:HB3	10:3Q:134:PHE:HB3	1.90	0.53
12:3T:143:PHE:HE2	12:3T:222:LEU:HD22	1.73	0.53
40:6G:229:ASN:HB3	40:6G:230:TYR:CD1	2.43	0.53
46:BD:145:SER:HB2	46:BD:188:SER:HB2	1.90	0.53
45:CC:89:PRO:HD3	45:DC:280:LYS:NZ	2.21	0.53
46:CN:316:LEU:HG	46:CN:352:SER:HB2	1.90	0.53
45:DA:322:ASP:OD1	45:DA:373:ARG:NH2	2.33	0.53
45:DC:345:ASP:OD1	45:DC:346:TRP:N	2.41	0.53
46:DL:18:ALA:O	46:DL:22:GLU:HG3	2.08	0.53
45:DM:121:ARG:O	45:DM:125:LEU:HG	2.08	0.53
46:EH:3:GLU:HG3	46:EH:62:ARG:NH1	2.23	0.53
46:EJ:318:ARG:HD3	46:EJ:358:PRO:HG3	1.90	0.53
45:FC:406:HIS:HA	45:FC:409:VAL:HG12	1.91	0.53
45:FM:9:VAL:HG12	45:FM:68:LEU:HB2	1.89	0.53
45:GE:73:THR:OG1	46:GF:247:ASN:ND2	2.40	0.53
46:GL:73:MET:HA	46:GL:76:VAL:HG12	1.90	0.53
46:GL:247:ASN:HD22	46:GL:247:ASN:C	2.10	0.53
45:GM:328:VAL:HG11	45:GM:353:VAL:HG21	1.89	0.53
46:HB:315:ALA:N	46:HB:350:LYS:O	2.37	0.53
46:IB:10:GLY:O	46:IB:14:ASN:ND2	2.41	0.53
45:IG:328:VAL:HG21	45:IG:353:VAL:HG21	1.89	0.53
45:IM:315:CYS:HB2	45:IM:377:MET:HE1	1.90	0.53
45:JM:226:ASN:ND2	45:JM:367:ASP:OD2	2.41	0.53
45:KI:109:THR:HG22	45:KI:110:ILE:HG23	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LC:55:GLU:HG3	45:LC:57:GLY:H	1.72	0.53
45:LG:90:GLU:OE2	45:LG:121:ARG:NH1	2.42	0.53
45:MA:214:ARG:HH11	46:MB:324:LYS:NZ	2.06	0.53
46:MF:67:ASP:OD1	46:MF:68:LEU:N	2.41	0.53
45:MK:254:GLU:OE2	46:MN:99:ASN:ND2	2.42	0.53
46:MN:114:ASP:OD1	46:MN:115:SER:N	2.40	0.53
45:NG:71:GLU:OE1	46:NH:247:ASN:ND2	2.41	0.53
45:OK:116:ASP:OD1	45:OK:117:LEU:N	2.41	0.53
46:OL:10:GLY:O	46:OL:14:ASN:ND2	2.40	0.53
45:PC:424:ASP:O	45:PC:428:LEU:N	2.39	0.53
46:PD:68:LEU:HD12	46:PD:93:GLY:HA3	1.91	0.53
46:PD:100:ASN:HD21	46:PD:102:ALA:HB3	1.73	0.53
45:PG:244:PHE:HB2	45:PG:356:ASN:HD21	1.72	0.53
45:SA:55:GLU:HG3	45:SA:57:GLY:H	1.74	0.53
46:SN:25:SER:HA	46:SN:28:HIS:CE1	2.43	0.53
46:TH:10:GLY:O	46:TH:14:ASN:ND2	2.42	0.53
46:TN:273:LEU:H	46:TN:292:GLN:HE22	1.55	0.53
46:UJ:318:ARG:HB3	46:UJ:357:PRO:HA	1.90	0.53
46:VD:31:ASP:OD1	46:VD:35:THR:N	2.33	0.53
46:WB:294:PHE:CE2	46:WB:333:VAL:HG11	2.42	0.53
45:WC:147:SER:HB2	45:WC:190:SER:HB3	1.90	0.53
45:WC:356:ASN:OD1	45:WC:357:TYR:N	2.41	0.53
46:WD:213:ARG:HH22	46:WD:297:LYS:HB2	1.72	0.53
14:1V:66:ASP:OD1	14:1V:67:PHE:N	2.41	0.53
27:2C:176:ASP:OD1	27:2C:177:LEU:N	2.41	0.53
5:2E:132:ILE:HD11	5:2E:142:VAL:HG21	1.90	0.53
11:2S:97:ARG:NH2	46:MJ:262:ARG:HE	1.98	0.53
13:2U:549:VAL:HA	13:2U:559:LEU:HA	1.90	0.53
5:3E:104:PHE:HB2	5:3E:164:TRP:CZ3	2.43	0.53
37:5G:39:ASP:HA	45:OG:370:LYS:HZ1	1.73	0.53
35:5S:211:ASN:HB3	35:5S:217:LEU:HD11	1.90	0.53
10:6Q:1:MET:H3	10:6Q:3:LYS:HG2	1.73	0.53
46:AD:222:TYR:O	46:AD:226:ASN:ND2	2.41	0.53
46:AJ:372:THR:HA	46:AJ:422:TYR:CE2	2.40	0.53
45:AM:69:ASP:OD1	45:AM:70:LEU:N	2.41	0.53
46:BH:274:THR:OG1	46:BH:279:GLN:OE1	2.14	0.53
46:BJ:319:GLY:HA2	46:BJ:357:PRO:HG3	1.90	0.53
45:CA:107:HIS:HA	45:CA:152:LEU:HD11	1.90	0.53
45:CA:136:LEU:HD13	45:CA:167:LEU:HB2	1.91	0.53
45:DA:113:GLU:HG2	45:DA:114:ILE:HD12	1.90	0.53
45:EI:88:HIS:HB3	45:EI:91:GLN:HG2	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FB:125:GLU:OE1	46:GB:291:GLN:NE2	2.41	0.53
46:FF:10:GLY:O	46:FF:14:ASN:ND2	2.40	0.53
46:FJ:135:ILE:HB	46:FJ:166:THR:HG22	1.91	0.53
46:GL:226:ASN:HD21	49:GL:501:GDP:HN1	1.56	0.53
45:HI:55:GLU:OE2	45:HI:61:HIS:NE2	2.41	0.53
45:IA:254:GLU:HG2	46:ID:98:GLY:HA2	1.90	0.53
45:IE:231:ILE:O	45:IE:235:ILE:HG12	2.08	0.53
46:IF:179:VAL:HG13	46:IF:180:VAL:HG23	1.91	0.53
45:JM:222:PRO:HG2	46:JN:324:LYS:HZ3	1.74	0.53
45:LA:55:GLU:OE1	45:LA:56:THR:N	2.41	0.53
45:MC:181:VAL:HG13	45:MC:182:VAL:HG13	1.89	0.53
46:NB:52:ASN:OD1	46:NB:62:ARG:NH2	2.41	0.53
45:NK:105:ARG:NH2	45:NK:411:GLU:OE2	2.42	0.53
45:OG:260:VAL:HB	46:OJ:397:TRP:HH2	1.74	0.53
46:PD:116:VAL:HA	46:PD:119:VAL:HG12	1.91	0.53
45:PG:254:GLU:HG3	46:PJ:98:GLY:HA2	1.91	0.53
46:PJ:236:VAL:HG13	46:PJ:237:THR:HG23	1.89	0.53
45:QA:167:LEU:HG	45:QA:200:VAL:HB	1.90	0.53
45:QG:269:LEU:HD12	45:QG:303:ALA:HB3	1.89	0.53
45:QI:437:ILE:O	46:QJ:391:ARG:NH2	2.40	0.53
45:QM:284:GLU:OE1	45:QM:286:LEU:HD22	2.08	0.53
45:RE:127:ASP:OD1	45:RE:128:ASN:N	2.41	0.53
45:RE:271:SER:OG	45:RE:301:MET:SD	2.66	0.53
45:RK:259:LEU:HD11	45:RK:316:SER:HB3	1.91	0.53
46:SB:190:HIS:ND1	46:SB:411:ALA:HA	2.23	0.53
45:SC:284:GLU:HG2	45:SC:286:LEU:HD22	1.89	0.53
45:SM:319:TYR:HB3	45:SM:323:VAL:HG11	1.90	0.53
46:TF:65:LEU:HD11	46:TF:85:PHE:CD2	2.43	0.53
45:TI:402:ARG:CZ	45:TI:405:VAL:HB	2.38	0.53
45:UE:250:VAL:HG13	45:UE:254:GLU:HB2	1.90	0.53
46:UJ:210:ILE:O	46:UJ:214:THR:OG1	2.19	0.53
46:VB:204:ASN:HA	46:VB:207:LEU:HD12	1.90	0.53
46:VH:362:LYS:NZ	46:VH:363:MET:SD	2.70	0.53
45:VK:407:TRP:CH2	46:VL:258:ILE:HB	2.44	0.53
45:VM:210:TYR:HE1	46:VN:324:LYS:HD2	1.72	0.53
45:WC:71:GLU:OE2	46:WD:2:ARG:NH2	2.34	0.53
12:1T:60:LYS:HA	12:1T:144:GLY:HA3	1.91	0.53
27:2C:128:ALA:HB1	27:2C:150:VAL:HG12	1.90	0.53
31:2I:24:GLU:CD	31:2I:25:ASN:H	2.10	0.53
21:2L:798:ILE:HD11	21:2L:803:PRO:HA	1.89	0.53
27:3C:223:GLN:HB3	45:KA:219:ILE:HG23	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:3D:21:GLN:OE1	32:3D:103:HIS:NE2	2.41	0.53
13:3U:63:VAL:HG22	13:3U:70:ILE:HG23	1.91	0.53
27:4C:23:VAL:HG12	27:4C:180:GLY:HA2	1.91	0.53
36:5D:19:ARG:HG3	36:5D:20:LEU:H	1.73	0.53
37:5E:117:ILE:HG13	37:5E:119:GLU:H	1.72	0.53
37:5F:111:ASN:HB3	46:NF:44:LEU:HD13	1.91	0.53
39:6F:38:SER:O	39:6F:39:LYS:HB2	2.07	0.53
46:AD:173:PRO:HG2	46:AD:380:ARG:HE	1.74	0.53
46:AJ:289:LEU:HD13	46:AJ:365:VAL:HG23	1.91	0.53
46:BF:207:LEU:HB3	46:BF:225:LEU:HD22	1.90	0.53
45:BG:103:PHE:HB3	45:BG:408:TYR:HE2	1.74	0.53
45:BK:224:TYR:CZ	46:BL:323:THR:HG21	2.43	0.53
45:CA:60:LYS:HZ3	45:CA:62:VAL:HA	1.73	0.53
45:CG:133:GLN:HB3	45:CG:252:ILE:HD11	1.90	0.53
45:DC:207:GLU:HA	45:DC:210:TYR:HB2	1.90	0.53
46:DN:316:LEU:HG	46:DN:352:SER:HB2	1.90	0.53
45:EA:247:ALA:HB3	45:EA:355:ILE:HD11	1.89	0.53
45:EA:329:ASN:HB2	46:EB:175:VAL:HG12	1.90	0.53
45:EC:6:SER:OG	45:EC:8:HIS:NE2	2.42	0.53
45:EC:309:HIS:ND1	45:EC:386:GLU:OE2	2.35	0.53
45:FC:77:GLU:HA	45:FC:80:THR:HG22	1.89	0.53
45:FG:402:ARG:HD3	45:FG:405:VAL:HG21	1.89	0.53
45:GA:72:PRO:HD3	46:GB:2:ARG:HH22	1.72	0.53
46:GB:423:GLN:NE2	46:GB:427:ASP:OD2	2.41	0.53
45:GG:256:GLN:HB3	46:GJ:397:TRP:CZ2	2.43	0.53
45:GK:287:SER:N	45:GK:290:GLU:OE2	2.36	0.53
45:HC:88:HIS:HD2	45:HC:89:PRO:HD2	1.72	0.53
45:HE:75:ILE:HG22	45:HE:79:ARG:HE	1.73	0.53
45:HG:244:PHE:HB2	45:HG:356:ASN:HD21	1.73	0.53
46:IN:229:VAL:O	46:IN:233:MET:HG3	2.08	0.53
45:JK:88:HIS:CE1	45:JK:90:GLU:HG2	2.42	0.53
45:JM:181:VAL:HG22	46:JN:256:ASN:OD1	2.08	0.53
45:KG:262:TYR:HD2	45:KG:265:ILE:HD11	1.73	0.53
46:KL:63:ALA:O	46:KL:89:ASN:ND2	2.41	0.53
45:LE:392:ASP:OD2	45:LE:422:ARG:NH1	2.41	0.53
46:LH:63:ALA:O	46:LH:89:ASN:ND2	2.40	0.53
46:LH:383:GLU:HA	46:LH:386:THR:HG22	1.91	0.53
46:MD:372:THR:HA	46:MD:422:TYR:HE2	1.73	0.53
45:ME:73:THR:HA	46:MF:46:ARG:HH22	1.73	0.53
46:MJ:31:ASP:OD1	46:MJ:35:THR:N	2.37	0.53
45:NG:254:GLU:OE2	46:NJ:99:ASN:HB2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NM:147:SER:HB2	45:NM:190:SER:HB3	1.91	0.53
45:OI:332:ILE:HD11	45:OI:353:VAL:HG11	1.90	0.53
46:PB:135:ILE:HB	46:PB:166:THR:HG22	1.91	0.53
45:PE:288:VAL:HG11	45:PE:327:ASP:HB3	1.90	0.53
46:QL:258:ILE:HG13	46:QL:266:PHE:HZ	1.72	0.53
45:QM:288:VAL:HG11	45:QM:327:ASP:HB3	1.90	0.53
45:RA:120:ASP:O	45:RA:124:LYS:NZ	2.41	0.53
45:RA:334:THR:C	45:RA:338:LYS:HZ3	2.12	0.53
45:RC:212:ILE:HD11	45:RC:300:ASN:HA	1.91	0.53
45:RE:7:ILE:HG22	45:RE:66:VAL:HG12	1.90	0.53
46:RF:107:THR:OG1	46:RF:108:GLU:OE1	2.25	0.53
45:RM:116:ASP:OD1	45:RM:117:LEU:N	2.41	0.53
45:SA:310:GLY:HA3	45:SA:383:ALA:HB2	1.91	0.53
45:SA:346:TRP:CE2	46:SB:391:ARG:HB2	2.44	0.53
45:SE:259:LEU:HD21	45:SE:316:SER:HB2	1.90	0.53
45:UC:260:VAL:HB	46:UD:397:TRP:CZ2	2.43	0.53
46:UF:184:ASN:OD1	46:UF:185:ALA:N	2.42	0.53
45:UI:129:CYS:SG	45:UI:130:THR:N	2.82	0.53
46:UL:326:VAL:O	46:UL:330:MET:HG2	2.09	0.53
45:UM:219:ILE:HG22	45:UM:221:ARG:H	1.74	0.53
45:VG:98:ASP:OD1	45:VG:99:ALA:N	2.40	0.53
45:VK:140:SER:OG	47:VK:501:GTP:O2B	2.27	0.53
46:VN:207:LEU:HB3	46:VN:225:LEU:HG	1.90	0.53
45:WG:292:THR:HG21	45:WG:331:SER:HB3	1.89	0.53
45:WI:174:SER:HB3	45:WI:207:GLU:HB2	1.89	0.53
21:1L:151:ARG:HG3	46:CH:357:PRO:HG2	1.89	0.53
13:1U:463:GLN:OE1	13:1U:483:ARG:NH2	2.39	0.53
4:2D:38:ILE:HB	4:2D:39:PRO:HD3	1.89	0.53
9:2N:44:SER:HA	9:2N:47:LYS:HE3	1.91	0.53
24:2P:461:ALA:O	24:2P:464:ILE:HG22	2.08	0.53
13:2U:493:PHE:HA	13:2U:509:GLY:HA2	1.89	0.53
16:3B:60:LEU:HG	16:3B:61:THR:HG23	1.90	0.53
21:3L:66:PHE:HE1	21:3L:85:LEU:HD13	1.74	0.53
11:3S:32:LYS:HD2	11:3S:33:ASN:H	1.74	0.53
37:5G:137:VAL:O	46:OL:279:GLN:NE2	2.42	0.53
35:5S:80:PHE:HA	35:5S:86:LYS:HE3	1.91	0.53
39:6F:11:THR:O	45:IE:96:LYS:NZ	2.37	0.53
40:6G:164:ASN:HB2	46:VH:213:ARG:HH12	1.73	0.53
40:6G:302:TYR:HE1	46:UB:125:GLU:HG3	1.74	0.53
45:AC:192:HIS:CD2	45:AC:421:ALA:HA	2.44	0.53
45:AK:68:LEU:HD11	45:AK:118:CYS:SG	2.48	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AK:238:LEU:HD11	45:AK:255:PHE:CE2	2.43	0.53
46:AN:67:ASP:OD1	46:AN:68:LEU:N	2.41	0.53
45:BA:22:GLU:HG3	45:BA:83:TYR:OH	2.08	0.53
45:DG:155:GLU:HA	45:DG:197:HIS:HD2	1.74	0.53
45:DG:414:GLU:HG3	45:DG:416:GLY:H	1.72	0.53
46:FD:221:THR:HG23	46:FD:223:GLY:H	1.73	0.53
46:FN:148:GLY:O	46:FN:152:ILE:HG12	2.07	0.53
46:FN:375:GLN:OE1	46:FN:379:LYS:HE2	2.09	0.53
45:GM:239:THR:HG23	45:GM:243:ARG:NH1	2.23	0.53
46:GN:46:ARG:HE	46:GN:49:VAL:HG23	1.74	0.53
46:HB:262:ARG:NH1	46:HB:421:GLU:OE1	2.41	0.53
46:HJ:16:ILE:HD13	46:HJ:226:ASN:OD1	2.08	0.53
45:HK:210:TYR:CE1	45:HK:227:LEU:HD21	2.43	0.53
45:JA:271:SER:HA	45:JA:302:MET:HG2	1.89	0.53
46:JB:128:ASP:OD1	46:JB:129:CYS:N	2.41	0.53
46:JF:226:ASN:HD21	49:JF:501:GDP:HN1	1.55	0.53
45:JI:66:VAL:HG11	45:JI:122:ILE:HD11	1.89	0.53
45:JK:141:VAL:HG11	45:JK:172:TYR:CD1	2.40	0.53
46:KH:257:LEU:HD11	46:KH:314:SER:HB2	1.90	0.53
46:LH:7:ILE:HD12	46:LH:151:LEU:HD21	1.90	0.53
45:LI:217:LEU:HD11	45:LI:368:LEU:HD23	1.90	0.53
45:LK:326:LYS:HZ3	46:LN:208:TYR:HB3	1.74	0.53
45:LM:98:ASP:OD1	45:LM:99:ALA:N	2.42	0.53
45:MC:174:SER:HB2	45:MC:177:VAL:O	2.08	0.53
45:MC:254:GLU:HG2	46:MF:98:GLY:HA2	1.89	0.53
46:MH:31:ASP:OD1	46:MH:35:THR:N	2.35	0.53
45:MM:74:VAL:O	45:MM:78:VAL:HG23	2.09	0.53
45:NC:98:ASP:OD1	45:NC:99:ALA:N	2.41	0.53
45:NC:214:ARG:HH22	45:NC:215:ARG:HH21	1.57	0.53
46:NN:169:VAL:HG12	46:NN:202:ILE:HB	1.90	0.53
46:NN:285:THR:OG1	46:NN:288:GLU:OE1	2.24	0.53
45:OI:311:LYS:N	45:OI:382:THR:OG1	2.41	0.53
45:PA:178:SER:OG	46:PB:347:ASN:ND2	2.41	0.53
45:PM:122:ILE:O	45:PM:126:ALA:N	2.42	0.53
45:QE:242:LEU:HD21	45:QE:251:ASP:HA	1.90	0.53
46:QF:350:LYS:HD3	45:QG:180:ALA:HA	1.90	0.53
46:QL:271:ALA:HB3	46:QL:365:VAL:HB	1.90	0.53
46:RF:167:PHE:HD2	46:RF:202:ILE:HD11	1.73	0.53
46:RH:55:THR:HG23	46:SH:283:ALA:HA	1.91	0.53
46:RH:58:ARG:NH1	46:SH:280:GLN:OE1	2.41	0.53
46:TB:314:SER:OG	46:TB:368:VAL:O	2.20	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TE:188:ILE:HD12	45:TE:425:LEU:HD11	1.90	0.53
46:TH:2:ARG:HG3	46:TH:240:LEU:HD11	1.91	0.53
46:TN:260:PHE:HB2	46:TN:263:LEU:HD13	1.90	0.53
45:UA:280:LYS:HD2	45:UA:283:HIS:CE1	2.44	0.53
45:UE:244:PHE:HB2	45:UE:356:ASN:HD21	1.73	0.53
45:UG:258:ASN:OD1	45:UG:352:LYS:NZ	2.40	0.53
46:UH:282:ARG:HD3	46:UH:283:ALA:N	2.24	0.53
45:UI:188:ILE:HG12	45:UI:421:ALA:HB1	1.90	0.53
45:UK:3:GLU:OE2	45:UK:131:GLY:N	2.41	0.53
45:VC:294:SER:HA	45:VC:297:GLU:HG3	1.91	0.53
46:VD:276:ARG:HB2	46:VD:276:ARG:NH1	2.24	0.53
45:VG:288:VAL:HA	45:VG:291:ILE:HG12	1.90	0.53
14:OV:86:ARG:HH22	46:LN:195:ASN:ND2	2.06	0.53
24:1P:222:LEU:HD22	45:TG:282:TYR:CZ	2.43	0.53
4:2D:85:VAL:HG23	4:2D:87:GLN:H	1.74	0.53
21:2L:526:ARG:NH2	25:3R:112:GLU:OE2	2.37	0.53
23:2O:474:LEU:HB3	23:2O:484:THR:HG22	1.91	0.53
37:5H:123:ARG:NH1	45:OM:372:MET:HA	2.24	0.53
34:7R:104:VAL:HG23	34:7R:105:GLU:HG2	1.90	0.53
46:AF:5:VAL:HG12	46:AF:62:ARG:HD2	1.90	0.53
45:AI:413:MET:HG2	45:AI:417:GLU:HG3	1.89	0.53
46:AL:190:HIS:CD2	46:AL:411:ALA:HA	2.43	0.53
46:BL:117:LEU:HD21	46:BL:154:LYS:HB3	1.91	0.53
45:CA:226:ASN:HA	45:CA:229:ARG:HD2	1.90	0.53
46:CB:63:ALA:O	46:CB:89:ASN:ND2	2.36	0.53
46:CB:211:CYS:HA	46:CB:215:LEU:HD12	1.91	0.53
45:CG:297:GLU:OE1	45:CG:298:PRO:HD2	2.08	0.53
45:CM:265:ILE:O	45:CM:265:ILE:HG13	2.08	0.53
45:DA:269:LEU:HG	45:DA:301:MET:HE2	1.89	0.53
46:DF:139:LEU:HD12	46:DF:170:VAL:HG12	1.91	0.53
45:EM:48:ALA:HB1	45:EM:243:ARG:HB2	1.91	0.53
45:FA:287:SER:N	45:FA:290:GLU:OE2	2.41	0.53
46:FF:208:TYR:HE1	46:FF:225:LEU:HD11	1.73	0.53
46:FH:31:ASP:OD2	46:FH:37:HIS:ND1	2.40	0.53
45:IC:174:SER:HB3	45:IC:177:VAL:O	2.07	0.53
45:IM:276:ILE:HD12	45:IM:281:ALA:HA	1.90	0.53
46:JJ:263:LEU:HD22	46:JJ:422:TYR:HD1	1.74	0.53
45:KA:77:GLU:HA	45:KA:80:THR:HB	1.89	0.53
46:KB:10:GLY:O	46:KB:14:ASN:ND2	2.41	0.53
46:KB:31:ASP:OD1	46:KB:35:THR:N	2.34	0.53
46:KF:191:GLN:O	46:KF:195:ASN:ND2	2.40	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LB:192:LEU:HD21	46:LB:199:CYS:SG	2.49	0.53
45:LC:118:CYS:O	45:LC:122:ILE:HG12	2.08	0.53
45:LM:430:LYS:HD2	45:LM:434:GLU:HG2	1.89	0.53
45:MI:288:VAL:HA	45:MI:291:ILE:HG12	1.90	0.53
45:MM:181:VAL:HG23	45:MM:182:VAL:HG13	1.90	0.53
45:NC:91:GLN:OE1	45:NC:121:ARG:NH2	2.41	0.53
46:ND:68:LEU:HB3	46:ND:96:GLY:HA2	1.90	0.53
46:ND:248:SER:HA	46:ND:252:LYS:HD3	1.89	0.53
45:NE:276:ILE:HG13	45:NE:283:HIS:HE1	1.74	0.53
46:NF:257:LEU:HD11	46:NF:314:SER:HB3	1.91	0.53
46:NH:67:ASP:OD1	46:NH:68:LEU:N	2.38	0.53
46:NN:68:LEU:HB3	46:NN:96:GLY:HA2	1.91	0.53
46:NN:257:LEU:HD11	46:NN:314:SER:HB3	1.90	0.53
45:OA:182:VAL:HG21	46:OB:255:VAL:HG22	1.91	0.53
45:OI:210:TYR:HE1	45:OI:227:LEU:HD11	1.74	0.53
46:OJ:10:GLY:O	46:OJ:14:ASN:ND2	2.42	0.53
46:QL:344:TRP:O	46:QL:345:ILE:HD13	2.08	0.53
46:QN:207:LEU:HB3	46:QN:225:LEU:HD22	1.89	0.53
45:RC:109:THR:HG22	45:RC:110:ILE:HG23	1.89	0.53
45:RG:297:GLU:OE1	45:RG:299:ALA:N	2.42	0.53
46:RJ:183:TYR:HE2	46:RJ:394:PHE:HB2	1.74	0.53
45:SC:127:ASP:OD1	45:SC:128:ASN:N	2.41	0.53
45:SG:422:ARG:HH21	45:SG:425:LEU:HD23	1.73	0.53
46:SH:320:ARG:HG3	46:SH:355:ASP:HB2	1.90	0.53
45:SK:176:GLN:NE2	45:SK:207:GLU:OE2	2.42	0.53
46:TF:68:LEU:HB3	46:TF:96:GLY:HA2	1.90	0.53
45:TG:69:ASP:OD1	45:TG:70:LEU:N	2.38	0.53
46:TH:372:THR:HA	46:TH:422:TYR:HE1	1.73	0.53
45:UC:115:VAL:HG23	45:UC:153:LEU:HD23	1.90	0.53
46:VF:372:THR:HA	46:VF:422:TYR:CE2	2.44	0.53
46:VH:326:VAL:O	46:VH:330:MET:HG2	2.09	0.53
45:WK:217:LEU:HB3	45:WK:219:ILE:HG12	1.90	0.53
45:WM:18:ASN:HD21	45:WM:78:VAL:HG22	1.74	0.53
4:2D:35:LYS:NZ	45:DK:84:ARG:HD3	2.24	0.53
21:2L:739:LEU:HD13	21:2L:789:GLN:HA	1.88	0.53
23:2O:415:GLU:HA	23:2O:418:GLN:CD	2.29	0.53
1:3A:115:THR:OG1	1:3A:116:THR:N	2.42	0.53
23:3O:402:GLN:HE22	23:3O:406:ARG:NH2	2.06	0.53
25:3R:30:GLN:HE22	46:MN:77:ARG:HD2	1.72	0.53
13:3U:135:GLU:HG2	13:3U:136:GLN:OE1	2.08	0.53
13:3U:435:ASN:HD22	13:3U:438:THR:HG22	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:3U:513:LYS:NZ	13:3U:528:LEU:HB2	2.23	0.53
14:3V:24:ARG:NH2	45:MA:430:LYS:O	2.42	0.53
14:3V:68:CYS:HB3	14:3V:72:GLY:HA2	1.89	0.53
35:4S:160:THR:O	35:4S:164:LYS:HG2	2.08	0.53
35:5S:78:VAL:HG23	35:5S:79:ASN:H	1.73	0.53
34:7R:250:GLU:OE2	34:7R:251:ASN:ND2	2.42	0.53
34:7R:287:ILE:HG22	34:7R:304:LEU:HB2	1.90	0.53
46:AB:186:THR:HA	46:AB:189:VAL:HG12	1.90	0.53
45:AC:17:GLY:HA2	45:AC:20:CYS:SG	2.48	0.53
45:AC:292:THR:HG21	45:AC:331:SER:HB2	1.90	0.53
45:BC:178:SER:OG	45:BC:183:GLU:OE2	2.23	0.53
45:CC:387:VAL:O	45:CC:390:ARG:HG2	2.09	0.53
46:CD:184:ASN:OD1	46:CD:398:TYR:OH	2.26	0.53
46:CD:326:VAL:O	46:CD:330:MET:HG2	2.09	0.53
46:CN:73:MET:HA	46:CN:76:VAL:HG12	1.91	0.53
46:CN:135:ILE:HB	46:CN:166:THR:HG22	1.91	0.53
46:DD:347:ASN:OD1	45:DE:178:SER:OG	2.26	0.53
46:DN:16:ILE:HG13	46:DN:226:ASN:ND2	2.24	0.53
46:EB:118:ASP:N	46:EB:121:ARG:HH21	2.06	0.53
45:EC:101:ASN:HA	45:EC:144:GLY:H	1.73	0.53
46:EF:8:GLN:HE21	46:EF:14:ASN:HA	1.73	0.53
46:EH:344:TRP:HB3	46:EH:430:ALA:HB2	1.91	0.53
46:EN:19:LYS:HG3	46:EN:226:ASN:HB2	1.91	0.53
46:GH:31:ASP:OD1	46:GH:37:HIS:ND1	2.28	0.53
45:GM:33:ASP:OD1	45:GM:34:GLY:N	2.42	0.53
46:HB:150:LEU:O	46:HB:153:SER:OG	2.25	0.53
45:HG:11:GLN:HG3	45:HG:74:VAL:HG11	1.90	0.53
45:HI:155:GLU:HG2	45:HI:197:HIS:CD2	2.44	0.53
46:IH:5:VAL:HG12	46:IH:62:ARG:HD3	1.90	0.53
45:IM:91:GLN:HB3	45:IM:121:ARG:NH1	2.23	0.53
46:JB:163:ILE:HD11	46:JB:251:ARG:HD3	1.90	0.53
46:JN:67:ASP:OD1	46:JN:68:LEU:N	2.41	0.53
46:JN:105:HIS:CE1	46:JN:150:LEU:HD12	2.43	0.53
46:KJ:156:ARG:NH2	46:KJ:195:ASN:O	2.35	0.53
45:LA:181:VAL:HG23	45:LA:182:VAL:HG13	1.89	0.53
45:LE:407:TRP:CH2	46:LF:258:ILE:HB	2.44	0.53
46:LF:304:ASP:OD2	46:LF:306:ARG:HG2	2.08	0.53
46:MB:237:THR:HG23	46:MB:241:ARG:HE	1.74	0.53
45:ME:241:SER:OG	45:ME:250:VAL:O	2.26	0.53
45:ME:254:GLU:HG2	46:MH:98:GLY:HA2	1.89	0.53
45:NK:287:SER:N	45:NK:290:GLU:OE2	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PJ:222:TYR:O	46:PJ:226:ASN:ND2	2.28	0.53
45:QC:119:LEU:HD13	45:QC:156:ARG:HE	1.73	0.53
46:QL:292:GLN:HG2	46:QL:298:ASN:ND2	2.24	0.53
46:RH:330:MET:HA	46:RH:333:VAL:HG22	1.89	0.53
45:SC:147:SER:HB2	45:SC:190:SER:HB3	1.90	0.53
46:SL:6:HIS:HB3	46:SL:63:ALA:HA	1.91	0.53
46:TB:87:PRO:HA	46:TB:90:PHE:HD2	1.72	0.53
46:TF:258:ILE:HD11	45:TG:407:TRP:HZ2	1.73	0.53
45:UC:88:HIS:CE1	45:UC:90:GLU:HG2	2.44	0.53
45:VI:288:VAL:HB	45:VI:373:ARG:HD2	1.90	0.53
46:VN:139:LEU:HD22	46:VN:170:VAL:HG12	1.90	0.53
46:VN:323:THR:HA	46:VN:326:VAL:HB	1.90	0.53
46:WH:1:MET:N	46:WH:3:GLU:OE2	2.42	0.53
46:WL:203:ASP:OD2	46:WL:205:GLU:HG2	2.09	0.53
46:WL:260:PHE:HB2	46:WL:263:LEU:HD13	1.90	0.53
46:WN:309:ARG:NH2	46:WN:426:GLN:O	2.29	0.53
7:OG:164:PRO:HA	26:2W:185:PHE:HA	1.91	0.53
11:1S:316:CYS:SG	11:1S:317:VAL:N	2.82	0.53
13:1U:431:VAL:HG12	13:1U:443:ALA:HB2	1.91	0.53
20:2K:219:GLN:NE2	20:2K:223:ASN:HD21	2.07	0.53
23:2O:318:LEU:O	23:2O:322:ARG:HG3	2.09	0.53
26:2W:185:PHE:N	45:KM:45:GLY:O	2.25	0.53
10:3Q:94:LEU:HB2	10:3Q:152:LEU:HD21	1.91	0.53
14:3V:36:SER:O	14:3V:49:ALA:HB2	2.08	0.53
34:4R:460:ASP:OD1	34:4R:461:LYS:N	2.42	0.53
46:AJ:257:LEU:HD11	46:AJ:314:SER:HB2	1.91	0.53
46:BD:139:LEU:HD13	46:BD:168:SER:HB3	1.91	0.53
46:BH:273:LEU:H	46:BH:292:GLN:HE22	1.56	0.53
45:BK:192:HIS:ND1	45:BK:424:ASP:OD2	2.41	0.53
46:BN:58:ARG:HD3	46:CL:280:GLN:OE1	2.09	0.53
46:BN:201:VAL:HG21	46:BN:374:ILE:HD11	1.90	0.53
46:CF:273:LEU:H	46:CF:292:GLN:HE22	1.56	0.53
45:CI:89:PRO:HD3	45:DI:283:HIS:ND1	2.23	0.53
46:CJ:319:GLY:HA2	46:CJ:357:PRO:HD3	1.91	0.53
46:CL:12:CYS:HB3	46:CL:138:SER:HB3	1.90	0.53
46:CN:64:ILE:HD11	46:CN:123:GLU:HG3	1.89	0.53
46:CN:376:GLU:HA	46:CN:379:LYS:HZ3	1.74	0.53
46:DJ:63:ALA:O	46:DJ:89:ASN:ND2	2.37	0.53
45:DM:70:LEU:HA	45:DM:95:GLY:HA3	1.90	0.53
46:DN:152:ILE:O	46:DN:156:ARG:HG2	2.09	0.53
46:EF:256:ASN:ND2	46:EF:350:LYS:HD2	2.23	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FE:188:ILE:HG22	45:FE:421:ALA:HB1	1.90	0.53
46:GB:86:ARG:NH1	46:HB:281:TYR:HB2	2.23	0.53
46:GB:384:GLN:NE2	46:GB:388:MET:SD	2.81	0.53
45:GC:174:SER:HB2	45:GC:177:VAL:O	2.09	0.53
46:GL:248:SER:HB2	46:GL:252:LYS:HD2	1.90	0.53
45:HG:188:ILE:HD12	45:HG:425:LEU:HD11	1.90	0.53
45:IM:288:VAL:HG21	45:IM:327:ASP:HB3	1.89	0.53
45:JI:402:ARG:NH2	45:JI:415:GLU:OE2	2.41	0.53
46:JJ:55:THR:HG23	46:KJ:283:ALA:HA	1.91	0.53
46:JN:257:LEU:HD21	46:JN:314:SER:HB3	1.91	0.53
46:KD:5:VAL:HG12	46:KD:62:ARG:HD3	1.91	0.53
46:KF:52:ASN:OD1	46:KF:62:ARG:NH2	2.41	0.53
46:LB:10:GLY:O	46:LB:14:ASN:ND2	2.42	0.53
46:LB:257:LEU:O	46:LB:312:THR:OG1	2.22	0.53
45:LC:11:GLN:NE2	46:LD:245:GLN:O	2.42	0.53
46:LJ:63:ALA:O	46:LJ:89:ASN:ND2	2.42	0.53
45:LK:147:SER:HB2	45:LK:190:SER:HB3	1.91	0.53
46:MH:109:GLY:HA2	46:MH:147:MET:HE2	1.91	0.53
46:ML:268:ILE:HG22	46:ML:368:VAL:HG22	1.91	0.53
45:MM:221:ARG:NH1	46:MN:325:GLU:OE2	2.42	0.53
45:NC:105:ARG:HG2	45:NC:110:ILE:HG12	1.89	0.53
45:NE:201:ALA:HB3	45:NE:267:PHE:HD1	1.73	0.53
45:NK:204:LEU:HD13	45:NK:231:ILE:HD12	1.91	0.53
45:NK:319:TYR:HB3	45:NK:323:VAL:HG21	1.89	0.53
46:OB:324:LYS:O	46:OB:327:ASP:N	2.42	0.53
45:PA:100:ALA:HB3	46:PB:251:ARG:HH11	1.74	0.53
45:PK:322:ASP:OD2	45:PK:373:ARG:NH1	2.41	0.53
45:QA:316:SER:HA	45:QA:352:LYS:HB3	1.90	0.53
46:QL:131:GLN:HE22	46:QL:250:LEU:HB2	1.74	0.53
46:QN:282:ARG:NH2	46:QN:292:GLN:OE1	2.40	0.53
46:RF:86:ARG:HE	46:RF:87:PRO:HD2	1.74	0.53
45:RG:254:GLU:OE1	45:RG:352:LYS:NZ	2.42	0.53
45:RM:256:GLN:HB2	45:RM:260:VAL:HB	1.91	0.53
46:RN:91:VAL:HG21	46:RN:116:VAL:HB	1.91	0.53
45:SC:215:ARG:NH2	45:SC:300:ASN:OD1	2.40	0.53
45:SG:254:GLU:HA	45:SG:257:THR:HG22	1.91	0.53
46:TB:374:ILE:HG12	46:TB:422:TYR:OH	2.09	0.53
46:TJ:113:ILE:HA	46:TJ:116:VAL:HG22	1.89	0.53
45:TM:90:GLU:HG2	45:TM:121:ARG:HH12	1.73	0.53
45:UA:316:SER:HA	45:UA:352:LYS:HB2	1.91	0.53
45:UG:172:TYR:HH	45:UG:191:THR:HG1	1.47	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UM:213:CYS:HA	45:UM:217:LEU:HB3	1.90	0.53
45:UM:256:GLN:O	46:UN:397:TRP:NE1	2.42	0.53
46:UN:5:VAL:HG12	46:UN:62:ARG:HD3	1.89	0.53
46:UN:55:THR:HG23	46:VN:283:ALA:HA	1.89	0.53
46:UN:86:ARG:HH21	46:UN:87:PRO:HG2	1.74	0.53
45:VC:132:LEU:O	45:VC:164:LYS:NZ	2.40	0.53
46:VN:165:GLU:HA	46:VN:198:GLU:HB2	1.90	0.53
45:WA:177:VAL:HG22	46:WB:331:LEU:HD22	1.91	0.53
45:WA:326:LYS:NZ	46:WD:220:PRO:O	2.34	0.53
46:WF:371:SER:O	46:WF:422:TYR:OH	2.16	0.53
46:WJ:396:HIS:HA	46:WJ:399:THR:HG22	1.90	0.53
2:0B:284:GLN:HE21	46:KL:280:GLN:HE21	1.56	0.53
22:1M:288:LEU:CD2	39:6F:56:LEU:H	2.21	0.53
23:1O:185:ARG:HG3	46:UD:279:GLN:NE2	2.23	0.53
24:1P:158:LYS:NZ	24:2P:496:LEU:HG	2.24	0.53
21:2L:887:LYS:HB2	21:2L:925:TYR:HD1	1.74	0.53
23:2O:486:GLU:OE2	23:2O:489:ARG:NH1	2.42	0.53
14:2V:238:LYS:NZ	46:WH:218:THR:HB	2.24	0.53
27:3C:51:ASN:ND2	27:3C:54:ASP:OD2	2.41	0.53
5:3E:47:GLU:O	5:3E:50:ILE:HG22	2.09	0.53
31:3I:228:ARG:HD3	46:GL:297:LYS:HA	1.91	0.53
33:4F:5:VAL:HG23	33:4F:8:TYR:HE1	1.74	0.53
36:5C:163:ALA:O	36:5C:167:LYS:HG2	2.09	0.53
36:5D:87:ARG:NH1	45:NM:363:VAL:HG22	2.17	0.53
37:5E:208:PRO:HG3	45:LC:430:LYS:HB3	1.90	0.53
34:7R:573:LEU:HD21	34:7R:580:LEU:HD12	1.91	0.53
46:AB:326:VAL:O	46:AB:330:MET:HG2	2.09	0.53
45:BC:241:SER:HB2	45:BC:249:ASN:HD22	1.73	0.53
46:BL:310:TYR:O	46:BL:342:VAL:HG23	2.09	0.53
45:BM:219:ILE:HG22	45:BM:222:PRO:HD3	1.90	0.53
46:CB:20:PHE:HA	46:CB:230:SER:HB2	1.91	0.53
46:CH:2:ARG:HH22	45:CI:73:THR:HG23	1.72	0.53
46:CN:168:SER:HB2	46:CN:201:VAL:HG12	1.91	0.53
46:DH:256:ASN:ND2	46:DH:350:LYS:HD2	2.23	0.53
45:EM:427:ALA:HA	45:EM:430:LYS:HE2	1.91	0.53
45:FE:118:CYS:O	45:FE:122:ILE:HG12	2.08	0.53
46:FJ:55:THR:HG23	46:GJ:283:ALA:HA	1.91	0.53
46:FJ:113:ILE:HA	46:FJ:116:VAL:HG12	1.91	0.53
45:FK:204:LEU:HD13	45:FK:231:ILE:HD12	1.90	0.53
46:FL:3:GLU:OE2	46:FL:128:ASP:N	2.42	0.53
46:FN:166:THR:HG21	46:FN:192:LEU:HD11	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FN:315:ALA:O	46:FN:352:SER:N	2.41	0.53
46:GN:52:ASN:OD1	46:GN:62:ARG:NH2	2.41	0.53
46:GN:286:VAL:HA	46:GN:289:LEU:HB2	1.90	0.53
45:HM:141:VAL:HG11	45:HM:172:TYR:HD1	1.74	0.53
46:IB:39:ASP:H	46:IB:43:GLN:HE22	1.57	0.53
46:IJ:113:ILE:HA	46:IJ:116:VAL:HG12	1.90	0.53
46:JF:3:GLU:OE2	46:JF:127:CYS:HB2	2.08	0.53
45:JI:17:GLY:HA2	45:JI:20:CYS:SG	2.49	0.53
45:LE:60:LYS:NZ	45:LE:85:GLN:O	2.30	0.53
45:LG:188:ILE:HG13	45:LG:189:LEU:HD12	1.91	0.53
46:LJ:51:TYR:HB3	46:LJ:59:TYR:HB3	1.90	0.53
45:LM:17:GLY:HA2	45:LM:20:CYS:SG	2.49	0.53
46:ML:169:VAL:HG22	46:ML:202:ILE:HB	1.90	0.53
45:NE:90:GLU:HB2	45:OE:280:LYS:HZ1	1.73	0.53
46:NH:383:GLU:HA	46:NH:386:THR:HG22	1.91	0.53
46:OD:252:LYS:O	46:OD:256:ASN:ND2	2.41	0.53
46:OF:135:ILE:HG13	46:OF:152:ILE:HD11	1.91	0.53
45:PE:244:PHE:HB2	45:PE:356:ASN:HD21	1.73	0.53
46:QJ:51:TYR:HB3	46:QJ:59:TYR:HB3	1.90	0.53
45:RA:185:TYR:HE2	45:RA:404:PHE:HB2	1.74	0.53
45:RG:367:ASP:OD1	45:RG:368:LEU:N	2.41	0.53
46:RH:52:ASN:OD1	46:RH:62:ARG:NH2	2.32	0.53
45:RI:206:ASN:OD1	47:RI:501:GTP:N2	2.42	0.53
45:SC:7:ILE:HB	45:SC:137:VAL:HG12	1.91	0.53
46:SJ:60:VAL:HG21	46:SJ:86:ARG:NE	2.24	0.53
46:SL:289:LEU:HD13	46:SL:365:VAL:HG23	1.91	0.53
46:TB:86:ARG:HD3	46:TB:87:PRO:HD2	1.91	0.53
46:TD:100:ASN:HD22	46:TD:103:LYS:HB2	1.73	0.53
46:TH:377:MET:HA	46:TH:380:ARG:HG2	1.91	0.53
45:TM:272:TYR:HD2	45:TM:275:ILE:HD11	1.72	0.53
46:TN:139:LEU:HD22	46:TN:170:VAL:HG12	1.91	0.53
45:UC:346:TRP:CD1	46:UD:391:ARG:HG3	2.44	0.53
45:UE:284:GLU:HG3	45:UE:286:LEU:HD22	1.91	0.53
46:UL:371:SER:O	46:UL:422:TYR:OH	2.24	0.53
46:VL:27:GLU:O	46:VL:43:GLN:NE2	2.34	0.53
45:VM:206:ASN:HB2	45:VM:210:TYR:HE2	1.72	0.53
46:VN:222:TYR:O	46:VN:226:ASN:ND2	2.41	0.53
46:WJ:113:ILE:HD13	46:WJ:150:LEU:HD22	1.90	0.53
45:WM:3:GLU:OE2	45:WM:130:THR:N	2.39	0.53
4:OD:93:GLN:NE2	45:EC:32:PRO:HD2	2.24	0.53
27:2C:23:VAL:HG12	27:2C:180:GLY:HA2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2E:27:LEU:HD23	5:2E:87:VAL:HG23	1.90	0.53
9:2N:50:ARG:O	9:2N:54:SER:OG	2.18	0.53
1:3A:124:LEU:HD22	46:AN:279:GLN:NE2	2.23	0.53
27:3C:3:LEU:HA	27:3C:7:GLY:HA3	1.90	0.53
31:3I:220:LYS:O	46:FL:125:GLU:HB3	2.09	0.53
25:3R:485:VAL:HG23	25:3R:488:LYS:HB2	1.91	0.53
13:3U:255:GLY:HA3	13:3U:281:VAL:HG11	1.91	0.53
13:3U:549:VAL:HA	13:3U:559:LEU:HA	1.90	0.53
27:4C:81:GLU:OE2	27:4C:83:ASN:ND2	2.42	0.53
37:5G:156:TYR:HD1	37:5G:159:GLN:HE21	1.56	0.53
41:6H:328:ASN:HD21	46:FJ:276:ARG:HE	1.56	0.53
46:AD:113:ILE:HD13	46:AD:150:LEU:HD22	1.90	0.53
46:AF:114:ASP:OD1	46:AF:115:SER:N	2.42	0.53
46:AN:289:LEU:HD13	46:AN:365:VAL:HG23	1.91	0.53
46:BD:247:ASN:C	46:BD:247:ASN:HD22	2.11	0.53
45:BE:407:TRP:CH2	46:BF:258:ILE:HB	2.41	0.53
45:BI:89:PRO:HD3	45:CI:283:HIS:ND1	2.24	0.53
46:CD:209:ASP:OD1	46:CD:213:ARG:NE	2.40	0.53
45:CM:10:GLY:O	45:CM:14:ILE:HG12	2.08	0.53
45:CM:26:LEU:HD11	45:CM:364:PRO:HD2	1.90	0.53
46:CN:31:ASP:OD1	46:CN:35:THR:N	2.40	0.53
45:DK:188:ILE:HG22	45:DK:421:ALA:HB1	1.90	0.53
46:DL:68:LEU:HA	46:DL:93:GLY:H	1.74	0.53
45:DM:36:MET:SD	45:DM:37:PRO:HD2	2.49	0.53
45:EM:328:VAL:HG11	45:EM:353:VAL:HG21	1.90	0.53
45:FC:392:ASP:OD1	45:FC:422:ARG:NE	2.41	0.53
46:FJ:238:CYS:SG	46:FJ:239:CYS:N	2.82	0.53
45:GA:174:SER:HB2	45:GA:177:VAL:O	2.09	0.53
46:GH:371:SER:O	46:GH:422:TYR:OH	2.24	0.53
45:HI:336:LYS:HD3	45:HI:351:PHE:HE1	1.73	0.53
45:HM:14:ILE:HD11	45:HM:69:ASP:HB2	1.90	0.53
45:IG:221:ARG:NH1	46:IH:325:GLU:OE2	2.42	0.53
46:IJ:86:ARG:HG3	45:JG:283:HIS:HB3	1.91	0.53
46:JD:10:GLY:O	46:JD:14:ASN:ND2	2.42	0.53
46:JD:113:ILE:HA	46:JD:116:VAL:HG12	1.90	0.53
46:JJ:81:PHE:HD2	46:JJ:84:LEU:HD11	1.72	0.53
46:JN:73:MET:HA	46:JN:76:VAL:HG12	1.89	0.53
46:KJ:63:ALA:O	46:KJ:89:ASN:ND2	2.41	0.53
46:LB:130:LEU:O	46:LB:162:ARG:NH1	2.41	0.53
45:LC:254:GLU:HG2	46:LF:98:GLY:HA2	1.90	0.53
46:LD:358:PRO:HB2	46:LD:361:LEU:HD13	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LD:418:LEU:O	46:LD:422:TYR:HB3	2.09	0.53
46:MD:139:LEU:HD13	46:MD:168:SER:HB3	1.90	0.53
45:ME:120:ASP:OD1	45:ME:124:LYS:NZ	2.41	0.53
45:ME:317:MET:HB3	45:ME:377:MET:HG2	1.91	0.53
46:ML:67:ASP:OD1	46:ML:68:LEU:N	2.39	0.53
46:MN:31:ASP:OD1	46:MN:35:THR:N	2.34	0.53
45:NG:105:ARG:HG2	45:NG:110:ILE:HG12	1.90	0.53
45:OM:271:SER:HB3	45:OM:377:MET:HB3	1.91	0.53
46:ON:282:ARG:NH2	46:ON:292:GLN:OE1	2.29	0.53
46:PB:314:SER:OG	46:PB:368:VAL:O	2.21	0.53
46:PJ:289:LEU:HD11	46:PJ:363:MET:HG3	1.90	0.53
45:QC:350:GLY:HA2	46:QD:179:VAL:HG22	1.91	0.53
46:QJ:83:GLN:O	46:RJ:281:TYR:OH	2.25	0.53
45:QM:346:TRP:HB2	46:QN:391:ARG:HH11	1.72	0.53
46:RJ:187:LEU:HD11	46:RJ:408:PHE:HE1	1.73	0.53
46:SD:252:LYS:HG2	46:SD:350:LYS:HZ3	1.74	0.53
45:SI:292:THR:HG21	45:SI:331:SER:HB3	1.90	0.53
45:SM:164:LYS:HD3	45:SM:165:SER:N	2.23	0.53
46:TH:86:ARG:HD3	46:TH:87:PRO:HD2	1.90	0.53
46:TH:162:ARG:HH21	46:TH:251:ARG:HH22	1.55	0.53
46:TJ:139:LEU:HD22	46:TJ:170:VAL:HG12	1.91	0.53
46:TJ:178:THR:HB	46:TJ:181:GLU:HG3	1.90	0.53
46:UF:113:ILE:HA	46:UF:116:VAL:HG12	1.89	0.53
45:UK:287:SER:N	45:UK:290:GLU:OE2	2.39	0.53
45:VG:68:LEU:HD11	45:VG:118:CYS:SG	2.49	0.53
45:WM:328:VAL:HG11	45:WM:353:VAL:HG21	1.91	0.53
46:WN:174:LYS:HG2	46:WN:380:ARG:HH22	1.74	0.53
46:WN:256:ASN:HB2	46:WN:350:LYS:HZ1	1.74	0.53
4:0D:223:ILE:O	34:7R:506:LEU:HD12	2.09	0.53
1:1A:80:LYS:HD3	34:4R:73:PRO:HB3	1.91	0.53
21:1L:490:TYR:OH	46:BH:78:ALA:O	2.28	0.53
22:1M:288:LEU:HD22	39:6F:55:THR:HB	1.90	0.53
16:2B:29:LEU:HD13	16:2B:56:LEU:HD21	1.90	0.53
27:2C:278:ASP:HB2	27:2C:285:ILE:HG12	1.90	0.53
5:2E:137:MET:HG2	5:2E:142:VAL:HG23	1.91	0.53
21:2L:770:PRO:HG2	21:2L:773:LYS:HG3	1.91	0.53
14:2V:242:GLU:OE2	46:WH:218:THR:OG1	2.27	0.53
14:3V:100:ILE:HG22	14:3V:101:ILE:H	1.74	0.53
34:4R:559:ASN:HD21	34:4R:561:ARG:HH21	1.57	0.53
36:5A:29:GLN:HE22	36:5A:36:ARG:HD3	1.73	0.53
37:5F:141:CYS:O	37:5F:145:GLU:HG3	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:5Q:140:THR:HG21	10:5Q:148:TYR:HB2	1.91	0.53
34:5R:135:MET:SD	34:5R:136:ASN:ND2	2.82	0.53
46:AB:268:ILE:HG13	46:AB:300:MET:HG3	1.91	0.53
46:AL:318:ARG:HH11	46:AL:358:PRO:HG3	1.74	0.53
45:BA:66:VAL:HG23	45:BA:91:GLN:HB2	1.91	0.53
46:BJ:105:HIS:CD2	46:BJ:150:LEU:HB2	2.44	0.53
46:CF:63:ALA:O	46:CF:89:ASN:ND2	2.29	0.53
46:CJ:331:LEU:HD11	45:CK:176:GLN:HG3	1.89	0.53
45:EA:84:ARG:HD2	45:EA:84:ARG:H	1.73	0.53
46:EJ:166:THR:OG1	46:EJ:199:CYS:SG	2.52	0.53
46:EN:401:GLU:N	46:EN:401:GLU:OE2	2.42	0.53
46:FF:116:VAL:HA	46:FF:119:VAL:HG12	1.91	0.53
45:FG:274:PRO:HG3	45:FG:286:LEU:HD23	1.91	0.53
46:FJ:207:LEU:HB3	46:FJ:225:LEU:HD22	1.91	0.53
46:GD:396:HIS:HA	46:GD:399:THR:HG22	1.91	0.53
46:GH:282:ARG:NE	46:GH:288:GLU:OE2	2.42	0.53
45:GI:259:LEU:HD11	45:GI:316:SER:HB2	1.91	0.53
46:GN:309:ARG:NH2	46:GN:426:GLN:O	2.36	0.53
46:GN:318:ARG:HD3	46:GN:356:ILE:O	2.08	0.53
46:GN:372:THR:HA	46:GN:422:TYR:HE1	1.74	0.53
45:HK:22:GLU:OE2	45:HK:229:ARG:NH1	2.42	0.53
46:JH:31:ASP:OD1	46:JH:35:THR:N	2.41	0.53
46:JN:309:ARG:NH2	46:JN:426:GLN:O	2.40	0.53
46:KB:222:TYR:O	46:KB:226:ASN:ND2	2.40	0.53
45:KI:88:HIS:HB3	45:KI:91:GLN:HG2	1.90	0.53
45:KI:371:VAL:HG22	45:KI:373:ARG:H	1.74	0.53
45:LI:271:SER:HB3	45:LI:377:MET:HB3	1.90	0.53
46:MF:68:LEU:HG	46:MF:147:MET:HE2	1.91	0.53
46:NB:135:ILE:HB	46:NB:166:THR:HG22	1.90	0.53
46:NN:73:MET:HE2	46:NN:73:MET:N	2.24	0.53
46:OB:211:CYS:HB3	46:OB:217:LEU:HD21	1.91	0.53
45:OG:339:ARG:O	45:OG:339:ARG:NH1	2.42	0.53
45:OK:336:LYS:O	45:OK:339:ARG:NH2	2.41	0.53
45:PC:185:TYR:OH	45:PC:403:ALA:O	2.22	0.53
45:PE:64:ARG:NH1	45:PE:129:CYS:SG	2.82	0.53
46:PH:309:ARG:NH2	46:PH:426:GLN:O	2.42	0.53
45:PM:73:THR:HG22	46:PN:46:ARG:NH2	2.24	0.53
45:QE:253:THR:O	45:QE:257:THR:OG1	2.21	0.53
45:QE:340:THR:HG23	45:QE:341:ILE:HG12	1.91	0.53
45:RE:140:SER:OG	47:RE:501:GTP:O2B	2.26	0.53
46:RL:312:THR:H	46:RL:370:ASN:HB3	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SB:285:THR:HB	46:SB:287:PRO:HD2	1.90	0.53
46:SB:372:THR:O	46:SB:375:GLN:NE2	2.38	0.53
45:SE:371:VAL:HG12	45:SE:373:ARG:H	1.73	0.53
46:SL:6:HIS:HE1	46:SL:8:GLN:HB3	1.73	0.53
46:TJ:320:ARG:HD3	46:TJ:355:ASP:HB3	1.90	0.53
46:UF:25:SER:OG	46:UF:30:ILE:O	2.27	0.53
45:UG:340:THR:HG23	45:UG:341:ILE:HG13	1.91	0.53
45:UM:346:TRP:CD1	46:UN:391:ARG:HG3	2.44	0.53
46:UN:178:THR:HB	46:UN:181:GLU:HG3	1.90	0.53
45:VA:90:GLU:HG3	45:VA:121:ARG:HD3	1.91	0.53
45:VC:388:PHE:HB3	45:VC:425:LEU:HD11	1.90	0.53
46:VD:260:PHE:HB2	46:VD:263:LEU:HD13	1.91	0.53
45:VK:210:TYR:CZ	46:VL:324:LYS:HG2	2.44	0.53
46:VL:289:LEU:HG	46:VL:363:MET:HG2	1.91	0.53
45:WG:319:TYR:HB3	45:WG:323:VAL:HG21	1.90	0.53
45:WM:120:ASP:OD2	45:WM:124:LYS:NZ	2.32	0.53
46:WN:260:PHE:HB2	46:WN:263:LEU:HD13	1.91	0.53
17:1F:21:GLN:HE22	46:HL:320:ARG:HE	1.55	0.52
13:1U:51:LEU:HD23	13:1U:87:TRP:CE3	2.44	0.52
13:1U:477:ASP:OD2	13:1U:480:THR:OG1	2.26	0.52
5:2E:168:TYR:OH	5:2E:189:TRP:NE1	2.26	0.52
21:2L:564:THR:O	21:2L:568:GLU:HG2	2.09	0.52
23:2O:322:ARG:HG2	45:VE:364:PRO:HA	1.91	0.52
12:3T:102:HIS:CE1	12:3T:216:LYS:HA	2.44	0.52
36:5A:85:ARG:HG3	36:5A:87:ARG:NH1	2.24	0.52
34:5R:291:LYS:HE2	34:5R:291:LYS:HA	1.91	0.52
45:AM:17:GLY:HA2	45:AM:20:CYS:SG	2.49	0.52
45:BA:36:MET:HG3	45:BA:37:PRO:HD2	1.90	0.52
45:BG:293:ASN:O	45:BG:297:GLU:HG3	2.08	0.52
46:CD:62:ARG:HH12	46:CD:127:CYS:HB3	1.72	0.52
46:CN:12:CYS:O	46:CN:16:ILE:HD12	2.09	0.52
46:DB:19:LYS:O	46:DB:22:GLU:HG3	2.08	0.52
46:DL:386:THR:O	46:DL:390:ARG:HG2	2.09	0.52
45:EM:71:GLU:HB3	45:EM:98:ASP:HB3	1.91	0.52
45:FK:221:ARG:HG2	46:FL:322:SER:HB3	1.90	0.52
45:GA:109:THR:HG22	45:GA:110:ILE:HG23	1.92	0.52
45:GA:174:SER:OG	45:GA:206:ASN:OD1	2.27	0.52
45:GI:88:HIS:HB3	45:GI:91:GLN:HG2	1.91	0.52
46:GJ:262:ARG:NH1	46:GJ:421:GLU:OE1	2.42	0.52
46:GN:326:VAL:O	46:GN:330:MET:HG2	2.10	0.52
46:HJ:201:VAL:HG21	46:HJ:374:ILE:HD11	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IF:318:ARG:HB3	46:IF:357:PRO:HA	1.90	0.52
46:JB:139:LEU:HD12	46:JB:170:VAL:HG12	1.92	0.52
45:JC:301:MET:HE2	45:JC:307:PRO:HD3	1.92	0.52
45:JG:26:LEU:HD23	45:JG:363:VAL:HG12	1.91	0.52
45:JM:11:GLN:NE2	47:JM:501:GTP:O3G	2.30	0.52
46:KF:73:MET:HE1	46:KF:92:PHE:HB3	1.91	0.52
45:LA:11:GLN:HG3	45:LA:74:VAL:HG11	1.91	0.52
46:LL:54:ALA:HA	46:ML:283:ALA:HB2	1.90	0.52
45:MC:217:LEU:HB3	45:MC:219:ILE:HG13	1.90	0.52
45:MI:75:ILE:HG22	45:MI:79:ARG:HH21	1.74	0.52
46:MJ:113:ILE:HD13	46:MJ:150:LEU:HD22	1.91	0.52
45:NA:180:ALA:HB3	45:NA:183:GLU:HG3	1.91	0.52
46:NB:236:VAL:HG13	46:NB:237:THR:HG23	1.91	0.52
45:NC:116:ASP:OD1	45:NC:117:LEU:N	2.42	0.52
46:NH:344:TRP:HB3	46:NH:430:ALA:HB2	1.91	0.52
46:OB:116:VAL:HA	46:OB:119:VAL:HG22	1.91	0.52
45:OE:173:PRO:O	45:OE:390:ARG:NH2	2.35	0.52
45:OG:326:LYS:HD2	46:OJ:220:PRO:HD2	1.91	0.52
46:PH:73:MET:HA	46:PH:76:VAL:HG12	1.91	0.52
46:QB:7:ILE:HG13	46:QB:64:ILE:HD13	1.91	0.52
46:QB:55:THR:HG23	46:RB:283:ALA:HA	1.91	0.52
45:QE:174:SER:HB3	45:QE:177:VAL:O	2.09	0.52
46:QF:19:LYS:NZ	46:QF:223:GLY:O	2.42	0.52
46:QJ:19:LYS:NZ	46:QJ:223:GLY:O	2.32	0.52
46:QN:257:LEU:HD11	46:QN:314:SER:HB2	1.90	0.52
46:RB:169:VAL:HG12	46:RB:202:ILE:HB	1.90	0.52
46:RF:256:ASN:OD1	45:RG:181:VAL:HG22	2.09	0.52
45:RI:268:MET:SD	45:RI:380:ASN:HB2	2.49	0.52
45:RK:326:LYS:NZ	46:RL:219:THR:HA	2.25	0.52
46:RL:136:THR:HG22	46:RL:167:PHE:HB2	1.90	0.52
46:SH:52:ASN:OD1	46:SH:62:ARG:NH1	2.43	0.52
46:SJ:55:THR:HG23	46:TJ:283:ALA:HA	1.91	0.52
46:SL:52:ASN:OD1	46:SL:62:ARG:NH1	2.41	0.52
46:SN:51:TYR:HB3	46:SN:59:TYR:HB3	1.91	0.52
46:TB:255:VAL:HA	45:TC:407:TRP:CZ3	2.40	0.52
45:TC:32:PRO:HB3	45:TC:83:TYR:HE1	1.74	0.52
45:UA:214:ARG:HH12	45:UA:222:PRO:HG3	1.74	0.52
46:UF:321:MET:HE1	46:UF:322:SER:O	2.10	0.52
45:UG:88:HIS:CE1	45:UG:90:GLU:HG2	2.44	0.52
46:UN:47:ILE:HD13	46:UN:59:TYR:HE2	1.74	0.52
45:VC:65:ALA:O	45:VC:91:GLN:NE2	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VC:76:ASP:OD2	46:VD:46:ARG:NH2	2.42	0.52
45:VE:326:LYS:HZ1	46:VH:219:THR:HG22	1.73	0.52
46:VH:113:ILE:HA	46:VH:116:VAL:HG12	1.90	0.52
45:VI:188:ILE:O	45:VI:191:THR:OG1	2.22	0.52
46:VN:211:CYS:HA	46:VN:215:LEU:HB2	1.91	0.52
45:WC:236:SER:OG	45:WC:243:ARG:NH2	2.43	0.52
1:0A:111:SER:OG	46:AB:276:ARG:NH2	2.42	0.52
5:2E:38:ASP:O	5:2E:40:ASN:N	2.40	0.52
23:2O:176:ARG:HA	23:2O:179:LEU:HD12	1.91	0.52
14:2V:70:THR:OG1	46:MF:337:ASN:ND2	2.40	0.52
12:3T:280:GLN:HB3	13:3U:47:SER:HA	1.90	0.52
34:4R:322:THR:HB	34:4R:324:LYS:HG2	1.92	0.52
37:5E:54:LYS:HD3	37:5E:54:LYS:H	1.75	0.52
40:6G:239:ILE:HD11	46:VD:336:LYS:HG3	1.91	0.52
40:6G:284:LYS:HB3	40:6G:288:LYS:HZ1	1.74	0.52
10:6Q:85:LYS:O	10:6Q:107:ASN:ND2	2.42	0.52
10:6Q:170:ARG:HG2	10:6Q:171:LEU:HD23	1.90	0.52
45:BA:88:HIS:HB3	45:BA:91:GLN:NE2	2.16	0.52
45:BE:76:ASP:OD2	46:BF:46:ARG:NH2	2.43	0.52
46:BN:65:LEU:HD13	46:BN:90:PHE:HE1	1.74	0.52
45:CE:271:SER:HB2	45:CE:377:MET:HB3	1.91	0.52
46:CJ:218:THR:HG23	46:CJ:219:THR:HG23	1.92	0.52
46:CL:238:CYS:SG	46:CL:239:CYS:N	2.82	0.52
46:DH:103:LYS:NZ	46:DH:401:GLU:OE2	2.39	0.52
46:DN:22:GLU:HG2	46:DN:81:PHE:HD1	1.74	0.52
46:DN:309:ARG:NH2	46:DN:426:GLN:O	2.40	0.52
45:EE:68:LEU:HD11	45:EE:118:CYS:SG	2.49	0.52
45:FA:270:SER:O	45:FA:302:MET:HB2	2.09	0.52
46:FH:207:LEU:HB3	46:FH:225:LEU:HD22	1.90	0.52
46:FH:342:VAL:HG13	46:FH:345:ILE:HG22	1.91	0.52
45:GA:180:ALA:HA	46:GB:350:LYS:NZ	2.23	0.52
45:GM:71:GLU:OE1	46:GN:247:ASN:ND2	2.39	0.52
45:GM:72:PRO:HA	45:GM:75:ILE:HD13	1.91	0.52
45:GM:319:TYR:HB3	45:GM:323:VAL:HG11	1.92	0.52
45:HK:296:PHE:CE2	45:HK:335:ILE:HG21	2.42	0.52
45:IA:174:SER:HB3	45:IA:207:GLU:HB2	1.91	0.52
46:JL:326:VAL:O	46:JL:330:MET:HG2	2.09	0.52
46:JL:344:TRP:HB3	46:JL:430:ALA:HB2	1.92	0.52
45:KG:118:CYS:O	45:KG:122:ILE:HG12	2.08	0.52
45:KK:88:HIS:HB3	45:KK:91:GLN:HB2	1.92	0.52
46:LJ:114:ASP:OD1	46:LJ:115:SER:N	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MA:211:ASP:OD2	45:MA:304:LYS:NZ	2.41	0.52
46:MF:11:GLN:NE2	49:MF:501:GDP:O1A	2.40	0.52
46:ML:121:ARG:NH2	46:ML:158:GLU:OE2	2.35	0.52
45:MM:242:LEU:HD11	45:MM:252:ILE:HG12	1.91	0.52
45:NA:285:GLN:OE1	45:NA:373:ARG:NH2	2.43	0.52
46:NB:248:SER:HA	46:NB:252:LYS:HD2	1.90	0.52
46:ND:67:ASP:OD1	46:ND:68:LEU:N	2.37	0.52
46:NF:207:LEU:HB3	46:NF:225:LEU:HD22	1.91	0.52
46:NF:309:ARG:HH21	46:NF:342:VAL:HA	1.74	0.52
46:NL:67:ASP:OD1	46:NL:68:LEU:N	2.34	0.52
45:OM:98:ASP:O	45:OM:105:ARG:NH2	2.42	0.52
46:ON:213:ARG:HH22	46:ON:297:LYS:HG3	1.73	0.52
46:PB:86:ARG:HE	46:PB:87:PRO:HD2	1.73	0.52
46:PD:2:ARG:H	46:PD:129:CYS:HB3	1.74	0.52
45:PK:215:ARG:CZ	45:PK:215:ARG:HA	2.39	0.52
45:PM:93:ILE:HD11	45:PM:121:ARG:HG3	1.91	0.52
46:PN:12:CYS:HB3	46:PN:138:SER:HB3	1.91	0.52
46:QD:87:PRO:HA	46:QD:90:PHE:HD2	1.74	0.52
46:QD:237:THR:HG23	46:QD:241:ARG:HH21	1.73	0.52
46:SD:83:GLN:O	46:TD:281:TYR:OH	2.20	0.52
45:SG:261:PRO:HB3	45:SG:346:TRP:HH2	1.75	0.52
46:SJ:178:THR:HB	46:SJ:181:GLU:HG3	1.91	0.52
46:TB:73:MET:HA	46:TB:76:VAL:HG12	1.91	0.52
45:UA:317:MET:HG2	45:UA:377:MET:HA	1.91	0.52
46:UD:310:TYR:CD1	46:UD:371:SER:HB2	2.45	0.52
46:UF:139:LEU:HD13	46:UF:168:SER:HB3	1.90	0.52
45:UG:147:SER:HB2	45:UG:190:SER:HB3	1.90	0.52
46:UH:52:ASN:OD1	46:UH:62:ARG:NH2	2.43	0.52
46:UH:184:ASN:OD1	46:UH:185:ALA:N	2.42	0.52
45:UI:194:LEU:O	45:UI:198:THR:HG22	2.08	0.52
46:UJ:247:ASN:C	46:UJ:247:ASN:HD22	2.10	0.52
45:VI:147:SER:HB2	45:VI:190:SER:HB3	1.90	0.52
45:WG:98:ASP:OD1	45:WG:99:ALA:N	2.42	0.52
46:WJ:222:TYR:O	46:WJ:226:ASN:ND2	2.25	0.52
46:WL:158:GLU:HG3	46:WL:159:TYR:CD1	2.44	0.52
18:1I:166:MET:N	45:KE:245:ASP:OD2	2.37	0.52
13:1U:5:LEU:N	13:1U:570:SER:O	2.41	0.52
13:1U:437:GLN:NE2	45:WE:37:PRO:O	2.41	0.52
21:2L:671:THR:HG21	45:CM:365:GLY:HA2	1.91	0.52
22:2M:324:HIS:HA	22:2M:338:ARG:NH1	2.23	0.52
23:2O:159:GLN:HA	23:2O:162:GLU:OE1	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2O:427:LEU:HD11	45:VA:282:TYR:CD2	2.44	0.52
24:2P:391:ARG:HB3	24:2P:395:GLN:HE22	1.74	0.52
13:2U:88:ASP:OD2	13:2U:91:THR:OG1	2.21	0.52
31:3I:267:THR:HG22	31:3I:270:SER:HB2	1.92	0.52
10:5Q:33:HIS:HB2	10:5Q:35:LYS:HE2	1.91	0.52
45:AA:276:ILE:HD12	45:AA:281:ALA:HA	1.91	0.52
46:AF:308:GLY:HA2	46:AF:426:GLN:HE22	1.73	0.52
45:AG:185:TYR:HE2	45:AG:404:PHE:HB2	1.74	0.52
46:BD:213:ARG:HD2	46:BD:297:LYS:HD3	1.90	0.52
45:BM:7:ILE:N	45:BM:136:LEU:O	2.35	0.52
45:CM:11:GLN:HG3	45:CM:74:VAL:HG11	1.91	0.52
46:CN:209:ASP:OD1	46:CN:213:ARG:NH2	2.41	0.52
45:DA:30:ILE:HG21	45:DA:53:PHE:HE2	1.73	0.52
45:DK:231:ILE:O	45:DK:235:ILE:HG12	2.09	0.52
45:EA:75:ILE:HG21	45:EA:94:SER:HB2	1.92	0.52
45:EC:260:VAL:HB	46:ED:397:TRP:CZ2	2.43	0.52
46:ED:67:ASP:OD1	46:ED:68:LEU:N	2.36	0.52
45:GA:259:LEU:HD11	45:GA:316:SER:HB2	1.92	0.52
45:GA:387:VAL:O	45:GA:390:ARG:HG2	2.09	0.52
45:GK:181:VAL:HG23	46:GL:348:ASN:HA	1.92	0.52
45:HA:180:ALA:N	45:HA:183:GLU:OE2	2.39	0.52
46:HD:149:THR:HA	46:HD:152:ILE:HD12	1.90	0.52
46:HN:152:ILE:HA	46:HN:164:MET:HE1	1.91	0.52
46:JB:52:ASN:ND2	46:JB:62:ARG:HB3	2.24	0.52
46:JF:55:THR:HG23	46:KF:283:ALA:HA	1.91	0.52
46:JF:414:ASN:C	46:JF:414:ASN:HD22	2.12	0.52
45:JG:71:GLU:HB3	45:JG:98:ASP:HB3	1.90	0.52
45:JM:189:LEU:HD11	45:JM:418:PHE:HE1	1.74	0.52
45:KC:31:GLN:HG3	45:KC:37:PRO:HD3	1.90	0.52
45:KG:244:PHE:HB2	45:KG:356:ASN:HD21	1.74	0.52
45:LC:224:TYR:HD1	45:LC:227:LEU:HD12	1.74	0.52
45:LE:188:ILE:HD12	45:LE:425:LEU:HD11	1.91	0.52
45:LG:339:ARG:HD3	45:LG:339:ARG:H	1.75	0.52
45:LM:176:GLN:N	45:LM:176:GLN:OE1	2.43	0.52
45:MA:147:SER:HB2	45:MA:190:SER:HB3	1.91	0.52
46:MB:289:LEU:HD13	46:MB:365:VAL:HG23	1.91	0.52
46:MF:313:ALA:HB3	46:MF:349:ILE:HG12	1.91	0.52
45:MI:112:LYS:NZ	45:MI:113:GLU:OE2	2.38	0.52
46:NB:192:LEU:HD21	46:NB:199:CYS:HB2	1.90	0.52
45:NI:276:ILE:HG13	45:NI:283:HIS:HE1	1.74	0.52
45:OA:10:GLY:O	45:OA:14:ILE:HG12	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OA:120:ASP:O	45:OA:124:LYS:HG2	2.10	0.52
45:PA:222:PRO:HG2	46:PB:324:LYS:HG2	1.91	0.52
45:PA:225:THR:OG1	45:PA:229:ARG:NH2	2.39	0.52
46:PB:87:PRO:HA	46:PB:90:PHE:HD2	1.74	0.52
45:PI:90:GLU:OE2	45:PI:121:ARG:NH1	2.43	0.52
45:PK:298:PRO:HA	45:PK:301:MET:HE1	1.91	0.52
46:PL:2:ARG:HD2	46:PL:240:LEU:HG	1.92	0.52
45:PM:221:ARG:NH1	46:PN:325:GLU:OE1	2.42	0.52
45:QC:320:ARG:HD3	45:QC:360:PRO:HG3	1.90	0.52
45:QK:262:TYR:HB2	45:QK:265:ILE:HG22	1.90	0.52
45:RC:251:ASP:HB2	45:RC:253:THR:HG22	1.91	0.52
46:RF:213:ARG:HG3	46:RF:214:THR:HG23	1.91	0.52
46:SB:213:ARG:HH21	46:SB:297:LYS:HG2	1.74	0.52
45:SC:229:ARG:NH2	45:SC:367:ASP:OD2	2.41	0.52
45:TK:285:GLN:HE22	45:TK:287:SER:HB3	1.74	0.52
46:TN:246:LEU:HD11	46:TN:352:SER:HA	1.90	0.52
45:UA:101:ASN:HA	45:UA:144:GLY:H	1.75	0.52
46:UB:245:GLN:O	45:UC:11:GLN:NE2	2.42	0.52
46:UD:10:GLY:O	46:UD:14:ASN:ND2	2.43	0.52
45:UI:248:LEU:HD13	45:UI:355:ILE:HD13	1.91	0.52
46:UJ:52:ASN:OD1	46:UJ:62:ARG:NH2	2.43	0.52
45:UM:287:SER:HA	45:UM:373:ARG:HH21	1.73	0.52
46:VD:113:ILE:HA	46:VD:116:VAL:HG12	1.92	0.52
46:VL:6:HIS:NE2	46:VL:8:GLN:OE1	2.42	0.52
46:VL:55:THR:HG21	46:WL:284:LEU:HD12	1.91	0.52
45:VM:88:HIS:HA	45:WM:280:LYS:HZ1	1.72	0.52
46:VN:52:ASN:OD1	46:VN:62:ARG:NH2	2.42	0.52
45:WE:178:SER:HB2	46:WF:347:ASN:ND2	2.24	0.52
46:WL:12:CYS:HB3	46:WL:138:SER:HB3	1.91	0.52
13:0U:447:GLU:HG3	45:WA:279:GLU:HA	1.91	0.52
20:1K:195:GLU:HA	46:GD:276:ARG:HE	1.74	0.52
11:1S:129:ILE:HG12	11:1S:221:THR:HG23	1.91	0.52
21:2L:529:GLU:HA	21:2L:532:ARG:HG2	1.92	0.52
9:2N:77:GLU:O	9:2N:273:ARG:N	2.38	0.52
10:2Q:71:ILE:HG22	10:2Q:73:LEU:H	1.75	0.52
14:2V:6:ILE:HG13	14:2V:9:LEU:HD12	1.91	0.52
15:2X:99:VAL:HG23	45:MG:370:LYS:HE2	1.90	0.52
27:3C:294:ILE:HG23	27:3C:295:VAL:HG23	1.92	0.52
32:3D:175:GLY:N	32:3D:178:ASP:OD1	2.42	0.52
13:3U:591:VAL:HG23	13:3U:601:ILE:HG22	1.90	0.52
14:3V:86:ARG:HH22	46:LB:194:GLU:H	1.57	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:4S:102:LEU:HD23	35:4S:138:VAL:HG21	1.91	0.52
36:5D:43:CYS:SG	36:5D:55:ALA:HB1	2.49	0.52
37:5E:63:HIS:CG	46:OB:280:GLN:HE22	2.27	0.52
34:7R:336:CYS:HA	34:7R:349:ILE:HB	1.90	0.52
45:BA:72:PRO:HB2	46:BB:46:ARG:HH22	1.73	0.52
46:BN:423:GLN:NE2	46:BN:427:ASP:OD2	2.42	0.52
45:CA:156:ARG:HA	45:CA:159:VAL:HG12	1.90	0.52
45:CA:212:ILE:HD11	45:CA:300:ASN:HA	1.92	0.52
45:CI:210:TYR:HE1	45:CI:227:LEU:HD11	1.74	0.52
46:CN:139:LEU:HD13	46:CN:168:SER:HB3	1.92	0.52
45:DA:185:TYR:HE2	45:DA:404:PHE:HB2	1.73	0.52
46:DB:101:TRP:HB2	46:DB:184:ASN:HB3	1.92	0.52
46:DD:246:LEU:HD11	45:DE:224:TYR:HE2	1.75	0.52
46:DL:274:THR:HG21	46:DL:282:ARG:HH12	1.74	0.52
45:EA:101:ASN:HA	45:EA:144:GLY:H	1.74	0.52
45:FG:322:ASP:OD1	45:FG:373:ARG:NH1	2.42	0.52
47:FM:501:GTP:O2G	46:FN:252:LYS:NZ	2.43	0.52
46:FN:130:LEU:O	46:FN:162:ARG:NH1	2.42	0.52
46:GF:203:ASP:OD2	46:GF:302:ALA:N	2.35	0.52
46:HB:132:GLY:HA2	46:HB:162:ARG:HB3	1.90	0.52
45:HE:88:HIS:CE1	45:HE:90:GLU:HG2	2.45	0.52
46:HJ:150:LEU:HD11	46:HJ:154:LYS:HE2	1.92	0.52
46:HN:310:TYR:HD2	46:HN:341:PHE:CE2	2.27	0.52
46:IB:117:LEU:HA	46:IB:120:VAL:HG12	1.91	0.52
46:IN:301:CYS:HB2	46:IN:377:MET:HE1	1.91	0.52
46:JF:52:ASN:OD1	46:JF:62:ARG:NH2	2.43	0.52
45:JG:88:HIS:CE1	45:JG:90:GLU:HG2	2.45	0.52
45:JG:296:PHE:HD2	45:JG:341:ILE:HD13	1.75	0.52
45:KK:192:HIS:ND1	45:KK:424:ASP:OD2	2.35	0.52
46:KN:101:TRP:HB2	46:KN:184:ASN:HB3	1.91	0.52
45:LC:66:VAL:HG11	45:LC:122:ILE:HD11	1.91	0.52
46:MN:91:VAL:HG21	46:MN:116:VAL:HB	1.91	0.52
45:NA:42:ILE:HG23	45:NA:43:GLY:H	1.74	0.52
45:NE:237:SER:HA	45:NE:320:ARG:HH11	1.74	0.52
45:NG:219:ILE:HG13	45:NG:221:ARG:H	1.73	0.52
46:NJ:294:PHE:HD2	46:NJ:333:VAL:HG21	1.75	0.52
46:NN:330:MET:SD	46:NN:349:ILE:HG21	2.49	0.52
46:OF:139:LEU:HD13	46:OF:168:SER:HB3	1.90	0.52
45:OG:88:HIS:HB3	45:OG:91:GLN:OE1	2.09	0.52
45:OG:331:SER:O	45:OG:334:THR:OG1	2.23	0.52
45:PM:99:ALA:HA	45:PM:105:ARG:HH11	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QC:311:LYS:H	45:QC:382:THR:HG22	1.74	0.52
46:QF:86:ARG:NH1	46:RF:281:TYR:O	2.42	0.52
46:QF:135:ILE:HG13	46:QF:152:ILE:HD11	1.90	0.52
46:QL:67:ASP:OD2	46:QL:68:LEU:N	2.42	0.52
45:QM:340:THR:HG23	45:QM:341:ILE:HG13	1.90	0.52
46:RD:31:ASP:OD1	46:RD:37:HIS:ND1	2.43	0.52
45:RE:285:GLN:O	45:RE:373:ARG:NH2	2.42	0.52
46:RJ:207:LEU:HD23	46:RJ:225:LEU:HB3	1.91	0.52
45:RM:242:LEU:HD11	45:RM:252:ILE:HG13	1.90	0.52
45:RM:338:LYS:HB3	45:RM:340:THR:HG22	1.91	0.52
45:SC:171:ILE:O	45:SC:171:ILE:HG13	2.10	0.52
46:SD:247:ASN:C	46:SD:247:ASN:HD22	2.09	0.52
46:SN:375:GLN:HE22	46:SN:419:VAL:HG22	1.73	0.52
46:TD:52:ASN:OD1	46:TD:62:ARG:NH2	2.42	0.52
45:TG:68:LEU:HD13	45:TG:93:ILE:HB	1.91	0.52
45:TM:97:GLU:HG2	45:TM:105:ARG:HH22	1.75	0.52
46:TN:87:PRO:HA	46:TN:90:PHE:HD2	1.74	0.52
46:TN:101:TRP:HB3	46:TN:398:TYR:HE1	1.74	0.52
46:TN:139:LEU:HD13	46:TN:168:SER:HB3	1.90	0.52
45:UA:319:TYR:HB3	45:UA:323:VAL:HG11	1.91	0.52
45:UI:174:SER:HB2	45:UI:177:VAL:O	2.10	0.52
46:UL:385:PHE:HE2	46:UL:412:GLU:HG2	1.73	0.52
45:UM:171:ILE:O	45:UM:171:ILE:HG13	2.10	0.52
46:UN:370:ASN:OD1	46:UN:422:TYR:OH	2.26	0.52
45:VA:103:PHE:HB3	45:VA:408:TYR:HE2	1.75	0.52
46:VF:218:THR:HG23	46:VF:219:THR:HG23	1.92	0.52
46:VL:319:GLY:HA2	46:VL:357:PRO:HG3	1.92	0.52
45:VM:90:GLU:HG3	45:VM:121:ARG:HH12	1.75	0.52
45:WM:408:TYR:HB3	45:WM:413:MET:HG3	1.91	0.52
12:OT:147:PHE:CZ	46:MB:107:THR:HB	2.44	0.52
8:1H:252:ARG:NH2	45:HE:31:GLN:HA	2.23	0.52
19:1J:314:VAL:HG22	45:IK:370:LYS:HE2	1.92	0.52
25:1R:101:ARG:HH11	45:AC:41:THR:HG21	1.75	0.52
5:2E:80:ASP:O	5:2E:83:GLU:HG3	2.10	0.52
23:2O:402:GLN:HG3	46:VD:279:GLN:HE21	1.75	0.52
11:2S:277:GLN:HB3	46:WJ:122:LYS:NZ	2.24	0.52
12:2T:215:ASN:O	12:2T:216:LYS:HG3	2.10	0.52
13:2U:583:ILE:HG12	13:2U:590:VAL:HG22	1.92	0.52
11:3S:160:ILE:HG23	11:3S:165:LEU:HD21	1.90	0.52
13:3U:303:TYR:HB3	13:3U:305:ILE:HD11	1.91	0.52
14:3V:70:THR:HG23	14:3V:71:PHE:HD1	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:4C:218:ARG:HH21	46:KN:320:ARG:CZ	2.22	0.52
36:5B:54:ARG:NH1	45:KC:439:THR:O	2.40	0.52
37:5F:164:LYS:H	37:5F:165:PRO:CD	2.23	0.52
37:5G:27:ARG:NH1	45:OG:225:THR:OG1	2.41	0.52
10:5Q:65:PRO:HG2	10:5Q:66:LYS:NZ	2.23	0.52
34:7R:508:ALA:HB3	34:7R:513:HIS:HE1	1.75	0.52
45:AE:210:TYR:HH	46:AF:323:THR:HG1	1.53	0.52
46:AN:69:GLU:HG3	46:AN:71:GLY:H	1.73	0.52
46:AN:377:MET:HA	46:AN:380:ARG:HH11	1.75	0.52
46:BD:93:GLY:O	46:BD:94:GLN:NE2	2.43	0.52
46:CF:55:THR:HG23	46:DF:283:ALA:HA	1.90	0.52
46:CF:252:LYS:HG2	45:CG:100:ALA:HA	1.92	0.52
46:CH:178:THR:HB	46:CH:181:GLU:HG2	1.91	0.52
46:CH:200:MET:HE2	46:CH:268:ILE:HG23	1.92	0.52
45:CM:271:SER:HB2	45:CM:377:MET:HB3	1.91	0.52
46:DF:101:TRP:CD1	46:DF:146:GLY:HA2	2.45	0.52
45:DK:88:HIS:HB3	45:DK:91:GLN:HB2	1.91	0.52
46:ED:113:ILE:HA	46:ED:116:VAL:HG12	1.91	0.52
46:EJ:324:LYS:HG3	45:EK:222:PRO:HD2	1.91	0.52
46:FJ:173:PRO:HD2	46:FJ:174:LYS:NZ	2.25	0.52
45:GI:136:LEU:HD22	45:GI:169:PHE:HE2	1.74	0.52
46:GL:1:MET:N	46:GL:48:ASN:OD1	2.43	0.52
46:HB:334:GLN:NE2	46:HB:348:ASN:OD1	2.43	0.52
46:HF:273:LEU:H	46:HF:292:GLN:NE2	2.07	0.52
46:IB:247:ASN:HD22	46:IB:247:ASN:C	2.09	0.52
46:IL:213:ARG:HH12	46:IL:297:LYS:HB3	1.75	0.52
46:JB:377:MET:HG2	46:JB:380:ARG:NH2	2.25	0.52
46:JF:410:GLU:OE2	46:NF:340:TYR:OH	2.26	0.52
46:JJ:67:ASP:OD1	46:JJ:68:LEU:N	2.42	0.52
45:KI:176:GLN:NE2	45:KI:207:GLU:OE1	2.43	0.52
46:KN:376:GLU:CD	46:KN:380:ARG:HH21	2.12	0.52
46:LF:159:TYR:HB3	46:LF:162:ARG:HG3	1.92	0.52
46:MB:396:HIS:HA	46:MB:399:THR:HG22	1.92	0.52
46:MH:370:ASN:OD1	46:MH:422:TYR:OH	2.27	0.52
45:MM:194:LEU:O	45:MM:198:THR:HG22	2.09	0.52
45:MM:210:TYR:CZ	45:MM:227:LEU:HD11	2.45	0.52
46:NN:305:PRO:HB3	46:NN:310:TYR:HE1	1.74	0.52
45:OA:50:ASN:O	45:OA:64:ARG:NH1	2.27	0.52
45:PG:133:GLN:HB3	45:PG:252:ILE:HG21	1.90	0.52
45:PI:390:ARG:HG3	45:PI:391:LEU:HD12	1.90	0.52
46:PL:309:ARG:NH2	46:PL:426:GLN:O	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PN:161:ASP:OD1	46:PN:161:ASP:N	2.42	0.52
45:QA:121:ARG:HE	45:QA:124:LYS:NZ	2.07	0.52
45:QA:223:THR:OG1	45:QA:225:THR:OG1	2.27	0.52
46:QJ:207:LEU:HB3	46:QJ:225:LEU:HD22	1.92	0.52
45:RI:98:ASP:OD1	45:RI:99:ALA:N	2.42	0.52
46:RN:42:LEU:HA	46:RN:45:GLU:HG3	1.91	0.52
46:SB:247:ASN:ND2	45:SC:71:GLU:OE1	2.42	0.52
46:SD:309:ARG:HH21	46:SD:342:VAL:HA	1.75	0.52
46:SL:136:THR:HG22	46:SL:167:PHE:HB2	1.90	0.52
45:TG:109:THR:HG22	45:TG:110:ILE:HG23	1.91	0.52
45:TK:108:TYR:HA	45:TK:112:LYS:HE3	1.91	0.52
45:UG:259:LEU:HD11	45:UG:316:SER:HB3	1.92	0.52
45:UM:271:SER:HA	45:UM:302:MET:HG2	1.92	0.52
46:VB:52:ASN:OD1	46:VB:62:ARG:NH2	2.42	0.52
45:VK:398:MET:SD	46:VL:345:ILE:HD12	2.49	0.52
45:WK:10:GLY:O	45:WK:14:ILE:HG12	2.10	0.52
45:WM:25:CYS:HB2	45:WM:30:ILE:HG23	1.92	0.52
2:0B:20:GLU:OE2	46:JH:218:THR:OG1	2.12	0.52
12:1T:94:ASP:OD1	12:1T:94:ASP:N	2.43	0.52
1:2A:63:PRO:HG3	46:MJ:44:LEU:HD21	1.91	0.52
16:2B:42:GLY:HA2	16:2B:82:TYR:CZ	2.44	0.52
25:2R:344:GLY:HA3	25:2R:364:GLY:HA2	1.91	0.52
12:2T:122:ARG:H	12:2T:199:ARG:HB3	1.74	0.52
13:2U:560:TRP:HE1	13:2U:567:LYS:HG2	1.75	0.52
14:2V:69:SER:HB3	46:MF:336:LYS:HB3	1.90	0.52
27:3C:100:ASN:HB3	27:3C:103:ARG:HG3	1.92	0.52
23:3O:381:GLU:OE1	23:3O:385:GLN:NE2	2.43	0.52
11:3S:292:GLU:OE2	11:3S:296:GLN:NE2	2.39	0.52
40:6G:122:TYR:OH	46:VJ:208:TYR:O	2.24	0.52
10:6Q:85:LYS:HB2	10:6Q:159:ASN:OD1	2.09	0.52
34:7R:401:VAL:HG12	46:EB:277:GLY:HA2	1.91	0.52
45:AM:280:LYS:HB3	45:MM:89:PRO:HG2	1.89	0.52
45:BA:101:ASN:HA	45:BA:144:GLY:H	1.74	0.52
45:BA:407:TRP:HZ3	46:BB:255:VAL:HA	1.74	0.52
45:CA:439:THR:HB	46:CB:391:ARG:HD3	1.92	0.52
45:CC:294:SER:O	45:CC:300:ASN:ND2	2.27	0.52
46:CD:116:VAL:HA	46:CD:119:VAL:HG12	1.92	0.52
45:DE:244:PHE:HB2	45:DE:356:ASN:HD21	1.72	0.52
45:DK:217:LEU:HD13	45:DK:367:ASP:HB3	1.92	0.52
46:DL:116:VAL:HA	46:DL:119:VAL:HG22	1.92	0.52
46:DN:86:ARG:HE	46:DN:88:ASP:H	1.56	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:387:ALA:HA	46:DN:390:ARG:NH1	2.21	0.52
45:EI:27:GLU:OE1	45:EI:243:ARG:NH1	2.38	0.52
45:FA:226:ASN:ND2	45:FA:367:ASP:OD2	2.42	0.52
46:FH:226:ASN:HD21	49:FH:501:GDP:HN1	1.58	0.52
45:FK:296:PHE:HE1	45:FK:377:MET:HG3	1.75	0.52
46:HF:167:PHE:CE2	46:HF:233:MET:HG2	2.44	0.52
45:HM:145:THR:OG1	47:HM:501:GTP:O1B	2.27	0.52
46:IB:325:GLU:HA	46:IB:328:GLU:HG2	1.91	0.52
46:ID:19:LYS:HD3	46:ID:226:ASN:HB2	1.91	0.52
46:IF:105:HIS:CE1	46:IF:150:LEU:HD12	2.44	0.52
46:JB:165:GLU:HG2	46:JB:198:GLU:HB2	1.91	0.52
46:JB:309:ARG:NH1	46:JB:426:GLN:O	2.33	0.52
45:JC:187:SER:O	45:JC:191:THR:HG23	2.10	0.52
46:JF:73:MET:HA	46:JF:76:VAL:HG12	1.91	0.52
45:KC:175:PRO:HG3	45:KC:304:LYS:HG2	1.91	0.52
45:KM:422:ARG:O	45:KM:422:ARG:NH1	2.43	0.52
46:LJ:371:SER:O	46:LJ:422:TYR:OH	2.27	0.52
46:MJ:139:LEU:HD13	46:MJ:168:SER:HB3	1.90	0.52
45:NG:98:ASP:OD1	45:NG:99:ALA:N	2.42	0.52
46:OB:407:GLU:HA	46:OB:410:GLU:HG2	1.91	0.52
45:PE:114:ILE:HD12	45:PE:117:LEU:HD12	1.90	0.52
45:PM:145:THR:OG1	47:PM:501:GTP:O1B	2.28	0.52
45:QC:53:PHE:HB3	45:QC:61:HIS:HB3	1.92	0.52
45:QE:280:LYS:HD3	45:QE:283:HIS:CD2	2.45	0.52
46:QN:372:THR:HA	46:QN:422:TYR:HE1	1.75	0.52
45:RC:14:ILE:HD11	45:RC:69:ASP:HB2	1.91	0.52
45:RC:260:VAL:O	46:RD:397:TRP:NE1	2.41	0.52
46:RF:258:ILE:O	46:RF:258:ILE:HG13	2.10	0.52
46:RL:258:ILE:HB	45:RM:407:TRP:HZ2	1.74	0.52
45:RM:203:MET:HB2	45:RM:269:LEU:HA	1.90	0.52
45:SC:402:ARG:HD3	45:SC:402:ARG:O	2.09	0.52
46:SD:67:ASP:OD1	46:SD:68:LEU:N	2.43	0.52
46:SN:159:TYR:HB3	46:SN:162:ARG:HB2	1.91	0.52
46:TB:52:ASN:OD1	46:TB:62:ARG:NH2	2.42	0.52
46:TD:337:ASN:HB3	46:TD:340:TYR:HD2	1.73	0.52
46:TF:52:ASN:OD1	46:TF:62:ARG:NH2	2.42	0.52
46:TH:247:ASN:ND2	45:TI:71:GLU:OE1	2.43	0.52
45:TM:48:ALA:HB1	45:TM:243:ARG:HB2	1.90	0.52
46:UH:248:SER:HA	46:UH:252:LYS:HD2	1.91	0.52
46:UL:237:THR:HG23	46:UL:241:ARG:HH21	1.74	0.52
46:UN:386:THR:O	46:UN:390:ARG:HG2	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VB:6:HIS:NE2	46:VB:8:GLN:OE1	2.42	0.52
46:VN:334:GLN:HA	46:VN:341:PHE:CE2	2.44	0.52
45:WA:242:LEU:HD22	45:WA:252:ILE:HD11	1.91	0.52
46:WB:163:ILE:HD11	46:WB:251:ARG:HG3	1.91	0.52
45:WG:123:ARG:NH2	45:WG:160:ASP:OD2	2.43	0.52
46:WH:209:ASP:HB3	46:WH:213:ARG:HH22	1.74	0.52
2:0B:132:LEU:HB3	29:2G:61:LEU:HD11	1.91	0.52
7:0G:103:THR:HG22	46:JN:355:ASP:HB2	1.92	0.52
13:0U:402:ASP:HB3	45:WA:365:GLY:HA3	1.92	0.52
11:1S:235:GLN:NE2	11:1S:290:THR:OG1	2.28	0.52
13:1U:489:GLU:OE1	13:1U:491:THR:OG1	2.19	0.52
23:2O:209:LYS:HZ3	45:VI:369:ALA:HA	1.73	0.52
25:2R:310:LEU:HD11	46:CH:227:HIS:CE1	2.45	0.52
14:2V:43:THR:HG23	14:2V:62:HIS:HB2	1.92	0.52
12:3T:120:LEU:HD23	12:3T:178:LEU:HD21	1.91	0.52
34:4R:294:ASN:HD21	46:DF:219:THR:H	1.58	0.52
34:4R:318:TYR:CE1	46:CF:273:LEU:HD13	2.45	0.52
35:4S:90:LYS:HD3	35:4S:91:LEU:HB2	1.91	0.52
36:5A:87:ARG:HB2	45:NA:364:PRO:HB2	1.92	0.52
36:5C:108:ARG:NH2	45:KI:396:ASP:OD2	2.42	0.52
36:5D:77:SER:O	46:NN:320:ARG:NH2	2.43	0.52
37:5H:113:LEU:HD21	45:NM:84:ARG:HD3	1.91	0.52
40:6G:164:ASN:HB3	40:6G:169:GLN:NE2	2.24	0.52
44:8R:125:TYR:HE1	45:PI:279:GLU:HA	1.74	0.52
46:AB:145:SER:HB2	46:AB:188:SER:HB3	1.92	0.52
46:AL:283:ALA:HB2	46:ML:54:ALA:HA	1.92	0.52
45:AM:9:VAL:HG12	45:AM:68:LEU:HB2	1.91	0.52
45:BE:11:GLN:NE2	46:BF:245:GLN:O	2.43	0.52
45:BE:183:GLU:N	45:BE:184:PRO:HD2	2.25	0.52
45:BE:372:MET:SD	45:BE:373:ARG:NH2	2.83	0.52
45:BG:392:ASP:HB3	45:BG:422:ARG:HH12	1.75	0.52
46:BH:372:THR:HA	46:BH:422:TYR:CE2	2.43	0.52
45:BI:322:ASP:OD1	45:BI:373:ARG:NH1	2.42	0.52
46:CB:395:LEU:O	46:CB:399:THR:HG23	2.09	0.52
46:CD:113:ILE:HD13	46:CD:150:LEU:HD22	1.91	0.52
46:CF:144:GLY:N	49:CF:501:GDP:O1B	2.30	0.52
46:CH:2:ARG:NH2	45:CI:73:THR:HG23	2.25	0.52
45:CI:147:SER:HB2	45:CI:190:SER:HB3	1.92	0.52
45:CM:319:TYR:HB3	45:CM:323:VAL:HG21	1.92	0.52
45:DA:8:HIS:HE1	45:DA:138:PHE:CD2	2.28	0.52
45:DC:416:GLY:O	45:DC:419:SER:N	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DE:75:ILE:HG22	45:DE:79:ARG:HE	1.74	0.52
46:DF:178:THR:HB	46:DF:181:GLU:HG3	1.92	0.52
46:DH:46:ARG:NH2	45:DI:76:ASP:OD2	2.42	0.52
45:DI:144:GLY:N	47:DI:501:GTP:O3B	2.43	0.52
45:DK:265:ILE:HD11	45:DK:435:VAL:HG21	1.92	0.52
45:EI:103:PHE:HB2	45:EI:186:ASN:HB3	1.91	0.52
46:EN:132:GLY:CA	46:EN:162:ARG:HE	2.22	0.52
45:FG:118:CYS:O	45:FG:122:ILE:HG12	2.10	0.52
46:FJ:247:ASN:C	46:FJ:247:ASN:HD22	2.11	0.52
46:GJ:113:ILE:HD13	46:GJ:150:LEU:HD22	1.91	0.52
45:GK:203:MET:HG3	45:GK:384:ILE:HD11	1.90	0.52
45:HG:173:PRO:HB3	45:HG:183:GLU:OE2	2.10	0.52
45:HM:409:VAL:HA	45:HM:413:MET:HB3	1.91	0.52
46:HN:226:ASN:HD21	49:HN:501:GDP:HN1	1.58	0.52
46:IJ:179:VAL:HG13	46:IJ:180:VAL:HG23	1.91	0.52
46:IJ:334:GLN:HE22	46:IJ:348:ASN:H	1.56	0.52
46:IL:334:GLN:HE22	46:IL:348:ASN:H	1.58	0.52
45:IM:175:PRO:HD3	45:IM:205:ASP:OD2	2.10	0.52
46:IN:10:GLY:O	46:IN:14:ASN:ND2	2.42	0.52
46:IN:179:VAL:HG13	46:IN:180:VAL:HG23	1.92	0.52
46:KD:139:LEU:HD13	46:KD:168:SER:HB3	1.90	0.52
45:LA:188:ILE:HG23	45:LA:425:LEU:HD11	1.92	0.52
46:LD:52:ASN:OD1	46:LD:62:ARG:NH2	2.42	0.52
45:LG:40:ARG:HH22	45:LG:42:ILE:HG12	1.74	0.52
45:LI:242:LEU:HD11	45:LI:252:ILE:HG12	1.92	0.52
45:MM:282:TYR:OH	45:MM:370:LYS:O	2.21	0.52
45:NA:81:GLY:O	45:NA:84:ARG:HG3	2.10	0.52
46:NB:190:HIS:HD2	46:NB:411:ALA:HA	1.75	0.52
45:NM:91:GLN:HG2	45:NM:121:ARG:HH21	1.74	0.52
46:OD:372:THR:HA	46:OD:422:TYR:HE2	1.75	0.52
45:OE:399:TYR:OH	45:OE:415:GLU:OE2	2.26	0.52
46:OF:99:ASN:HD21	46:OF:178:THR:HG23	1.75	0.52
45:OI:292:THR:HG21	45:OI:331:SER:HB3	1.90	0.52
46:OL:226:ASN:OD1	49:OL:501:GDP:N2	2.42	0.52
45:OM:7:ILE:N	45:OM:136:LEU:O	2.37	0.52
45:OM:209:ILE:HG23	45:OM:230:LEU:HD22	1.90	0.52
45:OM:311:LYS:NZ	45:OM:312:TYR:O	2.42	0.52
45:PM:174:SER:HB2	45:PM:177:VAL:O	2.09	0.52
46:QB:258:ILE:O	46:QB:258:ILE:HG13	2.09	0.52
46:QD:311:LEU:HD23	46:QD:342:VAL:HG21	1.91	0.52
46:QF:290:THR:HA	46:QF:293:MET:HG2	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QK:199:ASP:OD2	45:QK:256:GLN:HG2	2.09	0.52
46:QL:87:PRO:HA	46:QL:90:PHE:HD2	1.74	0.52
45:QM:174:SER:HB2	45:QM:177:VAL:O	2.10	0.52
46:RB:135:ILE:HD11	46:RB:166:THR:HG22	1.91	0.52
45:RC:76:ASP:OD1	45:RC:79:ARG:NH2	2.36	0.52
46:RF:309:ARG:NH2	46:RF:426:GLN:HG3	2.24	0.52
45:RG:223:THR:N	45:RG:226:ASN:OD1	2.42	0.52
46:SD:60:VAL:HG11	46:SD:86:ARG:HH21	1.75	0.52
45:TC:273:ALA:O	45:TC:375:VAL:N	2.35	0.52
45:TG:390:ARG:HG3	45:TG:391:LEU:HD12	1.92	0.52
45:TI:60:LYS:NZ	45:TI:85:GLN:O	2.37	0.52
46:TN:205:GLU:O	46:TN:209:ASP:N	2.37	0.52
46:UB:282:ARG:CZ	46:UB:282:ARG:HA	2.40	0.52
45:VC:395:PHE:HZ	45:VC:418:PHE:HB3	1.73	0.52
46:VD:334:GLN:NE2	46:VD:348:ASN:OD1	2.43	0.52
45:WM:51:THR:O	45:WM:64:ARG:NH1	2.35	0.52
24:1P:140:LYS:NZ	46:TJ:78:ALA:O	2.43	0.52
11:1S:40:ASN:O	45:WC:56:THR:OG1	2.18	0.52
14:1V:73:ARG:HG2	46:LJ:121:ARG:HH12	1.73	0.52
16:2B:14:ILE:HG23	16:2B:58:VAL:HG21	1.92	0.52
21:2L:363:ALA:O	34:6R:100:GLN:NE2	2.36	0.52
14:2V:257:LYS:HA	14:2V:260:LYS:NZ	2.25	0.52
32:3D:51:ASN:H	32:3D:54:ILE:HG22	1.75	0.52
5:3E:38:ASP:O	5:3E:40:ASN:N	2.42	0.52
13:3U:487:LEU:HB3	13:3U:517:TRP:CZ3	2.45	0.52
33:4F:23:LYS:HD3	33:4F:26:ARG:HH11	1.74	0.52
37:5H:44:ARG:O	45:OK:373:ARG:NH2	2.24	0.52
37:5H:123:ARG:HB2	45:OM:370:LYS:HZ2	1.74	0.52
34:5R:460:ASP:HB3	34:5R:463:SER:HB2	1.91	0.52
35:5S:187:LEU:HB2	35:5S:240:MET:HG2	1.92	0.52
45:AC:280:LYS:HB3	45:MC:89:PRO:HG2	1.92	0.52
46:AJ:273:LEU:H	46:AJ:292:GLN:HE22	1.56	0.52
46:BL:116:VAL:HG23	46:BL:117:LEU:HD12	1.92	0.52
45:CA:18:ASN:HA	45:CA:21:TRP:HD1	1.75	0.52
45:CA:320:ARG:NH2	45:CA:358:GLN:OE1	2.43	0.52
46:CD:6:HIS:HD2	46:CD:21:TRP:HE1	1.57	0.52
45:CG:17:GLY:HA2	45:CG:20:CYS:SG	2.49	0.52
45:CG:212:ILE:HD11	45:CG:300:ASN:HA	1.92	0.52
45:DA:75:ILE:HG21	45:DA:94:SER:HB2	1.92	0.52
46:DB:1:MET:HG3	46:DB:3:GLU:OE1	2.09	0.52
46:DF:8:GLN:OE1	46:DF:17:GLY:HA3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EE:69:ASP:OD1	45:EE:70:LEU:N	2.38	0.52
46:EF:128:ASP:OD1	46:EF:129:CYS:N	2.42	0.52
45:EK:7:ILE:N	45:EK:136:LEU:O	2.37	0.52
46:EN:136:THR:HG22	46:EN:167:PHE:HD2	1.74	0.52
45:FC:60:LYS:NZ	45:FC:85:GLN:O	2.38	0.52
45:FC:174:SER:HB2	45:FC:177:VAL:O	2.10	0.52
45:FE:226:ASN:ND2	45:FE:367:ASP:OD2	2.43	0.52
46:FF:267:MET:HE1	46:FF:305:PRO:HB3	1.91	0.52
45:FG:371:VAL:HG22	45:FG:373:ARG:H	1.74	0.52
46:FH:113:ILE:HA	46:FH:116:VAL:HG12	1.92	0.52
46:GB:149:THR:HB	46:GB:191:GLN:OE1	2.10	0.52
45:GK:203:MET:HE3	45:GK:267:PHE:HD2	1.74	0.52
46:GN:49:VAL:HG12	46:GN:50:TYR:HD2	1.75	0.52
46:HB:207:LEU:HB3	46:HB:225:LEU:HD22	1.92	0.52
45:HM:55:GLU:HG3	45:HM:57:GLY:H	1.75	0.52
46:IF:73:MET:HA	46:IF:76:VAL:HG12	1.92	0.52
45:JC:176:GLN:HB2	46:JD:331:LEU:HD11	1.92	0.52
45:JI:424:ASP:OD1	45:NI:339:ARG:NH2	2.42	0.52
46:JJ:173:PRO:HG3	46:JJ:380:ARG:HD3	1.91	0.52
45:KA:203:MET:HG3	45:KA:384:ILE:HD11	1.91	0.52
45:KG:55:GLU:OE2	45:KG:61:HIS:NE2	2.43	0.52
45:KK:177:VAL:HG21	46:KL:327:ASP:HB3	1.92	0.52
45:LG:103:PHE:HB2	45:LG:186:ASN:HB3	1.91	0.52
46:MF:170:VAL:HG11	46:MF:377:MET:HE1	1.92	0.52
45:MK:174:SER:HB2	45:MK:177:VAL:O	2.10	0.52
45:NA:31:GLN:HE21	45:NA:37:PRO:HG3	1.75	0.52
45:NI:98:ASP:OD1	45:NI:99:ALA:N	2.43	0.52
46:NJ:423:GLN:NE2	46:NJ:427:ASP:OD2	2.43	0.52
45:NM:210:TYR:HB3	45:NM:214:ARG:HH21	1.75	0.52
45:OA:245:ASP:OD1	45:OA:245:ASP:N	2.43	0.52
45:OM:220:GLU:O	46:ON:324:LYS:NZ	2.40	0.52
46:PD:113:ILE:HD13	46:PD:150:LEU:HD22	1.92	0.52
45:PK:214:ARG:HD2	45:PK:215:ARG:NH1	2.24	0.52
45:QE:88:HIS:NE2	45:QE:90:GLU:HG3	2.24	0.52
46:RL:323:THR:HA	46:RL:326:VAL:HB	1.90	0.52
46:SB:58:ARG:NH1	46:TB:280:GLN:OE1	2.42	0.52
46:SB:258:ILE:HD12	46:SB:264:HIS:HB3	1.91	0.52
45:SC:141:VAL:HG11	45:SC:172:TYR:HD1	1.73	0.52
45:SC:174:SER:HB2	45:SC:177:VAL:O	2.09	0.52
45:SE:326:LYS:NZ	45:SE:327:ASP:OD1	2.42	0.52
46:SF:8:GLN:HE22	46:SF:14:ASN:HA	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SL:155:VAL:HG21	46:SL:164:MET:HE1	1.92	0.52
45:TK:390:ARG:HG3	45:TK:391:LEU:HD12	1.90	0.52
46:TL:187:LEU:HD11	46:TL:408:PHE:HE1	1.74	0.52
46:UF:372:THR:HA	46:UF:422:TYR:HE1	1.75	0.52
46:UL:254:ALA:O	46:UL:258:ILE:HG22	2.10	0.52
46:UL:322:SER:OG	46:UL:325:GLU:OE1	2.24	0.52
46:VB:113:ILE:HG23	46:VB:117:LEU:HD23	1.91	0.52
46:VF:68:LEU:HD12	46:VF:97:ALA:HB2	1.92	0.52
45:VK:221:ARG:NH2	46:VL:322:SER:OG	2.35	0.52
45:WC:11:GLN:HG3	45:WC:74:VAL:HG21	1.91	0.52
45:WC:210:TYR:HD1	46:WD:324:LYS:HZ3	1.58	0.52
46:WH:250:LEU:HA	46:WH:253:LEU:HD12	1.90	0.52
46:WN:271:ALA:HB3	46:WN:365:VAL:HB	1.92	0.52
5:2E:38:ASP:N	5:2E:41:ASN:OD1	2.43	0.52
21:2L:655:ARG:NH2	45:CM:218:ASP:OD1	2.43	0.52
22:2M:19:LEU:HD23	22:2M:20:ILE:N	2.25	0.52
23:2O:458:GLN:HA	23:2O:461:LYS:HD3	1.90	0.52
13:2U:350:ARG:O	13:2U:352:ARG:NH1	2.43	0.52
10:3Q:76:LEU:O	10:3Q:134:PHE:N	2.42	0.52
12:3T:6:ILE:HD11	12:3T:185:LEU:HD22	1.92	0.52
14:3V:39:ILE:HD11	14:3V:64:HIS:CE1	2.45	0.52
35:4S:87:ILE:HD13	35:4S:122:GLN:HG2	1.90	0.52
15:4X:78:ASN:OD1	46:LJ:279:GLN:NE2	2.40	0.52
37:5E:165:PRO:HD2	37:5E:166:ARG:HH11	1.73	0.52
34:5R:287:ILE:HD12	34:5R:304:LEU:HD23	1.90	0.52
34:6R:287:ILE:HD12	34:6R:304:LEU:HD13	1.90	0.52
45:AC:88:HIS:CE1	45:AC:90:GLU:HG2	2.45	0.52
45:AG:174:SER:HB2	45:AG:177:VAL:O	2.09	0.52
46:AJ:107:THR:OG1	46:AJ:108:GLU:OE1	2.20	0.52
46:AJ:139:LEU:HD13	46:AJ:168:SER:HB3	1.92	0.52
46:BL:232:ALA:HB1	46:BL:268:ILE:HD12	1.92	0.52
45:CC:79:ARG:NH2	45:CC:92:LEU:O	2.42	0.52
46:CD:371:SER:O	46:CD:422:TYR:OH	2.23	0.52
46:CF:322:SER:OG	45:CG:221:ARG:NH1	2.36	0.52
45:DA:128:ASN:OD1	45:EA:285:GLN:NE2	2.43	0.52
46:DB:326:VAL:O	46:DB:330:MET:HG2	2.10	0.52
45:DC:328:VAL:O	45:DC:332:ILE:HG12	2.09	0.52
45:DE:433:GLU:O	45:DE:437:ILE:HG23	2.09	0.52
46:DJ:8:GLN:HE21	46:DJ:14:ASN:HA	1.75	0.52
46:EB:342:VAL:HG13	46:EB:345:ILE:HG22	1.92	0.52
45:EM:133:GLN:HB3	45:EM:252:ILE:HD13	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FN:167:PHE:CE1	46:FN:233:MET:HG2	2.41	0.52
46:GF:67:ASP:OD1	46:GF:68:LEU:N	2.35	0.52
46:GL:326:VAL:O	46:GL:330:MET:HG2	2.09	0.52
46:HD:173:PRO:HD2	46:HD:380:ARG:CZ	2.39	0.52
45:HM:7:ILE:HB	45:HM:137:VAL:HG12	1.91	0.52
46:HN:335:ASN:OD1	46:HN:336:LYS:N	2.43	0.52
45:IA:88:HIS:HB3	45:IA:91:GLN:HG3	1.91	0.52
46:IB:314:SER:HA	46:IB:350:LYS:HB3	1.92	0.52
45:IE:188:ILE:HG22	45:IE:421:ALA:HB1	1.92	0.52
45:IK:177:VAL:HG21	46:IL:327:ASP:HB3	1.90	0.52
45:IK:192:HIS:ND1	45:IK:424:ASP:OD2	2.38	0.52
45:KI:27:GLU:OE1	45:KI:243:ARG:NH2	2.43	0.52
46:KL:113:ILE:HD11	46:KL:151:LEU:HB2	1.91	0.52
46:LF:207:LEU:HB3	46:LF:225:LEU:HG	1.92	0.52
46:LH:209:ASP:OD1	46:LH:213:ARG:NH1	2.42	0.52
45:LI:244:PHE:HB2	45:LI:356:ASN:HD21	1.74	0.52
45:LK:289:ALA:O	45:LK:293:ASN:ND2	2.39	0.52
45:LM:217:LEU:HD12	45:LM:367:ASP:HB3	1.92	0.52
46:MF:190:HIS:CD2	46:MF:414:ASN:HD22	2.28	0.52
45:MM:116:ASP:OD1	45:MM:117:LEU:N	2.43	0.52
46:ND:179:VAL:HG23	46:ND:180:VAL:HG13	1.92	0.52
46:NH:25:SER:OG	46:NH:30:ILE:O	2.28	0.52
46:NN:383:GLU:HA	46:NN:386:THR:HG22	1.92	0.52
45:OA:141:VAL:HG22	45:OA:187:SER:HA	1.92	0.52
45:OE:395:PHE:HE2	45:OE:422:ARG:HD3	1.75	0.52
45:PE:76:ASP:OD1	45:PE:77:GLU:N	2.43	0.52
45:QA:269:LEU:HD23	45:QA:379:SER:O	2.10	0.52
46:QJ:31:ASP:OD2	46:QJ:37:HIS:CE1	2.62	0.52
45:QM:332:ILE:HG22	45:QM:336:LYS:NZ	2.23	0.52
46:RB:7:ILE:HB	46:RB:135:ILE:HG22	1.91	0.52
45:RC:175:PRO:HG3	45:RC:304:LYS:HG2	1.92	0.52
45:SA:258:ASN:HB3	45:SA:352:LYS:HE2	1.91	0.52
46:SB:101:TRP:HB3	46:SB:398:TYR:HE1	1.75	0.52
46:SD:105:HIS:CE1	46:SD:150:LEU:HD12	2.45	0.52
45:SE:301:MET:HG3	45:SE:303:ALA:H	1.75	0.52
45:SM:155:GLU:O	45:SM:158:SER:OG	2.26	0.52
46:TD:290:THR:HA	46:TD:293:MET:HB2	1.92	0.52
46:TF:230:SER:HA	46:TF:233:MET:HE3	1.92	0.52
46:TH:54:ALA:HA	46:UH:283:ALA:HB2	1.91	0.52
46:TH:113:ILE:HA	46:TH:116:VAL:HG12	1.91	0.52
46:TN:60:VAL:HB	46:UN:281:TYR:HD2	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UA:352:LYS:HZ3	46:UB:179:VAL:HG13	1.75	0.52
46:UB:131:GLN:HE22	46:UB:240:LEU:HD11	1.75	0.52
46:UD:87:PRO:HG2	46:VD:278:SER:HB3	1.92	0.52
45:UM:340:THR:HG23	45:UM:341:ILE:HG13	1.91	0.52
45:VA:329:ASN:HA	45:VA:332:ILE:HG22	1.92	0.52
46:VB:260:PHE:HB2	46:VB:263:LEU:HD13	1.90	0.52
46:VB:304:ASP:HB3	46:VB:307:HIS:CD2	2.45	0.52
46:WB:103:LYS:HA	46:WB:107:THR:HG22	1.92	0.52
45:WC:340:THR:HG23	45:WC:341:ILE:HG13	1.91	0.52
46:WJ:237:THR:HG23	46:WJ:241:ARG:HE	1.75	0.52
45:WK:356:ASN:OD1	45:WK:357:TYR:N	2.43	0.52
45:WM:121:ARG:HD2	45:WM:124:LYS:NZ	2.25	0.52
13:1U:319:HIS:CE1	13:1U:323:ILE:HG13	2.45	0.52
15:1X:49:ILE:CD1	45:ME:282:TYR:HD2	2.23	0.52
1:2A:105:HIS:CG	1:2A:106:ASP:H	2.27	0.52
5:2E:130:PRO:HA	5:2E:133:LYS:HB2	1.92	0.52
23:2O:458:GLN:O	23:2O:461:LYS:HG2	2.09	0.52
12:2T:149:ASN:ND2	46:MJ:407:GLU:OE2	2.41	0.52
36:5A:67:ALA:HB1	37:5E:69:LYS:HD3	1.91	0.52
37:5G:46:LEU:N	37:5G:48:ARG:HH22	2.08	0.52
34:5R:219:LYS:NZ	45:BI:245:ASP:OD2	2.41	0.52
46:AD:116:VAL:HA	46:AD:119:VAL:HG12	1.92	0.52
45:BC:103:PHE:HB3	45:BC:408:TYR:HE2	1.75	0.52
46:BH:6:HIS:CD2	46:BH:134:GLN:HG3	2.45	0.52
46:CB:290:THR:HA	46:CB:293:MET:HG2	1.91	0.52
45:CI:7:ILE:HB	45:CI:137:VAL:HG12	1.92	0.52
45:CK:328:VAL:O	45:CK:332:ILE:HG12	2.10	0.52
45:DA:15:GLN:OE1	45:DA:228:ASN:ND2	2.43	0.52
46:DF:58:ARG:NH1	46:EF:280:GLN:OE1	2.43	0.52
46:DF:282:ARG:HH11	46:DF:282:ARG:HG3	1.75	0.52
45:DG:140:SER:OG	47:DG:501:GTP:O2B	2.28	0.52
45:DM:22:GLU:OE2	45:DM:229:ARG:NH1	2.43	0.52
46:DN:262:ARG:NH1	46:DN:421:GLU:OE1	2.43	0.52
46:EH:125:GLU:OE2	46:FH:291:GLN:NE2	2.35	0.52
45:EI:208:ALA:O	45:EI:212:ILE:HG13	2.10	0.52
45:EM:140:SER:OG	47:EM:501:GTP:O2B	2.27	0.52
46:FB:309:ARG:HH12	46:FB:342:VAL:HG23	1.75	0.52
46:FJ:374:ILE:O	46:FJ:377:MET:HG2	2.10	0.52
46:FL:222:TYR:O	46:FL:226:ASN:ND2	2.27	0.52
46:FN:226:ASN:HD21	49:FN:501:GDP:HN1	1.56	0.52
46:GB:48:ASN:HA	46:GB:51:TYR:O	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GM:226:ASN:OD1	45:GM:227:LEU:N	2.43	0.52
45:GM:385:ALA:HA	45:GM:388:PHE:HD2	1.74	0.52
45:HG:387:VAL:HA	45:HG:390:ARG:HG2	1.92	0.52
45:IK:123:ARG:O	45:IK:123:ARG:NH1	2.43	0.52
45:IM:293:ASN:O	45:IM:297:GLU:HG2	2.10	0.52
46:JH:410:GLU:OE1	46:NH:340:TYR:OH	2.19	0.52
45:JI:55:GLU:O	45:KI:285:GLN:NE2	2.43	0.52
45:JI:262:TYR:HD2	45:JI:265:ILE:HD12	1.75	0.52
46:LN:362:LYS:HG3	46:LN:363:MET:HG3	1.92	0.52
45:MA:69:ASP:OD1	45:MA:70:LEU:N	2.43	0.52
45:ME:262:TYR:HD2	45:ME:265:ILE:HD11	1.74	0.52
46:MH:222:TYR:O	46:MH:226:ASN:ND2	2.22	0.52
45:OC:209:ILE:HA	45:OC:212:ILE:HG12	1.92	0.52
46:OD:99:ASN:HA	46:OD:142:GLY:HA3	1.92	0.52
45:OI:167:LEU:HB3	45:OI:169:PHE:HE1	1.75	0.52
45:OI:288:VAL:HG11	45:OI:327:ASP:HB3	1.92	0.52
45:OK:105:ARG:HH22	46:OL:251:ARG:HD3	1.74	0.52
45:OK:222:PRO:HD2	46:OL:324:LYS:HD3	1.91	0.52
45:PE:27:GLU:HG2	45:PE:243:ARG:HH12	1.75	0.52
45:PE:248:LEU:HD13	45:PE:355:ILE:HD12	1.91	0.52
46:PN:30:ILE:HD11	46:PN:47:ILE:HD11	1.91	0.52
45:QE:324:VAL:HG11	45:QE:326:LYS:HE2	1.91	0.52
46:QF:3:GLU:OE2	46:QF:127:CYS:HB2	2.10	0.52
45:QM:88:HIS:CE1	45:QM:90:GLU:HG2	2.45	0.52
46:RB:7:ILE:O	46:RB:135:ILE:HA	2.10	0.52
46:RB:83:GLN:O	46:SB:281:TYR:OH	2.20	0.52
45:RC:36:MET:HG3	45:RC:37:PRO:HD2	1.91	0.52
45:RE:11:GLN:HG3	45:RE:74:VAL:HG11	1.91	0.52
45:RM:127:ASP:OD1	45:RM:128:ASN:N	2.43	0.52
45:RM:206:ASN:HB3	45:RM:210:TYR:CZ	2.45	0.52
45:SA:74:VAL:HG23	45:SA:75:ILE:HD12	1.92	0.52
45:SA:167:LEU:HG	45:SA:200:VAL:HB	1.91	0.52
45:SA:312:TYR:O	45:SA:344:VAL:N	2.43	0.52
45:SE:90:GLU:OE1	45:SE:121:ARG:NH2	2.43	0.52
45:SM:184:PRO:O	45:SM:188:ILE:HG12	2.10	0.52
46:TB:238:CYS:SG	46:TB:318:ARG:NH1	2.82	0.52
46:TF:275:SER:OG	46:TF:278:SER:HB3	2.10	0.52
45:TG:439:THR:OG1	46:TH:391:ARG:NH1	2.40	0.52
46:TJ:86:ARG:HH22	46:UJ:281:TYR:HB3	1.73	0.52
45:UC:69:ASP:OD1	45:UC:70:LEU:N	2.42	0.52
46:UF:46:ARG:NH2	45:UG:76:ASP:OD2	2.35	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UI:257:THR:HA	46:UJ:397:TRP:NE1	2.25	0.52
45:UK:414:GLU:OE1	45:UK:417:GLU:N	2.43	0.52
45:UM:259:LEU:HD11	45:UM:316:SER:HB3	1.92	0.52
45:VG:70:LEU:HD13	45:VG:95:GLY:HA3	1.91	0.52
45:VG:296:PHE:HE2	45:VG:335:ILE:HG21	1.75	0.52
46:VJ:262:ARG:NH1	46:VJ:421:GLU:OE1	2.43	0.52
46:VL:178:THR:HB	46:VL:181:GLU:HG3	1.92	0.52
46:WB:5:VAL:HG12	46:WB:62:ARG:HD3	1.91	0.52
45:WE:244:PHE:HB2	45:WE:356:ASN:HD21	1.74	0.52
46:WJ:344:TRP:HB3	46:WJ:430:ALA:HB2	1.92	0.52
17:1F:21:GLN:HE22	46:HL:320:ARG:NE	2.06	0.51
21:1L:868:LYS:NZ	46:CB:39:ASP:OD2	2.31	0.51
20:2K:283:TYR:O	20:2K:287:ILE:HG12	2.10	0.51
13:2U:560:TRP:NE1	13:2U:567:LYS:HG2	2.24	0.51
14:2V:209:ARG:HH12	14:2V:255:ILE:HD12	1.75	0.51
21:3L:88:LYS:HG3	21:3L:89:TYR:CD1	2.45	0.51
12:3T:72:PHE:HA	12:3T:108:PRO:HA	1.92	0.51
34:7R:593:ASP:OD2	34:7R:597:ASN:N	2.43	0.51
46:AD:372:THR:HA	46:AD:422:TYR:CE2	2.43	0.51
45:AE:326:LYS:HE2	46:AH:219:THR:HA	1.92	0.51
45:AK:17:GLY:HA2	45:AK:20:CYS:SG	2.50	0.51
45:BI:17:GLY:HA2	45:BI:20:CYS:SG	2.50	0.51
46:CF:406:MET:O	46:CF:410:GLU:HG2	2.10	0.51
45:CM:206:ASN:HB3	45:CM:210:TYR:CZ	2.45	0.51
45:DA:253:THR:O	45:DA:257:THR:OG1	2.24	0.51
45:DE:326:LYS:HG2	46:DF:212:PHE:HZ	1.74	0.51
46:DJ:19:LYS:HG3	46:DJ:226:ASN:HB3	1.93	0.51
46:DN:167:PHE:CE1	46:DN:233:MET:HG2	2.45	0.51
46:EB:320:ARG:NH1	46:EB:355:ASP:OD1	2.42	0.51
46:ED:257:LEU:O	46:ED:312:THR:OG1	2.27	0.51
45:EE:84:ARG:HG3	45:EE:85:GLN:HG2	1.92	0.51
46:EH:324:LYS:HG3	45:EI:222:PRO:HD2	1.92	0.51
45:EM:213:CYS:HA	45:EM:217:LEU:HD23	1.91	0.51
46:GD:52:ASN:OD1	46:GD:62:ARG:NH2	2.43	0.51
45:HC:140:SER:OG	47:HC:501:GTP:O2B	2.28	0.51
46:IN:19:LYS:O	46:IN:22:GLU:HB3	2.09	0.51
46:JH:55:THR:HG23	46:KH:283:ALA:HA	1.90	0.51
46:KB:187:LEU:HD11	46:KB:408:PHE:HE2	1.75	0.51
46:KD:113:ILE:HA	46:KD:116:VAL:HG12	1.92	0.51
45:KI:17:GLY:HA2	45:KI:20:CYS:SG	2.50	0.51
46:KN:265:PHE:HB3	46:KN:374:ILE:HD13	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LA:11:GLN:NE2	46:LB:245:GLN:O	2.42	0.51
45:LE:210:TYR:CE1	45:LE:227:LEU:HD11	2.46	0.51
46:LL:309:ARG:NH1	46:LL:426:GLN:O	2.43	0.51
46:MB:109:GLY:O	46:MB:113:ILE:HB	2.11	0.51
45:ME:174:SER:HB2	45:ME:177:VAL:O	2.09	0.51
46:MH:135:ILE:HG13	46:MH:152:ILE:HD11	1.92	0.51
45:MI:141:VAL:HG12	45:MI:171:ILE:O	2.11	0.51
46:MJ:47:ILE:HG12	46:MJ:51:TYR:HB2	1.92	0.51
46:ML:52:ASN:OD1	46:ML:62:ARG:NH2	2.43	0.51
46:MN:208:TYR:HE1	46:MN:225:LEU:HD11	1.75	0.51
45:NC:69:ASP:OD1	45:NC:70:LEU:N	2.42	0.51
46:ND:272:PRO:O	46:ND:273:LEU:HD23	2.09	0.51
45:NE:112:LYS:HA	45:NE:115:VAL:HG12	1.92	0.51
46:NF:289:LEU:HD13	46:NF:365:VAL:HG23	1.91	0.51
45:NM:183:GLU:N	45:NM:184:PRO:HD2	2.26	0.51
45:NM:387:VAL:HG12	45:NM:390:ARG:HH12	1.75	0.51
46:OH:5:VAL:HG12	46:OH:62:ARG:HD3	1.91	0.51
46:OH:60:VAL:HG11	46:OH:86:ARG:HH21	1.75	0.51
46:OL:113:ILE:HG21	46:OL:150:LEU:HD22	1.91	0.51
46:OL:135:ILE:HB	46:OL:166:THR:HG22	1.92	0.51
46:PB:273:LEU:N	46:PB:292:GLN:OE1	2.43	0.51
45:PG:141:VAL:HG22	45:PG:187:SER:HA	1.92	0.51
45:PM:396:ASP:N	45:PM:396:ASP:OD2	2.43	0.51
46:QD:139:LEU:HD22	46:QD:170:VAL:HG12	1.92	0.51
45:QG:310:GLY:HA3	45:QG:383:ALA:HB2	1.91	0.51
46:QH:325:GLU:H	45:QI:221:ARG:HH12	1.56	0.51
45:QK:174:SER:OG	45:QK:207:GLU:OE1	2.25	0.51
46:QN:31:ASP:OD2	46:QN:37:HIS:ND1	2.43	0.51
46:RH:178:THR:HB	46:RH:181:GLU:HG3	1.91	0.51
45:RM:256:GLN:NE2	46:RN:397:TRP:HE1	2.07	0.51
45:SA:311:LYS:NZ	45:SA:344:VAL:HA	2.25	0.51
46:SL:316:LEU:HD13	46:SL:352:SER:HB3	1.92	0.51
46:SL:372:THR:HA	46:SL:422:TYR:HE2	1.75	0.51
46:TD:8:GLN:HE21	46:TD:14:ASN:HD22	1.56	0.51
45:TG:241:SER:OG	45:TG:250:VAL:O	2.22	0.51
45:TM:121:ARG:HD2	45:TM:124:LYS:NZ	2.25	0.51
45:UK:292:THR:HG21	45:UK:331:SER:HB3	1.91	0.51
45:VC:256:GLN:N	45:VC:256:GLN:OE1	2.42	0.51
45:VI:3:GLU:OE2	45:VI:129:CYS:HB3	2.09	0.51
46:VJ:272:PRO:HD3	46:VJ:364:ALA:HA	1.92	0.51
45:VM:100:ALA:O	46:VN:255:VAL:HG11	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VN:193:VAL:HA	46:VN:264:HIS:HE1	1.74	0.51
46:VN:256:ASN:HD21	46:VN:350:LYS:HG2	1.75	0.51
46:WL:318:ARG:HB3	46:WL:357:PRO:HA	1.92	0.51
7:0G:162:ALA:HB3	26:2W:185:PHE:HB2	1.92	0.51
21:1L:525:LEU:HD13	46:BF:320:ARG:N	2.24	0.51
13:1U:558:LYS:HD2	13:1U:560:TRP:CZ2	2.45	0.51
26:2W:243:ILE:HG21	34:6R:9:VAL:HB	1.92	0.51
1:3A:35:TYR:HD1	1:3A:47:PRO:HA	1.76	0.51
5:3E:45:ARG:NH2	5:3E:79:VAL:H	2.09	0.51
10:3Q:126:ASP:OD1	10:3Q:130:ASN:ND2	2.43	0.51
11:3S:33:ASN:HB2	11:3S:128:THR:HA	1.91	0.51
13:3U:143:ALA:HB2	13:3U:182:VAL:HG11	1.92	0.51
14:3V:53:GLY:HA3	45:MA:308:ARG:HH12	1.74	0.51
37:5G:129:ARG:HD3	37:5G:130:PRO:O	2.11	0.51
10:6Q:140:THR:HG21	10:6Q:148:TYR:HB3	1.92	0.51
45:AE:68:LEU:HD22	45:AE:153:LEU:HD11	1.92	0.51
45:AG:98:ASP:OD1	45:AG:99:ALA:N	2.42	0.51
45:AG:326:LYS:HE2	46:AJ:219:THR:HA	1.92	0.51
46:AL:301:CYS:HB3	46:AL:377:MET:HE3	1.92	0.51
45:AM:287:SER:O	45:AM:291:ILE:HG23	2.10	0.51
46:AN:268:ILE:HG13	46:AN:300:MET:HG3	1.91	0.51
46:AN:376:GLU:HG3	46:AN:380:ARG:HH12	1.74	0.51
46:BN:106:TYR:HE2	46:BN:403:MET:HG3	1.74	0.51
45:CA:334:THR:HG22	45:CA:338:LYS:NZ	2.25	0.51
46:EF:347:ASN:O	45:EG:181:VAL:HG12	2.10	0.51
45:EI:260:VAL:HG13	46:EJ:397:TRP:HZ2	1.74	0.51
46:FB:342:VAL:HG13	46:FB:345:ILE:HG22	1.92	0.51
46:FN:372:THR:HG21	46:FN:426:GLN:HG3	1.93	0.51
45:GA:19:ALA:O	45:GA:22:GLU:HG2	2.10	0.51
45:GA:384:ILE:O	45:GA:387:VAL:HG22	2.10	0.51
46:GB:178:THR:HB	46:GB:181:GLU:HG3	1.92	0.51
46:HB:62:ARG:HG2	46:HB:62:ARG:O	2.10	0.51
46:HH:52:ASN:ND2	46:HH:62:ARG:HB3	2.24	0.51
45:IG:284:GLU:HG2	45:IG:286:LEU:HD12	1.92	0.51
46:IN:139:LEU:HD22	46:IN:170:VAL:HG12	1.90	0.51
45:JA:256:GLN:O	46:JD:397:TRP:NE1	2.43	0.51
46:JH:139:LEU:HD12	46:JH:170:VAL:HG12	1.91	0.51
45:JI:147:SER:HB2	45:JI:190:SER:HB2	1.91	0.51
46:LD:121:ARG:NH1	46:LD:158:GLU:OE2	2.44	0.51
45:LM:244:PHE:HB2	45:LM:356:ASN:HD21	1.74	0.51
46:LN:52:ASN:OD1	46:LN:62:ARG:NH2	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NL:7:ILE:HG22	46:NL:64:ILE:HB	1.92	0.51
46:OB:329:GLN:HA	46:OB:332:ASN:HD21	1.74	0.51
46:OD:55:THR:HG23	46:PD:283:ALA:HA	1.93	0.51
45:OE:11:GLN:HG3	45:OE:74:VAL:HG11	1.92	0.51
45:OI:76:ASP:OD2	46:OJ:46:ARG:NH2	2.43	0.51
46:OJ:156:ARG:NE	46:OJ:195:ASN:O	2.41	0.51
46:OL:165:GLU:HA	46:OL:198:GLU:HB2	1.92	0.51
45:OM:70:LEU:HD13	45:OM:95:GLY:HA3	1.91	0.51
45:OM:414:GLU:CD	45:OM:416:GLY:H	2.12	0.51
45:PG:145:THR:OG1	47:PG:501:GTP:O1B	2.27	0.51
45:PI:210:TYR:HH	46:PJ:323:THR:HG1	1.58	0.51
45:PK:188:ILE:HG22	45:PK:421:ALA:HB1	1.92	0.51
45:PM:284:GLU:HG3	45:PM:286:LEU:HD22	1.92	0.51
46:QB:116:VAL:HA	46:QB:119:VAL:HG22	1.92	0.51
45:QG:254:GLU:HG2	46:QH:98:GLY:HA2	1.91	0.51
46:QH:347:ASN:ND2	45:QI:178:SER:HB2	2.25	0.51
45:QM:112:LYS:HA	45:QM:115:VAL:HG12	1.92	0.51
45:RA:119:LEU:HB3	45:RA:123:ARG:NH1	2.24	0.51
46:RH:91:VAL:HG11	46:RH:116:VAL:HG22	1.91	0.51
45:RK:15:GLN:NE2	47:RK:501:GTP:O6	2.38	0.51
46:SB:139:LEU:HD13	46:SB:168:SER:HB3	1.91	0.51
46:SB:191:GLN:O	46:SB:195:ASN:ND2	2.38	0.51
45:SG:64:ARG:HH12	45:SG:128:ASN:ND2	2.09	0.51
46:SN:113:ILE:HD11	46:SN:151:LEU:HB2	1.92	0.51
46:TJ:135:ILE:HG13	46:TJ:152:ILE:HD11	1.93	0.51
46:TL:2:ARG:NH2	45:TM:71:GLU:OE2	2.43	0.51
46:TL:156:ARG:O	46:TL:156:ARG:NH1	2.43	0.51
45:UA:141:VAL:HG11	45:UA:172:TYR:HD1	1.75	0.51
46:UB:190:HIS:CD2	46:UB:411:ALA:HA	2.45	0.51
45:UC:185:TYR:HA	45:UC:395:PHE:HE2	1.75	0.51
46:UL:294:PHE:HE2	46:UL:333:VAL:HG21	1.74	0.51
46:VN:257:LEU:HD21	46:VN:314:SER:HB2	1.90	0.51
46:VN:310:TYR:HD2	46:VN:341:PHE:HE1	1.55	0.51
46:WD:113:ILE:HD13	46:WD:150:LEU:HD22	1.92	0.51
7:OG:18:LEU:HD11	45:IK:76:ASP:HB3	1.92	0.51
19:1J:79:LYS:HA	45:HC:57:GLY:HA3	1.92	0.51
24:1P:308:LYS:HE3	46:TD:360:GLY:HA2	1.93	0.51
13:1U:120:LEU:HD21	13:1U:149:VAL:HB	1.92	0.51
26:1W:54:ARG:O	26:1W:54:ARG:HD2	2.10	0.51
22:2M:238:CYS:SG	22:2M:350:ILE:HD11	2.51	0.51
13:2U:348:ASN:OD1	13:2U:349:ALA:N	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:3B:136:ARG:CD	15:4X:90:ARG:HH12	2.23	0.51
10:3Q:41:ASP:OD2	10:3Q:81:LYS:NZ	2.34	0.51
13:3U:69:TYR:CZ	13:3U:134:VAL:HG21	2.46	0.51
36:5A:82:ASP:HA	36:5A:85:ARG:HH21	1.75	0.51
36:5C:142:GLN:HB3	46:NL:320:ARG:HD2	1.92	0.51
40:6G:198:ALA:HA	40:6G:201:MET:HB3	1.92	0.51
46:AJ:68:LEU:HD23	46:AJ:97:ALA:HB2	1.93	0.51
45:AK:231:ILE:O	45:AK:235:ILE:HG12	2.10	0.51
46:AL:117:LEU:HD11	46:AL:154:LYS:HD2	1.92	0.51
45:BK:277:SER:OG	45:BK:280:LYS:NZ	2.43	0.51
45:CI:141:VAL:HG21	45:CI:172:TYR:HE1	1.75	0.51
45:CM:172:TYR:HD1	45:CM:173:PRO:HD2	1.75	0.51
46:DB:315:ALA:N	46:DB:350:LYS:O	2.42	0.51
45:DC:175:PRO:HB3	45:DC:390:ARG:HE	1.76	0.51
46:DL:268:ILE:HG22	46:DL:368:VAL:HG22	1.93	0.51
45:DM:319:TYR:HE1	45:DM:375:VAL:HG23	1.75	0.51
46:EB:135:ILE:HG12	46:EB:164:MET:HE2	1.91	0.51
46:EJ:268:ILE:HG22	46:EJ:368:VAL:HG22	1.93	0.51
46:EN:203:ASP:HB3	46:EN:301:CYS:HA	1.92	0.51
46:FJ:42:LEU:HA	46:FJ:45:GLU:OE2	2.10	0.51
46:HN:68:LEU:HD13	46:HN:147:MET:HE1	1.92	0.51
46:ID:63:ALA:O	46:ID:89:ASN:ND2	2.42	0.51
46:JJ:139:LEU:HD22	46:JJ:170:VAL:HG12	1.92	0.51
45:LA:224:TYR:HD1	45:LA:227:LEU:HD12	1.75	0.51
45:LC:242:LEU:HD11	45:LC:252:ILE:HG12	1.92	0.51
46:LH:139:LEU:HD13	46:LH:168:SER:HB2	1.93	0.51
45:LM:174:SER:HB2	45:LM:177:VAL:O	2.09	0.51
46:ML:116:VAL:HA	46:ML:119:VAL:HG12	1.93	0.51
45:NA:254:GLU:OE2	46:ND:99:ASN:HB2	2.11	0.51
46:NF:179:VAL:HG13	46:NF:180:VAL:HG13	1.91	0.51
46:NJ:39:ASP:OD1	46:NJ:39:ASP:N	2.44	0.51
46:NL:8:GLN:HE21	46:NL:14:ASN:HA	1.75	0.51
45:NM:123:ARG:HH11	45:NM:123:ARG:HG2	1.74	0.51
45:OC:259:LEU:HD23	45:OC:268:MET:HG2	1.91	0.51
45:OC:317:MET:HG2	45:OC:377:MET:HG3	1.91	0.51
45:OI:205:ASP:OD1	45:OI:303:ALA:HA	2.10	0.51
45:PA:76:ASP:OD2	46:PB:46:ARG:NH2	2.39	0.51
45:PC:259:LEU:HD13	45:PC:268:MET:HE1	1.93	0.51
46:PH:10:GLY:O	46:PH:14:ASN:ND2	2.44	0.51
46:PJ:322:SER:OG	46:PJ:325:GLU:OE1	2.27	0.51
46:PL:73:MET:HA	46:PL:76:VAL:HG12	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QA:284:GLU:HG3	45:QA:286:LEU:HD22	1.90	0.51
46:QH:2:ARG:HB3	46:QH:131:GLN:HG3	1.91	0.51
46:QL:178:THR:HB	46:QL:181:GLU:HG3	1.92	0.51
45:RC:185:TYR:HA	45:RC:395:PHE:HE2	1.75	0.51
46:RD:178:THR:HG22	46:RD:180:VAL:H	1.76	0.51
46:RH:68:LEU:HB3	46:RH:96:GLY:HA2	1.92	0.51
45:RI:310:GLY:HA3	45:RI:383:ALA:HB2	1.91	0.51
45:SE:7:ILE:HB	45:SE:137:VAL:HG12	1.92	0.51
45:SE:210:TYR:HE1	45:SE:227:LEU:HD11	1.75	0.51
46:SL:324:LYS:HD3	45:SM:210:TYR:CE1	2.45	0.51
45:UA:69:ASP:HB3	45:UA:75:ILE:HD11	1.92	0.51
46:UH:63:ALA:O	46:UH:89:ASN:ND2	2.39	0.51
45:UK:326:LYS:HD3	46:UL:212:PHE:HZ	1.75	0.51
46:UN:70:PRO:HA	46:UN:73:MET:HB3	1.92	0.51
45:VG:70:LEU:HA	45:VG:95:GLY:HA3	1.92	0.51
45:VM:91:GLN:HB3	45:VM:121:ARG:NH2	2.25	0.51
45:WA:207:GLU:N	45:WA:207:GLU:OE1	2.42	0.51
45:WK:335:ILE:HD13	45:WK:338:LYS:HZ1	1.73	0.51
45:WK:346:TRP:CD1	46:WN:391:ARG:HG3	2.46	0.51
47:WM:501:GTP:O1G	46:WN:252:LYS:NZ	2.31	0.51
5:2E:175:ILE:HD11	5:2E:181:PHE:HD1	1.76	0.51
20:2K:248:GLU:O	20:2K:252:HIS:ND1	2.42	0.51
21:2L:892:ARG:NH2	45:CK:277:SER:OG	2.43	0.51
13:2U:69:TYR:OH	13:2U:114:GLU:O	2.27	0.51
1:3A:71:TYR:OH	46:AN:320:ARG:O	2.18	0.51
13:3U:492:LEU:HB2	13:3U:510:SER:HB2	1.92	0.51
14:3V:24:ARG:NH2	45:MA:433:GLU:HB2	2.25	0.51
36:5A:20:LEU:CD1	36:5A:21:GLN:H	2.14	0.51
37:5G:147:GLN:HA	37:5G:150:ILE:HG22	1.92	0.51
45:AE:181:VAL:HG13	45:AE:182:VAL:HG13	1.92	0.51
46:AL:283:ALA:HA	46:ML:55:THR:HG23	1.92	0.51
46:BB:245:GLN:HB3	46:BB:353:ILE:HB	1.91	0.51
46:BD:167:PHE:CE2	46:BD:233:MET:HG2	2.45	0.51
45:CE:399:TYR:OH	45:CE:402:ARG:NH1	2.44	0.51
45:CK:326:LYS:NZ	46:CL:220:PRO:O	2.34	0.51
46:CL:19:LYS:HZ1	46:CL:227:HIS:HA	1.76	0.51
45:DA:8:HIS:CE1	45:DA:138:PHE:CD2	2.98	0.51
45:DI:88:HIS:HB3	45:DI:91:GLN:HG3	1.92	0.51
45:DK:215:ARG:NH2	45:DK:299:ALA:O	2.43	0.51
46:EB:375:GLN:HA	46:EB:378:PHE:HD2	1.76	0.51
45:EG:265:ILE:HG12	45:EG:432:TYR:CE1	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FA:254:GLU:HG2	46:FD:98:GLY:HA2	1.90	0.51
46:FH:67:ASP:OD1	46:FH:69:GLU:N	2.38	0.51
46:FL:232:ALA:O	46:FL:236:VAL:HG23	2.10	0.51
46:FL:257:LEU:HD21	46:FL:314:SER:HB3	1.92	0.51
45:GC:259:LEU:HD11	45:GC:316:SER:HB2	1.93	0.51
45:GE:88:HIS:NE2	45:HE:284:GLU:OE2	2.36	0.51
46:GJ:52:ASN:OD1	46:GJ:62:ARG:NH2	2.44	0.51
46:GL:109:GLY:O	46:GL:113:ILE:HG23	2.10	0.51
46:GL:148:GLY:O	46:GL:152:ILE:HG12	2.09	0.51
46:HF:248:SER:HA	46:HF:252:LYS:HD2	1.93	0.51
45:HM:101:ASN:HA	45:HM:144:GLY:N	2.25	0.51
45:IA:390:ARG:HG3	45:IA:391:LEU:HD12	1.92	0.51
45:II:328:VAL:HG11	45:II:353:VAL:HG21	1.92	0.51
45:JE:147:SER:HB2	45:JE:190:SER:HB3	1.92	0.51
45:JK:175:PRO:HG3	45:JK:390:ARG:NH2	2.26	0.51
46:KB:268:ILE:HG22	46:KB:368:VAL:HG22	1.92	0.51
45:KC:69:ASP:OD1	45:KC:70:LEU:N	2.43	0.51
46:LB:1:MET:H1	46:LB:128:ASP:HB3	1.74	0.51
46:LH:247:ASN:HD22	46:LH:247:ASN:C	2.08	0.51
46:LN:309:ARG:H	46:LN:372:THR:HG22	1.75	0.51
46:MB:207:LEU:HD13	46:MB:225:LEU:HB3	1.92	0.51
45:ME:211:ASP:OD2	45:ME:304:LYS:NZ	2.33	0.51
45:MG:439:THR:OG1	46:MJ:390:ARG:NH2	2.43	0.51
45:MI:328:VAL:HG11	45:MI:353:VAL:HG21	1.92	0.51
45:NA:176:GLN:NE2	45:NA:207:GLU:OE2	2.44	0.51
46:ND:31:ASP:OD1	46:ND:35:THR:N	2.32	0.51
45:NE:88:HIS:O	45:NE:91:GLN:HG2	2.10	0.51
45:NG:71:GLU:HG3	45:NG:98:ASP:HB2	1.92	0.51
46:NH:191:GLN:O	46:NH:195:ASN:ND2	2.41	0.51
46:NN:8:GLN:HE22	46:NN:17:GLY:HA3	1.75	0.51
46:OB:405:GLU:OE2	46:OB:409:THR:OG1	2.27	0.51
45:OE:208:ALA:O	45:OE:212:ILE:HG12	2.10	0.51
46:OH:10:GLY:O	46:OH:14:ASN:ND2	2.43	0.51
45:OI:203:MET:HG3	45:OI:384:ILE:HD11	1.91	0.51
46:ON:135:ILE:HG13	46:ON:152:ILE:HD11	1.92	0.51
46:PB:278:SER:OG	46:PB:282:ARG:NH1	2.43	0.51
45:PC:71:GLU:OE2	45:PC:73:THR:OG1	2.25	0.51
45:QA:274:PRO:HG3	45:QA:291:ILE:HD12	1.92	0.51
45:QC:171:ILE:O	45:QC:171:ILE:HG13	2.09	0.51
45:QM:211:ASP:O	45:QM:214:ARG:HG2	2.11	0.51
46:RB:117:LEU:HD22	46:RB:154:LYS:HE3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:33:ASP:HA	45:RC:85:GLN:HE21	1.76	0.51
46:RD:201:VAL:HG21	46:RD:374:ILE:HD11	1.91	0.51
46:RD:319:GLY:N	46:RD:354:CYS:O	2.39	0.51
46:RJ:266:PHE:CD1	46:RJ:370:ASN:HB2	2.45	0.51
45:RM:326:LYS:HG2	46:RN:212:PHE:CE2	2.44	0.51
45:SA:188:ILE:HD12	45:SA:425:LEU:HD11	1.93	0.51
46:SD:156:ARG:HH21	46:SD:164:MET:HB2	1.74	0.51
45:SM:75:ILE:HG13	45:SM:94:SER:HB2	1.93	0.51
45:TE:119:LEU:HD21	45:TE:156:ARG:HB3	1.92	0.51
46:TF:135:ILE:HG13	46:TF:152:ILE:HD11	1.92	0.51
46:TN:32:PRO:O	46:TN:83:GLN:NE2	2.42	0.51
46:TN:282:ARG:NH2	46:TN:292:GLN:OE1	2.42	0.51
46:UD:318:ARG:HB3	46:UD:357:PRO:HA	1.93	0.51
45:UE:271:SER:HB2	45:UE:377:MET:HB3	1.92	0.51
46:UN:375:GLN:HB2	46:UN:379:LYS:HZ2	1.75	0.51
45:VI:260:VAL:HB	46:VL:397:TRP:HZ2	1.75	0.51
45:VK:423:GLU:HA	45:VK:426:ALA:HB3	1.92	0.51
46:WF:218:THR:HG23	46:WF:219:THR:HG23	1.93	0.51
46:WF:294:PHE:HD2	46:WF:333:VAL:HG21	1.75	0.51
45:WI:114:ILE:HD12	45:WI:117:LEU:HD12	1.91	0.51
2:0B:107:HIS:CD2	22:2M:222:LYS:HD3	2.45	0.51
9:0N:164:LYS:HA	46:KN:276:ARG:HH22	1.73	0.51
19:1J:280:SER:HB2	46:IL:360:GLY:HA3	1.91	0.51
13:1U:168:ASN:OD1	13:1U:169:GLY:N	2.43	0.51
13:1U:458:LYS:HZ2	13:1U:460:ASN:HB2	1.75	0.51
4:2D:225:ARG:HH12	34:5R:507:ARG:HD2	1.75	0.51
31:2I:197:GLN:HB3	31:2I:201:PRO:HG2	1.93	0.51
21:2L:424:ILE:HD12	21:2L:428:GLN:HB3	1.91	0.51
21:2L:701:ASP:OD1	21:2L:702:PHE:N	2.44	0.51
9:2N:11:GLN:NE2	46:IB:59:TYR:OH	2.35	0.51
23:2O:361:LEU:O	23:2O:365:ILE:HD12	2.10	0.51
23:2O:416:ARG:O	23:2O:420:ILE:HG12	2.11	0.51
10:2Q:168:SER:OG	10:2Q:170:ARG:O	2.28	0.51
11:2S:179:ARG:HD3	11:2S:217:THR:HG22	1.92	0.51
13:2U:604:MET:CE	13:2U:605:PRO:HD2	2.40	0.51
1:3A:61:TYR:HB2	46:MN:48:ASN:OD1	2.11	0.51
12:3T:168:HIS:O	12:3T:172:ILE:HG12	2.10	0.51
27:4C:255:ASN:O	27:4C:259:ILE:HG12	2.10	0.51
33:4F:32:ASN:OD1	33:4F:33:ASP:N	2.43	0.51
34:5R:247:LYS:NZ	34:5R:283:ASP:OD2	2.31	0.51
34:5R:497:GLN:NE2	34:5R:499:GLY:O	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:7R:508:ALA:HB3	34:7R:513:HIS:CE1	2.45	0.51
45:AA:37:PRO:HB2	45:AA:39:ASP:O	2.11	0.51
46:AB:5:VAL:HG12	46:AB:62:ARG:HD3	1.92	0.51
46:AD:139:LEU:HD13	46:AD:168:SER:HB2	1.92	0.51
46:BF:257:LEU:HD11	46:BF:314:SER:HB2	1.92	0.51
46:BN:10:GLY:O	46:BN:14:ASN:ND2	2.44	0.51
45:CA:31:GLN:N	45:CA:31:GLN:OE1	2.43	0.51
46:CB:139:LEU:HA	46:CB:145:SER:HB3	1.92	0.51
45:CK:141:VAL:HG21	45:CK:172:TYR:HE1	1.76	0.51
46:DB:2:ARG:H	45:DC:96:LYS:HZ1	1.57	0.51
45:DG:155:GLU:HA	45:DG:197:HIS:CD2	2.45	0.51
45:DG:167:LEU:HG	45:DG:200:VAL:HB	1.92	0.51
45:DI:69:ASP:OD1	45:DI:70:LEU:N	2.43	0.51
45:DI:98:ASP:N	45:DI:98:ASP:OD1	2.43	0.51
46:EH:209:ASP:OD1	46:EH:213:ARG:NE	2.43	0.51
46:EL:371:SER:O	46:EL:422:TYR:OH	2.24	0.51
46:EN:309:ARG:H	46:EN:426:GLN:HE22	1.59	0.51
45:FI:68:LEU:HD23	45:FI:93:ILE:HB	1.93	0.51
45:GE:69:ASP:OD1	45:GE:70:LEU:N	2.43	0.51
45:GE:178:SER:HB2	46:GF:347:ASN:ND2	2.25	0.51
46:GJ:289:LEU:HD13	46:GJ:365:VAL:HG13	1.91	0.51
46:GN:135:ILE:HG22	46:GN:137:HIS:HD2	1.74	0.51
46:HB:8:GLN:HE21	46:HB:65:LEU:HA	1.75	0.51
46:IB:60:VAL:HG21	46:IB:86:ARG:HG2	1.91	0.51
46:JB:379:LYS:HD3	46:JB:419:VAL:HG11	1.93	0.51
45:JK:278:ALA:HA	45:JK:369:ALA:HB2	1.93	0.51
46:JL:332:ASN:OD1	46:JL:336:LYS:NZ	2.43	0.51
45:JM:24:PHE:O	45:JM:28:HIS:ND1	2.30	0.51
45:JM:242:LEU:HD11	45:JM:252:ILE:HG23	1.91	0.51
45:KG:215:ARG:NH2	45:KG:299:ALA:O	2.44	0.51
46:KN:58:ARG:NH1	46:LN:280:GLN:OE1	2.44	0.51
45:MA:103:PHE:HB2	45:MA:186:ASN:HB3	1.91	0.51
46:MH:178:THR:HG22	46:MH:180:VAL:H	1.74	0.51
45:NG:414:GLU:OE1	45:NG:416:GLY:N	2.35	0.51
45:NI:176:GLN:NE2	45:NI:207:GLU:OE2	2.44	0.51
45:OM:294:SER:O	45:OM:300:ASN:ND2	2.39	0.51
45:PA:317:MET:N	45:PA:352:LYS:O	2.23	0.51
46:PH:325:GLU:HA	46:PH:328:GLU:HG3	1.93	0.51
46:QF:207:LEU:HB3	46:QF:225:LEU:HD22	1.91	0.51
45:RC:102:ASN:ND2	45:RC:411:GLU:OE2	2.41	0.51
45:RE:128:ASN:HD22	45:RE:128:ASN:C	2.13	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RH:257:LEU:HA	46:RH:312:THR:HG21	1.92	0.51
45:SC:69:ASP:OD1	45:SC:70:LEU:N	2.42	0.51
46:SF:139:LEU:HD22	46:SF:170:VAL:HG12	1.92	0.51
45:SI:240:ALA:HB1	45:SI:320:ARG:HH21	1.73	0.51
45:SK:192:HIS:ND1	45:SK:424:ASP:OD2	2.43	0.51
45:SK:225:THR:O	45:SK:229:ARG:HG2	2.10	0.51
45:SM:55:GLU:O	45:TM:285:GLN:NE2	2.39	0.51
46:TD:113:ILE:HG21	46:TD:150:LEU:HD22	1.92	0.51
45:TE:77:GLU:HA	45:TE:80:THR:HG22	1.91	0.51
46:TH:238:CYS:SG	46:TH:318:ARG:HD3	2.50	0.51
46:TL:322:SER:OG	45:TM:221:ARG:NH1	2.35	0.51
46:TN:258:ILE:O	46:TN:258:ILE:HG13	2.11	0.51
46:TN:309:ARG:NH2	46:TN:426:GLN:O	2.37	0.51
45:UA:213:CYS:HA	45:UA:217:LEU:HB2	1.93	0.51
46:UD:73:MET:HA	46:UD:76:VAL:HG12	1.93	0.51
46:UL:72:THR:OG1	46:UL:73:MET:SD	2.68	0.51
46:UL:324:LYS:HB3	45:UM:210:TYR:CE2	2.46	0.51
46:UN:375:GLN:HB2	46:UN:379:LYS:NZ	2.25	0.51
45:VC:174:SER:HB2	45:VC:177:VAL:O	2.11	0.51
45:VE:70:LEU:HA	45:VE:95:GLY:HA3	1.93	0.51
45:VI:69:ASP:OD2	45:VI:70:LEU:N	2.43	0.51
45:VK:251:ASP:OD1	45:VK:252:ILE:N	2.43	0.51
46:VL:156:ARG:HG3	46:VL:195:ASN:HB3	1.93	0.51
46:VN:7:ILE:HG22	46:VN:64:ILE:HB	1.93	0.51
45:WE:172:TYR:HD1	45:WE:173:PRO:HD2	1.75	0.51
45:WI:236:SER:OG	45:WI:243:ARG:NH2	2.44	0.51
45:WM:320:ARG:HH12	45:WM:360:PRO:N	2.08	0.51
6:0F:48:HIS:HA	45:EE:221:ARG:HB2	1.91	0.51
1:1A:50:PRO:HB2	34:4R:70:ARG:HG2	1.92	0.51
4:1D:93:GLN:HG3	45:EG:32:PRO:HD2	1.91	0.51
21:1L:872:MET:HB2	46:CB:362:LYS:HE2	1.91	0.51
23:1O:265:PHE:O	45:UA:282:TYR:OH	2.25	0.51
12:1T:89:ILE:O	14:3V:183:GLN:NE2	2.33	0.51
14:1V:101:ILE:HG12	45:LI:415:GLU:HG2	1.92	0.51
1:2A:50:PRO:HB2	34:5R:70:ARG:HG2	1.92	0.51
27:3C:230:ASP:HA	27:3C:233:LEU:HB3	1.92	0.51
31:3I:255:LYS:HB2	45:GI:214:ARG:HH21	1.76	0.51
10:3Q:69:LEU:O	10:3Q:69:LEU:HD23	2.09	0.51
11:3S:28:GLU:H	11:3S:31:LEU:HD21	1.75	0.51
12:3T:62:VAL:HB	12:3T:148:CYS:HB2	1.92	0.51
14:3V:250:GLN:NE2	14:3V:254:ASP:OD2	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:3X:9:PHE:HD2	15:3X:10:ARG:HG3	1.76	0.51
34:4R:203:ARG:HB3	34:4R:203:ARG:NH1	2.25	0.51
36:5A:117:PRO:O	36:5A:117:PRO:HD2	2.11	0.51
36:5B:31:SER:OG	36:5B:46:ILE:O	2.24	0.51
46:AD:178:THR:HB	46:AD:181:GLU:HG3	1.92	0.51
46:BD:372:THR:HA	46:BD:422:TYR:HE2	1.74	0.51
46:BF:105:HIS:CD2	46:BF:150:LEU:HB2	2.44	0.51
45:BG:109:THR:HG22	45:BG:110:ILE:HG23	1.92	0.51
46:BJ:299:MET:HG3	46:BJ:305:PRO:HG3	1.92	0.51
45:CA:188:ILE:HB	45:CA:425:LEU:HD11	1.92	0.51
46:CB:116:VAL:HA	46:CB:119:VAL:HG12	1.93	0.51
45:CI:167:LEU:HG	45:CI:200:VAL:HB	1.93	0.51
45:CI:294:SER:O	45:CI:300:ASN:ND2	2.33	0.51
46:CJ:273:LEU:H	46:CJ:292:GLN:HE22	1.57	0.51
46:DB:175:VAL:HG22	46:DB:205:GLU:OE2	2.10	0.51
45:DC:123:ARG:NH2	45:DC:160:ASP:OD1	2.43	0.51
46:DN:282:ARG:NH2	46:DN:292:GLN:OE1	2.41	0.51
45:EE:155:GLU:O	45:EE:158:SER:OG	2.27	0.51
46:EH:2:ARG:NH2	45:EI:71:GLU:OE2	2.43	0.51
46:EN:258:ILE:HD11	46:EN:266:PHE:HZ	1.75	0.51
46:FF:100:ASN:HB3	46:FF:103:LYS:HB2	1.92	0.51
46:GB:116:VAL:HA	46:GB:119:VAL:HG12	1.93	0.51
45:GM:394:LYS:NZ	46:GN:347:ASN:OD1	2.43	0.51
46:HB:121:ARG:NH2	46:HB:158:GLU:OE2	2.40	0.51
45:II:71:GLU:OE1	46:IJ:2:ARG:NH2	2.41	0.51
46:IN:289:LEU:HD13	46:IN:365:VAL:HG23	1.93	0.51
46:JB:274:THR:HB	46:JB:282:ARG:NH1	2.25	0.51
46:JD:148:GLY:O	46:JD:152:ILE:HG12	2.11	0.51
45:KE:206:ASN:OD1	47:KE:501:GTP:N2	2.44	0.51
46:KF:238:CYS:SG	46:KF:239:CYS:N	2.84	0.51
45:KI:178:SER:OG	46:KJ:347:ASN:OD1	2.26	0.51
46:KN:213:ARG:HE	46:KN:297:LYS:HD3	1.75	0.51
45:LA:174:SER:HB2	45:LA:177:VAL:O	2.11	0.51
45:MC:205:ASP:OD1	45:MC:303:ALA:HA	2.11	0.51
46:MD:222:TYR:O	46:MD:226:ASN:ND2	2.27	0.51
46:MF:374:ILE:O	46:MF:377:MET:HG2	2.10	0.51
46:MN:139:LEU:HD13	46:MN:168:SER:HB3	1.92	0.51
46:MN:287:PRO:HD3	46:MN:325:GLU:OE1	2.11	0.51
46:ND:117:LEU:HD21	46:ND:154:LYS:HD2	1.92	0.51
46:NH:117:LEU:HD22	46:NH:154:LYS:HD3	1.92	0.51
46:NJ:112:LEU:HD22	46:NJ:147:MET:HE1	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NJ:285:THR:OG1	46:NJ:288:GLU:OE1	2.22	0.51
46:OH:83:GLN:O	46:PH:281:TYR:OH	2.28	0.51
46:OH:372:THR:HG21	46:OH:426:GLN:HB2	1.92	0.51
45:OK:284:GLU:OE1	45:OK:286:LEU:HD22	2.10	0.51
46:OL:68:LEU:HD12	46:OL:97:ALA:HB2	1.92	0.51
46:OL:309:ARG:NH2	46:OL:341:PHE:O	2.44	0.51
46:PB:221:THR:HG23	46:PB:224:ASP:H	1.75	0.51
45:PC:152:LEU:O	45:PC:156:ARG:HG2	2.11	0.51
45:PC:203:MET:HA	45:PC:203:MET:HE3	1.93	0.51
45:QA:228:ASN:O	45:QA:232:ALA:N	2.34	0.51
46:QD:86:ARG:HH22	46:RD:282:ARG:HA	1.75	0.51
46:QL:99:ASN:HA	46:QL:142:GLY:H	1.74	0.51
45:RA:276:ILE:HD11	45:RA:280:LYS:HG3	1.91	0.51
46:RD:167:PHE:CE1	46:RD:200:MET:HG3	2.46	0.51
45:SA:7:ILE:N	45:SA:136:LEU:O	2.38	0.51
46:SB:11:GLN:HA	46:SB:14:ASN:HD22	1.76	0.51
46:SB:318:ARG:HE	46:SB:358:PRO:HG3	1.75	0.51
46:SD:386:THR:OG1	46:SD:390:ARG:NH2	2.38	0.51
46:SH:344:TRP:HB3	46:SH:430:ALA:HB2	1.93	0.51
46:SL:255:VAL:HG13	46:SL:256:ASN:HD22	1.75	0.51
46:SN:375:GLN:HE22	46:SN:378:PHE:HB2	1.74	0.51
46:TD:320:ARG:HH12	46:TD:355:ASP:HB3	1.74	0.51
45:TE:163:LYS:HE2	45:TE:163:LYS:HA	1.92	0.51
45:UC:121:ARG:HD2	45:UC:124:LYS:HZ2	1.74	0.51
45:UC:151:SER:O	45:UC:154:LEU:HG	2.10	0.51
45:UC:203:MET:HG3	45:UC:384:ILE:HD11	1.92	0.51
45:UM:427:ALA:HA	45:UM:430:LYS:HE2	1.92	0.51
45:VE:88:HIS:HB3	45:VE:91:GLN:NE2	2.26	0.51
46:VN:139:LEU:HD13	46:VN:168:SER:HB2	1.93	0.51
45:WE:147:SER:HB2	45:WE:190:SER:HB3	1.91	0.51
45:WE:207:GLU:HA	45:WE:210:TYR:CD2	2.45	0.51
45:WG:214:ARG:HH11	45:WG:214:ARG:HG2	1.76	0.51
46:WN:390:ARG:O	46:WN:392:LYS:NZ	2.44	0.51
4:OD:17:HIS:CE1	46:CB:47:ILE:HD11	2.46	0.51
13:1U:404:HIS:CD2	13:1U:408:VAL:HG22	2.46	0.51
26:1W:245:LEU:HD22	34:7R:17:PHE:HD2	1.75	0.51
20:2K:227:ARG:HB3	20:2K:231:LYS:NZ	2.24	0.51
21:2L:831:LYS:HD3	21:2L:832:PRO:HD2	1.92	0.51
11:2S:175:PHE:CD2	11:2S:211:LEU:HD22	2.46	0.51
13:2U:31:ILE:HG13	13:2U:40:VAL:HG12	1.91	0.51
5:3E:34:LEU:HD13	5:3E:47:GLU:HB3	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:3O:289:ILE:O	23:3O:293:ASN:ND2	2.41	0.51
34:4R:593:ASP:OD2	34:4R:598:TRP:N	2.29	0.51
36:5B:95:SER:OG	36:5B:96:GLN:N	2.43	0.51
36:5C:102:TYR:HA	45:KI:393:HIS:HE2	1.75	0.51
36:5D:68:ASP:HA	37:5H:69:LYS:HD3	1.93	0.51
37:5E:134:ILE:H	37:5E:134:ILE:HD12	1.75	0.51
37:5E:179:TYR:CD1	45:KC:410:GLY:HA2	2.45	0.51
37:5H:44:ARG:HH22	45:NK:55:GLU:HB3	1.76	0.51
34:5R:131:GLU:OE1	34:5R:141:GLN:NE2	2.44	0.51
34:5R:184:ASP:OD1	34:5R:185:SER:N	2.44	0.51
45:AA:118:CYS:O	45:AA:122:ILE:HG12	2.10	0.51
46:AB:208:TYR:HE1	46:AB:225:LEU:HD11	1.76	0.51
45:AG:238:LEU:HD11	45:AG:255:PHE:HE2	1.76	0.51
45:BE:414:GLU:CD	45:BE:416:GLY:H	2.14	0.51
46:BJ:342:VAL:HG13	46:BJ:345:ILE:HG22	1.93	0.51
45:CE:104:ALA:HB2	45:CE:413:MET:HB2	1.93	0.51
45:CM:260:VAL:HG23	45:CM:265:ILE:O	2.11	0.51
46:DN:73:MET:HA	46:DN:76:VAL:HG22	1.92	0.51
45:EA:147:SER:HB2	45:EA:190:SER:HB3	1.93	0.51
45:EC:244:PHE:HB2	45:EC:356:ASN:HD21	1.76	0.51
45:EG:256:GLN:HB2	46:EH:397:TRP:CZ2	2.45	0.51
46:EJ:67:ASP:OD1	46:EJ:68:LEU:N	2.44	0.51
46:EJ:294:PHE:HE2	46:EJ:333:VAL:HG11	1.76	0.51
45:EK:98:ASP:OD1	45:EK:99:ALA:N	2.44	0.51
45:FE:274:PRO:HG3	45:FE:286:LEU:HD23	1.93	0.51
45:FE:288:VAL:HA	45:FE:291:ILE:HG12	1.93	0.51
45:FM:105:ARG:HA	45:FM:109:THR:HB	1.93	0.51
45:GI:224:TYR:O	45:GI:228:ASN:ND2	2.44	0.51
46:GN:97:ALA:HB3	46:GN:143:THR:HB	1.93	0.51
46:GN:293:MET:HG3	46:GN:294:PHE:CD1	2.44	0.51
45:HA:76:ASP:HA	45:HA:79:ARG:HG2	1.91	0.51
46:HH:282:ARG:NH2	46:HH:292:GLN:OE1	2.43	0.51
46:HN:148:GLY:O	46:HN:152:ILE:HG12	2.11	0.51
45:IG:68:LEU:HD11	45:IG:118:CYS:SG	2.50	0.51
45:JG:215:ARG:NH2	45:JG:299:ALA:O	2.44	0.51
45:JG:288:VAL:HG11	45:JG:327:ASP:HB3	1.92	0.51
45:JI:192:HIS:NE2	45:JI:424:ASP:OD2	2.43	0.51
45:KG:102:ASN:HB3	45:KG:105:ARG:HB2	1.91	0.51
45:KM:265:ILE:HG22	45:KM:432:TYR:HE1	1.75	0.51
46:LD:326:VAL:O	46:LD:330:MET:HG2	2.11	0.51
45:LM:319:TYR:HB3	45:LM:323:VAL:HG21	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MF:289:LEU:HD13	46:MF:365:VAL:HG23	1.90	0.51
46:MJ:20:PHE:HA	46:MJ:230:SER:OG	2.11	0.51
45:NA:74:VAL:HG23	45:NA:75:ILE:HD12	1.92	0.51
46:NB:47:ILE:HG22	46:NB:51:TYR:HB2	1.92	0.51
45:NE:69:ASP:OD2	45:NE:71:GLU:HG3	2.10	0.51
45:NE:204:LEU:HD13	45:NE:231:ILE:HD12	1.93	0.51
45:OA:36:MET:HB2	45:OA:61:HIS:HE1	1.75	0.51
46:ON:101:TRP:HZ2	46:ON:191:GLN:HE22	1.59	0.51
45:PC:346:TRP:CD1	46:PF:391:ARG:HG3	2.45	0.51
46:PH:173:PRO:HD2	46:PH:380:ARG:HH12	1.74	0.51
46:PJ:324:LYS:O	46:PJ:328:GLU:N	2.32	0.51
46:PL:257:LEU:HA	46:PL:312:THR:HG21	1.93	0.51
45:QA:188:ILE:HD12	45:QA:425:LEU:HD11	1.93	0.51
45:QE:171:ILE:O	45:QE:171:ILE:HG13	2.10	0.51
45:QG:88:HIS:CE1	45:QG:90:GLU:HG3	2.45	0.51
46:RB:397:TRP:O	46:RB:401:GLU:HG3	2.10	0.51
46:RD:139:LEU:HD22	46:RD:170:VAL:HG22	1.93	0.51
46:RH:260:PHE:HB2	46:RH:263:LEU:HD13	1.92	0.51
46:SB:156:ARG:HH22	46:SB:197:ASP:CG	2.14	0.51
45:SC:430:LYS:O	45:SC:433:GLU:HG3	2.11	0.51
46:SJ:51:TYR:HB3	46:SJ:59:TYR:HB3	1.92	0.51
46:SL:192:LEU:HD21	46:SL:199:CYS:SG	2.51	0.51
45:SM:135:PHE:HB2	45:SM:166:LYS:CE	2.41	0.51
46:TB:2:ARG:HH21	46:TB:240:LEU:HD12	1.75	0.51
46:TB:167:PHE:CE2	46:TB:233:MET:HG2	2.46	0.51
45:TE:326:LYS:HG2	46:TF:220:PRO:HG2	1.91	0.51
46:TL:31:ASP:OD2	46:TL:37:HIS:ND1	2.43	0.51
45:TM:207:GLU:HA	45:TM:210:TYR:HB2	1.92	0.51
46:UB:54:ALA:HA	46:VB:283:ALA:HB2	1.92	0.51
46:UN:169:VAL:HG22	46:UN:202:ILE:HB	1.93	0.51
47:VA:501:GTP:O1G	46:VB:252:LYS:NZ	2.36	0.51
45:VE:292:THR:HG21	45:VE:331:SER:HB2	1.91	0.51
46:VH:324:LYS:O	46:VH:328:GLU:N	2.37	0.51
45:VI:31:GLN:HE22	45:VI:37:PRO:HG3	1.75	0.51
46:VL:113:ILE:HA	46:VL:116:VAL:HG12	1.93	0.51
6:0F:202:ASN:O	45:FC:221:ARG:NH1	2.43	0.51
24:1P:362:LYS:HD2	46:TB:362:LYS:HD3	1.93	0.51
1:2A:33:GLN:OE1	1:2A:34:LEU:HG	2.11	0.51
1:2A:39:TYR:HB3	1:2A:43:TRP:CH2	2.46	0.51
21:2L:396:ASN:HA	21:2L:399:HIS:ND1	2.26	0.51
21:2L:424:ILE:HD11	21:2L:429:PHE:HB2	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2O:198:LYS:HD2	23:2O:199:LYS:HZ2	1.76	0.51
12:2T:188:ASP:OD2	12:2T:188:ASP:N	2.43	0.51
13:2U:500:PRO:HB2	13:2U:501:GLU:OE1	2.10	0.51
34:4R:94:ARG:HD2	34:4R:184:ASP:HB2	1.91	0.51
34:4R:236:LEU:HD11	46:BH:94:GLN:OE1	2.11	0.51
36:5D:79:LEU:HD21	46:NN:320:ARG:HG3	1.92	0.51
34:5R:593:ASP:OD2	34:5R:598:TRP:N	2.39	0.51
40:6G:115:ILE:O	40:6G:115:ILE:HG13	2.11	0.51
45:AA:101:ASN:HA	45:AA:144:GLY:H	1.75	0.51
45:BA:147:SER:HB2	45:BA:190:SER:HB2	1.93	0.51
45:BA:194:LEU:O	45:BA:198:THR:OG1	2.24	0.51
46:BH:139:LEU:HD13	46:BH:168:SER:HB3	1.93	0.51
46:BH:190:HIS:HD2	46:BH:411:ALA:HA	1.76	0.51
46:BN:221:THR:HG23	46:BN:223:GLY:H	1.75	0.51
45:CA:346:TRP:CD1	46:CB:391:ARG:HG3	2.45	0.51
46:CD:46:ARG:NH2	45:CE:76:ASP:OD2	2.44	0.51
46:CD:238:CYS:SG	46:CD:239:CYS:N	2.84	0.51
45:CI:210:TYR:CE1	45:CI:227:LEU:HD11	2.45	0.51
45:DE:192:HIS:ND1	45:DE:424:ASP:OD2	2.44	0.51
45:EA:244:PHE:HB2	45:EA:356:ASN:HD21	1.74	0.51
46:EB:52:ASN:ND2	46:EB:123:GLU:OE2	2.38	0.51
46:EB:347:ASN:ND2	45:EC:176:GLN:O	2.41	0.51
46:EF:207:LEU:HD13	46:EF:225:LEU:HB3	1.92	0.51
45:EI:88:HIS:NE2	45:FG:284:GLU:OE1	2.38	0.51
46:EJ:288:GLU:O	46:EJ:291:GLN:HG3	2.11	0.51
46:EL:238:CYS:SG	46:EL:318:ARG:NH2	2.77	0.51
46:GB:16:ILE:HD13	46:GB:226:ASN:ND2	2.26	0.51
46:GB:16:ILE:HD13	46:GB:226:ASN:HD22	1.75	0.51
45:GM:274:PRO:HB3	45:GM:291:ILE:HD12	1.93	0.51
46:GN:99:ASN:HA	46:GN:142:GLY:H	1.75	0.51
46:GN:191:GLN:NE2	46:GN:195:ASN:OD1	2.43	0.51
45:HC:141:VAL:HG12	45:HC:187:SER:HA	1.92	0.51
46:HD:91:VAL:HG21	46:HD:116:VAL:HG12	1.93	0.51
46:HD:262:ARG:NH2	46:HD:421:GLU:OE1	2.43	0.51
45:IC:296:PHE:HE2	45:IC:335:ILE:HG21	1.76	0.51
46:IF:257:LEU:HD11	46:IF:314:SER:HB2	1.93	0.51
45:IM:231:ILE:O	45:IM:235:ILE:HG12	2.11	0.51
45:IM:244:PHE:HB2	45:IM:356:ASN:HD21	1.76	0.51
45:JM:244:PHE:HB2	45:JM:356:ASN:HD21	1.76	0.51
46:KB:410:GLU:O	46:KB:413:SER:OG	2.28	0.51
46:LB:229:VAL:HG12	46:LB:233:MET:HE2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LE:112:LYS:HA	45:LE:115:VAL:HG12	1.93	0.51
45:MK:326:LYS:HE2	45:MK:326:LYS:HA	1.93	0.51
46:ND:316:LEU:HD23	46:ND:352:SER:HB3	1.93	0.51
46:NH:307:HIS:ND1	46:NH:376:GLU:OE2	2.32	0.51
46:NH:391:ARG:HG3	46:NH:393:ALA:H	1.76	0.51
46:NN:87:PRO:HA	46:NN:90:PHE:CD2	2.46	0.51
46:OF:6:HIS:ND1	46:OF:134:GLN:OE1	2.37	0.51
45:OI:336:LYS:HE3	45:OI:351:PHE:HE1	1.75	0.51
46:OL:55:THR:HG23	46:PL:283:ALA:HA	1.92	0.51
46:ON:198:GLU:HA	46:ON:264:HIS:HB2	1.93	0.51
46:ON:345:ILE:O	46:ON:345:ILE:HG13	2.11	0.51
45:PC:292:THR:HG21	45:PC:331:SER:HB2	1.93	0.51
45:PE:172:TYR:HD1	45:PE:173:PRO:HD2	1.76	0.51
45:PE:346:TRP:CD1	46:PH:391:ARG:HG3	2.46	0.51
45:PI:172:TYR:HD1	45:PI:173:PRO:HD2	1.75	0.51
46:PJ:113:ILE:HA	46:PJ:116:VAL:HG12	1.91	0.51
45:PK:182:VAL:HG22	45:PK:185:TYR:HB2	1.93	0.51
46:QD:12:CYS:O	46:QD:16:ILE:HG12	2.11	0.51
46:QN:260:PHE:HB2	46:QN:263:LEU:HD13	1.93	0.51
45:RE:206:ASN:OD1	47:RE:501:GTP:N2	2.44	0.51
45:RK:223:THR:HG22	45:RK:224:TYR:H	1.76	0.51
46:RL:217:LEU:HD23	46:RL:219:THR:H	1.75	0.51
46:TH:252:LYS:O	46:TH:256:ASN:ND2	2.41	0.51
46:TJ:60:VAL:HG11	46:TJ:86:ARG:HH21	1.75	0.51
45:UC:305:CYS:SG	45:UC:306:ASP:N	2.84	0.51
45:UG:399:TYR:OH	45:UG:415:GLU:OE2	2.28	0.51
45:UM:31:GLN:HG3	45:UM:37:PRO:HD3	1.93	0.51
46:UN:7:ILE:HG12	46:UN:64:ILE:HB	1.92	0.51
46:VH:30:ILE:HD11	46:VH:47:ILE:HD11	1.93	0.51
1:1A:61:TYR:OH	46:MF:53:GLU:OE2	2.28	0.51
8:1H:60:ARG:NH2	46:HN:33:THR:HG23	2.26	0.51
10:2Q:109:GLN:O	10:2Q:122:PRO:HB3	2.11	0.51
13:2U:6:ASP:HB3	13:2U:603:LYS:HB3	1.93	0.51
13:2U:323:ILE:HG12	13:2U:599:ILE:HD11	1.91	0.51
13:2U:385:LYS:HG2	13:2U:401:SER:HA	1.92	0.51
13:2U:513:LYS:HE2	13:2U:526:ARG:CZ	2.40	0.51
14:2V:205:VAL:HG13	14:2V:258:LEU:HD21	1.93	0.51
5:3E:3:SER:N	5:3E:6:GLN:OE1	2.44	0.51
13:3U:319:HIS:NE2	13:3U:340:SER:OG	2.23	0.51
13:3U:494:LYS:HB2	13:3U:508:THR:HG23	1.92	0.51
37:5E:63:HIS:CD2	46:NB:56:GLY:HA3	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:7R:13:PRO:HB3	46:LB:228:LEU:HD22	1.92	0.51
45:AC:183:GLU:N	45:AC:184:PRO:HD2	2.26	0.51
45:AG:147:SER:HB2	45:AG:190:SER:HB3	1.93	0.51
46:AJ:113:ILE:HD13	46:AJ:154:LYS:HE2	1.93	0.51
45:BA:60:LYS:NZ	45:BA:85:GLN:O	2.39	0.51
45:BA:401:LYS:HE3	45:BA:403:ALA:HB2	1.93	0.51
46:BB:16:ILE:HD12	46:BB:229:VAL:HG11	1.93	0.51
45:BG:231:ILE:O	45:BG:235:ILE:HG12	2.10	0.51
45:BM:245:ASP:OD1	45:BM:245:ASP:N	2.42	0.51
45:CA:313:MET:HG2	45:CA:346:TRP:CH2	2.46	0.51
45:CE:196:GLU:HG2	45:CE:197:HIS:CD2	2.46	0.51
45:DA:17:GLY:O	45:DA:21:TRP:CD1	2.64	0.51
45:DC:349:THR:OG1	46:DD:176:SER:OG	2.22	0.51
46:DJ:86:ARG:HD2	46:DJ:87:PRO:HD2	1.92	0.51
45:DK:69:ASP:OD1	45:DK:70:LEU:N	2.42	0.51
45:DM:52:PHE:HZ	45:DM:239:THR:HG21	1.76	0.51
45:DM:119:LEU:HD21	45:DM:156:ARG:HG2	1.93	0.51
45:DM:231:ILE:O	45:DM:235:ILE:HD12	2.11	0.51
45:EC:328:VAL:O	45:EC:332:ILE:HG12	2.11	0.51
45:EI:184:PRO:O	45:EI:188:ILE:HG12	2.11	0.51
45:FA:141:VAL:HG22	45:FA:187:SER:HA	1.93	0.51
45:FM:62:VAL:HG22	45:GM:283:HIS:CE1	2.46	0.51
45:GA:292:THR:HG21	45:GA:331:SER:HB3	1.91	0.51
46:GB:55:THR:HG23	46:HB:283:ALA:HA	1.92	0.51
45:GE:210:TYR:HE1	45:GE:227:LEU:HD11	1.76	0.51
45:GM:174:SER:HB2	45:GM:177:VAL:O	2.11	0.51
46:GN:238:CYS:HB2	46:GN:318:ARG:NH2	2.22	0.51
45:HA:175:PRO:HB2	45:HA:176:GLN:OE1	2.11	0.51
46:HB:49:VAL:O	46:HB:62:ARG:NH2	2.43	0.51
45:HC:241:SER:OG	45:HC:250:VAL:O	2.24	0.51
46:HD:30:ILE:HD11	46:HD:47:ILE:HD11	1.92	0.51
45:HE:328:VAL:HG11	45:HE:353:VAL:HG21	1.92	0.51
46:HL:239:CYS:SG	46:HL:247:ASN:HA	2.50	0.51
46:HN:297:LYS:NZ	46:HN:306:ARG:HH12	2.09	0.51
45:IC:11:GLN:OE1	46:ID:247:ASN:ND2	2.43	0.51
46:IF:135:ILE:HG13	46:IF:152:ILE:HD11	1.93	0.51
45:IG:55:GLU:HG3	45:IG:57:GLY:H	1.76	0.51
45:IK:284:GLU:HG3	45:IK:286:LEU:HD12	1.93	0.51
46:IL:107:THR:OG1	46:IL:108:GLU:OE1	2.20	0.51
46:JB:190:HIS:CD2	46:JB:414:ASN:HD22	2.29	0.51
46:JL:232:ALA:O	46:JL:236:VAL:HG23	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KA:278:ALA:HA	45:KA:281:ALA:HB3	1.92	0.51
45:KK:265:ILE:O	45:KK:265:ILE:HG13	2.11	0.51
46:KL:10:GLY:O	46:KL:14:ASN:ND2	2.44	0.51
46:KL:239:CYS:SG	46:KL:247:ASN:HA	2.51	0.51
45:LA:183:GLU:N	45:LA:184:PRO:HD2	2.26	0.51
45:LC:90:GLU:OE1	45:LC:121:ARG:NH1	2.44	0.51
46:LJ:260:PHE:HB2	46:LJ:263:LEU:HD13	1.93	0.51
45:LM:184:PRO:HG2	45:LM:398:MET:CE	2.41	0.51
45:LM:345:ASP:OD1	45:LM:345:ASP:N	2.43	0.51
45:MK:326:LYS:HE3	46:MN:220:PRO:HG2	1.92	0.51
45:NA:180:ALA:HA	46:NB:350:LYS:NZ	2.26	0.51
45:NK:147:SER:HB2	45:NK:190:SER:OG	2.11	0.51
45:NK:174:SER:HB3	45:NK:207:GLU:HG3	1.93	0.51
45:OA:248:LEU:HD13	45:OA:355:ILE:HD12	1.93	0.51
46:OJ:139:LEU:HD13	46:OJ:168:SER:HB3	1.93	0.51
45:PC:88:HIS:HB3	45:PC:91:GLN:HG2	1.93	0.51
46:PJ:6:HIS:NE2	46:PJ:8:GLN:OE1	2.42	0.51
46:QB:15:GLN:HB3	46:QB:226:ASN:HD21	1.76	0.51
45:QE:88:HIS:ND1	45:RE:284:GLU:OE1	2.44	0.51
45:QG:206:ASN:OD1	47:QG:501:GTP:N2	2.42	0.51
46:QL:247:ASN:ND2	45:QM:71:GLU:OE1	2.44	0.51
46:QL:316:LEU:HB2	46:QL:366:THR:HB	1.92	0.51
45:QM:326:LYS:HG2	46:QN:220:PRO:HD2	1.92	0.51
46:RB:375:GLN:HE22	46:RB:423:GLN:HB3	1.76	0.51
46:RF:238:CYS:SG	46:RF:239:CYS:N	2.84	0.51
46:RH:318:ARG:HH11	46:RH:358:PRO:HG3	1.75	0.51
46:RL:12:CYS:HB3	46:RL:138:SER:HB2	1.93	0.51
46:RL:99:ASN:HA	46:RL:142:GLY:H	1.76	0.51
46:SB:62:ARG:NH1	46:SB:127:CYS:SG	2.84	0.51
45:SC:226:ASN:HD22	45:SC:229:ARG:HH21	1.57	0.51
45:SE:140:SER:OG	47:SE:501:GTP:O2B	2.28	0.51
45:SE:205:ASP:N	45:SE:205:ASP:OD2	2.40	0.51
45:SG:9:VAL:HG12	45:SG:68:LEU:HB2	1.92	0.51
45:SI:183:GLU:N	45:SI:184:PRO:HD2	2.26	0.51
45:SM:64:ARG:NH1	45:SM:129:CYS:SG	2.84	0.51
46:SN:105:HIS:CE1	46:SN:150:LEU:HB2	2.46	0.51
46:SN:318:ARG:HB3	46:SN:357:PRO:HA	1.93	0.51
45:TA:167:LEU:HG	45:TA:200:VAL:HB	1.93	0.51
46:TB:318:ARG:HD3	46:TB:358:PRO:HG3	1.92	0.51
46:TJ:251:ARG:NH2	45:TK:97:GLU:OE2	2.41	0.51
46:TL:113:ILE:HA	46:TL:116:VAL:HG12	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UA:320:ARG:NH2	45:UA:374:ALA:HB3	2.25	0.51
46:UB:113:ILE:HG12	46:UB:117:LEU:HD23	1.93	0.51
46:UD:273:LEU:O	46:UD:292:GLN:NE2	2.42	0.51
45:UE:207:GLU:OE1	45:UE:304:LYS:NZ	2.37	0.51
46:UL:167:PHE:CE2	46:UL:233:MET:HG2	2.46	0.51
46:VH:306:ARG:HB2	46:VH:340:TYR:CZ	2.45	0.51
45:VI:324:VAL:HG12	45:VI:326:LYS:HG2	1.92	0.51
46:VL:16:ILE:HD12	46:VL:229:VAL:HG11	1.93	0.51
46:VN:325:GLU:O	46:VN:329:GLN:HG3	2.11	0.51
46:WB:178:THR:HG22	46:WB:179:VAL:H	1.76	0.51
46:WD:222:TYR:HA	46:WD:225:LEU:HD12	1.92	0.51
8:1H:252:ARG:HH12	45:HE:30:ILE:C	2.13	0.51
12:1T:103:VAL:O	12:1T:103:VAL:HG13	2.11	0.51
28:2F:48:ILE:HG21	45:GC:362:VAL:HG12	1.93	0.51
23:2O:230:ARG:NH1	23:2O:231:GLU:OE2	2.44	0.51
12:2T:60:LYS:HA	12:2T:144:GLY:HA3	1.93	0.51
12:2T:109:CYS:HB2	12:2T:128:GLU:CG	2.41	0.51
14:3V:195:ARG:HH21	14:3V:196:GLN:HG3	1.76	0.51
15:3X:43:GLU:O	15:3X:47:GLN:HG2	2.10	0.51
36:5A:80:ASN:OD1	36:5A:81:HIS:N	2.44	0.51
35:5S:172:SER:HB3	35:5S:175:ILE:HD11	1.93	0.51
39:6F:139:LEU:HD21	45:IG:22:GLU:HB2	1.92	0.51
40:6G:273:MET:HG2	40:6G:275:TYR:CD2	2.46	0.51
41:6H:292:ASN:O	41:6H:294:PRO:HD3	2.11	0.51
46:BD:4:ILE:HG13	46:BD:132:GLY:O	2.11	0.51
46:BD:68:LEU:HD11	46:BD:147:MET:HE3	1.93	0.51
45:BE:11:GLN:OE1	46:BF:247:ASN:ND2	2.43	0.51
45:BG:26:LEU:HD13	45:BG:363:VAL:HG12	1.93	0.51
46:BH:178:THR:HG22	46:BH:180:VAL:H	1.75	0.51
45:BI:3:GLU:OE2	45:BI:131:GLY:N	2.44	0.51
45:BK:181:VAL:HG13	45:BK:182:VAL:HG13	1.92	0.51
45:BM:292:THR:HG21	45:BM:331:SER:HB3	1.93	0.51
45:CA:140:SER:OG	47:CA:501:GTP:O2B	2.28	0.51
46:CH:200:MET:SD	46:CH:266:PHE:HB2	2.51	0.51
45:CI:88:HIS:CD2	45:CI:90:GLU:HG3	2.46	0.51
46:CN:183:TYR:HE2	46:CN:394:PHE:HB2	1.76	0.51
45:DI:242:LEU:HD11	45:DI:252:ILE:HG23	1.93	0.51
45:DM:268:MET:SD	45:DM:380:ASN:HB2	2.51	0.51
46:EB:254:ALA:O	46:EB:258:ILE:HG22	2.11	0.51
45:EK:140:SER:OG	47:EK:501:GTP:O2B	2.28	0.51
45:EM:109:THR:HG22	45:EM:110:ILE:HG23	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EN:377:MET:O	46:EN:381:VAL:HG22	2.11	0.51
45:FA:183:GLU:N	45:FA:184:PRO:HD2	2.26	0.51
45:FK:414:GLU:HB3	45:FK:417:GLU:HG3	1.92	0.51
46:HD:226:ASN:HD21	49:HD:501:GDP:HN1	1.58	0.51
46:HF:221:THR:HG23	46:HF:223:GLY:H	1.76	0.51
45:HG:260:VAL:HG13	45:HG:265:ILE:O	2.11	0.51
45:HM:24:PHE:O	45:HM:28:HIS:ND1	2.39	0.51
46:IF:334:GLN:NE2	46:IF:348:ASN:OD1	2.44	0.51
45:II:288:VAL:HA	45:II:291:ILE:HG12	1.93	0.51
45:JA:183:GLU:N	45:JA:184:PRO:HD2	2.26	0.51
46:JD:74:ASP:OD1	46:JD:75:SER:N	2.44	0.51
45:JG:250:VAL:HG13	45:JG:254:GLU:HB2	1.93	0.51
46:KL:84:LEU:O	46:KL:86:ARG:NH1	2.32	0.51
46:LB:304:ASP:OD2	46:LB:306:ARG:HG2	2.11	0.51
46:MB:113:ILE:HD13	46:MB:150:LEU:HD22	1.93	0.51
46:MB:132:GLY:HA3	46:MB:163:ILE:HG22	1.93	0.51
45:MC:210:TYR:CE1	45:MC:227:LEU:HD11	2.46	0.51
45:NA:414:GLU:CD	45:NA:416:GLY:H	2.14	0.51
45:NE:147:SER:HB2	45:NE:190:SER:HB3	1.93	0.51
45:NK:56:THR:HG21	45:NK:60:LYS:HG2	1.93	0.51
45:NM:389:SER:O	45:NM:393:HIS:ND1	2.41	0.51
45:OC:205:ASP:OD1	45:OC:303:ALA:HA	2.10	0.51
45:OM:203:MET:HG3	45:OM:384:ILE:HD11	1.93	0.51
45:PA:310:GLY:HA3	45:PA:383:ALA:HB2	1.93	0.51
45:PC:68:LEU:HD21	45:PC:118:CYS:HB2	1.93	0.51
46:PH:396:HIS:CD2	46:PH:397:TRP:HD1	2.29	0.51
46:PN:1:MET:SD	46:PN:2:ARG:N	2.83	0.51
45:RA:188:ILE:HG23	45:RA:425:LEU:HD11	1.93	0.51
45:RC:53:PHE:HB3	45:RC:61:HIS:HB3	1.92	0.51
46:SD:380:ARG:O	46:SD:384:GLN:HG2	2.11	0.51
45:SE:171:ILE:HG21	47:SE:501:GTP:HN22	1.76	0.51
46:SF:2:ARG:NH2	45:SG:71:GLU:OE2	2.34	0.51
45:TA:317:MET:HA	45:TA:377:MET:HA	1.92	0.51
45:TC:101:ASN:HA	45:TC:144:GLY:H	1.75	0.51
45:UA:121:ARG:CZ	45:UA:124:LYS:HE2	2.41	0.51
45:UA:121:ARG:HE	45:UA:125:LEU:HG	1.76	0.51
45:UC:108:TYR:O	45:UC:112:LYS:NZ	2.32	0.51
45:UC:226:ASN:ND2	45:UC:367:ASP:OD2	2.44	0.51
45:UE:147:SER:HB2	45:UE:190:SER:HB3	1.92	0.51
46:UF:169:VAL:HG22	46:UF:202:ILE:HB	1.92	0.51
46:UH:377:MET:HG2	46:UH:380:ARG:HH21	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UI:128:ASN:OD1	45:VG:285:GLN:NE2	2.44	0.51
46:UJ:169:VAL:HG22	46:UJ:202:ILE:HB	1.92	0.51
46:UJ:248:SER:HA	46:UJ:252:LYS:HD2	1.93	0.51
46:UN:87:PRO:HA	46:UN:90:PHE:CD2	2.45	0.51
46:UN:257:LEU:HD11	46:UN:314:SER:HB3	1.93	0.51
46:VB:135:ILE:HG13	46:VB:152:ILE:HD11	1.92	0.51
45:VC:216:ASN:HB3	45:VC:275:ILE:O	2.11	0.51
46:VJ:3:GLU:HG2	46:VJ:49:VAL:HA	1.93	0.51
45:VK:102:ASN:OD1	45:VK:105:ARG:N	2.39	0.51
45:VK:245:ASP:OD1	45:VK:245:ASP:N	2.43	0.51
45:WA:265:ILE:O	45:WA:265:ILE:HG13	2.11	0.51
46:WL:218:THR:HG23	46:WL:219:THR:HG23	1.93	0.51
45:WM:401:LYS:HE2	46:WN:344:TRP:CE3	2.46	0.51
11:1S:140:ARG:NE	11:1S:142:ASP:OD2	2.44	0.50
4:2D:35:LYS:NZ	45:DK:84:ARG:HH11	2.09	0.50
4:2D:94:ASN:OD1	45:EK:26:LEU:HD13	2.10	0.50
23:2O:169:GLU:O	23:2O:172:LEU:HB2	2.11	0.50
13:2U:414:THR:HG23	13:2U:461:ASN:HB2	1.93	0.50
14:2V:22:ARG:HG3	14:2V:23:TYR:HD1	1.75	0.50
14:2V:59:LYS:NZ	14:2V:64:HIS:HD2	2.08	0.50
16:3B:181:LYS:HB3	16:3B:184:TYR:HB3	1.93	0.50
23:3O:283:LYS:O	23:3O:287:GLU:N	2.40	0.50
14:3V:247:GLU:O	14:3V:251:LEU:N	2.30	0.50
35:5S:131:GLY:HA3	35:5S:135:ILE:HD11	1.93	0.50
40:6G:201:MET:O	46:VF:336:LYS:NZ	2.40	0.50
40:6G:235:ILE:HD11	45:UE:114:ILE:HD11	1.93	0.50
45:AA:176:GLN:O	46:AB:347:ASN:ND2	2.42	0.50
45:AE:91:GLN:HG2	45:AE:121:ARG:HD2	1.92	0.50
46:BF:102:ALA:O	46:BF:106:TYR:HB2	2.11	0.50
45:BG:27:GLU:OE2	45:BG:236:SER:OG	2.26	0.50
45:BK:257:THR:HG22	46:BN:397:TRP:CZ3	2.45	0.50
45:CC:27:GLU:OE2	45:CC:236:SER:OG	2.27	0.50
46:CD:134:GLN:HA	46:CD:165:GLU:HB2	1.93	0.50
45:CM:2:ARG:HH21	45:CM:131:GLY:HA3	1.75	0.50
45:CM:111:GLY:O	45:CM:115:VAL:HG13	2.11	0.50
45:DA:262:TYR:HB2	45:DA:265:ILE:HG22	1.91	0.50
45:DC:9:VAL:HG12	45:DC:146:GLY:HA2	1.93	0.50
45:DC:288:VAL:HA	45:DC:291:ILE:HG12	1.93	0.50
45:DM:51:THR:HG21	45:DM:243:ARG:HB3	1.92	0.50
46:EN:114:ASP:OD1	46:EN:115:SER:N	2.43	0.50
46:FD:173:PRO:HD2	46:FD:174:LYS:NZ	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FK:340:THR:HG23	45:FK:341:ILE:HG13	1.93	0.50
46:FL:63:ALA:O	46:FL:89:ASN:ND2	2.44	0.50
45:GA:431:ASP:HA	45:GA:434:GLU:OE2	2.11	0.50
45:GC:191:THR:HA	45:GC:194:LEU:HG	1.93	0.50
45:GE:210:TYR:CE1	45:GE:227:LEU:HD11	2.47	0.50
45:GK:184:PRO:O	45:GK:188:ILE:HG12	2.11	0.50
45:HA:194:LEU:O	45:HA:198:THR:OG1	2.23	0.50
46:HB:164:MET:HB2	46:HB:197:ASP:H	1.74	0.50
45:HM:103:PHE:H	45:HM:408:TYR:HE2	1.59	0.50
46:HN:235:GLY:HA2	46:HN:318:ARG:HH11	1.76	0.50
45:II:175:PRO:O	45:II:394:LYS:NZ	2.38	0.50
45:JI:210:TYR:HH	46:JJ:323:THR:HG1	1.58	0.50
45:JK:319:TYR:HB3	45:JK:323:VAL:HG11	1.93	0.50
45:JM:212:ILE:HD13	45:JM:215:ARG:NH2	2.25	0.50
46:JN:211:CYS:HB3	46:JN:220:PRO:HG3	1.92	0.50
46:KF:51:TYR:HB3	46:KF:59:TYR:HB3	1.92	0.50
46:LD:180:VAL:O	46:LD:180:VAL:HG12	2.10	0.50
45:MA:245:ASP:OD1	45:MA:245:ASP:N	2.44	0.50
46:MF:248:SER:HA	46:MF:252:LYS:HD2	1.93	0.50
45:MG:9:VAL:HG12	45:MG:68:LEU:HB2	1.92	0.50
45:MI:141:VAL:HG11	45:MI:172:TYR:CD1	2.45	0.50
45:MM:118:CYS:O	45:MM:122:ILE:HG12	2.10	0.50
46:ND:190:HIS:CD2	46:ND:411:ALA:HA	2.46	0.50
46:ND:342:VAL:HG23	46:ND:345:ILE:HG22	1.92	0.50
45:NG:169:PHE:HA	45:NG:202:VAL:HG22	1.91	0.50
46:NH:372:THR:HA	46:NH:422:TYR:CE2	2.37	0.50
45:OA:172:TYR:HE2	45:OA:203:MET:HA	1.75	0.50
46:OJ:398:TYR:O	46:OJ:403:MET:HB3	2.11	0.50
46:ON:117:LEU:HA	46:ON:120:VAL:HG12	1.93	0.50
45:PA:251:ASP:N	45:PA:254:GLU:OE2	2.30	0.50
46:PD:309:ARG:H	46:PD:372:THR:HG22	1.75	0.50
46:PH:30:ILE:HD11	46:PH:47:ILE:HD11	1.93	0.50
45:PK:180:ALA:HB3	45:PK:183:GLU:HG2	1.92	0.50
46:PL:87:PRO:HA	46:PL:90:PHE:HD2	1.76	0.50
45:PM:21:TRP:HZ2	45:PM:65:ALA:HB2	1.76	0.50
46:PN:139:LEU:HD22	46:PN:170:VAL:HG12	1.92	0.50
46:QB:362:LYS:HG3	46:QB:363:MET:HG3	1.93	0.50
46:QD:375:GLN:HG3	46:QD:419:VAL:HG13	1.94	0.50
45:QM:226:ASN:HA	45:QM:229:ARG:HD2	1.92	0.50
46:RB:331:LEU:O	46:RB:334:GLN:NE2	2.44	0.50
45:RC:188:ILE:HD13	45:RC:422:ARG:HH21	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RD:83:GLN:O	46:SD:281:TYR:OH	2.22	0.50
46:RD:101:TRP:NE1	46:RD:145:SER:O	2.44	0.50
45:RG:98:ASP:OD1	45:RG:99:ALA:N	2.44	0.50
45:RG:210:TYR:CZ	45:RG:227:LEU:HD11	2.46	0.50
46:RH:166:THR:HG1	46:RH:199:CYS:HG	1.59	0.50
45:SE:166:LYS:N	45:SE:199:ASP:OD2	2.42	0.50
46:SH:105:HIS:CE1	46:SH:150:LEU:HD12	2.45	0.50
46:TL:156:ARG:HH12	46:TL:160:PRO:HB3	1.76	0.50
46:TN:44:LEU:HA	46:TN:47:ILE:HD11	1.91	0.50
46:UD:105:HIS:CD2	46:UD:150:LEU:HB2	2.47	0.50
45:UE:213:CYS:HA	45:UE:217:LEU:HD12	1.93	0.50
46:UH:107:THR:OG1	46:UH:108:GLU:OE1	2.24	0.50
45:VK:180:ALA:HA	46:VL:350:LYS:HE2	1.93	0.50
45:VK:217:LEU:HB2	45:VK:219:ILE:HG22	1.92	0.50
46:VN:362:LYS:HG3	46:VN:363:MET:HE3	1.93	0.50
46:WB:268:ILE:HG22	46:WB:368:VAL:HG12	1.94	0.50
46:WH:62:ARG:HB2	46:WH:123:GLU:OE1	2.11	0.50
45:WK:88:HIS:HB3	45:WK:91:GLN:HG2	1.92	0.50
45:WK:329:ASN:HA	45:WK:332:ILE:HG22	1.94	0.50
45:WM:147:SER:HB2	45:WM:190:SER:HB3	1.92	0.50
27:2C:225:THR:HG22	27:2C:226:LYS:HG2	1.94	0.50
29:2G:94:ILE:HG23	29:2G:95:TYR:N	2.26	0.50
20:2K:269:GLU:OE1	45:GK:370:LYS:N	2.43	0.50
13:2U:468:SER:O	13:2U:493:PHE:HB2	2.10	0.50
14:2V:238:LYS:HZ3	46:WH:218:THR:HB	1.76	0.50
32:3D:58:ALA:HB1	32:3D:68:VAL:HG11	1.92	0.50
32:3D:93:ASP:OD2	32:3D:96:GLY:N	2.44	0.50
21:3L:48:GLU:HA	21:3L:51:TYR:HD2	1.75	0.50
11:3S:162:PRO:HA	11:3S:165:LEU:HG	1.93	0.50
37:5E:116:TYR:OH	45:NA:84:ARG:NH2	2.43	0.50
34:6R:500:VAL:HG21	46:EN:32:PRO:HD2	1.93	0.50
44:8R:120:TYR:CD1	45:PI:370:LYS:HE3	2.46	0.50
45:AC:288:VAL:HA	45:AC:291:ILE:HG12	1.93	0.50
45:AG:254:GLU:HG2	46:AJ:98:GLY:HA2	1.92	0.50
45:AK:265:ILE:HG12	45:AK:432:TYR:HE1	1.76	0.50
46:BJ:372:THR:HA	46:BJ:422:TYR:HE2	1.76	0.50
45:BK:22:GLU:HG3	45:BK:83:TYR:CE2	2.46	0.50
46:CB:208:TYR:CE1	46:CB:225:LEU:HD11	2.45	0.50
46:CB:273:LEU:H	46:CB:292:GLN:NE2	2.08	0.50
46:CN:24:ILE:O	46:CN:28:HIS:HB2	2.10	0.50
46:CN:182:PRO:HG3	46:CN:384:GLN:HG3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DH:208:TYR:CE1	46:DH:225:LEU:HD11	2.47	0.50
45:DK:98:ASP:OD1	45:DK:98:ASP:N	2.42	0.50
46:DL:63:ALA:O	46:DL:89:ASN:ND2	2.42	0.50
45:EA:326:LYS:HG2	46:EB:208:TYR:HE1	1.76	0.50
46:EB:324:LYS:NZ	45:EC:210:TYR:HD2	2.10	0.50
45:EE:167:LEU:HD11	45:EE:252:ILE:HG23	1.93	0.50
46:EF:8:GLN:HE22	46:EF:17:GLY:HA3	1.77	0.50
46:EJ:265:PHE:HB3	46:EJ:374:ILE:HD13	1.93	0.50
46:EL:178:THR:HG22	46:EL:180:VAL:H	1.76	0.50
46:EN:21:TRP:CH2	46:EN:61:PRO:HB3	2.46	0.50
45:FE:402:ARG:HG3	45:FE:405:VAL:HG21	1.93	0.50
46:FH:139:LEU:HD13	46:FH:168:SER:HB3	1.93	0.50
46:GB:221:THR:HG23	46:GB:223:GLY:H	1.76	0.50
45:HA:398:MET:HA	45:HA:401:LYS:CE	2.40	0.50
46:HB:260:PHE:HB2	46:HB:263:LEU:HD13	1.91	0.50
46:HF:148:GLY:O	46:HF:152:ILE:HG13	2.10	0.50
46:HN:87:PRO:HG2	46:IN:278:SER:HB2	1.93	0.50
45:IA:72:PRO:HD2	46:IB:2:ARG:HH12	1.76	0.50
45:IE:88:HIS:CE1	45:IE:90:GLU:HG2	2.46	0.50
45:IE:326:LYS:HD3	46:IH:220:PRO:HD2	1.91	0.50
45:II:141:VAL:HG21	45:II:172:TYR:CD1	2.46	0.50
46:KB:12:CYS:SG	46:KB:13:GLY:N	2.85	0.50
46:KF:289:LEU:HD11	46:KF:363:MET:HB3	1.94	0.50
45:KK:203:MET:HG3	45:KK:384:ILE:HD11	1.93	0.50
45:LE:68:LEU:HD11	45:LE:118:CYS:SG	2.51	0.50
46:LJ:309:ARG:HG3	46:LJ:426:GLN:HG3	1.92	0.50
46:MD:201:VAL:HG21	46:MD:374:ILE:HD11	1.93	0.50
46:NF:372:THR:HA	46:NF:422:TYR:CE2	2.46	0.50
46:NH:347:ASN:C	46:NH:347:ASN:ND2	2.65	0.50
45:NI:183:GLU:N	45:NI:184:PRO:HD2	2.26	0.50
45:NK:180:ALA:HB3	45:NK:183:GLU:HB3	1.92	0.50
45:OA:75:ILE:HG21	45:OA:94:SER:HB2	1.92	0.50
46:OD:309:ARG:NH2	46:OD:341:PHE:O	2.45	0.50
45:OM:306:ASP:HB3	45:OM:309:HIS:HB2	1.92	0.50
45:PA:79:ARG:HH11	45:PA:92:LEU:HD13	1.77	0.50
46:PD:99:ASN:HA	46:PD:142:GLY:H	1.76	0.50
46:PF:193:VAL:O	46:PF:264:HIS:NE2	2.40	0.50
46:PH:149:THR:HA	46:PH:152:ILE:HD12	1.92	0.50
45:PK:174:SER:HB2	45:PK:177:VAL:O	2.11	0.50
45:PM:319:TYR:N	45:PM:354:GLY:O	2.44	0.50
46:QD:347:ASN:O	45:QE:181:VAL:HG12	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QE:20:CYS:HA	45:QE:232:ALA:HB1	1.92	0.50
45:QE:25:CYS:O	45:QE:30:ILE:N	2.44	0.50
45:QG:171:ILE:O	45:QG:171:ILE:HG13	2.10	0.50
45:QK:284:GLU:CD	45:QK:286:LEU:H	2.15	0.50
45:RE:350:GLY:HA2	46:RF:179:VAL:HG13	1.93	0.50
46:RF:379:LYS:NZ	46:RF:419:VAL:HG11	2.26	0.50
45:RG:69:ASP:OD1	45:RG:70:LEU:N	2.44	0.50
45:SA:217:LEU:HD13	45:SA:229:ARG:NH2	2.27	0.50
46:SB:286:VAL:HG21	46:SB:325:GLU:HB3	1.93	0.50
45:SC:194:LEU:O	45:SC:198:THR:HG22	2.12	0.50
45:SM:209:ILE:HD12	45:SM:227:LEU:HD22	1.93	0.50
45:TA:64:ARG:NH1	45:TA:129:CYS:SG	2.85	0.50
45:TE:115:VAL:HG11	45:TE:152:LEU:HD23	1.94	0.50
46:TF:372:THR:HA	46:TF:422:TYR:CE2	2.46	0.50
46:TH:226:ASN:HD21	49:TH:501:GDP:HN1	1.58	0.50
46:UB:210:ILE:O	46:UB:214:THR:OG1	2.28	0.50
46:UB:270:PHE:HD1	46:UB:366:THR:HG22	1.76	0.50
45:UE:68:LEU:HD11	45:UE:118:CYS:SG	2.50	0.50
45:UI:241:SER:OG	45:UI:250:VAL:O	2.20	0.50
46:UN:22:GLU:HG3	46:UN:81:PHE:CD2	2.46	0.50
45:VC:71:GLU:HG2	45:VC:73:THR:H	1.76	0.50
46:VF:324:LYS:HA	46:VF:327:ASP:HB2	1.94	0.50
46:VH:202:ILE:HD11	46:VH:268:ILE:HD11	1.92	0.50
45:VK:66:VAL:HG11	45:VK:122:ILE:HD11	1.92	0.50
46:VL:221:THR:HG23	46:VL:223:GLY:H	1.76	0.50
45:VM:221:ARG:HH22	46:VN:322:SER:H	1.58	0.50
46:VN:55:THR:HG23	46:WN:283:ALA:HA	1.93	0.50
46:VN:375:GLN:HB3	46:VN:422:TYR:CE2	2.40	0.50
45:WA:69:ASP:OD1	45:WA:70:LEU:N	2.44	0.50
45:WA:338:LYS:NZ	45:WA:340:THR:HG22	2.26	0.50
45:WC:73:THR:OG1	46:WD:2:ARG:NH2	2.45	0.50
45:WG:72:PRO:HD2	46:WH:2:ARG:NH2	2.27	0.50
6:0F:144:GLN:HA	31:2I:132:ARG:NH2	2.27	0.50
18:1I:183:ILE:HG21	46:KH:77:ARG:HG2	1.92	0.50
14:1V:133:TYR:CG	46:LL:421:GLU:HG3	2.45	0.50
16:2B:180:GLU:HG3	26:2W:272:LYS:NZ	2.26	0.50
5:2E:92:LEU:HD23	5:2E:169:SER:HA	1.92	0.50
21:2L:393:HIS:HA	21:2L:396:ASN:ND2	2.26	0.50
24:2P:367:GLU:O	24:2P:371:ARG:HG2	2.11	0.50
11:2S:104:THR:HB	46:MJ:156:ARG:HH22	1.77	0.50
13:2U:512:ARG:HB3	13:2U:529:ASP:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:4F:149:LYS:HD2	33:4F:150:PRO:HD2	1.92	0.50
36:5A:107:TYR:HA	36:5A:110:ARG:HD2	1.93	0.50
34:5R:246:GLN:HE21	45:BI:58:ALA:HB1	1.76	0.50
10:6Q:69:LEU:O	10:6Q:69:LEU:HD23	2.11	0.50
34:7R:335:VAL:HA	34:7R:368:GLN:HE22	1.76	0.50
47:AC:501:GTP:O1G	46:AD:252:LYS:NZ	2.39	0.50
45:AG:328:VAL:HG11	45:AG:353:VAL:HG21	1.92	0.50
45:AK:192:HIS:NE2	45:AK:424:ASP:OD2	2.45	0.50
45:BC:5:ILE:HG13	45:BC:132:LEU:HD11	1.94	0.50
45:BE:254:GLU:HB3	46:BH:98:GLY:HA2	1.92	0.50
45:BG:259:LEU:HD11	45:BG:316:SER:HB2	1.93	0.50
45:CG:257:THR:HG21	46:CH:98:GLY:O	2.12	0.50
45:DA:53:PHE:HB3	45:DA:61:HIS:HB3	1.93	0.50
45:DA:67:PHE:O	45:DA:93:ILE:N	2.44	0.50
45:DE:251:ASP:H	45:DE:254:GLU:HB2	1.75	0.50
46:DJ:105:HIS:CE1	46:DJ:150:LEU:HD13	2.46	0.50
45:DK:296:PHE:CE2	45:DK:335:ILE:HG21	2.46	0.50
46:DL:238:CYS:HB2	46:DL:318:ARG:NH1	2.24	0.50
45:DM:196:GLU:HG3	45:DM:197:HIS:CD2	2.46	0.50
45:EI:256:GLN:HA	45:EI:260:VAL:HG12	1.94	0.50
46:EJ:294:PHE:HD2	46:EJ:333:VAL:HG21	1.75	0.50
46:EN:22:GLU:HG2	46:EN:81:PHE:HD1	1.76	0.50
45:FC:231:ILE:O	45:FC:235:ILE:HG12	2.12	0.50
46:GF:143:THR:OG1	49:GF:501:GDP:O1B	2.27	0.50
45:GM:104:ALA:HB2	45:GM:413:MET:HE2	1.92	0.50
45:HA:424:ASP:OD1	45:HA:425:LEU:N	2.44	0.50
46:HD:107:THR:OG1	46:HD:108:GLU:OE1	2.26	0.50
46:HN:218:THR:HG23	46:HN:219:THR:HG23	1.92	0.50
45:IC:155:GLU:OE1	45:IC:197:HIS:NE2	2.45	0.50
46:IF:12:CYS:O	46:IF:16:ILE:HG12	2.12	0.50
45:JA:177:VAL:HG13	46:JB:327:ASP:OD2	2.12	0.50
45:JI:68:LEU:HD22	45:JI:153:LEU:HD11	1.93	0.50
46:KB:253:LEU:O	46:KB:257:LEU:HG	2.11	0.50
46:KL:301:CYS:HB3	46:KL:377:MET:HE1	1.93	0.50
46:LH:379:LYS:HD3	46:LH:419:VAL:HG11	1.93	0.50
45:LI:407:TRP:CZ3	46:LJ:255:VAL:HA	2.46	0.50
46:LN:288:GLU:O	46:LN:291:GLN:HG3	2.12	0.50
46:MB:135:ILE:HG21	46:MB:152:ILE:HD11	1.92	0.50
45:ME:7:ILE:HB	45:ME:137:VAL:HG12	1.92	0.50
45:ME:272:TYR:HB3	45:ME:275:ILE:HD11	1.92	0.50
45:MI:68:LEU:HD23	45:MI:93:ILE:HB	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MJ:73:MET:HE3	46:MJ:90:PHE:HD1	1.75	0.50
46:MJ:372:THR:HA	46:MJ:422:TYR:CE2	2.44	0.50
45:NC:90:GLU:OE1	45:OC:280:LYS:HD2	2.12	0.50
45:NC:183:GLU:N	45:NC:184:PRO:HD2	2.26	0.50
45:NM:112:LYS:HA	45:NM:115:VAL:HG12	1.94	0.50
45:OA:231:ILE:O	45:OA:235:ILE:HG12	2.12	0.50
46:OB:173:PRO:HD3	46:OB:380:ARG:CZ	2.41	0.50
45:OE:50:ASN:O	45:OE:64:ARG:NH1	2.37	0.50
46:OH:113:ILE:HA	46:OH:116:VAL:HG12	1.92	0.50
45:PA:326:LYS:NZ	46:PD:220:PRO:O	2.43	0.50
45:PA:384:ILE:HG22	45:PA:388:PHE:HE2	1.77	0.50
46:PD:73:MET:HA	46:PD:76:VAL:HG12	1.93	0.50
46:PN:139:LEU:HD13	46:PN:168:SER:HB3	1.93	0.50
46:PN:234:SER:OG	46:PN:241:ARG:NH2	2.45	0.50
46:QD:289:LEU:HD13	46:QD:365:VAL:HG23	1.93	0.50
45:QG:386:GLU:HB3	45:QG:390:ARG:HH22	1.76	0.50
45:RE:102:ASN:ND2	45:RE:105:ARG:HG3	2.27	0.50
45:RK:88:HIS:CE1	45:RK:90:GLU:HG2	2.46	0.50
46:RL:83:GLN:O	46:SL:281:TYR:OH	2.21	0.50
45:SE:242:LEU:HD21	45:SE:252:ILE:HG12	1.92	0.50
46:SF:345:ILE:HG23	46:SF:348:ASN:HB3	1.94	0.50
46:SH:67:ASP:OD1	46:SH:68:LEU:N	2.44	0.50
46:SL:372:THR:HA	46:SL:422:TYR:CE2	2.46	0.50
46:TD:258:ILE:HD11	45:TE:407:TRP:HZ2	1.75	0.50
45:TE:55:GLU:OE1	45:TE:61:HIS:NE2	2.45	0.50
46:TN:88:ASP:OD1	46:TN:89:ASN:N	2.44	0.50
46:UD:258:ILE:HD11	45:UE:407:TRP:HZ2	1.76	0.50
46:UH:25:SER:OG	46:UH:30:ILE:O	2.28	0.50
45:UI:101:ASN:HA	45:UI:144:GLY:H	1.76	0.50
46:UJ:372:THR:HA	46:UJ:422:TYR:HE2	1.76	0.50
46:VH:282:ARG:NH1	46:VH:292:GLN:OE1	2.38	0.50
45:WA:140:SER:OG	47:WA:501:GTP:O2B	2.29	0.50
46:WF:208:TYR:HE1	46:WF:220:PRO:HB2	1.76	0.50
45:WG:174:SER:HB2	45:WG:177:VAL:O	2.12	0.50
46:WL:16:ILE:HD12	46:WL:229:VAL:HG11	1.93	0.50
16:2B:19:HIS:CD2	16:2B:132:ARG:HH21	2.28	0.50
4:2D:6:ARG:HG3	4:2D:7:LEU:HG	1.92	0.50
31:2I:140:ILE:O	46:GD:306:ARG:NH2	2.43	0.50
11:2S:150:GLN:NE2	45:WG:164:LYS:HG2	2.27	0.50
27:3C:209:GLU:O	27:3C:213:ILE:HG12	2.12	0.50
21:3L:154:LEU:O	21:3L:157:PRO:HD2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:3S:140:ARG:HD2	10:5Q:72:LYS:HZ2	1.76	0.50
13:3U:60:ILE:HD13	13:3U:107:SER:HA	1.93	0.50
13:3U:292:HIS:ND1	13:3U:306:ASP:OD1	2.42	0.50
37:5G:13:ASN:HB3	37:5G:22:LYS:O	2.12	0.50
40:6G:100:PHE:HE1	46:VJ:336:LYS:NZ	2.09	0.50
40:6G:207:TYR:CD2	46:VF:306:ARG:HD2	2.47	0.50
45:AG:226:ASN:ND2	45:AG:367:ASP:OD2	2.42	0.50
46:CD:133:PHE:HB2	46:CD:164:MET:HG3	1.94	0.50
45:CE:89:PRO:HD3	45:DE:283:HIS:ND1	2.26	0.50
46:CH:371:SER:O	46:CH:422:TYR:OH	2.18	0.50
46:CL:208:TYR:CE1	46:CL:225:LEU:HD11	2.47	0.50
45:CM:121:ARG:HH22	45:CM:124:LYS:HD2	1.76	0.50
45:CM:167:LEU:HA	45:CM:200:VAL:HB	1.93	0.50
45:DM:17:GLY:HA2	45:DM:20:CYS:SG	2.51	0.50
46:DN:58:ARG:HD2	46:DN:59:TYR:N	2.26	0.50
45:EA:66:VAL:HA	45:EA:91:GLN:NE2	2.25	0.50
46:ED:294:PHE:HE2	46:ED:333:VAL:HG11	1.75	0.50
45:EK:392:ASP:OD1	45:EK:422:ARG:NH1	2.44	0.50
46:EN:135:ILE:HG21	46:EN:152:ILE:HD11	1.92	0.50
46:FB:265:PHE:CD2	46:FB:378:PHE:HZ	2.29	0.50
45:FG:76:ASP:OD1	45:FG:79:ARG:NH2	2.37	0.50
46:FJ:298:ASN:ND2	46:FJ:298:ASN:O	2.44	0.50
46:FN:289:LEU:HD11	46:FN:363:MET:CG	2.40	0.50
46:GB:3:GLU:HG3	46:GB:49:VAL:HA	1.92	0.50
45:GE:241:SER:OG	45:GE:250:VAL:O	2.25	0.50
46:HD:52:ASN:OD1	46:HD:62:ARG:NH2	2.44	0.50
46:HJ:3:GLU:OE1	46:HJ:3:GLU:N	2.42	0.50
45:HM:242:LEU:HD11	45:HM:252:ILE:HG13	1.92	0.50
46:HN:169:VAL:HG12	46:HN:202:ILE:HB	1.92	0.50
45:IE:98:ASP:O	45:IE:105:ARG:NH1	2.44	0.50
45:IG:68:LEU:HD23	45:IG:93:ILE:HB	1.93	0.50
46:IJ:169:VAL:HG22	46:IJ:202:ILE:HB	1.93	0.50
46:JD:125:GLU:OE2	46:JD:159:TYR:OH	2.23	0.50
45:JG:52:PHE:HZ	45:JG:239:THR:HG21	1.77	0.50
46:JH:295:ASP:HB3	46:JH:298:ASN:HB2	1.94	0.50
46:JJ:39:ASP:OD1	46:JJ:39:ASP:N	2.45	0.50
46:KB:11:GLN:HA	46:KB:72:THR:HG21	1.94	0.50
46:KF:334:GLN:NE2	46:KF:348:ASN:OD1	2.44	0.50
45:LI:72:PRO:HD2	46:LJ:2:ARG:HH12	1.75	0.50
45:MG:258:ASN:HD21	46:MJ:178:THR:HG23	1.76	0.50
45:NC:294:SER:HA	45:NC:297:GLU:HG3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NK:181:VAL:HG12	46:NL:256:ASN:HD22	1.77	0.50
46:OD:42:LEU:HA	46:OD:45:GLU:HG2	1.92	0.50
46:OF:218:THR:HG22	46:OF:219:THR:HG23	1.93	0.50
45:OM:248:LEU:HD13	45:OM:355:ILE:HD12	1.94	0.50
46:PD:49:VAL:HG11	46:PD:241:ARG:HG2	1.93	0.50
46:QB:238:CYS:HB2	46:QB:318:ARG:HD3	1.93	0.50
46:QD:256:ASN:OD1	45:QE:181:VAL:HG22	2.12	0.50
45:QG:36:MET:SD	45:QG:37:PRO:HD2	2.51	0.50
45:RC:183:GLU:N	45:RC:184:PRO:HD2	2.27	0.50
46:RF:213:ARG:HG3	46:RF:214:THR:N	2.26	0.50
46:RF:378:PHE:O	46:RF:382:ALA:N	2.42	0.50
46:RJ:3:GLU:HG3	46:RJ:62:ARG:NH1	2.26	0.50
46:RJ:63:ALA:O	46:RJ:89:ASN:ND2	2.45	0.50
46:RL:169:VAL:HA	46:RL:202:ILE:O	2.11	0.50
45:RM:381:SER:O	45:RM:384:ILE:HG12	2.12	0.50
46:RN:184:ASN:OD1	46:RN:185:ALA:N	2.45	0.50
45:SC:76:ASP:OD1	45:SC:79:ARG:NH2	2.36	0.50
46:SH:36:TYR:O	46:SH:37:HIS:ND1	2.45	0.50
46:SN:407:GLU:HA	46:SN:410:GLU:OE1	2.12	0.50
45:TA:203:MET:HG3	45:TA:384:ILE:HD11	1.93	0.50
46:TB:253:LEU:HD21	46:TB:316:LEU:HD11	1.94	0.50
45:TC:322:ASP:OD1	45:TC:373:ARG:NH1	2.44	0.50
46:TD:377:MET:HA	46:TD:380:ARG:HG2	1.92	0.50
45:UC:89:PRO:HG2	45:VA:280:LYS:HB3	1.94	0.50
45:UK:88:HIS:CE1	45:UK:90:GLU:HG2	2.46	0.50
45:UK:260:VAL:HB	46:UL:397:TRP:HZ2	1.75	0.50
45:VC:407:TRP:HE1	46:VD:258:ILE:HG13	1.77	0.50
45:VM:315:CYS:HA	45:VM:379:SER:HA	1.92	0.50
45:WE:66:VAL:HG11	45:WE:122:ILE:HD11	1.93	0.50
45:WE:185:TYR:HE2	45:WE:404:PHE:HB2	1.75	0.50
46:WH:198:GLU:HG2	46:WH:266:PHE:HE2	1.77	0.50
46:WH:211:CYS:SG	46:WH:220:PRO:HB3	2.51	0.50
45:WM:55:GLU:OE2	45:WM:57:GLY:N	2.44	0.50
26:1W:234:GLN:HG2	26:1W:238:ASN:HD21	1.75	0.50
21:2L:771:THR:HG22	21:2L:806:LEU:HB2	1.94	0.50
21:2L:905:THR:OG1	21:2L:908:GLN:OE1	2.29	0.50
23:2O:343:ALA:O	23:2O:346:GLN:HG3	2.11	0.50
23:2O:360:GLU:O	23:2O:364:LYS:HG2	2.11	0.50
24:2P:364:ASP:O	24:2P:368:LYS:N	2.35	0.50
13:2U:68:LYS:HG2	13:2U:69:TYR:H	1.76	0.50
1:3A:114:ALA:HB3	25:3R:166:TYR:CZ	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:3I:277:ASP:OD1	31:3I:278:MET:N	2.45	0.50
21:3L:100:ASP:OD1	21:3L:101:PHE:N	2.45	0.50
36:5A:137:ARG:NH1	36:5A:175:LYS:O	2.44	0.50
34:6R:135:MET:HG3	34:6R:136:ASN:OD1	2.12	0.50
45:AA:231:ILE:O	45:AA:235:ILE:HG12	2.11	0.50
45:AG:220:GLU:HG2	45:AG:221:ARG:HG3	1.93	0.50
46:AL:262:ARG:HG3	46:AL:263:LEU:HD12	1.94	0.50
45:BA:248:LEU:HD13	45:BA:355:ILE:HD12	1.93	0.50
45:BM:224:TYR:HD1	45:BM:227:LEU:HD12	1.75	0.50
45:CG:244:PHE:HB2	45:CG:356:ASN:HD21	1.76	0.50
45:CG:264:ARG:HH11	45:CG:264:ARG:HG3	1.77	0.50
45:CI:129:CYS:SG	45:CI:130:THR:N	2.84	0.50
45:CK:284:GLU:HG2	45:CK:286:LEU:HD22	1.93	0.50
46:CL:113:ILE:HA	46:CL:116:VAL:HG12	1.93	0.50
46:CN:86:ARG:HE	46:CN:87:PRO:HD2	1.76	0.50
45:DI:256:GLN:HG3	46:DJ:397:TRP:CH2	2.47	0.50
46:DN:15:GLN:OE1	46:DN:15:GLN:N	2.44	0.50
46:DN:198:GLU:HG2	46:DN:266:PHE:HE2	1.76	0.50
46:DN:375:GLN:HE22	46:DN:423:GLN:HB3	1.77	0.50
45:EA:214:ARG:HB3	45:EA:215:ARG:NH2	2.26	0.50
45:EG:69:ASP:OD1	45:EG:70:LEU:N	2.45	0.50
46:EL:67:ASP:OD1	46:EL:68:LEU:N	2.43	0.50
46:EN:6:HIS:CE1	46:EN:134:GLN:HE22	2.28	0.50
45:FI:371:VAL:HG22	45:FI:373:ARG:H	1.76	0.50
45:FK:174:SER:HB2	45:FK:177:VAL:HB	1.93	0.50
46:FL:341:PHE:HB3	46:FL:348:ASN:HD21	1.74	0.50
46:GB:119:VAL:HA	46:GB:122:LYS:HG2	1.93	0.50
46:GB:326:VAL:HG21	46:GB:353:ILE:HD11	1.92	0.50
45:GC:183:GLU:N	45:GC:184:PRO:HD2	2.27	0.50
45:GC:292:THR:HG21	45:GC:331:SER:HB3	1.94	0.50
46:GH:135:ILE:HG22	46:GH:137:HIS:HD2	1.77	0.50
45:GM:116:ASP:OD1	45:GM:117:LEU:N	2.44	0.50
46:HB:3:GLU:HB2	46:HB:62:ARG:NH2	2.27	0.50
46:IB:268:ILE:HG22	46:IB:368:VAL:HG22	1.92	0.50
46:IB:318:ARG:HH11	46:IB:358:PRO:HG3	1.76	0.50
45:IG:242:LEU:HD11	45:IG:252:ILE:HG12	1.94	0.50
46:JB:282:ARG:NH2	46:JB:288:GLU:OE2	2.43	0.50
46:KD:239:CYS:SG	46:KD:247:ASN:HA	2.52	0.50
45:LA:402:ARG:NH2	45:LA:415:GLU:OE2	2.42	0.50
45:LC:26:LEU:HD13	45:LC:363:VAL:HG22	1.92	0.50
46:LF:166:THR:OG1	46:LF:199:CYS:SG	2.61	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LL:262:ARG:HD2	46:LL:421:GLU:OE2	2.11	0.50
45:LM:207:GLU:OE1	45:LM:304:LYS:NZ	2.43	0.50
45:ME:68:LEU:HD11	45:ME:118:CYS:SG	2.51	0.50
46:MJ:116:VAL:HA	46:MJ:119:VAL:HG12	1.94	0.50
46:ML:372:THR:HA	46:ML:422:TYR:HE2	1.75	0.50
45:NA:101:ASN:HA	45:NA:144:GLY:H	1.76	0.50
45:NA:290:GLU:O	45:NA:294:SER:N	2.41	0.50
45:NC:105:ARG:NH2	45:NC:411:GLU:OE2	2.44	0.50
46:OB:169:VAL:HG22	46:OB:202:ILE:HB	1.93	0.50
45:OC:27:GLU:OE2	45:OC:236:SER:OG	2.21	0.50
46:OD:67:ASP:OD1	46:OD:68:LEU:N	2.38	0.50
46:OF:105:HIS:CD2	46:OF:150:LEU:HB2	2.46	0.50
46:PB:350:LYS:HD3	46:PB:351:SER:N	2.26	0.50
45:PC:194:LEU:O	45:PC:198:THR:OG1	2.21	0.50
45:PE:280:LYS:HE3	45:PE:283:HIS:HB2	1.92	0.50
46:PF:297:LYS:H	46:PF:297:LYS:HD2	1.77	0.50
45:PI:140:SER:OG	47:PI:501:GTP:O2B	2.25	0.50
45:PI:217:LEU:HB2	45:PI:219:ILE:HG12	1.92	0.50
45:PM:127:ASP:OD1	45:PM:128:ASN:N	2.45	0.50
45:PM:128:ASN:OD1	45:PM:129:CYS:N	2.45	0.50
45:QA:349:THR:HG23	46:QB:179:VAL:HA	1.94	0.50
45:QA:392:ASP:HA	45:QA:422:ARG:HH12	1.76	0.50
45:QC:256:GLN:HE22	46:QD:397:TRP:HH2	1.58	0.50
46:QD:54:ALA:HA	46:RD:283:ALA:HB2	1.93	0.50
45:QI:141:VAL:HG22	45:QI:187:SER:HA	1.92	0.50
46:QJ:371:SER:O	46:QJ:422:TYR:OH	2.24	0.50
46:QL:221:THR:HG22	46:QL:223:GLY:H	1.76	0.50
46:RL:345:ILE:HG12	46:RL:348:ASN:HB3	1.93	0.50
45:RM:31:GLN:HG2	45:RM:33:ASP:OD1	2.11	0.50
45:RM:331:SER:O	45:RM:335:ILE:HG12	2.11	0.50
46:RN:179:VAL:O	46:RN:182:PRO:HD2	2.12	0.50
45:SA:427:ALA:HA	45:SA:430:LYS:NZ	2.27	0.50
45:SG:260:VAL:O	46:SH:397:TRP:NE1	2.41	0.50
45:SI:139:ASN:HD21	45:SI:170:THR:HG22	1.76	0.50
45:SK:328:VAL:HG11	45:SK:353:VAL:HG21	1.93	0.50
46:SN:234:SER:O	46:SN:241:ARG:NH1	2.40	0.50
45:TA:78:VAL:HB	45:TA:79:ARG:HH12	1.77	0.50
46:TB:68:LEU:HD12	46:TB:93:GLY:HA3	1.92	0.50
45:TI:254:GLU:OE1	46:TJ:99:ASN:ND2	2.45	0.50
45:TM:317:MET:SD	45:TM:317:MET:N	2.85	0.50
45:UE:245:ASP:OD1	45:UE:245:ASP:N	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UH:316:LEU:HD13	46:UH:352:SER:HB2	1.93	0.50
46:UJ:184:ASN:OD1	46:UJ:185:ALA:N	2.45	0.50
45:UM:399:TYR:O	45:UM:402:ARG:NH1	2.44	0.50
46:VD:107:THR:OG1	46:VD:108:GLU:OE1	2.29	0.50
45:VE:340:THR:HG23	45:VE:341:ILE:HG13	1.94	0.50
45:VG:286:LEU:O	45:VG:373:ARG:NH2	2.45	0.50
45:VK:68:LEU:HD11	45:VK:118:CYS:SG	2.51	0.50
46:VL:7:ILE:HD11	46:VL:120:VAL:HG21	1.93	0.50
45:VM:389:SER:O	45:VM:393:HIS:ND1	2.41	0.50
46:WH:237:THR:HG22	46:WH:241:ARG:HE	1.75	0.50
18:II:152:LYS:NZ	45:KE:364:PRO:O	2.31	0.50
1:2A:36:ARG:HE	1:2A:38:SER:N	2.10	0.50
4:2D:173:GLY:O	45:EK:79:ARG:NH1	2.44	0.50
30:2H:199:GLU:HG3	30:2H:200:TYR:N	2.26	0.50
20:2K:260:PHE:O	20:2K:264:LYS:N	2.28	0.50
23:2O:339:ARG:HH12	23:2O:342:ARG:NH2	2.10	0.50
11:2S:316:CYS:SG	11:2S:317:VAL:N	2.85	0.50
16:3B:46:LYS:HZ1	16:3B:80:ILE:HG21	1.76	0.50
13:3U:181:LYS:NZ	45:VK:35:GLN:OE1	2.44	0.50
36:5B:127:GLU:HB3	46:NH:276:ARG:NH1	2.26	0.50
36:5C:102:TYR:CD1	45:KI:393:HIS:HD2	2.29	0.50
34:5R:242:ASN:HB2	45:BI:57:GLY:HA3	1.93	0.50
39:6F:75:LYS:HB2	39:6F:78:VAL:HG22	1.93	0.50
40:6G:130:ARG:HD2	45:UI:130:THR:HA	1.94	0.50
40:6G:133:ASN:N	40:6G:134:PRO:HD3	2.26	0.50
41:6H:259:THR:HG21	45:FE:77:GLU:HG2	1.92	0.50
41:6H:352:LYS:HD3	41:6H:353:ALA:N	2.26	0.50
34:6R:454:MET:HB3	34:6R:473:ARG:HB3	1.92	0.50
46:AL:60:VAL:HG11	46:AL:86:ARG:HH21	1.77	0.50
46:BB:139:LEU:HD13	46:BB:168:SER:HB3	1.94	0.50
45:BK:183:GLU:N	45:BK:184:PRO:HD2	2.27	0.50
45:CC:141:VAL:HG13	45:CC:190:SER:HB3	1.92	0.50
45:CE:244:PHE:HB2	45:CE:356:ASN:HD21	1.77	0.50
45:CM:326:LYS:HE3	46:CN:220:PRO:HB2	1.94	0.50
46:CN:6:HIS:HA	46:CN:134:GLN:HB3	1.92	0.50
45:DI:356:ASN:OD1	45:DI:357:TYR:N	2.44	0.50
45:DK:339:ARG:O	45:DK:339:ARG:HD2	2.11	0.50
45:DK:346:TRP:CD1	46:DL:391:ARG:HG3	2.46	0.50
46:DN:319:GLY:HA2	46:DN:357:PRO:HG3	1.93	0.50
45:EE:88:HIS:NE2	45:FC:284:GLU:OE1	2.43	0.50
46:EN:156:ARG:NH1	46:EN:162:ARG:O	2.28	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FI:322:ASP:OD1	45:FI:373:ARG:NH1	2.44	0.50
45:FI:398:MET:HE2	46:FJ:346:PRO:HD2	1.93	0.50
45:FM:33:ASP:HB3	45:FM:35:GLN:HE22	1.76	0.50
46:GH:180:VAL:O	46:GH:180:VAL:HG12	2.11	0.50
46:GN:130:LEU:HD21	46:GN:133:PHE:HE1	1.77	0.50
46:GN:271:ALA:HB3	46:GN:365:VAL:HB	1.94	0.50
45:HC:288:VAL:HA	45:HC:291:ILE:HG12	1.93	0.50
45:HE:288:VAL:HA	45:HE:291:ILE:HG12	1.93	0.50
45:HG:150:GLY:O	45:HG:154:LEU:HG	2.11	0.50
45:JC:97:GLU:OE2	46:JD:251:ARG:NH1	2.44	0.50
46:JH:204:ASN:OD1	49:JH:501:GDP:N2	2.45	0.50
46:JH:386:THR:O	46:JH:390:ARG:HG3	2.11	0.50
45:JI:107:HIS:ND1	45:JI:107:HIS:O	2.45	0.50
46:JJ:372:THR:O	46:JJ:375:GLN:HG2	2.12	0.50
46:JN:328:GLU:O	46:JN:332:ASN:N	2.40	0.50
46:KF:420:SER:O	46:KF:424:GLN:HG2	2.11	0.50
45:KG:269:LEU:HD12	45:KG:303:ALA:HB3	1.94	0.50
45:KI:241:SER:OG	45:KI:250:VAL:O	2.25	0.50
46:KJ:52:ASN:OD1	46:KJ:62:ARG:NH2	2.45	0.50
45:KM:241:SER:OG	45:KM:250:VAL:O	2.25	0.50
45:LE:210:TYR:HE1	45:LE:227:LEU:HD11	1.76	0.50
46:LL:48:ASN:O	46:LL:62:ARG:NH1	2.44	0.50
45:MA:238:LEU:HD12	45:MA:318:MET:HE1	1.94	0.50
46:MJ:237:THR:HG23	46:MJ:241:ARG:HH21	1.77	0.50
45:MM:88:HIS:CE1	45:MM:90:GLU:HG2	2.47	0.50
46:ND:316:LEU:HB2	46:ND:366:THR:HB	1.93	0.50
45:NG:210:TYR:CZ	46:NH:324:LYS:HG2	2.46	0.50
45:NI:174:SER:HB2	45:NI:177:VAL:O	2.12	0.50
45:NM:241:SER:OG	45:NM:250:VAL:O	2.25	0.50
46:OB:20:PHE:O	46:OB:24:ILE:HD12	2.12	0.50
46:OD:10:GLY:O	46:OD:14:ASN:ND2	2.43	0.50
45:OG:135:PHE:HB2	45:OG:166:LYS:HG2	1.94	0.50
46:OH:232:ALA:HB2	46:OH:270:PHE:HB2	1.93	0.50
46:ON:49:VAL:HG11	46:ON:241:ARG:HG2	1.94	0.50
46:PD:63:ALA:O	46:PD:89:ASN:ND2	2.44	0.50
46:PD:87:PRO:HA	46:PD:90:PHE:HD2	1.74	0.50
45:PI:72:PRO:HD2	46:PJ:2:ARG:HH12	1.75	0.50
46:PJ:86:ARG:HB3	46:PJ:89:ASN:OD1	2.12	0.50
46:QB:347:ASN:ND2	45:QC:180:ALA:O	2.44	0.50
46:QL:101:TRP:HB2	46:QL:184:ASN:HB3	1.93	0.50
45:RA:331:SER:O	45:RA:335:ILE:HG12	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RE:402:ARG:HE	45:RE:405:VAL:HG21	1.76	0.50
46:RF:100:ASN:ND2	46:RF:103:LYS:HD3	2.27	0.50
46:RN:97:ALA:HA	46:RN:103:LYS:HG2	1.94	0.50
46:SL:32:PRO:HA	46:SL:84:LEU:HD11	1.94	0.50
45:SM:53:PHE:HB3	45:SM:61:HIS:HB3	1.94	0.50
46:TB:2:ARG:NH1	45:TC:72:PRO:HD2	2.27	0.50
45:TE:68:LEU:HD11	45:TE:118:CYS:SG	2.52	0.50
45:TG:115:VAL:HG11	45:TG:152:LEU:HD23	1.94	0.50
46:TH:342:VAL:HG13	46:TH:345:ILE:HG22	1.94	0.50
45:TM:21:TRP:CZ2	45:TM:65:ALA:HB2	2.47	0.50
45:UC:181:VAL:HG23	45:UC:182:VAL:HG13	1.92	0.50
45:UC:348:PRO:HD2	46:UD:388:MET:HE2	1.94	0.50
46:UD:113:ILE:HA	46:UD:116:VAL:HG12	1.93	0.50
45:UE:263:PRO:HD3	46:UF:396:HIS:CE1	2.46	0.50
45:UK:265:ILE:HG12	45:UK:432:TYR:HE1	1.77	0.50
45:UM:132:LEU:HD22	45:UM:164:LYS:HD2	1.92	0.50
45:UM:389:SER:O	45:UM:393:HIS:ND1	2.45	0.50
46:UN:271:ALA:HB3	46:UN:365:VAL:HB	1.93	0.50
45:VA:325:PRO:HG2	46:VD:222:TYR:HE1	1.77	0.50
45:VE:5:ILE:HG13	45:VE:132:LEU:HD11	1.93	0.50
46:VJ:210:ILE:HG21	46:VJ:273:LEU:HD13	1.93	0.50
45:VM:181:VAL:HG23	45:VM:182:VAL:HG13	1.92	0.50
45:VM:205:ASP:CG	45:VM:304:LYS:H	2.15	0.50
45:WE:265:ILE:HD12	45:WE:432:TYR:HE1	1.77	0.50
45:WE:328:VAL:HG11	45:WE:353:VAL:HG21	1.93	0.50
46:WH:67:ASP:OD1	46:WH:68:LEU:N	2.42	0.50
45:WM:31:GLN:NE2	45:WM:35:GLN:O	2.45	0.50
46:WN:345:ILE:HG22	46:WN:348:ASN:HB3	1.94	0.50
5:2E:11:ARG:HH11	5:2E:11:ARG:HG2	1.77	0.50
29:2G:58:LYS:O	29:2G:58:LYS:NZ	2.32	0.50
31:2I:83:ARG:NH2	45:GE:299:ALA:O	2.45	0.50
20:2K:243:GLU:HA	20:2K:246:LYS:HG2	1.92	0.50
21:2L:270:ASP:HB3	21:2L:378:ARG:NE	2.27	0.50
21:2L:369:GLN:HG2	21:2L:371:GLU:H	1.77	0.50
9:2N:88:ASN:ND2	9:2N:91:ASP:OD2	2.44	0.50
12:2T:185:LEU:HB2	12:2T:196:VAL:HB	1.94	0.50
13:2U:525:ILE:HD12	13:2U:527:MET:HE2	1.92	0.50
27:3C:278:ASP:HB3	27:3C:285:ILE:HG12	1.92	0.50
21:3L:127:GLN:HG3	21:3L:195:ARG:HB3	1.94	0.50
23:3O:360:GLU:O	23:3O:364:LYS:HG2	2.12	0.50
34:4R:174:PHE:O	34:4R:175:GLU:HG2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5C:22:TYR:HB3	36:5C:59:TYR:HD2	1.77	0.50
43:8P:77:UNK:O	43:8P:81:UNK:N	2.44	0.50
46:AB:31:ASP:OD1	46:AB:34:GLY:N	2.45	0.50
45:AC:224:TYR:HD1	45:AC:227:LEU:HD12	1.76	0.50
46:AD:51:TYR:O	46:AD:62:ARG:NH2	2.44	0.50
45:AI:93:ILE:HD12	45:AI:117:LEU:HD23	1.94	0.50
46:BL:248:SER:HA	46:BL:252:LYS:HD2	1.94	0.50
46:CB:11:GLN:O	46:CB:15:GLN:HG2	2.11	0.50
45:DA:167:LEU:HG	45:DA:200:VAL:HB	1.94	0.50
45:DC:356:ASN:OD1	45:DC:357:TYR:N	2.44	0.50
46:DH:267:MET:HB3	46:DH:374:ILE:HD11	1.94	0.50
46:DJ:301:CYS:HB3	46:DJ:377:MET:HE1	1.94	0.50
45:DM:208:ALA:O	45:DM:212:ILE:HG12	2.11	0.50
46:EB:191:GLN:O	46:EB:195:ASN:ND2	2.41	0.50
46:EJ:200:MET:HG3	46:EJ:266:PHE:HB2	1.93	0.50
46:FN:405:GLU:HA	46:FN:408:PHE:HD2	1.77	0.50
45:GA:76:ASP:HA	45:GA:79:ARG:HG2	1.93	0.50
45:GA:99:ALA:HA	45:GA:105:ARG:HD3	1.93	0.50
46:GB:263:LEU:HG	46:GB:422:TYR:HD1	1.75	0.50
45:HE:288:VAL:HG11	45:HE:327:ASP:HB3	1.93	0.50
46:HF:226:ASN:HD21	49:HF:501:GDP:HN1	1.60	0.50
45:HG:420:GLU:O	45:HG:423:GLU:HG2	2.12	0.50
46:HN:114:ASP:OD1	46:HN:115:SER:N	2.45	0.50
46:IH:68:LEU:HD12	46:IH:97:ALA:HB2	1.92	0.50
46:IJ:239:CYS:SG	46:IJ:247:ASN:HA	2.51	0.50
45:JC:172:TYR:OH	45:JC:191:THR:HG22	2.12	0.50
45:JM:185:TYR:HE2	45:JM:404:PHE:HB2	1.76	0.50
45:KC:392:ASP:CG	45:KC:422:ARG:HH12	2.15	0.50
46:KH:249:ASP:OD1	46:KH:249:ASP:N	2.45	0.50
45:LA:317:MET:HB3	45:LA:377:MET:HG2	1.93	0.50
45:LG:339:ARG:NH1	45:LG:340:THR:HB	2.27	0.50
46:LL:67:ASP:OD1	46:LL:68:LEU:N	2.43	0.50
46:MJ:135:ILE:HB	46:MJ:166:THR:HG22	1.94	0.50
46:MN:69:GLU:HG3	46:MN:71:GLY:H	1.77	0.50
46:NB:155:VAL:HA	46:NB:158:GLU:HG2	1.93	0.50
46:ND:257:LEU:HD21	46:ND:314:SER:HB2	1.93	0.50
45:NM:181:VAL:HG13	45:NM:182:VAL:HG13	1.94	0.50
45:NM:222:PRO:HD2	46:NN:324:LYS:CE	2.41	0.50
45:NM:319:TYR:HB3	45:NM:323:VAL:HG21	1.93	0.50
46:OB:260:PHE:HE2	46:OB:425:TYR:CZ	2.30	0.50
46:OF:10:GLY:O	46:OF:14:ASN:ND2	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OF:334:GLN:NE2	46:OF:348:ASN:OD1	2.45	0.50
46:OJ:147:MET:HA	46:OJ:150:LEU:HB3	1.93	0.50
45:OK:65:ALA:O	45:OK:91:GLN:HG3	2.12	0.50
45:OK:292:THR:HG21	45:OK:331:SER:HB3	1.93	0.50
46:ON:131:GLN:HA	46:ON:162:ARG:HH21	1.77	0.50
45:PA:208:ALA:HB1	45:PA:301:MET:O	2.12	0.50
46:PD:247:ASN:O	46:PD:252:LYS:NZ	2.37	0.50
45:PI:229:ARG:HH12	45:PI:363:VAL:HG11	1.77	0.50
45:QA:214:ARG:NH1	45:QA:215:ARG:HB2	2.27	0.50
45:QE:311:LYS:HG2	45:QE:342:GLN:NE2	2.25	0.50
46:QF:396:HIS:HA	46:QF:399:THR:HG22	1.93	0.50
45:QG:188:ILE:HD12	45:QG:425:LEU:HD11	1.94	0.50
46:QL:290:THR:HA	46:QL:293:MET:HG2	1.93	0.50
46:QN:42:LEU:HA	46:QN:45:GLU:HG3	1.93	0.50
45:RA:206:ASN:OD1	47:RA:501:GTP:N2	2.44	0.50
46:RB:19:LYS:NZ	46:RB:223:GLY:O	2.45	0.50
46:RB:187:LEU:HD21	46:RB:408:PHE:HD1	1.76	0.50
45:RI:210:TYR:CE1	45:RI:227:LEU:HD21	2.47	0.50
46:RL:258:ILE:O	45:RM:407:TRP:NE1	2.32	0.50
46:RL:262:ARG:HH11	46:RL:262:ARG:HG2	1.75	0.50
45:RM:319:TYR:O	45:RM:356:ASN:N	2.45	0.50
45:SE:9:VAL:HG12	45:SE:68:LEU:HB2	1.93	0.50
46:SL:309:ARG:NH1	46:SL:426:GLN:O	2.45	0.50
45:TI:88:HIS:CE1	45:TI:90:GLU:HG2	2.47	0.50
45:UM:7:ILE:HD12	45:UM:66:VAL:HG13	1.94	0.50
46:UN:4:ILE:HG13	46:UN:132:GLY:O	2.11	0.50
46:UN:222:TYR:HA	46:UN:225:LEU:HD12	1.94	0.50
46:WB:295:ASP:OD2	46:WB:297:LYS:HG2	2.12	0.50
45:WC:56:THR:HG23	45:WC:58:ALA:H	1.76	0.50
45:WK:212:ILE:HD11	45:WK:300:ASN:HA	1.92	0.50
45:WM:30:ILE:HG21	45:WM:53:PHE:HE1	1.77	0.50
1:0A:50:PRO:HB2	34:7R:70:ARG:HG2	1.93	0.50
9:0N:15:ARG:HG2	46:IN:45:GLU:HG3	1.93	0.50
4:1D:40:GLY:O	45:DG:79:ARG:NH2	2.31	0.50
5:1E:61:LYS:HG2	46:DF:37:HIS:HB3	1.91	0.50
20:1K:56:ASN:OD1	46:JF:83:GLN:NE2	2.39	0.50
23:1O:156:ARG:HH21	45:UE:370:LYS:HZ2	1.60	0.50
11:1S:42:ASN:HB3	45:WC:124:LYS:HG3	1.94	0.50
4:2D:94:ASN:HB3	45:EK:364:PRO:HG3	1.94	0.50
30:2H:191:LEU:HD23	46:AD:360:GLY:HA2	1.94	0.50
31:2I:48:PHE:HE1	46:GH:294:PHE:HB3	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2O:198:LYS:O	23:2O:201:GLU:HG3	2.12	0.50
23:2O:356:ARG:NH2	23:2O:357:ARG:HH11	2.02	0.50
23:2O:413:GLN:HE21	23:2O:414:ILE:HG13	1.75	0.50
14:2V:172:LYS:NZ	45:MG:423:GLU:OE2	2.41	0.50
30:3H:209:ARG:NH1	30:3H:211:HIS:O	2.40	0.50
34:4R:231:TYR:CZ	46:CF:216:LYS:HG3	2.46	0.50
34:4R:318:TYR:HE1	46:CF:273:LEU:HD13	1.77	0.50
34:4R:389:ASN:OD1	34:4R:390:GLY:N	2.44	0.50
34:5R:413:ILE:HD12	45:EI:372:MET:HE1	1.93	0.50
35:5S:69:TYR:OH	45:WE:127:ASP:OD2	2.29	0.50
34:7R:94:ARG:HH21	45:AA:41:THR:HB	1.75	0.50
34:7R:497:GLN:HG3	34:7R:502:ARG:HG2	1.94	0.50
45:AC:248:LEU:HD11	46:AF:222:TYR:HE2	1.75	0.50
46:AH:238:CYS:SG	46:AH:239:CYS:N	2.85	0.50
45:AM:224:TYR:HE2	46:AN:246:LEU:HD11	1.77	0.50
45:BA:245:ASP:OD1	45:BA:245:ASP:N	2.44	0.50
46:BF:39:ASP:OD2	46:BF:39:ASP:N	2.45	0.50
46:BJ:132:GLY:HA3	46:BJ:163:ILE:HG22	1.94	0.50
45:BK:3:GLU:HG3	45:BK:129:CYS:SG	2.51	0.50
45:BM:36:MET:SD	45:BM:37:PRO:HD2	2.52	0.50
45:BM:89:PRO:HD3	45:CM:283:HIS:HD1	1.76	0.50
45:CA:195:LEU:HD12	45:CA:196:GLU:HG2	1.92	0.50
45:CA:319:TYR:HE1	45:CA:328:VAL:HG13	1.76	0.50
46:CD:103:LYS:HA	46:CD:107:THR:HG22	1.93	0.50
46:CL:156:ARG:HG3	46:CL:195:ASN:HB3	1.93	0.50
45:CM:26:LEU:HD13	45:CM:363:VAL:HG23	1.94	0.50
45:DA:335:ILE:HG22	45:DA:338:LYS:HZ3	1.76	0.50
46:DB:136:THR:HG22	46:DB:167:PHE:HB2	1.93	0.50
46:DH:17:GLY:HA2	46:DH:20:PHE:HB3	1.94	0.50
46:DJ:213:ARG:HH11	46:DJ:213:ARG:HG2	1.76	0.50
46:DL:21:TRP:HA	46:DL:24:ILE:HG22	1.93	0.50
45:EA:136:LEU:HD23	45:EA:167:LEU:HB2	1.94	0.50
45:EA:171:ILE:HG21	47:EA:501:GTP:HN22	1.77	0.50
46:ED:52:ASN:OD1	46:ED:62:ARG:NH2	2.44	0.50
46:ED:132:GLY:HA3	46:ED:163:ILE:HG22	1.93	0.50
46:EJ:344:TRP:CG	45:EK:401:LYS:HE3	2.47	0.50
45:EM:2:ARG:HD3	45:EM:2:ARG:H	1.76	0.50
45:FA:15:GLN:HA	45:FA:18:ASN:HD21	1.76	0.50
46:FD:334:GLN:NE2	46:FD:348:ASN:OD1	2.45	0.50
45:FE:27:GLU:OE2	45:FE:243:ARG:NH1	2.32	0.50
45:FG:64:ARG:NH1	45:FG:129:CYS:SG	2.85	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GE:326:LYS:HE2	46:GH:220:PRO:HD2	1.94	0.50
46:HB:274:THR:OG1	46:HB:278:SER:OG	2.23	0.50
46:HH:221:THR:HG23	46:HH:223:GLY:H	1.77	0.50
46:ID:167:PHE:CE2	46:ID:233:MET:HG2	2.46	0.50
46:IL:211:CYS:SG	46:IL:220:PRO:HB3	2.52	0.50
46:JF:375:GLN:OE1	46:JF:423:GLN:HB3	2.11	0.50
46:KF:130:LEU:HD23	46:KF:162:ARG:HG3	1.94	0.50
45:KI:33:ASP:OD1	45:KI:34:GLY:N	2.45	0.50
45:KI:104:ALA:HB2	45:KI:413:MET:HE2	1.94	0.50
45:KK:76:ASP:OD2	46:KL:46:ARG:NH2	2.44	0.50
46:LB:63:ALA:O	46:LB:89:ASN:ND2	2.36	0.50
45:LC:140:SER:OG	47:LC:501:GTP:O2B	2.28	0.50
46:MF:10:GLY:O	46:MF:14:ASN:ND2	2.44	0.50
46:MH:238:CYS:SG	46:MH:239:CYS:N	2.84	0.50
45:MK:221:ARG:NH2	46:ML:325:GLU:OE1	2.45	0.50
45:NA:88:HIS:HB3	45:NA:91:GLN:HG3	1.94	0.50
46:NB:99:ASN:HA	46:NB:142:GLY:H	1.77	0.50
46:ND:163:ILE:HG23	46:ND:251:ARG:HH21	1.77	0.50
46:ND:391:ARG:HG3	46:ND:393:ALA:H	1.76	0.50
45:NE:322:ASP:OD1	45:NE:373:ARG:NH1	2.44	0.50
46:NJ:105:HIS:CE1	46:NJ:150:LEU:HD12	2.46	0.50
46:OD:309:ARG:HH21	46:OD:342:VAL:HA	1.77	0.50
46:OF:248:SER:HA	46:OF:252:LYS:HD2	1.94	0.50
46:OH:257:LEU:HD11	46:OH:314:SER:HB3	1.94	0.50
45:OK:183:GLU:N	45:OK:184:PRO:HD2	2.27	0.50
45:OK:221:ARG:HB2	46:OL:322:SER:OG	2.12	0.50
46:PB:99:ASN:HD22	46:PB:141:GLY:HA2	1.76	0.50
45:PK:251:ASP:N	45:PK:254:GLU:OE2	2.32	0.50
46:QF:51:TYR:HB3	46:QF:59:TYR:HB3	1.93	0.50
46:QF:292:GLN:HG2	46:QF:298:ASN:ND2	2.27	0.50
45:QM:21:TRP:HA	45:QM:24:PHE:HB2	1.93	0.50
46:QN:221:THR:HG23	46:QN:224:ASP:H	1.76	0.50
46:RB:258:ILE:O	46:RB:258:ILE:HG13	2.12	0.50
46:RH:83:GLN:O	46:SH:281:TYR:OH	2.25	0.50
45:RI:246:GLY:HA2	45:RI:357:TYR:HD1	1.77	0.50
46:RJ:51:TYR:HB3	46:RJ:59:TYR:HB3	1.94	0.50
46:RL:326:VAL:O	46:RL:330:MET:HG2	2.12	0.50
45:RM:269:LEU:N	45:RM:379:SER:O	2.45	0.50
46:SJ:245:GLN:O	45:SK:11:GLN:NE2	2.44	0.50
45:TE:338:LYS:HZ2	45:TE:340:THR:H	1.60	0.50
46:TF:5:VAL:HG12	46:TF:62:ARG:HD3	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TJ:74:ASP:OD1	46:TJ:74:ASP:N	2.45	0.50
45:TK:206:ASN:HB3	45:TK:210:TYR:CZ	2.47	0.50
46:TL:135:ILE:HG13	46:TL:152:ILE:HD11	1.94	0.50
45:UA:332:ILE:HG22	45:UA:336:LYS:NZ	2.27	0.50
46:UB:22:GLU:N	46:UB:22:GLU:OE1	2.44	0.50
46:UB:287:PRO:HA	46:UB:329:GLN:HE21	1.77	0.50
45:UE:140:SER:OG	47:UE:501:GTP:O2B	2.30	0.50
45:UE:294:SER:HA	45:UE:297:GLU:HG3	1.94	0.50
46:UF:135:ILE:HG13	46:UF:152:ILE:HD11	1.94	0.50
46:UH:68:LEU:HD12	46:UH:93:GLY:HA3	1.93	0.50
46:UL:255:VAL:HG23	45:UM:407:TRP:CG	2.47	0.50
46:VD:269:GLY:HA3	46:VD:299:MET:HE3	1.94	0.50
45:VM:387:VAL:HA	45:VM:390:ARG:HD3	1.93	0.50
46:VN:167:PHE:CE1	46:VN:200:MET:HG3	2.47	0.50
45:WE:265:ILE:HD12	45:WE:432:TYR:CE1	2.47	0.50
46:WF:30:ILE:HD11	46:WF:47:ILE:HD11	1.92	0.50
45:WG:346:TRP:CD1	46:WJ:391:ARG:HG3	2.47	0.50
45:WM:272:TYR:HD1	45:WM:376:CYS:HB3	1.77	0.50
24:1P:254:ALA:O	46:TF:276:ARG:NH2	2.30	0.50
27:2C:16:LYS:HG3	27:2C:95:ILE:HG22	1.94	0.50
20:2K:223:ASN:OD1	20:2K:226:ARG:NH1	2.26	0.50
9:2N:9:LYS:NZ	9:2N:17:GLY:O	2.29	0.50
11:2S:97:ARG:HE	46:MJ:262:ARG:NE	2.10	0.50
12:2T:111:VAL:HG12	12:2T:128:GLU:HB3	1.94	0.50
13:2U:547:HIS:HA	13:2U:561:GLY:HA2	1.94	0.50
16:3B:212:LEU:O	16:3B:216:GLU:HG2	2.12	0.50
21:3L:129:SER:OG	21:3L:130:GLN:N	2.45	0.50
23:3O:281:GLU:HA	23:3O:284:VAL:HG22	1.92	0.50
23:3O:362:ARG:HH21	23:3O:365:ILE:HD13	1.76	0.50
15:4X:45:GLN:O	15:4X:49:ILE:HG12	2.12	0.50
36:5B:33:ALA:HA	36:5B:36:ARG:HH12	1.77	0.50
37:5F:157:ARG:NH2	46:NH:36:TYR:O	2.45	0.50
37:5G:133:PRO:HB2	37:5G:136:LEU:HD23	1.93	0.50
10:5Q:34:ILE:C	10:5Q:35:LYS:HD3	2.32	0.50
34:7R:129:VAL:HB	34:7R:145:ILE:HB	1.93	0.50
46:AB:257:LEU:HD11	46:AB:314:SER:HB3	1.92	0.50
46:AJ:178:THR:HG22	46:AJ:180:VAL:H	1.77	0.50
45:AM:288:VAL:HG11	45:AM:327:ASP:HB3	1.94	0.50
46:BL:201:VAL:HG21	46:BL:374:ILE:HD11	1.93	0.50
45:BM:313:MET:HB2	45:BM:380:ASN:HB3	1.94	0.50
46:CB:31:ASP:OD1	46:CB:32:PRO:HD2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CE:256:GLN:HB2	46:CF:397:TRP:CZ2	2.47	0.50
46:CH:282:ARG:NH2	46:CH:292:GLN:OE1	2.37	0.50
45:CI:128:ASN:OD1	45:DI:285:GLN:NE2	2.45	0.50
46:CJ:294:PHE:HD2	46:CJ:333:VAL:HG21	1.77	0.50
46:DB:19:LYS:HA	46:DB:22:GLU:HG3	1.93	0.50
46:DH:67:ASP:OD1	46:DH:68:LEU:N	2.44	0.50
46:DJ:58:ARG:NH1	46:EJ:280:GLN:OE1	2.45	0.50
45:DM:352:LYS:HZ1	46:DN:179:VAL:N	2.06	0.50
45:EA:317:MET:HA	45:EA:377:MET:HA	1.92	0.50
46:EB:70:PRO:HA	46:EB:73:MET:HG2	1.94	0.50
46:EN:198:GLU:HG2	46:EN:266:PHE:HE2	1.76	0.50
45:FG:178:SER:HB2	46:FH:347:ASN:ND2	2.27	0.50
46:FH:257:LEU:HD21	46:FH:314:SER:HB2	1.93	0.50
45:FK:89:PRO:HD3	45:GK:283:HIS:ND1	2.27	0.50
45:HA:191:THR:HG21	45:HA:425:LEU:HD21	1.94	0.50
45:HA:352:LYS:HZ3	46:HD:178:THR:HG23	1.77	0.50
45:IC:284:GLU:HG2	45:IC:286:LEU:HD22	1.94	0.50
46:JF:156:ARG:HG3	46:JF:195:ASN:HB3	1.93	0.50
45:JK:345:ASP:OD1	45:JK:345:ASP:N	2.42	0.50
45:KE:292:THR:HG21	45:KE:331:SER:HB2	1.94	0.50
45:KI:195:LEU:HD13	45:KI:428:LEU:HD22	1.93	0.50
46:KL:289:LEU:HD11	46:KL:363:MET:HB3	1.94	0.50
45:LA:288:VAL:HA	45:LA:291:ILE:HG12	1.93	0.50
45:LE:174:SER:HB2	45:LE:177:VAL:O	2.12	0.50
45:LE:319:TYR:HD2	45:LE:323:VAL:HG11	1.77	0.50
46:MB:70:PRO:HA	46:MB:73:MET:HE2	1.94	0.50
46:MB:405:GLU:HA	46:MB:408:PHE:HD2	1.77	0.50
45:NA:174:SER:HB2	45:NA:177:VAL:O	2.12	0.50
46:ND:407:GLU:OE1	46:ND:407:GLU:N	2.39	0.50
45:NG:265:ILE:HD11	45:NG:435:VAL:HG21	1.94	0.50
46:NL:190:HIS:CD2	46:NL:414:ASN:HD22	2.30	0.50
45:OA:51:THR:HG21	45:OA:243:ARG:HB3	1.94	0.50
45:OA:222:PRO:CD	46:OB:324:LYS:HE3	2.40	0.50
46:OD:304:ASP:OD2	46:OD:306:ARG:HG2	2.12	0.50
46:OH:28:HIS:C	46:OH:43:GLN:HE21	2.14	0.50
45:OM:6:SER:HA	45:OM:136:LEU:HB2	1.93	0.50
46:PB:257:LEU:HD11	46:PB:314:SER:HB3	1.94	0.50
45:PK:346:TRP:CD1	46:PN:391:ARG:HG3	2.47	0.50
45:PM:205:ASP:HB3	45:PM:303:ALA:HA	1.93	0.50
46:QD:2:ARG:HB2	46:QD:131:GLN:HG3	1.94	0.50
45:QG:183:GLU:N	45:QG:184:PRO:HD2	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QK:88:HIS:HB3	45:QK:91:GLN:HG2	1.94	0.50
45:RA:212:ILE:HD11	45:RA:300:ASN:HA	1.92	0.50
46:RB:175:VAL:HG22	46:RB:205:GLU:OE2	2.11	0.50
45:TA:328:VAL:HG11	45:TA:353:VAL:HG21	1.93	0.50
45:TM:438:GLU:HA	46:TN:391:ARG:HH12	1.76	0.50
46:UJ:324:LYS:HB3	45:UK:210:TYR:CZ	2.47	0.50
45:UK:69:ASP:OD1	45:UK:70:LEU:N	2.43	0.50
46:UL:327:ASP:OD1	46:UL:328:GLU:N	2.45	0.50
46:VF:226:ASN:ND2	49:VF:501:GDP:HN1	2.09	0.50
45:VG:71:GLU:OE2	45:VG:73:THR:OG1	2.20	0.50
45:VG:183:GLU:N	45:VG:184:PRO:HD2	2.27	0.50
46:VH:3:GLU:CD	46:VH:3:GLU:H	2.14	0.50
46:VH:178:THR:HG22	46:VH:180:VAL:H	1.76	0.50
46:VJ:135:ILE:HG13	46:VJ:152:ILE:HD11	1.94	0.50
45:VM:175:PRO:HG3	45:VM:390:ARG:NH1	2.26	0.50
46:WD:221:THR:HG23	46:WD:223:GLY:H	1.76	0.50
46:WH:49:VAL:HG11	46:WH:241:ARG:HG2	1.94	0.50
46:WN:388:MET:HE2	46:WN:388:MET:N	2.26	0.50
1:0A:102:TYR:HB3	46:MB:32:PRO:HG2	1.92	0.49
7:0G:27:PHE:HB3	46:JL:277:GLY:HA2	1.93	0.49
14:0V:46:PRO:HG3	45:LM:95:GLY:HA2	1.93	0.49
5:2E:93:ASN:ND2	5:2E:178:ASP:OD1	2.33	0.49
22:2M:119:SER:HB3	22:2M:160:GLU:HG3	1.94	0.49
9:2N:12:TYR:O	9:2N:15:ARG:NH2	2.45	0.49
23:2O:407:GLU:O	23:2O:411:LYS:HG2	2.12	0.49
11:2S:28:GLU:H	11:2S:31:LEU:HD21	1.75	0.49
13:2U:350:ARG:HD2	13:2U:351:ASN:HD22	1.76	0.49
30:3H:207:LYS:NZ	30:3H:209:ARG:HB2	2.27	0.49
31:3I:207:LYS:HA	31:3I:207:LYS:HE2	1.94	0.49
30:4H:205:GLN:NE2	45:AK:81:GLY:HA2	2.27	0.49
45:AM:222:PRO:HD2	46:AN:324:LYS:HD3	1.93	0.49
46:BB:274:THR:HG23	46:BB:279:GLN:HE21	1.77	0.49
46:BN:86:ARG:NE	46:CL:278:SER:HA	2.26	0.49
45:CC:31:GLN:HE21	45:CC:37:PRO:HB3	1.77	0.49
45:CC:212:ILE:HD11	45:CC:300:ASN:HA	1.94	0.49
46:CF:130:LEU:HG	46:CF:162:ARG:HD2	1.93	0.49
45:CK:324:VAL:CG1	45:CK:326:LYS:HE3	2.42	0.49
45:CM:55:GLU:HG3	45:CM:57:GLY:H	1.76	0.49
45:CM:127:ASP:OD1	45:CM:128:ASN:N	2.45	0.49
46:CN:216:LYS:HG3	46:CN:275:SER:HB2	1.94	0.49
45:DA:276:ILE:HD11	45:DA:280:LYS:HG3	1.92	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DC:329:ASN:HB3	46:DD:175:VAL:HG12	1.93	0.49
45:DK:265:ILE:HG23	45:DK:432:TYR:HE2	1.77	0.49
45:EC:206:ASN:HB2	45:EC:210:TYR:CE1	2.47	0.49
46:EJ:309:ARG:H	46:EJ:372:THR:HG22	1.77	0.49
45:EM:31:GLN:HB2	45:EM:35:GLN:O	2.13	0.49
46:EN:73:MET:HA	46:EN:76:VAL:HG12	1.94	0.49
45:FA:221:ARG:HH11	46:FB:325:GLU:HG2	1.76	0.49
45:FE:231:ILE:O	45:FE:235:ILE:HG12	2.12	0.49
45:FG:98:ASP:OD1	45:FG:99:ALA:N	2.45	0.49
46:FJ:173:PRO:HG2	46:FJ:380:ARG:HD2	1.93	0.49
46:FL:31:ASP:HB3	46:FL:37:HIS:CD2	2.47	0.49
46:GB:2:ARG:HB3	46:GB:131:GLN:HB2	1.94	0.49
45:GG:282:TYR:HE1	45:GG:371:VAL:HG12	1.75	0.49
45:GM:183:GLU:N	45:GM:184:PRO:HD2	2.26	0.49
46:GN:253:LEU:HD11	46:GN:316:LEU:HD11	1.95	0.49
46:HH:39:ASP:OD1	46:HH:39:ASP:N	2.45	0.49
45:HI:147:SER:HB2	45:HI:190:SER:HB3	1.94	0.49
46:HN:257:LEU:HD11	46:HN:314:SER:HB3	1.94	0.49
46:IL:344:TRP:HB3	46:IL:430:ALA:HB2	1.94	0.49
45:JG:141:VAL:HG12	45:JG:187:SER:HA	1.94	0.49
45:JK:2:ARG:HH21	45:JK:243:ARG:HA	1.77	0.49
46:KB:67:ASP:OD1	46:KB:68:LEU:N	2.45	0.49
46:KB:73:MET:HA	46:KB:76:VAL:HG12	1.94	0.49
45:LA:430:LYS:NZ	45:LA:434:GLU:OE1	2.35	0.49
46:LB:392:LYS:HD3	46:LB:395:LEU:HD22	1.93	0.49
45:LI:407:TRP:HH2	46:LJ:258:ILE:HB	1.77	0.49
45:ME:326:LYS:HD3	46:MH:220:PRO:HD2	1.94	0.49
45:MM:328:VAL:O	45:MM:332:ILE:HG12	2.11	0.49
46:MN:8:GLN:HE21	46:MN:14:ASN:HA	1.77	0.49
45:NE:390:ARG:HG3	45:NE:391:LEU:HD12	1.94	0.49
45:NI:372:MET:SD	45:NI:372:MET:N	2.85	0.49
46:NJ:268:ILE:HG22	46:NJ:368:VAL:HG22	1.92	0.49
46:NL:117:LEU:HA	46:NL:120:VAL:HG12	1.93	0.49
46:OD:282:ARG:NH1	46:OD:283:ALA:O	2.45	0.49
46:OD:290:THR:HA	46:OD:293:MET:HG2	1.93	0.49
46:OJ:156:ARG:NH2	46:OJ:197:ASP:OD1	2.45	0.49
46:PD:97:ALA:O	46:PD:103:LYS:NZ	2.34	0.49
46:PD:198:GLU:HG2	46:PD:266:PHE:HE2	1.76	0.49
46:PF:131:GLN:HE22	46:PF:250:LEU:HB2	1.77	0.49
45:PG:88:HIS:HB3	45:PG:91:GLN:HB3	1.94	0.49
46:PN:222:TYR:HD1	49:PN:501:GDP:C6	2.30	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QA:109:THR:HG22	45:QA:110:ILE:HG23	1.93	0.49
46:QB:11:GLN:HE22	49:QB:501:GDP:H8	1.58	0.49
46:QB:97:ALA:HB3	46:QB:143:THR:HG22	1.94	0.49
46:QB:324:LYS:HD3	45:QC:222:PRO:HD2	1.94	0.49
46:QB:383:GLU:HA	46:QB:386:THR:HG22	1.94	0.49
46:QD:169:VAL:HG12	46:QD:202:ILE:HB	1.93	0.49
46:QL:375:GLN:OE1	46:QL:379:LYS:NZ	2.45	0.49
46:RB:68:LEU:HD23	46:RB:97:ALA:HB2	1.93	0.49
45:RG:241:SER:OG	45:RG:250:VAL:O	2.27	0.49
46:RH:8:GLN:HE22	46:RH:17:GLY:HA3	1.76	0.49
46:RH:247:ASN:HD21	45:RI:73:THR:HG21	1.77	0.49
46:RJ:318:ARG:HH11	46:RJ:358:PRO:HG3	1.77	0.49
46:RL:318:ARG:HD3	46:RL:358:PRO:HG3	1.92	0.49
45:RM:221:ARG:NH1	45:RM:221:ARG:HA	2.27	0.49
46:RN:105:HIS:CD2	46:RN:150:LEU:HB2	2.47	0.49
46:SL:4:ILE:HG13	46:SL:131:GLN:HB3	1.93	0.49
45:TA:7:ILE:N	45:TA:136:LEU:O	2.36	0.49
46:TF:91:VAL:HG21	46:TF:116:VAL:HG12	1.93	0.49
45:TK:133:GLN:O	45:TK:165:SER:OG	2.29	0.49
46:TL:260:PHE:HB2	46:TL:263:LEU:HD12	1.94	0.49
46:TN:7:ILE:HG23	46:TN:66:MET:HE1	1.93	0.49
46:UB:244:GLY:N	46:UB:247:ASN:HD21	2.09	0.49
46:UH:201:VAL:HG21	46:UH:374:ILE:HD11	1.94	0.49
46:UL:3:GLU:OE1	46:UL:62:ARG:NH1	2.45	0.49
46:UL:107:THR:OG1	46:UL:108:GLU:OE1	2.21	0.49
46:UL:183:TYR:HE2	46:UL:394:PHE:HB2	1.77	0.49
45:VA:60:LYS:HZ1	45:WA:283:HIS:HA	1.76	0.49
46:VD:325:GLU:HA	46:VD:328:GLU:HG2	1.94	0.49
46:VH:83:GLN:O	46:WH:281:TYR:OH	2.25	0.49
46:VJ:200:MET:SD	46:VJ:268:ILE:HD11	2.51	0.49
45:VK:210:TYR:HE1	45:VK:227:LEU:HD21	1.77	0.49
46:VL:169:VAL:HG12	46:VL:202:ILE:HB	1.94	0.49
46:WB:67:ASP:OD1	46:WB:68:LEU:N	2.43	0.49
45:WE:143:GLY:HA3	47:WE:501:GTP:O2B	2.12	0.49
45:WI:301:MET:HE1	45:WI:307:PRO:HD3	1.93	0.49
2:OB:71:ILE:HD11	46:JH:279:GLN:HG3	1.94	0.49
17:1F:165:LYS:NZ	46:GL:162:ARG:HH22	2.10	0.49
7:1G:90:GLY:O	46:JB:276:ARG:NH2	2.42	0.49
14:1V:226:ILE:HD13	14:1V:240:LYS:HE2	1.94	0.49
30:2H:193:LEU:HD22	46:AD:357:PRO:HG3	1.95	0.49
22:2M:106:LYS:O	22:2M:109:SER:OG	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:2P:410:TRP:HD1	46:TL:280:GLN:HB3	1.77	0.49
11:2S:150:GLN:HE22	45:WG:164:LYS:H	1.60	0.49
11:2S:167:TYR:HE2	11:2S:196:LEU:HD22	1.76	0.49
13:2U:216:ASP:OD1	13:2U:216:ASP:N	2.45	0.49
13:2U:404:HIS:CD2	13:2U:408:VAL:HG22	2.47	0.49
26:2W:186:GLY:HA2	45:KM:48:ALA:HB2	1.93	0.49
14:3V:86:ARG:O	14:3V:86:ARG:HG3	2.12	0.49
34:4R:285:THR:HG21	34:4R:309:LEU:HB2	1.94	0.49
35:5S:216:ASP:OD1	35:5S:217:LEU:N	2.45	0.49
10:6Q:7:GLN:N	10:6Q:7:GLN:OE1	2.45	0.49
10:6Q:81:LYS:HB3	10:6Q:161:ARG:HB2	1.93	0.49
34:6R:334:LEU:O	34:6R:360:TYR:OH	2.30	0.49
34:6R:341:ARG:NH2	34:6R:344:ASN:OD1	2.42	0.49
34:6R:343:TYR:HB3	46:CN:32:PRO:HG2	1.92	0.49
46:AB:1:MET:HA	46:AB:129:CYS:HB3	1.93	0.49
45:AC:322:ASP:OD1	45:AC:373:ARG:NH1	2.45	0.49
45:AG:71:GLU:OE1	46:AH:247:ASN:ND2	2.45	0.49
45:BA:70:LEU:HD12	45:BA:145:THR:HG22	1.93	0.49
46:BD:173:PRO:HG3	46:BD:384:GLN:NE2	2.27	0.49
46:CH:239:CYS:SG	46:CH:247:ASN:HA	2.53	0.49
46:CL:77:ARG:NH1	46:CL:85:PHE:O	2.45	0.49
45:CM:276:ILE:HD12	45:CM:281:ALA:HA	1.94	0.49
45:DE:22:GLU:OE2	45:DE:229:ARG:NH1	2.45	0.49
45:DG:185:TYR:CE1	45:DG:398:MET:HE3	2.47	0.49
46:DH:95:THR:OG1	46:DH:108:GLU:OE2	2.28	0.49
45:DK:319:TYR:HB3	45:DK:323:VAL:HG11	1.93	0.49
46:DL:229:VAL:O	46:DL:233:MET:HG2	2.12	0.49
46:EB:317:PHE:N	46:EB:352:SER:O	2.42	0.49
46:EB:330:MET:HA	46:EB:333:VAL:HG12	1.94	0.49
46:ED:221:THR:HG23	46:ED:223:GLY:H	1.77	0.49
45:EK:208:ALA:O	45:EK:212:ILE:HG12	2.11	0.49
45:EM:296:PHE:HE1	45:EM:377:MET:HG3	1.76	0.49
45:FA:50:ASN:O	45:FA:64:ARG:NH1	2.45	0.49
46:FD:272:PRO:HG3	46:FD:284:LEU:HD11	1.95	0.49
46:FF:313:ALA:HB3	46:FF:349:ILE:HG13	1.94	0.49
45:FG:183:GLU:N	45:FG:184:PRO:HD2	2.27	0.49
45:FL:326:LYS:HG2	46:FL:220:PRO:HD2	1.93	0.49
46:GL:113:ILE:HA	46:GL:116:VAL:HG12	1.94	0.49
46:HB:55:THR:HG23	46:IB:283:ALA:HA	1.94	0.49
46:HB:284:LEU:HD13	46:HB:362:LYS:HB3	1.94	0.49
46:HJ:67:ASP:OD1	46:HJ:68:LEU:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HM:155:GLU:OE2	45:HM:197:HIS:NE2	2.45	0.49
46:HN:95:THR:OG1	46:HN:108:GLU:OE2	2.30	0.49
46:ID:3:GLU:HG3	46:ID:62:ARG:NH1	2.27	0.49
46:ID:116:VAL:HA	46:ID:119:VAL:HG12	1.93	0.49
45:II:183:GLU:N	45:II:184:PRO:HD2	2.27	0.49
45:IM:271:SER:HA	45:IM:302:MET:HG3	1.94	0.49
46:JJ:309:ARG:NH2	46:JJ:426:GLN:O	2.44	0.49
46:KJ:113:ILE:HA	46:KJ:116:VAL:HG12	1.93	0.49
45:LC:77:GLU:O	45:LC:81:GLY:N	2.44	0.49
45:LI:39:ASP:OD1	45:LI:39:ASP:N	2.45	0.49
45:LK:174:SER:HB3	45:LK:177:VAL:O	2.11	0.49
45:MA:326:LYS:NZ	45:MA:327:ASP:OD1	2.36	0.49
45:MK:72:PRO:HG2	46:ML:1:MET:SD	2.51	0.49
45:NA:38:SER:HA	45:NA:40:ARG:HH11	1.78	0.49
46:ND:391:ARG:NE	46:ND:393:ALA:HB3	2.16	0.49
45:NE:183:GLU:N	45:NE:184:PRO:HD2	2.26	0.49
45:NE:224:TYR:HE2	46:NF:246:LEU:HD11	1.77	0.49
45:NG:8:HIS:CD2	45:NG:17:GLY:HA3	2.48	0.49
45:NG:116:ASP:OD1	45:NG:116:ASP:N	2.43	0.49
46:NH:39:ASP:OD2	46:NH:39:ASP:N	2.43	0.49
46:NJ:289:LEU:HD23	46:NJ:365:VAL:HG23	1.94	0.49
46:NN:44:LEU:HD23	46:NN:47:ILE:HG13	1.94	0.49
46:NN:345:ILE:HG23	46:NN:345:ILE:O	2.11	0.49
45:OC:284:GLU:HG3	45:OC:286:LEU:H	1.76	0.49
46:OD:64:ILE:HD13	46:OD:119:VAL:HG13	1.95	0.49
46:PL:396:HIS:CD2	46:PL:397:TRP:CD1	3.00	0.49
46:QB:74:ASP:HA	46:QB:77:ARG:HH11	1.77	0.49
46:QH:139:LEU:HB2	46:QH:171:PRO:HD3	1.93	0.49
45:RE:69:ASP:OD1	45:RE:70:LEU:N	2.43	0.49
45:RG:276:ILE:HG13	45:RG:280:LYS:HE3	1.94	0.49
46:RJ:238:CYS:SG	46:RJ:239:CYS:N	2.85	0.49
45:SE:88:HIS:HB3	45:SE:91:GLN:HG3	1.93	0.49
46:SL:162:ARG:HG3	46:SL:163:ILE:N	2.27	0.49
46:SL:213:ARG:HH21	46:SL:297:LYS:HD3	1.76	0.49
46:SN:309:ARG:NH2	46:SN:426:GLN:O	2.38	0.49
46:TB:139:LEU:HD13	46:TB:168:SER:HB3	1.94	0.49
45:TC:284:GLU:HB2	45:TC:286:LEU:HD22	1.94	0.49
45:TE:188:ILE:HG23	45:TE:425:LEU:HD11	1.95	0.49
46:TN:25:SER:O	46:TN:29:GLY:N	2.46	0.49
45:UK:241:SER:OG	45:UK:250:VAL:O	2.19	0.49
45:UM:1:MET:N	45:UM:50:ASN:OD1	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VG:221:ARG:HH21	46:VH:322:SER:CB	2.25	0.49
46:VH:128:ASP:OD1	46:VH:129:CYS:N	2.43	0.49
46:VN:327:ASP:HA	46:VN:330:MET:HE1	1.93	0.49
11:1S:152:SER:O	46:WF:95:THR:OG1	2.30	0.49
12:1T:91:LYS:O	14:3V:179:TYR:OH	2.29	0.49
13:1U:308:GLU:O	13:1U:309:LYS:HD3	2.11	0.49
13:1U:515:THR:HG22	13:1U:526:ARG:HG3	1.93	0.49
26:1W:54:ARG:N	15:4X:131:MET:SD	2.85	0.49
26:1W:165:ILE:HD11	46:KD:55:THR:HG21	1.94	0.49
27:2C:207:LYS:HE2	27:2C:207:LYS:HA	1.93	0.49
21:2L:563:PHE:O	21:2L:567:ILE:HG12	2.12	0.49
23:2O:148:MET:HA	23:2O:151:LYS:HE2	1.94	0.49
32:3D:186:LYS:HE2	32:3D:190:HIS:CE1	2.47	0.49
5:3E:138:THR:O	5:3E:142:VAL:HG23	2.13	0.49
21:3L:150:ARG:HB3	21:3L:152:ILE:HG23	1.94	0.49
23:3O:394:GLU:OE1	23:3O:397:ARG:NH1	2.29	0.49
36:5C:161:ILE:O	36:5C:165:LYS:HG2	2.13	0.49
37:5G:60:TRP:CH2	46:OJ:282:ARG:HD3	2.47	0.49
34:5R:460:ASP:OD1	34:5R:461:LYS:N	2.44	0.49
40:6G:213:TYR:CZ	45:VC:326:LYS:HE2	2.47	0.49
10:6Q:68:THR:HG23	10:6Q:152:LEU:HG	1.94	0.49
34:6R:94:ARG:HG3	34:6R:184:ASP:HB2	1.94	0.49
34:6R:446:PHE:HE2	34:6R:487:GLU:HG3	1.78	0.49
45:AE:183:GLU:N	45:AE:184:PRO:HD2	2.27	0.49
45:AM:145:THR:OG1	47:AM:501:GTP:O1B	2.29	0.49
46:BB:319:GLY:HA2	46:BB:357:PRO:HG3	1.94	0.49
45:BE:238:LEU:HD12	45:BE:255:PHE:HE2	1.77	0.49
45:BM:390:ARG:HG3	45:BM:391:LEU:HD12	1.92	0.49
45:CA:183:GLU:N	45:CA:184:PRO:HD2	2.28	0.49
45:CC:419:SER:O	45:CC:423:GLU:HG3	2.13	0.49
45:DA:55:GLU:HG3	45:DA:57:GLY:H	1.76	0.49
46:DB:237:THR:HG23	46:DB:241:ARG:HE	1.77	0.49
46:DD:46:ARG:NH2	45:DE:76:ASP:OD2	2.45	0.49
45:DI:88:HIS:NE2	45:EI:284:GLU:OE2	2.46	0.49
45:DK:10:GLY:O	45:DK:14:ILE:HG12	2.13	0.49
45:DK:155:GLU:OE1	45:DK:197:HIS:NE2	2.44	0.49
45:DK:288:VAL:HG11	45:DK:327:ASP:HB3	1.95	0.49
46:DN:154:LYS:HA	46:DN:157:GLU:OE1	2.11	0.49
45:EA:324:VAL:HG21	45:EA:326:LYS:HE3	1.93	0.49
46:EB:73:MET:SD	46:EB:92:PHE:HB3	2.52	0.49
45:EE:253:THR:HA	45:EE:256:GLN:NE2	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EJ:68:LEU:HB3	46:EJ:96:GLY:HA2	1.94	0.49
45:EK:7:ILE:HB	45:EK:137:VAL:HG12	1.94	0.49
45:EM:175:PRO:HD2	45:EM:304:LYS:HE3	1.93	0.49
45:FA:80:THR:O	45:FA:84:ARG:NH2	2.35	0.49
45:FI:328:VAL:HG11	45:FI:353:VAL:HG21	1.93	0.49
45:FK:407:TRP:CG	46:FL:255:VAL:HG23	2.47	0.49
45:GE:259:LEU:HD11	45:GE:316:SER:HB2	1.94	0.49
46:GF:226:ASN:HD21	49:GF:501:GDP:HN1	1.60	0.49
45:GM:66:VAL:HG11	45:GM:122:ILE:HD11	1.93	0.49
46:HB:211:CYS:HA	46:HB:215:LEU:HB2	1.94	0.49
46:HD:299:MET:HG3	46:HD:305:PRO:HG3	1.94	0.49
45:HE:7:ILE:HB	45:HE:137:VAL:HG12	1.94	0.49
46:HH:304:ASP:OD2	46:HH:306:ARG:NH2	2.44	0.49
46:HL:22:GLU:HG2	46:HL:81:PHE:HD2	1.78	0.49
45:HM:174:SER:HB2	45:HM:177:VAL:O	2.12	0.49
45:IA:88:HIS:HD2	46:JB:281:TYR:HB3	1.77	0.49
46:ID:273:LEU:N	46:ID:292:GLN:OE1	2.38	0.49
45:JG:175:PRO:HG3	45:JG:390:ARG:CZ	2.42	0.49
45:JK:194:LEU:O	45:JK:198:THR:HG22	2.12	0.49
46:LB:202:ILE:HD11	46:LB:268:ILE:HD11	1.93	0.49
45:LI:222:PRO:O	46:LJ:322:SER:OG	2.28	0.49
46:NB:58:ARG:HD2	46:OB:280:GLN:HE21	1.78	0.49
46:ND:105:HIS:CD2	46:ND:150:LEU:HB2	2.47	0.49
45:NE:136:LEU:HD23	45:NE:167:LEU:HB2	1.95	0.49
45:NI:176:GLN:OE1	46:NJ:331:LEU:HD11	2.11	0.49
46:NL:7:ILE:HG13	46:NL:135:ILE:HG12	1.94	0.49
46:OL:222:TYR:O	46:OL:226:ASN:ND2	2.44	0.49
46:PB:319:GLY:HA2	46:PB:357:PRO:HD3	1.94	0.49
46:PB:350:LYS:HE2	46:PB:350:LYS:HA	1.95	0.49
45:PI:244:PHE:HB2	45:PI:356:ASN:HD21	1.76	0.49
45:PK:21:TRP:HA	45:PK:24:PHE:HD2	1.77	0.49
45:QC:269:LEU:HD23	45:QC:379:SER:O	2.12	0.49
45:QG:67:PHE:HB2	45:QG:92:LEU:HD13	1.94	0.49
46:RB:97:ALA:C	46:RB:103:LYS:HZ3	2.16	0.49
45:RC:204:LEU:HD22	45:RC:231:ILE:HD12	1.95	0.49
45:RC:423:GLU:O	45:RC:427:ALA:N	2.41	0.49
45:RG:319:TYR:HB3	45:RG:323:VAL:HG21	1.93	0.49
46:RN:178:THR:HG22	46:RN:180:VAL:HG12	1.94	0.49
46:SD:248:SER:HA	46:SD:252:LYS:HD3	1.94	0.49
46:SD:257:LEU:HD23	46:SD:266:PHE:CZ	2.47	0.49
46:SH:173:PRO:HG2	46:SH:380:ARG:HD3	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TD:342:VAL:HG13	46:TD:345:ILE:HG22	1.94	0.49
45:TE:399:TYR:OH	45:TE:415:GLU:OE1	2.30	0.49
46:TH:167:PHE:CZ	46:TH:233:MET:HG2	2.47	0.49
46:TL:213:ARG:NE	46:TL:297:LYS:HZ2	2.10	0.49
46:TL:396:HIS:CE1	46:TL:397:TRP:HD1	2.29	0.49
46:UL:113:ILE:HA	46:UL:116:VAL:HG12	1.93	0.49
46:VL:17:GLY:HA2	46:VL:20:PHE:HB3	1.94	0.49
45:VM:174:SER:HB2	45:VM:177:VAL:O	2.12	0.49
46:VN:293:MET:HE3	46:VN:367:PHE:HB2	1.94	0.49
46:WH:69:GLU:CD	46:WH:71:GLY:H	2.14	0.49
46:WH:222:TYR:O	46:WH:226:ASN:ND2	2.25	0.49
46:WJ:178:THR:HG22	46:WJ:180:VAL:H	1.77	0.49
21:1L:828:PRO:HA	34:7R:100:GLN:HG2	1.94	0.49
13:1U:198:CYS:SG	13:1U:199:VAL:N	2.85	0.49
13:1U:325:ASP:OD1	13:1U:339:CYS:HB3	2.12	0.49
27:2C:38:ILE:HD11	27:2C:61:LYS:HD2	1.95	0.49
21:2L:385:GLU:HA	21:2L:388:LYS:HE2	1.93	0.49
9:2N:259:ILE:HD12	46:KB:77:ARG:HH21	1.78	0.49
26:2W:191:ILE:HG22	26:2W:194:HIS:H	1.77	0.49
11:3S:34:ILE:O	11:3S:34:ILE:HG13	2.11	0.49
13:3U:95:MET:HG2	13:3U:96:HIS:ND1	2.27	0.49
13:3U:322:ARG:HH12	13:3U:324:ASN:HA	1.76	0.49
13:3U:463:GLN:OE1	13:3U:475:ILE:HG13	2.12	0.49
34:4R:319:PRO:HG3	46:CF:227:HIS:HD2	1.78	0.49
37:5E:164:LYS:H	37:5E:165:PRO:CD	2.26	0.49
37:5G:149:ARG:O	37:5G:152:GLN:HG2	2.12	0.49
34:6R:248:TYR:HD2	45:CM:370:LYS:HZ1	1.59	0.49
34:7R:430:LEU:HB3	34:7R:442:PHE:HE2	1.77	0.49
46:AF:3:GLU:HG3	46:AF:62:ARG:HH12	1.77	0.49
45:AK:98:ASP:OD1	45:AK:99:ALA:N	2.46	0.49
46:BD:139:LEU:HA	46:BD:145:SER:HB3	1.94	0.49
45:BE:35:GLN:NE2	45:BE:60:LYS:HB3	2.28	0.49
45:BG:70:LEU:HD12	45:BG:145:THR:HG22	1.94	0.49
46:BH:105:HIS:CD2	46:BH:150:LEU:HB2	2.48	0.49
46:BL:31:ASP:OD2	46:BL:37:HIS:ND1	2.42	0.49
45:CA:358:GLN:NE2	45:CA:359:PRO:O	2.44	0.49
45:CC:215:ARG:HG3	45:CC:215:ARG:HH11	1.77	0.49
46:CD:19:LYS:NZ	46:CD:227:HIS:HB2	2.28	0.49
45:CE:242:LEU:HD11	45:CE:252:ILE:HD11	1.94	0.49
47:CE:501:GTP:H8	47:CE:501:GTP:O2A	1.95	0.49
47:CI:501:GTP:H8	47:CI:501:GTP:O2A	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CK:326:LYS:HZ3	46:CL:220:PRO:CD	2.25	0.49
46:DD:190:HIS:CE1	46:DD:410:GLU:OE1	2.66	0.49
45:DG:251:ASP:H	45:DG:254:GLU:HG3	1.77	0.49
46:DH:348:ASN:HA	45:DI:181:VAL:HG12	1.94	0.49
45:DK:251:ASP:OD1	45:DK:252:ILE:N	2.45	0.49
46:EB:319:GLY:HA2	46:EB:357:PRO:HD3	1.94	0.49
46:EB:350:LYS:HD3	45:EC:180:ALA:HA	1.94	0.49
45:EI:98:ASP:OD1	45:EI:99:ALA:N	2.46	0.49
45:EK:183:GLU:N	45:EK:184:PRO:HD2	2.28	0.49
46:EN:105:HIS:HD2	46:EN:106:TYR:CE1	2.30	0.49
45:FA:427:ALA:O	45:FA:431:ASP:N	2.45	0.49
45:FE:185:TYR:HE1	45:FE:398:MET:HB3	1.77	0.49
45:FM:139:ASN:OD1	45:FM:140:SER:N	2.45	0.49
45:GI:231:ILE:O	45:GI:235:ILE:HG12	2.13	0.49
46:GL:404:ASP:OD1	46:GL:404:ASP:N	2.45	0.49
45:GM:414:GLU:HB2	45:GM:417:GLU:HG2	1.94	0.49
45:HE:181:VAL:HG12	46:HF:347:ASN:O	2.11	0.49
45:IC:231:ILE:O	45:IC:235:ILE:HG12	2.13	0.49
45:IG:326:LYS:NZ	46:IJ:218:THR:O	2.30	0.49
46:IH:326:VAL:O	46:IH:330:MET:HG2	2.12	0.49
45:II:90:GLU:OE2	45:II:121:ARG:NH1	2.45	0.49
45:IM:183:GLU:N	45:IM:184:PRO:HD2	2.27	0.49
46:JD:274:THR:HG23	46:JD:282:ARG:HH11	1.77	0.49
45:JI:103:PHE:HB2	45:JI:186:ASN:HB3	1.93	0.49
45:JI:141:VAL:HG13	45:JI:190:SER:HB3	1.94	0.49
45:JI:326:LYS:HG3	45:JI:327:ASP:N	2.28	0.49
46:KB:390:ARG:HA	46:KB:390:ARG:NE	2.26	0.49
45:KE:118:CYS:O	45:KE:122:ILE:HG12	2.12	0.49
46:KL:2:ARG:HB2	46:KL:131:GLN:HG3	1.93	0.49
45:MG:337:THR:O	45:MG:339:ARG:NH1	2.46	0.49
45:MM:272:TYR:HB3	45:MM:275:ILE:HD11	1.94	0.49
46:NJ:31:ASP:OD1	46:NJ:35:THR:N	2.32	0.49
46:NL:318:ARG:HD2	46:NL:354:CYS:HB3	1.93	0.49
46:NN:413:SER:O	46:NN:417:ASP:N	2.35	0.49
45:OA:140:SER:OG	47:OA:501:GTP:O2B	2.29	0.49
45:OE:259:LEU:HD21	45:OE:316:SER:HB2	1.95	0.49
46:OF:86:ARG:HG2	46:OF:89:ASN:ND2	2.26	0.49
46:OL:211:CYS:HB3	46:OL:217:LEU:HD21	1.95	0.49
46:PF:68:LEU:HB3	46:PF:96:GLY:HA2	1.95	0.49
45:PM:141:VAL:HG22	45:PM:187:SER:HA	1.93	0.49
46:PN:323:THR:HG22	46:PN:353:ILE:HG13	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QE:102:ASN:HB3	45:QE:105:ARG:HB2	1.94	0.49
45:QE:174:SER:OG	45:QE:207:GLU:OE1	2.30	0.49
45:RA:183:GLU:N	45:RA:184:PRO:HD2	2.28	0.49
45:RG:21:TRP:CZ3	45:RG:63:PRO:HB3	2.48	0.49
45:RK:109:THR:HG22	45:RK:110:ILE:HG23	1.95	0.49
45:RK:155:GLU:OE1	45:RK:197:HIS:NE2	2.46	0.49
46:SL:32:PRO:O	46:SL:83:GLN:NE2	2.45	0.49
45:TI:288:VAL:HG11	45:TI:327:ASP:HB3	1.93	0.49
45:UC:217:LEU:HA	45:UC:277:SER:HB3	1.93	0.49
46:UH:46:ARG:NH2	45:UI:76:ASP:OD2	2.46	0.49
45:UI:69:ASP:OD1	45:UI:70:LEU:N	2.43	0.49
46:UJ:105:HIS:CD2	46:UJ:150:LEU:HB2	2.47	0.49
46:UJ:207:LEU:HB3	46:UJ:225:LEU:HD22	1.94	0.49
45:UK:174:SER:HB2	45:UK:177:VAL:O	2.11	0.49
45:UM:55:GLU:HG3	45:UM:57:GLY:H	1.77	0.49
45:VA:185:TYR:OH	45:VA:403:ALA:O	2.23	0.49
46:VL:202:ILE:HD11	46:VL:268:ILE:HD11	1.93	0.49
46:WF:239:CYS:SG	46:WF:248:SER:N	2.81	0.49
46:WN:167:PHE:HA	46:WN:200:MET:HB2	1.94	0.49
46:WN:305:PRO:HD2	46:WN:306:ARG:NH1	2.27	0.49
2:0B:13:LEU:HD23	45:IG:76:ASP:HB3	1.94	0.49
5:2E:32:ARG:HD2	5:2E:151:CYS:HB2	1.93	0.49
21:2L:542:ILE:HB	21:2L:546:GLN:HB2	1.94	0.49
23:2O:341:LYS:HE3	23:2O:342:ARG:NH1	2.26	0.49
23:2O:378:TYR:O	23:2O:382:GLN:HG2	2.12	0.49
25:2R:287:ARG:NH2	25:2R:368:GLU:O	2.45	0.49
13:2U:446:LYS:HD2	13:2U:476:TRP:CE3	2.47	0.49
13:2U:486:CYS:HG	13:2U:488:PHE:HE1	1.61	0.49
1:3A:105:HIS:CE1	1:3A:107:PHE:H	2.30	0.49
34:4R:242:ASN:HB2	45:BE:57:GLY:HA3	1.94	0.49
34:4R:452:THR:HG21	34:4R:473:ARG:HE	1.78	0.49
10:5Q:21:PRO:HG2	10:5Q:36:ARG:HD3	1.94	0.49
35:5S:63:ASN:OD1	35:5S:65:PHE:N	2.45	0.49
40:6G:190:THR:H	40:6G:193:GLN:NE2	2.10	0.49
45:AA:147:SER:HB2	45:AA:190:SER:OG	2.12	0.49
46:AB:341:PHE:HB3	46:AB:348:ASN:HD21	1.77	0.49
46:AJ:382:ALA:HB2	46:AJ:415:MET:HE1	1.95	0.49
46:AL:8:GLN:NE2	46:AL:17:GLY:HA3	2.27	0.49
45:BC:174:SER:HB2	45:BC:177:VAL:O	2.12	0.49
45:BI:238:LEU:HD11	45:BI:255:PHE:HE2	1.77	0.49
45:BK:56:THR:HG23	45:BK:58:ALA:H	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BM:76:ASP:OD2	46:BN:46:ARG:NH2	2.45	0.49
46:CB:344:TRP:HB3	46:CB:430:ALA:HB2	1.94	0.49
45:CC:104:ALA:HB2	45:CC:413:MET:HG2	1.95	0.49
46:CH:213:ARG:NH2	46:CH:297:LYS:HB3	2.24	0.49
46:CL:226:ASN:HD21	49:CL:501:GDP:HN1	1.59	0.49
46:EB:114:ASP:OD1	46:EB:115:SER:N	2.46	0.49
45:EG:174:SER:HB3	45:EG:177:VAL:O	2.12	0.49
45:EK:217:LEU:HD21	45:EK:368:LEU:HD23	1.95	0.49
45:FA:174:SER:HB2	45:FA:177:VAL:O	2.12	0.49
46:FD:345:ILE:HG23	46:FD:348:ASN:HD22	1.77	0.49
46:FJ:105:HIS:CE1	46:FJ:150:LEU:HD12	2.47	0.49
46:FL:11:GLN:O	46:FL:15:GLN:HG2	2.12	0.49
45:GC:185:TYR:HE2	45:GC:404:PHE:HB2	1.76	0.49
45:GE:98:ASP:O	45:GE:105:ARG:NH1	2.45	0.49
46:GN:137:HIS:NE2	46:GN:166:THR:OG1	2.43	0.49
45:HA:88:HIS:NE2	45:IA:284:GLU:OE1	2.46	0.49
46:HD:204:ASN:OD1	46:HD:205:GLU:N	2.46	0.49
46:HH:238:CYS:SG	46:HH:239:CYS:N	2.85	0.49
45:HM:328:VAL:HG11	45:HM:353:VAL:HG21	1.95	0.49
46:ID:73:MET:HA	46:ID:76:VAL:HG12	1.95	0.49
45:II:241:SER:OG	45:II:250:VAL:O	2.24	0.49
45:IK:178:SER:HB2	46:IL:347:ASN:OD1	2.12	0.49
46:IN:116:VAL:HA	46:IN:119:VAL:HG12	1.94	0.49
45:JK:22:GLU:OE2	45:JK:229:ARG:NH1	2.45	0.49
46:KB:91:VAL:HG21	46:KB:116:VAL:HB	1.93	0.49
46:KN:153:SER:HA	46:KN:195:ASN:HD22	1.78	0.49
46:LB:320:ARG:HH11	46:LB:320:ARG:HG3	1.77	0.49
46:LF:55:THR:HG23	46:MF:283:ALA:HA	1.93	0.49
45:LK:103:PHE:HB2	45:LK:186:ASN:HB3	1.93	0.49
45:MA:36:MET:O	45:MA:38:SER:N	2.45	0.49
45:MA:286:LEU:N	45:MA:290:GLU:OE2	2.45	0.49
46:MB:69:GLU:HG3	46:MB:71:GLY:H	1.78	0.49
45:NA:394:LYS:NZ	46:NB:346:PRO:HG2	2.27	0.49
45:NE:262:TYR:CZ	46:NH:393:ALA:HB2	2.47	0.49
45:NG:221:ARG:NH1	46:NH:322:SER:H	2.10	0.49
45:NI:55:GLU:HG3	45:NI:57:GLY:H	1.78	0.49
45:OG:10:GLY:O	45:OG:14:ILE:HG12	2.12	0.49
46:ON:3:GLU:HG3	46:ON:49:VAL:HA	1.94	0.49
45:PC:133:GLN:HE22	45:PC:251:ASP:HB3	1.76	0.49
46:PF:354:CYS:SG	46:PF:355:ASP:N	2.86	0.49
45:PI:133:GLN:HB3	45:PI:252:ILE:HD11	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PK:399:TYR:OH	45:PK:402:ARG:NH2	2.45	0.49
46:QD:139:LEU:HA	46:QD:145:SER:HB3	1.95	0.49
45:QG:184:PRO:O	45:QG:188:ILE:HG12	2.12	0.49
46:QL:113:ILE:HA	46:QL:116:VAL:HG22	1.94	0.49
46:RB:406:MET:O	46:RB:409:THR:OG1	2.27	0.49
45:RC:384:ILE:O	45:RC:387:VAL:HG22	2.12	0.49
46:RH:324:LYS:O	46:RH:328:GLU:HG2	2.13	0.49
45:RK:288:VAL:HG11	45:RK:327:ASP:HB3	1.94	0.49
46:SB:297:LYS:HE2	46:SB:297:LYS:HA	1.94	0.49
45:SC:183:GLU:N	45:SC:184:PRO:HD2	2.27	0.49
46:SJ:238:CYS:SG	46:SJ:318:ARG:NE	2.85	0.49
46:SN:319:GLY:HA2	46:SN:357:PRO:HD3	1.94	0.49
45:TA:75:ILE:O	45:TA:79:ARG:HG2	2.12	0.49
46:TB:303:ALA:HB2	46:TB:377:MET:HE1	1.94	0.49
45:TC:136:LEU:HD23	45:TC:167:LEU:HB2	1.94	0.49
46:TD:292:GLN:HG2	46:TD:298:ASN:HD22	1.77	0.49
45:TE:328:VAL:HG11	45:TE:353:VAL:HG21	1.93	0.49
45:TI:271:SER:HB2	45:TI:377:MET:HB3	1.94	0.49
45:TI:326:LYS:HE2	46:TJ:220:PRO:HG2	1.94	0.49
45:TI:359:PRO:HB2	45:TI:370:LYS:NZ	2.27	0.49
45:TK:88:HIS:O	45:TK:91:GLN:HG2	2.13	0.49
45:TK:103:PHE:H	45:TK:408:TYR:HE2	1.60	0.49
45:UC:80:THR:HA	45:UC:84:ARG:HH21	1.76	0.49
45:UC:140:SER:OG	47:UC:501:GTP:O2B	2.23	0.49
46:UD:175:VAL:HG22	46:UD:205:GLU:HB3	1.93	0.49
45:UI:70:LEU:HD12	45:UI:145:THR:HG22	1.94	0.49
46:VB:190:HIS:HD2	46:VB:191:GLN:OE1	1.96	0.49
46:VF:31:ASP:OD2	46:VF:37:HIS:ND1	2.45	0.49
45:VG:224:TYR:HD1	45:VG:227:LEU:HD12	1.77	0.49
46:VJ:372:THR:HA	46:VJ:422:TYR:CE2	2.48	0.49
46:VN:345:ILE:HG22	46:VN:348:ASN:HB3	1.93	0.49
46:WB:73:MET:HA	46:WB:76:VAL:HG12	1.95	0.49
46:WB:215:LEU:HD21	46:WB:273:LEU:HD23	1.94	0.49
45:WC:346:TRP:CD1	46:WF:391:ARG:HG3	2.47	0.49
45:WE:326:LYS:NZ	46:WH:220:PRO:O	2.35	0.49
1:0A:124:LEU:HD22	46:AB:279:GLN:NE2	2.27	0.49
2:0B:282:GLN:HE22	46:JL:83:GLN:HG3	1.76	0.49
2:0B:304:ARG:NH2	45:KI:321:GLY:O	2.46	0.49
11:1S:24:GLN:HE21	13:1U:230:LEU:N	2.09	0.49
12:1T:275:LEU:HD12	13:1U:316:ASN:HD21	1.76	0.49
4:2D:205:ILE:O	4:2D:209:LYS:HG3	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2E:29:ARG:NH1	5:2E:150:PHE:O	2.41	0.49
20:2K:396:GLN:HA	20:2K:399:LEU:HB3	1.93	0.49
25:2R:325:THR:HG22	25:2R:357:TYR:CE2	2.47	0.49
16:3B:202:VAL:HG12	16:3B:266:LYS:HD3	1.94	0.49
27:4C:15:ILE:HD12	27:4C:66:LEU:HD13	1.93	0.49
27:4C:261:LEU:O	27:4C:263:ILE:HG12	2.12	0.49
40:6G:268:VAL:HG23	45:VA:338:LYS:HD2	1.94	0.49
41:6H:321:TYR:HD1	41:6H:322:LEU:HG	1.77	0.49
34:6R:424:LEU:HD22	34:6R:512:THR:HG23	1.94	0.49
34:7R:294:ASN:ND2	46:DB:219:THR:O	2.46	0.49
34:7R:426:PHE:CD2	34:7R:505:LEU:HD23	2.47	0.49
46:AB:309:ARG:NH2	46:AB:426:GLN:O	2.38	0.49
46:AF:281:TYR:HD1	46:MF:86:ARG:NE	2.10	0.49
46:AH:257:LEU:HD11	46:AH:314:SER:HB2	1.95	0.49
46:AL:318:ARG:HD3	46:AL:358:PRO:HG3	1.95	0.49
45:AM:88:HIS:O	45:AM:91:GLN:HG2	2.12	0.49
46:BB:254:ALA:HA	46:BB:258:ILE:HD13	1.94	0.49
45:BC:183:GLU:N	45:BC:184:PRO:HD2	2.26	0.49
46:BF:113:ILE:HD13	46:BF:154:LYS:HD2	1.94	0.49
45:BI:183:GLU:N	45:BI:184:PRO:HD2	2.28	0.49
45:BM:191:THR:HG21	45:BM:425:LEU:HD21	1.95	0.49
45:BM:398:MET:SD	46:BN:345:ILE:HG13	2.53	0.49
46:BN:86:ARG:CZ	46:CL:281:TYR:HD2	2.25	0.49
46:CB:68:LEU:HD13	46:CB:108:GLU:HG2	1.94	0.49
45:CC:408:TYR:HB3	45:CC:413:MET:HG3	1.95	0.49
45:CE:345:ASP:OD1	45:CE:346:TRP:N	2.45	0.49
46:CF:322:SER:HB2	45:CG:222:PRO:O	2.13	0.49
46:CH:166:THR:O	46:CH:200:MET:N	2.44	0.49
46:CL:109:GLY:O	46:CL:113:ILE:HG12	2.13	0.49
45:CM:402:ARG:NH2	45:CM:415:GLU:OE2	2.45	0.49
45:DG:39:ASP:N	45:DG:39:ASP:OD1	2.45	0.49
45:DG:174:SER:HB3	45:DG:177:VAL:O	2.12	0.49
45:DG:184:PRO:O	45:DG:188:ILE:HG12	2.12	0.49
46:DN:6:HIS:NE2	46:DN:8:GLN:OE1	2.46	0.49
46:DN:273:LEU:N	46:DN:292:GLN:HE22	2.06	0.49
45:EC:352:LYS:HA	46:ED:177:ASP:O	2.12	0.49
45:EG:288:VAL:HG11	45:EG:327:ASP:HB3	1.95	0.49
45:EM:273:ALA:O	45:EM:375:VAL:N	2.38	0.49
46:EN:164:MET:HE2	46:EN:196:ALA:HA	1.95	0.49
46:EN:237:THR:O	46:EN:241:ARG:HG3	2.12	0.49
46:FB:267:MET:HB3	46:FB:299:MET:HE2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FC:371:VAL:HG12	45:FC:373:ARG:H	1.76	0.49
46:FD:11:GLN:O	46:FD:15:GLN:HG2	2.12	0.49
45:FE:17:GLY:HA2	45:FE:20:CYS:SG	2.53	0.49
45:FI:68:LEU:HD21	45:FI:118:CYS:HB2	1.94	0.49
46:GB:8:GLN:HE21	46:GB:65:LEU:HG	1.77	0.49
46:GB:207:LEU:HD22	46:GB:228:LEU:HD11	1.95	0.49
45:GG:246:GLY:O	45:GG:249:ASN:ND2	2.45	0.49
46:GH:105:HIS:CE1	46:GH:150:LEU:HD12	2.47	0.49
46:GN:203:ASP:OD2	46:GN:302:ALA:N	2.36	0.49
46:HB:77:ARG:O	46:HB:83:GLN:NE2	2.33	0.49
46:HJ:342:VAL:HG13	46:HJ:345:ILE:HG22	1.94	0.49
46:HL:207:LEU:HB3	46:HL:225:LEU:HG	1.95	0.49
45:IC:172:TYR:HD1	45:IC:173:PRO:HD2	1.78	0.49
46:IN:68:LEU:HB3	46:IN:96:GLY:HA2	1.94	0.49
46:IN:313:ALA:HB3	46:IN:349:ILE:HG12	1.94	0.49
45:JG:422:ARG:O	45:JG:422:ARG:NH1	2.46	0.49
46:JN:63:ALA:O	46:JN:89:ASN:ND2	2.34	0.49
45:KG:287:SER:N	45:KG:290:GLU:OE1	2.45	0.49
45:KM:406:HIS:HA	45:KM:409:VAL:HG12	1.95	0.49
46:LF:192:LEU:HD21	46:LF:199:CYS:SG	2.53	0.49
45:LK:288:VAL:HA	45:LK:291:ILE:HG12	1.94	0.49
45:ME:356:ASN:OD1	45:ME:357:TYR:N	2.45	0.49
45:MK:205:ASP:OD1	45:MK:303:ALA:HA	2.12	0.49
46:NB:136:THR:HG22	46:NB:167:PHE:HD2	1.77	0.49
46:NF:200:MET:HE1	46:NF:268:ILE:HD13	1.95	0.49
46:NH:58:ARG:NH2	46:OH:280:GLN:OE1	2.45	0.49
46:NN:68:LEU:HA	46:NN:93:GLY:H	1.77	0.49
46:OB:297:LYS:O	46:OB:297:LYS:HD2	2.12	0.49
45:OC:326:LYS:HZ3	46:OF:212:PHE:HD2	1.59	0.49
46:OJ:32:PRO:HB3	46:OJ:81:PHE:HA	1.95	0.49
46:ON:99:ASN:HA	46:ON:142:GLY:HA3	1.95	0.49
46:PD:105:HIS:CE1	46:PD:150:LEU:HD12	2.48	0.49
46:PD:323:THR:HG22	46:PD:353:ILE:HG13	1.93	0.49
45:PI:252:ILE:HA	45:PI:255:PHE:HD2	1.77	0.49
45:PM:88:HIS:HA	45:QM:280:LYS:HE2	1.93	0.49
45:PM:414:GLU:HB2	45:PM:417:GLU:HG2	1.94	0.49
45:QA:242:LEU:HD11	45:QA:252:ILE:HG13	1.94	0.49
46:QB:238:CYS:SG	46:QB:239:CYS:N	2.86	0.49
46:QB:309:ARG:NH1	46:QB:426:GLN:O	2.37	0.49
46:QJ:292:GLN:HG2	46:QJ:298:ASN:ND2	2.28	0.49
45:QM:93:ILE:HD11	45:QM:121:ARG:HG3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QM:287:SER:N	45:QM:290:GLU:OE2	2.45	0.49
45:RA:238:LEU:HD21	45:RA:255:PHE:HE2	1.76	0.49
45:RA:319:TYR:CE2	45:RA:328:VAL:HG22	2.48	0.49
46:RD:62:ARG:HH12	46:RD:127:CYS:HB3	1.77	0.49
46:SF:213:ARG:HG3	46:SF:297:LYS:HE2	1.94	0.49
45:SI:272:TYR:HD2	45:SI:275:ILE:HD11	1.77	0.49
46:SJ:345:ILE:HG23	46:SJ:348:ASN:HD22	1.78	0.49
46:TD:5:VAL:HG12	46:TD:62:ARG:HD3	1.94	0.49
46:TD:72:THR:OG1	46:TD:73:MET:SD	2.69	0.49
45:TK:98:ASP:OD1	45:TK:99:ALA:N	2.44	0.49
45:UC:109:THR:HG22	45:UC:110:ILE:HG23	1.95	0.49
45:UG:244:PHE:HB2	45:UG:356:ASN:HD21	1.78	0.49
46:UH:173:PRO:HD3	46:UH:380:ARG:NH1	2.28	0.49
45:UI:27:GLU:OE2	45:UI:243:ARG:NH1	2.40	0.49
46:UL:99:ASN:HA	46:UL:142:GLY:H	1.76	0.49
45:VC:241:SER:OG	45:VC:250:VAL:O	2.29	0.49
46:VD:226:ASN:ND2	49:VD:501:GDP:HN1	2.09	0.49
45:VG:423:GLU:O	45:VG:427:ALA:N	2.36	0.49
46:VH:86:ARG:HD3	46:VH:88:ASP:HB3	1.94	0.49
46:VL:178:THR:HG22	46:VL:180:VAL:H	1.76	0.49
45:WE:337:THR:O	45:WE:339:ARG:NH1	2.46	0.49
45:WG:242:LEU:HD11	45:WG:252:ILE:HG12	1.94	0.49
46:WH:206:ALA:O	46:WH:210:ILE:HG13	2.12	0.49
45:WM:167:LEU:HG	45:WM:200:VAL:HB	1.94	0.49
46:WN:58:ARG:HH21	46:WN:84:LEU:HA	1.77	0.49
46:WN:313:ALA:HB1	46:WN:367:PHE:HE1	1.78	0.49
16:1B:63:GLN:NE2	45:LC:80:THR:HG23	2.26	0.49
18:1I:30:ARG:HH12	45:IC:84:ARG:HE	1.59	0.49
23:1O:207:HIS:NE2	45:TC:58:ALA:O	2.46	0.49
24:1P:255:ILE:HD13	46:TF:276:ARG:HH12	1.78	0.49
21:2L:667:ARG:HB2	21:2L:682:PHE:CZ	2.48	0.49
21:2L:860:LEU:O	21:2L:864:GLU:HG2	2.12	0.49
32:3D:23:ARG:HH11	32:3D:23:ARG:HG2	1.77	0.49
13:3U:416:ASP:OD2	13:3U:418:GLN:NE2	2.44	0.49
37:5G:129:ARG:NH1	46:OL:218:THR:OG1	2.46	0.49
37:5H:87:LEU:HD13	37:5H:92:GLN:HB3	1.94	0.49
40:6G:305:THR:HG21	46:UB:117:LEU:HD21	1.94	0.49
45:AA:398:MET:HE2	46:AB:346:PRO:HD2	1.95	0.49
45:AG:183:GLU:N	45:AG:184:PRO:HD2	2.28	0.49
46:AJ:67:ASP:OD2	46:AJ:72:THR:OG1	2.22	0.49
46:BB:237:THR:HG23	46:BB:241:ARG:NH2	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BG:326:LYS:NZ	46:BJ:220:PRO:HG2	2.27	0.49
46:CB:257:LEU:HD11	46:CB:314:SER:HB2	1.95	0.49
46:CD:12:CYS:HB3	46:CD:138:SER:HB3	1.93	0.49
46:DH:272:PRO:HG3	46:DH:284:LEU:HD21	1.93	0.49
46:DL:295:ASP:OD2	46:DL:296:ALA:N	2.46	0.49
45:DM:53:PHE:HB3	45:DM:61:HIS:HB3	1.93	0.49
46:DN:58:ARG:NH2	46:DN:83:GLN:OE1	2.42	0.49
46:EB:318:ARG:HB3	46:EB:357:PRO:HA	1.94	0.49
46:ED:187:LEU:HD11	46:ED:408:PHE:CE1	2.48	0.49
45:FA:222:PRO:HG2	46:FB:324:LYS:CE	2.43	0.49
46:FD:207:LEU:HB3	46:FD:225:LEU:HD22	1.94	0.49
45:FI:271:SER:HB2	45:FI:377:MET:HB3	1.94	0.49
46:FL:207:LEU:HB3	46:FL:225:LEU:HD22	1.94	0.49
45:GA:210:TYR:HA	46:GB:324:LYS:HZ3	1.77	0.49
46:GH:67:ASP:OD1	46:GH:68:LEU:N	2.37	0.49
46:GJ:7:ILE:HG22	46:GJ:64:ILE:HB	1.95	0.49
46:GJ:36:TYR:HB2	46:GJ:59:TYR:HE2	1.77	0.49
45:GM:235:ILE:O	45:GM:239:THR:HG22	2.13	0.49
46:HD:297:LYS:HZ1	46:HD:306:ARG:HH21	1.61	0.49
46:HH:207:LEU:HB3	46:HH:225:LEU:HD22	1.94	0.49
46:HL:97:ALA:HA	46:HL:103:LYS:HD2	1.94	0.49
45:II:174:SER:HB2	45:II:177:VAL:O	2.12	0.49
45:II:322:ASP:OD1	45:II:373:ARG:NH1	2.46	0.49
45:IK:242:LEU:HD11	45:IK:252:ILE:HG12	1.94	0.49
46:IN:19:LYS:HG3	46:IN:226:ASN:HB3	1.95	0.49
45:JA:188:ILE:O	45:JA:191:THR:OG1	2.24	0.49
46:JB:163:ILE:HD11	46:JB:251:ARG:HB2	1.94	0.49
46:JH:332:ASN:O	46:JH:336:LYS:HG2	2.12	0.49
46:JL:303:ALA:HB2	46:JL:377:MET:HG3	1.94	0.49
46:KJ:86:ARG:HG2	46:KJ:88:ASP:H	1.78	0.49
45:LA:7:ILE:N	45:LA:136:LEU:O	2.40	0.49
45:LA:269:LEU:HD21	45:LA:384:ILE:HD13	1.94	0.49
45:LE:224:TYR:HD1	45:LE:227:LEU:HD12	1.77	0.49
45:LK:224:TYR:HE2	46:LL:246:LEU:HD11	1.78	0.49
46:LN:372:THR:HA	46:LN:422:TYR:CZ	2.47	0.49
46:MD:73:MET:CE	46:MD:92:PHE:HB3	2.42	0.49
46:MJ:173:PRO:HG2	46:MJ:380:ARG:HD3	1.95	0.49
46:ML:128:ASP:OD1	46:ML:129:CYS:N	2.45	0.49
46:NB:64:ILE:HA	46:NB:89:ASN:HB3	1.94	0.49
46:NN:318:ARG:HD3	46:NN:358:PRO:HD3	1.94	0.49
45:OA:261:PRO:HG2	45:OA:313:MET:HE2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OB:371:SER:O	46:OB:422:TYR:OH	2.20	0.49
46:OD:377:MET:O	46:OD:380:ARG:HG3	2.13	0.49
45:OG:317:MET:HG3	45:OG:353:VAL:HG12	1.94	0.49
46:ON:314:SER:HB3	46:ON:368:VAL:HB	1.95	0.49
45:PC:229:ARG:HH12	45:PC:363:VAL:HG11	1.78	0.49
46:QB:290:THR:OG1	46:QB:329:GLN:OE1	2.18	0.49
45:QC:284:GLU:CD	45:QC:286:LEU:H	2.16	0.49
45:QM:183:GLU:N	45:QM:184:PRO:HD2	2.28	0.49
46:QN:318:ARG:HH11	46:QN:358:PRO:HG3	1.77	0.49
46:RB:376:GLU:HB2	46:RB:380:ARG:HH12	1.78	0.49
46:RL:152:ILE:O	46:RL:156:ARG:HG3	2.12	0.49
46:SH:326:VAL:HG11	46:SH:353:ILE:HD11	1.93	0.49
46:SL:54:ALA:HB3	46:SL:58:ARG:HG2	1.93	0.49
45:TE:74:VAL:HA	45:TE:77:GLU:OE2	2.12	0.49
46:TJ:9:GLY:HA3	46:TJ:66:MET:SD	2.53	0.49
45:TK:195:LEU:HD21	45:TK:428:LEU:HD21	1.93	0.49
46:UB:346:PRO:HD2	45:UC:398:MET:HE3	1.95	0.49
46:UF:65:LEU:HD11	46:UF:85:PHE:CD2	2.48	0.49
46:UJ:342:VAL:HG13	46:UJ:345:ILE:HG22	1.95	0.49
45:WA:181:VAL:HG23	45:WA:182:VAL:HG23	1.94	0.49
46:WB:327:ASP:OD1	46:WB:328:GLU:N	2.46	0.49
46:WJ:375:GLN:O	46:WJ:379:LYS:HG2	2.11	0.49
45:WK:22:GLU:OE1	45:WK:83:TYR:OH	2.28	0.49
46:WN:374:ILE:HD12	46:WN:377:MET:HE1	1.95	0.49
11:1S:18:ARG:NH1	11:1S:27:VAL:HG21	2.25	0.49
4:2D:218:GLN:HG2	4:2D:219:ASN:N	2.27	0.49
30:2H:208:ASN:OD1	30:2H:209:ARG:N	2.46	0.49
31:2I:118:LYS:HZ3	45:GC:339:ARG:HG3	1.78	0.49
21:2L:555:LYS:HE2	21:2L:555:LYS:HA	1.93	0.49
22:2M:98:PRO:HB3	22:2M:154:ASP:HB3	1.93	0.49
24:2P:439:HIS:HB2	45:TK:282:TYR:CE2	2.46	0.49
10:2Q:80:ILE:HD11	10:2Q:160:CYS:HB2	1.95	0.49
11:2S:136:ARG:NH2	10:3Q:149:ILE:HD12	2.28	0.49
11:2S:255:ILE:HG13	11:2S:256:LEU:HD22	1.95	0.49
15:2X:99:VAL:HG22	45:MG:282:TYR:HE2	1.77	0.49
1:3A:25:LYS:HG3	15:3X:76:GLU:OE2	2.13	0.49
30:3H:207:LYS:HD2	30:3H:208:ASN:O	2.13	0.49
13:3U:181:LYS:HZ3	45:VK:59:GLY:HA3	1.78	0.49
13:3U:266:ILE:O	13:3U:267:GLN:HG2	2.13	0.49
13:3U:341:THR:HA	13:3U:364:GLU:HG3	1.94	0.49
34:4R:227:GLU:HA	34:4R:230:GLU:CD	2.33	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:4R:294:ASN:ND2	46:DF:219:THR:OG1	2.46	0.49
10:6Q:92:GLN:HB3	10:6Q:153:ARG:H	1.77	0.49
45:AA:72:PRO:HG2	46:AB:1:MET:SD	2.52	0.49
45:AE:185:TYR:HE2	45:AE:404:PHE:HB2	1.78	0.49
45:AM:399:TYR:O	45:AM:402:ARG:NH2	2.46	0.49
45:BI:259:LEU:HD11	45:BI:316:SER:HB2	1.94	0.49
45:CM:19:ALA:O	45:CM:22:GLU:HG3	2.12	0.49
45:DA:211:ASP:OD1	45:DA:212:ILE:N	2.46	0.49
46:DB:15:GLN:NE2	49:DB:501:GDP:N7	2.60	0.49
46:DB:52:ASN:OD1	46:DB:62:ARG:NH2	2.46	0.49
45:DC:17:GLY:HA2	45:DC:20:CYS:SG	2.53	0.49
45:DI:147:SER:HB2	45:DI:190:SER:OG	2.12	0.49
46:DN:97:ALA:HB3	46:DN:143:THR:HB	1.95	0.49
45:EA:214:ARG:HB3	45:EA:215:ARG:HH22	1.77	0.49
45:EC:389:SER:O	45:EC:393:HIS:ND1	2.43	0.49
46:EH:66:MET:CE	46:EH:147:MET:HG2	2.42	0.49
46:EJ:192:LEU:HD21	46:EJ:199:CYS:SG	2.52	0.49
45:FE:176:GLN:O	46:FF:347:ASN:ND2	2.46	0.49
46:GB:215:LEU:HD21	46:GB:273:LEU:HD12	1.95	0.49
46:GB:241:ARG:HG3	46:GB:242:PHE:CD1	2.48	0.49
46:GD:5:VAL:HG12	46:GD:62:ARG:HD3	1.94	0.49
46:GL:153:SER:HB2	46:GL:191:GLN:HE21	1.78	0.49
45:GM:101:ASN:OD1	46:GN:252:LYS:NZ	2.43	0.49
45:HA:257:THR:HA	46:HD:397:TRP:NE1	2.27	0.49
46:HD:203:ASP:OD2	46:HD:205:GLU:HG3	2.12	0.49
46:HJ:374:ILE:HG22	46:HJ:422:TYR:CE2	2.48	0.49
45:HM:324:VAL:HG12	45:HM:326:LYS:HG2	1.95	0.49
45:II:7:ILE:HB	45:II:137:VAL:HG12	1.95	0.49
45:IK:100:ALA:HA	46:IL:252:LYS:HG3	1.94	0.49
46:IL:341:PHE:HE2	46:IL:349:ILE:HD11	1.77	0.49
45:JA:205:ASP:OD1	45:JA:303:ALA:HA	2.13	0.49
46:JB:8:GLN:HE21	46:JB:14:ASN:HA	1.77	0.49
46:JB:206:ALA:O	46:JB:210:ILE:HG12	2.13	0.49
45:JI:102:ASN:HB3	45:JI:105:ARG:HB2	1.94	0.49
45:JK:178:SER:HB2	46:JL:347:ASN:ND2	2.28	0.49
46:JN:139:LEU:HA	46:JN:145:SER:HB3	1.95	0.49
45:KA:109:THR:O	45:KA:112:LYS:NZ	2.42	0.49
45:KM:183:GLU:N	45:KM:184:PRO:HD2	2.28	0.49
46:LF:2:ARG:HB2	46:LF:131:GLN:HG3	1.93	0.49
46:LL:383:GLU:HA	46:LL:386:THR:HG22	1.94	0.49
45:LM:395:PHE:HZ	45:LM:418:PHE:HB3	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MB:390:ARG:O	46:MB:392:LYS:NZ	2.45	0.49
46:MD:113:ILE:HA	46:MD:116:VAL:HG12	1.93	0.49
45:ME:71:GLU:OE2	45:ME:73:THR:OG1	2.20	0.49
45:MG:244:PHE:HB2	45:MG:356:ASN:HD21	1.77	0.49
45:MK:120:ASP:O	45:MK:123:ARG:HB3	2.13	0.49
46:ND:309:ARG:NH2	46:ND:341:PHE:O	2.45	0.49
46:NL:3:GLU:OE2	46:NL:62:ARG:NH1	2.46	0.49
46:NL:154:LYS:O	46:NL:157:GLU:HG3	2.11	0.49
45:OA:88:HIS:HB3	45:OA:91:GLN:HG3	1.93	0.49
46:OB:14:ASN:HD22	46:OB:65:LEU:HD23	1.77	0.49
45:OC:68:LEU:HD21	45:OC:118:CYS:HB2	1.94	0.49
46:OF:52:ASN:OD1	46:OF:62:ARG:NH2	2.46	0.49
45:OG:80:THR:O	45:OG:84:ARG:NH2	2.46	0.49
45:OM:175:PRO:HB2	45:OM:176:GLN:OE1	2.13	0.49
47:PG:501:GTP:O2A	47:PG:501:GTP:H8	1.96	0.49
45:PI:183:GLU:N	45:PI:184:PRO:HD2	2.28	0.49
46:QB:49:VAL:HG21	46:QB:241:ARG:HG2	1.93	0.49
46:QB:167:PHE:CE2	46:QB:233:MET:HG3	2.47	0.49
46:QD:135:ILE:HB	46:QD:166:THR:HA	1.94	0.49
46:QD:258:ILE:O	46:QD:258:ILE:HG13	2.13	0.49
45:QI:242:LEU:HD11	45:QI:252:ILE:HG12	1.94	0.49
45:QK:340:THR:HG23	45:QK:341:ILE:HG13	1.93	0.49
45:QM:109:THR:OG1	45:QM:110:ILE:HD12	2.13	0.49
46:RB:390:ARG:O	46:RB:392:LYS:NZ	2.45	0.49
45:RE:306:ASP:OD1	45:RE:306:ASP:N	2.45	0.49
46:RF:190:HIS:CD2	46:RF:414:ASN:HD22	2.31	0.49
46:RF:238:CYS:SG	46:RF:318:ARG:NH2	2.86	0.49
46:RL:7:ILE:HB	46:RL:135:ILE:HG22	1.95	0.49
46:RL:322:SER:HB2	46:RL:324:LYS:HZ3	1.77	0.49
45:RM:88:HIS:CE1	45:RM:90:GLU:HB3	2.46	0.49
45:SE:183:GLU:N	45:SE:184:PRO:HD2	2.28	0.49
45:SG:254:GLU:HG2	45:SG:258:ASN:ND2	2.28	0.49
46:SH:292:GLN:O	46:SH:298:ASN:ND2	2.33	0.49
45:SI:174:SER:HB2	45:SI:177:VAL:O	2.13	0.49
45:SM:55:GLU:HG3	45:SM:57:GLY:H	1.77	0.49
46:TB:290:THR:HA	46:TB:293:MET:HB2	1.94	0.49
46:TF:99:ASN:HA	46:TF:142:GLY:H	1.76	0.49
46:TF:269:GLY:HA2	46:TF:300:MET:HG3	1.93	0.49
46:TJ:164:MET:H	46:TJ:197:ASP:HB2	1.77	0.49
45:UI:258:ASN:OD1	45:UI:352:LYS:NZ	2.41	0.49
45:UM:315:CYS:HA	45:UM:379:SER:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UN:22:GLU:HG3	46:UN:81:PHE:HD2	1.75	0.49
45:VI:284:GLU:HG2	45:VI:286:LEU:H	1.77	0.49
46:WL:248:SER:HB2	46:WL:252:LYS:HD2	1.94	0.49
45:WM:284:GLU:HG3	45:WM:286:LEU:HD22	1.95	0.49
46:WN:31:ASP:OD1	46:WN:35:THR:N	2.41	0.49
18:1I:93:TYR:HE2	45:JC:19:ALA:HB2	1.76	0.49
16:2B:21:LYS:HD3	16:2B:23:ILE:HD11	1.94	0.49
4:2D:53:ILE:HD12	4:2D:61:ILE:HD11	1.94	0.49
21:2L:302:SER:OG	21:2L:305:GLN:OE1	2.31	0.49
23:2O:195:GLN:OE1	23:2O:199:LYS:NZ	2.31	0.49
23:2O:415:GLU:HA	23:2O:418:GLN:NE2	2.27	0.49
13:2U:34:LEU:HG	13:2U:35:GLY:H	1.78	0.49
1:3A:39:TYR:HB2	45:MM:77:GLU:OE2	2.12	0.49
23:3O:392:ARG:HH22	46:TH:56:GLY:HA2	1.78	0.49
23:3O:405:GLU:O	23:3O:408:ILE:HG12	2.13	0.49
14:3V:24:ARG:HH22	45:MA:433:GLU:HB2	1.77	0.49
27:4C:99:LEU:HD22	27:4C:175:GLU:HB3	1.94	0.49
35:4S:176:GLY:O	35:4S:180:VAL:HG13	2.13	0.49
40:6G:229:ASN:HB3	40:6G:230:TYR:HD1	1.78	0.49
34:6R:30:GLN:HG3	34:6R:41:LYS:HB2	1.93	0.49
46:AF:139:LEU:HD13	46:AF:168:SER:HB3	1.95	0.49
45:BA:329:ASN:HB3	46:BD:175:VAL:HG12	1.93	0.49
45:CE:112:LYS:HA	45:CE:115:VAL:HG22	1.94	0.49
46:CH:294:PHE:CE2	46:CH:333:VAL:HG11	2.45	0.49
45:CM:155:GLU:HA	45:CM:197:HIS:HD2	1.78	0.49
46:CN:20:PHE:CE1	46:CN:233:MET:HG3	2.47	0.49
46:DB:2:ARG:NH2	45:DC:71:GLU:OE2	2.32	0.49
46:DF:209:ASP:O	46:DF:213:ARG:HG2	2.12	0.49
46:DH:7:ILE:HG12	46:DH:64:ILE:HD13	1.95	0.49
45:DI:215:ARG:NH2	45:DI:299:ALA:O	2.46	0.49
46:DJ:309:ARG:NH2	46:DJ:426:GLN:O	2.42	0.49
45:EA:290:GLU:HA	45:EA:293:ASN:HD22	1.78	0.49
46:EB:149:THR:HA	46:EB:152:ILE:HD12	1.95	0.49
45:EC:260:VAL:HB	46:ED:397:TRP:HZ2	1.78	0.49
45:EM:223:THR:N	45:EM:226:ASN:OD1	2.43	0.49
46:EN:150:LEU:HD23	46:EN:154:LYS:HZ2	1.78	0.49
45:FA:406:HIS:HA	45:FA:409:VAL:HG12	1.94	0.49
45:FC:241:SER:OG	45:FC:250:VAL:O	2.24	0.49
45:FE:27:GLU:HB2	45:FE:361:THR:HG21	1.94	0.49
45:FK:328:VAL:HG11	45:FK:353:VAL:HG21	1.94	0.49
46:FN:12:CYS:O	46:FN:16:ILE:HG12	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GA:180:ALA:HA	46:GB:350:LYS:HZ3	1.78	0.49
46:GB:11:GLN:O	46:GB:15:GLN:HG2	2.13	0.49
45:GG:175:PRO:HG3	45:GG:390:ARG:CZ	2.43	0.49
45:GG:311:LYS:NZ	45:GG:438:GLU:OE2	2.44	0.49
46:HB:58:ARG:NH2	46:HB:59:TYR:O	2.46	0.49
46:HF:282:ARG:HH21	46:HF:288:GLU:HG3	1.77	0.49
45:HK:259:LEU:HD23	45:HK:268:MET:HE3	1.94	0.49
46:HN:179:VAL:HG23	46:HN:180:VAL:HG13	1.94	0.49
46:IB:6:HIS:NE2	46:IB:8:GLN:OE1	2.46	0.49
46:ID:344:TRP:HB3	46:ID:430:ALA:HB2	1.95	0.49
46:IN:148:GLY:O	46:IN:152:ILE:HG13	2.12	0.49
46:JB:187:LEU:HD21	46:JB:408:PHE:CE2	2.48	0.49
45:JK:324:VAL:HG12	45:JK:326:LYS:HG2	1.94	0.49
46:JN:171:PRO:HB2	46:JN:181:GLU:OE1	2.13	0.49
45:KA:116:ASP:OD1	45:KA:117:LEU:N	2.44	0.49
46:KF:406:MET:O	46:KF:410:GLU:HG2	2.12	0.49
45:KM:271:SER:HB3	45:KM:377:MET:HB3	1.94	0.49
45:MA:173:PRO:HB3	45:MA:183:GLU:OE2	2.12	0.49
45:MA:288:VAL:HA	45:MA:291:ILE:HG12	1.93	0.49
46:MB:101:TRP:HB2	46:MB:184:ASN:HB3	1.95	0.49
46:MF:405:GLU:HA	46:MF:408:PHE:HD1	1.77	0.49
46:MN:423:GLN:NE2	46:MN:427:ASP:OD2	2.46	0.49
46:ND:309:ARG:N	46:ND:372:THR:OG1	2.43	0.49
45:NG:339:ARG:O	45:NG:339:ARG:HD2	2.13	0.49
45:NK:183:GLU:N	45:NK:184:PRO:HD2	2.27	0.49
46:NN:392:LYS:HD2	46:NN:395:LEU:HD22	1.94	0.49
45:OA:18:ASN:O	45:OA:22:GLU:HG3	2.13	0.49
45:OC:340:THR:HG23	45:OC:341:ILE:HG13	1.94	0.49
45:OK:167:LEU:HD11	45:OK:252:ILE:HD12	1.94	0.49
45:PA:251:ASP:H	45:PA:254:GLU:CD	2.14	0.49
45:PA:297:GLU:OE1	45:PA:300:ASN:ND2	2.46	0.49
46:PB:8:GLN:NE2	46:PB:14:ASN:OD1	2.37	0.49
45:PE:183:GLU:N	45:PE:184:PRO:HD2	2.27	0.49
46:PJ:45:GLU:OE1	46:PJ:46:ARG:HG2	2.13	0.49
46:PL:398:TYR:O	46:PL:403:MET:HB2	2.13	0.49
45:PM:7:ILE:HB	45:PM:137:VAL:HG12	1.94	0.49
45:PM:274:PRO:HD3	45:PM:374:ALA:HA	1.95	0.49
45:QA:270:SER:HB3	45:QA:378:ILE:HD13	1.95	0.49
45:QE:298:PRO:HB3	45:QE:307:PRO:HD2	1.93	0.49
45:QG:167:LEU:HD11	45:QG:256:GLN:HE21	1.78	0.49
45:QI:183:GLU:N	45:QI:184:PRO:HD2	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QJ:54:ALA:HA	46:RJ:283:ALA:HB2	1.95	0.49
46:QJ:62:ARG:HD2	46:QJ:123:GLU:OE1	2.13	0.49
45:QK:240:ALA:HB1	45:QK:356:ASN:HD22	1.78	0.49
45:QM:333:ALA:HA	45:QM:336:LYS:HE2	1.94	0.49
45:RC:141:VAL:HG22	45:RC:187:SER:HA	1.94	0.49
45:RE:310:GLY:HA3	45:RE:383:ALA:HB2	1.95	0.49
45:RI:141:VAL:HG22	45:RI:187:SER:HA	1.95	0.49
46:RJ:190:HIS:NE2	46:RJ:410:GLU:OE1	2.46	0.49
45:RM:55:GLU:OE1	45:RM:61:HIS:NE2	2.45	0.49
45:RM:262:TYR:OH	46:RN:391:ARG:O	2.28	0.49
45:SC:259:LEU:O	45:SC:261:PRO:HD3	2.11	0.49
46:SL:117:LEU:HG	46:SL:121:ARG:HE	1.78	0.49
46:SL:318:ARG:HD3	46:SL:358:PRO:HD3	1.94	0.49
45:TM:166:LYS:N	45:TM:199:ASP:OD2	2.41	0.49
45:TM:317:MET:HA	45:TM:377:MET:HA	1.95	0.49
45:UG:326:LYS:HD3	46:UH:212:PHE:HZ	1.78	0.49
45:UK:328:VAL:HG11	45:UK:353:VAL:HG21	1.93	0.49
46:UN:68:LEU:HD12	46:UN:93:GLY:HA3	1.95	0.49
45:VC:282:TYR:OH	45:VC:370:LYS:O	2.27	0.49
45:VG:328:VAL:O	45:VG:332:ILE:HG12	2.13	0.49
45:VK:109:THR:OG1	45:VK:411:GLU:OE2	2.23	0.49
45:VK:346:TRP:CD1	46:VN:391:ARG:HG3	2.48	0.49
46:WD:73:MET:HA	46:WD:76:VAL:HG12	1.95	0.49
46:WH:181:GLU:CG	46:WH:182:PRO:HD3	2.43	0.49
45:WM:50:ASN:O	45:WM:64:ARG:NH2	2.45	0.49
17:1F:31:PHE:HD1	45:HK:364:PRO:HB3	1.77	0.49
20:1K:200:VAL:HG11	28:2F:15:ILE:HD11	1.94	0.49
21:1L:524:ARG:NH1	46:BF:358:PRO:O	2.45	0.49
12:1T:274:ASP:OD2	13:1U:46:ARG:NH2	2.45	0.49
13:1U:468:SER:OG	13:1U:469:ALA:N	2.46	0.49
16:2B:5:ASN:ND2	16:2B:64:GLU:HB3	2.28	0.49
27:2C:102:ARG:NH2	27:2C:184:ASP:HB3	2.28	0.49
20:2K:239:MET:HA	20:2K:242:LYS:HG2	1.94	0.49
21:2L:682:PHE:HA	21:2L:685:ILE:HG22	1.94	0.49
23:2O:198:LYS:C	23:2O:198:LYS:HD3	2.33	0.49
14:2V:240:LYS:O	14:2V:243:GLU:HG3	2.13	0.49
15:2X:18:ILE:O	15:2X:18:ILE:HG13	2.13	0.49
13:3U:11:ILE:HD11	13:3U:352:ARG:HB3	1.95	0.49
13:3U:295:CYS:HB3	13:3U:303:TYR:HB2	1.95	0.49
10:4Q:81:LYS:HB3	10:4Q:161:ARG:HB2	1.95	0.49
35:4S:110:ARG:HH22	35:4S:148:LYS:HD2	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:5D:65:THR:HG23	36:5D:68:ASP:H	1.78	0.49
10:5Q:177:LEU:O	10:5Q:182:LYS:NZ	2.41	0.49
34:6R:93:LEU:HB2	34:6R:120:TYR:HB3	1.95	0.49
45:AA:116:ASP:N	45:AA:116:ASP:OD1	2.45	0.49
46:AB:311:LEU:HD11	46:AB:372:THR:HG23	1.94	0.49
45:AI:174:SER:HB2	45:AI:177:VAL:O	2.12	0.49
45:BC:276:ILE:HD12	45:BC:280:LYS:HE2	1.95	0.49
45:BM:319:TYR:HB3	45:BM:323:VAL:HG21	1.94	0.49
46:BN:327:ASP:OD1	46:BN:328:GLU:N	2.46	0.49
46:BN:345:ILE:HG23	46:BN:348:ASN:HB3	1.95	0.49
45:CA:429:GLU:O	45:CA:432:TYR:N	2.46	0.49
46:CF:148:GLY:O	46:CF:152:ILE:HG13	2.13	0.49
46:CH:3:GLU:OE2	46:CH:127:CYS:HB2	2.12	0.49
46:CN:238:CYS:HB2	46:CN:318:ARG:CZ	2.42	0.49
46:CN:279:GLN:NE2	46:CN:280:GLN:HE22	2.11	0.49
46:CN:414:ASN:OD1	46:CN:415:MET:N	2.46	0.49
46:DB:200:MET:HE1	46:DB:266:PHE:HB2	1.94	0.49
45:DE:120:ASP:OD1	45:DE:124:LYS:NZ	2.45	0.49
46:DH:167:PHE:CZ	46:DH:233:MET:HG3	2.48	0.49
46:DL:10:GLY:O	46:DL:14:ASN:ND2	2.46	0.49
46:DL:156:ARG:NH1	46:DL:162:ARG:O	2.45	0.49
46:DN:289:LEU:HD13	46:DN:365:VAL:HG23	1.95	0.49
45:EA:241:SER:OG	45:EA:250:VAL:O	2.30	0.49
46:EB:215:LEU:HD11	46:EB:273:LEU:HD12	1.94	0.49
46:EB:309:ARG:NH2	46:EB:343:GLU:OE1	2.46	0.49
45:FE:76:ASP:OD2	46:FF:46:ARG:NH2	2.46	0.49
45:FK:135:PHE:HB2	45:FK:166:LYS:HG2	1.95	0.49
46:FL:10:GLY:O	46:FL:14:ASN:ND2	2.46	0.49
45:GI:288:VAL:HA	45:GI:291:ILE:HG12	1.94	0.49
45:GM:221:ARG:HA	46:GN:324:LYS:HZ3	1.77	0.49
45:GM:244:PHE:CD2	45:GM:358:GLN:HB2	2.47	0.49
45:HI:214:ARG:HH11	45:HI:214:ARG:HG2	1.78	0.49
45:HK:72:PRO:HB2	46:HL:46:ARG:HH22	1.78	0.49
45:HM:416:GLY:O	45:HM:419:SER:OG	2.19	0.49
45:IA:153:LEU:O	45:IA:157:LEU:HD12	2.13	0.49
45:IA:183:GLU:N	45:IA:184:PRO:HD2	2.28	0.49
45:IE:11:GLN:NE2	46:IF:245:GLN:O	2.45	0.49
45:II:192:HIS:ND1	45:II:424:ASP:OD2	2.42	0.49
45:JA:384:ILE:O	45:JA:387:VAL:HG22	2.13	0.49
46:KD:322:SER:OG	46:KD:325:GLU:OE1	2.18	0.49
45:KE:119:LEU:HD11	45:KE:156:ARG:HB3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LB:156:ARG:NH1	46:LB:162:ARG:O	2.46	0.49
46:LD:207:LEU:HD13	46:LD:225:LEU:HB3	1.95	0.49
45:NA:105:ARG:HE	46:NB:251:ARG:NH2	2.11	0.49
45:NA:414:GLU:HG3	45:NA:417:GLU:OE2	2.13	0.49
46:ND:105:HIS:CE1	46:ND:150:LEU:HD12	2.48	0.49
45:NG:183:GLU:N	45:NG:184:PRO:HD2	2.28	0.49
45:NG:279:GLU:HB2	45:NG:283:HIS:NE2	2.27	0.49
45:OA:184:PRO:HB3	45:OA:394:LYS:HG3	1.94	0.49
45:OE:255:PHE:O	45:OE:259:LEU:HG	2.13	0.49
46:OF:131:GLN:HA	46:OF:162:ARG:HH21	1.78	0.49
46:OH:215:LEU:HD21	46:OH:273:LEU:HD22	1.93	0.49
46:PB:86:ARG:NE	46:PB:87:PRO:HD2	2.28	0.49
45:PC:177:VAL:HG13	46:PD:327:ASP:HB3	1.95	0.49
45:PK:229:ARG:HH12	45:PK:363:VAL:HG11	1.77	0.49
46:PL:178:THR:HB	46:PL:181:GLU:HG2	1.94	0.49
45:QE:140:SER:OG	47:QE:501:GTP:O2B	2.29	0.49
45:QE:194:LEU:O	45:QE:198:THR:HG22	2.13	0.49
46:QF:3:GLU:HG3	46:QF:62:ARG:NH1	2.27	0.49
46:QF:113:ILE:HD13	46:QF:150:LEU:HD22	1.95	0.49
46:QL:350:LYS:NZ	45:QM:180:ALA:HA	2.27	0.49
46:RD:139:LEU:HA	46:RD:145:SER:HB3	1.95	0.49
45:RK:215:ARG:NH1	45:RK:299:ALA:HB1	2.27	0.49
46:RN:309:ARG:NH2	46:RN:426:GLN:O	2.41	0.49
45:SG:183:GLU:N	45:SG:184:PRO:HD2	2.28	0.49
45:SG:276:ILE:HD11	45:SG:280:LYS:HG3	1.95	0.49
46:SL:74:ASP:OD1	46:SL:75:SER:N	2.46	0.49
45:TC:183:GLU:N	45:TC:184:PRO:HD2	2.28	0.49
45:TK:183:GLU:N	45:TK:184:PRO:HD2	2.26	0.49
45:TM:269:LEU:HD23	45:TM:303:ALA:HB3	1.95	0.49
46:UB:7:ILE:HB	46:UB:135:ILE:HG13	1.94	0.49
46:UB:344:TRP:HE3	46:UB:345:ILE:HG23	1.78	0.49
45:UK:356:ASN:OD1	45:UK:357:TYR:N	2.46	0.49
46:UN:286:VAL:HA	46:UN:289:LEU:HD12	1.94	0.49
46:VF:113:ILE:HA	46:VF:116:VAL:HG12	1.94	0.49
45:VK:429:GLU:HA	45:VK:432:TYR:HD2	1.78	0.49
45:VM:88:HIS:HB3	45:VM:91:GLN:HG2	1.95	0.49
46:WB:293:MET:HG2	46:WB:365:VAL:HG11	1.95	0.49
45:WC:66:VAL:HG11	45:WC:122:ILE:HD11	1.94	0.49
45:WG:311:LYS:NZ	45:WG:342:GLN:HB3	2.28	0.49
13:1U:9:ALA:HB3	13:1U:601:ILE:HD11	1.95	0.48
13:1U:30:LEU:HB2	13:1U:43:ILE:HD11	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1U:383:ASP:N	13:1U:383:ASP:OD1	2.46	0.48
14:1V:154:ASN:HB3	14:1V:158:LYS:HE2	1.94	0.48
21:2L:379:TYR:HD2	21:2L:381:LEU:HB2	1.78	0.48
21:2L:523:GLN:HE21	21:2L:525:LEU:HD12	1.77	0.48
21:2L:888:VAL:HG22	21:2L:889:SER:H	1.78	0.48
23:2O:130:GLN:O	23:2O:134:ASN:HB2	2.12	0.48
23:2O:191:TYR:O	23:2O:194:GLU:HG3	2.12	0.48
23:2O:453:ARG:HH22	46:UB:58:ARG:HH11	1.61	0.48
10:2Q:140:THR:HG21	10:2Q:148:TYR:HB3	1.95	0.48
25:2R:304:LEU:HD23	25:2R:322:VAL:HG21	1.94	0.48
13:2U:9:ALA:HB3	13:2U:601:ILE:HD11	1.94	0.48
5:3E:32:ARG:HH12	5:3E:163:GLU:HB2	1.78	0.48
25:3R:467:ASN:OD1	25:3R:468:ARG:N	2.46	0.48
12:3T:68:GLY:HA2	12:3T:112:PRO:HA	1.95	0.48
12:3T:254:ASN:HB3	12:3T:257:GLN:HB3	1.94	0.48
27:4C:114:ILE:HG21	27:4C:127:LEU:HD23	1.94	0.48
46:AB:116:VAL:HA	46:AB:119:VAL:HG12	1.94	0.48
46:AD:67:ASP:OD1	46:AD:69:GLU:N	2.46	0.48
46:AJ:238:CYS:SG	46:AJ:318:ARG:HD3	2.53	0.48
45:BA:145:THR:OG1	47:BA:501:GTP:O1B	2.30	0.48
45:BA:358:GLN:NE2	45:BA:359:PRO:O	2.46	0.48
46:BD:282:ARG:NH1	46:BD:288:GLU:OE1	2.44	0.48
45:CC:174:SER:HB2	45:CC:177:VAL:O	2.13	0.48
46:CH:238:CYS:SG	46:CH:239:CYS:N	2.86	0.48
46:CN:175:VAL:HG22	46:CN:205:GLU:HG3	1.95	0.48
45:DA:372:MET:SD	45:DA:373:ARG:HG2	2.53	0.48
46:DB:2:ARG:HH12	45:DC:72:PRO:HD2	1.78	0.48
45:DC:10:GLY:O	45:DC:13:GLY:N	2.46	0.48
45:DI:171:ILE:O	45:DI:171:ILE:HG13	2.13	0.48
46:DJ:167:PHE:CZ	46:DJ:233:MET:HG3	2.48	0.48
45:DK:192:HIS:HD2	45:DK:421:ALA:HA	1.78	0.48
46:DN:374:ILE:HG22	46:DN:378:PHE:HE2	1.77	0.48
46:EF:174:LYS:NZ	46:EF:205:GLU:OE2	2.34	0.48
46:EH:45:GLU:HG2	46:EH:46:ARG:HG2	1.94	0.48
46:EH:258:ILE:O	46:EH:258:ILE:HG13	2.13	0.48
46:EL:383:GLU:HA	46:EL:386:THR:HG22	1.93	0.48
45:EM:208:ALA:HB2	45:EM:304:LYS:HG3	1.94	0.48
45:FA:205:ASP:OD1	45:FA:206:ASN:N	2.46	0.48
45:FA:401:LYS:NZ	46:FB:425:TYR:OH	2.35	0.48
46:FB:2:ARG:HB2	46:FB:131:GLN:HG2	1.95	0.48
45:FC:2:ARG:NH2	46:FF:69:GLU:HB2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FC:183:GLU:N	45:FC:184:PRO:HD2	2.28	0.48
45:FE:269:LEU:HD21	45:FE:305:CYS:HB3	1.94	0.48
46:FN:248:SER:HA	46:FN:252:LYS:HG3	1.94	0.48
46:GB:51:TYR:HD1	46:GB:61:PRO:HA	1.78	0.48
46:GB:268:ILE:HG22	46:GB:368:VAL:HG22	1.95	0.48
45:GM:185:TYR:HE2	45:GM:404:PHE:HB2	1.78	0.48
45:GM:231:ILE:O	45:GM:235:ILE:HD12	2.12	0.48
46:GN:2:ARG:HG3	46:GN:240:LEU:HD11	1.95	0.48
46:HB:31:ASP:OD2	46:HB:33:THR:OG1	2.30	0.48
45:HC:328:VAL:HG11	45:HC:353:VAL:HG21	1.94	0.48
45:HG:290:GLU:N	45:HG:290:GLU:OE1	2.46	0.48
46:HJ:31:ASP:OD1	46:HJ:35:THR:N	2.34	0.48
46:ID:207:LEU:HD13	46:ID:225:LEU:HB3	1.94	0.48
45:IG:245:ASP:OD1	45:IG:245:ASP:N	2.46	0.48
46:JH:341:PHE:HB3	46:JH:348:ASN:HD21	1.78	0.48
45:JK:119:LEU:O	45:JK:123:ARG:HG2	2.13	0.48
45:JK:207:GLU:HG2	45:JK:304:LYS:HE3	1.94	0.48
45:JM:25:CYS:HB2	45:JM:30:ILE:HB	1.94	0.48
45:JM:217:LEU:HB3	45:JM:219:ILE:HG12	1.95	0.48
45:KA:185:TYR:HE1	45:KA:398:MET:HB3	1.77	0.48
45:KM:178:SER:HB3	46:KN:347:ASN:ND2	2.28	0.48
46:LD:309:ARG:H	46:LD:372:THR:HG1	1.58	0.48
45:LG:174:SER:HB2	45:LG:177:VAL:O	2.12	0.48
46:LH:288:GLU:HA	46:LH:291:GLN:HG2	1.93	0.48
46:MF:207:LEU:HB3	46:MF:225:LEU:HG	1.94	0.48
45:MK:88:HIS:CE1	45:MK:90:GLU:HG2	2.48	0.48
45:MM:69:ASP:OD1	45:MM:71:GLU:HG2	2.13	0.48
45:NK:311:LYS:H	45:NK:382:THR:HB	1.78	0.48
45:PC:90:GLU:OE2	45:PC:121:ARG:NH1	2.46	0.48
45:PC:195:LEU:HD22	45:PC:428:LEU:HD12	1.95	0.48
46:PH:173:PRO:HD2	46:PH:380:ARG:NH1	2.27	0.48
45:PM:96:LYS:HE3	46:PN:129:CYS:HB3	1.93	0.48
45:QA:384:ILE:O	45:QA:387:VAL:HG12	2.12	0.48
45:QI:71:GLU:HB3	45:QI:98:ASP:HB3	1.95	0.48
45:RC:349:THR:O	46:RD:179:VAL:HG23	2.12	0.48
45:RC:414:GLU:CD	45:RC:416:GLY:H	2.15	0.48
46:RD:26:ASP:O	46:RD:359:LYS:NZ	2.44	0.48
46:RL:371:SER:O	46:RL:422:TYR:OH	2.31	0.48
45:RM:67:PHE:HD2	45:RM:92:LEU:HG	1.78	0.48
45:RM:352:LYS:HD3	46:RN:178:THR:HA	1.95	0.48
45:SC:2:ARG:HD3	45:SC:2:ARG:H	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SD:256:ASN:ND2	45:SE:181:VAL:HG22	2.26	0.48
45:SK:75:ILE:HD12	45:SK:92:LEU:HB3	1.95	0.48
45:SK:183:GLU:N	45:SK:184:PRO:HD2	2.27	0.48
45:SK:329:ASN:ND2	46:SL:175:VAL:HG12	2.28	0.48
46:SN:83:GLN:O	46:SN:86:ARG:NH2	2.46	0.48
45:TI:98:ASP:O	45:TI:105:ARG:NH1	2.46	0.48
45:TM:242:LEU:HD11	45:TM:252:ILE:HG13	1.95	0.48
45:TM:326:LYS:HZ1	46:TN:219:THR:HA	1.77	0.48
45:UA:147:SER:HB2	45:UA:190:SER:HB3	1.95	0.48
45:UA:183:GLU:N	45:UA:184:PRO:HD2	2.28	0.48
46:UB:149:THR:OG1	46:UB:191:GLN:OE1	2.19	0.48
45:UK:2:ARG:O	45:UK:51:THR:HA	2.13	0.48
45:VC:11:GLN:HG3	45:VC:74:VAL:HG11	1.94	0.48
45:VC:97:GLU:HG2	45:VC:105:ARG:HH22	1.78	0.48
45:VC:183:GLU:N	45:VC:184:PRO:HD2	2.27	0.48
45:VK:219:ILE:HG13	45:VK:222:PRO:HD3	1.94	0.48
46:VN:390:ARG:O	46:VN:392:LYS:NZ	2.45	0.48
45:WA:270:SER:HA	45:WA:378:ILE:HA	1.93	0.48
45:WG:339:ARG:O	45:WG:342:GLN:NE2	2.38	0.48
45:WK:55:GLU:CD	45:WK:57:GLY:H	2.16	0.48
1:1A:139:GLN:HG2	46:AF:320:ARG:HH22	1.77	0.48
19:1J:314:VAL:HG11	45:IK:372:MET:HG3	1.94	0.48
13:1U:508:THR:OG1	13:1U:536:VAL:HG13	2.13	0.48
14:1V:69:SER:OG	46:MJ:336:LYS:HG2	2.13	0.48
26:1W:239:ARG:NH1	9:2N:260:GLU:OE1	2.27	0.48
16:2B:60:LEU:O	16:2B:61:THR:OG1	2.20	0.48
20:2K:429:HIS:HE1	45:GE:282:TYR:OH	1.97	0.48
23:2O:338:LEU:HB3	23:2O:342:ARG:NH2	2.27	0.48
16:3B:17:GLN:HG2	16:3B:60:LEU:HD22	1.94	0.48
30:3H:200:TYR:HE2	45:AG:18:ASN:ND2	2.11	0.48
27:4C:8:LEU:HD12	34:6R:4:ASN:HD22	1.77	0.48
33:4F:200:THR:HG23	33:4F:202:HIS:H	1.79	0.48
35:4S:64:LEU:HB3	35:4S:107:GLU:HG2	1.94	0.48
37:5E:46:LEU:HG	37:5E:47:GLU:H	1.78	0.48
37:5F:44:ARG:HH21	45:NC:57:GLY:HA2	1.78	0.48
37:5H:46:LEU:HG	37:5H:47:GLU:H	1.78	0.48
41:6H:367:ARG:HD3	46:FL:361:LEU:HG	1.95	0.48
45:AA:145:THR:OG1	47:AA:501:GTP:O1B	2.31	0.48
46:AB:21:TRP:HA	46:AB:24:ILE:HG22	1.96	0.48
46:AD:273:LEU:H	46:AD:292:GLN:NE2	2.10	0.48
46:AF:257:LEU:HD11	46:AF:314:SER:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AK:326:LYS:HG2	46:AN:220:PRO:HD2	1.95	0.48
45:AK:345:ASP:OD1	45:AK:346:TRP:N	2.46	0.48
46:AN:101:TRP:HB2	46:AN:184:ASN:HB3	1.94	0.48
45:BA:35:GLN:NE2	45:BA:60:LYS:HB3	2.28	0.48
45:BC:223:THR:HG23	45:BC:225:THR:H	1.77	0.48
45:CA:211:ASP:HB3	45:CA:215:ARG:HH12	1.78	0.48
46:CH:209:ASP:OD1	46:CH:213:ARG:NE	2.41	0.48
46:CL:21:TRP:HZ3	46:CL:50:TYR:HB3	1.77	0.48
46:CN:51:TYR:O	46:CN:62:ARG:NH2	2.42	0.48
46:CN:309:ARG:N	46:CN:372:THR:OG1	2.47	0.48
46:CN:310:TYR:HB2	46:CN:340:TYR:O	2.13	0.48
45:DC:223:THR:HG23	45:DC:225:THR:H	1.78	0.48
45:DC:390:ARG:HG2	45:DC:394:LYS:HZ3	1.77	0.48
46:DN:178:THR:HG23	46:DN:181:GLU:HG3	1.95	0.48
45:EC:105:ARG:HA	45:EC:109:THR:HB	1.94	0.48
45:EI:384:ILE:O	45:EI:387:VAL:HG22	2.13	0.48
46:EL:235:GLY:HA2	46:EL:318:ARG:NH2	2.28	0.48
45:FA:206:ASN:O	45:FA:210:TYR:N	2.44	0.48
45:FA:271:SER:HA	45:FA:302:MET:HG2	1.94	0.48
46:FF:111:GLU:N	46:FF:111:GLU:OE1	2.46	0.48
46:GB:119:VAL:HG23	46:GB:122:LYS:HE3	1.95	0.48
45:GC:132:LEU:O	45:GC:164:LYS:NZ	2.44	0.48
46:GJ:318:ARG:HH11	46:GJ:358:PRO:HG3	1.78	0.48
45:GK:188:ILE:HD12	45:GK:425:LEU:HD11	1.95	0.48
46:GL:55:THR:HG21	46:HL:284:LEU:HG	1.95	0.48
45:HE:68:LEU:HD11	45:HE:118:CYS:SG	2.54	0.48
45:HM:322:ASP:N	45:HM:373:ARG:HH22	2.09	0.48
45:IC:183:GLU:N	45:IC:184:PRO:HD2	2.28	0.48
46:IH:19:LYS:HD2	46:IH:227:HIS:CD2	2.49	0.48
46:JD:292:GLN:HG2	46:JD:298:ASN:ND2	2.27	0.48
45:JG:306:ASP:OD1	45:JG:308:ARG:NE	2.43	0.48
46:JH:260:PHE:HB2	46:JH:263:LEU:HD13	1.96	0.48
45:JI:192:HIS:CD2	45:JI:421:ALA:HA	2.48	0.48
45:JK:399:TYR:OH	45:JK:415:GLU:OE2	2.28	0.48
46:JL:370:ASN:OD1	46:JL:422:TYR:OH	2.25	0.48
45:KI:133:GLN:HB3	45:KI:252:ILE:HD13	1.95	0.48
45:KI:265:ILE:O	45:KI:265:ILE:HG13	2.13	0.48
45:LC:217:LEU:HD12	45:LC:367:ASP:HB3	1.95	0.48
46:MH:139:LEU:HD13	46:MH:168:SER:HB3	1.95	0.48
45:MK:329:ASN:ND2	46:MN:208:TYR:HE2	2.11	0.48
46:MN:156:ARG:NH2	46:MN:197:ASP:OD2	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NA:271:SER:N	45:NA:377:MET:O	2.46	0.48
45:NC:238:LEU:HD11	45:NC:255:PHE:HE1	1.78	0.48
46:NH:388:MET:HA	46:NH:391:ARG:HD3	1.95	0.48
45:NK:259:LEU:O	45:NK:380:ASN:ND2	2.46	0.48
46:NN:202:ILE:HD11	46:NN:268:ILE:HD11	1.94	0.48
45:OA:11:GLN:N	47:OA:501:GTP:O1B	2.43	0.48
46:OJ:1:MET:HG2	46:OJ:2:ARG:HG3	1.95	0.48
46:OJ:211:CYS:HB3	46:OJ:217:LEU:HD21	1.95	0.48
45:OK:88:HIS:CD2	45:OK:90:GLU:HB2	2.48	0.48
45:OM:207:GLU:HA	45:OM:210:TYR:HB2	1.95	0.48
46:PD:45:GLU:HG2	46:PD:46:ARG:HG2	1.95	0.48
46:PD:67:ASP:OD1	46:PD:68:LEU:N	2.46	0.48
45:PG:10:GLY:O	45:PG:14:ILE:HG12	2.13	0.48
46:PJ:336:LYS:HE2	46:PJ:336:LYS:HA	1.94	0.48
46:QB:130:LEU:O	46:QB:162:ARG:NE	2.38	0.48
45:QC:140:SER:OG	47:QC:501:GTP:O2B	2.29	0.48
45:QE:55:GLU:OE2	45:QE:61:HIS:NE2	2.43	0.48
45:QE:70:LEU:HD13	45:QE:145:THR:OG1	2.13	0.48
46:QF:12:CYS:HB3	46:QF:138:SER:HB3	1.95	0.48
45:QI:26:LEU:HD11	45:QI:364:PRO:HD2	1.95	0.48
46:QL:350:LYS:HE2	46:QL:350:LYS:HA	1.95	0.48
46:RB:254:ALA:O	46:RB:258:ILE:HG12	2.14	0.48
45:RI:292:THR:HG21	45:RI:331:SER:HB2	1.95	0.48
45:SA:348:PRO:HD3	46:SB:388:MET:HE3	1.95	0.48
45:SC:88:HIS:HB3	45:SC:91:GLN:HG3	1.95	0.48
45:SC:402:ARG:NH1	45:SC:405:VAL:HB	2.28	0.48
46:SF:190:HIS:ND1	46:SF:411:ALA:HA	2.28	0.48
46:SJ:316:LEU:HB2	46:SJ:366:THR:HB	1.95	0.48
46:SJ:392:LYS:HE3	46:SJ:395:LEU:HD21	1.94	0.48
45:SM:194:LEU:O	45:SM:198:THR:HG22	2.12	0.48
45:SM:287:SER:HB3	45:SM:290:GLU:HG2	1.93	0.48
46:SN:260:PHE:HB2	46:SN:263:LEU:HD13	1.96	0.48
45:TC:338:LYS:HZ2	45:TC:340:THR:H	1.62	0.48
46:TJ:324:LYS:HG3	45:TK:222:PRO:HD2	1.93	0.48
46:UH:350:LYS:NZ	46:UH:352:SER:OG	2.46	0.48
45:VC:68:LEU:HD11	45:VC:118:CYS:SG	2.53	0.48
46:VD:65:LEU:HD22	46:VD:90:PHE:CE1	2.47	0.48
45:VE:205:ASP:OD1	45:VE:303:ALA:HA	2.13	0.48
46:VJ:156:ARG:HD3	46:VJ:164:MET:HE3	1.95	0.48
46:VJ:211:CYS:HB3	46:VJ:220:PRO:HG3	1.95	0.48
45:VK:204:LEU:HD13	45:VK:231:ILE:HD12	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VM:136:LEU:HD22	45:VM:169:PHE:HE2	1.78	0.48
45:WC:183:GLU:N	45:WC:184:PRO:HD2	2.27	0.48
45:WM:33:ASP:HA	45:WM:85:GLN:HE21	1.77	0.48
46:WN:156:ARG:NH2	46:WN:162:ARG:O	2.38	0.48
9:0N:191:LYS:HE3	45:KK:42:ILE:HA	1.94	0.48
20:2K:212:ARG:HG2	45:GM:282:TYR:CZ	2.48	0.48
21:2L:660:LYS:HB3	21:2L:699:TYR:CE2	2.48	0.48
21:2L:864:GLU:O	21:2L:868:LYS:HG2	2.13	0.48
22:2M:245:VAL:HG12	22:2M:250:VAL:HB	1.95	0.48
9:2N:10:TYR:CD2	46:IB:53:GLU:HB2	2.48	0.48
23:2O:339:ARG:HH22	23:2O:342:ARG:NH2	2.09	0.48
25:2R:212:ASP:OD1	25:2R:212:ASP:N	2.46	0.48
25:2R:416:THR:OG1	45:EG:40:ARG:NH2	2.46	0.48
25:2R:510:PHE:O	25:2R:514:ILE:HG22	2.12	0.48
15:2X:43:GLU:O	15:2X:47:GLN:HG2	2.13	0.48
23:3O:394:GLU:HB3	46:UH:362:LYS:NZ	2.28	0.48
12:3T:277:THR:O	13:3U:41:ARG:NH2	2.46	0.48
13:3U:109:SER:OG	13:3U:152:ILE:O	2.31	0.48
34:5R:277:ASN:HD21	34:5R:288:LYS:HE2	1.77	0.48
34:5R:359:TRP:O	34:5R:363:ASN:ND2	2.33	0.48
34:5R:534:HIS:ND1	34:5R:578:TYR:OH	2.44	0.48
35:5S:194:LYS:HA	35:5S:218:ILE:HD11	1.95	0.48
41:6H:224:SER:HB2	41:6H:226:PHE:CE1	2.48	0.48
41:6H:247:LYS:O	41:6H:248:LEU:HG	2.13	0.48
34:6R:253:ARG:HH11	34:6R:253:ARG:HG3	1.79	0.48
34:6R:291:LYS:HE2	34:6R:291:LYS:HA	1.95	0.48
45:AA:8:HIS:CE1	45:AA:138:PHE:CD2	3.01	0.48
46:AF:334:GLN:HE22	46:AF:347:ASN:HA	1.79	0.48
45:AG:340:THR:HG23	45:AG:341:ILE:HG13	1.96	0.48
46:AH:310:TYR:CD1	46:AH:371:SER:HB2	2.48	0.48
45:AM:102:ASN:OD1	45:AM:105:ARG:N	2.35	0.48
45:BA:191:THR:HG21	45:BA:425:LEU:HD21	1.96	0.48
46:BJ:282:ARG:NE	46:BJ:288:GLU:OE2	2.45	0.48
45:BK:155:GLU:OE1	45:BK:197:HIS:NE2	2.46	0.48
46:BN:52:ASN:HB2	46:BN:60:VAL:HB	1.95	0.48
45:CG:192:HIS:ND1	45:CG:424:ASP:OD2	2.46	0.48
46:CH:46:ARG:NH2	45:CI:76:ASP:OD2	2.46	0.48
45:CM:360:PRO:HG3	45:CM:374:ALA:HB2	1.95	0.48
46:DB:183:TYR:HD1	46:DB:385:PHE:CE2	2.32	0.48
46:DJ:294:PHE:HE2	46:DJ:333:VAL:HG11	1.77	0.48
45:EA:183:GLU:N	45:EA:184:PRO:HD2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EB:3:GLU:OE2	46:EB:127:CYS:HB2	2.14	0.48
45:EG:194:LEU:O	45:EG:198:THR:HG22	2.14	0.48
46:EH:19:LYS:HE2	46:EH:19:LYS:HB2	1.67	0.48
45:EM:319:TYR:CE1	45:EM:375:VAL:HG22	2.48	0.48
45:EM:338:LYS:HD2	45:EM:341:ILE:HG12	1.96	0.48
45:FM:167:LEU:HG	45:FM:200:VAL:HB	1.95	0.48
45:GG:203:MET:HG3	45:GG:384:ILE:HD11	1.95	0.48
46:GH:268:ILE:HG22	46:GH:368:VAL:HG22	1.95	0.48
45:GI:98:ASP:OD1	45:GI:99:ALA:N	2.45	0.48
45:GK:204:LEU:HD13	45:GK:231:ILE:HD12	1.94	0.48
46:GL:167:PHE:CE2	46:GL:233:MET:HG2	2.49	0.48
46:GN:3:GLU:HA	46:GN:49:VAL:HG13	1.95	0.48
46:GN:3:GLU:HG3	46:GN:62:ARG:NH1	2.28	0.48
45:HC:194:LEU:O	45:HC:198:THR:HG22	2.13	0.48
45:HK:238:LEU:HD11	45:HK:255:PHE:HE2	1.79	0.48
45:IG:183:GLU:N	45:IG:184:PRO:HD2	2.28	0.48
45:IK:76:ASP:OD2	46:IL:46:ARG:NH2	2.42	0.48
45:IM:316:SER:HB3	45:IM:378:ILE:HG23	1.95	0.48
45:JC:147:SER:HB2	45:JC:190:SER:HB3	1.96	0.48
45:JC:183:GLU:N	45:JC:184:PRO:HD2	2.28	0.48
46:JH:101:TRP:HB2	46:JH:184:ASN:HB3	1.95	0.48
46:JN:290:THR:HA	46:JN:293:MET:HG2	1.95	0.48
46:KF:105:HIS:CE1	46:KF:150:LEU:HD12	2.48	0.48
45:KG:210:TYR:CE1	45:KG:227:LEU:HD21	2.48	0.48
46:KJ:172:SER:HB2	46:KJ:174:LYS:HZ3	1.78	0.48
45:LK:396:ASP:OD2	45:LK:422:ARG:NH2	2.33	0.48
45:MA:174:SER:HB2	45:MA:177:VAL:O	2.13	0.48
46:MD:176:SER:OG	46:MD:181:GLU:OE1	2.26	0.48
45:MM:103:PHE:HB2	45:MM:186:ASN:HB3	1.95	0.48
45:MM:188:ILE:HG22	45:MM:421:ALA:HB1	1.95	0.48
46:ND:375:GLN:OE1	46:ND:423:GLN:NE2	2.42	0.48
46:NJ:313:ALA:HB1	46:NJ:367:PHE:HE1	1.78	0.48
45:NM:319:TYR:N	45:NM:354:GLY:O	2.45	0.48
46:OB:237:THR:HA	46:OB:240:LEU:HD13	1.95	0.48
45:OC:88:HIS:NE2	45:OC:90:GLU:HB2	2.27	0.48
45:OC:203:MET:HG3	45:OC:384:ILE:HD11	1.94	0.48
45:OE:276:ILE:HG21	45:OE:281:ALA:HB2	1.94	0.48
45:OM:101:ASN:HA	45:OM:144:GLY:H	1.77	0.48
45:PE:174:SER:HB2	45:PE:177:VAL:O	2.12	0.48
45:PE:356:ASN:OD1	45:PE:357:TYR:N	2.46	0.48
45:PK:72:PRO:HD2	46:PL:2:ARG:HH22	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QB:200:MET:HB3	46:QB:266:PHE:HB2	1.95	0.48
45:QC:239:THR:HG23	45:QC:243:ARG:HH21	1.78	0.48
46:QD:187:LEU:HD21	46:QD:408:PHE:CE2	2.48	0.48
45:QK:206:ASN:OD1	47:QK:501:GTP:N2	2.38	0.48
46:QL:313:ALA:HA	46:QL:369:GLY:HA2	1.95	0.48
46:QN:5:VAL:HG12	46:QN:62:ARG:HD3	1.95	0.48
46:RB:91:VAL:HG11	46:RB:116:VAL:HG12	1.95	0.48
46:RD:105:HIS:CD2	46:RD:150:LEU:HB2	2.49	0.48
46:RD:258:ILE:HG13	45:RE:407:TRP:HZ2	1.79	0.48
45:RG:183:GLU:N	45:RG:184:PRO:HD2	2.29	0.48
46:SD:258:ILE:HG13	45:SE:407:TRP:HZ2	1.76	0.48
46:SL:388:MET:HG3	46:SL:393:ALA:HB3	1.93	0.48
45:SM:103:PHE:CE2	45:SM:189:LEU:HD22	2.48	0.48
45:TA:16:VAL:HA	45:TA:228:ASN:HB3	1.95	0.48
46:TB:65:LEU:HD11	46:TB:85:PHE:CD1	2.47	0.48
46:TB:190:HIS:CD2	46:TB:411:ALA:HA	2.48	0.48
45:TC:217:LEU:HB3	45:TC:219:ILE:HG13	1.96	0.48
46:TF:60:VAL:HG11	46:TF:86:ARG:NH1	2.28	0.48
46:TL:324:LYS:HG3	45:TM:222:PRO:HG2	1.96	0.48
46:TL:392:LYS:HB3	46:TL:395:LEU:HD22	1.95	0.48
45:TM:340:THR:HG23	45:TM:341:ILE:HG23	1.95	0.48
46:UB:52:ASN:OD1	46:UB:62:ARG:NH2	2.45	0.48
45:UC:245:ASP:OD1	45:UC:245:ASP:N	2.45	0.48
45:UG:174:SER:HB2	45:UG:177:VAL:O	2.13	0.48
46:UH:113:ILE:HA	46:UH:116:VAL:HG12	1.93	0.48
45:UK:340:THR:HG23	45:UK:341:ILE:HG13	1.95	0.48
46:UL:256:ASN:OD1	45:UM:181:VAL:HG22	2.14	0.48
46:VD:326:VAL:O	46:VD:330:MET:HG2	2.14	0.48
46:WD:238:CYS:HB2	46:WD:318:ARG:HH11	1.77	0.48
45:WG:70:LEU:HA	45:WG:95:GLY:HA3	1.95	0.48
45:WG:175:PRO:HG3	45:WG:390:ARG:CZ	2.43	0.48
46:WH:52:ASN:OD1	46:WH:62:ARG:NH2	2.46	0.48
46:WN:377:MET:HA	46:WN:380:ARG:HG2	1.94	0.48
8:1H:267:ILE:HG21	46:HF:320:ARG:HH22	1.78	0.48
26:1W:189:ARG:HH21	45:LA:44:GLY:HA2	1.78	0.48
23:2O:417:GLU:HB3	23:2O:421:LYS:NZ	2.28	0.48
24:2P:355:GLN:NE2	46:TN:359:LYS:O	2.47	0.48
13:2U:161:LYS:NZ	13:2U:174:THR:HG22	2.29	0.48
13:2U:432:TRP:CE3	13:2U:441:MET:HB3	2.48	0.48
1:3A:23:HIS:NE2	1:3A:25:LYS:HE3	2.28	0.48
27:3C:258:LEU:HD12	27:3C:263:ILE:HB	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:3D:16:VAL:O	32:3D:28:GLY:N	2.47	0.48
10:3Q:68:THR:HG22	10:3Q:70:GLY:N	2.29	0.48
25:3R:316:THR:H	46:CL:276:ARG:HH22	1.61	0.48
25:3R:503:ASP:OD1	45:EK:41:THR:OG1	2.27	0.48
13:3U:84:ILE:HG12	13:3U:105:ILE:HD13	1.96	0.48
13:3U:404:HIS:CD2	13:3U:408:VAL:HG22	2.48	0.48
10:4Q:19:SER:O	10:4Q:20:LYS:HD2	2.13	0.48
10:4Q:93:VAL:HA	10:4Q:151:THR:HA	1.96	0.48
36:5C:43:CYS:SG	46:KJ:391:ARG:NE	2.86	0.48
40:6G:84:VAL:HB	40:6G:85:PRO:HD3	1.95	0.48
45:AA:141:VAL:HG22	45:AA:187:SER:HA	1.95	0.48
45:AE:245:ASP:N	45:AE:245:ASP:OD2	2.45	0.48
45:AI:283:HIS:HB3	45:MI:88:HIS:CD2	2.49	0.48
46:AJ:320:ARG:HH11	46:AJ:320:ARG:HG3	1.78	0.48
45:BA:11:GLN:NE2	46:BB:247:ASN:OD1	2.46	0.48
45:BA:203:MET:HG3	45:BA:384:ILE:HD11	1.94	0.48
46:BF:293:MET:HG3	46:BF:367:PHE:HB2	1.94	0.48
46:BN:3:GLU:N	46:BN:3:GLU:OE1	2.47	0.48
45:CC:141:VAL:HG23	45:CC:170:THR:HB	1.95	0.48
46:CD:273:LEU:H	46:CD:292:GLN:NE2	2.04	0.48
45:CK:68:LEU:HD21	45:CK:118:CYS:HB2	1.96	0.48
45:CK:399:TYR:OH	45:CK:415:GLU:OE2	2.28	0.48
46:CL:375:GLN:HB2	46:CL:419:VAL:HG23	1.95	0.48
46:CN:116:VAL:HA	46:CN:119:VAL:HG12	1.96	0.48
45:DA:7:ILE:N	45:DA:136:LEU:O	2.43	0.48
45:DE:88:HIS:CE1	45:DE:90:GLU:HG2	2.49	0.48
46:DH:156:ARG:NH2	46:DH:160:PRO:O	2.47	0.48
45:DK:269:LEU:HD12	45:DK:303:ALA:HB3	1.94	0.48
46:EB:11:GLN:HA	46:EB:14:ASN:OD1	2.13	0.48
45:EC:322:ASP:OD1	45:EC:373:ARG:NH1	2.45	0.48
45:EE:31:GLN:HB2	45:EE:35:GLN:O	2.13	0.48
45:EG:75:ILE:O	45:EG:79:ARG:HG2	2.12	0.48
45:EK:322:ASP:OD1	45:EK:373:ARG:NH1	2.47	0.48
46:EL:113:ILE:HA	46:EL:116:VAL:HG12	1.96	0.48
45:EM:333:ALA:HA	45:EM:336:LYS:HE2	1.94	0.48
45:FA:103:PHE:HB3	45:FA:408:TYR:HE2	1.77	0.48
46:FD:99:ASN:HA	46:FD:142:GLY:H	1.78	0.48
46:FD:202:ILE:HD11	46:FD:268:ILE:HD11	1.94	0.48
45:FI:141:VAL:HG21	45:FI:172:TYR:HE1	1.79	0.48
45:FM:79:ARG:O	45:FM:84:ARG:HB2	2.14	0.48
46:GJ:148:GLY:O	46:GJ:152:ILE:HG12	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GJ:198:GLU:HG2	46:GJ:266:PHE:HE2	1.78	0.48
45:GK:288:VAL:HA	45:GK:291:ILE:HG12	1.96	0.48
45:GM:208:ALA:O	45:GM:212:ILE:HG12	2.13	0.48
45:GM:320:ARG:HG3	45:GM:356:ASN:HB3	1.94	0.48
45:HC:173:PRO:HG2	45:HC:391:LEU:HD21	1.95	0.48
45:HC:191:THR:HG21	45:HC:425:LEU:HD21	1.95	0.48
46:HJ:173:PRO:HG2	46:HJ:380:ARG:HD3	1.93	0.48
45:IC:216:ASN:HB3	45:IC:275:ILE:O	2.12	0.48
46:IF:16:ILE:HD13	46:IF:226:ASN:OD1	2.13	0.48
46:JB:5:VAL:HG12	46:JB:62:ARG:HD3	1.93	0.48
45:JG:165:SER:OG	45:JG:256:GLN:NE2	2.46	0.48
46:JJ:211:CYS:HB3	46:JJ:217:LEU:HD21	1.95	0.48
45:JK:384:ILE:O	45:JK:387:VAL:HG22	2.13	0.48
45:KA:338:LYS:HZ2	45:KA:339:ARG:H	1.60	0.48
45:KG:258:ASN:HD21	46:KJ:178:THR:HG23	1.77	0.48
46:LD:211:CYS:HB3	46:LD:217:LEU:HD21	1.95	0.48
45:LE:262:TYR:HD2	45:LE:265:ILE:HD11	1.79	0.48
45:MA:183:GLU:N	45:MA:184:PRO:HD2	2.28	0.48
46:MD:114:ASP:OD1	46:MD:115:SER:N	2.47	0.48
46:MF:135:ILE:HG13	46:MF:152:ILE:HD11	1.95	0.48
45:MG:55:GLU:OE2	45:MG:61:HIS:NE2	2.47	0.48
45:MK:259:LEU:O	45:MK:380:ASN:ND2	2.43	0.48
45:MM:224:TYR:HE2	46:MN:246:LEU:HD11	1.76	0.48
46:NB:190:HIS:CD2	46:NB:411:ALA:HA	2.47	0.48
45:NG:217:LEU:HA	45:NG:277:SER:HB2	1.96	0.48
46:NN:113:ILE:HD13	46:NN:150:LEU:HD22	1.95	0.48
46:OB:130:LEU:HD21	46:OB:133:PHE:CE1	2.48	0.48
46:OB:150:LEU:HG	46:OB:154:LYS:NZ	2.28	0.48
46:OB:334:GLN:NE2	46:OB:348:ASN:OD1	2.47	0.48
46:OH:211:CYS:HB3	46:OH:217:LEU:HD21	1.94	0.48
45:PA:60:LYS:HD3	45:QA:283:HIS:HD2	1.78	0.48
46:PD:299:MET:HG3	46:PD:305:PRO:HG3	1.95	0.48
45:PI:326:LYS:HG3	46:PL:220:PRO:HD2	1.96	0.48
46:PN:345:ILE:O	46:PN:345:ILE:HG13	2.12	0.48
45:QG:244:PHE:HB2	45:QG:356:ASN:HD21	1.78	0.48
46:QH:268:ILE:HG13	46:QH:300:MET:HG3	1.95	0.48
45:QI:406:HIS:HA	45:QI:409:VAL:HG12	1.94	0.48
45:QK:68:LEU:HD21	45:QK:118:CYS:HB2	1.95	0.48
45:QM:332:ILE:HA	45:QM:335:ILE:HD13	1.94	0.48
46:RB:7:ILE:HG23	46:RB:64:ILE:HD11	1.95	0.48
45:RC:188:ILE:HD13	45:RC:422:ARG:NH2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RD:131:GLN:HE22	46:RD:249:ASP:HB2	1.78	0.48
46:RD:318:ARG:HH11	46:RD:358:PRO:HG3	1.78	0.48
45:RE:259:LEU:HB3	45:RE:268:MET:HE1	1.93	0.48
45:SA:324:VAL:HG11	45:SA:326:LYS:HE2	1.94	0.48
46:SJ:91:VAL:HG21	46:SJ:116:VAL:HB	1.94	0.48
45:TE:183:GLU:N	45:TE:184:PRO:HD2	2.28	0.48
46:TJ:216:LYS:HE2	46:TJ:216:LYS:HA	1.96	0.48
46:TL:86:ARG:CZ	46:UL:281:TYR:HB3	2.42	0.48
45:UC:54:SER:HB3	45:UC:64:ARG:NH1	2.29	0.48
45:UK:183:GLU:N	45:UK:184:PRO:HD2	2.28	0.48
45:UM:89:PRO:CD	45:VK:280:LYS:HE3	2.38	0.48
45:VA:356:ASN:OD1	45:VA:357:TYR:N	2.46	0.48
46:VN:310:TYR:HD2	46:VN:341:PHE:CE1	2.30	0.48
45:WA:217:LEU:HD11	45:WA:367:ASP:HB3	1.95	0.48
46:WF:258:ILE:HD11	46:WF:266:PHE:HZ	1.77	0.48
46:WL:1:MET:N	46:WL:3:GLU:OE1	2.42	0.48
46:WL:148:GLY:O	46:WL:152:ILE:HG12	2.13	0.48
45:WM:271:SER:HA	45:WM:302:MET:HE1	1.95	0.48
7:0G:25:GLU:OE1	46:JL:276:ARG:NH2	2.43	0.48
14:0V:115:ASN:HA	45:LM:264:ARG:HG3	1.94	0.48
4:2D:41:TYR:OH	46:DJ:45:GLU:OE2	2.31	0.48
21:2L:381:LEU:HD11	21:2L:450:LYS:HG2	1.95	0.48
25:2R:415:VAL:HB	25:2R:441:LEU:HD12	1.95	0.48
12:2T:103:VAL:O	12:2T:103:VAL:HG13	2.13	0.48
13:2U:604:MET:HE2	13:2U:605:PRO:HD2	1.95	0.48
16:3B:100:VAL:HG22	16:3B:199:VAL:HG11	1.95	0.48
32:3D:20:THR:O	32:3D:22:THR:N	2.45	0.48
32:3D:102:ALA:HB2	32:3D:136:ILE:HD12	1.94	0.48
13:3U:320:TYR:CD2	13:3U:321:GLU:HG2	2.47	0.48
13:3U:386:ILE:HB	13:3U:400:ILE:HB	1.96	0.48
33:4F:119:VAL:HG21	46:IL:359:LYS:HA	1.95	0.48
30:4H:205:GLN:HE22	45:AK:81:GLY:HA2	1.77	0.48
37:5E:53:ALA:HA	37:5E:56:VAL:HG12	1.95	0.48
37:5E:126:LEU:HD12	45:NA:57:GLY:HA2	1.95	0.48
34:7R:50:ASP:OD1	34:7R:51:PRO:HD2	2.14	0.48
42:8L:348:UNK:HA	46:SD:276:ARG:NH2	2.29	0.48
46:BB:190:HIS:CE1	46:BB:414:ASN:HD22	2.31	0.48
45:BE:221:ARG:CZ	46:BF:322:SER:HB3	2.44	0.48
45:BK:68:LEU:HD11	45:BK:118:CYS:SG	2.53	0.48
45:BK:174:SER:HB2	45:BK:177:VAL:O	2.12	0.48
46:BL:208:TYR:CE1	46:BL:225:LEU:HD11	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:161:ASP:OD1	46:BN:161:ASP:N	2.41	0.48
46:BN:376:GLU:O	46:BN:380:ARG:HG2	2.14	0.48
45:CA:289:ALA:O	45:CA:293:ASN:ND2	2.29	0.48
46:CB:44:LEU:HD22	46:CB:47:ILE:HD13	1.94	0.48
45:CC:244:PHE:HB2	45:CC:356:ASN:HD21	1.78	0.48
46:CJ:239:CYS:SG	46:CJ:247:ASN:HA	2.54	0.48
46:CL:251:ARG:HB3	45:CM:100:ALA:HB2	1.94	0.48
46:DB:16:ILE:HD13	46:DB:226:ASN:OD1	2.13	0.48
46:DB:68:LEU:HG	46:DB:96:GLY:H	1.78	0.48
45:DE:265:ILE:HG12	45:DE:432:TYR:HE1	1.79	0.48
45:EM:338:LYS:HZ2	45:EM:341:ILE:HG23	1.77	0.48
46:EN:386:THR:O	46:EN:390:ARG:HG2	2.14	0.48
46:FF:113:ILE:HG12	46:FF:117:LEU:HD23	1.95	0.48
45:FI:3:GLU:HG3	45:FI:129:CYS:SG	2.53	0.48
45:FI:254:GLU:HG2	46:FL:98:GLY:HA2	1.94	0.48
46:FJ:249:ASP:N	46:FJ:249:ASP:OD2	2.46	0.48
46:FL:68:LEU:HD12	46:FL:97:ALA:HB2	1.96	0.48
45:FM:171:ILE:HG21	47:FM:501:GTP:HN22	1.77	0.48
45:GC:188:ILE:O	45:GC:191:THR:HG22	2.14	0.48
46:GD:403:MET:HE1	46:GD:407:GLU:HG2	1.96	0.48
45:GE:174:SER:HB2	45:GE:177:VAL:O	2.13	0.48
46:GN:178:THR:HG22	46:GN:180:VAL:H	1.78	0.48
45:HM:210:TYR:CE1	46:HN:324:LYS:HB3	2.48	0.48
45:IA:141:VAL:HG22	45:IA:187:SER:HA	1.94	0.48
46:IB:286:VAL:HA	46:IB:289:LEU:HD12	1.96	0.48
45:IE:326:LYS:HD2	46:IH:212:PHE:CZ	2.49	0.48
45:JA:244:PHE:HB2	45:JA:356:ASN:HD21	1.79	0.48
45:JE:181:VAL:HB	46:JF:347:ASN:O	2.13	0.48
46:JF:95:THR:OG1	46:JF:108:GLU:OE1	2.30	0.48
46:JL:3:GLU:OE2	46:JL:127:CYS:HB2	2.13	0.48
46:JL:165:GLU:OE2	46:JL:250:LEU:HD22	2.14	0.48
46:KB:2:ARG:HB2	46:KB:131:GLN:HG3	1.95	0.48
46:KB:257:LEU:HD21	46:KB:314:SER:HB2	1.94	0.48
46:KJ:104:GLY:O	46:KJ:147:MET:HB2	2.13	0.48
45:KM:384:ILE:O	45:KM:387:VAL:HG12	2.14	0.48
45:LC:26:LEU:HD11	45:LC:364:PRO:HD2	1.94	0.48
45:LE:46:ASP:HB2	45:LE:49:PHE:HE1	1.79	0.48
46:LL:178:THR:OG1	46:LL:181:GLU:HG3	2.13	0.48
46:LN:204:ASN:OD1	49:LN:501:GDP:O2'	2.30	0.48
45:MG:217:LEU:HB3	45:MG:219:ILE:HG13	1.95	0.48
46:MH:260:PHE:HB2	46:MH:263:LEU:HD13	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MK:298:PRO:HG3	45:MK:308:ARG:HH21	1.76	0.48
45:NC:113:GLU:OE1	45:NC:113:GLU:N	2.46	0.48
46:ND:117:LEU:HA	46:ND:120:VAL:HG12	1.95	0.48
46:NL:65:LEU:HD12	46:NL:90:PHE:CE1	2.48	0.48
45:OA:17:GLY:HA2	45:OA:20:CYS:SG	2.53	0.48
46:OH:238:CYS:SG	46:OH:239:CYS:N	2.85	0.48
45:OI:276:ILE:HG21	45:OI:281:ALA:HB2	1.96	0.48
46:OJ:105:HIS:CE1	46:OJ:150:LEU:HD13	2.49	0.48
46:OJ:259:PRO:HG2	46:OJ:311:LEU:HD23	1.95	0.48
46:OL:28:HIS:C	46:OL:43:GLN:HE21	2.16	0.48
46:ON:60:VAL:HG21	46:ON:86:ARG:HG3	1.95	0.48
46:PB:106:TYR:HE2	46:PB:403:MET:HB2	1.76	0.48
46:PB:106:TYR:OH	46:PB:407:GLU:OE1	2.30	0.48
45:PI:350:GLY:HA2	46:PL:179:VAL:HG12	1.95	0.48
45:PK:60:LYS:NZ	45:PK:85:GLN:O	2.43	0.48
46:PL:372:THR:HA	46:PL:422:TYR:HE2	1.78	0.48
46:PN:51:TYR:HE1	46:PN:61:PRO:HG3	1.78	0.48
46:QD:49:VAL:HG21	46:QD:241:ARG:HG2	1.94	0.48
46:QJ:73:MET:HA	46:QJ:76:VAL:HG12	1.95	0.48
46:QJ:249:ASP:OD1	46:QJ:252:LYS:N	2.40	0.48
45:RC:174:SER:HB2	45:RC:177:VAL:O	2.13	0.48
46:RD:213:ARG:NH2	46:RD:297:LYS:HB3	2.22	0.48
46:RF:379:LYS:O	46:RF:383:GLU:HG3	2.13	0.48
46:RH:139:LEU:HD22	46:RH:170:VAL:HG12	1.95	0.48
46:RL:178:THR:HG22	46:RL:180:VAL:H	1.78	0.48
45:RM:268:MET:HG3	45:RM:380:ASN:HB3	1.95	0.48
46:SH:156:ARG:NH1	46:SH:197:ASP:OD1	2.47	0.48
46:SJ:62:ARG:HH12	46:SJ:127:CYS:HB3	1.78	0.48
46:SJ:168:SER:OG	46:SJ:199:CYS:SG	2.68	0.48
45:SK:253:THR:HG23	45:SK:254:GLU:OE2	2.13	0.48
45:SM:11:GLN:NE2	47:SM:501:GTP:O3A	2.42	0.48
45:SM:258:ASN:HB3	45:SM:352:LYS:HD2	1.95	0.48
45:TC:270:SER:OG	45:TC:302:MET:SD	2.60	0.48
46:UB:296:ALA:HB1	46:UB:305:PRO:HD2	1.94	0.48
46:UJ:87:PRO:HA	46:UJ:90:PHE:HD2	1.78	0.48
45:UM:85:GLN:O	45:VK:283:HIS:HE1	1.97	0.48
46:VB:19:LYS:HE2	46:VB:19:LYS:HA	1.96	0.48
45:VE:3:GLU:OE2	45:VE:129:CYS:HB3	2.13	0.48
46:VH:289:LEU:HD13	46:VH:365:VAL:HG23	1.95	0.48
45:VM:52:PHE:O	45:VM:63:PRO:HA	2.14	0.48
45:WA:265:ILE:HG22	45:WA:432:TYR:CE1	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WA:265:ILE:HG22	45:WA:432:TYR:HE1	1.79	0.48
45:WE:338:LYS:HG2	45:WE:340:THR:HG22	1.96	0.48
45:WG:195:LEU:HD21	45:WG:264:ARG:HH21	1.78	0.48
11:1S:42:ASN:ND2	45:WC:124:LYS:O	2.47	0.48
1:2A:102:TYR:CZ	46:MJ:80:PRO:HG3	2.48	0.48
30:2H:181:VAL:O	30:2H:184:LYS:NZ	2.42	0.48
21:2L:768:VAL:HG12	21:2L:805:LYS:HE2	1.95	0.48
23:2O:205:GLU:OE2	45:VI:370:LYS:HE3	2.14	0.48
23:2O:433:LEU:HB3	23:2O:437:LYS:HZ2	1.79	0.48
14:3V:124:LEU:HD12	46:LD:409:THR:HG21	1.95	0.48
14:3V:246:ARG:O	14:3V:249:THR:OG1	2.26	0.48
34:5R:94:ARG:HH21	45:AI:41:THR:HB	1.78	0.48
39:6F:113:PHE:HE2	46:IH:32:PRO:HG2	1.78	0.48
34:7R:405:GLN:O	34:7R:407:LYS:NZ	2.47	0.48
45:AA:8:HIS:CE1	45:AA:138:PHE:HD2	2.31	0.48
45:AA:280:LYS:HB3	45:MA:89:PRO:HG2	1.94	0.48
45:AC:174:SER:HB2	45:AC:177:VAL:O	2.13	0.48
45:AE:98:ASP:OD2	45:AE:99:ALA:N	2.47	0.48
46:AF:372:THR:HA	46:AF:422:TYR:CE2	2.47	0.48
46:AJ:73:MET:SD	46:AJ:92:PHE:HB3	2.54	0.48
46:BB:52:ASN:OD1	46:BB:62:ARG:NH2	2.46	0.48
46:BD:86:ARG:HG2	46:CB:281:TYR:HB3	1.95	0.48
46:BD:130:LEU:HD21	46:BD:133:PHE:CE1	2.48	0.48
45:BG:151:SER:O	45:BG:155:GLU:HG2	2.14	0.48
45:BG:183:GLU:N	45:BG:184:PRO:HD2	2.28	0.48
45:BM:68:LEU:HD22	45:BM:153:LEU:HD11	1.94	0.48
46:CB:163:ILE:HD11	46:CB:251:ARG:HE	1.78	0.48
46:CB:322:SER:O	45:CC:221:ARG:NH2	2.46	0.48
46:CH:294:PHE:CD2	46:CH:333:VAL:HG21	2.49	0.48
46:CL:262:ARG:NH1	46:CL:262:ARG:HB2	2.27	0.48
45:CM:88:HIS:CE1	45:DM:280:LYS:HE3	2.49	0.48
46:DD:292:GLN:HG3	46:DD:298:ASN:ND2	2.29	0.48
45:DE:123:ARG:HA	45:DE:123:ARG:HH11	1.79	0.48
45:DE:183:GLU:N	45:DE:184:PRO:HD2	2.28	0.48
46:DH:350:LYS:HA	45:DI:179:THR:O	2.14	0.48
46:EH:347:ASN:ND2	45:EI:178:SER:HB3	2.28	0.48
45:FA:167:LEU:HB3	45:FA:169:PHE:HE2	1.79	0.48
46:FB:285:THR:HB	46:FB:287:PRO:HD2	1.95	0.48
45:FG:210:TYR:HH	46:FH:323:THR:HG1	1.55	0.48
45:GG:135:PHE:HB2	45:GG:166:LYS:HG2	1.95	0.48
45:GK:259:LEU:HD21	45:GK:316:SER:HB3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HG:132:LEU:HD23	45:HG:164:LYS:HE2	1.94	0.48
46:HJ:52:ASN:OD1	46:HJ:62:ARG:NH2	2.47	0.48
46:HL:201:VAL:HG21	46:HL:374:ILE:HD11	1.96	0.48
46:JH:54:ALA:HA	46:KH:283:ALA:HB2	1.96	0.48
45:JI:183:GLU:N	45:JI:184:PRO:HD2	2.28	0.48
45:JK:174:SER:HB3	45:JK:177:VAL:O	2.13	0.48
46:LB:237:THR:HG23	46:LB:241:ARG:HH21	1.77	0.48
45:LC:383:ALA:O	45:LC:386:GLU:HG2	2.14	0.48
46:LF:103:LYS:HA	46:LF:107:THR:HG22	1.95	0.48
45:MC:66:VAL:HG11	45:MC:122:ILE:HD11	1.96	0.48
45:MI:71:GLU:HB2	45:MI:98:ASP:HB3	1.96	0.48
46:MJ:114:ASP:OD1	46:MJ:115:SER:N	2.46	0.48
45:MK:183:GLU:N	45:MK:184:PRO:HD2	2.29	0.48
46:NB:180:VAL:HG12	46:NB:180:VAL:O	2.13	0.48
46:NB:375:GLN:NE2	46:NB:426:GLN:OE1	2.46	0.48
45:OI:183:GLU:N	45:OI:184:PRO:HD2	2.28	0.48
45:OM:88:HIS:CD2	45:OM:90:GLU:HG3	2.49	0.48
46:PH:178:THR:HB	46:PH:181:GLU:HG2	1.95	0.48
45:PK:350:GLY:HA2	46:PN:179:VAL:HG12	1.94	0.48
46:PN:60:VAL:HG21	46:PN:86:ARG:CZ	2.44	0.48
45:QA:183:GLU:N	45:QA:184:PRO:HD2	2.28	0.48
45:QE:184:PRO:O	45:QE:188:ILE:HG12	2.14	0.48
45:QE:404:PHE:HD1	45:QE:407:TRP:HZ3	1.62	0.48
46:QF:118:ASP:OD1	46:QF:119:VAL:N	2.46	0.48
46:QH:344:TRP:HB3	46:QH:430:ALA:HB2	1.96	0.48
45:QM:88:HIS:HE1	45:QM:90:GLU:HG2	1.77	0.48
46:RB:371:SER:O	46:RB:422:TYR:OH	2.28	0.48
45:RC:194:LEU:O	45:RC:198:THR:HG22	2.14	0.48
45:RG:345:ASP:OD2	45:RG:346:TRP:N	2.46	0.48
46:RH:318:ARG:HB3	46:RH:357:PRO:HA	1.96	0.48
46:SD:293:MET:SD	46:SD:367:PHE:HB2	2.52	0.48
46:SH:42:LEU:HA	46:SH:45:GLU:HG3	1.96	0.48
46:SH:113:ILE:HA	46:SH:116:VAL:HG12	1.94	0.48
46:SH:257:LEU:HD11	46:SH:314:SER:OG	2.12	0.48
45:SI:384:ILE:O	45:SI:387:VAL:HG22	2.12	0.48
45:SI:414:GLU:HG2	45:SI:417:GLU:HG2	1.93	0.48
46:SJ:32:PRO:HA	46:SJ:84:LEU:HD11	1.95	0.48
46:SL:238:CYS:SG	46:SL:239:CYS:N	2.86	0.48
45:SM:183:GLU:N	45:SM:184:PRO:HD2	2.28	0.48
45:TA:183:GLU:N	45:TA:184:PRO:HD2	2.28	0.48
46:TB:77:ARG:NH1	46:TB:82:GLY:O	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TF:242:PHE:HB3	46:TF:356:ILE:HD12	1.95	0.48
45:TK:192:HIS:ND1	45:TK:424:ASP:OD2	2.46	0.48
46:TN:309:ARG:HG3	46:TN:426:GLN:HE22	1.77	0.48
45:UA:257:THR:HG22	46:UB:397:TRP:CE2	2.48	0.48
46:VB:68:LEU:HA	46:VB:93:GLY:H	1.78	0.48
46:VB:269:GLY:N	46:VB:367:PHE:O	2.47	0.48
46:VH:399:THR:HA	46:VH:403:MET:O	2.13	0.48
45:VI:88:HIS:HB3	45:VI:91:GLN:HG2	1.95	0.48
46:VL:167:PHE:HA	46:VL:200:MET:HB2	1.95	0.48
46:VL:342:VAL:HG13	46:VL:345:ILE:HG22	1.96	0.48
46:VN:61:PRO:HD3	46:VN:84:LEU:HD12	1.96	0.48
46:WN:122:LYS:HB2	46:WN:122:LYS:HE3	1.69	0.48
46:WN:372:THR:O	46:WN:375:GLN:NE2	2.37	0.48
2:0B:203:THR:O	45:KI:373:ARG:NH2	2.31	0.48
13:1U:208:CYS:HB3	13:1U:222:ILE:HD11	1.95	0.48
13:1U:229:ARG:NH2	13:1U:267:GLN:O	2.47	0.48
14:1V:105:LYS:HG3	14:1V:106:TYR:H	1.78	0.48
16:2B:65:LEU:O	16:2B:68:VAL:HG22	2.13	0.48
16:2B:216:GLU:HG2	16:2B:220:GLN:HE21	1.77	0.48
5:2E:121:ARG:O	34:5R:579:ASN:ND2	2.39	0.48
21:2L:393:HIS:HA	21:2L:396:ASN:HD21	1.78	0.48
9:2N:257:LYS:HG2	9:2N:263:MET:SD	2.54	0.48
10:2Q:69:LEU:O	10:2Q:69:LEU:HD23	2.13	0.48
13:3U:287:THR:OG1	13:3U:291:THR:O	2.27	0.48
13:3U:487:LEU:HB3	13:3U:517:TRP:HZ3	1.79	0.48
27:4C:266:GLN:HB3	27:4C:269:TYR:HD2	1.79	0.48
37:5G:107:VAL:HG23	37:5G:108:LYS:H	1.78	0.48
35:5S:75:PRO:HD3	35:5S:101:TYR:HE2	1.79	0.48
35:5S:78:VAL:HG23	35:5S:79:ASN:N	2.29	0.48
41:6H:176:ASN:O	41:6H:180:ASN:HB2	2.14	0.48
46:AJ:55:THR:H	46:BJ:283:ALA:HA	1.78	0.48
45:AM:75:ILE:HG21	45:AM:94:SER:HB2	1.95	0.48
45:AM:262:TYR:HB2	45:AM:265:ILE:HG12	1.95	0.48
46:BB:252:LYS:O	46:BB:256:ASN:ND2	2.46	0.48
45:BC:107:HIS:ND1	45:BC:107:HIS:O	2.46	0.48
46:BD:238:CYS:SG	46:BD:239:CYS:N	2.86	0.48
45:BG:238:LEU:HD11	45:BG:255:PHE:HE2	1.78	0.48
45:BG:324:VAL:HB	45:BG:327:ASP:OD2	2.14	0.48
46:CH:103:LYS:HG2	46:CH:108:GLU:HG2	1.95	0.48
45:CI:422:ARG:HH12	45:CI:426:ALA:HB2	1.79	0.48
45:CK:175:PRO:HG3	45:CK:390:ARG:HH12	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DM:195:LEU:HD13	45:DM:264:ARG:HH22	1.79	0.48
45:EE:259:LEU:HB3	45:EE:268:MET:CE	2.44	0.48
45:EE:362:VAL:HB	45:EE:370:LYS:HB3	1.95	0.48
45:EI:166:LYS:N	45:EI:199:ASP:OD2	2.39	0.48
46:EN:265:PHE:O	46:EN:370:ASN:ND2	2.46	0.48
45:FC:224:TYR:HE2	46:FD:246:LEU:HD11	1.78	0.48
45:FG:174:SER:HB2	45:FG:177:VAL:O	2.13	0.48
45:FG:384:ILE:O	45:FG:387:VAL:HG22	2.14	0.48
46:FH:290:THR:HA	46:FH:293:MET:HB2	1.96	0.48
45:FI:340:THR:HG23	45:FI:341:ILE:HG13	1.94	0.48
45:GA:349:THR:OG1	46:GD:176:SER:OG	2.23	0.48
46:GB:204:ASN:HA	46:GB:207:LEU:HD12	1.96	0.48
45:GM:22:GLU:HG2	45:GM:83:TYR:OH	2.13	0.48
45:HG:19:ALA:HA	45:HG:22:GLU:HG2	1.95	0.48
45:IM:20:CYS:O	45:IM:24:PHE:HD1	1.97	0.48
45:JM:175:PRO:HB2	45:JM:176:GLN:NE2	2.27	0.48
45:KA:328:VAL:HG11	45:KA:353:VAL:HG21	1.95	0.48
45:KC:288:VAL:HG11	45:KC:327:ASP:HB3	1.95	0.48
46:KD:238:CYS:CB	46:KD:318:ARG:HE	2.27	0.48
45:KI:183:GLU:N	45:KI:184:PRO:HD2	2.29	0.48
46:LD:186:THR:HA	46:LD:189:VAL:HG12	1.96	0.48
46:LL:7:ILE:HG22	46:LL:64:ILE:HB	1.95	0.48
46:LL:20:PHE:HA	46:LL:230:SER:OG	2.13	0.48
45:NC:11:GLN:NE2	46:ND:245:GLN:O	2.47	0.48
45:NE:285:GLN:HE21	45:NE:373:ARG:NH2	2.12	0.48
45:NK:8:HIS:CD2	45:NK:17:GLY:HA3	2.49	0.48
45:NK:132:LEU:HD12	45:NK:164:LYS:HE3	1.96	0.48
46:OB:282:ARG:NH2	46:OB:283:ALA:O	2.47	0.48
46:OD:257:LEU:HD11	46:OD:314:SER:HB3	1.96	0.48
46:OF:207:LEU:HB3	46:OF:225:LEU:HD22	1.95	0.48
45:PA:320:ARG:HG3	45:PA:356:ASN:HD22	1.79	0.48
45:PC:89:PRO:HG3	45:QC:280:LYS:HG3	1.94	0.48
45:PC:325:PRO:O	45:PC:329:ASN:ND2	2.47	0.48
45:PE:10:GLY:O	45:PE:14:ILE:HG12	2.14	0.48
45:PE:120:ASP:OD1	45:PE:121:ARG:N	2.46	0.48
45:PG:174:SER:HB3	45:PG:177:VAL:O	2.14	0.48
45:PM:121:ARG:NH1	45:PM:121:ARG:HA	2.29	0.48
46:QB:326:VAL:O	46:QB:330:MET:HG2	2.13	0.48
45:QC:259:LEU:HD21	45:QC:316:SER:HB2	1.94	0.48
46:QF:238:CYS:SG	46:QF:239:CYS:N	2.87	0.48
46:QH:207:LEU:HB3	46:QH:225:LEU:HD22	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:310:GLY:HA3	45:RC:383:ALA:HB2	1.95	0.48
46:RF:269:GLY:HA2	46:RF:300:MET:HG3	1.95	0.48
46:RJ:249:ASP:OD1	46:RJ:252:LYS:HG2	2.14	0.48
46:RL:416:ASN:O	46:RL:420:SER:N	2.40	0.48
45:RM:269:LEU:HD23	45:RM:379:SER:O	2.14	0.48
46:SD:139:LEU:HD22	46:SD:170:VAL:HG12	1.96	0.48
45:SG:384:ILE:O	45:SG:387:VAL:HG22	2.13	0.48
46:SJ:74:ASP:OD1	46:SJ:77:ARG:NH2	2.44	0.48
46:SL:26:ASP:O	46:SL:359:LYS:NZ	2.39	0.48
46:TD:208:TYR:HE1	46:TD:225:LEU:HD11	1.78	0.48
45:TE:176:GLN:NE2	45:TE:207:GLU:OE2	2.46	0.48
46:TH:218:THR:HG23	46:TH:219:THR:HG23	1.96	0.48
46:TJ:399:THR:HA	46:TJ:403:MET:O	2.14	0.48
46:TL:261:PRO:HD3	45:TM:406:HIS:NE2	2.29	0.48
46:TN:386:THR:O	46:TN:390:ARG:HG2	2.13	0.48
45:UA:14:ILE:O	45:UA:18:ASN:N	2.34	0.48
45:UC:1:MET:HG3	45:UC:2:ARG:HD3	1.96	0.48
45:UE:3:GLU:OE2	45:UE:129:CYS:HB3	2.13	0.48
46:VB:296:ALA:HB1	46:VB:305:PRO:HD2	1.95	0.48
46:VL:210:ILE:O	46:VL:214:THR:OG1	2.28	0.48
46:VN:376:GLU:HA	46:VN:379:LYS:HG2	1.96	0.48
45:WA:271:SER:N	45:WA:377:MET:O	2.42	0.48
46:WB:284:LEU:HD12	46:WB:362:LYS:HE3	1.95	0.48
46:WB:350:LYS:HZ3	46:WB:352:SER:HG	1.58	0.48
45:WI:433:GLU:O	45:WI:437:ILE:HG23	2.13	0.48
45:WK:236:SER:OG	45:WK:243:ARG:NH2	2.42	0.48
4:1D:166:ARG:HH11	45:EG:80:THR:HG22	1.79	0.48
23:1O:178:ASP:OD1	46:UD:362:LYS:NZ	2.29	0.48
13:1U:431:VAL:H	13:1U:443:ALA:HB2	1.79	0.48
13:1U:464:ALA:O	13:1U:476:TRP:N	2.40	0.48
14:1V:161:TYR:HA	14:1V:162:GLY:HA2	1.61	0.48
1:2A:40:GLY:O	1:2A:41:THR:OG1	2.27	0.48
10:2Q:88:THR:HG22	10:2Q:106:SER:HA	1.96	0.48
11:2S:167:TYR:CE2	11:2S:196:LEU:HD22	2.48	0.48
13:2U:489:GLU:OE2	13:2U:491:THR:OG1	2.30	0.48
16:3B:182:GLU:O	16:3B:186:ILE:HD12	2.14	0.48
21:3L:60:VAL:HG13	21:3L:97:LYS:HE2	1.95	0.48
25:3R:129:LEU:HD11	25:3R:169:LEU:HD21	1.95	0.48
12:3T:198:ASP:N	12:3T:198:ASP:OD1	2.45	0.48
37:5H:113:LEU:HD12	37:5H:114:PRO:HD2	1.96	0.48
41:6H:329:LEU:HD23	46:FJ:361:LEU:HD11	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:7R:457:GLU:HB2	34:7R:470:PHE:HB2	1.96	0.48
45:AA:27:GLU:HB2	45:AA:361:THR:HG21	1.96	0.48
45:AA:398:MET:HE1	46:AB:345:ILE:HA	1.95	0.48
46:AB:345:ILE:HG22	46:AB:348:ASN:HB3	1.96	0.48
46:AF:281:TYR:HE2	46:MF:58:ARG:NE	2.12	0.48
45:AI:402:ARG:NH1	45:AI:415:GLU:OE2	2.46	0.48
45:BC:245:ASP:OD1	45:BC:245:ASP:N	2.46	0.48
46:BF:343:GLU:OE2	46:BF:430:ALA:N	2.45	0.48
45:BG:392:ASP:HB3	45:BG:422:ARG:NH1	2.29	0.48
45:CC:384:ILE:O	45:CC:387:VAL:HG22	2.13	0.48
45:CE:91:GLN:HE22	45:CE:125:LEU:HD21	1.79	0.48
45:CE:183:GLU:N	45:CE:184:PRO:HD2	2.28	0.48
46:CH:252:LYS:HG2	46:CH:350:LYS:HE2	1.96	0.48
45:DA:31:GLN:HG3	45:DA:34:GLY:H	1.79	0.48
46:DB:2:ARG:N	45:DC:96:LYS:HZ1	2.11	0.48
45:DG:127:ASP:OD1	45:DG:128:ASN:N	2.46	0.48
46:DH:73:MET:HE1	46:DH:92:PHE:HB3	1.96	0.48
45:DI:265:ILE:HD11	45:DI:435:VAL:HG21	1.96	0.48
45:DK:171:ILE:O	45:DK:171:ILE:HG13	2.14	0.48
45:DM:317:MET:N	45:DM:352:LYS:O	2.29	0.48
46:ED:31:ASP:OD1	46:ED:35:THR:N	2.32	0.48
45:EE:367:ASP:OD1	45:EE:368:LEU:N	2.46	0.48
45:EI:155:GLU:OE1	45:EI:197:HIS:NE2	2.47	0.48
46:EN:46:ARG:HH21	46:EN:48:ASN:HB2	1.77	0.48
45:FA:276:ILE:HD11	45:FA:280:LYS:HE2	1.95	0.48
46:FB:258:ILE:HG13	46:FB:266:PHE:CZ	2.48	0.48
46:FD:232:ALA:O	46:FD:236:VAL:HG23	2.13	0.48
46:FF:206:ALA:O	46:FF:210:ILE:HG12	2.14	0.48
46:FN:91:VAL:HG21	46:FN:116:VAL:HG12	1.96	0.48
45:GG:183:GLU:N	45:GG:184:PRO:HD2	2.29	0.48
46:GH:334:GLN:NE2	46:GH:348:ASN:OD1	2.47	0.48
45:GM:17:GLY:HA2	45:GM:20:CYS:SG	2.54	0.48
45:HC:218:ASP:OD2	45:HC:280:LYS:NZ	2.45	0.48
45:HI:17:GLY:HA2	45:HI:20:CYS:SG	2.53	0.48
45:IE:262:TYR:HB2	45:IE:265:ILE:HD12	1.95	0.48
45:IK:183:GLU:N	45:IK:184:PRO:HD2	2.28	0.48
46:IL:145:SER:OG	46:IL:188:SER:HB2	2.14	0.48
45:JG:101:ASN:HD22	46:JH:256:ASN:HD21	1.62	0.48
45:JK:245:ASP:OD1	45:JK:246:GLY:N	2.47	0.48
46:KB:101:TRP:HB2	46:KB:184:ASN:HB3	1.96	0.48
46:KD:105:HIS:CE1	46:KD:150:LEU:HD12	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KK:309:HIS:ND1	45:KK:386:GLU:OE2	2.46	0.48
46:KN:5:VAL:HG12	46:KN:62:ARG:HD3	1.96	0.48
46:KN:153:SER:HA	46:KN:195:ASN:ND2	2.29	0.48
46:LD:174:LYS:HE2	46:LD:380:ARG:HH22	1.78	0.48
46:LD:375:GLN:OE1	46:LD:423:GLN:HB3	2.14	0.48
46:MD:171:PRO:HB2	46:MD:181:GLU:OE2	2.14	0.48
46:MF:309:ARG:HH11	46:MF:342:VAL:HA	1.79	0.48
45:MI:68:LEU:HD11	45:MI:118:CYS:SG	2.53	0.48
45:NE:120:ASP:HB3	45:NE:124:LYS:NZ	2.29	0.48
46:NF:342:VAL:HG13	46:NF:345:ILE:HG22	1.95	0.48
46:NH:190:HIS:CD2	46:NH:411:ALA:HA	2.49	0.48
46:NH:391:ARG:NE	46:NH:393:ALA:HB3	2.15	0.48
45:NI:324:VAL:O	45:NI:328:VAL:HG23	2.14	0.48
46:NJ:284:LEU:HD11	46:NJ:363:MET:HB2	1.95	0.48
46:NN:236:VAL:HG23	46:NN:237:THR:HG23	1.95	0.48
45:OA:221:ARG:HH11	46:OB:324:LYS:NZ	2.11	0.48
46:OH:217:LEU:HD23	46:OH:217:LEU:H	1.79	0.48
45:OK:174:SER:HB2	45:OK:177:VAL:O	2.13	0.48
46:OL:68:LEU:HD11	46:OL:147:MET:HE1	1.95	0.48
46:OL:164:MET:HG3	46:OL:197:ASP:HB2	1.95	0.48
45:PA:384:ILE:O	45:PA:387:VAL:HG12	2.14	0.48
46:PN:10:GLY:O	46:PN:14:ASN:ND2	2.46	0.48
46:PN:86:ARG:NH2	46:QL:281:TYR:HB3	2.28	0.48
46:PN:313:ALA:HB1	46:PN:367:PHE:HE1	1.79	0.48
45:QE:98:ASP:OD1	45:QE:99:ALA:N	2.45	0.48
46:QJ:317:PHE:HB2	46:QJ:353:ILE:HD13	1.95	0.48
45:QK:55:GLU:CD	45:QK:57:GLY:H	2.17	0.48
46:QL:73:MET:HA	46:QL:76:VAL:HG12	1.96	0.48
45:RE:300:ASN:O	45:RE:300:ASN:ND2	2.42	0.48
46:RF:20:PHE:HA	46:RF:230:SER:OG	2.13	0.48
46:RN:257:LEU:HD11	46:RN:314:SER:HB2	1.94	0.48
45:SG:116:ASP:OD1	45:SG:117:LEU:N	2.46	0.48
46:SH:100:ASN:ND2	46:SH:103:LYS:HE2	2.25	0.48
46:SJ:292:GLN:NE2	46:SJ:298:ASN:HD21	2.12	0.48
45:SK:98:ASP:O	45:SK:105:ARG:NH1	2.47	0.48
46:SL:178:THR:HB	46:SL:181:GLU:HG3	1.96	0.48
46:SL:282:ARG:HH22	46:SL:292:GLN:HG3	1.78	0.48
46:SN:150:LEU:O	46:SN:153:SER:OG	2.31	0.48
46:TB:178:THR:HB	46:TB:181:GLU:HG3	1.95	0.48
46:TF:113:ILE:HA	46:TF:116:VAL:HG22	1.96	0.48
46:TJ:96:GLY:O	46:TJ:103:LYS:NZ	2.45	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TJ:324:LYS:HD2	45:TK:222:PRO:HG2	1.96	0.48
45:TK:7:ILE:N	45:TK:136:LEU:O	2.39	0.48
45:TK:271:SER:HB2	45:TK:377:MET:HB3	1.95	0.48
45:UE:260:VAL:HB	46:UF:397:TRP:HZ2	1.77	0.48
46:UN:375:GLN:HA	46:UN:378:PHE:CD2	2.48	0.48
45:VA:406:HIS:HA	45:VA:409:VAL:HG22	1.96	0.48
45:WG:11:GLN:NE2	47:WG:501:GTP:O3A	2.46	0.48
45:WG:66:VAL:HG11	45:WG:122:ILE:HD11	1.96	0.48
45:WG:120:ASP:OD1	45:WG:121:ARG:N	2.47	0.48
46:WH:318:ARG:HB3	46:WH:357:PRO:HA	1.96	0.48
46:WL:10:GLY:O	46:WL:14:ASN:ND2	2.43	0.48
46:WN:113:ILE:HD11	46:WN:151:LEU:HB2	1.95	0.48
23:1O:239:ILE:HG23	46:UB:280:GLN:HB2	1.95	0.48
12:1T:44:ILE:O	12:1T:48:THR:HG23	2.14	0.48
20:2K:291:GLN:NE2	46:FL:55:THR:O	2.38	0.48
23:2O:341:LYS:O	23:2O:345:GLU:HG2	2.14	0.48
10:2Q:118:ILE:HD13	45:AE:427:ALA:HB1	1.95	0.48
12:2T:44:ILE:O	12:2T:48:THR:HG23	2.13	0.48
16:3B:43:ARG:HE	16:3B:79:GLN:NE2	2.12	0.48
32:3D:34:ASN:HD21	32:3D:65:GLY:HA2	1.79	0.48
10:3Q:11:LEU:HD23	10:3Q:71:ILE:HD13	1.95	0.48
27:4C:278:ASP:HB3	27:4C:285:ILE:HG12	1.96	0.48
33:4F:129:ASN:HA	33:4F:131:LYS:HZ3	1.79	0.48
34:4R:596:GLU:OE1	34:4R:598:TRP:NE1	2.47	0.48
40:6G:286:LEU:O	40:6G:289:THR:HG22	2.14	0.48
41:6H:216:PRO:HB3	41:6H:218:PHE:HD2	1.78	0.48
34:6R:432:SER:HA	34:6R:502:ARG:HH21	1.79	0.48
34:7R:157:THR:HG22	34:7R:157:THR:O	2.14	0.48
46:AD:117:LEU:HA	46:AD:120:VAL:HG12	1.95	0.48
46:AF:281:TYR:OH	46:MF:83:GLN:O	2.28	0.48
46:AJ:232:ALA:HB1	46:AJ:268:ILE:HD12	1.96	0.48
45:AM:27:GLU:OE2	45:AM:243:ARG:NH1	2.46	0.48
45:AM:183:GLU:N	45:AM:184:PRO:HD2	2.29	0.48
46:AN:166:THR:HG21	46:AN:192:LEU:HD11	1.96	0.48
46:AN:295:ASP:OD2	46:AN:297:LYS:NZ	2.47	0.48
45:BA:305:CYS:SG	45:BA:306:ASP:N	2.87	0.48
46:BB:20:PHE:CE2	46:BB:24:ILE:HD11	2.49	0.48
45:BC:3:GLU:OE2	45:BC:129:CYS:HB3	2.14	0.48
45:BE:88:HIS:CE1	45:BE:90:GLU:HG2	2.49	0.48
45:BE:147:SER:HB2	45:BE:190:SER:HB2	1.95	0.48
46:CH:180:VAL:HG13	46:CH:184:ASN:HD21	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CH:319:GLY:HA2	46:CH:357:PRO:HD3	1.96	0.48
46:CN:309:ARG:HH22	46:CN:342:VAL:HA	1.78	0.48
46:CN:317:PHE:HA	46:CN:365:VAL:HG22	1.95	0.48
46:DB:190:HIS:ND1	46:DB:411:ALA:HA	2.29	0.48
45:DE:53:PHE:HB3	45:DE:61:HIS:HB3	1.95	0.48
46:DF:163:ILE:HD11	46:DF:251:ARG:HG3	1.96	0.48
45:DK:53:PHE:HB3	45:DK:61:HIS:HB3	1.95	0.48
45:DM:55:GLU:HG3	45:DM:57:GLY:H	1.79	0.48
45:EC:88:HIS:HB3	45:EC:91:GLN:HG2	1.96	0.48
45:EC:112:LYS:HA	45:EC:115:VAL:HG12	1.95	0.48
45:EC:194:LEU:O	45:EC:198:THR:HG22	2.14	0.48
45:EE:377:MET:SD	45:EE:379:SER:HB2	2.54	0.48
45:EI:183:GLU:N	45:EI:184:PRO:HD2	2.28	0.48
46:EJ:116:VAL:HA	46:EJ:119:VAL:HG12	1.96	0.48
45:EM:261:PRO:CD	45:EM:262:TYR:H	2.23	0.48
46:FB:265:PHE:HD2	46:FB:378:PHE:HZ	1.61	0.48
46:FD:226:ASN:ND2	49:FD:501:GDP:HN1	2.10	0.48
45:FM:11:GLN:NE2	45:FM:15:GLN:OE1	2.46	0.48
45:FM:188:ILE:HD11	45:FM:391:LEU:HB3	1.96	0.48
45:GA:68:LEU:HD21	45:GA:118:CYS:SG	2.53	0.48
46:GD:344:TRP:HB3	46:GD:430:ALA:HB2	1.95	0.48
45:GK:183:GLU:N	45:GK:184:PRO:HD2	2.29	0.48
45:GM:310:GLY:HA3	45:GM:383:ALA:HB2	1.96	0.48
45:HA:224:TYR:HE2	46:HB:246:LEU:HD21	1.78	0.48
46:IN:117:LEU:HG	46:IN:121:ARG:NH1	2.29	0.48
45:JI:265:ILE:HG21	45:JI:313:MET:HE1	1.95	0.48
45:JK:288:VAL:HA	45:JK:291:ILE:HG12	1.95	0.48
46:KH:52:ASN:OD1	46:KH:62:ARG:NH2	2.47	0.48
45:KI:11:GLN:HG3	45:KI:74:VAL:HG11	1.95	0.48
46:KJ:105:HIS:CE1	46:KJ:150:LEU:HD12	2.49	0.48
46:KL:285:THR:HB	46:KL:287:PRO:HD2	1.95	0.48
46:LB:132:GLY:HA3	46:LB:163:ILE:HG22	1.95	0.48
45:LG:383:ALA:O	45:LG:386:GLU:HG2	2.13	0.48
46:LJ:6:HIS:NE2	46:LJ:8:GLN:OE1	2.45	0.48
45:LK:406:HIS:HA	45:LK:409:VAL:HG12	1.94	0.48
46:LN:63:ALA:O	46:LN:89:ASN:ND2	2.44	0.48
46:MD:405:GLU:OE2	46:MD:405:GLU:N	2.44	0.48
45:MG:68:LEU:HD23	45:MG:93:ILE:HB	1.94	0.48
46:ND:309:ARG:HH21	46:ND:342:VAL:HA	1.77	0.48
46:NF:201:VAL:O	46:NF:202:ILE:HD13	2.14	0.48
45:NI:224:TYR:CZ	46:NJ:323:THR:HG21	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NI:231:ILE:O	45:NI:235:ILE:HG12	2.14	0.48
45:NM:7:ILE:N	45:NM:136:LEU:O	2.35	0.48
45:OG:402:ARG:NH1	45:OG:415:GLU:OE2	2.47	0.48
45:OM:408:TYR:HD2	45:OM:418:PHE:HZ	1.61	0.48
46:ON:392:LYS:HA	46:ON:395:LEU:HD12	1.96	0.48
46:PB:318:ARG:HH21	46:PB:358:PRO:HA	1.78	0.48
45:PE:214:ARG:HH11	45:PE:214:ARG:HG2	1.78	0.48
46:PH:372:THR:HA	46:PH:422:TYR:HE2	1.78	0.48
46:QD:257:LEU:HD11	46:QD:314:SER:HB2	1.96	0.48
45:QG:31:GLN:OE1	45:QG:37:PRO:HD3	2.13	0.48
46:QH:19:LYS:HE2	46:QH:227:HIS:ND1	2.29	0.48
45:RA:239:THR:OG1	45:RA:243:ARG:NH2	2.41	0.48
46:RB:313:ALA:HB3	46:RB:349:ILE:HD12	1.95	0.48
45:RC:68:LEU:HD22	45:RC:153:LEU:HD11	1.96	0.48
46:RF:50:TYR:OH	46:RF:237:THR:HG21	2.13	0.48
46:RJ:279:GLN:OE1	46:RJ:279:GLN:N	2.45	0.48
46:RL:267:MET:HE3	46:RL:301:CYS:HB2	1.95	0.48
46:SB:100:ASN:HD21	46:SB:102:ALA:HB3	1.79	0.48
45:SC:401:LYS:HD3	45:SC:401:LYS:O	2.13	0.48
45:SC:426:ALA:O	45:SC:430:LYS:HG2	2.14	0.48
46:SD:285:THR:HB	46:SD:287:PRO:HD2	1.96	0.48
45:SK:381:SER:O	45:SK:384:ILE:HG12	2.14	0.48
45:TG:183:GLU:N	45:TG:184:PRO:HD2	2.28	0.48
45:TK:223:THR:HG22	45:TK:224:TYR:H	1.78	0.48
46:UD:167:PHE:CE2	46:UD:233:MET:HG2	2.48	0.48
45:UK:346:TRP:CD1	46:UL:391:ARG:HG3	2.48	0.48
45:VA:300:ASN:O	45:VA:300:ASN:ND2	2.45	0.48
45:VE:8:HIS:HB3	45:VE:14:ILE:HD13	1.95	0.48
46:VJ:342:VAL:HG13	46:VJ:345:ILE:HG22	1.96	0.48
46:VL:201:VAL:HG21	46:VL:374:ILE:HD11	1.96	0.48
46:WB:207:LEU:HB3	46:WB:225:LEU:HD22	1.96	0.48
45:WI:84:ARG:HG3	45:WI:85:GLN:HG2	1.94	0.48
45:WM:189:LEU:HD11	45:WM:418:PHE:HE1	1.79	0.48
7:1G:180:PRO:HG2	46:LD:174:LYS:NZ	2.29	0.48
23:1O:155:ILE:HD11	45:UE:370:LYS:HZ2	1.79	0.48
25:1R:300:LYS:NZ	46:CD:80:PRO:HD3	2.28	0.48
13:1U:88:ASP:HB2	13:1U:95:MET:HG3	1.95	0.48
13:1U:348:ASN:HB3	13:1U:351:ASN:O	2.14	0.48
1:2A:39:TYR:CE2	45:MI:78:VAL:HA	2.49	0.48
16:2B:134:ARG:O	26:2W:261:LYS:NZ	2.39	0.48
28:2F:91:TRP:CG	45:GE:116:ASP:HB3	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2K:266:LEU:HD13	45:GK:370:LYS:HZ2	1.79	0.48
20:2K:421:GLU:HA	20:2K:424:LEU:HD12	1.96	0.48
21:2L:748:LYS:HE3	21:2L:835:PHE:HB2	1.96	0.48
23:2O:125:LEU:O	23:2O:128:ARG:HD3	2.14	0.48
24:2P:389:LEU:HD12	24:2P:390:LYS:HD3	1.95	0.48
10:2Q:74:PRO:HB3	10:2Q:148:TYR:OH	2.13	0.48
15:2X:2:LYS:NZ	46:ML:74:ASP:O	2.47	0.48
1:3A:95:LEU:HD21	1:3A:105:HIS:HB2	1.95	0.48
1:3A:125:LEU:HD23	1:3A:126:LYS:N	2.28	0.48
5:3E:87:VAL:HG23	5:3E:88:ILE:HG13	1.95	0.48
21:3L:170:THR:OG1	21:3L:173:GLN:OE1	2.31	0.48
34:4R:16:CYS:SG	34:4R:18:PRO:HD3	2.54	0.48
34:4R:331:PRO:O	34:4R:360:TYR:OH	2.32	0.48
36:5D:111:LEU:HD12	36:5D:112:PRO:HD2	1.96	0.48
37:5F:17:ASN:HB3	37:5F:21:LEU:HD12	1.94	0.48
37:5G:26:GLY:H	45:OG:221:ARG:HD3	1.77	0.48
34:6R:268:GLU:HB3	46:DN:280:GLN:HG3	1.95	0.48
34:6R:298:ASP:OD1	34:6R:298:ASP:N	2.47	0.48
45:AC:430:LYS:HA	45:AC:433:GLU:HG3	1.94	0.48
45:AI:183:GLU:N	45:AI:184:PRO:HD2	2.28	0.48
46:AL:116:VAL:HA	46:AL:119:VAL:HG12	1.96	0.48
45:BC:259:LEU:HD11	45:BC:316:SER:HB2	1.95	0.48
46:BL:328:GLU:OE2	46:BL:332:ASN:ND2	2.46	0.48
46:CB:238:CYS:SG	46:CB:239:CYS:N	2.87	0.48
45:CC:71:GLU:HB3	45:CC:98:ASP:HB3	1.95	0.48
45:CC:231:ILE:O	45:CC:235:ILE:HG12	2.14	0.48
45:CC:259:LEU:HD11	45:CC:316:SER:HB3	1.96	0.48
46:CD:64:ILE:HD12	46:CD:120:VAL:HG22	1.95	0.48
45:CG:26:LEU:HD11	45:CG:364:PRO:HD2	1.96	0.48
45:CK:70:LEU:HA	45:CK:95:GLY:HA3	1.96	0.48
45:CM:292:THR:HG21	45:CM:331:SER:HB3	1.96	0.48
46:CN:289:LEU:HD13	46:CN:365:VAL:HG23	1.95	0.48
46:DB:148:GLY:O	46:DB:151:LEU:HG	2.14	0.48
45:DE:356:ASN:OD1	45:DE:357:TYR:N	2.46	0.48
45:DM:19:ALA:O	45:DM:22:GLU:HG3	2.14	0.48
46:DN:226:ASN:HA	46:DN:229:VAL:HG22	1.96	0.48
45:EA:88:HIS:ND1	45:EA:91:GLN:HB2	2.29	0.48
45:EC:183:GLU:N	45:EC:184:PRO:HD2	2.28	0.48
46:ED:213:ARG:HH12	46:ED:297:LYS:HD3	1.78	0.48
45:EG:292:THR:HG21	45:EG:331:SER:HB3	1.95	0.48
45:EK:288:VAL:HA	45:EK:291:ILE:HG12	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EM:332:ILE:HA	45:EM:335:ILE:HD12	1.95	0.48
45:FE:98:ASP:OD1	45:FE:99:ALA:N	2.47	0.48
45:FG:224:TYR:HE2	46:FH:246:LEU:HD11	1.77	0.48
45:FK:251:ASP:HB2	45:FK:254:GLU:HG3	1.95	0.48
46:FL:342:VAL:HG13	46:FL:345:ILE:HG22	1.96	0.48
46:GN:263:LEU:HD22	46:GN:422:TYR:CD2	2.49	0.48
45:HC:326:LYS:HD3	45:HC:326:LYS:C	2.33	0.48
45:IG:296:PHE:HE2	45:IG:335:ILE:HG21	1.78	0.48
45:JA:11:GLN:NE2	46:JB:245:GLN:O	2.46	0.48
46:JB:342:VAL:HG13	46:JB:345:ILE:HG22	1.96	0.48
45:JK:250:VAL:HG13	45:JK:254:GLU:HB2	1.95	0.48
45:KC:183:GLU:N	45:KC:184:PRO:HD2	2.29	0.48
46:KD:260:PHE:HB2	46:KD:263:LEU:HD13	1.96	0.48
46:KL:275:SER:O	46:KL:279:GLN:HG3	2.14	0.48
45:LC:258:ASN:ND2	45:LC:352:LYS:HD2	2.28	0.48
46:LD:418:LEU:O	46:LD:422:TYR:HB2	2.13	0.48
45:LI:256:GLN:HB2	46:LL:397:TRP:HZ2	1.79	0.48
46:LN:10:GLY:O	46:LN:14:ASN:ND2	2.47	0.48
46:LN:51:TYR:HB3	46:LN:59:TYR:HB3	1.96	0.48
45:ME:103:PHE:HB2	45:ME:186:ASN:HB3	1.96	0.48
45:MM:284:GLU:N	45:MM:284:GLU:OE2	2.47	0.48
46:NF:130:LEU:HB3	46:NF:162:ARG:HD2	1.96	0.48
46:NN:207:LEU:HD23	46:NN:225:LEU:HB3	1.95	0.48
45:OE:174:SER:HB2	45:OE:177:VAL:O	2.14	0.48
46:OH:237:THR:O	46:OH:237:THR:HG22	2.14	0.48
45:OM:265:ILE:HG12	45:OM:432:TYR:HE1	1.78	0.48
45:PA:3:GLU:OE2	45:PA:130:THR:N	2.47	0.48
45:PA:406:HIS:CD2	46:PB:261:PRO:HD3	2.49	0.48
45:PC:339:ARG:HD2	45:PC:339:ARG:N	2.29	0.48
46:QB:3:GLU:HG3	46:QB:62:ARG:NH1	2.28	0.48
46:QB:376:GLU:OE1	46:QB:380:ARG:NH1	2.47	0.48
46:QD:51:TYR:HB3	46:QD:59:TYR:HB3	1.96	0.48
45:QG:167:LEU:HG	45:QG:200:VAL:HB	1.95	0.48
45:QG:262:TYR:HB2	45:QG:265:ILE:HG12	1.96	0.48
45:QM:31:GLN:HB2	45:QM:32:PRO:HD2	1.96	0.48
45:RA:53:PHE:HB3	45:RA:61:HIS:HB3	1.95	0.48
45:RA:108:TYR:HA	45:RA:112:LYS:HE3	1.96	0.48
45:RA:262:TYR:OH	46:RB:391:ARG:O	2.27	0.48
45:RE:384:ILE:O	45:RE:387:VAL:HG22	2.14	0.48
46:RF:341:PHE:HD1	46:RF:348:ASN:HD21	1.62	0.48
45:RI:287:SER:HB3	45:RI:290:GLU:HG2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RJ:192:LEU:HD21	46:RJ:199:CYS:SG	2.54	0.48
45:SI:225:THR:O	45:SI:229:ARG:HG3	2.14	0.48
46:SJ:289:LEU:HD22	46:SJ:365:VAL:HG23	1.95	0.48
45:SK:2:ARG:HD3	45:SK:2:ARG:H	1.78	0.48
46:TD:1:MET:O	46:TD:2:ARG:HG2	2.14	0.48
45:TE:184:PRO:O	45:TE:188:ILE:HG12	2.14	0.48
46:TJ:105:HIS:CE1	46:TJ:150:LEU:HD12	2.48	0.48
46:TL:7:ILE:HG13	46:TL:64:ILE:HB	1.95	0.48
45:TM:56:THR:HG23	45:TM:58:ALA:H	1.79	0.48
45:UI:55:GLU:HG3	45:UI:57:GLY:H	1.79	0.48
46:UJ:156:ARG:HD3	46:UJ:164:MET:HE3	1.95	0.48
45:UM:278:ALA:HA	45:UM:281:ALA:HB3	1.96	0.48
45:VC:178:SER:OG	45:VC:183:GLU:OE2	2.22	0.48
46:VD:178:THR:HG22	46:VD:180:VAL:H	1.79	0.48
46:VN:217:LEU:HD12	46:VN:220:PRO:HD3	1.95	0.48
46:WH:67:ASP:O	46:WH:92:PHE:HA	2.14	0.48
46:WH:326:VAL:O	46:WH:330:MET:HG2	2.14	0.48
45:WM:70:LEU:HA	45:WM:95:GLY:HA3	1.96	0.48
45:WM:87:PHE:HB3	45:WM:91:GLN:HE21	1.78	0.48
14:0V:24:ARG:NH1	45:MM:430:LYS:HE3	2.27	0.47
18:1I:90:ASN:HD21	45:JC:15:GLN:HE21	1.61	0.47
27:2C:181:ILE:HD11	27:2C:187:PHE:HD1	1.79	0.47
20:2K:393:GLU:HA	20:2K:396:GLN:HG2	1.95	0.47
12:2T:236:THR:O	12:2T:240:LYS:HG2	2.14	0.47
16:3B:72:TYR:CE1	16:3B:79:GLN:HB3	2.48	0.47
13:3U:542:THR:HG23	13:3U:587:GLN:NE2	2.29	0.47
14:3V:119:ILE:O	14:3V:122:LYS:HE3	2.14	0.47
14:3V:121:GLU:O	14:3V:121:GLU:HG2	2.13	0.47
34:4R:318:TYR:HB3	34:4R:321:MET:SD	2.54	0.47
37:5E:44:ARG:HD3	37:5E:45:PRO:HD2	1.95	0.47
41:6H:174:MET:HE1	46:FB:245:GLN:HG2	1.96	0.47
34:6R:461:LYS:HE2	34:6R:461:LYS:HA	1.96	0.47
34:6R:536:ARG:HH22	34:6R:609:LEU:HA	1.79	0.47
45:AE:398:MET:SD	46:AF:345:ILE:HG13	2.54	0.47
45:AM:215:ARG:NH2	45:AM:300:ASN:OD1	2.47	0.47
45:BE:113:GLU:OE2	45:BE:113:GLU:N	2.47	0.47
45:BK:213:CYS:HB3	45:BK:219:ILE:HD11	1.96	0.47
45:BK:387:VAL:HA	45:BK:390:ARG:HG2	1.96	0.47
46:BL:133:PHE:HB2	46:BL:164:MET:HG3	1.95	0.47
46:CD:45:GLU:HG3	46:CD:46:ARG:HG2	1.95	0.47
46:CD:67:ASP:OD1	46:CD:68:LEU:N	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CD:221:THR:HG22	46:CD:223:GLY:H	1.79	0.47
45:CE:136:LEU:HD23	45:CE:167:LEU:HB2	1.95	0.47
46:CH:168:SER:N	46:CH:200:MET:O	2.37	0.47
46:CL:10:GLY:O	46:CL:14:ASN:ND2	2.47	0.47
45:DC:296:PHE:CE2	45:DC:335:ILE:HG13	2.48	0.47
45:DC:384:ILE:O	45:DC:387:VAL:HG12	2.14	0.47
46:DD:380:ARG:O	46:DD:384:GLN:HG2	2.14	0.47
46:DL:46:ARG:NH2	45:DM:76:ASP:OD2	2.41	0.47
45:EC:21:TRP:HZ2	45:EC:65:ALA:HB2	1.79	0.47
45:EC:406:HIS:HA	45:EC:409:VAL:HG12	1.95	0.47
45:EK:268:MET:HE2	45:EK:380:ASN:HB2	1.96	0.47
46:FB:320:ARG:HA	46:FB:320:ARG:HE	1.79	0.47
45:FE:141:VAL:HG12	45:FE:171:ILE:O	2.14	0.47
45:FE:174:SER:HB2	45:FE:177:VAL:O	2.14	0.47
45:FI:56:THR:HG23	45:FI:58:ALA:H	1.79	0.47
46:FJ:139:LEU:HD13	46:FJ:168:SER:HB3	1.95	0.47
45:GG:68:LEU:HD22	45:GG:153:LEU:HD11	1.96	0.47
46:GJ:180:VAL:O	46:GJ:180:VAL:HG12	2.14	0.47
46:GJ:201:VAL:HG21	46:GJ:374:ILE:HD11	1.96	0.47
46:HB:87:PRO:HA	46:HB:90:PHE:CD2	2.45	0.47
45:HG:178:SER:HB3	46:HH:347:ASN:ND2	2.29	0.47
45:HK:183:GLU:N	45:HK:184:PRO:HD2	2.29	0.47
46:HL:73:MET:HA	46:HL:76:VAL:HG12	1.95	0.47
45:HM:212:ILE:HD11	45:HM:300:ASN:HA	1.96	0.47
46:HN:324:LYS:O	46:HN:327:ASP:N	2.45	0.47
46:IB:4:ILE:HG13	46:IB:131:GLN:HB3	1.96	0.47
45:IK:188:ILE:HG22	45:IK:421:ALA:HB1	1.96	0.47
45:IM:245:ASP:N	45:IM:245:ASP:OD1	2.47	0.47
46:JF:268:ILE:HG13	46:JF:300:MET:HG3	1.96	0.47
45:JM:17:GLY:HA2	45:JM:20:CYS:SG	2.54	0.47
45:KA:407:TRP:CZ2	46:KB:258:ILE:HD11	2.47	0.47
45:LA:10:GLY:O	45:LA:14:ILE:HG12	2.15	0.47
45:LA:205:ASP:OD1	45:LA:303:ALA:HA	2.14	0.47
45:LC:55:GLU:OE1	45:LC:56:THR:N	2.47	0.47
45:LE:88:HIS:HB3	45:LE:91:GLN:HG2	1.95	0.47
45:LG:183:GLU:N	45:LG:184:PRO:HD2	2.29	0.47
46:LH:375:GLN:OE1	46:LH:423:GLN:HB3	2.14	0.47
45:LK:123:ARG:NH2	45:LK:160:ASP:OD1	2.46	0.47
45:LK:294:SER:HA	45:LK:297:GLU:HG2	1.95	0.47
45:MA:11:GLN:HG3	45:MA:74:VAL:HG11	1.96	0.47
46:MF:173:PRO:HG3	46:MF:380:ARG:HD2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MG:68:LEU:HD11	45:MG:118:CYS:SG	2.54	0.47
45:MK:210:TYR:HH	46:ML:323:THR:HG1	1.62	0.47
46:MN:21:TRP:HA	46:MN:24:ILE:HG22	1.95	0.47
46:NB:247:ASN:O	46:NB:252:LYS:NZ	2.35	0.47
46:ND:31:ASP:HB2	46:ND:32:PRO:HD2	1.96	0.47
46:NF:105:HIS:CE1	46:NF:150:LEU:HD12	2.49	0.47
46:NH:392:LYS:HG3	46:NH:395:LEU:HD23	1.96	0.47
45:NM:221:ARG:HD3	46:NN:324:LYS:HZ1	1.79	0.47
46:NN:179:VAL:HG13	46:NN:180:VAL:HG13	1.95	0.47
46:OB:105:HIS:HB3	46:OB:106:TYR:HD1	1.78	0.47
46:OD:180:VAL:HG12	46:OD:180:VAL:O	2.14	0.47
45:OE:88:HIS:ND1	45:PE:280:LYS:HE2	2.29	0.47
45:OE:109:THR:O	45:OE:112:LYS:NZ	2.47	0.47
45:OM:316:SER:HB3	45:OM:378:ILE:HB	1.96	0.47
46:ON:105:HIS:CD2	46:ON:150:LEU:HB2	2.49	0.47
46:PB:119:VAL:HA	46:PB:122:LYS:HE3	1.95	0.47
46:PD:86:ARG:HH22	46:QB:282:ARG:HA	1.79	0.47
46:PJ:92:PHE:HD1	46:PJ:94:GLN:HE22	1.61	0.47
45:PK:98:ASP:O	45:PK:105:ARG:NH1	2.46	0.47
45:QA:346:TRP:CZ3	46:QB:390:ARG:HB2	2.50	0.47
45:QE:356:ASN:OD1	45:QE:357:TYR:N	2.45	0.47
46:QJ:178:THR:HG22	46:QJ:180:VAL:H	1.79	0.47
45:QK:70:LEU:HD23	45:QK:145:THR:OG1	2.14	0.47
46:QN:10:GLY:O	46:QN:14:ASN:ND2	2.46	0.47
45:RE:175:PRO:HG2	45:RE:176:GLN:OE1	2.14	0.47
46:RH:2:ARG:HH12	46:RH:46:ARG:HH22	1.61	0.47
45:RI:174:SER:HB2	45:RI:177:VAL:O	2.13	0.47
46:RJ:52:ASN:OD1	46:RJ:62:ARG:NH2	2.46	0.47
45:RM:191:THR:O	45:RM:195:LEU:HG	2.14	0.47
45:SA:319:TYR:CD2	45:SA:323:VAL:HG21	2.50	0.47
46:SH:83:GLN:O	46:TH:281:TYR:OH	2.23	0.47
45:SI:371:VAL:HG12	45:SI:373:ARG:H	1.79	0.47
46:SJ:316:LEU:HD13	46:SJ:352:SER:HB3	1.95	0.47
46:SN:139:LEU:HD13	46:SN:168:SER:HB3	1.95	0.47
45:TC:108:TYR:HA	45:TC:112:LYS:HE3	1.95	0.47
45:TG:66:VAL:HG21	45:TG:121:ARG:HG2	1.95	0.47
45:TG:338:LYS:HE3	45:TG:340:THR:HG22	1.95	0.47
46:TJ:238:CYS:HB2	46:TJ:318:ARG:NH2	2.28	0.47
46:TJ:262:ARG:HH21	46:TJ:418:LEU:HD22	1.78	0.47
45:TK:285:GLN:HE22	45:TK:287:SER:CB	2.27	0.47
45:TM:385:ALA:HB2	45:TM:432:TYR:CD2	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UB:245:GLN:NE2	45:UC:224:TYR:HB2	2.29	0.47
46:UD:139:LEU:HA	46:UD:145:SER:HB3	1.95	0.47
46:UN:284:LEU:HD22	46:UN:363:MET:HB3	1.95	0.47
45:VA:208:ALA:O	45:VA:212:ILE:HG12	2.14	0.47
45:VA:278:ALA:HB2	45:VA:369:ALA:HB2	1.96	0.47
46:VB:293:MET:HE2	46:VB:367:PHE:HB2	1.96	0.47
45:VI:135:PHE:HD2	45:VI:166:LYS:HG2	1.78	0.47
45:VK:396:ASP:OD1	45:VK:397:LEU:N	2.46	0.47
46:WF:208:TYR:CE1	46:WF:220:PRO:HB2	2.49	0.47
46:WJ:211:CYS:SG	46:WJ:220:PRO:HB3	2.54	0.47
14:0V:24:ARG:NH2	45:MM:430:LYS:HA	2.23	0.47
19:1J:198:ARG:O	45:IG:371:VAL:HA	2.13	0.47
13:1U:11:ILE:HB	13:1U:599:ILE:HB	1.94	0.47
12:2T:102:HIS:CD2	12:2T:216:LYS:HA	2.49	0.47
13:2U:137:GLY:O	13:2U:138:LYS:HD2	2.14	0.47
13:2U:458:LYS:NZ	13:2U:460:ASN:HB3	2.29	0.47
32:3D:166:HIS:HB3	32:3D:201:TYR:HE2	1.79	0.47
21:3L:196:ARG:NH1	21:3L:197:TYR:CE1	2.83	0.47
25:3R:62:MET:SD	46:ML:40:SER:HA	2.53	0.47
33:4F:172:LYS:N	33:4F:175:ASP:OD2	2.47	0.47
36:5C:54:ARG:HH12	45:KG:439:THR:C	2.14	0.47
40:6G:276:PRO:HD3	40:6G:284:LYS:HZ1	1.78	0.47
41:6H:170:TYR:CE2	46:FB:320:ARG:HD2	2.49	0.47
34:7R:95:PHE:HB2	34:7R:118:LEU:HB3	1.96	0.47
45:AA:141:VAL:HG11	45:AA:172:TYR:HD1	1.79	0.47
46:AD:135:ILE:HB	46:AD:166:THR:HG22	1.96	0.47
46:AH:169:VAL:HG22	46:AH:202:ILE:HB	1.96	0.47
45:AI:226:ASN:ND2	45:AI:367:ASP:OD2	2.43	0.47
46:AJ:207:LEU:HD13	46:AJ:225:LEU:HB3	1.96	0.47
46:AJ:213:ARG:HH12	46:AJ:297:LYS:HB3	1.79	0.47
45:AK:250:VAL:HG13	45:AK:254:GLU:HB2	1.96	0.47
45:AK:326:LYS:HB3	46:AN:208:TYR:CE1	2.48	0.47
47:AK:501:GTP:O1G	46:AL:252:LYS:NZ	2.33	0.47
46:BH:99:ASN:HA	46:BH:142:GLY:H	1.79	0.47
45:BM:183:GLU:N	45:BM:184:PRO:HD2	2.29	0.47
46:BN:299:MET:HG3	46:BN:305:PRO:HG3	1.96	0.47
45:CC:173:PRO:O	45:CC:390:ARG:NH2	2.47	0.47
45:DA:152:LEU:HA	45:DA:155:GLU:OE1	2.13	0.47
45:DA:326:LYS:HZ2	46:DB:220:PRO:HD2	1.78	0.47
46:DB:117:LEU:HG	46:DB:121:ARG:HH12	1.79	0.47
45:DI:174:SER:HB3	45:DI:177:VAL:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DK:328:VAL:O	45:DK:332:ILE:HD12	2.14	0.47
45:EA:259:LEU:HD21	45:EA:316:SER:HB2	1.95	0.47
46:EB:42:LEU:HA	46:EB:45:GLU:HB2	1.96	0.47
45:EC:176:GLN:N	45:EC:176:GLN:OE1	2.48	0.47
46:EN:15:GLN:NE2	46:EN:16:ILE:HG13	2.29	0.47
46:EN:211:CYS:O	46:EN:216:LYS:N	2.47	0.47
46:FB:101:TRP:CE3	46:FB:187:LEU:HD13	2.49	0.47
46:FF:229:VAL:HG12	46:FF:233:MET:HE2	1.97	0.47
45:FI:69:ASP:OD1	45:FI:70:LEU:N	2.47	0.47
46:GB:73:MET:HA	46:GB:76:VAL:HG22	1.96	0.47
46:GJ:178:THR:HG22	46:GJ:180:VAL:H	1.80	0.47
46:HB:337:ASN:OD1	46:HB:340:TYR:HB2	2.14	0.47
45:HC:68:LEU:HD11	45:HC:118:CYS:SG	2.54	0.47
45:HC:135:PHE:HB2	45:HC:166:LYS:HG2	1.95	0.47
46:IB:12:CYS:SG	46:IB:13:GLY:N	2.87	0.47
45:IE:174:SER:HB3	45:IE:177:VAL:O	2.14	0.47
46:IH:268:ILE:HG22	46:IH:368:VAL:HG22	1.96	0.47
46:IJ:73:MET:SD	46:IJ:92:PHE:HB3	2.54	0.47
45:JC:258:ASN:OD1	46:JF:179:VAL:HG22	2.15	0.47
46:JD:27:GLU:O	46:JD:43:GLN:NE2	2.47	0.47
46:JH:27:GLU:O	46:JH:43:GLN:NE2	2.47	0.47
45:KG:175:PRO:HG3	45:KG:304:LYS:HG2	1.96	0.47
45:LA:246:GLY:HA2	45:LA:357:TYR:CD1	2.49	0.47
46:LB:179:VAL:HG23	46:LB:180:VAL:HG13	1.96	0.47
45:LK:52:PHE:HZ	45:LK:239:THR:HG21	1.78	0.47
45:LM:406:HIS:CE1	46:LN:261:PRO:HD3	2.48	0.47
45:MA:194:LEU:O	45:MA:198:THR:HG22	2.14	0.47
46:MB:42:LEU:HD23	46:MB:42:LEU:H	1.80	0.47
46:MD:156:ARG:NH2	46:MD:197:ASP:OD1	2.47	0.47
45:MI:102:ASN:HB3	45:MI:105:ARG:HB2	1.95	0.47
45:MI:249:ASN:N	45:MI:249:ASN:HD22	2.13	0.47
45:MK:181:VAL:HG23	45:MK:182:VAL:HG13	1.96	0.47
45:MK:262:TYR:OH	46:MN:391:ARG:O	2.27	0.47
46:ML:370:ASN:OD1	46:ML:422:TYR:OH	2.32	0.47
46:MN:67:ASP:OD1	46:MN:68:LEU:N	2.46	0.47
46:MN:342:VAL:HG13	46:MN:345:ILE:HG22	1.95	0.47
46:NH:345:ILE:HG23	46:NH:348:ASN:HB3	1.96	0.47
46:NH:385:PHE:HE2	46:NH:412:GLU:HB3	1.78	0.47
45:NI:257:THR:HA	46:NL:397:TRP:HZ3	1.80	0.47
45:OC:136:LEU:HD23	45:OC:167:LEU:HB2	1.96	0.47
45:OC:333:ALA:O	45:OC:337:THR:HG23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OD:102:ALA:HB2	46:OD:403:MET:HG3	1.96	0.47
46:OF:68:LEU:HD12	46:OF:97:ALA:HB2	1.96	0.47
46:OH:268:ILE:HG22	46:OH:368:VAL:HG22	1.95	0.47
46:ON:125:GLU:OE2	46:PN:336:LYS:NZ	2.46	0.47
45:PE:3:GLU:OE2	45:PE:131:GLY:N	2.45	0.47
45:PE:195:LEU:HD21	45:PE:264:ARG:HE	1.79	0.47
46:PF:253:LEU:HD12	46:PF:257:LEU:HD13	1.96	0.47
45:PG:167:LEU:HG	45:PG:200:VAL:HB	1.95	0.47
46:PN:318:ARG:HB3	46:PN:357:PRO:HA	1.95	0.47
45:QA:5:ILE:HG12	45:QA:64:ARG:HG2	1.96	0.47
45:QA:121:ARG:HH21	45:QA:124:LYS:HE2	1.78	0.47
46:QB:222:TYR:HD1	46:QB:225:LEU:HD12	1.77	0.47
46:QF:258:ILE:O	46:QF:258:ILE:HG13	2.14	0.47
46:QH:136:THR:HG22	46:QH:167:PHE:HB2	1.97	0.47
45:QI:319:TYR:HB3	45:QI:323:VAL:HG11	1.96	0.47
46:QJ:390:ARG:HD2	46:QJ:391:ARG:HG2	1.96	0.47
46:QL:318:ARG:HH11	46:QL:358:PRO:HG3	1.79	0.47
46:RD:8:GLN:NE2	46:RD:17:GLY:HA3	2.24	0.47
45:RI:53:PHE:HB3	45:RI:61:HIS:HB3	1.96	0.47
46:RL:135:ILE:HD11	46:RL:152:ILE:HD11	1.96	0.47
45:RM:356:ASN:OD1	45:RM:357:TYR:N	2.46	0.47
45:SA:213:CYS:HA	45:SA:217:LEU:HB2	1.95	0.47
46:SB:169:VAL:HG22	46:SB:202:ILE:HB	1.96	0.47
45:SE:2:ARG:NE	45:SE:242:LEU:O	2.45	0.47
45:SE:254:GLU:OE2	46:SF:98:GLY:HA2	2.13	0.47
46:SL:324:LYS:HD2	46:SL:324:LYS:HA	1.69	0.47
45:SM:268:MET:HB3	45:SM:380:ASN:OD1	2.14	0.47
45:SM:392:ASP:OD1	45:SM:425:LEU:HD13	2.14	0.47
46:SN:105:HIS:ND1	46:SN:146:GLY:O	2.41	0.47
46:TN:11:GLN:HE21	49:TN:501:GDP:PA	2.37	0.47
45:UA:287:SER:N	45:UA:290:GLU:OE2	2.41	0.47
46:UB:139:LEU:HA	46:UB:145:SER:HB3	1.96	0.47
45:UC:244:PHE:HB2	45:UC:356:ASN:HD21	1.79	0.47
46:UJ:289:LEU:HD23	46:UJ:365:VAL:HG23	1.96	0.47
45:UK:10:GLY:O	45:UK:14:ILE:HG12	2.14	0.47
46:UL:246:LEU:HD11	45:UM:224:TYR:HE2	1.79	0.47
46:UN:398:TYR:HD1	46:UN:408:PHE:HZ	1.61	0.47
46:VD:3:GLU:CD	46:VD:3:GLU:H	2.17	0.47
46:VF:105:HIS:CD2	46:VF:150:LEU:HB2	2.49	0.47
46:VH:286:VAL:HG11	46:VH:325:GLU:HB3	1.96	0.47
45:WK:433:GLU:O	45:WK:437:ILE:HG23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:0B:242:PRO:HB3	46:JL:361:LEU:HD13	1.95	0.47
9:1N:159:PRO:HG3	46:KJ:224:ASP:HA	1.95	0.47
10:1Q:21:PRO:HD2	35:4S:202:ASP:OD2	2.14	0.47
13:1U:518:GLU:N	13:1U:522:GLY:O	2.46	0.47
23:2O:436:GLU:O	23:2O:440:GLN:NE2	2.46	0.47
25:2R:265:SER:C	25:2R:267:ILE:H	2.18	0.47
16:3B:200:ASP:OD1	16:3B:201:TYR:N	2.47	0.47
25:3R:263:VAL:O	25:3R:269:PHE:N	2.47	0.47
27:4C:209:GLU:O	27:4C:213:ILE:HG12	2.14	0.47
35:4S:109:LEU:HD21	35:4S:164:LYS:HG3	1.96	0.47
10:5Q:72:LYS:NZ	10:5Q:150:GLU:OE2	2.43	0.47
34:5R:71:LYS:HE2	34:5R:71:LYS:HA	1.95	0.47
39:6F:64:THR:HG21	46:JF:276:ARG:HG2	1.95	0.47
10:6Q:102:ARG:HH22	45:AM:430:LYS:HB3	1.78	0.47
34:6R:13:PRO:HB3	46:LN:228:LEU:HD23	1.95	0.47
45:AA:227:LEU:O	45:AA:231:ILE:HG12	2.14	0.47
46:AF:42:LEU:HA	46:AF:45:GLU:HG3	1.96	0.47
46:AF:342:VAL:HG13	46:AF:345:ILE:HG22	1.96	0.47
46:AF:401:GLU:N	46:AF:401:GLU:OE1	2.47	0.47
45:AI:288:VAL:HG11	45:AI:327:ASP:HB3	1.95	0.47
46:AJ:113:ILE:HA	46:AJ:116:VAL:HG22	1.96	0.47
45:BA:257:THR:HG23	46:BD:397:TRP:CH2	2.49	0.47
46:BB:322:SER:OG	46:BB:325:GLU:OE1	2.31	0.47
45:BE:242:LEU:HD11	45:BE:252:ILE:HD11	1.96	0.47
45:BG:288:VAL:HA	45:BG:291:ILE:HG12	1.97	0.47
46:BH:222:TYR:O	46:BH:226:ASN:ND2	2.47	0.47
46:BL:63:ALA:O	46:BL:89:ASN:ND2	2.45	0.47
45:BM:267:PHE:HD2	45:BM:388:PHE:HZ	1.62	0.47
46:BN:156:ARG:HG3	46:BN:156:ARG:HH11	1.80	0.47
46:BN:341:PHE:HB3	46:BN:348:ASN:HD21	1.77	0.47
45:CA:329:ASN:HB3	46:CB:175:VAL:HG12	1.96	0.47
45:CA:387:VAL:HA	45:CA:390:ARG:HG2	1.95	0.47
45:CC:255:PHE:O	45:CC:259:LEU:HB2	2.13	0.47
45:CE:147:SER:HB2	45:CE:190:SER:HB2	1.96	0.47
45:CG:172:TYR:HE2	45:CG:388:PHE:HE1	1.62	0.47
46:CJ:101:TRP:CD1	46:CJ:146:GLY:HA2	2.49	0.47
46:CL:45:GLU:OE1	46:CL:45:GLU:N	2.45	0.47
46:CN:47:ILE:HG22	46:CN:51:TYR:HB2	1.96	0.47
46:DF:101:TRP:CE3	46:DF:187:LEU:HD13	2.48	0.47
46:DF:130:LEU:HD12	46:DF:131:GLN:N	2.28	0.47
46:DF:298:ASN:O	46:DF:298:ASN:ND2	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DH:171:PRO:HB3	46:DH:181:GLU:OE1	2.14	0.47
45:DI:259:LEU:HD21	45:DI:316:SER:HB2	1.95	0.47
46:EN:66:MET:HE3	46:EN:116:VAL:HG21	1.95	0.47
45:FE:371:VAL:HG12	45:FE:373:ARG:H	1.80	0.47
45:FK:269:LEU:HD11	45:FK:384:ILE:HD13	1.96	0.47
46:GB:101:TRP:HB2	46:GB:184:ASN:HB3	1.96	0.47
45:GC:265:ILE:HG22	45:GC:380:ASN:HD21	1.79	0.47
45:GK:231:ILE:O	45:GK:235:ILE:HG12	2.15	0.47
45:GM:7:ILE:N	45:GM:136:LEU:O	2.36	0.47
45:II:254:GLU:HA	45:II:257:THR:HG22	1.95	0.47
46:JN:179:VAL:HG23	46:JN:180:VAL:HG13	1.95	0.47
45:KE:224:TYR:HE2	46:KF:246:LEU:HD11	1.78	0.47
45:KG:275:ILE:O	45:KG:276:ILE:HD13	2.14	0.47
46:KJ:58:ARG:NH1	46:LJ:280:GLN:OE1	2.47	0.47
45:KK:352:LYS:HA	46:KN:177:ASP:O	2.15	0.47
45:LA:275:ILE:O	45:LA:275:ILE:HG13	2.13	0.47
46:LD:101:TRP:HB2	46:LD:184:ASN:HB3	1.96	0.47
45:LM:223:THR:HG22	45:LM:224:TYR:H	1.80	0.47
45:MC:183:GLU:N	45:MC:184:PRO:HD2	2.29	0.47
46:MD:67:ASP:OD1	46:MD:68:LEU:N	2.45	0.47
46:ML:190:HIS:CD2	46:ML:414:ASN:HD22	2.32	0.47
45:MM:394:LYS:HE3	45:MM:394:LYS:HB3	1.69	0.47
46:MN:324:LYS:HD3	46:MN:324:LYS:HA	1.67	0.47
46:ND:161:ASP:OD2	46:ND:161:ASP:N	2.43	0.47
45:NE:181:VAL:HG13	45:NE:182:VAL:HG13	1.96	0.47
45:NM:293:ASN:OD1	45:NM:294:SER:N	2.47	0.47
46:NN:31:ASP:OD2	46:NN:33:THR:OG1	2.33	0.47
46:NN:324:LYS:O	46:NN:328:GLU:N	2.30	0.47
46:NN:372:THR:HA	46:NN:422:TYR:CE2	2.49	0.47
45:OA:184:PRO:O	45:OA:188:ILE:HG12	2.14	0.47
46:OB:130:LEU:HD11	46:OB:133:PHE:HE1	1.79	0.47
46:OB:376:GLU:O	46:OB:380:ARG:HG2	2.14	0.47
45:OC:398:MET:HE1	46:OD:346:PRO:HD2	1.96	0.47
46:OF:103:LYS:NZ	46:OF:401:GLU:OE2	2.44	0.47
46:PF:297:LYS:HD2	46:PF:297:LYS:N	2.28	0.47
45:PI:55:GLU:CD	45:PI:57:GLY:H	2.18	0.47
47:PI:501:GTP:O2A	47:PI:501:GTP:H8	1.97	0.47
45:QA:280:LYS:HD2	45:QA:283:HIS:ND1	2.29	0.47
46:QF:334:GLN:HE21	46:QF:349:ILE:HD12	1.78	0.47
45:QG:167:LEU:HD11	45:QG:256:GLN:NE2	2.30	0.47
46:QH:105:HIS:CE1	46:QH:150:LEU:HD13	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QI:317:MET:HB3	45:QI:377:MET:HB3	1.96	0.47
46:QJ:258:ILE:O	46:QJ:258:ILE:HG13	2.14	0.47
46:QN:262:ARG:NH1	46:QN:421:GLU:OE1	2.47	0.47
45:RA:207:GLU:HA	45:RA:210:TYR:HD2	1.79	0.47
45:RE:288:VAL:HB	45:RE:373:ARG:HD2	1.96	0.47
45:RI:422:ARG:HA	45:RI:422:ARG:NE	2.29	0.47
45:SK:68:LEU:HD11	45:SK:118:CYS:SG	2.54	0.47
45:TE:338:LYS:HZ2	45:TE:339:ARG:H	1.62	0.47
46:TF:327:ASP:OD1	46:TF:328:GLU:N	2.47	0.47
46:TN:254:ALA:O	46:TN:258:ILE:HG12	2.15	0.47
46:TN:372:THR:HA	46:TN:422:TYR:HE1	1.79	0.47
46:UB:324:LYS:HZ3	45:UC:210:TYR:HD1	1.62	0.47
46:UN:86:ARG:HB3	46:UN:89:ASN:ND2	2.29	0.47
45:VA:205:ASP:OD1	45:VA:303:ALA:HA	2.14	0.47
45:VA:439:THR:HG21	46:VD:390:ARG:HH12	1.79	0.47
46:VB:97:ALA:HA	46:VB:103:LYS:HE3	1.96	0.47
46:VH:207:LEU:HB3	46:VH:225:LEU:HD22	1.96	0.47
45:VM:210:TYR:CE1	46:VN:324:LYS:HD2	2.49	0.47
45:WA:224:TYR:HD1	45:WA:227:LEU:HD12	1.79	0.47
45:WC:222:PRO:HD2	46:WD:324:LYS:HG3	1.96	0.47
45:WE:7:ILE:HB	45:WE:137:VAL:HG12	1.97	0.47
45:WK:210:TYR:CZ	45:WK:227:LEU:HD11	2.48	0.47
45:WM:155:GLU:HB2	45:WM:156:ARG:HH21	1.78	0.47
18:1I:218:THR:HB	45:LE:322:ASP:HB3	1.96	0.47
19:1J:318:PRO:HA	45:IK:372:MET:HE1	1.96	0.47
24:1P:226:HIS:HE1	45:TG:279:GLU:HA	1.79	0.47
4:2D:30:GLN:OE1	4:2D:30:GLN:N	2.45	0.47
4:2D:84:SER:HA	46:EJ:320:ARG:HH21	1.78	0.47
25:2R:283:ARG:NH2	45:CG:46:ASP:OD2	2.46	0.47
11:2S:232:LYS:HE3	11:2S:286:LEU:HD21	1.97	0.47
13:2U:287:THR:OG1	13:2U:291:THR:O	2.32	0.47
5:3E:166:ASP:O	5:3E:169:SER:OG	2.25	0.47
45:AC:387:VAL:HA	45:AC:390:ARG:HG2	1.95	0.47
46:AH:68:LEU:HD23	46:AH:97:ALA:HB2	1.95	0.47
46:AJ:318:ARG:HD2	46:AJ:354:CYS:HB3	1.96	0.47
45:AK:105:ARG:HG2	45:AK:411:GLU:HG2	1.96	0.47
45:AK:152:LEU:O	45:AK:156:ARG:HG2	2.14	0.47
45:AM:109:THR:HG22	45:AM:110:ILE:HG23	1.97	0.47
45:BG:2:ARG:HD2	45:BG:242:LEU:O	2.15	0.47
45:BG:322:ASP:OD1	45:BG:373:ARG:NH1	2.47	0.47
46:BL:207:LEU:HG	46:BL:300:MET:SD	2.54	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CA:203:MET:SD	45:CA:203:MET:N	2.87	0.47
46:CH:113:ILE:HA	46:CH:116:VAL:HG12	1.95	0.47
45:CI:21:TRP:CZ3	45:CI:63:PRO:HB3	2.50	0.47
45:CI:66:VAL:HG11	45:CI:122:ILE:HD11	1.96	0.47
45:CI:216:ASN:HB3	45:CI:275:ILE:O	2.14	0.47
45:CI:244:PHE:HB2	45:CI:356:ASN:HD21	1.80	0.47
45:CI:402:ARG:NH1	45:CI:415:GLU:OE2	2.47	0.47
45:CM:231:ILE:O	45:CM:235:ILE:HG12	2.14	0.47
45:DA:301:MET:HG3	45:DA:303:ALA:H	1.79	0.47
46:DB:289:LEU:HD21	46:DB:365:VAL:HG23	1.95	0.47
46:DD:372:THR:O	46:DD:375:GLN:HG2	2.13	0.47
45:DM:116:ASP:OD1	45:DM:116:ASP:N	2.47	0.47
46:DN:318:ARG:HH11	46:DN:358:PRO:HG3	1.79	0.47
46:EB:205:GLU:O	46:EB:209:ASP:N	2.43	0.47
45:EE:393:HIS:O	45:EE:397:LEU:HG	2.14	0.47
46:EN:132:GLY:HA3	46:EN:162:ARG:NE	2.29	0.47
46:FB:213:ARG:NH1	46:FB:297:LYS:HB2	2.30	0.47
45:FG:188:ILE:HD12	45:FG:425:LEU:HD11	1.96	0.47
45:FM:109:THR:HG22	45:FM:110:ILE:HG23	1.96	0.47
46:FN:135:ILE:HB	46:FN:166:THR:HA	1.97	0.47
46:FN:398:TYR:HB3	46:FN:403:MET:HE3	1.96	0.47
45:GA:93:ILE:HD11	45:GA:121:ARG:HG3	1.96	0.47
46:GJ:326:VAL:O	46:GJ:330:MET:HG2	2.15	0.47
45:GM:88:HIS:ND1	45:GM:91:GLN:OE1	2.48	0.47
45:HA:324:VAL:HB	45:HA:327:ASP:OD2	2.13	0.47
46:HF:175:VAL:HG22	46:HF:205:GLU:HB2	1.95	0.47
45:HK:226:ASN:ND2	45:HK:367:ASP:OD2	2.47	0.47
45:HM:105:ARG:HG3	45:HM:411:GLU:OE1	2.15	0.47
45:IC:301:MET:HA	45:IC:301:MET:HE3	1.95	0.47
45:II:250:VAL:HG13	45:II:254:GLU:HG3	1.96	0.47
45:IM:319:TYR:HB3	45:IM:323:VAL:HG11	1.96	0.47
45:JA:28:HIS:NE2	45:JA:48:ALA:O	2.44	0.47
46:JF:113:ILE:HA	46:JF:116:VAL:HG12	1.96	0.47
45:JG:183:GLU:N	45:JG:184:PRO:HD2	2.29	0.47
45:JK:196:GLU:N	45:JK:196:GLU:OE2	2.47	0.47
45:JM:3:GLU:N	45:JM:3:GLU:OE1	2.47	0.47
46:KB:105:HIS:CE1	46:KB:150:LEU:HD12	2.48	0.47
45:KM:11:GLN:HG3	45:KM:74:VAL:HG21	1.96	0.47
46:KN:341:PHE:HD1	46:KN:348:ASN:HD21	1.61	0.47
46:LB:86:ARG:HA	46:LB:86:ARG:NE	2.29	0.47
46:LB:159:TYR:HB3	46:LB:162:ARG:HG3	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LF:63:ALA:O	46:LF:89:ASN:ND2	2.48	0.47
45:LG:27:GLU:OE1	45:LG:243:ARG:NH1	2.25	0.47
46:LH:159:TYR:HB3	46:LH:162:ARG:HG3	1.95	0.47
46:LH:344:TRP:CE3	46:LH:345:ILE:HG23	2.49	0.47
46:LL:73:MET:CE	46:LL:92:PHE:HB3	2.45	0.47
45:LM:69:ASP:OD1	45:LM:70:LEU:N	2.47	0.47
46:LN:7:ILE:HG22	46:LN:64:ILE:HB	1.97	0.47
45:MA:284:GLU:HG3	45:MA:286:LEU:HD12	1.96	0.47
45:MI:265:ILE:HG22	45:MI:380:ASN:HD21	1.79	0.47
46:MN:326:VAL:O	46:MN:330:MET:HG2	2.15	0.47
45:NA:402:ARG:HH21	45:NA:405:VAL:HG21	1.79	0.47
46:NB:149:THR:HG21	46:NB:191:GLN:HE21	1.78	0.47
46:NB:342:VAL:HG13	46:NB:345:ILE:HG22	1.96	0.47
45:NE:387:VAL:HA	45:NE:390:ARG:HG2	1.97	0.47
46:NF:5:VAL:HG12	46:NF:62:ARG:HD2	1.96	0.47
45:NK:165:SER:HA	45:NK:199:ASP:OD2	2.15	0.47
45:NK:169:PHE:HA	45:NK:202:VAL:HG22	1.96	0.47
46:NL:73:MET:HA	46:NL:76:VAL:HG12	1.95	0.47
46:NN:375:GLN:NE2	46:NN:426:GLN:OE1	2.47	0.47
45:OE:416:GLY:O	45:OE:420:GLU:HG3	2.13	0.47
46:OF:122:LYS:HZ3	46:PF:291:GLN:HB3	1.80	0.47
45:OG:182:VAL:HG13	45:OG:186:ASN:HD21	1.80	0.47
46:OJ:319:GLY:HA2	46:OJ:357:PRO:HD3	1.95	0.47
45:OK:256:GLN:HG2	46:ON:397:TRP:HH2	1.78	0.47
46:ON:240:LEU:HD11	46:ON:249:ASP:HA	1.97	0.47
46:ON:398:TYR:O	46:ON:403:MET:HB2	2.13	0.47
45:PE:264:ARG:HH11	45:PE:264:ARG:HG3	1.79	0.47
46:PJ:170:VAL:HG21	46:PJ:377:MET:HE1	1.96	0.47
46:QB:174:LYS:HB2	46:QB:205:GLU:OE2	2.14	0.47
45:QM:432:TYR:O	45:QM:436:GLY:N	2.43	0.47
46:QN:268:ILE:HG13	46:QN:300:MET:HE2	1.95	0.47
45:RE:175:PRO:HB3	45:RE:390:ARG:HH12	1.78	0.47
45:RI:183:GLU:N	45:RI:184:PRO:HD2	2.29	0.47
45:RK:434:GLU:O	46:RL:391:ARG:NH2	2.48	0.47
45:SE:71:GLU:N	45:SE:71:GLU:OE1	2.47	0.47
45:SM:31:GLN:OE1	45:SM:32:PRO:HD2	2.14	0.47
45:SM:371:VAL:HG22	45:SM:373:ARG:H	1.78	0.47
45:TA:297:GLU:OE2	45:TA:300:ASN:ND2	2.47	0.47
46:TD:69:GLU:CD	46:TD:71:GLY:H	2.16	0.47
46:TD:163:ILE:HG21	46:TD:250:LEU:HD22	1.97	0.47
46:TF:252:LYS:NZ	47:TG:501:GTP:O1G	2.46	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TF:293:MET:SD	46:TF:367:PHE:HB2	2.55	0.47
46:TF:374:ILE:HD12	46:TF:378:PHE:HE2	1.78	0.47
46:TL:19:LYS:HD3	46:TL:22:GLU:OE1	2.15	0.47
45:UC:174:SER:HB2	45:UC:177:VAL:O	2.13	0.47
46:UF:10:GLY:O	46:UF:14:ASN:ND2	2.46	0.47
46:UJ:327:ASP:OD1	46:UJ:328:GLU:N	2.47	0.47
46:UN:405:GLU:HA	46:UN:408:PHE:HD2	1.79	0.47
46:VB:178:THR:HB	46:VB:181:GLU:HG3	1.95	0.47
45:VG:195:LEU:HD21	45:VG:264:ARG:HH21	1.80	0.47
46:VH:211:CYS:HA	46:VH:215:LEU:HD12	1.95	0.47
45:VM:390:ARG:HG3	45:VM:391:LEU:HD12	1.96	0.47
45:WA:174:SER:HB2	45:WA:177:VAL:O	2.14	0.47
45:WE:88:HIS:NE2	45:WE:90:GLU:OE2	2.47	0.47
45:WI:183:GLU:N	45:WI:184:PRO:HD2	2.30	0.47
3:0C:56:THR:HA	45:EI:219:ILE:HG12	1.97	0.47
23:1O:209:LYS:HE3	45:UC:370:LYS:HD3	1.95	0.47
21:2L:647:LYS:NZ	46:BN:55:THR:HA	2.29	0.47
21:2L:880:LYS:HE3	21:2L:892:ARG:HD3	1.96	0.47
23:2O:367:GLN:O	23:2O:371:GLU:HG2	2.14	0.47
11:2S:106:THR:HG21	45:MI:109:THR:HG21	1.96	0.47
11:2S:217:THR:O	11:2S:221:THR:HG23	2.15	0.47
13:2U:406:HIS:ND1	13:2U:426:GLU:OE1	2.47	0.47
14:2V:257:LYS:HA	14:2V:260:LYS:HZ3	1.78	0.47
15:2X:36:ALA:HB3	15:3X:140:PRO:HD2	1.96	0.47
15:2X:46:LYS:O	15:2X:50:GLU:HG2	2.14	0.47
32:3D:45:GLN:HE22	32:3D:73:LEU:H	1.62	0.47
32:3D:217:GLN:HB3	32:3D:219:GLN:HE22	1.79	0.47
10:3Q:88:THR:HG22	10:3Q:106:SER:HA	1.95	0.47
25:3R:31:GLU:OE2	25:3R:34:ARG:NH2	2.48	0.47
14:3V:240:LYS:O	14:3V:243:GLU:HG3	2.14	0.47
27:4C:214:VAL:HG22	27:4C:218:ARG:HD2	1.96	0.47
15:4X:131:MET:O	15:4X:134:THR:HG22	2.14	0.47
36:5A:154:ASP:OD1	36:5A:155:PRO:HD2	2.14	0.47
37:5E:199:LYS:HZ2	45:LC:392:ASP:HB3	1.79	0.47
10:6Q:38:THR:HA	10:6Q:45:SER:HA	1.95	0.47
43:8P:340:UNK:O	43:8P:344:UNK:N	2.48	0.47
45:AA:114:ILE:HG22	45:AA:118:CYS:HG	1.78	0.47
45:AC:384:ILE:O	45:AC:387:VAL:HG22	2.15	0.47
45:AK:311:LYS:HD2	45:AK:342:GLN:HG3	1.96	0.47
46:BH:36:TYR:O	46:BH:37:HIS:ND1	2.47	0.47
46:BH:87:PRO:HG2	46:CF:278:SER:HB2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BM:88:HIS:CE1	45:BM:90:GLU:HG2	2.49	0.47
46:CD:105:HIS:CE1	46:CD:150:LEU:HD12	2.49	0.47
46:CN:68:LEU:HB3	46:CN:96:GLY:HA2	1.95	0.47
46:DB:347:ASN:ND2	45:DC:180:ALA:O	2.47	0.47
45:DM:426:ALA:HB1	45:DM:430:LYS:NZ	2.28	0.47
45:EC:370:LYS:O	45:EC:370:LYS:HD3	2.14	0.47
46:EH:114:ASP:OD1	46:EH:115:SER:N	2.48	0.47
45:EI:7:ILE:HB	45:EI:137:VAL:HG12	1.95	0.47
45:EK:194:LEU:O	45:EK:198:THR:HG22	2.15	0.47
46:EN:100:ASN:OD1	46:EN:102:ALA:N	2.43	0.47
46:FF:117:LEU:O	46:FF:121:ARG:HG3	2.14	0.47
46:FJ:202:ILE:HD11	46:FJ:268:ILE:HD11	1.97	0.47
45:FK:272:TYR:HD2	45:FK:275:ILE:HD11	1.79	0.47
45:FK:329:ASN:HB3	46:FN:175:VAL:HG12	1.97	0.47
46:FN:150:LEU:O	46:FN:154:LYS:HG2	2.13	0.47
46:FN:319:GLY:N	46:FN:354:CYS:O	2.41	0.47
45:GA:70:LEU:HA	45:GA:95:GLY:HA3	1.96	0.47
45:GA:72:PRO:O	45:GA:76:ASP:N	2.41	0.47
47:GG:501:GTP:O1G	46:GH:252:LYS:NZ	2.35	0.47
46:GN:169:VAL:HG22	46:GN:202:ILE:HB	1.95	0.47
46:GN:285:THR:HG22	46:GN:287:PRO:HD2	1.95	0.47
45:HA:241:SER:OG	45:HA:250:VAL:O	2.27	0.47
45:HC:329:ASN:HB3	46:HF:175:VAL:HG12	1.96	0.47
45:HG:238:LEU:HD11	45:HG:255:PHE:CE2	2.50	0.47
45:IE:68:LEU:HD21	45:IE:118:CYS:SG	2.54	0.47
45:IE:265:ILE:HD11	45:IE:435:VAL:HG21	1.96	0.47
45:IG:177:VAL:HG11	46:IH:327:ASP:HB3	1.97	0.47
45:IM:96:LYS:HD3	45:IM:97:GLU:HG2	1.97	0.47
45:IM:174:SER:HB2	45:IM:177:VAL:O	2.14	0.47
46:JB:224:ASP:OD1	46:JB:225:LEU:N	2.48	0.47
45:JM:222:PRO:HG2	46:JN:324:LYS:NZ	2.29	0.47
45:KA:399:TYR:O	45:KA:402:ARG:NH1	2.46	0.47
45:KE:258:ASN:HD22	45:KE:352:LYS:HD3	1.79	0.47
46:KL:248:SER:HA	46:KL:252:LYS:HD2	1.97	0.47
46:LD:31:ASP:OD2	46:LD:37:HIS:ND1	2.48	0.47
46:LD:67:ASP:OD2	46:LD:72:THR:OG1	2.24	0.47
45:LE:7:ILE:HB	45:LE:137:VAL:HA	1.95	0.47
45:LE:346:TRP:CD1	46:LH:391:ARG:HG3	2.49	0.47
45:LI:183:GLU:N	45:LI:184:PRO:HD2	2.30	0.47
46:LJ:309:ARG:H	46:LJ:372:THR:HG22	1.80	0.47
46:MB:88:ASP:OD1	46:MB:89:ASN:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MB:116:VAL:HA	46:MB:119:VAL:HG12	1.97	0.47
46:MD:2:ARG:HD2	46:MD:240:LEU:HD11	1.96	0.47
45:MK:174:SER:HB3	45:MK:207:GLU:HG3	1.95	0.47
46:ML:379:LYS:HD3	46:ML:419:VAL:HG11	1.97	0.47
45:NA:371:VAL:HG22	45:NA:373:ARG:H	1.80	0.47
45:NG:265:ILE:HG22	45:NG:380:ASN:HD21	1.80	0.47
45:NI:268:MET:HB2	45:NI:379:SER:O	2.15	0.47
45:NM:371:VAL:HG22	45:NM:373:ARG:H	1.78	0.47
45:NM:383:ALA:O	45:NM:386:GLU:HG2	2.15	0.47
45:OE:183:GLU:N	45:OE:184:PRO:HD2	2.29	0.47
45:OE:265:ILE:HG12	45:OE:432:TYR:HE1	1.79	0.47
45:PC:221:ARG:NH2	46:PD:321:MET:HE2	2.30	0.47
45:PE:191:THR:HG21	45:PE:425:LEU:HD11	1.95	0.47
45:PG:277:SER:OG	45:PG:280:LYS:NZ	2.45	0.47
45:PK:10:GLY:O	45:PK:14:ILE:HG12	2.15	0.47
45:PM:398:MET:HB3	46:PN:345:ILE:HG22	1.96	0.47
45:QC:189:LEU:HD11	45:QC:418:PHE:HE1	1.78	0.47
46:QH:173:PRO:HG3	46:QH:380:ARG:HG2	1.96	0.47
45:QK:349:THR:HG23	46:QL:179:VAL:HG12	1.96	0.47
46:RB:330:MET:HE1	46:RB:349:ILE:HG21	1.97	0.47
46:RD:284:LEU:HD12	46:RD:362:LYS:HD3	1.96	0.47
46:RF:3:GLU:HG3	46:RF:62:ARG:NH1	2.28	0.47
46:RF:47:ILE:HG22	46:RF:51:TYR:HB2	1.97	0.47
45:RG:248:LEU:HB2	45:RG:355:ILE:HG12	1.96	0.47
46:RL:288:GLU:HG3	46:RL:291:GLN:HE21	1.80	0.47
46:SD:380:ARG:O	46:SD:383:GLU:HG2	2.14	0.47
46:SH:313:ALA:HA	46:SH:369:GLY:HA2	1.95	0.47
46:SN:105:HIS:HD2	46:SN:106:TYR:CE1	2.32	0.47
45:TA:176:GLN:NE2	45:TA:207:GLU:OE2	2.47	0.47
46:TD:293:MET:SD	46:TD:365:VAL:HG11	2.54	0.47
45:TI:2:ARG:HB2	45:TI:133:GLN:NE2	2.26	0.47
45:TK:166:LYS:N	45:TK:199:ASP:OD2	2.46	0.47
45:TM:243:ARG:HH11	45:TM:243:ARG:HG2	1.79	0.47
46:TN:375:GLN:OE1	46:TN:379:LYS:NZ	2.46	0.47
45:UA:346:TRP:CD1	46:UB:391:ARG:HG3	2.49	0.47
45:UC:54:SER:HB3	45:UC:64:ARG:HH12	1.78	0.47
45:UC:109:THR:OG1	45:UC:411:GLU:OE2	2.28	0.47
45:UC:207:GLU:HA	45:UC:210:TYR:HD2	1.79	0.47
46:UD:318:ARG:HH11	46:UD:358:PRO:HG3	1.80	0.47
45:UK:216:ASN:HB3	45:UK:275:ILE:O	2.15	0.47
45:VG:272:TYR:HD2	45:VG:275:ILE:HD11	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VI:183:GLU:N	45:VI:184:PRO:HD2	2.28	0.47
46:VN:335:ASN:OD1	46:VN:336:LYS:N	2.48	0.47
46:WB:376:GLU:HA	46:WB:379:LYS:HG2	1.97	0.47
46:WL:318:ARG:HH11	46:WL:358:PRO:HG3	1.78	0.47
45:WM:174:SER:HB2	45:WM:177:VAL:O	2.14	0.47
45:WM:407:TRP:HE1	46:WN:258:ILE:HB	1.79	0.47
46:WN:39:ASP:OD1	46:WN:40:SER:N	2.48	0.47
46:WN:208:TYR:HE2	46:WN:220:PRO:HB2	1.79	0.47
13:1U:493:PHE:O	13:1U:494:LYS:HD3	2.14	0.47
13:1U:560:TRP:CH2	13:1U:567:LYS:HE3	2.50	0.47
5:2E:177:ASN:HB3	5:2E:180:HIS:HB2	1.97	0.47
20:2K:312:GLU:HA	20:2K:315:ARG:HG2	1.96	0.47
23:2O:128:ARG:HA	23:2O:131:GLU:CG	2.37	0.47
12:2T:72:PHE:HA	12:2T:108:PRO:HA	1.97	0.47
13:2U:104:LEU:HD12	13:2U:105:ILE:H	1.78	0.47
21:3L:175:SER:O	21:3L:179:THR:HG23	2.15	0.47
25:3R:30:GLN:NE2	46:MN:77:ARG:HD2	2.29	0.47
30:4H:197:LYS:NZ	30:4H:201:ASN:HB3	2.30	0.47
38:5K:44:UNK:O	45:JK:430:LYS:NZ	2.30	0.47
39:6F:39:LYS:HA	39:6F:60:LYS:HA	1.96	0.47
41:6H:216:PRO:HB3	41:6H:218:PHE:CD2	2.49	0.47
34:7R:323:LEU:HD13	46:CB:276:ARG:HG2	1.95	0.47
46:AD:190:HIS:CD2	46:AD:414:ASN:HD22	2.32	0.47
46:AD:288:GLU:HA	46:AD:291:GLN:HG2	1.95	0.47
45:AM:194:LEU:O	45:AM:198:THR:HG22	2.15	0.47
46:BB:119:VAL:HA	46:BB:122:LYS:HG2	1.96	0.47
46:BD:105:HIS:CD2	46:BD:150:LEU:HB2	2.50	0.47
46:BF:3:GLU:HB2	46:BF:62:ARG:HH21	1.80	0.47
45:BK:326:LYS:HD3	46:BN:220:PRO:HD2	1.96	0.47
45:CI:205:ASP:OD1	45:CI:303:ALA:HA	2.14	0.47
45:CI:350:GLY:HA2	46:CJ:179:VAL:HG23	1.97	0.47
46:CL:317:PHE:HB2	46:CL:353:ILE:HD13	1.96	0.47
46:CL:318:ARG:NH1	46:CL:358:PRO:HG3	2.30	0.47
46:DB:412:GLU:HA	46:DB:415:MET:HG3	1.96	0.47
46:DD:229:VAL:O	46:DD:233:MET:HG3	2.14	0.47
46:DD:304:ASP:OD2	46:DD:306:ARG:HG2	2.14	0.47
45:DE:31:GLN:HG2	45:DE:35:GLN:O	2.14	0.47
46:DN:156:ARG:NH1	46:DN:156:ARG:HA	2.29	0.47
45:EA:214:ARG:NH2	45:EA:222:PRO:HD3	2.29	0.47
45:EE:187:SER:O	45:EE:190:SER:OG	2.24	0.47
45:EG:166:LYS:N	45:EG:199:ASP:OD2	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EJ:68:LEU:HD13	46:EJ:143:THR:OG1	2.15	0.47
46:EJ:318:ARG:HA	46:EJ:354:CYS:O	2.15	0.47
46:FB:301:CYS:HB3	46:FB:377:MET:HE1	1.96	0.47
45:GC:322:ASP:OD1	45:GC:373:ARG:NH1	2.48	0.47
45:GE:245:ASP:N	45:GE:245:ASP:OD1	2.47	0.47
45:GI:68:LEU:HD21	45:GI:118:CYS:SG	2.55	0.47
45:GM:223:THR:OG1	46:GN:323:THR:HG23	2.15	0.47
46:HB:64:ILE:HD11	46:HB:123:GLU:HG3	1.95	0.47
46:HJ:12:CYS:O	46:HJ:16:ILE:HG12	2.14	0.47
45:HK:322:ASP:OD1	45:HK:373:ARG:NH1	2.47	0.47
45:IA:109:THR:HB	45:IA:110:ILE:HD12	1.96	0.47
46:ID:372:THR:O	46:ID:375:GLN:NE2	2.45	0.47
46:IJ:73:MET:HA	46:IJ:76:VAL:HG12	1.97	0.47
45:JA:141:VAL:HG21	45:JA:172:TYR:HE1	1.78	0.47
46:JH:217:LEU:HD11	46:JH:220:PRO:HB3	1.95	0.47
45:JI:174:SER:HB3	45:JI:177:VAL:O	2.15	0.47
45:LA:141:VAL:HG12	45:LA:171:ILE:O	2.15	0.47
46:LB:375:GLN:HB3	46:LB:422:TYR:HD2	1.79	0.47
45:LK:34:GLY:O	45:LK:61:HIS:ND1	2.22	0.47
45:LM:56:THR:HG23	45:LM:58:ALA:H	1.80	0.47
45:ME:340:THR:HG23	45:ME:341:ILE:HG13	1.97	0.47
45:MK:284:GLU:HG3	45:MK:286:LEU:HD22	1.95	0.47
46:ND:313:ALA:HB3	46:ND:349:ILE:HG12	1.96	0.47
45:NG:205:ASP:OD1	45:NG:205:ASP:N	2.44	0.47
45:NG:397:LEU:HD23	46:NH:346:PRO:HD3	1.95	0.47
45:OA:69:ASP:OD1	45:OA:70:LEU:N	2.48	0.47
46:OD:211:CYS:HA	46:OD:215:LEU:HB2	1.97	0.47
46:OH:178:THR:HB	46:OH:181:GLU:HG3	1.97	0.47
45:OI:188:ILE:HD12	45:OI:425:LEU:HD22	1.96	0.47
46:OJ:329:GLN:HA	46:OJ:332:ASN:HD21	1.79	0.47
46:OL:285:THR:HG23	46:OL:287:PRO:HD2	1.96	0.47
45:PC:133:GLN:HG2	45:PC:252:ILE:HB	1.97	0.47
45:PK:214:ARG:HH11	45:PK:215:ARG:HH11	1.61	0.47
45:QA:334:THR:HG22	45:QA:338:LYS:NZ	2.29	0.47
45:QA:352:LYS:HE2	45:QA:352:LYS:HA	1.95	0.47
45:QG:199:ASP:OD2	45:QG:256:GLN:HG2	2.15	0.47
46:QH:249:ASP:OD1	46:QH:252:LYS:N	2.30	0.47
45:RA:226:ASN:HA	45:RA:229:ARG:NH1	2.29	0.47
45:RC:311:LYS:H	45:RC:382:THR:HG22	1.79	0.47
45:RE:183:GLU:N	45:RE:184:PRO:HD2	2.30	0.47
46:RH:62:ARG:HH12	46:RH:127:CYS:HB3	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SB:190:HIS:CE1	46:SB:411:ALA:HA	2.50	0.47
46:SB:292:GLN:O	46:SB:298:ASN:ND2	2.35	0.47
46:SD:48:ASN:O	46:SD:62:ARG:NH2	2.48	0.47
45:SE:194:LEU:O	45:SE:198:THR:HG22	2.15	0.47
45:SM:85:GLN:OE1	45:SM:85:GLN:N	2.47	0.47
45:SM:88:HIS:HB3	45:SM:91:GLN:HG3	1.96	0.47
46:SN:11:GLN:NE2	49:SN:501:GDP:O3B	2.38	0.47
45:TA:12:GLY:O	45:TA:16:VAL:HG12	2.15	0.47
45:TC:391:LEU:HA	45:TC:394:LYS:HB2	1.95	0.47
46:TD:200:MET:CE	46:TD:268:ILE:HD13	2.45	0.47
46:TD:374:ILE:HD12	46:TD:378:PHE:HE2	1.78	0.47
45:TE:102:ASN:HB3	45:TE:105:ARG:HB2	1.95	0.47
45:TG:91:GLN:HG2	45:TG:121:ARG:HD2	1.97	0.47
45:TG:317:MET:SD	45:TG:319:TYR:OH	2.65	0.47
46:TH:68:LEU:HG	46:TH:96:GLY:H	1.80	0.47
46:TL:328:GLU:O	46:TL:332:ASN:N	2.39	0.47
45:TM:326:LYS:NZ	46:TN:220:PRO:O	2.33	0.47
46:UB:322:SER:OG	45:UC:221:ARG:NH1	2.47	0.47
46:UB:322:SER:H	45:UC:221:ARG:NH1	2.13	0.47
45:VC:147:SER:HB2	45:VC:190:SER:HB2	1.96	0.47
45:VE:422:ARG:HH12	45:VE:426:ALA:HB2	1.80	0.47
46:VF:73:MET:HA	46:VF:76:VAL:HG12	1.97	0.47
45:WA:217:LEU:HG	45:WA:219:ILE:HG12	1.96	0.47
46:WD:141:GLY:HA3	49:WD:501:GDP:PB	2.54	0.47
45:WG:384:ILE:O	45:WG:387:VAL:HG22	2.14	0.47
45:WG:392:ASP:OD1	45:WG:422:ARG:NE	2.47	0.47
46:WH:257:LEU:HA	46:WH:312:THR:HG21	1.97	0.47
13:1U:169:GLY:HA2	13:1U:196:TYR:CE1	2.49	0.47
27:2C:100:ASN:H	27:2C:103:ARG:HD3	1.80	0.47
4:2D:167:ILE:HA	45:EK:80:THR:HG23	1.97	0.47
9:2N:164:LYS:HA	46:KB:276:ARG:HH21	1.80	0.47
23:2O:375:GLN:O	23:2O:379:GLU:HG2	2.14	0.47
10:2Q:102:ARG:HD2	10:2Q:118:ILE:HG12	1.94	0.47
12:2T:109:CYS:HB2	12:2T:128:GLU:HG2	1.96	0.47
13:2U:320:TYR:HD2	13:2U:321:GLU:HG2	1.80	0.47
13:2U:464:ALA:O	13:2U:476:TRP:N	2.35	0.47
14:2V:226:ILE:HG22	14:2V:226:ILE:O	2.14	0.47
26:2W:240:PHE:CZ	34:6R:12:LEU:HD12	2.50	0.47
27:3C:64:PHE:CE2	27:3C:66:LEU:HD11	2.50	0.47
5:3E:29:ARG:HG3	5:3E:33:GLN:HE22	1.79	0.47
23:3O:231:GLU:O	46:UN:362:LYS:NZ	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:3R:454:ARG:NH2	46:FL:218:THR:OG1	2.44	0.47
13:3U:171:GLN:HE21	13:3U:184:SER:HB2	1.79	0.47
13:3U:512:ARG:NH1	13:3U:531:SER:O	2.48	0.47
15:3X:49:ILE:O	15:3X:53:ILE:HG12	2.15	0.47
10:4Q:103:PHE:HE1	10:4Q:144:TYR:HE2	1.62	0.47
34:4R:398:LEU:HB3	34:4R:402:TYR:CE1	2.50	0.47
35:4S:94:GLU:OE1	35:4S:130:ARG:NH2	2.48	0.47
35:4S:98:TYR:HE2	35:4S:127:LEU:HD22	1.80	0.47
36:5C:142:GLN:HA	36:5C:145:ASN:ND2	2.29	0.47
37:5F:55:GLU:O	37:5F:59:THR:OG1	2.21	0.47
37:5F:93:PHE:CE2	46:KF:261:PRO:HG3	2.50	0.47
37:5F:116:TYR:O	37:5F:118:PRO:HD3	2.14	0.47
37:5F:134:ILE:HD11	46:OH:217:LEU:HD13	1.96	0.47
34:5R:242:ASN:OD1	45:CI:373:ARG:NH2	2.48	0.47
34:5R:418:THR:HG23	34:5R:419:GLN:OE1	2.15	0.47
41:6H:321:TYR:CD1	41:6H:322:LEU:HG	2.50	0.47
34:6R:116:CYS:HB3	34:6R:131:GLU:HB3	1.95	0.47
34:7R:501:TYR:HB3	34:7R:503:PHE:CE1	2.50	0.47
45:AA:387:VAL:HG12	45:AA:390:ARG:HH12	1.79	0.47
46:AB:278:SER:HA	46:AB:281:TYR:CD2	2.50	0.47
45:AC:89:PRO:HG2	45:BC:280:LYS:HB3	1.96	0.47
45:AG:69:ASP:OD1	45:AG:70:LEU:N	2.48	0.47
45:AG:245:ASP:OD1	45:AG:245:ASP:N	2.46	0.47
46:AJ:39:ASP:OD1	46:AJ:40:SER:N	2.47	0.47
45:AM:70:LEU:HD12	45:AM:145:THR:HG22	1.96	0.47
45:AM:210:TYR:CE1	45:AM:227:LEU:HD11	2.50	0.47
46:BB:424:GLN:HG3	46:BB:425:TYR:HD2	1.79	0.47
45:BG:90:GLU:OE1	45:BG:121:ARG:HD3	2.15	0.47
45:BG:174:SER:HB2	45:BG:177:VAL:O	2.14	0.47
46:BH:86:ARG:HG2	46:BH:88:ASP:H	1.78	0.47
46:BL:124:ALA:HB1	46:BL:130:LEU:HD11	1.96	0.47
45:CA:141:VAL:HG11	45:CA:172:TYR:HD1	1.80	0.47
45:CA:269:LEU:HD22	45:CA:303:ALA:HB3	1.97	0.47
46:CB:261:PRO:HG2	46:CB:262:ARG:NH1	2.29	0.47
45:CE:301:MET:HE3	45:CE:307:PRO:HG3	1.96	0.47
46:CF:150:LEU:O	46:CF:154:LYS:HG2	2.15	0.47
46:CF:208:TYR:CE1	46:CF:225:LEU:HD11	2.49	0.47
46:CF:229:VAL:O	46:CF:233:MET:HG3	2.15	0.47
45:CG:180:ALA:HB3	45:CG:183:GLU:HG3	1.96	0.47
46:CJ:172:SER:HA	46:CJ:380:ARG:HH21	1.80	0.47
46:CL:207:LEU:HB3	46:CL:225:LEU:HD22	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CM:64:ARG:NH1	45:CM:129:CYS:SG	2.88	0.47
45:CM:422:ARG:O	45:CM:425:LEU:HG	2.14	0.47
46:CN:116:VAL:O	46:CN:120:VAL:HG23	2.15	0.47
46:CN:184:ASN:OD1	46:CN:185:ALA:N	2.47	0.47
46:CN:282:ARG:NH2	46:CN:292:GLN:OE1	2.48	0.47
46:DB:7:ILE:HG22	46:DB:64:ILE:HD13	1.95	0.47
45:DC:88:HIS:CE1	45:DC:90:GLU:HG2	2.50	0.47
45:DC:280:LYS:HG3	45:DC:283:HIS:CE1	2.50	0.47
45:DC:384:ILE:HG12	45:DC:388:PHE:HE1	1.78	0.47
45:DE:167:LEU:HG	45:DE:200:VAL:HB	1.97	0.47
46:DF:61:PRO:HD2	46:DF:84:LEU:O	2.15	0.47
46:DF:68:LEU:HD12	46:DF:97:ALA:HB2	1.96	0.47
45:DG:329:ASN:HB3	46:DH:175:VAL:HG12	1.95	0.47
46:DH:73:MET:HA	46:DH:76:VAL:HG12	1.95	0.47
46:DH:163:ILE:HD13	46:DH:250:LEU:HB3	1.97	0.47
46:DJ:359:LYS:HA	46:DJ:359:LYS:HD2	1.78	0.47
46:DN:389:PHE:O	46:DN:391:ARG:N	2.48	0.47
46:EB:315:ALA:N	46:EB:350:LYS:O	2.42	0.47
45:EC:191:THR:HA	45:EC:194:LEU:HG	1.96	0.47
46:ED:107:THR:OG1	46:ED:108:GLU:OE1	2.25	0.47
45:EG:371:VAL:HG12	45:EG:373:ARG:H	1.79	0.47
46:EH:67:ASP:OD1	46:EH:68:LEU:N	2.40	0.47
46:EH:173:PRO:HG2	46:EH:380:ARG:HE	1.80	0.47
46:EH:178:THR:HG23	46:EH:181:GLU:HG3	1.96	0.47
45:EI:48:ALA:HB1	45:EI:243:ARG:HB2	1.96	0.47
45:EI:141:VAL:HG12	45:EI:171:ILE:O	2.14	0.47
45:EK:388:PHE:HB3	45:EK:425:LEU:HD11	1.97	0.47
46:EL:294:PHE:CE2	46:EL:333:VAL:HG11	2.49	0.47
46:EL:318:ARG:HB3	46:EL:364:ALA:HB3	1.95	0.47
46:EL:324:LYS:HA	46:EL:327:ASP:HB3	1.97	0.47
45:EM:88:HIS:HB3	45:EM:91:GLN:HG2	1.97	0.47
45:FA:259:LEU:HD23	45:FA:268:MET:HG2	1.96	0.47
46:FB:222:TYR:O	46:FB:226:ASN:ND2	2.48	0.47
46:FD:116:VAL:HA	46:FD:119:VAL:HG12	1.97	0.47
46:FF:52:ASN:OD1	46:FF:62:ARG:NH2	2.48	0.47
45:FG:221:ARG:HG3	46:FH:322:SER:HB3	1.95	0.47
46:FH:260:PHE:HB2	46:FH:263:LEU:HD13	1.97	0.47
46:FH:274:THR:HG21	46:FH:282:ARG:HE	1.80	0.47
45:FI:205:ASP:N	45:FI:205:ASP:OD2	2.44	0.47
46:FJ:342:VAL:HG13	46:FJ:345:ILE:HG22	1.94	0.47
45:FK:210:TYR:CE1	45:FK:227:LEU:HD11	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FM:102:ASN:HB3	45:FM:105:ARG:HD3	1.96	0.47
46:FN:20:PHE:O	46:FN:24:ILE:HG12	2.15	0.47
46:FN:334:GLN:NE2	46:FN:335:ASN:OD1	2.48	0.47
46:GD:238:CYS:SG	46:GD:239:CYS:N	2.88	0.47
46:GF:73:MET:HE1	46:GF:92:PHE:CG	2.50	0.47
46:GF:295:ASP:OD1	46:GF:296:ALA:N	2.47	0.47
45:GL:183:GLU:N	45:GL:184:PRO:HD2	2.30	0.47
46:GJ:174:LYS:HE2	46:GJ:174:LYS:HA	1.96	0.47
46:GJ:263:LEU:HG	46:GJ:422:TYR:HD1	1.79	0.47
46:GL:18:ALA:O	46:GL:22:GLU:HG3	2.15	0.47
46:GL:251:ARG:O	46:GL:255:VAL:HG23	2.15	0.47
46:GL:293:MET:SD	46:GL:365:VAL:HG11	2.55	0.47
46:GL:423:GLN:NE2	46:GL:427:ASP:OD2	2.48	0.47
45:HA:269:LEU:HD23	45:HA:303:ALA:HB3	1.96	0.47
45:HE:210:TYR:CE1	45:HE:227:LEU:HD11	2.50	0.47
45:HE:377:MET:SD	45:HE:379:SER:HB3	2.54	0.47
46:HF:10:GLY:O	46:HF:14:ASN:ND2	2.47	0.47
45:HG:180:ALA:HB3	45:HG:183:GLU:HB2	1.96	0.47
46:HH:132:GLY:HA3	46:HH:163:ILE:HG22	1.96	0.47
46:HH:294:PHE:CD1	46:HH:333:VAL:HG11	2.50	0.47
46:HH:345:ILE:HG23	46:HH:345:ILE:O	2.15	0.47
46:HJ:125:GLU:OE2	46:IJ:336:LYS:NZ	2.48	0.47
46:HL:226:ASN:ND2	49:HL:501:GDP:HN1	2.10	0.47
45:IA:10:GLY:O	45:IA:14:ILE:HG12	2.15	0.47
46:IB:262:ARG:NH1	46:IB:421:GLU:OE1	2.47	0.47
46:IH:190:HIS:CE1	46:IH:414:ASN:HD22	2.32	0.47
45:IK:88:HIS:CE1	45:IK:90:GLU:HG2	2.50	0.47
45:IK:90:GLU:HG3	45:IK:121:ARG:NH1	2.30	0.47
46:IL:139:LEU:HD13	46:IL:168:SER:HB3	1.96	0.47
45:JC:206:ASN:OD1	47:JC:501:GTP:N2	2.47	0.47
45:JE:185:TYR:O	45:JE:189:LEU:HD12	2.15	0.47
45:JI:296:PHE:CE2	45:JI:335:ILE:HG21	2.50	0.47
45:JI:349:THR:HG23	46:JL:179:VAL:HA	1.95	0.47
46:JN:113:ILE:HA	46:JN:116:VAL:HG22	1.95	0.47
45:KA:222:PRO:HD2	46:KB:324:LYS:HG3	1.95	0.47
46:KD:2:ARG:HB2	46:KD:131:GLN:HG3	1.96	0.47
46:KD:173:PRO:HG2	46:KD:380:ARG:HG2	1.97	0.47
45:KE:346:TRP:CD1	46:KH:391:ARG:HG3	2.49	0.47
46:KF:140:GLY:HA3	46:KF:171:PRO:HG3	1.97	0.47
45:KG:15:GLN:NE2	47:KG:501:GTP:O6	2.46	0.47
45:KG:242:LEU:HD11	45:KG:252:ILE:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:KH:262:ARG:HH22	46:KH:414:ASN:HD21	1.63	0.47
45:KI:349:THR:O	46:KL:179:VAL:HG23	2.15	0.47
45:KK:70:LEU:HA	45:KK:95:GLY:HA3	1.96	0.47
46:KL:101:TRP:HB2	46:KL:184:ASN:HB3	1.97	0.47
45:KM:14:ILE:HD11	45:KM:69:ASP:HB2	1.97	0.47
46:KN:113:ILE:HD13	46:KN:150:LEU:HD22	1.96	0.47
45:LA:255:PHE:O	45:LA:259:LEU:HB2	2.15	0.47
45:LE:183:GLU:N	45:LE:184:PRO:HD2	2.30	0.47
46:LJ:139:LEU:HD12	46:LJ:170:VAL:HG12	1.97	0.47
45:LM:265:ILE:HG22	45:LM:432:TYR:CE1	2.49	0.47
45:LM:417:GLU:OE1	45:LM:417:GLU:N	2.45	0.47
45:MA:91:GLN:NE2	45:MA:125:LEU:HD21	2.30	0.47
45:MG:288:VAL:HG11	45:MG:327:ASP:HB3	1.96	0.47
46:MH:100:ASN:HB3	46:MH:103:LYS:HB3	1.97	0.47
45:MI:346:TRP:CD1	46:ML:391:ARG:HG3	2.50	0.47
46:ML:178:THR:HG22	46:ML:180:VAL:H	1.79	0.47
46:ML:289:LEU:HD11	46:ML:363:MET:HB3	1.96	0.47
45:MM:223:THR:HG22	45:MM:224:TYR:N	2.30	0.47
45:MM:265:ILE:HD11	45:MM:435:VAL:HG21	1.95	0.47
45:MM:384:ILE:O	45:MM:387:VAL:HG22	2.14	0.47
46:MN:289:LEU:HD11	46:MN:363:MET:HB3	1.97	0.47
45:NC:363:VAL:HG23	45:NC:366:GLY:HA3	1.96	0.47
45:NE:326:LYS:HG3	45:NE:327:ASP:N	2.29	0.47
46:NF:68:LEU:HD13	46:NF:143:THR:OG1	2.14	0.47
46:NH:145:SER:HB2	46:NH:188:SER:OG	2.15	0.47
46:NJ:179:VAL:HG13	46:NJ:180:VAL:HG13	1.96	0.47
46:NL:31:ASP:OD2	46:NL:35:THR:HB	2.14	0.47
45:NM:276:ILE:HD13	45:NM:283:HIS:HE1	1.80	0.47
46:NN:174:LYS:HD3	46:NN:205:GLU:HG2	1.95	0.47
45:OA:310:GLY:HA3	45:OA:383:ALA:HB2	1.95	0.47
45:OA:390:ARG:HG3	45:OA:391:LEU:HD12	1.97	0.47
46:OB:325:GLU:O	46:OB:329:GLN:HG3	2.15	0.47
45:OE:231:ILE:O	45:OE:235:ILE:HG12	2.15	0.47
45:OE:250:VAL:HG13	45:OE:254:GLU:HG3	1.97	0.47
45:OG:176:GLN:HB3	46:OH:331:LEU:HD11	1.96	0.47
46:OH:25:SER:O	46:OH:29:GLY:N	2.48	0.47
46:OH:64:ILE:HD13	46:OH:119:VAL:HG13	1.96	0.47
45:OI:50:ASN:O	45:OI:64:ARG:NH1	2.25	0.47
45:OI:287:SER:HB3	45:OI:290:GLU:HG2	1.96	0.47
45:OK:402:ARG:NH1	45:OK:415:GLU:OE2	2.48	0.47
45:OM:222:PRO:HD2	46:ON:324:LYS:HE3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PA:223:THR:HG23	45:PA:225:THR:HG22	1.96	0.47
45:PC:215:ARG:NH2	45:PC:299:ALA:O	2.48	0.47
46:PD:372:THR:HG1	46:PD:375:GLN:HE22	1.60	0.47
46:PF:36:TYR:HB2	46:PF:59:TYR:HE2	1.80	0.47
45:PI:88:HIS:HB3	45:PI:91:GLN:HG2	1.95	0.47
45:PI:185:TYR:HE1	45:PI:398:MET:HB3	1.79	0.47
45:PM:328:VAL:HG11	45:PM:353:VAL:HG21	1.97	0.47
46:QB:256:ASN:OD1	45:QC:181:VAL:HG12	2.15	0.47
46:QD:255:VAL:HA	45:QE:407:TRP:CZ2	2.50	0.47
46:QH:258:ILE:O	46:QH:258:ILE:HG13	2.15	0.47
46:QJ:309:ARG:NH2	46:QJ:426:GLN:O	2.32	0.47
45:QM:188:ILE:HG21	45:QM:422:ARG:NH2	2.30	0.47
45:QM:208:ALA:O	45:QM:212:ILE:HD12	2.15	0.47
45:QM:244:PHE:HB2	45:QM:356:ASN:HD21	1.78	0.47
46:RD:206:ALA:O	46:RD:210:ILE:HG12	2.15	0.47
46:RD:258:ILE:HG13	46:RD:258:ILE:O	2.14	0.47
46:RD:375:GLN:HB2	46:RD:379:LYS:NZ	2.30	0.47
46:RF:169:VAL:HG12	46:RF:202:ILE:HB	1.96	0.47
46:RF:293:MET:HE2	46:RF:365:VAL:HG11	1.96	0.47
46:RF:327:ASP:OD1	46:RF:328:GLU:N	2.48	0.47
45:RG:262:TYR:HB2	45:RG:265:ILE:HG22	1.97	0.47
46:RJ:101:TRP:HB2	46:RJ:184:ASN:HB3	1.96	0.47
45:RM:26:LEU:HD11	45:RM:364:PRO:HD2	1.95	0.47
46:RN:31:ASP:OD2	46:RN:37:HIS:ND1	2.47	0.47
45:SA:183:GLU:N	45:SA:184:PRO:HD2	2.28	0.47
46:SD:256:ASN:HD21	45:SE:181:VAL:HG22	1.80	0.47
45:SE:55:GLU:HG3	45:SE:57:GLY:H	1.79	0.47
45:SE:174:SER:HB2	45:SE:177:VAL:O	2.14	0.47
46:SF:135:ILE:HB	46:SF:166:THR:HG22	1.97	0.47
46:SH:73:MET:SD	46:SH:90:PHE:HD1	2.38	0.47
46:SH:289:LEU:HB3	46:SH:365:VAL:HG21	1.97	0.47
45:SI:108:TYR:HA	45:SI:112:LYS:HE3	1.96	0.47
45:SI:210:TYR:HE1	45:SI:227:LEU:HD11	1.80	0.47
46:SJ:252:LYS:HA	45:SK:100:ALA:HB1	1.97	0.47
46:SL:418:LEU:O	46:SL:422:TYR:N	2.43	0.47
45:TA:135:PHE:HB2	45:TA:166:LYS:HG2	1.96	0.47
45:TA:324:VAL:HG21	45:TA:326:LYS:NZ	2.30	0.47
45:TA:356:ASN:OD1	45:TA:357:TYR:N	2.48	0.47
46:TB:293:MET:SD	46:TB:367:PHE:HB2	2.55	0.47
46:TD:327:ASP:OD1	46:TD:328:GLU:N	2.48	0.47
45:TE:155:GLU:HG2	45:TE:197:HIS:CD2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TF:121:ARG:NH2	46:TF:158:GLU:OE2	2.44	0.47
46:TF:139:LEU:HD22	46:TF:170:VAL:HG12	1.97	0.47
45:TG:288:VAL:HG11	45:TG:327:ASP:HB3	1.96	0.47
45:TI:183:GLU:N	45:TI:184:PRO:HD2	2.30	0.47
46:TL:345:ILE:HG22	46:TL:348:ASN:HB3	1.97	0.47
46:TN:69:GLU:CD	46:TN:71:GLY:H	2.18	0.47
46:TN:271:ALA:HB3	46:TN:365:VAL:HB	1.97	0.47
46:TN:289:LEU:HD11	46:TN:363:MET:HB3	1.97	0.47
45:UA:32:PRO:HB3	45:UA:83:TYR:CE1	2.50	0.47
46:UB:8:GLN:HE22	46:UB:17:GLY:CA	2.27	0.47
46:UB:213:ARG:HB2	46:UB:297:LYS:HZ2	1.80	0.47
45:UC:209:ILE:HD11	45:UC:230:LEU:HD23	1.96	0.47
46:UD:178:THR:HB	46:UD:181:GLU:HG3	1.96	0.47
45:UE:68:LEU:HD21	45:UE:118:CYS:SG	2.54	0.47
45:UG:183:GLU:N	45:UG:184:PRO:HD2	2.30	0.47
46:UH:399:THR:HA	46:UH:403:MET:O	2.15	0.47
45:UI:288:VAL:HA	45:UI:291:ILE:HG12	1.97	0.47
46:UL:167:PHE:HA	46:UL:200:MET:HB2	1.97	0.47
46:UN:262:ARG:NH1	46:UN:421:GLU:OE1	2.47	0.47
46:UN:292:GLN:HA	46:UN:295:ASP:OD2	2.15	0.47
45:VA:251:ASP:OD1	45:VA:252:ILE:N	2.46	0.47
45:VC:334:THR:O	45:VC:338:LYS:HG2	2.15	0.47
45:VE:183:GLU:N	45:VE:184:PRO:HD2	2.30	0.47
45:VG:88:HIS:ND1	45:VG:89:PRO:HD2	2.30	0.47
45:VI:91:GLN:HB3	45:VI:121:ARG:HH12	1.79	0.47
45:VI:244:PHE:HB2	45:VI:356:ASN:HD21	1.80	0.47
46:VJ:276:ARG:HD3	46:VJ:276:ARG:C	2.35	0.47
46:VJ:287:PRO:HA	46:VJ:329:GLN:HE22	1.80	0.47
45:VK:214:ARG:NH1	45:VK:220:GLU:OE1	2.48	0.47
46:VL:87:PRO:HA	46:VL:90:PHE:CD2	2.50	0.47
45:VM:99:ALA:HA	45:VM:105:ARG:HH11	1.80	0.47
45:VM:119:LEU:HD12	45:VM:123:ARG:HH22	1.79	0.47
45:VM:286:LEU:O	45:VM:373:ARG:NH2	2.48	0.47
45:VM:384:ILE:O	45:VM:387:VAL:HG22	2.15	0.47
46:VN:3:GLU:OE2	46:VN:62:ARG:HD2	2.15	0.47
45:WC:213:CYS:HA	45:WC:217:LEU:HD12	1.97	0.47
45:WE:191:THR:HG21	45:WE:425:LEU:HD11	1.96	0.47
46:WH:39:ASP:OD1	46:WH:40:SER:N	2.47	0.47
45:WM:298:PRO:HG3	45:WM:307:PRO:HG2	1.97	0.47
3:1C:122:ARG:HH22	45:DM:229:ARG:HD2	1.78	0.47
8:1H:282:GLN:HE22	46:HF:276:ARG:HG3	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1L:658:ARG:HD2	45:BE:80:THR:HB	1.97	0.47
30:2H:199:GLU:HG3	30:2H:200:TYR:H	1.79	0.47
31:2I:140:ILE:HG23	46:FD:118:ASP:OD2	2.15	0.47
21:2L:836:GLU:O	21:2L:838:LYS:HD3	2.15	0.47
15:2X:42:LYS:NZ	45:LI:57:GLY:HA2	2.29	0.47
15:3X:45:GLN:O	15:3X:49:ILE:HG12	2.15	0.47
10:4Q:93:VAL:HG12	10:4Q:151:THR:HG22	1.97	0.47
37:5G:46:LEU:HG	37:5G:47:GLU:H	1.80	0.47
40:6G:238:LYS:HZ1	40:6G:239:ILE:HG22	1.80	0.47
34:6R:542:TYR:HB3	34:6R:547:GLU:OE2	2.14	0.47
43:8P:274:UNK:O	43:8P:276:UNK:N	2.48	0.47
45:AE:280:LYS:HB3	45:ME:89:PRO:HG2	1.97	0.47
46:AJ:69:GLU:CD	46:AJ:71:GLY:H	2.18	0.47
46:BB:99:ASN:HA	46:BB:142:GLY:H	1.80	0.47
46:BB:227:HIS:O	46:BB:230:SER:OG	2.22	0.47
46:BF:211:CYS:HB3	46:BF:217:LEU:HD21	1.97	0.47
46:BJ:232:ALA:HB1	46:BJ:268:ILE:HD12	1.96	0.47
46:BN:398:TYR:HB3	46:BN:403:MET:HE3	1.97	0.47
45:CA:80:THR:HA	45:CA:84:ARG:CZ	2.45	0.47
45:CA:433:GLU:O	45:CA:437:ILE:HG12	2.14	0.47
46:CD:177:ASP:OD2	49:CD:501:GDP:O3'	2.27	0.47
46:CD:198:GLU:HG2	46:CD:266:PHE:HE2	1.79	0.47
45:CE:35:GLN:N	45:CE:35:GLN:OE1	2.48	0.47
46:CH:16:ILE:HD13	46:CH:226:ASN:OD1	2.14	0.47
46:CJ:12:CYS:HB3	46:CJ:138:SER:HB3	1.97	0.47
46:CJ:177:ASP:N	46:CJ:177:ASP:OD2	2.48	0.47
46:CJ:372:THR:HA	46:CJ:422:TYR:CE2	2.50	0.47
45:CK:213:CYS:HA	45:CK:217:LEU:HD12	1.97	0.47
45:DC:109:THR:O	45:DC:112:LYS:NZ	2.44	0.47
45:DG:10:GLY:O	45:DG:14:ILE:HG12	2.15	0.47
46:DL:5:VAL:HG12	46:DL:62:ARG:HD3	1.96	0.47
45:EA:332:ILE:HA	45:EA:335:ILE:HG22	1.97	0.47
46:EB:237:THR:HG23	46:EB:241:ARG:HH21	1.79	0.47
45:EE:103:PHE:HB2	45:EE:186:ASN:HB3	1.97	0.47
45:EE:227:LEU:O	45:EE:231:ILE:HD12	2.14	0.47
45:EG:188:ILE:HD12	45:EG:425:LEU:HD12	1.96	0.47
45:EM:52:PHE:HZ	45:EM:239:THR:HG21	1.79	0.47
46:FB:133:PHE:HB2	46:FB:164:MET:SD	2.54	0.47
46:FB:287:PRO:HA	46:FB:329:GLN:HE22	1.79	0.47
45:FC:76:ASP:OD2	46:FD:46:ARG:NH2	2.48	0.47
45:FK:88:HIS:CE1	45:FK:90:GLU:HG2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FL:260:PHE:HB2	46:FL:263:LEU:HD13	1.96	0.47
46:FL:355:ASP:OD1	46:FL:356:ILE:HD12	2.15	0.47
45:FM:226:ASN:ND2	45:FM:367:ASP:OD2	2.47	0.47
45:GC:70:LEU:HD21	45:GC:149:LEU:HD11	1.97	0.47
45:GG:292:THR:HG21	45:GG:331:SER:HB3	1.95	0.47
46:GH:165:GLU:OE2	46:GH:250:LEU:HD22	2.15	0.47
46:GJ:374:ILE:HG22	46:GJ:422:TYR:CE2	2.50	0.47
45:GK:188:ILE:HG22	45:GK:421:ALA:HB1	1.96	0.47
46:HB:203:ASP:HB2	46:HB:301:CYS:HA	1.97	0.47
45:HC:174:SER:HB2	45:HC:177:VAL:O	2.14	0.47
46:HF:5:VAL:HG12	46:HF:62:ARG:HD3	1.96	0.47
46:HL:31:ASP:OD2	46:HL:33:THR:OG1	2.22	0.47
46:IF:113:ILE:HA	46:IF:116:VAL:HG12	1.97	0.47
46:IF:295:ASP:OD1	46:IF:297:LYS:NZ	2.47	0.47
45:II:216:ASN:HB3	45:II:275:ILE:O	2.14	0.47
45:JA:271:SER:OG	45:JA:301:MET:SD	2.73	0.47
45:JE:183:GLU:N	45:JE:184:PRO:HD2	2.29	0.47
46:JF:173:PRO:HG2	46:JF:380:ARG:HB3	1.97	0.47
46:JJ:5:VAL:HG12	46:JJ:62:ARG:HD3	1.97	0.47
46:KF:251:ARG:O	46:KF:255:VAL:HG23	2.15	0.47
46:KJ:31:ASP:OD1	46:KJ:35:THR:N	2.45	0.47
46:KN:334:GLN:HE22	46:KN:348:ASN:H	1.62	0.47
46:LJ:248:SER:HA	46:LJ:252:LYS:HD2	1.97	0.47
46:LL:207:LEU:CB	46:LL:225:LEU:HD22	2.42	0.47
46:LN:68:LEU:HD12	46:LN:97:ALA:HB2	1.97	0.47
46:MF:31:ASP:OD1	46:MF:34:GLY:N	2.48	0.47
46:MF:42:LEU:HD23	46:MF:42:LEU:H	1.79	0.47
46:ML:289:LEU:HD13	46:ML:365:VAL:HG23	1.95	0.47
45:NA:328:VAL:O	45:NA:332:ILE:HG12	2.15	0.47
45:NC:66:VAL:HA	45:NC:91:GLN:HB2	1.96	0.47
45:NE:371:VAL:HG22	45:NE:373:ARG:H	1.79	0.47
46:OB:119:VAL:O	46:OB:122:LYS:HG3	2.14	0.47
46:OB:200:MET:SD	46:OB:200:MET:N	2.88	0.47
46:OJ:237:THR:HG22	46:OJ:250:LEU:HD11	1.96	0.47
46:PB:24:ILE:O	46:PB:28:HIS:N	2.38	0.47
45:PG:7:ILE:HB	45:PG:137:VAL:HG12	1.95	0.47
46:PJ:87:PRO:HA	46:PJ:90:PHE:CD2	2.50	0.47
45:PK:181:VAL:HG12	46:PL:348:ASN:HA	1.96	0.47
45:PK:280:LYS:NZ	45:PK:283:HIS:HB2	2.28	0.47
46:PL:317:PHE:HB2	46:PL:353:ILE:HD13	1.97	0.47
46:QB:133:PHE:HB2	46:QB:164:MET:SD	2.55	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QB:178:THR:HG22	46:QB:180:VAL:H	1.78	0.47
46:QD:7:ILE:HG22	46:QD:64:ILE:HD13	1.97	0.47
45:QE:11:GLN:HG2	45:QE:74:VAL:HG21	1.96	0.47
46:QF:73:MET:HA	46:QF:76:VAL:HG12	1.97	0.47
45:QG:28:HIS:NE2	45:QG:48:ALA:O	2.48	0.47
45:QI:254:GLU:N	45:QI:254:GLU:OE1	2.48	0.47
45:QK:98:ASP:OD1	45:QK:99:ALA:N	2.47	0.47
45:QM:81:GLY:O	45:QM:84:ARG:HG3	2.15	0.47
46:RB:8:GLN:HE22	46:RB:17:GLY:HA3	1.80	0.47
46:RB:373:ALA:O	46:RB:376:GLU:HG2	2.15	0.47
45:RC:11:GLN:HG2	45:RC:74:VAL:HG11	1.97	0.47
45:RC:166:LYS:N	45:RC:199:ASP:OD2	2.39	0.47
45:RE:256:GLN:O	46:RF:397:TRP:NE1	2.48	0.47
45:RG:113:GLU:N	45:RG:113:GLU:OE1	2.48	0.47
45:RG:292:THR:HG21	45:RG:331:SER:HB2	1.96	0.47
45:RI:115:VAL:HG23	45:RI:153:LEU:HD23	1.97	0.47
45:RM:87:PHE:HB3	45:RM:91:GLN:HE21	1.80	0.47
45:RM:141:VAL:HG11	45:RM:172:TYR:HD1	1.79	0.47
46:SB:3:GLU:N	46:SB:129:CYS:O	2.42	0.47
46:SB:313:ALA:HA	46:SB:369:GLY:HA2	1.96	0.47
45:SC:223:THR:HG23	45:SC:225:THR:H	1.80	0.47
46:SD:174:LYS:HD2	46:SD:174:LYS:H	1.79	0.47
46:SJ:372:THR:HG21	46:SJ:426:GLN:HB2	1.97	0.47
45:TA:324:VAL:HG21	45:TA:326:LYS:HZ3	1.80	0.47
46:TB:161:ASP:O	46:TB:251:ARG:NH2	2.45	0.47
46:TD:167:PHE:CE2	46:TD:233:MET:HG2	2.50	0.47
45:TG:201:ALA:HB3	45:TG:267:PHE:HD1	1.80	0.47
45:TG:423:GLU:O	45:TG:427:ALA:N	2.45	0.47
46:TJ:86:ARG:NH1	46:TJ:87:PRO:HD2	2.30	0.47
45:TM:121:ARG:HD2	45:TM:124:LYS:HZ1	1.79	0.47
46:UB:113:ILE:HA	46:UB:116:VAL:HG12	1.96	0.47
45:UC:11:GLN:HG3	45:UC:74:VAL:HG11	1.97	0.47
46:UD:3:GLU:O	46:UD:130:LEU:HD12	2.14	0.47
45:UE:346:TRP:CD1	46:UF:391:ARG:HG3	2.50	0.47
45:UG:259:LEU:HD23	45:UG:268:MET:HG2	1.96	0.47
45:UI:183:GLU:N	45:UI:184:PRO:HD2	2.30	0.47
46:UJ:135:ILE:HG13	46:UJ:152:ILE:HD11	1.97	0.47
45:VC:101:ASN:HD22	46:VD:256:ASN:HD21	1.63	0.47
46:VF:204:ASN:OD1	49:VF:501:GDP:O2'	2.32	0.47
46:VJ:164:MET:SD	46:VJ:164:MET:N	2.88	0.47
46:VN:331:LEU:HD12	46:VN:334:GLN:HE21	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WE:174:SER:HB2	45:WE:177:VAL:O	2.15	0.47
45:WM:33:ASP:OD1	45:WM:34:GLY:N	2.48	0.47
45:WM:69:ASP:OD2	45:WM:75:ILE:HG12	2.15	0.47
4:0D:75:ASP:OD1	46:EB:362:LYS:N	2.39	0.47
6:0F:144:GLN:NE2	45:FC:94:SER:OG	2.46	0.47
17:1F:165:LYS:HZ3	46:GL:162:ARG:HH22	1.62	0.47
12:1T:106:ILE:HG21	12:1T:213:LEU:HD12	1.96	0.47
16:2B:27:GLU:OE1	16:2B:27:GLU:N	2.31	0.47
21:2L:633:ALA:HA	21:2L:636:ARG:CZ	2.45	0.47
21:2L:642:THR:O	21:2L:644:ILE:HG13	2.15	0.47
23:2O:174:GLU:HA	23:2O:177:LYS:HG2	1.96	0.47
10:2Q:76:LEU:HB3	10:2Q:134:PHE:HB3	1.96	0.47
11:2S:11:THR:O	11:2S:15:ILE:HG12	2.15	0.47
12:2T:225:SER:HB3	45:MG:196:GLU:HG3	1.96	0.47
13:2U:365:CYS:HB3	13:2U:381:TRP:CD2	2.49	0.47
26:2W:240:PHE:HE1	34:6R:10:PRO:HD2	1.79	0.47
23:3O:371:GLU:HG3	23:3O:374:ARG:NH1	2.30	0.47
33:4F:110:ASN:ND2	33:4F:111:GLU:OE1	2.48	0.47
30:4H:187:LEU:HD23	30:4H:188:ASP:N	2.29	0.47
34:4R:215:LEU:HB3	34:4R:218:ILE:HD11	1.97	0.47
35:4S:219:GLN:O	35:4S:219:GLN:NE2	2.48	0.47
34:5R:450:ASP:OD1	34:5R:452:THR:OG1	2.26	0.47
34:7R:12:LEU:HB2	34:7R:15:HIS:CD2	2.50	0.47
34:7R:33:LEU:HB2	46:LB:92:PHE:HE2	1.80	0.47
34:7R:430:LEU:HB3	34:7R:442:PHE:CE2	2.50	0.47
46:BH:103:LYS:HA	46:BH:401:GLU:OE2	2.15	0.47
46:BJ:293:MET:HG3	46:BJ:367:PHE:HB2	1.97	0.47
46:CB:350:LYS:HD3	45:CC:180:ALA:HA	1.96	0.47
45:CE:141:VAL:HG13	45:CE:190:SER:HB3	1.97	0.47
46:CF:141:GLY:HA3	49:CF:501:GDP:O3A	2.15	0.47
45:CG:356:ASN:OD1	45:CG:357:TYR:N	2.47	0.47
45:CK:185:TYR:HE1	45:CK:398:MET:HB3	1.79	0.47
45:DI:322:ASP:OD1	45:DI:373:ARG:NH1	2.45	0.47
45:DM:169:PHE:HD1	45:DM:204:LEU:HD11	1.80	0.47
46:EB:2:ARG:HH22	45:EC:73:THR:HG23	1.80	0.47
46:EF:20:PHE:HA	46:EF:230:SER:OG	2.13	0.47
45:EG:326:LYS:HZ3	46:EH:212:PHE:HB2	1.80	0.47
45:EK:422:ARG:HA	45:EK:422:ARG:HH11	1.80	0.47
46:EL:313:ALA:HB1	46:EL:367:PHE:HE1	1.80	0.47
46:FB:167:PHE:HA	46:FB:200:MET:HB2	1.96	0.47
46:FD:248:SER:HA	46:FD:252:LYS:HD2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FE:401:LYS:HE3	46:FF:344:TRP:CD2	2.50	0.47
45:FK:207:GLU:HB3	45:FK:304:LYS:NZ	2.29	0.47
45:FM:78:VAL:HG11	45:FM:92:LEU:HD21	1.97	0.47
46:FN:226:ASN:HA	46:FN:229:VAL:HG12	1.97	0.47
46:GB:374:ILE:HG13	46:GB:378:PHE:HE2	1.80	0.47
46:GD:148:GLY:O	46:GD:152:ILE:HG12	2.15	0.47
46:GD:272:PRO:HG3	46:GD:284:LEU:HD21	1.97	0.47
46:GD:398:TYR:O	46:GD:403:MET:HB2	2.14	0.47
46:GH:249:ASP:OD1	46:GH:249:ASP:N	2.47	0.47
45:GK:394:LYS:NZ	46:GL:346:PRO:O	2.48	0.47
45:GM:181:VAL:HG22	46:GN:256:ASN:HD22	1.79	0.47
45:HC:319:TYR:HB3	45:HC:323:VAL:HG21	1.97	0.47
46:HD:39:ASP:OD1	46:HD:40:SER:N	2.47	0.47
46:HD:344:TRP:CE3	46:HD:345:ILE:HG23	2.50	0.47
45:HG:317:MET:HG2	45:HG:377:MET:HG2	1.97	0.47
46:HH:139:LEU:HD13	46:HH:168:SER:HB3	1.96	0.47
45:HK:398:MET:SD	46:HL:345:ILE:HG13	2.55	0.47
45:IC:22:GLU:HG2	45:IC:83:TYR:CE2	2.50	0.47
45:IE:217:LEU:HB3	45:IE:219:ILE:HG13	1.96	0.47
46:IL:201:VAL:HG23	46:IL:301:CYS:SG	2.55	0.47
46:IL:334:GLN:NE2	46:IL:348:ASN:OD1	2.48	0.47
45:JE:184:PRO:O	45:JE:188:ILE:HG12	2.15	0.47
45:JE:272:TYR:HD2	45:JE:275:ILE:HD11	1.80	0.47
45:JK:286:LEU:N	45:JK:290:GLU:OE2	2.48	0.47
45:KC:147:SER:HB2	45:KC:190:SER:HB3	1.95	0.47
46:KD:268:ILE:HG22	46:KD:368:VAL:HG22	1.97	0.47
45:KM:76:ASP:OD2	46:KN:46:ARG:NH2	2.47	0.47
45:LC:384:ILE:O	45:LC:387:VAL:HG22	2.15	0.47
45:MA:56:THR:HG23	45:MA:58:ALA:H	1.80	0.47
46:MH:6:HIS:NE2	46:MH:8:GLN:OE1	2.34	0.47
45:MK:425:LEU:O	45:MK:429:GLU:HG3	2.15	0.47
45:NA:11:GLN:HG3	45:NA:74:VAL:HG11	1.97	0.47
46:NF:7:ILE:CD1	46:NF:64:ILE:HG23	2.45	0.47
45:NK:260:VAL:HB	46:NN:397:TRP:HZ2	1.80	0.47
46:NN:341:PHE:HD2	46:NN:348:ASN:HD21	1.62	0.47
45:OA:230:LEU:O	45:OA:234:VAL:HG23	2.14	0.47
46:OB:269:GLY:N	46:OB:367:PHE:O	2.48	0.47
45:OE:263:PRO:HD3	46:OH:396:HIS:NE2	2.30	0.47
45:OK:317:MET:HG3	45:OK:377:MET:HG2	1.95	0.47
45:OM:11:GLN:HG3	45:OM:74:VAL:HG11	1.96	0.47
46:PB:2:ARG:N	46:PB:129:CYS:SG	2.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PE:271:SER:HB2	45:PE:377:MET:HB3	1.95	0.47
46:PN:105:HIS:CD2	46:PN:150:LEU:HD12	2.50	0.47
45:QA:352:LYS:NZ	46:QB:177:ASP:O	2.42	0.47
46:QH:136:THR:HG21	46:QH:233:MET:HE1	1.95	0.47
46:QJ:268:ILE:HG22	46:QJ:368:VAL:HA	1.97	0.47
45:QK:215:ARG:HH12	45:QK:299:ALA:HB1	1.79	0.47
45:QM:324:VAL:HG12	45:QM:326:LYS:HG3	1.96	0.47
45:RA:76:ASP:OD1	45:RA:79:ARG:NH2	2.48	0.47
45:RA:123:ARG:O	45:RA:127:ASP:N	2.40	0.47
45:RA:213:CYS:HA	45:RA:217:LEU:HB2	1.96	0.47
46:RD:323:THR:HG1	45:RE:210:TYR:HH	1.55	0.47
45:RG:141:VAL:HG11	45:RG:172:TYR:HD1	1.80	0.47
45:SE:98:ASP:OD1	45:SE:99:ALA:N	2.48	0.47
46:SL:202:ILE:HD12	46:SL:300:MET:SD	2.54	0.47
45:SM:296:PHE:CD2	45:SM:335:ILE:HG12	2.49	0.47
46:TB:212:PHE:HE1	46:TB:220:PRO:HG2	1.80	0.47
45:TC:384:ILE:O	45:TC:387:VAL:HG22	2.15	0.47
46:TD:165:GLU:HA	46:TD:198:GLU:HB3	1.97	0.47
46:TD:282:ARG:HH12	46:TD:284:LEU:HG	1.80	0.47
46:TH:27:GLU:HA	46:TH:359:LYS:NZ	2.30	0.47
45:TM:329:ASN:HA	45:TM:332:ILE:HG12	1.97	0.47
45:UC:278:ALA:HB2	45:UC:369:ALA:HB2	1.97	0.47
46:UD:169:VAL:HG22	46:UD:202:ILE:HB	1.97	0.47
45:UE:88:HIS:HB3	45:UE:91:GLN:HG2	1.97	0.47
46:UF:178:THR:HG22	46:UF:180:VAL:H	1.80	0.47
46:UF:324:LYS:HZ1	45:UG:227:LEU:HD11	1.79	0.47
46:UH:206:ALA:O	46:UH:210:ILE:HG12	2.15	0.47
45:VA:396:ASP:OD1	45:VA:396:ASP:N	2.44	0.47
46:VD:94:GLN:HA	46:VD:94:GLN:OE1	2.15	0.47
45:VG:258:ASN:OD1	45:VG:352:LYS:NZ	2.42	0.47
45:VM:116:ASP:OD1	45:VM:117:LEU:N	2.47	0.47
45:WG:183:GLU:N	45:WG:184:PRO:HD2	2.30	0.47
45:WK:143:GLY:HA3	47:WK:501:GTP:O2B	2.15	0.47
45:WM:32:PRO:HA	45:WM:86:LEU:HD12	1.97	0.47
6:0F:32:ILE:HD11	45:DE:79:ARG:HB3	1.96	0.47
19:1J:140:PHE:HB2	45:IE:371:VAL:HA	1.97	0.47
19:1J:148:GLU:OE2	46:IH:219:THR:N	2.41	0.47
9:1N:258:THR:OG1	46:LJ:276:ARG:NH1	2.46	0.47
13:1U:328:PHE:HD2	13:1U:582:GLN:HG2	1.80	0.47
27:2C:102:ARG:HH21	27:2C:184:ASP:HB3	1.80	0.47
21:2L:858:LEU:O	21:2L:862:LEU:HD23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2O:338:LEU:HB3	23:2O:342:ARG:CZ	2.44	0.47
12:2T:1:MET:HA	12:2T:5:SER:HB2	1.97	0.47
12:2T:225:SER:HB2	45:MG:264:ARG:HD3	1.98	0.47
32:3D:27:PRO:HG2	32:3D:72:ASP:OD2	2.15	0.47
5:3E:45:ARG:HB3	5:3E:49:PHE:CE2	2.50	0.47
31:3I:205:ILE:O	31:3I:205:ILE:HG23	2.15	0.47
12:3T:52:ILE:HG12	12:3T:62:VAL:HG21	1.96	0.47
12:3T:256:ASN:OD1	12:3T:257:GLN:N	2.48	0.47
27:4C:64:PHE:CZ	27:4C:66:LEU:HD21	2.50	0.47
35:4S:93:PRO:HD2	35:4S:130:ARG:CZ	2.45	0.47
36:5A:150:PHE:CD2	45:NC:364:PRO:HG2	2.50	0.47
34:5R:33:LEU:H	45:LG:1:MET:CE	2.28	0.47
40:6G:280:ALA:HB3	45:VA:214:ARG:NH2	2.29	0.47
34:7R:400:SER:HB2	46:EB:216:LYS:NZ	2.29	0.47
34:7R:501:TYR:HB3	34:7R:503:PHE:HE1	1.80	0.47
46:AB:100:ASN:HD22	46:AB:103:LYS:HB2	1.79	0.47
45:AC:325:PRO:O	45:AC:329:ASN:ND2	2.31	0.47
45:AG:238:LEU:HD11	45:AG:255:PHE:CE2	2.49	0.47
45:AI:97:GLU:HG2	45:AI:105:ARG:HH22	1.80	0.47
45:AM:270:SER:O	45:AM:302:MET:HB2	2.15	0.47
45:BA:195:LEU:O	45:BA:266:HIS:NE2	2.44	0.47
45:BE:179:THR:HG21	46:BF:246:LEU:HD22	1.97	0.47
45:BG:254:GLU:HB3	46:BJ:98:GLY:HA2	1.97	0.47
45:BM:203:MET:HG3	45:BM:384:ILE:HD11	1.97	0.47
46:CB:167:PHE:HA	46:CB:200:MET:HB2	1.98	0.47
46:CD:16:ILE:HD13	46:CD:226:ASN:OD1	2.15	0.47
46:CD:68:LEU:HD23	46:CD:143:THR:OG1	2.15	0.47
45:CE:3:GLU:HG3	45:CE:129:CYS:HB3	1.97	0.47
46:CH:268:ILE:HG13	46:CH:300:MET:HG3	1.97	0.47
45:CM:17:GLY:HA2	45:CM:20:CYS:SG	2.55	0.47
45:CM:288:VAL:HA	45:CM:291:ILE:HG12	1.97	0.47
45:DC:206:ASN:HB3	45:DC:210:TYR:CE2	2.49	0.47
45:DE:36:MET:SD	45:DE:37:PRO:HD2	2.55	0.47
45:DI:2:ARG:HD3	45:DI:2:ARG:H	1.79	0.47
46:EB:406:MET:O	46:EB:409:THR:OG1	2.25	0.47
45:EI:141:VAL:HG11	45:EI:172:TYR:CD1	2.46	0.47
46:EL:318:ARG:HG2	46:EL:357:PRO:HA	1.96	0.47
45:EM:227:LEU:O	45:EM:231:ILE:HG12	2.15	0.47
45:EM:276:ILE:HD13	45:EM:286:LEU:HD11	1.97	0.47
45:FA:263:PRO:HD3	46:FD:396:HIS:CE1	2.50	0.47
46:FB:191:GLN:O	46:FB:195:ASN:ND2	2.46	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FK:224:TYR:HD1	45:FK:227:LEU:HD12	1.80	0.47
46:GB:119:VAL:O	46:GB:123:GLU:OE1	2.33	0.47
46:GB:314:SER:OG	46:GB:368:VAL:O	2.20	0.47
46:GD:262:ARG:NH1	46:GD:421:GLU:OE1	2.47	0.47
46:GL:180:VAL:HG12	46:GL:180:VAL:O	2.14	0.47
45:GM:386:GLU:HB2	45:GM:390:ARG:NH1	2.30	0.47
46:HL:342:VAL:HG13	46:HL:345:ILE:HG22	1.97	0.47
46:HN:44:LEU:HA	46:HN:47:ILE:HG13	1.97	0.47
45:IA:127:ASP:OD1	45:IA:128:ASN:N	2.48	0.47
46:ID:114:ASP:OD1	46:ID:115:SER:N	2.47	0.47
45:II:164:LYS:O	45:II:166:LYS:NZ	2.47	0.47
45:IM:387:VAL:HG12	45:IM:390:ARG:NH1	2.28	0.47
46:IN:301:CYS:HB2	46:IN:377:MET:CE	2.43	0.47
46:JB:54:ALA:HA	46:KB:283:ALA:HB2	1.97	0.47
46:KB:103:LYS:NZ	46:KB:401:GLU:OE2	2.44	0.47
46:KF:208:TYR:CE1	46:KF:225:LEU:HD11	2.50	0.47
46:LB:404:ASP:N	46:LB:404:ASP:OD1	2.48	0.47
45:LK:345:ASP:OD1	45:LK:345:ASP:N	2.48	0.47
45:LK:383:ALA:O	45:LK:386:GLU:HG2	2.14	0.47
45:MG:123:ARG:HA	45:MG:123:ARG:NE	2.30	0.47
46:MJ:156:ARG:NH1	46:MJ:197:ASP:OD2	2.47	0.47
45:MM:132:LEU:HD23	45:MM:164:LYS:HE2	1.97	0.47
45:NA:100:ALA:HA	46:NB:252:LYS:HE2	1.97	0.47
46:ND:341:PHE:HB3	46:ND:348:ASN:HD21	1.80	0.47
46:NL:341:PHE:HB3	46:NL:348:ASN:HD21	1.80	0.47
45:NM:167:LEU:HG	45:NM:200:VAL:HB	1.96	0.47
45:OA:141:VAL:HG12	45:OA:171:ILE:O	2.14	0.47
45:OA:205:ASP:OD1	45:OA:303:ALA:HA	2.14	0.47
45:OA:402:ARG:HB3	45:OA:405:VAL:HG21	1.97	0.47
46:OF:319:GLY:HA2	46:OF:357:PRO:HD3	1.96	0.47
45:OG:274:PRO:HB2	45:OG:276:ILE:HG12	1.96	0.47
45:OM:147:SER:HB3	45:OM:190:SER:HB3	1.97	0.47
46:PF:156:ARG:HH21	46:PF:164:MET:HB2	1.80	0.47
46:PN:152:ILE:HA	46:PN:164:MET:HE3	1.96	0.47
46:QB:152:ILE:HG22	46:QB:195:ASN:ND2	2.30	0.47
45:QE:259:LEU:HD21	45:QE:316:SER:HB2	1.97	0.47
45:QK:317:MET:HA	45:QK:377:MET:HA	1.97	0.47
46:QN:139:LEU:HD13	46:QN:168:SER:HB3	1.97	0.47
45:RA:340:THR:HG23	45:RA:341:ILE:HG23	1.97	0.47
45:RC:306:ASP:OD1	45:RC:306:ASP:N	2.48	0.47
46:RD:113:ILE:HA	46:RD:116:VAL:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RE:292:THR:HG21	45:RE:331:SER:HB2	1.96	0.47
46:RL:16:ILE:HD12	46:RL:229:VAL:HG21	1.97	0.47
46:RL:203:ASP:OD2	46:RL:205:GLU:HG3	2.15	0.47
46:RN:207:LEU:HB3	46:RN:225:LEU:HD22	1.97	0.47
46:SB:312:THR:O	46:SB:370:ASN:N	2.35	0.47
46:SF:342:VAL:HG13	46:SF:345:ILE:HG22	1.97	0.47
45:SG:434:GLU:O	45:SG:437:ILE:HG22	2.15	0.47
45:SI:319:TYR:HB3	45:SI:323:VAL:HG11	1.96	0.47
46:SL:252:LYS:HE2	46:SL:350:LYS:NZ	2.30	0.47
46:SL:258:ILE:O	46:SL:258:ILE:HG13	2.15	0.47
45:SM:5:ILE:HD13	45:SM:64:ARG:HB3	1.96	0.47
45:SM:137:VAL:HG23	45:SM:168:GLY:HA2	1.96	0.47
45:SM:188:ILE:HG21	45:SM:422:ARG:HH22	1.80	0.47
45:TA:14:ILE:O	45:TA:18:ASN:N	2.41	0.47
46:TD:262:ARG:HH21	46:TD:418:LEU:HD22	1.79	0.47
46:TF:3:GLU:OE1	46:TF:62:ARG:NH1	2.48	0.47
46:UB:139:LEU:HD13	46:UB:168:SER:HB3	1.95	0.47
46:UB:210:ILE:HA	46:UB:297:LYS:HZ3	1.80	0.47
45:UE:141:VAL:HG21	45:UE:172:TYR:HE1	1.80	0.47
45:UE:205:ASP:OD1	45:UE:303:ALA:HA	2.15	0.47
46:UH:87:PRO:HA	46:UH:90:PHE:HD2	1.79	0.47
46:UJ:113:ILE:HA	46:UJ:116:VAL:HG12	1.96	0.47
46:UJ:203:ASP:OD2	46:UJ:377:MET:HE1	2.15	0.47
46:VD:286:VAL:HG21	46:VD:325:GLU:HG3	1.97	0.47
46:VF:362:LYS:NZ	46:VF:363:MET:HG3	2.30	0.47
45:VG:287:SER:HA	45:VG:373:ARG:HH22	1.80	0.47
46:WJ:262:ARG:HH22	46:WJ:418:LEU:HA	1.78	0.47
45:WM:318:MET:HB3	45:WM:376:CYS:SG	2.55	0.47
4:2D:39:PRO:HG2	45:DK:79:ARG:NH1	2.30	0.46
31:2I:133:PRO:HD3	45:FC:96:LYS:HZ3	1.80	0.46
20:2K:384:GLU:HA	20:2K:387:GLN:HB2	1.96	0.46
21:2L:671:THR:HG21	45:CM:365:GLY:CA	2.45	0.46
10:2Q:26:ASP:OD1	10:2Q:27:LYS:N	2.48	0.46
25:2R:455:ASN:O	46:FH:276:ARG:NH2	2.35	0.46
5:3E:45:ARG:HB3	5:3E:49:PHE:CZ	2.50	0.46
5:3E:160:GLN:OE1	5:3E:162:LYS:HB2	2.15	0.46
10:3Q:138:ASP:O	10:3Q:142:ARG:N	2.46	0.46
13:3U:125:ASP:O	13:3U:128:MET:HG2	2.15	0.46
42:8N:314:UNK:C	46:RB:276:ARG:HH22	2.28	0.46
44:8R:89:UNK:O	44:8R:93:UNK:N	2.48	0.46
45:AM:322:ASP:OD1	45:AM:373:ARG:NH1	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BA:135:PHE:HB2	45:BA:166:LYS:HG2	1.96	0.46
45:BC:279:GLU:OE2	45:BC:279:GLU:N	2.48	0.46
46:BD:148:GLY:O	46:BD:152:ILE:HD12	2.15	0.46
46:BF:10:GLY:O	46:BF:14:ASN:ND2	2.48	0.46
45:BI:103:PHE:HB3	45:BI:408:TYR:HE2	1.80	0.46
45:BI:174:SER:HB2	45:BI:177:VAL:O	2.15	0.46
46:BN:40:SER:OG	46:BN:43:GLN:HG3	2.15	0.46
45:CA:384:ILE:O	45:CA:387:VAL:HG22	2.15	0.46
46:CB:16:ILE:HD13	46:CB:226:ASN:OD1	2.16	0.46
46:CD:19:LYS:NZ	46:CD:223:GLY:O	2.49	0.46
45:CG:259:LEU:HB3	45:CG:268:MET:HE2	1.97	0.46
46:CJ:173:PRO:HD2	46:CJ:174:LYS:NZ	2.30	0.46
46:CJ:318:ARG:HB2	46:CJ:364:ALA:HB3	1.95	0.46
45:CM:352:LYS:HE2	45:CM:352:LYS:HA	1.96	0.46
46:DB:253:LEU:HD12	46:DB:257:LEU:HD13	1.96	0.46
45:DC:206:ASN:HB3	45:DC:210:TYR:HE2	1.80	0.46
45:DC:298:PRO:HB3	45:DC:307:PRO:HD2	1.97	0.46
45:DC:312:TYR:HB2	45:DC:343:PHE:CD1	2.50	0.46
46:ED:318:ARG:HB2	46:ED:364:ALA:HB3	1.96	0.46
45:EI:174:SER:HB3	45:EI:177:VAL:O	2.16	0.46
45:EK:227:LEU:O	45:EK:231:ILE:HG12	2.15	0.46
45:FA:221:ARG:NH1	46:FB:325:GLU:HG2	2.30	0.46
45:FC:179:THR:O	46:FD:350:LYS:HA	2.14	0.46
46:FF:183:TYR:HA	46:FF:385:PHE:CE1	2.49	0.46
46:FL:139:LEU:HD13	46:FL:168:SER:HB3	1.95	0.46
46:FN:257:LEU:HD11	46:FN:314:SER:HB3	1.97	0.46
45:GE:224:TYR:CE2	46:GF:246:LEU:HD11	2.51	0.46
46:GH:274:THR:HB	46:GH:282:ARG:HH12	1.79	0.46
46:HJ:132:GLY:HA3	46:HJ:163:ILE:HG22	1.97	0.46
45:HK:244:PHE:HB2	45:HK:356:ASN:HD21	1.79	0.46
45:HM:90:GLU:OE2	45:HM:121:ARG:NH1	2.49	0.46
45:IA:116:ASP:OD1	45:IA:117:LEU:N	2.48	0.46
46:IB:11:GLN:O	46:IB:15:GLN:HG2	2.14	0.46
46:IB:387:ALA:HA	46:IB:390:ARG:CZ	2.45	0.46
45:IC:386:GLU:O	45:IC:390:ARG:HG2	2.15	0.46
46:IL:372:THR:HA	46:IL:422:TYR:CE2	2.40	0.46
45:IM:101:ASN:HA	45:IM:144:GLY:H	1.80	0.46
46:IN:117:LEU:HA	46:IN:120:VAL:HG12	1.97	0.46
45:JC:11:GLN:HG2	45:JC:74:VAL:HG11	1.96	0.46
45:JE:73:THR:HG1	46:JF:2:ARG:HH22	1.63	0.46
46:JJ:52:ASN:OD1	46:JJ:62:ARG:NH2	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KA:177:VAL:HG12	45:KA:207:GLU:OE1	2.14	0.46
46:KD:153:SER:HA	46:KD:195:ASN:ND2	2.31	0.46
45:KE:98:ASP:OD1	45:KE:99:ALA:N	2.48	0.46
46:KJ:51:TYR:HB3	46:KJ:59:TYR:HB3	1.97	0.46
45:KK:141:VAL:HG21	45:KK:172:TYR:CE1	2.49	0.46
46:LB:65:LEU:HD11	46:LB:85:PHE:CD2	2.50	0.46
45:LG:108:TYR:O	45:LG:112:LYS:NZ	2.38	0.46
45:LM:147:SER:OG	45:LM:190:SER:HB3	2.15	0.46
46:MB:178:THR:HB	46:MB:181:GLU:HG3	1.96	0.46
46:MB:309:ARG:NH2	46:MB:426:GLN:O	2.44	0.46
46:MH:289:LEU:HD13	46:MH:365:VAL:HG23	1.97	0.46
45:MK:422:ARG:O	45:MK:422:ARG:NH1	2.47	0.46
46:NB:318:ARG:HD3	46:NB:358:PRO:HD3	1.97	0.46
45:NC:414:GLU:CD	45:NC:416:GLY:H	2.18	0.46
46:NH:122:LYS:HZ1	46:OH:291:GLN:CD	2.18	0.46
45:NI:137:VAL:HG23	45:NI:168:GLY:HA2	1.97	0.46
45:OA:31:GLN:HE22	45:OA:37:PRO:HG3	1.79	0.46
45:OE:109:THR:HG21	45:OE:411:GLU:HG3	1.97	0.46
46:OH:34:GLY:HA3	46:OH:58:ARG:HG3	1.97	0.46
45:OI:205:ASP:OD1	45:OI:205:ASP:N	2.46	0.46
45:OI:294:SER:HA	45:OI:297:GLU:HG3	1.97	0.46
46:OL:83:GLN:O	46:PL:281:TYR:OH	2.24	0.46
45:OM:132:LEU:HD11	45:OM:135:PHE:HE1	1.81	0.46
46:PB:99:ASN:HA	46:PB:142:GLY:H	1.80	0.46
46:PD:375:GLN:OE1	46:PD:375:GLN:N	2.45	0.46
46:PH:175:VAL:O	46:PH:175:VAL:HG13	2.15	0.46
45:PM:407:TRP:HH2	46:PN:254:ALA:HB1	1.79	0.46
46:PN:4:ILE:O	46:PN:62:ARG:NH2	2.48	0.46
45:QA:228:ASN:OD1	45:QA:229:ARG:N	2.48	0.46
46:QF:177:ASP:OD2	49:QF:501:GDP:O3'	2.26	0.46
45:RI:7:ILE:HB	45:RI:137:VAL:HG12	1.96	0.46
45:RK:384:ILE:O	45:RK:387:VAL:HG12	2.15	0.46
46:RL:256:ASN:OD1	45:RM:181:VAL:HG22	2.14	0.46
46:SB:384:GLN:O	46:SB:388:MET:HG2	2.15	0.46
46:SB:390:ARG:O	46:SB:392:LYS:NZ	2.48	0.46
46:SL:317:PHE:HE2	46:SL:351:SER:HB2	1.80	0.46
45:TC:401:LYS:O	45:TC:401:LYS:HD2	2.15	0.46
45:TI:317:MET:HB3	45:TI:377:MET:HG2	1.97	0.46
46:TL:164:MET:H	46:TL:197:ASP:HB2	1.80	0.46
46:TL:334:GLN:HG2	46:TL:341:PHE:HD2	1.80	0.46
46:TN:46:ARG:HG3	46:TN:46:ARG:O	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UC:298:PRO:HA	45:UC:301:MET:HG2	1.96	0.46
45:UK:242:LEU:HD11	45:UK:252:ILE:HG12	1.97	0.46
45:VA:70:LEU:HA	45:VA:95:GLY:HA3	1.97	0.46
45:VC:284:GLU:CD	45:VC:286:LEU:H	2.18	0.46
46:VJ:310:TYR:CD1	46:VJ:371:SER:HB2	2.50	0.46
46:VN:145:SER:HB2	46:VN:188:SER:HB3	1.97	0.46
46:VN:309:ARG:N	46:VN:372:THR:OG1	2.25	0.46
46:VN:330:MET:HA	46:VN:333:VAL:HG22	1.97	0.46
45:WA:377:MET:SD	45:WA:379:SER:HB3	2.54	0.46
45:WM:3:GLU:HB2	45:WM:64:ARG:CZ	2.45	0.46
45:WM:181:VAL:HG13	46:WN:350:LYS:HE2	1.97	0.46
45:WM:287:SER:HB3	45:WM:290:GLU:HG2	1.96	0.46
46:WN:282:ARG:NH2	46:WN:292:GLN:OE1	2.34	0.46
8:1H:115:ARG:NH1	46:HL:279:GLN:HB3	2.29	0.46
11:1S:282:THR:O	11:1S:286:LEU:HD23	2.14	0.46
5:2E:88:ILE:HG22	5:2E:88:ILE:O	2.16	0.46
21:2L:274:LYS:HB2	21:2L:378:ARG:NH1	2.27	0.46
11:2S:14:SER:O	11:2S:18:ARG:HG3	2.15	0.46
11:2S:94:GLN:OE1	11:2S:94:GLN:N	2.46	0.46
11:2S:275:TYR:HB3	46:WJ:88:ASP:OD2	2.15	0.46
26:2W:205:ASP:HA	26:2W:208:LEU:HB2	1.97	0.46
21:3L:140:LEU:HB3	21:3L:144:LYS:HZ3	1.80	0.46
10:3Q:156:ILE:HG21	10:3Q:162:ILE:HD11	1.97	0.46
11:3S:162:PRO:HG2	11:3S:199:LYS:HD2	1.98	0.46
11:3S:261:LEU:HD13	46:AN:424:GLN:HG2	1.97	0.46
15:3X:40:TYR:O	15:3X:44:THR:HG23	2.15	0.46
15:4X:18:ILE:HD12	46:LL:22:GLU:OE2	2.15	0.46
37:5G:157:ARG:HH12	46:NL:37:HIS:CB	2.28	0.46
37:5G:209:ARG:HH12	45:LK:424:ASP:HA	1.80	0.46
10:6Q:13:ILE:HG22	10:6Q:25:TRP:HE1	1.80	0.46
46:AB:281:TYR:OH	46:MB:87:PRO:HD2	2.14	0.46
45:AC:88:HIS:HB3	45:AC:91:GLN:HG2	1.98	0.46
46:AD:253:LEU:O	46:AD:257:LEU:HB2	2.15	0.46
45:AI:68:LEU:HD11	45:AI:118:CYS:SG	2.56	0.46
45:AK:183:GLU:N	45:AK:184:PRO:HD2	2.30	0.46
46:AN:372:THR:HA	46:AN:422:TYR:HE2	1.81	0.46
46:BB:65:LEU:HD22	46:BB:90:PHE:HE1	1.79	0.46
45:BG:118:CYS:O	45:BG:122:ILE:HG12	2.15	0.46
46:BN:60:VAL:HG22	46:CL:281:TYR:HD1	1.78	0.46
46:BN:135:ILE:HG13	46:BN:152:ILE:HD11	1.96	0.46
45:CA:4:VAL:H	45:CA:64:ARG:HH21	1.63	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CA:122:ILE:O	45:CA:126:ALA:N	2.45	0.46
45:CC:252:ILE:HA	45:CC:255:PHE:CE1	2.50	0.46
46:CF:392:LYS:HG2	46:CF:395:LEU:HD22	1.97	0.46
46:CH:105:HIS:CE1	46:CH:150:LEU:HD12	2.49	0.46
45:CM:284:GLU:HG2	45:CM:286:LEU:HD22	1.97	0.46
46:CN:237:THR:HG23	46:CN:241:ARG:HH11	1.79	0.46
46:CN:260:PHE:HB2	46:CN:263:LEU:HD13	1.95	0.46
46:DB:153:SER:HA	46:DB:195:ASN:ND2	2.30	0.46
45:DC:332:ILE:O	45:DC:336:LYS:HG2	2.15	0.46
45:DE:155:GLU:HA	45:DE:197:HIS:HD2	1.80	0.46
46:DH:20:PHE:HA	46:DH:230:SER:OG	2.15	0.46
46:DN:119:VAL:HA	46:DN:122:LYS:HG2	1.96	0.46
46:EB:178:THR:HG22	46:EB:179:VAL:N	2.29	0.46
46:ED:248:SER:HA	46:ED:252:LYS:HD2	1.97	0.46
45:EM:204:LEU:HD12	45:EM:231:ILE:HD12	1.96	0.46
46:EN:316:LEU:HB2	46:EN:366:THR:HB	1.96	0.46
46:FB:282:ARG:CZ	46:FB:282:ARG:HA	2.44	0.46
46:FB:310:TYR:CD1	46:FB:371:SER:HB2	2.50	0.46
46:FF:178:THR:HG22	46:FF:180:VAL:H	1.80	0.46
45:FI:89:PRO:HG2	45:GI:280:LYS:HE2	1.97	0.46
45:FI:187:SER:O	45:FI:191:THR:HG23	2.16	0.46
45:FM:75:ILE:HG21	45:FM:94:SER:HB2	1.96	0.46
45:GA:189:LEU:HD11	45:GA:418:PHE:HE1	1.80	0.46
45:GA:210:TYR:CE1	45:GA:227:LEU:HD11	2.50	0.46
46:GB:194:GLU:OE2	46:GB:195:ASN:ND2	2.48	0.46
45:GC:10:GLY:O	45:GC:14:ILE:HG12	2.15	0.46
45:GK:3:GLU:HG2	45:GK:64:ARG:CZ	2.45	0.46
46:GN:315:ALA:N	46:GN:350:LYS:O	2.43	0.46
45:HE:17:GLY:HA2	45:HE:20:CYS:SG	2.56	0.46
46:HF:213:ARG:HH21	46:HF:297:LYS:HG3	1.79	0.46
46:HH:52:ASN:HD21	46:HH:62:ARG:HB3	1.78	0.46
45:HM:321:GLY:HA3	45:HM:373:ARG:HH22	1.81	0.46
45:IC:272:TYR:HD2	45:IC:275:ILE:HD11	1.80	0.46
46:ID:150:LEU:O	46:ID:154:LYS:HG2	2.16	0.46
45:IM:153:LEU:O	45:IM:157:LEU:HD23	2.15	0.46
46:IN:81:PHE:HD1	46:IN:84:LEU:HD11	1.79	0.46
45:JC:221:ARG:NE	46:JD:325:GLU:OE1	2.48	0.46
45:JK:262:TYR:HD2	45:JK:265:ILE:HD12	1.80	0.46
46:KB:322:SER:OG	46:KB:325:GLU:OE1	2.29	0.46
45:KG:26:LEU:HD11	45:KG:364:PRO:HD2	1.96	0.46
46:KL:301:CYS:HB3	46:KL:377:MET:CE	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LA:210:TYR:CD2	46:LB:324:LYS:HG2	2.50	0.46
46:LB:372:THR:O	46:LB:375:GLN:HG2	2.15	0.46
46:LN:113:ILE:HD13	46:LN:150:LEU:HD22	1.96	0.46
46:MJ:262:ARG:NH1	46:MJ:421:GLU:OE1	2.42	0.46
45:MM:288:VAL:O	45:MM:291:ILE:HG22	2.15	0.46
46:MN:252:LYS:HG2	46:MN:350:LYS:HE2	1.97	0.46
45:NC:88:HIS:H	45:NC:91:GLN:NE2	2.12	0.46
45:NE:116:ASP:OD1	45:NE:117:LEU:N	2.47	0.46
46:NF:178:THR:HB	46:NF:181:GLU:HG3	1.97	0.46
45:NG:177:VAL:HG22	45:NG:207:GLU:OE2	2.16	0.46
45:NI:113:GLU:N	45:NI:113:GLU:OE1	2.48	0.46
45:NM:300:ASN:O	45:NM:300:ASN:ND2	2.47	0.46
46:PB:183:TYR:HE2	46:PB:394:PHE:HB2	1.80	0.46
45:PK:407:TRP:HH2	46:PL:254:ALA:HB1	1.80	0.46
45:QA:7:ILE:HB	45:QA:137:VAL:HA	1.96	0.46
45:QC:340:THR:HG23	45:QC:341:ILE:HG13	1.97	0.46
45:QI:14:ILE:HD11	45:QI:69:ASP:HB2	1.97	0.46
46:QJ:156:ARG:HD2	46:QJ:156:ARG:HA	1.73	0.46
46:QJ:208:TYR:CE1	46:QJ:225:LEU:HD11	2.50	0.46
46:QL:86:ARG:HE	46:QL:87:PRO:HD2	1.80	0.46
46:QL:183:TYR:HE2	46:QL:394:PHE:HB2	1.80	0.46
45:QM:75:ILE:O	45:QM:79:ARG:HG2	2.16	0.46
46:RF:257:LEU:HA	46:RF:312:THR:HG21	1.97	0.46
45:RK:141:VAL:HG22	45:RK:187:SER:HA	1.97	0.46
46:SD:58:ARG:NH1	46:TD:280:GLN:OE1	2.49	0.46
46:SF:8:GLN:NE2	46:SF:14:ASN:HA	2.30	0.46
46:SJ:168:SER:HB2	46:SJ:201:VAL:HG12	1.96	0.46
46:SJ:207:LEU:HB3	46:SJ:225:LEU:HD22	1.95	0.46
46:SN:113:ILE:HD13	46:SN:150:LEU:HD22	1.97	0.46
45:TE:147:SER:HB2	45:TE:190:SER:HB3	1.97	0.46
46:TJ:52:ASN:OD1	46:TJ:62:ARG:NH2	2.48	0.46
45:UC:183:GLU:N	45:UC:184:PRO:HD2	2.31	0.46
45:UE:183:GLU:N	45:UE:184:PRO:HD2	2.31	0.46
46:UL:276:ARG:HD3	46:UL:276:ARG:HA	1.69	0.46
45:UM:70:LEU:HA	45:UM:95:GLY:HA3	1.97	0.46
45:VA:10:GLY:O	45:VA:14:ILE:HG12	2.16	0.46
45:VA:104:ALA:HA	45:VA:413:MET:HE3	1.98	0.46
46:VJ:113:ILE:HA	46:VJ:116:VAL:HG12	1.96	0.46
46:VL:30:ILE:HD11	46:VL:47:ILE:HD11	1.97	0.46
45:VM:60:LYS:HD3	45:WM:283:HIS:ND1	2.30	0.46
45:WK:66:VAL:HG11	45:WK:122:ILE:HD11	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WK:205:ASP:OD1	45:WK:303:ALA:HA	2.15	0.46
45:WK:340:THR:HG23	45:WK:341:ILE:HG13	1.97	0.46
46:WL:49:VAL:HG13	46:WL:50:TYR:HD1	1.80	0.46
45:WM:7:ILE:N	45:WM:136:LEU:O	2.44	0.46
45:WM:178:SER:OG	46:WN:347:ASN:ND2	2.48	0.46
24:1P:126:GLU:HG2	23:3O:345:GLU:HG2	1.96	0.46
16:2B:170:TYR:OH	16:2B:193:TRP:NE1	2.28	0.46
4:2D:73:GLY:O	4:2D:76:VAL:HG22	2.16	0.46
21:2L:868:LYS:HE3	46:CJ:39:ASP:HB2	1.98	0.46
9:2N:189:ASP:O	9:2N:193:ARG:NH1	2.48	0.46
23:2O:125:LEU:O	23:2O:128:ARG:NH1	2.48	0.46
23:2O:170:LYS:O	23:2O:173:GLU:N	2.48	0.46
23:2O:188:LYS:HE3	46:VL:276:ARG:HH11	1.79	0.46
1:3A:102:TYR:CG	1:3A:103:GLN:N	2.84	0.46
21:3L:53:PHE:CE1	21:3L:65:LYS:HD2	2.51	0.46
23:3O:242:LEU:HD13	46:UN:276:ARG:HD3	1.96	0.46
23:3O:271:ALA:HB2	45:UM:278:ALA:HB3	1.96	0.46
25:3R:304:LEU:HD23	25:3R:322:VAL:HG21	1.96	0.46
25:3R:312:GLN:NE2	46:CL:359:LYS:HB3	2.30	0.46
11:3S:137:TYR:HA	11:3S:140:ARG:CG	2.45	0.46
13:3U:194:ARG:HG3	13:3U:218:PHE:HE2	1.81	0.46
13:3U:319:HIS:CE1	13:3U:323:ILE:HG13	2.50	0.46
34:4R:578:TYR:CE2	34:4R:580:LEU:HG	2.50	0.46
36:5C:49:LYS:HB3	36:5C:49:LYS:HE2	1.65	0.46
37:5G:41:THR:HG21	45:OG:372:MET:HB3	1.96	0.46
34:5R:567:ASN:OD1	34:5R:568:ASP:N	2.46	0.46
34:6R:581:THR:OG1	34:6R:584:GLU:OE1	2.22	0.46
34:7R:318:TYR:HB3	34:7R:321:MET:HB2	1.97	0.46
45:AC:55:GLU:HG3	45:AC:57:GLY:H	1.80	0.46
45:AE:89:PRO:HG2	45:BE:280:LYS:HB3	1.96	0.46
45:AE:226:ASN:ND2	45:AE:367:ASP:OD2	2.48	0.46
46:AH:201:VAL:O	46:AH:202:ILE:HD13	2.16	0.46
46:BB:22:GLU:OE2	46:BB:22:GLU:N	2.37	0.46
46:BB:327:ASP:OD1	46:BB:328:GLU:N	2.48	0.46
45:BC:173:PRO:HG2	45:BC:391:LEU:HD21	1.97	0.46
45:BE:103:PHE:HB3	45:BE:408:TYR:HE2	1.81	0.46
45:BG:98:ASP:O	45:BG:105:ARG:NH1	2.49	0.46
46:BL:131:GLN:O	46:BL:163:ILE:HG22	2.16	0.46
45:BM:212:ILE:HD11	45:BM:300:ASN:HA	1.98	0.46
45:CA:264:ARG:HA	45:CA:264:ARG:NE	2.30	0.46
46:CB:19:LYS:HD3	46:CB:226:ASN:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CE:231:ILE:O	45:CE:235:ILE:HG12	2.15	0.46
45:CI:164:LYS:HD3	45:CI:164:LYS:HA	1.74	0.46
45:CM:248:LEU:HD23	45:CM:355:ILE:HD13	1.98	0.46
45:CM:340:THR:HG23	45:CM:341:ILE:HG12	1.97	0.46
46:CN:290:THR:HG21	46:CN:329:GLN:HB3	1.96	0.46
46:CN:332:ASN:OD1	46:CN:336:LYS:HD3	2.15	0.46
45:DE:194:LEU:O	45:DE:198:THR:HG22	2.16	0.46
46:DF:396:HIS:HA	46:DF:399:THR:HG22	1.98	0.46
45:DK:174:SER:HB3	45:DK:177:VAL:O	2.14	0.46
46:EB:83:GLN:O	46:FB:281:TYR:OH	2.20	0.46
45:EC:254:GLU:O	45:EC:255:PHE:HD1	1.98	0.46
45:EC:345:ASP:N	45:EC:345:ASP:OD1	2.47	0.46
46:EF:52:ASN:OD1	46:EF:62:ARG:NH2	2.49	0.46
45:EK:345:ASP:OD1	45:EK:345:ASP:N	2.48	0.46
45:EM:245:ASP:N	45:EM:245:ASP:OD1	2.47	0.46
46:EN:7:ILE:HG23	46:EN:135:ILE:HD13	1.97	0.46
46:FB:258:ILE:HG13	46:FB:266:PHE:HZ	1.80	0.46
45:FE:256:GLN:OE1	45:FE:256:GLN:N	2.45	0.46
46:FH:68:LEU:HD23	46:FH:143:THR:OG1	2.15	0.46
45:FK:127:ASP:OD1	45:FK:128:ASN:N	2.48	0.46
45:GE:118:CYS:O	45:GE:122:ILE:HG12	2.16	0.46
46:GF:248:SER:HB2	46:GF:252:LYS:HD2	1.96	0.46
45:GM:386:GLU:O	45:GM:389:SER:OG	2.18	0.46
46:GN:314:SER:HA	46:GN:350:LYS:HB3	1.97	0.46
46:HB:50:TYR:OH	46:HB:237:THR:HG21	2.15	0.46
45:HG:326:LYS:HD2	46:HJ:220:PRO:HD2	1.98	0.46
45:HI:183:GLU:N	45:HI:184:PRO:HD2	2.31	0.46
45:HK:272:TYR:HB3	45:HK:275:ILE:HD11	1.98	0.46
46:IB:105:HIS:CD2	46:IB:150:LEU:HD23	2.50	0.46
46:JB:178:THR:HG22	46:JB:180:VAL:H	1.80	0.46
45:JG:292:THR:HG21	45:JG:331:SER:HB2	1.98	0.46
46:JH:342:VAL:HG13	46:JH:345:ILE:HG22	1.96	0.46
45:JK:191:THR:HA	45:JK:194:LEU:HG	1.96	0.46
45:KC:88:HIS:CE1	45:KC:90:GLU:HG2	2.50	0.46
45:KE:349:THR:O	46:KH:179:VAL:HG23	2.16	0.46
45:LE:320:ARG:HD3	45:LE:360:PRO:HG3	1.97	0.46
46:LJ:91:VAL:HG21	46:LJ:116:VAL:HB	1.96	0.46
46:LL:267:MET:HB3	46:LL:374:ILE:HD11	1.98	0.46
46:MB:105:HIS:CE1	46:MB:150:LEU:HD12	2.50	0.46
46:MJ:173:PRO:HD2	46:MJ:174:LYS:HZ2	1.80	0.46
46:NB:86:ARG:HG2	46:NB:88:ASP:H	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NB:114:ASP:OD1	46:NB:115:SER:N	2.49	0.46
46:ND:2:ARG:HB2	46:ND:131:GLN:HG3	1.98	0.46
46:ND:33:THR:O	46:ND:58:ARG:NH2	2.41	0.46
45:NE:102:ASN:HD22	45:NE:105:ARG:HG2	1.80	0.46
45:NE:268:MET:HB2	45:NE:379:SER:O	2.15	0.46
47:NE:501:GTP:O1G	46:NF:252:LYS:NZ	2.38	0.46
46:NL:8:GLN:NE2	46:NL:14:ASN:HA	2.31	0.46
45:OG:224:TYR:O	45:OG:228:ASN:ND2	2.48	0.46
46:OL:68:LEU:HD21	46:OL:147:MET:HE1	1.97	0.46
46:OL:316:LEU:HD23	46:OL:352:SER:HB2	1.96	0.46
45:OM:174:SER:HB2	45:OM:177:VAL:O	2.14	0.46
45:PA:113:GLU:HG2	45:PA:114:ILE:HD12	1.96	0.46
46:PH:234:SER:OG	46:PH:241:ARG:NH2	2.48	0.46
45:PI:205:ASP:OD1	45:PI:303:ALA:HA	2.15	0.46
45:PM:141:VAL:HG11	45:PM:172:TYR:HD1	1.81	0.46
45:QA:140:SER:OG	47:QA:501:GTP:O2B	2.33	0.46
45:QC:242:LEU:HD11	45:QC:252:ILE:HG13	1.98	0.46
45:QI:434:GLU:O	45:QI:437:ILE:HG12	2.15	0.46
46:QL:346:PRO:HD3	45:QM:397:LEU:HD23	1.98	0.46
46:QL:423:GLN:NE2	46:QL:427:ASP:OD2	2.45	0.46
45:RC:88:HIS:HB3	45:RC:91:GLN:HG2	1.96	0.46
45:RC:254:GLU:HA	45:RC:257:THR:OG1	2.15	0.46
46:RD:325:GLU:HA	46:RD:328:GLU:HG2	1.98	0.46
46:RD:423:GLN:NE2	46:RD:426:GLN:OE1	2.48	0.46
45:RI:68:LEU:HD22	45:RI:153:LEU:HD11	1.96	0.46
45:RI:312:TYR:CE1	45:RI:341:ILE:HD11	2.50	0.46
46:RJ:298:ASN:ND2	46:RJ:298:ASN:O	2.49	0.46
45:RK:141:VAL:HG11	45:RK:172:TYR:CD1	2.48	0.46
46:SD:370:ASN:OD1	46:SD:422:TYR:OH	2.33	0.46
45:SG:263:PRO:HD3	46:SH:396:HIS:CE1	2.49	0.46
46:SJ:233:MET:HA	46:SJ:236:VAL:HG23	1.96	0.46
45:SK:102:ASN:ND2	45:SK:105:ARG:HG3	2.30	0.46
45:SK:108:TYR:HA	45:SK:112:LYS:HE3	1.97	0.46
45:SK:194:LEU:O	45:SK:198:THR:HG22	2.16	0.46
45:SM:154:LEU:HD23	45:SM:157:LEU:HD21	1.97	0.46
46:SN:257:LEU:HD11	46:SN:314:SER:HB2	1.96	0.46
46:TB:105:HIS:CD2	46:TB:150:LEU:HB2	2.50	0.46
46:TB:198:GLU:HA	46:TB:264:HIS:HB2	1.98	0.46
45:TC:292:THR:HG21	45:TC:331:SER:HB3	1.96	0.46
46:TF:83:GLN:OE1	46:TF:83:GLN:N	2.48	0.46
45:TI:210:TYR:HE1	45:TI:227:LEU:HD11	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TI:419:SER:HA	45:TI:422:ARG:NH1	2.30	0.46
45:UA:208:ALA:HB2	45:UA:304:LYS:HD2	1.96	0.46
45:UC:167:LEU:HD13	45:UC:252:ILE:HD11	1.98	0.46
46:UD:205:GLU:OE2	46:UD:302:ALA:HB2	2.15	0.46
46:UH:318:ARG:HH11	46:UH:358:PRO:HG3	1.80	0.46
46:UJ:178:THR:HG22	46:UJ:180:VAL:H	1.80	0.46
45:UM:231:ILE:O	45:UM:235:ILE:HG12	2.15	0.46
45:VC:89:PRO:HD3	45:WC:283:HIS:ND1	2.30	0.46
45:VC:256:GLN:O	46:VF:397:TRP:NE1	2.48	0.46
46:VH:105:HIS:CD2	46:VH:150:LEU:HB2	2.50	0.46
45:VI:242:LEU:HD11	45:VI:252:ILE:HG23	1.98	0.46
45:VK:294:SER:O	45:VK:300:ASN:ND2	2.31	0.46
45:VM:88:HIS:HA	45:WM:280:LYS:HZ3	1.81	0.46
46:VN:178:THR:HG22	46:VN:180:VAL:H	1.80	0.46
46:WF:141:GLY:HA3	49:WF:501:GDP:PB	2.55	0.46
45:WG:88:HIS:HB3	45:WG:91:GLN:HG2	1.96	0.46
45:WK:348:PRO:HD3	46:WN:388:MET:HE1	1.97	0.46
45:WK:423:GLU:HA	45:WK:426:ALA:HB3	1.96	0.46
45:WM:183:GLU:OE1	45:WM:183:GLU:N	2.44	0.46
45:WM:356:ASN:OD1	45:WM:357:TYR:N	2.48	0.46
46:WN:193:VAL:HG23	46:WN:265:PHE:HE1	1.80	0.46
19:1J:80:LYS:HD2	45:IC:372:MET:HG2	1.97	0.46
16:2B:202:VAL:O	16:2B:207:LEU:HB2	2.16	0.46
31:2I:80:TYR:CZ	45:FE:119:LEU:HB3	2.50	0.46
9:2N:248:ASN:OD1	9:2N:249:LEU:N	2.48	0.46
23:2O:232:GLY:O	23:2O:236:ILE:HG12	2.16	0.46
13:2U:535:GLU:O	13:2U:553:GLU:N	2.49	0.46
13:2U:564:GLU:HG3	13:2U:566:ILE:HG23	1.98	0.46
13:2U:578:ILE:HD11	13:2U:592:SER:HB2	1.98	0.46
15:2X:70:TYR:HE2	46:MJ:284:LEU:HD12	1.79	0.46
1:3A:51:LYS:HG2	46:MN:41:ASP:OD1	2.15	0.46
32:3D:223:ALA:O	32:3D:227:GLU:HG3	2.15	0.46
11:3S:88:THR:OG1	13:3U:309:LYS:HE3	2.16	0.46
12:3T:185:LEU:HB2	12:3T:196:VAL:HB	1.96	0.46
12:3T:215:ASN:O	12:3T:216:LYS:HG3	2.16	0.46
14:3V:122:LYS:CD	46:LD:390:ARG:HH21	2.29	0.46
34:4R:286:GLU:OE2	34:4R:288:LYS:NZ	2.42	0.46
37:5E:213:TYR:CD2	46:LF:392:LYS:HE3	2.50	0.46
37:5H:111:ASN:HB3	46:NN:44:LEU:HD13	1.97	0.46
10:5Q:79:ILE:HD12	10:5Q:164:ARG:HB3	1.97	0.46
40:6G:93:LYS:NZ	45:UK:114:ILE:HD13	2.30	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:6R:354:ALA:HB3	45:CM:39:ASP:OD1	2.16	0.46
34:7R:555:ASN:O	34:7R:575:ARG:NH2	2.47	0.46
46:AB:8:GLN:HE21	46:AB:14:ASN:HA	1.80	0.46
45:AC:254:GLU:O	45:AC:255:PHE:HD1	1.99	0.46
45:AM:188:ILE:HG12	45:AM:425:LEU:HD11	1.97	0.46
46:AN:334:GLN:HE22	46:AN:347:ASN:HA	1.81	0.46
46:BD:5:VAL:HG12	46:BD:62:ARG:HD3	1.96	0.46
46:BD:178:THR:HG22	46:BD:180:VAL:H	1.79	0.46
45:BE:216:ASN:HB3	45:BE:275:ILE:O	2.16	0.46
45:BE:256:GLN:NE2	46:BH:397:TRP:HH2	2.12	0.46
45:BI:120:ASP:OD1	45:BI:123:ARG:NH2	2.43	0.46
45:BM:84:ARG:HE	45:BM:85:GLN:HE22	1.62	0.46
46:BN:238:CYS:SG	46:BN:239:CYS:N	2.88	0.46
46:CB:114:ASP:OD1	46:CB:115:SER:N	2.49	0.46
46:CB:418:LEU:O	46:CB:422:TYR:HB2	2.15	0.46
46:CF:152:ILE:HG23	46:CF:164:MET:SD	2.56	0.46
46:CF:207:LEU:HB3	46:CF:225:LEU:HD22	1.98	0.46
45:CM:88:HIS:CE1	45:CM:90:GLU:HB3	2.50	0.46
46:DB:350:LYS:HA	45:DC:179:THR:O	2.15	0.46
46:DH:19:LYS:HE2	46:DH:227:HIS:ND1	2.30	0.46
46:DJ:46:ARG:NH2	45:DK:76:ASP:OD2	2.48	0.46
45:DK:11:GLN:NE2	47:DK:501:GTP:O3A	2.49	0.46
45:DK:386:GLU:OE2	45:DK:386:GLU:N	2.48	0.46
45:DM:356:ASN:OD1	45:DM:357:TYR:N	2.48	0.46
46:DN:45:GLU:HG2	46:DN:46:ARG:HG2	1.97	0.46
46:EF:237:THR:HG23	46:EF:241:ARG:HE	1.81	0.46
45:EG:183:GLU:N	45:EG:184:PRO:HD2	2.30	0.46
46:EH:101:TRP:HB2	46:EH:184:ASN:HB3	1.96	0.46
45:EK:141:VAL:HG12	45:EK:171:ILE:O	2.16	0.46
45:FA:433:GLU:O	45:FA:437:ILE:HG23	2.16	0.46
46:FB:100:ASN:HD22	46:FB:103:LYS:HB2	1.79	0.46
46:FD:395:LEU:O	46:FD:399:THR:HG23	2.15	0.46
45:FE:73:THR:OG1	46:FF:2:ARG:NH2	2.48	0.46
45:FE:205:ASP:OD1	45:FE:303:ALA:HA	2.15	0.46
45:FG:27:GLU:HB2	45:FG:361:THR:HG21	1.96	0.46
45:FG:205:ASP:OD1	45:FG:303:ALA:HA	2.15	0.46
45:FI:76:ASP:OD1	45:FI:79:ARG:NH2	2.33	0.46
45:FI:88:HIS:HB3	45:FI:91:GLN:HG2	1.98	0.46
45:FK:220:GLU:OE2	45:FK:221:ARG:NH2	2.49	0.46
45:FM:135:PHE:HB2	45:FM:166:LYS:HG2	1.98	0.46
46:GB:20:PHE:O	46:GB:24:ILE:HG12	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GC:340:THR:HG23	45:GC:341:ILE:HG13	1.98	0.46
45:GE:183:GLU:N	45:GE:184:PRO:HD2	2.31	0.46
46:GF:341:PHE:CE2	46:GF:349:ILE:HD11	2.49	0.46
45:GG:384:ILE:O	45:GG:387:VAL:HG22	2.15	0.46
45:GM:216:ASN:HB3	45:GM:275:ILE:O	2.16	0.46
45:HG:174:SER:HB2	45:HG:177:VAL:O	2.15	0.46
45:HI:349:THR:HG23	46:HL:179:VAL:HA	1.97	0.46
45:HM:387:VAL:HA	45:HM:390:ARG:NE	2.31	0.46
46:IH:285:THR:HB	46:IH:287:PRO:HD2	1.96	0.46
45:II:325:PRO:O	45:II:329:ASN:ND2	2.48	0.46
45:IM:194:LEU:O	45:IM:198:THR:HG22	2.16	0.46
45:JC:231:ILE:O	45:JC:235:ILE:HG12	2.16	0.46
45:JE:256:GLN:O	46:JH:397:TRP:NE1	2.49	0.46
46:JJ:116:VAL:HA	46:JJ:119:VAL:HG22	1.96	0.46
46:JL:86:ARG:HG2	46:JL:88:ASP:H	1.79	0.46
46:JN:327:ASP:OD1	46:JN:328:GLU:N	2.48	0.46
45:KA:210:TYR:HB3	46:KB:324:LYS:HZ1	1.79	0.46
46:KH:5:VAL:HG12	46:KH:62:ARG:HD3	1.97	0.46
45:KI:116:ASP:OD1	45:KI:117:LEU:N	2.47	0.46
45:LC:181:VAL:HG13	45:LC:182:VAL:HG13	1.98	0.46
46:LJ:48:ASN:O	46:LJ:62:ARG:NH1	2.44	0.46
46:LJ:113:ILE:HA	46:LJ:116:VAL:HG12	1.98	0.46
46:MB:242:PHE:CG	46:MB:356:ILE:HG13	2.51	0.46
45:MM:3:GLU:HG2	45:MM:64:ARG:NE	2.30	0.46
45:MM:282:TYR:CD1	45:MM:286:LEU:HD12	2.51	0.46
46:MN:113:ILE:HA	46:MN:116:VAL:HG12	1.97	0.46
46:MN:173:PRO:HG2	46:MN:380:ARG:NE	2.30	0.46
45:NA:258:ASN:HD22	45:NA:352:LYS:HD3	1.81	0.46
45:NA:384:ILE:O	45:NA:387:VAL:HG22	2.14	0.46
46:ND:262:ARG:NH1	46:ND:421:GLU:OE2	2.49	0.46
45:NE:349:THR:OG1	46:NH:176:SER:OG	2.23	0.46
46:NF:319:GLY:N	46:NF:354:CYS:O	2.45	0.46
46:NJ:328:GLU:HA	46:NJ:331:LEU:HB3	1.97	0.46
45:OA:164:LYS:O	45:OA:166:LYS:NZ	2.48	0.46
46:OB:399:THR:HA	46:OB:403:MET:O	2.15	0.46
45:OE:18:ASN:O	45:OE:22:GLU:HG3	2.16	0.46
45:OE:89:PRO:HD3	45:PE:280:LYS:HE2	1.97	0.46
46:OH:275:SER:O	46:OH:279:GLN:HG3	2.16	0.46
46:OL:275:SER:O	46:OL:279:GLN:HG3	2.15	0.46
46:PD:214:THR:OG1	46:PD:273:LEU:O	2.34	0.46
45:PE:336:LYS:NZ	45:PE:348:PRO:O	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PG:324:VAL:HG12	45:PG:326:LYS:HG2	1.96	0.46
45:PI:310:GLY:HA3	45:PI:383:ALA:HB2	1.96	0.46
45:PI:339:ARG:HD3	45:PI:339:ARG:N	2.30	0.46
46:PL:68:LEU:HB3	46:PL:96:GLY:HA2	1.96	0.46
45:PM:75:ILE:HG21	45:PM:94:SER:HB2	1.98	0.46
45:PM:87:PHE:HD2	45:PM:91:GLN:HE22	1.62	0.46
46:PN:172:SER:HB2	46:PN:380:ARG:HH12	1.81	0.46
45:QC:183:GLU:N	45:QC:184:PRO:HD2	2.30	0.46
46:QH:222:TYR:O	46:QH:226:ASN:ND2	2.29	0.46
45:QI:5:ILE:HD12	45:QI:125:LEU:HD21	1.98	0.46
45:QK:67:PHE:HB2	45:QK:92:LEU:HD13	1.98	0.46
45:QM:339:ARG:O	45:QM:342:GLN:NE2	2.48	0.46
45:RC:153:LEU:O	45:RC:157:LEU:HG	2.15	0.46
46:RH:101:TRP:HB2	46:RH:184:ASN:HB3	1.97	0.46
46:RJ:131:GLN:HE22	46:RJ:250:LEU:H	1.64	0.46
45:RM:60:LYS:NZ	45:RM:85:GLN:O	2.33	0.46
46:RN:30:ILE:HG13	46:RN:51:TYR:HE2	1.80	0.46
46:RN:211:CYS:O	46:RN:216:LYS:N	2.47	0.46
46:SH:132:GLY:HA3	46:SH:163:ILE:HG22	1.96	0.46
46:SH:310:TYR:CD1	46:SH:371:SER:HB2	2.49	0.46
45:SK:386:GLU:O	45:SK:390:ARG:HG3	2.15	0.46
46:SN:282:ARG:NH2	46:SN:292:GLN:OE1	2.48	0.46
46:SN:375:GLN:NE2	46:SN:378:PHE:HB2	2.31	0.46
45:TE:271:SER:HA	45:TE:302:MET:HG2	1.97	0.46
45:TK:132:LEU:HG	45:TK:164:LYS:NZ	2.30	0.46
46:TL:46:ARG:HH22	45:TM:73:THR:HA	1.79	0.46
46:TL:110:ALA:O	46:TL:113:ILE:HG22	2.14	0.46
45:TM:245:ASP:N	45:TM:245:ASP:OD1	2.46	0.46
45:UI:340:THR:HG23	45:UI:341:ILE:HG13	1.97	0.46
45:UM:56:THR:OG1	45:VK:282:TYR:O	2.29	0.46
45:UM:430:LYS:HE2	45:UM:430:LYS:HB2	1.80	0.46
46:UN:289:LEU:HD11	46:UN:363:MET:HG2	1.98	0.46
46:UN:324:LYS:HD2	46:UN:324:LYS:N	2.29	0.46
45:VA:96:LYS:HZ1	46:VB:129:CYS:HB2	1.79	0.46
45:VA:246:GLY:HA2	45:VA:357:TYR:CD1	2.50	0.46
46:VB:330:MET:HB3	46:VB:349:ILE:HG21	1.97	0.46
45:VC:384:ILE:O	45:VC:387:VAL:HG22	2.15	0.46
46:VH:309:ARG:NH2	46:VH:426:GLN:O	2.47	0.46
45:VM:178:SER:O	46:VN:350:LYS:NZ	2.48	0.46
45:VM:414:GLU:OE1	45:VM:416:GLY:N	2.42	0.46
46:VN:49:VAL:HG12	46:VN:50:TYR:HD2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VN:282:ARG:NH1	46:VN:283:ALA:O	2.47	0.46
46:WB:280:GLN:OE1	46:WB:280:GLN:N	2.40	0.46
45:WC:278:ALA:HA	45:WC:369:ALA:HB2	1.98	0.46
45:WK:335:ILE:HA	45:WK:338:LYS:HZ3	1.79	0.46
46:WN:36:TYR:CG	46:WN:44:LEU:HD21	2.50	0.46
4:0D:224:ARG:CZ	34:7R:566:PHE:HB3	2.46	0.46
19:1J:134:HIS:CE1	45:IE:282:TYR:CZ	3.03	0.46
19:1J:201:LYS:O	45:IG:373:ARG:NH2	2.48	0.46
20:1K:238:LYS:HZ2	46:FB:56:GLY:N	2.13	0.46
13:1U:64:SER:HB3	13:1U:110:PHE:CD2	2.51	0.46
27:2C:106:PHE:HA	27:2C:109:LYS:HG2	1.97	0.46
5:2E:83:GLU:HA	5:2E:86:CYS:SG	2.55	0.46
28:2F:16:LYS:O	28:2F:20:GLU:OE1	2.33	0.46
20:2K:431:SER:HA	20:2K:434:ILE:HD13	1.97	0.46
21:2L:330:LYS:NZ	21:2L:335:PRO:O	2.49	0.46
21:2L:698:ARG:HD3	21:2L:698:ARG:HA	1.78	0.46
21:2L:870:ARG:HG3	46:CJ:357:PRO:HG2	1.97	0.46
23:2O:414:ILE:HG22	23:2O:418:GLN:OE1	2.15	0.46
26:2W:238:ASN:O	26:2W:242:LEU:HG	2.16	0.46
16:3B:102:LYS:O	16:3B:105:PHE:N	2.48	0.46
12:3T:71:THR:OG1	12:3T:145:MET:SD	2.71	0.46
13:3U:513:LYS:HZ1	13:3U:528:LEU:HB2	1.81	0.46
14:3V:46:PRO:HG3	45:LA:95:GLY:HA2	1.97	0.46
33:4F:17:LYS:HB2	33:4F:18:PRO:HD3	1.97	0.46
34:4R:311:LYS:HB3	34:4R:327:GLU:HG3	1.97	0.46
35:4S:175:ILE:HG22	35:4S:179:LEU:HD23	1.97	0.46
37:5F:35:LEU:HD21	45:OC:279:GLU:OE2	2.16	0.46
39:6F:124:ARG:O	39:6F:128:THR:N	2.49	0.46
46:AB:65:LEU:HD22	46:AB:90:PHE:HE1	1.81	0.46
46:AD:180:VAL:O	46:AD:180:VAL:HG12	2.15	0.46
45:AE:194:LEU:O	45:AE:198:THR:HG22	2.16	0.46
46:AF:238:CYS:SG	46:AF:318:ARG:HD3	2.56	0.46
46:AJ:226:ASN:HD21	49:AJ:501:GDP:HN1	1.63	0.46
46:AN:221:THR:HG23	46:AN:223:GLY:H	1.81	0.46
46:BB:256:ASN:ND2	46:BB:350:LYS:HE3	2.31	0.46
46:BF:8:GLN:OE1	46:BF:17:GLY:HA3	2.16	0.46
45:CA:31:GLN:HE22	45:CA:37:PRO:HB3	1.80	0.46
46:CD:318:ARG:CZ	46:CD:358:PRO:HG3	2.45	0.46
45:CE:328:VAL:O	45:CE:332:ILE:HG12	2.16	0.46
46:CH:67:ASP:OD2	46:CH:143:THR:HG21	2.14	0.46
46:CJ:144:GLY:N	49:CJ:501:GDP:O1B	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CL:55:THR:HG23	46:DL:283:ALA:HA	1.98	0.46
45:DA:141:VAL:HG11	45:DA:172:TYR:HD1	1.80	0.46
45:DC:386:GLU:HG2	45:DC:390:ARG:NH1	2.25	0.46
46:DF:7:ILE:HG13	46:DF:135:ILE:HG13	1.98	0.46
46:DH:67:ASP:O	46:DH:92:PHE:HA	2.15	0.46
45:DM:10:GLY:O	45:DM:14:ILE:HG12	2.16	0.46
45:EA:82:THR:HA	45:EA:84:ARG:NH1	2.30	0.46
45:EA:212:ILE:HD11	45:EA:300:ASN:HA	1.97	0.46
46:EB:334:GLN:HA	46:EB:341:PHE:HE2	1.81	0.46
45:EI:205:ASP:OD1	45:EI:303:ALA:HA	2.15	0.46
45:EK:223:THR:HG23	45:EK:225:THR:H	1.80	0.46
45:EM:22:GLU:HA	45:EM:25:CYS:HB2	1.96	0.46
46:EN:242:PHE:CD1	46:EN:356:ILE:HG13	2.50	0.46
45:FE:108:TYR:HA	45:FE:112:LYS:HE3	1.97	0.46
46:FF:55:THR:HG23	46:GF:283:ALA:HA	1.97	0.46
45:FK:322:ASP:OD1	45:FK:373:ARG:NH1	2.48	0.46
45:GA:100:ALA:HB1	46:GB:252:LYS:HA	1.97	0.46
46:GB:345:ILE:O	46:GB:345:ILE:HG13	2.16	0.46
45:GC:210:TYR:CE1	45:GC:227:LEU:HD11	2.50	0.46
45:GC:426:ALA:O	45:GC:430:LYS:HG2	2.15	0.46
46:GD:206:ALA:O	46:GD:210:ILE:HD12	2.15	0.46
46:GD:218:THR:HG23	46:GD:219:THR:HG23	1.98	0.46
45:GE:89:PRO:HG2	45:HE:280:LYS:HB3	1.98	0.46
45:GI:215:ARG:NH2	45:GI:300:ASN:OD1	2.45	0.46
46:GJ:7:ILE:HD12	46:GJ:151:LEU:HD21	1.98	0.46
45:HA:90:GLU:HG3	45:HA:121:ARG:HH12	1.80	0.46
46:HB:205:GLU:O	46:HB:209:ASP:N	2.40	0.46
46:HB:299:MET:HG3	46:HB:305:PRO:HG3	1.97	0.46
46:HD:345:ILE:O	46:HD:345:ILE:HG13	2.16	0.46
46:HF:122:LYS:HE2	46:IF:291:GLN:HE22	1.80	0.46
46:ID:101:TRP:HB2	46:ID:184:ASN:HB3	1.97	0.46
45:IE:183:GLU:N	45:IE:184:PRO:HD2	2.30	0.46
46:IH:113:ILE:HG12	46:IH:117:LEU:HG	1.98	0.46
46:IH:372:THR:HA	46:IH:422:TYR:CE2	2.47	0.46
46:IN:52:ASN:OD1	46:IN:62:ARG:NH2	2.48	0.46
46:JB:282:ARG:HH21	46:JB:288:GLU:CD	2.19	0.46
46:JD:256:ASN:O	46:JD:312:THR:HG21	2.15	0.46
45:JI:141:VAL:HG12	45:JI:187:SER:HA	1.98	0.46
45:JI:258:ASN:OD1	46:JL:179:VAL:HG22	2.15	0.46
45:JM:340:THR:HG23	45:JM:341:ILE:HD12	1.96	0.46
46:JN:103:LYS:HB3	46:JN:103:LYS:HE3	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KC:326:LYS:HE2	46:KF:219:THR:HA	1.97	0.46
45:LA:407:TRP:CH2	46:LB:255:VAL:HA	2.51	0.46
45:LA:407:TRP:CZ3	46:LB:255:VAL:HA	2.50	0.46
45:LC:183:GLU:N	45:LC:184:PRO:HD2	2.31	0.46
45:LG:300:ASN:O	45:LG:300:ASN:ND2	2.43	0.46
45:LI:69:ASP:OD1	45:LI:70:LEU:N	2.48	0.46
46:MB:139:LEU:HA	46:MB:145:SER:HB3	1.97	0.46
46:MF:105:HIS:CE1	46:MF:150:LEU:HD12	2.50	0.46
45:MG:183:GLU:N	45:MG:184:PRO:HD2	2.31	0.46
46:ML:31:ASP:OD1	46:ML:35:THR:N	2.39	0.46
45:MM:427:ALA:O	45:MM:430:LYS:HB3	2.15	0.46
46:ND:111:GLU:OE1	46:ND:111:GLU:N	2.44	0.46
46:NF:237:THR:HG22	46:NF:250:LEU:HD21	1.97	0.46
45:NM:24:PHE:HA	45:NM:27:GLU:HG2	1.98	0.46
46:OB:310:TYR:CD1	46:OB:371:SER:HB3	2.51	0.46
45:OC:88:HIS:CD2	45:OC:90:GLU:HB2	2.50	0.46
45:OC:179:THR:HG21	46:OD:246:LEU:HD13	1.98	0.46
46:OD:150:LEU:O	46:OD:154:LYS:HG2	2.15	0.46
45:OE:257:THR:HA	46:OH:397:TRP:CZ3	2.49	0.46
46:OF:113:ILE:HG12	46:OF:117:LEU:HD23	1.98	0.46
46:OJ:248:SER:HB2	46:OJ:252:LYS:HD2	1.98	0.46
45:OM:80:THR:O	45:OM:84:ARG:NH2	2.48	0.46
45:PA:166:LYS:HD2	45:PA:198:THR:HA	1.96	0.46
45:PA:191:THR:HA	45:PA:194:LEU:HG	1.97	0.46
45:PA:318:MET:HB3	45:PA:376:CYS:SG	2.56	0.46
45:PC:88:HIS:HD2	45:PC:90:GLU:HG2	1.80	0.46
45:PC:356:ASN:OD1	45:PC:357:TYR:N	2.48	0.46
46:PD:156:ARG:NH1	46:PD:162:ARG:O	2.49	0.46
45:QA:294:SER:O	45:QA:297:GLU:HG2	2.16	0.46
45:QC:202:VAL:HA	45:QC:268:MET:HB3	1.97	0.46
46:QD:177:ASP:N	46:QD:177:ASP:OD1	2.48	0.46
45:QK:188:ILE:HD12	45:QK:425:LEU:HD11	1.98	0.46
46:QL:64:ILE:HA	46:QL:89:ASN:HB3	1.96	0.46
46:QL:65:LEU:HD22	46:QL:90:PHE:CE1	2.50	0.46
46:QL:324:LYS:HE3	45:QM:222:PRO:HG2	1.96	0.46
45:QM:88:HIS:CG	45:QM:89:PRO:HD2	2.51	0.46
46:RB:132:GLY:HA3	46:RB:163:ILE:O	2.15	0.46
45:RK:408:TYR:HB3	45:RK:413:MET:SD	2.56	0.46
45:RM:183:GLU:N	45:RM:184:PRO:HD2	2.30	0.46
46:SD:324:LYS:HZ3	45:SE:210:TYR:HB3	1.80	0.46
45:SG:422:ARG:HA	45:SG:422:ARG:NE	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TA:212:ILE:HD11	45:TA:300:ASN:HA	1.98	0.46
46:TB:310:TYR:HD1	46:TB:371:SER:HB2	1.79	0.46
45:TI:76:ASP:HB3	45:TI:79:ARG:HH21	1.81	0.46
45:TI:163:LYS:HE2	45:TI:163:LYS:HA	1.98	0.46
45:TK:174:SER:HB2	45:TK:177:VAL:O	2.16	0.46
45:UE:3:GLU:HG3	45:UE:129:CYS:SG	2.55	0.46
45:UM:169:PHE:CE2	45:UM:235:ILE:HD12	2.51	0.46
46:VB:105:HIS:CE1	46:VB:150:LEU:HB3	2.51	0.46
45:VC:205:ASP:OD1	45:VC:303:ALA:HA	2.15	0.46
46:VF:2:ARG:HE	46:VF:240:LEU:HG	1.80	0.46
46:VF:55:THR:HG23	46:WF:283:ALA:HA	1.97	0.46
46:WJ:141:GLY:HA3	49:WJ:501:GDP:PB	2.56	0.46
14:OV:96:ASN:HD21	46:LN:262:ARG:HB2	1.79	0.46
7:IG:121:SER:HA	46:JB:362:LYS:HE3	1.98	0.46
21:1L:412:HIS:NE2	45:CG:221:ARG:HG3	2.31	0.46
24:1P:200:LEU:HB3	46:TH:276:ARG:NH1	2.29	0.46
13:1U:486:CYS:HG	13:1U:488:PHE:HE1	1.63	0.46
14:1V:41:HIS:ND1	14:1V:42:THR:HG23	2.31	0.46
15:1X:49:ILE:HD11	45:ME:282:TYR:HD2	1.81	0.46
1:2A:111:SER:OG	46:AJ:276:ARG:NH2	2.48	0.46
28:2F:56:HIS:HB2	45:GC:2:ARG:HH22	1.80	0.46
20:2K:447:GLU:O	20:2K:451:ILE:HG12	2.16	0.46
21:2L:357:ILE:HD12	21:2L:365:VAL:HG13	1.98	0.46
22:2M:97:LYS:NZ	22:2M:204:HIS:HB2	2.30	0.46
23:2O:364:LYS:O	23:2O:368:GLU:HG2	2.16	0.46
14:2V:161:TYR:HA	14:2V:162:GLY:HA2	1.64	0.46
5:3E:25:ARG:HH11	5:3E:25:ARG:HG3	1.79	0.46
21:3L:204:LYS:HE3	21:3L:204:LYS:HB3	1.67	0.46
25:3R:72:HIS:NE2	45:MK:77:GLU:OE2	2.49	0.46
12:3T:73:GLU:HG3	12:3T:129:ILE:HG22	1.97	0.46
14:3V:69:SER:OG	46:MB:336:LYS:HB3	2.16	0.46
15:4X:46:LYS:O	15:4X:50:GLU:HG3	2.15	0.46
36:5D:75:TYR:CE1	46:NN:320:ARG:HD3	2.51	0.46
37:5F:44:ARG:NH2	45:NC:57:GLY:HA2	2.31	0.46
40:6G:188:LEU:HD23	40:6G:188:LEU:H	1.79	0.46
34:7R:430:LEU:HA	34:7R:503:PHE:HA	1.98	0.46
46:AD:289:LEU:HD13	46:AD:365:VAL:HG23	1.96	0.46
46:AN:11:GLN:O	46:AN:15:GLN:HG2	2.16	0.46
45:BE:35:GLN:HA	45:BE:60:LYS:HA	1.97	0.46
46:BH:11:GLN:O	46:BH:15:GLN:HG2	2.16	0.46
46:BH:398:TYR:O	46:BH:403:MET:HB2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BK:55:GLU:HG3	45:BK:57:GLY:H	1.80	0.46
45:BM:174:SER:HB2	45:BM:177:VAL:O	2.15	0.46
45:CA:109:THR:HG22	45:CA:110:ILE:HG23	1.96	0.46
45:CA:271:SER:HB2	45:CA:377:MET:HB3	1.98	0.46
46:CD:12:CYS:SG	46:CD:169:VAL:HG21	2.55	0.46
45:CG:196:GLU:HG3	45:CG:197:HIS:ND1	2.31	0.46
45:CG:350:GLY:HA2	46:CH:179:VAL:HG12	1.97	0.46
45:CM:205:ASP:OD1	45:CM:303:ALA:HA	2.16	0.46
45:DC:25:CYS:SG	45:DC:30:ILE:HG13	2.56	0.46
46:DD:136:THR:HG22	46:DD:167:PHE:HB2	1.98	0.46
46:DD:418:LEU:O	46:DD:422:TYR:HB2	2.16	0.46
46:DJ:36:TYR:HB2	46:DJ:59:TYR:HE2	1.81	0.46
46:DL:116:VAL:O	46:DL:120:VAL:HG13	2.16	0.46
45:DM:68:LEU:HD21	45:DM:118:CYS:HB2	1.97	0.46
46:EB:238:CYS:SG	46:EB:239:CYS:N	2.89	0.46
45:EG:244:PHE:HB2	45:EG:356:ASN:HD21	1.80	0.46
45:EM:74:VAL:HA	45:EM:77:GLU:OE2	2.14	0.46
45:EM:183:GLU:N	45:EM:184:PRO:HD2	2.30	0.46
45:FA:222:PRO:HG2	46:FB:324:LYS:HE2	1.98	0.46
45:FA:423:GLU:HA	45:FA:426:ALA:HB3	1.97	0.46
46:FB:46:ARG:HD3	46:FB:46:ARG:HA	1.74	0.46
46:FB:139:LEU:HD13	46:FB:168:SER:HB3	1.97	0.46
45:FE:183:GLU:N	45:FE:184:PRO:HD2	2.31	0.46
45:FK:256:GLN:HB3	46:FN:397:TRP:CZ2	2.50	0.46
46:GB:280:GLN:N	46:GB:280:GLN:OE1	2.49	0.46
45:GE:326:LYS:HZ3	46:GH:219:THR:HA	1.79	0.46
45:GK:297:GLU:HG2	45:GK:299:ALA:H	1.80	0.46
45:HA:269:LEU:HD11	45:HA:384:ILE:HD13	1.97	0.46
46:HB:52:ASN:HD22	46:HB:62:ARG:HB3	1.81	0.46
46:HB:371:SER:O	46:HB:422:TYR:OH	2.34	0.46
45:HC:3:GLU:N	45:HC:3:GLU:OE1	2.49	0.46
46:HH:86:ARG:NH2	46:HH:88:ASP:OD2	2.36	0.46
46:HJ:396:HIS:HA	46:HJ:399:THR:OG1	2.15	0.46
45:HK:205:ASP:OD1	45:HK:303:ALA:HA	2.16	0.46
45:HM:21:TRP:CD1	45:HM:87:PHE:HZ	2.34	0.46
46:HN:133:PHE:HB2	46:HN:164:MET:HG3	1.96	0.46
45:IC:147:SER:HB2	45:IC:190:SER:OG	2.15	0.46
46:IF:334:GLN:HE22	46:IF:348:ASN:H	1.62	0.46
45:JA:103:PHE:HB2	45:JA:186:ASN:HB3	1.97	0.46
46:JB:292:GLN:NE2	46:JB:298:ASN:OD1	2.45	0.46
45:JC:88:HIS:CE1	45:JC:90:GLU:HG2	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JI:335:ILE:HD13	45:JI:338:LYS:NZ	2.30	0.46
46:JL:31:ASP:OD1	46:JL:35:THR:N	2.41	0.46
45:KA:210:TYR:HB3	46:KB:324:LYS:HZ3	1.81	0.46
46:LD:107:THR:OG1	46:LD:108:GLU:OE1	2.22	0.46
46:LH:73:MET:CE	46:LH:92:PHE:HB3	2.46	0.46
46:LH:374:ILE:HG22	46:LH:422:TYR:CE2	2.50	0.46
45:LM:387:VAL:HG12	45:LM:390:ARG:NH2	2.31	0.46
46:LN:177:ASP:OD2	49:LN:501:GDP:O3'	2.23	0.46
46:LN:323:THR:HA	46:LN:326:VAL:HG12	1.98	0.46
45:MC:147:SER:HB2	45:MC:190:SER:HB3	1.98	0.46
45:MI:2:ARG:HD3	45:MI:242:LEU:HD22	1.96	0.46
45:MK:75:ILE:HG22	45:MK:79:ARG:NE	2.30	0.46
45:MM:90:GLU:OE2	45:MM:121:ARG:NH2	2.49	0.46
45:MM:91:GLN:NE2	45:MM:125:LEU:HD21	2.31	0.46
46:NB:222:TYR:O	46:NB:226:ASN:ND2	2.48	0.46
45:NC:71:GLU:OE1	46:ND:247:ASN:ND2	2.49	0.46
45:NC:259:LEU:HD11	45:NC:316:SER:HB2	1.96	0.46
46:ND:344:TRP:HB3	46:ND:430:ALA:HB2	1.97	0.46
45:OA:313:MET:HG3	45:OA:381:SER:HA	1.96	0.46
46:OD:282:ARG:HH22	46:OD:288:GLU:HB3	1.80	0.46
45:PG:301:MET:HE3	45:PG:307:PRO:HG3	1.96	0.46
45:PI:245:ASP:OD1	45:PI:245:ASP:N	2.47	0.46
45:PI:278:ALA:HA	45:PI:369:ALA:HB2	1.97	0.46
45:PK:96:LYS:HE2	45:PK:96:LYS:HA	1.97	0.46
45:PK:287:SER:OG	45:PK:288:VAL:N	2.49	0.46
46:PL:105:HIS:CD2	46:PL:150:LEU:HB2	2.50	0.46
45:QG:384:ILE:O	45:QG:387:VAL:HG22	2.15	0.46
45:QI:70:LEU:HD23	45:QI:145:THR:OG1	2.16	0.46
45:QI:174:SER:HB3	45:QI:177:VAL:O	2.14	0.46
46:QJ:86:ARG:HG3	46:QJ:88:ASP:H	1.81	0.46
46:QJ:372:THR:HA	46:QJ:422:TYR:CE2	2.51	0.46
45:QK:183:GLU:N	45:QK:184:PRO:HD2	2.31	0.46
46:QL:114:ASP:OD1	46:QL:115:SER:N	2.48	0.46
46:RB:87:PRO:HA	46:RB:90:PHE:HD2	1.80	0.46
45:RE:90:GLU:OE1	45:SE:280:LYS:NZ	2.37	0.46
46:RF:67:ASP:OD1	46:RF:68:LEU:N	2.49	0.46
45:RM:311:LYS:N	45:RM:382:THR:OG1	2.47	0.46
46:RN:318:ARG:HH11	46:RN:358:PRO:HG3	1.80	0.46
46:SD:44:LEU:O	46:SD:44:LEU:HD23	2.16	0.46
46:SD:74:ASP:OD1	46:SD:75:SER:N	2.49	0.46
46:SD:313:ALA:HB3	46:SD:349:ILE:HG23	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SG:155:GLU:HA	45:SG:197:HIS:CD2	2.51	0.46
46:SH:139:LEU:HA	46:SH:145:SER:HB3	1.97	0.46
45:SK:206:ASN:OD1	47:SK:501:GTP:N2	2.48	0.46
46:SL:162:ARG:HG3	46:SL:163:ILE:H	1.80	0.46
45:SM:164:LYS:HD3	45:SM:165:SER:H	1.79	0.46
45:SM:329:ASN:HA	45:SM:332:ILE:HG12	1.98	0.46
45:TA:121:ARG:HA	45:TA:121:ARG:HH11	1.80	0.46
46:TH:132:GLY:HA3	46:TH:163:ILE:HG22	1.98	0.46
46:TH:200:MET:SD	46:TH:268:ILE:HD13	2.56	0.46
46:TJ:287:PRO:HA	46:TJ:290:THR:HG22	1.97	0.46
46:TL:383:GLU:HA	46:TL:386:THR:HG22	1.98	0.46
45:TM:103:PHE:H	45:TM:408:TYR:HE2	1.63	0.46
45:TM:387:VAL:O	45:TM:391:LEU:HG	2.16	0.46
45:UA:244:PHE:HB2	45:UA:356:ASN:HD21	1.80	0.46
45:UI:8:HIS:CE1	45:UI:17:GLY:HA3	2.50	0.46
45:UK:175:PRO:HG3	45:UK:390:ARG:CZ	2.46	0.46
45:UM:384:ILE:O	45:UM:387:VAL:HG22	2.16	0.46
46:VD:173:PRO:HD2	46:VD:380:ARG:NH2	2.31	0.46
45:VK:133:GLN:HB2	45:VK:252:ILE:HD11	1.98	0.46
45:VK:271:SER:HB2	45:VK:377:MET:HB3	1.97	0.46
46:VN:267:MET:SD	46:VN:267:MET:N	2.88	0.46
46:VN:385:PHE:CE2	46:VN:412:GLU:HB3	2.50	0.46
46:WD:238:CYS:HB2	46:WD:318:ARG:NH1	2.30	0.46
45:WE:288:VAL:HA	45:WE:291:ILE:HG12	1.98	0.46
45:WG:322:ASP:OD1	45:WG:373:ARG:NH1	2.46	0.46
45:WK:245:ASP:OD1	45:WK:246:GLY:N	2.49	0.46
45:WM:241:SER:OG	45:WM:250:VAL:O	2.30	0.46
45:WM:280:LYS:HD3	45:WM:283:HIS:HB2	1.97	0.46
10:1Q:4:ASN:HD22	11:1S:44:LYS:H	1.64	0.46
13:1U:365:CYS:HB3	13:1U:381:TRP:CD2	2.51	0.46
4:2D:6:ARG:HH12	46:CJ:45:GLU:HA	1.80	0.46
20:2K:375:VAL:HA	45:GG:370:LYS:NZ	2.31	0.46
21:2L:830:ALA:O	34:5R:100:GLN:NE2	2.40	0.46
26:2W:189:ARG:NH1	45:KM:47:ASP:H	2.13	0.46
5:3E:46:ASP:HB3	34:6R:379:LYS:HG3	1.98	0.46
23:3O:288:LYS:HZ1	23:3O:292:TYR:HE2	1.61	0.46
23:3O:373:ARG:O	23:3O:377:GLN:HG2	2.16	0.46
10:3Q:51:GLY:HA3	10:3Q:57:ASN:HD22	1.80	0.46
11:3S:135:ARG:NH2	11:3S:180:GLU:OE1	2.49	0.46
12:3T:219:GLU:O	12:3T:223:ARG:HG2	2.16	0.46
13:3U:119:SER:OG	13:3U:132:TRP:NE1	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:3V:105:LYS:O	14:3V:107:ALA:N	2.46	0.46
36:5C:45:TYR:CZ	36:5C:56:ILE:HG13	2.51	0.46
41:6H:306:LYS:HA	41:6H:306:LYS:HD2	1.68	0.46
10:6Q:70:GLY:HA2	10:6Q:150:GLU:OE1	2.16	0.46
34:6R:37:VAL:HG22	46:MN:213:ARG:HH12	1.80	0.46
34:6R:229:ASN:OD1	34:6R:230:GLU:N	2.49	0.46
34:6R:278:TYR:HD1	34:6R:285:THR:HB	1.81	0.46
34:7R:398:LEU:HB3	34:7R:402:TYR:CZ	2.51	0.46
45:AC:326:LYS:NZ	46:AF:212:PHE:HB2	2.31	0.46
45:AG:11:GLN:NE2	46:AH:247:ASN:OD1	2.49	0.46
45:AG:192:HIS:ND1	45:AG:424:ASP:OD2	2.48	0.46
46:AN:201:VAL:O	46:AN:202:ILE:HD13	2.16	0.46
46:BB:375:GLN:HE21	46:BB:422:TYR:HD2	1.64	0.46
46:BF:113:ILE:HA	46:BF:116:VAL:HG12	1.97	0.46
45:BG:305:CYS:SG	45:BG:306:ASP:N	2.89	0.46
46:BN:52:ASN:N	46:BN:60:VAL:O	2.34	0.46
45:CA:14:ILE:HD11	45:CA:69:ASP:HB2	1.97	0.46
46:CB:318:ARG:NH1	46:CB:358:PRO:HG3	2.30	0.46
45:CC:167:LEU:HG	45:CC:200:VAL:HB	1.97	0.46
46:CD:328:GLU:OE1	46:CD:332:ASN:ND2	2.49	0.46
45:CE:301:MET:CE	45:CE:307:PRO:HG3	2.46	0.46
45:CK:346:TRP:CD1	46:CL:391:ARG:HG3	2.50	0.46
45:CM:118:CYS:SG	45:CM:153:LEU:HD11	2.56	0.46
45:DA:88:HIS:HB3	45:DA:91:GLN:HG2	1.98	0.46
45:DA:250:VAL:HG13	45:DA:254:GLU:HB2	1.98	0.46
46:DB:193:VAL:HG23	46:DB:264:HIS:HE1	1.80	0.46
46:DD:63:ALA:O	46:DD:89:ASN:ND2	2.48	0.46
45:DM:269:LEU:HD23	45:DM:301:MET:SD	2.56	0.46
46:DN:299:MET:SD	46:DN:301:CYS:N	2.89	0.46
45:EA:288:VAL:HA	45:EA:291:ILE:HG12	1.97	0.46
46:EB:187:LEU:HD21	46:EB:408:PHE:HD1	1.80	0.46
46:EF:309:ARG:NH1	46:EF:426:GLN:O	2.49	0.46
45:EK:297:GLU:OE2	45:EK:298:PRO:HD2	2.16	0.46
45:FC:430:LYS:O	45:FC:433:GLU:HG3	2.16	0.46
45:FE:345:ASP:OD1	45:FE:346:TRP:N	2.49	0.46
45:FM:210:TYR:CZ	45:FM:227:LEU:HD11	2.50	0.46
46:FN:67:ASP:OD1	46:FN:68:LEU:N	2.46	0.46
45:GA:188:ILE:HG12	45:GA:421:ALA:HB1	1.98	0.46
46:GF:217:LEU:H	46:GF:217:LEU:HD23	1.81	0.46
46:GH:198:GLU:HG2	46:GH:266:PHE:HE2	1.80	0.46
45:GM:31:GLN:HB2	45:GM:32:PRO:HD2	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GN:3:GLU:OE2	46:GN:127:CYS:HB2	2.15	0.46
45:HA:69:ASP:OD1	45:HA:70:LEU:N	2.48	0.46
46:HL:423:GLN:NE2	46:HL:427:ASP:OD2	2.48	0.46
45:HM:297:GLU:OE1	45:HM:300:ASN:ND2	2.48	0.46
45:IA:118:CYS:O	45:IA:122:ILE:HG12	2.15	0.46
45:IA:349:THR:OG1	46:ID:176:SER:OG	2.17	0.46
45:IC:120:ASP:OD1	45:IC:124:LYS:NZ	2.48	0.46
45:IE:239:THR:HG23	45:IE:242:LEU:HD12	1.97	0.46
46:IJ:145:SER:OG	46:IJ:188:SER:HB2	2.16	0.46
46:IJ:238:CYS:SG	46:IJ:239:CYS:N	2.89	0.46
45:IK:311:LYS:NZ	45:IK:342:GLN:HG3	2.31	0.46
46:IN:385:PHE:HE2	46:IN:412:GLU:HB2	1.80	0.46
45:JA:210:TYR:CE1	45:JA:227:LEU:HD21	2.50	0.46
45:JA:211:ASP:OD1	45:JA:212:ILE:N	2.48	0.46
45:JE:119:LEU:HD11	45:JE:156:ARG:HB3	1.98	0.46
45:JG:345:ASP:OD1	45:JG:345:ASP:N	2.49	0.46
46:JH:268:ILE:HG13	46:JH:300:MET:HG3	1.96	0.46
46:KD:376:GLU:HA	46:KD:379:LYS:HD3	1.98	0.46
45:KE:147:SER:HB2	45:KE:190:SER:HB3	1.97	0.46
46:KJ:374:ILE:O	46:KJ:377:MET:HG3	2.14	0.46
45:LA:75:ILE:HG21	45:LA:94:SER:HB2	1.98	0.46
45:LA:325:PRO:HA	45:LA:328:VAL:HG12	1.97	0.46
46:LB:375:GLN:HB3	46:LB:422:TYR:CD2	2.51	0.46
45:LK:55:GLU:HG3	45:LK:57:GLY:H	1.80	0.46
46:LN:334:GLN:HE22	46:LN:348:ASN:H	1.62	0.46
46:MD:41:ASP:O	46:MD:45:GLU:N	2.49	0.46
45:MI:75:ILE:CG2	45:MI:79:ARG:HH21	2.29	0.46
45:NC:326:LYS:HG3	45:NC:327:ASP:N	2.30	0.46
46:NN:117:LEU:HA	46:NN:120:VAL:HG12	1.96	0.46
45:OA:206:ASN:O	45:OA:209:ILE:HG22	2.16	0.46
46:OB:298:ASN:O	46:OB:298:ASN:ND2	2.47	0.46
46:OJ:113:ILE:HG12	46:OJ:117:LEU:HD23	1.97	0.46
46:OJ:238:CYS:SG	46:OJ:239:CYS:N	2.88	0.46
46:PH:319:GLY:HA2	46:PH:357:PRO:HG3	1.98	0.46
45:PI:174:SER:HB2	45:PI:177:VAL:O	2.15	0.46
45:PK:424:ASP:OD1	45:PK:425:LEU:N	2.47	0.46
46:QB:199:CYS:O	46:QB:266:PHE:N	2.46	0.46
45:QG:11:GLN:HG2	45:QG:74:VAL:HG21	1.98	0.46
45:QI:310:GLY:HA3	45:QI:383:ALA:HB2	1.98	0.46
46:QL:2:ARG:NH2	45:QM:71:GLU:OE2	2.48	0.46
45:QM:224:TYR:HA	45:QM:227:LEU:HD12	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QM:408:TYR:HD2	45:QM:418:PHE:HZ	1.63	0.46
46:RB:127:CYS:SG	46:RB:130:LEU:HB2	2.56	0.46
46:RD:347:ASN:O	45:RE:181:VAL:HG12	2.16	0.46
45:RG:160:ASP:OD2	45:RG:161:TYR:N	2.46	0.46
45:RG:404:PHE:HD1	45:RG:407:TRP:HZ3	1.62	0.46
46:RH:135:ILE:HD13	46:RH:152:ILE:HD11	1.98	0.46
45:RI:259:LEU:HD11	45:RI:316:SER:HB3	1.97	0.46
45:RM:50:ASN:O	45:RM:64:ARG:NH2	2.49	0.46
45:RM:319:TYR:HE1	45:RM:375:VAL:HG23	1.81	0.46
46:SH:319:GLY:N	46:SH:354:CYS:O	2.44	0.46
45:SI:120:ASP:O	45:SI:124:LYS:HG2	2.16	0.46
46:SJ:324:LYS:HE3	45:SK:210:TYR:HD2	1.81	0.46
45:SK:102:ASN:HD21	45:SK:411:GLU:HG3	1.80	0.46
46:SL:143:THR:O	46:SL:147:MET:HG2	2.15	0.46
45:TE:224:TYR:HD1	45:TE:227:LEU:HD12	1.79	0.46
46:TF:105:HIS:CE1	46:TF:150:LEU:HD12	2.50	0.46
46:UB:4:ILE:HD11	46:UB:50:TYR:HE1	1.79	0.46
46:UB:4:ILE:HG22	46:UB:131:GLN:HB2	1.97	0.46
45:UC:205:ASP:OD1	45:UC:303:ALA:HA	2.16	0.46
45:UC:356:ASN:OD1	45:UC:357:TYR:N	2.48	0.46
46:UD:299:MET:HE3	46:UD:300:MET:H	1.80	0.46
46:UF:342:VAL:HG13	46:UF:345:ILE:HG22	1.98	0.46
45:UM:9:VAL:HG23	45:UM:68:LEU:HD22	1.98	0.46
45:UM:271:SER:HB2	45:UM:301:MET:HA	1.97	0.46
45:VC:262:TYR:HB2	45:VC:265:ILE:HD12	1.97	0.46
46:VF:217:LEU:HD23	46:VF:217:LEU:H	1.80	0.46
45:VG:224:TYR:HE2	46:VH:246:LEU:HD11	1.80	0.46
45:VI:88:HIS:CE1	45:VI:90:GLU:HG3	2.51	0.46
45:VI:167:LEU:HD22	45:VI:200:VAL:HB	1.98	0.46
45:VI:395:PHE:HZ	45:VI:418:PHE:HB3	1.80	0.46
45:WA:214:ARG:HH22	46:WB:324:LYS:HZ2	1.63	0.46
46:WN:173:PRO:HD2	46:WN:380:ARG:CZ	2.45	0.46
6:0F:192:THR:OG1	45:EE:76:ASP:OD2	2.26	0.46
4:2D:93:GLN:HE21	4:2D:96:VAL:HG22	1.80	0.46
9:2N:193:ARG:NH2	9:2N:266:GLN:HE22	2.12	0.46
23:2O:173:GLU:O	23:2O:177:LYS:HG2	2.16	0.46
23:2O:195:GLN:O	23:2O:199:LYS:HG2	2.16	0.46
12:2T:168:HIS:O	12:2T:172:ILE:HG12	2.16	0.46
16:3B:21:LYS:HG3	16:3B:57:GLY:HA3	1.98	0.46
21:3L:72:MET:HE2	21:3L:72:MET:HB2	1.79	0.46
13:3U:348:ASN:HB3	13:3U:351:ASN:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:3U:418:GLN:O	13:3U:434:ILE:N	2.48	0.46
27:4C:104:ALA:HA	27:4C:107:VAL:HG12	1.98	0.46
36:5A:45:TYR:CE2	36:5A:56:ILE:HD13	2.51	0.46
36:5D:66:TYR:OH	46:NN:26:ASP:OD1	2.34	0.46
37:5E:95:ASP:OD1	37:5E:96:TYR:N	2.48	0.46
34:7R:235:LYS:HA	46:CB:212:PHE:HZ	1.81	0.46
46:AB:27:GLU:HA	46:AB:359:LYS:NZ	2.31	0.46
46:AD:6:HIS:HE2	46:AD:8:GLN:HB3	1.80	0.46
46:AD:392:LYS:HD2	46:AD:395:LEU:HD22	1.97	0.46
46:AJ:404:ASP:OD1	46:AJ:404:ASP:N	2.49	0.46
46:AN:170:VAL:HG11	46:AN:377:MET:SD	2.56	0.46
46:AN:376:GLU:HG3	46:AN:380:ARG:NH1	2.31	0.46
45:BA:117:LEU:O	45:BA:121:ARG:HG2	2.16	0.46
46:BF:189:VAL:HG11	46:BF:415:MET:CE	2.46	0.46
45:BI:177:VAL:HG13	46:BJ:327:ASP:HB3	1.97	0.46
45:CC:252:ILE:HA	45:CC:255:PHE:CD1	2.51	0.46
45:CE:21:TRP:CZ3	45:CE:63:PRO:HB3	2.51	0.46
45:CE:422:ARG:NH1	45:CE:426:ALA:HB2	2.30	0.46
46:CF:246:LEU:HD13	46:CF:353:ILE:HD13	1.97	0.46
45:CI:199:ASP:OD1	45:CI:200:VAL:HG23	2.16	0.46
45:CK:10:GLY:O	45:CK:14:ILE:HG12	2.16	0.46
46:CN:221:THR:HG23	46:CN:224:ASP:H	1.81	0.46
46:DB:21:TRP:HZ3	46:DB:50:TYR:HB3	1.81	0.46
45:DC:339:ARG:HA	45:DC:339:ARG:CZ	2.45	0.46
46:DD:20:PHE:HA	46:DD:230:SER:OG	2.16	0.46
45:DI:392:ASP:OD1	45:DI:422:ARG:NE	2.48	0.46
45:DK:115:VAL:HG11	45:DK:152:LEU:HD23	1.96	0.46
45:DK:349:THR:O	46:DL:179:VAL:HG23	2.15	0.46
46:DN:237:THR:O	46:DN:241:ARG:HD3	2.15	0.46
45:EA:328:VAL:O	45:EA:332:ILE:HG12	2.16	0.46
46:EH:10:GLY:O	46:EH:14:ASN:ND2	2.48	0.46
46:EL:68:LEU:HD12	46:EL:97:ALA:HB2	1.98	0.46
45:FA:320:ARG:HG3	45:FA:360:PRO:HG3	1.98	0.46
45:FE:203:MET:HA	45:FE:203:MET:HE3	1.97	0.46
46:FH:345:ILE:O	46:FH:345:ILE:HG23	2.16	0.46
45:FM:183:GLU:N	45:FM:184:PRO:HD2	2.31	0.46
45:GA:209:ILE:HD12	45:GA:227:LEU:HD22	1.97	0.46
45:GA:340:THR:HG23	45:GA:341:ILE:HG13	1.98	0.46
46:GD:372:THR:HG21	46:GD:426:GLN:HB2	1.97	0.46
46:GF:7:ILE:HD12	46:GF:151:LEU:HD21	1.97	0.46
46:GH:169:VAL:HG22	46:GH:202:ILE:HB	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GL:39:ASP:OD1	46:GL:40:SER:N	2.49	0.46
45:GM:136:LEU:HD23	45:GM:167:LEU:HB2	1.98	0.46
45:HA:256:GLN:CD	45:HA:256:GLN:H	2.19	0.46
45:HG:224:TYR:HE2	46:HH:246:LEU:HD11	1.81	0.46
45:HI:47:ASP:OD1	45:HI:47:ASP:N	2.49	0.46
45:HK:155:GLU:HG2	45:HK:197:HIS:CD2	2.50	0.46
45:HK:230:LEU:HD11	45:HK:275:ILE:HD13	1.98	0.46
45:HM:182:VAL:HG12	45:HM:182:VAL:O	2.15	0.46
45:IA:174:SER:HB2	45:IA:177:VAL:O	2.15	0.46
45:IA:317:MET:HA	45:IA:377:MET:HA	1.98	0.46
46:IF:48:ASN:O	46:IF:62:ARG:NH1	2.49	0.46
45:IK:296:PHE:HE1	45:IK:377:MET:SD	2.39	0.46
46:IL:64:ILE:HD11	46:IL:123:GLU:HG3	1.97	0.46
46:IL:167:PHE:CE2	46:IL:233:MET:HG2	2.51	0.46
46:IN:7:ILE:HG13	46:IN:135:ILE:HG12	1.97	0.46
45:JC:188:ILE:HD12	45:JC:425:LEU:HD22	1.96	0.46
45:JC:278:ALA:HA	45:JC:369:ALA:HB2	1.97	0.46
45:JG:259:LEU:HD23	45:JG:268:MET:SD	2.56	0.46
45:JG:384:ILE:O	45:JG:387:VAL:HG22	2.16	0.46
45:JI:88:HIS:HB3	45:JI:91:GLN:HG2	1.98	0.46
45:JM:199:ASP:OD1	45:JM:200:VAL:N	2.49	0.46
45:KA:386:GLU:OE2	45:KA:390:ARG:NH2	2.42	0.46
45:KC:177:VAL:HG21	46:KD:327:ASP:HB3	1.97	0.46
46:KD:248:SER:HA	46:KD:252:LYS:HD2	1.98	0.46
45:KE:183:GLU:N	45:KE:184:PRO:HD2	2.31	0.46
45:KE:217:LEU:HD13	45:KE:367:ASP:HB3	1.98	0.46
46:KL:54:ALA:HA	46:LL:283:ALA:HB2	1.97	0.46
46:KN:77:ARG:NH1	46:KN:82:GLY:O	2.48	0.46
46:LD:374:ILE:O	46:LD:377:MET:HG2	2.16	0.46
46:LD:421:GLU:HG3	46:LD:424:GLN:HG3	1.97	0.46
46:LL:73:MET:HE3	46:LL:92:PHE:HB3	1.98	0.46
46:MF:66:MET:HE1	46:MF:147:MET:HG2	1.98	0.46
45:MM:387:VAL:HA	45:MM:390:ARG:HG2	1.96	0.46
45:NE:19:ALA:HA	45:NE:22:GLU:HG2	1.98	0.46
46:NL:372:THR:HA	46:NL:422:TYR:CE2	2.51	0.46
45:NM:384:ILE:O	45:NM:387:VAL:HG22	2.16	0.46
45:OA:251:ASP:OD2	45:OA:252:ILE:N	2.48	0.46
46:OB:51:TYR:O	46:OB:62:ARG:NH2	2.47	0.46
45:OE:7:ILE:HB	45:OE:137:VAL:HG12	1.96	0.46
46:OF:122:LYS:HD2	46:OF:122:LYS:HA	1.64	0.46
45:OK:215:ARG:HH11	45:OK:215:ARG:HG2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PA:14:ILE:HD11	45:PA:69:ASP:HB2	1.98	0.46
45:PA:172:TYR:CD2	45:PA:203:MET:HG3	2.51	0.46
45:PE:104:ALA:HB2	45:PE:413:MET:HG2	1.97	0.46
46:PF:73:MET:HA	46:PF:76:VAL:HG12	1.98	0.46
45:QA:287:SER:O	45:QA:291:ILE:HG12	2.16	0.46
46:QD:49:VAL:HG23	46:QD:50:TYR:CD1	2.51	0.46
46:QF:132:GLY:HA3	46:QF:163:ILE:HG22	1.97	0.46
45:QG:284:GLU:CD	45:QG:286:LEU:H	2.18	0.46
46:QH:309:ARG:NH1	46:QH:426:GLN:O	2.49	0.46
46:QH:311:LEU:HD23	46:QH:342:VAL:HG21	1.98	0.46
45:QI:210:TYR:CE1	45:QI:227:LEU:HD11	2.51	0.46
45:QI:384:ILE:O	45:QI:387:VAL:HG12	2.15	0.46
46:QN:313:ALA:HB3	46:QN:349:ILE:HG12	1.98	0.46
45:RI:206:ASN:HB3	45:RI:210:TYR:CZ	2.51	0.46
45:RK:329:ASN:HA	45:RK:332:ILE:HG12	1.96	0.46
45:SA:331:SER:O	45:SA:335:ILE:HG12	2.16	0.46
45:SC:91:GLN:NE2	45:SC:125:LEU:HD21	2.30	0.46
46:SD:184:ASN:OD1	46:SD:185:ALA:N	2.49	0.46
46:SF:258:ILE:HG13	45:SG:407:TRP:HE1	1.80	0.46
45:SG:287:SER:O	45:SG:291:ILE:HG23	2.15	0.46
46:SH:101:TRP:HE1	46:SH:188:SER:HB3	1.81	0.46
45:SM:426:ALA:O	45:SM:430:LYS:HE3	2.16	0.46
46:SN:11:GLN:NE2	49:SN:501:GDP:O2A	2.48	0.46
45:TC:2:ARG:HD3	45:TC:2:ARG:H	1.81	0.46
45:TC:21:TRP:CZ2	45:TC:65:ALA:HB2	2.51	0.46
45:TG:80:THR:O	45:TG:84:ARG:NH2	2.49	0.46
45:TK:48:ALA:HB1	45:TK:243:ARG:HB2	1.98	0.46
45:UA:32:PRO:HB3	45:UA:83:TYR:HE1	1.81	0.46
46:UB:248:SER:HA	46:UB:252:LYS:HG3	1.98	0.46
46:UD:184:ASN:OD1	46:UD:185:ALA:N	2.48	0.46
45:UE:51:THR:HG21	45:UE:243:ARG:HB3	1.98	0.46
45:UG:70:LEU:HD12	45:UG:145:THR:HG22	1.98	0.46
45:UG:223:THR:OG1	45:UG:224:TYR:N	2.48	0.46
46:UH:30:ILE:HD11	46:UH:47:ILE:HD11	1.96	0.46
46:UL:173:PRO:HG2	46:UL:380:ARG:HE	1.81	0.46
46:UN:86:ARG:HG3	46:UN:88:ASP:H	1.80	0.46
45:VC:98:ASP:OD1	45:VC:99:ALA:N	2.49	0.46
45:VC:141:VAL:HG12	45:VC:187:SER:HA	1.98	0.46
45:VK:425:LEU:HD23	45:VK:425:LEU:HA	1.81	0.46
46:WN:178:THR:HB	46:WN:181:GLU:HG3	1.98	0.46
1:0A:63:PRO:HG3	46:MB:44:LEU:HD21	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1H:122:ARG:HD2	46:HL:276:ARG:NH1	2.31	0.46
18:1I:81:LYS:HD2	46:JD:360:GLY:HA3	1.98	0.46
1:2A:147:ARG:HH22	34:5R:75:ASN:H	1.62	0.46
23:2O:165:ASP:HA	23:2O:168:ASP:HB2	1.95	0.46
11:2S:30:HIS:HA	11:2S:34:ILE:HG21	1.97	0.46
11:2S:280:LYS:HB3	11:2S:286:LEU:HD11	1.98	0.46
15:2X:78:ASN:CG	46:MJ:279:GLN:HE21	2.18	0.46
16:3B:46:LYS:HZ3	16:3B:80:ILE:HD13	1.81	0.46
16:3B:96:LYS:NZ	16:3B:203:SER:H	2.13	0.46
5:3E:60:THR:OG1	5:3E:63:GLU:OE1	2.32	0.46
21:3L:140:LEU:O	21:3L:143:ILE:HG22	2.15	0.46
23:3O:198:LYS:HB2	23:3O:198:LYS:HE3	1.79	0.46
25:3R:283:ARG:HH21	45:CK:46:ASP:H	1.64	0.46
25:3R:312:GLN:HE22	46:CL:359:LYS:HB3	1.81	0.46
13:3U:535:GLU:HB2	13:3U:553:GLU:HB2	1.98	0.46
27:4C:3:LEU:HD13	27:4C:8:LEU:HD21	1.98	0.46
33:4F:141:ARG:NH2	33:4F:145:SER:OG	2.49	0.46
35:4S:152:THR:HG23	35:4S:154:SER:H	1.81	0.46
36:5C:65:THR:HG22	36:5C:68:ASP:OD1	2.16	0.46
37:5E:54:LYS:HG3	46:OB:227:HIS:ND1	2.31	0.46
46:AB:73:MET:HG2	46:AB:77:ARG:NH2	2.31	0.46
45:AE:174:SER:HB2	45:AE:177:VAL:O	2.15	0.46
45:AE:220:GLU:N	45:AE:220:GLU:OE1	2.48	0.46
46:AH:301:CYS:HB3	46:AH:377:MET:HE1	1.98	0.46
46:BB:12:CYS:HA	46:BB:15:GLN:NE2	2.31	0.46
45:BI:19:ALA:HA	45:BI:22:GLU:HG2	1.96	0.46
45:BI:231:ILE:O	45:BI:235:ILE:HG12	2.16	0.46
46:BJ:113:ILE:HG12	46:BJ:117:LEU:HG	1.96	0.46
46:BJ:213:ARG:HH12	46:BJ:297:LYS:HG3	1.81	0.46
46:CB:226:ASN:HD21	49:CB:501:GDP:HN1	1.62	0.46
46:CB:380:ARG:HG3	46:CB:381:VAL:N	2.31	0.46
45:CC:56:THR:HG21	45:DC:282:TYR:O	2.15	0.46
46:DB:1:MET:HB3	45:DC:96:LYS:NZ	2.31	0.46
45:DE:242:LEU:HD11	45:DE:252:ILE:HG12	1.98	0.46
46:DJ:161:ASP:OD1	46:DJ:161:ASP:N	2.48	0.46
45:DK:163:LYS:HD3	45:DK:163:LYS:N	2.30	0.46
45:DM:27:GLU:OE2	45:DM:243:ARG:NH1	2.38	0.46
45:DM:111:GLY:O	45:DM:115:VAL:HG13	2.15	0.46
45:DM:310:GLY:HA3	45:DM:383:ALA:HB2	1.98	0.46
45:EE:244:PHE:HB2	45:EE:356:ASN:HD21	1.80	0.46
46:EH:213:ARG:HH12	46:EH:297:LYS:HE2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EN:58:ARG:NH2	46:FN:280:GLN:HE22	2.14	0.46
46:FB:87:PRO:HA	46:FB:90:PHE:CD2	2.49	0.46
46:FB:189:VAL:O	46:FB:193:VAL:HG13	2.16	0.46
46:FD:47:ILE:HG22	46:FD:51:TYR:HB2	1.97	0.46
46:FF:16:ILE:HD12	46:FF:229:VAL:HG11	1.97	0.46
45:FM:141:VAL:HG21	45:FM:172:TYR:CD1	2.51	0.46
45:GA:406:HIS:CD2	46:GB:261:PRO:HD3	2.51	0.46
45:HA:258:ASN:HD22	45:HA:352:LYS:CE	2.28	0.46
46:HD:273:LEU:H	46:HD:292:GLN:HE22	1.64	0.46
46:HF:201:VAL:HG23	46:HF:301:CYS:SG	2.56	0.46
45:HG:147:SER:HB2	45:HG:190:SER:HB3	1.97	0.46
46:HH:173:PRO:HD2	46:HH:174:LYS:NZ	2.31	0.46
45:HI:203:MET:HG3	45:HI:384:ILE:HD11	1.97	0.46
45:HM:151:SER:O	45:HM:155:GLU:HG2	2.16	0.46
45:HM:224:TYR:HD2	46:HN:323:THR:HG21	1.80	0.46
45:IA:433:GLU:O	45:IA:437:ILE:HG23	2.16	0.46
46:IB:344:TRP:CE3	46:IB:345:ILE:HG23	2.50	0.46
46:IB:387:ALA:HA	46:IB:390:ARG:NH2	2.31	0.46
45:JA:7:ILE:HB	45:JA:137:VAL:HG12	1.98	0.46
45:JC:424:ASP:OD1	45:NC:339:ARG:NH2	2.40	0.46
46:JD:113:ILE:HD13	46:JD:150:LEU:HD22	1.97	0.46
46:JH:67:ASP:OD1	46:JH:68:LEU:N	2.48	0.46
46:JH:326:VAL:O	46:JH:330:MET:HG2	2.16	0.46
45:JM:416:GLY:HA3	45:NM:308:ARG:HH12	1.81	0.46
46:JN:371:SER:O	46:JN:422:TYR:OH	2.34	0.46
45:KA:339:ARG:NH2	45:KA:340:THR:HA	2.30	0.46
46:KH:405:GLU:N	46:KH:405:GLU:OE2	2.48	0.46
46:KL:238:CYS:SG	46:KL:239:CYS:N	2.89	0.46
46:LB:213:ARG:HD2	46:LB:297:LYS:HE2	1.98	0.46
45:LG:147:SER:HB2	45:LG:190:SER:HB3	1.98	0.46
46:LH:48:ASN:O	46:LH:62:ARG:NH1	2.46	0.46
45:LI:103:PHE:HB2	45:LI:186:ASN:HB3	1.98	0.46
46:LL:222:TYR:HD1	46:LL:225:LEU:HD12	1.81	0.46
46:LL:233:MET:O	46:LL:236:VAL:HG12	2.16	0.46
45:MA:90:GLU:OE2	45:MA:121:ARG:NH1	2.49	0.46
45:MA:427:ALA:O	45:MA:430:LYS:HB3	2.16	0.46
45:MG:88:HIS:CE1	45:MG:90:GLU:HG2	2.51	0.46
45:MM:183:GLU:N	45:MM:184:PRO:HD2	2.31	0.46
45:NE:283:HIS:O	45:NE:283:HIS:CG	2.69	0.46
45:NG:345:ASP:OD1	45:NG:346:TRP:N	2.49	0.46
46:NH:118:ASP:O	46:NH:122:LYS:HG2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NL:361:LEU:HD23	46:NL:364:ALA:HB2	1.98	0.46
46:OB:145:SER:HB3	46:OB:188:SER:HB3	1.98	0.46
46:ON:124:ALA:HB1	46:ON:130:LEU:HD11	1.98	0.46
46:PB:198:GLU:HG2	46:PB:266:PHE:HE2	1.81	0.46
46:PD:210:ILE:O	46:PD:214:THR:HG22	2.16	0.46
45:PG:319:TYR:HB3	45:PG:323:VAL:HG11	1.96	0.46
45:PI:88:HIS:CE1	45:PI:90:GLU:HG2	2.51	0.46
45:PI:222:PRO:HG2	46:PJ:324:LYS:NZ	2.29	0.46
46:PL:372:THR:HA	46:PL:422:TYR:CE2	2.50	0.46
46:PN:376:GLU:O	46:PN:380:ARG:HG2	2.16	0.46
45:QA:259:LEU:HD11	45:QA:316:SER:HB3	1.98	0.46
45:QC:27:GLU:CD	45:QC:243:ARG:HH12	2.19	0.46
46:QD:238:CYS:SG	46:QD:239:CYS:N	2.88	0.46
46:QL:390:ARG:HD2	46:QL:391:ARG:HG2	1.98	0.46
45:RI:18:ASN:HD21	45:RI:78:VAL:HG22	1.81	0.46
45:RI:56:THR:HG23	45:RI:58:ALA:H	1.81	0.46
46:RJ:315:ALA:N	46:RJ:350:LYS:O	2.46	0.46
45:RK:216:ASN:HB3	45:RK:275:ILE:O	2.16	0.46
45:RK:288:VAL:HA	45:RK:291:ILE:HG22	1.98	0.46
46:RL:3:GLU:HG3	46:RL:62:ARG:HH12	1.81	0.46
46:RL:175:VAL:O	46:RL:175:VAL:HG13	2.16	0.46
46:SF:4:ILE:HG13	46:SF:132:GLY:O	2.16	0.46
45:SK:430:LYS:HE2	45:SK:430:LYS:HA	1.97	0.46
46:TB:346:PRO:HG2	45:TC:394:LYS:HZ2	1.81	0.46
45:TE:396:ASP:OD1	45:TE:397:LEU:N	2.49	0.46
45:TG:384:ILE:O	45:TG:387:VAL:HG22	2.16	0.46
46:TL:394:PHE:C	46:TL:397:TRP:HB2	2.36	0.46
45:UE:11:GLN:HG3	45:UE:74:VAL:HG11	1.97	0.46
46:UJ:25:SER:OG	46:UJ:30:ILE:O	2.33	0.46
46:UJ:383:GLU:HA	46:UJ:386:THR:HG22	1.98	0.46
45:UK:68:LEU:HD11	45:UK:118:CYS:SG	2.55	0.46
45:UK:210:TYR:CZ	45:UK:227:LEU:HD11	2.51	0.46
45:UM:88:HIS:ND1	45:VK:284:GLU:OE2	2.48	0.46
45:VA:259:LEU:HD11	45:VA:316:SER:HB2	1.96	0.46
45:VG:332:ILE:HD12	45:VG:351:PHE:CE2	2.50	0.46
45:VG:406:HIS:HA	45:VG:409:VAL:HG22	1.98	0.46
46:VH:279:GLN:OE1	46:VH:279:GLN:N	2.46	0.46
46:VL:325:GLU:O	46:VL:329:GLN:HG3	2.16	0.46
45:WA:96:LYS:NZ	46:WB:129:CYS:HB3	2.31	0.46
45:WC:339:ARG:NH1	45:WC:340:THR:HB	2.30	0.46
46:WD:418:LEU:O	46:WD:422:TYR:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WI:188:ILE:HG22	45:WI:421:ALA:HB1	1.98	0.46
45:WI:346:TRP:CD1	46:WL:391:ARG:HG3	2.50	0.46
45:WM:116:ASP:OD1	45:WM:117:LEU:N	2.49	0.46
9:0N:194:TYR:OH	26:2W:242:LEU:HD22	2.16	0.46
4:1D:35:LYS:HZ3	45:DG:84:ARG:HH22	1.62	0.46
21:1L:575:LYS:NZ	45:AE:84:ARG:HE	2.14	0.46
26:1W:242:LEU:O	26:1W:246:GLU:HG3	2.16	0.46
15:1X:18:ILE:O	15:1X:18:ILE:HG13	2.16	0.46
16:2B:72:TYR:CE2	16:2B:75:ASN:HA	2.51	0.46
4:2D:91:ILE:HG23	4:2D:92:ASN:N	2.31	0.46
4:2D:187:PHE:CZ	46:FJ:320:ARG:HG2	2.51	0.46
21:2L:658:ARG:N	21:2L:658:ARG:HD2	2.30	0.46
23:2O:206:GLY:O	23:2O:210:ILE:HG12	2.15	0.46
23:2O:272:ILE:HA	23:2O:275:LYS:HZ3	1.81	0.46
23:2O:413:GLN:NE2	23:2O:414:ILE:HG13	2.30	0.46
10:2Q:101:ARG:HD2	10:2Q:144:TYR:CE1	2.51	0.46
13:2U:502:GLU:OE2	13:2U:504:GLN:HB2	2.16	0.46
26:2W:191:ILE:HB	26:2W:194:HIS:O	2.15	0.46
1:3A:102:TYR:CZ	46:MN:80:PRO:HG3	2.51	0.46
1:3A:134:LYS:HG2	1:3A:138:TRP:HD1	1.80	0.46
31:3I:246:ALA:HB2	45:GI:214:ARG:HG2	1.98	0.46
21:3L:53:PHE:CD2	21:3L:65:LYS:HB3	2.50	0.46
10:3Q:86:TYR:O	10:3Q:159:ASN:HB2	2.16	0.46
13:3U:423:GLY:HA3	13:3U:452:VAL:HG11	1.97	0.46
35:4S:111:GLU:OE1	35:4S:113:GLU:HG3	2.16	0.46
40:6G:191:ASP:HA	40:6G:194:VAL:HG12	1.98	0.46
44:8R:204:ALA:HA	44:8R:206:TYR:CE1	2.50	0.46
45:AE:256:GLN:HB3	46:AH:397:TRP:CZ2	2.52	0.46
46:AJ:3:GLU:HG3	46:AJ:62:ARG:NH1	2.27	0.46
46:BB:154:LYS:HA	46:BB:157:GLU:HG2	1.98	0.46
46:BB:257:LEU:HA	46:BB:312:THR:HG21	1.97	0.46
45:BE:250:VAL:HG13	45:BE:254:GLU:HG3	1.97	0.46
46:BH:334:GLN:HE22	46:BH:348:ASN:H	1.64	0.46
45:BK:22:GLU:HG3	45:BK:83:TYR:HE2	1.80	0.46
45:BM:288:VAL:HA	45:BM:291:ILE:HG12	1.97	0.46
45:CA:191:THR:HA	45:CA:194:LEU:HG	1.98	0.46
45:CA:254:GLU:HG2	46:CB:98:GLY:HA2	1.98	0.46
46:CF:140:GLY:HA3	46:CF:181:GLU:OE2	2.16	0.46
46:CF:143:THR:O	46:CF:147:MET:HB3	2.16	0.46
46:CJ:260:PHE:HB2	46:CJ:263:LEU:HD13	1.97	0.46
45:DE:292:THR:HG21	45:DE:331:SER:HB2	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DF:208:TYR:CZ	46:DF:225:LEU:HD11	2.51	0.46
45:DI:55:GLU:CD	45:DI:57:GLY:H	2.18	0.46
46:DJ:317:PHE:HB2	46:DJ:353:ILE:HD13	1.97	0.46
45:DK:438:GLU:OE2	45:DK:438:GLU:N	2.49	0.46
46:DL:418:LEU:O	46:DL:422:TYR:HB2	2.16	0.46
45:EA:27:GLU:HB3	45:EA:361:THR:HG21	1.98	0.46
46:EB:21:TRP:CZ2	46:EB:63:ALA:HB2	2.51	0.46
46:ED:238:CYS:SG	46:ED:318:ARG:NE	2.82	0.46
45:EG:7:ILE:N	45:EG:136:LEU:O	2.39	0.46
45:EG:258:ASN:OD1	46:EH:179:VAL:HG22	2.15	0.46
46:EH:407:GLU:HA	46:EH:410:GLU:HG2	1.97	0.46
46:FN:8:GLN:HE21	46:FN:14:ASN:HA	1.81	0.46
46:FN:198:GLU:HG2	46:FN:266:PHE:HE2	1.82	0.46
45:GI:174:SER:HB2	45:GI:177:VAL:O	2.16	0.46
45:GK:210:TYR:CE1	45:GK:227:LEU:HD11	2.51	0.46
45:HA:384:ILE:O	45:HA:387:VAL:HG22	2.16	0.46
46:IB:147:MET:O	46:IB:151:LEU:HD23	2.16	0.46
45:IC:281:ALA:HA	45:IC:284:GLU:OE2	2.16	0.46
45:IK:222:PRO:HD2	46:IL:324:LYS:HD3	1.98	0.46
45:IM:208:ALA:O	45:IM:212:ILE:HG12	2.16	0.46
45:JA:306:ASP:OD1	45:JA:308:ARG:NE	2.49	0.46
46:JH:209:ASP:OD1	46:JH:213:ARG:NE	2.44	0.46
46:JJ:100:ASN:HB3	46:JJ:103:LYS:HB2	1.97	0.46
45:JK:21:TRP:CZ2	45:JK:65:ALA:HB2	2.51	0.46
45:JM:296:PHE:HE1	45:JM:377:MET:HG3	1.81	0.46
46:KB:375:GLN:HB3	46:KB:422:TYR:HD1	1.81	0.46
45:KE:210:TYR:CE1	45:KE:227:LEU:HD11	2.51	0.46
45:KG:183:GLU:N	45:KG:184:PRO:HD2	2.31	0.46
46:KH:101:TRP:HB2	46:KH:184:ASN:HB3	1.98	0.46
46:KL:95:THR:HG21	46:KL:108:GLU:HG2	1.97	0.46
45:KM:328:VAL:HG11	45:KM:353:VAL:HG21	1.98	0.46
45:LA:88:HIS:ND1	45:LA:90:GLU:HG2	2.30	0.46
45:LG:242:LEU:HD11	45:LG:252:ILE:HG12	1.96	0.46
45:LI:217:LEU:HD12	45:LI:367:ASP:HB3	1.98	0.46
45:LI:269:LEU:HD12	45:LI:301:MET:HG2	1.98	0.46
45:LM:245:ASP:OD1	45:LM:245:ASP:N	2.48	0.46
45:LM:288:VAL:HA	45:LM:291:ILE:HG12	1.98	0.46
46:MB:107:THR:HG23	46:MB:108:GLU:HG2	1.98	0.46
45:MI:183:GLU:N	45:MI:184:PRO:HD2	2.30	0.46
46:NB:302:ALA:HB3	46:NB:380:ARG:HH22	1.81	0.46
45:NE:107:HIS:ND1	45:NE:107:HIS:O	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NE:346:TRP:O	46:NH:391:ARG:HD2	2.16	0.46
46:NL:87:PRO:HA	46:NL:90:PHE:HD2	1.80	0.46
46:OD:376:GLU:O	46:OD:380:ARG:HG2	2.16	0.46
45:OI:254:GLU:HG3	46:OL:98:GLY:HA2	1.97	0.46
46:OJ:118:ASP:OD2	46:PJ:297:LYS:NZ	2.48	0.46
45:PA:392:ASP:CG	45:PA:422:ARG:HH22	2.20	0.46
45:PC:221:ARG:HA	45:PC:221:ARG:HD2	1.56	0.46
46:QF:386:THR:HA	46:QF:390:ARG:HH21	1.81	0.46
45:QG:406:HIS:HA	45:QG:409:VAL:HG12	1.97	0.46
46:QH:391:ARG:HD2	46:QH:391:ARG:HA	1.77	0.46
46:RD:3:GLU:HG3	46:RD:62:ARG:NH1	2.31	0.46
45:RE:187:SER:O	45:RE:191:THR:HG23	2.16	0.46
45:RG:141:VAL:HG22	45:RG:187:SER:HA	1.96	0.46
46:RL:124:ALA:O	46:RL:130:LEU:HD21	2.16	0.46
45:SA:319:TYR:CB	45:SA:323:VAL:HG11	2.46	0.46
45:SC:362:VAL:HG22	45:SC:370:LYS:NZ	2.31	0.46
46:SH:318:ARG:HH11	46:SH:358:PRO:HG3	1.81	0.46
45:SI:172:TYR:HH	45:SI:191:THR:HG1	1.63	0.46
46:SJ:378:PHE:HB3	46:SJ:415:MET:HE3	1.98	0.46
46:SL:304:ASP:HB3	46:SL:307:HIS:ND1	2.31	0.46
45:SM:272:TYR:HD2	45:SM:275:ILE:HD11	1.81	0.46
46:SN:221:THR:HG23	46:SN:224:ASP:H	1.81	0.46
46:UJ:8:GLN:HE21	46:UJ:65:LEU:CD2	2.29	0.46
46:UJ:17:GLY:HA2	46:UJ:20:PHE:HB3	1.98	0.46
45:UM:80:THR:HA	45:UM:84:ARG:CZ	2.46	0.46
45:UM:244:PHE:HB2	45:UM:356:ASN:HD21	1.81	0.46
46:UN:375:GLN:NE2	46:UN:422:TYR:HD2	2.13	0.46
46:VB:208:TYR:HE1	46:VB:225:LEU:HD11	1.81	0.46
45:VC:407:TRP:CZ2	46:VD:258:ILE:HD11	2.51	0.46
46:VF:289:LEU:HD23	46:VF:365:VAL:HG23	1.99	0.46
45:VI:69:ASP:OD2	45:VI:71:GLU:N	2.28	0.46
46:WN:306:ARG:HG3	46:WN:306:ARG:HH11	1.81	0.46
4:0D:213:PHE:HB2	34:7R:433:GLN:NE2	2.31	0.45
4:1D:41:TYR:OH	46:DF:45:GLU:OE2	2.34	0.45
12:1T:62:VAL:HG12	12:1T:146:MET:HB3	1.97	0.45
13:1U:458:LYS:HG2	13:1U:460:ASN:H	1.81	0.45
14:1V:71:PHE:CD2	46:MJ:306:ARG:HG2	2.50	0.45
1:2A:114:ALA:HB3	25:2R:166:TYR:CZ	2.51	0.45
21:2L:396:ASN:HA	21:2L:399:HIS:CE1	2.51	0.45
21:2L:831:LYS:HD2	34:5R:111:TYR:CZ	2.52	0.45
26:2W:266:LEU:HD21	45:LK:370:LYS:H	1.80	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3A:142:THR:HB	1:3A:146:PHE:CE2	2.51	0.45
16:3B:261:CYS:HB3	16:3B:263:PHE:CE2	2.51	0.45
11:3S:235:GLN:HE22	11:3S:289:GLU:HG3	1.80	0.45
27:4C:103:ARG:NH2	27:4C:184:ASP:OD1	2.43	0.45
34:4R:29:GLN:HA	46:LF:74:ASP:OD1	2.15	0.45
10:5Q:35:LYS:HD3	10:5Q:35:LYS:N	2.31	0.45
34:5R:564:ILE:HD11	34:5R:600:LEU:HD23	1.98	0.45
40:6G:170:ILE:O	40:6G:174:GLN:HG2	2.16	0.45
10:6Q:57:ASN:HB2	10:6Q:158:ALA:HB2	1.97	0.45
34:7R:278:TYR:HD1	34:7R:285:THR:HB	1.81	0.45
45:AA:224:TYR:HD1	45:AA:227:LEU:HD12	1.80	0.45
46:AB:8:GLN:NE2	46:AB:14:ASN:HA	2.30	0.45
46:AD:201:VAL:HG23	46:AD:301:CYS:SG	2.55	0.45
45:AE:56:THR:HG23	45:AE:58:ALA:H	1.81	0.45
45:AI:210:TYR:CE1	45:AI:227:LEU:HD11	2.51	0.45
45:AK:174:SER:HB2	45:AK:177:VAL:O	2.16	0.45
46:AL:404:ASP:OD1	46:AL:404:ASP:N	2.48	0.45
45:BA:141:VAL:HG22	45:BA:187:SER:HA	1.98	0.45
46:BB:118:ASP:HA	46:BB:121:ARG:NH1	2.30	0.45
46:BB:238:CYS:SG	46:BB:239:CYS:N	2.89	0.45
46:BF:252:LYS:HG2	46:BF:256:ASN:HD21	1.81	0.45
46:BH:39:ASP:OD1	46:BH:39:ASP:N	2.49	0.45
45:BM:223:THR:HG22	45:BM:224:TYR:N	2.31	0.45
45:CC:183:GLU:N	45:CC:184:PRO:HD2	2.31	0.45
45:CC:396:ASP:OD1	45:CC:422:ARG:NH1	2.49	0.45
46:CF:322:SER:OG	45:CG:221:ARG:HD2	2.17	0.45
45:CG:36:MET:HG3	45:CG:61:HIS:CE1	2.51	0.45
46:CN:382:ALA:O	46:CN:386:THR:HG23	2.16	0.45
46:DD:199:CYS:O	46:DD:266:PHE:N	2.49	0.45
45:DE:195:LEU:HD13	45:DE:428:LEU:HD12	1.97	0.45
46:DF:199:CYS:O	46:DF:266:PHE:N	2.29	0.45
45:DG:21:TRP:CZ3	45:DG:63:PRO:HB3	2.51	0.45
45:DG:194:LEU:O	45:DG:198:THR:HG22	2.16	0.45
45:DI:296:PHE:HD2	45:DI:341:ILE:HD13	1.80	0.45
45:EA:21:TRP:CH2	45:EA:63:PRO:HB3	2.52	0.45
45:EA:63:PRO:HG2	45:EA:87:PHE:HA	1.97	0.45
46:EB:39:ASP:H	46:EB:43:GLN:HE22	1.63	0.45
46:EB:204:ASN:OD1	46:EB:205:GLU:N	2.49	0.45
45:EC:21:TRP:CZ2	45:EC:65:ALA:HB2	2.51	0.45
46:EH:87:PRO:HA	46:EH:90:PHE:HD2	1.81	0.45
46:EJ:295:ASP:OD1	46:EJ:297:LYS:NZ	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EL:243:PRO:HB3	45:EM:77:GLU:OE1	2.17	0.45
46:FJ:153:SER:O	46:FJ:157:GLU:HG2	2.15	0.45
45:FK:176:GLN:O	46:FL:347:ASN:ND2	2.49	0.45
45:FK:389:SER:O	45:FK:393:HIS:ND1	2.49	0.45
46:FL:67:ASP:O	46:FL:92:PHE:HA	2.15	0.45
46:FN:97:ALA:HB3	46:FN:143:THR:HB	1.98	0.45
45:GC:147:SER:HB2	45:GC:190:SER:HB2	1.99	0.45
46:GL:113:ILE:HD13	46:GL:150:LEU:HD21	1.97	0.45
46:GL:204:ASN:O	46:GL:208:TYR:HD2	1.99	0.45
45:HG:89:PRO:HD3	45:IG:283:HIS:ND1	2.31	0.45
45:HG:210:TYR:CE1	45:HG:227:LEU:HD11	2.51	0.45
45:HI:88:HIS:HB3	45:HI:91:GLN:HG2	1.98	0.45
46:HN:286:VAL:HG21	46:HN:325:GLU:HG3	1.99	0.45
46:ID:105:HIS:CD2	46:ID:150:LEU:HB2	2.51	0.45
46:IH:272:PRO:HG3	46:IH:284:LEU:HD11	1.97	0.45
45:IK:274:PRO:HG3	45:IK:286:LEU:HD23	1.98	0.45
46:IN:27:GLU:HA	46:IN:359:LYS:HD2	1.98	0.45
45:JA:185:TYR:HE2	45:JA:404:PHE:HB2	1.81	0.45
45:JA:349:THR:HG23	46:JD:179:VAL:HA	1.97	0.45
45:JA:406:HIS:HA	45:JA:409:VAL:HG12	1.98	0.45
46:JJ:68:LEU:HD23	46:JJ:143:THR:OG1	2.16	0.45
45:KG:90:GLU:OE2	45:KG:90:GLU:N	2.49	0.45
45:KK:183:GLU:N	45:KK:184:PRO:HD2	2.31	0.45
45:KK:224:TYR:HA	45:KK:227:LEU:HB2	1.98	0.45
45:KM:72:PRO:HD2	46:KN:2:ARG:HH22	1.81	0.45
45:KM:175:PRO:HG2	45:KM:176:GLN:OE1	2.15	0.45
46:KN:239:CYS:SG	46:KN:247:ASN:HA	2.56	0.45
45:LC:227:LEU:O	45:LC:231:ILE:HG13	2.15	0.45
46:LD:51:TYR:HE1	46:LD:61:PRO:HG3	1.81	0.45
46:LF:139:LEU:HD12	46:LF:170:VAL:HG12	1.98	0.45
45:LG:21:TRP:CZ2	45:LG:65:ALA:HB2	2.51	0.45
46:LN:313:ALA:HA	46:LN:369:GLY:HA2	1.98	0.45
45:MI:76:ASP:HA	45:MI:79:ARG:HG2	1.97	0.45
45:MI:224:TYR:HD1	45:MI:227:LEU:HD12	1.80	0.45
46:MJ:36:TYR:CZ	46:MJ:38:GLY:HA3	2.51	0.45
45:MM:209:ILE:HG12	45:MM:302:MET:SD	2.57	0.45
45:MM:401:LYS:HZ3	46:MN:428:ALA:HB1	1.81	0.45
45:NK:113:GLU:N	45:NK:113:GLU:OE1	2.48	0.45
46:NL:139:LEU:HD13	46:NL:168:SER:HB2	1.97	0.45
45:NM:210:TYR:HH	46:NN:323:THR:HG1	1.61	0.45
46:OB:238:CYS:SG	46:OB:239:CYS:N	2.89	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OC:210:TYR:CE1	45:OC:227:LEU:HD21	2.51	0.45
46:OD:266:PHE:CE1	46:OD:370:ASN:HB2	2.51	0.45
46:OJ:68:LEU:HB3	46:OJ:96:GLY:HA2	1.98	0.45
46:OL:32:PRO:HB3	46:OL:81:PHE:HA	1.98	0.45
46:OL:36:TYR:O	46:OL:37:HIS:ND1	2.50	0.45
46:OL:180:VAL:HG12	46:OL:180:VAL:O	2.16	0.45
45:PA:404:PHE:CE1	46:PB:259:PRO:HA	2.51	0.45
46:PB:105:HIS:CD2	46:PB:150:LEU:HB3	2.51	0.45
45:PE:147:SER:HB2	45:PE:190:SER:HB2	1.97	0.45
46:PF:73:MET:HE3	46:PF:92:PHE:HB3	1.97	0.45
45:PK:180:ALA:HA	46:PL:350:LYS:HE2	1.98	0.45
46:PN:86:ARG:HA	46:PN:86:ARG:NE	2.31	0.45
46:PN:317:PHE:HB2	46:PN:353:ILE:HD13	1.97	0.45
45:QA:51:THR:O	45:QA:64:ARG:NH1	2.49	0.45
46:QB:173:PRO:HD2	46:QB:174:LYS:H	1.80	0.45
46:QB:394:PHE:HA	46:QB:397:TRP:CD1	2.51	0.45
45:QG:265:ILE:O	45:QG:265:ILE:HG13	2.15	0.45
45:QG:340:THR:HG23	45:QG:341:ILE:HG13	1.97	0.45
46:QH:166:THR:HG21	46:QH:192:LEU:HD11	1.97	0.45
45:QM:217:LEU:HD22	45:QM:367:ASP:HB3	1.97	0.45
45:QM:372:MET:SD	45:QM:373:ARG:HG3	2.57	0.45
46:RB:2:ARG:NH2	45:RC:73:THR:OG1	2.41	0.45
45:RC:66:VAL:HG12	45:RC:91:GLN:HB2	1.98	0.45
46:RF:91:VAL:HG21	46:RF:116:VAL:HG22	1.98	0.45
46:RF:309:ARG:NH2	46:RF:426:GLN:HA	2.25	0.45
46:SB:238:CYS:HB3	46:SB:318:ARG:NH1	2.31	0.45
45:SE:250:VAL:HG11	45:SE:318:MET:HE2	1.98	0.45
46:SF:254:ALA:O	46:SF:258:ILE:HG12	2.16	0.45
45:SG:76:ASP:HA	45:SG:79:ARG:HG2	1.98	0.45
46:SH:238:CYS:SG	46:SH:318:ARG:NE	2.89	0.45
46:SL:386:THR:O	46:SL:390:ARG:HG2	2.15	0.45
45:SM:27:GLU:OE2	45:SM:243:ARG:NH2	2.48	0.45
45:TC:172:TYR:HE2	45:TC:203:MET:HA	1.81	0.45
46:UD:190:HIS:CD2	46:UD:411:ALA:HA	2.50	0.45
46:UJ:328:GLU:O	46:UJ:332:ASN:N	2.34	0.45
46:UN:42:LEU:HD22	46:UN:356:ILE:HD11	1.97	0.45
46:VB:154:LYS:N	46:VB:154:LYS:HD3	2.31	0.45
46:VJ:221:THR:HG23	46:VJ:223:GLY:H	1.81	0.45
45:VM:210:TYR:CZ	45:VM:227:LEU:HD11	2.51	0.45
46:WL:105:HIS:CD2	46:WL:150:LEU:HB2	2.51	0.45
46:WL:113:ILE:HA	46:WL:116:VAL:HG12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WM:87:PHE:HB3	45:WM:91:GLN:NE2	2.31	0.45
46:WN:308:GLY:HA2	46:WN:426:GLN:NE2	2.31	0.45
2:0B:46:PHE:HE2	46:JH:77:ARG:HB2	1.81	0.45
1:1A:136:ASN:HD22	46:AF:245:GLN:NE2	2.07	0.45
8:1H:190:LYS:HE3	45:HG:372:MET:SD	2.55	0.45
24:1P:301:ILE:HG22	46:TD:362:LYS:NZ	2.29	0.45
11:1S:33:ASN:HD21	11:1S:126:LYS:HD2	1.81	0.45
13:1U:352:ARG:HD2	13:1U:352:ARG:N	2.31	0.45
13:1U:386:ILE:HG13	13:1U:408:VAL:HG21	1.98	0.45
26:1W:97:ARG:HH11	26:1W:97:ARG:HG2	1.82	0.45
16:2B:63:GLN:HE22	45:LK:84:ARG:NH1	2.15	0.45
16:2B:97:ARG:HH12	16:2B:179:LYS:HA	1.81	0.45
4:2D:224:ARG:NH2	34:5R:492:ILE:HG12	2.31	0.45
5:2E:130:PRO:O	5:2E:134:THR:HG22	2.16	0.45
5:2E:134:THR:HG23	5:2E:136:GLN:OE1	2.15	0.45
23:2O:346:GLN:NE2	23:2O:347:ASN:OD1	2.49	0.45
11:2S:150:GLN:HE21	45:WG:161:TYR:C	2.19	0.45
16:3B:214:LEU:HD22	16:3B:292:PHE:CE1	2.51	0.45
27:3C:11:GLN:O	27:3C:15:ILE:HG13	2.16	0.45
21:3L:155:LYS:HA	21:3L:158:PHE:HD2	1.81	0.45
14:3V:72:GLY:O	46:MB:340:TYR:OH	2.33	0.45
10:4Q:95:ASP:OD1	10:4Q:140:THR:OG1	2.33	0.45
35:4S:178:ALA:O	35:4S:181:PRO:HD2	2.16	0.45
15:4X:22:SER:HB3	46:LL:359:LYS:HB3	1.98	0.45
37:5G:95:ASP:OD1	37:5G:99:ARG:NH2	2.49	0.45
45:AA:68:LEU:HD23	45:AA:93:ILE:HB	1.98	0.45
45:AA:145:THR:OG1	47:AA:501:GTP:O3G	2.23	0.45
46:AD:237:THR:HG23	46:AD:241:ARG:HH21	1.80	0.45
45:AE:40:ARG:O	45:AE:40:ARG:HD2	2.16	0.45
46:AF:238:CYS:SG	46:AF:239:CYS:N	2.89	0.45
45:CE:64:ARG:NH1	45:CE:129:CYS:SG	2.89	0.45
45:CE:317:MET:O	45:CE:354:GLY:N	2.45	0.45
46:CF:322:SER:H	45:CG:221:ARG:NH1	2.15	0.45
46:CH:200:MET:CE	46:CH:268:ILE:HG23	2.46	0.45
45:CM:192:HIS:CD2	45:CM:421:ALA:HA	2.51	0.45
45:CM:329:ASN:OD1	45:CM:330:ALA:N	2.49	0.45
45:DA:141:VAL:HG11	45:DA:172:TYR:CD1	2.51	0.45
46:DD:178:THR:HG22	46:DD:180:VAL:H	1.80	0.45
45:DE:189:LEU:HD11	45:DE:418:PHE:HE1	1.81	0.45
46:DH:258:ILE:O	46:DH:258:ILE:HG13	2.15	0.45
46:DN:326:VAL:O	46:DN:330:MET:HG2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EA:239:THR:HG23	45:EA:243:ARG:HH21	1.80	0.45
46:EB:222:TYR:HA	46:EB:225:LEU:HD13	1.96	0.45
45:EE:183:GLU:N	45:EE:184:PRO:HD2	2.30	0.45
46:EH:211:CYS:SG	46:EH:220:PRO:HB3	2.56	0.45
46:EJ:7:ILE:HG23	46:EJ:135:ILE:HG13	1.98	0.45
46:EJ:54:ALA:HA	46:FJ:283:ALA:HB2	1.97	0.45
45:EK:265:ILE:HG23	45:EK:432:TYR:CZ	2.52	0.45
46:EL:323:THR:OG1	46:EL:324:LYS:HD2	2.15	0.45
46:EL:334:GLN:HA	46:EL:341:PHE:CE2	2.51	0.45
46:EN:68:LEU:HB3	46:EN:96:GLY:HA2	1.98	0.45
45:FG:184:PRO:O	45:FG:188:ILE:HG12	2.16	0.45
46:FH:66:MET:HE3	46:FH:151:LEU:HD22	1.98	0.45
46:GB:6:HIS:HB3	46:GB:63:ALA:HA	1.98	0.45
45:GC:434:GLU:O	45:GC:437:ILE:HG12	2.16	0.45
46:GH:113:ILE:HD13	46:GH:150:LEU:HD22	1.97	0.45
46:GH:289:LEU:HD13	46:GH:365:VAL:HG13	1.98	0.45
45:GK:394:LYS:NZ	46:GL:346:PRO:HG2	2.31	0.45
46:HB:135:ILE:N	46:HB:165:GLU:O	2.47	0.45
46:HD:201:VAL:HG21	46:HD:374:ILE:HD11	1.98	0.45
46:HD:272:PRO:HG3	46:HD:284:LEU:HD11	1.98	0.45
46:HN:289:LEU:HD13	46:HN:365:VAL:HG23	1.98	0.45
45:IC:89:PRO:HD3	46:JD:281:TYR:CD2	2.51	0.45
45:II:88:HIS:CE1	45:II:90:GLU:HG2	2.52	0.45
46:IL:203:ASP:O	46:IL:207:LEU:HG	2.16	0.45
45:IM:256:GLN:HA	45:IM:260:VAL:HG12	1.97	0.45
45:JA:70:LEU:HA	45:JA:95:GLY:HA3	1.97	0.45
45:JA:221:ARG:HG3	46:JB:325:GLU:OE2	2.17	0.45
45:JC:177:VAL:HG13	46:JD:327:ASP:HB3	1.97	0.45
46:KD:386:THR:O	46:KD:390:ARG:HG3	2.16	0.45
46:KH:311:LEU:HD23	46:KH:342:VAL:HG11	1.97	0.45
45:LE:256:GLN:HB3	46:LH:397:TRP:CZ2	2.52	0.45
45:LI:256:GLN:HB2	46:LL:397:TRP:CZ2	2.51	0.45
45:LK:76:ASP:OD1	45:LK:79:ARG:NH1	2.50	0.45
45:LK:241:SER:OG	45:LK:250:VAL:O	2.22	0.45
45:MC:192:HIS:ND1	45:MC:424:ASP:OD2	2.49	0.45
45:MG:174:SER:HB2	45:MG:177:VAL:O	2.16	0.45
45:MM:11:GLN:HE22	46:MN:247:ASN:H	1.64	0.45
45:MM:178:SER:HB3	46:MN:347:ASN:ND2	2.32	0.45
45:NA:56:THR:OG1	45:OA:284:GLU:O	2.32	0.45
45:NA:239:THR:HA	45:NA:242:LEU:HD13	1.98	0.45
46:ND:139:LEU:HD13	46:ND:168:SER:HB3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NF:285:THR:OG1	46:NF:288:GLU:OE1	2.29	0.45
45:NI:88:HIS:HE2	45:OI:280:LYS:HZ3	1.63	0.45
45:NK:420:GLU:N	45:NK:420:GLU:OE1	2.48	0.45
46:NL:307:HIS:ND1	46:NL:376:GLU:OE2	2.49	0.45
45:NM:402:ARG:HB3	45:NM:405:VAL:HG11	1.97	0.45
46:NN:25:SER:OG	46:NN:30:ILE:O	2.34	0.45
45:OC:36:MET:SD	45:OC:37:PRO:HD2	2.56	0.45
45:OC:427:ALA:HA	45:OC:430:LYS:NZ	2.30	0.45
45:OI:98:ASP:OD1	45:OI:99:ALA:N	2.49	0.45
45:OK:259:LEU:HD23	45:OK:268:MET:HG2	1.97	0.45
45:OM:384:ILE:O	45:OM:387:VAL:HG22	2.16	0.45
46:PF:399:THR:HA	46:PF:403:MET:O	2.16	0.45
45:PM:387:VAL:HA	45:PM:390:ARG:HG2	1.96	0.45
46:PN:318:ARG:HH11	46:PN:358:PRO:HG3	1.82	0.45
45:QA:371:VAL:HG22	45:QA:373:ARG:H	1.81	0.45
46:QB:175:VAL:HG22	46:QB:205:GLU:OE2	2.16	0.45
45:QE:188:ILE:HG22	45:QE:421:ALA:HB1	1.99	0.45
45:QE:268:MET:HG2	45:QE:380:ASN:HB2	1.97	0.45
45:QI:265:ILE:HD11	45:QI:435:VAL:HG21	1.98	0.45
45:QK:53:PHE:HB3	45:QK:61:HIS:HB3	1.98	0.45
46:QL:391:ARG:HD2	46:QL:391:ARG:HA	1.74	0.45
45:QM:96:LYS:HD2	45:QM:96:LYS:HA	1.72	0.45
46:RB:335:ASN:OD1	46:RB:336:LYS:N	2.48	0.45
45:RG:55:GLU:OE1	45:RG:57:GLY:N	2.47	0.45
45:RI:88:HIS:CE1	45:RI:90:GLU:HG2	2.51	0.45
45:RI:188:ILE:HG23	45:RI:422:ARG:HH22	1.80	0.45
46:RJ:6:HIS:HE1	46:RJ:233:MET:HE1	1.81	0.45
46:RJ:190:HIS:CE1	46:RJ:414:ASN:HD22	2.34	0.45
45:RK:183:GLU:N	45:RK:184:PRO:HD2	2.31	0.45
46:SD:47:ILE:HG23	46:SD:51:TYR:HD2	1.80	0.45
46:SD:327:ASP:OD1	46:SD:328:GLU:N	2.49	0.45
45:SG:174:SER:HB2	45:SG:177:VAL:O	2.15	0.45
45:SG:371:VAL:HG22	45:SG:373:ARG:H	1.81	0.45
46:SJ:6:HIS:HB3	46:SJ:63:ALA:HA	1.98	0.45
46:SJ:370:ASN:OD1	46:SJ:422:TYR:OH	2.33	0.45
45:SK:239:THR:HG23	45:SK:243:ARG:HH21	1.81	0.45
45:SM:166:LYS:N	45:SM:199:ASP:OD2	2.47	0.45
46:TD:143:THR:O	46:TD:147:MET:HG2	2.16	0.45
45:TE:276:ILE:HD11	45:TE:280:LYS:HG3	1.98	0.45
46:TF:318:ARG:HH11	46:TF:358:PRO:HG3	1.81	0.45
46:TJ:372:THR:HA	46:TJ:422:TYR:CE2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TN:178:THR:HB	46:TN:181:GLU:HG3	1.98	0.45
45:UA:325:PRO:HA	45:UA:328:VAL:HB	1.98	0.45
46:UB:2:ARG:HB2	46:UB:131:GLN:NE2	2.30	0.45
45:UC:121:ARG:HA	45:UC:124:LYS:HZ2	1.82	0.45
46:UD:39:ASP:OD1	46:UD:40:SER:N	2.50	0.45
45:UI:427:ALA:HA	45:UI:430:LYS:HE3	1.97	0.45
46:VD:86:ARG:HB3	46:VD:89:ASN:OD1	2.16	0.45
45:VG:11:GLN:NE2	46:VH:245:GLN:O	2.49	0.45
45:VI:1:MET:SD	46:VL:94:GLN:NE2	2.65	0.45
46:VN:30:ILE:HD11	46:VN:47:ILE:HD11	1.97	0.45
46:WB:139:LEU:HA	46:WB:145:SER:HB3	1.98	0.45
46:WB:325:GLU:O	46:WB:329:GLN:HB2	2.16	0.45
46:WF:15:GLN:HA	46:WF:15:GLN:OE1	2.16	0.45
45:WG:60:LYS:NZ	45:WG:85:GLN:O	2.50	0.45
45:WG:179:THR:HG21	46:WH:246:LEU:HD13	1.97	0.45
46:WH:229:VAL:O	46:WH:233:MET:HG2	2.15	0.45
46:WL:49:VAL:HG13	46:WL:50:TYR:CD1	2.51	0.45
45:WM:100:ALA:O	46:WN:255:VAL:HG21	2.17	0.45
46:WN:139:LEU:HD22	46:WN:170:VAL:HG12	1.99	0.45
17:1F:154:PHE:N	46:GL:118:ASP:OD2	2.49	0.45
10:1Q:97:LYS:HD3	46:AF:392:LYS:HZ3	1.81	0.45
13:1U:543:LYS:H	13:1U:587:GLN:NE2	2.15	0.45
4:2D:32:GLN:N	4:2D:32:GLN:OE1	2.49	0.45
5:2E:127:ASP:O	5:2E:133:LYS:NZ	2.47	0.45
30:2H:172:SER:HB3	34:7R:124:ASP:OD2	2.16	0.45
31:2I:20:LEU:HD12	31:2I:21:LEU:N	2.31	0.45
21:2L:301:VAL:O	21:2L:339:VAL:N	2.35	0.45
23:2O:166:ILE:HG22	23:2O:170:LYS:NZ	2.31	0.45
24:2P:390:LYS:O	24:2P:394:GLN:HG3	2.16	0.45
13:2U:499:HIS:HE2	13:2U:545:GLY:HA3	1.82	0.45
15:2X:38:ILE:HG22	15:2X:42:LYS:HE3	1.97	0.45
16:3B:196:THR:HG22	16:3B:197:SER:H	1.80	0.45
16:3B:239:PHE:CE2	16:3B:255:ALA:HA	2.51	0.45
23:3O:338:LEU:O	23:3O:342:ARG:HG3	2.17	0.45
23:3O:368:GLU:O	23:3O:372:ALA:N	2.44	0.45
23:3O:479:ILE:HG12	23:3O:480:PRO:HD2	1.97	0.45
11:3S:87:ALA:H	13:3U:309:LYS:HZ1	1.63	0.45
12:3T:29:ASN:HB3	12:3T:32:TYR:HD2	1.81	0.45
12:3T:35:LEU:HB2	12:3T:40:GLN:HB3	1.97	0.45
10:4Q:85:LYS:O	10:4Q:107:ASN:ND2	2.47	0.45
37:5F:44:ARG:HD3	37:5F:45:PRO:HD2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:5H:72:ASP:O	37:5H:104:MET:N	2.49	0.45
35:5S:87:ILE:HD13	35:5S:122:GLN:HB3	1.98	0.45
10:6Q:11:LEU:HD13	10:6Q:71:ILE:HD11	1.98	0.45
46:AB:105:HIS:CD2	46:AB:150:LEU:HD12	2.51	0.45
45:AM:192:HIS:ND1	45:AM:421:ALA:HA	2.32	0.45
46:AN:117:LEU:HA	46:AN:120:VAL:HG12	1.99	0.45
45:BE:259:LEU:HD11	45:BE:316:SER:HB2	1.98	0.45
46:BJ:145:SER:OG	46:BJ:188:SER:HB2	2.16	0.45
45:BK:397:LEU:HD23	45:BK:397:LEU:HA	1.84	0.45
45:CA:135:PHE:HB2	45:CA:166:LYS:HB3	1.98	0.45
45:CC:250:VAL:HG13	45:CC:254:GLU:HG2	1.99	0.45
45:CE:331:SER:O	45:CE:335:ILE:HG12	2.15	0.45
46:CN:342:VAL:HG12	46:CN:348:ASN:ND2	2.31	0.45
46:CN:372:THR:O	46:CN:375:GLN:HG3	2.16	0.45
45:DC:398:MET:HE3	45:DC:403:ALA:HB3	1.98	0.45
45:DE:155:GLU:HA	45:DE:197:HIS:CD2	2.52	0.45
45:DE:184:PRO:O	45:DE:188:ILE:HG12	2.16	0.45
45:DG:349:THR:HG23	46:DH:179:VAL:HA	1.99	0.45
46:DH:10:GLY:O	46:DH:14:ASN:ND2	2.48	0.45
45:DK:195:LEU:HD21	45:DK:264:ARG:HH21	1.81	0.45
45:DM:352:LYS:HD3	45:DM:352:LYS:HA	1.66	0.45
46:EB:173:PRO:HG3	46:EB:384:GLN:NE2	2.31	0.45
45:EC:206:ASN:HB2	45:EC:210:TYR:HE1	1.81	0.45
45:EE:414:GLU:CD	45:EE:414:GLU:H	2.19	0.45
46:EH:258:ILE:HG13	45:EI:407:TRP:HE1	1.80	0.45
46:EH:293:MET:HE2	46:EH:367:PHE:HB3	1.97	0.45
45:EI:223:THR:HG23	45:EI:225:THR:H	1.82	0.45
45:EK:258:ASN:HD21	46:EL:178:THR:HG23	1.81	0.45
46:EN:376:GLU:HG3	46:EN:380:ARG:HH12	1.81	0.45
46:FB:221:THR:O	46:FB:225:LEU:HD12	2.16	0.45
46:FB:311:LEU:N	46:FB:370:ASN:O	2.49	0.45
45:FG:188:ILE:HG23	45:FG:425:LEU:HD11	1.98	0.45
45:FI:174:SER:HB2	45:FI:177:VAL:O	2.16	0.45
45:GE:88:HIS:HB3	45:GE:91:GLN:HG2	1.98	0.45
45:GG:377:MET:HE2	45:GG:379:SER:HB3	1.98	0.45
45:GI:150:GLY:O	45:GI:154:LEU:HD13	2.16	0.45
46:HB:350:LYS:HE2	46:HB:350:LYS:HA	1.98	0.45
45:HE:174:SER:HB2	45:HE:177:VAL:O	2.16	0.45
45:HM:53:PHE:HE1	45:HM:63:PRO:HG3	1.80	0.45
45:IA:292:THR:HG21	45:IA:331:SER:HB3	1.97	0.45
45:II:205:ASP:OD1	45:II:303:ALA:HA	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:II:326:LYS:HZ3	46:IL:212:PHE:HB2	1.81	0.45
46:IJ:390:ARG:O	46:IJ:392:LYS:NZ	2.50	0.45
45:IM:210:TYR:CE1	45:IM:227:LEU:HD21	2.50	0.45
45:IM:272:TYR:HD2	45:IM:275:ILE:HD11	1.80	0.45
45:JA:88:HIS:HB3	45:JA:91:GLN:HG2	1.97	0.45
45:JE:178:SER:HB3	46:JF:347:ASN:ND2	2.31	0.45
46:JN:404:ASP:N	46:JN:407:GLU:OE2	2.40	0.45
46:KN:247:ASN:O	46:KN:252:LYS:NZ	2.37	0.45
45:LA:56:THR:HG23	45:LA:58:ALA:H	1.81	0.45
46:LF:150:LEU:O	46:LF:154:LYS:HG2	2.17	0.45
45:LI:298:PRO:HB3	45:LI:307:PRO:HD2	1.98	0.45
45:LM:150:GLY:O	45:LM:154:LEU:HD23	2.16	0.45
46:ML:20:PHE:HA	46:ML:230:SER:HB2	1.98	0.45
45:NA:283:HIS:O	45:NA:283:HIS:CG	2.69	0.45
45:NA:349:THR:HG1	46:ND:176:SER:HG	1.61	0.45
45:NE:331:SER:O	45:NE:335:ILE:HG12	2.17	0.45
46:NF:232:ALA:HB1	46:NF:268:ILE:HD12	1.99	0.45
46:NH:173:PRO:CG	46:NH:380:ARG:HD2	2.46	0.45
45:NM:424:ASP:OD2	45:NM:425:LEU:N	2.49	0.45
45:PE:164:LYS:HE2	45:PE:164:LYS:HB2	1.75	0.45
45:PG:208:ALA:O	45:PG:212:ILE:HG12	2.16	0.45
46:PH:391:ARG:HA	46:PH:391:ARG:HD2	1.77	0.45
45:PM:229:ARG:HH12	45:PM:363:VAL:HG11	1.82	0.45
46:PN:113:ILE:HA	46:PN:116:VAL:HG12	1.97	0.45
46:PN:257:LEU:HA	46:PN:312:THR:HG21	1.98	0.45
46:PN:396:HIS:O	46:PN:400:GLY:N	2.49	0.45
45:QE:188:ILE:HD11	45:QE:391:LEU:HB3	1.98	0.45
45:QG:140:SER:OG	47:QG:501:GTP:O2B	2.28	0.45
45:QG:311:LYS:HE3	45:QG:344:VAL:HA	1.99	0.45
45:QI:141:VAL:HG11	45:QI:172:TYR:CD1	2.50	0.45
46:QL:190:HIS:HE1	46:QL:414:ASN:HD22	1.64	0.45
45:RC:328:VAL:O	45:RC:332:ILE:HD12	2.17	0.45
45:RE:153:LEU:O	45:RE:157:LEU:HG	2.17	0.45
45:RG:408:TYR:O	45:RG:413:MET:HB3	2.16	0.45
46:RJ:309:ARG:HH21	46:RJ:426:GLN:HG2	1.82	0.45
46:RL:68:LEU:HB3	46:RL:96:GLY:HA2	1.97	0.45
45:RM:280:LYS:HA	45:RM:283:HIS:HD2	1.81	0.45
46:SB:293:MET:SD	46:SB:367:PHE:HB2	2.57	0.45
45:SG:141:VAL:HG12	45:SG:171:ILE:O	2.17	0.45
45:SI:102:ASN:ND2	45:SI:105:ARG:HG3	2.31	0.45
45:SK:88:HIS:HA	45:TK:283:HIS:ND1	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SK:103:PHE:HB2	45:SK:186:ASN:HB3	1.98	0.45
46:SL:398:TYR:HD2	46:SL:408:PHE:HZ	1.64	0.45
45:TA:257:THR:HA	46:TB:397:TRP:NE1	2.31	0.45
46:TF:8:GLN:HE21	46:TF:14:ASN:HA	1.82	0.45
45:TM:119:LEU:HD22	45:TM:156:ARG:CZ	2.47	0.45
46:TN:295:ASP:HB3	46:TN:298:ASN:HB2	1.97	0.45
45:UC:426:ALA:O	45:UC:430:LYS:HG2	2.17	0.45
45:UE:18:ASN:O	45:UE:22:GLU:HG3	2.16	0.45
46:UF:325:GLU:HG2	45:UG:221:ARG:NH1	2.32	0.45
46:UL:178:THR:HG22	46:UL:180:VAL:H	1.81	0.45
45:UM:14:ILE:O	45:UM:18:ASN:N	2.46	0.45
46:VB:68:LEU:HD23	46:VB:68:LEU:H	1.81	0.45
46:VD:87:PRO:HA	46:VD:90:PHE:HD2	1.80	0.45
45:VE:150:GLY:O	45:VE:154:LEU:HD23	2.16	0.45
45:VE:191:THR:HG21	45:VE:425:LEU:HD11	1.97	0.45
46:VF:100:ASN:OD1	46:VF:103:LYS:HG3	2.16	0.45
45:VG:384:ILE:O	45:VG:387:VAL:HG22	2.16	0.45
46:VH:105:HIS:CE1	46:VH:150:LEU:HD12	2.49	0.45
46:VJ:5:VAL:HG12	46:VJ:62:ARG:HD3	1.99	0.45
46:VJ:21:TRP:CZ2	46:VJ:63:ALA:HB2	2.51	0.45
46:VJ:105:HIS:CD2	46:VJ:150:LEU:HB2	2.51	0.45
45:VK:143:GLY:HA3	47:VK:501:GTP:O2B	2.17	0.45
46:VL:317:PHE:HB3	46:VL:321:MET:CE	2.47	0.45
46:VN:16:ILE:HD12	46:VN:229:VAL:HG11	1.99	0.45
46:WD:306:ARG:HH11	46:WD:306:ARG:HG3	1.81	0.45
46:WF:73:MET:HA	46:WF:76:VAL:HG12	1.99	0.45
45:WG:338:LYS:HG2	45:WG:340:THR:HG22	1.99	0.45
13:1U:590:VAL:HG13	13:1U:602:TRP:HB2	1.98	0.45
21:2L:641:ALA:HB1	46:CL:40:SER:HB2	1.97	0.45
23:2O:364:LYS:O	23:2O:367:GLN:HG3	2.17	0.45
13:2U:364:GLU:N	13:2U:364:GLU:OE1	2.49	0.45
26:2W:261:LYS:HA	26:2W:261:LYS:HE3	1.98	0.45
16:3B:238:TYR:CZ	45:JG:84:ARG:HD2	2.51	0.45
34:4R:478:ASN:HD21	34:4R:480:ILE:HB	1.81	0.45
36:5C:79:LEU:N	46:NJ:320:ARG:HH21	2.14	0.45
36:5C:135:ASN:ND2	46:NL:362:LYS:HE3	2.31	0.45
10:5Q:86:TYR:O	10:5Q:159:ASN:HB2	2.17	0.45
10:6Q:178:PRO:HB2	10:6Q:180:GLU:OE2	2.16	0.45
34:7R:334:LEU:O	34:7R:360:TYR:OH	2.32	0.45
46:AB:21:TRP:CZ2	46:AB:63:ALA:HB2	2.52	0.45
46:AB:41:ASP:OD1	46:AB:42:LEU:HD12	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AM:88:HIS:ND1	45:AM:89:PRO:HD2	2.30	0.45
46:BJ:39:ASP:OD1	46:BJ:40:SER:N	2.50	0.45
46:CD:63:ALA:O	46:CD:89:ASN:ND2	2.39	0.45
46:CN:31:ASP:OD2	46:CN:35:THR:OG1	2.34	0.45
46:CN:105:HIS:HB3	46:CN:106:TYR:HD1	1.82	0.45
45:DA:212:ILE:HD11	45:DA:300:ASN:HA	1.99	0.45
46:DB:49:VAL:HG21	46:DB:241:ARG:HG2	1.98	0.45
46:DD:250:LEU:HA	46:DD:253:LEU:HD12	1.97	0.45
45:DI:438:GLU:OE1	45:DI:438:GLU:N	2.47	0.45
46:DL:139:LEU:HG	46:DL:168:SER:HB3	1.97	0.45
46:DL:251:ARG:NH2	45:DM:105:ARG:CZ	2.79	0.45
46:DN:62:ARG:H	46:DN:62:ARG:HG2	1.61	0.45
46:EN:97:ALA:HA	46:EN:103:LYS:HE2	1.98	0.45
45:FA:155:GLU:HG2	45:FA:197:HIS:NE2	2.30	0.45
45:FA:188:ILE:HG13	45:FA:189:LEU:N	2.30	0.45
46:FF:345:ILE:HG23	46:FF:348:ASN:HD22	1.81	0.45
46:FH:117:LEU:HG	46:FH:121:ARG:NH1	2.32	0.45
46:FH:293:MET:SD	46:FH:365:VAL:HG11	2.55	0.45
46:FN:204:ASN:OD1	46:FN:205:GLU:N	2.50	0.45
46:GB:344:TRP:HB3	46:GB:430:ALA:HB2	1.97	0.45
45:GC:88:HIS:HB3	45:GC:91:GLN:HG2	1.98	0.45
45:GE:224:TYR:O	45:GE:228:ASN:ND2	2.49	0.45
46:HH:167:PHE:CE2	46:HH:233:MET:HG2	2.51	0.45
46:HJ:166:THR:OG1	46:HJ:199:CYS:SG	2.75	0.45
46:HN:334:GLN:HG3	46:HN:341:PHE:CD1	2.51	0.45
46:IB:375:GLN:HE21	46:IB:422:TYR:HD2	1.64	0.45
45:IG:178:SER:HB2	45:IG:183:GLU:OE2	2.16	0.45
45:IG:326:LYS:HG3	45:IG:327:ASP:N	2.32	0.45
45:II:210:TYR:HE1	45:II:227:LEU:HD11	1.81	0.45
46:JB:212:PHE:CE1	46:JB:220:PRO:HG3	2.52	0.45
46:JB:375:GLN:O	46:JB:379:LYS:HG2	2.16	0.45
46:JH:20:PHE:HA	46:JH:230:SER:HB3	1.98	0.45
45:JM:129:CYS:SG	45:JM:132:LEU:HB2	2.56	0.45
45:JM:195:LEU:HD21	45:JM:264:ARG:HH21	1.80	0.45
46:KD:4:ILE:HG22	46:KD:131:GLN:HB3	1.99	0.45
45:KM:56:THR:HG23	45:KM:58:ALA:H	1.81	0.45
45:KM:278:ALA:HA	45:KM:281:ALA:HB3	1.99	0.45
45:LA:188:ILE:HG22	45:LA:421:ALA:HB1	1.99	0.45
45:LK:239:THR:HG23	45:LK:243:ARG:HH21	1.81	0.45
46:ML:91:VAL:HG21	46:ML:116:VAL:HB	1.98	0.45
45:MM:231:ILE:O	45:MM:235:ILE:HG12	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NB:310:TYR:HD1	46:NB:371:SER:HB2	1.80	0.45
45:NE:356:ASN:OD1	45:NE:357:TYR:N	2.50	0.45
46:NF:105:HIS:CD2	46:NF:150:LEU:HB2	2.51	0.45
45:NG:93:ILE:HG12	45:NG:117:LEU:HD22	1.98	0.45
46:NH:218:THR:HG23	46:NH:219:THR:HG23	1.97	0.45
45:NI:79:ARG:O	45:NI:84:ARG:HG2	2.16	0.45
45:OA:185:TYR:OH	45:OA:403:ALA:O	2.19	0.45
46:OB:143:THR:O	46:OB:147:MET:HG2	2.17	0.45
46:OB:226:ASN:HD21	49:OB:501:GDP:HN1	1.63	0.45
46:OD:53:GLU:OE2	46:OD:54:ALA:N	2.49	0.45
46:OD:117:LEU:HA	46:OD:120:VAL:HG12	1.97	0.45
46:OF:145:SER:HB3	46:OF:188:SER:HB3	1.98	0.45
45:OG:136:LEU:HD23	45:OG:167:LEU:HB2	1.99	0.45
46:OH:217:LEU:HD21	46:OH:220:PRO:HG3	1.98	0.45
46:OL:107:THR:OG1	46:OL:108:GLU:OE1	2.25	0.45
46:OL:145:SER:HB3	46:OL:188:SER:OG	2.16	0.45
45:OM:119:LEU:HD13	45:OM:122:ILE:HD12	1.99	0.45
45:PA:319:TYR:CD2	45:PA:323:VAL:HG21	2.52	0.45
45:PC:326:LYS:HE2	45:PC:326:LYS:HA	1.98	0.45
45:PG:205:ASP:OD1	45:PG:303:ALA:HA	2.16	0.45
45:PI:10:GLY:O	45:PI:14:ILE:HG12	2.16	0.45
45:PI:141:VAL:HG22	45:PI:187:SER:HA	1.98	0.45
46:PJ:396:HIS:CD2	46:PJ:397:TRP:HD1	2.34	0.45
46:PN:308:GLY:HA2	46:PN:426:GLN:HE22	1.81	0.45
46:PN:344:TRP:CE3	46:PN:345:ILE:HG23	2.51	0.45
45:QA:18:ASN:OD1	45:QA:19:ALA:N	2.49	0.45
45:QA:239:THR:OG1	45:QA:243:ARG:NH2	2.39	0.45
46:QD:74:ASP:OD1	46:QD:77:ARG:NH1	2.49	0.45
45:QE:269:LEU:HD22	45:QE:384:ILE:HD11	1.98	0.45
45:RA:335:ILE:HD13	45:RA:338:LYS:HZ1	1.82	0.45
45:RC:296:PHE:HE2	45:RC:335:ILE:HG21	1.81	0.45
46:RF:252:LYS:HA	46:RF:255:VAL:HG12	1.97	0.45
46:RJ:266:PHE:CE1	46:RJ:370:ASN:HB2	2.51	0.45
45:RK:55:GLU:HG3	45:RK:57:GLY:H	1.81	0.45
45:RK:349:THR:HG23	46:RL:179:VAL:HA	1.97	0.45
46:RN:87:PRO:HA	46:RN:90:PHE:HD2	1.81	0.45
46:SL:425:TYR:OH	45:SM:401:LYS:NZ	2.35	0.45
45:TC:201:ALA:HB3	45:TC:267:PHE:HD1	1.81	0.45
45:TC:259:LEU:HD11	45:TC:316:SER:HB3	1.99	0.45
46:TF:257:LEU:HD23	46:TF:257:LEU:HA	1.82	0.45
46:TJ:259:PRO:HG2	46:TJ:311:LEU:HD21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TK:260:VAL:O	46:TL:397:TRP:NE1	2.49	0.45
45:TM:98:ASP:O	45:TM:105:ARG:NH1	2.50	0.45
45:TM:377:MET:HE1	45:TM:379:SER:HB3	1.99	0.45
45:UA:214:ARG:NH1	45:UA:222:PRO:HG3	2.32	0.45
46:UB:371:SER:O	46:UB:422:TYR:OH	2.24	0.45
45:UE:2:ARG:HD2	45:UE:242:LEU:O	2.15	0.45
46:UF:217:LEU:HD23	46:UF:217:LEU:H	1.82	0.45
46:UH:203:ASP:OD1	46:UH:205:GLU:N	2.38	0.45
46:UJ:1:MET:O	46:UJ:2:ARG:HG2	2.16	0.45
46:UJ:21:TRP:CZ3	46:UJ:61:PRO:HB3	2.51	0.45
45:UM:183:GLU:N	45:UM:184:PRO:HD2	2.31	0.45
46:UN:204:ASN:HA	46:UN:207:LEU:HB3	1.99	0.45
46:VB:391:ARG:HA	46:VB:391:ARG:HD2	1.80	0.45
45:VC:251:ASP:HB3	45:VC:254:GLU:OE1	2.17	0.45
46:VL:73:MET:HA	46:VL:76:VAL:HG12	1.98	0.45
45:WC:36:MET:HA	45:WC:37:PRO:HD3	1.86	0.45
46:WJ:217:LEU:HD12	46:WJ:220:PRO:HD3	1.99	0.45
46:WL:67:ASP:OD1	46:WL:68:LEU:N	2.48	0.45
2:0B:196:LYS:NZ	45:KI:282:TYR:HE1	2.14	0.45
24:1P:301:ILE:HG22	46:TD:362:LYS:HZ3	1.81	0.45
11:1S:184:PRO:HG3	45:WC:127:ASP:HB3	1.97	0.45
13:1U:404:HIS:HD2	13:1U:408:VAL:HG22	1.82	0.45
15:1X:99:VAL:HG22	45:MC:282:TYR:HE2	1.81	0.45
15:1X:131:MET:O	15:1X:134:THR:HG22	2.17	0.45
21:2L:667:ARG:NH2	45:CM:365:GLY:H	2.14	0.45
23:2O:259:LYS:O	23:2O:263:GLU:HG2	2.16	0.45
23:2O:343:ALA:HB1	46:VF:360:GLY:HA2	1.97	0.45
23:2O:448:GLU:O	23:2O:452:ILE:HG13	2.17	0.45
12:2T:29:ASN:HB3	12:2T:32:TYR:HD2	1.80	0.45
13:2U:84:ILE:HB	13:2U:98:LEU:HB2	1.98	0.45
32:3D:133:LEU:HD11	32:3D:142:GLY:HA3	1.99	0.45
31:3I:204:TYR:CE1	45:FK:119:LEU:HB3	2.52	0.45
21:3L:170:THR:H	21:3L:173:GLN:NE2	2.14	0.45
11:3S:87:ALA:H	13:3U:309:LYS:NZ	2.15	0.45
13:3U:348:ASN:HB2	13:3U:355:LEU:HD21	1.99	0.45
13:3U:558:LYS:HD2	13:3U:560:TRP:HE1	1.81	0.45
14:3V:24:ARG:NE	45:MA:430:LYS:HD3	2.31	0.45
37:5H:107:VAL:HG23	37:5H:108:LYS:N	2.30	0.45
34:7R:219:LYS:HA	34:7R:219:LYS:HD2	1.82	0.45
34:7R:386:PRO:HB2	46:EB:279:GLN:NE2	2.31	0.45
45:AA:319:TYR:HB3	45:AA:323:VAL:HG11	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AB:70:PRO:HA	46:AB:73:MET:SD	2.55	0.45
46:AF:55:THR:H	46:BF:283:ALA:HA	1.81	0.45
45:AM:212:ILE:HD11	45:AM:300:ASN:HA	1.98	0.45
45:BA:340:THR:HG23	45:BA:341:ILE:HG13	1.98	0.45
45:BC:205:ASP:OD1	45:BC:303:ALA:HA	2.17	0.45
45:BC:413:MET:HE2	45:BC:413:MET:HB2	1.63	0.45
46:BH:293:MET:HE2	46:BH:293:MET:HB3	1.65	0.45
46:BL:105:HIS:CE1	46:BL:150:LEU:HD12	2.51	0.45
45:BM:46:ASP:OD1	45:BM:46:ASP:N	2.49	0.45
47:CG:501:GTP:H8	47:CG:501:GTP:O2A	2.00	0.45
45:CI:120:ASP:HA	45:CI:123:ARG:HH21	1.82	0.45
45:CI:183:GLU:N	45:CI:184:PRO:HD2	2.31	0.45
46:CJ:87:PRO:HA	46:CJ:90:PHE:HD2	1.80	0.45
45:CK:276:ILE:HG13	45:CK:280:LYS:HE3	1.98	0.45
45:CM:70:LEU:HA	45:CM:95:GLY:HA3	1.99	0.45
45:CM:88:HIS:HE1	45:CM:90:GLU:HB3	1.82	0.45
46:CN:65:LEU:HD21	46:CN:90:PHE:CD1	2.52	0.45
46:CN:86:ARG:NH1	46:DN:281:TYR:HB2	2.32	0.45
46:CN:280:GLN:CD	46:CN:280:GLN:H	2.20	0.45
46:CN:371:SER:O	46:CN:422:TYR:OH	2.35	0.45
45:DI:206:ASN:OD1	47:DI:501:GTP:N2	2.42	0.45
46:DL:105:HIS:NE2	46:DL:150:LEU:HB3	2.31	0.45
46:DL:238:CYS:SG	46:DL:318:ARG:HD2	2.57	0.45
45:DM:207:GLU:HB2	45:DM:304:LYS:HD2	1.98	0.45
45:EC:188:ILE:O	45:EC:191:THR:OG1	2.27	0.45
45:EG:267:PHE:HE2	45:EG:428:LEU:HD11	1.80	0.45
46:EJ:258:ILE:HG13	45:EK:407:TRP:HE1	1.81	0.45
46:EL:318:ARG:HD2	46:EL:358:PRO:HG3	1.98	0.45
46:FB:208:TYR:CE2	46:FB:212:PHE:HE2	2.35	0.45
45:FK:113:GLU:N	45:FK:113:GLU:OE1	2.50	0.45
45:FM:75:ILE:CG2	45:FM:79:ARG:HH12	2.28	0.45
45:GE:71:GLU:OE1	45:GE:73:THR:OG1	2.34	0.45
45:GI:297:GLU:OE1	45:GI:300:ASN:N	2.50	0.45
45:GM:11:GLN:HB2	45:GM:74:VAL:HG11	1.98	0.45
46:GN:370:ASN:OD1	46:GN:422:TYR:OH	2.34	0.45
46:HB:139:LEU:HD13	46:HB:168:SER:HB3	1.98	0.45
46:HD:405:GLU:HA	46:HD:408:PHE:HD2	1.81	0.45
45:HG:115:VAL:HG22	45:HG:119:LEU:HD23	1.97	0.45
45:HI:2:ARG:HD3	45:HI:2:ARG:H	1.80	0.45
46:HN:211:CYS:O	46:HN:216:LYS:N	2.49	0.45
46:HN:294:PHE:CD2	46:HN:333:VAL:HG11	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IB:161:ASP:OD2	46:IB:161:ASP:N	2.45	0.45
46:JB:213:ARG:HG3	46:JB:297:LYS:NZ	2.32	0.45
45:JC:387:VAL:HG12	45:JC:390:ARG:NH2	2.31	0.45
45:JG:174:SER:HB2	45:JG:177:VAL:O	2.17	0.45
45:JI:21:TRP:CZ2	45:JI:65:ALA:HB2	2.51	0.45
46:JL:156:ARG:NH2	46:JL:197:ASP:OD1	2.49	0.45
45:JM:72:PRO:HD2	46:JN:2:ARG:HH12	1.82	0.45
45:JM:183:GLU:N	45:JM:184:PRO:HD2	2.31	0.45
45:KA:398:MET:HE1	46:KB:345:ILE:HA	1.99	0.45
45:KC:192:HIS:ND1	45:KC:424:ASP:OD1	2.46	0.45
46:KF:20:PHE:HA	46:KF:230:SER:OG	2.16	0.45
45:KG:1:MET:SD	46:KJ:70:PRO:HG2	2.56	0.45
45:KG:194:LEU:O	45:KG:198:THR:HG22	2.17	0.45
45:LA:52:PHE:HZ	45:LA:239:THR:HG21	1.81	0.45
46:LB:207:LEU:HB3	46:LB:225:LEU:HG	1.99	0.45
46:LD:167:PHE:CE2	46:LD:233:MET:HG2	2.51	0.45
46:LD:344:TRP:CE3	46:LD:345:ILE:HG23	2.51	0.45
45:LE:115:VAL:O	45:LE:119:LEU:HD23	2.17	0.45
46:LJ:209:ASP:OD2	46:LJ:213:ARG:NH2	2.49	0.45
45:LM:431:ASP:O	45:LM:435:VAL:HG23	2.15	0.45
46:LN:130:LEU:HB3	46:LN:162:ARG:HE	1.82	0.45
45:MA:387:VAL:HA	45:MA:390:ARG:HG2	1.97	0.45
45:ME:56:THR:HG23	45:ME:58:ALA:H	1.81	0.45
46:MF:239:CYS:SG	46:MF:247:ASN:HA	2.56	0.45
45:MM:210:TYR:CE2	45:MM:227:LEU:HD11	2.51	0.45
45:NA:31:GLN:HG2	45:NA:37:PRO:HD3	1.99	0.45
45:NG:31:GLN:HE21	45:NG:37:PRO:HG3	1.81	0.45
45:NI:395:PHE:HD2	45:NI:422:ARG:HH21	1.64	0.45
46:NL:179:VAL:HG23	46:NL:180:VAL:HG13	1.98	0.45
45:NM:71:GLU:OE1	46:NN:247:ASN:ND2	2.50	0.45
46:OB:329:GLN:HA	46:OB:332:ASN:ND2	2.31	0.45
46:OD:34:GLY:HA3	46:OD:58:ARG:HG3	1.98	0.45
46:OD:334:GLN:HE22	46:OD:348:ASN:H	1.63	0.45
46:OF:6:HIS:HD1	46:OF:134:GLN:CD	2.20	0.45
46:OF:217:LEU:H	46:OF:217:LEU:HD23	1.80	0.45
45:OI:202:VAL:HG12	45:OI:204:LEU:HG	1.99	0.45
46:OJ:391:ARG:HD2	46:OJ:391:ARG:HA	1.79	0.45
46:OL:12:CYS:SG	46:OL:138:SER:OG	2.70	0.45
45:OM:214:ARG:HA	45:OM:214:ARG:HD2	1.81	0.45
46:ON:32:PRO:HG3	46:ON:81:PHE:CE1	2.52	0.45
45:PA:401:LYS:HG2	46:PB:344:TRP:CH2	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PC:337:THR:O	45:PC:339:ARG:NH1	2.49	0.45
46:PH:236:VAL:HA	46:PH:316:LEU:HD22	1.98	0.45
45:PI:210:TYR:OH	46:PJ:323:THR:OG1	2.32	0.45
45:PK:141:VAL:HG11	45:PK:172:TYR:HE1	1.81	0.45
46:PN:3:GLU:CB	46:PN:62:ARG:HH22	2.28	0.45
46:PN:212:PHE:HB3	46:PN:213:ARG:CZ	2.46	0.45
46:QB:87:PRO:HA	46:QB:90:PHE:HD2	1.82	0.45
46:QD:207:LEU:HB3	46:QD:225:LEU:HD22	1.98	0.45
46:QH:86:ARG:CZ	46:RH:282:ARG:HH21	2.29	0.45
45:QI:184:PRO:O	45:QI:188:ILE:HG12	2.16	0.45
45:QI:268:MET:HB2	45:QI:379:SER:O	2.17	0.45
45:QI:288:VAL:HG21	45:QI:327:ASP:HB3	1.99	0.45
45:QM:207:GLU:HA	45:QM:210:TYR:CD2	2.52	0.45
45:RE:247:ALA:HB3	45:RE:355:ILE:HD11	1.99	0.45
45:RK:267:PHE:CD1	45:RK:388:PHE:HZ	2.34	0.45
45:RK:433:GLU:O	45:RK:437:ILE:HG23	2.16	0.45
45:RM:192:HIS:CD2	45:RM:421:ALA:HA	2.52	0.45
46:SB:113:ILE:HG12	46:SB:117:LEU:HD23	1.99	0.45
46:SB:193:VAL:HA	46:SB:264:HIS:CE1	2.52	0.45
45:SG:5:ILE:HD13	45:SG:64:ARG:HB3	1.97	0.45
46:SJ:148:GLY:O	46:SJ:152:ILE:HG12	2.17	0.45
46:SL:344:TRP:HA	45:SM:397:LEU:HD21	1.97	0.45
45:SM:372:MET:SD	45:SM:372:MET:N	2.89	0.45
46:TB:184:ASN:OD1	46:TB:185:ALA:N	2.49	0.45
45:TM:180:ALA:N	45:TM:183:GLU:OE2	2.44	0.45
46:TN:58:ARG:NH1	46:UN:280:GLN:OE1	2.50	0.45
46:UD:183:TYR:OH	46:UD:393:ALA:O	2.28	0.45
46:UD:238:CYS:SG	46:UD:239:CYS:N	2.89	0.45
46:UD:372:THR:HA	46:UD:422:TYR:CE2	2.52	0.45
45:UE:141:VAL:HG21	45:UE:172:TYR:CE1	2.50	0.45
45:UM:238:LEU:HD11	45:UM:255:PHE:HE2	1.81	0.45
45:VE:241:SER:OG	45:VE:250:VAL:O	2.27	0.45
45:VM:141:VAL:HG12	45:VM:171:ILE:O	2.17	0.45
45:WG:188:ILE:HD12	45:WG:425:LEU:HD22	1.98	0.45
45:WG:326:LYS:HE2	46:WJ:220:PRO:HD2	1.97	0.45
46:WJ:3:GLU:HB3	46:WJ:49:VAL:HA	1.98	0.45
45:WK:174:SER:HB2	45:WK:177:VAL:O	2.17	0.45
19:1J:223:PHE:CE2	22:2M:345:ARG:HD3	2.51	0.45
23:1O:153:VAL:HG21	23:3O:483:TYR:CD1	2.51	0.45
24:1P:226:HIS:CE1	45:TG:279:GLU:HA	2.51	0.45
14:1V:33:PRO:HB2	14:1V:36:SER:HB3	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:2C:233:LEU:O	27:2C:237:LEU:HG	2.17	0.45
21:2L:390:GLN:OE1	21:2L:390:GLN:N	2.44	0.45
21:2L:910:LYS:HD2	21:2L:910:LYS:HA	1.82	0.45
23:2O:444:ASN:O	23:2O:448:GLU:HG2	2.17	0.45
16:3B:28:SER:HA	16:3B:31:ARG:HE	1.81	0.45
11:3S:127:ARG:O	11:3S:128:THR:OG1	2.31	0.45
34:4R:245:LEU:HD23	45:BE:58:ALA:HB3	1.97	0.45
36:5D:19:ARG:HG3	36:5D:20:LEU:N	2.32	0.45
34:5R:128:HIS:HE1	34:5R:143:VAL:HG13	1.82	0.45
40:6G:241:LYS:HB3	46:VD:336:LYS:HA	1.98	0.45
34:6R:248:TYR:CD1	34:6R:281:ALA:HB1	2.50	0.45
34:6R:593:ASP:OD2	34:6R:597:ASN:N	2.48	0.45
45:AA:220:GLU:N	45:AA:220:GLU:OE1	2.50	0.45
46:AB:154:LYS:HE2	46:AB:154:LYS:HA	1.98	0.45
46:AB:391:ARG:HD2	46:AB:391:ARG:HA	1.77	0.45
45:AE:222:PRO:HD2	46:AF:324:LYS:HE3	1.99	0.45
46:AH:10:GLY:O	46:AH:14:ASN:ND2	2.50	0.45
45:AM:283:HIS:CD2	45:MM:60:LYS:HD2	2.52	0.45
46:AN:68:LEU:HD13	46:AN:147:MET:HE3	1.99	0.45
46:AN:86:ARG:HG2	46:BN:281:TYR:HB3	1.99	0.45
46:BH:42:LEU:HA	46:BH:45:GLU:HG2	1.97	0.45
46:BH:116:VAL:HA	46:BH:119:VAL:HG12	1.99	0.45
46:BN:324:LYS:HZ3	46:BN:324:LYS:HB2	1.82	0.45
45:CC:278:ALA:HA	45:CC:369:ALA:HB2	1.99	0.45
46:CD:294:PHE:CD1	46:CD:333:VAL:HG21	2.52	0.45
46:CF:246:LEU:HD11	45:CG:224:TYR:CE2	2.51	0.45
45:DA:133:GLN:HB3	45:DA:252:ILE:HG21	1.99	0.45
45:DC:10:GLY:O	45:DC:14:ILE:HD12	2.16	0.45
45:DC:88:HIS:HB3	45:DC:91:GLN:HG2	1.98	0.45
46:DN:116:VAL:HA	46:DN:119:VAL:HG22	1.98	0.45
45:EA:311:LYS:HZ3	45:EA:342:GLN:HG3	1.79	0.45
46:EB:51:TYR:HE1	46:EB:61:PRO:HG3	1.81	0.45
45:EC:272:TYR:HD2	45:EC:275:ILE:HD11	1.82	0.45
45:EI:195:LEU:HD13	45:EI:428:LEU:HD22	1.99	0.45
45:EI:210:TYR:CE1	45:EI:227:LEU:HD11	2.51	0.45
45:EI:241:SER:OG	45:EI:250:VAL:O	2.26	0.45
46:EL:31:ASP:OD2	46:EL:37:HIS:NE2	2.50	0.45
46:EL:313:ALA:HB1	46:EL:367:PHE:CE1	2.52	0.45
46:EL:373:ALA:O	46:EL:376:GLU:HG2	2.16	0.45
45:EM:163:LYS:HA	45:EM:163:LYS:HD3	1.85	0.45
45:EM:284:GLU:HG2	45:EM:286:LEU:H	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FH:190:HIS:CD2	46:FH:414:ASN:HD22	2.34	0.45
45:FI:119:LEU:HG	45:FI:156:ARG:HG2	1.99	0.45
46:FL:207:LEU:HD13	46:FL:225:LEU:HB3	1.99	0.45
46:FN:46:ARG:HA	46:FN:46:ARG:HD3	1.83	0.45
45:GE:244:PHE:HB2	45:GE:356:ASN:HD21	1.82	0.45
46:GF:7:ILE:HG13	46:GF:135:ILE:HG12	1.99	0.45
45:GG:66:VAL:HG11	45:GG:122:ILE:HD11	1.99	0.45
45:GI:107:HIS:ND1	45:GI:107:HIS:O	2.49	0.45
46:GL:178:THR:HG22	46:GL:180:VAL:H	1.81	0.45
45:GM:185:TYR:CE2	45:GM:404:PHE:HB2	2.51	0.45
45:HC:88:HIS:CD2	45:HC:89:PRO:HD2	2.51	0.45
45:HC:203:MET:HG3	45:HC:384:ILE:HD11	1.99	0.45
45:HG:263:PRO:HD3	46:HJ:396:HIS:CE1	2.52	0.45
45:HI:2:ARG:HH21	45:HI:243:ARG:HA	1.82	0.45
45:HM:31:GLN:HB2	45:HM:32:PRO:HD2	1.98	0.45
45:IG:241:SER:OG	45:IG:250:VAL:O	2.24	0.45
46:IN:342:VAL:HG13	46:IN:345:ILE:HG22	1.99	0.45
46:JB:212:PHE:HE1	46:JB:220:PRO:HG3	1.81	0.45
46:JB:375:GLN:OE1	46:JB:423:GLN:HB3	2.17	0.45
45:JC:46:ASP:N	45:JC:46:ASP:OD1	2.49	0.45
45:JC:174:SER:HB3	45:JC:177:VAL:O	2.17	0.45
45:KC:88:HIS:ND1	45:KC:90:GLU:HG2	2.32	0.45
46:KF:158:GLU:HG2	46:KF:159:TYR:CE1	2.51	0.45
45:LI:72:PRO:HD2	46:LJ:2:ARG:NH1	2.32	0.45
45:LK:326:LYS:NZ	46:LN:208:TYR:HB3	2.31	0.45
45:ME:408:TYR:HB3	45:ME:413:MET:CE	2.46	0.45
46:MH:121:ARG:O	46:MH:125:GLU:HG2	2.16	0.45
46:MH:217:LEU:HD23	46:MH:217:LEU:H	1.82	0.45
45:MI:356:ASN:OD1	45:MI:357:TYR:N	2.50	0.45
46:MJ:27:GLU:OE2	46:MJ:241:ARG:NH1	2.33	0.45
45:MM:319:TYR:HB3	45:MM:323:VAL:HG11	1.99	0.45
45:MM:339:ARG:NE	45:MM:339:ARG:HA	2.31	0.45
46:MN:132:GLY:HA3	46:MN:163:ILE:HG22	1.98	0.45
46:MN:139:LEU:HD22	46:MN:170:VAL:HG12	1.99	0.45
45:NA:9:VAL:HG13	45:NA:139:ASN:HB3	1.97	0.45
46:NB:15:GLN:NE2	49:NB:502:GDP:N7	2.65	0.45
45:NC:269:LEU:HD23	45:NC:384:ILE:HD13	1.98	0.45
45:NI:206:ASN:ND2	47:NI:501:GTP:O2'	2.49	0.45
45:NI:326:LYS:HG3	45:NI:327:ASP:N	2.32	0.45
45:NM:98:ASP:OD1	45:NM:99:ALA:N	2.49	0.45
46:NN:156:ARG:NH2	46:NN:197:ASP:OD1	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OA:259:LEU:HD23	45:OA:268:MET:HE2	1.99	0.45
46:OD:32:PRO:HA	46:OD:84:LEU:HD11	1.99	0.45
45:OE:177:VAL:HG13	46:OF:327:ASP:HB3	1.97	0.45
45:OE:395:PHE:CE2	45:OE:422:ARG:HD3	2.52	0.45
45:OG:88:HIS:H	45:OG:91:GLN:HE22	1.64	0.45
46:OH:12:CYS:SG	46:OH:138:SER:OG	2.66	0.45
46:OJ:117:LEU:O	46:OJ:121:ARG:HG2	2.17	0.45
45:OM:417:GLU:HA	45:OM:420:GLU:OE2	2.17	0.45
45:PC:191:THR:HA	45:PC:194:LEU:HG	1.98	0.45
46:PF:130:LEU:HB3	46:PF:162:ARG:NH1	2.31	0.45
45:PG:222:PRO:CG	46:PH:324:LYS:HZ2	2.29	0.45
45:PG:317:MET:HG2	45:PG:377:MET:HB2	1.99	0.45
45:PK:152:LEU:O	45:PK:156:ARG:HG2	2.17	0.45
46:PL:55:THR:HG23	46:QJ:283:ALA:HA	1.98	0.45
45:PM:81:GLY:O	45:PM:84:ARG:NH1	2.50	0.45
46:PN:11:GLN:O	46:PN:15:GLN:HG2	2.17	0.45
46:PN:68:LEU:HD13	46:PN:93:GLY:HA3	1.99	0.45
46:PN:211:CYS:HB3	46:PN:220:PRO:HG3	1.97	0.45
45:QC:55:GLU:HG3	45:QC:57:GLY:H	1.81	0.45
46:QD:50:TYR:OH	46:QD:237:THR:HG21	2.17	0.45
46:QD:246:LEU:HD11	45:QE:224:TYR:HE2	1.81	0.45
45:QE:167:LEU:HG	45:QE:200:VAL:HB	1.98	0.45
46:QF:247:ASN:O	46:QF:252:LYS:NZ	2.43	0.45
46:QL:375:GLN:HG3	46:QL:419:VAL:HG13	1.99	0.45
45:QM:431:ASP:O	45:QM:435:VAL:HG23	2.16	0.45
45:RA:75:ILE:HG21	45:RA:94:SER:HB2	1.98	0.45
45:RC:346:TRP:CD1	46:RD:391:ARG:HG3	2.52	0.45
46:RH:20:PHE:HA	46:RH:230:SER:OG	2.16	0.45
46:RL:284:LEU:HD13	46:RL:362:LYS:HB2	1.99	0.45
46:RL:318:ARG:HB3	46:RL:357:PRO:HA	1.98	0.45
45:RM:207:GLU:HA	45:RM:210:TYR:CD2	2.52	0.45
46:SB:8:GLN:NE2	46:SB:14:ASN:HA	2.32	0.45
46:SB:324:LYS:O	46:SB:327:ASP:N	2.40	0.45
46:SD:286:VAL:HG12	46:SD:289:LEU:HD12	1.99	0.45
46:SF:173:PRO:HG2	46:SF:380:ARG:HD3	1.98	0.45
46:SL:12:CYS:O	46:SL:16:ILE:HG12	2.16	0.45
45:TE:76:ASP:OD1	45:TE:79:ARG:NH2	2.44	0.45
45:TI:103:PHE:H	45:TI:408:TYR:HE2	1.64	0.45
45:TI:241:SER:HA	45:TI:356:ASN:HD21	1.81	0.45
45:UA:273:ALA:HB3	45:UA:375:VAL:HG23	1.98	0.45
46:UB:244:GLY:H	46:UB:247:ASN:HD21	1.65	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UC:326:LYS:HE2	45:UC:326:LYS:HB3	1.81	0.45
45:UC:329:ASN:HB3	46:UD:175:VAL:HG12	1.97	0.45
46:UD:178:THR:HG22	46:UD:180:VAL:H	1.82	0.45
45:UE:133:GLN:HB3	45:UE:252:ILE:HD11	1.99	0.45
45:UK:3:GLU:HG3	45:UK:129:CYS:SG	2.57	0.45
45:UM:3:GLU:N	45:UM:133:GLN:OE1	2.48	0.45
46:UN:271:ALA:HB1	46:UN:292:GLN:NE2	2.31	0.45
45:VA:98:ASP:O	45:VA:105:ARG:NH1	2.49	0.45
45:VG:69:ASP:OD1	45:VG:70:LEU:N	2.50	0.45
45:VG:387:VAL:HG12	45:VG:390:ARG:NH1	2.32	0.45
46:VN:193:VAL:HG22	46:VN:262:ARG:NH2	2.30	0.45
45:WA:103:PHE:H	45:WA:408:TYR:HE1	1.64	0.45
46:WB:306:ARG:HA	46:WB:306:ARG:HE	1.82	0.45
45:WE:2:ARG:NH1	45:WE:242:LEU:O	2.47	0.45
45:WG:288:VAL:HA	45:WG:291:ILE:HG12	1.99	0.45
20:1K:182:ILE:HG12	28:2F:29:HIS:CD2	2.52	0.45
4:2D:129:GLN:O	4:2D:133:THR:HG23	2.17	0.45
30:2H:206:SER:O	30:2H:207:LYS:HB2	2.17	0.45
21:2L:699:TYR:HA	21:2L:702:PHE:HB3	1.99	0.45
23:2O:168:ASP:O	23:2O:171:LYS:HB2	2.17	0.45
13:2U:62:THR:HG21	13:2U:108:LEU:HB2	1.99	0.45
13:2U:69:TYR:CZ	13:2U:134:VAL:HG11	2.51	0.45
13:2U:325:ASP:O	13:2U:338:THR:OG1	2.29	0.45
27:3C:104:ALA:HA	27:3C:107:VAL:HG12	1.98	0.45
5:3E:114:PHE:HB2	5:3E:158:LYS:NZ	2.32	0.45
10:3Q:68:THR:HG23	10:3Q:152:LEU:HD13	1.97	0.45
34:4R:150:ILE:HD13	34:4R:173:LEU:HD22	1.98	0.45
36:5A:102:TYR:HA	45:KA:393:HIS:HE2	1.82	0.45
37:5F:54:LYS:HG3	46:OF:227:HIS:CE1	2.51	0.45
10:5Q:69:LEU:HD23	10:5Q:69:LEU:O	2.15	0.45
45:AC:188:ILE:HG23	45:AC:425:LEU:HD11	1.99	0.45
45:AE:259:LEU:HD11	45:AE:316:SER:HB2	1.98	0.45
46:AF:200:MET:HE2	46:AF:268:ILE:HG21	1.98	0.45
45:AG:422:ARG:HH12	45:AG:426:ALA:HB2	1.81	0.45
45:BA:109:THR:HG22	45:BA:110:ILE:HG23	1.99	0.45
46:BB:282:ARG:NH1	46:BB:288:GLU:OE1	2.50	0.45
46:BB:293:MET:HE2	46:BB:367:PHE:HB2	1.98	0.45
46:BD:152:ILE:HG23	46:BD:164:MET:SD	2.57	0.45
46:BD:293:MET:HE2	46:BD:367:PHE:HD1	1.81	0.45
46:BF:313:ALA:HB3	46:BF:349:ILE:HG12	1.99	0.45
46:BH:201:VAL:HG23	46:BH:301:CYS:SG	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BI:205:ASP:OD1	45:BI:303:ALA:HA	2.16	0.45
45:BK:398:MET:HG2	46:BL:345:ILE:HG22	1.98	0.45
45:CA:141:VAL:HG22	45:CA:187:SER:HA	1.98	0.45
45:CE:433:GLU:O	45:CE:437:ILE:HG23	2.17	0.45
46:CF:11:GLN:HG3	46:CF:72:THR:OG1	2.16	0.45
46:CF:379:LYS:HD3	46:CF:419:VAL:HG21	1.97	0.45
45:CI:256:GLN:O	45:CI:260:VAL:HG22	2.17	0.45
46:CJ:3:GLU:OE2	46:CJ:127:CYS:HB2	2.16	0.45
45:CK:255:PHE:HZ	45:CK:378:ILE:HG13	1.81	0.45
45:DA:318:MET:SD	45:DA:376:CYS:HB3	2.56	0.45
46:DB:252:LYS:HA	45:DC:100:ALA:HB1	1.98	0.45
45:DE:350:GLY:HA2	46:DF:179:VAL:HG23	1.98	0.45
46:DF:145:SER:O	46:DF:149:THR:OG1	2.24	0.45
45:DK:21:TRP:CZ3	45:DK:63:PRO:HB3	2.52	0.45
45:DK:205:ASP:OD1	45:DK:303:ALA:HA	2.16	0.45
45:EA:256:GLN:HA	45:EA:260:VAL:HG23	1.98	0.45
46:EB:116:VAL:O	46:EB:120:VAL:HG23	2.16	0.45
45:EC:102:ASN:HB3	45:EC:105:ARG:HB2	1.99	0.45
45:EC:262:TYR:HB2	45:EC:265:ILE:HD12	1.98	0.45
45:EC:290:GLU:N	45:EC:290:GLU:OE1	2.50	0.45
46:EF:68:LEU:HB3	46:EF:96:GLY:HA2	1.97	0.45
46:EF:258:ILE:HD11	45:EG:407:TRP:HZ2	1.82	0.45
45:EG:103:PHE:H	45:EG:408:TYR:HE1	1.64	0.45
46:EH:247:ASN:O	46:EH:252:LYS:NZ	2.46	0.45
45:EI:395:PHE:CD1	45:EI:422:ARG:HD3	2.52	0.45
46:EJ:358:PRO:HG2	46:EJ:364:ALA:HB3	1.99	0.45
46:FB:296:ALA:HB1	46:FB:305:PRO:HD2	1.99	0.45
45:FE:141:VAL:HG11	45:FE:172:TYR:CD1	2.51	0.45
46:FF:253:LEU:HD11	46:FF:316:LEU:HD11	1.99	0.45
45:FG:287:SER:O	45:FG:291:ILE:HG23	2.17	0.45
46:FH:105:HIS:CE1	46:FH:150:LEU:HD12	2.51	0.45
46:FN:25:SER:OG	46:FN:30:ILE:O	2.34	0.45
45:GC:108:TYR:O	45:GC:112:LYS:NZ	2.48	0.45
46:GD:3:GLU:HG3	46:GD:127:CYS:HB2	1.97	0.45
46:GN:117:LEU:HA	46:GN:120:VAL:HG12	1.98	0.45
46:GN:166:THR:HG21	46:GN:192:LEU:HD21	1.98	0.45
46:HD:60:VAL:HG11	46:HD:86:ARG:HH21	1.82	0.45
45:HK:88:HIS:CD2	45:HK:89:PRO:HD2	2.51	0.45
45:HK:187:SER:O	45:HK:191:THR:HG23	2.17	0.45
45:IA:195:LEU:HD12	45:IA:266:HIS:HE1	1.81	0.45
46:ID:233:MET:O	46:ID:236:VAL:HG12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JA:342:GLN:N	45:JA:342:GLN:OE1	2.49	0.45
45:JG:123:ARG:HA	45:JG:123:ARG:HD3	1.84	0.45
45:JM:113:GLU:HG2	45:JM:114:ILE:HD12	1.99	0.45
46:KN:169:VAL:HG12	46:KN:202:ILE:HB	1.97	0.45
46:LB:156:ARG:HD2	46:LB:156:ARG:HA	1.72	0.45
45:LE:57:GLY:HA3	45:ME:285:GLN:HA	1.99	0.45
46:LH:51:TYR:HE1	46:LH:61:PRO:HG3	1.80	0.45
45:LM:141:VAL:HG12	45:LM:171:ILE:O	2.17	0.45
46:LN:156:ARG:HG2	46:LN:195:ASN:HD22	1.81	0.45
45:MA:257:THR:HA	46:MD:397:TRP:CZ2	2.52	0.45
46:MB:288:GLU:O	46:MB:291:GLN:HG3	2.16	0.45
46:MF:2:ARG:HB2	46:MF:131:GLN:HG3	1.99	0.45
46:MF:3:GLU:HG3	46:MF:62:ARG:NH1	2.31	0.45
45:MM:6:SER:OG	45:MM:8:HIS:NE2	2.43	0.45
45:NA:172:TYR:CE1	45:NA:203:MET:HG3	2.52	0.45
45:NC:71:GLU:HG3	45:NC:98:ASP:HB2	1.99	0.45
45:OA:255:PHE:O	45:OA:259:LEU:HB2	2.16	0.45
46:OB:86:ARG:HH11	46:PB:281:TYR:HB3	1.80	0.45
47:OE:501:GTP:O1G	46:OF:252:LYS:NZ	2.50	0.45
46:OH:342:VAL:HG12	46:OH:348:ASN:HD22	1.82	0.45
45:OI:3:GLU:HG3	45:OI:129:CYS:SG	2.56	0.45
45:PA:252:ILE:H	45:PA:252:ILE:HD12	1.82	0.45
45:PA:256:GLN:HB2	46:PD:397:TRP:HH2	1.81	0.45
46:PB:6:HIS:CE1	46:PB:8:GLN:HB3	2.47	0.45
46:PB:117:LEU:HD13	46:PB:121:ARG:HH12	1.81	0.45
46:PD:49:VAL:HG13	46:PD:50:TYR:CD2	2.52	0.45
45:PG:356:ASN:OD1	45:PG:357:TYR:N	2.50	0.45
46:PH:326:VAL:O	46:PH:330:MET:HG2	2.17	0.45
45:QA:93:ILE:HD11	45:QA:121:ARG:HG3	1.99	0.45
45:QC:406:HIS:HA	45:QC:409:VAL:HG12	1.97	0.45
46:QD:99:ASN:HD21	46:QD:178:THR:HG21	1.81	0.45
46:QH:323:THR:HG21	45:QI:224:TYR:HE2	1.82	0.45
46:QL:260:PHE:HB3	46:QL:262:ARG:HH21	1.82	0.45
46:QL:336:LYS:HG3	46:QL:337:ASN:OD1	2.16	0.45
45:QM:174:SER:HB3	45:QM:207:GLU:HB2	1.98	0.45
46:QN:268:ILE:HG22	46:QN:368:VAL:HG22	1.98	0.45
45:RA:338:LYS:HB3	45:RA:340:THR:HG22	1.98	0.45
46:RB:117:LEU:HB2	46:RB:154:LYS:NZ	2.32	0.45
45:RC:69:ASP:OD1	45:RC:70:LEU:N	2.50	0.45
45:RC:208:ALA:O	45:RC:212:ILE:HG12	2.17	0.45
45:RE:345:ASP:OD1	45:RE:346:TRP:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RF:167:PHE:CZ	46:RF:200:MET:HG3	2.52	0.45
46:RF:235:GLY:HA2	46:RF:318:ARG:NH2	2.31	0.45
46:RH:67:ASP:OD1	46:RH:68:LEU:N	2.42	0.45
46:RH:284:LEU:O	46:RH:284:LEU:HD12	2.17	0.45
45:RI:207:GLU:HA	45:RI:210:TYR:CD2	2.52	0.45
46:RJ:135:ILE:HD12	46:RJ:137:HIS:CD2	2.52	0.45
46:RJ:238:CYS:SG	46:RJ:316:LEU:HD21	2.57	0.45
46:SB:324:LYS:NZ	45:SC:222:PRO:HG2	2.31	0.45
45:SC:288:VAL:HG11	45:SC:327:ASP:HB3	1.97	0.45
46:SD:255:VAL:O	46:SD:255:VAL:HG12	2.16	0.45
45:SE:102:ASN:HB3	45:SE:105:ARG:HB2	1.99	0.45
45:SE:292:THR:HG21	45:SE:331:SER:HB3	1.98	0.45
46:SH:73:MET:HE1	46:SH:92:PHE:CD1	2.51	0.45
46:SJ:86:ARG:NH1	46:TJ:281:TYR:HB3	2.31	0.45
45:SM:339:ARG:HA	45:SM:339:ARG:NE	2.32	0.45
46:TB:87:PRO:HA	46:TB:90:PHE:CD2	2.51	0.45
46:TB:320:ARG:NH1	46:TB:355:ASP:HB3	2.32	0.45
46:TF:8:GLN:NE2	46:TF:14:ASN:HA	2.31	0.45
45:TI:259:LEU:HD11	45:TI:316:SER:HB3	1.99	0.45
45:TK:254:GLU:HA	45:TK:257:THR:OG1	2.17	0.45
46:TN:175:VAL:HG21	46:TN:204:ASN:HD21	1.82	0.45
45:UC:93:ILE:HD11	45:UC:121:ARG:HG3	1.99	0.45
45:UC:271:SER:HB2	45:UC:377:MET:HB3	1.99	0.45
46:UD:247:ASN:O	46:UD:252:LYS:NZ	2.47	0.45
46:UD:391:ARG:HD2	46:UD:391:ARG:HA	1.82	0.45
46:UH:327:ASP:OD1	46:UH:328:GLU:N	2.50	0.45
46:UJ:31:ASP:HB3	46:UJ:37:HIS:CD2	2.51	0.45
45:UM:224:TYR:HA	45:UM:227:LEU:HD13	1.99	0.45
46:UN:47:ILE:HG22	46:UN:51:TYR:HB2	1.98	0.45
46:VB:285:THR:HB	46:VB:287:PRO:HD2	1.99	0.45
46:VB:341:PHE:HD2	46:VB:348:ASN:HD21	1.64	0.45
46:VB:423:GLN:NE2	46:VB:427:ASP:OD2	2.49	0.45
46:VF:318:ARG:NH1	46:VF:358:PRO:HG3	2.32	0.45
46:VL:3:GLU:HG3	46:VL:127:CYS:HB2	1.98	0.45
45:VM:183:GLU:N	45:VM:184:PRO:HD2	2.32	0.45
46:WB:294:PHE:CD2	46:WB:333:VAL:HG21	2.51	0.45
45:WC:339:ARG:O	45:WC:342:GLN:NE2	2.49	0.45
45:WE:297:GLU:OE2	45:WE:300:ASN:HB2	2.16	0.45
45:WI:384:ILE:O	45:WI:387:VAL:HG22	2.16	0.45
46:WL:141:GLY:HA3	49:WL:501:GDP:PB	2.57	0.45
45:WM:181:VAL:HG12	46:WN:347:ASN:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WM:396:ASP:OD1	45:WM:422:ARG:NH1	2.50	0.45
23:1O:65:ALA:HA	14:2V:215:LYS:HE3	1.98	0.45
12:1T:1:MET:HB2	12:1T:185:LEU:HD23	1.99	0.45
12:1T:228:PRO:O	12:1T:229:THR:OG1	2.32	0.45
13:1U:474:ILE:HB	13:1U:476:TRP:HE1	1.81	0.45
13:1U:483:ARG:O	13:1U:483:ARG:HG3	2.17	0.45
13:1U:487:LEU:HD13	13:1U:517:TRP:CE3	2.52	0.45
16:2B:145:ALA:O	16:2B:149:ASN:ND2	2.36	0.45
23:2O:261:LEU:HA	23:2O:264:ILE:HD12	1.99	0.45
25:2R:8:LEU:HD21	46:MJ:361:LEU:HG	1.99	0.45
12:2T:120:LEU:HD23	12:2T:178:LEU:HD21	1.98	0.45
12:2T:223:ARG:HB2	45:MG:196:GLU:OE1	2.16	0.45
13:2U:175:ILE:O	13:2U:175:ILE:HG13	2.17	0.45
27:3C:80:VAL:HG13	27:3C:81:GLU:HG2	1.98	0.45
30:3H:207:LYS:HZ3	30:3H:209:ARG:HB2	1.82	0.45
11:3S:316:CYS:SG	11:3S:317:VAL:N	2.90	0.45
12:3T:146:MET:HE2	12:3T:146:MET:HB3	1.68	0.45
27:4C:213:ILE:O	27:4C:217:ILE:HG12	2.16	0.45
34:4R:334:LEU:O	34:4R:360:TYR:OH	2.34	0.45
34:4R:422:TYR:HB2	34:4R:448:CYS:SG	2.57	0.45
37:5G:214:LEU:O	46:LN:390:ARG:NH2	2.49	0.45
37:5H:10:PRO:HB3	37:5H:17:ASN:ND2	2.31	0.45
34:6R:549:MET:HB3	34:6R:606:PHE:HE1	1.81	0.45
34:6R:595:ASP:OD1	34:6R:595:ASP:N	2.46	0.45
34:7R:455:VAL:HG11	34:7R:503:PHE:HE2	1.81	0.45
45:AA:182:VAL:HG12	45:AA:182:VAL:O	2.17	0.45
45:AA:296:PHE:CE2	45:AA:335:ILE:HG21	2.51	0.45
45:AE:27:GLU:OE1	45:AE:243:ARG:NH1	2.36	0.45
46:AF:109:GLY:HA2	46:AF:147:MET:HE2	1.99	0.45
46:BD:342:VAL:HG12	46:BD:348:ASN:HD22	1.82	0.45
45:BE:3:GLU:OE2	45:BE:129:CYS:HB3	2.17	0.45
45:BE:174:SER:HB2	45:BE:177:VAL:O	2.17	0.45
46:BJ:273:LEU:H	46:BJ:292:GLN:HE22	1.65	0.45
46:BJ:423:GLN:NE2	46:BJ:427:ASP:OD2	2.50	0.45
45:BM:223:THR:HG22	45:BM:224:TYR:H	1.82	0.45
46:CB:181:GLU:HG3	46:CB:182:PRO:CD	2.46	0.45
45:CM:89:PRO:HD2	45:DM:280:LYS:HE2	1.98	0.45
45:CM:140:SER:OG	47:CM:501:GTP:O2B	2.29	0.45
45:CM:223:THR:HG22	45:CM:225:THR:H	1.82	0.45
46:CN:376:GLU:HA	46:CN:379:LYS:NZ	2.31	0.45
45:DA:334:THR:HG22	45:DA:338:LYS:NZ	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DJ:7:ILE:HG22	46:DJ:64:ILE:HB	1.98	0.45
46:DJ:130:LEU:HB3	46:DJ:162:ARG:NH1	2.31	0.45
45:EA:206:ASN:HB3	45:EA:210:TYR:CZ	2.52	0.45
45:EC:108:TYR:HA	45:EC:112:LYS:NZ	2.32	0.45
46:ED:254:ALA:O	46:ED:258:ILE:HG12	2.17	0.45
45:EG:184:PRO:O	45:EG:188:ILE:HG12	2.16	0.45
45:EG:187:SER:O	45:EG:190:SER:OG	2.25	0.45
45:EK:210:TYR:CE2	45:EK:227:LEU:HD11	2.52	0.45
46:EN:28:HIS:CE1	46:EN:241:ARG:HH21	2.34	0.45
46:EN:119:VAL:HG23	46:EN:122:LYS:HE3	1.97	0.45
46:EN:162:ARG:NH1	46:EN:163:ILE:O	2.50	0.45
46:FB:226:ASN:HA	46:FB:229:VAL:HG22	1.99	0.45
46:FD:318:ARG:HH11	46:FD:358:PRO:HG3	1.81	0.45
45:FE:37:PRO:O	45:FE:39:ASP:N	2.50	0.45
45:FK:7:ILE:N	45:FK:136:LEU:O	2.49	0.45
45:GA:426:ALA:O	45:GA:430:LYS:HG2	2.17	0.45
46:GB:151:LEU:HA	46:GB:154:LYS:NZ	2.32	0.45
45:GC:210:TYR:HE1	45:GC:227:LEU:HD11	1.81	0.45
45:GK:3:GLU:HB2	45:GK:129:CYS:SG	2.56	0.45
45:GK:72:PRO:O	45:GK:76:ASP:HB2	2.17	0.45
45:GM:118:CYS:O	45:GM:122:ILE:HG12	2.17	0.45
46:HD:121:ARG:O	46:HD:125:GLU:HG2	2.16	0.45
46:HN:314:SER:CB	46:HN:350:LYS:HB3	2.47	0.45
46:IB:3:GLU:HB3	46:IB:62:ARG:NH2	2.29	0.45
46:ID:5:VAL:HG12	46:ID:62:ARG:HD3	1.99	0.45
45:IK:2:ARG:HD3	45:IK:242:LEU:HD22	1.98	0.45
45:IK:288:VAL:HA	45:IK:291:ILE:HG12	1.98	0.45
46:JB:21:TRP:HA	46:JB:24:ILE:HG22	1.99	0.45
45:JE:66:VAL:HG11	45:JE:122:ILE:HD11	1.99	0.45
45:JG:176:GLN:HB2	46:JH:331:LEU:HD11	1.98	0.45
46:JH:112:LEU:HD23	46:JH:147:MET:HE1	1.99	0.45
45:JK:387:VAL:HG12	45:JK:390:ARG:NH2	2.32	0.45
45:KA:75:ILE:HG13	45:KA:94:SER:HB2	1.99	0.45
46:KH:128:ASP:OD1	46:KH:129:CYS:N	2.48	0.45
45:KK:155:GLU:OE1	45:KK:197:HIS:NE2	2.50	0.45
45:KK:413:MET:HG3	45:KK:417:GLU:HG3	1.99	0.45
46:KL:178:THR:HG22	46:KL:180:VAL:H	1.82	0.45
45:KM:98:ASP:OD1	45:KM:98:ASP:N	2.47	0.45
46:LB:87:PRO:HA	46:LB:90:PHE:HD2	1.81	0.45
46:LF:334:GLN:HE22	46:LF:348:ASN:N	2.11	0.45
45:LK:60:LYS:NZ	45:LK:85:GLN:O	2.36	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LM:112:LYS:HA	45:LM:115:VAL:HG12	1.98	0.45
45:LM:181:VAL:HG22	46:LN:256:ASN:OD1	2.17	0.45
45:LM:206:ASN:OD1	47:LM:501:GTP:N2	2.50	0.45
45:MC:155:GLU:HG2	45:MC:197:HIS:NE2	2.31	0.45
46:MH:210:ILE:O	46:MH:214:THR:OG1	2.25	0.45
45:MI:178:SER:OG	46:MJ:347:ASN:OD1	2.35	0.45
45:MK:48:ALA:HB1	45:MK:243:ARG:HB2	1.97	0.45
46:ML:156:ARG:NH2	46:ML:197:ASP:OD1	2.50	0.45
45:NK:326:LYS:HG3	45:NK:327:ASP:N	2.32	0.45
46:OB:325:GLU:HA	46:OB:328:GLU:CD	2.37	0.45
46:OD:5:VAL:HG12	46:OD:62:ARG:HD3	1.97	0.45
46:OL:1:MET:N	46:OL:48:ASN:OD1	2.49	0.45
45:PA:319:TYR:HD2	45:PA:328:VAL:HG22	1.77	0.45
46:PB:113:ILE:HG23	46:PB:117:LEU:HD23	1.99	0.45
45:PE:195:LEU:HD12	45:PE:428:LEU:HD12	1.98	0.45
46:PJ:207:LEU:HB3	46:PJ:225:LEU:HD22	1.99	0.45
46:PJ:209:ASP:OD1	46:PJ:213:ARG:NE	2.50	0.45
46:PJ:376:GLU:O	46:PJ:380:ARG:HG2	2.16	0.45
45:QA:20:CYS:O	45:QA:24:PHE:N	2.48	0.45
45:QG:195:LEU:HD11	45:QG:428:LEU:HD13	1.99	0.45
45:QG:221:ARG:HA	45:QG:221:ARG:HD3	1.81	0.45
45:QG:251:ASP:HB3	45:QG:254:GLU:HG3	1.99	0.45
45:QG:356:ASN:OD1	45:QG:357:TYR:N	2.49	0.45
45:QK:276:ILE:HB	45:QK:281:ALA:HB2	1.99	0.45
46:QL:318:ARG:HB3	46:QL:357:PRO:HA	1.97	0.45
45:RA:88:HIS:ND1	45:RA:91:GLN:OE1	2.50	0.45
45:RA:93:ILE:HD11	45:RA:121:ARG:HG3	1.98	0.45
46:RB:405:GLU:HA	46:RB:408:PHE:CD2	2.52	0.45
45:RG:324:VAL:HG11	45:RG:326:LYS:HE3	1.98	0.45
46:RH:346:PRO:HD3	45:RI:397:LEU:HD22	1.98	0.45
45:SA:88:HIS:CG	45:SA:89:PRO:HD2	2.51	0.45
45:SA:280:LYS:HA	45:SA:283:HIS:CD2	2.49	0.45
45:SC:36:MET:HG3	45:SC:61:HIS:HE1	1.81	0.45
46:SF:122:LYS:HD2	46:SF:122:LYS:HA	1.78	0.45
45:SG:259:LEU:O	45:SG:261:PRO:HD3	2.17	0.45
46:SH:178:THR:HG22	46:SH:180:VAL:H	1.81	0.45
45:SI:288:VAL:HA	45:SI:291:ILE:HG12	1.99	0.45
46:SN:316:LEU:HG	46:SN:352:SER:HB2	1.99	0.45
45:TC:141:VAL:HG12	45:TC:171:ILE:O	2.17	0.45
46:TF:73:MET:SD	46:TF:74:ASP:N	2.90	0.45
46:TJ:101:TRP:NE1	46:TJ:145:SER:O	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UA:25:CYS:HB2	45:UA:30:ILE:HB	1.98	0.45
46:UB:66:MET:HE1	46:UB:147:MET:HG2	1.99	0.45
46:UJ:324:LYS:HB3	45:UK:210:TYR:CE1	2.51	0.45
45:UK:143:GLY:HA3	47:UK:501:GTP:O2B	2.17	0.45
45:UM:181:VAL:HG23	45:UM:182:VAL:HG13	1.99	0.45
45:VC:246:GLY:HA2	45:VC:357:TYR:CD1	2.52	0.45
45:VC:430:LYS:NZ	45:VC:434:GLU:OE1	2.50	0.45
46:VD:221:THR:HG23	46:VD:223:GLY:H	1.82	0.45
45:VK:3:GLU:OE2	45:VK:130:THR:N	2.50	0.45
45:VK:35:GLN:NE2	45:VK:60:LYS:HB3	2.31	0.45
46:WB:14:ASN:O	46:WB:18:ALA:N	2.49	0.45
45:WE:346:TRP:CD1	46:WH:391:ARG:HG3	2.52	0.45
46:WH:141:GLY:HA3	49:WH:501:GDP:PB	2.57	0.45
46:WL:344:TRP:HB3	46:WL:430:ALA:HB2	1.98	0.45
14:0V:86:ARG:NH1	46:LN:195:ASN:OD1	2.48	0.45
21:1L:479:VAL:HG12	46:CF:279:GLN:HE22	1.82	0.45
25:1R:83:ASP:OD2	30:2H:220:ARG:NH1	2.36	0.45
13:1U:319:HIS:NE2	13:1U:340:SER:OG	2.32	0.45
27:2C:188:ILE:O	27:2C:192:GLN:HG2	2.17	0.45
21:2L:905:THR:H	21:2L:908:GLN:NE2	2.14	0.45
9:2N:113:ARG:HA	9:2N:145:LEU:HD11	1.98	0.45
23:2O:365:ILE:O	23:2O:369:LEU:HD23	2.16	0.45
24:2P:335:ASP:O	24:2P:339:LYS:HG2	2.17	0.45
25:2R:236:MET:O	25:2R:239:LYS:HB2	2.17	0.45
13:2U:73:GLY:HA3	13:2U:105:ILE:HD11	1.98	0.45
13:2U:513:LYS:HE2	13:2U:526:ARG:NH2	2.31	0.45
14:2V:248:LEU:HB3	46:WH:276:ARG:NH2	2.31	0.45
26:2W:247:ARG:HH22	34:6R:17:PHE:CB	2.28	0.45
5:3E:160:GLN:NE2	5:3E:162:LYS:H	2.15	0.45
21:3L:36:LYS:HG3	21:3L:108:GLN:NE2	2.31	0.45
10:4Q:76:LEU:O	10:4Q:134:PHE:N	2.50	0.45
34:4R:50:ASP:OD1	34:4R:51:PRO:HD2	2.17	0.45
34:4R:83:PRO:HG3	45:ME:58:ALA:HB1	1.99	0.45
34:4R:157:THR:HG22	34:4R:157:THR:O	2.17	0.45
35:4S:126:GLU:O	35:4S:130:ARG:HG2	2.17	0.45
37:5E:105:LYS:HD2	37:5E:106:VAL:N	2.32	0.45
10:5Q:81:LYS:HB3	10:5Q:161:ARG:HB2	1.99	0.45
34:6R:379:LYS:HZ2	34:6R:381:PHE:HE1	1.65	0.45
34:6R:512:THR:O	34:6R:516:MET:N	2.40	0.45
46:AB:91:VAL:HG21	46:AB:116:VAL:HB	1.98	0.45
46:AB:281:TYR:HA	46:MB:86:ARG:NH2	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AC:116:ASP:N	45:AC:116:ASP:OD1	2.49	0.45
46:AF:274:THR:HG21	46:AF:282:ARG:HE	1.82	0.45
46:AF:374:ILE:HD11	46:AF:422:TYR:CE1	2.52	0.45
46:BB:133:PHE:HB2	46:BB:164:MET:SD	2.57	0.45
46:BF:325:GLU:HA	46:BF:328:GLU:CD	2.37	0.45
45:BK:185:TYR:O	45:BK:188:ILE:HG22	2.16	0.45
45:BM:222:PRO:HD2	46:BN:324:LYS:HZ1	1.81	0.45
45:BM:262:TYR:HB2	45:BM:265:ILE:HG12	1.98	0.45
45:CC:17:GLY:HA2	45:CC:20:CYS:SG	2.57	0.45
45:CC:93:ILE:HG12	45:CC:117:LEU:HD13	1.98	0.45
46:CF:359:LYS:HD3	46:CF:359:LYS:HA	1.84	0.45
45:CI:141:VAL:HG21	45:CI:172:TYR:CE1	2.52	0.45
46:CJ:52:ASN:OD1	46:CJ:62:ARG:NH2	2.50	0.45
45:DA:5:ILE:HD11	45:DA:125:LEU:HD13	1.98	0.45
45:DA:54:SER:HB3	45:DA:64:ARG:NH1	2.28	0.45
46:DF:3:GLU:HG3	46:DF:62:ARG:NH1	2.31	0.45
45:DI:139:ASN:OD1	45:DI:170:THR:HG22	2.17	0.45
46:DJ:178:THR:HG22	46:DJ:180:VAL:H	1.82	0.45
46:DL:164:MET:HB3	46:DL:197:ASP:H	1.82	0.45
45:DM:68:LEU:HD23	45:DM:149:LEU:HD21	1.98	0.45
46:EB:11:GLN:NE2	49:EB:501:GDP:O3B	2.41	0.45
45:EG:434:GLU:O	45:EG:437:ILE:HG22	2.17	0.45
45:EI:185:TYR:O	45:EI:189:LEU:HG	2.17	0.45
45:EI:231:ILE:O	45:EI:235:ILE:HG12	2.17	0.45
45:EI:326:LYS:HD3	46:EJ:212:PHE:HZ	1.80	0.45
46:EN:28:HIS:CD2	46:EN:47:ILE:HG13	2.52	0.45
46:EN:139:LEU:HD13	46:EN:168:SER:HB3	1.98	0.45
45:FA:256:GLN:CD	45:FA:256:GLN:H	2.20	0.45
46:FB:119:VAL:O	46:FB:123:GLU:OE1	2.34	0.45
46:FF:318:ARG:HH11	46:FF:358:PRO:HG3	1.81	0.45
46:FL:31:ASP:OD2	46:FL:33:THR:OG1	2.35	0.45
45:GA:222:PRO:HG2	46:GB:324:LYS:CE	2.44	0.45
46:GB:73:MET:SD	46:GB:90:PHE:HD1	2.40	0.45
45:GC:151:SER:O	45:GC:155:GLU:HG3	2.16	0.45
46:GD:173:PRO:HD2	46:GD:174:LYS:NZ	2.31	0.45
46:GJ:116:VAL:HA	46:GJ:119:VAL:HG12	1.97	0.45
46:HD:73:MET:HA	46:HD:76:VAL:HG12	1.98	0.45
45:HE:414:GLU:CD	45:HE:416:GLY:H	2.20	0.45
45:HG:132:LEU:O	45:HG:164:LYS:NZ	2.38	0.45
45:IG:174:SER:HB2	45:IG:177:VAL:O	2.17	0.45
46:IL:11:GLN:O	46:IL:15:GLN:HG2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JC:188:ILE:HG22	45:JC:421:ALA:HB1	1.99	0.45
46:JD:173:PRO:HG2	46:JD:380:ARG:HD2	1.98	0.45
45:JG:194:LEU:O	45:JG:198:THR:HG22	2.16	0.45
46:JH:398:TYR:O	46:JH:403:MET:HB3	2.17	0.45
45:JM:231:ILE:O	45:JM:235:ILE:HG12	2.17	0.45
45:KG:66:VAL:HG11	45:KG:122:ILE:HD11	1.97	0.45
46:LB:163:ILE:HD13	46:LB:250:LEU:HB3	1.99	0.45
46:LF:48:ASN:O	46:LF:62:ARG:NH1	2.44	0.45
45:LK:387:VAL:HG23	45:LK:390:ARG:NH2	2.31	0.45
45:MA:304:LYS:HD3	45:MA:304:LYS:HA	1.70	0.45
46:MB:193:VAL:HA	46:MB:264:HIS:CE1	2.51	0.45
45:ME:309:HIS:ND1	45:ME:386:GLU:OE1	2.43	0.45
46:MH:203:ASP:OD2	46:MH:302:ALA:N	2.42	0.45
46:MJ:6:HIS:NE2	46:MJ:8:GLN:OE1	2.50	0.45
45:MM:322:ASP:OD1	45:MM:373:ARG:NH1	2.50	0.45
46:MN:372:THR:HA	46:MN:422:TYR:HE2	1.81	0.45
46:NB:139:LEU:HD23	46:NB:188:SER:HB2	1.99	0.45
46:NB:150:LEU:HD23	46:NB:154:LYS:NZ	2.32	0.45
46:NB:237:THR:HG22	46:NB:250:LEU:HD21	1.99	0.45
45:NC:88:HIS:NE2	45:NC:90:GLU:OE1	2.50	0.45
46:ND:12:CYS:O	46:ND:16:ILE:HG12	2.17	0.45
46:ND:326:VAL:O	46:ND:330:MET:HG2	2.16	0.45
45:NG:166:LYS:N	45:NG:199:ASP:OD2	2.50	0.45
46:NL:226:ASN:ND2	49:NL:501:GDP:HN1	2.10	0.45
45:NM:55:GLU:O	45:OM:285:GLN:NE2	2.44	0.45
46:OB:154:LYS:HA	46:OB:157:GLU:OE2	2.17	0.45
46:OB:303:ALA:HB2	46:OB:377:MET:HE1	1.99	0.45
45:OE:188:ILE:HD12	45:OE:425:LEU:HD22	1.99	0.45
46:ON:217:LEU:HD23	46:ON:217:LEU:H	1.82	0.45
46:PF:113:ILE:HD11	46:PF:151:LEU:HB2	1.99	0.45
45:PG:288:VAL:HG11	45:PG:327:ASP:HB3	1.98	0.45
46:QD:392:LYS:C	46:QD:395:LEU:HD23	2.37	0.45
45:QE:31:GLN:HG3	45:QE:33:ASP:OD1	2.16	0.45
45:QE:105:ARG:HH21	45:QE:110:ILE:HD13	1.82	0.45
46:QH:299:MET:HE1	46:QH:305:PRO:HG3	1.99	0.45
46:QN:290:THR:HA	46:QN:293:MET:HG2	1.99	0.45
45:RA:167:LEU:HG	45:RA:200:VAL:HB	1.99	0.45
46:RB:309:ARG:HG2	46:RB:426:GLN:HG2	1.99	0.45
45:RC:177:VAL:HB	45:RC:207:GLU:OE1	2.17	0.45
45:RE:434:GLU:O	45:RE:437:ILE:HG22	2.16	0.45
46:RF:43:GLN:O	46:RF:47:ILE:HD11	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RF:167:PHE:CE1	46:RF:200:MET:HG3	2.51	0.45
46:RH:207:LEU:HB3	46:RH:225:LEU:HD22	1.98	0.45
46:RH:238:CYS:SG	46:RH:239:CYS:N	2.90	0.45
45:RI:11:GLN:HE21	47:RI:501:GTP:PA	2.40	0.45
46:RJ:67:ASP:OD1	46:RJ:68:LEU:N	2.49	0.45
46:RJ:178:THR:HB	46:RJ:181:GLU:HG3	1.99	0.45
45:SE:280:LYS:HA	45:SE:283:HIS:HD2	1.81	0.45
46:SJ:83:GLN:OE1	46:SJ:83:GLN:N	2.48	0.45
46:SN:31:ASP:OD1	46:SN:32:PRO:HD2	2.17	0.45
46:SN:77:ARG:HD2	46:SN:77:ARG:HA	1.76	0.45
46:TF:200:MET:CE	46:TF:268:ILE:HD13	2.46	0.45
45:TM:343:PHE:CZ	45:TM:351:PHE:HE1	2.35	0.45
46:UB:9:GLY:HA2	46:UB:66:MET:O	2.17	0.45
46:UH:221:THR:HG23	46:UH:223:GLY:H	1.81	0.45
46:UL:252:LYS:NZ	47:UM:501:GTP:O1G	2.40	0.45
45:VA:3:GLU:OE2	45:VA:131:GLY:N	2.49	0.45
46:VD:254:ALA:O	46:VD:258:ILE:HG12	2.17	0.45
46:VJ:309:ARG:HE	46:VJ:342:VAL:HA	1.81	0.45
46:VJ:399:THR:HA	46:VJ:403:MET:O	2.17	0.45
46:VL:105:HIS:CD2	46:VL:150:LEU:HB2	2.51	0.45
45:VM:51:THR:OG1	45:VM:243:ARG:HD2	2.17	0.45
45:WC:172:TYR:HH	45:WC:191:THR:HG1	1.63	0.45
46:WF:395:LEU:HD21	46:WF:405:GLU:HG3	1.99	0.45
45:WK:98:ASP:OD1	45:WK:99:ALA:N	2.50	0.45
46:WL:257:LEU:HA	46:WL:312:THR:HG21	1.98	0.45
8:1H:267:ILE:HG21	46:HF:320:ARG:NH2	2.32	0.45
13:1U:390:LEU:HD21	13:1U:397:LEU:HD12	1.99	0.45
13:1U:548:PHE:CE1	13:1U:560:TRP:HB2	2.53	0.45
4:2D:95:GLN:C	4:2D:97:LEU:H	2.21	0.45
29:2G:2:ILE:HA	29:2G:5:GLN:NE2	2.31	0.45
9:2N:165:PHE:HB3	9:2N:223:VAL:HG11	1.97	0.45
24:2P:426:ARG:HH12	24:2P:430:ASN:CG	2.21	0.45
24:2P:435:LEU:HD22	45:TK:372:MET:SD	2.57	0.45
14:2V:122:LYS:HD3	46:LH:390:ARG:NH2	2.32	0.45
1:3A:127:ASN:C	1:3A:127:ASN:ND2	2.67	0.45
5:3E:60:THR:HA	46:DN:37:HIS:ND1	2.32	0.45
30:3H:193:LEU:HD12	46:AH:362:LYS:HA	1.99	0.45
10:3Q:125:LEU:HD12	10:3Q:130:ASN:HD21	1.82	0.45
11:3S:164:GLN:N	11:3S:164:GLN:OE1	2.50	0.45
13:3U:342:THR:OG1	13:3U:360:VAL:O	2.34	0.45
34:4R:288:LYS:HA	34:4R:302:LEU:HA	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:4R:319:PRO:HG2	46:CF:228:LEU:HD12	1.99	0.45
34:4R:404:LEU:HD12	34:4R:404:LEU:H	1.81	0.45
35:4S:180:VAL:HG23	35:4S:181:PRO:HD3	1.97	0.45
37:5E:67:ARG:HD3	37:5E:68:PRO:O	2.17	0.45
34:5R:319:PRO:HB3	46:CJ:227:HIS:HB3	1.98	0.45
40:6G:185:TYR:OH	45:UG:120:ASP:HA	2.17	0.45
34:6R:555:ASN:HD22	34:6R:576:LEU:HD12	1.82	0.45
46:AB:86:ARG:HH22	46:BB:278:SER:HA	1.81	0.45
45:AC:231:ILE:O	45:AC:235:ILE:HG12	2.16	0.45
45:AG:220:GLU:CD	45:AG:220:GLU:H	2.21	0.45
46:AL:105:HIS:CE1	46:AL:150:LEU:HD12	2.51	0.45
45:BA:349:THR:O	46:BD:179:VAL:HG23	2.17	0.45
46:BF:11:GLN:O	46:BF:15:GLN:HG2	2.17	0.45
45:BG:191:THR:HG21	45:BG:425:LEU:HD21	1.99	0.45
45:BK:244:PHE:HB2	45:BK:356:ASN:HD21	1.81	0.45
45:BM:101:ASN:HA	45:BM:144:GLY:H	1.81	0.45
45:CC:434:GLU:O	45:CC:437:ILE:HG12	2.17	0.45
46:CD:4:ILE:HD11	46:CD:50:TYR:CZ	2.52	0.45
45:CE:71:GLU:HA	45:CE:72:PRO:HD3	1.85	0.45
46:CL:97:ALA:HB2	46:CL:143:THR:HB	1.99	0.45
46:CL:395:LEU:O	46:CL:395:LEU:HD23	2.17	0.45
46:CN:319:GLY:N	46:CN:354:CYS:O	2.40	0.45
46:DD:19:LYS:O	46:DD:22:GLU:HG3	2.17	0.45
46:DD:294:PHE:HE2	46:DD:333:VAL:HG11	1.81	0.45
46:DF:16:ILE:HD13	46:DF:226:ASN:OD1	2.17	0.45
46:DJ:31:ASP:OD1	46:DJ:35:THR:N	2.43	0.45
46:DJ:418:LEU:HD12	46:DJ:421:GLU:OE1	2.17	0.45
46:DL:114:ASP:OD2	46:DL:115:SER:N	2.50	0.45
46:DL:342:VAL:HG13	46:DL:345:ILE:HG22	1.98	0.45
45:DM:260:VAL:HG13	45:DM:265:ILE:O	2.17	0.45
45:EA:319:TYR:HB3	45:EA:323:VAL:HG21	1.98	0.45
45:EE:284:GLU:HG3	45:EE:286:LEU:HD22	1.99	0.45
46:EF:44:LEU:HD23	46:EF:44:LEU:O	2.17	0.45
46:EF:246:LEU:HD11	45:EG:224:TYR:HE2	1.82	0.45
45:EK:204:LEU:HD22	45:EK:231:ILE:HD12	1.99	0.45
46:EL:304:ASP:HB3	46:EL:307:HIS:ND1	2.31	0.45
46:EN:150:LEU:HD23	46:EN:154:LYS:NZ	2.32	0.45
46:FB:163:ILE:HG13	46:FB:251:ARG:HG3	1.98	0.45
46:FH:226:ASN:ND2	49:FH:501:GDP:HN1	2.14	0.45
46:FL:375:GLN:NE2	46:FL:426:GLN:OE1	2.50	0.45
45:GA:209:ILE:HA	45:GA:212:ILE:HG22	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GA:387:VAL:HG12	45:GA:390:ARG:CZ	2.46	0.45
46:GB:105:HIS:CE1	46:GB:150:LEU:HD12	2.52	0.45
45:GC:66:VAL:HG11	45:GC:122:ILE:HD11	1.98	0.45
45:GE:346:TRP:CD1	46:GH:391:ARG:HG3	2.52	0.45
45:GM:317:MET:HA	45:GM:377:MET:HA	1.97	0.45
46:GN:55:THR:HG23	46:HN:283:ALA:HA	1.99	0.45
46:GN:326:VAL:HG11	46:GN:353:ILE:HD11	1.98	0.45
46:HB:282:ARG:HH12	46:HB:284:LEU:HD23	1.82	0.45
45:HC:88:HIS:HB3	45:HC:91:GLN:HG3	1.99	0.45
45:HC:356:ASN:OD1	45:HC:357:TYR:N	2.50	0.45
46:HD:226:ASN:ND2	49:HD:501:GDP:HN1	2.15	0.45
46:HH:113:ILE:HA	46:HH:116:VAL:HG22	1.98	0.45
46:HJ:262:ARG:NE	46:HJ:421:GLU:OE2	2.49	0.45
45:HK:88:HIS:HD2	45:HK:90:GLU:H	1.64	0.45
45:HM:298:PRO:HA	45:HM:301:MET:HG2	1.99	0.45
45:II:268:MET:HB2	45:II:379:SER:O	2.16	0.45
45:IM:192:HIS:C	45:IM:192:HIS:HD1	2.20	0.45
46:IN:178:THR:HB	46:IN:181:GLU:HG2	1.99	0.45
46:JD:178:THR:HB	46:JD:181:GLU:HG3	1.99	0.45
45:JG:147:SER:HB2	45:JG:190:SER:HB2	1.99	0.45
45:JG:221:ARG:HH11	45:JG:221:ARG:HG3	1.82	0.45
46:JH:289:LEU:HD13	46:JH:365:VAL:HG23	1.99	0.45
45:JI:205:ASP:OD1	45:JI:303:ALA:HA	2.17	0.45
45:JM:23:LEU:O	45:JM:27:GLU:OE1	2.35	0.45
45:JM:103:PHE:HB2	45:JM:186:ASN:HB3	1.98	0.45
45:KA:229:ARG:NH1	45:KA:366:GLY:HA2	2.32	0.45
45:KA:284:GLU:OE2	45:KA:285:GLN:N	2.49	0.45
46:KH:20:PHE:HA	46:KH:230:SER:OG	2.17	0.45
46:KJ:27:GLU:OE1	46:KJ:241:ARG:NH1	2.35	0.45
45:KM:386:GLU:HG2	45:KM:390:ARG:HE	1.82	0.45
46:KN:32:PRO:HG3	46:KN:81:PHE:CE2	2.52	0.45
45:LA:407:TRP:CH2	46:LB:258:ILE:HG23	2.51	0.45
46:LD:116:VAL:HA	46:LD:119:VAL:HG22	1.99	0.45
45:LE:223:THR:HG22	45:LE:224:TYR:H	1.82	0.45
45:LK:88:HIS:CE1	45:LK:90:GLU:HG2	2.52	0.45
46:NB:52:ASN:HD21	46:NB:62:ARG:HB3	1.81	0.45
45:NG:174:SER:HB2	45:NG:177:VAL:O	2.17	0.45
46:NH:268:ILE:HG22	46:NH:368:VAL:HG22	1.98	0.45
46:NJ:44:LEU:HD12	46:NJ:47:ILE:HD12	1.98	0.45
45:NK:210:TYR:CE1	45:NK:227:LEU:HD21	2.52	0.45
45:NK:422:ARG:HD2	45:NK:422:ARG:HA	1.77	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NN:314:SER:OG	46:NN:368:VAL:O	2.25	0.45
45:OA:329:ASN:OD1	45:OA:330:ALA:N	2.50	0.45
46:OB:290:THR:HA	46:OB:293:MET:HG2	1.98	0.45
45:OE:107:HIS:ND1	45:OE:107:HIS:O	2.50	0.45
45:PA:229:ARG:HD3	45:PA:229:ARG:N	2.31	0.45
45:PA:381:SER:O	45:PA:384:ILE:HD12	2.16	0.45
46:PB:20:PHE:CE2	46:PB:24:ILE:HD11	2.52	0.45
45:PC:187:SER:O	45:PC:191:THR:HG23	2.17	0.45
45:PE:98:ASP:OD1	45:PE:99:ALA:N	2.49	0.45
45:PI:392:ASP:OD1	45:PI:422:ARG:NE	2.50	0.45
45:QA:31:GLN:HG3	45:QA:33:ASP:HB2	1.97	0.45
45:QA:260:VAL:H	46:QB:397:TRP:HH2	1.65	0.45
46:QB:416:ASN:OD1	46:QB:417:ASP:N	2.50	0.45
45:QG:66:VAL:HG21	45:QG:122:ILE:HD11	1.99	0.45
46:QH:65:LEU:HD22	46:QH:90:PHE:CE1	2.52	0.45
46:QH:390:ARG:HD2	46:QH:391:ARG:HG2	2.00	0.45
45:QK:60:LYS:HD2	45:RK:283:HIS:HD2	1.82	0.45
46:QL:16:ILE:HD12	46:QL:229:VAL:HG11	1.99	0.45
45:RA:91:GLN:HG3	45:RA:121:ARG:HD3	1.99	0.45
46:RD:334:GLN:HA	46:RD:341:PHE:HE2	1.82	0.45
45:RK:215:ARG:HH12	45:RK:299:ALA:HB1	1.81	0.45
45:RM:68:LEU:HD21	45:RM:118:CYS:HB2	1.98	0.45
45:RM:221:ARG:HA	45:RM:221:ARG:CZ	2.46	0.45
46:RN:10:GLY:O	46:RN:14:ASN:ND2	2.49	0.45
46:SB:184:ASN:OD1	46:SB:185:ALA:N	2.50	0.45
46:SB:268:ILE:O	46:SB:300:MET:HB3	2.16	0.45
46:SD:99:ASN:HA	46:SD:142:GLY:H	1.82	0.45
45:TA:11:GLN:H	47:TA:501:GTP:PB	2.40	0.45
46:TB:278:SER:HA	46:TB:281:TYR:HB2	1.97	0.45
46:TH:86:ARG:HD3	46:UH:281:TYR:HD2	1.81	0.45
46:UH:16:ILE:HD13	46:UH:226:ASN:OD1	2.17	0.45
45:UK:101:ASN:HA	45:UK:144:GLY:H	1.81	0.45
45:UM:425:LEU:HD23	45:UM:425:LEU:HA	1.89	0.45
45:VA:347:CYS:HA	46:VD:388:MET:HE1	1.99	0.45
45:VC:358:GLN:HA	45:VC:358:GLN:OE1	2.17	0.45
45:VG:9:VAL:HG21	45:VG:149:LEU:HB3	1.99	0.45
45:VG:346:TRP:CD1	46:VJ:391:ARG:HG3	2.52	0.45
45:VI:276:ILE:HD11	45:VI:280:LYS:HG3	1.98	0.45
45:VK:336:LYS:HD3	45:VK:336:LYS:HA	1.76	0.45
45:VK:394:LYS:O	45:VK:398:MET:HG2	2.16	0.45
46:WB:22:GLU:HG3	46:WB:81:PHE:CD1	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WB:25:SER:O	46:WB:30:ILE:N	2.44	0.45
46:WJ:299:MET:HE2	46:WJ:299:MET:HA	1.98	0.45
46:WL:391:ARG:HA	46:WL:391:ARG:HD2	1.77	0.45
46:WL:418:LEU:O	46:WL:422:TYR:HB2	2.16	0.45
46:WN:328:GLU:O	46:WN:332:ASN:N	2.40	0.45
14:OV:96:ASN:OD1	46:LN:262:ARG:HD3	2.17	0.44
25:1R:411:VAL:HG22	45:EC:370:LYS:HE2	1.99	0.44
11:1S:27:VAL:HG22	11:1S:29:ASP:H	1.82	0.44
12:1T:134:SER:OG	12:1T:135:GLN:OE1	2.32	0.44
4:2D:52:ASN:ND2	46:EJ:320:ARG:O	2.38	0.44
4:2D:187:PHE:CE2	46:FJ:320:ARG:HG2	2.52	0.44
31:2I:131:ARG:O	45:FC:96:LYS:NZ	2.45	0.44
20:2K:452:ARG:HA	20:2K:455:GLU:OE2	2.17	0.44
21:2L:512:LEU:HD22	21:2L:566:VAL:HG22	1.99	0.44
21:2L:658:ARG:HH22	46:BN:45:GLU:N	2.15	0.44
24:2P:384:SER:H	45:TM:370:LYS:NZ	2.15	0.44
24:2P:416:GLN:HA	24:2P:419:GLN:NE2	2.32	0.44
25:2R:467:ASN:OD1	25:2R:468:ARG:N	2.50	0.44
13:2U:107:SER:O	13:2U:108:LEU:HD23	2.17	0.44
14:2V:141:ASN:HD22	45:LG:405:VAL:HB	1.82	0.44
26:2W:220:LEU:HA	26:2W:223:LEU:HD23	1.99	0.44
27:3C:211:LYS:HA	27:3C:214:VAL:HG12	1.99	0.44
5:3E:131:LYS:O	5:3E:134:THR:OG1	2.35	0.44
21:3L:152:ILE:HD12	21:3L:181:LEU:HD12	1.98	0.44
23:3O:287:GLU:O	23:3O:290:VAL:HG22	2.16	0.44
25:3R:259:LEU:HB2	25:3R:273:TYR:HB3	1.98	0.44
27:4C:252:ASP:OD1	27:4C:253:GLU:N	2.50	0.44
35:4S:214:LEU:HD23	35:4S:214:LEU:HA	1.88	0.44
36:5B:156:VAL:HG22	36:5B:158:ASN:H	1.83	0.44
37:5G:27:ARG:NH2	45:OG:367:ASP:OD2	2.50	0.44
40:6G:177:ARG:NH2	45:UG:130:THR:O	2.50	0.44
34:6R:182:ASP:OD1	34:6R:183:CYS:N	2.49	0.44
45:AC:21:TRP:CZ2	45:AC:65:ALA:HB2	2.52	0.44
45:AC:195:LEU:HD21	45:AC:264:ARG:HE	1.82	0.44
46:AH:140:GLY:O	46:AH:184:ASN:ND2	2.38	0.44
45:AK:338:LYS:HB2	45:AK:338:LYS:HE2	1.70	0.44
46:BF:73:MET:HA	46:BF:76:VAL:HG12	1.98	0.44
46:BF:201:VAL:HG23	46:BF:301:CYS:SG	2.57	0.44
46:BF:238:CYS:SG	46:BF:239:CYS:N	2.91	0.44
46:BJ:217:LEU:H	46:BJ:217:LEU:HD23	1.82	0.44
46:BJ:238:CYS:SG	46:BJ:239:CYS:N	2.90	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BK:141:VAL:HG23	45:BK:170:THR:HB	1.98	0.44
46:BL:81:PHE:HD2	46:BL:84:LEU:HD11	1.82	0.44
46:CB:406:MET:O	46:CB:410:GLU:HG2	2.16	0.44
45:CE:68:LEU:HD21	45:CE:149:LEU:HD12	1.99	0.44
45:CG:216:ASN:HB3	45:CG:275:ILE:O	2.17	0.44
45:CG:396:ASP:OD2	45:CG:422:ARG:NH2	2.49	0.44
45:CI:175:PRO:HB2	45:CI:176:GLN:OE1	2.17	0.44
46:CL:63:ALA:O	46:CL:89:ASN:ND2	2.46	0.44
46:CL:133:PHE:HB2	46:CL:164:MET:HG2	1.99	0.44
46:CN:149:THR:HG21	46:CN:188:SER:HA	1.99	0.44
46:CN:317:PHE:N	46:CN:352:SER:O	2.37	0.44
45:DC:101:ASN:HA	45:DC:144:GLY:H	1.82	0.44
46:DD:376:GLU:O	46:DD:380:ARG:HG3	2.17	0.44
45:DE:5:ILE:HD12	45:DE:125:LEU:HD21	1.99	0.44
45:DE:129:CYS:SG	45:DE:132:LEU:HB2	2.56	0.44
46:DF:252:LYS:HA	45:DG:100:ALA:HB1	1.99	0.44
45:DG:384:ILE:O	45:DG:387:VAL:HG22	2.17	0.44
45:DI:208:ALA:O	45:DI:212:ILE:HG12	2.17	0.44
46:DJ:54:ALA:HA	46:EJ:283:ALA:HB2	1.97	0.44
46:DL:6:HIS:HD2	46:DL:21:TRP:HE1	1.64	0.44
45:EC:276:ILE:HD13	45:EC:281:ALA:HA	2.00	0.44
45:EE:292:THR:HG21	45:EE:331:SER:HB3	1.99	0.44
46:EH:117:LEU:HG	46:EH:121:ARG:HH21	1.81	0.44
46:EL:20:PHE:HE1	46:EL:234:SER:HB2	1.82	0.44
45:EM:256:GLN:HB2	45:EM:260:VAL:HG22	1.97	0.44
46:EN:51:TYR:CE1	46:EN:61:PRO:HG3	2.51	0.44
46:EN:154:LYS:O	46:EN:158:GLU:HG3	2.17	0.44
46:FF:252:LYS:HG2	46:FF:350:LYS:HE2	1.99	0.44
46:GJ:73:MET:HA	46:GJ:76:VAL:HG12	2.00	0.44
46:GN:105:HIS:CD2	46:GN:150:LEU:HB2	2.52	0.44
45:HA:211:ASP:OD1	45:HA:214:ARG:NH2	2.50	0.44
45:HK:174:SER:HB2	45:HK:177:VAL:O	2.17	0.44
46:HL:294:PHE:CE2	46:HL:333:VAL:HG11	2.53	0.44
46:HN:86:ARG:NH2	46:IN:281:TYR:O	2.50	0.44
45:IA:112:LYS:HB2	45:IA:112:LYS:HE3	1.73	0.44
46:ID:48:ASN:O	46:ID:48:ASN:ND2	2.49	0.44
46:ID:290:THR:O	46:ID:293:MET:HB3	2.17	0.44
46:IH:3:GLU:OE2	46:IH:127:CYS:HB2	2.17	0.44
46:IL:113:ILE:HA	46:IL:116:VAL:HG12	1.99	0.44
45:JA:96:LYS:HA	45:JA:96:LYS:HD2	1.89	0.44
46:JH:221:THR:HG22	46:JH:222:TYR:N	2.28	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JI:76:ASP:OD1	45:JI:77:GLU:N	2.50	0.44
46:JJ:3:GLU:OE2	46:JJ:127:CYS:HB2	2.17	0.44
46:JJ:257:LEU:HB3	46:JJ:266:PHE:HE2	1.82	0.44
45:KA:2:ARG:HG2	45:KA:242:LEU:HD22	1.99	0.44
45:KA:286:LEU:HD23	45:KA:286:LEU:HA	1.85	0.44
45:KE:326:LYS:HD2	46:KH:220:PRO:HD2	1.98	0.44
45:KG:174:SER:HB3	45:KG:177:VAL:O	2.17	0.44
46:KJ:73:MET:HA	46:KJ:76:VAL:HG12	1.98	0.44
46:KJ:169:VAL:O	46:KJ:169:VAL:HG13	2.17	0.44
45:KK:239:THR:HG23	45:KK:242:LEU:HD12	1.99	0.44
45:KM:262:TYR:HB2	45:KM:265:ILE:HG12	1.98	0.44
45:LA:222:PRO:HG2	46:LB:324:LYS:NZ	2.29	0.44
46:LF:380:ARG:O	46:LF:383:GLU:HG2	2.17	0.44
45:LK:217:LEU:HD23	45:LK:367:ASP:HB3	2.00	0.44
46:LL:217:LEU:HD23	46:LL:217:LEU:H	1.81	0.44
45:LM:298:PRO:HB3	45:LM:307:PRO:HD2	2.00	0.44
45:ME:278:ALA:HA	45:ME:281:ALA:HB2	2.00	0.44
46:MH:288:GLU:O	46:MH:291:GLN:HG3	2.17	0.44
45:NA:292:THR:HG21	45:NA:331:SER:HB3	1.99	0.44
45:NC:192:HIS:ND1	45:NC:424:ASP:OD2	2.50	0.44
46:ND:297:LYS:HE2	46:ND:297:LYS:HA	1.99	0.44
46:NF:310:TYR:CD1	46:NF:371:SER:HB3	2.52	0.44
46:NH:341:PHE:HB3	46:NH:348:ASN:HD21	1.82	0.44
46:NH:342:VAL:HG13	46:NH:345:ILE:HG22	1.99	0.44
45:NM:73:THR:HA	46:NN:46:ARG:NH2	2.32	0.44
45:OC:358:GLN:HA	45:OC:358:GLN:OE1	2.18	0.44
46:OH:105:HIS:CE1	46:OH:150:LEU:HD12	2.51	0.44
45:OI:174:SER:HB2	45:OI:177:VAL:O	2.17	0.44
45:OI:177:VAL:HG13	46:OJ:327:ASP:HB3	1.98	0.44
46:PD:372:THR:HA	46:PD:422:TYR:HE2	1.83	0.44
45:PG:346:TRP:CD1	46:PJ:391:ARG:HG3	2.52	0.44
46:PH:156:ARG:NH1	46:PH:162:ARG:O	2.43	0.44
46:PJ:252:LYS:O	46:PJ:256:ASN:ND2	2.50	0.44
45:PM:68:LEU:HD21	45:PM:118:CYS:SG	2.57	0.44
45:PM:271:SER:OG	45:PM:301:MET:HA	2.17	0.44
46:PN:226:ASN:HD21	49:PN:501:GDP:HN1	1.64	0.44
46:PN:236:VAL:HA	46:PN:316:LEU:HD12	1.99	0.44
45:QC:349:THR:HG23	46:QD:179:VAL:HA	1.99	0.44
46:QD:156:ARG:NH1	46:QD:162:ARG:O	2.45	0.44
46:QF:254:ALA:O	46:QF:258:ILE:HG12	2.17	0.44
45:QG:284:GLU:OE1	45:QG:286:LEU:HD22	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QK:326:LYS:HZ2	46:QL:208:TYR:HB3	1.82	0.44
46:QL:309:ARG:NH2	46:QL:426:GLN:O	2.44	0.44
46:QN:52:ASN:OD1	46:QN:62:ARG:NH2	2.51	0.44
45:RA:20:CYS:HA	45:RA:232:ALA:HB1	2.00	0.44
45:RA:213:CYS:O	45:RA:218:ASP:N	2.50	0.44
45:RC:150:GLY:O	45:RC:154:LEU:HD23	2.17	0.44
45:RE:67:PHE:O	45:RE:93:ILE:N	2.48	0.44
45:RE:187:SER:O	45:RE:190:SER:OG	2.24	0.44
45:RI:246:GLY:HA2	45:RI:357:TYR:CD1	2.51	0.44
46:RL:424:GLN:O	46:RL:428:ALA:N	2.50	0.44
46:SB:51:TYR:HB3	46:SB:59:TYR:HB3	1.99	0.44
46:SB:282:ARG:CZ	46:SB:283:ALA:H	2.30	0.44
45:SE:103:PHE:HB2	45:SE:186:ASN:HB3	1.98	0.44
45:SE:396:ASP:OD1	45:SE:397:LEU:N	2.50	0.44
45:SE:404:PHE:O	45:SE:407:TRP:HB2	2.17	0.44
45:SG:296:PHE:HE2	45:SG:335:ILE:HG21	1.82	0.44
46:SH:344:TRP:CD2	45:SI:401:LYS:HD3	2.52	0.44
46:SL:163:ILE:HD13	46:SL:251:ARG:HD2	1.98	0.44
46:SL:172:SER:HB3	46:SL:175:VAL:HG22	1.99	0.44
45:SM:2:ARG:HH21	45:SM:51:THR:HB	1.82	0.44
45:SM:70:LEU:HA	45:SM:95:GLY:HA3	1.98	0.44
45:SM:388:PHE:O	45:SM:391:LEU:HG	2.17	0.44
45:TA:346:TRP:CD1	46:TB:391:ARG:HG3	2.52	0.44
45:TE:133:GLN:HB3	45:TE:252:ILE:HG21	2.00	0.44
45:TM:185:TYR:HA	45:TM:395:PHE:HE2	1.83	0.44
45:UA:203:MET:HG3	45:UA:384:ILE:HD11	1.99	0.44
45:UG:88:HIS:O	45:UG:91:GLN:HG2	2.17	0.44
45:UI:326:LYS:HZ1	46:UJ:220:PRO:HB2	1.82	0.44
46:UJ:372:THR:HA	46:UJ:422:TYR:CE2	2.52	0.44
45:UK:256:GLN:OE1	45:UK:256:GLN:N	2.45	0.44
45:UM:201:ALA:O	45:UM:268:MET:N	2.50	0.44
46:VL:317:PHE:HB3	46:VL:321:MET:HE1	1.99	0.44
45:VM:99:ALA:HA	45:VM:105:ARG:NH1	2.32	0.44
45:VM:316:SER:N	45:VM:378:ILE:O	2.42	0.44
46:VN:165:GLU:N	46:VN:165:GLU:OE1	2.50	0.44
46:VN:289:LEU:O	46:VN:293:MET:N	2.50	0.44
46:VN:313:ALA:HB3	46:VN:349:ILE:HA	1.99	0.44
45:WE:217:LEU:HD12	45:WE:367:ASP:HB3	1.99	0.44
46:WN:356:ILE:HD12	46:WN:357:PRO:HD2	2.00	0.44
18:II:164:ARG:HH12	45:KE:2:ARG:NH2	2.14	0.44
24:IP:223:ARG:NH2	45:TG:282:TYR:HB2	2.27	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:1V:121:GLU:C	14:1V:122:LYS:HD2	2.37	0.44
5:2E:117:ILE:HG21	5:2E:147:LEU:HD21	1.98	0.44
28:2F:48:ILE:HG22	28:2F:48:ILE:O	2.17	0.44
20:2K:434:ILE:HD12	20:2K:434:ILE:H	1.82	0.44
21:2L:571:ALA:O	21:2L:579:VAL:HA	2.16	0.44
22:2M:35:GLU:HG2	22:2M:46:LEU:O	2.17	0.44
9:2N:2:HIS:NE2	9:2N:16:ILE:O	2.39	0.44
10:2Q:76:LEU:O	10:2Q:134:PHE:N	2.47	0.44
25:2R:87:LEU:HA	45:MG:85:GLN:HE22	1.83	0.44
11:2S:91:ASN:HD21	12:2T:34:PRO:HD3	1.81	0.44
12:2T:136:HIS:O	12:2T:141:LYS:NZ	2.41	0.44
13:2U:489:GLU:HG2	13:2U:517:TRP:HH2	1.81	0.44
26:2W:263:PHE:HD2	26:2W:266:LEU:HD12	1.82	0.44
1:3A:35:TYR:OH	1:3A:41:THR:N	2.49	0.44
27:3C:223:GLN:HA	45:KA:221:ARG:HB2	1.98	0.44
32:3D:8:VAL:HG11	32:3D:210:ARG:HD3	1.97	0.44
21:3L:36:LYS:HG3	21:3L:108:GLN:HE22	1.82	0.44
11:3S:90:VAL:HG12	11:3S:92:LYS:HG2	1.99	0.44
13:3U:98:LEU:HD13	13:3U:132:TRP:CE3	2.52	0.44
13:3U:535:GLU:H	13:3U:553:GLU:HB3	1.81	0.44
36:5C:166:THR:HG23	36:5C:170:HIS:CE1	2.53	0.44
36:5D:75:TYR:HE1	46:NN:320:ARG:HD3	1.82	0.44
37:5G:213:TYR:CE2	46:LN:392:LYS:HD2	2.53	0.44
40:6G:238:LYS:NZ	40:6G:239:ILE:HG22	2.32	0.44
34:6R:152:LYS:HG2	34:6R:160:TYR:CE1	2.52	0.44
46:AD:210:ILE:O	46:AD:214:THR:OG1	2.32	0.44
46:AD:268:ILE:HG22	46:AD:368:VAL:HG22	1.99	0.44
46:AD:391:ARG:HD2	46:AD:391:ARG:HA	1.76	0.44
46:AF:117:LEU:HA	46:AF:120:VAL:HG12	1.98	0.44
45:AI:284:GLU:HB2	45:AI:286:LEU:HD22	1.99	0.44
45:AI:340:THR:HG23	45:AI:341:ILE:HG13	1.98	0.44
46:AJ:293:MET:HG3	46:AJ:367:PHE:HB2	1.99	0.44
46:AN:316:LEU:HD22	46:AN:352:SER:HB2	1.99	0.44
45:BC:216:ASN:HB3	45:BC:275:ILE:O	2.17	0.44
46:BD:204:ASN:OD1	49:BD:501:GDP:O2'	2.28	0.44
46:BF:406:MET:HG3	46:BF:407:GLU:N	2.32	0.44
45:BK:215:ARG:NH2	45:BK:299:ALA:O	2.50	0.44
45:BK:231:ILE:O	45:BK:235:ILE:HG12	2.17	0.44
45:CC:93:ILE:HG21	45:CC:117:LEU:HD11	1.99	0.44
45:CC:211:ASP:HB3	45:CC:215:ARG:HH22	1.81	0.44
46:CF:178:THR:HG22	46:CF:180:VAL:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CG:414:GLU:HA	45:CG:414:GLU:OE2	2.18	0.44
46:CL:203:ASP:O	46:CL:207:LEU:HD23	2.18	0.44
45:CM:320:ARG:HB2	45:CM:358:GLN:O	2.17	0.44
45:DA:109:THR:HG22	45:DA:110:ILE:HG23	1.98	0.44
46:DH:173:PRO:HG2	46:DH:380:ARG:HH11	1.81	0.44
46:DJ:226:ASN:HD21	49:DJ:501:GDP:HN1	1.63	0.44
45:DK:5:ILE:HG12	45:DK:132:LEU:HD13	2.00	0.44
45:DK:196:GLU:HG2	45:DK:197:HIS:ND1	2.32	0.44
46:EB:24:ILE:HG23	46:EB:28:HIS:HD2	1.82	0.44
46:EB:152:ILE:HA	46:EB:155:VAL:HG12	1.98	0.44
45:EC:188:ILE:HG13	45:EC:189:LEU:HD12	1.99	0.44
45:EC:242:LEU:HD11	45:EC:252:ILE:HG12	1.99	0.44
45:EK:30:ILE:HD11	45:EK:34:GLY:O	2.17	0.44
45:EK:35:GLN:HE21	45:EK:60:LYS:HB3	1.82	0.44
45:EK:174:SER:HB2	45:EK:177:VAL:O	2.16	0.44
46:EN:67:ASP:OD1	46:EN:68:LEU:N	2.47	0.44
46:FB:326:VAL:O	46:FB:330:MET:HG2	2.17	0.44
45:FE:390:ARG:HG3	45:FE:391:LEU:N	2.32	0.44
46:FL:318:ARG:HH11	46:FL:358:PRO:HG3	1.81	0.44
46:FL:345:ILE:O	46:FL:348:ASN:HB3	2.17	0.44
46:GB:119:VAL:HA	46:GB:122:LYS:CE	2.47	0.44
46:GB:317:PHE:HD1	46:GB:365:VAL:HG22	1.82	0.44
46:GF:295:ASP:OD1	46:GF:297:LYS:HG2	2.17	0.44
45:GK:172:TYR:OH	45:GK:191:THR:HG22	2.17	0.44
46:GN:257:LEU:HA	46:GN:312:THR:HG21	1.99	0.44
46:GN:318:ARG:HB3	46:GN:364:ALA:HB3	1.98	0.44
45:HA:209:ILE:HG23	45:HA:227:LEU:HD22	2.00	0.44
45:HA:319:TYR:HB3	45:HA:323:VAL:HG21	1.99	0.44
46:HD:202:ILE:HD11	46:HD:268:ILE:HD11	1.99	0.44
46:HJ:318:ARG:NH1	46:HJ:358:PRO:HG3	2.33	0.44
45:HK:7:ILE:N	45:HK:136:LEU:O	2.41	0.44
46:IB:310:TYR:HA	46:IB:371:SER:HA	1.99	0.44
46:IJ:107:THR:OG1	46:IJ:108:GLU:OE1	2.26	0.44
45:JA:241:SER:O	45:JA:249:ASN:ND2	2.44	0.44
46:JB:404:ASP:O	46:JB:407:GLU:HG2	2.18	0.44
46:JD:31:ASP:OD1	46:JD:35:THR:N	2.48	0.44
46:JF:330:MET:N	46:JF:330:MET:SD	2.91	0.44
46:JL:67:ASP:OD1	46:JL:68:LEU:N	2.49	0.44
46:JN:194:GLU:N	46:JN:194:GLU:OE1	2.50	0.44
45:KG:185:TYR:HE1	45:KG:398:MET:HG3	1.81	0.44
45:KK:264:ARG:HB3	45:KK:264:ARG:NH1	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LA:171:ILE:HG13	45:LA:204:LEU:O	2.17	0.44
46:LB:135:ILE:HB	46:LB:166:THR:HG22	1.99	0.44
45:LC:21:TRP:CZ2	45:LC:65:ALA:HB2	2.53	0.44
45:LE:221:ARG:HB3	46:LF:322:SER:OG	2.17	0.44
45:LE:398:MET:HG3	46:LF:345:ILE:HG22	1.98	0.44
45:LE:419:SER:O	45:LE:423:GLU:HG2	2.18	0.44
46:LF:51:TYR:HB3	46:LF:59:TYR:HB3	1.98	0.44
45:LG:88:HIS:CE1	45:LG:90:GLU:HG2	2.52	0.44
46:LL:8:GLN:HE21	46:LL:65:LEU:HG	1.82	0.44
45:MA:250:VAL:HG13	45:MA:254:GLU:HB3	1.98	0.44
46:MB:7:ILE:O	46:MB:135:ILE:HA	2.17	0.44
46:MB:50:TYR:HE1	46:MB:241:ARG:HD3	1.82	0.44
46:MD:73:MET:HE2	46:MD:92:PHE:HB3	2.00	0.44
46:MF:190:HIS:NE2	46:MF:410:GLU:OE1	2.50	0.44
46:ML:68:LEU:HD23	46:ML:97:ALA:N	2.32	0.44
45:NC:27:GLU:OE1	45:NC:243:ARG:NH1	2.44	0.44
45:NG:210:TYR:CE1	45:NG:227:LEU:HD21	2.50	0.44
46:NJ:33:THR:O	46:NJ:58:ARG:NH2	2.51	0.44
46:NL:257:LEU:HA	46:NL:312:THR:HG21	1.99	0.44
45:NM:397:LEU:HD21	46:NN:344:TRP:HA	1.99	0.44
46:NN:105:HIS:CD2	46:NN:150:LEU:HB2	2.51	0.44
45:OA:347:CYS:HA	46:OD:388:MET:HE1	1.99	0.44
45:OC:191:THR:HG21	45:OC:425:LEU:HD11	1.99	0.44
46:OF:148:GLY:O	46:OF:152:ILE:HG12	2.18	0.44
46:OJ:178:THR:HG22	46:OJ:180:VAL:H	1.82	0.44
45:OK:331:SER:O	45:OK:334:THR:OG1	2.29	0.44
46:ON:372:THR:HA	46:ON:422:TYR:HE2	1.81	0.44
45:PA:11:GLN:HE21	47:PA:501:GTP:PA	2.40	0.44
45:PE:1:MET:O	45:PE:131:GLY:HA3	2.17	0.44
46:PF:143:THR:OG1	49:PF:501:GDP:O1B	2.25	0.44
45:PG:345:ASP:OD1	45:PG:346:TRP:N	2.51	0.44
45:PI:254:GLU:HA	45:PI:257:THR:OG1	2.18	0.44
46:PJ:86:ARG:HG2	46:PJ:88:ASP:H	1.82	0.44
45:PK:98:ASP:OD1	45:PK:99:ALA:N	2.50	0.44
46:PN:335:ASN:OD1	46:PN:336:LYS:N	2.51	0.44
45:QC:424:ASP:OD1	45:QC:425:LEU:N	2.50	0.44
46:QD:68:LEU:HD22	46:QD:97:ALA:HB2	1.98	0.44
46:QD:116:VAL:HA	46:QD:119:VAL:HG22	1.99	0.44
45:QE:384:ILE:O	45:QE:387:VAL:HG22	2.17	0.44
45:QI:188:ILE:HG23	45:QI:425:LEU:HD11	2.00	0.44
45:QK:121:ARG:HD3	45:QK:121:ARG:HA	1.72	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RB:372:THR:HA	46:RB:422:TYR:CE2	2.51	0.44
46:RD:107:THR:OG1	46:RD:108:GLU:OE1	2.29	0.44
45:RE:105:ARG:HH21	45:RE:110:ILE:HG21	1.81	0.44
46:RF:83:GLN:O	46:SF:281:TYR:OH	2.20	0.44
45:RK:274:PRO:HD3	45:RK:291:ILE:HD11	1.99	0.44
45:RM:259:LEU:HD21	45:RM:316:SER:OG	2.17	0.44
46:SB:286:VAL:O	46:SB:329:GLN:NE2	2.32	0.44
46:SD:258:ILE:HG13	46:SD:258:ILE:O	2.16	0.44
45:SM:2:ARG:HD2	45:SM:242:LEU:HD22	1.98	0.44
45:SM:2:ARG:O	45:SM:51:THR:HA	2.17	0.44
45:TA:210:TYR:CE1	45:TA:227:LEU:HD21	2.51	0.44
46:TB:215:LEU:HB3	46:TB:217:LEU:HD23	2.00	0.44
46:TF:274:THR:HA	46:TF:282:ARG:HH21	1.83	0.44
46:TL:183:TYR:HE2	46:TL:394:PHE:HB2	1.81	0.44
46:TL:255:VAL:HG11	45:TM:102:ASN:HD21	1.81	0.44
45:TM:372:MET:HB2	45:TM:373:ARG:NH1	2.32	0.44
46:UB:139:LEU:HD22	46:UB:170:VAL:HG12	1.99	0.44
46:UB:178:THR:HB	46:UB:181:GLU:HG3	2.00	0.44
45:UI:98:ASP:O	45:UI:105:ARG:NH1	2.50	0.44
46:UJ:252:LYS:NZ	47:UK:501:GTP:O1G	2.47	0.44
45:UK:56:THR:HG23	45:UK:58:ALA:H	1.82	0.44
46:UN:210:ILE:HG12	46:UN:297:LYS:O	2.17	0.44
46:UN:238:CYS:SG	46:UN:239:CYS:N	2.91	0.44
46:VB:67:ASP:O	46:VB:92:PHE:HA	2.18	0.44
45:VC:222:PRO:HD2	46:VD:324:LYS:HE2	1.99	0.44
46:VF:239:CYS:SG	46:VF:247:ASN:HA	2.58	0.44
45:VG:209:ILE:HD13	45:VG:231:ILE:HD11	1.99	0.44
45:VI:26:LEU:HD23	45:VI:363:VAL:HG22	1.99	0.44
46:VL:87:PRO:HA	46:VL:90:PHE:HD2	1.81	0.44
45:VM:60:LYS:HD3	45:WM:283:HIS:CE1	2.53	0.44
45:VM:90:GLU:HG3	45:VM:121:ARG:NH1	2.32	0.44
45:WG:244:PHE:HB2	45:WG:356:ASN:HD21	1.82	0.44
45:WG:278:ALA:HA	45:WG:369:ALA:HB2	2.00	0.44
45:WI:179:THR:HG21	46:WJ:246:LEU:HD13	2.00	0.44
45:WM:113:GLU:HG2	45:WM:114:ILE:HD12	1.98	0.44
46:WN:322:SER:OG	46:WN:325:GLU:OE2	2.34	0.44
6:OF:150:TYR:HE2	46:FD:55:THR:HA	1.83	0.44
13:1U:98:LEU:HD23	13:1U:132:TRP:CD2	2.53	0.44
14:1V:248:LEU:HB3	46:WL:276:ARG:NH2	2.32	0.44
1:2A:125:LEU:HD23	1:2A:126:LYS:N	2.32	0.44
16:2B:62:THR:O	16:2B:65:LEU:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:2H:207:LYS:HZ2	30:2H:209:ARG:HG2	1.82	0.44
20:2K:259:LEU:O	20:2K:263:ASN:N	2.51	0.44
23:2O:179:LEU:HD23	23:2O:182:GLU:OE2	2.17	0.44
24:2P:351:ARG:HD3	46:TN:360:GLY:H	1.83	0.44
10:2Q:86:TYR:O	10:2Q:159:ASN:HB2	2.16	0.44
25:2R:289:ASN:HA	46:DH:218:THR:H	1.81	0.44
25:2R:332:ASP:OD2	25:2R:341:ARG:NH2	2.50	0.44
27:3C:33:ARG:HH21	27:3C:173:TYR:HA	1.83	0.44
23:3O:292:TYR:HD1	23:3O:296:LYS:HZ1	1.64	0.44
25:3R:87:LEU:HA	45:MK:85:GLN:NE2	2.30	0.44
36:5A:32:ALA:O	36:5A:34:PHE:N	2.50	0.44
35:5S:66:LYS:HG3	35:5S:116:TYR:CE1	2.52	0.44
40:6G:114:LYS:HE3	46:VJ:339:SER:HB3	2.00	0.44
10:6Q:35:LYS:HB3	10:6Q:35:LYS:HE2	1.71	0.44
34:6R:295:SER:O	46:DN:276:ARG:HG2	2.18	0.44
45:AA:390:ARG:HG3	45:AA:391:LEU:HD12	1.99	0.44
46:AD:379:LYS:HE3	46:AD:379:LYS:HB3	1.84	0.44
45:AE:279:GLU:N	45:AE:279:GLU:OE1	2.50	0.44
45:AI:147:SER:HB2	45:AI:190:SER:HB3	1.99	0.44
46:AJ:320:ARG:HG3	46:AJ:320:ARG:NH1	2.33	0.44
46:AL:287:PRO:HG3	46:AL:329:GLN:NE2	2.32	0.44
46:AN:41:ASP:OD1	46:AN:41:ASP:N	2.50	0.44
46:BD:268:ILE:HG22	46:BD:368:VAL:HG22	1.99	0.44
45:BE:210:TYR:CE1	45:BE:227:LEU:HD11	2.52	0.44
46:BF:273:LEU:H	46:BF:292:GLN:HE22	1.66	0.44
46:BL:105:HIS:CD2	46:BL:150:LEU:HB2	2.53	0.44
45:CC:284:GLU:CD	45:CC:286:LEU:H	2.21	0.44
46:CD:73:MET:HE2	46:CD:73:MET:HB2	1.79	0.44
46:CF:101:TRP:HB2	46:CF:184:ASN:HB3	2.00	0.44
45:CI:408:TYR:HB3	45:CI:413:MET:HG3	2.00	0.44
45:DA:123:ARG:NH2	45:DA:161:TYR:OH	2.50	0.44
46:DB:12:CYS:O	46:DB:16:ILE:HG12	2.18	0.44
45:DC:39:ASP:OD1	45:DC:39:ASP:N	2.50	0.44
46:DD:86:ARG:HH22	46:ED:282:ARG:HA	1.82	0.44
46:DF:8:GLN:HE21	46:DF:65:LEU:HG	1.81	0.44
46:DH:347:ASN:O	45:DI:181:VAL:HG12	2.16	0.44
45:DI:103:PHE:HB2	45:DI:186:ASN:HB3	2.00	0.44
46:DJ:295:ASP:OD1	46:DJ:297:LYS:NZ	2.44	0.44
45:DK:242:LEU:HD21	45:DK:251:ASP:OD1	2.17	0.44
45:DK:414:GLU:HB2	45:DK:417:GLU:OE1	2.18	0.44
45:DM:176:GLN:HG2	45:DM:177:VAL:HG23	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EA:33:ASP:HA	45:EA:85:GLN:HE21	1.82	0.44
45:EA:68:LEU:HD22	45:EA:153:LEU:HD11	1.99	0.44
45:EA:256:GLN:OE1	46:EB:397:TRP:NE1	2.47	0.44
45:EC:209:ILE:HG22	45:EC:227:LEU:HD22	1.99	0.44
46:ED:326:VAL:O	46:ED:330:MET:HG2	2.17	0.44
45:EE:328:VAL:O	45:EE:332:ILE:HG12	2.18	0.44
45:FA:100:ALA:HB1	46:FB:252:LYS:HA	1.99	0.44
45:FA:383:ALA:O	45:FA:386:GLU:HG2	2.17	0.44
46:FB:221:THR:HG23	46:FB:224:ASP:H	1.81	0.44
45:FC:71:GLU:OE1	45:FC:73:THR:HB	2.17	0.44
45:FC:216:ASN:HB3	45:FC:275:ILE:O	2.17	0.44
46:FD:8:GLN:HE21	46:FD:14:ASN:HA	1.83	0.44
45:FE:88:HIS:HB3	45:FE:91:GLN:HG2	1.99	0.44
45:FE:192:HIS:ND1	45:FE:424:ASP:OD2	2.46	0.44
45:FE:254:GLU:O	45:FE:255:PHE:HD2	2.00	0.44
46:FH:289:LEU:HD13	46:FH:365:VAL:HG23	2.00	0.44
45:FI:181:VAL:HG13	45:FI:182:VAL:HG13	1.99	0.44
46:FL:211:CYS:HB3	46:FL:217:LEU:HD21	1.99	0.44
45:FM:141:VAL:HG21	45:FM:172:TYR:HD1	1.82	0.44
46:FN:47:ILE:HG22	46:FN:51:TYR:HB2	1.99	0.44
46:GB:86:ARG:HH21	46:GB:87:PRO:CG	2.30	0.44
46:GB:119:VAL:O	46:GB:122:LYS:HG2	2.17	0.44
45:HE:55:GLU:HG3	45:HE:57:GLY:H	1.83	0.44
45:HG:265:ILE:HG23	45:HG:432:TYR:CZ	2.53	0.44
45:HK:326:LYS:O	45:HK:329:ASN:N	2.50	0.44
46:HL:204:ASN:OD1	49:HL:501:GDP:O2'	2.34	0.44
45:HM:216:ASN:HB3	45:HM:275:ILE:O	2.17	0.44
45:IC:74:VAL:O	45:IC:78:VAL:HG23	2.17	0.44
45:IE:11:GLN:HG3	45:IE:74:VAL:HG11	2.00	0.44
46:IH:105:HIS:CE1	46:IH:150:LEU:HD12	2.52	0.44
45:II:11:GLN:NE2	46:IJ:247:ASN:OD1	2.39	0.44
46:IL:169:VAL:HG22	46:IL:202:ILE:HB	1.99	0.44
46:IL:341:PHE:CE2	46:IL:349:ILE:HD11	2.53	0.44
46:IN:37:HIS:ND1	46:IN:37:HIS:O	2.50	0.44
45:JA:395:PHE:CD2	45:JA:422:ARG:HD3	2.52	0.44
45:JE:242:LEU:HD11	45:JE:252:ILE:HG23	1.99	0.44
45:JM:294:SER:O	45:JM:300:ASN:ND2	2.41	0.44
45:KE:425:LEU:O	45:KE:425:LEU:HD23	2.17	0.44
45:KI:103:PHE:HB2	45:KI:186:ASN:HB3	1.99	0.44
45:KK:163:LYS:HA	45:KK:163:LYS:HD3	1.78	0.44
45:LE:55:GLU:OE1	45:LE:56:THR:N	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LM:210:TYR:CZ	45:LM:227:LEU:HD11	2.53	0.44
45:LM:394:LYS:HG2	46:LN:346:PRO:HG3	1.98	0.44
46:LN:164:MET:HB3	46:LN:197:ASP:H	1.82	0.44
45:ME:286:LEU:N	45:ME:290:GLU:OE2	2.48	0.44
46:MF:372:THR:HA	46:MF:422:TYR:CE2	2.50	0.44
46:MH:66:MET:HE1	46:MH:151:LEU:HD22	2.00	0.44
46:MJ:209:ASP:OD1	46:MJ:213:ARG:HG3	2.17	0.44
45:NA:405:VAL:HG23	45:NA:418:PHE:HE2	1.82	0.44
46:NB:2:ARG:HG2	46:NB:131:GLN:HB2	1.98	0.44
46:ND:113:ILE:HG12	46:ND:154:LYS:NZ	2.32	0.44
45:NE:294:SER:HA	45:NE:297:GLU:HG3	1.99	0.44
46:NF:21:TRP:CZ2	46:NF:63:ALA:HB2	2.52	0.44
45:NG:217:LEU:HD12	45:NG:367:ASP:HB3	1.99	0.44
46:NH:139:LEU:HD13	46:NH:168:SER:HB2	1.99	0.44
45:NI:181:VAL:HG13	45:NI:182:VAL:HG13	1.99	0.44
45:NI:223:THR:HG22	45:NI:224:TYR:N	2.31	0.44
45:NM:210:TYR:CE1	46:NN:324:LYS:HB3	2.53	0.44
46:NN:211:CYS:HA	46:NN:215:LEU:HB2	1.99	0.44
45:OA:390:ARG:HG3	45:OA:391:LEU:N	2.33	0.44
46:OB:172:SER:HA	46:OB:380:ARG:HH22	1.83	0.44
46:OB:380:ARG:O	46:OB:383:GLU:HG3	2.17	0.44
45:OE:288:VAL:HA	45:OE:291:ILE:HG12	1.99	0.44
46:OF:26:ASP:OD2	46:OF:27:GLU:N	2.50	0.44
46:OH:105:HIS:CD2	46:OH:150:LEU:HB2	2.53	0.44
46:OH:237:THR:O	46:OH:241:ARG:NE	2.48	0.44
46:OJ:19:LYS:HA	46:OJ:19:LYS:HD2	1.85	0.44
45:OM:209:ILE:HG21	45:OM:227:LEU:HA	1.99	0.44
45:PA:141:VAL:HG22	45:PA:187:SER:HA	1.99	0.44
46:PD:73:MET:HE3	46:PD:92:PHE:HB3	1.99	0.44
46:PL:208:TYR:CE1	46:PL:225:LEU:HD11	2.52	0.44
46:PN:99:ASN:ND2	46:PN:178:THR:HG21	2.33	0.44
46:QB:74:ASP:OD1	46:QB:77:ARG:NH1	2.50	0.44
45:QE:88:HIS:HB3	45:QE:91:GLN:HG2	2.00	0.44
45:QE:183:GLU:N	45:QE:184:PRO:HD2	2.31	0.44
45:QG:174:SER:HB3	45:QG:177:VAL:O	2.18	0.44
46:QH:3:GLU:HA	46:QH:49:VAL:HG13	1.99	0.44
46:QJ:31:ASP:OD1	46:QJ:35:THR:N	2.32	0.44
45:QK:377:MET:SD	45:QK:379:SER:HB3	2.57	0.44
46:QL:12:CYS:O	46:QL:16:ILE:HG12	2.18	0.44
45:RA:210:TYR:CZ	45:RA:227:LEU:HD11	2.53	0.44
45:RC:160:ASP:OD1	45:RC:161:TYR:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RG:326:LYS:NZ	46:RH:219:THR:HA	2.32	0.44
46:RH:316:LEU:HB2	46:RH:366:THR:HB	2.00	0.44
46:RH:321:MET:SD	46:RH:321:MET:N	2.90	0.44
45:RK:334:THR:O	45:RK:338:LYS:N	2.49	0.44
46:RL:268:ILE:HG13	46:RL:300:MET:SD	2.57	0.44
45:RM:167:LEU:HG	45:RM:200:VAL:HB	2.00	0.44
46:RN:313:ALA:HB3	46:RN:349:ILE:HG12	1.99	0.44
45:SA:288:VAL:HA	45:SA:291:ILE:HG12	2.00	0.44
45:SE:259:LEU:HB3	45:SE:268:MET:HE1	1.99	0.44
45:SE:384:ILE:O	45:SE:387:VAL:HG22	2.17	0.44
45:SK:98:ASP:OD1	45:SK:99:ALA:N	2.50	0.44
45:TA:68:LEU:HD22	45:TA:153:LEU:HD11	2.00	0.44
45:TC:319:TYR:HE1	45:TC:375:VAL:HG13	1.81	0.44
46:TF:139:LEU:HA	46:TF:145:SER:HB3	1.99	0.44
45:TG:256:GLN:HB2	46:TH:397:TRP:CH2	2.53	0.44
46:TH:68:LEU:HB2	46:TH:147:MET:HE1	1.98	0.44
46:TJ:230:SER:HA	46:TJ:233:MET:HE3	1.99	0.44
46:TL:164:MET:O	46:TL:198:GLU:N	2.49	0.44
45:UE:419:SER:OG	45:UE:420:GLU:OE2	2.30	0.44
46:UH:105:HIS:CD2	46:UH:150:LEU:HB2	2.52	0.44
46:UH:324:LYS:HB2	45:UI:210:TYR:CE2	2.53	0.44
45:UI:112:LYS:HE2	45:UI:112:LYS:HB3	1.69	0.44
45:UI:208:ALA:O	45:UI:212:ILE:HG12	2.17	0.44
45:UM:297:GLU:OE2	45:UM:300:ASN:ND2	2.50	0.44
45:VA:76:ASP:OD1	45:VA:79:ARG:NH2	2.50	0.44
45:VA:319:TYR:HB2	45:VA:355:ILE:HD13	1.99	0.44
45:VA:384:ILE:O	45:VA:387:VAL:HG22	2.17	0.44
46:VB:257:LEU:HD11	46:VB:314:SER:HB3	1.98	0.44
46:VD:379:LYS:O	46:VD:383:GLU:HG2	2.16	0.44
45:VE:387:VAL:HG12	45:VE:390:ARG:NH2	2.33	0.44
46:VJ:239:CYS:SG	46:VJ:247:ASN:HA	2.58	0.44
45:VK:433:GLU:O	45:VK:437:ILE:HG23	2.18	0.44
46:VL:39:ASP:OD1	46:VL:40:SER:N	2.51	0.44
45:VM:121:ARG:HD2	45:VM:121:ARG:HA	1.73	0.44
45:WK:141:VAL:HG21	45:WK:172:TYR:HE1	1.82	0.44
45:WK:251:ASP:H	45:WK:254:GLU:CD	2.19	0.44
45:WM:247:ALA:HB3	45:WM:355:ILE:HD11	1.98	0.44
4:1D:166:ARG:NH1	45:EG:80:THR:HG22	2.31	0.44
4:1D:187:PHE:HB2	46:FF:322:SER:HB3	2.00	0.44
18:1I:35:VAL:HG21	46:JD:276:ARG:NH2	2.32	0.44
12:1T:109:CYS:HB2	12:1T:128:GLU:HG2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:1U:325:ASP:OD1	13:1U:325:ASP:N	2.49	0.44
13:1U:475:ILE:HG12	13:1U:483:ARG:HH22	1.82	0.44
26:1W:242:LEU:HD11	34:7R:15:HIS:CE1	2.52	0.44
5:2E:45:ARG:NH1	5:2E:79:VAL:O	2.45	0.44
23:2O:190:LYS:HA	23:2O:193:GLU:HG3	2.00	0.44
24:2P:387:LEU:HG	24:2P:391:ARG:HH12	1.75	0.44
25:2R:196:GLU:HA	25:2R:199:GLU:HG2	1.99	0.44
5:3E:88:ILE:HG22	5:3E:88:ILE:O	2.17	0.44
30:3H:184:LYS:H	30:3H:184:LYS:HG2	1.66	0.44
21:3L:190:PHE:O	21:3L:194:ILE:HG23	2.16	0.44
23:3O:375:GLN:O	23:3O:379:GLU:HG2	2.17	0.44
11:3S:97:ARG:NH2	46:MN:417:ASP:OD2	2.50	0.44
12:3T:228:PRO:O	12:3T:229:THR:OG1	2.36	0.44
15:3X:100:LYS:HA	45:MK:282:TYR:HD2	1.83	0.44
27:4C:48:GLY:HA2	27:4C:88:TYR:HE1	1.83	0.44
27:4C:75:LEU:HA	27:4C:86:VAL:HG12	1.99	0.44
27:4C:127:LEU:HD11	27:4C:165:ILE:HD11	1.98	0.44
36:5B:150:PHE:CZ	45:NG:26:LEU:HD11	2.53	0.44
37:5F:46:LEU:HA	37:5F:48:ARG:HH11	1.82	0.44
46:AD:174:LYS:HE2	46:AD:174:LYS:HA	1.99	0.44
46:AH:91:VAL:HG21	46:AH:116:VAL:HG23	1.99	0.44
45:AM:155:GLU:O	45:AM:158:SER:OG	2.33	0.44
45:AM:276:ILE:HD12	45:AM:281:ALA:HA	1.99	0.44
45:AM:317:MET:HB3	45:AM:319:TYR:CE1	2.53	0.44
45:AM:394:LYS:HE3	46:AN:346:PRO:HB2	1.99	0.44
46:BB:40:SER:OG	46:BB:43:GLN:HB2	2.16	0.44
46:BB:74:ASP:OD1	46:BB:75:SER:N	2.51	0.44
45:BC:261:PRO:HG2	45:BC:313:MET:SD	2.58	0.44
46:BH:190:HIS:CD2	46:BH:411:ALA:HA	2.52	0.44
46:BJ:229:VAL:O	46:BJ:233:MET:HG3	2.18	0.44
46:BL:296:ALA:HA	46:BL:305:PRO:HG2	1.98	0.44
46:CB:391:ARG:HA	46:CB:391:ARG:HD2	1.80	0.44
46:CD:152:ILE:HA	46:CD:164:MET:HE1	1.99	0.44
46:CD:170:VAL:HG11	46:CD:201:VAL:HB	1.99	0.44
45:CG:231:ILE:O	45:CG:235:ILE:HG12	2.18	0.44
46:DB:187:LEU:HD11	46:DB:408:PHE:HE1	1.82	0.44
45:DC:427:ALA:HA	45:DC:430:LYS:HG2	1.99	0.44
45:DE:334:THR:O	45:DE:337:THR:OG1	2.30	0.44
45:DE:385:ALA:HB2	45:DE:432:TYR:HD2	1.82	0.44
45:DG:98:ASP:OD1	45:DG:99:ALA:N	2.50	0.44
46:DL:260:PHE:HB2	46:DL:263:LEU:HD13	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DM:3:GLU:HB2	45:DM:129:CYS:SG	2.57	0.44
45:EA:88:HIS:CD2	45:EA:89:PRO:HD2	2.52	0.44
45:EA:210:TYR:O	45:EA:214:ARG:HG2	2.17	0.44
46:EB:375:GLN:HE22	46:EB:423:GLN:HB3	1.82	0.44
45:EI:252:ILE:H	45:EI:252:ILE:HD12	1.81	0.44
45:EI:414:GLU:HG3	45:EI:416:GLY:H	1.82	0.44
46:FB:187:LEU:HD11	46:FB:408:PHE:CE1	2.52	0.44
45:FE:402:ARG:NH1	45:FE:402:ARG:HB2	2.32	0.44
46:FF:183:TYR:HA	46:FF:385:PHE:HE1	1.82	0.44
46:FH:318:ARG:HH11	46:FH:358:PRO:HG3	1.82	0.44
45:FM:328:VAL:HG11	45:FM:353:VAL:HG21	2.00	0.44
45:GE:72:PRO:HD2	46:GF:2:ARG:NH1	2.32	0.44
46:GH:396:HIS:HA	46:GH:399:THR:HG22	1.98	0.44
46:GL:238:CYS:SG	46:GL:239:CYS:N	2.90	0.44
46:HB:20:PHE:O	46:HB:24:ILE:HG12	2.17	0.44
46:HB:204:ASN:OD1	46:HB:205:GLU:N	2.51	0.44
45:HC:384:ILE:O	45:HC:387:VAL:HG22	2.18	0.44
45:HG:205:ASP:OD1	45:HG:303:ALA:HA	2.17	0.44
46:IB:310:TYR:CD2	46:IB:371:SER:HB2	2.52	0.44
46:ID:110:ALA:O	46:ID:113:ILE:HG22	2.18	0.44
46:IF:45:GLU:HG3	46:IF:46:ARG:HG2	1.99	0.44
46:IH:238:CYS:SG	46:IH:239:CYS:N	2.90	0.44
46:IH:293:MET:HG3	46:IH:367:PHE:HB2	2.00	0.44
45:IM:60:LYS:NZ	45:IM:85:GLN:O	2.49	0.44
46:JD:175:VAL:O	46:JD:175:VAL:HG13	2.16	0.44
45:JI:265:ILE:HG12	45:JI:432:TYR:HE1	1.81	0.44
45:JI:407:TRP:CG	46:JJ:255:VAL:HG23	2.51	0.44
46:JL:221:THR:HG22	46:JL:222:TYR:H	1.82	0.44
45:KI:115:VAL:O	45:KI:119:LEU:HD23	2.18	0.44
45:KI:183:GLU:O	45:KI:187:SER:HB2	2.17	0.44
45:KK:260:VAL:HB	46:KN:397:TRP:CZ2	2.53	0.44
45:LA:383:ALA:O	45:LA:386:GLU:HG2	2.17	0.44
46:LL:55:THR:HG23	46:ML:283:ALA:HA	1.99	0.44
46:MB:178:THR:HG22	46:MB:180:VAL:H	1.82	0.44
46:MJ:63:ALA:O	46:MJ:89:ASN:ND2	2.47	0.44
46:ML:74:ASP:OD1	46:ML:77:ARG:NH2	2.50	0.44
46:MN:73:MET:HA	46:MN:76:VAL:HG12	1.99	0.44
45:NA:91:GLN:HG2	45:NA:121:ARG:NH1	2.26	0.44
46:NB:317:PHE:O	46:NB:354:CYS:N	2.41	0.44
45:NE:339:ARG:HG2	45:NE:339:ARG:NH1	2.32	0.44
45:NE:387:VAL:HG12	45:NE:390:ARG:NH1	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NG:141:VAL:HG12	45:NG:171:ILE:O	2.17	0.44
46:NH:105:HIS:CE1	46:NH:150:LEU:HD12	2.52	0.44
45:NI:229:ARG:HD3	45:NI:363:VAL:HG11	1.98	0.44
45:NK:219:ILE:HG12	45:NK:221:ARG:H	1.81	0.44
46:NL:149:THR:HB	46:NL:191:GLN:HB3	2.00	0.44
45:OA:22:GLU:HG2	45:OA:83:TYR:CE2	2.52	0.44
45:OC:398:MET:HE1	46:OD:345:ILE:HA	1.99	0.44
46:OF:167:PHE:CE1	46:OF:200:MET:HG3	2.53	0.44
45:OK:251:ASP:OD1	45:OK:254:GLU:HG2	2.17	0.44
45:PA:254:GLU:HB3	46:PD:98:GLY:HA2	1.98	0.44
46:PB:12:CYS:HA	46:PB:15:GLN:HE21	1.83	0.44
46:PF:113:ILE:HA	46:PF:116:VAL:HG12	1.98	0.44
45:PG:70:LEU:HA	45:PG:95:GLY:HA3	1.99	0.44
45:PG:298:PRO:HA	45:PG:301:MET:HE3	1.99	0.44
45:PI:104:ALA:HB2	45:PI:413:MET:HE2	1.98	0.44
46:PL:152:ILE:HG23	46:PL:164:MET:SD	2.57	0.44
45:QA:332:ILE:HA	45:QA:335:ILE:HD12	1.98	0.44
46:QH:167:PHE:CE2	46:QH:233:MET:HG3	2.45	0.44
46:QJ:282:ARG:HH22	46:QJ:292:GLN:NE2	2.15	0.44
45:QK:356:ASN:OD1	45:QK:357:TYR:N	2.51	0.44
45:QK:414:GLU:CD	45:QK:416:GLY:H	2.21	0.44
45:QM:319:TYR:HE2	45:QM:328:VAL:HG13	1.82	0.44
45:RA:206:ASN:HB3	45:RA:210:TYR:HE2	1.81	0.44
45:RE:88:HIS:NE2	45:SE:284:GLU:OE2	2.51	0.44
45:RG:317:MET:HB2	45:RG:353:VAL:HA	2.00	0.44
45:RI:52:PHE:HZ	45:RI:239:THR:HG21	1.81	0.44
45:RM:215:ARG:HH11	45:RM:299:ALA:HB1	1.82	0.44
46:RN:85:PHE:HB3	46:RN:90:PHE:HE2	1.82	0.44
46:RN:260:PHE:HB2	46:RN:263:LEU:HD13	1.99	0.44
46:SH:74:ASP:OD1	46:SH:77:ARG:NH1	2.30	0.44
46:SJ:86:ARG:HH12	46:TJ:281:TYR:C	2.20	0.44
46:TF:251:ARG:NH2	45:TG:97:GLU:OE2	2.51	0.44
45:TM:194:LEU:O	45:TM:198:THR:HG22	2.17	0.44
46:TN:86:ARG:HH22	46:UN:278:SER:HA	1.82	0.44
45:UA:14:ILE:HD11	45:UA:69:ASP:HB2	1.99	0.44
46:UB:216:LYS:HB2	46:UB:216:LYS:HE3	1.72	0.44
45:UG:207:GLU:HA	45:UG:210:TYR:CD1	2.45	0.44
46:UH:226:ASN:HD21	49:UH:501:GDP:HN1	1.65	0.44
45:VA:76:ASP:OD2	46:VB:46:ARG:NH2	2.51	0.44
46:VB:314:SER:HA	46:VB:350:LYS:HB3	1.99	0.44
46:VD:376:GLU:O	46:VD:380:ARG:HB3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VE:141:VAL:HG22	45:VE:187:SER:HA	2.00	0.44
46:VF:285:THR:HG23	46:VF:287:PRO:HD2	1.99	0.44
46:WB:12:CYS:O	46:WB:16:ILE:HG12	2.17	0.44
46:WB:105:HIS:NE2	46:WB:150:LEU:HB3	2.32	0.44
45:WC:259:LEU:HD11	45:WC:316:SER:HB2	1.99	0.44
45:WI:175:PRO:HB2	45:WI:176:GLN:OE1	2.17	0.44
45:WM:11:GLN:HB2	47:WM:501:GTP:O3A	2.17	0.44
45:WM:271:SER:HA	45:WM:302:MET:CE	2.47	0.44
7:OG:45:MET:HE1	45:JK:78:VAL:HG22	2.00	0.44
4:1D:41:TYR:HE1	45:DG:76:ASP:HB2	1.81	0.44
4:1D:116:LEU:H	25:2R:516:GLN:HE22	1.66	0.44
12:1T:280:GLN:HB3	13:1U:47:SER:HA	1.98	0.44
13:1U:343:ASP:OD1	13:1U:343:ASP:N	2.49	0.44
1:2A:53:HIS:CD2	1:2A:80:LYS:HD3	2.53	0.44
21:2L:584:PHE:O	21:2L:588:ILE:HG12	2.17	0.44
22:2M:290:GLU:HG2	22:2M:291:PHE:N	2.33	0.44
9:2N:15:ARG:HD3	9:2N:19:TRP:CE2	2.52	0.44
23:2O:142:GLU:O	23:2O:146:MET:HG2	2.18	0.44
23:2O:238:ALA:HB1	46:VJ:276:ARG:HH21	1.83	0.44
25:2R:43:PRO:O	25:2R:44:VAL:HG23	2.18	0.44
13:2U:63:VAL:HG22	13:2U:70:ILE:HG23	1.99	0.44
13:2U:373:ASP:HB3	13:2U:375:LYS:NZ	2.32	0.44
13:2U:445:MET:SD	13:2U:445:MET:N	2.91	0.44
1:3A:135:SER:HB3	1:3A:138:TRP:CD1	2.53	0.44
16:3B:136:ARG:CZ	15:4X:90:ARG:HH22	2.29	0.44
27:3C:139:TYR:O	27:3C:140:GLN:HB2	2.18	0.44
23:3O:413:GLN:OE1	23:3O:416:ARG:NH2	2.38	0.44
23:3O:479:ILE:CG1	23:3O:480:PRO:HD2	2.47	0.44
10:3Q:168:SER:O	10:3Q:169:ASP:OD1	2.36	0.44
11:3S:137:TYR:O	11:3S:140:ARG:HB2	2.17	0.44
11:3S:191:LEU:HD23	11:3S:191:LEU:HA	1.83	0.44
12:3T:197:GLN:HG3	12:3T:198:ASP:N	2.26	0.44
14:3V:134:ILE:H	14:3V:134:ILE:HD12	1.83	0.44
33:4F:67:GLN:HA	33:4F:67:GLN:OE1	2.17	0.44
10:4Q:14:LEU:HD12	10:4Q:25:TRP:CE2	2.53	0.44
34:4R:547:GLU:HA	34:4R:550:VAL:HG22	2.00	0.44
35:5S:213:ASN:O	35:5S:217:LEU:HD13	2.17	0.44
10:6Q:170:ARG:HG2	10:6Q:171:LEU:N	2.33	0.44
45:AE:73:THR:O	45:AE:76:ASP:N	2.46	0.44
46:AH:64:ILE:HD11	46:AH:123:GLU:HG3	1.99	0.44
46:AH:372:THR:HA	46:AH:422:TYR:CE2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BA:257:THR:HG23	46:BD:397:TRP:CZ2	2.53	0.44
45:BA:345:ASP:OD1	45:BA:346:TRP:N	2.51	0.44
46:BD:247:ASN:O	46:BD:247:ASN:ND2	2.45	0.44
45:BE:328:VAL:HG11	45:BE:353:VAL:HG21	2.00	0.44
46:BH:174:LYS:HD3	46:BH:174:LYS:HA	1.79	0.44
46:BH:385:PHE:CE2	46:BH:412:GLU:HB2	2.52	0.44
45:BM:179:THR:HG21	46:BN:246:LEU:HD13	2.00	0.44
45:BM:276:ILE:HD12	45:BM:281:ALA:HA	2.00	0.44
45:CA:292:THR:HG21	45:CA:331:SER:HB3	1.99	0.44
46:CF:21:TRP:CZ2	46:CF:63:ALA:HB2	2.52	0.44
45:CI:97:GLU:HG2	45:CI:105:ARG:HH22	1.82	0.44
45:CK:261:PRO:HG3	46:CL:394:PHE:CE1	2.52	0.44
45:CM:180:ALA:N	45:CM:183:GLU:OE2	2.47	0.44
46:DF:46:ARG:NH2	45:DG:76:ASP:OD2	2.49	0.44
45:DI:188:ILE:HG22	45:DI:421:ALA:HB1	2.00	0.44
46:DJ:16:ILE:HD13	46:DJ:226:ASN:OD1	2.18	0.44
45:DK:7:ILE:HB	45:DK:137:VAL:HG12	2.00	0.44
45:EI:7:ILE:N	45:EI:136:LEU:O	2.42	0.44
45:EI:108:TYR:O	45:EI:112:LYS:NZ	2.37	0.44
46:EJ:282:ARG:HH22	46:EJ:292:GLN:NE2	2.15	0.44
45:EK:195:LEU:HD13	45:EK:428:LEU:HD12	1.98	0.44
45:EK:206:ASN:OD1	47:EK:501:GTP:N2	2.47	0.44
45:FA:181:VAL:HG23	45:FA:182:VAL:HG13	1.98	0.44
45:FE:39:ASP:N	45:FE:39:ASP:OD1	2.51	0.44
45:FE:60:LYS:HZ3	45:GE:283:HIS:CD2	2.36	0.44
46:FF:64:ILE:HD13	46:FF:120:VAL:HG22	1.99	0.44
46:FF:116:VAL:O	46:FF:120:VAL:HG23	2.16	0.44
46:FN:372:THR:HA	46:FN:422:TYR:CE2	2.53	0.44
45:GA:248:LEU:HD12	45:GA:248:LEU:HA	1.87	0.44
45:GE:203:MET:HG3	45:GE:384:ILE:HD11	1.99	0.44
46:GL:253:LEU:HD23	46:GL:257:LEU:HD13	1.99	0.44
45:GM:101:ASN:HA	45:GM:144:GLY:H	1.83	0.44
45:GM:268:MET:HB2	45:GM:379:SER:O	2.18	0.44
46:HB:173:PRO:HG2	46:HB:380:ARG:HD3	2.00	0.44
45:HC:210:TYR:CE1	45:HC:227:LEU:HD11	2.52	0.44
45:HC:377:MET:SD	45:HC:379:SER:HB3	2.57	0.44
45:HE:183:GLU:N	45:HE:184:PRO:HD2	2.33	0.44
46:HH:232:ALA:HB1	46:HH:268:ILE:HD12	1.98	0.44
46:HN:161:ASP:OD1	46:HN:162:ARG:HD3	2.18	0.44
45:IA:389:SER:O	45:IA:393:HIS:ND1	2.48	0.44
46:IB:154:LYS:O	46:IB:158:GLU:OE1	2.36	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:JB:311:LEU:HD11	46:JB:372:THR:HG23	1.98	0.44
45:JC:21:TRP:CZ2	45:JC:65:ALA:HB2	2.53	0.44
45:JE:88:HIS:CE1	45:JE:90:GLU:HG3	2.53	0.44
45:JG:2:ARG:HD3	45:JG:2:ARG:H	1.83	0.44
45:JI:346:TRP:CD1	46:JL:391:ARG:HG3	2.53	0.44
45:JM:259:LEU:HD11	45:JM:316:SER:HB3	2.00	0.44
45:JM:270:SER:O	45:JM:302:MET:HB2	2.18	0.44
45:KG:11:GLN:NE2	46:KH:245:GLN:O	2.50	0.44
46:KJ:172:SER:HB2	46:KJ:174:LYS:NZ	2.31	0.44
45:LE:222:PRO:HD2	46:LF:324:LYS:HD3	2.00	0.44
45:LE:223:THR:HG22	45:LE:224:TYR:N	2.33	0.44
46:LJ:153:SER:O	46:LJ:157:GLU:HG2	2.18	0.44
45:LM:183:GLU:N	45:LM:184:PRO:HD2	2.33	0.44
45:MA:384:ILE:O	45:MA:387:VAL:HG22	2.17	0.44
45:NA:22:GLU:HB3	45:NA:83:TYR:HE2	1.83	0.44
45:NE:89:PRO:HG2	45:OE:280:LYS:NZ	2.32	0.44
45:NE:288:VAL:HA	45:NE:291:ILE:HG12	1.99	0.44
46:NH:86:ARG:HA	46:OH:281:TYR:CD2	2.53	0.44
46:NL:105:HIS:CD2	46:NL:150:LEU:HB2	2.52	0.44
46:NN:73:MET:HA	46:NN:76:VAL:HG12	2.00	0.44
46:NN:289:LEU:HD23	46:NN:289:LEU:HA	1.83	0.44
45:OA:429:GLU:O	45:OA:433:GLU:OE1	2.36	0.44
46:OH:345:ILE:O	46:OH:345:ILE:HG13	2.18	0.44
46:OJ:372:THR:HA	46:OJ:422:TYR:CE2	2.46	0.44
45:OK:3:GLU:HG3	45:OK:64:ARG:HH12	1.83	0.44
45:OK:189:LEU:HD11	45:OK:418:PHE:HE1	1.82	0.44
45:OM:105:ARG:HH12	46:ON:251:ARG:HG2	1.82	0.44
45:OM:394:LYS:NZ	46:ON:346:PRO:HG2	2.32	0.44
46:PB:260:PHE:HB2	46:PB:263:LEU:HD13	2.00	0.44
45:QA:225:THR:HB	45:QA:229:ARG:HH12	1.83	0.44
45:QG:3:GLU:HB2	45:QG:129:CYS:SG	2.58	0.44
45:QG:256:GLN:O	46:QH:397:TRP:NE1	2.50	0.44
45:QI:67:PHE:HB2	45:QI:92:LEU:HG	1.98	0.44
45:QK:241:SER:OG	45:QK:250:VAL:O	2.35	0.44
45:QK:255:PHE:HE1	45:QK:318:MET:HE1	1.83	0.44
46:RB:20:PHE:HA	46:RB:230:SER:OG	2.18	0.44
45:RE:329:ASN:HB3	46:RF:175:VAL:HG12	1.99	0.44
46:RF:379:LYS:HZ3	46:RF:419:VAL:HG11	1.82	0.44
46:RJ:165:GLU:HG3	46:RJ:250:LEU:HD23	1.99	0.44
46:RL:17:GLY:HA2	46:RL:20:PHE:HB3	2.00	0.44
46:RL:416:ASN:OD1	46:RL:417:ASP:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SA:11:GLN:HG3	45:SA:74:VAL:HG11	2.00	0.44
45:SA:226:ASN:HB3	45:SA:229:ARG:NH1	2.31	0.44
46:SB:32:PRO:HA	46:SB:84:LEU:HD11	1.99	0.44
46:SB:324:LYS:HA	46:SB:327:ASP:OD2	2.17	0.44
45:SG:102:ASN:ND2	45:SG:105:ARG:HG3	2.32	0.44
45:SI:166:LYS:N	45:SI:199:ASP:OD2	2.43	0.44
45:TA:191:THR:HA	45:TA:194:LEU:HG	1.99	0.44
46:TB:191:GLN:HG3	46:TB:195:ASN:ND2	2.33	0.44
46:TB:282:ARG:HE	46:TB:283:ALA:N	2.12	0.44
46:TH:164:MET:HB2	46:TH:197:ASP:H	1.83	0.44
46:TH:318:ARG:HB3	46:TH:357:PRO:HA	1.98	0.44
45:UA:265:ILE:HG22	45:UA:380:ASN:HD21	1.81	0.44
46:UD:12:CYS:O	46:UD:16:ILE:HG12	2.17	0.44
46:UD:41:ASP:OD1	46:UD:41:ASP:N	2.49	0.44
46:UD:174:LYS:HD3	46:UD:174:LYS:HA	1.81	0.44
45:UE:74:VAL:O	45:UE:77:GLU:HG2	2.18	0.44
45:UE:174:SER:HB2	45:UE:177:VAL:O	2.16	0.44
46:UF:205:GLU:OE2	46:UF:302:ALA:HB2	2.17	0.44
45:UM:320:ARG:HB2	45:UM:358:GLN:O	2.17	0.44
45:VC:287:SER:HA	45:VC:373:ARG:HH21	1.83	0.44
45:VK:339:ARG:CZ	45:VK:339:ARG:HA	2.47	0.44
45:VM:75:ILE:HD11	45:VM:92:LEU:HB3	1.98	0.44
45:VM:177:VAL:HA	46:VN:347:ASN:HD21	1.83	0.44
45:VM:319:TYR:CD2	45:VM:323:VAL:HG11	2.53	0.44
46:WB:113:ILE:HA	46:WB:116:VAL:HG22	1.99	0.44
45:WE:328:VAL:O	45:WE:332:ILE:HD12	2.18	0.44
46:WF:27:GLU:O	46:WF:43:GLN:NE2	2.50	0.44
46:WN:12:CYS:HB3	46:WN:138:SER:HB2	2.00	0.44
2:0B:247:ALA:HB2	46:JL:22:GLU:OE2	2.17	0.44
2:0B:284:GLN:HE21	46:KL:280:GLN:NE2	2.13	0.44
15:0X:45:GLN:NE2	45:MA:282:TYR:CD1	2.85	0.44
1:1A:147:ARG:HH22	34:4R:74:ILE:HG13	1.81	0.44
24:1P:119:ARG:HB3	23:3O:342:ARG:HE	1.83	0.44
11:1S:91:ASN:HD21	12:1T:30:PRO:HA	1.83	0.44
13:1U:57:GLN:HB2	13:1U:75:LYS:HZ3	1.83	0.44
13:1U:506:LEU:HD23	13:1U:541:ILE:HD11	1.98	0.44
26:1W:220:LEU:HD11	27:3C:21:LEU:HD11	2.00	0.44
21:2L:544:LYS:HD2	21:2L:578:ASN:HB2	1.99	0.44
23:2O:365:ILE:HA	23:2O:368:GLU:HG2	1.99	0.44
11:2S:260:ASN:HB2	11:2S:310:ILE:HG22	1.98	0.44
1:3A:134:LYS:HZ2	1:3A:138:TRP:HB2	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:3B:190:LEU:HD22	16:3B:195:ILE:HB	1.99	0.44
21:3L:53:PHE:CD1	21:3L:65:LYS:HD2	2.53	0.44
12:3T:118:TYR:OH	46:AN:304:ASP:OD1	2.36	0.44
14:3V:104:PHE:HE2	45:LA:416:GLY:C	2.20	0.44
36:5C:32:ALA:O	36:5C:34:PHE:N	2.51	0.44
37:5G:110:ARG:HG3	37:5G:111:ASN:N	2.33	0.44
35:5S:155:HIS:NE2	35:5S:212:GLU:O	2.40	0.44
39:6F:45:LYS:HG3	46:IF:42:LEU:HD11	1.98	0.44
46:AB:101:TRP:HB3	46:AB:398:TYR:HE1	1.82	0.44
45:AE:37:PRO:HB2	45:AE:39:ASP:O	2.18	0.44
46:AF:87:PRO:HG2	46:BF:278:SER:HB2	1.99	0.44
45:AG:174:SER:HB3	45:AG:207:GLU:HB2	2.00	0.44
45:AK:390:ARG:HG3	45:AK:391:LEU:HD12	1.99	0.44
46:AL:148:GLY:O	46:AL:152:ILE:HG12	2.18	0.44
46:AL:391:ARG:HA	46:AL:391:ARG:HD2	1.82	0.44
45:BK:3:GLU:OE2	45:BK:131:GLY:N	2.50	0.44
46:BL:178:THR:HG22	46:BL:180:VAL:H	1.82	0.44
45:BM:104:ALA:HB1	45:BM:411:GLU:OE2	2.17	0.44
45:BM:147:SER:HB2	45:BM:190:SER:OG	2.17	0.44
46:BN:324:LYS:HA	46:BN:327:ASP:OD1	2.18	0.44
45:CA:313:MET:HG2	45:CA:346:TRP:HH2	1.82	0.44
46:CB:198:GLU:HG2	46:CB:266:PHE:HE2	1.81	0.44
46:CD:344:TRP:CG	45:CE:401:LYS:HE2	2.53	0.44
45:CM:152:LEU:O	45:CM:156:ARG:HG2	2.17	0.44
45:CM:156:ARG:N	45:CM:156:ARG:HD2	2.33	0.44
46:CN:185:ALA:O	46:CN:189:VAL:HG23	2.18	0.44
45:DE:396:ASP:OD1	45:DE:422:ARG:NH1	2.50	0.44
46:DH:7:ILE:O	46:DH:135:ILE:HA	2.18	0.44
45:DM:353:VAL:HG12	46:DN:177:ASP:HA	2.00	0.44
46:DN:331:LEU:HA	46:DN:334:GLN:HG3	1.98	0.44
45:EC:204:LEU:HD22	45:EC:231:ILE:HD12	2.00	0.44
46:EH:31:ASP:OD1	46:EH:35:THR:N	2.34	0.44
46:FB:116:VAL:HA	46:FB:119:VAL:HG12	1.98	0.44
45:FG:210:TYR:CE1	45:FG:227:LEU:HD11	2.53	0.44
46:FH:392:LYS:HA	46:FH:392:LYS:HD3	1.88	0.44
45:FI:372:MET:N	45:FI:372:MET:SD	2.91	0.44
45:FK:414:GLU:CD	45:FK:416:GLY:H	2.21	0.44
46:FN:310:TYR:CD1	46:FN:371:SER:HB2	2.53	0.44
46:GB:150:LEU:O	46:GB:153:SER:OG	2.26	0.44
45:GG:210:TYR:CE1	45:GG:227:LEU:HD11	2.53	0.44
45:GI:28:HIS:HE1	45:GI:243:ARG:NH1	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GK:387:VAL:O	45:GK:391:LEU:HD23	2.18	0.44
46:GN:1:MET:HB3	46:GN:46:ARG:HH12	1.81	0.44
45:HA:90:GLU:HG3	45:HA:121:ARG:NH1	2.33	0.44
46:HB:257:LEU:HD11	46:HB:314:SER:HB3	2.00	0.44
46:HF:156:ARG:HH22	46:HF:197:ASP:CG	2.21	0.44
46:HH:209:ASP:OD1	46:HH:213:ARG:HD3	2.17	0.44
45:HK:276:ILE:HD12	45:HK:281:ALA:HA	1.99	0.44
45:IA:3:GLU:HB2	45:IA:129:CYS:SG	2.57	0.44
45:IA:155:GLU:O	45:IA:158:SER:OG	2.31	0.44
46:IB:309:ARG:H	46:IB:372:THR:HG1	1.63	0.44
46:IB:337:ASN:OD1	46:IB:340:TYR:HB2	2.17	0.44
45:JC:103:PHE:CD2	45:JC:189:LEU:HD13	2.52	0.44
45:JI:384:ILE:O	45:JI:387:VAL:HG22	2.18	0.44
45:JK:101:ASN:HD21	45:JK:180:ALA:HB1	1.83	0.44
46:JL:64:ILE:HD13	46:JL:120:VAL:HG22	1.99	0.44
46:JN:247:ASN:O	46:JN:252:LYS:NZ	2.50	0.44
45:KA:338:LYS:NZ	45:KA:340:THR:H	2.15	0.44
46:KD:404:ASP:OD1	46:KD:404:ASP:N	2.45	0.44
45:KG:11:GLN:HG3	45:KG:74:VAL:HG11	1.99	0.44
45:KG:202:VAL:HA	45:KG:268:MET:O	2.17	0.44
45:KM:88:HIS:CD2	45:KM:89:PRO:HD2	2.53	0.44
45:LA:111:GLY:O	45:LA:115:VAL:HG13	2.17	0.44
45:LC:109:THR:HG22	45:LC:110:ILE:HG23	1.99	0.44
45:LC:176:GLN:NE2	45:LC:177:VAL:HG23	2.33	0.44
46:LD:73:MET:CE	46:LD:92:PHE:HB3	2.48	0.44
45:LE:387:VAL:HG12	45:LE:390:ARG:NH2	2.33	0.44
45:LG:66:VAL:HG11	45:LG:122:ILE:HD11	1.99	0.44
45:LK:351:PHE:HB2	46:LN:176:SER:OG	2.18	0.44
45:LM:210:TYR:HB3	46:LN:324:LYS:HZ3	1.83	0.44
45:ME:64:ARG:HB3	45:ME:125:LEU:HD21	1.99	0.44
46:ML:174:LYS:HD3	46:ML:174:LYS:HA	1.76	0.44
45:NC:224:TYR:CE2	46:ND:246:LEU:HD11	2.52	0.44
45:NC:285:GLN:O	45:NC:373:ARG:NH2	2.50	0.44
45:NC:292:THR:HG23	45:NC:317:MET:HE1	2.00	0.44
46:NF:117:LEU:HA	46:NF:120:VAL:HG12	2.00	0.44
45:NG:181:VAL:HG13	45:NG:182:VAL:HG13	2.00	0.44
45:OA:188:ILE:HG22	45:OA:421:ALA:HB1	1.99	0.44
45:OA:269:LEU:H	45:OA:269:LEU:HD23	1.82	0.44
46:OB:49:VAL:HG12	46:OB:50:TYR:HD1	1.82	0.44
46:OF:391:ARG:HD2	46:OF:391:ARG:HA	1.82	0.44
45:OI:71:GLU:OE1	46:OJ:247:ASN:ND2	2.49	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OI:167:LEU:HB3	45:OI:169:PHE:CE1	2.52	0.44
45:OK:206:ASN:OD1	47:OK:501:GTP:O2'	2.28	0.44
45:OM:164:LYS:O	45:OM:166:LYS:NZ	2.41	0.44
46:ON:391:ARG:HD2	46:ON:391:ARG:HA	1.83	0.44
45:PA:248:LEU:H	45:PA:355:ILE:HB	1.82	0.44
45:PG:215:ARG:HH11	45:PG:215:ARG:HG2	1.83	0.44
46:PJ:274:THR:HG21	46:PJ:279:GLN:OE1	2.17	0.44
45:PK:214:ARG:HH11	45:PK:215:ARG:NH1	2.16	0.44
46:QB:65:LEU:HG	46:QB:90:PHE:CE1	2.52	0.44
45:QC:133:GLN:HB2	45:QC:252:ILE:HD12	1.99	0.44
45:QC:252:ILE:HA	45:QC:255:PHE:CE1	2.52	0.44
46:QF:167:PHE:CE2	46:QF:233:MET:HG3	2.52	0.44
45:QG:7:ILE:HB	45:QG:137:VAL:HG12	1.99	0.44
45:QK:88:HIS:HE1	45:QK:90:GLU:HB2	1.82	0.44
45:QK:346:TRP:CD1	46:QL:391:ARG:HG3	2.53	0.44
46:QL:260:PHE:HB3	46:QL:262:ARG:NH2	2.33	0.44
46:QL:318:ARG:HB2	46:QL:364:ALA:HB3	1.99	0.44
46:QL:362:LYS:HD3	46:QL:363:MET:HG3	1.99	0.44
46:QN:3:GLU:HG3	46:QN:62:ARG:NH1	2.33	0.44
46:RB:73:MET:SD	46:RB:92:PHE:HB3	2.57	0.44
46:RB:86:ARG:HG2	46:RB:89:ASN:OD1	2.18	0.44
46:RB:323:THR:HG21	45:RC:224:TYR:CZ	2.53	0.44
45:RC:384:ILE:HG12	45:RC:388:PHE:HE1	1.82	0.44
45:RC:402:ARG:HB3	45:RC:402:ARG:CZ	2.46	0.44
46:RJ:173:PRO:HG2	46:RJ:380:ARG:HD2	2.00	0.44
45:RK:262:TYR:OH	46:RL:391:ARG:O	2.36	0.44
46:RL:330:MET:HA	46:RL:333:VAL:HG12	1.99	0.44
45:SA:316:SER:O	45:SA:378:ILE:N	2.34	0.44
46:SD:286:VAL:HG21	46:SD:325:GLU:HB3	1.99	0.44
45:SE:192:HIS:ND1	45:SE:424:ASP:OD2	2.51	0.44
45:SE:265:ILE:HG22	45:SE:380:ASN:HD21	1.82	0.44
45:TA:217:LEU:HD22	45:TA:367:ASP:HB3	2.00	0.44
46:TH:86:ARG:HH12	46:UH:282:ARG:NH2	2.16	0.44
45:TI:188:ILE:HD12	45:TI:425:LEU:HD11	1.99	0.44
46:TL:362:LYS:HA	46:TL:362:LYS:HD3	1.79	0.44
45:TM:233:GLN:HE21	45:TM:368:LEU:HD11	1.81	0.44
45:UI:88:HIS:HB3	45:UI:91:GLN:HG2	2.00	0.44
45:UK:265:ILE:HG12	45:UK:432:TYR:CE1	2.53	0.44
46:UN:272:PRO:HD3	46:UN:364:ALA:HA	1.99	0.44
45:VC:317:MET:HG2	45:VC:377:MET:HG2	2.00	0.44
45:VC:388:PHE:HB2	45:VC:429:GLU:OE2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VD:139:LEU:HA	46:VD:145:SER:HB3	1.99	0.44
46:VJ:139:LEU:HA	46:VJ:145:SER:HB3	1.99	0.44
45:VK:132:LEU:HD11	45:VK:135:PHE:HE1	1.81	0.44
46:VL:248:SER:HB2	46:VL:252:LYS:HD2	1.99	0.44
45:WA:384:ILE:O	45:WA:387:VAL:HG22	2.18	0.44
46:WB:3:GLU:HA	46:WB:49:VAL:HG23	2.00	0.44
46:WB:342:VAL:HG13	46:WB:345:ILE:HG22	2.00	0.44
45:WC:15:GLN:HA	45:WC:18:ASN:HD22	1.82	0.44
46:WL:226:ASN:HD21	49:WL:501:GDP:HN1	1.66	0.44
46:WL:326:VAL:O	46:WL:330:MET:HG2	2.18	0.44
45:WM:240:ALA:HB1	45:WM:356:ASN:HD22	1.82	0.44
46:WN:139:LEU:HD13	46:WN:168:SER:HB3	1.99	0.44
27:2C:3:LEU:HD12	27:2C:3:LEU:O	2.17	0.44
27:2C:232:PHE:HE1	46:JJ:57:GLY:HA2	1.83	0.44
24:2P:494:LYS:HD3	24:2P:494:LYS:HA	1.78	0.44
32:3D:17:ILE:HG22	32:3D:27:PRO:HA	1.99	0.44
23:3O:242:LEU:HD22	46:UN:276:ARG:HH11	1.83	0.44
10:3Q:178:PRO:HG2	10:3Q:181:PHE:CD2	2.51	0.44
13:3U:120:LEU:HD21	13:3U:149:VAL:HG23	1.99	0.44
13:3U:590:VAL:O	13:3U:602:TRP:N	2.31	0.44
14:3V:122:LYS:HD2	46:LD:390:ARG:HH21	1.81	0.44
10:4Q:100:ARG:HH22	45:AI:437:ILE:HD11	1.82	0.44
37:5H:19:LEU:HB3	37:5H:29:LYS:HZ1	1.83	0.44
34:5R:291:LYS:HD3	34:5R:292:ARG:N	2.32	0.44
34:5R:410:ARG:HH11	34:5R:410:ARG:HG2	1.82	0.44
34:5R:453:ILE:HG21	34:5R:498:LEU:HD11	1.99	0.44
40:6G:101:GLU:HA	40:6G:104:SER:HB2	2.00	0.44
34:7R:80:ARG:NH1	45:MA:38:SER:HA	2.33	0.44
46:AB:88:ASP:OD1	46:AB:89:ASN:N	2.50	0.44
46:AB:114:ASP:OD1	46:AB:115:SER:N	2.51	0.44
46:AH:5:VAL:HG12	46:AH:62:ARG:HD2	1.99	0.44
46:AJ:67:ASP:OD1	46:AJ:68:LEU:N	2.45	0.44
46:AJ:342:VAL:HG13	46:AJ:345:ILE:HG22	2.00	0.44
45:AM:100:ALA:HB1	46:AN:252:LYS:HA	1.98	0.44
46:AN:230:SER:HA	46:AN:233:MET:HG2	1.99	0.44
45:BA:70:LEU:HD11	45:BA:149:LEU:HD21	1.98	0.44
46:BB:135:ILE:O	46:BB:166:THR:HA	2.18	0.44
45:BC:210:TYR:CE1	45:BC:227:LEU:HD11	2.52	0.44
45:BC:294:SER:O	45:BC:300:ASN:ND2	2.37	0.44
45:BE:71:GLU:HG2	45:BE:98:ASP:HB3	1.99	0.44
46:BF:221:THR:O	46:BF:225:LEU:HG	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BI:191:THR:HG21	45:BI:425:LEU:HD21	2.00	0.44
46:BJ:77:ARG:HD3	46:BJ:90:PHE:CZ	2.53	0.44
46:BJ:174:LYS:HD3	46:BJ:174:LYS:HA	1.79	0.44
45:CA:60:LYS:NZ	45:CA:86:LEU:O	2.37	0.44
46:CB:204:ASN:OD1	49:CB:501:GDP:O2'	2.34	0.44
45:CC:55:GLU:HG2	45:CC:57:GLY:H	1.82	0.44
45:CC:338:LYS:HE2	45:CC:338:LYS:HB2	1.73	0.44
46:CD:30:ILE:HD11	46:CD:47:ILE:HD11	2.00	0.44
46:CD:290:THR:HA	46:CD:293:MET:HG2	1.99	0.44
46:CF:185:ALA:O	46:CF:189:VAL:HG23	2.18	0.44
45:CG:167:LEU:HG	45:CG:200:VAL:HB	1.99	0.44
45:CG:387:VAL:HG12	45:CG:390:ARG:NH1	2.32	0.44
46:CJ:375:GLN:OE1	46:CJ:423:GLN:HB2	2.18	0.44
45:CK:11:GLN:NE2	45:CK:71:GLU:OE1	2.50	0.44
46:CL:239:CYS:SG	46:CL:247:ASN:HA	2.57	0.44
46:CL:319:GLY:HA2	46:CL:357:PRO:HD3	1.99	0.44
45:CM:260:VAL:O	45:CM:260:VAL:HG13	2.18	0.44
46:CN:318:ARG:HG2	46:CN:358:PRO:HD3	1.98	0.44
46:DB:253:LEU:HD11	46:DB:368:VAL:HG21	2.00	0.44
46:DH:16:ILE:HD13	46:DH:226:ASN:OD1	2.18	0.44
46:DH:256:ASN:OD1	45:DI:181:VAL:HG22	2.18	0.44
45:DI:68:LEU:HD23	45:DI:149:LEU:HD21	1.99	0.44
46:DJ:198:GLU:HG2	46:DJ:266:PHE:HE2	1.83	0.44
45:EA:93:ILE:HD11	45:EA:121:ARG:HD2	2.00	0.44
46:ED:321:MET:SD	46:ED:321:MET:N	2.91	0.44
46:EF:270:PHE:O	46:EF:298:ASN:ND2	2.41	0.44
46:EJ:258:ILE:HG13	46:EJ:258:ILE:O	2.17	0.44
46:EJ:324:LYS:HE2	46:EJ:324:LYS:HA	1.99	0.44
45:EM:261:PRO:CD	45:EM:262:TYR:N	2.78	0.44
46:EN:268:ILE:HG22	46:EN:368:VAL:HG22	1.99	0.44
46:FB:372:THR:HG21	46:FB:426:GLN:HB2	2.00	0.44
45:FE:123:ARG:NH2	45:GE:297:GLU:OE2	2.51	0.44
47:FK:501:GTP:O1G	46:FL:252:LYS:NZ	2.35	0.44
45:FM:259:LEU:HD11	45:FM:316:SER:HB3	1.99	0.44
46:GB:317:PHE:CD1	46:GB:365:VAL:HG22	2.53	0.44
45:GC:326:LYS:NZ	46:GF:212:PHE:HB2	2.32	0.44
45:GE:205:ASP:OD1	45:GE:303:ALA:HA	2.18	0.44
45:GG:64:ARG:NH1	45:GG:129:CYS:SG	2.90	0.44
46:GH:179:VAL:HG13	46:GH:180:VAL:HG23	1.99	0.44
45:GI:19:ALA:O	45:GI:22:GLU:HG3	2.17	0.44
46:GN:274:THR:HB	46:GN:282:ARG:CZ	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HC:79:ARG:HG3	45:HC:92:LEU:HD22	1.99	0.44
46:HD:180:VAL:HG22	46:HD:394:PHE:HD2	1.83	0.44
46:HD:211:CYS:HA	46:HD:215:LEU:HB2	1.99	0.44
45:HE:211:ASP:HB3	45:HE:215:ARG:NH1	2.33	0.44
46:HF:3:GLU:OE1	46:HF:3:GLU:N	2.46	0.44
45:IA:52:PHE:HE2	45:IA:243:ARG:NH1	2.15	0.44
46:ID:285:THR:HB	46:ID:287:PRO:HD2	1.99	0.44
46:IF:233:MET:O	46:IF:236:VAL:HG12	2.17	0.44
45:II:326:LYS:HE3	46:IL:220:PRO:HG2	1.98	0.44
46:IJ:391:ARG:HA	46:IJ:391:ARG:HD2	1.85	0.44
45:IM:239:THR:HG23	45:IM:243:ARG:HE	1.83	0.44
46:IN:344:TRP:HB3	46:IN:430:ALA:HB2	2.00	0.44
45:JM:3:GLU:HA	45:JM:51:THR:HA	2.00	0.44
46:KF:2:ARG:HB2	46:KF:131:GLN:HG3	2.00	0.44
45:KG:42:ILE:H	45:KG:42:ILE:HD12	1.83	0.44
45:KK:66:VAL:HG11	45:KK:122:ILE:HD11	2.00	0.44
46:KL:307:HIS:CD2	46:NL:279:GLN:HE21	2.36	0.44
45:LA:346:TRP:CD1	46:LD:391:ARG:HG3	2.52	0.44
45:LE:153:LEU:HD23	45:LE:153:LEU:HA	1.85	0.44
45:LG:345:ASP:N	45:LG:345:ASP:OD1	2.51	0.44
46:LH:105:HIS:CE1	46:LH:150:LEU:HD12	2.53	0.44
45:LI:210:TYR:HE1	45:LI:227:LEU:HD11	1.82	0.44
45:LM:223:THR:HG22	45:LM:224:TYR:N	2.32	0.44
45:LM:406:HIS:HA	45:LM:409:VAL:HG12	2.00	0.44
45:LM:429:GLU:O	45:LM:432:TYR:N	2.51	0.44
46:LN:221:THR:HG23	46:LN:224:ASP:H	1.83	0.44
45:MA:68:LEU:HD21	45:MA:118:CYS:SG	2.58	0.44
46:MB:200:MET:HG3	46:MB:266:PHE:HB2	2.00	0.44
46:MB:323:THR:HG22	46:MB:353:ILE:HD13	1.98	0.44
45:MC:153:LEU:HD23	45:MC:153:LEU:HA	1.87	0.44
45:ME:222:PRO:HD2	46:MF:324:LYS:HD2	1.99	0.44
46:MF:304:ASP:HB3	46:MF:307:HIS:ND1	2.32	0.44
45:MI:102:ASN:ND2	45:MI:105:ARG:HG3	2.31	0.44
45:MI:171:ILE:HG23	45:MI:204:LEU:O	2.18	0.44
46:ML:232:ALA:O	46:ML:236:VAL:HG23	2.17	0.44
46:ML:248:SER:HA	46:ML:252:LYS:HD2	2.00	0.44
45:MM:224:TYR:HD1	45:MM:227:LEU:HD12	1.82	0.44
45:MM:276:ILE:HD12	45:MM:281:ALA:HA	2.00	0.44
45:NC:105:ARG:HA	45:NC:109:THR:HB	1.98	0.44
45:NK:136:LEU:HD23	45:NK:167:LEU:HB2	2.00	0.44
45:NM:220:GLU:O	46:NN:324:LYS:NZ	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OB:230:SER:HA	46:OB:233:MET:HG2	1.98	0.44
46:OB:372:THR:HG21	46:OB:426:GLN:HB2	2.00	0.44
46:OF:399:THR:HA	46:OF:403:MET:O	2.17	0.44
45:OG:257:THR:HA	46:OJ:397:TRP:CZ3	2.53	0.44
45:OG:318:MET:SD	45:OG:318:MET:N	2.90	0.44
45:OI:339:ARG:O	45:OI:339:ARG:NH1	2.51	0.44
46:OL:119:VAL:O	46:OL:122:LYS:HG3	2.18	0.44
45:PA:390:ARG:O	45:PA:394:LYS:HG2	2.18	0.44
46:PB:121:ARG:O	46:PB:125:GLU:N	2.37	0.44
45:PG:75:ILE:HG22	45:PG:79:ARG:HD2	1.99	0.44
45:PG:439:THR:HB	46:PJ:391:ARG:HH11	1.82	0.44
46:PJ:141:GLY:HA3	49:PJ:501:GDP:PB	2.58	0.44
46:PJ:390:ARG:O	46:PJ:392:LYS:NZ	2.51	0.44
46:PL:141:GLY:HA3	49:PL:501:GDP:PB	2.58	0.44
46:QB:286:VAL:HG23	46:QB:287:PRO:HD3	2.00	0.44
46:QD:391:ARG:HA	46:QD:391:ARG:HD2	1.89	0.44
46:QF:255:VAL:HG23	45:QG:407:TRP:CG	2.53	0.44
46:QH:182:PRO:O	46:QH:186:THR:HG23	2.18	0.44
45:QI:12:GLY:HA2	47:QI:501:GTP:N7	2.33	0.44
45:QK:289:ALA:O	45:QK:292:THR:HG22	2.18	0.44
46:RB:375:GLN:HG2	46:RB:379:LYS:HE2	1.99	0.44
45:RC:209:ILE:HD13	45:RC:231:ILE:HD11	1.99	0.44
46:RD:256:ASN:ND2	46:RD:350:LYS:HG3	2.31	0.44
45:RE:209:ILE:HG22	45:RE:227:LEU:HD22	2.00	0.44
46:RL:8:GLN:NE2	46:RL:14:ASN:HA	2.32	0.44
45:RM:293:ASN:O	45:RM:297:GLU:HG2	2.17	0.44
45:SC:253:THR:O	45:SC:257:THR:HG22	2.17	0.44
45:SC:276:ILE:HD11	45:SC:280:LYS:HG3	2.00	0.44
45:SC:381:SER:O	45:SC:384:ILE:HG12	2.18	0.44
46:SD:113:ILE:HA	46:SD:116:VAL:HG12	1.99	0.44
45:SE:296:PHE:HE2	45:SE:377:MET:HG3	1.83	0.44
46:SF:99:ASN:HA	46:SF:142:GLY:H	1.83	0.44
46:SF:161:ASP:OD1	46:SF:162:ARG:NH1	2.50	0.44
46:SJ:334:GLN:HE22	46:SJ:347:ASN:HA	1.83	0.44
45:SK:7:ILE:HB	45:SK:137:VAL:HG12	2.00	0.44
46:SN:8:GLN:NE2	46:SN:14:ASN:HA	2.33	0.44
46:TB:105:HIS:CE1	46:TB:150:LEU:HD12	2.53	0.44
46:TD:105:HIS:CD2	46:TD:150:LEU:HB2	2.53	0.44
45:TE:238:LEU:HD11	45:TE:255:PHE:CE2	2.53	0.44
45:TG:272:TYR:HD2	45:TG:275:ILE:HD11	1.83	0.44
46:TJ:17:GLY:HA2	46:TJ:20:PHE:HB3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TL:36:TYR:CD1	46:TL:44:LEU:HD21	2.53	0.44
46:TL:73:MET:HA	46:TL:76:VAL:HG22	1.99	0.44
46:TL:105:HIS:CE1	46:TL:150:LEU:HD12	2.52	0.44
45:TM:27:GLU:OE2	45:TM:243:ARG:NH2	2.44	0.44
45:TM:384:ILE:O	45:TM:387:VAL:HG22	2.18	0.44
46:TN:175:VAL:HG22	46:TN:205:GLU:OE2	2.18	0.44
46:UB:268:ILE:HG22	46:UB:368:VAL:HG12	1.99	0.44
45:UC:119:LEU:HA	45:UC:122:ILE:HD12	1.99	0.44
45:UC:324:VAL:HG12	45:UC:326:LYS:HG2	1.98	0.44
46:UH:22:GLU:HG2	46:UH:81:PHE:CD2	2.52	0.44
46:UH:107:THR:HG1	46:UH:108:GLU:CD	2.19	0.44
46:UL:293:MET:SD	46:UL:367:PHE:HB2	2.57	0.44
45:UM:141:VAL:HG22	45:UM:187:SER:HA	2.00	0.44
46:UN:50:TYR:HA	46:UN:62:ARG:HD2	1.99	0.44
46:VB:289:LEU:HD13	46:VB:365:VAL:HG23	2.00	0.44
45:VG:287:SER:O	45:VG:290:GLU:HG2	2.17	0.44
46:VH:391:ARG:HD2	46:VH:391:ARG:HA	1.79	0.44
45:VI:88:HIS:O	45:VI:91:GLN:HG2	2.17	0.44
45:VI:174:SER:HB3	45:VI:207:GLU:HB2	1.99	0.44
45:VK:84:ARG:HG3	45:VK:85:GLN:HG2	1.99	0.44
45:VK:222:PRO:HG2	46:VL:324:LYS:HD3	1.98	0.44
46:VL:26:ASP:OD1	46:VL:27:GLU:N	2.51	0.44
46:VL:135:ILE:HG13	46:VL:152:ILE:HD11	1.99	0.44
46:VL:226:ASN:ND2	49:VL:501:GDP:HN1	2.16	0.44
45:VM:174:SER:OG	45:VM:206:ASN:OD1	2.33	0.44
46:WD:238:CYS:SG	46:WD:239:CYS:N	2.90	0.44
45:WG:90:GLU:OE2	45:WG:121:ARG:NH1	2.51	0.44
46:WH:268:ILE:HG22	46:WH:368:VAL:HG22	1.98	0.44
46:WJ:156:ARG:NH1	46:WJ:162:ARG:O	2.40	0.44
45:WM:101:ASN:HA	45:WM:144:GLY:H	1.83	0.44
3:0C:37:ILE:HD11	45:DI:79:ARG:HD3	1.98	0.44
8:1H:252:ARG:NH2	45:HE:32:PRO:HD3	2.33	0.44
8:1H:274:LEU:HB3	46:HF:360:GLY:HA2	2.00	0.44
21:1L:109:PHE:CE2	46:BJ:362:LYS:HE3	2.53	0.44
13:1U:137:GLY:O	13:1U:138:LYS:HD2	2.17	0.44
16:2B:248:ASP:OD1	16:2B:249:ILE:N	2.46	0.44
20:2K:433:LEU:HD21	45:GE:281:ALA:HB3	2.00	0.44
21:2L:349:ASP:HA	21:2L:352:PHE:HD2	1.82	0.44
21:2L:396:ASN:OD1	21:2L:397:LEU:N	2.51	0.44
23:2O:239:ILE:HD13	46:VJ:276:ARG:NH1	2.32	0.44
25:2R:345:CYS:CB	25:2R:349:THR:HG1	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:2T:179:THR:O	12:2T:199:ARG:NH2	2.51	0.44
13:2U:538:ALA:C	13:2U:539:LEU:HD12	2.38	0.44
13:2U:557:VAL:O	13:2U:571:GLY:N	2.51	0.44
16:3B:115:LYS:HD3	16:3B:162:ASN:HB3	1.99	0.44
5:3E:162:LYS:HB3	5:3E:162:LYS:HE3	1.81	0.44
31:3I:292:LYS:HA	31:3I:292:LYS:HD3	1.70	0.44
15:3X:38:ILE:O	15:3X:42:LYS:HG3	2.16	0.44
34:4R:171:ILE:HG22	34:4R:173:LEU:HG	1.99	0.44
34:4R:508:ALA:HB3	34:4R:513:HIS:NE2	2.33	0.44
37:5E:177:LEU:HG	46:KD:160:PRO:HB3	1.99	0.44
37:5F:89:LYS:NZ	46:KF:160:PRO:O	2.51	0.44
37:5G:29:LYS:HD2	37:5G:30:PRO:HD2	2.00	0.44
34:5R:90:ARG:NH2	45:AI:26:LEU:O	2.37	0.44
39:6F:123:TYR:CG	39:6F:124:ARG:N	2.86	0.44
10:6Q:170:ARG:HB3	10:6Q:172:TYR:CE2	2.49	0.44
34:7R:437:ASP:HB3	34:7R:440:ARG:HH12	1.82	0.44
45:AA:419:SER:O	45:AA:423:GLU:OE1	2.36	0.44
46:AD:31:ASP:OD1	46:AD:32:PRO:HD2	2.17	0.44
46:AF:65:LEU:HD22	46:AF:90:PHE:CE1	2.52	0.44
46:AF:293:MET:HG3	46:AF:365:VAL:HG11	2.00	0.44
46:AH:73:MET:HA	46:AH:76:VAL:HG22	2.00	0.44
45:AI:115:VAL:O	45:AI:119:LEU:HD23	2.18	0.44
46:AJ:207:LEU:HB3	46:AJ:225:LEU:HD22	1.98	0.44
45:AM:21:TRP:CZ2	45:AM:65:ALA:HB2	2.53	0.44
45:BA:88:HIS:ND1	45:BA:91:GLN:OE1	2.34	0.44
45:BA:224:TYR:HE2	46:BB:246:LEU:HD11	1.83	0.44
45:BA:259:LEU:HD23	45:BA:268:MET:SD	2.58	0.44
46:BB:24:ILE:O	46:BB:28:HIS:ND1	2.42	0.44
45:BC:224:TYR:CE2	46:BD:246:LEU:HD11	2.45	0.44
45:BK:238:LEU:HD12	45:BK:318:MET:HE1	2.00	0.44
45:CA:68:LEU:HD21	45:CA:118:CYS:SG	2.58	0.44
45:CE:215:ARG:NH1	45:CE:215:ARG:HB2	2.33	0.44
45:CG:68:LEU:HD21	45:CG:118:CYS:HB2	1.98	0.44
45:CG:286:LEU:N	45:CG:290:GLU:OE2	2.51	0.44
46:CH:10:GLY:HA2	46:CH:143:THR:HG23	2.00	0.44
45:CI:209:ILE:HG22	45:CI:227:LEU:HD22	2.00	0.44
46:CJ:161:ASP:O	46:CJ:251:ARG:NH2	2.51	0.44
46:CJ:173:PRO:HD2	46:CJ:174:LYS:HZ1	1.82	0.44
45:DA:287:SER:HB3	45:DA:290:GLU:HG3	1.99	0.44
46:DB:169:VAL:HG12	46:DB:202:ILE:HB	1.99	0.44
45:DI:10:GLY:O	45:DI:14:ILE:HD12	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DI:214:ARG:HH21	45:DI:215:ARG:HG2	1.82	0.44
46:DL:318:ARG:HB3	46:DL:357:PRO:HA	2.00	0.44
45:DM:238:LEU:HA	45:DM:318:MET:SD	2.57	0.44
45:EA:30:ILE:HD12	45:EA:36:MET:HA	1.98	0.44
45:EA:132:LEU:HD22	45:EA:164:LYS:HD2	1.99	0.44
45:EA:346:TRP:CD1	46:EB:391:ARG:HG3	2.52	0.44
46:EB:3:GLU:HG3	46:EB:62:ARG:NH1	2.32	0.44
46:EB:113:ILE:HA	46:EB:116:VAL:HG12	1.99	0.44
45:EC:69:ASP:OD1	45:EC:70:LEU:N	2.51	0.44
46:EH:206:ALA:O	46:EH:210:ILE:HG12	2.17	0.44
45:EI:322:ASP:OD2	45:EI:373:ARG:NH1	2.50	0.44
45:EI:433:GLU:O	45:EI:437:ILE:HG23	2.18	0.44
46:EJ:237:THR:HG23	46:EJ:241:ARG:HH21	1.82	0.44
46:EL:3:GLU:HG3	46:EL:62:ARG:NH1	2.32	0.44
46:EL:306:ARG:HB2	46:EL:340:TYR:CZ	2.53	0.44
45:FA:93:ILE:HG12	45:FA:117:LEU:HD22	2.00	0.44
45:FA:427:ALA:HA	45:FA:430:LYS:HB2	1.99	0.44
46:FB:114:ASP:OD1	46:FB:114:ASP:N	2.49	0.44
46:FD:305:PRO:HB3	46:FD:310:TYR:HE1	1.82	0.44
46:FF:268:ILE:HG22	46:FF:368:VAL:HG22	1.99	0.44
46:FH:272:PRO:HG3	46:FH:284:LEU:HD11	2.00	0.44
45:FK:181:VAL:HG12	46:FL:348:ASN:HA	2.00	0.44
45:FM:206:ASN:HD22	45:FM:210:TYR:HE2	1.64	0.44
45:FM:401:LYS:HG2	46:FN:344:TRP:CZ2	2.53	0.44
45:GA:152:LEU:O	45:GA:156:ARG:HG2	2.18	0.44
45:GE:147:SER:HB2	45:GE:190:SER:HB3	1.99	0.44
45:GK:255:PHE:HA	45:GK:259:LEU:HD13	2.00	0.44
46:HB:49:VAL:HG12	46:HB:50:TYR:HD2	1.83	0.44
45:HG:85:GLN:HE21	45:HG:85:GLN:HB3	1.58	0.44
45:HI:141:VAL:HG21	45:HI:172:TYR:HE1	1.82	0.44
45:IC:296:PHE:HE1	45:IC:377:MET:SD	2.41	0.44
46:ID:152:ILE:HG23	46:ID:164:MET:SD	2.58	0.44
46:ID:309:ARG:NH1	46:ID:343:GLU:OE1	2.50	0.44
46:ID:330:MET:HA	46:ID:333:VAL:HG12	2.00	0.44
45:IE:51:THR:HG21	45:IE:243:ARG:HD3	2.00	0.44
45:IE:387:VAL:O	45:IE:390:ARG:HG2	2.18	0.44
46:IF:294:PHE:CE2	46:IF:333:VAL:HG11	2.53	0.44
45:IG:336:LYS:O	45:IG:339:ARG:NH2	2.51	0.44
46:IH:239:CYS:SG	46:IH:247:ASN:HA	2.57	0.44
45:II:292:THR:HG21	45:II:331:SER:HB3	1.99	0.44
46:IL:251:ARG:O	46:IL:255:VAL:HG23	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JA:80:THR:O	45:JA:84:ARG:NH2	2.51	0.44
45:JK:183:GLU:N	45:JK:184:PRO:HD2	2.33	0.44
45:JM:224:TYR:CD2	46:JN:323:THR:HG21	2.52	0.44
46:KF:116:VAL:HA	46:KF:119:VAL:HG12	2.00	0.44
45:KG:205:ASP:OD1	45:KG:303:ALA:HA	2.17	0.44
45:KK:88:HIS:CE1	45:KK:90:GLU:HG2	2.53	0.44
46:KL:190:HIS:O	46:KL:194:GLU:HG2	2.18	0.44
45:KM:133:GLN:HB3	45:KM:252:ILE:HD13	1.99	0.44
46:KN:172:SER:HB2	46:KN:174:LYS:NZ	2.33	0.44
46:LF:221:THR:HG23	46:LF:224:ASP:H	1.82	0.44
46:LH:73:MET:HE3	46:LH:92:PHE:HB3	2.00	0.44
46:LJ:268:ILE:HG22	46:LJ:368:VAL:HG22	1.98	0.44
46:LJ:372:THR:HA	46:LJ:422:TYR:CE2	2.53	0.44
45:LK:326:LYS:HD3	45:LK:326:LYS:HA	1.83	0.44
45:LM:88:HIS:ND1	45:LM:90:GLU:HG2	2.33	0.44
45:MA:181:VAL:HG23	45:MA:182:VAL:HG13	1.99	0.44
45:MG:242:LEU:HD11	45:MG:252:ILE:HG12	2.00	0.44
45:NA:422:ARG:HA	45:NA:422:ARG:HD2	1.72	0.44
46:ND:372:THR:HA	46:ND:422:TYR:CE2	2.52	0.44
46:NF:268:ILE:HG22	46:NF:368:VAL:HG22	1.99	0.44
46:NJ:297:LYS:NZ	46:NJ:306:ARG:HH22	2.16	0.44
45:NM:226:ASN:HA	45:NM:229:ARG:HD3	1.99	0.44
45:OA:149:LEU:H	45:OA:149:LEU:HD12	1.82	0.44
46:OB:172:SER:HA	46:OB:380:ARG:NH2	2.33	0.44
46:OF:178:THR:HG22	46:OF:180:VAL:H	1.83	0.44
46:OF:211:CYS:HB3	46:OF:217:LEU:HD21	2.00	0.44
46:OF:332:ASN:O	46:OF:336:LYS:HG3	2.17	0.44
46:OJ:110:ALA:O	46:OJ:113:ILE:HG22	2.17	0.44
46:OJ:284:LEU:HD12	46:OJ:284:LEU:HA	1.89	0.44
45:PA:314:ALA:O	45:PA:380:ASN:N	2.47	0.44
45:PA:384:ILE:HG22	45:PA:388:PHE:CE2	2.53	0.44
46:PJ:311:LEU:HD12	46:PJ:342:VAL:HG11	2.00	0.44
46:PJ:391:ARG:HA	46:PJ:391:ARG:HD2	1.78	0.44
45:PK:276:ILE:HD11	45:PK:286:LEU:HD11	2.00	0.44
46:PN:314:SER:CB	46:PN:350:LYS:HB3	2.48	0.44
46:PN:325:GLU:HA	46:PN:328:GLU:HG2	1.99	0.44
45:QA:390:ARG:HG3	45:QA:391:LEU:HD12	2.00	0.44
46:QB:247:ASN:HD21	45:QC:73:THR:HG21	1.83	0.44
45:QC:155:GLU:OE1	45:QC:197:HIS:NE2	2.50	0.44
46:QF:19:LYS:O	46:QF:22:GLU:HG3	2.17	0.44
46:QH:334:GLN:HE22	46:QH:348:ASN:H	1.65	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QL:165:GLU:OE2	46:QL:200:MET:HG2	2.17	0.44
45:RE:195:LEU:HD13	45:RE:428:LEU:HD21	2.00	0.44
46:RF:86:ARG:NH1	46:SF:281:TYR:HB2	2.33	0.44
46:RF:249:ASP:OD1	46:RF:252:LYS:N	2.43	0.44
46:RJ:255:VAL:HA	45:RK:407:TRP:CE2	2.53	0.44
45:RK:269:LEU:HD23	45:RK:379:SER:O	2.18	0.44
46:RL:304:ASP:OD1	46:RL:306:ARG:NH1	2.50	0.44
45:RM:408:TYR:HB3	45:RM:413:MET:HG3	1.98	0.44
46:SB:1:MET:SD	46:SB:2:ARG:N	2.91	0.44
46:SB:350:LYS:HA	45:SC:179:THR:O	2.17	0.44
46:SD:324:LYS:HZ1	45:SE:210:TYR:HB3	1.82	0.44
46:SF:45:GLU:OE2	46:SF:46:ARG:NE	2.47	0.44
45:SI:132:LEU:HD12	45:SI:132:LEU:H	1.82	0.44
45:SK:253:THR:HA	45:SK:256:GLN:NE2	2.32	0.44
45:SK:292:THR:HG21	45:SK:331:SER:HB3	1.99	0.44
46:SN:42:LEU:HA	46:SN:45:GLU:HG3	1.99	0.44
46:TD:213:ARG:HD2	46:TD:297:LYS:HD2	1.99	0.44
46:TD:258:ILE:HD11	45:TE:407:TRP:CZ2	2.53	0.44
45:TE:231:ILE:O	45:TE:235:ILE:HG12	2.18	0.44
46:TF:117:LEU:HD23	46:TF:117:LEU:HA	1.91	0.44
46:TF:263:LEU:HG	46:TF:422:TYR:CD1	2.53	0.44
45:TG:238:LEU:HD11	45:TG:255:PHE:CE1	2.52	0.44
45:TI:176:GLN:OE1	45:TI:176:GLN:N	2.51	0.44
46:TJ:397:TRP:O	46:TJ:401:GLU:HG3	2.18	0.44
46:TN:376:GLU:HA	46:TN:379:LYS:HZ3	1.82	0.44
46:TN:376:GLU:HA	46:TN:379:LYS:NZ	2.33	0.44
45:UA:167:LEU:HG	45:UA:200:VAL:HB	1.99	0.44
45:UC:53:PHE:O	45:UC:64:ARG:NH2	2.51	0.44
45:UC:178:SER:OG	45:UC:179:THR:N	2.51	0.44
45:UC:326:LYS:HD2	46:UD:220:PRO:HD2	2.00	0.44
46:UD:290:THR:HA	46:UD:293:MET:HG2	1.99	0.44
45:UE:206:ASN:OD1	47:UE:501:GTP:N2	2.49	0.44
46:UF:128:ASP:OD1	46:UF:129:CYS:N	2.44	0.44
46:UH:377:MET:HG2	46:UH:380:ARG:NH2	2.33	0.44
45:UI:274:PRO:HG2	45:UI:371:VAL:HG21	1.99	0.44
45:UK:25:CYS:O	45:UK:30:ILE:N	2.48	0.44
46:VD:239:CYS:SG	46:VD:247:ASN:HA	2.58	0.44
46:VH:198:GLU:HG2	46:VH:266:PHE:HE2	1.83	0.44
46:VJ:318:ARG:NH1	46:VJ:358:PRO:HG3	2.33	0.44
45:VM:71:GLU:HA	45:VM:72:PRO:HD3	1.88	0.44
46:WD:19:LYS:NZ	46:WD:223:GLY:O	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WD:239:CYS:SG	46:WD:247:ASN:HA	2.58	0.44
46:WD:301:CYS:HB3	46:WD:377:MET:CE	2.48	0.44
46:WF:16:ILE:HD13	46:WF:226:ASN:OD1	2.17	0.44
46:WH:16:ILE:HD13	46:WH:226:ASN:OD1	2.18	0.44
45:WI:88:HIS:HB3	45:WI:91:GLN:HG2	2.00	0.44
46:WJ:292:GLN:HG2	46:WJ:298:ASN:ND2	2.32	0.44
45:WK:352:LYS:NZ	46:WN:178:THR:HG23	2.33	0.44
24:1P:168:ARG:NH1	45:TI:370:LYS:O	2.50	0.44
25:1R:60:LYS:NZ	30:2H:220:ARG:HG2	2.33	0.44
11:1S:291:LEU:HD11	11:1S:310:ILE:HD12	2.00	0.44
12:1T:92:ASP:OD1	12:1T:92:ASP:N	2.50	0.44
12:1T:198:ASP:OD1	12:1T:198:ASP:N	2.51	0.44
26:1W:239:ARG:HD3	46:LB:279:GLN:HB2	1.99	0.44
4:2D:186:ILE:H	4:2D:186:ILE:HD12	1.82	0.44
20:2K:386:LYS:O	20:2K:390:VAL:HG23	2.18	0.44
21:2L:676:ASN:OD1	21:2L:677:ILE:N	2.51	0.44
21:2L:922:GLU:HG2	21:2L:923:PHE:N	2.32	0.44
9:2N:10:TYR:HD1	9:2N:16:ILE:HG13	1.83	0.44
23:2O:287:GLU:HG2	23:2O:291:LYS:HE3	1.99	0.44
23:2O:311:LYS:HE2	45:VE:359:PRO:HG3	1.99	0.44
24:2P:324:LYS:O	24:2P:328:GLU:N	2.47	0.44
24:2P:394:GLN:HE22	24:2P:395:GLN:NE2	2.16	0.44
25:2R:423:PHE:HB2	25:2R:435:PHE:HE2	1.82	0.44
11:2S:24:GLN:NE2	13:2U:229:ARG:HA	2.33	0.44
13:2U:590:VAL:O	13:2U:602:TRP:N	2.36	0.44
14:2V:24:ARG:NH1	45:ME:430:LYS:HG3	2.32	0.44
14:2V:213:LYS:HD3	14:2V:213:LYS:HA	1.86	0.44
15:2X:42:LYS:HD2	45:LI:57:GLY:O	2.18	0.44
16:3B:84:GLU:O	16:3B:87:GLN:HG3	2.18	0.44
25:3R:179:GLU:HA	25:3R:183:LYS:O	2.18	0.44
25:3R:310:LEU:HD11	46:CL:227:HIS:HE1	1.82	0.44
11:3S:140:ARG:CD	10:5Q:72:LYS:HZ2	2.31	0.44
11:3S:245:GLY:HA3	11:3S:297:THR:HG22	2.00	0.44
27:4C:117:GLU:OE1	27:4C:119:LYS:HG3	2.18	0.44
15:4X:45:GLN:OE1	15:4X:49:ILE:HD11	2.18	0.44
37:5H:122:PHE:O	37:5H:123:ARG:HB3	2.17	0.44
34:7R:83:PRO:HG3	45:MA:58:ALA:HB1	2.00	0.44
45:AA:36:MET:HG3	45:AA:61:HIS:HE1	1.82	0.44
45:AA:177:VAL:HG21	46:AB:327:ASP:HB3	2.00	0.44
46:AB:215:LEU:HD21	46:AB:273:LEU:HD12	1.99	0.44
46:AD:145:SER:HB2	46:AD:188:SER:OG	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AD:267:MET:HG2	46:AD:301:CYS:SG	2.58	0.44
46:AH:178:THR:HG22	46:AH:180:VAL:H	1.83	0.44
46:BB:101:TRP:HB3	46:BB:398:TYR:HE1	1.83	0.44
45:BC:414:GLU:HG3	45:BC:417:GLU:HG2	2.00	0.44
46:BD:6:HIS:HE1	46:BD:8:GLN:HB3	1.82	0.44
46:BF:207:LEU:HD13	46:BF:225:LEU:HB3	2.00	0.44
45:BI:287:SER:O	45:BI:291:ILE:HG23	2.18	0.44
45:BK:167:LEU:HG	45:BK:200:VAL:HB	2.00	0.44
46:BL:148:GLY:O	46:BL:152:ILE:HG12	2.17	0.44
45:CA:171:ILE:HD13	47:CA:501:GTP:N2	2.33	0.44
45:CA:209:ILE:CD1	45:CA:302:MET:HG3	2.47	0.44
45:CA:423:GLU:HA	45:CA:426:ALA:HB3	1.99	0.44
46:CD:282:ARG:NH2	46:CD:292:GLN:OE1	2.34	0.44
46:CF:19:LYS:HG3	46:CF:226:ASN:HB3	2.00	0.44
46:CN:272:PRO:HG3	46:CN:289:LEU:HD21	2.00	0.44
45:DA:115:VAL:HG23	45:DA:153:LEU:HD23	1.99	0.44
46:DB:1:MET:HB3	45:DC:96:LYS:HZ3	1.83	0.44
46:DB:180:VAL:HG23	46:DB:183:TYR:HD2	1.83	0.44
45:DC:28:HIS:NE2	45:DC:48:ALA:O	2.50	0.44
45:DC:70:LEU:HA	45:DC:95:GLY:HA3	2.00	0.44
45:DC:231:ILE:O	45:DC:235:ILE:HG12	2.18	0.44
45:DG:153:LEU:O	45:DG:157:LEU:HG	2.18	0.44
45:DI:39:ASP:OD1	45:DI:39:ASP:N	2.51	0.44
46:DL:208:TYR:CE1	46:DL:225:LEU:HD11	2.53	0.44
45:EA:77:GLU:O	45:EA:81:GLY:N	2.51	0.44
46:ED:318:ARG:HH11	46:ED:358:PRO:HG3	1.83	0.44
46:EH:11:GLN:NE2	49:EH:501:GDP:O1A	2.50	0.44
46:EH:116:VAL:HA	46:EH:119:VAL:HG12	2.00	0.44
46:EH:372:THR:HA	46:EH:422:TYR:CE2	2.53	0.44
45:EI:75:ILE:HG22	45:EI:79:ARG:HE	1.83	0.44
45:EM:306:ASP:OD1	45:EM:308:ARG:NH1	2.50	0.44
46:EN:105:HIS:CE1	46:EN:150:LEU:HB2	2.53	0.44
46:EN:375:GLN:NE2	46:EN:422:TYR:HB3	2.33	0.44
45:FA:51:THR:HB	45:FA:243:ARG:HD3	1.99	0.44
46:FB:54:ALA:HA	46:GB:283:ALA:HB2	1.98	0.44
45:FC:370:LYS:HB2	45:FC:370:LYS:HE3	1.76	0.44
46:FF:113:ILE:HG12	46:FF:117:LEU:CD2	2.48	0.44
46:FF:342:VAL:HG13	46:FF:345:ILE:HG22	1.99	0.44
45:FK:141:VAL:HG12	45:FK:171:ILE:O	2.17	0.44
45:FK:183:GLU:N	45:FK:184:PRO:HD2	2.33	0.44
46:FL:373:ALA:O	46:FL:376:GLU:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FN:411:ALA:O	46:FN:415:MET:HG2	2.18	0.44
45:GA:254:GLU:HG2	46:GD:98:GLY:HA2	1.99	0.44
46:GB:64:ILE:HG13	46:GB:89:ASN:ND2	2.33	0.44
46:GB:391:ARG:HD2	46:GB:391:ARG:HA	1.81	0.44
45:GC:56:THR:HG23	45:GC:58:ALA:H	1.83	0.44
46:GF:262:ARG:NE	46:GF:421:GLU:OE2	2.38	0.44
45:GI:205:ASP:OD1	45:GI:303:ALA:HA	2.17	0.44
46:GJ:103:LYS:HA	46:GJ:107:THR:HG22	1.99	0.44
45:GK:312:TYR:HE2	45:GK:379:SER:HG	1.64	0.44
46:GL:179:VAL:HG13	46:GL:180:VAL:HG23	2.00	0.44
46:GN:239:CYS:SG	46:GN:248:SER:N	2.81	0.44
45:HA:387:VAL:HG12	45:HA:390:ARG:NH1	2.33	0.44
46:HB:70:PRO:HG3	46:HB:92:PHE:CD2	2.53	0.44
46:HD:31:ASP:OD1	46:HD:35:THR:N	2.46	0.44
45:HE:55:GLU:OE2	45:HE:56:THR:N	2.50	0.44
45:HE:396:ASP:OD1	45:HE:397:LEU:N	2.51	0.44
46:HF:272:PRO:HD3	46:HF:364:ALA:HA	1.99	0.44
46:HH:376:GLU:O	46:HH:380:ARG:HG2	2.17	0.44
45:HI:175:PRO:HG3	45:HI:390:ARG:NH1	2.33	0.44
46:HL:372:THR:HA	46:HL:422:TYR:CE2	2.47	0.44
45:HM:141:VAL:HG11	45:HM:172:TYR:CD1	2.52	0.44
45:JE:174:SER:HB3	45:JE:177:VAL:O	2.18	0.44
45:JK:47:ASP:OD1	45:JK:47:ASP:N	2.51	0.44
46:JL:221:THR:HG22	46:JL:222:TYR:N	2.32	0.44
45:JM:434:GLU:O	45:JM:437:ILE:HG12	2.17	0.44
45:KC:384:ILE:O	45:KC:387:VAL:HG12	2.18	0.44
45:KG:153:LEU:HD23	45:KG:153:LEU:HA	1.88	0.44
45:KI:118:CYS:O	45:KI:122:ILE:HG12	2.18	0.44
46:LD:63:ALA:O	46:LD:89:ASN:ND2	2.48	0.44
45:LG:272:TYR:HD2	45:LG:275:ILE:HD11	1.83	0.44
46:LH:213:ARG:HD2	46:LH:297:LYS:HD2	2.00	0.44
45:LM:21:TRP:CZ2	45:LM:65:ALA:HB2	2.52	0.44
46:LN:117:LEU:HG	46:LN:121:ARG:NH1	2.33	0.44
45:MA:399:TYR:O	45:MA:402:ARG:NH2	2.49	0.44
46:MD:239:CYS:SG	46:MD:247:ASN:HA	2.57	0.44
46:MD:289:LEU:HD11	46:MD:363:MET:HB3	1.99	0.44
45:MG:21:TRP:CZ2	45:MG:65:ALA:HB2	2.53	0.44
46:MH:72:THR:HG23	46:MH:73:MET:HG3	2.00	0.44
46:MJ:139:LEU:HD22	46:MJ:170:VAL:HG12	2.00	0.44
45:MK:115:VAL:O	45:MK:119:LEU:HD23	2.18	0.44
46:NB:295:ASP:HB3	46:NB:298:ASN:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ND:36:TYR:O	46:ND:37:HIS:ND1	2.50	0.44
45:NG:419:SER:O	45:NG:423:GLU:HG2	2.18	0.44
46:NH:39:ASP:OD2	46:NH:43:GLN:NE2	2.50	0.44
45:NM:55:GLU:HG3	45:NM:57:GLY:H	1.82	0.44
45:NM:69:ASP:OD1	45:NM:70:LEU:N	2.50	0.44
45:NM:141:VAL:HG11	45:NM:172:TYR:HD1	1.82	0.44
46:NN:27:GLU:HA	46:NN:359:LYS:HE3	2.00	0.44
45:OA:21:TRP:CZ2	45:OA:65:ALA:HB2	2.52	0.44
46:OH:2:ARG:HG2	46:OH:131:GLN:HG3	2.00	0.44
46:OL:103:LYS:O	46:OL:107:THR:OG1	2.36	0.44
46:ON:372:THR:HA	46:ON:422:TYR:CE2	2.52	0.44
45:PA:17:GLY:O	45:PA:21:TRP:HD1	2.01	0.44
45:PA:269:LEU:HD22	45:PA:384:ILE:HD11	1.99	0.44
45:PA:271:SER:HB2	45:PA:377:MET:CB	2.47	0.44
45:PC:433:GLU:O	45:PC:437:ILE:HG23	2.18	0.44
46:PD:139:LEU:HD13	46:PD:168:SER:OG	2.18	0.44
46:PF:257:LEU:HA	46:PF:312:THR:HG21	2.00	0.44
46:PH:87:PRO:HA	46:PH:90:PHE:HD2	1.83	0.44
46:PJ:173:PRO:HD2	46:PJ:380:ARG:CZ	2.47	0.44
46:PN:403:MET:HG3	46:PN:404:ASP:N	2.33	0.44
45:QA:404:PHE:HA	45:QA:407:TRP:CE3	2.53	0.44
46:QB:245:GLN:O	45:QC:11:GLN:NE2	2.51	0.44
45:QC:429:GLU:O	45:QC:433:GLU:HG2	2.17	0.44
45:QG:188:ILE:HG22	45:QG:421:ALA:HB1	2.00	0.44
45:QI:259:LEU:HD21	45:QI:316:SER:HB2	2.00	0.44
45:QM:223:THR:HG23	45:QM:225:THR:H	1.82	0.44
46:QN:190:HIS:CE1	46:QN:414:ASN:HD22	2.35	0.44
46:RB:2:ARG:HH22	45:RC:73:THR:HG1	1.60	0.44
45:RI:210:TYR:HE1	45:RI:227:LEU:HD21	1.82	0.44
45:RI:297:GLU:HG3	45:RI:298:PRO:HD2	2.00	0.44
46:RL:135:ILE:HD11	46:RL:166:THR:HG22	1.99	0.44
46:RL:222:TYR:O	46:RL:226:ASN:ND2	2.50	0.44
46:RL:325:GLU:OE2	45:RM:221:ARG:NH1	2.51	0.44
45:RM:206:ASN:HB3	45:RM:210:TYR:OH	2.18	0.44
46:RN:262:ARG:NH1	46:RN:421:GLU:OE1	2.51	0.44
45:SA:225:THR:HA	45:SA:228:ASN:OD1	2.18	0.44
46:SB:105:HIS:CE1	46:SB:150:LEU:HD12	2.52	0.44
45:SE:171:ILE:HG23	45:SE:204:LEU:O	2.18	0.44
46:SF:83:GLN:OE1	46:SF:83:GLN:N	2.49	0.44
45:SM:118:CYS:O	45:SM:122:ILE:HG12	2.18	0.44
46:SN:131:GLN:C	46:SN:162:ARG:HE	2.21	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TA:91:GLN:HB3	45:TA:121:ARG:NH2	2.32	0.44
46:TB:158:GLU:HG2	46:TB:159:TYR:CD1	2.53	0.44
45:TC:68:LEU:HD11	45:TC:118:CYS:HB2	2.00	0.44
45:TC:338:LYS:NZ	45:TC:340:THR:H	2.16	0.44
46:TF:227:HIS:C	46:TF:227:HIS:HD1	2.21	0.44
46:TH:105:HIS:CE1	46:TH:150:LEU:HD12	2.52	0.44
46:TJ:21:TRP:CZ3	46:TJ:61:PRO:HB3	2.53	0.44
46:TJ:109:GLY:O	46:TJ:113:ILE:HG23	2.18	0.44
46:TN:379:LYS:O	46:TN:383:GLU:N	2.40	0.44
45:UA:171:ILE:HD13	47:UA:501:GTP:N2	2.33	0.44
46:UB:19:LYS:HZ3	46:UB:227:HIS:HB2	1.83	0.44
46:UD:139:LEU:HD13	46:UD:168:SER:HB3	1.99	0.44
45:UE:434:GLU:O	45:UE:437:ILE:HG12	2.18	0.44
46:UF:238:CYS:SG	46:UF:239:CYS:N	2.91	0.44
46:UF:275:SER:O	46:UF:279:GLN:NE2	2.50	0.44
46:UJ:207:LEU:HD13	46:UJ:225:LEU:HB3	1.98	0.44
46:UJ:257:LEU:HD11	46:UJ:314:SER:HB2	2.00	0.44
46:VB:105:HIS:ND1	46:VB:150:LEU:HD23	2.33	0.44
46:VH:19:LYS:HA	46:VH:19:LYS:HD3	1.82	0.44
46:WB:273:LEU:N	46:WB:292:GLN:HE22	2.15	0.44
45:WC:384:ILE:O	45:WC:387:VAL:HG22	2.18	0.44
45:WE:178:SER:HB2	46:WF:347:ASN:HD22	1.83	0.44
46:WF:286:VAL:HG21	46:WF:325:GLU:HG3	1.99	0.44
45:WG:390:ARG:HG3	45:WG:391:LEU:HD12	2.00	0.44
46:WH:290:THR:HA	46:WH:293:MET:HG2	2.00	0.44
45:WI:271:SER:OG	45:WI:301:MET:HG2	2.18	0.44
46:WJ:181:GLU:OE2	46:WJ:181:GLU:HA	2.18	0.44
45:WM:70:LEU:HD23	45:WM:95:GLY:HA3	1.99	0.44
45:WM:239:THR:HA	45:WM:242:LEU:HD23	2.00	0.44
3:1C:81:TYR:HA	46:EL:356:ILE:HD12	2.00	0.43
21:1L:773:LYS:HG2	45:BC:279:GLU:OE1	2.18	0.43
12:1T:29:ASN:HB3	12:1T:32:TYR:HD2	1.81	0.43
16:2B:43:ARG:CZ	16:2B:79:GLN:HB2	2.47	0.43
29:2G:46:ASN:N	29:2G:46:ASN:HD22	2.16	0.43
22:2M:310:GLN:HG3	22:2M:311:GLU:N	2.31	0.43
15:2X:10:ARG:NH1	15:2X:28:GLU:OE1	2.51	0.43
31:3I:268:ARG:NH2	46:GJ:301:CYS:O	2.51	0.43
21:3L:38:GLU:HA	21:3L:41:LYS:HB2	1.99	0.43
23:3O:423:HIS:HE1	45:UG:282:TYR:CE1	2.36	0.43
13:3U:9:ALA:HB3	13:3U:601:ILE:HD11	2.00	0.43
34:4R:78:ILE:HG22	45:AE:282:TYR:CE2	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:5E:63:HIS:CE1	46:NB:58:ARG:HG2	2.52	0.43
37:5F:60:TRP:HH2	46:OF:282:ARG:HD3	1.83	0.43
37:5F:140:ASN:HD22	46:OH:361:LEU:CD2	2.30	0.43
34:5R:285:THR:HG21	34:5R:309:LEU:HB2	2.00	0.43
34:6R:15:HIS:HA	34:6R:17:PHE:CE2	2.53	0.43
44:8R:29:UNK:O	44:8R:33:UNK:N	2.51	0.43
46:AB:288:GLU:O	46:AB:291:GLN:HG3	2.18	0.43
45:AE:387:VAL:HA	45:AE:390:ARG:HG2	2.00	0.43
46:AF:208:TYR:CE1	46:AF:225:LEU:HD11	2.53	0.43
46:AL:293:MET:HG3	46:AL:367:PHE:HB2	1.99	0.43
45:AM:258:ASN:ND2	45:AM:352:LYS:HG2	2.33	0.43
45:AM:383:ALA:O	45:AM:386:GLU:HG2	2.18	0.43
46:BB:298:ASN:O	46:BB:298:ASN:ND2	2.51	0.43
45:BC:21:TRP:CZ2	45:BC:65:ALA:HB2	2.53	0.43
46:BD:103:LYS:HA	46:BD:107:THR:HG22	1.99	0.43
45:BE:279:GLU:OE2	45:BE:279:GLU:N	2.51	0.43
45:BG:31:GLN:HG2	45:BG:37:PRO:HD3	2.00	0.43
45:BI:414:GLU:HG3	45:BI:416:GLY:H	1.83	0.43
45:BK:88:HIS:O	45:BK:91:GLN:HG2	2.18	0.43
46:BL:376:GLU:O	46:BL:380:ARG:HG2	2.18	0.43
45:BM:182:VAL:HG22	45:BM:185:TYR:HB2	2.00	0.43
45:BM:407:TRP:CE3	46:BN:255:VAL:HG22	2.53	0.43
45:CA:195:LEU:HD13	45:CA:264:ARG:HH22	1.83	0.43
46:CD:386:THR:O	46:CD:390:ARG:HG3	2.18	0.43
45:CE:276:ILE:HD11	45:CE:280:LYS:HG3	2.00	0.43
45:CE:370:LYS:NZ	45:CE:372:MET:HG3	2.33	0.43
45:CK:345:ASP:OD1	45:CK:346:TRP:N	2.50	0.43
45:CM:98:ASP:OD1	45:CM:99:ALA:N	2.50	0.43
45:CM:155:GLU:HA	45:CM:197:HIS:CD2	2.53	0.43
45:CM:174:SER:HB2	45:CM:177:VAL:O	2.17	0.43
46:CN:19:LYS:O	46:CN:22:GLU:HB2	2.18	0.43
45:DA:231:ILE:O	45:DA:235:ILE:HD12	2.18	0.43
45:DG:156:ARG:HD3	45:DG:156:ARG:HA	1.82	0.43
45:DI:251:ASP:H	45:DI:254:GLU:HG2	1.82	0.43
46:DJ:213:ARG:HG2	46:DJ:213:ARG:NH1	2.33	0.43
45:DK:172:TYR:OH	45:DK:191:THR:HG22	2.17	0.43
46:DL:167:PHE:CD2	46:DL:233:MET:HE1	2.53	0.43
46:DL:170:VAL:HG21	46:DL:377:MET:HE1	1.99	0.43
46:DL:392:LYS:HA	46:DL:392:LYS:HD3	1.87	0.43
45:EA:390:ARG:HG3	45:EA:391:LEU:HD12	1.99	0.43
45:EC:116:ASP:N	45:EC:116:ASP:OD1	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EG:163:LYS:HA	45:EG:163:LYS:HD3	1.81	0.43
45:EG:322:ASP:OD1	45:EG:373:ARG:NH1	2.46	0.43
46:EL:372:THR:O	46:EL:375:GLN:HG2	2.18	0.43
46:EN:88:ASP:N	46:EN:88:ASP:OD1	2.50	0.43
45:FI:411:GLU:OE2	45:FI:411:GLU:N	2.51	0.43
45:FK:398:MET:SD	46:FL:345:ILE:HD12	2.58	0.43
46:FL:31:ASP:HB2	46:FL:32:PRO:HD2	2.00	0.43
45:GG:176:GLN:NE2	45:GG:207:GLU:OE2	2.51	0.43
45:GG:414:GLU:HB2	45:GG:417:GLU:HG2	2.00	0.43
45:GM:185:TYR:OH	45:GM:398:MET:HB3	2.18	0.43
45:GM:287:SER:O	45:GM:291:ILE:HG12	2.18	0.43
45:HA:407:TRP:CH2	46:HB:258:ILE:HB	2.52	0.43
46:HB:20:PHE:HZ	46:HB:50:TYR:HE1	1.64	0.43
46:HD:320:ARG:HB2	46:HD:320:ARG:NH1	2.32	0.43
46:HF:139:LEU:HD22	46:HF:170:VAL:HG12	2.00	0.43
46:HF:178:THR:HG22	46:HF:180:VAL:H	1.82	0.43
45:HI:185:TYR:HE1	45:HI:398:MET:HB2	1.82	0.43
45:HM:54:SER:HB3	45:HM:64:ARG:HE	1.83	0.43
45:IA:71:GLU:OE2	46:IB:2:ARG:NH1	2.51	0.43
46:IB:391:ARG:HA	46:IB:391:ARG:HD2	1.78	0.43
45:IE:82:THR:HG23	45:IE:83:TYR:CD2	2.53	0.43
45:IG:210:TYR:HE1	45:IG:227:LEU:HD11	1.83	0.43
45:II:64:ARG:NH1	45:II:129:CYS:SG	2.91	0.43
45:IM:434:GLU:O	45:IM:437:ILE:HG12	2.18	0.43
46:IN:63:ALA:O	46:IN:89:ASN:ND2	2.43	0.43
46:JD:60:VAL:HG11	46:KD:281:TYR:HD1	1.82	0.43
45:JE:424:ASP:OD1	45:JE:425:LEU:N	2.51	0.43
46:JF:403:MET:HG3	46:JF:407:GLU:OE2	2.18	0.43
45:JG:220:GLU:O	45:JG:221:ARG:HD3	2.18	0.43
45:JK:151:SER:O	45:JK:155:GLU:HG3	2.18	0.43
45:KC:265:ILE:O	45:KC:265:ILE:HG13	2.18	0.43
46:KF:217:LEU:HD23	46:KF:219:THR:H	1.83	0.43
45:KG:345:ASP:OD1	45:KG:345:ASP:N	2.50	0.43
45:LG:31:GLN:HG3	45:LG:33:ASP:OD1	2.18	0.43
46:MB:30:ILE:HD11	46:MB:47:ILE:HD11	2.00	0.43
46:MB:375:GLN:HB3	46:MB:422:TYR:HD2	1.83	0.43
46:MF:130:LEU:HB3	46:MF:162:ARG:HE	1.82	0.43
45:MI:31:GLN:HB3	45:MI:33:ASP:OD2	2.18	0.43
45:MI:286:LEU:N	45:MI:290:GLU:OE2	2.51	0.43
46:MN:42:LEU:HA	46:MN:45:GLU:HG3	1.99	0.43
46:NB:268:ILE:N	46:NB:299:MET:HE1	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ND:214:THR:HG23	46:ND:215:LEU:HD22	2.00	0.43
45:NI:387:VAL:HA	45:NI:390:ARG:HG2	2.00	0.43
46:NJ:201:VAL:O	46:NJ:202:ILE:HD13	2.17	0.43
45:NM:120:ASP:O	45:NM:123:ARG:HB3	2.18	0.43
45:NM:320:ARG:NH1	45:NM:360:PRO:HG3	2.32	0.43
46:OD:171:PRO:O	46:OD:380:ARG:NH2	2.49	0.43
46:OH:341:PHE:CE1	46:OH:349:ILE:HD11	2.53	0.43
45:OI:269:LEU:HD23	45:OI:269:LEU:H	1.82	0.43
46:OJ:404:ASP:OD1	46:OJ:404:ASP:N	2.51	0.43
46:OL:341:PHE:CE1	46:OL:349:ILE:HD11	2.53	0.43
45:OM:210:TYR:CE2	45:OM:227:LEU:HD21	2.53	0.43
45:OM:228:ASN:OD1	47:OM:501:GTP:N1	2.50	0.43
46:ON:191:GLN:O	46:ON:195:ASN:ND2	2.39	0.43
45:PA:179:THR:HG22	46:PB:350:LYS:NZ	2.33	0.43
45:PG:156:ARG:N	45:PG:156:ARG:HD2	2.33	0.43
45:PG:342:GLN:N	45:PG:342:GLN:OE1	2.51	0.43
45:PM:340:THR:HG23	45:PM:341:ILE:HG13	2.00	0.43
46:QB:153:SER:HA	46:QB:195:ASN:ND2	2.33	0.43
46:QD:135:ILE:HG13	46:QD:152:ILE:HD11	1.99	0.43
46:QF:178:THR:N	46:QF:181:GLU:OE2	2.51	0.43
46:QJ:68:LEU:HD23	46:QJ:143:THR:OG1	2.17	0.43
45:QM:273:ALA:HA	45:QM:275:ILE:HD12	2.00	0.43
46:RD:268:ILE:O	46:RD:300:MET:HB2	2.19	0.43
46:RD:309:ARG:H	46:RD:372:THR:HG22	1.83	0.43
46:RF:347:ASN:O	45:RG:181:VAL:HG12	2.18	0.43
46:RH:69:GLU:HA	46:RH:70:PRO:HD3	1.85	0.43
46:RJ:169:VAL:O	46:RJ:169:VAL:HG23	2.18	0.43
45:RK:167:LEU:HD11	45:RK:252:ILE:HG23	1.99	0.43
45:RM:88:HIS:O	45:RM:91:GLN:HG2	2.17	0.43
45:SC:372:MET:N	45:SC:372:MET:SD	2.91	0.43
46:SH:345:ILE:O	46:SH:345:ILE:HG23	2.17	0.43
46:SL:328:GLU:HA	46:SL:331:LEU:HB3	2.00	0.43
45:TA:401:LYS:HE3	45:TA:401:LYS:HB2	1.74	0.43
46:TB:191:GLN:O	46:TB:195:ASN:ND2	2.50	0.43
45:TG:68:LEU:HD11	45:TG:118:CYS:HB2	2.00	0.43
45:TK:98:ASP:O	45:TK:105:ARG:NH1	2.51	0.43
46:TL:251:ARG:HH21	45:TM:105:ARG:HD2	1.82	0.43
45:TM:362:VAL:HG11	45:TM:370:LYS:HB3	2.00	0.43
46:TN:312:THR:HA	46:TN:348:ASN:HB2	2.00	0.43
46:UB:51:TYR:HB3	46:UB:59:TYR:HB3	2.00	0.43
45:UC:223:THR:HG23	45:UC:225:THR:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UG:71:GLU:HA	45:UG:72:PRO:HD3	1.90	0.43
46:UH:359:LYS:HA	46:UH:359:LYS:HD3	1.83	0.43
46:UL:156:ARG:NH1	46:UL:197:ASP:OD1	2.48	0.43
45:UM:202:VAL:HA	45:UM:268:MET:HB3	1.99	0.43
45:UM:339:ARG:NE	45:UM:339:ARG:HA	2.33	0.43
46:VF:184:ASN:OD1	46:VF:185:ALA:N	2.51	0.43
46:VJ:282:ARG:HG2	46:VJ:283:ALA:N	2.33	0.43
46:VL:317:PHE:HB2	46:VL:353:ILE:HD13	2.00	0.43
45:WA:356:ASN:OD1	45:WA:357:TYR:N	2.51	0.43
46:WF:101:TRP:CE3	46:WF:187:LEU:HD13	2.53	0.43
46:WJ:263:LEU:HG	46:WJ:422:TYR:HD1	1.82	0.43
45:WK:203:MET:HG3	45:WK:384:ILE:HD11	2.00	0.43
46:WL:350:LYS:HE2	46:WL:350:LYS:HA	1.98	0.43
46:WN:30:ILE:HD11	46:WN:47:ILE:HD11	1.99	0.43
46:WN:273:LEU:N	46:WN:292:GLN:HE22	2.13	0.43
18:1I:195:PHE:CE2	15:4X:137:GLN:HB3	2.52	0.43
12:1T:52:ILE:HG12	12:1T:62:VAL:HG21	1.99	0.43
12:1T:120:LEU:HD23	12:1T:123:TYR:HB2	1.99	0.43
12:1T:197:GLN:HG3	12:1T:198:ASP:H	1.83	0.43
1:2A:102:TYR:CG	1:2A:103:GLN:N	2.86	0.43
4:2D:174:TYR:OH	46:EJ:45:GLU:OE2	2.32	0.43
20:2K:240:MET:HA	20:2K:243:GLU:HG2	2.00	0.43
21:2L:667:ARG:NH2	45:CM:364:PRO:HA	2.33	0.43
21:2L:667:ARG:HH21	45:CM:364:PRO:HA	1.84	0.43
22:2M:33:THR:HG21	22:2M:48:ARG:HE	1.82	0.43
9:2N:240:TYR:HB3	9:2N:267:THR:HG22	2.00	0.43
11:2S:85:GLN:N	11:2S:85:GLN:OE1	2.50	0.43
11:2S:136:ARG:HH22	10:3Q:149:ILE:HG23	1.83	0.43
12:2T:135:GLN:OE1	12:2T:140:GLN:HB3	2.17	0.43
13:2U:104:LEU:O	13:2U:122:GLY:N	2.51	0.43
1:3A:113:THR:OG1	1:3A:114:ALA:N	2.47	0.43
23:3O:238:ALA:O	23:3O:242:LEU:N	2.46	0.43
23:3O:369:LEU:HD22	45:UI:282:TYR:CZ	2.53	0.43
10:3Q:74:PRO:HB3	10:3Q:148:TYR:CZ	2.53	0.43
12:3T:44:ILE:O	12:3T:48:THR:HG23	2.18	0.43
12:3T:103:VAL:O	12:3T:103:VAL:HG23	2.17	0.43
27:4C:169:GLU:HA	27:4C:172:SER:HB3	2.00	0.43
27:4C:230:ASP:HA	27:4C:233:LEU:HB3	2.00	0.43
34:4R:219:LYS:HE2	34:4R:219:LYS:HA	1.99	0.43
37:5E:71:PRO:HG3	37:5E:106:VAL:HG23	2.00	0.43
37:5F:63:HIS:CD2	46:NF:58:ARG:HD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:5G:126:LEU:O	45:OI:373:ARG:NH2	2.50	0.43
10:5Q:72:LYS:HA	10:5Q:72:LYS:HD3	1.64	0.43
10:5Q:93:VAL:HG11	10:5Q:136:LEU:HD11	2.01	0.43
10:6Q:178:PRO:HG2	10:6Q:181:PHE:HD2	1.83	0.43
34:7R:94:ARG:HB3	34:7R:184:ASP:HB2	1.99	0.43
34:7R:429:LYS:HE2	34:7R:429:LYS:HB3	1.80	0.43
46:AL:73:MET:CE	46:AL:92:PHE:HB3	2.49	0.43
46:AN:406:MET:HG3	46:AN:407:GLU:N	2.33	0.43
45:BA:336:LYS:HA	45:BA:336:LYS:HD3	1.76	0.43
46:BD:391:ARG:HD2	46:BD:391:ARG:HA	1.80	0.43
46:BH:167:PHE:CE2	46:BH:233:MET:HG2	2.54	0.43
46:BH:267:MET:HG3	46:BH:299:MET:HE2	2.00	0.43
45:BK:188:ILE:HD11	45:BK:422:ARG:HA	1.99	0.43
45:CA:216:ASN:HD22	45:CA:275:ILE:HB	1.83	0.43
46:CD:148:GLY:O	46:CD:152:ILE:HG13	2.17	0.43
45:CG:102:ASN:HB3	45:CG:105:ARG:HB2	1.99	0.43
46:CN:117:LEU:HD13	46:CN:121:ARG:NH2	2.33	0.43
46:CN:119:VAL:HA	46:CN:122:LYS:HG2	2.00	0.43
46:DB:86:ARG:HD3	46:DB:86:ARG:HA	1.73	0.43
46:DB:174:LYS:HB2	46:DB:205:GLU:OE2	2.18	0.43
46:DF:46:ARG:HH12	45:DG:73:THR:HG23	1.83	0.43
45:DG:76:ASP:HA	45:DG:79:ARG:HD3	2.00	0.43
46:DH:8:GLN:OE1	46:DH:17:GLY:HA3	2.18	0.43
46:DJ:326:VAL:O	46:DJ:330:MET:HG2	2.19	0.43
46:DL:12:CYS:O	46:DL:16:ILE:HG12	2.17	0.43
46:DN:175:VAL:HG21	46:DN:204:ASN:HD21	1.83	0.43
46:DN:325:GLU:HA	46:DN:328:GLU:HG2	1.99	0.43
46:EL:99:ASN:HA	46:EL:142:GLY:H	1.83	0.43
46:EL:321:MET:N	46:EL:321:MET:SD	2.91	0.43
46:EN:316:LEU:HG	46:EN:352:SER:HB2	1.99	0.43
46:FD:150:LEU:HD21	46:FD:154:LYS:NZ	2.33	0.43
45:FE:76:ASP:OD1	45:FE:77:GLU:N	2.51	0.43
45:FE:88:HIS:CE1	45:FE:90:GLU:HG2	2.53	0.43
46:FH:148:GLY:O	46:FH:152:ILE:HG12	2.17	0.43
46:FL:330:MET:CE	46:FL:349:ILE:HG21	2.47	0.43
45:FM:288:VAL:HG11	45:FM:327:ASP:HB3	2.00	0.43
46:FN:68:LEU:HD11	46:FN:108:GLU:OE2	2.18	0.43
46:FN:324:LYS:NZ	46:FN:325:GLU:OE2	2.50	0.43
45:GA:405:VAL:O	45:GA:409:VAL:HG13	2.18	0.43
45:GC:7:ILE:HG21	45:GC:153:LEU:HD21	1.99	0.43
46:GF:221:THR:HG23	46:GF:223:GLY:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GI:262:TYR:HB2	45:GI:265:ILE:HD12	2.00	0.43
45:HA:105:ARG:NH1	46:HB:251:ARG:HD3	2.33	0.43
45:HA:395:PHE:HA	45:HA:398:MET:HE3	1.99	0.43
46:HB:101:TRP:HB3	46:HB:398:TYR:HE1	1.84	0.43
46:HF:73:MET:HA	46:HF:76:VAL:HG12	2.00	0.43
46:HF:107:THR:HG1	46:HF:108:GLU:CD	2.20	0.43
46:HF:237:THR:HG23	46:HF:241:ARG:HH21	1.83	0.43
46:HJ:180:VAL:HG12	46:HJ:180:VAL:O	2.18	0.43
45:HK:278:ALA:HA	45:HK:369:ALA:HB2	1.99	0.43
45:HM:384:ILE:O	45:HM:387:VAL:HG22	2.18	0.43
45:IA:147:SER:HB2	45:IA:190:SER:HB3	2.00	0.43
45:IA:384:ILE:O	45:IA:387:VAL:HG22	2.18	0.43
46:IB:238:CYS:SG	46:IB:239:CYS:N	2.91	0.43
45:IC:1:MET:HE2	45:IC:130:THR:HG23	1.99	0.43
45:IC:102:ASN:HB3	45:IC:105:ARG:HB2	2.00	0.43
46:ID:145:SER:HB2	46:ID:188:SER:HB2	2.00	0.43
46:ID:289:LEU:HD13	46:ID:365:VAL:HG23	1.99	0.43
46:ID:385:PHE:HE2	46:ID:412:GLU:HB2	1.82	0.43
45:IG:322:ASP:OD1	45:IG:373:ARG:NH1	2.50	0.43
46:IJ:105:HIS:CE1	46:IJ:150:LEU:HD12	2.54	0.43
46:IL:68:LEU:HB3	46:IL:96:GLY:HA2	2.00	0.43
46:IL:163:ILE:HD11	46:IL:251:ARG:HE	1.83	0.43
45:IM:310:GLY:HA3	45:IM:383:ALA:HB2	1.99	0.43
46:IN:6:HIS:O	46:IN:63:ALA:HA	2.18	0.43
46:JB:1:MET:O	46:JB:2:ARG:HG2	2.16	0.43
45:JE:84:ARG:HG3	45:JE:85:GLN:HG2	2.01	0.43
45:JE:384:ILE:O	45:JE:387:VAL:HG22	2.18	0.43
45:JM:174:SER:HB2	45:JM:177:VAL:O	2.18	0.43
46:KB:139:LEU:HD13	46:KB:168:SER:HB3	1.99	0.43
46:KB:274:THR:HG21	46:KB:282:ARG:HD3	1.99	0.43
45:KC:192:HIS:NE2	45:KC:420:GLU:OE2	2.51	0.43
45:KE:256:GLN:O	45:KE:260:VAL:HG22	2.17	0.43
45:KI:75:ILE:O	45:KI:79:ARG:HG3	2.18	0.43
46:KJ:67:ASP:OD1	46:KJ:68:LEU:N	2.51	0.43
45:LA:185:TYR:HE1	45:LA:398:MET:HB3	1.84	0.43
45:LI:174:SER:HB2	45:LI:177:VAL:O	2.17	0.43
45:MC:383:ALA:O	45:MC:386:GLU:HG2	2.19	0.43
46:NB:139:LEU:HD13	46:NB:170:VAL:HG12	2.00	0.43
45:NC:169:PHE:HA	45:NC:202:VAL:HG22	2.00	0.43
45:NC:340:THR:HG23	45:NC:341:ILE:HG13	1.99	0.43
45:NE:239:THR:HG23	45:NE:243:ARG:HH21	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NG:387:VAL:HA	45:NG:390:ARG:HG2	1.98	0.43
46:NH:173:PRO:HG3	46:NH:380:ARG:HD2	2.00	0.43
46:NH:190:HIS:CD2	46:NH:414:ASN:HD22	2.36	0.43
45:NI:331:SER:O	45:NI:335:ILE:HG12	2.18	0.43
46:NL:54:ALA:HA	46:OL:283:ALA:HB2	2.00	0.43
45:NM:210:TYR:CE2	45:NM:227:LEU:HD21	2.53	0.43
46:OB:248:SER:HA	46:OB:252:LYS:HG3	2.00	0.43
46:OD:173:PRO:HD3	46:OD:380:ARG:CZ	2.47	0.43
45:OG:397:LEU:HD23	45:OG:397:LEU:HA	1.88	0.43
46:OH:32:PRO:HB3	46:OH:81:PHE:HA	2.00	0.43
45:OI:88:HIS:CE1	45:PI:280:LYS:NZ	2.86	0.43
46:OJ:334:GLN:NE2	46:OJ:348:ASN:OD1	2.51	0.43
45:OK:88:HIS:HB3	45:OK:91:GLN:NE2	2.32	0.43
46:ON:179:VAL:HG13	46:ON:180:VAL:HG13	2.00	0.43
45:PA:102:ASN:HB2	46:PB:251:ARG:HH12	1.83	0.43
45:PA:358:GLN:NE2	45:PA:359:PRO:O	2.51	0.43
46:PB:101:TRP:HB2	46:PB:184:ASN:HB3	2.00	0.43
46:PD:207:LEU:HD22	46:PD:228:LEU:HD11	2.00	0.43
45:PG:5:ILE:HD11	45:PG:135:PHE:CE2	2.53	0.43
45:PG:278:ALA:HB2	45:PG:369:ALA:HB2	2.00	0.43
46:PN:3:GLU:HB2	46:PN:62:ARG:NH2	2.28	0.43
45:QC:244:PHE:CE1	45:QC:358:GLN:HG2	2.53	0.43
45:QE:372:MET:SD	45:QE:372:MET:N	2.91	0.43
45:QI:51:THR:HG21	45:QI:243:ARG:HB3	1.98	0.43
46:QJ:46:ARG:HA	46:QJ:46:ARG:HD2	1.77	0.43
45:QM:260:VAL:HB	46:QN:397:TRP:HZ2	1.83	0.43
45:QM:313:MET:HG3	45:QM:344:VAL:HG11	2.00	0.43
46:RB:105:HIS:CE1	46:RB:150:LEU:HD13	2.53	0.43
46:RD:267:MET:SD	46:RD:299:MET:HG2	2.58	0.43
46:RD:324:LYS:HD3	45:RE:210:TYR:CD1	2.53	0.43
45:RE:68:LEU:HD22	45:RE:153:LEU:HD11	2.00	0.43
45:RG:326:LYS:HZ1	46:RH:219:THR:HA	1.83	0.43
45:RI:383:ALA:O	45:RI:386:GLU:HG2	2.17	0.43
45:RK:10:GLY:O	45:RK:14:ILE:HG12	2.18	0.43
46:RL:19:LYS:HD3	46:RL:227:HIS:CD2	2.53	0.43
46:RN:282:ARG:NH2	46:RN:292:GLN:OE1	2.44	0.43
46:SB:247:ASN:OD1	45:SC:11:GLN:NE2	2.51	0.43
45:SC:56:THR:HG23	45:SC:58:ALA:H	1.82	0.43
45:SC:348:PRO:HD2	46:SD:388:MET:HE2	2.00	0.43
45:SE:362:VAL:H	45:SE:370:LYS:NZ	2.12	0.43
45:SG:55:GLU:OE1	45:SG:61:HIS:NE2	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SG:414:GLU:HG2	45:SG:417:GLU:HG3	1.99	0.43
46:SH:304:ASP:HB3	46:SH:307:HIS:ND1	2.32	0.43
45:SI:259:LEU:HD11	45:SI:316:SER:OG	2.17	0.43
45:SM:315:CYS:HA	45:SM:379:SER:HA	1.99	0.43
45:TA:294:SER:O	45:TA:297:GLU:HG2	2.18	0.43
46:TJ:313:ALA:HB3	46:TJ:349:ILE:HG12	2.00	0.43
46:TJ:319:GLY:N	46:TJ:354:CYS:O	2.46	0.43
46:TJ:327:ASP:OD1	46:TJ:328:GLU:N	2.50	0.43
45:TK:261:PRO:HB3	45:TK:346:TRP:HH2	1.82	0.43
46:TL:304:ASP:HB3	46:TL:307:HIS:ND1	2.33	0.43
45:UC:121:ARG:HD2	45:UC:124:LYS:NZ	2.34	0.43
45:UC:273:ALA:HA	45:UC:274:PRO:HA	1.80	0.43
46:UD:203:ASP:OD2	46:UD:377:MET:HE1	2.18	0.43
46:UD:254:ALA:O	46:UD:258:ILE:HG12	2.18	0.43
45:UG:317:MET:SD	45:UG:319:TYR:OH	2.53	0.43
45:UM:169:PHE:HA	45:UM:202:VAL:HG22	2.00	0.43
45:VE:105:ARG:HG2	45:VE:411:GLU:HG2	1.99	0.43
46:VJ:178:THR:HG22	46:VJ:180:VAL:H	1.84	0.43
45:VK:70:LEU:HD13	45:VK:95:GLY:HA3	2.00	0.43
46:VL:391:ARG:HD2	46:VL:391:ARG:HA	1.80	0.43
45:WA:178:SER:HB2	45:WA:183:GLU:OE2	2.18	0.43
45:WA:251:ASP:HB2	45:WA:254:GLU:HG3	2.00	0.43
46:WB:230:SER:HA	46:WB:233:MET:HB2	2.00	0.43
45:WC:68:LEU:HD21	45:WC:118:CYS:HB2	1.99	0.43
45:WE:93:ILE:HD11	45:WE:121:ARG:HG3	2.00	0.43
46:WN:213:ARG:HD3	46:WN:213:ARG:HA	1.69	0.43
46:WN:285:THR:HB	46:WN:287:PRO:HD2	2.00	0.43
1:0A:136:ASN:HA	46:AB:320:ARG:HH12	1.82	0.43
4:0D:177:THR:HG22	46:EB:48:ASN:HD22	1.83	0.43
17:1F:155:ASP:HB3	46:HL:296:ALA:HB3	2.00	0.43
13:1U:499:HIS:HD1	13:1U:502:GLU:HG2	1.84	0.43
1:2A:105:HIS:CG	1:2A:106:ASP:N	2.86	0.43
27:2C:233:LEU:HA	27:2C:236:LYS:NZ	2.34	0.43
29:2G:69:ASN:ND2	22:2M:283:VAL:O	2.38	0.43
30:2H:199:GLU:HG2	46:AD:245:GLN:OE1	2.18	0.43
21:2L:660:LYS:HB3	21:2L:699:TYR:HE2	1.82	0.43
22:2M:9:ILE:H	22:2M:9:ILE:HD12	1.83	0.43
25:2R:459:PRO:HB2	46:EH:77:ARG:NH1	2.33	0.43
12:2T:146:MET:HB3	12:2T:146:MET:HE2	1.56	0.43
12:2T:231:GLU:HB2	12:2T:235:THR:HG23	2.01	0.43
13:2U:194:ARG:HB3	13:2U:212:THR:HG23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2U:352:ARG:N	13:2U:352:ARG:HD2	2.32	0.43
13:2U:405:ILE:HG23	13:2U:406:HIS:ND1	2.33	0.43
13:2U:525:ILE:HD12	13:2U:527:MET:CE	2.48	0.43
32:3D:7:LYS:HD2	32:3D:52:GLU:HB2	1.99	0.43
25:3R:152:LEU:HA	46:AN:78:ALA:O	2.19	0.43
25:3R:224:PHE:CG	46:BN:80:PRO:HG3	2.54	0.43
11:3S:140:ARG:CZ	10:5Q:72:LYS:HD2	2.48	0.43
13:3U:589:THR:OG1	13:3U:602:TRP:O	2.26	0.43
14:3V:93:MET:HB3	46:LB:261:PRO:HB2	1.99	0.43
36:5C:47:SER:OG	36:5C:54:ARG:HB3	2.17	0.43
36:5D:80:ASN:O	36:5D:84:TYR:HB2	2.18	0.43
37:5E:129:ARG:NH2	46:OD:218:THR:O	2.52	0.43
41:6H:209:LEU:HD11	46:FD:227:HIS:CD2	2.54	0.43
45:AC:56:THR:HG23	45:AC:58:ALA:H	1.83	0.43
46:AH:95:THR:OG1	46:AH:108:GLU:OE2	2.37	0.43
46:AH:105:HIS:CE1	46:AH:150:LEU:HD12	2.53	0.43
46:AJ:268:ILE:HG22	46:AJ:368:VAL:HG22	2.00	0.43
46:AL:42:LEU:HA	46:AL:45:GLU:HG3	2.00	0.43
45:AM:226:ASN:ND2	45:AM:367:ASP:OD2	2.52	0.43
46:BB:23:VAL:O	46:BB:27:GLU:HG3	2.17	0.43
45:BC:46:ASP:OD1	45:BC:46:ASP:N	2.51	0.43
45:BG:79:ARG:HG3	45:BG:92:LEU:HD22	2.00	0.43
45:BI:294:SER:O	45:BI:300:ASN:ND2	2.35	0.43
45:BK:211:ASP:OD2	45:BK:215:ARG:NH1	2.50	0.43
45:CA:352:LYS:HZ1	46:CB:179:VAL:H	1.65	0.43
46:CD:246:LEU:HD13	46:CD:353:ILE:HD13	2.00	0.43
46:CJ:190:HIS:CD2	46:CJ:411:ALA:HA	2.53	0.43
45:CK:324:VAL:HG12	45:CK:326:LYS:HG2	1.99	0.43
46:CL:68:LEU:HG	46:CL:96:GLY:H	1.83	0.43
45:CM:220:GLU:O	45:CM:221:ARG:HD3	2.18	0.43
45:CM:261:PRO:HD3	46:CN:394:PHE:CZ	2.53	0.43
46:DB:51:TYR:HB3	46:DB:59:TYR:HB3	1.99	0.43
45:DC:18:ASN:HD21	45:DC:78:VAL:HG22	1.84	0.43
45:DC:422:ARG:HE	45:DC:425:LEU:HD11	1.83	0.43
45:DE:37:PRO:O	45:DE:38:SER:OG	2.34	0.43
45:DE:272:TYR:HD2	45:DE:275:ILE:HD11	1.84	0.43
45:DE:311:LYS:NZ	45:DE:342:GLN:OE1	2.43	0.43
45:DK:372:MET:SD	45:DK:372:MET:N	2.89	0.43
46:DL:252:LYS:HA	45:DM:100:ALA:HB1	1.99	0.43
45:DM:212:ILE:HD11	45:DM:300:ASN:HA	1.98	0.43
46:DN:66:MET:HG2	46:DN:116:VAL:HG21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EB:375:GLN:HG3	46:EB:379:LYS:HZ1	1.84	0.43
45:EC:325:PRO:HB2	46:ED:208:TYR:OH	2.19	0.43
45:EE:408:TYR:HB3	45:EE:413:MET:HE2	2.01	0.43
46:EH:423:GLN:NE2	46:EH:427:ASP:OD2	2.50	0.43
45:EK:395:PHE:CE2	45:EK:422:ARG:HD3	2.53	0.43
46:EL:325:GLU:OE2	45:EM:221:ARG:HG2	2.18	0.43
46:EN:65:LEU:HB2	46:EN:90:PHE:CE1	2.53	0.43
45:FA:223:THR:HG23	45:FA:225:THR:H	1.83	0.43
45:FA:288:VAL:HA	45:FA:291:ILE:HG12	1.99	0.43
46:FB:19:LYS:HE3	46:FB:19:LYS:HB3	1.73	0.43
46:FB:132:GLY:HA2	46:FB:162:ARG:HG3	1.99	0.43
45:FC:2:ARG:O	45:FC:51:THR:HA	2.19	0.43
45:FC:115:VAL:HG22	45:FC:119:LEU:HD23	2.00	0.43
45:FC:434:GLU:O	45:FC:437:ILE:HG12	2.19	0.43
45:FE:129:CYS:SG	45:FE:132:LEU:HB2	2.58	0.43
45:FE:377:MET:SD	45:FE:379:SER:HB3	2.58	0.43
46:FH:128:ASP:OD1	46:FH:129:CYS:N	2.50	0.43
45:FK:177:VAL:HG13	46:FL:327:ASP:OD2	2.18	0.43
46:FL:372:THR:HG21	46:FL:426:GLN:HA	2.00	0.43
45:GA:311:LYS:HG3	45:GA:342:GLN:HG3	2.00	0.43
45:GE:173:PRO:HG2	45:GE:391:LEU:HD11	2.00	0.43
46:GH:258:ILE:HD11	46:GH:266:PHE:HZ	1.83	0.43
45:GK:74:VAL:HA	45:GK:77:GLU:OE2	2.18	0.43
45:GK:174:SER:HB2	45:GK:177:VAL:O	2.18	0.43
45:GM:147:SER:HB2	45:GM:190:SER:HB3	2.00	0.43
46:HB:69:GLU:HA	46:HB:70:PRO:HD3	1.83	0.43
46:HB:342:VAL:HG13	46:HB:345:ILE:HG22	2.00	0.43
45:HE:69:ASP:OD1	45:HE:70:LEU:N	2.51	0.43
46:HJ:166:THR:HG1	46:HJ:199:CYS:HG	1.64	0.43
46:HN:113:ILE:HA	46:HN:116:VAL:HG22	2.00	0.43
46:ID:293:MET:HE2	46:ID:365:VAL:HG11	1.99	0.43
45:IM:419:SER:O	45:IM:423:GLU:OE1	2.36	0.43
46:IN:11:GLN:O	46:IN:15:GLN:HG2	2.18	0.43
46:JB:145:SER:HB2	46:JB:188:SER:OG	2.18	0.43
46:JD:404:ASP:OD1	46:JD:404:ASP:N	2.51	0.43
45:JE:244:PHE:HB2	45:JE:356:ASN:ND2	2.33	0.43
45:JG:177:VAL:HG13	46:JH:327:ASP:HB3	2.00	0.43
46:JJ:374:ILE:HG22	46:JJ:422:TYR:CE2	2.53	0.43
45:JM:70:LEU:HD23	45:JM:145:THR:OG1	2.19	0.43
45:JM:155:GLU:HG2	45:JM:197:HIS:CD2	2.52	0.43
45:KA:208:ALA:HB1	45:KA:301:MET:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KA:276:ILE:HD11	45:KA:280:LYS:HD2	1.99	0.43
45:KM:178:SER:HB3	46:KN:347:ASN:HD21	1.83	0.43
46:LB:326:VAL:O	46:LB:330:MET:HG2	2.19	0.43
45:LC:75:ILE:HG22	45:LC:79:ARG:NE	2.33	0.43
45:LE:155:GLU:OE1	45:LE:197:HIS:NE2	2.51	0.43
45:MA:326:LYS:HG3	45:MA:327:ASP:N	2.33	0.43
46:MH:174:LYS:HD3	46:MH:174:LYS:N	2.34	0.43
46:MH:289:LEU:HD23	46:MH:289:LEU:HA	1.90	0.43
45:MI:231:ILE:O	45:MI:235:ILE:HG12	2.18	0.43
46:MN:293:MET:SD	46:MN:365:VAL:HG11	2.58	0.43
45:NA:258:ASN:ND2	45:NA:352:LYS:HD3	2.33	0.43
45:NA:262:TYR:CZ	46:ND:393:ALA:HB2	2.53	0.43
45:NA:306:ASP:HB3	45:NA:309:HIS:ND1	2.32	0.43
46:NB:164:MET:O	46:NB:198:GLU:N	2.51	0.43
46:NB:318:ARG:HH11	46:NB:358:PRO:HG3	1.83	0.43
45:NC:223:THR:OG1	45:NC:224:TYR:N	2.51	0.43
45:NG:326:LYS:HE2	46:NJ:219:THR:HA	2.00	0.43
46:NH:112:LEU:HD22	46:NH:147:MET:HE1	2.00	0.43
46:NL:257:LEU:HD11	46:NL:314:SER:HB3	2.00	0.43
46:NL:334:GLN:HE21	46:NL:349:ILE:HG13	1.82	0.43
46:NL:407:GLU:OE1	46:NL:407:GLU:N	2.48	0.43
45:OA:221:ARG:HD2	46:OB:324:LYS:NZ	2.33	0.43
45:OA:407:TRP:HH2	46:OB:254:ALA:HB1	1.83	0.43
45:OC:204:LEU:HD13	45:OC:231:ILE:HD12	1.99	0.43
45:OE:326:LYS:HB2	45:OE:326:LYS:HE3	1.81	0.43
45:OE:338:LYS:HG2	45:OE:340:THR:HG22	1.98	0.43
46:OF:105:HIS:CE1	46:OF:150:LEU:HD13	2.54	0.43
45:OG:21:TRP:CZ2	45:OG:65:ALA:HB2	2.53	0.43
45:OI:265:ILE:HG12	45:OI:432:TYR:HE1	1.83	0.43
45:OI:336:LYS:HE3	45:OI:351:PHE:CE1	2.54	0.43
46:OL:217:LEU:HD23	46:OL:217:LEU:H	1.82	0.43
45:OM:88:HIS:HB3	45:OM:91:GLN:NE2	2.32	0.43
45:PA:147:SER:HB2	45:PA:190:SER:HB3	2.00	0.43
45:PC:180:ALA:HA	46:PD:350:LYS:HD3	1.99	0.43
45:PE:141:VAL:HG23	45:PE:190:SER:HB3	2.00	0.43
45:PG:251:ASP:N	45:PG:254:GLU:OE1	2.31	0.43
45:PM:167:LEU:HG	45:PM:200:VAL:HB	2.00	0.43
45:QA:332:ILE:O	45:QA:336:LYS:HG3	2.18	0.43
46:QD:7:ILE:HG22	46:QD:64:ILE:HB	2.00	0.43
46:QF:46:ARG:HA	46:QF:46:ARG:HD3	1.91	0.43
45:QI:11:GLN:NE2	47:QI:501:GTP:O3A	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QI:184:PRO:HG2	45:QI:398:MET:HE1	2.00	0.43
46:QJ:326:VAL:O	46:QJ:330:MET:HG2	2.17	0.43
46:QL:1:MET:HA	45:QM:96:LYS:HE3	2.00	0.43
45:RC:377:MET:SD	45:RC:379:SER:HB2	2.57	0.43
46:RD:256:ASN:OD1	45:RE:181:VAL:HG22	2.18	0.43
46:RH:145:SER:OG	46:RH:188:SER:HB3	2.18	0.43
46:RN:372:THR:HA	46:RN:422:TYR:HE1	1.83	0.43
46:SB:86:ARG:NH2	46:TB:278:SER:OG	2.51	0.43
46:SD:395:LEU:HD23	46:SD:395:LEU:HA	1.87	0.43
45:SE:254:GLU:HA	45:SE:257:THR:OG1	2.18	0.43
45:SG:124:LYS:HE2	45:SG:124:LYS:HB2	1.84	0.43
46:SH:16:ILE:HA	46:SH:226:ASN:OD1	2.18	0.43
45:SI:11:GLN:NE2	45:SI:15:GLN:OE1	2.46	0.43
45:SM:88:HIS:ND1	45:SM:89:PRO:HD2	2.33	0.43
46:TB:204:ASN:HA	46:TB:207:LEU:HD12	2.00	0.43
46:TB:346:PRO:HG2	45:TC:394:LYS:HZ1	1.82	0.43
45:TC:3:GLU:HG2	45:TC:64:ARG:CZ	2.48	0.43
46:TF:267:MET:HG3	46:TF:299:MET:HE2	2.01	0.43
46:TH:347:ASN:ND2	45:TI:176:GLN:O	2.52	0.43
45:TI:62:VAL:HG21	45:TI:88:HIS:HB2	1.99	0.43
46:TJ:51:TYR:O	46:TJ:62:ARG:NH2	2.49	0.43
46:UB:11:GLN:HB3	46:UB:72:THR:HG21	1.99	0.43
46:UF:69:GLU:CD	46:UF:71:GLY:H	2.22	0.43
46:UF:201:VAL:HG21	46:UF:374:ILE:HD11	2.00	0.43
46:UJ:105:HIS:CE1	46:UJ:150:LEU:HD12	2.53	0.43
46:UN:375:GLN:C	46:UN:379:LYS:HZ3	2.22	0.43
46:VF:284:LEU:HD23	46:VF:284:LEU:HA	1.86	0.43
45:VI:88:HIS:CD2	45:WI:283:HIS:HB3	2.54	0.43
45:VI:356:ASN:OD1	45:VI:357:TYR:N	2.52	0.43
45:VK:222:PRO:HD2	46:VL:324:LYS:HE3	2.00	0.43
45:VM:217:LEU:HB3	45:VM:219:ILE:HG12	2.00	0.43
45:VM:288:VAL:HG11	45:VM:327:ASP:HB3	1.98	0.43
46:VN:134:GLN:HA	46:VN:134:GLN:OE1	2.17	0.43
46:VN:309:ARG:NH1	46:VN:340:TYR:HA	2.34	0.43
46:WD:113:ILE:HA	46:WD:116:VAL:HG12	1.99	0.43
45:WK:40:ARG:HD3	45:WK:41:THR:OG1	2.18	0.43
45:WK:182:VAL:HG22	45:WK:185:TYR:HB2	2.00	0.43
46:WL:3:GLU:HA	46:WL:49:VAL:HG23	1.99	0.43
46:WN:167:PHE:CZ	46:WN:200:MET:HG3	2.52	0.43
1:0A:128:HIS:CE1	46:AB:359:LYS:HA	2.52	0.43
25:1R:60:LYS:HZ2	30:2H:220:ARG:HG2	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:2F:85:MET:HG3	45:GE:95:GLY:HA2	2.00	0.43
31:2I:96:TRP:HD1	46:FF:125:GLU:OE2	2.02	0.43
21:2L:667:ARG:CZ	45:CM:365:GLY:H	2.30	0.43
9:2N:157:ILE:HD11	9:2N:169:GLN:HB2	1.99	0.43
23:2O:402:GLN:HG2	23:2O:406:ARG:NH1	2.32	0.43
25:2R:136:ILE:HG22	25:2R:151:PHE:HB3	2.01	0.43
11:2S:15:ILE:HD13	11:2S:18:ARG:HE	1.82	0.43
13:2U:280:ALA:O	13:2U:298:SER:N	2.51	0.43
13:2U:587:GLN:HE21	13:2U:587:GLN:HB2	1.62	0.43
14:2V:213:LYS:O	14:2V:217:GLU:HG2	2.18	0.43
26:2W:204:LYS:HG3	26:2W:208:LEU:HD13	2.00	0.43
5:3E:80:ASP:O	5:3E:83:GLU:HG3	2.19	0.43
5:3E:134:THR:HB	5:3E:136:GLN:HE22	1.83	0.43
23:3O:273:LEU:O	23:3O:277:LYS:HG3	2.18	0.43
11:3S:152:SER:HA	46:WN:95:THR:HG21	2.00	0.43
14:3V:198:PHE:CB	14:3V:265:VAL:HG13	2.48	0.43
36:5B:172:LEU:HD23	36:5B:172:LEU:HA	1.88	0.43
36:5D:80:ASN:OD1	36:5D:81:HIS:ND1	2.52	0.43
10:5Q:74:PRO:O	10:5Q:136:LEU:HB3	2.19	0.43
10:5Q:81:LYS:HD3	10:5Q:161:ARG:HD2	2.00	0.43
34:5R:12:LEU:HD12	34:5R:15:HIS:CD2	2.52	0.43
40:6G:147:SER:OG	46:VH:335:ASN:ND2	2.52	0.43
41:6H:242:LYS:O	41:6H:244:SER:N	2.52	0.43
10:6Q:6:PHE:CE1	10:6Q:8:SER:HB3	2.50	0.43
34:6R:203:ARG:HD3	34:6R:204:VAL:O	2.18	0.43
34:7R:398:LEU:HB3	34:7R:402:TYR:CE2	2.53	0.43
45:AA:55:GLU:HG3	45:AA:57:GLY:H	1.83	0.43
45:AC:2:ARG:HH21	45:AC:243:ARG:HA	1.84	0.43
45:AG:425:LEU:O	45:AG:429:GLU:HG2	2.18	0.43
45:BA:90:GLU:HG3	45:BA:121:ARG:NH1	2.30	0.43
45:BA:401:LYS:HE3	46:BB:344:TRP:HH2	1.82	0.43
46:BD:107:THR:HG23	46:BD:108:GLU:OE1	2.18	0.43
45:BG:192:HIS:ND1	45:BG:424:ASP:OD2	2.51	0.43
45:BK:145:THR:O	45:BK:149:LEU:HB2	2.19	0.43
46:BN:341:PHE:CE1	46:BN:349:ILE:HD11	2.53	0.43
46:CD:375:GLN:OE1	46:CD:423:GLN:HB3	2.19	0.43
45:CE:91:GLN:NE2	45:CE:125:LEU:HD21	2.33	0.43
45:CG:387:VAL:HA	45:CG:390:ARG:HG2	1.99	0.43
46:CL:304:ASP:OD1	46:CL:306:ARG:HG2	2.19	0.43
46:DB:121:ARG:O	46:DB:124:ALA:N	2.51	0.43
46:DB:167:PHE:CE1	46:DB:200:MET:HG3	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DB:344:TRP:CG	45:DC:401:LYS:HE3	2.54	0.43
45:DC:137:VAL:HG21	45:DC:154:LEU:HD21	2.00	0.43
45:DC:217:LEU:HB3	45:DC:219:ILE:HG13	1.99	0.43
46:DJ:221:THR:HG23	46:DJ:224:ASP:H	1.83	0.43
46:DJ:372:THR:HA	46:DJ:422:TYR:CE2	2.53	0.43
46:DL:183:TYR:O	46:DL:187:LEU:HD23	2.18	0.43
46:DN:203:ASP:HB3	46:DN:301:CYS:HA	2.00	0.43
45:EC:89:PRO:HG2	45:FA:280:LYS:HD2	2.00	0.43
45:EC:226:ASN:ND2	45:EC:367:ASP:OD2	2.52	0.43
45:EC:342:GLN:N	45:EC:342:GLN:OE1	2.51	0.43
46:ED:3:GLU:OE1	46:ED:3:GLU:N	2.49	0.43
46:ED:293:MET:HE1	46:ED:317:PHE:CZ	2.54	0.43
46:EF:116:VAL:HA	46:EF:119:VAL:HG12	2.00	0.43
46:EH:54:ALA:HA	46:FH:283:ALA:HB2	2.00	0.43
46:EH:130:LEU:HD21	46:EH:133:PHE:CE1	2.53	0.43
46:EL:246:LEU:O	46:EL:352:SER:OG	2.31	0.43
46:FB:55:THR:HG23	46:GB:283:ALA:HA	2.01	0.43
46:FB:69:GLU:HA	46:FB:70:PRO:HD3	1.78	0.43
46:FB:97:ALA:HB3	46:FB:143:THR:HB	1.99	0.43
46:FB:289:LEU:HD23	46:FB:289:LEU:HA	1.88	0.43
46:FD:48:ASN:O	46:FD:62:ARG:NH1	2.52	0.43
46:FD:273:LEU:H	46:FD:292:GLN:HE22	1.65	0.43
45:FG:170:THR:O	45:FG:204:LEU:HB2	2.18	0.43
46:GB:208:TYR:HE1	46:GB:225:LEU:HD11	1.83	0.43
46:GB:224:ASP:HA	46:GB:227:HIS:HD1	1.83	0.43
45:GC:245:ASP:OD1	45:GC:246:GLY:N	2.52	0.43
45:GI:192:HIS:ND1	45:GI:424:ASP:OD2	2.43	0.43
46:GN:65:LEU:HD22	46:GN:90:PHE:CE1	2.53	0.43
46:GN:372:THR:O	46:GN:375:GLN:NE2	2.41	0.43
45:HA:22:GLU:HG2	45:HA:83:TYR:CE2	2.53	0.43
45:HA:96:LYS:HE3	46:HB:129:CYS:SG	2.58	0.43
45:HA:210:TYR:CE1	45:HA:227:LEU:HD11	2.54	0.43
46:HB:62:ARG:HD3	46:HB:62:ARG:H	1.83	0.43
46:HB:345:ILE:O	46:HB:345:ILE:HG23	2.19	0.43
45:HC:68:LEU:HD23	45:HC:93:ILE:HB	2.01	0.43
45:HC:326:LYS:HG2	46:HF:212:PHE:HZ	1.83	0.43
45:HG:377:MET:SD	45:HG:379:SER:HB3	2.58	0.43
46:HH:293:MET:HG3	46:HH:367:PHE:HB2	2.01	0.43
45:HK:56:THR:HG21	45:HK:60:LYS:HG2	2.00	0.43
46:IB:316:LEU:HB2	46:IB:366:THR:OG1	2.19	0.43
45:IC:68:LEU:HD21	45:IC:118:CYS:SG	2.59	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ID:204:ASN:OD1	49:ID:501:GDP:O2'	2.36	0.43
46:IH:372:THR:O	46:IH:375:GLN:HG2	2.17	0.43
46:IJ:399:THR:HA	46:IJ:403:MET:O	2.19	0.43
45:IK:88:HIS:HB3	45:IK:91:GLN:HB2	2.00	0.43
46:JD:139:LEU:HD13	46:JD:168:SER:HB3	1.99	0.43
46:JJ:206:ALA:HA	46:JJ:209:ASP:OD2	2.18	0.43
45:KG:223:THR:HG23	45:KG:225:THR:H	1.84	0.43
46:KN:167:PHE:HA	46:KN:200:MET:HB2	1.99	0.43
46:LD:273:LEU:HD23	46:LD:273:LEU:HA	1.89	0.43
46:LF:11:GLN:O	46:LF:15:GLN:HG2	2.19	0.43
46:LF:181:GLU:HG2	46:LF:182:PRO:HD3	2.00	0.43
46:LF:265:PHE:HB3	46:LF:374:ILE:HD13	2.01	0.43
46:LF:362:LYS:HA	46:LF:362:LYS:HD3	1.63	0.43
45:LI:346:TRP:CD1	46:LL:391:ARG:HG3	2.53	0.43
45:ME:183:GLU:N	45:ME:184:PRO:HD2	2.33	0.43
45:MG:346:TRP:HZ2	45:MG:435:VAL:HG13	1.83	0.43
45:MI:98:ASP:N	45:MI:98:ASP:OD2	2.51	0.43
45:MM:141:VAL:HB	45:MM:171:ILE:O	2.19	0.43
45:MM:215:ARG:NH2	45:MM:299:ALA:O	2.50	0.43
46:MN:201:VAL:HG23	46:MN:301:CYS:SG	2.58	0.43
45:NA:179:THR:HG21	46:NB:246:LEU:HD22	2.01	0.43
46:NB:207:LEU:HB3	46:NB:225:LEU:HD22	1.98	0.43
45:NC:184:PRO:O	45:NC:188:ILE:HG12	2.19	0.43
45:NC:217:LEU:HB3	45:NC:219:ILE:HG12	1.99	0.43
46:ND:7:ILE:HG13	46:ND:64:ILE:HB	1.99	0.43
46:ND:20:PHE:O	46:ND:24:ILE:HG12	2.19	0.43
45:NI:175:PRO:HB3	45:NI:390:ARG:NE	2.33	0.43
45:NM:175:PRO:HD3	45:NM:205:ASP:OD2	2.18	0.43
46:OD:118:ASP:O	46:OD:121:ARG:HG2	2.18	0.43
46:OF:233:MET:O	46:OF:236:VAL:HG22	2.19	0.43
45:OG:174:SER:HB2	45:OG:177:VAL:O	2.18	0.43
46:OH:60:VAL:HG23	46:OH:84:LEU:O	2.18	0.43
46:OL:66:MET:HA	46:OL:91:VAL:O	2.18	0.43
46:ON:294:PHE:CE2	46:ON:333:VAL:HG11	2.52	0.43
45:PA:105:ARG:HE	46:PB:251:ARG:NH2	2.16	0.43
46:PD:30:ILE:HD12	46:PD:51:TYR:CE2	2.53	0.43
46:PD:375:GLN:O	46:PD:379:LYS:HG3	2.18	0.43
46:PH:257:LEU:HD13	46:PH:312:THR:HG23	1.99	0.43
46:PJ:204:ASN:OD1	49:PJ:501:GDP:O2'	2.36	0.43
45:PK:387:VAL:HA	45:PK:390:ARG:HG2	1.99	0.43
46:PL:260:PHE:HB2	46:PL:263:LEU:HD13	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QA:352:LYS:NZ	46:QB:178:THR:OG1	2.48	0.43
45:QE:56:THR:HG23	45:QE:58:ALA:H	1.84	0.43
45:QG:76:ASP:OD1	45:QG:77:GLU:N	2.51	0.43
45:QM:70:LEU:HA	45:QM:95:GLY:HA3	1.99	0.43
45:QM:219:ILE:HG23	45:QM:222:PRO:HG3	2.00	0.43
46:QN:198:GLU:HG2	46:QN:266:PHE:HE2	1.82	0.43
45:RA:257:THR:HA	46:RB:397:TRP:CZ2	2.53	0.43
46:RB:19:LYS:HE2	46:RB:19:LYS:HB3	1.88	0.43
46:RB:331:LEU:HA	46:RB:334:GLN:HG3	1.99	0.43
45:RG:184:PRO:O	45:RG:188:ILE:HG12	2.18	0.43
45:RG:192:HIS:HD2	45:RG:421:ALA:HA	1.83	0.43
45:RI:311:LYS:H	45:RI:382:THR:HG22	1.84	0.43
46:RJ:178:THR:HG22	46:RJ:180:VAL:H	1.82	0.43
46:RL:104:GLY:O	46:RL:147:MET:HB2	2.18	0.43
45:RM:225:THR:O	45:RM:229:ARG:HG2	2.18	0.43
46:SB:183:TYR:OH	46:SB:388:MET:O	2.30	0.43
46:SD:252:LYS:HE2	46:SD:350:LYS:NZ	2.32	0.43
46:SF:130:LEU:HD21	46:SF:133:PHE:CE1	2.53	0.43
46:SH:161:ASP:OD1	46:SH:162:ARG:NH1	2.48	0.43
45:SK:256:GLN:HA	45:SK:260:VAL:HG23	2.01	0.43
45:TA:201:ALA:HB3	45:TA:267:PHE:CD1	2.54	0.43
45:TE:317:MET:HB2	45:TE:377:MET:HG2	1.99	0.43
46:TH:334:GLN:HE22	46:TH:347:ASN:H	1.66	0.43
46:TJ:68:LEU:HD23	46:TJ:143:THR:OG1	2.18	0.43
46:TL:324:LYS:NZ	45:TM:227:LEU:HD21	2.33	0.43
46:TL:389:PHE:O	46:TL:392:LYS:NZ	2.33	0.43
45:TM:141:VAL:HG12	45:TM:171:ILE:O	2.18	0.43
46:TN:91:VAL:HG21	46:TN:116:VAL:HB	2.01	0.43
46:UB:313:ALA:HB1	46:UB:367:PHE:HE1	1.83	0.43
46:UD:17:GLY:HA2	46:UD:20:PHE:HB3	2.00	0.43
46:UF:396:HIS:HA	46:UF:399:THR:OG1	2.18	0.43
45:UG:12:GLY:HA3	45:UG:140:SER:HB3	2.00	0.43
45:UG:326:LYS:HE2	46:UH:220:PRO:HD2	1.98	0.43
46:UH:150:LEU:HD21	46:UH:154:LYS:HE2	2.01	0.43
46:UH:158:GLU:HG2	46:UH:159:TYR:CD1	2.54	0.43
46:UJ:167:PHE:CE2	46:UJ:233:MET:HG2	2.54	0.43
46:UN:1:MET:O	46:UN:2:ARG:HG2	2.18	0.43
46:UN:301:CYS:SG	46:UN:302:ALA:N	2.90	0.43
46:VB:153:SER:OG	46:VB:154:LYS:HD3	2.18	0.43
45:VE:62:VAL:HG21	45:VE:88:HIS:HB2	2.00	0.43
45:VG:88:HIS:CG	45:VG:89:PRO:HD2	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VH:260:PHE:HB2	46:VH:263:LEU:HD13	2.01	0.43
46:VL:8:GLN:HG3	46:VL:14:ASN:HD22	1.84	0.43
45:WA:70:LEU:HA	45:WA:95:GLY:HA3	2.01	0.43
45:WA:209:ILE:HG23	45:WA:227:LEU:HD22	1.98	0.43
45:WC:331:SER:O	45:WC:334:THR:OG1	2.28	0.43
45:WG:77:GLU:O	45:WG:81:GLY:N	2.50	0.43
46:WH:65:LEU:HD22	46:WH:90:PHE:CE1	2.53	0.43
46:WJ:391:ARG:HD2	46:WJ:391:ARG:HA	1.81	0.43
45:WK:51:THR:HG21	45:WK:243:ARG:HB3	2.01	0.43
45:WK:184:PRO:O	45:WK:188:ILE:HG12	2.18	0.43
46:WL:65:LEU:HD22	46:WL:90:PHE:CE1	2.53	0.43
13:1U:102:LYS:HB2	13:1U:125:ASP:HB3	2.00	0.43
13:1U:478:LEU:O	13:1U:478:LEU:HD23	2.18	0.43
1:2A:124:LEU:HD22	46:AJ:279:GLN:NE2	2.28	0.43
16:2B:1:MET:HE2	16:2B:1:MET:HB2	1.90	0.43
20:2K:471:GLU:HA	20:2K:474:ILE:HG22	1.99	0.43
21:2L:396:ASN:O	21:2L:400:LYS:HG2	2.18	0.43
22:2M:78:ASP:HB2	45:IG:39:ASP:O	2.18	0.43
22:2M:168:LYS:HD2	22:2M:168:LYS:HA	1.91	0.43
9:2N:48:GLU:HA	9:2N:51:LEU:HB2	2.01	0.43
23:2O:182:GLU:O	23:2O:186:LEU:HG	2.17	0.43
23:2O:268:ASN:O	23:2O:272:ILE:HG23	2.19	0.43
23:2O:396:GLN:O	23:2O:400:GLN:OE1	2.37	0.43
13:2U:89:PHE:C	13:2U:91:THR:H	2.22	0.43
15:2X:88:PHE:CE2	15:2X:92:LYS:HD2	2.54	0.43
16:3B:109:ASP:HA	16:3B:116:LEU:HD21	2.00	0.43
30:3H:197:LYS:HD3	30:3H:201:ASN:HB3	1.99	0.43
21:3L:154:LEU:HG	21:3L:158:PHE:HE2	1.84	0.43
23:3O:353:ASP:OD1	23:3O:356:ARG:NH2	2.47	0.43
10:3Q:82:ASN:ND2	10:3Q:126:ASP:O	2.49	0.43
25:3R:11:PHE:HA	15:3X:81:ARG:HD3	1.99	0.43
12:3T:225:SER:HG	45:MK:264:ARG:HH11	1.67	0.43
13:3U:78:MET:HA	13:3U:103:VAL:HG12	1.99	0.43
27:4C:32:VAL:HG11	27:4C:179:LEU:HD12	2.01	0.43
33:4F:14:TYR:OH	46:GJ:53:GLU:OE1	2.33	0.43
36:5A:172:LEU:HD23	36:5A:172:LEU:HA	1.87	0.43
37:5E:52:GLY:N	37:5E:55:GLU:OE2	2.50	0.43
37:5G:116:TYR:O	37:5G:118:PRO:HD3	2.18	0.43
40:6G:150:GLU:HA	40:6G:153:LYS:HG2	2.01	0.43
34:6R:550:VAL:HG13	34:6R:551:LEU:HD12	2.01	0.43
44:8R:83:UNK:O	44:8R:86:UNK:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AD:226:ASN:OD1	49:AD:501:GDP:N1	2.50	0.43
45:AK:238:LEU:HD11	45:AK:255:PHE:HE2	1.84	0.43
46:AL:345:ILE:O	46:AL:345:ILE:HG13	2.19	0.43
45:AM:88:HIS:CE1	45:AM:90:GLU:HG2	2.53	0.43
46:AN:134:GLN:HA	46:AN:165:GLU:O	2.19	0.43
45:BK:205:ASP:OD1	45:BK:205:ASP:N	2.50	0.43
46:BN:105:HIS:CD2	46:BN:150:LEU:HB2	2.54	0.43
45:CA:76:ASP:HA	45:CA:79:ARG:HD3	2.00	0.43
46:CD:102:ALA:HB1	46:CD:401:GLU:HB2	2.01	0.43
46:CJ:19:LYS:NZ	46:CJ:223:GLY:O	2.40	0.43
46:CL:7:ILE:O	46:CL:135:ILE:HA	2.19	0.43
45:DA:377:MET:SD	45:DA:379:SER:HB3	2.58	0.43
46:DB:3:GLU:OE2	46:DB:127:CYS:HB2	2.18	0.43
46:DB:91:VAL:HG21	46:DB:116:VAL:HB	2.00	0.43
46:DB:391:ARG:HA	46:DB:391:ARG:HD2	1.71	0.43
45:DC:259:LEU:HD11	45:DC:316:SER:HB3	2.00	0.43
45:DG:265:ILE:HG12	45:DG:432:TYR:HE1	1.83	0.43
45:DK:345:ASP:OD1	45:DK:345:ASP:N	2.52	0.43
46:DL:16:ILE:HD13	46:DL:226:ASN:OD1	2.19	0.43
46:DL:68:LEU:HB3	46:DL:96:GLY:HA2	2.00	0.43
46:EB:186:THR:OG1	46:EB:415:MET:SD	2.66	0.43
45:EC:171:ILE:HG13	45:EC:204:LEU:HB2	2.00	0.43
45:EC:262:TYR:OH	46:ED:391:ARG:O	2.34	0.43
45:EE:102:ASN:ND2	45:EE:105:ARG:HG3	2.34	0.43
45:EI:55:GLU:OE2	45:EI:61:HIS:NE2	2.52	0.43
46:EJ:372:THR:HA	46:EJ:422:TYR:CE2	2.49	0.43
46:EN:105:HIS:HD2	46:EN:106:TYR:HE1	1.64	0.43
45:FC:176:GLN:NE2	45:FC:207:GLU:OE2	2.51	0.43
45:FK:47:ASP:CG	45:FK:48:ALA:H	2.21	0.43
45:FK:71:GLU:HA	45:FK:72:PRO:HD3	1.85	0.43
45:FM:169:PHE:HB3	45:FM:204:LEU:HD12	2.00	0.43
46:GF:68:LEU:HB3	46:GF:96:GLY:HA2	1.99	0.43
45:GK:426:ALA:O	45:GK:430:LYS:HG2	2.18	0.43
46:GL:341:PHE:CE1	46:GL:349:ILE:HD11	2.53	0.43
45:GM:68:LEU:HD21	45:GM:118:CYS:SG	2.58	0.43
46:HB:172:SER:OG	46:HB:205:GLU:OE2	2.25	0.43
45:HC:21:TRP:CZ2	45:HC:65:ALA:HB2	2.53	0.43
46:HF:97:ALA:O	46:HF:103:LYS:HD2	2.19	0.43
46:HF:135:ILE:HB	46:HF:166:THR:HG22	2.00	0.43
45:HG:191:THR:HG21	45:HG:425:LEU:HD21	2.00	0.43
45:HG:242:LEU:HD11	45:HG:252:ILE:HG12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HI:244:PHE:HB2	45:HI:356:ASN:HD21	1.83	0.43
46:HJ:391:ARG:HA	46:HJ:391:ARG:HD2	1.83	0.43
46:HL:36:TYR:CD1	46:HL:44:LEU:HD21	2.53	0.43
46:HL:256:ASN:O	46:HL:312:THR:HG21	2.18	0.43
46:HN:310:TYR:HB2	46:HN:341:PHE:HD2	1.82	0.43
46:HN:391:ARG:HD2	46:HN:391:ARG:HA	1.80	0.43
46:IB:97:ALA:HB3	46:IB:143:THR:HB	1.99	0.43
46:IB:386:THR:HA	46:IB:389:PHE:HB3	2.00	0.43
45:IC:120:ASP:O	45:IC:124:LYS:HG2	2.19	0.43
46:ID:173:PRO:HB3	46:ID:384:GLN:NE2	2.34	0.43
45:IE:69:ASP:OD1	45:IE:70:LEU:N	2.51	0.43
46:IF:201:VAL:HG23	46:IF:301:CYS:SG	2.59	0.43
45:IG:256:GLN:HB2	46:IJ:397:TRP:CZ2	2.53	0.43
45:IK:2:ARG:HD2	45:IK:242:LEU:O	2.18	0.43
46:IL:362:LYS:HE3	46:IL:362:LYS:HB2	1.88	0.43
46:IN:145:SER:HB2	46:IN:188:SER:OG	2.18	0.43
45:JC:188:ILE:O	45:JC:191:THR:OG1	2.32	0.43
45:JE:183:GLU:HG2	45:JE:184:PRO:HD3	2.00	0.43
46:JH:389:PHE:HZ	46:JH:405:GLU:HG3	1.84	0.43
45:JK:1:MET:O	45:JK:131:GLY:HA3	2.18	0.43
46:JL:11:GLN:O	46:JL:15:GLN:HG2	2.18	0.43
46:JL:306:ARG:HG2	46:JL:340:TYR:HE1	1.82	0.43
45:JM:209:ILE:HG21	45:JM:227:LEU:HG	2.01	0.43
45:JM:317:MET:HA	45:JM:377:MET:HA	2.00	0.43
45:KA:262:TYR:HD2	45:KA:265:ILE:HD11	1.83	0.43
46:KD:114:ASP:OD2	46:KD:115:SER:N	2.51	0.43
46:KD:272:PRO:HG3	46:KD:284:LEU:HD21	2.00	0.43
46:KF:392:LYS:HG2	46:KF:395:LEU:HD22	2.00	0.43
45:KI:31:GLN:HG3	45:KI:37:PRO:HG3	2.01	0.43
46:KJ:53:GLU:OE1	46:KJ:54:ALA:N	2.51	0.43
46:KJ:257:LEU:HD23	46:KJ:266:PHE:CZ	2.54	0.43
45:LA:288:VAL:HG21	45:LA:327:ASP:HB3	2.00	0.43
45:LG:351:PHE:HB2	46:LJ:176:SER:OG	2.18	0.43
45:MA:36:MET:SD	45:MA:37:PRO:HD2	2.58	0.43
45:MA:214:ARG:HH11	46:MB:324:LYS:HZ3	1.66	0.43
46:MB:107:THR:HG23	46:MB:108:GLU:N	2.34	0.43
46:MH:3:GLU:OE2	46:MH:127:CYS:HB2	2.17	0.43
46:MH:386:THR:O	46:MH:390:ARG:HG3	2.18	0.43
46:ML:113:ILE:HD13	46:ML:150:LEU:HD22	2.00	0.43
45:MM:429:GLU:O	45:MM:433:GLU:HG2	2.17	0.43
46:ND:173:PRO:HD2	46:ND:174:LYS:HZ1	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NG:129:CYS:HB2	45:NG:132:LEU:HD21	2.01	0.43
46:NN:345:ILE:HG23	46:NN:348:ASN:HD22	1.82	0.43
45:OC:185:TYR:HE1	45:OC:398:MET:HB3	1.83	0.43
46:OD:316:LEU:HD23	46:OD:352:SER:HB2	1.98	0.43
45:OI:55:GLU:OE2	45:OI:59:GLY:N	2.52	0.43
45:OK:178:SER:HB2	46:OL:347:ASN:ND2	2.32	0.43
45:OM:279:GLU:H	45:OM:279:GLU:CD	2.21	0.43
46:ON:94:GLN:N	46:ON:94:GLN:OE1	2.51	0.43
45:PA:88:HIS:HB3	45:PA:91:GLN:CG	2.48	0.43
45:PA:121:ARG:HH21	45:PA:124:LYS:HD3	1.83	0.43
45:PA:183:GLU:N	45:PA:184:PRO:HD2	2.33	0.43
46:PB:274:THR:HG21	46:PB:282:ARG:HG3	2.00	0.43
46:PB:290:THR:HG21	46:PB:329:GLN:NE2	2.33	0.43
45:PC:349:THR:O	46:PF:179:VAL:HG23	2.19	0.43
45:PE:259:LEU:HD23	45:PE:268:MET:SD	2.59	0.43
46:PF:178:THR:HG22	46:PF:180:VAL:H	1.83	0.43
45:PG:229:ARG:HH12	45:PG:363:VAL:HG11	1.84	0.43
45:PI:21:TRP:CZ3	45:PI:63:PRO:HB3	2.53	0.43
45:PI:203:MET:HG3	45:PI:384:ILE:HD11	1.99	0.43
46:PJ:39:ASP:OD1	46:PJ:40:SER:N	2.52	0.43
46:PJ:206:ALA:O	46:PJ:210:ILE:HD12	2.18	0.43
46:PL:321:MET:N	46:PL:321:MET:SD	2.91	0.43
45:QA:134:GLY:HA3	45:QA:165:SER:O	2.18	0.43
45:QG:257:THR:HA	46:QH:397:TRP:CE2	2.53	0.43
45:QI:47:ASP:HB3	45:QI:48:ALA:H	1.58	0.43
46:QN:99:ASN:HA	46:QN:142:GLY:H	1.82	0.43
46:QN:391:ARG:HG3	46:QN:393:ALA:H	1.84	0.43
45:RA:206:ASN:HB3	45:RA:210:TYR:CE2	2.53	0.43
46:RB:398:TYR:O	46:RB:403:MET:HB2	2.18	0.43
45:RC:268:MET:HB2	45:RC:379:SER:O	2.19	0.43
46:RJ:246:LEU:HD11	45:RK:224:TYR:HE2	1.84	0.43
46:RL:31:ASP:OD2	46:RL:37:HIS:ND1	2.52	0.43
45:SA:47:ASP:O	45:SA:50:ASN:ND2	2.51	0.43
46:SF:67:ASP:OD1	46:SF:68:LEU:N	2.48	0.43
46:SH:148:GLY:O	46:SH:152:ILE:HG12	2.19	0.43
46:SL:1:MET:SD	46:SL:2:ARG:N	2.91	0.43
46:SN:97:ALA:HB3	46:SN:143:THR:HB	2.01	0.43
45:TA:20:CYS:HB2	45:TA:24:PHE:HE2	1.83	0.43
45:TE:98:ASP:O	45:TE:105:ARG:NH1	2.51	0.43
45:TI:237:SER:HA	45:TI:320:ARG:HH11	1.82	0.43
45:TI:274:PRO:HG2	45:TI:371:VAL:HG21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TM:237:SER:HA	45:TM:320:ARG:HH11	1.82	0.43
46:TN:44:LEU:HD23	46:TN:47:ILE:HD11	2.01	0.43
45:UA:54:SER:HB3	45:UA:64:ARG:HE	1.82	0.43
45:UC:185:TYR:HA	45:UC:395:PHE:CE2	2.54	0.43
45:UC:317:MET:HB3	45:UC:377:MET:HG2	2.01	0.43
46:UD:309:ARG:NH2	46:UD:426:GLN:O	2.31	0.43
45:UE:98:ASP:OD1	45:UE:99:ALA:N	2.52	0.43
46:UF:143:THR:OG1	49:UF:501:GDP:O1B	2.24	0.43
45:UI:104:ALA:HB2	45:UI:413:MET:HE2	2.00	0.43
45:UI:245:ASP:N	45:UI:245:ASP:OD1	2.49	0.43
46:UN:282:ARG:NH2	46:UN:292:GLN:OE1	2.51	0.43
45:VA:22:GLU:HG3	45:VA:83:TYR:OH	2.18	0.43
46:VB:150:LEU:HB2	46:VB:154:LYS:NZ	2.34	0.43
46:VB:214:THR:HG23	46:VB:215:LEU:HD22	2.00	0.43
45:VE:280:LYS:HD2	45:VE:283:HIS:HB2	2.00	0.43
45:VE:402:ARG:NH2	45:VE:415:GLU:OE1	2.51	0.43
46:VH:183:TYR:OH	46:VH:393:ALA:O	2.21	0.43
45:VI:326:LYS:HD3	46:VL:212:PHE:CZ	2.53	0.43
46:VL:226:ASN:HD21	49:VL:501:GDP:HN1	1.66	0.43
45:WA:26:LEU:HD21	45:WA:364:PRO:HD2	2.01	0.43
46:WF:238:CYS:SG	46:WF:239:CYS:N	2.91	0.43
46:WH:161:ASP:O	46:WH:251:ARG:NH2	2.50	0.43
46:WN:238:CYS:SG	46:WN:318:ARG:HD3	2.58	0.43
46:WN:287:PRO:O	46:WN:290:THR:OG1	2.36	0.43
19:1J:102:MET:HB2	39:6F:51:TYR:CD2	2.53	0.43
19:1J:229:VAL:N	29:2G:94:ILE:HG21	2.31	0.43
24:1P:162:VAL:HG23	24:2P:486:TRP:HZ3	1.84	0.43
13:1U:235:LYS:HB2	13:1U:235:LYS:HE2	1.85	0.43
27:2C:166:THR:HG22	27:2C:168:ASP:H	1.83	0.43
28:2F:18:LEU:HA	28:2F:21:GLU:OE1	2.18	0.43
29:2G:39:LYS:HD3	29:2G:39:LYS:HA	1.80	0.43
20:2K:253:LYS:HD3	20:2K:253:LYS:HA	1.79	0.43
23:2O:157:ASP:O	23:2O:161:THR:HG23	2.19	0.43
23:2O:395:PHE:O	23:2O:399:ILE:HG13	2.19	0.43
27:3C:90:ALA:O	27:3C:93:SER:OG	2.37	0.43
30:3H:220:ARG:HB3	45:MG:84:ARG:CZ	2.48	0.43
23:3O:482:LYS:HE2	23:3O:483:TYR:CE2	2.53	0.43
12:3T:105:ARG:O	12:3T:106:ILE:HD13	2.19	0.43
13:3U:493:PHE:HA	13:3U:509:GLY:HA2	2.00	0.43
15:3X:51:GLN:O	15:3X:55:GLU:HG3	2.19	0.43
36:5B:105:HIS:HB3	36:5B:110:ARG:HH21	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:5R:496:ILE:HG22	34:5R:498:LEU:HD22	2.01	0.43
41:6H:295:GLN:HE21	46:FH:362:LYS:HA	1.82	0.43
45:AC:2:ARG:HD3	45:AC:2:ARG:H	1.83	0.43
46:AD:1:MET:O	46:AD:2:ARG:HG2	2.19	0.43
45:AG:280:LYS:HE3	45:MG:89:PRO:HG2	1.98	0.43
45:BA:254:GLU:OE2	46:BD:99:ASN:ND2	2.52	0.43
45:BA:319:TYR:HB3	45:BA:323:VAL:HG11	1.99	0.43
46:BB:113:ILE:HA	46:BB:116:VAL:HG12	2.01	0.43
46:BD:208:TYR:CE1	46:BD:225:LEU:HD11	2.53	0.43
45:BG:119:LEU:HD11	45:BG:156:ARG:HB3	1.99	0.43
46:BJ:113:ILE:HA	46:BJ:116:VAL:HG12	2.00	0.43
45:BK:116:ASP:OD1	45:BK:116:ASP:N	2.52	0.43
46:CB:70:PRO:HG3	46:CB:92:PHE:HB2	2.00	0.43
46:CB:139:LEU:HD11	46:CB:168:SER:HB3	2.00	0.43
45:CE:245:ASP:OD1	45:CE:245:ASP:N	2.50	0.43
45:CG:254:GLU:HA	45:CG:257:THR:HG22	2.00	0.43
45:CG:259:LEU:HB3	45:CG:268:MET:CE	2.49	0.43
46:CJ:341:PHE:HD1	46:CJ:348:ASN:HD21	1.66	0.43
46:CL:359:LYS:HE2	46:CL:359:LYS:HB2	1.71	0.43
45:CM:324:VAL:O	45:CM:328:VAL:HG23	2.18	0.43
46:CN:306:ARG:NH1	46:CN:307:HIS:CE1	2.87	0.43
46:CN:385:PHE:HZ	46:CN:408:PHE:HD1	1.64	0.43
46:DF:268:ILE:HG22	46:DF:368:VAL:HG12	2.01	0.43
46:DF:372:THR:O	46:DF:375:GLN:HG2	2.19	0.43
45:DK:434:GLU:O	45:DK:437:ILE:HG12	2.18	0.43
46:DL:318:ARG:HH11	46:DL:318:ARG:HG2	1.84	0.43
46:DN:234:SER:HB2	46:DN:241:ARG:HH22	1.83	0.43
46:EB:130:LEU:O	46:EB:162:ARG:NH1	2.52	0.43
46:EB:317:PHE:HD2	46:EB:326:VAL:HG22	1.83	0.43
46:EB:394:PHE:HA	46:EB:397:TRP:CZ3	2.53	0.43
45:EE:287:SER:O	45:EE:291:ILE:HG23	2.19	0.43
45:EE:291:ILE:HG13	45:EE:292:THR:N	2.33	0.43
46:EJ:254:ALA:O	46:EJ:258:ILE:HG12	2.19	0.43
45:EK:48:ALA:HB1	45:EK:243:ARG:HB2	2.01	0.43
46:EL:303:ALA:HA	46:EL:376:GLU:OE2	2.19	0.43
46:EN:415:MET:O	46:EN:419:VAL:HG23	2.18	0.43
45:FC:60:LYS:HD3	45:GC:283:HIS:HD2	1.83	0.43
46:FL:135:ILE:HG13	46:FL:152:ILE:HD11	1.99	0.43
46:FN:318:ARG:HH11	46:FN:318:ARG:HG2	1.83	0.43
46:GB:12:CYS:O	46:GB:16:ILE:HG12	2.18	0.43
46:GB:299:MET:HE3	46:GB:301:CYS:N	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GB:324:LYS:O	46:GB:327:ASP:N	2.51	0.43
46:GD:345:ILE:O	46:GD:345:ILE:HG13	2.19	0.43
45:GE:156:ARG:HA	45:GE:156:ARG:HD2	1.76	0.43
45:GE:282:TYR:OH	45:GE:371:VAL:HA	2.17	0.43
45:GI:187:SER:O	45:GI:191:THR:HG23	2.18	0.43
45:GK:71:GLU:OE1	46:GL:2:ARG:NH1	2.52	0.43
46:GL:87:PRO:HA	46:GL:90:PHE:HD2	1.83	0.43
46:GL:274:THR:HG23	46:GL:282:ARG:HH21	1.84	0.43
46:HB:5:VAL:HG23	46:HB:62:ARG:HG2	2.01	0.43
45:HG:214:ARG:HG2	45:HG:214:ARG:HH11	1.84	0.43
45:HI:425:LEU:O	45:HI:429:GLU:HG3	2.19	0.43
46:HJ:3:GLU:OE2	46:HJ:127:CYS:HB2	2.18	0.43
46:HJ:139:LEU:HD13	46:HJ:168:SER:HB3	2.01	0.43
46:HN:169:VAL:O	46:HN:169:VAL:HG23	2.19	0.43
45:IE:164:LYS:O	45:IE:166:LYS:NZ	2.39	0.43
45:IG:224:TYR:O	45:IG:228:ASN:ND2	2.52	0.43
45:II:240:ALA:O	45:II:356:ASN:ND2	2.52	0.43
45:JA:167:LEU:HG	45:JA:200:VAL:HB	2.00	0.43
46:JB:116:VAL:HA	46:JB:119:VAL:HG22	1.99	0.43
45:JC:384:ILE:O	45:JC:387:VAL:HG22	2.19	0.43
45:JI:280:LYS:HB2	45:JI:280:LYS:HE3	1.78	0.43
45:JI:319:TYR:HB3	45:JI:323:VAL:HG21	2.01	0.43
46:JJ:183:TYR:O	46:JJ:187:LEU:HD23	2.19	0.43
46:JL:273:LEU:H	46:JL:292:GLN:NE2	2.16	0.43
45:KG:103:PHE:HB2	45:KG:186:ASN:HB3	2.00	0.43
45:KI:231:ILE:O	45:KI:235:ILE:HG12	2.18	0.43
46:KJ:198:GLU:OE2	46:KJ:254:ALA:HB2	2.18	0.43
45:LA:265:ILE:O	45:LA:265:ILE:HG13	2.19	0.43
46:LB:3:GLU:OE2	46:LB:128:ASP:N	2.51	0.43
46:LJ:304:ASP:OD1	46:LJ:306:ARG:HG2	2.19	0.43
45:LM:221:ARG:HB3	46:LN:322:SER:OG	2.18	0.43
45:LM:271:SER:HB3	45:LM:377:MET:HB3	2.01	0.43
45:MG:254:GLU:OE2	46:MJ:98:GLY:HA2	2.17	0.43
46:MN:208:TYR:CE1	46:MN:225:LEU:HD11	2.52	0.43
46:MN:345:ILE:O	46:MN:345:ILE:HG23	2.18	0.43
46:NB:376:GLU:O	46:NB:380:ARG:HG2	2.17	0.43
46:NB:376:GLU:OE2	46:NB:380:ARG:NH2	2.51	0.43
45:NC:11:GLN:HG3	45:NC:74:VAL:HG11	1.99	0.43
46:ND:151:LEU:O	46:ND:155:VAL:HG22	2.18	0.43
46:ND:345:ILE:O	46:ND:345:ILE:HG23	2.18	0.43
46:ND:405:GLU:CD	46:ND:405:GLU:H	2.21	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NE:143:GLY:HA3	47:NE:501:GTP:O2B	2.19	0.43
45:NE:395:PHE:HZ	45:NE:418:PHE:HB3	1.83	0.43
47:NI:501:GTP:O1G	46:NJ:252:LYS:NZ	2.52	0.43
45:NK:203:MET:HG3	45:NK:384:ILE:HD11	1.99	0.43
46:NL:25:SER:OG	46:NL:30:ILE:O	2.36	0.43
46:NL:103:LYS:HA	46:NL:401:GLU:OE2	2.19	0.43
45:NM:210:TYR:HE2	45:NM:227:LEU:HD21	1.83	0.43
45:NM:283:HIS:NE2	45:NM:371:VAL:HG23	2.34	0.43
46:OB:86:ARG:NH1	46:PB:281:TYR:HB3	2.34	0.43
45:OE:141:VAL:HG22	45:OE:187:SER:HA	1.99	0.43
45:OK:249:ASN:ND2	46:ON:11:GLN:OE1	2.45	0.43
46:OL:1:MET:SD	46:OL:2:ARG:HG3	2.59	0.43
46:OL:113:ILE:HD13	46:OL:150:LEU:HD21	2.01	0.43
46:OL:211:CYS:HA	46:OL:215:LEU:HB2	1.99	0.43
45:OM:275:ILE:HG23	45:OM:368:LEU:HD11	2.01	0.43
45:OM:276:ILE:HG23	45:OM:280:LYS:HB3	1.99	0.43
45:PA:105:ARG:HB3	45:PA:411:GLU:HB3	2.00	0.43
45:PA:181:VAL:HG12	46:PB:347:ASN:O	2.19	0.43
45:PC:174:SER:HB2	45:PC:177:VAL:O	2.19	0.43
45:PC:312:TYR:O	45:PC:344:VAL:HG23	2.19	0.43
45:PC:391:LEU:HD12	45:PC:391:LEU:HA	1.88	0.43
45:PE:387:VAL:HA	45:PE:390:ARG:HG2	2.01	0.43
45:PK:205:ASP:OD1	45:PK:303:ALA:HA	2.18	0.43
45:PM:96:LYS:HG2	46:PN:1:MET:SD	2.58	0.43
45:PM:147:SER:OG	45:PM:190:SER:HB2	2.18	0.43
45:QC:97:GLU:HG2	45:QC:105:ARG:HH22	1.84	0.43
46:QF:399:THR:HA	46:QF:403:MET:O	2.18	0.43
46:RB:86:ARG:NH1	46:SB:282:ARG:HD2	2.33	0.43
45:RC:133:GLN:HB3	45:RC:252:ILE:HG21	2.01	0.43
45:RC:277:SER:OG	45:RC:279:GLU:OE1	2.36	0.43
45:RE:21:TRP:CH2	45:RE:63:PRO:HB3	2.54	0.43
46:RF:419:VAL:HA	46:RF:422:TYR:HB3	1.99	0.43
45:RI:7:ILE:N	45:RI:136:LEU:O	2.45	0.43
45:RM:315:CYS:HB3	45:RM:350:GLY:O	2.19	0.43
45:SA:425:LEU:O	45:SA:429:GLU:HG2	2.18	0.43
45:SC:141:VAL:HG12	45:SC:171:ILE:O	2.19	0.43
46:SD:8:GLN:HE21	46:SD:65:LEU:HG	1.83	0.43
45:SE:229:ARG:NH1	45:SE:363:VAL:HG21	2.34	0.43
46:SF:32:PRO:HA	46:SF:84:LEU:HD11	2.01	0.43
46:SL:248:SER:HA	46:SL:252:LYS:HD3	1.99	0.43
46:SL:383:GLU:HA	46:SL:386:THR:HG22	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SM:318:MET:HB2	45:SM:376:CYS:HB3	1.99	0.43
45:TA:215:ARG:NH2	45:TA:299:ALA:O	2.46	0.43
46:TD:21:TRP:CZ3	46:TD:61:PRO:HB3	2.53	0.43
45:TE:223:THR:HG23	45:TE:225:THR:H	1.83	0.43
45:TG:205:ASP:OD1	45:TG:303:ALA:HA	2.18	0.43
45:TK:14:ILE:HG13	45:TK:69:ASP:OD2	2.18	0.43
45:TK:102:ASN:OD1	45:TK:105:ARG:N	2.43	0.43
45:TM:90:GLU:HG2	45:TM:121:ARG:NH1	2.34	0.43
45:UA:413:MET:HB3	45:UA:417:GLU:HG3	1.99	0.43
45:UC:221:ARG:N	45:UC:222:PRO:HD3	2.32	0.43
46:UF:144:GLY:N	49:UF:501:GDP:O1B	2.44	0.43
46:UH:204:ASN:OD1	49:UH:501:GDP:O2'	2.35	0.43
46:UJ:3:GLU:HB2	46:UJ:49:VAL:O	2.18	0.43
46:UJ:154:LYS:O	46:UJ:157:GLU:HG2	2.19	0.43
46:UL:257:LEU:HD12	46:UL:312:THR:HG23	1.99	0.43
46:UN:173:PRO:HG3	46:UN:380:ARG:HE	1.83	0.43
45:VA:288:VAL:HA	45:VA:291:ILE:HG12	2.00	0.43
45:VC:35:GLN:NE2	45:VC:60:LYS:HB3	2.34	0.43
45:VC:268:MET:HB2	45:VC:379:SER:O	2.18	0.43
45:VI:152:LEU:O	45:VI:156:ARG:HG2	2.19	0.43
45:VM:288:VAL:O	45:VM:292:THR:HG23	2.18	0.43
45:WA:18:ASN:HD21	45:WA:78:VAL:HG22	1.83	0.43
46:WH:375:GLN:O	46:WH:379:LYS:HG2	2.18	0.43
45:WI:340:THR:HG23	45:WI:341:ILE:HG13	2.01	0.43
45:WM:240:ALA:O	45:WM:244:PHE:HD2	2.02	0.43
46:WN:154:LYS:O	46:WN:157:GLU:HG2	2.19	0.43
46:WN:239:CYS:SG	46:WN:247:ASN:HA	2.58	0.43
14:0V:69:SER:OG	46:MN:336:LYS:HB3	2.18	0.43
8:1H:90:ARG:HH21	45:HK:282:TYR:HE1	1.65	0.43
25:1R:11:PHE:CD1	15:1X:81:ARG:HD3	2.54	0.43
13:1U:55:ASP:HB3	13:1U:74:GLN:HE22	1.83	0.43
14:1V:183:GLN:NE2	12:3T:89:ILE:O	2.28	0.43
26:1W:258:ASP:O	26:1W:261:LYS:HG2	2.19	0.43
27:2C:217:ILE:HG12	27:2C:258:LEU:HD11	2.00	0.43
27:2C:240:GLU:OE1	27:2C:241:PHE:HD1	2.02	0.43
28:2F:13:GLU:O	28:2F:17:LYS:HG2	2.19	0.43
29:2G:46:ASN:C	29:2G:48:TYR:H	2.22	0.43
20:2K:402:ASP:HA	20:2K:405:THR:HG22	2.01	0.43
22:2M:272:LEU:HD23	22:2M:272:LEU:H	1.84	0.43
25:2R:8:LEU:HB2	25:2R:11:PHE:CE2	2.53	0.43
25:2R:59:GLN:HG2	25:2R:61:GLY:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:2R:60:LYS:NZ	30:3H:220:ARG:H	2.17	0.43
25:2R:329:PHE:HB2	25:2R:361:PHE:CE1	2.54	0.43
13:2U:133:ASP:HB2	13:2U:140:LEU:HD11	2.00	0.43
15:2X:26:GLU:OE1	46:ML:276:ARG:NH2	2.51	0.43
30:3H:210:ILE:HG21	45:AG:40:ARG:HD3	2.01	0.43
12:3T:250:LEU:HD23	12:3T:250:LEU:H	1.83	0.43
13:3U:235:LYS:HD2	13:3U:235:LYS:HA	1.81	0.43
36:5C:79:LEU:HB3	46:NJ:320:ARG:HE	1.83	0.43
37:5E:123:ARG:NH2	45:OA:370:LYS:HB2	2.34	0.43
40:6G:108:LYS:HE2	45:VI:393:HIS:CG	2.53	0.43
45:AA:10:GLY:O	45:AA:14:ILE:HG12	2.18	0.43
45:AA:93:ILE:HG21	45:AA:117:LEU:HD11	1.99	0.43
45:AA:325:PRO:HA	45:AA:328:VAL:HG22	2.00	0.43
46:AH:4:ILE:HG13	46:AH:132:GLY:O	2.19	0.43
46:BD:260:PHE:CE1	46:BD:425:TYR:HE2	2.35	0.43
45:BE:145:THR:OG1	47:BE:501:GTP:O1B	2.37	0.43
46:BH:319:GLY:HA2	46:BH:357:PRO:HG3	2.01	0.43
45:BI:230:LEU:HD11	45:BI:275:ILE:HD13	2.01	0.43
45:CA:203:MET:HE3	45:CA:384:ILE:HG12	1.99	0.43
46:CB:268:ILE:HG13	46:CB:300:MET:HG3	2.00	0.43
45:CC:182:VAL:HG23	45:CC:404:PHE:HD2	1.82	0.43
45:CC:215:ARG:HG3	45:CC:215:ARG:NH1	2.33	0.43
45:CE:174:SER:HB3	45:CE:177:VAL:O	2.19	0.43
46:CH:67:ASP:OD2	46:CH:68:LEU:N	2.49	0.43
46:CJ:94:GLN:HA	46:CJ:94:GLN:OE1	2.18	0.43
45:CK:174:SER:HB2	45:CK:177:VAL:O	2.18	0.43
45:CM:3:GLU:N	45:CM:133:GLN:HE22	2.17	0.43
45:CM:51:THR:HG21	45:CM:243:ARG:HB3	1.99	0.43
45:DA:244:PHE:HB2	45:DA:356:ASN:HD21	1.84	0.43
45:DA:329:ASN:HA	45:DA:332:ILE:HG12	2.00	0.43
46:DB:344:TRP:CD2	45:DC:401:LYS:HE3	2.53	0.43
45:DI:10:GLY:O	45:DI:13:GLY:N	2.52	0.43
45:DI:71:GLU:HG2	45:DI:71:GLU:O	2.18	0.43
46:DJ:4:ILE:HD11	46:DJ:50:TYR:CZ	2.53	0.43
45:DM:21:TRP:CZ2	45:DM:65:ALA:HB2	2.53	0.43
46:EB:206:ALA:O	46:EB:210:ILE:HG13	2.18	0.43
45:EE:25:CYS:O	45:EE:30:ILE:N	2.52	0.43
45:EE:422:ARG:HH12	45:EE:425:LEU:HB3	1.84	0.43
45:EG:124:LYS:HE2	45:EG:124:LYS:HB2	1.84	0.43
45:EG:223:THR:HG23	45:EG:225:THR:H	1.83	0.43
46:EH:100:ASN:HB3	46:EH:103:LYS:HB3	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EL:213:ARG:NH1	46:EL:297:LYS:HG2	2.33	0.43
46:EL:237:THR:HG23	46:EL:241:ARG:HH21	1.82	0.43
46:FF:36:TYR:CD1	46:FF:44:LEU:HD21	2.54	0.43
46:FF:207:LEU:HB3	46:FF:225:LEU:HD22	2.00	0.43
45:FG:68:LEU:HD23	45:FG:93:ILE:HB	1.99	0.43
45:FM:79:ARG:O	45:FM:84:ARG:NE	2.51	0.43
46:FN:391:ARG:HD2	46:FN:391:ARG:HA	1.82	0.43
45:GA:252:ILE:HD12	45:GA:255:PHE:CD2	2.53	0.43
46:GB:212:PHE:CE1	46:GB:220:PRO:HG2	2.53	0.43
46:GB:248:SER:HA	46:GB:252:LYS:HD2	2.00	0.43
46:GB:325:GLU:N	46:GB:325:GLU:OE2	2.51	0.43
45:GE:73:THR:HG23	46:GF:2:ARG:HH22	1.84	0.43
45:GI:387:VAL:HA	45:GI:390:ARG:HG2	2.01	0.43
45:GK:54:SER:HB3	45:GK:64:ARG:CZ	2.48	0.43
45:GK:135:PHE:HB2	45:GK:166:LYS:HG2	2.01	0.43
45:GK:422:ARG:HD2	45:GK:422:ARG:HA	1.89	0.43
45:GM:13:GLY:HA2	45:GM:16:VAL:HG12	2.00	0.43
45:GM:103:PHE:CE1	45:GM:148:GLY:HA2	2.53	0.43
46:HH:318:ARG:HD3	46:HH:358:PRO:HG3	2.00	0.43
46:HJ:39:ASP:OD1	46:HJ:39:ASP:N	2.51	0.43
46:IB:15:GLN:HB3	46:IB:19:LYS:NZ	2.34	0.43
45:IC:156:ARG:HD3	45:IC:156:ARG:HA	1.92	0.43
46:ID:334:GLN:HE22	46:ID:347:ASN:HA	1.83	0.43
46:IF:221:THR:HG23	46:IF:223:GLY:H	1.84	0.43
45:IG:175:PRO:HG3	45:IG:390:ARG:CZ	2.48	0.43
45:II:377:MET:HE3	45:II:377:MET:HB3	1.98	0.43
45:IK:263:PRO:HD3	46:IN:396:HIS:CE1	2.54	0.43
45:IM:212:ILE:HD11	45:IM:300:ASN:HA	1.99	0.43
45:IM:395:PHE:HE2	45:IM:422:ARG:HD3	1.84	0.43
45:JA:10:GLY:O	45:JA:14:ILE:HG12	2.19	0.43
46:JB:178:THR:O	46:JB:181:GLU:HG3	2.19	0.43
46:JD:218:THR:HG23	46:JD:219:THR:HG22	2.01	0.43
45:JG:109:THR:HG22	45:JG:110:ILE:HG23	2.01	0.43
45:JG:221:ARG:NE	46:JH:325:GLU:OE2	2.52	0.43
45:JG:258:ASN:OD1	46:JJ:179:VAL:HG22	2.18	0.43
45:KC:303:ALA:O	45:KC:305:CYS:N	2.51	0.43
45:KE:56:THR:OG1	45:LE:283:HIS:O	2.37	0.43
46:KF:248:SER:HA	46:KF:252:LYS:HD2	2.01	0.43
46:KF:318:ARG:NH1	46:KF:358:PRO:HG3	2.33	0.43
45:KG:231:ILE:O	45:KG:235:ILE:HG12	2.18	0.43
46:LB:86:ARG:NH1	46:LB:87:PRO:HD2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LB:254:ALA:O	46:LB:258:ILE:HG22	2.17	0.43
45:LE:185:TYR:CE1	45:LE:398:MET:HE3	2.54	0.43
46:LF:377:MET:HG3	46:LF:378:PHE:N	2.32	0.43
45:LG:181:VAL:HG13	45:LG:182:VAL:HG13	2.00	0.43
45:LI:71:GLU:HG2	45:LI:71:GLU:O	2.18	0.43
45:LI:188:ILE:HG22	45:LI:421:ALA:HB1	2.01	0.43
45:MA:296:PHE:CE2	45:MA:335:ILE:HG21	2.54	0.43
46:MD:262:ARG:NH2	46:MD:421:GLU:OE1	2.51	0.43
46:MF:175:VAL:HG22	46:MF:205:GLU:OE2	2.17	0.43
45:MI:9:VAL:HG12	45:MI:68:LEU:HB2	2.01	0.43
45:MI:56:THR:HG23	45:MI:58:ALA:H	1.82	0.43
46:ML:68:LEU:HD12	46:ML:93:GLY:HA3	2.01	0.43
46:NL:6:HIS:HD2	46:NL:134:GLN:NE2	2.16	0.43
46:NL:248:SER:HA	46:NL:252:LYS:HD3	2.00	0.43
45:NM:33:ASP:HA	45:NM:85:GLN:NE2	2.33	0.43
46:NN:135:ILE:HD12	46:NN:152:ILE:HD11	2.00	0.43
46:NN:372:THR:HA	46:NN:422:TYR:HE2	1.82	0.43
45:OA:257:THR:HA	46:OD:397:TRP:CH2	2.54	0.43
46:OB:14:ASN:ND2	46:OB:65:LEU:HD23	2.34	0.43
46:OD:217:LEU:HD23	46:OD:217:LEU:H	1.84	0.43
45:OE:339:ARG:NE	45:OE:339:ARG:HA	2.34	0.43
46:OH:376:GLU:OE2	46:OH:376:GLU:HA	2.19	0.43
45:OI:268:MET:HB3	45:OI:379:SER:O	2.19	0.43
45:OK:71:GLU:OE1	46:OL:247:ASN:ND2	2.49	0.43
45:PA:121:ARG:O	45:PA:124:LYS:HG2	2.19	0.43
45:PA:406:HIS:HA	45:PA:409:VAL:HG22	1.99	0.43
46:PB:315:ALA:N	46:PB:350:LYS:O	2.47	0.43
45:PC:70:LEU:HA	45:PC:95:GLY:HA3	1.99	0.43
45:PC:350:GLY:HA2	46:PF:179:VAL:HG23	2.01	0.43
45:PE:22:GLU:OE1	45:PE:83:TYR:OH	2.25	0.43
46:PH:399:THR:HA	46:PH:403:MET:O	2.18	0.43
45:PI:135:PHE:HB2	45:PI:166:LYS:HG2	2.01	0.43
45:QC:268:MET:SD	45:QC:380:ASN:HB3	2.58	0.43
46:QF:60:VAL:HG21	46:QF:86:ARG:HD3	2.01	0.43
46:QF:182:PRO:O	46:QF:186:THR:HG23	2.19	0.43
46:QF:341:PHE:HD1	46:QF:348:ASN:HD21	1.65	0.43
46:QH:130:LEU:HB3	46:QH:162:ARG:HE	1.82	0.43
45:QI:54:SER:HB3	45:QI:64:ARG:CZ	2.48	0.43
45:QM:284:GLU:CD	45:QM:286:LEU:H	2.22	0.43
45:QM:285:GLN:HE22	45:QM:287:SER:CB	2.24	0.43
46:QN:183:TYR:HE2	46:QN:394:PHE:HB2	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RB:32:PRO:HA	46:RB:84:LEU:HD21	2.00	0.43
45:RE:60:LYS:HZ3	45:SE:283:HIS:CE1	2.36	0.43
45:RG:7:ILE:HG22	45:RG:66:VAL:HG22	2.00	0.43
46:RJ:324:LYS:NZ	45:RK:210:TYR:HD2	2.14	0.43
46:RJ:347:ASN:O	45:RK:181:VAL:HG12	2.18	0.43
45:RK:11:GLN:HG3	45:RK:74:VAL:HG11	1.99	0.43
46:RL:205:GLU:OE2	46:RL:302:ALA:HB2	2.19	0.43
45:RM:280:LYS:HA	45:RM:283:HIS:CD2	2.53	0.43
46:RN:135:ILE:HG13	46:RN:152:ILE:HD11	2.01	0.43
46:SB:83:GLN:O	46:TB:281:TYR:OH	2.21	0.43
45:SC:205:ASP:OD1	45:SC:303:ALA:HA	2.18	0.43
46:SD:247:ASN:C	46:SD:247:ASN:ND2	2.72	0.43
46:SF:293:MET:SD	46:SF:367:PHE:HB2	2.59	0.43
46:SJ:215:LEU:HD21	46:SJ:273:LEU:HD12	1.99	0.43
45:SK:254:GLU:O	45:SK:255:PHE:HD1	2.02	0.43
46:SL:86:ARG:HD2	46:TL:281:TYR:HB3	2.00	0.43
45:TA:228:ASN:O	45:TA:232:ALA:N	2.43	0.43
46:TB:261:PRO:HD3	45:TC:406:HIS:NE2	2.31	0.43
45:TE:137:VAL:HG13	45:TE:168:GLY:HA2	2.01	0.43
46:TF:86:ARG:HE	46:UF:282:ARG:NH2	2.14	0.43
46:TF:344:TRP:HB3	46:TF:430:ALA:HB2	2.00	0.43
45:TG:71:GLU:HA	45:TG:72:PRO:HD3	1.88	0.43
45:TI:135:PHE:HB2	45:TI:166:LYS:HG2	2.00	0.43
46:TJ:139:LEU:HD13	46:TJ:168:SER:HB3	2.01	0.43
46:TL:9:GLY:HA2	46:TL:66:MET:O	2.18	0.43
45:UA:141:VAL:HG12	45:UA:171:ILE:O	2.19	0.43
46:UB:245:GLN:HG3	46:UB:246:LEU:HD12	2.00	0.43
46:UD:318:ARG:HD3	46:UD:358:PRO:HD3	2.01	0.43
46:UF:210:ILE:O	46:UF:214:THR:OG1	2.24	0.43
46:UH:299:MET:HG3	46:UH:305:PRO:HG3	2.00	0.43
46:UN:207:LEU:HD23	46:UN:225:LEU:HD22	1.99	0.43
45:VC:304:LYS:HD2	45:VC:304:LYS:HA	1.68	0.43
45:VE:102:ASN:OD1	45:VE:105:ARG:N	2.48	0.43
45:VG:300:ASN:O	45:VG:300:ASN:ND2	2.48	0.43
45:VG:324:VAL:HG12	45:VG:326:LYS:HG2	2.00	0.43
46:VH:118:ASP:OD1	46:VH:121:ARG:NH2	2.51	0.43
45:VK:21:TRP:CZ2	45:VK:65:ALA:HB2	2.53	0.43
45:VK:419:SER:O	45:VK:422:ARG:HB2	2.18	0.43
45:VK:425:LEU:O	45:VK:428:LEU:HB3	2.19	0.43
46:VN:164:MET:O	46:VN:198:GLU:N	2.51	0.43
45:WA:213:CYS:SG	45:WA:217:LEU:HD23	2.59	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WA:256:GLN:HB2	46:WD:397:TRP:CZ2	2.53	0.43
46:WB:330:MET:HB3	46:WB:349:ILE:HG21	2.01	0.43
46:WB:375:GLN:HB3	46:WB:419:VAL:HG23	2.01	0.43
45:WE:205:ASP:OD1	45:WE:303:ALA:HA	2.18	0.43
45:WE:214:ARG:HH12	45:WE:220:GLU:HA	1.83	0.43
46:WJ:308:GLY:HA2	46:WJ:426:GLN:HE21	1.83	0.43
45:WM:407:TRP:CE2	46:WN:255:VAL:HA	2.53	0.43
46:WN:234:SER:HB2	46:WN:241:ARG:HH22	1.82	0.43
14:OV:98:LEU:HD21	45:LM:415:GLU:OE1	2.18	0.43
4:1D:35:LYS:HZ2	45:DG:84:ARG:HH12	1.64	0.43
8:1H:274:LEU:HD11	46:HF:359:LYS:HZ2	1.82	0.43
19:1J:302:PHE:HE1	45:HK:89:PRO:HB2	1.84	0.43
24:1P:222:LEU:HD22	45:TG:282:TYR:CE1	2.53	0.43
25:1R:152:LEU:HA	46:AF:78:ALA:O	2.18	0.43
25:1R:386:GLY:HA3	46:ED:217:LEU:HD21	2.00	0.43
14:1V:94:GLY:HA2	46:LJ:262:ARG:HG2	2.01	0.43
4:2D:37:GLN:OE1	45:DK:84:ARG:NH2	2.48	0.43
5:2E:44:ASP:CA	5:2E:78:THR:HG21	2.49	0.43
5:2E:130:PRO:O	5:2E:134:THR:N	2.52	0.43
31:2I:40:LYS:HB3	45:GG:214:ARG:NH2	2.34	0.43
21:2L:274:LYS:NZ	21:2L:376:ALA:HB1	2.33	0.43
21:2L:669:VAL:O	21:2L:673:VAL:HG23	2.19	0.43
21:2L:748:LYS:HZ3	21:2L:837:LYS:HA	1.82	0.43
23:2O:214:ILE:HG13	40:6G:85:PRO:O	2.18	0.43
13:2U:404:HIS:HD2	13:2U:408:VAL:HG22	1.84	0.43
16:3B:209:ASP:HA	16:3B:212:LEU:HD12	2.01	0.43
27:3C:237:LEU:HD22	27:3C:257:MET:HG3	2.00	0.43
21:3L:173:GLN:O	21:3L:176:ARG:HB2	2.19	0.43
25:3R:156:LYS:HE3	25:3R:166:TYR:CD2	2.53	0.43
11:3S:42:ASN:OD1	45:WK:128:ASN:ND2	2.33	0.43
12:3T:2:ASN:HA	12:3T:186:ASN:OD1	2.19	0.43
14:3V:121:GLU:O	14:3V:122:LYS:HE2	2.19	0.43
10:4Q:108:TYR:OH	45:AI:423:GLU:OE2	2.25	0.43
34:4R:459:ALA:HB2	34:4R:467:GLY:HA3	2.01	0.43
36:5C:145:ASN:OD1	36:5C:146:VAL:N	2.51	0.43
44:8R:117:ALA:HB1	45:PI:282:TYR:CZ	2.53	0.43
46:AB:208:TYR:CE1	46:AB:225:LEU:HD11	2.53	0.43
46:AH:376:GLU:HA	46:AH:376:GLU:OE2	2.18	0.43
46:AJ:9:GLY:HA2	46:AJ:66:MET:O	2.19	0.43
46:BB:326:VAL:HG21	46:BB:353:ILE:HD11	2.00	0.43
45:BC:199:ASP:HB3	45:BC:256:GLN:HG2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BD:87:PRO:HA	46:BD:90:PHE:CD1	2.54	0.43
46:BH:221:THR:HG23	46:BH:223:GLY:H	1.83	0.43
45:CC:288:VAL:HA	45:CC:291:ILE:HG12	1.99	0.43
45:CE:356:ASN:OD1	45:CE:357:TYR:N	2.52	0.43
46:CF:318:ARG:NH1	46:CF:358:PRO:HG3	2.33	0.43
46:CL:391:ARG:HA	46:CL:391:ARG:HD2	1.84	0.43
45:CM:155:GLU:HG3	45:CM:156:ARG:HD2	2.00	0.43
46:CN:372:THR:HG21	46:CN:426:GLN:HB2	2.00	0.43
45:DC:21:TRP:CH2	45:DC:52:PHE:HB3	2.53	0.43
46:DH:262:ARG:HG3	46:DH:262:ARG:HH11	1.83	0.43
46:DJ:207:LEU:HD13	46:DJ:225:LEU:HB3	2.00	0.43
45:DK:288:VAL:HA	45:DK:291:ILE:HG12	2.01	0.43
46:DL:295:ASP:OD2	46:DL:297:LYS:HG2	2.19	0.43
45:DM:183:GLU:N	45:DM:184:PRO:HD2	2.34	0.43
46:DN:31:ASP:OD2	46:DN:37:HIS:HD2	2.02	0.43
46:DN:106:TYR:HE2	46:DN:403:MET:HG3	1.83	0.43
46:DN:406:MET:O	46:DN:410:GLU:OE1	2.37	0.43
45:EA:167:LEU:HG	45:EA:200:VAL:HB	2.01	0.43
45:EA:325:PRO:HA	45:EA:328:VAL:HB	2.00	0.43
46:ED:271:ALA:HB3	46:ED:365:VAL:HB	2.01	0.43
45:EE:188:ILE:HD11	45:EE:391:LEU:HB3	1.99	0.43
45:EE:241:SER:OG	45:EE:250:VAL:O	2.29	0.43
45:EK:88:HIS:CE1	45:EK:90:GLU:HG2	2.54	0.43
45:FC:288:VAL:HG11	45:FC:327:ASP:HB3	1.99	0.43
46:FD:55:THR:HG23	46:GD:283:ALA:HA	2.00	0.43
45:FE:113:GLU:N	45:FE:113:GLU:OE1	2.52	0.43
46:FF:68:LEU:HD23	46:FF:68:LEU:HA	1.87	0.43
46:FF:201:VAL:O	46:FF:202:ILE:HD13	2.18	0.43
46:FJ:69:GLU:HG3	46:FJ:71:GLY:H	1.84	0.43
46:FN:153:SER:HA	46:FN:156:ARG:CZ	2.48	0.43
46:FN:331:LEU:HD12	46:FN:334:GLN:NE2	2.33	0.43
45:GA:206:ASN:HA	45:GA:209:ILE:HG12	2.00	0.43
46:GB:97:ALA:HB3	46:GB:143:THR:HB	2.00	0.43
46:GB:285:THR:O	46:GB:288:GLU:HG3	2.18	0.43
45:GC:205:ASP:OD1	45:GC:303:ALA:HA	2.18	0.43
45:GE:55:GLU:HG3	45:GE:57:GLY:H	1.84	0.43
45:GE:414:GLU:HB2	45:GE:417:GLU:HG2	2.01	0.43
46:GF:324:LYS:O	46:GF:328:GLU:HG2	2.19	0.43
45:GM:56:THR:HG23	45:GM:58:ALA:H	1.84	0.43
46:HD:6:HIS:ND1	46:HD:134:GLN:OE1	2.39	0.43
46:HD:256:ASN:O	46:HD:312:THR:HG21	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HE:224:TYR:HE2	46:HF:246:LEU:HD11	1.84	0.43
46:HF:52:ASN:OD1	46:HF:62:ARG:NH2	2.51	0.43
45:HI:3:GLU:OE1	45:HI:129:CYS:HB3	2.19	0.43
46:HJ:36:TYR:CZ	46:HJ:44:LEU:HD11	2.54	0.43
46:IB:313:ALA:HB1	46:IB:367:PHE:CE1	2.53	0.43
45:IC:254:GLU:HA	45:IC:257:THR:HG22	2.01	0.43
45:IC:288:VAL:HA	45:IC:291:ILE:HG12	2.00	0.43
46:IL:148:GLY:O	46:IL:152:ILE:HG13	2.18	0.43
45:JA:141:VAL:HG21	45:JA:172:TYR:CE1	2.53	0.43
46:JB:99:ASN:HA	46:JB:142:GLY:HA3	2.01	0.43
46:JH:101:TRP:CE3	46:JH:187:LEU:HD13	2.54	0.43
46:KB:239:CYS:SG	46:KB:247:ASN:HA	2.59	0.43
46:KD:201:VAL:HG21	46:KD:374:ILE:HD11	2.00	0.43
45:KE:408:TYR:O	45:KE:413:MET:HB3	2.18	0.43
46:KH:113:ILE:HD13	46:KH:150:LEU:HD22	2.01	0.43
46:KJ:132:GLY:HA3	46:KJ:163:ILE:HG22	2.00	0.43
45:KM:119:LEU:HA	45:KM:122:ILE:HG22	2.00	0.43
46:LB:274:THR:HG23	46:LB:279:GLN:HE21	1.84	0.43
46:LB:334:GLN:HE22	46:LB:348:ASN:N	2.16	0.43
45:LC:408:TYR:HB3	45:LC:413:MET:SD	2.59	0.43
46:LD:237:THR:HG23	46:LD:241:ARG:HH21	1.84	0.43
46:LD:380:ARG:O	46:LD:384:GLN:HG3	2.19	0.43
45:LK:55:GLU:OE2	45:LK:56:THR:N	2.51	0.43
46:MB:322:SER:OG	46:MB:324:LYS:HB3	2.18	0.43
45:ME:175:PRO:HD2	45:ME:207:GLU:OE1	2.19	0.43
46:MF:91:VAL:HG21	46:MF:116:VAL:HB	2.01	0.43
45:MG:195:LEU:HD21	45:MG:264:ARG:HD2	1.99	0.43
45:MI:414:GLU:HG3	45:MI:416:GLY:H	1.84	0.43
46:ML:213:ARG:NH1	46:ML:297:LYS:HD2	2.32	0.43
45:MM:123:ARG:NH1	45:MM:127:ASP:HB3	2.34	0.43
45:MM:124:LYS:HE2	45:MM:124:LYS:HB2	1.80	0.43
45:MM:317:MET:HG2	45:MM:377:MET:HG3	2.00	0.43
45:NA:189:LEU:HD11	45:NA:418:PHE:HE1	1.84	0.43
45:NA:288:VAL:HG11	45:NA:323:VAL:HG13	2.01	0.43
45:NA:394:LYS:HZ1	46:NB:346:PRO:HG2	1.84	0.43
45:NC:345:ASP:OD1	45:NC:346:TRP:N	2.52	0.43
45:NE:174:SER:HB2	45:NE:177:VAL:O	2.19	0.43
46:NH:87:PRO:HA	46:NH:90:PHE:HD2	1.83	0.43
45:NM:414:GLU:HB3	45:NM:417:GLU:HG3	2.00	0.43
45:OC:276:ILE:CG2	45:OC:280:LYS:HB3	2.49	0.43
45:OC:413:MET:SD	45:OC:417:GLU:HG3	2.59	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OD:178:THR:HG22	46:OD:180:VAL:H	1.83	0.43
46:OD:272:PRO:HG3	46:OD:284:LEU:HD11	2.01	0.43
46:OL:137:HIS:O	46:OL:168:SER:HA	2.19	0.43
46:PD:317:PHE:HB2	46:PD:353:ILE:HD13	2.00	0.43
45:PK:68:LEU:HD21	45:PK:118:CYS:HB2	2.01	0.43
45:PK:439:THR:OG1	46:PN:390:ARG:NH2	2.50	0.43
46:PL:149:THR:HA	46:PL:152:ILE:HD12	2.01	0.43
45:QA:334:THR:HG22	45:QA:338:LYS:HZ3	1.83	0.43
46:QF:239:CYS:SG	46:QF:247:ASN:HA	2.59	0.43
45:QG:288:VAL:HA	45:QG:291:ILE:HG12	2.00	0.43
46:QH:101:TRP:HB2	46:QH:184:ASN:HB3	2.00	0.43
46:QH:103:LYS:HB2	46:QH:103:LYS:HE2	1.74	0.43
45:QI:188:ILE:HD11	45:QI:391:LEU:HB3	2.01	0.43
46:QL:109:GLY:O	46:QL:113:ILE:HG12	2.19	0.43
45:QM:25:CYS:O	45:QM:29:GLY:N	2.51	0.43
45:RA:31:GLN:HB2	45:RA:32:PRO:HD2	2.00	0.43
46:RB:113:ILE:HG23	46:RB:154:LYS:HZ2	1.83	0.43
45:RE:88:HIS:CE1	45:RE:90:GLU:HG2	2.54	0.43
45:RE:88:HIS:CG	45:RE:89:PRO:HD2	2.53	0.43
45:RG:220:GLU:HB2	45:RG:221:ARG:NH1	2.27	0.43
46:RJ:8:GLN:HE21	46:RJ:14:ASN:HA	1.84	0.43
46:RJ:284:LEU:HD12	46:RJ:362:LYS:HE2	2.01	0.43
45:RM:108:TYR:O	45:RM:112:LYS:NZ	2.51	0.43
45:RM:336:LYS:HE3	45:RM:351:PHE:CE1	2.54	0.43
46:RN:86:ARG:NE	46:RN:87:PRO:HD2	2.33	0.43
46:SB:327:ASP:OD1	46:SB:328:GLU:N	2.52	0.43
45:SC:329:ASN:ND2	46:SD:175:VAL:HG13	2.34	0.43
46:SJ:178:THR:HG22	46:SJ:180:VAL:H	1.84	0.43
46:SJ:252:LYS:HG2	46:SJ:350:LYS:HE3	2.01	0.43
46:SL:6:HIS:CE1	46:SL:8:GLN:HB3	2.52	0.43
45:SM:296:PHE:HD2	45:SM:335:ILE:HG12	1.84	0.43
45:TG:414:GLU:CD	45:TG:416:GLY:H	2.22	0.43
45:TI:248:LEU:HD11	46:TJ:222:TYR:HE2	1.84	0.43
45:TK:377:MET:HE2	45:TK:379:SER:HB3	2.00	0.43
45:TK:425:LEU:HD23	45:TK:425:LEU:HA	1.89	0.43
46:TL:361:LEU:HD12	46:TL:362:LYS:N	2.33	0.43
46:TN:145:SER:HB2	46:TN:188:SER:HB3	2.01	0.43
46:UB:333:VAL:HA	46:UB:336:LYS:HZ3	1.84	0.43
46:UN:100:ASN:ND2	46:UN:103:LYS:HB2	2.34	0.43
46:UN:173:PRO:HG3	46:UN:380:ARG:HH21	1.83	0.43
46:VB:221:THR:HG23	46:VB:224:ASP:H	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WA:217:LEU:HD12	45:WA:277:SER:HB3	2.01	0.43
45:WA:328:VAL:O	45:WA:332:ILE:HG12	2.19	0.43
46:WD:172:SER:OG	46:WD:205:GLU:OE1	2.30	0.43
46:WF:113:ILE:HA	46:WF:116:VAL:HG12	2.01	0.43
45:WK:377:MET:SD	45:WK:379:SER:HB3	2.59	0.43
46:WL:16:ILE:HD13	46:WL:226:ASN:OD1	2.19	0.43
45:WM:55:GLU:OE2	45:WM:56:THR:N	2.52	0.43
45:WM:118:CYS:SG	45:WM:153:LEU:HD11	2.58	0.43
46:WN:240:LEU:HD12	46:WN:249:ASP:HB2	2.00	0.43
8:1H:90:ARG:NH2	45:HK:279:GLU:O	2.52	0.43
20:1K:212:ARG:NH1	45:GA:370:LYS:O	2.50	0.43
14:1V:50:ASN:OD1	14:1V:51:LEU:N	2.51	0.43
15:1X:46:LYS:O	15:1X:50:GLU:HG2	2.19	0.43
1:2A:14:GLN:HG2	1:2A:19:ARG:HH11	1.83	0.43
1:2A:37:THR:HG23	1:2A:37:THR:O	2.18	0.43
16:2B:206:ARG:NH1	16:2B:210:LEU:HD21	2.34	0.43
4:2D:224:ARG:HH21	34:5R:492:ILE:HG23	1.84	0.43
31:2I:62:ASN:OD1	31:2I:63:LYS:N	2.46	0.43
21:2L:330:LYS:HE2	21:2L:337:GLY:O	2.18	0.43
21:2L:525:LEU:HD23	21:2L:525:LEU:HA	1.88	0.43
23:2O:272:ILE:HG22	23:2O:275:LYS:HZ1	1.84	0.43
24:2P:478:TRP:O	24:2P:481:ARG:HG2	2.19	0.43
11:2S:246:GLU:N	11:2S:246:GLU:OE1	2.51	0.43
12:2T:240:LYS:HA	12:2T:243:LYS:NZ	2.34	0.43
16:3B:165:GLU:HA	16:3B:168:GLU:HG2	2.01	0.43
27:3C:145:THR:HG22	27:3C:145:THR:O	2.19	0.43
32:3D:133:LEU:HD23	32:3D:139:PHE:HD2	1.84	0.43
5:3E:115:VAL:O	5:3E:159:ILE:N	2.49	0.43
21:3L:154:LEU:HG	21:3L:158:PHE:CE2	2.54	0.43
25:3R:232:LEU:HD21	46:BN:90:PHE:HD2	1.84	0.43
25:3R:502:CYS:SG	25:3R:506:THR:OG1	2.72	0.43
11:3S:146:LYS:HD2	45:WK:123:ARG:HD2	2.01	0.43
13:3U:161:LYS:HG2	13:3U:174:THR:HG22	2.01	0.43
36:5B:130:ASP:OD1	36:5B:131:ARG:N	2.52	0.43
36:5C:85:ARG:HB3	36:5C:87:ARG:HH12	1.83	0.43
37:5G:44:ARG:NH2	45:NG:55:GLU:O	2.52	0.43
37:5G:208:PRO:HD3	45:LK:430:LYS:NZ	2.33	0.43
34:6R:400:SER:HB2	46:EN:216:LYS:NZ	2.34	0.43
45:AA:326:LYS:HG3	45:AA:327:ASP:N	2.34	0.43
46:AB:97:ALA:HB3	46:AB:143:THR:HB	1.99	0.43
46:BB:49:VAL:HG12	46:BB:50:TYR:HD1	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BD:304:ASP:OD2	46:BD:306:ARG:HG3	2.19	0.43
45:BG:60:LYS:HD2	45:CG:283:HIS:CD2	2.54	0.43
46:BL:217:LEU:H	46:BL:217:LEU:HD23	1.82	0.43
46:CB:2:ARG:HB2	46:CB:131:GLN:HB2	2.01	0.43
46:CB:109:GLY:O	46:CB:113:ILE:HB	2.19	0.43
46:CB:296:ALA:HB3	46:CB:297:LYS:NZ	2.34	0.43
45:CE:105:ARG:NH2	45:CE:110:ILE:HD11	2.34	0.43
46:CH:205:GLU:OE2	46:CH:302:ALA:HB2	2.19	0.43
46:CH:391:ARG:HA	46:CH:391:ARG:HD2	1.85	0.43
45:DA:248:LEU:HB3	45:DA:355:ILE:HG12	2.01	0.43
46:DB:4:ILE:HD11	46:DB:50:TYR:OH	2.19	0.43
45:DC:278:ALA:HB2	45:DC:369:ALA:HA	2.01	0.43
46:DD:294:PHE:HD2	46:DD:333:VAL:HG21	1.83	0.43
46:DD:387:ALA:HA	46:DD:390:ARG:HE	1.84	0.43
45:DE:156:ARG:HA	45:DE:156:ARG:HD3	1.74	0.43
45:EA:310:GLY:HA3	45:EA:383:ALA:HB2	2.01	0.43
46:EB:105:HIS:CE1	46:EB:150:LEU:HD12	2.54	0.43
46:ED:55:THR:HG23	46:FD:283:ALA:HA	2.00	0.43
46:ED:113:ILE:HD11	46:ED:151:LEU:HA	2.00	0.43
46:EF:376:GLU:HG3	46:EF:377:MET:HE3	1.99	0.43
45:EG:103:PHE:CD2	45:EG:189:LEU:HD23	2.54	0.43
45:EG:209:ILE:HG12	45:EG:302:MET:HG3	2.01	0.43
46:EH:7:ILE:HG22	46:EH:64:ILE:HG12	2.00	0.43
46:EJ:246:LEU:HD11	45:EK:224:TYR:HE2	1.82	0.43
45:EK:371:VAL:HG22	45:EK:373:ARG:H	1.84	0.43
46:EL:319:GLY:N	46:EL:354:CYS:O	2.48	0.43
45:EM:174:SER:OG	45:EM:207:GLU:HG3	2.18	0.43
45:FA:194:LEU:O	45:FA:198:THR:HG22	2.19	0.43
45:FA:208:ALA:HB1	45:FA:301:MET:O	2.18	0.43
45:FA:208:ALA:O	45:FA:212:ILE:HG13	2.19	0.43
46:FH:372:THR:HA	46:FH:422:TYR:CE2	2.54	0.43
45:FI:248:LEU:HD12	45:FI:355:ILE:HD12	2.01	0.43
45:FK:212:ILE:HD11	45:FK:300:ASN:HA	2.00	0.43
45:GC:98:ASP:OD1	45:GC:99:ALA:N	2.51	0.43
46:GD:139:LEU:HD13	46:GD:168:SER:HB3	2.00	0.43
46:GF:55:THR:HG23	46:HF:283:ALA:HA	2.00	0.43
46:GF:318:ARG:HH11	46:GF:358:PRO:HG3	1.84	0.43
45:GM:11:GLN:O	45:GM:15:GLN:OE1	2.37	0.43
46:GN:137:HIS:HE2	46:GN:166:THR:HG1	1.63	0.43
46:HB:169:VAL:HG22	46:HB:202:ILE:HB	2.01	0.43
46:HF:183:TYR:CE2	46:HF:388:MET:HE3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HG:72:PRO:HD2	46:HH:2:ARG:NH1	2.33	0.43
46:HH:101:TRP:HB2	46:HH:184:ASN:HB3	2.01	0.43
46:HH:309:ARG:NH2	46:HH:342:VAL:HG23	2.34	0.43
46:HJ:273:LEU:O	46:HJ:292:GLN:NE2	2.50	0.43
46:HL:1:MET:O	46:HL:2:ARG:HG2	2.19	0.43
45:IA:129:CYS:SG	45:IA:130:THR:N	2.92	0.43
45:IA:256:GLN:NE2	46:ID:397:TRP:HH2	2.17	0.43
45:IC:107:HIS:ND1	45:IC:107:HIS:O	2.52	0.43
45:IM:26:LEU:HD21	45:IM:364:PRO:HD2	1.99	0.43
45:JC:88:HIS:HB3	45:JC:91:GLN:HB2	1.99	0.43
46:JD:4:ILE:HG22	46:JD:131:GLN:HB3	2.01	0.43
45:JE:10:GLY:O	45:JE:14:ILE:HG12	2.18	0.43
45:JI:98:ASP:OD1	45:JI:99:ALA:N	2.52	0.43
45:JM:387:VAL:HA	45:JM:390:ARG:HG2	2.01	0.43
46:KB:230:SER:HA	46:KB:233:MET:HE3	2.01	0.43
45:KC:152:LEU:HD12	45:KC:152:LEU:HA	1.90	0.43
45:KI:252:ILE:H	45:KI:252:ILE:HD12	1.84	0.43
46:KL:103:LYS:HE2	46:KL:103:LYS:HB2	1.77	0.43
46:LB:91:VAL:HG21	46:LB:116:VAL:HB	2.00	0.43
45:LE:56:THR:HG23	45:LE:58:ALA:H	1.83	0.43
46:MB:276:ARG:HD3	46:MB:279:GLN:HE22	1.84	0.43
46:MF:86:ARG:HD3	46:MF:86:ARG:HA	1.76	0.43
45:MK:21:TRP:CZ2	45:MK:65:ALA:HB2	2.54	0.43
45:MK:223:THR:HG22	45:MK:224:TYR:N	2.34	0.43
45:MM:53:PHE:HB3	45:MM:61:HIS:HB3	1.99	0.43
45:MM:178:SER:OG	45:MM:179:THR:N	2.52	0.43
45:NA:423:GLU:HA	45:NA:426:ALA:HB3	2.01	0.43
45:NC:181:VAL:HG13	45:NC:182:VAL:HG13	2.00	0.43
45:NC:208:ALA:O	45:NC:212:ILE:HG13	2.18	0.43
45:NE:141:VAL:HG22	45:NE:187:SER:HA	2.01	0.43
46:NF:116:VAL:O	46:NF:120:VAL:HG12	2.18	0.43
45:NG:70:LEU:HA	45:NG:95:GLY:HA3	2.01	0.43
45:NG:231:ILE:O	45:NG:235:ILE:HG12	2.19	0.43
46:NL:100:ASN:HB3	46:NL:103:LYS:HB2	2.01	0.43
46:NL:109:GLY:O	46:NL:113:ILE:HG23	2.19	0.43
45:NM:37:PRO:HB2	45:NM:39:ASP:OD1	2.19	0.43
46:NN:417:ASP:O	46:NN:421:GLU:HG2	2.18	0.43
46:OB:237:THR:HG23	46:OB:241:ARG:NH1	2.34	0.43
45:OK:142:GLY:HA2	45:OK:183:GLU:HB2	2.01	0.43
45:OM:324:VAL:HG12	45:OM:326:LYS:HG2	2.01	0.43
45:OM:340:THR:HG23	45:OM:341:ILE:HG13	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ON:287:PRO:N	46:ON:329:GLN:HE22	2.17	0.43
46:ON:289:LEU:O	46:ON:293:MET:N	2.45	0.43
45:PA:88:HIS:NE2	45:PA:90:GLU:HG2	2.33	0.43
45:PA:154:LEU:HD13	45:PA:197:HIS:HB2	2.01	0.43
46:PD:4:ILE:HG22	46:PD:131:GLN:HB3	2.01	0.43
46:PD:171:PRO:HB2	46:PD:181:GLU:OE2	2.19	0.43
46:PL:86:ARG:HG2	46:PL:88:ASP:H	1.84	0.43
45:PM:215:ARG:HH22	45:PM:299:ALA:C	2.21	0.43
45:QA:334:THR:C	45:QA:338:LYS:HZ3	2.22	0.43
45:QA:336:LYS:HB3	45:QA:336:LYS:HE3	1.80	0.43
45:QC:326:LYS:NZ	46:QD:220:PRO:O	2.49	0.43
45:QC:345:ASP:OD1	45:QC:346:TRP:N	2.52	0.43
45:QE:215:ARG:HG3	45:QE:216:ASN:ND2	2.34	0.43
46:QF:257:LEU:HD21	46:QF:314:SER:HB2	2.01	0.43
46:QH:247:ASN:ND2	45:QI:73:THR:HG21	2.33	0.43
45:QI:70:LEU:HB3	45:QI:98:ASP:HA	2.01	0.43
45:QI:284:GLU:OE2	45:QI:286:LEU:HD23	2.18	0.43
46:QJ:245:GLN:NE2	46:QJ:353:ILE:HG21	2.34	0.43
46:RB:375:GLN:NE2	46:RB:423:GLN:HB3	2.33	0.43
45:RE:168:GLY:N	45:RE:200:VAL:O	2.45	0.43
45:RG:141:VAL:HG12	45:RG:171:ILE:O	2.19	0.43
46:RL:272:PRO:HG3	46:RL:289:LEU:HD11	2.01	0.43
46:RN:87:PRO:HA	46:RN:90:PHE:CD2	2.54	0.43
46:SB:86:ARG:CZ	46:TB:281:TYR:HB3	2.49	0.43
46:SD:31:ASP:OD1	46:SD:35:THR:N	2.31	0.43
45:SG:240:ALA:CB	45:SG:320:ARG:HH21	2.31	0.43
45:SI:9:VAL:HG12	45:SI:68:LEU:HB2	2.01	0.43
46:SJ:309:ARG:HD3	46:SJ:342:VAL:HB	2.00	0.43
46:SL:190:HIS:ND1	46:SL:411:ALA:HA	2.34	0.43
46:SN:12:CYS:O	46:SN:15:GLN:NE2	2.50	0.43
46:SN:16:ILE:HD13	46:SN:226:ASN:OD1	2.19	0.43
46:TD:258:ILE:O	46:TD:258:ILE:HG13	2.19	0.43
45:TE:256:GLN:HB3	46:TF:397:TRP:CH2	2.53	0.43
45:TG:280:LYS:HA	45:TG:283:HIS:CD2	2.36	0.43
46:TH:68:LEU:HD12	46:TH:93:GLY:HA3	2.01	0.43
45:TI:271:SER:OG	45:TI:301:MET:SD	2.77	0.43
46:TJ:77:ARG:HH12	46:TJ:83:GLN:HA	1.84	0.43
45:TK:294:SER:HB3	45:TK:300:ASN:HD22	1.84	0.43
46:TL:21:TRP:CZ3	46:TL:61:PRO:HB3	2.54	0.43
45:UA:88:HIS:CD2	45:UA:90:GLU:HG2	2.54	0.43
46:UD:301:CYS:HB3	46:UD:377:MET:CE	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UE:3:GLU:OE2	45:UE:131:GLY:N	2.50	0.43
45:UE:35:GLN:HA	45:UE:35:GLN:OE1	2.18	0.43
46:UF:204:ASN:OD1	49:UF:501:GDP:O2'	2.35	0.43
46:VB:212:PHE:HE1	46:VB:220:PRO:HG2	1.83	0.43
46:VH:51:TYR:HE1	46:VH:61:PRO:HG3	1.83	0.43
46:VH:99:ASN:HA	46:VH:142:GLY:H	1.84	0.43
46:VL:362:LYS:HA	46:VL:362:LYS:HD3	1.79	0.43
45:VM:191:THR:HA	45:VM:194:LEU:HG	1.99	0.43
45:VM:317:MET:O	45:VM:353:VAL:HA	2.19	0.43
46:VN:158:GLU:HG3	46:VN:159:TYR:CD2	2.54	0.43
45:WI:31:GLN:HE22	45:WI:37:PRO:HG3	1.83	0.43
46:WJ:218:THR:HG23	46:WJ:219:THR:HG23	2.01	0.43
45:WK:234:VAL:HG13	45:WK:376:CYS:SG	2.59	0.43
46:WN:213:ARG:HB3	46:WN:297:LYS:NZ	2.33	0.43
46:WN:238:CYS:HA	46:WN:241:ARG:HH21	1.84	0.43
4:0D:170:PRO:HB3	45:EC:80:THR:HG22	2.01	0.43
4:0D:187:PHE:HA	45:FA:221:ARG:HG3	2.00	0.43
8:1H:90:ARG:NH1	45:HK:278:ALA:O	2.52	0.43
11:1S:145:ILE:HD11	11:1S:174:PHE:CZ	2.54	0.43
13:1U:496:VAL:O	13:1U:497:LEU:HD23	2.19	0.43
13:1U:574:HIS:CE1	13:1U:578:ILE:HD13	2.54	0.43
26:1W:216:GLU:OE1	27:3C:21:LEU:HD22	2.19	0.43
1:2A:14:GLN:HG2	1:2A:19:ARG:NH1	2.34	0.43
16:2B:180:GLU:HG3	26:2W:272:LYS:HZ2	1.83	0.43
4:2D:218:GLN:CG	4:2D:219:ASN:H	2.26	0.43
9:2N:154:SER:HB2	9:2N:171:VAL:HG12	2.00	0.43
23:2O:269:GLN:HA	23:2O:272:ILE:HG12	2.00	0.43
23:2O:338:LEU:HB3	23:2O:342:ARG:NH1	2.34	0.43
10:2Q:134:PHE:CD2	10:2Q:136:LEU:HG	2.54	0.43
25:2R:70:THR:HG21	46:MH:245:GLN:NE2	2.34	0.43
25:2R:293:ASP:OD2	25:2R:294:PRO:HD2	2.18	0.43
25:2R:310:LEU:HD11	46:CH:227:HIS:HE1	1.82	0.43
13:2U:180:LYS:HD2	45:VG:38:SER:H	1.84	0.43
16:3B:37:ASP:OD1	16:3B:82:TYR:OH	2.32	0.43
11:3S:97:ARG:HD3	11:3S:97:ARG:HA	1.71	0.43
11:3S:223:ASP:HB2	11:3S:226:ILE:HG22	2.00	0.43
35:4S:144:ILE:HD12	35:4S:144:ILE:H	1.84	0.43
36:5A:47:SER:HB3	36:5A:56:ILE:HD11	2.00	0.43
37:5G:18:THR:O	37:5G:22:LYS:HG3	2.19	0.43
37:5G:144:LEU:O	37:5G:148:GLN:HG2	2.18	0.43
37:5H:9:TYR:CD1	37:5H:10:PRO:HD3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:6R:422:TYR:HB2	34:6R:448:CYS:SG	2.59	0.43
34:7R:80:ARG:HH22	45:MA:38:SER:H	1.66	0.43
45:AA:21:TRP:CZ2	45:AA:65:ALA:HB2	2.54	0.43
46:AD:73:MET:CE	46:AD:92:PHE:HB3	2.49	0.43
45:AG:37:PRO:HB2	45:AG:39:ASP:O	2.19	0.43
46:AH:309:ARG:H	46:AH:372:THR:HG1	1.64	0.43
45:AK:98:ASP:O	45:AK:105:ARG:NH1	2.52	0.43
46:BB:21:TRP:CH2	46:BB:61:PRO:HB3	2.54	0.43
46:BB:233:MET:O	46:BB:237:THR:HG22	2.19	0.43
45:BC:207:GLU:HG2	45:BC:304:LYS:NZ	2.34	0.43
46:BF:372:THR:HA	46:BF:422:TYR:CE2	2.53	0.43
46:BH:141:GLY:HA3	49:BH:501:GDP:PB	2.59	0.43
45:BM:203:MET:HB3	45:BM:303:ALA:HB2	2.00	0.43
45:CA:211:ASP:HB3	45:CA:215:ARG:NH1	2.34	0.43
45:CC:14:ILE:HD11	45:CC:69:ASP:HB2	2.01	0.43
46:CD:372:THR:HA	46:CD:422:TYR:CE2	2.54	0.43
45:CE:66:VAL:HG11	45:CE:122:ILE:HD11	2.00	0.43
45:CK:384:ILE:O	45:CK:387:VAL:HG22	2.18	0.43
46:CL:14:ASN:O	46:CL:18:ALA:N	2.50	0.43
46:CL:87:PRO:HA	46:CL:90:PHE:HD2	1.83	0.43
45:CM:103:PHE:HB3	45:CM:408:TYR:HE2	1.84	0.43
45:CM:123:ARG:NH2	45:CM:127:ASP:HB3	2.28	0.43
46:DD:121:ARG:NH2	46:DD:158:GLU:OE1	2.52	0.43
45:DI:434:GLU:O	45:DI:437:ILE:HG12	2.19	0.43
46:DJ:301:CYS:HB3	46:DJ:377:MET:CE	2.49	0.43
46:DL:165:GLU:HG3	46:DL:198:GLU:HB2	2.01	0.43
45:EA:140:SER:OG	47:EA:501:GTP:O2B	2.37	0.43
45:EI:419:SER:O	45:EI:423:GLU:HG2	2.19	0.43
46:EL:392:LYS:HG2	46:EL:395:LEU:HD22	2.00	0.43
45:EM:223:THR:HG23	45:EM:225:THR:H	1.83	0.43
45:FA:185:TYR:HE2	45:FA:404:PHE:HB2	1.84	0.43
45:FC:431:ASP:O	45:FC:434:GLU:HG3	2.18	0.43
46:FH:268:ILE:HG22	46:FH:368:VAL:HG22	2.01	0.43
45:FI:68:LEU:HD11	45:FI:118:CYS:SG	2.59	0.43
45:FK:39:ASP:OD1	45:FK:39:ASP:N	2.52	0.43
45:FK:219:ILE:HD11	45:FK:367:ASP:OD2	2.19	0.43
45:FK:222:PRO:O	46:FL:322:SER:HB2	2.18	0.43
45:GA:14:ILE:HD11	45:GA:69:ASP:HB2	2.00	0.43
45:GA:19:ALA:HA	45:GA:22:GLU:OE2	2.18	0.43
46:GD:55:THR:HG23	46:HD:283:ALA:HA	2.00	0.43
45:GE:88:HIS:CE1	45:GE:90:GLU:HG3	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:GE:110:ILE:O	45:GE:114:ILE:HG12	2.18	0.43
45:GE:187:SER:O	45:GE:191:THR:HG23	2.19	0.43
46:GJ:21:TRP:CZ3	46:GJ:61:PRO:HB3	2.54	0.43
45:GM:100:ALA:HB3	46:GN:251:ARG:HH11	1.84	0.43
46:GN:236:VAL:HG13	46:GN:237:THR:HG23	2.00	0.43
46:GN:248:SER:HA	46:GN:252:LYS:HG3	2.00	0.43
46:GN:404:ASP:OD1	46:GN:404:ASP:N	2.51	0.43
45:HA:166:LYS:O	45:HA:199:ASP:HB3	2.19	0.43
45:HA:206:ASN:HA	45:HA:209:ILE:HG22	2.01	0.43
45:HC:290:GLU:N	45:HC:290:GLU:OE1	2.52	0.43
46:HD:42:LEU:HA	46:HD:45:GLU:HG3	2.00	0.43
45:HE:108:TYR:HA	45:HE:112:LYS:HE2	2.00	0.43
45:HG:275:ILE:HG23	45:HG:368:LEU:HD11	2.00	0.43
46:HH:69:GLU:HA	46:HH:70:PRO:HD3	1.88	0.43
46:HH:289:LEU:HD11	46:HH:363:MET:HB3	1.99	0.43
45:HM:192:HIS:ND1	45:HM:424:ASP:OD2	2.49	0.43
45:HM:318:MET:HB2	45:HM:376:CYS:SG	2.59	0.43
46:HN:372:THR:HA	46:HN:422:TYR:CE2	2.53	0.43
46:IB:31:ASP:OD2	46:IB:37:HIS:ND1	2.52	0.43
46:IB:293:MET:HG3	46:IB:294:PHE:HD2	1.84	0.43
46:IH:304:ASP:OD2	46:IH:306:ARG:NH1	2.52	0.43
45:IK:112:LYS:HE3	45:IK:112:LYS:HB3	1.74	0.43
45:IK:194:LEU:O	45:IK:198:THR:HG22	2.18	0.43
45:IK:326:LYS:NZ	46:IN:219:THR:HA	2.34	0.43
45:IM:177:VAL:HG22	46:IN:331:LEU:HD13	1.99	0.43
45:IM:261:PRO:CD	45:IM:262:TYR:N	2.82	0.43
45:JA:384:ILE:H	45:JA:384:ILE:HD12	1.84	0.43
45:JA:392:ASP:OD2	45:JA:422:ARG:NH1	2.52	0.43
46:JD:68:LEU:HD12	46:JD:97:ALA:HB2	2.00	0.43
45:JG:349:THR:HG23	46:JJ:179:VAL:HA	2.01	0.43
46:JH:232:ALA:O	46:JH:236:VAL:HG23	2.18	0.43
45:JI:331:SER:O	45:JI:335:ILE:HG12	2.19	0.43
46:JN:317:PHE:N	46:JN:352:SER:O	2.48	0.43
46:KB:139:LEU:HG	46:KB:188:SER:HB2	2.00	0.43
45:KI:71:GLU:HA	45:KI:72:PRO:HD3	1.88	0.43
46:KN:194:GLU:HG2	46:KN:195:ASN:OD1	2.18	0.43
45:LE:271:SER:HB3	45:LE:377:MET:HB3	2.01	0.43
45:LK:77:GLU:O	45:LK:81:GLY:N	2.52	0.43
45:MC:338:LYS:HE3	45:MC:338:LYS:HB3	1.81	0.43
45:MC:377:MET:SD	45:MC:379:SER:HB3	2.59	0.43
45:ME:66:VAL:HG11	45:ME:122:ILE:HD11	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:ME:248:LEU:HD12	45:ME:355:ILE:HD12	2.01	0.43
46:MH:116:VAL:HA	46:MH:119:VAL:HG12	2.01	0.43
45:MI:184:PRO:O	45:MI:188:ILE:HG12	2.19	0.43
45:MI:304:LYS:HD3	45:MI:304:LYS:HA	1.81	0.43
46:MJ:101:TRP:HB2	46:MJ:184:ASN:HB3	2.00	0.43
45:MK:223:THR:HG22	45:MK:224:TYR:H	1.84	0.43
45:MM:36:MET:O	45:MM:38:SER:N	2.51	0.43
45:MM:71:GLU:HA	45:MM:72:PRO:HD3	1.89	0.43
46:ND:31:ASP:OD2	46:ND:33:THR:OG1	2.37	0.43
45:NE:339:ARG:HG2	45:NE:339:ARG:HH11	1.84	0.43
45:NG:195:LEU:HD21	45:NG:264:ARG:HE	1.84	0.43
45:NG:332:ILE:HD12	45:NG:351:PHE:CD1	2.54	0.43
45:NI:143:GLY:HA3	47:NI:501:GTP:O2B	2.18	0.43
45:OA:420:GLU:HA	45:OA:423:GLU:HG3	2.01	0.43
45:OC:195:LEU:HD21	45:OC:264:ARG:HE	1.83	0.43
45:OC:394:LYS:O	45:OC:398:MET:HG2	2.18	0.43
46:OD:110:ALA:O	46:OD:113:ILE:HG22	2.19	0.43
46:OD:175:VAL:O	46:OD:175:VAL:HG23	2.19	0.43
46:OD:334:GLN:NE2	46:OD:348:ASN:OD1	2.52	0.43
45:OE:34:GLY:HA3	45:OE:60:LYS:HG3	2.00	0.43
45:OE:304:LYS:HB2	45:OE:304:LYS:HE2	1.83	0.43
46:OH:148:GLY:O	46:OH:152:ILE:HG12	2.19	0.43
46:OJ:217:LEU:HD23	46:OJ:217:LEU:H	1.83	0.43
46:ON:329:GLN:HA	46:ON:332:ASN:HD21	1.84	0.43
45:PA:88:HIS:CD2	45:PA:90:GLU:HG2	2.54	0.43
45:PA:401:LYS:O	45:PA:402:ARG:HG2	2.19	0.43
46:PB:156:ARG:HG3	46:PB:195:ASN:HB3	2.01	0.43
45:PC:205:ASP:OD1	45:PC:303:ALA:HA	2.19	0.43
45:PC:254:GLU:HA	45:PC:257:THR:HG22	2.01	0.43
46:PD:398:TYR:O	46:PD:403:MET:HB2	2.19	0.43
45:PK:97:GLU:HG3	45:PK:105:ARG:HH12	1.84	0.43
46:PN:145:SER:HB3	46:PN:188:SER:HB3	2.01	0.43
45:QC:243:ARG:HG3	45:QC:244:PHE:CE2	2.53	0.43
46:QJ:3:GLU:HB2	46:QJ:62:ARG:HH22	1.83	0.43
45:QM:32:PRO:HB3	45:QM:83:TYR:CE1	2.54	0.43
45:QM:196:GLU:HG2	45:QM:197:HIS:CE1	2.54	0.43
45:RA:21:TRP:HZ2	45:RA:65:ALA:HB2	1.84	0.43
45:RC:210:TYR:HE1	45:RC:227:LEU:HD11	1.84	0.43
45:RE:337:THR:O	45:RE:339:ARG:HD2	2.19	0.43
46:RF:10:GLY:O	46:RF:14:ASN:ND2	2.51	0.43
45:RG:320:ARG:HH12	45:RG:360:PRO:HA	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RH:324:LYS:HE2	46:RH:324:LYS:HA	2.00	0.43
45:RI:20:CYS:HA	45:RI:232:ALA:HB1	2.01	0.43
45:RI:71:GLU:HA	45:RI:72:PRO:HD3	1.83	0.43
46:RL:288:GLU:HG3	46:RL:291:GLN:NE2	2.34	0.43
45:RM:33:ASP:OD1	45:RM:34:GLY:N	2.51	0.43
46:SJ:7:ILE:HD13	46:SJ:64:ILE:HB	2.01	0.43
45:TA:332:ILE:HG22	45:TA:336:LYS:NZ	2.33	0.43
45:TE:174:SER:HB2	45:TE:177:VAL:O	2.18	0.43
45:TG:274:PRO:HG3	45:TG:286:LEU:HD12	2.01	0.43
45:TK:315:CYS:N	45:TK:350:GLY:O	2.46	0.43
46:TL:229:VAL:O	46:TL:233:MET:HE2	2.19	0.43
46:TL:289:LEU:O	46:TL:293:MET:N	2.45	0.43
45:TM:96:LYS:HB3	45:TM:96:LYS:HE3	1.83	0.43
45:TM:183:GLU:N	45:TM:184:PRO:HD2	2.34	0.43
45:UA:401:LYS:HB2	45:UA:401:LYS:HE3	1.74	0.43
46:UB:91:VAL:HG21	46:UB:116:VAL:HB	2.01	0.43
45:UC:188:ILE:HD12	45:UC:395:PHE:CD2	2.54	0.43
45:UC:256:GLN:H	45:UC:256:GLN:HG3	1.72	0.43
46:UD:213:ARG:HA	46:UD:213:ARG:HD3	1.80	0.43
45:UI:143:GLY:HA3	47:UI:501:GTP:O2B	2.19	0.43
46:UJ:318:ARG:HD3	46:UJ:358:PRO:HD3	2.01	0.43
45:UM:124:LYS:HE2	45:UM:124:LYS:HB2	1.84	0.43
46:UN:290:THR:HG21	46:UN:329:GLN:OE1	2.19	0.43
45:VA:104:ALA:HB2	45:VA:413:MET:HG2	2.00	0.43
45:VA:143:GLY:HA3	47:VA:501:GTP:O2B	2.19	0.43
46:VB:267:MET:CE	46:VB:301:CYS:HB2	2.49	0.43
46:VD:97:ALA:O	46:VD:103:LYS:HD2	2.19	0.43
46:VF:230:SER:HA	46:VF:233:MET:HE2	2.00	0.43
45:VG:34:GLY:O	45:VG:60:LYS:HB2	2.18	0.43
46:VJ:73:MET:HA	46:VJ:76:VAL:HG12	2.01	0.43
45:VK:141:VAL:HG11	45:VK:172:TYR:CD1	2.53	0.43
45:VK:174:SER:HB2	45:VK:177:VAL:O	2.19	0.43
45:WA:209:ILE:HA	45:WA:212:ILE:HD12	2.01	0.43
45:WA:221:ARG:NH2	46:WB:325:GLU:OE2	2.51	0.43
46:WB:86:ARG:NH1	46:WB:88:ASP:HB3	2.34	0.43
45:WC:174:SER:HB3	45:WC:207:GLU:HB2	2.01	0.43
46:WH:73:MET:HE1	46:WH:92:PHE:HB3	2.01	0.43
46:WH:390:ARG:HH11	46:WH:391:ARG:HD3	1.84	0.43
45:WI:276:ILE:HD12	45:WI:280:LYS:NZ	2.34	0.43
46:WL:172:SER:HB3	46:WL:203:ASP:OD1	2.19	0.43
4:1D:93:GLN:HG3	45:EG:32:PRO:CD	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:1J:49:ARG:NH2	46:HD:53:GLU:OE2	2.52	0.42
23:1O:269:GLN:HG3	45:UA:282:TYR:HE2	1.83	0.42
14:1V:122:LYS:CE	46:LL:390:ARG:HH12	2.16	0.42
14:1V:228:HIS:HE1	46:VL:90:PHE:CD1	2.38	0.42
20:2K:223:ASN:HA	20:2K:226:ARG:NH1	2.33	0.42
9:2N:77:GLU:HB3	9:2N:273:ARG:HB3	2.01	0.42
9:2N:195:GLU:OE1	9:2N:195:GLU:N	2.46	0.42
11:2S:84:SER:O	12:2T:35:LEU:HD12	2.19	0.42
13:2U:458:LYS:NZ	13:2U:462:ASP:HB2	2.34	0.42
13:2U:492:LEU:O	13:2U:510:SER:N	2.52	0.42
27:3C:78:PHE:HE2	27:3C:91:PHE:HD1	1.67	0.42
10:3Q:91:VAL:HG12	10:3Q:154:VAL:HG23	2.01	0.42
11:3S:32:LYS:HD2	11:3S:33:ASN:N	2.33	0.42
13:3U:237:PHE:O	13:3U:238:SER:OG	2.37	0.42
14:3V:102:LYS:HB2	14:3V:104:PHE:CE1	2.54	0.42
36:5A:158:ASN:HB3	36:5A:161:ILE:HG12	2.01	0.42
36:5B:27:LYS:C	36:5B:27:LYS:HD3	2.40	0.42
10:5Q:100:ARG:NH2	45:AK:437:ILE:HD11	2.32	0.42
41:6H:300:GLU:HG2	46:FH:245:GLN:NE2	2.34	0.42
34:7R:21:LEU:HD23	34:7R:21:LEU:H	1.84	0.42
45:AA:114:ILE:HG22	45:AA:118:CYS:SG	2.59	0.42
46:AH:283:ALA:HA	46:MH:55:THR:HG23	2.00	0.42
46:AJ:156:ARG:HH22	46:AJ:197:ASP:CG	2.22	0.42
45:AK:181:VAL:HG13	45:AK:182:VAL:HG13	2.01	0.42
46:AL:178:THR:HG22	46:AL:180:VAL:H	1.84	0.42
45:AM:71:GLU:HA	45:AM:72:PRO:HD3	1.86	0.42
45:AM:408:TYR:HB3	45:AM:413:MET:HE2	2.00	0.42
46:BB:86:ARG:HD2	46:BB:86:ARG:HA	1.78	0.42
46:BB:319:GLY:N	46:BB:354:CYS:O	2.36	0.42
45:BC:384:ILE:O	45:BC:387:VAL:HG22	2.19	0.42
46:BF:3:GLU:CD	46:BF:3:GLU:H	2.22	0.42
45:BG:164:LYS:HD3	45:BG:164:LYS:HA	1.92	0.42
45:BI:141:VAL:HG23	45:BI:170:THR:HB	2.01	0.42
46:BJ:372:THR:HA	46:BJ:422:TYR:CE2	2.52	0.42
46:BJ:391:ARG:HD2	46:BJ:391:ARG:HA	1.83	0.42
45:CA:2:ARG:HH22	46:CB:70:PRO:HD2	1.83	0.42
45:CE:88:HIS:HB3	45:CE:91:GLN:HB2	2.00	0.42
45:CE:181:VAL:HG13	45:CE:182:VAL:HG13	2.01	0.42
46:CF:67:ASP:OD1	46:CF:68:LEU:N	2.51	0.42
45:CG:175:PRO:HG3	45:CG:390:ARG:NH1	2.33	0.42
46:CH:86:ARG:HG2	46:CH:88:ASP:H	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CH:294:PHE:HE1	46:CH:367:PHE:CE1	2.36	0.42
45:CI:346:TRP:CD1	46:CJ:391:ARG:HG3	2.54	0.42
46:CJ:24:ILE:HD11	46:CJ:234:SER:HB2	2.01	0.42
46:CN:86:ARG:HH21	46:CN:87:PRO:HD2	1.82	0.42
45:DA:12:GLY:HA2	45:DA:15:GLN:HG3	2.01	0.42
45:DA:317:MET:N	45:DA:352:LYS:O	2.48	0.42
46:DB:135:ILE:O	46:DB:167:PHE:N	2.40	0.42
46:DB:341:PHE:HD1	46:DB:348:ASN:HD21	1.67	0.42
46:DD:7:ILE:HG22	46:DD:64:ILE:HB	2.01	0.42
45:DE:319:TYR:HB3	45:DE:323:VAL:HG11	2.00	0.42
46:DF:350:LYS:HD2	46:DF:351:SER:N	2.34	0.42
45:DM:76:ASP:HA	45:DM:79:ARG:HG2	2.01	0.42
45:DM:247:ALA:HB3	45:DM:355:ILE:HG21	2.01	0.42
46:EB:331:LEU:HA	46:EB:334:GLN:HG2	2.01	0.42
46:ED:39:ASP:OD1	46:ED:40:SER:N	2.52	0.42
46:ED:247:ASN:HD21	45:EE:73:THR:HB	1.83	0.42
46:EH:334:GLN:NE2	46:EH:348:ASN:H	2.16	0.42
45:EI:171:ILE:HG23	45:EI:204:LEU:O	2.19	0.42
46:EL:405:GLU:HA	46:EL:408:PHE:HD2	1.83	0.42
46:EN:207:LEU:HD13	46:EN:225:LEU:HD11	2.00	0.42
45:FA:203:MET:SD	45:FA:203:MET:N	2.92	0.42
46:FF:359:LYS:HB3	46:FF:359:LYS:HE3	1.77	0.42
45:FG:149:LEU:HD23	45:FG:149:LEU:HA	1.87	0.42
46:FH:64:ILE:HD11	46:FH:123:GLU:HG3	2.00	0.42
46:FL:310:TYR:CD1	46:FL:371:SER:HB3	2.54	0.42
45:FM:269:LEU:HD23	45:FM:269:LEU:H	1.84	0.42
46:GD:87:PRO:HA	46:GD:90:PHE:HD2	1.83	0.42
46:GD:282:ARG:HG3	46:GD:282:ARG:HH11	1.83	0.42
45:GM:230:LEU:O	45:GM:234:VAL:HG23	2.19	0.42
45:GM:239:THR:OG1	45:GM:242:LEU:HD12	2.19	0.42
45:HA:175:PRO:HG3	45:HA:390:ARG:NH1	2.34	0.42
46:HB:309:ARG:NE	46:HB:342:VAL:HB	2.34	0.42
45:HI:181:VAL:HG23	45:HI:182:VAL:HG13	2.01	0.42
45:IA:1:MET:SD	45:IA:2:ARG:NH2	2.92	0.42
46:IB:60:VAL:HG23	46:IB:84:LEU:O	2.19	0.42
46:ID:178:THR:HG22	46:ID:180:VAL:H	1.83	0.42
45:IE:317:MET:HA	45:IE:377:MET:HA	2.01	0.42
46:IF:180:VAL:HG12	46:IF:180:VAL:O	2.19	0.42
45:II:384:ILE:O	45:II:387:VAL:HG22	2.19	0.42
45:IK:174:SER:HB3	45:IK:207:GLU:HG2	2.01	0.42
46:IL:86:ARG:HB3	46:IL:89:ASN:OD1	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:IM:422:ARG:HA	45:IM:422:ARG:HD2	1.84	0.42
45:JC:96:LYS:HE2	45:JC:96:LYS:HA	2.01	0.42
46:JN:203:ASP:OD1	46:JN:377:MET:HE1	2.19	0.42
45:KA:215:ARG:NH2	45:KA:300:ASN:OD1	2.51	0.42
46:KL:128:ASP:OD1	46:KL:129:CYS:N	2.52	0.42
45:MA:38:SER:OG	45:MA:39:ASP:N	2.51	0.42
45:MA:188:ILE:HG22	45:MA:425:LEU:HD11	2.01	0.42
46:MB:154:LYS:O	46:MB:157:GLU:HG3	2.18	0.42
45:MC:288:VAL:HA	45:MC:291:ILE:HG12	2.01	0.42
45:ME:69:ASP:OD1	45:ME:70:LEU:N	2.52	0.42
45:MG:326:LYS:HG2	46:MJ:220:PRO:HG2	2.01	0.42
45:MK:179:THR:O	46:ML:350:LYS:HA	2.18	0.42
45:MK:319:TYR:HB3	45:MK:323:VAL:HG21	2.01	0.42
45:MM:38:SER:OG	45:MM:39:ASP:OD1	2.37	0.42
46:MN:391:ARG:HA	46:MN:391:ARG:HD2	1.83	0.42
45:NA:287:SER:N	45:NA:290:GLU:OE2	2.51	0.42
45:NC:219:ILE:HG22	45:NC:221:ARG:H	1.84	0.42
46:ND:3:GLU:HB2	46:ND:62:ARG:NH2	2.34	0.42
46:ND:58:ARG:HH11	46:OD:281:TYR:HE1	1.67	0.42
46:NF:115:SER:O	46:NF:119:VAL:HG12	2.19	0.42
45:NG:100:ALA:HB1	46:NH:252:LYS:HA	2.01	0.42
45:NI:157:LEU:HA	45:NI:160:ASP:HB2	2.00	0.42
45:NI:257:THR:HA	46:NL:397:TRP:CZ3	2.54	0.42
45:NK:174:SER:HB2	45:NK:177:VAL:O	2.18	0.42
45:OG:248:LEU:HB2	45:OG:355:ILE:H	1.84	0.42
45:OK:319:TYR:HB2	45:OK:355:ILE:HD13	2.00	0.42
45:OM:31:GLN:OE1	45:OM:37:PRO:HG3	2.18	0.42
46:PB:253:LEU:O	46:PB:257:LEU:HB2	2.19	0.42
45:PC:384:ILE:O	45:PC:387:VAL:HG22	2.19	0.42
46:PJ:175:VAL:O	46:PJ:175:VAL:HG13	2.19	0.42
45:PK:211:ASP:OD2	45:PK:214:ARG:NH2	2.50	0.42
45:PM:7:ILE:N	45:PM:136:LEU:O	2.42	0.42
45:QE:105:ARG:O	45:QE:110:ILE:HG12	2.19	0.42
46:QF:20:PHE:HA	46:QF:230:SER:OG	2.19	0.42
46:QH:198:GLU:HG2	46:QH:266:PHE:HE2	1.84	0.42
46:QH:319:GLY:HA2	46:QH:357:PRO:HD3	2.01	0.42
46:QJ:164:MET:HB3	46:QJ:197:ASP:H	1.83	0.42
46:QL:217:LEU:HD23	46:QL:219:THR:H	1.84	0.42
45:RG:259:LEU:HB3	45:RG:268:MET:CE	2.49	0.42
46:RH:3:GLU:HG3	46:RH:62:ARG:NH1	2.33	0.42
46:RH:325:GLU:O	46:RH:329:GLN:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RM:115:VAL:HG22	45:RM:119:LEU:HD23	2.01	0.42
45:SA:109:THR:HG22	45:SA:110:ILE:HG23	1.99	0.42
45:SC:434:GLU:HA	45:SC:437:ILE:HD12	2.01	0.42
46:SD:86:ARG:HD3	46:SD:87:PRO:HD2	2.01	0.42
45:SE:133:GLN:O	45:SE:165:SER:OG	2.36	0.42
46:SH:163:ILE:HD13	46:SH:250:LEU:HB3	2.01	0.42
46:SH:238:CYS:HB2	46:SH:318:ARG:NH2	2.34	0.42
46:SJ:318:ARG:HD3	46:SJ:358:PRO:HG3	2.01	0.42
45:SK:171:ILE:HG23	45:SK:204:LEU:O	2.18	0.42
45:SK:320:ARG:HD3	45:SK:360:PRO:HG3	2.01	0.42
46:SL:375:GLN:NE2	46:SL:423:GLN:OE1	2.52	0.42
46:SN:117:LEU:HD13	46:SN:154:LYS:HE2	2.01	0.42
46:TB:334:GLN:HA	46:TB:341:PHE:CE2	2.53	0.42
46:TD:391:ARG:HD2	46:TD:391:ARG:HA	1.88	0.42
46:TH:3:GLU:HG3	46:TH:62:ARG:NH1	2.33	0.42
45:TI:346:TRP:CE3	46:TJ:391:ARG:HB2	2.54	0.42
45:TM:171:ILE:HG13	45:TM:204:LEU:O	2.18	0.42
45:UC:216:ASN:ND2	45:UC:275:ILE:O	2.44	0.42
46:UD:134:GLN:HA	46:UD:165:GLU:HB3	2.01	0.42
46:UF:1:MET:SD	45:UG:72:PRO:HG2	2.59	0.42
46:UH:203:ASP:OD1	46:UH:204:ASN:N	2.52	0.42
46:UJ:10:GLY:O	46:UJ:14:ASN:ND2	2.51	0.42
45:UK:12:GLY:O	45:UK:16:VAL:HG12	2.19	0.42
45:UK:213:CYS:SG	45:UK:222:PRO:HG3	2.59	0.42
46:UL:258:ILE:HD12	46:UL:264:HIS:HB3	2.00	0.42
46:UL:268:ILE:HG22	46:UL:368:VAL:HA	2.01	0.42
45:UM:386:GLU:HA	45:UM:386:GLU:OE2	2.19	0.42
46:UN:361:LEU:HD23	46:UN:361:LEU:HA	1.89	0.42
46:VB:262:ARG:NH1	46:VB:421:GLU:HG2	2.33	0.42
45:VC:356:ASN:OD1	45:VC:357:TYR:N	2.52	0.42
45:VE:11:GLN:NE2	46:VF:245:GLN:O	2.52	0.42
45:VG:10:GLY:O	45:VG:14:ILE:HG12	2.19	0.42
45:VK:2:ARG:HB3	45:VK:133:GLN:HE22	1.84	0.42
45:VK:213:CYS:HA	45:VK:217:LEU:HG	2.01	0.42
45:VM:188:ILE:HG22	45:VM:421:ALA:HB1	2.01	0.42
46:VN:317:PHE:HB2	46:VN:353:ILE:HD13	2.00	0.42
45:WA:51:THR:HG21	45:WA:243:ARG:HD3	2.01	0.42
45:WC:205:ASP:OD1	45:WC:206:ASN:N	2.51	0.42
45:WE:384:ILE:O	45:WE:387:VAL:HG22	2.19	0.42
46:WF:257:LEU:HD11	46:WF:314:SER:HB2	2.00	0.42
46:WF:391:ARG:HD2	46:WF:391:ARG:HA	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WG:3:GLU:OE2	45:WG:131:GLY:N	2.49	0.42
45:WK:254:GLU:HB3	46:WN:98:GLY:HA2	2.00	0.42
45:WM:99:ALA:HA	45:WM:105:ARG:HG2	2.01	0.42
46:WN:141:GLY:HA3	49:WN:501:GDP:PB	2.59	0.42
46:WN:423:GLN:NE2	46:WN:427:ASP:OD2	2.52	0.42
1:0A:3:GLN:HE22	26:1W:241:MET:HE1	1.83	0.42
4:1D:117:THR:HG23	25:2R:482:THR:HG21	2.00	0.42
24:1P:392:LYS:HZ3	45:TA:282:TYR:HE1	1.64	0.42
11:1S:34:ILE:O	11:1S:34:ILE:HG13	2.19	0.42
13:1U:166:LEU:HD23	13:1U:168:ASN:OD1	2.19	0.42
13:1U:414:THR:HG22	13:1U:419:ARG:O	2.19	0.42
5:2E:11:ARG:HG2	5:2E:11:ARG:NH1	2.35	0.42
21:2L:340:ARG:NH1	21:2L:343:ASP:OD2	2.52	0.42
21:2L:593:THR:HB	21:2L:608:ASN:N	2.34	0.42
22:2M:236:THR:HG22	22:2M:313:ALA:HB1	2.02	0.42
22:2M:262:PHE:HE2	22:2M:320:ILE:HD11	1.84	0.42
9:2N:169:GLN:O	9:2N:236:PHE:HB2	2.19	0.42
9:2N:169:GLN:HB3	9:2N:237:CYS:O	2.19	0.42
23:2O:173:GLU:HG2	46:VL:362:LYS:NZ	2.34	0.42
24:2P:386:GLN:O	24:2P:390:LYS:HG2	2.20	0.42
25:2R:161:ASP:N	25:2R:161:ASP:OD1	2.51	0.42
12:2T:121:ALA:H	12:2T:199:ARG:HG2	1.84	0.42
12:2T:246:LEU:O	12:2T:247:ASN:OD1	2.37	0.42
14:2V:24:ARG:NH2	45:ME:430:LYS:HG3	2.34	0.42
1:3A:134:LYS:NZ	1:3A:139:GLN:HG2	2.34	0.42
5:3E:104:PHE:CZ	5:3E:115:VAL:HG23	2.54	0.42
31:3I:264:GLY:HA2	46:FJ:121:ARG:HH12	1.85	0.42
21:3L:163:ARG:NE	21:3L:164:THR:OG1	2.48	0.42
25:3R:445:SER:HB2	25:3R:467:ASN:O	2.19	0.42
11:3S:295:GLU:OE2	11:3S:317:VAL:HG12	2.19	0.42
12:3T:198:ASP:C	12:3T:199:ARG:HD2	2.39	0.42
13:3U:457:VAL:HG12	13:3U:461:ASN:HA	2.02	0.42
33:4F:120:GLU:N	33:4F:120:GLU:OE1	2.52	0.42
10:4Q:69:LEU:O	10:4Q:69:LEU:HD23	2.18	0.42
34:4R:456:TYR:CE1	45:EE:45:GLY:HA2	2.54	0.42
35:5S:139:LEU:HD22	35:5S:175:ILE:HG23	2.01	0.42
35:5S:198:LEU:HD23	35:5S:198:LEU:H	1.84	0.42
34:6R:457:GLU:HB2	34:6R:470:PHE:HB2	2.01	0.42
43:8P:91:UNK:O	43:8P:95:UNK:N	2.51	0.42
45:AA:141:VAL:HG11	45:AA:172:TYR:CD1	2.54	0.42
46:AB:63:ALA:HB3	46:AB:85:PHE:HE1	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AB:86:ARG:HH11	46:BB:281:TYR:HB2	1.80	0.42
45:AK:433:GLU:O	45:AK:437:ILE:HG23	2.19	0.42
45:AM:183:GLU:HG2	45:AM:184:PRO:HD3	2.01	0.42
45:AM:384:ILE:O	45:AM:387:VAL:HG22	2.19	0.42
45:BE:11:GLN:HE22	46:BF:246:LEU:HA	1.84	0.42
46:BF:217:LEU:HD23	46:BF:217:LEU:H	1.84	0.42
46:BH:3:GLU:OE1	46:BH:3:GLU:N	2.43	0.42
45:BI:301:MET:HE1	45:BI:307:PRO:HG3	2.00	0.42
45:BK:93:ILE:HG12	45:BK:117:LEU:HD22	2.00	0.42
45:BM:88:HIS:ND1	45:BM:90:GLU:HG2	2.35	0.42
46:CB:139:LEU:CD1	46:CB:168:SER:HB3	2.49	0.42
46:CB:184:ASN:OD1	46:CB:398:TYR:OH	2.36	0.42
46:CD:152:ILE:HG12	46:CD:164:MET:HE2	2.00	0.42
45:CE:55:GLU:HG3	45:CE:57:GLY:H	1.84	0.42
45:CE:84:ARG:HG3	45:CE:85:GLN:HE21	1.84	0.42
45:CE:377:MET:HE3	45:CE:377:MET:HB2	1.94	0.42
46:CF:122:LYS:HE3	46:CF:122:LYS:HB2	1.74	0.42
46:CF:139:LEU:HD13	46:CF:168:SER:HB3	2.01	0.42
45:CG:174:SER:HB2	45:CG:177:VAL:O	2.18	0.42
45:CG:245:ASP:OD2	45:CG:246:GLY:N	2.52	0.42
46:CJ:347:ASN:HD22	45:CK:178:SER:HG	1.65	0.42
45:CK:143:GLY:HA3	47:CK:501:GTP:O2B	2.20	0.42
45:CK:244:PHE:HB2	45:CK:356:ASN:HD21	1.84	0.42
45:DA:188:ILE:HG23	45:DA:425:LEU:HD11	2.01	0.42
46:DF:113:ILE:HA	46:DF:116:VAL:HG12	2.00	0.42
46:DJ:256:ASN:HD21	45:DK:181:VAL:H	1.65	0.42
46:DL:146:GLY:O	46:DL:149:THR:HG22	2.19	0.42
45:EC:224:TYR:HD1	45:EC:227:LEU:HD12	1.84	0.42
46:ED:135:ILE:HB	46:ED:166:THR:HA	2.01	0.42
46:EF:72:THR:HG23	46:EF:73:MET:HE2	2.01	0.42
46:EJ:3:GLU:OE1	46:EJ:3:GLU:N	2.49	0.42
46:EJ:135:ILE:HB	46:EJ:166:THR:HG22	2.02	0.42
46:EL:288:GLU:O	46:EL:291:GLN:HG3	2.18	0.42
46:FB:304:ASP:HB3	46:FB:307:HIS:ND1	2.33	0.42
45:FG:88:HIS:HE1	45:GG:280:LYS:NZ	2.17	0.42
45:FK:245:ASP:OD1	45:FK:245:ASP:N	2.49	0.42
46:FN:258:ILE:HG13	46:FN:266:PHE:HZ	1.83	0.42
45:GA:91:GLN:HG2	45:GA:121:ARG:HH21	1.84	0.42
45:GK:55:GLU:CD	45:GK:57:GLY:H	2.22	0.42
45:GM:301:MET:SD	45:GM:301:MET:N	2.92	0.42
45:HA:18:ASN:O	45:HA:22:GLU:HG3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:HE:431:ASP:O	45:HE:434:GLU:HG3	2.19	0.42
46:HH:403:MET:HB3	46:HH:407:GLU:OE2	2.19	0.42
46:HJ:190:HIS:ND1	46:HJ:411:ALA:HA	2.34	0.42
46:ID:391:ARG:HA	46:ID:391:ARG:HD2	1.82	0.42
45:IG:384:ILE:O	45:IG:387:VAL:HG22	2.18	0.42
46:IL:285:THR:HB	46:IL:287:PRO:HD2	2.01	0.42
46:IN:289:LEU:HD23	46:IN:289:LEU:HA	1.88	0.42
45:JA:105:ARG:O	45:JA:110:ILE:HG12	2.19	0.42
45:JA:425:LEU:O	45:JA:429:GLU:HG3	2.19	0.42
46:JD:147:MET:HE2	46:JD:147:MET:HB2	1.90	0.42
46:JD:213:ARG:NH2	46:JD:297:LYS:HD2	2.34	0.42
45:JK:103:PHE:HD2	45:JK:413:MET:HE1	1.84	0.42
46:KB:4:ILE:HD11	46:KB:50:TYR:CZ	2.53	0.42
45:KC:64:ARG:NH1	45:KC:129:CYS:SG	2.92	0.42
46:KF:19:LYS:HB3	46:KF:19:LYS:HE2	1.83	0.42
45:LC:103:PHE:HB2	45:LC:186:ASN:HB3	2.02	0.42
46:LF:233:MET:O	46:LF:236:VAL:HG12	2.19	0.42
45:LG:39:ASP:OD1	45:LG:39:ASP:N	2.46	0.42
46:LH:373:ALA:O	46:LH:376:GLU:HG3	2.20	0.42
45:LI:256:GLN:O	46:LL:397:TRP:NE1	2.52	0.42
45:LM:185:TYR:O	45:LM:188:ILE:HG22	2.19	0.42
45:LM:239:THR:HG23	45:LM:243:ARG:HH21	1.83	0.42
45:MC:69:ASP:OD1	45:MC:70:LEU:N	2.52	0.42
46:MD:6:HIS:NE2	46:MD:8:GLN:OE1	2.52	0.42
45:ME:349:THR:HG23	46:MH:179:VAL:HA	2.00	0.42
46:MF:63:ALA:O	46:MF:89:ASN:ND2	2.52	0.42
46:MH:64:ILE:HD11	46:MH:123:GLU:HG3	2.01	0.42
46:MH:372:THR:HA	46:MH:422:TYR:HE2	1.83	0.42
45:MI:217:LEU:HD21	45:MI:368:LEU:HD23	2.00	0.42
45:NE:42:ILE:HG13	45:NE:43:GLY:H	1.84	0.42
45:NI:88:HIS:HB3	45:NI:91:GLN:HG2	2.01	0.42
45:NK:274:PRO:HD2	45:NK:374:ALA:HA	2.00	0.42
46:NL:133:PHE:HB2	46:NL:164:MET:SD	2.59	0.42
45:OC:103:PHE:HB3	45:OC:408:TYR:HE2	1.83	0.42
45:OE:265:ILE:HG12	45:OE:432:TYR:CE1	2.54	0.42
46:OH:268:ILE:HG13	46:OH:300:MET:HG3	2.01	0.42
46:OH:404:ASP:OD1	46:OH:404:ASP:N	2.52	0.42
45:OI:229:ARG:NH1	45:OI:363:VAL:HG11	2.33	0.42
46:OJ:233:MET:O	46:OJ:236:VAL:HG12	2.19	0.42
46:OL:127:CYS:SG	46:OL:130:LEU:HG	2.59	0.42
46:ON:189:VAL:HA	46:ON:192:LEU:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PA:207:GLU:HA	45:PA:210:TYR:CD1	2.54	0.42
45:PG:245:ASP:OD1	45:PG:245:ASP:N	2.46	0.42
46:PJ:105:HIS:CD2	46:PJ:150:LEU:HD23	2.53	0.42
46:PJ:217:LEU:HD23	46:PJ:217:LEU:H	1.84	0.42
46:PL:268:ILE:HG13	46:PL:300:MET:HG3	2.00	0.42
46:PN:67:ASP:OD1	46:PN:73:MET:HE1	2.19	0.42
46:PN:207:LEU:HB3	46:PN:225:LEU:CD1	2.45	0.42
46:QB:114:ASP:OD1	46:QB:115:SER:N	2.52	0.42
46:QD:245:GLN:O	45:QE:11:GLN:NE2	2.52	0.42
45:QE:348:PRO:HG2	46:QF:384:GLN:HG3	2.01	0.42
46:QH:217:LEU:HD23	46:QH:219:THR:H	1.84	0.42
46:QL:379:LYS:HB3	46:QL:380:ARG:HH22	1.84	0.42
46:QN:105:HIS:CE1	46:QN:150:LEU:HD12	2.55	0.42
45:RA:141:VAL:HG12	45:RA:171:ILE:O	2.18	0.42
46:RD:324:LYS:HZ1	45:RE:222:PRO:HG2	1.84	0.42
45:RE:141:VAL:HG12	45:RE:171:ILE:O	2.19	0.42
45:RI:187:SER:O	45:RI:190:SER:OG	2.33	0.42
46:RJ:248:SER:HA	46:RJ:252:LYS:HG3	2.01	0.42
46:RL:262:ARG:HG2	46:RL:262:ARG:NH1	2.34	0.42
45:SC:2:ARG:NH2	45:SC:242:LEU:O	2.45	0.42
45:SC:81:GLY:O	45:SC:83:TYR:N	2.52	0.42
45:SC:278:ALA:HB2	45:SC:369:ALA:HB2	2.00	0.42
46:SD:154:LYS:HE3	46:SD:154:LYS:HB2	1.88	0.42
45:SE:278:ALA:HB2	45:SE:369:ALA:HB2	2.01	0.42
45:SG:127:ASP:OD1	45:SG:128:ASN:N	2.52	0.42
45:SG:277:SER:O	45:SG:281:ALA:N	2.52	0.42
45:SI:265:ILE:HG23	45:SI:432:TYR:CZ	2.54	0.42
46:SJ:213:ARG:HH21	46:SJ:297:LYS:HB2	1.85	0.42
45:SK:11:GLN:HG3	45:SK:74:VAL:HG11	2.00	0.42
45:SK:141:VAL:HG12	45:SK:171:ILE:O	2.19	0.42
45:SM:165:SER:C	45:SM:166:LYS:HD2	2.40	0.42
46:TB:212:PHE:CE1	46:TB:220:PRO:HG2	2.54	0.42
46:TB:375:GLN:H	46:TB:375:GLN:HG2	1.67	0.42
45:TE:248:LEU:HD13	45:TE:355:ILE:HD12	2.01	0.42
46:TF:293:MET:CE	46:TF:365:VAL:HG11	2.49	0.42
46:TH:64:ILE:HG13	46:TH:120:VAL:HG12	2.01	0.42
46:TH:167:PHE:CE2	46:TH:233:MET:HG2	2.53	0.42
45:TK:411:GLU:N	45:TK:411:GLU:OE1	2.52	0.42
46:TL:86:ARG:NH2	46:UL:281:TYR:HB3	2.34	0.42
46:TL:183:TYR:OH	46:TL:393:ALA:O	2.28	0.42
45:UC:260:VAL:HB	46:UD:397:TRP:HZ2	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UD:183:TYR:HE2	46:UD:394:PHE:HB2	1.83	0.42
46:UF:105:HIS:CE1	46:UF:150:LEU:HD12	2.53	0.42
45:UG:113:GLU:N	45:UG:113:GLU:OE1	2.53	0.42
45:UI:387:VAL:HA	45:UI:390:ARG:HG2	2.01	0.42
46:UJ:22:GLU:HG2	46:UJ:81:PHE:CD2	2.52	0.42
46:UN:34:GLY:HA2	46:UN:84:LEU:HD11	2.00	0.42
46:UN:54:ALA:HA	46:VN:283:ALA:HB2	2.01	0.42
46:UN:152:ILE:O	46:UN:156:ARG:HG2	2.19	0.42
45:VA:31:GLN:HG3	45:VA:37:PRO:HD3	2.00	0.42
46:VD:105:HIS:CE1	46:VD:150:LEU:HD12	2.54	0.42
45:VG:182:VAL:HG23	45:VG:404:PHE:HD2	1.82	0.42
45:VI:268:MET:SD	45:VI:268:MET:N	2.92	0.42
45:VI:399:TYR:OH	45:VI:402:ARG:NH2	2.52	0.42
46:VJ:131:GLN:HE22	46:VJ:240:LEU:HD11	1.85	0.42
46:VN:86:ARG:HG2	46:VN:88:ASP:H	1.83	0.42
45:WA:244:PHE:HB2	45:WA:356:ASN:HD21	1.84	0.42
46:WB:306:ARG:HA	46:WB:306:ARG:NE	2.34	0.42
45:WC:174:SER:HB2	45:WC:177:VAL:O	2.20	0.42
45:WI:258:ASN:HD21	46:WL:178:THR:HG23	1.84	0.42
45:WI:356:ASN:OD1	45:WI:358:GLN:N	2.45	0.42
46:WJ:92:PHE:O	46:WJ:112:LEU:HD11	2.19	0.42
45:WK:41:THR:HG22	45:WK:42:ILE:N	2.25	0.42
45:WK:352:LYS:HE2	46:WN:178:THR:HA	2.01	0.42
45:WM:319:TYR:HB3	45:WM:323:VAL:HG11	2.01	0.42
22:1M:44:VAL:HG13	46:IF:78:ALA:HB2	2.01	0.42
12:1T:236:THR:O	12:1T:240:LYS:HG3	2.19	0.42
13:1U:207:TYR:CE1	13:1U:221:ASN:HB3	2.54	0.42
4:2D:116:LEU:HD13	4:2D:121:LYS:HZ1	1.84	0.42
29:2G:62:LYS:O	29:2G:66:MET:HG3	2.19	0.42
30:2H:207:LYS:HZ2	30:2H:209:ARG:HH11	1.67	0.42
31:2I:44:PRO:HB3	46:FH:126:GLY:HA2	2.00	0.42
23:2O:395:PHE:CE2	23:2O:399:ILE:HD11	2.54	0.42
25:2R:410:TRP:HB2	25:2R:442:ASN:O	2.20	0.42
12:2T:213:LEU:HD13	12:2T:218:PHE:CE1	2.54	0.42
15:2X:34:TYR:O	15:2X:38:ILE:HG12	2.19	0.42
15:2X:131:MET:O	15:2X:134:THR:HG22	2.19	0.42
1:3A:91:ASN:HD22	1:3A:94:LYS:HA	1.84	0.42
23:3O:409:GLU:O	23:3O:413:GLN:HG2	2.18	0.42
10:3Q:110:SER:O	10:3Q:110:SER:OG	2.35	0.42
11:3S:30:HIS:HA	11:3S:34:ILE:HG21	2.01	0.42
12:3T:80:LYS:HE3	12:3T:80:LYS:HB3	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3T:238:GLU:OE2	12:3T:238:GLU:N	2.52	0.42
13:3U:474:ILE:HG12	13:3U:486:CYS:HB3	2.00	0.42
27:4C:223:GLN:HA	45:KM:221:ARG:HB2	2.00	0.42
33:4F:14:TYR:OH	46:GJ:53:GLU:HB2	2.19	0.42
10:4Q:39:ASP:OD1	10:4Q:40:GLN:N	2.52	0.42
36:5B:21:GLN:HE21	46:KF:409:THR:HG22	1.84	0.42
34:5R:389:ASN:OD1	34:5R:390:GLY:N	2.52	0.42
40:6G:236:LEU:HD12	40:6G:236:LEU:O	2.19	0.42
10:6Q:21:PRO:HD3	10:6Q:36:ARG:NH1	2.34	0.42
10:6Q:141:ARG:HH12	10:6Q:148:TYR:HE1	1.66	0.42
45:AA:100:ALA:HB1	46:AB:252:LYS:HA	2.01	0.42
45:AC:113:GLU:N	45:AC:113:GLU:OE1	2.52	0.42
45:BC:244:PHE:HB2	45:BC:356:ASN:HD21	1.83	0.42
45:BE:390:ARG:HG3	45:BE:391:LEU:HD22	2.01	0.42
46:BJ:147:MET:HB3	46:BJ:147:MET:HE2	1.87	0.42
46:BL:133:PHE:O	46:BL:165:GLU:N	2.42	0.42
45:CA:88:HIS:ND1	45:CA:90:GLU:HG2	2.34	0.42
45:CA:335:ILE:HD11	45:CA:341:ILE:HB	2.02	0.42
45:DA:260:VAL:H	46:DB:397:TRP:HZ2	1.67	0.42
45:DC:62:VAL:HG21	45:EC:283:HIS:O	2.20	0.42
45:DC:311:LYS:H	45:DC:382:THR:HG22	1.83	0.42
46:DH:324:LYS:NZ	45:DI:210:TYR:HB3	2.33	0.42
46:DJ:257:LEU:O	46:DJ:259:PRO:HD3	2.19	0.42
45:DK:36:MET:HG3	45:DK:37:PRO:HD2	2.00	0.42
45:DK:88:HIS:ND1	45:DK:89:PRO:HD2	2.34	0.42
46:DL:6:HIS:NE2	46:DL:8:GLN:OE1	2.51	0.42
46:DL:324:LYS:HD3	45:DM:210:TYR:CD1	2.53	0.42
45:DM:320:ARG:HB2	45:DM:358:GLN:O	2.20	0.42
46:DN:3:GLU:HB2	46:DN:62:ARG:NH2	2.34	0.42
46:DN:221:THR:HG23	46:DN:224:ASP:H	1.84	0.42
46:EB:55:THR:HG23	46:FB:283:ALA:HA	2.00	0.42
46:EB:311:LEU:HD13	46:EB:342:VAL:HG11	2.01	0.42
46:ED:255:VAL:HG13	46:ED:256:ASN:HD22	1.84	0.42
46:EH:319:GLY:N	46:EH:354:CYS:O	2.38	0.42
46:EH:386:THR:OG1	46:EH:390:ARG:NH2	2.52	0.42
45:EK:14:ILE:HD11	45:EK:69:ASP:HB2	2.01	0.42
45:EK:319:TYR:HE2	45:EK:328:VAL:HG13	1.83	0.42
45:FA:398:MET:HE1	46:FB:345:ILE:HD12	2.01	0.42
46:FD:399:THR:HA	46:FD:403:MET:O	2.19	0.42
45:FI:183:GLU:N	45:FI:184:PRO:HD2	2.35	0.42
45:FI:287:SER:O	45:FI:291:ILE:HG23	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FI:288:VAL:HA	45:FI:291:ILE:HG12	2.01	0.42
45:FI:384:ILE:O	45:FI:387:VAL:HG22	2.19	0.42
45:GC:248:LEU:HD12	45:GC:248:LEU:HA	1.88	0.42
46:GF:232:ALA:O	46:GF:236:VAL:HG23	2.20	0.42
45:GI:66:VAL:HG11	45:GI:122:ILE:HD11	2.00	0.42
46:GL:347:ASN:C	46:GL:347:ASN:HD22	2.21	0.42
45:GM:132:LEU:HD22	45:GM:164:LYS:HD2	2.01	0.42
45:GM:406:HIS:CE1	45:GM:407:TRP:CD1	3.08	0.42
46:GN:318:ARG:CD	46:GN:358:PRO:HD3	2.49	0.42
46:HB:210:ILE:O	46:HB:214:THR:OG1	2.26	0.42
46:HB:324:LYS:O	46:HB:327:ASP:N	2.49	0.42
45:HC:265:ILE:HG23	45:HC:432:TYR:CZ	2.54	0.42
45:HC:439:THR:HB	46:HF:391:ARG:HH11	1.83	0.42
45:HG:260:VAL:HB	46:HJ:397:TRP:CH2	2.54	0.42
45:HI:195:LEU:HD21	45:HI:264:ARG:HE	1.84	0.42
45:HM:226:ASN:O	45:HM:230:LEU:HD23	2.19	0.42
46:HN:217:LEU:HD23	46:HN:217:LEU:H	1.85	0.42
46:IB:213:ARG:HD2	46:IB:214:THR:N	2.34	0.42
45:IE:430:LYS:HE2	45:IE:430:LYS:HB2	1.74	0.42
46:IF:139:LEU:HD22	46:IF:170:VAL:HG12	2.01	0.42
45:IK:239:THR:HG23	45:IK:242:LEU:HD12	2.00	0.42
46:IL:156:ARG:NH2	46:IL:164:MET:HG3	2.34	0.42
46:IL:345:ILE:O	46:IL:345:ILE:HG13	2.19	0.42
45:IM:260:VAL:HG23	45:IM:265:ILE:O	2.20	0.42
45:JA:210:TYR:HE1	45:JA:227:LEU:HD21	1.83	0.42
45:JE:326:LYS:HZ2	46:JH:220:PRO:HG2	1.83	0.42
45:JM:178:SER:HB3	46:JN:347:ASN:ND2	2.31	0.42
45:KA:346:TRP:CD1	46:KD:391:ARG:HG3	2.54	0.42
45:KC:345:ASP:OD2	45:KC:438:GLU:HG2	2.18	0.42
46:KH:253:LEU:O	46:KH:257:LEU:HB2	2.19	0.42
45:KI:275:ILE:HD13	45:KI:368:LEU:HD11	2.01	0.42
45:KI:406:HIS:HA	45:KI:409:VAL:HG12	2.01	0.42
45:KK:170:THR:O	45:KK:204:LEU:HB2	2.19	0.42
45:KM:152:LEU:HD12	45:KM:152:LEU:HA	1.92	0.42
45:LA:41:THR:HG21	45:LA:45:GLY:O	2.19	0.42
45:LC:269:LEU:HD23	45:LC:269:LEU:H	1.84	0.42
46:LL:282:ARG:HD3	46:LL:282:ARG:HA	1.84	0.42
45:MC:434:GLU:O	45:MC:437:ILE:HG12	2.19	0.42
46:MH:342:VAL:HG13	46:MH:345:ILE:HG22	2.00	0.42
45:MI:223:THR:HG22	45:MI:224:TYR:N	2.34	0.42
46:ML:207:LEU:HD13	46:ML:225:LEU:HB3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ML:377:MET:O	46:ML:380:ARG:HG2	2.19	0.42
45:NE:176:GLN:O	46:NF:347:ASN:ND2	2.52	0.42
46:NH:4:ILE:HD12	46:NH:134:GLN:HG2	2.00	0.42
45:NI:88:HIS:HB3	45:NI:91:GLN:CD	2.39	0.42
45:NI:239:THR:HG23	45:NI:243:ARG:HH21	1.84	0.42
46:NJ:65:LEU:HD12	46:NJ:90:PHE:CE1	2.54	0.42
45:NK:205:ASP:OD1	45:NK:303:ALA:HA	2.19	0.42
46:NN:25:SER:HG	46:NN:81:PHE:HE1	1.62	0.42
46:OD:133:PHE:O	46:OD:165:GLU:N	2.51	0.42
46:OD:178:THR:HB	46:OD:181:GLU:CD	2.40	0.42
46:OD:222:TYR:O	46:OD:226:ASN:ND2	2.52	0.42
46:OF:130:LEU:O	46:OF:162:ARG:NH2	2.52	0.42
45:OG:22:GLU:O	45:OG:26:LEU:HD23	2.20	0.42
45:OG:28:HIS:HD1	45:OG:49:PHE:HB3	1.83	0.42
45:OI:304:LYS:HB2	45:OI:304:LYS:HE2	1.83	0.42
46:ON:105:HIS:CE1	46:ON:150:LEU:HD13	2.55	0.42
46:ON:326:VAL:O	46:ON:330:MET:HG2	2.20	0.42
45:PA:60:LYS:HZ3	45:PA:86:LEU:HA	1.84	0.42
46:PB:375:GLN:HG3	46:PB:379:LYS:NZ	2.34	0.42
46:PD:65:LEU:HD22	46:PD:90:PHE:CE1	2.55	0.42
45:PG:328:VAL:O	45:PG:332:ILE:HG12	2.19	0.42
46:QD:289:LEU:HD23	46:QD:289:LEU:HA	1.89	0.42
45:QE:31:GLN:HG2	45:QE:35:GLN:O	2.19	0.42
46:QF:208:TYR:CE1	46:QF:225:LEU:HD11	2.54	0.42
45:QG:202:VAL:HA	45:QG:268:MET:O	2.19	0.42
46:QH:5:VAL:HG12	46:QH:62:ARG:HD3	2.01	0.42
45:QI:155:GLU:HA	45:QI:197:HIS:CD2	2.54	0.42
45:QI:195:LEU:HD11	45:QI:428:LEU:HD13	2.00	0.42
45:QM:71:GLU:HA	45:QM:72:PRO:HD3	1.86	0.42
45:QM:306:ASP:HB3	45:QM:309:HIS:ND1	2.35	0.42
45:RA:239:THR:O	45:RA:243:ARG:NE	2.52	0.42
45:RA:243:ARG:HG3	45:RA:244:PHE:CE1	2.54	0.42
45:RC:155:GLU:O	45:RC:158:SER:OG	2.30	0.42
46:RF:405:GLU:HA	46:RF:408:PHE:CD2	2.54	0.42
45:RK:297:GLU:OE2	45:RK:298:PRO:HD2	2.19	0.42
46:RL:286:VAL:N	46:RL:287:PRO:HD2	2.34	0.42
46:RN:208:TYR:CE1	46:RN:225:LEU:HD11	2.54	0.42
46:SB:314:SER:OG	46:SB:350:LYS:HB3	2.19	0.42
46:SD:99:ASN:HA	46:SD:142:GLY:N	2.34	0.42
45:SE:259:LEU:HB3	45:SE:268:MET:CE	2.48	0.42
46:SJ:86:ARG:NH2	46:TJ:281:TYR:HB3	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SK:271:SER:OG	45:SK:301:MET:SD	2.77	0.42
46:TF:278:SER:OG	46:TF:281:TYR:HB2	2.19	0.42
45:TG:132:LEU:O	45:TG:164:LYS:NZ	2.35	0.42
46:TH:257:LEU:HD21	46:TH:314:SER:HB3	2.00	0.42
45:TI:156:ARG:HA	45:TI:156:ARG:HD3	1.88	0.42
45:TI:223:THR:HG23	45:TI:225:THR:H	1.84	0.42
45:TK:237:SER:HA	45:TK:320:ARG:HH11	1.83	0.42
45:TM:20:CYS:HB3	45:TM:24:PHE:CE2	2.54	0.42
46:TN:286:VAL:O	46:TN:290:THR:HG23	2.19	0.42
46:UD:346:PRO:HD2	45:UE:398:MET:HE3	2.01	0.42
46:UF:391:ARG:HD2	46:UF:391:ARG:HA	1.83	0.42
46:UH:5:VAL:HG12	46:UH:62:ARG:HD3	2.01	0.42
46:UJ:399:THR:HA	46:UJ:403:MET:O	2.19	0.42
45:UK:22:GLU:HG3	45:UK:83:TYR:CE2	2.54	0.42
46:UN:86:ARG:HH21	46:UN:87:PRO:CG	2.31	0.42
46:VB:139:LEU:HA	46:VB:145:SER:HB3	2.01	0.42
45:VM:275:ILE:HG23	45:VM:368:LEU:HD11	2.01	0.42
45:VM:306:ASP:HB3	45:VM:309:HIS:ND1	2.35	0.42
46:VN:73:MET:HA	46:VN:76:VAL:HG12	2.01	0.42
46:VN:183:TYR:OH	46:VN:393:ALA:O	2.32	0.42
46:VN:337:ASN:HB3	46:VN:340:TYR:HB2	2.01	0.42
46:VN:391:ARG:HD2	46:VN:391:ARG:HA	1.74	0.42
45:WA:385:ALA:HB2	45:WA:432:TYR:HD2	1.83	0.42
46:WB:238:CYS:SG	46:WB:318:ARG:HD3	2.59	0.42
46:WD:386:THR:O	46:WD:390:ARG:HG2	2.18	0.42
45:WE:320:ARG:HB2	45:WE:358:GLN:O	2.19	0.42
45:WG:298:PRO:HB3	45:WG:307:PRO:HD2	2.01	0.42
46:WH:267:MET:HB3	46:WH:374:ILE:HD11	2.00	0.42
45:WI:288:VAL:HA	45:WI:291:ILE:HG12	2.00	0.42
45:WI:320:ARG:HB2	45:WI:358:GLN:O	2.20	0.42
46:WJ:258:ILE:HD11	46:WJ:266:PHE:HZ	1.84	0.42
45:WK:258:ASN:ND2	45:WK:352:LYS:HE3	2.34	0.42
45:WM:11:GLN:NE2	45:WM:71:GLU:HB3	2.34	0.42
45:WM:372:MET:SD	45:WM:373:ARG:HG3	2.59	0.42
5:0E:50:ILE:HD13	34:7R:382:TYR:HB3	2.01	0.42
7:0G:164:PRO:HA	26:2W:184:ALA:O	2.19	0.42
19:1J:314:VAL:HG12	45:IK:372:MET:HG3	2.00	0.42
24:1P:175:LYS:HE2	45:TI:279:GLU:OE2	2.19	0.42
25:1R:60:LYS:NZ	30:2H:220:ARG:H	2.13	0.42
13:1U:446:LYS:HG2	13:1U:476:TRP:CZ3	2.54	0.42
27:2C:109:LYS:NZ	27:2C:199:GLU:HB3	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:2K:426:ASN:HB3	45:FE:58:ALA:HB2	2.02	0.42
21:2L:279:VAL:HG12	21:2L:352:PHE:HZ	1.84	0.42
21:2L:541:ASN:HB3	21:2L:577:ASN:HB3	2.02	0.42
22:2M:95:MET:O	22:2M:203:CYS:HB2	2.19	0.42
25:2R:422:LYS:HB2	25:2R:500:LEU:HD11	2.01	0.42
11:2S:191:LEU:HD23	11:2S:191:LEU:HA	1.86	0.42
12:2T:102:HIS:HD2	12:2T:219:GLU:HG2	1.85	0.42
13:2U:162:ILE:CG1	13:2U:173:LEU:HB2	2.49	0.42
16:3B:53:LEU:HD23	16:3B:59:PHE:HA	2.02	0.42
16:3B:196:THR:HG22	16:3B:197:SER:N	2.34	0.42
5:3E:19:ARG:NH1	5:3E:55:ASN:O	2.52	0.42
21:3L:41:LYS:HZ2	46:BB:40:SER:HA	1.84	0.42
13:3U:3:LYS:HD2	13:3U:569:TYR:CE1	2.55	0.42
14:3V:45:ARG:O	14:3V:47:GLY:N	2.46	0.42
27:4C:33:ARG:O	27:4C:36:ARG:HG3	2.19	0.42
33:4F:204:PRO:HG2	45:HM:89:PRO:HB2	1.99	0.42
36:5C:85:ARG:HB3	36:5C:87:ARG:NH1	2.34	0.42
37:5E:173:LYS:HD2	46:KD:194:GLU:HA	2.01	0.42
10:6Q:73:LEU:HB2	10:6Q:167:PHE:HD2	1.84	0.42
45:AA:109:THR:HB	45:AA:110:ILE:HD12	2.01	0.42
46:AH:267:MET:CE	46:AH:371:SER:HB3	2.49	0.42
46:BB:116:VAL:O	46:BB:119:VAL:HG12	2.20	0.42
46:BB:263:LEU:HG	46:BB:422:TYR:HD1	1.83	0.42
45:BC:75:ILE:HD13	45:BC:75:ILE:HA	1.93	0.42
45:BE:221:ARG:NH2	46:BF:321:MET:HB2	2.33	0.42
45:CA:97:GLU:HG2	45:CA:105:ARG:HH22	1.85	0.42
46:CB:226:ASN:ND2	49:CB:501:GDP:HN1	2.17	0.42
45:CC:9:VAL:HG13	45:CC:139:ASN:HB3	2.02	0.42
45:CE:258:ASN:OD1	46:CF:179:VAL:HG22	2.18	0.42
45:CK:205:ASP:OD1	45:CK:303:ALA:HA	2.19	0.42
46:CL:134:GLN:HA	46:CL:165:GLU:O	2.20	0.42
46:CL:375:GLN:OE1	46:CL:423:GLN:HB3	2.19	0.42
46:CN:66:MET:HG2	46:CN:116:VAL:HG21	2.01	0.42
46:DB:311:LEU:O	46:DB:345:ILE:HD11	2.19	0.42
46:DD:238:CYS:SG	46:DD:239:CYS:N	2.92	0.42
46:DF:208:TYR:CE1	46:DF:225:LEU:HD11	2.55	0.42
46:DH:139:LEU:HA	46:DH:145:SER:HB3	2.01	0.42
46:DL:44:LEU:HA	46:DL:47:ILE:HG23	2.01	0.42
46:DL:389:PHE:O	46:DL:392:LYS:NZ	2.37	0.42
45:DM:11:GLN:HB3	45:DM:74:VAL:HG21	2.02	0.42
46:DN:66:MET:HE3	46:DN:116:VAL:HG11	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EA:15:GLN:NE2	45:EA:16:VAL:HG13	2.35	0.42
45:EA:229:ARG:HA	45:EA:232:ALA:HB3	2.02	0.42
45:EC:223:THR:HG23	45:EC:225:THR:H	1.85	0.42
46:ED:3:GLU:HG3	46:ED:62:ARG:NH1	2.34	0.42
45:EE:238:LEU:HD11	45:EE:255:PHE:HE1	1.84	0.42
46:EJ:175:VAL:HG22	46:EJ:205:GLU:HB3	2.01	0.42
46:EJ:396:HIS:HA	46:EJ:399:THR:OG1	2.19	0.42
45:EM:11:GLN:HA	45:EM:14:ILE:HG22	2.01	0.42
46:FH:9:GLY:HA2	46:FH:66:MET:HG3	2.01	0.42
46:FH:375:GLN:HB2	46:FH:419:VAL:HG23	2.02	0.42
45:FI:98:ASP:OD1	45:FI:98:ASP:N	2.53	0.42
45:FI:194:LEU:O	45:FI:198:THR:HG22	2.20	0.42
46:FL:336:LYS:HB3	46:FL:336:LYS:HE2	1.89	0.42
45:GA:138:PHE:CE1	45:GA:169:PHE:HB2	2.55	0.42
46:GB:118:ASP:HA	46:GB:121:ARG:NH1	2.35	0.42
46:GB:153:SER:HB3	46:GB:191:GLN:NE2	2.34	0.42
46:GF:200:MET:HB3	46:GF:268:ILE:HD11	2.00	0.42
46:GF:208:TYR:CE1	46:GF:225:LEU:HD11	2.54	0.42
45:GK:317:MET:HB3	45:GK:377:MET:HG2	2.02	0.42
46:GN:46:ARG:NH2	46:GN:48:ASN:HB2	2.35	0.42
46:GN:173:PRO:HG2	46:GN:380:ARG:HD2	2.01	0.42
45:HC:164:LYS:O	45:HC:166:LYS:NZ	2.52	0.42
45:HE:64:ARG:HH12	45:HE:128:ASN:HD22	1.67	0.42
45:HI:394:LYS:HG2	46:HJ:346:PRO:HG3	2.01	0.42
45:HK:259:LEU:HD23	45:HK:268:MET:CE	2.48	0.42
45:HM:401:LYS:HD3	46:HN:344:TRP:CE3	2.55	0.42
46:IF:21:TRP:CZ3	46:IF:61:PRO:HB3	2.54	0.42
46:IJ:293:MET:HB3	46:IJ:293:MET:HE2	1.77	0.42
46:IL:289:LEU:HD13	46:IL:365:VAL:HG23	2.00	0.42
46:IN:12:CYS:O	46:IN:16:ILE:HG12	2.20	0.42
46:JB:68:LEU:HD12	46:JB:97:ALA:HB2	2.02	0.42
46:JB:119:VAL:HA	46:JB:122:LYS:HG2	2.02	0.42
46:JD:398:TYR:O	46:JD:403:MET:HB3	2.18	0.42
45:JG:287:SER:HA	45:JG:373:ARG:HH21	1.84	0.42
45:JI:226:ASN:ND2	45:JI:367:ASP:OD2	2.52	0.42
46:JN:19:LYS:HE3	46:JN:19:LYS:HB3	1.87	0.42
46:JN:128:ASP:OD1	46:JN:128:ASP:N	2.49	0.42
45:KA:77:GLU:OE2	45:KA:77:GLU:N	2.41	0.42
45:KC:7:ILE:HB	45:KC:137:VAL:HG12	2.00	0.42
46:LD:248:SER:HA	46:LD:252:LYS:HE2	2.01	0.42
45:LE:394:LYS:HG2	46:LF:346:PRO:HG3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LF:201:VAL:HG23	46:LF:301:CYS:SG	2.58	0.42
45:LK:122:ILE:HD13	45:LK:122:ILE:HA	1.89	0.42
45:MA:132:LEU:O	45:MA:164:LYS:NZ	2.37	0.42
45:MG:149:LEU:HD23	45:MG:149:LEU:HA	1.86	0.42
46:MJ:221:THR:HG23	46:MJ:223:GLY:H	1.84	0.42
46:ML:19:LYS:HA	46:ML:19:LYS:HD2	1.84	0.42
46:NB:268:ILE:H	46:NB:299:MET:HE1	1.85	0.42
46:NB:391:ARG:HD2	46:NB:391:ARG:HA	1.74	0.42
45:NC:178:SER:OG	46:ND:347:ASN:OD1	2.36	0.42
45:NC:238:LEU:HD12	45:NC:238:LEU:HA	1.84	0.42
45:NC:384:ILE:HD12	45:NC:384:ILE:HA	1.91	0.42
46:NF:31:ASP:OD1	46:NF:34:GLY:N	2.51	0.42
45:NG:150:GLY:O	45:NG:154:LEU:HD23	2.20	0.42
45:NG:425:LEU:HD23	45:NG:425:LEU:HA	1.90	0.42
46:NH:7:ILE:HG12	46:NH:135:ILE:HG12	2.02	0.42
46:NH:318:ARG:HB3	46:NH:357:PRO:HA	2.02	0.42
45:NI:141:VAL:HG12	45:NI:187:SER:HA	2.01	0.42
46:NJ:372:THR:HA	46:NJ:422:TYR:CE2	2.42	0.42
45:NK:9:VAL:HG12	45:NK:68:LEU:HB2	2.02	0.42
46:NL:183:TYR:HB3	46:NL:398:TYR:HE2	1.84	0.42
45:OA:325:PRO:HA	45:OA:328:VAL:HG12	2.01	0.42
45:OC:21:TRP:CZ2	45:OC:65:ALA:HB2	2.54	0.42
45:OE:269:LEU:HD23	45:OE:269:LEU:H	1.85	0.42
45:OE:390:ARG:HG3	45:OE:391:LEU:HD12	2.00	0.42
46:OF:201:VAL:HG23	46:OF:301:CYS:SG	2.59	0.42
45:OI:271:SER:HB3	45:OI:377:MET:HB3	2.00	0.42
45:OK:271:SER:HB2	45:OK:377:MET:HB3	2.01	0.42
46:OL:19:LYS:HA	46:OL:19:LYS:HD2	1.88	0.42
46:OL:334:GLN:HE22	46:OL:347:ASN:HA	1.83	0.42
46:PH:211:CYS:HA	46:PH:215:LEU:HD12	2.01	0.42
45:PI:196:GLU:HG2	45:PI:197:HIS:ND1	2.35	0.42
45:PI:264:ARG:HG3	45:PI:264:ARG:HH11	1.83	0.42
45:PI:264:ARG:HG3	45:PI:264:ARG:NH1	2.34	0.42
46:PJ:226:ASN:ND2	49:PJ:501:GDP:HN1	2.08	0.42
46:QD:119:VAL:HA	46:QD:122:LYS:HE2	2.00	0.42
46:QD:330:MET:HA	46:QD:333:VAL:HG12	2.01	0.42
46:QF:73:MET:HE3	46:QF:92:PHE:HB3	2.01	0.42
46:QF:375:GLN:HE21	46:QF:419:VAL:HG13	1.83	0.42
46:QH:153:SER:HA	46:QH:195:ASN:ND2	2.34	0.42
46:QH:317:PHE:HB2	46:QH:353:ILE:HD13	2.00	0.42
45:QI:217:LEU:HD12	45:QI:367:ASP:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QJ:5:VAL:HG12	46:QJ:62:ARG:HE	1.84	0.42
45:QM:408:TYR:HB3	45:QM:413:MET:HG2	2.00	0.42
45:RA:119:LEU:HB3	45:RA:123:ARG:HH12	1.84	0.42
46:RD:67:ASP:OD1	46:RD:68:LEU:N	2.49	0.42
45:RE:372:MET:HG3	45:RE:373:ARG:NH1	2.34	0.42
45:RG:223:THR:HG22	45:RG:224:TYR:N	2.33	0.42
46:RJ:321:MET:SD	46:RJ:321:MET:N	2.92	0.42
46:SB:259:PRO:HA	45:SC:404:PHE:CE1	2.53	0.42
45:SK:9:VAL:HG12	45:SK:68:LEU:HB2	2.01	0.42
45:SK:433:GLU:HG2	45:SK:434:GLU:N	2.35	0.42
46:SL:3:GLU:HG3	46:SL:62:ARG:NH2	2.34	0.42
46:SL:276:ARG:HA	46:SL:276:ARG:HD3	1.71	0.42
45:SM:14:ILE:HD11	45:SM:69:ASP:HB2	2.00	0.42
46:TB:121:ARG:HH11	46:TB:121:ARG:HG2	1.84	0.42
45:TE:276:ILE:HG13	45:TE:280:LYS:HE3	2.02	0.42
45:TG:131:GLY:O	45:TG:133:GLN:NE2	2.52	0.42
45:TI:405:VAL:HG12	45:TI:409:VAL:HG23	2.01	0.42
46:TJ:30:ILE:HD11	46:TJ:47:ILE:HD11	2.01	0.42
46:TN:97:ALA:HB3	46:TN:143:THR:HB	2.01	0.42
45:UA:21:TRP:CH2	45:UA:63:PRO:HB3	2.54	0.42
45:UG:346:TRP:CD1	46:UH:391:ARG:HG3	2.55	0.42
46:UJ:238:CYS:SG	46:UJ:239:CYS:N	2.92	0.42
46:UL:238:CYS:SG	46:UL:239:CYS:N	2.92	0.42
46:UN:83:GLN:NE2	46:UN:84:LEU:HD22	2.34	0.42
46:VB:31:ASP:OD2	46:VB:33:THR:OG1	2.37	0.42
45:VE:31:GLN:OE1	45:VE:31:GLN:HA	2.19	0.42
45:VE:399:TYR:OH	45:VE:402:ARG:NH2	2.52	0.42
46:VF:20:PHE:CD1	46:VF:233:MET:HE3	2.54	0.42
46:VF:74:ASP:OD1	46:VF:75:SER:N	2.52	0.42
45:VM:307:PRO:HB2	45:VM:308:ARG:HH21	1.83	0.42
45:WC:41:THR:HG22	45:WC:42:ILE:N	2.26	0.42
45:WI:27:GLU:OE1	45:WI:243:ARG:NH1	2.43	0.42
46:WL:268:ILE:HG22	46:WL:368:VAL:HA	2.02	0.42
4:0D:87:GLN:OE1	45:EC:81:GLY:HA2	2.18	0.42
17:1F:142:ASN:HA	46:GL:74:ASP:OD2	2.19	0.42
8:1H:187:LEU:HD22	45:GG:58:ALA:HA	2.01	0.42
19:1J:246:LEU:HD12	33:4F:40:ARG:NH2	2.35	0.42
23:1O:189:ILE:HD13	46:UD:276:ARG:HD2	2.02	0.42
26:1W:72:ASN:ND2	15:4X:140:PRO:HD2	2.33	0.42
1:2A:130:SER:C	1:2A:132:ASP:H	2.22	0.42
20:2K:365:ARG:HH21	31:3I:284:VAL:HG23	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2L:266:LYS:HG3	21:2L:271:VAL:HB	2.01	0.42
21:2L:748:LYS:HZ1	21:2L:836:GLU:C	2.23	0.42
22:2M:279:GLU:HA	22:2M:282:GLU:HG2	2.02	0.42
25:2R:33:ASN:HD21	45:MG:45:GLY:N	2.18	0.42
25:2R:423:PHE:HB2	25:2R:435:PHE:CE2	2.53	0.42
11:2S:24:GLN:HE21	13:2U:229:ARG:HA	1.85	0.42
13:2U:59:SER:HB3	13:2U:60:ILE:HD12	2.02	0.42
15:2X:7:SER:OG	15:2X:10:ARG:HG2	2.19	0.42
32:3D:95:LYS:HD3	32:3D:95:LYS:HA	1.86	0.42
31:3I:212:THR:O	45:FK:96:LYS:HE3	2.19	0.42
12:3T:88:ASP:OD1	12:3T:91:LYS:HD3	2.19	0.42
13:3U:166:LEU:HD23	13:3U:171:GLN:HB2	2.02	0.42
33:4F:193:LYS:O	33:4F:196:THR:OG1	2.28	0.42
34:4R:452:THR:HG22	34:4R:473:ARG:HB2	2.00	0.42
36:5A:29:GLN:OE1	36:5A:36:ARG:NH1	2.52	0.42
36:5C:21:GLN:HA	36:5C:21:GLN:OE1	2.19	0.42
37:5F:129:ARG:HD3	37:5F:130:PRO:HD2	2.01	0.42
34:5R:26:HIS:HB3	45:LG:46:ASP:OD2	2.18	0.42
39:6F:133:THR:O	39:6F:133:THR:HG23	2.20	0.42
40:6G:123:LEU:HB3	40:6G:127:ILE:HG12	2.02	0.42
34:6R:282:ASP:OD2	34:6R:306:ARG:NH2	2.53	0.42
34:7R:304:LEU:HA	46:CB:78:ALA:O	2.20	0.42
45:AC:210:TYR:OH	46:AD:323:THR:OG1	2.38	0.42
45:AG:384:ILE:O	45:AG:387:VAL:HG22	2.18	0.42
45:AM:7:ILE:HD11	45:AM:135:PHE:HD2	1.85	0.42
45:AM:271:SER:OG	45:AM:301:MET:HA	2.19	0.42
46:BB:28:HIS:HA	46:BB:43:GLN:CD	2.40	0.42
45:BG:256:GLN:O	46:BJ:397:TRP:CE2	2.72	0.42
45:BI:88:HIS:O	45:BI:91:GLN:HG2	2.19	0.42
45:BI:334:THR:O	45:BI:338:LYS:HG2	2.19	0.42
46:BJ:65:LEU:HD22	46:BJ:90:PHE:CE2	2.54	0.42
45:BK:349:THR:O	46:BN:179:VAL:HG23	2.19	0.42
45:CA:324:VAL:HG12	45:CA:326:LYS:HE2	2.02	0.42
46:CB:260:PHE:HD2	46:CB:263:LEU:HD13	1.83	0.42
46:CF:97:ALA:O	46:CF:103:LYS:HE2	2.19	0.42
46:CF:326:VAL:O	46:CF:330:MET:HG2	2.19	0.42
46:CH:134:GLN:HA	46:CH:165:GLU:O	2.20	0.42
46:CL:93:GLY:O	46:CL:94:GLN:NE2	2.53	0.42
45:DE:298:PRO:HB3	45:DE:307:PRO:HD2	2.01	0.42
46:DF:275:SER:O	46:DF:279:GLN:HG3	2.20	0.42
45:DG:60:LYS:HD2	45:EG:283:HIS:CD2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DH:336:LYS:HA	46:DH:336:LYS:HD2	1.70	0.42
46:DJ:247:ASN:ND2	45:DK:73:THR:HG21	2.35	0.42
46:DJ:347:ASN:OD1	45:DK:178:SER:OG	2.37	0.42
45:DK:107:HIS:ND1	45:DK:107:HIS:O	2.52	0.42
46:DL:139:LEU:HA	46:DL:145:SER:HB3	2.00	0.42
45:DM:264:ARG:HA	45:DM:264:ARG:HH11	1.84	0.42
46:ED:11:GLN:NE2	49:ED:501:GDP:O3B	2.52	0.42
45:EG:328:VAL:O	45:EG:332:ILE:HG12	2.18	0.42
46:EH:294:PHE:CE2	46:EH:333:VAL:HG11	2.53	0.42
46:EJ:207:LEU:HB3	46:EJ:225:LEU:HD22	2.00	0.42
45:EM:21:TRP:O	45:EM:25:CYS:N	2.43	0.42
46:EN:383:GLU:HA	46:EN:386:THR:HG22	2.01	0.42
45:FA:353:VAL:HG12	46:FD:177:ASP:OD1	2.18	0.42
46:FB:391:ARG:HD2	46:FB:391:ARG:HA	1.78	0.42
45:FC:322:ASP:OD1	45:FC:373:ARG:NH1	2.52	0.42
45:FE:384:ILE:O	45:FE:387:VAL:HG22	2.19	0.42
46:FH:161:ASP:OD1	46:FH:161:ASP:N	2.49	0.42
45:FK:7:ILE:HB	45:FK:137:VAL:HA	2.01	0.42
45:GA:171:ILE:HG12	47:GA:501:GTP:HN22	1.85	0.42
45:GC:51:THR:HG21	45:GC:243:ARG:HB3	2.01	0.42
45:GM:1:MET:O	45:GM:131:GLY:HA3	2.20	0.42
45:GM:174:SER:HB3	45:GM:207:GLU:OE2	2.20	0.42
45:GM:294:SER:O	45:GM:297:GLU:HG3	2.18	0.42
46:GN:39:ASP:OD1	46:GN:40:SER:N	2.52	0.42
46:GN:374:ILE:HA	46:GN:377:MET:HE2	2.02	0.42
46:HF:290:THR:HG21	46:HF:329:GLN:HG3	2.00	0.42
45:HG:259:LEU:HD11	45:HG:316:SER:HB2	2.00	0.42
46:HH:105:HIS:CE1	46:HH:150:LEU:HD13	2.55	0.42
46:HH:127:CYS:SG	46:HH:130:LEU:HD13	2.59	0.42
46:HH:273:LEU:H	46:HH:292:GLN:HE22	1.68	0.42
45:HI:141:VAL:HG21	45:HI:172:TYR:CE1	2.54	0.42
45:HI:356:ASN:OD1	45:HI:357:TYR:N	2.52	0.42
46:HL:391:ARG:HA	46:HL:391:ARG:HD2	1.89	0.42
45:HM:141:VAL:HG12	45:HM:171:ILE:O	2.19	0.42
45:HM:203:MET:HB3	45:HM:303:ALA:HB2	2.01	0.42
45:IA:257:THR:HG22	46:ID:397:TRP:CZ3	2.54	0.42
46:IB:156:ARG:HH21	46:IB:164:MET:HB2	1.84	0.42
46:IB:285:THR:O	46:IB:288:GLU:HG3	2.20	0.42
46:IB:345:ILE:O	46:IB:345:ILE:HG13	2.20	0.42
46:ID:19:LYS:HA	46:ID:22:GLU:HG2	2.01	0.42
45:IE:194:LEU:O	45:IE:198:THR:HG22	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:IG:399:TYR:O	45:IG:402:ARG:NH1	2.52	0.42
46:IH:77:ARG:HH21	46:IH:87:PRO:HB3	1.85	0.42
46:IL:268:ILE:HG13	46:IL:300:MET:HG3	2.01	0.42
45:IM:172:TYR:HD1	45:IM:173:PRO:HD2	1.84	0.42
46:JB:110:ALA:O	46:JB:113:ILE:HG22	2.20	0.42
46:JF:16:ILE:HD13	46:JF:226:ASN:OD1	2.20	0.42
45:JI:175:PRO:O	45:JI:394:LYS:NZ	2.33	0.42
46:JJ:224:ASP:OD1	46:JJ:225:LEU:N	2.52	0.42
46:KH:233:MET:O	46:KH:236:VAL:HG12	2.19	0.42
45:KI:430:LYS:O	45:KI:434:GLU:HG2	2.20	0.42
45:KK:262:TYR:HB2	45:KK:265:ILE:HG12	2.01	0.42
45:KM:408:TYR:HB3	45:KM:413:MET:SD	2.59	0.42
45:LA:118:CYS:O	45:LA:122:ILE:HG12	2.20	0.42
46:LD:51:TYR:HB3	46:LD:59:TYR:HB3	2.01	0.42
45:LG:210:TYR:CE1	45:LG:227:LEU:HD11	2.55	0.42
46:LL:253:LEU:HD11	46:LL:316:LEU:HD11	2.01	0.42
46:LL:280:GLN:HE21	46:LL:281:TYR:HE1	1.67	0.42
45:LM:411:GLU:HA	45:LM:411:GLU:OE1	2.19	0.42
46:LN:100:ASN:HB3	46:LN:103:LYS:HB2	2.01	0.42
45:MA:93:ILE:HG22	45:MA:114:ILE:HD11	2.00	0.42
45:MA:294:SER:O	45:MA:300:ASN:ND2	2.37	0.42
46:MB:193:VAL:HA	46:MB:264:HIS:HE1	1.84	0.42
45:ME:27:GLU:CD	45:ME:243:ARG:HH12	2.21	0.42
46:MF:345:ILE:HG23	46:MF:345:ILE:O	2.18	0.42
45:MI:74:VAL:O	45:MI:78:VAL:HG23	2.19	0.42
45:MI:174:SER:HB2	45:MI:177:VAL:O	2.19	0.42
46:MJ:73:MET:HA	46:MJ:76:VAL:HG12	2.00	0.42
46:MJ:309:ARG:H	46:MJ:372:THR:HG1	1.63	0.42
45:MM:93:ILE:HD11	45:MM:121:ARG:HG3	2.00	0.42
45:MM:216:ASN:HB3	45:MM:275:ILE:O	2.19	0.42
45:NA:89:PRO:HD3	45:OA:283:HIS:ND1	2.34	0.42
45:NA:383:ALA:O	45:NA:386:GLU:HG2	2.19	0.42
45:NC:291:ILE:HD13	45:NC:373:ARG:HB3	2.01	0.42
45:NE:225:THR:O	45:NE:229:ARG:HG3	2.19	0.42
46:NF:345:ILE:O	46:NF:345:ILE:HG23	2.19	0.42
46:NH:359:LYS:HE2	46:NH:359:LYS:HB2	1.76	0.42
45:NI:276:ILE:HG13	45:NI:283:HIS:CE1	2.53	0.42
46:NJ:306:ARG:HG2	46:NJ:340:TYR:CZ	2.54	0.42
45:NK:7:ILE:N	45:NK:136:LEU:O	2.37	0.42
45:NK:101:ASN:HD21	46:NL:252:LYS:HE3	1.83	0.42
45:NM:31:GLN:NE2	45:NM:33:ASP:OD2	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:NN:69:GLU:HA	46:NN:70:PRO:HD3	1.91	0.42
46:NN:222:TYR:O	46:NN:226:ASN:ND2	2.52	0.42
46:NN:309:ARG:HH21	46:NN:342:VAL:HA	1.84	0.42
45:OC:22:GLU:O	45:OC:26:LEU:HD23	2.20	0.42
45:OC:176:GLN:HB3	46:OD:331:LEU:HD11	2.00	0.42
46:OD:406:MET:O	46:OD:409:THR:N	2.52	0.42
45:OG:2:ARG:HB2	45:OG:133:GLN:NE2	2.35	0.42
45:OI:133:GLN:HB3	45:OI:252:ILE:HD11	2.00	0.42
45:OK:89:PRO:HD2	45:PK:280:LYS:CE	2.46	0.42
46:OL:139:LEU:HG	46:OL:168:SER:OG	2.20	0.42
46:OL:210:ILE:HD11	46:OL:228:LEU:HD21	2.01	0.42
46:ON:1:MET:HG2	46:ON:2:ARG:HG3	2.01	0.42
46:ON:130:LEU:O	46:ON:162:ARG:NH2	2.53	0.42
45:PA:393:HIS:CE1	45:PA:397:LEU:HD11	2.55	0.42
45:PE:245:ASP:OD1	45:PE:245:ASP:N	2.47	0.42
46:PH:208:TYR:CE1	46:PH:225:LEU:HD11	2.55	0.42
46:PL:86:ARG:HD3	46:PL:88:ASP:HB3	2.02	0.42
45:QA:75:ILE:O	45:QA:79:ARG:NH1	2.52	0.42
45:QA:401:LYS:HB2	45:QA:401:LYS:HE3	1.76	0.42
46:QB:5:VAL:HG11	46:QB:123:GLU:OE1	2.19	0.42
45:QE:320:ARG:HD3	45:QE:360:PRO:HG3	2.00	0.42
45:QI:21:TRP:CZ2	45:QI:65:ALA:HB2	2.55	0.42
46:QJ:16:ILE:HD13	46:QJ:226:ASN:OD1	2.19	0.42
46:QJ:238:CYS:SG	46:QJ:239:CYS:N	2.93	0.42
46:QJ:318:ARG:NH1	46:QJ:358:PRO:HG3	2.35	0.42
45:QK:21:TRP:CZ2	45:QK:65:ALA:HB2	2.55	0.42
45:RG:11:GLN:HG3	45:RG:74:VAL:HG11	2.00	0.42
46:RL:2:ARG:NH1	45:RM:72:PRO:HD3	2.34	0.42
46:RL:238:CYS:SG	46:RL:239:CYS:N	2.92	0.42
45:RM:371:VAL:HG12	45:RM:373:ARG:H	1.85	0.42
45:SA:224:TYR:HB3	47:SA:501:GTP:O6	2.20	0.42
46:SB:391:ARG:HA	46:SB:391:ARG:HD2	1.91	0.42
45:SC:261:PRO:HB3	45:SC:346:TRP:HH2	1.85	0.42
46:SH:318:ARG:HD3	46:SH:358:PRO:HG3	2.01	0.42
45:SI:102:ASN:HD22	45:SI:105:ARG:HG3	1.84	0.42
45:SI:265:ILE:HG22	45:SI:380:ASN:HD21	1.83	0.42
46:SJ:67:ASP:O	46:SJ:92:PHE:HA	2.20	0.42
45:SM:91:GLN:HG3	45:SM:121:ARG:HH21	1.84	0.42
46:TD:135:ILE:HG22	46:TD:137:HIS:HD2	1.85	0.42
45:TE:338:LYS:HG3	45:TE:340:THR:HG22	2.01	0.42
45:TG:90:GLU:HG3	45:UG:280:LYS:HE3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:TH:113:ILE:HD12	46:TH:154:LYS:HE3	2.01	0.42
46:TH:372:THR:O	46:TH:375:GLN:HG2	2.19	0.42
45:TK:254:GLU:O	45:TK:255:PHE:HD2	2.02	0.42
46:TL:274:THR:CG2	46:TL:279:GLN:HG2	2.49	0.42
46:TN:21:TRP:O	46:TN:25:SER:N	2.38	0.42
45:UA:332:ILE:HA	45:UA:335:ILE:HD13	2.00	0.42
46:UB:318:ARG:HB3	46:UB:357:PRO:HA	2.01	0.42
46:UD:74:ASP:OD1	46:UD:75:SER:N	2.52	0.42
45:UI:377:MET:SD	45:UI:379:SER:HB3	2.59	0.42
45:UK:156:ARG:HD3	45:UK:156:ARG:HA	1.88	0.42
46:UL:74:ASP:OD2	46:UL:74:ASP:N	2.53	0.42
46:UN:44:LEU:HA	46:UN:47:ILE:HD11	2.02	0.42
45:VA:101:ASN:HA	45:VA:144:GLY:H	1.84	0.42
45:VC:407:TRP:HZ2	46:VD:258:ILE:HD11	1.84	0.42
45:VK:141:VAL:HG22	45:VK:187:SER:HA	2.01	0.42
46:VL:141:GLY:HA3	49:VL:501:GDP:O3A	2.20	0.42
46:VL:317:PHE:O	46:VL:354:CYS:N	2.52	0.42
45:VM:108:TYR:HE2	45:VM:413:MET:HB2	1.84	0.42
45:VM:183:GLU:HG2	45:VM:184:PRO:HD3	2.02	0.42
46:WB:221:THR:HG23	46:WB:224:ASP:H	1.85	0.42
45:WK:174:SER:HB3	45:WK:207:GLU:HG2	2.02	0.42
46:WN:188:SER:O	46:WN:192:LEU:HD23	2.20	0.42
46:WN:287:PRO:HA	46:WN:329:GLN:OE1	2.19	0.42
24:1P:146:TYR:HE2	24:2P:478:TRP:CD1	2.36	0.42
13:1U:495:GLN:HE21	13:1U:497:LEU:HD21	1.85	0.42
14:1V:111:SER:O	14:1V:111:SER:OG	2.34	0.42
28:2F:94:HIS:O	45:HE:308:ARG:NH1	2.52	0.42
30:2H:207:LYS:HD2	30:2H:208:ASN:O	2.19	0.42
30:2H:207:LYS:NZ	30:2H:209:ARG:HH11	2.18	0.42
31:2I:20:LEU:HD12	31:2I:22:LYS:H	1.84	0.42
31:2I:83:ARG:HH11	45:GE:304:LYS:HE2	1.84	0.42
31:2I:91:GLN:N	31:2I:91:GLN:OE1	2.53	0.42
20:2K:249:GLU:O	20:2K:253:LYS:HG2	2.19	0.42
20:2K:474:ILE:HA	20:2K:477:LYS:HD2	2.02	0.42
11:2S:164:GLN:N	11:2S:164:GLN:OE1	2.53	0.42
12:2T:77:ASP:HB3	12:2T:103:VAL:HG22	2.00	0.42
13:2U:251:ASP:OD1	13:2U:265:SER:HA	2.19	0.42
15:2X:124:TYR:CE2	46:MH:362:LYS:HE3	2.55	0.42
1:3A:111:SER:O	1:3A:112:LEU:HD23	2.19	0.42
21:3L:41:LYS:NZ	46:BB:39:ASP:O	2.52	0.42
13:3U:292:HIS:HB3	13:3U:304:TRP:NE1	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:4C:3:LEU:HD12	27:4C:3:LEU:O	2.20	0.42
10:4Q:115:LYS:HZ3	45:AI:264:ARG:HH21	1.67	0.42
34:4R:226:LYS:O	34:4R:230:GLU:OE1	2.37	0.42
34:4R:353:ASP:OD1	34:4R:356:THR:OG1	2.22	0.42
36:5A:27:LYS:O	36:5A:44:SER:OG	2.26	0.42
36:5B:43:CYS:SG	46:KF:391:ARG:NE	2.93	0.42
36:5B:45:TYR:CZ	36:5B:56:ILE:HG13	2.55	0.42
41:6H:319:MET:HB2	41:6H:323:TYR:CZ	2.55	0.42
10:6Q:127:GLU:H	10:6Q:127:GLU:CD	2.23	0.42
43:8P:270:UNK:HA	46:QD:276:ARG:NH2	2.34	0.42
46:AB:372:THR:HA	46:AB:422:TYR:CE2	2.46	0.42
46:AD:270:PHE:HD2	46:AD:273:LEU:HD21	1.84	0.42
46:AJ:175:VAL:O	46:AJ:175:VAL:HG23	2.19	0.42
46:AL:289:LEU:HD11	46:AL:363:MET:HB3	2.01	0.42
45:BA:88:HIS:CE1	45:CA:280:LYS:HZ1	2.37	0.42
46:BB:10:GLY:O	46:BB:14:ASN:ND2	2.52	0.42
45:BG:208:ALA:O	45:BG:212:ILE:HG12	2.19	0.42
46:BH:232:ALA:HB1	46:BH:268:ILE:HD12	2.02	0.42
46:BJ:201:VAL:HG23	46:BJ:301:CYS:SG	2.59	0.42
45:BK:210:TYR:CE1	45:BK:227:LEU:HD11	2.55	0.42
45:BM:124:LYS:HA	45:BM:124:LYS:HD3	1.60	0.42
45:BM:209:ILE:HG22	45:BM:227:LEU:HD22	2.02	0.42
46:BN:86:ARG:CZ	46:CL:281:TYR:CD2	3.03	0.42
46:CB:69:GLU:HA	46:CB:70:PRO:HD3	1.93	0.42
46:CB:149:THR:HA	46:CB:152:ILE:HD12	2.02	0.42
46:CD:374:ILE:HG22	46:CD:422:TYR:CE2	2.55	0.42
46:CH:236:VAL:HG23	46:CH:237:THR:HG23	2.01	0.42
45:CI:3:GLU:HB2	45:CI:129:CYS:SG	2.59	0.42
45:CM:23:LEU:HG	45:CM:27:GLU:OE1	2.19	0.42
46:DB:139:LEU:HB3	46:DB:185:ALA:HA	2.01	0.42
46:DB:344:TRP:HE3	46:DB:345:ILE:HG23	1.84	0.42
45:DE:245:ASP:OD1	45:DE:246:GLY:N	2.53	0.42
46:DH:68:LEU:HB3	46:DH:96:GLY:HA2	2.01	0.42
46:DH:284:LEU:HD23	46:DH:284:LEU:HA	1.91	0.42
46:DH:361:LEU:HD23	46:DH:361:LEU:HA	1.86	0.42
45:DI:408:TYR:HB3	45:DI:413:MET:HE2	2.01	0.42
46:DJ:294:PHE:CD2	46:DJ:333:VAL:HG21	2.55	0.42
46:DL:336:LYS:O	46:DL:336:LYS:HD3	2.20	0.42
46:DN:147:MET:HA	46:DN:150:LEU:HG	2.01	0.42
45:EA:8:HIS:HD1	45:EA:67:PHE:HE1	1.68	0.42
46:ED:239:CYS:HB3	46:ED:354:CYS:HB2	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EG:141:VAL:HG12	45:EG:171:ILE:O	2.19	0.42
45:EK:75:ILE:HG22	45:EK:79:ARG:HE	1.84	0.42
46:FB:376:GLU:O	46:FB:380:ARG:HG2	2.19	0.42
45:FC:10:GLY:O	45:FC:14:ILE:HD12	2.18	0.42
45:FC:430:LYS:HD3	45:FC:433:GLU:OE2	2.20	0.42
45:FK:384:ILE:O	45:FK:387:VAL:HG22	2.20	0.42
45:FM:71:GLU:HA	45:FM:72:PRO:HD3	1.91	0.42
45:FM:124:LYS:HE2	45:FM:124:LYS:HB2	1.82	0.42
45:GE:183:GLU:HG3	45:GE:184:PRO:HD3	2.01	0.42
46:GH:68:LEU:HD13	46:GH:143:THR:OG1	2.18	0.42
46:GJ:391:ARG:HA	46:GJ:391:ARG:HD2	1.90	0.42
45:GK:139:ASN:OD1	45:GK:139:ASN:N	2.53	0.42
46:HB:318:ARG:HD3	46:HB:358:PRO:HG3	2.02	0.42
46:HB:391:ARG:HA	46:HB:391:ARG:HD2	1.78	0.42
45:HC:183:GLU:N	45:HC:184:PRO:HD2	2.34	0.42
45:HE:322:ASP:OD1	45:HE:373:ARG:NH1	2.52	0.42
45:HG:263:PRO:HD3	46:HJ:396:HIS:NE2	2.34	0.42
46:HJ:167:PHE:CZ	46:HJ:233:MET:HG2	2.55	0.42
46:HJ:287:PRO:HG3	46:HJ:329:GLN:NE2	2.34	0.42
46:HJ:293:MET:SD	46:HJ:365:VAL:HG11	2.59	0.42
46:HN:51:TYR:HE1	46:HN:61:PRO:HG3	1.85	0.42
46:IF:3:GLU:OE2	46:IF:128:ASP:N	2.51	0.42
45:IG:56:THR:HG23	45:IG:58:ALA:H	1.85	0.42
46:IN:103:LYS:HB2	46:IN:103:LYS:HE2	1.81	0.42
45:JC:322:ASP:OD2	45:JC:372:MET:HG2	2.19	0.42
46:JD:153:SER:O	46:JD:157:GLU:HG3	2.19	0.42
45:JE:439:THR:HB	46:JH:391:ARG:HH11	1.85	0.42
45:JG:420:GLU:OE2	45:NG:308:ARG:NH1	2.45	0.42
45:JK:372:MET:SD	45:JK:372:MET:N	2.92	0.42
46:JN:221:THR:HG22	46:JN:222:TYR:N	2.33	0.42
46:KB:374:ILE:O	46:KB:377:MET:HG3	2.20	0.42
46:KD:69:GLU:CD	46:KD:71:GLY:H	2.23	0.42
46:KD:213:ARG:NH1	46:KD:297:LYS:HD2	2.34	0.42
45:KE:177:VAL:HG13	46:KF:327:ASP:HB3	2.00	0.42
46:KN:410:GLU:HA	46:KN:413:SER:HB3	2.01	0.42
45:LC:241:SER:OG	45:LC:250:VAL:O	2.22	0.42
45:LG:109:THR:HG22	45:LG:110:ILE:HG23	2.01	0.42
45:LI:88:HIS:ND1	45:LI:90:GLU:HG2	2.34	0.42
47:LI:501:GTP:O2A	47:LI:501:GTP:H8	2.03	0.42
45:MC:194:LEU:O	45:MC:198:THR:HG22	2.19	0.42
46:MJ:207:LEU:HB3	46:MJ:225:LEU:HG	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ML:99:ASN:HA	46:ML:142:GLY:H	1.85	0.42
46:ML:342:VAL:HG13	46:ML:345:ILE:HG22	2.02	0.42
45:MM:121:ARG:NH2	45:MM:124:LYS:HD2	2.34	0.42
45:NE:42:ILE:HG23	45:NE:43:GLY:H	1.84	0.42
46:NH:109:GLY:HA2	46:NH:147:MET:HE3	2.01	0.42
45:NI:98:ASP:O	45:NI:105:ARG:NH2	2.52	0.42
46:NJ:7:ILE:HD12	46:NJ:64:ILE:O	2.20	0.42
45:OA:11:GLN:HG2	45:OA:15:GLN:HE22	1.85	0.42
45:OA:296:PHE:CE2	45:OA:335:ILE:HG21	2.55	0.42
45:OA:401:LYS:O	45:OA:401:LYS:HD2	2.20	0.42
46:OB:156:ARG:HA	46:OB:156:ARG:HD2	1.76	0.42
45:OC:229:ARG:NH1	45:OC:363:VAL:HG11	2.35	0.42
45:OE:222:PRO:HD2	46:OF:324:LYS:HD3	2.02	0.42
46:OF:289:LEU:HD13	46:OF:365:VAL:HG13	2.02	0.42
45:OK:336:LYS:HE3	45:OK:351:PHE:HE2	1.84	0.42
46:OL:178:THR:HG22	46:OL:180:VAL:H	1.84	0.42
45:OM:195:LEU:HD12	45:OM:266:HIS:HE1	1.84	0.42
45:OM:292:THR:HG21	45:OM:331:SER:HB3	2.01	0.42
45:PA:320:ARG:NH2	45:PA:360:PRO:HA	2.34	0.42
46:PB:63:ALA:O	46:PB:89:ASN:ND2	2.46	0.42
46:PB:116:VAL:O	46:PB:120:VAL:HG23	2.19	0.42
46:PH:183:TYR:O	46:PH:187:LEU:HD23	2.19	0.42
46:PH:341:PHE:HD1	46:PH:348:ASN:HD21	1.66	0.42
45:PM:210:TYR:HE1	45:PM:227:LEU:HD11	1.83	0.42
45:PM:280:LYS:O	45:PM:280:LYS:HG3	2.20	0.42
46:PN:213:ARG:O	46:PN:216:LYS:HG3	2.19	0.42
45:QA:269:LEU:HD12	45:QA:301:MET:SD	2.59	0.42
45:QG:47:ASP:HB2	45:QG:49:PHE:HD1	1.84	0.42
45:QG:195:LEU:HD21	45:QG:264:ARG:HH21	1.84	0.42
46:QH:372:THR:HA	46:QH:422:TYR:CE2	2.54	0.42
46:QJ:257:LEU:HD11	46:QJ:314:SER:HB2	2.00	0.42
45:QM:3:GLU:OE2	45:QM:130:THR:N	2.51	0.42
46:RB:107:THR:HG1	46:RB:108:GLU:CD	2.21	0.42
45:RC:434:GLU:HA	45:RC:434:GLU:OE1	2.20	0.42
46:RF:135:ILE:HB	46:RF:166:THR:HA	2.01	0.42
46:RH:66:MET:HE3	46:RH:116:VAL:HG21	2.01	0.42
45:RI:48:ALA:HB1	45:RI:243:ARG:HB2	2.01	0.42
45:RI:329:ASN:ND2	46:RJ:175:VAL:HG13	2.34	0.42
45:RK:328:VAL:HG11	45:RK:353:VAL:HG21	2.02	0.42
45:SA:191:THR:HA	45:SA:194:LEU:HG	2.00	0.42
46:SF:300:MET:HG2	46:SF:300:MET:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SJ:324:LYS:HG3	45:SK:222:PRO:HD2	2.01	0.42
46:SL:2:ARG:NH1	46:SL:46:ARG:HH22	2.18	0.42
46:SL:156:ARG:HD3	46:SL:156:ARG:HA	1.80	0.42
45:SM:68:LEU:HD11	45:SM:118:CYS:HB2	2.02	0.42
45:SM:98:ASP:OD1	45:SM:99:ALA:N	2.52	0.42
46:SN:414:ASN:O	46:SN:418:LEU:N	2.44	0.42
45:TE:254:GLU:O	45:TE:255:PHE:HD1	2.02	0.42
45:TI:102:ASN:OD1	45:TI:105:ARG:N	2.45	0.42
45:TI:387:VAL:O	45:TI:390:ARG:HG2	2.18	0.42
45:TK:301:MET:HG3	45:TK:303:ALA:H	1.85	0.42
46:TL:316:LEU:HG	46:TL:352:SER:HB2	2.01	0.42
46:TL:334:GLN:HG2	46:TL:341:PHE:CD2	2.55	0.42
45:TM:169:PHE:HA	45:TM:202:VAL:HG22	2.01	0.42
46:TN:219:THR:O	46:TN:219:THR:HG23	2.19	0.42
46:TN:246:LEU:HD12	46:TN:246:LEU:O	2.20	0.42
46:UB:213:ARG:HB2	46:UB:297:LYS:NZ	2.35	0.42
45:UC:32:PRO:HB3	45:UC:83:TYR:CE1	2.54	0.42
46:UH:202:ILE:HD12	46:UH:300:MET:HG2	2.02	0.42
46:UL:255:VAL:HG23	45:UM:407:TRP:CD1	2.54	0.42
45:UM:331:SER:O	45:UM:335:ILE:HG12	2.20	0.42
46:UN:22:GLU:OE1	46:UN:22:GLU:N	2.51	0.42
46:UN:164:MET:H	46:UN:197:ASP:HB2	1.85	0.42
46:UN:290:THR:O	46:UN:293:MET:HG2	2.20	0.42
46:VD:208:TYR:CE1	46:VD:225:LEU:HD11	2.55	0.42
45:VG:356:ASN:OD1	45:VG:357:TYR:N	2.52	0.42
45:VI:338:LYS:HD2	45:VI:341:ILE:HD12	2.01	0.42
45:VM:75:ILE:O	45:VM:79:ARG:NH1	2.52	0.42
45:WA:183:GLU:N	45:WA:184:PRO:HD2	2.34	0.42
45:WE:141:VAL:HG23	45:WE:170:THR:HB	2.02	0.42
45:WE:207:GLU:O	45:WE:210:TYR:HB2	2.19	0.42
46:WH:390:ARG:HD2	46:WH:391:ARG:HG2	2.00	0.42
45:WI:87:PHE:HB3	45:WI:92:LEU:HD11	2.00	0.42
46:WJ:11:GLN:HG2	49:WJ:501:GDP:O3B	2.20	0.42
46:WL:105:HIS:CE1	46:WL:150:LEU:HD12	2.54	0.42
46:WL:156:ARG:NH1	46:WL:162:ARG:O	2.52	0.42
45:WM:3:GLU:OE2	45:WM:131:GLY:N	2.34	0.42
45:WM:121:ARG:HA	45:WM:124:LYS:HZ3	1.85	0.42
7:0G:178:LYS:NZ	45:LM:326:LYS:O	2.49	0.42
14:1V:1:MET:SD	14:1V:2:GLU:N	2.93	0.42
16:2B:15:LYS:HD2	16:2B:178:PRO:HA	2.02	0.42
27:2C:130:ARG:HH12	27:2C:195:TRP:HA	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:2C:268:ARG:HA	27:2C:268:ARG:HH11	1.82	0.42
4:2D:57:THR:H	45:EK:219:ILE:HG12	1.85	0.42
20:2K:263:ASN:O	20:2K:266:LEU:HB2	2.20	0.42
21:2L:372:THR:O	21:2L:375:PRO:HD2	2.19	0.42
21:2L:620:LEU:HB2	21:2L:624:GLU:HG2	2.02	0.42
24:2P:410:TRP:CZ3	24:2P:413:LYS:HD2	2.55	0.42
11:2S:256:LEU:N	11:2S:257:PRO:HD2	2.35	0.42
13:2U:435:ASN:HD21	13:2U:437:GLN:HE21	1.67	0.42
13:2U:462:ASP:HA	13:2U:479:LYS:NZ	2.35	0.42
13:2U:560:TRP:CD1	13:2U:567:LYS:HA	2.54	0.42
16:3B:100:VAL:HG12	16:3B:189:ILE:HD13	2.02	0.42
30:3H:199:GLU:OE2	46:AH:245:GLN:NE2	2.44	0.42
31:3I:206:GLN:N	31:3I:206:GLN:OE1	2.52	0.42
21:3L:140:LEU:HD23	21:3L:140:LEU:HA	1.80	0.42
21:3L:216:ASP:OD1	21:3L:216:ASP:N	2.50	0.42
25:3R:26:SER:O	25:3R:30:GLN:HG3	2.20	0.42
13:3U:239:LEU:HD23	13:3U:239:LEU:HA	1.82	0.42
13:3U:264:LEU:HD23	13:3U:269:MET:HB3	2.01	0.42
14:3V:66:ASP:OD1	14:3V:67:PHE:N	2.52	0.42
27:4C:69:VAL:HG22	46:LN:41:ASP:HB3	2.01	0.42
36:5B:142:GLN:HB2	46:NH:320:ARG:HH11	1.84	0.42
36:5C:65:THR:HG23	36:5C:67:ALA:H	1.84	0.42
37:5H:22:LYS:HE2	37:5H:22:LYS:HA	2.01	0.42
10:5Q:48:GLU:HG3	10:5Q:161:ARG:HG2	2.02	0.42
34:5R:318:TYR:HB3	34:5R:321:MET:HB2	2.01	0.42
41:6H:290:LEU:HD12	41:6H:290:LEU:HA	1.90	0.42
34:6R:374:LYS:HD2	34:6R:374:LYS:HA	1.78	0.42
45:AA:216:ASN:HB3	45:AA:275:ILE:O	2.18	0.42
46:AB:45:GLU:O	46:AB:46:ARG:HD3	2.19	0.42
46:AB:74:ASP:OD1	46:AB:77:ARG:NH1	2.52	0.42
45:AC:329:ASN:OD1	46:AF:175:VAL:HG13	2.20	0.42
45:AC:387:VAL:HG12	45:AC:390:ARG:NH1	2.34	0.42
46:AD:74:ASP:OD1	46:AD:77:ARG:NH2	2.53	0.42
45:AE:135:PHE:HB2	45:AE:166:LYS:HG2	2.02	0.42
46:AH:99:ASN:HA	46:AH:142:GLY:H	1.85	0.42
45:AM:208:ALA:O	45:AM:212:ILE:HG12	2.19	0.42
45:BA:174:SER:HB2	45:BA:177:VAL:O	2.20	0.42
45:BA:223:THR:HG23	45:BA:225:THR:H	1.84	0.42
46:BD:324:LYS:HE2	46:BD:328:GLU:OE2	2.20	0.42
45:BK:70:LEU:HD12	45:BK:145:THR:HG22	2.02	0.42
46:BN:91:VAL:HG21	46:BN:116:VAL:HB	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:156:ARG:HG3	46:BN:156:ARG:NH1	2.35	0.42
46:CB:382:ALA:O	46:CB:386:THR:HG22	2.20	0.42
45:CC:27:GLU:HG2	45:CC:361:THR:HG21	2.02	0.42
45:CC:331:SER:O	45:CC:335:ILE:HG12	2.20	0.42
46:CD:50:TYR:CE2	46:CD:241:ARG:HD3	2.54	0.42
45:CI:71:GLU:HA	45:CI:72:PRO:HD3	1.86	0.42
45:CI:214:ARG:NH2	45:CI:215:ARG:HG2	2.34	0.42
45:CK:21:TRP:CZ3	45:CK:63:PRO:HB3	2.55	0.42
45:CM:88:HIS:HB3	45:CM:91:GLN:CD	2.39	0.42
46:DB:11:GLN:HG2	46:DB:12:CYS:N	2.34	0.42
46:DB:221:THR:HG23	46:DB:224:ASP:H	1.85	0.42
46:DB:322:SER:OG	46:DB:325:GLU:HG2	2.20	0.42
45:DG:196:GLU:HG2	45:DG:197:HIS:ND1	2.34	0.42
46:DH:131:GLN:HE22	46:DH:250:LEU:HB2	1.84	0.42
46:DJ:379:LYS:HE3	46:DJ:379:LYS:HB3	1.66	0.42
46:DN:105:HIS:ND1	46:DN:150:LEU:HD23	2.35	0.42
46:DN:235:GLY:HA2	46:DN:238:CYS:SG	2.60	0.42
46:EB:68:LEU:HB2	46:EB:147:MET:HE3	2.01	0.42
46:EB:156:ARG:NH1	46:EB:197:ASP:OD2	2.53	0.42
45:EC:75:ILE:HG22	45:EC:79:ARG:HE	1.85	0.42
46:EF:3:GLU:HG3	46:EF:62:ARG:NH1	2.34	0.42
45:EG:245:ASP:OD1	45:EG:246:GLY:N	2.53	0.42
45:EM:326:LYS:HZ3	46:EN:220:PRO:HD2	1.83	0.42
46:FB:330:MET:HB3	46:FB:349:ILE:HD12	2.02	0.42
45:FC:372:MET:SD	45:FC:372:MET:N	2.92	0.42
45:FE:205:ASP:OD1	45:FE:205:ASP:N	2.53	0.42
46:FF:207:LEU:HD13	46:FF:225:LEU:HB3	2.02	0.42
46:FF:253:LEU:HD23	46:FF:253:LEU:HA	1.88	0.42
46:FH:310:TYR:CD1	46:FH:371:SER:HB2	2.55	0.42
46:FL:100:ASN:HB3	46:FL:103:LYS:HB2	2.01	0.42
45:FM:408:TYR:HD2	45:FM:418:PHE:HZ	1.66	0.42
45:GA:71:GLU:HA	46:GB:2:ARG:HH22	1.84	0.42
45:GA:420:GLU:HA	45:GA:423:GLU:HG3	2.02	0.42
45:GG:164:LYS:HD3	45:GG:164:LYS:HA	1.81	0.42
45:GM:288:VAL:HG11	45:GM:327:ASP:HB3	2.02	0.42
45:HA:209:ILE:HA	45:HA:212:ILE:HG22	2.01	0.42
46:HD:238:CYS:SG	46:HD:239:CYS:N	2.92	0.42
46:HD:391:ARG:HA	46:HD:391:ARG:HD2	1.90	0.42
46:HF:68:LEU:HD12	46:HF:97:ALA:HB2	2.01	0.42
46:IB:359:LYS:HA	46:IB:359:LYS:HD2	1.78	0.42
45:IG:141:VAL:HG11	45:IG:172:TYR:CE1	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IN:74:ASP:HA	46:IN:77:ARG:HG2	2.00	0.42
46:IN:372:THR:HA	46:IN:422:TYR:HE2	1.83	0.42
46:JB:148:GLY:O	46:JB:152:ILE:HG13	2.19	0.42
46:JB:179:VAL:HG23	46:JB:180:VAL:HG13	2.02	0.42
46:JB:372:THR:HA	46:JB:422:TYR:CE2	2.54	0.42
45:JI:215:ARG:NH2	45:JI:299:ALA:O	2.52	0.42
46:KD:265:PHE:HB3	46:KD:374:ILE:HD13	2.01	0.42
45:KE:66:VAL:HG21	45:KE:122:ILE:HD11	2.01	0.42
46:KH:69:GLU:HA	46:KH:70:PRO:HD3	1.94	0.42
46:KH:141:GLY:O	46:KH:145:SER:HB3	2.20	0.42
46:KJ:233:MET:O	46:KJ:236:VAL:HG12	2.20	0.42
46:KJ:372:THR:O	46:KJ:375:GLN:HG2	2.19	0.42
45:LC:254:GLU:O	45:LC:255:PHE:HD1	2.01	0.42
46:LJ:173:PRO:HG2	46:LJ:380:ARG:HD2	2.01	0.42
45:MA:265:ILE:O	45:MA:265:ILE:HG13	2.20	0.42
45:MI:19:ALA:HA	45:MI:22:GLU:HG2	2.02	0.42
46:MJ:326:VAL:O	46:MJ:330:MET:HG2	2.19	0.42
46:MJ:376:GLU:HA	46:MJ:376:GLU:OE1	2.20	0.42
45:MK:118:CYS:O	45:MK:122:ILE:HG12	2.19	0.42
46:NB:316:LEU:HB2	46:NB:366:THR:HB	2.01	0.42
46:NB:318:ARG:HB3	46:NB:357:PRO:HA	2.01	0.42
45:NC:68:LEU:HD21	45:NC:118:CYS:SG	2.60	0.42
45:NC:70:LEU:HA	45:NC:95:GLY:HA3	2.01	0.42
45:NC:108:TYR:O	45:NC:112:LYS:NZ	2.50	0.42
45:NC:256:GLN:OE1	46:NF:397:TRP:HH2	2.03	0.42
45:NE:137:VAL:HG23	45:NE:168:GLY:HA2	2.02	0.42
46:NH:248:SER:HA	46:NH:252:LYS:HD3	2.01	0.42
45:NI:105:ARG:NH1	46:NJ:251:ARG:HD3	2.35	0.42
45:NM:141:VAL:HG22	45:NM:187:SER:HA	2.02	0.42
46:NN:137:HIS:HE1	46:NN:166:THR:HB	1.85	0.42
46:NN:162:ARG:NH1	46:NN:162:ARG:HA	2.35	0.42
46:NN:248:SER:HB2	46:NN:252:LYS:HG2	2.01	0.42
45:OA:242:LEU:HD11	45:OA:252:ILE:HG23	2.01	0.42
46:OB:312:THR:O	46:OB:370:ASN:N	2.49	0.42
46:OD:134:GLN:HA	46:OD:165:GLU:HB2	2.01	0.42
46:OD:164:MET:HE3	46:OD:196:ALA:HA	2.02	0.42
45:OE:28:HIS:CE1	45:OE:49:PHE:HA	2.55	0.42
46:OF:113:ILE:HA	46:OF:116:VAL:HG12	2.00	0.42
45:OK:71:GLU:HA	45:OK:72:PRO:HD3	1.89	0.42
45:OM:304:LYS:HD3	45:OM:304:LYS:HA	1.87	0.42
46:ON:229:VAL:O	46:ON:233:MET:HG2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ON:325:GLU:O	46:ON:329:GLN:HG3	2.19	0.42
45:PA:53:PHE:HB3	45:PA:61:HIS:HB3	2.02	0.42
45:PA:245:ASP:OD1	45:PA:246:GLY:N	2.53	0.42
46:PF:107:THR:OG1	46:PF:401:GLU:OE2	2.31	0.42
46:PF:186:THR:HG21	46:PF:385:PHE:CE1	2.55	0.42
46:PF:317:PHE:HB2	46:PF:353:ILE:HG12	2.02	0.42
46:PH:128:ASP:OD1	46:PH:129:CYS:N	2.53	0.42
45:PI:407:TRP:HH2	46:PJ:254:ALA:HB1	1.85	0.42
46:PL:399:THR:HG22	46:PL:404:ASP:HA	2.01	0.42
45:QA:171:ILE:HG21	47:QA:501:GTP:HN22	1.84	0.42
46:QB:312:THR:HA	46:QB:348:ASN:HB2	2.01	0.42
45:QG:252:ILE:HG22	45:QG:256:GLN:HE22	1.85	0.42
45:QG:422:ARG:O	45:QG:422:ARG:NH1	2.53	0.42
46:QJ:65:LEU:HD22	46:QJ:90:PHE:CE1	2.55	0.42
45:QK:105:ARG:O	45:QK:110:ILE:HG22	2.19	0.42
45:QK:127:ASP:OD1	45:QK:128:ASN:N	2.52	0.42
46:QL:28:HIS:CE1	46:QL:47:ILE:HG22	2.53	0.42
46:QL:248:SER:HA	46:QL:252:LYS:HG3	2.02	0.42
45:QM:320:ARG:HH12	45:QM:360:PRO:HA	1.85	0.42
46:QN:73:MET:HA	46:QN:76:VAL:HG12	2.02	0.42
45:RC:2:ARG:HD3	45:RC:2:ARG:H	1.83	0.42
46:RD:73:MET:SD	46:RD:92:PHE:HB3	2.59	0.42
46:RD:375:GLN:HB2	46:RD:379:LYS:HZ2	1.84	0.42
45:RI:122:ILE:HD13	45:RI:122:ILE:HA	1.91	0.42
46:RL:153:SER:O	46:RL:157:GLU:HG3	2.20	0.42
45:RM:70:LEU:HA	45:RM:95:GLY:HA3	2.00	0.42
45:RM:141:VAL:HG12	45:RM:171:ILE:O	2.20	0.42
45:SA:188:ILE:HG23	45:SA:425:LEU:HD11	2.01	0.42
46:SB:210:ILE:HG13	46:SB:211:CYS:N	2.35	0.42
45:SE:434:GLU:O	45:SE:437:ILE:HG12	2.19	0.42
46:SH:102:ALA:HB2	46:SH:398:TYR:HD1	1.84	0.42
46:SJ:8:GLN:HG2	46:SJ:136:THR:OG1	2.20	0.42
46:SJ:21:TRP:HA	46:SJ:21:TRP:CE3	2.55	0.42
46:SL:255:VAL:HG23	45:SM:407:TRP:CG	2.55	0.42
45:SM:71:GLU:HA	45:SM:72:PRO:HD3	1.83	0.42
46:SN:184:ASN:OD1	46:SN:185:ALA:N	2.53	0.42
46:SN:372:THR:HA	46:SN:422:TYR:HE1	1.84	0.42
45:TA:101:ASN:HA	45:TA:144:GLY:H	1.85	0.42
45:TA:260:VAL:HG13	45:TA:265:ILE:O	2.20	0.42
45:TC:71:GLU:HA	45:TC:72:PRO:HD3	1.88	0.42
46:TD:109:GLY:O	46:TD:113:ILE:HG23	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TE:261:PRO:HB3	45:TE:346:TRP:HH2	1.85	0.42
46:TH:289:LEU:HD13	46:TH:365:VAL:HG23	2.01	0.42
46:TH:345:ILE:HG23	46:TH:345:ILE:O	2.20	0.42
45:TI:3:GLU:OE1	45:TI:64:ARG:NH1	2.52	0.42
45:TM:141:VAL:HG22	45:TM:187:SER:HA	2.01	0.42
46:TN:268:ILE:HG13	46:TN:300:MET:HE2	2.02	0.42
45:UA:242:LEU:HD11	45:UA:252:ILE:HG13	2.02	0.42
46:UB:6:HIS:CE1	46:UB:8:GLN:NE2	2.88	0.42
46:UB:45:GLU:OE1	46:UB:46:ARG:HG3	2.19	0.42
45:UC:250:VAL:HG13	45:UC:254:GLU:OE2	2.19	0.42
46:UF:69:GLU:HA	46:UF:70:PRO:HD3	1.92	0.42
45:UG:32:PRO:HB3	45:UG:83:TYR:HE1	1.84	0.42
46:UJ:12:CYS:HB3	46:UJ:138:SER:HB3	2.02	0.42
46:UJ:86:ARG:HB3	46:UJ:89:ASN:OD1	2.20	0.42
46:UN:153:SER:HB2	46:UN:191:GLN:NE2	2.33	0.42
46:UN:376:GLU:N	46:UN:379:LYS:HZ3	2.17	0.42
45:VA:35:GLN:CD	45:VA:35:GLN:H	2.23	0.42
46:VF:139:LEU:HG	46:VF:168:SER:HB3	2.01	0.42
45:VG:319:TYR:HB3	45:VG:323:VAL:HG11	2.02	0.42
46:VH:239:CYS:SG	46:VH:247:ASN:HA	2.59	0.42
46:VL:296:ALA:HB1	46:VL:305:PRO:HD2	2.01	0.42
45:VM:3:GLU:OE2	45:VM:131:GLY:N	2.52	0.42
45:VM:49:PHE:HB2	45:VM:53:PHE:HB2	2.02	0.42
46:VN:221:THR:HG23	46:VN:223:GLY:H	1.84	0.42
45:WA:206:ASN:OD1	47:WA:501:GTP:N2	2.52	0.42
45:WC:195:LEU:HD21	45:WC:264:ARG:HH21	1.85	0.42
46:WD:31:ASP:OD1	46:WD:35:THR:N	2.39	0.42
46:WD:67:ASP:OD1	46:WD:68:LEU:N	2.52	0.42
46:WJ:164:MET:SD	46:WJ:196:ALA:HA	2.59	0.42
45:WK:71:GLU:HA	45:WK:72:PRO:HD3	1.85	0.42
4:0D:225:ARG:O	34:7R:598:TRP:HZ3	2.02	0.42
13:0U:391:PRO:HD2	14:3V:4:GLU:OE1	2.18	0.42
17:1F:132:GLU:HB2	45:GI:362:VAL:HG13	1.99	0.42
8:1H:60:ARG:NH1	46:HN:32:PRO:HB2	2.33	0.42
19:1J:229:VAL:HG22	29:2G:94:ILE:HG12	2.01	0.42
21:1L:149:THR:HG1	46:CH:40:SER:HG	1.44	0.42
21:1L:481:LYS:HG3	46:CF:280:GLN:NE2	2.35	0.42
25:1R:247:SER:HA	45:BC:57:GLY:O	2.20	0.42
13:1U:42:HIS:CD2	13:1U:45:SER:HB3	2.40	0.42
15:1X:49:ILE:HD11	45:ME:282:TYR:CD2	2.55	0.42
1:2A:36:ARG:NH2	46:MJ:355:ASP:OD2	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:2C:109:LYS:HB2	27:2C:109:LYS:HE2	1.89	0.42
28:2F:51:PRO:HB3	28:2F:53:HIS:CE1	2.55	0.42
31:2I:86:ASP:OD1	31:2I:86:ASP:N	2.50	0.42
9:2N:251:ALA:HB1	9:2N:257:LYS:HE2	2.02	0.42
23:2O:166:ILE:C	23:2O:170:LYS:HZ2	2.23	0.42
23:2O:219:LEU:O	23:2O:222:LEU:HG	2.19	0.42
23:2O:414:ILE:H	23:2O:414:ILE:HD12	1.85	0.42
25:2R:112:GLU:HG3	46:BJ:284:LEU:HD12	2.00	0.42
25:3R:417:LEU:HB2	25:3R:439:TYR:HB3	2.00	0.42
13:3U:238:SER:HB2	46:WN:31:ASP:OD2	2.20	0.42
14:3V:133:TYR:HD1	46:LD:421:GLU:OE2	2.02	0.42
14:3V:176:GLN:HA	14:3V:176:GLN:OE1	2.20	0.42
36:5B:32:ALA:O	36:5B:34:PHE:N	2.53	0.42
36:5C:150:PHE:CD1	45:NK:364:PRO:HG2	2.54	0.42
35:5S:102:LEU:HD23	35:5S:138:VAL:HG11	2.02	0.42
40:6G:302:TYR:OH	46:VB:336:LYS:HD2	2.20	0.42
41:6H:170:TYR:HE2	46:FB:320:ARG:HD2	1.85	0.42
34:6R:488:LEU:HD22	34:6R:523:PHE:HE1	1.84	0.42
46:AB:83:GLN:O	46:BB:281:TYR:OH	2.20	0.42
46:AD:201:VAL:HG21	46:AD:374:ILE:HD11	2.02	0.42
46:AF:173:PRO:HG3	46:AF:380:ARG:HD3	2.02	0.42
46:AJ:221:THR:HG23	46:AJ:223:GLY:H	1.85	0.42
45:AM:85:GLN:CD	45:AM:85:GLN:H	2.23	0.42
45:AM:101:ASN:HA	45:AM:144:GLY:H	1.84	0.42
46:AN:232:ALA:HB1	46:AN:268:ILE:HD12	2.01	0.42
45:BA:291:ILE:HD12	45:BA:375:VAL:HG23	2.02	0.42
46:BD:135:ILE:HB	46:BD:166:THR:HG22	2.02	0.42
46:BF:226:ASN:ND2	49:BF:501:GDP:HN1	2.05	0.42
45:BG:216:ASN:O	45:BG:280:LYS:NZ	2.36	0.42
45:BG:387:VAL:O	45:BG:390:ARG:HG2	2.20	0.42
46:BJ:282:ARG:NH2	46:BJ:292:GLN:OE1	2.47	0.42
45:BM:82:THR:HG23	45:BM:83:TYR:CD1	2.55	0.42
46:CB:26:ASP:HB3	46:CB:359:LYS:HE3	2.02	0.42
45:CC:384:ILE:HG22	45:CC:388:PHE:HE2	1.85	0.42
46:CF:18:ALA:HB2	46:CF:76:VAL:HG23	2.00	0.42
45:CG:427:ALA:HA	45:CG:430:LYS:HG2	2.02	0.42
46:CH:144:GLY:N	49:CH:501:GDP:O1B	2.44	0.42
46:CJ:63:ALA:O	46:CJ:89:ASN:ND2	2.51	0.42
45:CM:332:ILE:HA	45:CM:335:ILE:HD12	2.01	0.42
46:CN:8:GLN:OE1	46:CN:65:LEU:HB3	2.20	0.42
46:CN:309:ARG:HH12	46:CN:341:PHE:C	2.22	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DD:183:TYR:CD2	46:DD:398:TYR:HE2	2.38	0.42
46:DF:5:VAL:HG12	46:DF:62:ARG:HD3	2.00	0.42
46:DF:45:GLU:HB3	46:DF:46:ARG:HD2	2.02	0.42
46:DF:51:TYR:HB3	46:DF:59:TYR:HB3	2.01	0.42
45:DM:155:GLU:HG2	45:DM:197:HIS:CE1	2.55	0.42
45:DM:183:GLU:HG2	45:DM:184:PRO:HD3	2.02	0.42
46:DN:407:GLU:HA	46:DN:410:GLU:CD	2.40	0.42
45:EA:269:LEU:H	45:EA:269:LEU:HD23	1.85	0.42
46:ED:121:ARG:NH2	46:ED:158:GLU:OE2	2.51	0.42
45:EI:269:LEU:HD13	45:EI:301:MET:CE	2.50	0.42
45:EI:269:LEU:HD13	45:EI:301:MET:HE1	2.02	0.42
45:FA:260:VAL:HG13	45:FA:265:ILE:O	2.20	0.42
45:FA:397:LEU:HD11	46:FB:344:TRP:HB2	2.01	0.42
46:FB:113:ILE:HD13	46:FB:154:LYS:HD2	2.01	0.42
46:FB:186:THR:OG1	46:FB:415:MET:SD	2.73	0.42
45:FK:64:ARG:NH1	45:FK:129:CYS:SG	2.93	0.42
46:FN:150:LEU:O	46:FN:153:SER:OG	2.26	0.42
46:FN:193:VAL:O	46:FN:264:HIS:NE2	2.48	0.42
45:GC:21:TRP:CZ2	45:GC:65:ALA:HB2	2.55	0.42
45:GC:93:ILE:HG12	45:GC:117:LEU:HD22	2.02	0.42
46:GF:229:VAL:O	46:GF:233:MET:HG3	2.20	0.42
46:GJ:60:VAL:HG11	46:HJ:281:TYR:HD1	1.83	0.42
45:GK:396:ASP:OD1	45:GK:397:LEU:N	2.53	0.42
46:GL:156:ARG:HA	46:GL:156:ARG:HD2	1.88	0.42
46:GL:287:PRO:O	46:GL:291:GLN:HG3	2.19	0.42
45:GM:179:THR:O	46:GN:350:LYS:HA	2.20	0.42
45:GM:180:ALA:HB1	46:GN:256:ASN:HD21	1.85	0.42
46:GN:290:THR:HA	46:GN:293:MET:HG2	2.01	0.42
46:HH:276:ARG:HE	46:HH:276:ARG:HB3	1.65	0.42
45:HK:55:GLU:CD	45:HK:57:GLY:H	2.22	0.42
46:HL:121:ARG:O	46:HL:125:GLU:HG2	2.20	0.42
46:HN:69:GLU:HA	46:HN:70:PRO:HD3	1.90	0.42
46:ID:341:PHE:HE2	46:ID:349:ILE:HD11	1.85	0.42
45:IE:71:GLU:HA	45:IE:72:PRO:HD3	1.87	0.42
46:IH:167:PHE:CE2	46:IH:233:MET:HG2	2.54	0.42
46:IH:399:THR:HA	46:IH:403:MET:O	2.19	0.42
45:II:71:GLU:HA	45:II:72:PRO:HD3	1.88	0.42
45:IK:174:SER:HB2	45:IK:177:VAL:O	2.19	0.42
46:IN:309:ARG:NH1	46:IN:343:GLU:OE1	2.37	0.42
45:JA:88:HIS:CE1	45:JA:90:GLU:HG2	2.55	0.42
45:JC:75:ILE:HG22	45:JC:79:ARG:HD2	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JE:177:VAL:HG13	46:JF:327:ASP:HB3	2.02	0.42
46:JF:163:ILE:HD13	46:JF:250:LEU:HB3	2.01	0.42
45:JI:231:ILE:O	45:JI:235:ILE:HG12	2.20	0.42
45:JM:143:GLY:HA3	47:JM:501:GTP:O2B	2.18	0.42
45:JM:188:ILE:HG23	45:JM:425:LEU:HD13	2.02	0.42
45:KA:183:GLU:N	45:KA:184:PRO:HD2	2.35	0.42
46:KB:213:ARG:O	46:KB:216:LYS:NZ	2.36	0.42
45:KC:70:LEU:HA	45:KC:95:GLY:HA3	2.02	0.42
45:KC:205:ASP:OD1	45:KC:206:ASN:N	2.48	0.42
46:KD:91:VAL:HG21	46:KD:116:VAL:HB	2.02	0.42
46:KJ:67:ASP:OD1	46:KJ:143:THR:HG21	2.19	0.42
46:KL:298:ASN:O	46:KL:298:ASN:ND2	2.51	0.42
45:KM:1:MET:HB3	45:KM:2:ARG:HD3	2.01	0.42
46:LJ:97:ALA:HB2	46:LJ:143:THR:HB	2.01	0.42
46:LJ:311:LEU:HD23	46:LJ:311:LEU:HA	1.86	0.42
46:LL:7:ILE:HG22	46:LL:64:ILE:HD13	2.01	0.42
46:LN:11:GLN:O	46:LN:15:GLN:HG2	2.20	0.42
45:MA:259:LEU:HD11	45:MA:316:SER:HB2	2.02	0.42
46:MB:67:ASP:OD1	46:MB:68:LEU:N	2.53	0.42
46:MB:375:GLN:OE1	46:MB:423:GLN:HB3	2.20	0.42
45:ME:434:GLU:O	45:ME:437:ILE:HG22	2.19	0.42
45:MK:231:ILE:O	45:MK:235:ILE:HG12	2.19	0.42
45:MM:288:VAL:HA	45:MM:291:ILE:HG22	2.02	0.42
46:NF:404:ASP:OD1	46:NF:406:MET:HG3	2.20	0.42
45:NG:136:LEU:HD23	45:NG:167:LEU:HB2	2.02	0.42
46:OD:107:THR:OG1	46:OD:108:GLU:OE1	2.38	0.42
46:OD:172:SER:HA	46:OD:380:ARG:NH1	2.33	0.42
45:OE:10:GLY:O	45:OE:14:ILE:HG12	2.19	0.42
45:OE:152:LEU:O	45:OE:156:ARG:HG2	2.20	0.42
46:OJ:316:LEU:HD13	46:OJ:352:SER:HB2	2.01	0.42
45:OK:56:THR:HG23	45:OK:58:ALA:H	1.84	0.42
46:PB:318:ARG:HB3	46:PB:357:PRO:HA	2.02	0.42
45:PC:183:GLU:N	45:PC:184:PRO:HD2	2.35	0.42
46:PD:263:LEU:HG	46:PD:422:TYR:HD1	1.85	0.42
46:PD:370:ASN:OD1	46:PD:422:TYR:OH	2.37	0.42
45:PE:7:ILE:HB	45:PE:137:VAL:HG12	2.01	0.42
46:PJ:156:ARG:NH1	46:PJ:162:ARG:O	2.44	0.42
45:PK:296:PHE:CE2	45:PK:335:ILE:HG21	2.55	0.42
45:PM:84:ARG:HH11	45:PM:84:ARG:HG2	1.84	0.42
45:PM:188:ILE:HG23	45:PM:425:LEU:HD11	2.01	0.42
46:PN:399:THR:HA	46:PN:403:MET:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QD:132:GLY:HA3	46:QD:163:ILE:HG22	2.01	0.42
46:QF:66:MET:SD	46:QF:116:VAL:HG21	2.60	0.42
46:QF:255:VAL:HA	45:QG:407:TRP:CE2	2.54	0.42
46:QF:350:LYS:HD2	46:QF:351:SER:H	1.84	0.42
45:QK:147:SER:HB2	45:QK:190:SER:OG	2.19	0.42
46:QL:187:LEU:HD21	46:QL:408:PHE:CE1	2.55	0.42
46:QN:289:LEU:HD23	46:QN:289:LEU:HA	1.91	0.42
46:RB:386:THR:O	46:RB:390:ARG:HG2	2.20	0.42
45:RI:31:GLN:HG3	45:RI:33:ASP:OD1	2.20	0.42
46:RJ:6:HIS:NE2	46:RJ:8:GLN:OE1	2.52	0.42
45:RK:67:PHE:HB2	45:RK:92:LEU:HG	2.02	0.42
45:RK:260:VAL:HB	46:RL:397:TRP:HZ2	1.85	0.42
46:RL:267:MET:SD	46:RL:268:ILE:N	2.92	0.42
45:RM:25:CYS:O	45:RM:29:GLY:N	2.53	0.42
46:RN:86:ARG:HH21	46:RN:87:PRO:HG2	1.84	0.42
46:SB:138:SER:HA	46:SB:169:VAL:HB	2.02	0.42
45:SE:155:GLU:HG2	45:SE:197:HIS:CD2	2.55	0.42
46:SJ:50:TYR:O	46:SJ:62:ARG:HG2	2.20	0.42
45:SK:127:ASP:OD1	45:SK:128:ASN:N	2.53	0.42
46:SL:320:ARG:HG2	46:SL:355:ASP:HB3	2.01	0.42
46:SN:130:LEU:HG	46:SN:162:ARG:CZ	2.50	0.42
45:TC:283:HIS:HB3	45:TC:284:GLU:OE2	2.20	0.42
46:TH:3:GLU:CD	46:TH:3:GLU:H	2.23	0.42
46:TH:68:LEU:HD12	46:TH:68:LEU:HA	1.93	0.42
46:TH:191:GLN:HG3	46:TH:195:ASN:ND2	2.32	0.42
46:TN:48:ASN:HA	46:TN:51:TYR:O	2.20	0.42
45:UA:118:CYS:O	45:UA:122:ILE:HG12	2.20	0.42
45:UA:317:MET:SD	45:UA:375:VAL:HB	2.60	0.42
45:UA:377:MET:SD	45:UA:379:SER:OG	2.68	0.42
45:UC:167:LEU:HG	45:UC:200:VAL:HB	2.01	0.42
45:UE:288:VAL:HA	45:UE:291:ILE:HG12	2.01	0.42
45:UG:322:ASP:OD1	45:UG:373:ARG:NH1	2.52	0.42
45:UG:328:VAL:O	45:UG:332:ILE:HG12	2.19	0.42
46:UJ:19:LYS:HD2	46:UJ:19:LYS:HA	1.78	0.42
45:UK:154:LEU:HD13	45:UK:197:HIS:HB2	2.02	0.42
45:UM:147:SER:HB2	45:UM:190:SER:HB3	2.01	0.42
45:VA:185:TYR:HE1	45:VA:398:MET:HG3	1.85	0.42
45:VE:90:GLU:OE2	45:VE:124:LYS:NZ	2.53	0.42
46:VH:303:ALA:HB2	46:VH:377:MET:HG3	2.02	0.42
46:VH:342:VAL:HG13	46:VH:345:ILE:HG22	2.02	0.42
46:VL:117:LEU:HA	46:VL:120:VAL:HG12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:VL:139:LEU:HD11	46:VL:168:SER:HB3	2.01	0.42
45:VM:98:ASP:O	45:VM:105:ARG:NH1	2.51	0.42
46:VN:99:ASN:HA	46:VN:142:GLY:H	1.85	0.42
46:VN:134:GLN:OE1	46:VN:165:GLU:HB2	2.19	0.42
46:VN:187:LEU:HD11	46:VN:408:PHE:CE1	2.54	0.42
45:WK:337:THR:O	45:WK:339:ARG:HD2	2.20	0.42
46:WL:153:SER:HA	46:WL:195:ASN:ND2	2.35	0.42
45:WM:10:GLY:O	45:WM:14:ILE:HD12	2.20	0.42
1:0A:152:LYS:HB3	34:7R:78:ILE:HD11	2.02	0.42
6:0F:75:ARG:HH22	46:ED:359:LYS:HG2	1.82	0.42
19:1J:253:THR:HG21	33:4F:38:THR:HA	2.00	0.42
14:1V:93:MET:HG2	46:LJ:196:ALA:O	2.20	0.42
4:2D:117:THR:OG1	4:2D:119:LYS:HE2	2.19	0.42
28:2F:75:LEU:HB3	46:HF:337:ASN:ND2	2.35	0.42
21:2L:457:THR:HG23	21:2L:460:GLU:HG2	2.02	0.42
21:2L:523:GLN:NE2	21:2L:525:LEU:HB2	2.34	0.42
21:2L:529:GLU:OE1	21:2L:529:GLU:N	2.48	0.42
21:2L:654:ASP:OD1	21:2L:654:ASP:N	2.52	0.42
9:2N:4:TYR:HE2	46:JB:216:LYS:HD3	1.85	0.42
23:2O:222:LEU:O	23:2O:225:LYS:HG3	2.20	0.42
23:2O:235:MET:SD	46:VJ:280:GLN:HG2	2.60	0.42
11:2S:36:ALA:O	11:2S:37:LYS:HG2	2.20	0.42
13:2U:578:ILE:HG13	13:2U:593:VAL:O	2.20	0.42
15:2X:15:TRP:CG	46:ML:32:PRO:HG3	2.55	0.42
1:3A:143:HIS:CG	45:AM:32:PRO:HG3	2.55	0.42
1:3A:151:HIS:CD2	1:3A:153:PRO:HG3	2.54	0.42
31:3I:197:GLN:HE22	45:FK:126:ALA:C	2.23	0.42
14:3V:252:GLU:OE1	46:WD:276:ARG:NH2	2.47	0.42
15:3X:99:VAL:HG13	45:MK:282:TYR:CE2	2.55	0.42
27:4C:12:VAL:HG21	27:4C:77:TYR:HD2	1.84	0.42
33:4F:27:GLN:O	33:4F:28:VAL:HG22	2.20	0.42
15:4X:3:ARG:H	46:LL:75:SER:CB	2.33	0.42
37:5G:70:GLU:HA	37:5G:71:PRO:HD3	1.91	0.42
40:6G:235:ILE:HG21	45:UE:96:LYS:HD2	2.02	0.42
40:6G:277:LEU:O	40:6G:279:TYR:N	2.50	0.42
34:6R:48:LYS:HG3	34:6R:49:ASN:H	1.85	0.42
46:AD:16:ILE:HD12	46:AD:229:VAL:HG11	2.02	0.42
46:AF:273:LEU:H	46:AF:292:GLN:HE22	1.67	0.42
45:AG:210:TYR:CE1	45:AG:227:LEU:HD11	2.55	0.42
45:AG:414:GLU:CD	45:AG:416:GLY:H	2.23	0.42
45:AI:241:SER:OG	45:AI:250:VAL:O	2.31	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AM:150:GLY:O	45:AM:154:LEU:HD23	2.19	0.42
45:AM:272:TYR:HD2	45:AM:275:ILE:HD11	1.85	0.42
46:BB:69:GLU:HA	46:BB:70:PRO:HD3	1.82	0.42
45:BC:109:THR:OG1	45:BC:411:GLU:OE2	2.24	0.42
45:BC:399:TYR:OH	45:BC:415:GLU:OE2	2.36	0.42
45:BI:167:LEU:HG	45:BI:200:VAL:HB	2.00	0.42
45:BK:390:ARG:HG3	45:BK:391:LEU:HD12	2.01	0.42
45:CA:22:GLU:OE1	45:CA:22:GLU:N	2.41	0.42
46:CF:385:PHE:CE2	46:CF:412:GLU:HB3	2.54	0.42
45:CG:264:ARG:NH1	45:CG:431:ASP:OD2	2.53	0.42
46:CH:318:ARG:NH1	46:CH:358:PRO:HG3	2.35	0.42
45:CK:141:VAL:HG23	45:CK:170:THR:HB	2.01	0.42
45:CK:352:LYS:HA	46:CL:177:ASP:O	2.19	0.42
45:DA:8:HIS:CE1	45:DA:17:GLY:HA3	2.55	0.42
45:DA:18:ASN:O	45:DA:22:GLU:OE1	2.38	0.42
45:DA:270:SER:O	45:DA:302:MET:HB2	2.19	0.42
45:DE:172:TYR:OH	45:DE:191:THR:OG1	2.25	0.42
46:DF:65:LEU:HD22	46:DF:90:PHE:CE1	2.55	0.42
45:DI:141:VAL:HG12	45:DI:187:SER:HA	2.02	0.42
45:DI:349:THR:O	46:DJ:179:VAL:HG23	2.20	0.42
46:DJ:318:ARG:HH11	46:DJ:358:PRO:HG3	1.84	0.42
46:DN:210:ILE:O	46:DN:214:THR:HG22	2.20	0.42
46:DN:325:GLU:O	46:DN:328:GLU:HG2	2.20	0.42
45:EA:30:ILE:HG21	45:EA:53:PHE:CE2	2.53	0.42
46:ED:163:ILE:HD12	46:ED:163:ILE:HA	1.88	0.42
45:EE:48:ALA:HB1	45:EE:243:ARG:HB2	2.02	0.42
46:EF:362:LYS:HG3	46:EF:363:MET:HG3	2.02	0.42
46:EH:312:THR:HG22	46:EH:370:ASN:HB3	2.02	0.42
45:EI:261:PRO:HG2	45:EI:313:MET:HE2	2.02	0.42
46:EJ:207:LEU:HD13	46:EJ:225:LEU:HB3	2.02	0.42
46:EN:46:ARG:O	46:EN:46:ARG:HG3	2.20	0.42
45:FA:239:THR:HA	45:FA:242:LEU:HD13	2.01	0.42
45:FA:292:THR:HG21	45:FA:331:SER:HB3	2.01	0.42
45:FA:395:PHE:CE2	45:FA:422:ARG:HD3	2.55	0.42
46:FB:199:CYS:HB3	46:FB:265:PHE:CD1	2.54	0.42
45:FE:71:GLU:HA	45:FE:72:PRO:HD3	1.86	0.42
46:FF:287:PRO:HG3	46:FF:329:GLN:NE2	2.35	0.42
46:FH:67:ASP:OD1	46:FH:68:LEU:N	2.52	0.42
45:FI:171:ILE:HG23	45:FI:204:LEU:O	2.20	0.42
45:GA:3:GLU:HG3	45:GA:129:CYS:SG	2.59	0.42
45:GA:132:LEU:HD11	45:GA:135:PHE:HE2	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GB:173:PRO:HG2	46:GB:380:ARG:HD3	2.01	0.42
46:GB:190:HIS:ND1	46:GB:411:ALA:HA	2.35	0.42
45:GC:68:LEU:HD21	45:GC:118:CYS:SG	2.59	0.42
45:GG:71:GLU:HA	45:GG:72:PRO:HD3	1.88	0.42
45:GG:390:ARG:HG3	45:GG:391:LEU:N	2.35	0.42
46:GJ:69:GLU:HA	46:GJ:70:PRO:HD3	1.90	0.42
45:HA:55:GLU:HG3	45:HA:57:GLY:H	1.85	0.42
45:HK:340:THR:HG23	45:HK:341:ILE:HG13	2.02	0.42
46:HN:154:LYS:HE2	46:HN:154:LYS:HB2	1.79	0.42
46:HN:221:THR:HG23	46:HN:223:GLY:H	1.85	0.42
46:IB:134:GLN:HA	46:IB:165:GLU:O	2.20	0.42
45:IE:109:THR:O	45:IE:112:LYS:NZ	2.53	0.42
46:IF:238:CYS:SG	46:IF:239:CYS:N	2.93	0.42
46:IF:263:LEU:HG	46:IF:422:TYR:HD1	1.85	0.42
45:IK:107:HIS:ND1	45:IK:107:HIS:O	2.53	0.42
46:IL:156:ARG:HH21	46:IL:164:MET:HG3	1.85	0.42
46:IL:376:GLU:O	46:IL:380:ARG:HG3	2.20	0.42
45:IM:141:VAL:HG22	45:IM:187:SER:HA	2.01	0.42
45:JA:105:ARG:NH1	46:JB:251:ARG:NH2	2.67	0.42
46:JD:141:GLY:O	46:JD:145:SER:OG	2.29	0.42
45:JG:350:GLY:HA2	46:JJ:179:VAL:HG12	2.01	0.42
46:JH:1:MET:HB2	46:JH:48:ASN:HD21	1.85	0.42
46:JH:167:PHE:CZ	46:JH:233:MET:HG3	2.55	0.42
46:JJ:105:HIS:CD2	46:JJ:150:LEU:HB2	2.55	0.42
45:JM:141:VAL:HG13	45:JM:190:SER:OG	2.20	0.42
45:JM:211:ASP:HB2	45:JM:215:ARG:HH21	1.84	0.42
46:JN:201:VAL:HG13	46:JN:301:CYS:SG	2.60	0.42
45:KA:320:ARG:HD3	45:KA:360:PRO:HG3	2.01	0.42
46:KB:187:LEU:HD11	46:KB:408:PHE:CE2	2.54	0.42
46:KD:181:GLU:HG2	46:KD:182:PRO:HD3	2.02	0.42
46:KH:376:GLU:HG3	46:KH:380:ARG:HH21	1.85	0.42
46:KJ:181:GLU:HG2	46:KJ:182:PRO:HD3	2.02	0.42
46:KJ:193:VAL:HG13	46:KJ:194:GLU:HG3	2.01	0.42
46:KL:3:GLU:OE2	46:KL:127:CYS:HB2	2.19	0.42
45:LC:288:VAL:HA	45:LC:291:ILE:HG12	2.00	0.42
45:LE:107:HIS:ND1	45:LE:107:HIS:O	2.52	0.42
45:LG:224:TYR:HE2	46:LH:246:LEU:HD11	1.84	0.42
45:LI:152:LEU:HD12	45:LI:152:LEU:HA	1.94	0.42
46:LJ:1:MET:H1	46:LJ:128:ASP:HB3	1.85	0.42
46:LJ:252:LYS:HG2	46:LJ:350:LYS:HE2	2.02	0.42
45:LM:272:TYR:HD2	45:LM:275:ILE:HD11	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LN:229:VAL:O	46:LN:233:MET:HG3	2.19	0.42
45:MM:98:ASP:OD1	45:MM:99:ALA:N	2.53	0.42
45:NA:7:ILE:N	45:NA:136:LEU:O	2.38	0.42
45:NC:174:SER:HB2	45:NC:177:VAL:O	2.20	0.42
46:NF:113:ILE:HA	46:NF:116:VAL:HG22	2.02	0.42
46:NH:213:ARG:NH2	46:NH:297:LYS:HB3	2.34	0.42
46:NJ:204:ASN:HD21	49:NJ:501:GDP:HN22	1.68	0.42
45:NK:425:LEU:O	45:NK:429:GLU:HG2	2.20	0.42
46:NL:36:TYR:CD1	46:NL:44:LEU:HD21	2.55	0.42
45:NM:231:ILE:O	45:NM:235:ILE:HG12	2.20	0.42
45:OA:426:ALA:O	45:OA:429:GLU:HG3	2.20	0.42
46:OB:122:LYS:NZ	46:OB:123:GLU:OE2	2.34	0.42
45:OE:88:HIS:HB3	45:OE:91:GLN:CD	2.39	0.42
46:OF:83:GLN:O	46:PF:281:TYR:OH	2.22	0.42
45:OK:108:TYR:O	45:OK:112:LYS:NZ	2.32	0.42
45:OK:202:VAL:HG12	45:OK:204:LEU:HG	2.02	0.42
45:OM:10:GLY:O	45:OM:14:ILE:HG12	2.19	0.42
45:OM:398:MET:HG2	46:ON:345:ILE:HG22	2.02	0.42
46:PB:87:PRO:HA	46:PB:90:PHE:CD2	2.54	0.42
46:PD:113:ILE:HA	46:PD:116:VAL:HG12	2.01	0.42
46:PD:310:TYR:CD1	46:PD:371:SER:HB2	2.54	0.42
45:PG:340:THR:HG23	45:PG:341:ILE:HG13	2.01	0.42
45:PI:98:ASP:OD1	45:PI:99:ALA:N	2.53	0.42
46:PJ:297:LYS:HD2	46:PJ:297:LYS:H	1.83	0.42
45:QC:326:LYS:HD3	46:QD:212:PHE:HZ	1.84	0.42
45:QC:385:ALA:HB2	45:QC:432:TYR:HD2	1.84	0.42
45:QG:265:ILE:HG22	45:QG:432:TYR:CE1	2.54	0.42
46:QH:181:GLU:HB3	46:QH:182:PRO:HD3	2.02	0.42
46:QL:1:MET:HB2	46:QL:48:ASN:HD21	1.85	0.42
46:RB:376:GLU:HB2	46:RB:380:ARG:NH1	2.35	0.42
46:RF:139:LEU:HA	46:RF:145:SER:HB2	2.01	0.42
45:RG:346:TRP:CD1	46:RH:391:ARG:HG3	2.55	0.42
45:RK:356:ASN:OD1	45:RK:357:TYR:N	2.52	0.42
46:RL:101:TRP:CZ3	46:RL:187:LEU:HD13	2.55	0.42
46:SH:31:ASP:OD2	46:SH:35:THR:OG1	2.35	0.42
45:SI:102:ASN:HD21	45:SI:411:GLU:HG3	1.84	0.42
46:SJ:69:GLU:CD	46:SJ:71:GLY:H	2.22	0.42
46:SJ:345:ILE:HG13	46:SJ:348:ASN:HB3	2.02	0.42
46:TB:21:TRP:CZ3	46:TB:50:TYR:HB3	2.55	0.42
46:TB:280:GLN:H	46:TB:280:GLN:HG3	1.68	0.42
45:TC:416:GLY:O	45:TC:419:SER:OG	2.27	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TG:54:SER:HB3	45:TG:64:ARG:HE	1.85	0.42
45:TG:84:ARG:HG3	45:TG:85:GLN:HG2	2.01	0.42
46:TH:324:LYS:HE2	45:TI:210:TYR:CD1	2.55	0.42
45:TI:101:ASN:ND2	45:TI:143:GLY:HA2	2.35	0.42
45:TI:294:SER:HA	45:TI:297:GLU:HG3	2.01	0.42
46:TJ:106:TYR:CE2	46:TJ:403:MET:HB2	2.55	0.42
46:TJ:175:VAL:O	46:TJ:175:VAL:HG23	2.20	0.42
46:TJ:347:ASN:ND2	45:TK:176:GLN:O	2.53	0.42
45:TK:184:PRO:O	45:TK:188:ILE:HG12	2.20	0.42
46:TL:274:THR:HG23	46:TL:279:GLN:HG2	2.00	0.42
45:TM:208:ALA:O	45:TM:212:ILE:HG12	2.19	0.42
46:UB:308:GLY:HA3	46:UB:373:ALA:HB2	2.01	0.42
46:UH:247:ASN:O	46:UH:252:LYS:NZ	2.50	0.42
46:UH:252:LYS:HA	45:UI:100:ALA:HB1	2.02	0.42
46:UH:324:LYS:HE2	45:UI:222:PRO:HD2	2.02	0.42
46:UJ:208:TYR:CE1	46:UJ:225:LEU:HD11	2.54	0.42
45:UM:88:HIS:CG	45:UM:89:PRO:HD2	2.54	0.42
46:UN:107:THR:HG1	46:UN:108:GLU:CD	2.18	0.42
45:VA:325:PRO:HG2	46:VD:222:TYR:CE1	2.55	0.42
45:VC:214:ARG:HH21	46:VD:324:LYS:NZ	2.18	0.42
45:VE:174:SER:HB2	45:VE:177:VAL:O	2.20	0.42
45:VE:257:THR:HG22	46:VH:397:TRP:CE2	2.54	0.42
45:VG:121:ARG:HA	45:VG:121:ARG:HH11	1.84	0.42
46:VL:287:PRO:HA	46:VL:329:GLN:HE22	1.84	0.42
46:VN:319:GLY:HA2	46:VN:357:PRO:HD3	2.02	0.42
46:WB:200:MET:HB3	46:WB:266:PHE:HB2	2.00	0.42
46:WB:239:CYS:SG	46:WB:248:SER:N	2.79	0.42
46:WD:273:LEU:H	46:WD:292:GLN:NE2	2.13	0.42
46:WD:301:CYS:HB3	46:WD:377:MET:HE1	2.01	0.42
45:WG:74:VAL:O	45:WG:77:GLU:HG3	2.20	0.42
46:WH:105:HIS:CE1	46:WH:150:LEU:HD13	2.55	0.42
45:WI:208:ALA:O	45:WI:212:ILE:HD12	2.20	0.42
45:WI:256:GLN:O	46:WL:397:TRP:NE1	2.53	0.42
45:WM:10:GLY:O	45:WM:13:GLY:N	2.52	0.42
45:WM:248:LEU:HB3	45:WM:355:ILE:HG12	2.01	0.42
13:1U:174:THR:OG1	13:1U:183:LYS:HB2	2.20	0.42
14:1V:68:CYS:HB3	14:1V:72:GLY:HA2	2.00	0.42
14:1V:237:LEU:HD23	14:1V:240:LYS:HD3	2.02	0.42
5:2E:50:ILE:HG23	34:5R:382:TYR:CE1	2.54	0.42
21:2L:418:LYS:HB2	21:2L:418:LYS:HE2	1.86	0.42
9:2N:212:ILE:HB	9:2N:213:PRO:HD3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2O:356:ARG:HH21	23:2O:357:ARG:NH1	2.06	0.42
15:2X:33:ALA:CB	15:3X:140:PRO:HG3	2.47	0.42
32:3D:67:LYS:HB2	32:3D:67:LYS:HE3	1.92	0.42
5:3E:50:ILE:HD12	5:3E:50:ILE:HA	1.90	0.42
12:3T:231:GLU:HA	12:3T:234:ASN:HB2	2.02	0.42
13:3U:384:GLY:HA2	13:3U:407:GLY:HA2	2.02	0.42
33:4F:206:TYR:CZ	33:4F:208:GLY:HA3	2.55	0.42
30:4H:206:SER:O	30:4H:207:LYS:HB3	2.20	0.42
37:5F:141:CYS:O	37:5F:144:LEU:HG	2.20	0.42
37:5G:12:ASN:OD1	37:5G:13:ASN:N	2.53	0.42
10:5Q:73:LEU:HD23	10:5Q:169:ASP:N	2.35	0.42
34:5R:80:ARG:NH1	45:MI:38:SER:OG	2.53	0.42
45:AA:250:VAL:HG13	45:AA:254:GLU:HB3	2.02	0.42
46:AF:280:GLN:OE1	46:MF:58:ARG:NH1	2.53	0.42
45:AG:88:HIS:HB3	45:AG:91:GLN:HG2	2.02	0.42
45:AG:352:LYS:NZ	46:AJ:99:ASN:OD1	2.53	0.42
46:BB:87:PRO:HA	46:BB:90:PHE:HD2	1.84	0.42
45:BC:141:VAL:HG13	45:BC:190:SER:HB3	2.02	0.42
45:BC:431:ASP:O	45:BC:435:VAL:HG22	2.19	0.42
45:BG:395:PHE:HD2	45:BG:422:ARG:HH21	1.67	0.42
46:BH:69:GLU:HA	46:BH:70:PRO:HD3	1.92	0.42
45:BI:398:MET:SD	46:BJ:345:ILE:HG13	2.60	0.42
46:BJ:370:ASN:OD1	46:BJ:422:TYR:OH	2.38	0.42
45:BK:241:SER:OG	45:BK:250:VAL:O	2.34	0.42
45:BM:305:CYS:SG	45:BM:306:ASP:N	2.93	0.42
46:BN:39:ASP:OD2	46:BN:39:ASP:N	2.51	0.42
46:CB:219:THR:HG23	46:CB:219:THR:O	2.20	0.42
46:CD:112:LEU:HD23	46:CD:147:MET:HE1	2.02	0.42
45:CG:71:GLU:HA	45:CG:72:PRO:HD3	1.90	0.42
45:CG:175:PRO:HG2	45:CG:304:LYS:HG2	2.02	0.42
46:CH:3:GLU:OE1	46:CH:3:GLU:N	2.49	0.42
46:CH:8:GLN:HE21	46:CH:65:LEU:HG	1.85	0.42
46:CH:237:THR:HG22	46:CH:250:LEU:HD11	2.02	0.42
46:CH:318:ARG:HB2	46:CH:364:ALA:HB3	2.01	0.42
46:CH:377:MET:HA	46:CH:380:ARG:HD3	2.01	0.42
46:CJ:294:PHE:HE1	46:CJ:367:PHE:CE1	2.38	0.42
46:CL:183:TYR:HE2	46:CL:394:PHE:HB2	1.85	0.42
45:DA:135:PHE:HZ	45:DA:161:TYR:CZ	2.38	0.42
45:DA:261:PRO:HA	46:DB:394:PHE:CD1	2.55	0.42
45:DK:128:ASN:ND2	45:EK:290:GLU:OE1	2.40	0.42
45:DK:417:GLU:H	45:DK:417:GLU:CD	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DL:163:ILE:HG22	46:DL:165:GLU:OE1	2.19	0.42
45:DM:124:LYS:HE2	45:DM:124:LYS:HB2	1.86	0.42
46:EB:398:TYR:O	46:EB:403:MET:HB3	2.20	0.42
45:EC:118:CYS:O	45:EC:122:ILE:HG12	2.19	0.42
46:EF:139:LEU:HD22	46:EF:170:VAL:HG12	2.02	0.42
46:EH:45:GLU:HG2	46:EH:46:ARG:N	2.35	0.42
46:EJ:135:ILE:HG12	46:EJ:152:ILE:HD11	2.01	0.42
46:EL:113:ILE:HD13	46:EL:150:LEU:HD22	2.01	0.42
45:FA:60:LYS:HD3	45:GA:283:HIS:HD2	1.85	0.42
46:FB:208:TYR:CD2	46:FB:212:PHE:HE2	2.38	0.42
45:FC:68:LEU:HD13	45:FC:93:ILE:HB	2.01	0.42
46:FF:45:GLU:O	46:FF:46:ARG:HD3	2.19	0.42
46:FL:45:GLU:O	46:FL:46:ARG:HD3	2.19	0.42
46:FN:151:LEU:O	46:FN:155:VAL:HG23	2.19	0.42
46:FN:260:PHE:HB2	46:FN:263:LEU:HD13	2.02	0.42
45:GA:71:GLU:HA	45:GA:72:PRO:HD3	1.93	0.42
45:GA:213:CYS:O	45:GA:217:LEU:HB2	2.20	0.42
46:GB:139:LEU:HD13	46:GB:168:SER:HB3	2.00	0.42
46:GD:391:ARG:HA	46:GD:391:ARG:HD2	1.77	0.42
45:GG:419:SER:O	45:GG:423:GLU:HG2	2.19	0.42
46:GH:343:GLU:OE2	46:GH:430:ALA:N	2.50	0.42
46:GH:391:ARG:HD2	46:GH:391:ARG:HA	1.82	0.42
45:GI:69:ASP:OD1	45:GI:70:LEU:N	2.50	0.42
46:GL:61:PRO:HD3	46:GL:84:LEU:HB3	2.01	0.42
46:GL:287:PRO:O	46:GL:290:THR:HG22	2.20	0.42
46:GN:113:ILE:O	46:GN:117:LEU:HD23	2.20	0.42
46:GN:274:THR:HB	46:GN:282:ARG:NH2	2.35	0.42
45:HA:407:TRP:CZ3	46:HB:255:VAL:HA	2.52	0.42
45:HC:88:HIS:CD2	45:HC:90:GLU:HG2	2.55	0.42
45:HI:284:GLU:HG3	45:HI:286:LEU:HD22	2.02	0.42
46:HJ:273:LEU:H	46:HJ:292:GLN:NE2	2.17	0.42
45:HK:4:VAL:HG12	45:HK:133:GLN:HB2	2.02	0.42
45:HK:356:ASN:OD1	45:HK:357:TYR:N	2.53	0.42
46:ID:3:GLU:HG3	46:ID:62:ARG:HH12	1.85	0.42
45:IG:422:ARG:HH12	45:IG:426:ALA:HB2	1.84	0.42
45:II:285:GLN:CD	45:II:285:GLN:H	2.23	0.42
45:IK:207:GLU:HB3	45:IK:304:LYS:NZ	2.35	0.42
46:IL:156:ARG:O	46:IL:156:ARG:HD3	2.19	0.42
45:JC:223:THR:HG22	45:JC:224:TYR:N	2.35	0.42
45:JE:36:MET:HG3	45:JE:37:PRO:HD2	2.02	0.42
45:JG:119:LEU:HD11	45:JG:156:ARG:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:JG:205:ASP:OD1	45:JG:303:ALA:HA	2.19	0.42
45:JG:269:LEU:HD12	45:JG:303:ALA:HB3	2.02	0.42
46:JH:372:THR:O	46:JH:375:GLN:HG2	2.20	0.42
45:JI:88:HIS:NE2	45:JI:90:GLU:HG2	2.35	0.42
45:JK:70:LEU:HA	45:JK:95:GLY:HA3	2.02	0.42
45:JK:317:MET:HG2	45:JK:377:MET:HG3	2.02	0.42
46:JN:69:GLU:HA	46:JN:70:PRO:HD3	1.91	0.42
45:KA:69:ASP:OD1	45:KA:70:LEU:N	2.53	0.42
45:KA:74:VAL:HA	45:KA:77:GLU:OE1	2.19	0.42
45:KA:77:GLU:H	45:KA:77:GLU:CD	2.23	0.42
45:KC:254:GLU:O	45:KC:255:PHE:HD1	2.03	0.42
46:KD:73:MET:HA	46:KD:76:VAL:HG12	2.01	0.42
45:KE:153:LEU:HD23	45:KE:153:LEU:HA	1.86	0.42
47:LA:501:GTP:H8	47:LA:501:GTP:O2A	2.03	0.42
45:LC:163:LYS:HA	45:LC:163:LYS:HD3	1.79	0.42
46:LD:260:PHE:HB2	46:LD:263:LEU:HD13	2.02	0.42
45:LG:7:ILE:HB	45:LG:137:VAL:HG12	2.02	0.42
45:LG:75:ILE:HG21	45:LG:94:SER:HB2	2.02	0.42
46:LH:4:ILE:HD11	46:LH:50:TYR:CZ	2.55	0.42
45:LI:286:LEU:N	45:LI:290:GLU:OE2	2.53	0.42
45:LI:396:ASP:OD2	45:LI:422:ARG:NH1	2.53	0.42
45:MA:101:ASN:HA	45:MA:144:GLY:H	1.85	0.42
45:MC:166:LYS:HE2	45:MC:197:HIS:O	2.20	0.42
45:MG:286:LEU:HD23	45:MG:286:LEU:HA	1.94	0.42
45:MG:384:ILE:O	45:MG:387:VAL:HG22	2.20	0.42
46:MH:4:ILE:HG23	46:MH:131:GLN:HB3	2.01	0.42
45:MI:258:ASN:HD21	46:ML:178:THR:HG23	1.85	0.42
45:MK:176:GLN:HG2	45:MK:207:GLU:OE2	2.20	0.42
45:NA:143:GLY:HA3	47:NA:501:GTP:O2B	2.20	0.42
45:NE:221:ARG:HD2	46:NF:325:GLU:OE2	2.20	0.42
46:NF:186:THR:HG23	46:NF:415:MET:HG3	2.02	0.42
45:NG:3:GLU:HG2	45:NG:64:ARG:HH22	1.85	0.42
46:NL:52:ASN:HD21	46:NL:62:ARG:HG2	1.85	0.42
46:NL:254:ALA:O	46:NL:258:ILE:HG12	2.20	0.42
46:NN:105:HIS:CE1	46:NN:150:LEU:HD12	2.54	0.42
46:NN:407:GLU:HA	46:NN:410:GLU:OE2	2.19	0.42
46:OB:24:ILE:HG23	46:OB:28:HIS:CE1	2.54	0.42
45:OI:107:HIS:ND1	45:OI:107:HIS:O	2.53	0.42
45:OI:261:PRO:HG2	45:OI:313:MET:SD	2.60	0.42
45:OI:273:ALA:HA	45:OI:274:PRO:HA	1.85	0.42
45:OM:390:ARG:HG3	45:OM:391:LEU:HD12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PB:156:ARG:NH2	46:PB:160:PRO:O	2.52	0.42
46:PB:286:VAL:N	46:PB:287:PRO:HD2	2.35	0.42
46:PB:323:THR:HA	46:PB:326:VAL:HB	2.02	0.42
46:PD:32:PRO:HG3	46:PD:81:PHE:CE1	2.54	0.42
45:PE:149:LEU:HD23	45:PE:149:LEU:HA	1.94	0.42
45:PE:214:ARG:HG2	45:PE:214:ARG:NH1	2.35	0.42
45:PG:164:LYS:HD3	45:PG:164:LYS:HA	1.82	0.42
46:PH:19:LYS:HE2	46:PH:19:LYS:HB3	1.75	0.42
46:PH:41:ASP:OD1	46:PH:42:LEU:HD12	2.20	0.42
46:PH:245:GLN:HB2	46:PH:353:ILE:HB	2.02	0.42
45:PI:257:THR:HA	46:PL:397:TRP:CZ3	2.54	0.42
46:PJ:64:ILE:HD13	46:PJ:120:VAL:HG23	2.00	0.42
46:PJ:105:HIS:NE2	46:PJ:150:LEU:HB3	2.35	0.42
46:PL:154:LYS:O	46:PL:157:GLU:HG2	2.20	0.42
46:PL:163:ILE:HD13	46:PL:251:ARG:HD2	2.02	0.42
45:PM:135:PHE:HB2	45:PM:166:LYS:HG2	2.02	0.42
45:PM:294:SER:O	45:PM:297:GLU:HG2	2.19	0.42
46:PN:51:TYR:CE1	46:PN:61:PRO:HG3	2.55	0.42
46:PN:156:ARG:NH1	46:PN:162:ARG:O	2.49	0.42
46:QB:99:ASN:HA	46:QB:142:GLY:H	1.85	0.42
45:QC:268:MET:CE	45:QC:378:ILE:HG22	2.48	0.42
45:QG:152:LEU:HD23	45:QG:152:LEU:HA	1.86	0.42
46:QJ:252:LYS:HA	45:QK:100:ALA:HB1	2.01	0.42
46:QJ:347:ASN:ND2	45:QK:178:SER:HB2	2.34	0.42
46:QL:51:TYR:HB3	46:QL:59:TYR:HB3	2.01	0.42
46:QL:156:ARG:HE	46:QL:156:ARG:HB3	1.66	0.42
45:RC:98:ASP:OD1	45:RC:99:ALA:N	2.53	0.42
45:RC:119:LEU:HA	45:RC:122:ILE:HG22	2.01	0.42
46:RD:324:LYS:NZ	45:RE:222:PRO:HG2	2.34	0.42
46:RD:391:ARG:HA	46:RD:391:ARG:HD2	1.92	0.42
45:RE:289:ALA:O	45:RE:292:THR:HG22	2.20	0.42
45:RG:81:GLY:O	45:RG:84:ARG:NH1	2.53	0.42
45:RG:402:ARG:NH1	45:RG:405:VAL:HB	2.35	0.42
45:RI:289:ALA:O	45:RI:292:THR:HG22	2.20	0.42
46:RJ:304:ASP:HB3	46:RJ:307:HIS:ND1	2.35	0.42
46:RL:306:ARG:HB2	46:RL:340:TYR:CZ	2.55	0.42
45:RM:319:TYR:HE2	45:RM:328:VAL:HG22	1.85	0.42
45:SA:81:GLY:O	45:SA:84:ARG:NH1	2.53	0.42
45:SC:254:GLU:O	45:SC:255:PHE:HD2	2.03	0.42
45:SE:150:GLY:O	45:SE:154:LEU:HG	2.20	0.42
45:SE:328:VAL:O	45:SE:332:ILE:HG12	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SG:226:ASN:ND2	45:SG:367:ASP:OD2	2.53	0.42
45:SG:231:ILE:O	45:SG:235:ILE:HG12	2.19	0.42
45:SG:291:ILE:HG13	45:SG:292:THR:N	2.35	0.42
46:SH:101:TRP:HB2	46:SH:184:ASN:HB3	2.01	0.42
45:SK:205:ASP:OD1	45:SK:205:ASP:N	2.52	0.42
46:SL:156:ARG:NH1	46:SL:195:ASN:O	2.53	0.42
45:SM:31:GLN:CD	45:SM:32:PRO:HD2	2.40	0.42
45:SM:270:SER:HB3	45:SM:378:ILE:HD13	2.02	0.42
46:TB:97:ALA:HA	46:TB:103:LYS:HG2	2.02	0.42
45:TC:169:PHE:HB3	45:TC:204:LEU:HD11	2.01	0.42
46:TD:42:LEU:HA	46:TD:45:GLU:HG2	2.02	0.42
46:TF:86:ARG:HD2	46:TF:86:ARG:HA	1.96	0.42
45:TG:102:ASN:HB3	45:TG:105:ARG:HB2	2.02	0.42
45:TG:217:LEU:HD23	45:TG:217:LEU:HA	1.89	0.42
46:TH:173:PRO:HG2	46:TH:380:ARG:HD3	2.01	0.42
46:TN:212:PHE:CZ	46:TN:220:PRO:HG2	2.54	0.42
45:UA:262:TYR:OH	46:UB:392:LYS:HB2	2.20	0.42
46:UD:21:TRP:CZ3	46:UD:61:PRO:HB3	2.54	0.42
46:UF:324:LYS:NZ	45:UG:227:LEU:HD11	2.35	0.42
45:UI:124:LYS:HE2	45:UI:124:LYS:HB2	1.83	0.42
45:UI:276:ILE:HD11	45:UI:280:LYS:HG3	2.01	0.42
46:UJ:69:GLU:HA	46:UJ:70:PRO:HD3	1.88	0.42
46:UL:73:MET:HA	46:UL:76:VAL:HG12	2.01	0.42
45:UM:295:ALA:HB1	45:UM:377:MET:HG2	2.02	0.42
46:VB:208:TYR:CE1	46:VB:225:LEU:HD11	2.54	0.42
46:VB:287:PRO:HA	46:VB:329:GLN:HE22	1.85	0.42
46:VB:421:GLU:O	46:VB:424:GLN:NE2	2.53	0.42
45:VG:71:GLU:OE2	46:VH:2:ARG:NH2	2.53	0.42
45:VM:320:ARG:HD2	45:VM:356:ASN:HD21	1.85	0.42
46:VN:54:ALA:HA	46:WN:283:ALA:HB2	2.02	0.42
46:VN:162:ARG:NE	46:VN:162:ARG:HA	2.35	0.42
45:WA:241:SER:OG	45:WA:250:VAL:O	2.33	0.42
46:WH:30:ILE:HD11	46:WH:47:ILE:HD11	2.01	0.42
46:WJ:203:ASP:O	46:WJ:207:LEU:HD23	2.19	0.42
46:WN:101:TRP:HZ2	46:WN:149:THR:HG21	1.85	0.42
10:OQ:31:ASN:HD22	45:AA:400:ALA:HB1	1.84	0.41
11:1S:127:ARG:O	11:1S:127:ARG:HG3	2.20	0.41
12:1T:13:GLN:HB3	12:1T:16:ASN:HB2	2.02	0.41
13:1U:341:THR:HA	13:1U:364:GLU:HG3	2.01	0.41
4:2D:35:LYS:HZ1	45:DK:84:ARG:HD3	1.85	0.41
31:2I:53:ARG:NH1	46:GH:209:ASP:OD2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:2L:525:LEU:HD13	46:BN:320:ARG:CB	2.49	0.41
21:2L:853:GLU:HG2	21:2L:854:ASP:N	2.34	0.41
9:2N:220:THR:HB	9:2N:235:VAL:HG12	2.01	0.41
23:2O:198:LYS:HZ1	45:VI:372:MET:HG3	1.85	0.41
23:2O:443:ARG:NH1	23:2O:444:ASN:OD1	2.52	0.41
26:2W:240:PHE:CE1	34:6R:10:PRO:HD2	2.54	0.41
1:3A:134:LYS:HZ3	1:3A:138:TRP:HB2	1.81	0.41
16:3B:58:VAL:O	16:3B:60:LEU:HD23	2.19	0.41
32:3D:23:ARG:HG2	32:3D:23:ARG:NH1	2.35	0.41
30:3H:200:TYR:OH	45:AG:78:VAL:HA	2.20	0.41
25:3R:397:ARG:NH1	25:3R:401:LYS:HD3	2.34	0.41
11:3S:46:TRP:NE1	45:WK:89:PRO:HD3	2.34	0.41
14:3V:204:GLU:HA	14:3V:207:GLN:NE2	2.35	0.41
27:4C:297:ASP:O	46:KN:320:ARG:NH2	2.44	0.41
10:4Q:3:LYS:HE3	10:4Q:3:LYS:HB3	1.84	0.41
37:5E:38:VAL:HG13	37:5E:39:ASP:N	2.35	0.41
34:5R:498:LEU:N	34:5R:501:TYR:O	2.53	0.41
40:6G:275:TYR:N	40:6G:276:PRO:HD2	2.35	0.41
10:6Q:7:GLN:CG	10:6Q:73:LEU:HD21	2.50	0.41
34:6R:288:LYS:HG3	34:6R:301:PRO:O	2.20	0.41
45:AE:71:GLU:HA	45:AE:72:PRO:HD3	1.89	0.41
45:AE:284:GLU:HG3	45:ME:88:HIS:HE2	1.85	0.41
46:AF:65:LEU:HD22	46:AF:90:PHE:HE1	1.85	0.41
46:AH:276:ARG:HA	46:AH:276:ARG:HD3	1.84	0.41
46:AH:289:LEU:HD13	46:AH:365:VAL:HG23	2.02	0.41
45:AI:256:GLN:HB3	46:AL:397:TRP:CZ2	2.54	0.41
45:AK:420:GLU:HA	45:AK:423:GLU:CD	2.40	0.41
46:BD:25:SER:O	46:BD:29:GLY:N	2.53	0.41
46:BF:232:ALA:HB1	46:BF:268:ILE:HD12	2.01	0.41
45:BG:425:LEU:HA	45:BG:425:LEU:HD23	1.77	0.41
46:BH:359:LYS:HE2	46:BH:359:LYS:HB3	1.73	0.41
45:BI:21:TRP:CZ2	45:BI:65:ALA:HB2	2.55	0.41
46:BJ:246:LEU:HD12	46:BJ:246:LEU:HA	1.87	0.41
46:BJ:334:GLN:HE22	46:BJ:348:ASN:H	1.68	0.41
46:BJ:341:PHE:HB3	46:BJ:348:ASN:HD21	1.85	0.41
45:BK:222:PRO:HD2	46:BL:324:LYS:HD3	2.02	0.41
46:BN:25:SER:HG	46:BN:51:TYR:HH	1.64	0.41
46:BN:217:LEU:HD23	46:BN:217:LEU:H	1.85	0.41
46:CB:21:TRP:CZ2	46:CB:63:ALA:HB2	2.55	0.41
46:CB:372:THR:HA	46:CB:422:TYR:CE2	2.55	0.41
45:CC:205:ASP:OD1	45:CC:303:ALA:HA	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:CG:258:ASN:OD1	46:CH:179:VAL:HG22	2.20	0.41
45:CG:384:ILE:O	45:CG:387:VAL:HG22	2.20	0.41
46:CH:22:GLU:HG3	46:CH:81:PHE:CD1	2.55	0.41
46:CH:32:PRO:HG3	46:CH:81:PHE:CZ	2.55	0.41
46:CH:65:LEU:HD22	46:CH:90:PHE:CE1	2.54	0.41
46:CH:417:ASP:O	46:CH:420:SER:OG	2.28	0.41
45:CI:245:ASP:OD1	45:CI:245:ASP:N	2.52	0.41
46:CJ:21:TRP:CZ3	46:CJ:61:PRO:HB3	2.55	0.41
45:CM:3:GLU:O	45:CM:133:GLN:NE2	2.53	0.41
45:CM:393:HIS:O	45:CM:397:LEU:HD23	2.20	0.41
45:DA:31:GLN:HG2	45:DA:35:GLN:O	2.20	0.41
45:DC:55:GLU:HG3	45:DC:57:GLY:H	1.85	0.41
45:DC:324:VAL:HG12	45:DC:326:LYS:HG3	2.01	0.41
46:DF:255:VAL:HA	45:DG:407:TRP:CE2	2.55	0.41
46:DF:318:ARG:NH1	46:DF:358:PRO:HG3	2.35	0.41
46:DH:12:CYS:O	46:DH:16:ILE:HG12	2.20	0.41
45:DI:245:ASP:OD1	45:DI:246:GLY:N	2.53	0.41
45:DK:39:ASP:OD1	45:DK:39:ASP:N	2.50	0.41
46:DL:314:SER:HA	46:DL:350:LYS:HB3	2.02	0.41
45:DM:258:ASN:CB	45:DM:352:LYS:HE2	2.49	0.41
46:DN:7:ILE:HG12	46:DN:64:ILE:HD13	2.02	0.41
46:DN:251:ARG:O	46:DN:255:VAL:HG23	2.20	0.41
46:DN:380:ARG:O	46:DN:384:GLN:OE1	2.38	0.41
45:EA:122:ILE:HA	45:EA:125:LEU:HG	2.02	0.41
46:EB:310:TYR:HD2	46:EB:341:PHE:CE1	2.38	0.41
46:ED:286:VAL:HG12	46:ED:329:GLN:HG3	2.02	0.41
46:EH:109:GLY:HA2	46:EH:147:MET:CE	2.50	0.41
46:EH:148:GLY:O	46:EH:152:ILE:HG12	2.19	0.41
45:EI:115:VAL:HG22	45:EI:119:LEU:HD23	2.02	0.41
46:EJ:145:SER:OG	46:EJ:188:SER:HB3	2.19	0.41
46:EL:213:ARG:HH12	46:EL:297:LYS:HG2	1.85	0.41
45:EM:269:LEU:HD11	45:EM:302:MET:HB3	2.01	0.41
45:EM:413:MET:HB3	45:EM:413:MET:HE2	1.98	0.41
46:FB:237:THR:HG23	46:FB:241:ARG:HE	1.85	0.41
46:FD:87:PRO:HA	46:FD:90:PHE:HD1	1.84	0.41
46:FD:105:HIS:CE1	46:FD:150:LEU:HD12	2.54	0.41
46:FD:341:PHE:CE2	46:FD:349:ILE:HD11	2.55	0.41
45:FG:91:GLN:OE1	45:FG:125:LEU:HD21	2.19	0.41
45:FM:318:MET:HG3	45:FM:354:GLY:HA3	2.02	0.41
46:FN:285:THR:HB	46:FN:287:PRO:HD2	2.02	0.41
46:GB:224:ASP:OD1	46:GB:225:LEU:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GB:309:ARG:N	46:GB:372:THR:OG1	2.46	0.41
46:GB:371:SER:O	46:GB:422:TYR:OH	2.29	0.41
46:GD:162:ARG:HA	46:GD:162:ARG:HD3	1.83	0.41
46:GH:139:LEU:HD13	46:GH:168:SER:HB3	2.01	0.41
45:GI:265:ILE:HD11	45:GI:435:VAL:HG21	2.02	0.41
46:GJ:226:ASN:HD21	49:GJ:501:GDP:HN1	1.66	0.41
45:GM:124:LYS:HE2	45:GM:124:LYS:HB2	1.88	0.41
45:GM:311:LYS:HD2	45:GM:342:GLN:HG3	2.01	0.41
46:GN:180:VAL:HG22	46:GN:183:TYR:HB2	2.01	0.41
45:HA:27:GLU:OE2	45:HA:243:ARG:NH1	2.45	0.41
46:HD:280:GLN:OE1	46:HD:280:GLN:N	2.47	0.41
46:HF:295:ASP:HB3	46:HF:298:ASN:HB2	2.03	0.41
46:HJ:3:GLU:HG3	46:HJ:62:ARG:NH1	2.35	0.41
46:IB:102:ALA:HB1	46:IB:401:GLU:HB2	2.01	0.41
45:IC:319:TYR:HD2	45:IC:323:VAL:HG11	1.85	0.41
46:ID:167:PHE:CZ	46:ID:233:MET:HG2	2.54	0.41
45:IE:115:VAL:HG22	45:IE:119:LEU:HD23	2.02	0.41
46:IF:282:ARG:HH21	46:IF:288:GLU:HG3	1.85	0.41
46:IJ:156:ARG:HA	46:IJ:156:ARG:HD3	1.88	0.41
46:IL:285:THR:O	46:IL:288:GLU:HG3	2.20	0.41
45:IM:207:GLU:HB2	45:IM:304:LYS:HD3	2.02	0.41
46:IN:130:LEU:HD21	46:IN:133:PHE:CZ	2.55	0.41
45:JI:184:PRO:O	45:JI:188:ILE:HG12	2.20	0.41
46:JJ:210:ILE:HD11	46:JJ:299:MET:O	2.20	0.41
46:JJ:362:LYS:HE2	46:JJ:362:LYS:HB2	1.76	0.41
46:JN:215:LEU:HB3	46:JN:217:LEU:HD22	2.00	0.41
46:JN:226:ASN:ND2	49:JN:501:GDP:HN1	2.18	0.41
46:JN:380:ARG:HE	46:JN:380:ARG:HB2	1.74	0.41
45:KC:217:LEU:HD13	45:KC:367:ASP:HB3	2.02	0.41
45:KE:294:SER:O	45:KE:300:ASN:ND2	2.47	0.41
46:KF:68:LEU:HD23	46:KF:112:LEU:HD13	2.01	0.41
45:KG:417:GLU:HA	45:KG:420:GLU:OE1	2.20	0.41
46:KH:161:ASP:OD1	46:KH:161:ASP:N	2.48	0.41
45:LA:259:LEU:HB3	45:LA:268:MET:CE	2.50	0.41
46:LB:319:GLY:N	46:LB:354:CYS:O	2.47	0.41
46:LD:209:ASP:OD1	46:LD:213:ARG:HD3	2.20	0.41
46:LF:262:ARG:HD3	46:LF:421:GLU:OE2	2.20	0.41
45:LG:384:ILE:O	45:LG:387:VAL:HG12	2.20	0.41
46:LH:9:GLY:HA2	46:LH:66:MET:O	2.20	0.41
46:LJ:1:MET:N	46:LJ:3:GLU:OE1	2.43	0.41
45:MA:214:ARG:HH11	46:MB:324:LYS:CE	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MC:211:ASP:OD2	45:MC:304:LYS:NZ	2.53	0.41
45:ME:216:ASN:HB3	45:ME:275:ILE:O	2.20	0.41
46:MN:51:TYR:HE1	46:MN:61:PRO:HG3	1.85	0.41
46:MN:260:PHE:HB2	46:MN:263:LEU:HD13	2.02	0.41
45:NA:352:LYS:HD2	46:ND:177:ASP:O	2.20	0.41
46:NB:268:ILE:HG22	46:NB:368:VAL:HG22	2.02	0.41
46:NB:372:THR:O	46:NB:375:GLN:HG2	2.20	0.41
45:NC:127:ASP:OD1	45:NC:128:ASN:N	2.54	0.41
45:NE:326:LYS:HD3	46:NH:220:PRO:HD2	2.02	0.41
45:NG:417:GLU:HA	45:NG:420:GLU:CD	2.40	0.41
46:NL:117:LEU:HB3	46:NL:121:ARG:NH2	2.34	0.41
46:NL:148:GLY:O	46:NL:152:ILE:HD12	2.20	0.41
46:OB:105:HIS:CE1	46:OB:150:LEU:HB2	2.55	0.41
46:OB:173:PRO:HD3	46:OB:380:ARG:NH2	2.35	0.41
45:OC:222:PRO:O	46:OD:322:SER:HB2	2.19	0.41
45:OG:35:GLN:NE2	45:OG:60:LYS:HB3	2.35	0.41
46:OJ:285:THR:HG23	46:OJ:288:GLU:H	1.84	0.41
45:PA:11:GLN:HB2	45:PA:74:VAL:HG11	2.02	0.41
46:PB:119:VAL:HG23	46:PB:122:LYS:HE3	2.02	0.41
46:PB:184:ASN:OD1	46:PB:185:ALA:N	2.53	0.41
46:PB:268:ILE:HG22	46:PB:368:VAL:HG22	2.01	0.41
46:PB:329:GLN:HA	46:PB:332:ASN:HB2	2.03	0.41
45:PE:11:GLN:NE2	47:PE:501:GTP:O1B	2.53	0.41
45:PE:205:ASP:OD1	45:PE:303:ALA:HA	2.20	0.41
45:PG:203:MET:HG3	45:PG:384:ILE:HD11	2.02	0.41
46:PH:239:CYS:SG	46:PH:247:ASN:HA	2.60	0.41
45:PI:69:ASP:OD1	45:PI:70:LEU:N	2.53	0.41
45:PI:271:SER:OG	45:PI:301:MET:HG3	2.20	0.41
46:PL:45:GLU:H	46:PL:45:GLU:CD	2.24	0.41
46:PL:239:CYS:SG	46:PL:247:ASN:HA	2.60	0.41
45:QA:147:SER:HB2	45:QA:190:SER:HB3	2.01	0.41
46:QB:5:VAL:HG23	46:QB:7:ILE:HD11	2.02	0.41
45:QE:244:PHE:CE1	45:QE:358:GLN:HG2	2.55	0.41
46:QL:69:GLU:CD	46:QL:71:GLY:H	2.23	0.41
46:QL:384:GLN:O	46:QL:388:MET:HG2	2.20	0.41
45:QM:167:LEU:HG	45:QM:200:VAL:HB	2.02	0.41
45:QM:296:PHE:CD2	45:QM:335:ILE:HG12	2.55	0.41
45:RA:210:TYR:HB3	45:RA:214:ARG:NH1	2.29	0.41
45:RA:298:PRO:HB3	45:RA:308:ARG:HH12	1.84	0.41
46:RB:117:LEU:HD13	46:RB:154:LYS:HE2	2.01	0.41
46:RF:318:ARG:HD2	46:RF:358:PRO:HG3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RJ:20:PHE:HA	46:RJ:230:SER:OG	2.20	0.41
46:SB:193:VAL:O	46:SB:264:HIS:NE2	2.37	0.41
45:SC:108:TYR:HA	45:SC:112:LYS:HE2	2.01	0.41
45:SC:384:ILE:O	45:SC:387:VAL:HG22	2.20	0.41
46:SF:5:VAL:HG12	46:SF:62:ARG:CD	2.50	0.41
46:SF:153:SER:HA	46:SF:195:ASN:HD22	1.84	0.41
45:SI:265:ILE:HG12	45:SI:432:TYR:CE1	2.54	0.41
45:SI:402:ARG:O	45:SI:402:ARG:HG3	2.19	0.41
45:SI:405:VAL:HG13	45:SI:418:PHE:HE2	1.84	0.41
45:SK:91:GLN:HB3	45:SK:121:ARG:HH21	1.84	0.41
46:SL:167:PHE:CE1	46:SL:200:MET:HG2	2.55	0.41
46:TB:204:ASN:OD1	46:TB:205:GLU:N	2.53	0.41
46:TB:248:SER:HA	46:TB:252:LYS:HD2	2.01	0.41
46:TB:350:LYS:HZ1	45:TC:180:ALA:HA	1.84	0.41
45:TC:174:SER:HB2	45:TC:177:VAL:O	2.20	0.41
45:TC:238:LEU:HD11	45:TC:255:PHE:CE1	2.55	0.41
46:TF:101:TRP:HB3	46:TF:398:TYR:HE1	1.84	0.41
46:TH:1:MET:O	46:TH:2:ARG:HG2	2.20	0.41
46:TH:86:ARG:HH12	46:UH:282:ARG:HH21	1.67	0.41
46:TL:139:LEU:HD13	46:TL:168:SER:HB3	2.01	0.41
46:TL:178:THR:HB	46:TL:181:GLU:HG3	2.00	0.41
46:TL:247:ASN:ND2	45:TM:71:GLU:OE1	2.53	0.41
45:TM:115:VAL:HG13	45:TM:156:ARG:NH1	2.35	0.41
46:UB:303:ALA:HB2	46:UB:377:MET:SD	2.60	0.41
45:UE:414:GLU:HB2	45:UE:417:GLU:HG2	2.02	0.41
46:UF:380:ARG:O	46:UF:383:GLU:HG2	2.19	0.41
45:UG:387:VAL:HG23	45:UG:388:PHE:CD1	2.55	0.41
46:UJ:391:ARG:HD2	46:UJ:391:ARG:HA	1.80	0.41
45:UK:326:LYS:HB3	46:UL:208:TYR:CE1	2.55	0.41
45:UM:109:THR:HG22	45:UM:110:ILE:HG23	2.00	0.41
45:VA:147:SER:HB2	45:VA:190:SER:HB3	2.02	0.41
45:VA:164:LYS:O	45:VA:166:LYS:NZ	2.53	0.41
46:VD:299:MET:HG3	46:VD:305:PRO:HG3	2.00	0.41
46:VH:139:LEU:CD1	46:VH:168:SER:HB3	2.49	0.41
45:WA:14:ILE:HD11	45:WA:69:ASP:HB2	2.02	0.41
46:WD:16:ILE:HD13	46:WD:226:ASN:OD1	2.20	0.41
46:WD:236:VAL:HG13	46:WD:237:THR:HG23	2.01	0.41
45:WE:3:GLU:HB2	45:WE:129:CYS:SG	2.60	0.41
46:WF:187:LEU:HD11	46:WF:408:PHE:CE1	2.55	0.41
46:WL:239:CYS:SG	46:WL:247:ASN:HA	2.60	0.41
46:WN:178:THR:HG22	46:WN:180:VAL:H	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:1H:274:LEU:HD12	46:HF:360:GLY:N	2.35	0.41
14:1V:6:ILE:HG12	13:2U:370:PHE:CE1	2.55	0.41
1:2A:93:PHE:HB2	1:2A:95:LEU:HD23	2.02	0.41
16:2B:111:ARG:NH1	16:2B:113:ASN:HD21	2.18	0.41
4:2D:53:ILE:O	45:EK:221:ARG:NH1	2.37	0.41
28:2F:16:LYS:O	28:2F:19:GLU:HB2	2.20	0.41
28:2F:93:GLU:OE2	45:HE:299:ALA:HA	2.20	0.41
31:2I:27:GLU:O	31:2I:27:GLU:HG3	2.20	0.41
20:2K:381:THR:O	20:2K:385:LEU:HD23	2.20	0.41
22:2M:107:ILE:HG13	22:2M:190:ILE:HD12	2.00	0.41
23:2O:151:LYS:O	23:2O:154:THR:OG1	2.28	0.41
23:2O:291:LYS:HE2	23:2O:291:LYS:HB3	1.94	0.41
23:2O:423:HIS:HA	23:2O:426:GLU:OE1	2.20	0.41
10:2Q:126:ASP:OD1	10:2Q:130:ASN:ND2	2.52	0.41
13:2U:383:ASP:N	13:2U:383:ASP:OD1	2.53	0.41
13:2U:512:ARG:HB3	13:2U:530:GLY:HA2	2.03	0.41
14:2V:107:ALA:O	14:2V:112:ARG:NH2	2.53	0.41
27:3C:20:ARG:HH21	27:3C:97:GLN:HG3	1.85	0.41
27:3C:174:TYR:O	27:3C:178:GLY:N	2.51	0.41
31:3I:202:GLY:O	45:GK:340:THR:HG21	2.20	0.41
21:3L:69:ALA:O	21:3L:73:LEU:HG	2.20	0.41
23:3O:281:GLU:O	23:3O:285:GLU:HG2	2.20	0.41
13:3U:117:LEU:O	13:3U:132:TRP:N	2.35	0.41
13:3U:446:LYS:HG2	13:3U:476:TRP:HZ3	1.85	0.41
14:3V:24:ARG:HE	45:MA:430:LYS:HD3	1.85	0.41
14:3V:223:TYR:HE1	14:3V:241:LYS:HG3	1.85	0.41
15:3X:38:ILE:HD12	15:3X:41:GLN:NE2	2.34	0.41
33:4F:169:PHE:HA	45:IM:82:THR:HA	2.02	0.41
35:4S:206:TYR:HE2	46:WD:86:ARG:CZ	2.33	0.41
36:5A:29:GLN:NE2	36:5A:36:ARG:HD3	2.34	0.41
36:5C:167:LYS:NZ	45:NK:279:GLU:HA	2.35	0.41
37:5G:210:THR:OG1	45:LK:431:ASP:OD1	2.38	0.41
37:5H:9:TYR:CG	37:5H:10:PRO:HD3	2.56	0.41
34:5R:21:LEU:HD23	34:5R:21:LEU:HA	1.87	0.41
34:6R:426:PHE:N	34:6R:444:ILE:O	2.44	0.41
34:7R:129:VAL:HG12	34:7R:144:PHE:HB3	2.02	0.41
34:7R:364:MET:SD	34:7R:364:MET:N	2.94	0.41
34:7R:500:VAL:HG21	46:EB:32:PRO:HD2	2.01	0.41
45:AA:19:ALA:HA	45:AA:22:GLU:HG2	2.02	0.41
45:AI:135:PHE:HB2	45:AI:166:LYS:HG2	2.03	0.41
46:AJ:146:GLY:O	46:AJ:149:THR:HG22	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:AK:319:TYR:HB2	45:AK:323:VAL:HG11	2.03	0.41
45:BA:183:GLU:N	45:BA:184:PRO:HD2	2.35	0.41
45:BA:425:LEU:HD23	45:BA:425:LEU:HA	1.79	0.41
46:BB:263:LEU:HG	46:BB:422:TYR:CD1	2.54	0.41
46:BF:395:LEU:O	46:BF:399:THR:HG23	2.20	0.41
45:BG:396:ASP:HB3	45:BG:422:ARG:NH2	2.35	0.41
46:BH:16:ILE:HD13	46:BH:226:ASN:OD1	2.20	0.41
45:BI:276:ILE:HG22	45:BI:277:SER:O	2.20	0.41
45:BK:21:TRP:CH2	45:BK:63:PRO:HB3	2.55	0.41
45:BK:152:LEU:O	45:BK:156:ARG:HG2	2.20	0.41
46:BN:167:PHE:CE1	46:BN:233:MET:HG2	2.55	0.41
45:CC:90:GLU:OE1	45:CC:121:ARG:HD3	2.19	0.41
46:CF:4:ILE:HG22	46:CF:131:GLN:HB3	2.01	0.41
45:CG:329:ASN:OD1	46:CH:175:VAL:HG23	2.21	0.41
46:CH:148:GLY:O	46:CH:152:ILE:HG12	2.19	0.41
46:CJ:73:MET:HE1	46:CJ:92:PHE:HB3	2.02	0.41
46:CN:191:GLN:HG3	46:CN:195:ASN:OD1	2.19	0.41
45:DA:326:LYS:O	45:DA:330:ALA:N	2.48	0.41
46:DB:256:ASN:HB3	46:DB:257:LEU:HD12	2.02	0.41
45:DE:438:GLU:OE1	45:DE:438:GLU:N	2.46	0.41
45:DG:244:PHE:HB2	45:DG:356:ASN:HD21	1.85	0.41
46:DH:32:PRO:HA	46:DH:84:LEU:HD11	2.02	0.41
46:EB:169:VAL:HG22	46:EB:202:ILE:HB	2.03	0.41
46:EB:239:CYS:HB3	46:EB:354:CYS:HB2	2.01	0.41
46:EF:101:TRP:HB2	46:EF:184:ASN:HB3	2.01	0.41
46:EF:156:ARG:NH1	46:EF:162:ARG:O	2.53	0.41
45:EG:352:LYS:HA	46:EH:177:ASP:O	2.19	0.41
45:EI:211:ASP:OD1	45:EI:215:ARG:HD3	2.21	0.41
45:EM:137:VAL:HG12	45:EM:167:LEU:O	2.21	0.41
45:FA:138:PHE:CD1	45:FA:169:PHE:HB2	2.55	0.41
45:FC:431:ASP:O	45:FC:435:VAL:HG23	2.20	0.41
46:FD:117:LEU:HA	46:FD:120:VAL:HG12	2.02	0.41
46:FH:44:LEU:O	46:FH:44:LEU:HD23	2.20	0.41
46:FH:111:GLU:OE1	46:FH:111:GLU:N	2.52	0.41
45:FI:249:ASN:OD1	45:FI:250:VAL:N	2.53	0.41
45:FI:274:PRO:HG3	45:FI:286:LEU:HD13	2.02	0.41
45:FK:356:ASN:OD1	45:FK:357:TYR:N	2.53	0.41
45:GA:1:MET:CE	46:GD:94:GLN:HE21	2.33	0.41
45:GA:20:CYS:O	45:GA:24:PHE:CD2	2.74	0.41
45:GA:132:LEU:HD21	45:GA:135:PHE:CE2	2.55	0.41
45:GE:284:GLU:HG3	45:GE:286:LEU:HD22	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GH:113:ILE:HG12	46:GH:117:LEU:HD23	2.02	0.41
45:HA:56:THR:HG21	45:HA:60:LYS:HG2	2.02	0.41
46:HB:258:ILE:HG13	46:HB:266:PHE:CZ	2.55	0.41
45:HE:384:ILE:O	45:HE:387:VAL:HG22	2.21	0.41
46:HF:158:GLU:N	46:HF:158:GLU:OE2	2.53	0.41
46:HF:293:MET:HG3	46:HF:367:PHE:HB2	2.02	0.41
45:HK:112:LYS:HA	45:HK:112:LYS:HD2	1.90	0.41
46:HL:301:CYS:HB3	46:HL:377:MET:HE1	2.02	0.41
46:HN:208:TYR:CE1	46:HN:225:LEU:HD11	2.55	0.41
46:IB:114:ASP:OD1	46:IB:114:ASP:N	2.53	0.41
46:IB:226:ASN:HA	46:IB:229:VAL:HG22	2.02	0.41
45:IC:33:ASP:HA	45:IC:85:GLN:HB2	2.02	0.41
45:IC:70:LEU:HD11	45:IC:149:LEU:HD21	2.03	0.41
45:IC:105:ARG:NH1	46:ID:251:ARG:HD3	2.35	0.41
46:ID:198:GLU:HG2	46:ID:266:PHE:HE2	1.86	0.41
45:IE:167:LEU:HG	45:IE:200:VAL:HB	2.01	0.41
46:IJ:175:VAL:O	46:IJ:175:VAL:HG23	2.20	0.41
45:IK:265:ILE:HG12	45:IK:432:TYR:HE1	1.85	0.41
46:IL:305:PRO:HB3	46:IL:310:TYR:HE1	1.85	0.41
45:JA:76:ASP:HA	45:JA:79:ARG:HD2	2.03	0.41
45:JC:183:GLU:HG2	45:JC:184:PRO:HD3	2.01	0.41
45:JE:326:LYS:HA	45:JE:329:ASN:HB2	2.01	0.41
46:JF:178:THR:HG22	46:JF:180:VAL:H	1.85	0.41
45:JK:325:PRO:HA	45:JK:328:VAL:HG22	2.02	0.41
45:JK:422:ARG:O	45:JK:422:ARG:NH1	2.53	0.41
45:JM:76:ASP:OD1	45:JM:77:GLU:N	2.53	0.41
46:JN:4:ILE:HG22	46:JN:131:GLN:HB3	2.01	0.41
45:KA:296:PHE:HE1	45:KA:335:ILE:HG21	1.85	0.41
46:KB:3:GLU:HG3	46:KB:62:ARG:NH1	2.35	0.41
45:KE:251:ASP:H	45:KE:254:GLU:HB2	1.86	0.41
45:KG:74:VAL:O	45:KG:78:VAL:HG23	2.19	0.41
45:KK:356:ASN:OD1	45:KK:357:TYR:N	2.53	0.41
45:KM:68:LEU:HD13	45:KM:93:ILE:HB	2.01	0.41
46:KN:394:PHE:HD2	46:KN:397:TRP:HZ3	1.67	0.41
45:LA:3:GLU:HG2	45:LA:64:ARG:CZ	2.50	0.41
45:LC:31:GLN:HG3	45:LC:33:ASP:OD1	2.20	0.41
45:LE:217:LEU:HD23	45:LE:367:ASP:HB3	2.01	0.41
45:LE:227:LEU:O	45:LE:231:ILE:HG13	2.21	0.41
45:LG:37:PRO:HB2	45:LG:40:ARG:HG2	2.01	0.41
46:LN:60:VAL:HG11	46:MN:281:TYR:HD1	1.85	0.41
46:MB:72:THR:HG23	46:MB:73:MET:HG3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:MB:273:LEU:H	46:MB:292:GLN:NE2	2.19	0.41
46:MB:374:ILE:HD12	46:MB:422:TYR:OH	2.20	0.41
45:MG:259:LEU:HD11	45:MG:316:SER:HB3	2.01	0.41
45:MI:203:MET:HG3	45:MI:384:ILE:HD11	2.02	0.41
46:MJ:156:ARG:NH2	46:MJ:197:ASP:OD1	2.53	0.41
46:ML:221:THR:HG23	46:ML:223:GLY:H	1.85	0.41
45:MM:286:LEU:N	45:MM:290:GLU:OE2	2.47	0.41
46:MN:172:SER:HA	46:MN:173:PRO:HD3	1.93	0.41
45:NE:205:ASP:N	45:NE:205:ASP:OD2	2.53	0.41
45:NI:263:PRO:HD3	46:NL:396:HIS:NE2	2.35	0.41
46:NJ:117:LEU:HA	46:NJ:120:VAL:HG12	2.01	0.41
45:NK:71:GLU:HA	45:NK:72:PRO:HD3	1.90	0.41
46:NL:362:LYS:HA	46:NL:362:LYS:HE2	2.02	0.41
45:NM:123:ARG:HG2	45:NM:123:ARG:NH1	2.34	0.41
46:NN:213:ARG:CZ	46:NN:297:LYS:HD3	2.50	0.41
46:OB:316:LEU:HD13	46:OB:352:SER:OG	2.19	0.41
45:OE:98:ASP:O	45:OE:105:ARG:NH1	2.53	0.41
45:OG:202:VAL:HG12	45:OG:204:LEU:HG	2.01	0.41
46:OH:169:VAL:HG22	46:OH:202:ILE:HB	2.02	0.41
46:PB:70:PRO:HG3	46:PB:92:PHE:CD2	2.56	0.41
46:PB:181:GLU:HG2	46:PB:182:PRO:HD3	2.01	0.41
45:PC:100:ALA:HA	46:PD:252:LYS:HG3	2.02	0.41
45:PE:279:GLU:OE2	45:PE:280:LYS:HB2	2.20	0.41
45:PG:384:ILE:O	45:PG:387:VAL:HG22	2.21	0.41
45:PG:407:TRP:HH2	46:PH:254:ALA:HB1	1.85	0.41
45:PK:331:SER:O	45:PK:334:THR:OG1	2.33	0.41
46:QB:416:ASN:HA	46:QB:419:VAL:HB	2.01	0.41
46:QD:292:GLN:HG2	46:QD:298:ASN:ND2	2.35	0.41
45:QE:71:GLU:HG2	45:QE:71:GLU:O	2.20	0.41
45:QE:280:LYS:HA	45:QE:283:HIS:CD2	2.52	0.41
46:QJ:50:TYR:OH	46:QJ:237:THR:HG21	2.20	0.41
46:QJ:289:LEU:HD13	46:QJ:365:VAL:HG23	2.02	0.41
46:QL:238:CYS:SG	46:QL:239:CYS:N	2.94	0.41
46:RB:21:TRP:CH2	46:RB:50:TYR:HB3	2.56	0.41
46:RB:135:ILE:HG12	46:RB:165:GLU:O	2.19	0.41
45:RC:208:ALA:HB1	45:RC:301:MET:O	2.20	0.41
46:RD:169:VAL:HA	46:RD:202:ILE:O	2.20	0.41
46:RD:324:LYS:HA	46:RD:327:ASP:HB2	2.02	0.41
46:RF:178:THR:HB	46:RF:181:GLU:HG3	2.02	0.41
45:RG:76:ASP:HA	45:RG:79:ARG:HG2	2.02	0.41
45:RG:220:GLU:C	45:RG:221:ARG:HD3	2.41	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RH:51:TYR:HB3	46:RH:59:TYR:HB3	2.01	0.41
46:RH:269:GLY:HA2	46:RH:300:MET:HG3	2.03	0.41
45:RK:223:THR:HG22	45:RK:224:TYR:N	2.36	0.41
46:RL:328:GLU:HA	46:RL:328:GLU:OE2	2.19	0.41
46:RL:350:LYS:NZ	46:RL:352:SER:HB2	2.35	0.41
46:RN:86:ARG:HE	46:RN:87:PRO:HD2	1.85	0.41
46:SB:359:LYS:HD2	46:SB:360:GLY:N	2.35	0.41
45:SC:3:GLU:HG2	45:SC:64:ARG:CZ	2.50	0.41
45:SC:163:LYS:HE3	45:SC:163:LYS:HB2	1.81	0.41
45:SE:33:ASP:N	45:SE:33:ASP:OD2	2.53	0.41
46:SH:388:MET:HB3	46:SH:393:ALA:HB3	2.02	0.41
45:SI:56:THR:HG23	45:SI:58:ALA:H	1.85	0.41
46:SJ:187:LEU:HD11	46:SJ:408:PHE:CE1	2.55	0.41
45:TA:288:VAL:HG11	45:TA:327:ASP:HB3	2.02	0.41
45:TC:26:LEU:HD21	45:TC:363:VAL:HG12	2.01	0.41
46:TD:385:PHE:HE2	46:TD:412:GLU:HB3	1.84	0.41
45:TE:152:LEU:HD12	45:TE:152:LEU:HA	1.90	0.41
45:TE:338:LYS:HD2	45:TE:338:LYS:HA	1.82	0.41
46:TH:31:ASP:OD2	46:TH:37:HIS:ND1	2.53	0.41
46:TL:119:VAL:HA	46:TL:122:LYS:HE2	2.02	0.41
45:TM:22:GLU:HG3	45:TM:83:TYR:HE1	1.85	0.41
46:TN:5:VAL:HG12	46:TN:62:ARG:HD3	2.02	0.41
46:UD:25:SER:OG	46:UD:30:ILE:O	2.36	0.41
45:UE:153:LEU:HD23	45:UE:153:LEU:HA	1.84	0.41
45:UE:186:ASN:OD1	45:UE:187:SER:N	2.54	0.41
46:UF:16:ILE:HD13	46:UF:226:ASN:OD1	2.20	0.41
45:UG:7:ILE:N	45:UG:136:LEU:O	2.42	0.41
45:UG:56:THR:HG23	45:UG:58:ALA:H	1.84	0.41
46:UH:148:GLY:O	46:UH:152:ILE:HG12	2.20	0.41
46:UL:73:MET:HE3	46:UL:92:PHE:HB3	2.02	0.41
45:UM:306:ASP:HB3	45:UM:309:HIS:ND1	2.35	0.41
46:VB:238:CYS:SG	46:VB:239:CYS:N	2.93	0.41
46:VD:202:ILE:HD11	46:VD:268:ILE:HD11	2.01	0.41
46:VD:309:ARG:NH2	46:VD:426:GLN:O	2.54	0.41
45:VE:210:TYR:CE1	45:VE:227:LEU:HD11	2.55	0.41
45:VG:68:LEU:HD23	45:VG:93:ILE:HB	2.01	0.41
46:VH:317:PHE:HB2	46:VH:353:ILE:HD13	2.02	0.41
45:VI:210:TYR:CE1	45:VI:227:LEU:HD11	2.55	0.41
46:VJ:184:ASN:OD1	46:VJ:185:ALA:N	2.53	0.41
46:VJ:354:CYS:SG	46:VJ:355:ASP:N	2.93	0.41
45:VK:180:ALA:HB3	45:VK:183:GLU:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VM:135:PHE:HB2	45:VM:166:LYS:HG2	2.03	0.41
46:VN:398:TYR:O	46:VN:403:MET:HB3	2.20	0.41
45:WI:297:GLU:CD	45:WI:298:PRO:HD2	2.41	0.41
46:WL:69:GLU:HA	46:WL:70:PRO:HD3	1.86	0.41
7:0G:158:PRO:HG2	26:2W:189:ARG:NH2	2.35	0.41
9:1N:215:CYS:SG	46:KJ:32:PRO:HG2	2.59	0.41
23:1O:122:LYS:HB2	46:UF:33:THR:HG21	2.02	0.41
25:1R:314:GLY:HA3	46:CD:215:LEU:HD22	2.01	0.41
11:1S:260:ASN:HB3	11:1S:310:ILE:HG12	2.03	0.41
13:1U:54:HIS:CE1	13:1U:85:ILE:HD13	2.56	0.41
15:1X:31:ASP:OD2	46:MH:218:THR:OG1	2.30	0.41
16:2B:125:TYR:CE1	16:2B:192:THR:HB	2.55	0.41
5:2E:5:LEU:HD21	5:2E:70:CYS:SG	2.60	0.41
30:2H:199:GLU:O	30:2H:200:TYR:HB3	2.20	0.41
20:2K:404:LEU:HD23	20:2K:404:LEU:HA	1.92	0.41
23:2O:179:LEU:O	23:2O:183:ILE:HG12	2.20	0.41
23:2O:462:MET:O	23:2O:466:ILE:HG12	2.20	0.41
24:2P:385:ILE:O	24:2P:388:THR:OG1	2.30	0.41
10:2Q:168:SER:O	10:2Q:169:ASP:OD1	2.38	0.41
25:2R:277:ASP:OD1	25:2R:301:ARG:NH2	2.45	0.41
11:2S:186:ARG:O	11:2S:190:ILE:HD12	2.21	0.41
13:2U:177:LYS:N	13:2U:177:LYS:HD3	2.34	0.41
13:2U:412:SER:OG	13:2U:455:ILE:O	2.38	0.41
14:2V:31:LEU:HD21	14:2V:55:PHE:CD2	2.55	0.41
1:3A:90:GLN:O	1:3A:92:PRO:HD3	2.20	0.41
32:3D:235:LEU:HD12	32:3D:235:LEU:HA	1.81	0.41
31:3I:258:LEU:HD12	31:3I:258:LEU:H	1.85	0.41
23:3O:363:GLN:HG3	23:3O:364:LYS:HD2	2.02	0.41
25:3R:210:LEU:HD23	25:3R:210:LEU:HA	1.91	0.41
25:3R:398:LEU:HD22	46:DL:77:ARG:HE	1.85	0.41
11:3S:179:ARG:HD3	11:3S:217:THR:HG22	2.01	0.41
13:3U:442:LYS:HG3	13:3U:442:LYS:O	2.20	0.41
14:3V:266:ASP:OD1	14:3V:266:ASP:N	2.52	0.41
15:4X:66:GLU:OE2	15:4X:70:TYR:HE1	2.03	0.41
37:5E:148:GLN:O	37:5E:152:GLN:HG2	2.20	0.41
37:5F:132:THR:HG21	46:OH:276:ARG:HH21	1.85	0.41
37:5H:116:TYR:O	37:5H:118:PRO:HD3	2.20	0.41
10:5Q:1:MET:HB3	10:5Q:3:LYS:HZ2	1.85	0.41
34:5R:492:ILE:HD11	34:5R:507:ARG:HA	2.02	0.41
40:6G:114:LYS:CE	46:VJ:339:SER:HB3	2.51	0.41
40:6G:122:TYR:OH	46:VJ:212:PHE:HB2	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:6G:273:MET:HE2	40:6G:274:ASN:N	2.35	0.41
34:6R:318:TYR:CG	34:6R:319:PRO:HD2	2.55	0.41
34:7R:297:LYS:HD2	34:7R:297:LYS:HA	1.79	0.41
34:7R:381:PHE:CD2	46:DB:32:PRO:HD2	2.55	0.41
42:8L:277:UNK:O	42:8L:279:UNK:N	2.53	0.41
46:AF:288:GLU:O	46:AF:291:GLN:HG3	2.20	0.41
45:AI:192:HIS:ND1	45:AI:424:ASP:OD2	2.48	0.41
45:AK:55:GLU:HG3	45:AK:57:GLY:H	1.85	0.41
45:AK:265:ILE:HG12	45:AK:432:TYR:CE1	2.54	0.41
46:AL:386:THR:O	46:AL:390:ARG:HG3	2.20	0.41
45:BA:176:GLN:HG3	46:BB:331:LEU:HD13	2.03	0.41
45:BE:288:VAL:HG21	45:BE:323:VAL:HG23	2.02	0.41
46:BF:21:TRP:CZ3	46:BF:61:PRO:HB3	2.55	0.41
46:BF:329:GLN:O	46:BF:333:VAL:HG23	2.19	0.41
45:BG:21:TRP:CZ3	45:BG:63:PRO:HB3	2.54	0.41
45:CC:35:GLN:HA	45:CC:60:LYS:HA	2.02	0.41
46:CD:21:TRP:CZ3	46:CD:61:PRO:HB3	2.55	0.41
46:CD:62:ARG:NH1	46:CD:127:CYS:HB3	2.35	0.41
45:CG:191:THR:HG21	45:CG:425:LEU:HD11	2.01	0.41
46:CJ:161:ASP:OD2	46:CJ:162:ARG:N	2.53	0.41
45:CM:68:LEU:HD21	45:CM:118:CYS:HB2	2.01	0.41
46:CN:86:ARG:HB3	46:CN:89:ASN:OD1	2.20	0.41
45:DA:292:THR:HG21	45:DA:331:SER:HB2	2.02	0.41
46:DB:122:LYS:NZ	46:EB:291:GLN:OE1	2.53	0.41
45:DC:296:PHE:CE2	45:DC:335:ILE:HG21	2.55	0.41
46:DJ:162:ARG:HA	46:DJ:162:ARG:HD3	1.95	0.41
45:DK:262:TYR:OH	46:DL:391:ARG:O	2.39	0.41
45:DM:346:TRP:CH2	46:DN:390:ARG:HD3	2.55	0.41
46:DN:375:GLN:HA	46:DN:378:PHE:CD2	2.52	0.41
45:EC:216:ASN:HB3	45:EC:275:ILE:O	2.21	0.41
45:EE:2:ARG:HD3	45:EE:242:LEU:HD22	2.01	0.41
46:EL:21:TRP:CH2	46:EL:61:PRO:HB3	2.55	0.41
46:EL:282:ARG:HE	46:EL:283:ALA:N	2.13	0.41
46:EL:286:VAL:HA	46:EL:289:LEU:HD12	2.02	0.41
45:EM:191:THR:HA	45:EM:194:LEU:HG	2.02	0.41
45:EM:384:ILE:O	45:EM:387:VAL:HG22	2.21	0.41
45:EM:414:GLU:CD	45:EM:416:GLY:H	2.24	0.41
46:EN:204:ASN:HA	46:EN:207:LEU:HD12	2.01	0.41
45:FA:394:LYS:NZ	46:FB:347:ASN:OD1	2.53	0.41
46:FD:101:TRP:HB2	46:FD:184:ASN:HB3	2.02	0.41
46:FD:330:MET:CE	46:FD:349:ILE:HG21	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FG:107:HIS:O	45:FG:107:HIS:ND1	2.52	0.41
46:FJ:262:ARG:NE	46:FJ:421:GLU:OE2	2.31	0.41
46:FJ:298:ASN:HD22	46:FJ:298:ASN:C	2.23	0.41
45:FK:311:LYS:HE2	45:FK:342:GLN:NE2	2.35	0.41
45:FM:12:GLY:O	45:FM:15:GLN:HG2	2.20	0.41
45:FM:88:HIS:CE1	45:FM:90:GLU:HG2	2.55	0.41
45:GA:1:MET:HE2	46:GD:94:GLN:HE21	1.85	0.41
46:GD:68:LEU:HD12	46:GD:97:ALA:HB2	2.02	0.41
45:GK:398:MET:SD	46:GL:345:ILE:HG13	2.60	0.41
46:GL:380:ARG:HE	46:GL:380:ARG:HB3	1.73	0.41
46:GN:8:GLN:HE21	46:GN:65:LEU:HG	1.86	0.41
46:HB:51:TYR:CE1	46:HB:61:PRO:HG3	2.55	0.41
46:HD:9:GLY:HA2	46:HD:66:MET:HG3	2.02	0.41
45:HE:271:SER:OG	45:HE:301:MET:SD	2.79	0.41
45:HI:11:GLN:HG3	45:HI:74:VAL:HG11	2.02	0.41
45:IG:430:LYS:HA	45:IG:433:GLU:HG2	2.02	0.41
46:IL:306:ARG:HG3	46:IL:340:TYR:CE2	2.55	0.41
45:JC:2:ARG:HD2	45:JC:242:LEU:O	2.20	0.41
45:JE:387:VAL:HG12	45:JE:390:ARG:HH12	1.86	0.41
46:JN:16:ILE:HD13	46:JN:226:ASN:OD1	2.20	0.41
45:KC:174:SER:HB3	45:KC:177:VAL:O	2.20	0.41
46:KD:289:LEU:HD11	46:KD:363:MET:HB3	2.03	0.41
46:KF:146:GLY:O	46:KF:149:THR:HG22	2.20	0.41
46:KN:86:ARG:HD3	46:KN:88:ASP:HB2	2.01	0.41
46:KN:150:LEU:O	46:KN:154:LYS:HG2	2.20	0.41
46:KN:222:TYR:HD1	46:KN:225:LEU:HD12	1.86	0.41
45:LC:123:ARG:HA	45:LC:123:ARG:HD3	1.89	0.41
45:LE:21:TRP:CZ2	45:LE:65:ALA:HB2	2.55	0.41
45:LI:210:TYR:CE1	45:LI:227:LEU:HD11	2.55	0.41
45:LI:352:LYS:HA	46:LL:177:ASP:O	2.19	0.41
46:LJ:73:MET:HA	46:LJ:76:VAL:HG12	2.03	0.41
46:LJ:326:VAL:O	46:LJ:330:MET:HG2	2.20	0.41
45:LK:39:ASP:OD1	45:LK:39:ASP:N	2.51	0.41
46:LN:260:PHE:HB2	46:LN:263:LEU:HD13	2.02	0.41
46:MB:187:LEU:HD11	46:MB:408:PHE:HE1	1.86	0.41
46:MB:219:THR:O	46:MB:219:THR:HG23	2.20	0.41
46:MD:391:ARG:HA	46:MD:391:ARG:HD2	1.88	0.41
45:ME:9:VAL:HG12	45:ME:68:LEU:HB2	2.01	0.41
46:MH:101:TRP:HB2	46:MH:184:ASN:HB3	2.02	0.41
46:MH:121:ARG:NE	46:MH:158:GLU:OE2	2.40	0.41
45:MI:434:GLU:O	45:MI:437:ILE:HG12	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:MM:394:LYS:NZ	46:MN:346:PRO:HG2	2.35	0.41
46:NB:377:MET:HG3	46:NB:380:ARG:HH21	1.85	0.41
45:NC:296:PHE:CZ	45:NC:377:MET:HE3	2.56	0.41
46:ND:174:LYS:HE2	46:ND:205:GLU:OE2	2.21	0.41
45:NE:175:PRO:HG3	45:NE:390:ARG:NH1	2.34	0.41
46:NF:7:ILE:HG23	46:NF:135:ILE:HG12	2.01	0.41
46:NF:318:ARG:HB3	46:NF:357:PRO:HA	2.02	0.41
45:NG:134:GLY:HA2	45:NG:164:LYS:HE2	2.02	0.41
46:NH:374:ILE:HD11	46:NH:422:TYR:CE1	2.55	0.41
46:NJ:2:ARG:HB2	46:NJ:131:GLN:HG3	2.02	0.41
45:OA:88:HIS:ND1	45:OA:90:GLU:HG3	2.35	0.41
45:OA:420:GLU:O	45:OA:423:GLU:HG3	2.20	0.41
46:OB:72:THR:O	46:OB:76:VAL:HG23	2.20	0.41
46:OB:319:GLY:N	46:OB:354:CYS:O	2.49	0.41
45:OC:178:SER:HB2	46:OD:347:ASN:ND2	2.34	0.41
46:OF:3:GLU:HG3	46:OF:62:ARG:NH1	2.35	0.41
46:OF:179:VAL:HG13	46:OF:180:VAL:HG13	2.01	0.41
46:OF:189:VAL:HA	46:OF:192:LEU:HB3	2.03	0.41
45:OG:145:THR:O	45:OG:149:LEU:HB2	2.20	0.41
45:OI:305:CYS:SG	45:OI:306:ASP:N	2.93	0.41
45:OI:377:MET:HE2	45:OI:379:SER:HB3	2.02	0.41
46:OJ:122:LYS:HA	46:OJ:122:LYS:HD3	1.91	0.41
45:OM:107:HIS:ND1	45:OM:107:HIS:O	2.53	0.41
45:PE:241:SER:OG	45:PE:250:VAL:O	2.26	0.41
45:PI:163:LYS:N	45:PI:163:LYS:HD3	2.35	0.41
45:PK:320:ARG:HB2	45:PK:358:GLN:O	2.20	0.41
46:PL:299:MET:HG3	46:PL:305:PRO:HG3	2.02	0.41
46:PN:205:GLU:HG2	46:PN:206:ALA:N	2.35	0.41
45:QA:322:ASP:OD1	45:QA:322:ASP:N	2.52	0.41
45:QM:326:LYS:HE2	46:QN:220:PRO:HD2	2.02	0.41
45:RC:176:GLN:HG2	45:RC:177:VAL:HG23	2.02	0.41
45:RC:263:PRO:HD3	46:RD:396:HIS:NE2	2.35	0.41
45:RC:337:THR:O	45:RC:339:ARG:NH1	2.53	0.41
46:RD:213:ARG:HG3	46:RD:214:THR:N	2.35	0.41
45:RI:14:ILE:HD11	45:RI:69:ASP:HB2	2.02	0.41
46:RJ:251:ARG:NH1	45:RK:97:GLU:OE2	2.54	0.41
45:RK:48:ALA:HB1	45:RK:243:ARG:HB2	2.02	0.41
45:SA:201:ALA:HB3	45:SA:267:PHE:CD1	2.55	0.41
45:SA:294:SER:O	45:SA:297:GLU:HG3	2.20	0.41
45:SA:311:LYS:NZ	45:SA:344:VAL:HG23	2.35	0.41
46:SB:116:VAL:O	46:SB:120:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:SC:242:LEU:HD11	45:SC:252:ILE:HG13	2.02	0.41
45:SE:329:ASN:OD1	46:SF:175:VAL:HG13	2.21	0.41
46:SF:83:GLN:O	46:TF:281:TYR:OH	2.29	0.41
46:SF:345:ILE:HG23	46:SF:345:ILE:O	2.20	0.41
45:SI:254:GLU:O	45:SI:255:PHE:HD1	2.04	0.41
46:SJ:256:ASN:ND2	45:SK:181:VAL:HG22	2.34	0.41
46:SJ:272:PRO:HD3	46:SJ:289:LEU:HD21	2.02	0.41
46:SJ:345:ILE:HG23	46:SJ:345:ILE:O	2.20	0.41
45:SK:88:HIS:NE2	45:TK:284:GLU:OE1	2.54	0.41
45:SK:88:HIS:ND1	45:SK:89:PRO:HD2	2.36	0.41
45:SM:352:LYS:HE3	46:SN:179:VAL:HG13	2.03	0.41
46:TD:166:THR:O	46:TD:200:MET:HB3	2.21	0.41
45:TG:249:ASN:OD1	46:TH:11:GLN:NE2	2.47	0.41
46:TJ:1:MET:O	46:TJ:2:ARG:HG2	2.20	0.41
46:TL:16:ILE:HD12	46:TL:229:VAL:HG11	2.03	0.41
45:TM:22:GLU:HG3	45:TM:83:TYR:CE1	2.55	0.41
45:UC:88:HIS:O	45:UC:91:GLN:HG2	2.20	0.41
45:UC:217:LEU:HD13	45:UC:277:SER:HA	2.01	0.41
46:UJ:247:ASN:C	46:UJ:247:ASN:ND2	2.74	0.41
45:UM:352:LYS:NZ	46:UN:178:THR:OG1	2.41	0.41
46:UN:3:GLU:OE2	46:UN:128:ASP:N	2.54	0.41
45:VA:62:VAL:HG21	45:WA:283:HIS:O	2.21	0.41
46:VB:305:PRO:HB3	46:VB:310:TYR:HE2	1.85	0.41
46:VB:324:LYS:HZ2	46:VB:324:LYS:HG2	1.66	0.41
46:VD:87:PRO:HA	46:VD:90:PHE:CD2	2.54	0.41
46:VF:154:LYS:HD3	46:VF:154:LYS:HA	1.89	0.41
46:VF:289:LEU:HD22	46:VF:363:MET:HE3	2.02	0.41
46:VF:310:TYR:CD1	46:VF:371:SER:HB2	2.54	0.41
45:VG:332:ILE:HD12	45:VG:351:PHE:HE2	1.83	0.41
46:VH:184:ASN:OD1	46:VH:185:ALA:N	2.53	0.41
45:VK:72:PRO:HD2	46:VL:2:ARG:HH12	1.85	0.41
45:VK:430:LYS:HA	45:VK:430:LYS:HE3	2.01	0.41
46:VL:139:LEU:CD1	46:VL:168:SER:HB3	2.50	0.41
45:WA:338:LYS:HZ1	45:WA:340:THR:HG22	1.85	0.41
46:WD:65:LEU:HD22	46:WD:90:PHE:CE1	2.55	0.41
1:0A:34:LEU:HD21	46:MB:43:GLN:HE21	1.86	0.41
1:0A:61:TYR:OH	46:MB:53:GLU:OE1	2.38	0.41
25:1R:233:LYS:HE3	46:BF:74:ASP:OD2	2.20	0.41
12:1T:209:PHE:O	12:1T:213:LEU:HD23	2.20	0.41
12:1T:229:THR:HA	12:1T:232:HIS:ND1	2.36	0.41
14:1V:134:ILE:H	14:1V:134:ILE:HD12	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:1X:36:ALA:HB3	15:2X:140:PRO:HD2	2.02	0.41
5:2E:13:ARG:HH21	5:2E:89:ARG:HG3	1.84	0.41
9:2N:69:LYS:HG2	9:2N:130:VAL:HA	2.01	0.41
23:2O:378:TYR:HA	23:2O:381:GLU:OE2	2.20	0.41
10:2Q:26:ASP:HB2	10:2Q:63:ALA:HA	2.03	0.41
12:2T:274:ASP:O	12:2T:275:LEU:HD23	2.21	0.41
13:2U:18:ASN:HB3	13:2U:19:GLU:OE1	2.20	0.41
13:2U:372:ASN:C	13:2U:372:ASN:ND2	2.73	0.41
14:2V:209:ARG:NH1	14:2V:255:ILE:HD12	2.35	0.41
16:3B:70:ASP:OD2	16:3B:71:THR:N	2.53	0.41
23:3O:236:ILE:HD11	46:TN:56:GLY:HA3	2.02	0.41
10:3Q:81:LYS:HD3	10:3Q:161:ARG:HD3	2.03	0.41
12:3T:1:MET:HB2	12:3T:185:LEU:HD23	2.02	0.41
34:4R:319:PRO:HG3	46:CF:227:HIS:CD2	2.54	0.41
34:4R:472:GLU:OE2	46:EF:79:GLY:HA2	2.19	0.41
36:5A:43:CYS:SG	46:KB:391:ARG:HG2	2.61	0.41
36:5C:102:TYR:HA	45:KI:393:HIS:NE2	2.35	0.41
37:5F:38:VAL:HG13	37:5F:39:ASP:N	2.35	0.41
37:5F:67:ARG:HA	37:5F:68:PRO:HD3	1.88	0.41
37:5G:91:ASN:OD1	37:5G:92:GLN:N	2.51	0.41
10:5Q:97:LYS:O	10:5Q:99:VAL:N	2.53	0.41
34:5R:116:CYS:HB3	34:5R:131:GLU:HB3	2.03	0.41
39:6F:94:PRO:HA	39:6F:97:GLN:HG2	2.02	0.41
40:6G:121:SER:HA	40:6G:122:TYR:HA	1.75	0.41
40:6G:151:ILE:O	40:6G:155:LYS:HG2	2.20	0.41
34:6R:43:ASN:HA	34:6R:46:GLU:OE2	2.20	0.41
34:6R:380:ARG:HH12	34:6R:382:TYR:HD1	1.68	0.41
44:8R:175:TYR:CD2	45:PG:370:LYS:HE2	2.55	0.41
45:AA:390:ARG:HG3	45:AA:391:LEU:N	2.34	0.41
45:AE:346:TRP:O	46:AH:388:MET:HG2	2.21	0.41
45:AG:256:GLN:O	46:AJ:397:TRP:NE1	2.52	0.41
45:AG:288:VAL:HA	45:AG:291:ILE:HG12	2.02	0.41
45:AG:372:MET:SD	45:AG:373:ARG:NH2	2.94	0.41
46:AJ:345:ILE:O	46:AJ:345:ILE:HG23	2.20	0.41
45:AK:387:VAL:HA	45:AK:390:ARG:HG2	2.01	0.41
45:AM:149:LEU:HD23	45:AM:149:LEU:HA	1.83	0.41
45:BC:252:ILE:O	45:BC:255:PHE:HB2	2.20	0.41
46:BD:69:GLU:HA	46:BD:70:PRO:HD3	1.89	0.41
45:BE:98:ASP:O	45:BE:105:ARG:NH1	2.53	0.41
45:BG:121:ARG:HD2	45:BG:121:ARG:HA	1.82	0.41
45:BI:287:SER:O	45:BI:290:GLU:HG2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BJ:257:LEU:O	46:BJ:259:PRO:HD3	2.21	0.41
45:BK:177:VAL:HG13	46:BL:327:ASP:OD1	2.19	0.41
45:BM:291:ILE:HG13	45:BM:292:THR:N	2.36	0.41
46:BN:39:ASP:H	46:BN:43:GLN:NE2	2.18	0.41
46:BN:105:HIS:CE1	46:BN:150:LEU:HD12	2.55	0.41
45:CA:2:ARG:NH2	46:CB:69:GLU:HG2	2.35	0.41
45:CA:155:GLU:OE2	45:CA:156:ARG:NH1	2.53	0.41
46:CB:48:ASN:O	46:CB:62:ARG:NH1	2.36	0.41
46:CB:201:VAL:HG23	46:CB:301:CYS:SG	2.61	0.41
45:CC:147:SER:HB2	45:CC:190:SER:HB2	2.03	0.41
45:CE:251:ASP:H	45:CE:254:GLU:HG2	1.85	0.41
45:CI:252:ILE:HA	45:CI:255:PHE:CD2	2.55	0.41
46:CL:48:ASN:O	46:CL:62:ARG:NH1	2.54	0.41
45:CM:330:ALA:O	45:CM:334:THR:HG23	2.20	0.41
45:CM:426:ALA:O	45:CM:429:GLU:HG3	2.20	0.41
45:DA:67:PHE:HB2	45:DA:92:LEU:HA	2.02	0.41
46:DB:322:SER:O	46:DB:326:VAL:HG23	2.21	0.41
45:DC:21:TRP:CH2	45:DC:63:PRO:HB3	2.55	0.41
46:DF:130:LEU:HD12	46:DF:131:GLN:H	1.84	0.41
45:DG:184:PRO:HG2	45:DG:398:MET:HE2	2.02	0.41
45:DG:240:ALA:HB1	45:DG:356:ASN:HD22	1.84	0.41
46:DJ:182:PRO:O	46:DJ:186:THR:HG23	2.20	0.41
46:DJ:287:PRO:HG3	46:DJ:329:GLN:NE2	2.32	0.41
45:DK:36:MET:HB2	45:DK:61:HIS:HE1	1.85	0.41
45:DK:183:GLU:N	45:DK:184:PRO:HD2	2.35	0.41
45:EA:274:PRO:HD2	45:EA:374:ALA:HA	2.02	0.41
45:EC:28:HIS:NE2	45:EC:243:ARG:HD2	2.35	0.41
45:EE:413:MET:HE2	45:EE:413:MET:HB3	1.89	0.41
46:EF:263:LEU:HD22	46:EF:422:TYR:CD1	2.40	0.41
46:EF:324:LYS:HA	46:EF:324:LYS:HD3	1.41	0.41
45:EI:287:SER:O	45:EI:291:ILE:HG23	2.20	0.41
46:EL:267:MET:HG3	46:EL:299:MET:HE3	2.03	0.41
45:FC:90:GLU:OE2	45:FC:90:GLU:N	2.52	0.41
45:FC:155:GLU:HG2	45:FC:197:HIS:CD2	2.55	0.41
45:FC:178:SER:HB2	45:FC:183:GLU:OE2	2.20	0.41
46:FF:345:ILE:HG23	46:FF:345:ILE:O	2.19	0.41
45:FG:333:ALA:O	45:FG:337:THR:HG23	2.20	0.41
46:FH:391:ARG:HA	46:FH:391:ARG:HD2	1.94	0.41
45:FI:123:ARG:HA	45:FI:123:ARG:HD3	1.91	0.41
45:FK:1:MET:O	45:FK:131:GLY:HA3	2.20	0.41
45:FK:79:ARG:HG3	45:FK:92:LEU:HD22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FL:252:LYS:HG2	46:FL:350:LYS:HE2	2.01	0.41
46:FN:304:ASP:OD1	46:FN:306:ARG:HG2	2.20	0.41
45:GA:175:PRO:HG3	45:GA:390:ARG:CZ	2.50	0.41
46:GB:214:THR:HG21	46:GB:273:LEU:HB3	2.01	0.41
46:GD:161:ASP:OD1	46:GD:161:ASP:N	2.42	0.41
46:GH:139:LEU:HA	46:GH:145:SER:HB3	2.02	0.41
45:GI:36:MET:HG3	45:GI:61:HIS:HE1	1.86	0.41
45:GI:122:ILE:HD13	45:GI:122:ILE:HA	1.93	0.41
46:GL:53:GLU:HA	46:GL:53:GLU:OE1	2.20	0.41
46:GL:391:ARG:HD2	46:GL:391:ARG:HA	1.84	0.41
45:HA:133:GLN:HB3	45:HA:252:ILE:HG21	2.03	0.41
47:HC:501:GTP:O1G	46:HD:252:LYS:NZ	2.43	0.41
46:HF:36:TYR:O	46:HF:37:HIS:ND1	2.53	0.41
46:HF:306:ARG:H	46:HF:306:ARG:HG2	1.74	0.41
46:HL:376:GLU:O	46:HL:380:ARG:HG2	2.21	0.41
45:HM:21:TRP:HA	45:HM:21:TRP:CE3	2.55	0.41
45:IA:138:PHE:HD1	45:IA:169:PHE:HB2	1.85	0.41
46:IB:323:THR:HG22	46:IB:353:ILE:HD13	2.01	0.41
45:IC:55:GLU:OE1	45:IC:56:THR:N	2.53	0.41
46:ID:10:GLY:O	46:ID:14:ASN:ND2	2.53	0.41
45:IE:124:LYS:HE2	45:IE:124:LYS:HB2	1.83	0.41
46:IF:141:GLY:HA3	49:IF:501:GDP:O3A	2.20	0.41
45:II:339:ARG:HA	45:II:339:ARG:HD2	1.91	0.41
45:IK:205:ASP:OD1	45:IK:303:ALA:HA	2.19	0.41
46:IL:253:LEU:O	46:IL:257:LEU:HB2	2.20	0.41
45:IM:91:GLN:HB3	45:IM:121:ARG:CZ	2.50	0.41
45:IM:177:VAL:HG11	46:IN:327:ASP:OD2	2.20	0.41
45:JA:387:VAL:HG12	45:JA:390:ARG:NH1	2.36	0.41
46:JB:65:LEU:HD12	46:JB:90:PHE:CE2	2.55	0.41
45:JC:312:TYR:O	45:JC:344:VAL:HG23	2.21	0.41
45:JC:339:ARG:CZ	45:JC:339:ARG:HA	2.49	0.41
46:JF:201:VAL:HG21	46:JF:374:ILE:HD11	2.03	0.41
46:JH:2:ARG:HB2	46:JH:131:GLN:HG3	2.03	0.41
46:JH:204:ASN:ND2	49:JH:501:GDP:O2'	2.53	0.41
46:JJ:2:ARG:HB2	46:JJ:131:GLN:HG3	2.01	0.41
45:KA:149:LEU:HA	45:KA:149:LEU:HD23	1.86	0.41
45:KA:422:ARG:O	45:KA:422:ARG:NH1	2.54	0.41
46:KB:187:LEU:HD21	46:KB:408:PHE:CD2	2.55	0.41
46:KF:63:ALA:O	46:KF:89:ASN:ND2	2.51	0.41
46:KF:184:ASN:OD1	46:KF:185:ALA:N	2.52	0.41
46:KL:24:ILE:HG21	46:KL:50:TYR:HD2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:KL:284:LEU:HD11	46:KL:362:LYS:HB2	2.02	0.41
45:LA:226:ASN:ND2	45:LA:367:ASP:OD2	2.53	0.41
46:LF:260:PHE:HB2	46:LF:263:LEU:HD13	2.01	0.41
46:LH:311:LEU:HD23	46:LH:311:LEU:HA	1.91	0.41
46:LJ:239:CYS:SG	46:LJ:247:ASN:HA	2.60	0.41
46:LL:9:GLY:HA2	46:LL:66:MET:O	2.21	0.41
46:LN:117:LEU:HA	46:LN:120:VAL:HG12	2.01	0.41
45:MA:419:SER:O	45:MA:423:GLU:HG2	2.20	0.41
46:MB:342:VAL:HG13	46:MB:345:ILE:HG22	2.01	0.41
45:ME:223:THR:HG22	45:ME:224:TYR:N	2.36	0.41
45:NA:247:ALA:HB3	45:NA:355:ILE:HB	2.03	0.41
46:ND:234:SER:O	46:ND:241:ARG:NH2	2.54	0.41
46:ND:286:VAL:HG21	46:ND:325:GLU:HG3	2.02	0.41
46:NF:22:GLU:HG2	46:NF:81:PHE:CD2	2.56	0.41
46:NJ:304:ASP:HB3	46:NJ:307:HIS:ND1	2.35	0.41
45:OA:143:GLY:HA3	47:OA:501:GTP:O2B	2.21	0.41
46:OB:282:ARG:HH21	46:OB:288:GLU:CD	2.23	0.41
45:OE:3:GLU:OE2	45:OE:131:GLY:N	2.49	0.41
45:OE:8:HIS:HB2	45:OE:67:PHE:HD1	1.85	0.41
45:OG:133:GLN:HB3	45:OG:252:ILE:HG21	2.02	0.41
45:OI:141:VAL:HG13	45:OI:170:THR:HG21	2.03	0.41
45:OI:416:GLY:O	45:OI:420:GLU:HG3	2.20	0.41
45:OK:98:ASP:OD2	45:OK:99:ALA:N	2.53	0.41
45:OM:265:ILE:HG12	45:OM:432:TYR:CE1	2.55	0.41
46:ON:238:CYS:SG	46:ON:318:ARG:NE	2.94	0.41
46:ON:328:GLU:O	46:ON:332:ASN:ND2	2.53	0.41
45:PA:2:ARG:O	45:PA:51:THR:HA	2.20	0.41
46:PD:161:ASP:OD2	46:PD:162:ARG:N	2.53	0.41
46:PD:193:VAL:O	46:PD:264:HIS:NE2	2.42	0.41
46:PD:217:LEU:HG	46:PD:220:PRO:HD3	2.01	0.41
46:PD:292:GLN:HG2	46:PD:298:ASN:ND2	2.34	0.41
45:PE:88:HIS:O	45:PE:91:GLN:HG2	2.20	0.41
46:PF:417:ASP:O	46:PF:420:SER:OG	2.23	0.41
46:PJ:294:PHE:HD2	46:PJ:333:VAL:HG21	1.85	0.41
45:PK:3:GLU:OE2	45:PK:131:GLY:N	2.45	0.41
46:PL:134:GLN:HA	46:PL:165:GLU:O	2.20	0.41
45:PM:88:HIS:HB3	45:PM:91:GLN:HG2	2.02	0.41
46:PN:178:THR:HG22	46:PN:180:VAL:H	1.85	0.41
46:PN:238:CYS:SG	46:PN:239:CYS:N	2.93	0.41
46:PN:403:MET:HG3	46:PN:404:ASP:H	1.84	0.41
45:QA:31:GLN:HB2	45:QA:32:PRO:HD2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:QE:239:THR:HG23	45:QE:243:ARG:HH21	1.85	0.41
46:QH:269:GLY:HA2	46:QH:300:MET:HG2	2.01	0.41
45:QK:184:PRO:O	45:QK:188:ILE:HG12	2.20	0.41
46:QL:3:GLU:HG3	46:QL:62:ARG:NH1	2.34	0.41
46:QL:379:LYS:HB3	46:QL:380:ARG:NH2	2.35	0.41
45:QM:416:GLY:O	45:QM:419:SER:OG	2.25	0.41
45:RA:216:ASN:ND2	45:RA:275:ILE:O	2.51	0.41
46:RB:345:ILE:HG23	46:RB:345:ILE:O	2.19	0.41
45:RC:242:LEU:HD11	45:RC:252:ILE:HB	2.02	0.41
46:RF:317:PHE:HD2	46:RF:326:VAL:HG22	1.85	0.41
45:RG:20:CYS:HA	45:RG:232:ALA:HB1	2.02	0.41
46:RH:10:GLY:O	46:RH:14:ASN:ND2	2.54	0.41
46:RJ:297:LYS:HD3	46:RJ:297:LYS:HA	1.68	0.41
45:RK:31:GLN:HG3	45:RK:33:ASP:OD1	2.21	0.41
45:RK:395:PHE:HE2	45:RK:422:ARG:HD2	1.85	0.41
46:RL:73:MET:HA	46:RL:76:VAL:HG12	2.02	0.41
46:SB:292:GLN:HG3	46:SB:298:ASN:ND2	2.34	0.41
46:SD:135:ILE:N	46:SD:165:GLU:O	2.51	0.41
46:SD:221:THR:HG23	46:SD:224:ASP:H	1.85	0.41
46:SH:296:ALA:HB1	46:SH:304:ASP:OD1	2.20	0.41
45:TA:109:THR:HG22	45:TA:110:ILE:HG23	2.02	0.41
45:TA:141:VAL:HG11	45:TA:172:TYR:HD1	1.84	0.41
45:TA:278:ALA:HB2	45:TA:369:ALA:HB2	2.02	0.41
46:TB:377:MET:HA	46:TB:380:ARG:HG2	2.01	0.41
45:TC:135:PHE:HB2	45:TC:166:LYS:HG3	2.02	0.41
45:TC:184:PRO:O	45:TC:188:ILE:HG12	2.21	0.41
46:TF:66:MET:HE2	46:TF:66:MET:HB2	1.83	0.41
45:TG:254:GLU:OE1	46:TH:99:ASN:ND2	2.53	0.41
45:TI:371:VAL:HG12	45:TI:373:ARG:H	1.86	0.41
46:TL:167:PHE:CZ	46:TL:233:MET:HG2	2.56	0.41
45:TM:5:ILE:HD11	45:TM:129:CYS:SG	2.61	0.41
46:TN:87:PRO:HA	46:TN:90:PHE:CD2	2.55	0.41
45:UA:317:MET:HG2	45:UA:377:MET:CA	2.51	0.41
46:UB:255:VAL:HA	45:UC:407:TRP:CZ3	2.55	0.41
46:UD:342:VAL:HG13	46:UD:345:ILE:HG22	2.02	0.41
45:UE:123:ARG:HH21	45:UE:124:LYS:HE2	1.85	0.41
45:UI:326:LYS:HA	45:UI:329:ASN:HB2	2.02	0.41
45:UK:332:ILE:HD12	45:UK:351:PHE:CD2	2.54	0.41
46:UN:316:LEU:HG	46:UN:352:SER:HB2	2.03	0.41
46:VB:101:TRP:HB3	46:VB:398:TYR:HE1	1.85	0.41
45:VC:124:LYS:HB2	45:VC:124:LYS:HE3	1.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VE:87:PHE:HB3	45:VE:92:LEU:HD11	2.02	0.41
45:VI:377:MET:SD	45:VI:379:SER:HB3	2.61	0.41
46:VN:392:LYS:HA	46:VN:395:LEU:HD13	2.03	0.41
46:WF:257:LEU:HA	46:WF:312:THR:HG21	2.02	0.41
45:WG:296:PHE:HE1	45:WG:377:MET:HG3	1.84	0.41
46:WJ:21:TRP:CZ3	46:WJ:61:PRO:HB3	2.56	0.41
45:WK:345:ASP:OD1	45:WK:345:ASP:N	2.53	0.41
46:WL:194:GLU:HG2	46:WL:195:ASN:OD1	2.20	0.41
46:WN:152:ILE:HG22	46:WN:195:ASN:ND2	2.35	0.41
4:OD:40:GLY:O	45:DC:79:ARG:NH1	2.54	0.41
15:OX:25:LYS:NZ	46:MD:360:GLY:O	2.41	0.41
20:1K:42:GLU:HG2	46:KF:213:ARG:HB3	2.00	0.41
24:1P:82:LEU:HD13	13:2U:503:SER:HB3	2.02	0.41
1:2A:101:ASN:HA	1:2A:104:ARG:HB3	2.01	0.41
16:2B:134:ARG:HG2	26:2W:264:ASN:ND2	2.35	0.41
27:2C:226:LYS:HA	45:KI:221:ARG:HH12	1.84	0.41
23:2O:166:ILE:O	23:2O:169:GLU:HB2	2.20	0.41
24:2P:391:ARG:HA	24:2P:394:GLN:HG3	2.01	0.41
10:2Q:15:TYR:CE2	10:2Q:17:ILE:HB	2.55	0.41
25:2R:213:SER:HB2	25:2R:217:GLU:OE2	2.21	0.41
25:2R:324:PRO:O	25:2R:353:TYR:OH	2.32	0.41
13:2U:45:SER:OG	13:2U:46:ARG:N	2.53	0.41
1:3A:58:TYR:OH	46:MN:45:GLU:OE1	2.33	0.41
1:3A:71:TYR:OH	46:AN:320:ARG:HB2	2.21	0.41
16:3B:72:TYR:CE2	16:3B:75:ASN:HA	2.56	0.41
12:3T:135:GLN:NE2	12:3T:140:GLN:HB3	2.36	0.41
12:3T:285:ARG:HA	12:3T:285:ARG:HD3	1.90	0.41
13:3U:228:LYS:HD2	13:3U:228:LYS:HA	1.78	0.41
13:3U:578:ILE:HG13	13:3U:593:VAL:O	2.20	0.41
14:3V:101:ILE:HD11	45:LA:416:GLY:HA3	2.03	0.41
14:3V:159:ARG:HB2	14:3V:160:ASP:H	1.68	0.41
15:3X:18:ILE:O	15:3X:18:ILE:HG13	2.20	0.41
35:4S:175:ILE:O	35:4S:179:LEU:HD23	2.21	0.41
36:5B:161:ILE:O	36:5B:165:LYS:HG3	2.21	0.41
37:5F:54:LYS:HG3	46:OF:227:HIS:CD2	2.55	0.41
41:6H:382:PHE:HZ	45:FK:26:LEU:HD11	1.84	0.41
34:6R:149:GLN:HB3	34:6R:159:TYR:CD1	2.55	0.41
34:6R:326:GLU:H	34:6R:326:GLU:HG2	1.71	0.41
45:AC:177:VAL:HG13	46:AD:327:ASP:HB3	2.03	0.41
46:AH:86:ARG:HG3	46:BH:281:TYR:HB3	2.02	0.41
46:AJ:69:GLU:HA	46:AJ:70:PRO:HD3	1.92	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AJ:359:LYS:HB3	46:AJ:359:LYS:HE3	1.83	0.41
46:AN:404:ASP:N	46:AN:404:ASP:OD1	2.53	0.41
45:BA:222:PRO:O	46:BB:322:SER:HB2	2.21	0.41
46:BB:3:GLU:OE2	46:BB:62:ARG:HD2	2.21	0.41
46:BB:237:THR:OG1	46:BB:240:LEU:HD12	2.21	0.41
45:BG:175:PRO:HG3	45:BG:390:ARG:NH1	2.35	0.41
46:BJ:282:ARG:HH21	46:BJ:288:GLU:HG2	1.85	0.41
45:BK:103:PHE:HB3	45:BK:408:TYR:HE2	1.85	0.41
45:CA:340:THR:HG23	45:CA:341:ILE:HG13	2.02	0.41
45:CC:111:GLY:O	45:CC:115:VAL:HG13	2.20	0.41
45:CC:175:PRO:HG2	45:CC:304:LYS:HG2	2.01	0.41
46:CL:347:ASN:HB3	45:CM:178:SER:OG	2.20	0.41
46:CN:203:ASP:OD2	46:CN:302:ALA:N	2.40	0.41
46:CN:238:CYS:HB2	46:CN:318:ARG:NH1	2.36	0.41
45:DA:352:LYS:HA	46:DB:177:ASP:O	2.20	0.41
45:DA:401:LYS:HE3	45:DA:401:LYS:HB2	1.74	0.41
46:DB:258:ILE:HD11	45:DC:407:TRP:HZ2	1.86	0.41
45:DC:68:LEU:HD21	45:DC:118:CYS:SG	2.60	0.41
46:DF:60:VAL:HB	46:DF:86:ARG:HH11	1.85	0.41
45:DK:75:ILE:O	45:DK:79:ARG:HG3	2.20	0.41
45:DM:62:VAL:HG21	45:EM:283:HIS:O	2.20	0.41
46:DN:25:SER:HA	46:DN:30:ILE:HG22	2.01	0.41
46:DN:183:TYR:OH	46:DN:388:MET:HB3	2.20	0.41
46:DN:222:TYR:HD1	46:DN:225:LEU:HD12	1.86	0.41
45:EA:324:VAL:HG22	45:EA:326:LYS:HG3	2.02	0.41
46:EB:54:ALA:HA	46:FB:283:ALA:HB2	2.01	0.41
45:EC:326:LYS:HB2	46:ED:208:TYR:CE1	2.56	0.41
45:EC:331:SER:O	45:EC:335:ILE:HG12	2.19	0.41
45:EC:338:LYS:HA	45:EC:338:LYS:HD2	1.80	0.41
46:ED:193:VAL:HA	46:ED:264:HIS:HE1	1.85	0.41
46:EF:36:TYR:CZ	46:EF:38:GLY:HA3	2.55	0.41
46:EF:105:HIS:CE1	46:EF:150:LEU:HD12	2.56	0.41
46:EF:311:LEU:HD23	46:EF:311:LEU:HA	1.85	0.41
46:EF:317:PHE:HE1	46:EF:330:MET:HE1	1.85	0.41
46:EF:424:GLN:HA	46:EF:424:GLN:OE1	2.20	0.41
46:EH:172:SER:HB2	46:EH:205:GLU:OE2	2.21	0.41
46:EH:294:PHE:HD2	46:EH:333:VAL:HG21	1.84	0.41
45:EK:319:TYR:HB3	45:EK:323:VAL:HG21	2.02	0.41
45:FA:108:TYR:HA	45:FA:112:LYS:HE3	2.02	0.41
45:FA:384:ILE:O	45:FA:387:VAL:HG22	2.20	0.41
45:FE:398:MET:SD	46:FF:345:ILE:HD12	2.61	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:FF:139:LEU:HD13	46:FF:168:SER:HB3	2.02	0.41
45:FG:325:PRO:HA	45:FG:328:VAL:HG22	2.01	0.41
45:FI:105:ARG:NH2	45:FI:110:ILE:HD11	2.35	0.41
45:FI:317:MET:SD	45:FI:377:MET:HG2	2.60	0.41
46:FL:32:PRO:HA	46:FL:84:LEU:HD11	2.01	0.41
46:GB:153:SER:HB3	46:GB:191:GLN:HE21	1.84	0.41
46:GF:109:GLY:HA2	46:GF:147:MET:HE2	2.02	0.41
45:GG:68:LEU:HD21	45:GG:118:CYS:SG	2.60	0.41
45:GG:69:ASP:OD1	45:GG:70:LEU:N	2.53	0.41
46:GH:226:ASN:ND2	49:GH:501:GDP:HN1	2.19	0.41
46:GH:372:THR:HA	46:GH:422:TYR:CE2	2.55	0.41
45:GI:223:THR:HG22	45:GI:224:TYR:N	2.35	0.41
46:GL:60:VAL:HG11	46:HL:281:TYR:HD1	1.85	0.41
45:HA:401:LYS:NZ	46:HB:344:TRP:HB2	2.35	0.41
46:HB:167:PHE:CZ	46:HB:233:MET:HG2	2.56	0.41
45:HC:77:GLU:HA	45:HC:80:THR:HG22	2.02	0.41
45:HE:256:GLN:HB2	46:HH:397:TRP:CZ2	2.55	0.41
46:HJ:92:PHE:HE2	46:HJ:94:GLN:HE22	1.68	0.41
45:HK:152:LEU:HD12	45:HK:152:LEU:HA	1.92	0.41
45:IA:154:LEU:HD13	45:IA:197:HIS:HB2	2.03	0.41
45:IA:174:SER:CB	45:IA:207:GLU:HB2	2.49	0.41
45:IA:296:PHE:HZ	45:IA:351:PHE:HE2	1.67	0.41
46:IH:273:LEU:H	46:IH:292:GLN:HE22	1.67	0.41
45:II:89:PRO:HD3	46:JJ:281:TYR:CD1	2.55	0.41
46:IN:362:LYS:HA	46:IN:362:LYS:HD2	1.96	0.41
46:JB:12:CYS:O	46:JB:16:ILE:HG12	2.21	0.41
45:JC:89:PRO:HG2	45:KC:280:LYS:HG3	2.02	0.41
46:JH:91:VAL:HG21	46:JH:116:VAL:HB	2.02	0.41
45:JI:105:ARG:HG2	45:JI:411:GLU:OE1	2.21	0.41
45:JM:209:ILE:HD13	45:JM:209:ILE:HA	1.80	0.41
45:KE:71:GLU:HA	45:KE:72:PRO:HD3	1.88	0.41
46:KJ:222:TYR:O	46:KJ:226:ASN:ND2	2.53	0.41
45:KK:308:ARG:HG3	45:NK:282:TYR:OH	2.20	0.41
45:KM:319:TYR:HE2	45:KM:328:VAL:HG13	1.85	0.41
45:LA:256:GLN:HB3	46:LD:397:TRP:CZ2	2.55	0.41
45:LA:407:TRP:HH2	46:LB:258:ILE:HG23	1.83	0.41
45:LE:88:HIS:CE1	45:LE:90:GLU:HG2	2.56	0.41
46:LF:257:LEU:HA	46:LF:312:THR:HG21	2.02	0.41
45:LG:31:GLN:HG2	45:LG:35:GLN:O	2.20	0.41
46:LH:247:ASN:C	46:LH:247:ASN:ND2	2.72	0.41
45:LI:98:ASP:OD1	45:LI:99:ALA:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LJ:285:THR:OG1	46:LJ:288:GLU:HG2	2.19	0.41
45:LK:223:THR:HG22	45:LK:224:TYR:H	1.85	0.41
46:LL:135:ILE:HG12	46:LL:165:GLU:O	2.20	0.41
46:LL:280:GLN:HG3	46:LL:281:TYR:CD1	2.55	0.41
45:MA:377:MET:SD	45:MA:379:SER:HB3	2.60	0.41
45:MG:71:GLU:HG2	45:MG:73:THR:H	1.85	0.41
46:MH:175:VAL:HG23	46:MH:175:VAL:O	2.21	0.41
45:MI:53:PHE:HB3	45:MI:61:HIS:HB3	2.02	0.41
45:MI:269:LEU:H	45:MI:269:LEU:HD23	1.86	0.41
46:MJ:165:GLU:OE2	46:MJ:167:PHE:HE1	2.04	0.41
45:MM:335:ILE:HG23	45:MM:341:ILE:HD11	2.02	0.41
45:NA:260:VAL:HG13	45:NA:265:ILE:O	2.20	0.41
46:ND:11:GLN:O	46:ND:15:GLN:HG2	2.20	0.41
46:ND:16:ILE:HD13	46:ND:226:ASN:OD1	2.20	0.41
45:NE:227:LEU:O	45:NE:231:ILE:HG12	2.21	0.41
45:NG:155:GLU:HG2	45:NG:197:HIS:CD2	2.56	0.41
46:NH:310:TYR:HE2	46:NH:367:PHE:HZ	1.69	0.41
45:NK:132:LEU:CD1	45:NK:164:LYS:HE3	2.51	0.41
45:NM:272:TYR:OH	45:NM:320:ARG:NH2	2.51	0.41
45:OA:394:LYS:HZ2	46:OB:346:PRO:HG2	1.85	0.41
46:OH:252:LYS:O	46:OH:256:ASN:ND2	2.45	0.41
46:OL:154:LYS:HB3	46:OL:154:LYS:HE2	1.93	0.41
45:OM:269:LEU:H	45:OM:269:LEU:HD23	1.86	0.41
45:OM:414:GLU:OE1	45:OM:416:GLY:N	2.43	0.41
46:ON:109:GLY:O	46:ON:113:ILE:HB	2.21	0.41
46:ON:122:LYS:HA	46:ON:122:LYS:HD3	1.74	0.41
45:PA:116:ASP:OD1	45:PA:117:LEU:HD12	2.21	0.41
45:PA:280:LYS:HD2	45:PA:283:HIS:ND1	2.36	0.41
45:PA:326:LYS:HZ1	46:PD:220:PRO:C	2.23	0.41
46:PB:8:GLN:NE2	46:PB:14:ASN:HA	2.35	0.41
45:PC:98:ASP:OD1	45:PC:99:ALA:N	2.52	0.41
45:PC:210:TYR:CE1	45:PC:227:LEU:HD21	2.55	0.41
46:PD:372:THR:OG1	46:PD:375:GLN:NE2	2.44	0.41
46:PF:372:THR:HA	46:PF:422:TYR:CE2	2.55	0.41
46:PF:391:ARG:HA	46:PF:391:ARG:HD2	1.79	0.41
46:PH:86:ARG:HG2	46:PH:88:ASP:H	1.85	0.41
45:QA:168:GLY:O	45:QA:201:ALA:HA	2.21	0.41
45:QA:310:GLY:HA3	45:QA:383:ALA:HB2	2.01	0.41
46:QD:219:THR:O	46:QD:219:THR:HG23	2.21	0.41
46:QF:5:VAL:HG12	46:QF:62:ARG:HD3	2.03	0.41
46:QF:213:ARG:NH1	46:QF:213:ARG:HB2	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:QH:322:SER:HB2	45:QI:222:PRO:O	2.21	0.41
45:QI:188:ILE:HG22	45:QI:421:ALA:HB1	2.03	0.41
46:QJ:86:ARG:NH1	46:RJ:281:TYR:HB3	2.35	0.41
46:QL:315:ALA:N	46:QL:350:LYS:O	2.48	0.41
46:QL:316:LEU:HG	46:QL:352:SER:OG	2.20	0.41
45:QM:285:GLN:NE2	45:QM:287:SER:HB3	2.23	0.41
45:QM:319:TYR:CE1	45:QM:375:VAL:HG12	2.55	0.41
45:RA:108:TYR:HB2	45:RA:413:MET:HE1	2.02	0.41
46:RD:167:PHE:CE2	46:RD:233:MET:HB2	2.55	0.41
45:RE:52:PHE:HZ	45:RE:239:THR:HG21	1.85	0.41
45:RE:210:TYR:CE1	45:RE:227:LEU:HD11	2.56	0.41
45:RE:326:LYS:HG3	46:RF:220:PRO:HG2	2.02	0.41
45:RE:346:TRP:CD1	46:RF:391:ARG:HG3	2.56	0.41
46:RF:83:GLN:HA	46:RF:83:GLN:OE1	2.20	0.41
45:RG:414:GLU:HG3	45:RG:415:GLU:H	1.85	0.41
46:RH:296:ALA:HB1	46:RH:305:PRO:HD2	2.02	0.41
45:RK:298:PRO:HG3	45:RK:308:ARG:NH1	2.35	0.41
45:SA:97:GLU:HG2	45:SA:105:ARG:HH22	1.85	0.41
46:SB:324:LYS:O	46:SB:326:VAL:N	2.54	0.41
46:SF:258:ILE:HD11	45:SG:407:TRP:CZ2	2.52	0.41
46:SF:289:LEU:HD13	46:SF:365:VAL:HG23	2.02	0.41
45:SG:108:TYR:HA	45:SG:112:LYS:HE3	2.02	0.41
45:SI:70:LEU:HD12	45:SI:145:THR:HB	2.02	0.41
46:SJ:60:VAL:HG21	46:SJ:86:ARG:HE	1.84	0.41
46:SJ:118:ASP:O	46:SJ:122:LYS:HG3	2.20	0.41
45:SM:69:ASP:O	45:SM:95:GLY:N	2.51	0.41
45:SM:352:LYS:NZ	46:SN:178:THR:HA	2.36	0.41
45:TA:168:GLY:O	45:TA:201:ALA:HA	2.21	0.41
45:TC:180:ALA:HB3	45:TC:183:GLU:HB3	2.03	0.41
46:TD:112:LEU:HD12	46:TD:112:LEU:O	2.21	0.41
46:TD:345:ILE:O	46:TD:345:ILE:HG23	2.20	0.41
45:TE:201:ALA:HB3	45:TE:267:PHE:HD1	1.85	0.41
46:TF:412:GLU:HA	46:TF:415:MET:HB3	2.03	0.41
46:TH:86:ARG:NE	46:UH:281:TYR:HB3	2.35	0.41
45:TI:2:ARG:HD2	45:TI:242:LEU:O	2.21	0.41
46:TL:178:THR:HG22	46:TL:180:VAL:H	1.85	0.41
46:TN:312:THR:HG22	46:TN:370:ASN:HB3	2.03	0.41
46:UF:68:LEU:HD23	46:UF:97:ALA:N	2.35	0.41
46:UH:69:GLU:HA	46:UH:70:PRO:HD3	1.88	0.41
45:UI:326:LYS:HZ1	46:UJ:220:PRO:CB	2.33	0.41
46:UJ:87:PRO:HA	46:UJ:90:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VA:176:GLN:HG2	45:VA:207:GLU:OE2	2.20	0.41
45:VC:434:GLU:O	45:VC:437:ILE:HG12	2.19	0.41
45:VE:433:GLU:O	45:VE:437:ILE:HG23	2.20	0.41
46:VF:159:TYR:HB3	46:VF:162:ARG:HG3	2.02	0.41
46:VF:257:LEU:O	46:VF:259:PRO:HD3	2.20	0.41
46:VJ:89:ASN:HD22	46:VJ:119:VAL:HG11	1.85	0.41
46:VN:119:VAL:O	46:VN:123:GLU:HG2	2.19	0.41
46:WD:65:LEU:HD22	46:WD:90:PHE:HE1	1.86	0.41
45:WG:124:LYS:HE3	45:WG:124:LYS:HB3	1.93	0.41
46:WJ:16:ILE:HD13	46:WJ:226:ASN:OD1	2.21	0.41
45:WM:16:VAL:HG12	45:WM:228:ASN:ND2	2.35	0.41
8:0H:418:LEU:HD23	45:GK:42:ILE:HG22	2.01	0.41
1:1A:26:PHE:HD2	15:1X:77:LEU:HD23	1.85	0.41
11:1S:104:THR:HG21	46:MF:163:ILE:HD12	2.03	0.41
13:1U:238:SER:OG	13:1U:258:ASP:OD2	2.37	0.41
13:1U:491:THR:HG21	13:1U:511:ASP:HB2	2.01	0.41
26:1W:160:GLN:HB3	46:LD:362:LYS:HD3	2.01	0.41
1:2A:139:GLN:OE1	46:AJ:320:ARG:NH2	2.44	0.41
16:2B:154:LYS:HG2	16:2B:169:TYR:HB2	2.01	0.41
4:2D:39:PRO:HB2	4:2D:40:GLY:H	1.54	0.41
5:2E:50:ILE:HD12	34:5R:382:TYR:CD1	2.55	0.41
21:2L:573:THR:HG23	21:2L:577:ASN:O	2.20	0.41
21:2L:691:SER:HB3	21:2L:698:ARG:HG2	2.03	0.41
22:2M:315:LYS:HD3	22:2M:315:LYS:HA	1.70	0.41
22:2M:336:THR:HG23	22:2M:339:ALA:H	1.86	0.41
24:2P:341:LEU:HD23	24:2P:341:LEU:HA	1.91	0.41
24:2P:450:ARG:HH11	24:2P:450:ARG:HG3	1.86	0.41
13:2U:36:SER:HA	13:2U:57:GLN:HA	2.02	0.41
1:3A:105:HIS:CG	1:3A:106:ASP:N	2.88	0.41
23:3O:381:GLU:O	23:3O:385:GLN:HG3	2.20	0.41
25:3R:248:GLN:HB2	45:BK:58:ALA:HB2	2.03	0.41
27:4C:64:PHE:CE2	27:4C:66:LEU:HD21	2.56	0.41
33:4F:194:MET:HE2	33:4F:214:ARG:HB3	2.03	0.41
34:4R:33:LEU:HD12	34:4R:38:HIS:CD2	2.56	0.41
36:5C:20:LEU:HB3	36:5C:62:PRO:HG3	2.01	0.41
36:5C:29:GLN:C	36:5C:30:LYS:HZ2	2.24	0.41
37:5E:63:HIS:CD2	37:5E:63:HIS:N	2.88	0.41
37:5G:214:LEU:HD11	45:LK:439:THR:HA	2.03	0.41
34:5R:259:ASN:HB2	34:5R:351:ASN:HB2	2.02	0.41
34:5R:429:LYS:HE2	34:5R:429:LYS:HB3	1.83	0.41
34:5R:492:ILE:HG22	34:5R:583:GLN:OE1	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:5S:187:LEU:HD13	35:5S:190:MET:HE2	2.03	0.41
35:5S:241:ILE:O	35:5S:241:ILE:HG13	2.18	0.41
40:6G:136:PRO:HB2	40:6G:139:TYR:HB2	2.03	0.41
10:6Q:22:LEU:HD12	10:6Q:25:TRP:HB2	2.01	0.41
10:6Q:27:LYS:HA	10:6Q:59:ILE:HG22	2.01	0.41
34:6R:331:PRO:O	34:6R:360:TYR:OH	2.26	0.41
46:AB:318:ARG:HB3	46:AB:357:PRO:HA	2.02	0.41
45:AC:181:VAL:HG23	46:AD:348:ASN:HA	2.02	0.41
45:AC:210:TYR:CE1	45:AC:227:LEU:HD11	2.56	0.41
45:AG:135:PHE:HB2	45:AG:166:LYS:HG2	2.03	0.41
45:AI:402:ARG:HA	45:AI:402:ARG:HD3	1.80	0.41
46:AJ:190:HIS:CE1	46:AJ:414:ASN:HD22	2.39	0.41
45:BA:116:ASP:OD1	45:BA:116:ASP:N	2.52	0.41
45:BA:120:ASP:O	45:BA:124:LYS:HG2	2.21	0.41
45:BA:216:ASN:HB3	45:BA:275:ILE:O	2.21	0.41
45:BC:254:GLU:O	45:BC:255:PHE:HD2	2.03	0.41
45:BE:221:ARG:HD2	45:BE:221:ARG:HA	1.89	0.41
46:BH:211:CYS:HB3	46:BH:217:LEU:HD21	2.02	0.41
46:BH:299:MET:HG3	46:BH:305:PRO:HG3	2.03	0.41
45:BI:109:THR:HG22	45:BI:110:ILE:HG23	2.02	0.41
46:BJ:186:THR:HA	46:BJ:189:VAL:HG12	2.03	0.41
46:BN:139:LEU:CD1	46:BN:168:SER:HB3	2.50	0.41
46:BN:209:ASP:OD2	46:BN:213:ARG:NH2	2.54	0.41
45:CA:385:ALA:HA	45:CA:388:PHE:HD2	1.86	0.41
46:CB:183:TYR:HD1	46:CB:385:PHE:HE1	1.68	0.41
46:CB:325:GLU:OE1	45:CC:221:ARG:NH1	2.53	0.41
45:CE:185:TYR:O	45:CE:189:LEU:HG	2.21	0.41
46:CJ:318:ARG:NH1	46:CJ:358:PRO:HG3	2.35	0.41
45:CM:26:LEU:CD1	45:CM:364:PRO:HD2	2.50	0.41
45:DA:115:VAL:HG22	45:DA:156:ARG:HD2	2.02	0.41
45:DA:230:LEU:O	45:DA:233:GLN:HG3	2.20	0.41
45:DC:371:VAL:HG22	45:DC:373:ARG:H	1.86	0.41
45:DE:11:GLN:HG2	47:DE:501:GTP:O1B	2.21	0.41
46:DF:350:LYS:HD2	46:DF:351:SER:H	1.85	0.41
45:DI:122:ILE:HD13	45:DI:122:ILE:HA	1.90	0.41
46:DJ:254:ALA:O	46:DJ:258:ILE:HG12	2.20	0.41
46:DL:20:PHE:HA	46:DL:230:SER:OG	2.20	0.41
46:DL:234:SER:OG	46:DL:241:ARG:NH2	2.54	0.41
45:DM:350:GLY:HA2	46:DN:179:VAL:HG11	2.02	0.41
45:EA:292:THR:HG21	45:EA:331:SER:HB3	2.02	0.41
45:EA:308:ARG:HH22	45:EA:341:ILE:CG1	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:EB:287:PRO:HA	46:EB:290:THR:HG22	2.03	0.41
45:EE:288:VAL:HA	45:EE:291:ILE:HG12	2.03	0.41
46:EH:182:PRO:HG2	46:EH:388:MET:HE2	2.02	0.41
46:EJ:68:LEU:CD1	46:EJ:147:MET:HE1	2.51	0.41
46:EJ:167:PHE:CE2	46:EJ:233:MET:HB3	2.55	0.41
46:EL:252:LYS:HA	45:EM:100:ALA:HB1	2.03	0.41
45:EM:219:ILE:HG13	45:EM:222:PRO:HD3	2.02	0.41
45:FC:377:MET:SD	45:FC:379:SER:HB3	2.61	0.41
46:FF:1:MET:N	46:FF:3:GLU:OE1	2.52	0.41
45:FG:56:THR:HG23	45:FG:58:ALA:H	1.86	0.41
46:FL:289:LEU:HD23	46:FL:289:LEU:HA	1.92	0.41
47:FM:501:GTP:PG	46:FN:252:LYS:HZ1	2.44	0.41
46:FN:398:TYR:HD2	46:FN:403:MET:HE1	1.86	0.41
45:GI:21:TRP:CZ2	45:GI:65:ALA:HB2	2.56	0.41
46:GL:177:ASP:OD1	46:GL:177:ASP:N	2.54	0.41
46:HB:362:LYS:HA	46:HB:362:LYS:HD2	1.88	0.41
46:HD:97:ALA:O	46:HD:103:LYS:HD2	2.21	0.41
46:HD:159:TYR:HB3	46:HD:162:ARG:HG3	2.03	0.41
45:HE:262:TYR:HB2	45:HE:265:ILE:HD12	2.03	0.41
45:HG:284:GLU:OE2	45:HG:285:GLN:HG2	2.20	0.41
45:HM:32:PRO:HB3	45:HM:83:TYR:HE1	1.86	0.41
45:HM:91:GLN:NE2	45:HM:125:LEU:HD11	2.36	0.41
46:IF:1:MET:O	46:IF:2:ARG:HG2	2.21	0.41
46:IF:174:LYS:HA	46:IF:174:LYS:HD3	1.88	0.41
46:IL:218:THR:HG23	46:IL:219:THR:HG23	2.03	0.41
46:IN:207:LEU:HB3	46:IN:225:LEU:HD22	2.02	0.41
45:JA:175:PRO:HB2	45:JA:176:GLN:OE1	2.20	0.41
45:JA:181:VAL:HG22	46:JB:347:ASN:O	2.20	0.41
46:JB:221:THR:HG23	46:JB:223:GLY:N	2.28	0.41
45:JE:356:ASN:OD1	45:JE:357:TYR:N	2.54	0.41
46:JF:67:ASP:O	46:JF:92:PHE:HA	2.21	0.41
45:JG:262:TYR:HD2	45:JG:265:ILE:HD12	1.85	0.41
46:JJ:171:PRO:HB2	46:JJ:181:GLU:OE1	2.20	0.41
45:JK:195:LEU:HD13	45:JK:428:LEU:HD22	2.02	0.41
45:KC:337:THR:O	45:KC:339:ARG:NH1	2.53	0.41
45:KE:370:LYS:HE3	45:KE:370:LYS:HB2	1.94	0.41
46:KF:233:MET:O	46:KF:236:VAL:HG12	2.20	0.41
46:KF:265:PHE:HB3	46:KF:374:ILE:HD13	2.02	0.41
45:KI:384:ILE:O	45:KI:387:VAL:HG22	2.20	0.41
45:KK:167:LEU:HD11	45:KK:256:GLN:HE22	1.85	0.41
46:KN:267:MET:HG3	46:KN:299:MET:HE3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LE:242:LEU:HD11	45:LE:252:ILE:HG13	2.02	0.41
45:LK:123:ARG:HA	45:LK:123:ARG:HD3	1.83	0.41
45:MC:88:HIS:CE1	45:MC:90:GLU:HG2	2.55	0.41
46:MF:65:LEU:HD22	46:MF:90:PHE:CE1	2.55	0.41
45:MG:141:VAL:HG11	45:MG:172:TYR:CE1	2.56	0.41
46:ML:113:ILE:HA	46:ML:116:VAL:HG12	2.02	0.41
46:ML:201:VAL:O	46:ML:202:ILE:HD13	2.19	0.41
45:NA:332:ILE:HG23	45:NA:351:PHE:CD1	2.56	0.41
46:ND:112:LEU:O	46:ND:112:LEU:HD23	2.20	0.41
45:NM:143:GLY:HA3	47:NM:501:GTP:O2B	2.21	0.41
45:NM:395:PHE:CD2	45:NM:422:ARG:HD3	2.56	0.41
46:NN:238:CYS:SG	46:NN:239:CYS:N	2.94	0.41
45:OA:191:THR:HA	45:OA:194:LEU:HG	2.02	0.41
45:OA:200:VAL:HG13	45:OA:268:MET:HE1	2.02	0.41
46:OB:114:ASP:O	46:OB:117:LEU:HG	2.21	0.41
46:OB:217:LEU:HD23	46:OB:217:LEU:H	1.85	0.41
45:OC:139:ASN:ND2	45:OC:140:SER:O	2.54	0.41
45:OC:174:SER:HB2	45:OC:177:VAL:O	2.21	0.41
45:OC:331:SER:O	45:OC:335:ILE:HG12	2.20	0.41
45:OI:88:HIS:CE1	45:PI:280:LYS:HZ1	2.38	0.41
45:PE:70:LEU:HA	45:PE:95:GLY:HA3	2.01	0.41
45:PE:215:ARG:NH2	45:PE:299:ALA:HB1	2.36	0.41
46:PF:150:LEU:O	46:PF:154:LYS:HG2	2.21	0.41
45:PI:427:ALA:O	45:PI:430:LYS:HG3	2.19	0.41
46:PJ:221:THR:HG22	46:PJ:222:TYR:N	2.35	0.41
45:PM:185:TYR:HE2	45:PM:404:PHE:HB2	1.86	0.41
46:PN:289:LEU:O	46:PN:293:MET:HG3	2.21	0.41
45:QA:271:SER:HB2	45:QA:377:MET:SD	2.60	0.41
45:QC:204:LEU:HD22	45:QC:231:ILE:HD12	2.02	0.41
46:QD:73:MET:HE1	46:QD:91:VAL:O	2.20	0.41
45:QG:320:ARG:HD3	45:QG:360:PRO:HG3	2.02	0.41
45:QG:434:GLU:O	45:QG:437:ILE:HG12	2.21	0.41
46:QJ:394:PHE:HB3	46:QJ:397:TRP:CZ3	2.55	0.41
45:QK:60:LYS:HD2	45:RK:283:HIS:CD2	2.55	0.41
45:QK:128:ASN:ND2	45:RK:290:GLU:OE2	2.44	0.41
45:QK:155:GLU:HA	45:QK:197:HIS:CE1	2.56	0.41
45:QK:209:ILE:HG22	45:QK:227:LEU:HD22	2.03	0.41
45:QM:77:GLU:O	45:QM:81:GLY:N	2.53	0.41
45:QM:201:ALA:HB3	45:QM:267:PHE:CD1	2.56	0.41
46:QN:287:PRO:HA	46:QN:290:THR:HG22	2.03	0.41
46:RB:122:LYS:HB2	46:RB:122:LYS:HE3	1.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RC:326:LYS:HZ3	46:RD:220:PRO:HD2	1.84	0.41
45:RG:332:ILE:HA	45:RG:335:ILE:HG12	2.03	0.41
46:RH:8:GLN:NE2	46:RH:17:GLY:HA3	2.35	0.41
45:RI:89:PRO:HG2	45:SI:280:LYS:HB3	2.03	0.41
45:RI:141:VAL:HG11	45:RI:172:TYR:CD1	2.47	0.41
46:RJ:50:TYR:OH	46:RJ:237:THR:HG21	2.20	0.41
45:RK:66:VAL:HG11	45:RK:122:ILE:HD11	2.03	0.41
45:RM:132:LEU:HD22	45:RM:164:LYS:HD2	2.02	0.41
45:RM:346:TRP:CD1	46:RN:391:ARG:HG3	2.56	0.41
46:RN:175:VAL:O	46:RN:175:VAL:HG23	2.21	0.41
46:SB:305:PRO:HB3	46:SB:310:TYR:CE1	2.56	0.41
45:SC:326:LYS:HE2	46:SD:220:PRO:HD2	2.02	0.41
46:SD:327:ASP:HA	46:SD:330:MET:HB3	2.02	0.41
46:SH:107:THR:HG1	46:SH:108:GLU:H	1.68	0.41
46:SJ:238:CYS:HB2	46:SJ:318:ARG:NH2	2.36	0.41
45:TG:166:LYS:N	45:TG:199:ASP:OD2	2.54	0.41
46:TH:163:ILE:HG21	46:TH:250:LEU:HD23	2.01	0.41
45:TI:174:SER:HB2	45:TI:177:VAL:O	2.19	0.41
45:TI:401:LYS:HB2	45:TI:401:LYS:HE3	1.85	0.41
46:TL:256:ASN:CG	46:TL:350:LYS:HD2	2.41	0.41
45:TM:243:ARG:HG2	45:TM:243:ARG:NH1	2.35	0.41
45:UA:22:GLU:H	45:UA:22:GLU:CD	2.24	0.41
45:UG:156:ARG:HD3	45:UG:156:ARG:HA	1.94	0.41
46:UH:178:THR:HG22	46:UH:180:VAL:H	1.86	0.41
45:UK:244:PHE:HB2	45:UK:356:ASN:HD21	1.86	0.41
45:UM:174:SER:HB2	45:UM:177:VAL:O	2.19	0.41
46:UN:299:MET:CE	46:UN:301:CYS:HB3	2.50	0.41
46:VB:173:PRO:HG3	46:VB:384:GLN:NE2	2.36	0.41
46:VD:258:ILE:HG13	46:VD:258:ILE:O	2.21	0.41
45:VG:21:TRP:CZ2	45:VG:65:ALA:HB2	2.54	0.41
45:VG:149:LEU:HD12	45:VG:149:LEU:HA	1.90	0.41
46:VJ:2:ARG:HB2	46:VJ:131:GLN:HG3	2.01	0.41
46:VL:345:ILE:O	46:VL:345:ILE:HG23	2.20	0.41
46:VL:395:LEU:HD12	46:VL:395:LEU:HA	1.92	0.41
45:VM:175:PRO:HB2	45:VM:176:GLN:OE1	2.20	0.41
45:VM:259:LEU:HD11	45:VM:316:SER:HB3	2.02	0.41
45:WE:33:ASP:OD1	45:WE:33:ASP:N	2.50	0.41
45:WE:308:ARG:HE	45:WE:308:ARG:HB2	1.63	0.41
46:WH:113:ILE:HA	46:WH:116:VAL:HG12	2.03	0.41
3:OC:80:ARG:HH12	46:EH:359:LYS:HA	1.86	0.41
21:1L:52:ASP:OD2	45:BI:221:ARG:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:1T:108:PRO:HB2	12:1T:205:TYR:CZ	2.56	0.41
15:1X:33:ALA:CB	15:2X:140:PRO:HG3	2.49	0.41
5:2E:116:GLU:OE1	5:2E:118:ARG:HB2	2.21	0.41
25:2R:192:ILE:O	25:2R:196:GLU:HG3	2.21	0.41
11:2S:97:ARG:HD2	11:2S:97:ARG:HA	1.82	0.41
11:2S:277:GLN:HB3	46:WJ:122:LYS:HZ1	1.85	0.41
12:2T:48:THR:O	12:2T:52:ILE:HG12	2.20	0.41
1:3A:14:GLN:HG2	1:3A:19:ARG:HH11	1.85	0.41
1:3A:119:PHE:HE1	1:3A:122:GLN:H	1.68	0.41
31:3I:218:GLU:OE2	31:3I:219:PRO:HD2	2.21	0.41
21:3L:61:VAL:O	21:3L:96:VAL:HG22	2.21	0.41
21:3L:163:ARG:NH2	45:BA:76:ASP:OD1	2.41	0.41
21:3L:169:ILE:HG13	21:3L:173:GLN:HE21	1.84	0.41
25:3R:283:ARG:HH21	45:CK:46:ASP:N	2.18	0.41
14:3V:57:LEU:O	14:3V:57:LEU:HD23	2.21	0.41
14:3V:141:ASN:HD22	45:LC:405:VAL:HB	1.85	0.41
15:3X:56:LYS:HB2	15:3X:56:LYS:HE3	1.82	0.41
10:4Q:82:ASN:HD22	10:4Q:127:GLU:HA	1.86	0.41
36:5A:49:LYS:HE2	36:5A:49:LYS:HB3	1.72	0.41
37:5E:131:SER:OG	37:5E:132:THR:N	2.54	0.41
37:5E:182:THR:HA	37:5E:185:LYS:HE2	2.02	0.41
37:5G:33:TYR:HB3	45:NG:85:GLN:CD	2.41	0.41
46:AB:374:ILE:HD11	46:AB:422:TYR:CE1	2.56	0.41
45:AC:155:GLU:HG3	45:AC:197:HIS:NE2	2.35	0.41
46:AH:268:ILE:HG22	46:AH:368:VAL:HG22	2.02	0.41
46:AH:391:ARG:HA	46:AH:391:ARG:HD2	1.82	0.41
46:AL:415:MET:O	46:AL:419:VAL:HG23	2.20	0.41
45:BA:207:GLU:O	45:BA:210:TYR:HB2	2.21	0.41
46:BB:45:GLU:O	46:BB:46:ARG:HD3	2.20	0.41
46:BB:286:VAL:HG21	46:BB:325:GLU:HG3	2.02	0.41
46:BD:222:TYR:O	46:BD:226:ASN:ND2	2.53	0.41
46:BD:242:PHE:CD1	46:BD:356:ILE:HG13	2.56	0.41
46:BF:324:LYS:O	46:BF:328:GLU:OE1	2.39	0.41
46:BF:362:LYS:HA	46:BF:362:LYS:HD3	1.77	0.41
45:BG:188:ILE:HG13	45:BG:425:LEU:HD12	2.03	0.41
46:BN:135:ILE:N	46:BN:165:GLU:O	2.47	0.41
45:CA:209:ILE:HD11	45:CA:302:MET:CG	2.49	0.41
45:CA:209:ILE:HG23	45:CA:209:ILE:HD12	1.81	0.41
46:CD:327:ASP:HB3	45:CE:177:VAL:HG13	2.01	0.41
45:CE:384:ILE:O	45:CE:387:VAL:HG12	2.21	0.41
46:CJ:289:LEU:HD23	46:CJ:365:VAL:HG23	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CJ:301:CYS:HB3	46:CJ:377:MET:CE	2.51	0.41
45:DE:10:GLY:O	45:DE:13:GLY:N	2.52	0.41
46:DF:254:ALA:O	46:DF:258:ILE:HG12	2.20	0.41
45:DG:320:ARG:HD3	45:DG:360:PRO:HG3	2.02	0.41
46:DH:318:ARG:NH1	46:DH:358:PRO:HG3	2.36	0.41
46:EB:99:ASN:OD1	46:EB:141:GLY:HA2	2.20	0.41
46:ED:258:ILE:O	46:ED:258:ILE:HG13	2.21	0.41
45:EG:329:ASN:HB3	46:EH:175:VAL:HG12	2.03	0.41
46:EJ:344:TRP:HB3	46:EJ:430:ALA:HB2	2.02	0.41
45:EK:271:SER:HA	45:EK:302:MET:HG2	2.02	0.41
45:EM:98:ASP:OD1	45:EM:98:ASP:N	2.53	0.41
45:EM:178:SER:OG	45:EM:180:ALA:O	2.38	0.41
46:FB:7:ILE:O	46:FB:135:ILE:HD12	2.21	0.41
46:FB:41:ASP:OD1	46:FB:42:LEU:HD12	2.20	0.41
46:FB:253:LEU:O	46:FB:257:LEU:CB	2.68	0.41
46:FB:345:ILE:HG23	46:FB:345:ILE:O	2.20	0.41
46:FF:113:ILE:O	46:FF:117:LEU:HD23	2.21	0.41
46:FF:288:GLU:O	46:FF:291:GLN:HG3	2.20	0.41
46:FH:375:GLN:OE1	46:FH:423:GLN:HB3	2.21	0.41
45:FI:60:LYS:NZ	45:FI:85:GLN:O	2.51	0.41
45:FI:124:LYS:HE2	45:FI:124:LYS:HB2	1.84	0.41
45:FK:216:ASN:HB3	45:FK:275:ILE:O	2.20	0.41
46:FL:285:THR:N	46:FL:288:GLU:OE2	2.33	0.41
46:FN:377:MET:SD	46:FN:380:ARG:NH1	2.87	0.41
46:GB:350:LYS:HE3	46:GB:350:LYS:CA	2.43	0.41
45:GI:178:SER:HB2	46:GJ:347:ASN:ND2	2.36	0.41
46:GJ:221:THR:HG23	46:GJ:223:GLY:H	1.85	0.41
45:GM:386:GLU:HG2	45:GM:390:ARG:HH22	1.85	0.41
46:GN:113:ILE:HG12	46:GN:117:LEU:HD23	2.01	0.41
45:HA:97:GLU:HB2	45:HA:110:ILE:HD13	2.02	0.41
45:HA:175:PRO:HG3	45:HA:390:ARG:CZ	2.51	0.41
46:HF:175:VAL:HG23	46:HF:175:VAL:O	2.20	0.41
46:HH:409:THR:O	46:HH:412:GLU:HG3	2.20	0.41
45:HI:173:PRO:HG3	45:HI:183:GLU:OE1	2.19	0.41
45:HM:230:LEU:HD11	45:HM:368:LEU:HD21	2.03	0.41
46:HN:31:ASP:OD1	46:HN:35:THR:N	2.53	0.41
46:HN:326:VAL:O	46:HN:330:MET:HG2	2.20	0.41
45:IA:91:GLN:HG2	45:IA:121:ARG:HH21	1.86	0.41
46:IB:117:LEU:O	46:IB:121:ARG:HG3	2.20	0.41
46:ID:253:LEU:O	46:ID:257:LEU:HB2	2.21	0.41
46:IF:135:ILE:HB	46:IF:166:THR:HG22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IN:207:LEU:HD13	46:IN:225:LEU:HB3	2.03	0.41
45:JA:231:ILE:O	45:JA:235:ILE:HG12	2.21	0.41
46:JB:63:ALA:O	46:JB:89:ASN:ND2	2.49	0.41
45:JE:308:ARG:HE	45:JE:308:ARG:HB2	1.60	0.41
45:JE:387:VAL:HG12	45:JE:390:ARG:NH1	2.36	0.41
46:JF:174:LYS:HB3	46:JF:205:GLU:HG3	2.02	0.41
45:JI:164:LYS:HD3	45:JI:164:LYS:HA	1.95	0.41
45:JI:183:GLU:HG3	45:JI:184:PRO:HD3	2.01	0.41
45:JK:259:LEU:HB3	45:JK:268:MET:CE	2.51	0.41
45:JM:105:ARG:O	45:JM:110:ILE:HG12	2.21	0.41
45:JM:116:ASP:OD1	45:JM:117:LEU:N	2.54	0.41
46:JN:287:PRO:HD3	46:JN:325:GLU:OE1	2.20	0.41
45:KA:338:LYS:HZ1	45:KA:340:THR:H	1.67	0.41
46:KD:81:PHE:HD2	46:KD:84:LEU:HD11	1.85	0.41
45:KG:47:ASP:HB3	45:KG:48:ALA:H	1.77	0.41
45:KK:224:TYR:HE2	46:KL:246:LEU:HD11	1.85	0.41
45:KM:265:ILE:HG22	45:KM:432:TYR:CE1	2.53	0.41
46:LD:139:LEU:HD13	46:LD:168:SER:HB2	2.03	0.41
45:LE:259:LEU:HB3	45:LE:268:MET:CE	2.50	0.41
46:LF:344:TRP:CE3	46:LF:345:ILE:HG23	2.55	0.41
45:LG:256:GLN:H	45:LG:256:GLN:HG3	1.65	0.41
45:LI:254:GLU:O	45:LI:255:PHE:HD1	2.04	0.41
45:LM:260:VAL:O	45:LM:260:VAL:HG23	2.21	0.41
46:LN:173:PRO:HG2	46:LN:380:ARG:HD2	2.01	0.41
46:MB:310:TYR:CD1	46:MB:371:SER:HB2	2.56	0.41
45:ME:53:PHE:HB3	45:ME:61:HIS:HB3	2.03	0.41
46:MF:274:THR:HG21	46:MF:279:GLN:OE1	2.21	0.41
45:NA:271:SER:O	45:NA:377:MET:N	2.30	0.41
45:NA:345:ASP:OD1	45:NA:346:TRP:N	2.52	0.41
45:NA:350:GLY:HA2	46:ND:179:VAL:HG12	2.02	0.41
46:NB:122:LYS:HA	46:NB:125:GLU:HG2	2.03	0.41
46:NF:12:CYS:SG	46:NF:13:GLY:N	2.94	0.41
46:NH:31:ASP:HB2	46:NH:32:PRO:HD2	2.02	0.41
45:NI:37:PRO:HB2	45:NI:39:ASP:OD1	2.20	0.41
45:NI:88:HIS:NE2	45:OI:284:GLU:OE2	2.35	0.41
46:OB:131:GLN:HA	46:OB:162:ARG:HH21	1.84	0.41
46:OB:260:PHE:HB2	46:OB:263:LEU:HD13	2.02	0.41
46:OL:116:VAL:HA	46:OL:119:VAL:HG12	2.03	0.41
45:OM:178:SER:HB3	45:OM:183:GLU:OE2	2.21	0.41
45:PA:11:GLN:NE2	47:PA:501:GTP:O3A	2.36	0.41
45:PA:62:VAL:HA	45:PA:63:PRO:HD3	1.98	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PA:223:THR:HA	46:PB:324:LYS:NZ	2.34	0.41
45:PE:406:HIS:HA	45:PE:409:VAL:HG12	2.02	0.41
46:PH:322:SER:O	46:PH:325:GLU:HG2	2.21	0.41
45:PI:147:SER:HB2	45:PI:190:SER:HB3	2.03	0.41
46:PJ:375:GLN:OE1	46:PJ:423:GLN:HB3	2.21	0.41
46:PL:16:ILE:HD13	46:PL:226:ASN:OD1	2.21	0.41
45:PM:174:SER:HB3	45:PM:207:GLU:HB2	2.02	0.41
46:PN:359:LYS:HD2	46:PN:359:LYS:HA	1.78	0.41
46:QB:103:LYS:O	46:QB:108:GLU:HG3	2.21	0.41
45:QE:2:ARG:HG3	45:QE:133:GLN:NE2	2.35	0.41
45:QG:210:TYR:CE1	45:QG:227:LEU:HD21	2.47	0.41
45:QK:212:ILE:HD11	45:QK:300:ASN:HA	2.03	0.41
45:QM:319:TYR:N	45:QM:354:GLY:O	2.42	0.41
46:RB:121:ARG:NH2	46:RB:158:GLU:OE1	2.34	0.41
46:RB:331:LEU:HG	45:RC:177:VAL:HG22	2.03	0.41
45:RE:256:GLN:OE1	45:RE:256:GLN:N	2.49	0.41
46:RF:8:GLN:NE2	46:RF:17:GLY:HA3	2.33	0.41
46:RF:161:ASP:OD1	46:RF:162:ARG:N	2.54	0.41
46:RH:169:VAL:HG12	46:RH:202:ILE:HB	2.01	0.41
45:RK:416:GLY:O	45:RK:419:SER:OG	2.35	0.41
45:SA:76:ASP:OD1	45:SA:79:ARG:NH2	2.54	0.41
45:SC:338:LYS:HG2	45:SC:340:THR:HG22	2.02	0.41
45:SE:98:ASP:O	45:SE:105:ARG:NH1	2.54	0.41
45:SE:195:LEU:HD23	45:SE:196:GLU:HG2	2.01	0.41
45:SG:137:VAL:HG23	45:SG:168:GLY:HA2	2.02	0.41
45:SI:280:LYS:HA	45:SI:283:HIS:ND1	2.35	0.41
46:SJ:407:GLU:HA	46:SJ:410:GLU:HG2	2.02	0.41
46:SL:350:LYS:HG3	45:SM:180:ALA:HA	2.02	0.41
45:SM:2:ARG:NH1	45:SM:4:VAL:HG13	2.33	0.41
46:SN:167:PHE:CE2	46:SN:233:MET:HG2	2.56	0.41
45:TA:371:VAL:HG22	45:TA:373:ARG:H	1.85	0.41
46:TD:270:PHE:HD2	46:TD:273:LEU:HD21	1.85	0.41
46:TD:321:MET:HA	45:TE:221:ARG:NH2	2.35	0.41
45:TE:97:GLU:N	45:TE:97:GLU:OE1	2.54	0.41
46:TF:282:ARG:HG2	46:TF:283:ALA:N	2.35	0.41
45:TI:11:GLN:NE2	47:TI:501:GTP:O3A	2.53	0.41
46:TJ:16:ILE:HD12	46:TJ:229:VAL:HG11	2.03	0.41
45:TK:336:LYS:O	45:TK:339:ARG:NH2	2.53	0.41
46:TL:268:ILE:HG22	46:TL:368:VAL:HG22	2.03	0.41
45:UA:93:ILE:HD12	45:UA:93:ILE:H	1.85	0.41
46:UB:86:ARG:NH1	46:VB:281:TYR:HB3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:UB:116:VAL:HA	46:UB:119:VAL:HG12	2.03	0.41
46:UH:247:ASN:ND2	45:UI:11:GLN:OE1	2.48	0.41
46:UH:290:THR:HA	46:UH:293:MET:HG3	2.03	0.41
45:UI:205:ASP:OD1	45:UI:205:ASP:N	2.50	0.41
46:UJ:40:SER:H	46:UJ:43:GLN:NE2	2.18	0.41
45:UM:88:HIS:HA	45:VK:280:LYS:HE3	2.03	0.41
46:VB:130:LEU:HD23	46:VB:130:LEU:H	1.86	0.41
45:VC:141:VAL:HG23	45:VC:170:THR:HB	2.01	0.41
46:VD:17:GLY:HA2	46:VD:20:PHE:HB3	2.02	0.41
46:VF:87:PRO:HA	46:VF:90:PHE:CD2	2.55	0.41
45:VG:164:LYS:O	45:VG:166:LYS:NZ	2.53	0.41
46:VH:217:LEU:H	46:VH:217:LEU:HD23	1.85	0.41
46:VL:91:VAL:HG21	46:VL:116:VAL:HB	2.01	0.41
45:VM:89:PRO:HD3	45:WM:280:LYS:HZ1	1.85	0.41
46:VN:377:MET:HA	46:VN:380:ARG:HG2	2.02	0.41
45:WA:294:SER:O	45:WA:300:ASN:ND2	2.36	0.41
45:WC:181:VAL:N	46:WD:256:ASN:OD1	2.53	0.41
46:WD:139:LEU:HD13	46:WD:168:SER:HB3	2.02	0.41
46:WD:289:LEU:HD11	46:WD:363:MET:HB3	2.02	0.41
45:WE:298:PRO:HA	45:WE:301:MET:HE3	2.03	0.41
45:WG:69:ASP:OD1	45:WG:70:LEU:N	2.54	0.41
45:WG:332:ILE:HD12	45:WG:351:PHE:CD2	2.56	0.41
46:WJ:239:CYS:SG	46:WJ:247:ASN:HA	2.61	0.41
46:WJ:318:ARG:HB3	46:WJ:357:PRO:HA	2.03	0.41
45:WK:372:MET:SD	45:WK:372:MET:N	2.88	0.41
46:WL:10:GLY:HA2	46:WL:143:THR:HG23	2.03	0.41
2:0B:57:SER:OG	45:JE:1:MET:HB2	2.21	0.41
10:0Q:53:ASN:HD21	45:AA:396:ASP:CG	2.23	0.41
19:1J:128:GLU:O	45:HE:85:GLN:NE2	2.52	0.41
9:1N:427:ARG:CZ	45:II:42:ILE:HD11	2.51	0.41
23:1O:275:LYS:HB2	45:UA:278:ALA:HB3	2.01	0.41
13:1U:253:ILE:HD11	13:1U:307:THR:HG23	2.03	0.41
13:1U:502:GLU:HG3	13:1U:504:GLN:H	1.85	0.41
13:1U:505:LEU:HB2	13:1U:517:TRP:HB2	2.02	0.41
13:1U:513:LYS:NZ	13:1U:526:ARG:HB3	2.35	0.41
16:2B:72:TYR:HE1	16:2B:77:ASP:HA	1.86	0.41
5:2E:52:LEU:HD23	5:2E:52:LEU:HA	1.88	0.41
21:2L:398:TYR:O	21:2L:402:ILE:HG12	2.20	0.41
22:2M:10:VAL:HG12	22:2M:73:ILE:HG13	2.02	0.41
9:2N:225:TYR:HB2	9:2N:234:GLU:OE2	2.20	0.41
23:2O:409:GLU:OE1	46:VD:276:ARG:NE	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:2U:69:TYR:CE2	13:2U:110:PHE:HE2	2.38	0.41
1:3A:14:GLN:HG2	1:3A:19:ARG:NH1	2.36	0.41
32:3D:6:LYS:HA	32:3D:9:THR:HG22	2.03	0.41
34:4R:69:LYS:HE2	34:4R:69:LYS:HB3	1.84	0.41
34:4R:550:VAL:O	34:4R:554:LYS:HG3	2.20	0.41
36:5B:113:VAL:HA	36:5B:114:PRO:HD3	1.98	0.41
37:5E:123:ARG:H	45:OA:370:LYS:NZ	2.18	0.41
37:5F:24:ASP:OD1	37:5F:25:VAL:N	2.52	0.41
10:6Q:66:LYS:HB3	10:6Q:66:LYS:HE3	1.90	0.41
10:6Q:104:ARG:HB3	10:6Q:104:ARG:NH1	2.36	0.41
34:7R:152:LYS:HE3	34:7R:152:LYS:HB2	1.76	0.41
34:7R:501:TYR:HE1	46:EB:33:THR:HG22	1.86	0.41
44:8R:121:ALA:HB2	45:PI:282:TYR:CD2	2.56	0.41
45:AC:107:HIS:O	45:AC:107:HIS:ND1	2.53	0.41
46:AD:99:ASN:HA	46:AD:142:GLY:H	1.86	0.41
45:AK:116:ASP:OD1	45:AK:117:LEU:N	2.51	0.41
45:BC:88:HIS:O	45:BC:91:GLN:HG2	2.20	0.41
46:BF:99:ASN:HA	46:BF:142:GLY:HA3	2.01	0.41
45:BI:252:ILE:O	45:BI:255:PHE:HB2	2.20	0.41
45:BK:248:LEU:HD13	45:BK:355:ILE:HD12	2.02	0.41
46:BN:73:MET:HA	46:BN:76:VAL:HG12	2.02	0.41
46:BN:211:CYS:HB3	46:BN:217:LEU:HD21	2.02	0.41
45:CA:88:HIS:O	45:CA:91:GLN:HG2	2.21	0.41
45:CE:3:GLU:HB2	45:CE:132:LEU:HA	2.03	0.41
45:CE:183:GLU:HG2	45:CE:184:PRO:HD3	2.03	0.41
45:CE:196:GLU:OE1	45:CE:196:GLU:N	2.49	0.41
45:CG:221:ARG:N	45:CG:222:PRO:HD3	2.36	0.41
46:CJ:168:SER:O	46:CJ:202:ILE:N	2.53	0.41
46:CJ:332:ASN:O	46:CJ:336:LYS:HG2	2.21	0.41
46:CN:21:TRP:CH2	46:CN:61:PRO:HB3	2.56	0.41
45:DA:88:HIS:ND1	45:DA:90:GLU:HG2	2.36	0.41
45:DA:306:ASP:OD2	45:DA:308:ARG:HB2	2.21	0.41
46:DB:117:LEU:HG	46:DB:121:ARG:NH1	2.35	0.41
46:DB:175:VAL:O	46:DB:175:VAL:HG23	2.20	0.41
46:DB:318:ARG:HH11	46:DB:358:PRO:HG3	1.85	0.41
45:DE:71:GLU:HA	45:DE:72:PRO:HD3	1.95	0.41
45:DE:185:TYR:HE2	45:DE:404:PHE:HB2	1.86	0.41
45:DI:5:ILE:HD12	45:DI:125:LEU:HD21	2.02	0.41
45:DI:174:SER:OG	45:DI:207:GLU:OE1	2.38	0.41
46:DJ:68:LEU:HD23	46:DJ:143:THR:OG1	2.20	0.41
46:DJ:149:THR:HA	46:DJ:152:ILE:HD12	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DJ:263:LEU:HG	46:DJ:422:TYR:HD1	1.86	0.41
45:DM:118:CYS:O	45:DM:122:ILE:HG12	2.21	0.41
46:DN:11:GLN:O	46:DN:15:GLN:OE1	2.38	0.41
46:DN:69:GLU:CD	46:DN:71:GLY:H	2.24	0.41
46:DN:271:ALA:HB2	46:DN:298:ASN:HD21	1.85	0.41
46:EB:372:THR:HA	46:EB:422:TYR:CE2	2.56	0.41
46:ED:100:ASN:OD1	46:ED:103:LYS:HG3	2.21	0.41
46:ED:219:THR:O	46:ED:219:THR:HG23	2.21	0.41
45:EE:141:VAL:HG12	45:EE:171:ILE:O	2.20	0.41
46:EF:244:GLY:HA2	46:EF:355:ASP:OD2	2.20	0.41
45:EG:297:GLU:OE1	45:EG:298:PRO:HD2	2.20	0.41
45:EI:207:GLU:HG3	45:EI:304:LYS:HE3	2.03	0.41
46:EJ:290:THR:O	46:EJ:293:MET:HB3	2.21	0.41
45:EK:256:GLN:O	45:EK:260:VAL:HG22	2.21	0.41
45:EM:4:VAL:HG12	45:EM:133:GLN:HB2	2.03	0.41
45:EM:297:GLU:HG2	45:EM:298:PRO:HD2	2.03	0.41
45:FE:434:GLU:O	45:FE:437:ILE:HG22	2.20	0.41
46:FF:21:TRP:CZ3	46:FF:61:PRO:HB3	2.56	0.41
45:FI:66:VAL:HG11	45:FI:122:ILE:HD11	2.02	0.41
45:FK:122:ILE:HD13	45:FK:122:ILE:HA	1.95	0.41
45:GA:394:LYS:NZ	46:GB:346:PRO:HG2	2.36	0.41
45:GC:224:TYR:HE2	46:GD:246:LEU:HD11	1.85	0.41
46:GD:221:THR:HG23	46:GD:223:GLY:H	1.85	0.41
46:GL:68:LEU:HD23	46:GL:143:THR:OG1	2.20	0.41
46:GL:103:LYS:HB2	46:GL:103:LYS:HE2	1.76	0.41
45:GM:69:ASP:OD1	45:GM:70:LEU:N	2.54	0.41
45:GM:259:LEU:HD11	45:GM:316:SER:HB3	2.03	0.41
46:GN:27:GLU:HA	46:GN:359:LYS:HD2	2.02	0.41
46:GN:316:LEU:HG	46:GN:352:SER:HB2	2.02	0.41
46:GN:325:GLU:O	46:GN:329:GLN:HB2	2.20	0.41
45:HE:180:ALA:HA	46:HF:256:ASN:HD21	1.86	0.41
46:HF:113:ILE:HA	46:HF:116:VAL:HG22	2.03	0.41
46:HF:211:CYS:SG	46:HF:220:PRO:HB3	2.61	0.41
46:HF:372:THR:HA	46:HF:422:TYR:CE2	2.55	0.41
46:HH:73:MET:HE3	46:HH:92:PHE:HB3	2.03	0.41
45:HI:222:PRO:O	46:HJ:322:SER:HB2	2.20	0.41
46:HJ:117:LEU:HD23	46:HJ:117:LEU:HA	1.87	0.41
45:IA:8:HIS:CD2	45:IA:138:PHE:HD2	2.38	0.41
46:IB:84:LEU:HD23	46:IB:84:LEU:H	1.86	0.41
46:IB:200:MET:HG2	46:IB:266:PHE:CB	2.51	0.41
46:IB:260:PHE:HB2	46:IB:263:LEU:HD13	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ID:2:ARG:HB2	46:ID:131:GLN:HB2	2.02	0.41
45:IE:384:ILE:O	45:IE:387:VAL:HG22	2.21	0.41
45:IK:326:LYS:HZ3	46:IN:219:THR:HA	1.85	0.41
45:IM:89:PRO:HD3	46:JN:281:TYR:CE2	2.55	0.41
45:JA:205:ASP:OD1	45:JA:205:ASP:N	2.53	0.41
45:JC:151:SER:O	45:JC:155:GLU:HG3	2.20	0.41
45:JE:181:VAL:HG23	46:JF:346:PRO:O	2.20	0.41
46:JF:26:ASP:OD2	46:JF:359:LYS:HD3	2.20	0.41
46:JF:226:ASN:ND2	49:JF:501:GDP:HN1	2.18	0.41
46:JJ:175:VAL:O	46:JJ:175:VAL:HG23	2.21	0.41
46:JJ:248:SER:HA	46:JJ:252:LYS:HD2	2.03	0.41
45:JM:68:LEU:HD13	45:JM:93:ILE:HB	2.02	0.41
45:JM:308:ARG:HE	45:JM:308:ARG:HB2	1.61	0.41
45:KC:422:ARG:HD2	45:KC:422:ARG:HA	1.83	0.41
45:KG:259:LEU:HD21	45:KG:316:SER:HB3	2.03	0.41
46:KH:86:ARG:HG2	46:KH:87:PRO:HD2	2.01	0.41
45:KK:14:ILE:HD11	45:KK:69:ASP:HB2	2.02	0.41
46:KN:113:ILE:HA	46:KN:116:VAL:HG12	2.03	0.41
46:LB:317:PHE:HA	46:LB:365:VAL:HG23	2.03	0.41
45:LC:205:ASP:OD1	45:LC:303:ALA:HA	2.20	0.41
45:LE:123:ARG:HA	45:LE:123:ARG:HD3	1.86	0.41
45:LE:291:ILE:HG13	45:LE:292:THR:N	2.36	0.41
45:LG:176:GLN:HG3	46:LH:331:LEU:HD21	2.03	0.41
46:LH:311:LEU:HG	46:LH:372:THR:HG23	2.02	0.41
45:LI:71:GLU:HA	45:LI:72:PRO:HD3	1.86	0.41
45:LI:254:GLU:HG3	46:LL:98:GLY:HA2	2.02	0.41
45:LK:11:GLN:HE21	45:LK:15:GLN:NE2	2.19	0.41
45:LK:69:ASP:OD1	45:LK:70:LEU:N	2.53	0.41
45:LK:115:VAL:HG23	45:LK:153:LEU:HD22	2.02	0.41
45:LK:398:MET:HE2	46:LL:346:PRO:HD2	2.03	0.41
46:LL:162:ARG:HD3	46:LL:162:ARG:HA	1.82	0.41
46:LL:386:THR:O	46:LL:390:ARG:HG2	2.21	0.41
46:LN:237:THR:HG23	46:LN:241:ARG:HH21	1.86	0.41
45:MA:70:LEU:HA	45:MA:95:GLY:HA3	2.03	0.41
45:MC:188:ILE:HD12	45:MC:425:LEU:HG	2.03	0.41
45:MI:115:VAL:O	45:MI:119:LEU:HD23	2.21	0.41
45:MI:259:LEU:HD11	45:MI:316:SER:HB3	2.03	0.41
46:NB:223:GLY:HA2	46:NB:226:ASN:HD22	1.84	0.41
46:ND:32:PRO:HA	46:ND:84:LEU:HD11	2.03	0.41
45:NE:98:ASP:OD1	45:NE:99:ALA:N	2.52	0.41
45:NG:118:CYS:O	45:NG:122:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NG:259:LEU:HD11	45:NG:316:SER:HB2	2.03	0.41
45:NG:326:LYS:NZ	46:NJ:218:THR:O	2.37	0.41
45:OA:210:TYR:CE2	46:OB:324:LYS:HB3	2.52	0.41
45:OA:416:GLY:O	45:OA:419:SER:OG	2.28	0.41
46:OB:319:GLY:HA2	46:OB:357:PRO:HD3	2.02	0.41
45:OC:224:TYR:O	45:OC:228:ASN:ND2	2.54	0.41
45:OG:177:VAL:HG13	46:OH:327:ASP:HB3	2.02	0.41
46:OH:19:LYS:HD3	46:OH:19:LYS:HA	1.77	0.41
46:OJ:362:LYS:HA	46:OJ:362:LYS:HD3	1.86	0.41
45:OM:21:TRP:CZ2	45:OM:65:ALA:HB2	2.56	0.41
46:PB:249:ASP:OD1	46:PB:252:LYS:N	2.48	0.41
45:PC:342:GLN:OE1	45:PC:342:GLN:N	2.54	0.41
46:PF:58:ARG:NH1	46:QD:280:GLN:OE1	2.52	0.41
46:PH:178:THR:HG22	46:PH:180:VAL:H	1.86	0.41
46:PJ:68:LEU:HD23	46:PJ:143:THR:OG1	2.20	0.41
46:PJ:203:ASP:O	46:PJ:207:LEU:HG	2.21	0.41
45:PK:7:ILE:HB	45:PK:137:VAL:HG12	2.03	0.41
45:PM:32:PRO:HB3	45:PM:83:TYR:CE1	2.56	0.41
45:PM:88:HIS:CG	45:PM:89:PRO:HD2	2.56	0.41
45:PM:177:VAL:HG13	46:PN:327:ASP:HB3	2.02	0.41
45:QA:245:ASP:OD1	45:QA:246:GLY:N	2.54	0.41
46:QD:113:ILE:HA	46:QD:116:VAL:HG12	2.02	0.41
45:QE:221:ARG:HA	45:QE:221:ARG:HD3	1.96	0.41
46:QH:254:ALA:O	46:QH:258:ILE:HG12	2.21	0.41
45:QK:210:TYR:CZ	45:QK:227:LEU:HD11	2.56	0.41
45:RA:247:ALA:HB3	45:RA:355:ILE:HG21	2.02	0.41
46:RB:238:CYS:SG	46:RB:239:CYS:N	2.93	0.41
45:RC:191:THR:HA	45:RC:194:LEU:HG	2.03	0.41
45:RC:195:LEU:HB3	45:RC:196:GLU:OE2	2.21	0.41
46:RD:167:PHE:CZ	46:RD:233:MET:HB2	2.55	0.41
46:RJ:187:LEU:HD11	46:RJ:408:PHE:CE1	2.55	0.41
46:SF:272:PRO:O	46:SF:273:LEU:HD23	2.20	0.41
46:SJ:164:MET:N	46:SJ:197:ASP:OD2	2.53	0.41
46:SJ:174:LYS:HE2	46:SJ:174:LYS:HB2	1.90	0.41
46:SJ:255:VAL:HA	45:SK:407:TRP:NE1	2.35	0.41
45:SK:175:PRO:HA	45:SK:390:ARG:HH12	1.85	0.41
45:SK:257:THR:HG22	45:SK:257:THR:O	2.21	0.41
46:SL:327:ASP:OD1	45:SM:177:VAL:HG13	2.20	0.41
46:SL:394:PHE:HB3	46:SL:397:TRP:CD2	2.56	0.41
46:TF:283:ALA:O	46:TF:288:GLU:HG2	2.20	0.41
45:TG:322:ASP:OD1	45:TG:373:ARG:NH1	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TI:13:GLY:O	45:TI:17:GLY:N	2.52	0.41
46:TJ:226:ASN:O	46:TJ:230:SER:N	2.50	0.41
45:TM:254:GLU:OE2	46:TN:99:ASN:ND2	2.53	0.41
46:TN:198:GLU:HG2	46:TN:266:PHE:HE2	1.86	0.41
46:UB:19:LYS:NZ	46:UB:227:HIS:HB2	2.35	0.41
46:UB:114:ASP:OD1	46:UB:114:ASP:N	2.54	0.41
46:UD:66:MET:HA	46:UD:91:VAL:O	2.21	0.41
46:UD:221:THR:O	46:UD:225:LEU:HD12	2.20	0.41
46:UD:345:ILE:HG23	46:UD:345:ILE:O	2.21	0.41
45:UE:68:LEU:HD23	45:UE:149:LEU:HD13	2.02	0.41
46:UL:10:GLY:O	46:UL:14:ASN:ND2	2.54	0.41
46:UL:116:VAL:HA	46:UL:119:VAL:HG12	2.03	0.41
46:UL:375:GLN:OE1	46:UL:423:GLN:HB3	2.21	0.41
45:UM:91:GLN:HB3	45:UM:121:ARG:HD2	2.02	0.41
46:VF:141:GLY:HA3	49:VF:501:GDP:O3A	2.21	0.41
45:VI:19:ALA:O	45:VI:22:GLU:HG2	2.21	0.41
46:VL:139:LEU:HA	46:VL:145:SER:HB3	2.03	0.41
45:VM:401:LYS:NZ	46:VN:260:PHE:HZ	2.16	0.41
45:WA:21:TRP:CZ2	45:WA:65:ALA:HB2	2.56	0.41
46:WB:32:PRO:HG3	46:WB:81:PHE:CZ	2.56	0.41
45:WI:3:GLU:HB2	45:WI:129:CYS:SG	2.61	0.41
45:WI:245:ASP:OD1	45:WI:246:GLY:N	2.54	0.41
45:WK:64:ARG:NH1	45:WK:129:CYS:SG	2.94	0.41
7:1G:112:LYS:NZ	45:JA:364:PRO:HG2	2.35	0.41
20:1K:198:GLU:OE2	46:GD:276:ARG:HD3	2.21	0.41
20:1K:203:TYR:OH	28:2F:10:GLN:NE2	2.54	0.41
20:1K:245:TRP:HZ3	46:GB:279:GLN:NE2	2.17	0.41
21:1L:901:LYS:HG3	46:CB:320:ARG:HH22	1.84	0.41
23:1O:210:ILE:HG12	45:UC:282:TYR:CE1	2.54	0.41
23:1O:268:ASN:HB3	45:UA:282:TYR:CE1	2.56	0.41
12:1T:121:ALA:H	12:1T:199:ARG:HG2	1.86	0.41
13:1U:234:LYS:HA	13:1U:234:LYS:HD3	1.85	0.41
13:1U:320:TYR:CD2	13:1U:321:GLU:HG2	2.56	0.41
13:1U:410:ALA:O	13:1U:411:LEU:HD23	2.21	0.41
14:1V:6:ILE:HG13	13:2U:391:PRO:HB3	2.03	0.41
14:1V:22:ARG:HD2	14:1V:22:ARG:HA	1.82	0.41
26:1W:170:THR:CG2	26:1W:171:ASN:H	2.26	0.41
26:1W:253:HIS:O	26:1W:257:MET:HG2	2.21	0.41
15:1X:27:PHE:C	15:1X:29:GLY:H	2.24	0.41
4:2D:52:ASN:ND2	46:EJ:320:ARG:HB2	2.36	0.41
4:2D:104:ILE:HD11	45:EK:282:TYR:HE2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2E:43:VAL:O	5:2E:44:ASP:HB2	2.21	0.41
28:2F:85:MET:SD	45:GE:114:ILE:HD12	2.61	0.41
31:2I:80:TYR:CE1	45:FE:119:LEU:HB3	2.55	0.41
31:2I:83:ARG:NH1	45:GE:304:LYS:HE2	2.36	0.41
31:2I:142:LEU:HD22	46:FD:118:ASP:OD2	2.21	0.41
20:2K:395:GLU:O	20:2K:399:LEU:N	2.51	0.41
21:2L:274:LYS:HB2	21:2L:274:LYS:HE2	1.94	0.41
21:2L:409:ILE:HG12	21:2L:413:PHE:CE2	2.52	0.41
21:2L:901:LYS:HD3	21:2L:901:LYS:HA	1.87	0.41
22:2M:19:LEU:HD23	22:2M:20:ILE:H	1.86	0.41
22:2M:262:PHE:CE1	22:2M:310:GLN:HG2	2.56	0.41
23:2O:201:GLU:HA	23:2O:204:LYS:HG2	2.03	0.41
23:2O:408:ILE:O	23:2O:412:LEU:HD23	2.20	0.41
24:2P:388:THR:O	24:2P:392:LYS:HG2	2.20	0.41
24:2P:439:HIS:NE2	45:TK:370:LYS:O	2.50	0.41
25:2R:44:VAL:HG12	25:2R:45:VAL:C	2.41	0.41
25:2R:401:LYS:HB3	25:2R:401:LYS:HE3	1.81	0.41
12:2T:57:LEU:HD23	12:2T:57:LEU:HA	1.89	0.41
12:2T:128:GLU:OE2	12:2T:203:TYR:OH	2.38	0.41
13:2U:231:GLY:HA2	13:2U:269:MET:SD	2.61	0.41
13:2U:233:VAL:HG22	13:2U:234:LYS:HG2	2.02	0.41
13:2U:345:ARG:HH21	13:2U:357:ARG:HH12	1.69	0.41
13:2U:541:ILE:HG22	13:2U:542:THR:O	2.21	0.41
14:2V:256:GLU:OE1	14:2V:260:LYS:NZ	2.50	0.41
1:3A:147:ARG:HH22	34:6R:74:ILE:HA	1.86	0.41
27:3C:7:GLY:HA2	27:3C:10:VAL:HG12	2.02	0.41
27:3C:192:GLN:OE1	27:3C:198:LYS:HE2	2.21	0.41
27:3C:276:GLN:O	27:3C:279:ARG:NH1	2.44	0.41
21:3L:199:ASP:OD2	21:3L:207:ASN:ND2	2.54	0.41
25:3R:159:LYS:HB2	25:3R:165:VAL:O	2.20	0.41
11:3S:179:ARG:HA	11:3S:226:ILE:HD11	2.02	0.41
13:3U:332:TYR:CZ	13:3U:334:ASP:HB2	2.55	0.41
13:3U:364:GLU:N	13:3U:382:ASN:OD1	2.44	0.41
13:3U:466:SER:HB2	13:3U:476:TRP:HE1	1.86	0.41
14:3V:180:LYS:HA	14:3V:183:GLN:HB2	2.02	0.41
15:3X:96:ARG:O	15:3X:99:VAL:HG12	2.20	0.41
27:4C:11:GLN:O	27:4C:15:ILE:HG12	2.20	0.41
27:4C:172:SER:O	27:4C:175:GLU:HG3	2.21	0.41
34:4R:203:ARG:HB3	34:4R:203:ARG:HH11	1.86	0.41
34:4R:207:ASP:OD1	34:4R:207:ASP:N	2.54	0.41
34:4R:248:TYR:HD1	34:4R:281:ALA:HB1	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:4R:429:LYS:HE2	34:4R:429:LYS:HB3	1.88	0.41
34:4R:573:LEU:HD13	34:4R:580:LEU:HD12	2.02	0.41
35:4S:111:GLU:OE1	35:4S:112:THR:N	2.47	0.41
35:4S:167:LYS:HE2	35:4S:167:LYS:HB2	1.78	0.41
15:4X:81:ARG:O	15:4X:85:GLU:HG2	2.21	0.41
15:4X:99:VAL:HG23	45:LG:370:LYS:HD3	2.02	0.41
36:5A:47:SER:OG	36:5A:48:LEU:N	2.53	0.41
37:5E:73:ARG:HG3	37:5E:103:ARG:NH1	2.36	0.41
34:5R:517:LYS:HE2	34:5R:517:LYS:HB2	1.84	0.41
39:6F:113:PHE:CE2	46:IH:32:PRO:HG2	2.56	0.41
40:6G:235:ILE:CD1	45:UE:114:ILE:HD11	2.51	0.41
41:6H:352:LYS:HD3	41:6H:352:LYS:C	2.41	0.41
10:6Q:178:PRO:HG2	10:6Q:181:PHE:CD2	2.56	0.41
34:7R:595:ASP:OD1	34:7R:595:ASP:N	2.53	0.41
45:AA:89:PRO:HD3	45:BA:283:HIS:ND1	2.36	0.41
46:AB:313:ALA:HB3	46:AB:349:ILE:HG13	2.03	0.41
46:AB:377:MET:HA	46:AB:380:ARG:HD3	2.02	0.41
45:AC:96:LYS:HB2	45:AC:96:LYS:HE2	1.86	0.41
45:AE:223:THR:HG22	45:AE:224:TYR:N	2.35	0.41
46:AF:73:MET:CE	46:AF:92:PHE:HB3	2.50	0.41
46:AF:289:LEU:HD13	46:AF:365:VAL:HG23	2.03	0.41
46:AF:415:MET:HE2	46:AF:415:MET:HB3	2.01	0.41
45:AG:220:GLU:OE1	45:AG:220:GLU:N	2.54	0.41
45:AG:284:GLU:HB2	45:AG:286:LEU:HD22	2.03	0.41
45:AI:434:GLU:O	45:AI:437:ILE:HG12	2.21	0.41
46:AJ:40:SER:H	46:AJ:43:GLN:NE2	2.18	0.41
46:AJ:201:VAL:HG23	46:AJ:301:CYS:SG	2.61	0.41
46:AJ:405:GLU:N	46:AJ:405:GLU:OE1	2.54	0.41
45:AK:11:GLN:HG3	45:AK:74:VAL:HG11	2.03	0.41
45:AK:328:VAL:O	45:AK:332:ILE:HG12	2.21	0.41
46:AL:378:PHE:CD1	46:AL:415:MET:HE3	2.55	0.41
46:BB:21:TRP:CZ3	46:BB:61:PRO:HB3	2.55	0.41
46:BB:199:CYS:O	46:BB:265:PHE:HA	2.21	0.41
46:BB:253:LEU:O	46:BB:257:LEU:HG	2.21	0.41
45:BE:164:LYS:O	45:BE:166:LYS:NZ	2.53	0.41
45:BG:55:GLU:OE1	45:BG:61:HIS:NE2	2.54	0.41
45:BG:175:PRO:HG3	45:BG:390:ARG:CZ	2.51	0.41
46:BH:63:ALA:O	46:BH:89:ASN:ND2	2.46	0.41
46:BH:65:LEU:HD22	46:BH:90:PHE:CE1	2.56	0.41
45:BI:153:LEU:HD23	45:BI:153:LEU:HA	1.89	0.41
45:BK:103:PHE:CD2	45:BK:189:LEU:HD13	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BK:109:THR:HG22	45:BK:110:ILE:HG23	2.03	0.41
46:BL:3:GLU:OE2	46:BL:127:CYS:HB2	2.20	0.41
47:BM:501:GTP:O1G	46:BN:252:LYS:NZ	2.43	0.41
46:BN:391:ARG:HA	46:BN:391:ARG:HD2	1.80	0.41
46:CD:354:CYS:SG	46:CD:355:ASP:N	2.94	0.41
45:CE:166:LYS:HD2	45:CE:197:HIS:O	2.20	0.41
46:CF:113:ILE:HA	46:CF:116:VAL:HG12	2.02	0.41
46:CH:21:TRP:CZ3	46:CH:61:PRO:HB3	2.56	0.41
46:CH:310:TYR:CD1	46:CH:371:SER:HB2	2.55	0.41
45:CI:408:TYR:O	45:CI:413:MET:HB2	2.21	0.41
45:CI:430:LYS:HB3	45:CI:430:LYS:HE2	1.88	0.41
46:CJ:39:ASP:OD1	46:CJ:40:SER:N	2.53	0.41
46:CJ:310:TYR:CD1	46:CJ:371:SER:HB2	2.56	0.41
45:CK:141:VAL:HG13	45:CK:190:SER:HB3	2.03	0.41
45:CK:152:LEU:O	45:CK:156:ARG:HG2	2.20	0.41
45:CK:394:LYS:HE3	45:CK:394:LYS:HB2	1.67	0.41
46:CL:69:GLU:HA	46:CL:70:PRO:HD3	1.91	0.41
45:CM:305:CYS:SG	45:CM:306:ASP:N	2.94	0.41
45:CM:336:LYS:HA	45:CM:336:LYS:HD2	1.86	0.41
46:CN:70:PRO:HG3	46:CN:92:PHE:CD2	2.56	0.41
46:CN:237:THR:HG23	46:CN:241:ARG:NH1	2.36	0.41
46:CN:308:GLY:HA3	46:CN:373:ALA:HB2	2.01	0.41
46:CN:386:THR:HG22	46:CN:412:GLU:HG2	2.01	0.41
45:DA:332:ILE:O	45:DA:336:LYS:HG2	2.21	0.41
45:DC:183:GLU:HG2	45:DC:184:PRO:HD3	2.03	0.41
45:DC:183:GLU:N	45:DC:184:PRO:HD2	2.35	0.41
46:DF:342:VAL:HG13	46:DF:345:ILE:HG22	2.02	0.41
45:DG:217:LEU:HD13	45:DG:367:ASP:HB3	2.02	0.41
45:DI:66:VAL:HG21	45:DI:122:ILE:HD11	2.02	0.41
45:DI:183:GLU:N	45:DI:184:PRO:HD2	2.36	0.41
45:DI:184:PRO:O	45:DI:188:ILE:HG12	2.21	0.41
46:DJ:258:ILE:O	46:DJ:258:ILE:HG13	2.21	0.41
45:DK:202:VAL:HA	45:DK:268:MET:O	2.21	0.41
46:DL:101:TRP:HB2	46:DL:184:ASN:HB3	2.03	0.41
46:DL:147:MET:O	46:DL:150:LEU:HG	2.21	0.41
45:DM:99:ALA:O	45:DM:105:ARG:HD3	2.20	0.41
45:DM:121:ARG:HA	45:DM:121:ARG:HE	1.86	0.41
45:DM:434:GLU:O	45:DM:437:ILE:HG12	2.21	0.41
45:EA:31:GLN:HG3	45:EA:33:ASP:H	1.86	0.41
45:EA:66:VAL:HG23	45:EA:91:GLN:HE22	1.86	0.41
45:EA:263:PRO:HD3	46:EB:396:HIS:NE2	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:EA:401:LYS:HE3	45:EA:401:LYS:HB2	1.74	0.41
46:EB:16:ILE:HG21	46:EB:136:THR:HG21	2.03	0.41
46:EB:345:ILE:O	46:EB:345:ILE:HG23	2.20	0.41
45:EE:37:PRO:HB2	45:EE:39:ASP:H	1.85	0.41
46:EH:6:HIS:O	46:EH:63:ALA:HA	2.20	0.41
45:EI:195:LEU:HD11	45:EI:428:LEU:HD13	2.03	0.41
45:EK:35:GLN:NE2	45:EK:60:LYS:HB3	2.36	0.41
45:EK:156:ARG:HE	45:EK:156:ARG:HB3	1.60	0.41
45:EM:326:LYS:NZ	46:EN:220:PRO:HD2	2.36	0.41
46:EN:70:PRO:HG3	46:EN:92:PHE:CD2	2.56	0.41
45:FC:224:TYR:CE2	46:FD:246:LEU:HD11	2.55	0.41
46:FD:167:PHE:CZ	46:FD:233:MET:HG2	2.56	0.41
46:FD:252:LYS:HG2	46:FD:350:LYS:HE2	2.02	0.41
46:FF:69:GLU:HA	46:FF:70:PRO:HD3	1.91	0.41
45:FG:141:VAL:HG23	45:FG:170:THR:HB	2.02	0.41
45:FG:188:ILE:HD11	45:FG:391:LEU:HG	2.02	0.41
45:FI:259:LEU:HD21	45:FI:316:SER:HB2	2.02	0.41
46:FJ:293:MET:SD	46:FJ:365:VAL:HG11	2.61	0.41
46:FL:217:LEU:H	46:FL:217:LEU:HD23	1.86	0.41
47:FM:501:GTP:H8	47:FM:501:GTP:O2A	2.04	0.41
46:FN:11:GLN:O	46:FN:15:GLN:HG2	2.21	0.41
46:FN:270:PHE:HD1	46:FN:273:LEU:HD21	1.86	0.41
45:GA:72:PRO:CD	46:GB:2:ARG:HH12	2.34	0.41
46:GB:64:ILE:HA	46:GB:89:ASN:HB3	2.02	0.41
45:GC:132:LEU:HD23	45:GC:164:LYS:HE3	2.03	0.41
45:GC:163:LYS:H	45:GC:163:LYS:HG2	1.70	0.41
46:GH:167:PHE:CE2	46:GH:233:MET:HG2	2.56	0.41
46:GL:77:ARG:NH1	46:GL:82:GLY:O	2.53	0.41
46:GL:145:SER:HB2	46:GL:188:SER:OG	2.21	0.41
46:GL:203:ASP:OD2	46:GL:302:ALA:N	2.40	0.41
46:GL:374:ILE:HG22	46:GL:422:TYR:CZ	2.56	0.41
46:HB:36:TYR:CZ	46:HB:44:LEU:HD11	2.55	0.41
46:HB:113:ILE:HA	46:HB:116:VAL:HG12	2.03	0.41
46:HD:110:ALA:O	46:HD:113:ILE:HG22	2.20	0.41
45:HG:183:GLU:N	45:HG:184:PRO:HD2	2.35	0.41
46:HH:226:ASN:HD21	49:HH:501:GDP:HN1	1.67	0.41
46:HH:280:GLN:H	46:HH:280:GLN:HG2	1.74	0.41
46:HH:289:LEU:HD13	46:HH:365:VAL:HG23	2.03	0.41
45:HK:296:PHE:HE1	45:HK:377:MET:SD	2.44	0.41
46:HL:69:GLU:HA	46:HL:70:PRO:HD3	1.94	0.41
45:HM:70:LEU:HD22	45:HM:145:THR:HG22	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:HN:334:GLN:HG3	46:HN:341:PHE:HD1	1.84	0.41
45:IA:103:PHE:HB3	45:IA:408:TYR:HE2	1.86	0.41
45:IA:340:THR:HG23	45:IA:341:ILE:HG13	2.02	0.41
46:IB:58:ARG:HH22	46:IB:84:LEU:HA	1.86	0.41
46:ID:99:ASN:HA	46:ID:142:GLY:H	1.85	0.41
45:IG:66:VAL:HG12	45:IG:91:GLN:HB2	2.02	0.41
45:IK:71:GLU:HA	45:IK:72:PRO:HD3	1.86	0.41
45:IK:113:GLU:OE2	45:IK:113:GLU:N	2.53	0.41
45:IK:349:THR:O	46:IN:179:VAL:HG23	2.21	0.41
45:IK:390:ARG:HG3	45:IK:391:LEU:HD12	2.03	0.41
45:IM:328:VAL:HG11	45:IM:353:VAL:HG21	2.03	0.41
46:IN:2:ARG:H	46:IN:129:CYS:HB3	1.85	0.41
46:IN:304:ASP:OD1	46:IN:306:ARG:NH1	2.54	0.41
45:JA:335:ILE:HA	45:JA:338:LYS:HG2	2.03	0.41
45:JA:345:ASP:OD1	45:JA:345:ASP:N	2.53	0.41
46:JD:177:ASP:OD1	46:JD:177:ASP:N	2.51	0.41
45:JE:245:ASP:OD1	45:JE:246:GLY:N	2.54	0.41
45:JE:296:PHE:HE2	45:JE:335:ILE:HG21	1.86	0.41
46:JF:73:MET:CE	46:JF:92:PHE:HB3	2.50	0.41
46:JF:209:ASP:OD1	46:JF:210:ILE:N	2.53	0.41
45:JG:23:LEU:HD11	45:JG:361:THR:HG23	2.03	0.41
46:JH:141:GLY:HA3	49:JH:501:GDP:O3A	2.21	0.41
45:JI:70:LEU:HD12	45:JI:99:ALA:HB2	2.02	0.41
45:JI:96:LYS:HD3	45:JI:96:LYS:HA	1.83	0.41
45:JK:155:GLU:HA	45:JK:197:HIS:ND1	2.36	0.41
45:JK:173:PRO:HB3	45:JK:183:GLU:OE2	2.20	0.41
45:JK:226:ASN:O	45:JK:230:LEU:HD23	2.21	0.41
45:JK:260:VAL:HG23	45:JK:260:VAL:O	2.21	0.41
45:JK:338:LYS:HZ1	45:JK:340:THR:HB	1.86	0.41
46:JL:21:TRP:CZ3	46:JL:61:PRO:HB3	2.56	0.41
46:JL:247:ASN:O	46:JL:252:LYS:NZ	2.48	0.41
45:JM:79:ARG:NH2	45:JM:92:LEU:O	2.54	0.41
45:JM:406:HIS:HA	45:JM:409:VAL:HG12	2.02	0.41
46:KB:3:GLU:HG3	46:KB:127:CYS:HB2	2.03	0.41
46:KB:86:ARG:HD2	46:LB:281:TYR:HB3	2.02	0.41
46:KB:140:GLY:HA3	46:KB:171:PRO:HG3	2.02	0.41
45:KE:194:LEU:O	45:KE:198:THR:HG22	2.20	0.41
46:KF:322:SER:OG	46:KF:325:GLU:OE1	2.31	0.41
45:KG:349:THR:HG1	46:KJ:176:SER:HG	1.64	0.41
46:KH:123:GLU:HA	46:KH:123:GLU:OE2	2.21	0.41
45:KI:152:LEU:HD12	45:KI:152:LEU:HA	1.93	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:KI:392:ASP:OD1	45:KI:422:ARG:NH1	2.54	0.41
45:KK:76:ASP:OD1	45:KK:79:ARG:NH1	2.52	0.41
45:KK:147:SER:HB2	45:KK:190:SER:HB3	2.03	0.41
45:KK:308:ARG:HG3	45:NK:282:TYR:HE1	1.85	0.41
45:KM:215:ARG:NE	45:KM:216:ASN:OD1	2.51	0.41
45:LA:98:ASP:OD1	45:LA:99:ALA:N	2.53	0.41
45:LA:297:GLU:OE2	45:LA:300:ASN:HB2	2.21	0.41
45:LA:397:LEU:HD22	46:LB:346:PRO:HD3	2.02	0.41
46:LB:1:MET:H2	46:LB:129:CYS:H	1.69	0.41
46:LB:117:LEU:HA	46:LB:120:VAL:HG12	2.02	0.41
46:LB:260:PHE:HB2	46:LB:263:LEU:HD13	2.02	0.41
45:LC:71:GLU:HA	45:LC:72:PRO:HD3	1.94	0.41
45:LC:119:LEU:HD23	45:LC:119:LEU:HA	1.92	0.41
45:LE:170:THR:O	45:LE:204:LEU:HB2	2.21	0.41
45:LE:209:ILE:HB	45:LE:227:LEU:HD22	2.01	0.41
45:LE:231:ILE:O	45:LE:235:ILE:HG12	2.21	0.41
46:LF:372:THR:HA	46:LF:422:TYR:CE1	2.50	0.41
45:LI:223:THR:N	45:LI:226:ASN:OD1	2.52	0.41
45:LK:205:ASP:OD1	45:LK:303:ALA:HA	2.20	0.41
45:LK:332:ILE:HD13	45:LK:332:ILE:HA	1.95	0.41
46:LL:233:MET:HE3	46:LL:233:MET:HB2	1.92	0.41
45:LM:7:ILE:N	45:LM:136:LEU:O	2.39	0.41
45:LM:82:THR:HG1	45:LM:83:TYR:HD1	1.69	0.41
45:LM:149:LEU:O	45:LM:153:LEU:HD23	2.20	0.41
45:LM:178:SER:HB2	46:LN:347:ASN:ND2	2.36	0.41
45:LM:320:ARG:HD3	45:LM:360:PRO:HG3	2.02	0.41
45:MA:21:TRP:CZ2	45:MA:65:ALA:HB2	2.56	0.41
45:MA:383:ALA:O	45:MA:386:GLU:HG2	2.20	0.41
46:MB:97:ALA:HA	46:MB:103:LYS:HG2	2.03	0.41
46:MF:319:GLY:N	46:MF:354:CYS:O	2.31	0.41
45:MG:75:ILE:HG22	45:MG:79:ARG:HD2	2.03	0.41
46:MH:167:PHE:CZ	46:MH:233:MET:HG3	2.56	0.41
45:MI:248:LEU:C	45:MI:249:ASN:HD22	2.23	0.41
45:MK:178:SER:HB2	45:MK:183:GLU:OE2	2.21	0.41
46:ML:383:GLU:HG3	46:ML:384:GLN:N	2.35	0.41
46:MN:19:LYS:HB2	46:MN:19:LYS:HE2	1.79	0.41
45:NA:9:VAL:HA	45:NA:68:LEU:O	2.21	0.41
46:NB:117:LEU:HD11	46:NB:154:LYS:HE3	2.02	0.41
45:NC:102:ASN:OD1	45:NC:105:ARG:N	2.46	0.41
45:NC:284:GLU:HG2	45:NC:286:LEU:HD22	2.03	0.41
46:ND:293:MET:HG3	46:ND:367:PHE:HB2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:ND:318:ARG:HB3	46:ND:358:PRO:HD3	2.03	0.41
46:ND:374:ILE:O	46:ND:377:MET:HG3	2.20	0.41
45:NE:42:ILE:HG23	45:NE:43:GLY:N	2.35	0.41
45:NG:188:ILE:HG12	45:NG:421:ALA:HB1	2.03	0.41
46:NH:31:ASP:OD2	46:NH:33:THR:OG1	2.35	0.41
46:NH:184:ASN:OD1	46:NH:185:ALA:N	2.54	0.41
46:NH:330:MET:HE2	46:NH:349:ILE:HG21	2.03	0.41
46:NH:345:ILE:HG23	46:NH:345:ILE:O	2.21	0.41
45:NI:135:PHE:HB2	45:NI:166:LYS:HD3	2.03	0.41
46:NJ:132:GLY:HA3	46:NJ:163:ILE:HG22	2.02	0.41
46:NL:66:MET:HA	46:NL:91:VAL:O	2.21	0.41
46:NL:396:HIS:CD2	46:NL:397:TRP:CD1	3.08	0.41
45:NM:280:LYS:NZ	45:NM:283:HIS:HA	2.35	0.41
45:OA:60:LYS:HZ3	45:PA:283:HIS:CG	2.39	0.41
45:OA:276:ILE:HG21	45:OA:281:ALA:HB2	2.03	0.41
46:OB:333:VAL:HA	46:OB:336:LYS:HG2	2.02	0.41
45:OC:3:GLU:OE2	45:OC:129:CYS:HB3	2.21	0.41
46:OD:139:LEU:HD12	46:OD:170:VAL:HG12	2.02	0.41
46:OD:161:ASP:OD1	46:OD:162:ARG:HG2	2.21	0.41
46:OF:318:ARG:HH11	46:OF:358:PRO:HG3	1.86	0.41
45:OG:229:ARG:NH1	45:OG:363:VAL:HG11	2.36	0.41
45:OG:298:PRO:HB3	45:OG:307:PRO:HD2	2.02	0.41
45:OK:326:LYS:HA	45:OK:329:ASN:HB2	2.03	0.41
46:OL:247:ASN:OD1	46:OL:247:ASN:N	2.53	0.41
45:OM:8:HIS:HB3	45:OM:14:ILE:HD13	2.01	0.41
45:OM:178:SER:HB2	46:ON:347:ASN:OD1	2.20	0.41
46:ON:163:ILE:HG22	46:ON:197:ASP:OD2	2.20	0.41
46:ON:216:LYS:HE2	46:ON:216:LYS:HB3	1.82	0.41
45:PA:207:GLU:CA	45:PA:210:TYR:HB2	2.46	0.41
45:PA:328:VAL:HG11	45:PA:353:VAL:HG21	2.02	0.41
46:PD:325:GLU:H	46:PD:325:GLU:CD	2.24	0.41
45:PE:8:HIS:HB2	45:PE:67:PHE:HD2	1.86	0.41
45:PG:72:PRO:HD2	46:PH:2:ARG:HH12	1.86	0.41
45:PG:261:PRO:HG3	46:PJ:394:PHE:CZ	2.55	0.41
46:PH:51:TYR:HB3	46:PH:59:TYR:HB3	2.03	0.41
45:PI:384:ILE:O	45:PI:387:VAL:HG22	2.20	0.41
46:PJ:210:ILE:HG23	46:PJ:214:THR:HB	2.03	0.41
45:PK:107:HIS:ND1	45:PK:107:HIS:O	2.53	0.41
45:PK:184:PRO:O	45:PK:188:ILE:HG12	2.20	0.41
45:PK:260:VAL:HG23	46:PN:397:TRP:CH2	2.56	0.41
45:PK:352:LYS:HD2	46:PN:178:THR:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:PK:406:HIS:CD2	45:PK:407:TRP:HD1	2.38	0.41
46:PL:36:TYR:CZ	46:PL:44:LEU:HD11	2.56	0.41
45:PM:391:LEU:HA	45:PM:394:LYS:HB2	2.03	0.41
46:PN:239:CYS:SG	46:PN:247:ASN:HA	2.61	0.41
45:QA:221:ARG:NH2	45:QA:223:THR:HG22	2.36	0.41
45:QA:279:GLU:OE1	45:QA:280:LYS:HB2	2.20	0.41
46:QB:66:MET:HE1	46:QB:116:VAL:HG21	2.02	0.41
46:QB:415:MET:O	46:QB:419:VAL:N	2.48	0.41
45:QE:28:HIS:NE2	45:QE:48:ALA:O	2.53	0.41
45:QE:75:ILE:HG21	45:QE:94:SER:HB3	2.03	0.41
45:QI:221:ARG:HD2	45:QI:221:ARG:HA	1.85	0.41
45:QI:246:GLY:HA2	45:QI:357:TYR:CD1	2.55	0.41
46:QJ:86:ARG:HG3	46:QJ:88:ASP:N	2.35	0.41
45:QK:7:ILE:HB	45:QK:137:VAL:HG12	2.03	0.41
45:QK:68:LEU:HD23	45:QK:149:LEU:HD21	2.01	0.41
45:QK:174:SER:HB3	45:QK:177:VAL:O	2.21	0.41
45:QK:318:MET:O	45:QK:375:VAL:HA	2.20	0.41
45:QK:352:LYS:HZ2	46:QL:178:THR:HG23	1.86	0.41
46:QL:86:ARG:HH21	46:QL:87:PRO:HG2	1.85	0.41
46:QL:267:MET:CE	46:QL:299:MET:HG2	2.51	0.41
45:QM:384:ILE:O	45:QM:387:VAL:HG22	2.21	0.41
45:RA:81:GLY:O	45:RA:84:ARG:HG3	2.20	0.41
45:RA:317:MET:HA	45:RA:377:MET:HA	2.03	0.41
46:RB:101:TRP:CE3	46:RB:187:LEU:HD13	2.56	0.41
45:RC:401:LYS:HB2	45:RC:401:LYS:HE3	1.79	0.41
46:RD:193:VAL:HG23	46:RD:264:HIS:HE1	1.85	0.41
46:RF:208:TYR:CE2	46:RF:225:LEU:HD11	2.56	0.41
45:RG:55:GLU:HG3	45:RG:57:GLY:H	1.85	0.41
45:RG:326:LYS:HG3	45:RG:327:ASP:N	2.35	0.41
46:RH:68:LEU:HD13	46:RH:143:THR:OG1	2.21	0.41
46:RH:416:ASN:OD1	46:RH:417:ASP:N	2.53	0.41
45:RI:113:GLU:OE1	45:RI:113:GLU:N	2.53	0.41
46:RJ:221:THR:HG23	46:RJ:223:GLY:H	1.85	0.41
46:RJ:222:TYR:O	46:RJ:226:ASN:ND2	2.44	0.41
45:RK:88:HIS:ND1	45:RK:89:PRO:HD2	2.35	0.41
45:RM:211:ASP:C	45:RM:215:ARG:HH21	2.24	0.41
45:RM:220:GLU:O	45:RM:221:ARG:HD2	2.20	0.41
46:RN:344:TRP:HB3	46:RN:430:ALA:HB2	2.02	0.41
45:SA:90:GLU:HG3	45:SA:121:ARG:HH22	1.85	0.41
45:SA:216:ASN:HB3	45:SA:275:ILE:O	2.21	0.41
45:SA:248:LEU:HD23	45:SA:353:VAL:HG13	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:SB:19:LYS:HA	46:SB:19:LYS:HE2	2.02	0.41
46:SD:347:ASN:O	45:SE:181:VAL:HG12	2.20	0.41
46:SD:390:ARG:HE	46:SD:390:ARG:HB2	1.74	0.41
46:SH:181:GLU:HG3	46:SH:182:PRO:HD3	2.03	0.41
45:SI:123:ARG:HD3	45:SI:123:ARG:HA	1.85	0.41
45:SI:164:LYS:HA	45:SI:164:LYS:HD3	1.87	0.41
45:SI:277:SER:O	45:SI:281:ALA:N	2.54	0.41
46:SJ:31:ASP:HB2	46:SJ:32:PRO:HD2	2.03	0.41
46:SJ:391:ARG:HD2	46:SJ:391:ARG:HA	1.87	0.41
45:SK:115:VAL:HG22	45:SK:119:LEU:HD23	2.03	0.41
46:SL:264:HIS:O	46:SL:264:HIS:ND1	2.54	0.41
46:SL:318:ARG:HH11	46:SL:358:PRO:HG3	1.85	0.41
45:SM:123:ARG:HA	45:SM:123:ARG:HH11	1.86	0.41
45:SM:141:VAL:HG12	45:SM:171:ILE:O	2.21	0.41
45:SM:277:SER:O	45:SM:281:ALA:N	2.54	0.41
46:SN:8:GLN:HG3	46:SN:14:ASN:HD22	1.85	0.41
45:TA:155:GLU:HG2	45:TA:197:HIS:NE2	2.36	0.41
45:TA:174:SER:OG	45:TA:206:ASN:OD1	2.39	0.41
45:TA:384:ILE:O	45:TA:387:VAL:HG22	2.21	0.41
46:TB:289:LEU:O	46:TB:293:MET:N	2.54	0.41
45:TC:342:GLN:N	45:TC:342:GLN:OE1	2.54	0.41
46:TD:44:LEU:HD23	46:TD:44:LEU:HA	1.87	0.41
46:TD:148:GLY:O	46:TD:152:ILE:HG12	2.20	0.41
45:TE:141:VAL:HG12	45:TE:171:ILE:O	2.21	0.41
46:TF:272:PRO:HD3	46:TF:364:ALA:HA	2.03	0.41
45:TG:174:SER:HB2	45:TG:177:VAL:O	2.21	0.41
45:TG:304:LYS:HA	45:TG:304:LYS:HD3	1.90	0.41
46:TH:374:ILE:HD11	46:TH:422:TYR:CE2	2.56	0.41
46:TJ:268:ILE:HG13	46:TJ:300:MET:CE	2.51	0.41
45:TK:194:LEU:O	45:TK:198:THR:HG22	2.21	0.41
45:TK:257:THR:HA	46:TL:397:TRP:CZ3	2.56	0.41
46:TL:91:VAL:HG21	46:TL:116:VAL:HB	2.02	0.41
45:TM:265:ILE:HD12	45:TM:432:TYR:CE1	2.56	0.41
46:TN:52:ASN:N	46:TN:60:VAL:O	2.46	0.41
46:TN:86:ARG:HD2	46:UN:281:TYR:HB2	2.03	0.41
46:UB:5:VAL:HG13	46:UB:7:ILE:HD11	2.01	0.41
46:UB:7:ILE:O	46:UB:135:ILE:HA	2.20	0.41
46:UB:69:GLU:HA	46:UB:70:PRO:HD3	1.91	0.41
46:UB:86:ARG:HH11	46:UB:87:PRO:HD2	1.85	0.41
45:UC:90:GLU:HG3	45:UC:121:ARG:CZ	2.51	0.41
45:UC:149:LEU:HD12	45:UC:149:LEU:HA	1.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UC:288:VAL:HA	45:UC:291:ILE:HG12	2.01	0.41
46:UD:306:ARG:H	46:UD:306:ARG:HG2	1.69	0.41
45:UE:150:GLY:O	45:UE:154:LEU:HG	2.21	0.41
45:UE:288:VAL:HB	45:UE:373:ARG:HD2	2.03	0.41
46:UF:97:ALA:HB3	46:UF:143:THR:HG22	2.02	0.41
45:UG:326:LYS:HD3	46:UH:212:PHE:CZ	2.54	0.41
46:UH:67:ASP:N	46:UH:67:ASP:OD1	2.53	0.41
46:UJ:73:MET:HB2	46:UJ:90:PHE:HE1	1.86	0.41
46:UJ:190:HIS:CD2	46:UJ:411:ALA:HA	2.55	0.41
46:UJ:324:LYS:HA	46:UJ:327:ASP:OD2	2.21	0.41
46:UL:42:LEU:O	46:UL:42:LEU:HD12	2.21	0.41
45:UM:97:GLU:HG2	45:UM:105:ARG:HH21	1.86	0.41
45:UM:339:ARG:HA	45:UM:339:ARG:CZ	2.51	0.41
45:VA:21:TRP:HZ2	45:VA:65:ALA:HB2	1.86	0.41
45:VA:439:THR:HG1	46:VD:390:ARG:HH22	1.67	0.41
46:VB:113:ILE:HA	46:VB:116:VAL:HG12	2.02	0.41
45:VG:175:PRO:HG3	45:VG:390:ARG:NH1	2.36	0.41
45:VG:208:ALA:O	45:VG:212:ILE:HG13	2.21	0.41
46:VH:63:ALA:O	46:VH:89:ASN:ND2	2.50	0.41
46:VH:91:VAL:HG21	46:VH:116:VAL:HB	2.03	0.41
46:VH:175:VAL:HG22	46:VH:205:GLU:HB2	2.02	0.41
46:VH:208:TYR:CE1	46:VH:225:LEU:HD11	2.56	0.41
45:VI:105:ARG:O	45:VI:110:ILE:HG22	2.20	0.41
46:VJ:7:ILE:HD11	46:VJ:120:VAL:HG21	2.02	0.41
45:VM:54:SER:HB3	45:VM:64:ARG:CZ	2.51	0.41
45:VM:115:VAL:HG22	45:VM:119:LEU:HD23	2.03	0.41
45:VM:122:ILE:H	45:VM:122:ILE:HD12	1.85	0.41
45:VM:149:LEU:HD13	45:VM:152:LEU:HD12	2.03	0.41
45:VM:239:THR:O	45:VM:243:ARG:NH1	2.54	0.41
46:VN:179:VAL:HG23	46:VN:394:PHE:HE1	1.86	0.41
46:VN:361:LEU:HD23	46:VN:361:LEU:HA	1.93	0.41
46:WB:391:ARG:HD2	46:WB:391:ARG:HA	1.80	0.41
45:WC:51:THR:HG21	45:WC:243:ARG:HB3	2.02	0.41
45:WG:188:ILE:HG22	45:WG:421:ALA:HB1	2.02	0.41
45:WI:105:ARG:HG2	45:WI:411:GLU:HG2	2.03	0.41
45:WI:251:ASP:OD2	45:WI:253:THR:HG22	2.21	0.41
46:WJ:290:THR:HA	46:WJ:293:MET:HG2	2.02	0.41
45:WK:384:ILE:O	45:WK:387:VAL:HG22	2.21	0.41
45:WK:385:ALA:HB2	45:WK:432:TYR:HD2	1.86	0.41
46:WL:73:MET:HA	46:WL:76:VAL:HG12	2.02	0.41
45:WM:7:ILE:HB	45:WM:137:VAL:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:WM:417:GLU:HA	45:WM:420:GLU:OE2	2.21	0.41
46:WN:208:TYR:CZ	46:WN:225:LEU:HD11	2.56	0.41
46:WN:314:SER:N	46:WN:368:VAL:O	2.51	0.41
9:0N:162:CYS:O	46:KN:276:ARG:NE	2.53	0.41
5:1E:141:GLN:HE22	34:4R:502:ARG:HH12	1.68	0.41
21:1L:658:ARG:HH11	45:BE:80:THR:HG21	1.86	0.41
11:1S:8:GLN:HB2	11:1S:191:LEU:HD11	2.02	0.41
13:1U:226:ILE:HG13	13:1U:227:PHE:N	2.36	0.41
13:1U:462:ASP:O	13:1U:478:LEU:HB3	2.20	0.41
13:1U:469:ALA:O	13:1U:492:LEU:HG	2.21	0.41
27:2C:111:PHE:HB2	27:2C:170:PHE:CE1	2.56	0.41
4:2D:60:LYS:O	4:2D:64:THR:HG23	2.21	0.41
4:2D:123:SER:OG	4:2D:124:ASN:N	2.53	0.41
9:2N:120:ARG:NH2	9:2N:124:ASP:H	2.19	0.41
23:2O:215:LYS:HE3	23:2O:215:LYS:HB3	1.90	0.41
23:2O:339:ARG:NH2	23:2O:342:ARG:HH21	2.11	0.41
24:2P:491:LYS:HA	24:2P:491:LYS:HD2	1.82	0.41
1:3A:105:HIS:CG	1:3A:106:ASP:H	2.38	0.41
16:3B:36:PHE:HB3	16:3B:44:LEU:HD21	2.03	0.41
5:3E:131:LYS:HD3	5:3E:136:GLN:HB2	2.02	0.41
12:3T:264:LYS:HD3	13:3U:27:ASN:HB2	2.02	0.41
15:3X:41:GLN:HA	15:3X:44:THR:OG1	2.21	0.41
27:4C:225:THR:N	45:KM:220:GLU:OE2	2.52	0.41
35:4S:114:GLU:HB3	35:4S:117:LYS:NZ	2.36	0.41
36:5A:142:GLN:O	36:5A:146:VAL:HG12	2.21	0.41
36:5C:39:ARG:HA	36:5C:39:ARG:HD3	1.85	0.41
36:5D:32:ALA:O	36:5D:34:PHE:N	2.54	0.41
36:5D:45:TYR:CE2	36:5D:56:ILE:HG13	2.56	0.41
37:5F:155:MET:HE2	37:5F:155:MET:HA	2.03	0.41
34:5R:288:LYS:HB2	34:5R:288:LYS:HE3	1.81	0.41
39:6F:29:GLU:OE2	46:JF:218:THR:HG21	2.21	0.41
10:6Q:36:ARG:HB2	10:6Q:47:LEU:HD23	2.02	0.41
34:7R:341:ARG:NH2	34:7R:344:ASN:HA	2.36	0.41
34:7R:381:PHE:CE2	46:DB:32:PRO:HD2	2.56	0.41
46:AB:133:PHE:HB2	46:AB:164:MET:SD	2.61	0.41
46:AH:237:THR:HG22	46:AH:250:LEU:HD11	2.03	0.41
45:AK:283:HIS:ND1	45:MK:89:PRO:HD3	2.35	0.41
45:BA:241:SER:O	45:BA:249:ASN:ND2	2.54	0.41
46:BB:320:ARG:HA	46:BB:320:ARG:HD3	1.92	0.41
45:BC:136:LEU:HD23	45:BC:167:LEU:HB2	2.03	0.41
46:BF:403:MET:HE2	46:BF:403:MET:HB3	1.93	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BH:97:ALA:O	46:BH:103:LYS:HD2	2.21	0.41
46:CB:295:ASP:OD1	46:CB:296:ALA:N	2.54	0.41
46:CD:12:CYS:O	46:CD:16:ILE:HG12	2.20	0.41
45:CG:183:GLU:N	45:CG:184:PRO:HD2	2.36	0.41
45:CK:229:ARG:HH12	45:CK:363:VAL:HG11	1.86	0.41
46:CL:193:VAL:HA	46:CL:264:HIS:CE1	2.56	0.41
45:CM:175:PRO:HG3	45:CM:390:ARG:NH1	2.36	0.41
45:DA:191:THR:HA	45:DA:194:LEU:HG	2.03	0.41
45:DE:140:SER:OG	47:DE:501:GTP:O2B	2.39	0.41
45:DE:260:VAL:O	45:DE:260:VAL:HG23	2.21	0.41
45:DI:428:LEU:HD12	45:DI:428:LEU:HA	1.91	0.41
46:DJ:107:THR:HG23	46:DJ:108:GLU:HG2	2.03	0.41
46:DL:399:THR:HA	46:DL:403:MET:O	2.21	0.41
45:DM:185:TYR:HE1	45:DM:398:MET:HG3	1.85	0.41
46:EB:60:VAL:HG23	46:EB:84:LEU:O	2.21	0.41
46:EB:105:HIS:CD2	46:EB:150:LEU:HB2	2.56	0.41
45:EC:155:GLU:O	45:EC:158:SER:OG	2.34	0.41
45:EC:353:VAL:HG22	46:ED:177:ASP:HB2	2.02	0.41
46:ED:68:LEU:HB3	46:ED:96:GLY:HA2	2.03	0.41
45:EG:88:HIS:CE1	45:EG:90:GLU:HG2	2.56	0.41
45:EK:3:GLU:HB3	45:EK:129:CYS:SG	2.61	0.41
46:EL:251:ARG:O	46:EL:255:VAL:HG23	2.22	0.41
46:EL:386:THR:O	46:EL:390:ARG:HG2	2.20	0.41
46:FD:4:ILE:HG13	46:FD:132:GLY:O	2.21	0.41
46:FD:345:ILE:HG23	46:FD:345:ILE:O	2.20	0.41
45:FE:326:LYS:HE2	46:FH:219:THR:HA	2.02	0.41
45:FG:292:THR:HG23	45:FG:317:MET:HE1	2.02	0.41
45:FI:181:VAL:HG23	46:FJ:348:ASN:HA	2.02	0.41
46:FL:345:ILE:HG23	46:FL:348:ASN:HB3	2.03	0.41
46:GF:211:CYS:HB3	46:GF:217:LEU:HD21	2.03	0.41
45:GG:174:SER:HB2	45:GG:177:VAL:O	2.20	0.41
46:GL:68:LEU:HD11	46:GL:108:GLU:HB3	2.03	0.41
45:HE:143:GLY:O	45:HE:147:SER:OG	2.35	0.41
46:HF:391:ARG:HA	46:HF:391:ARG:HD2	1.80	0.41
45:HI:98:ASP:OD1	45:HI:99:ALA:N	2.54	0.41
45:HI:165:SER:HB3	45:HI:256:GLN:HE22	1.85	0.41
45:HI:174:SER:HB2	45:HI:177:VAL:O	2.21	0.41
45:HK:71:GLU:HB3	45:HK:98:ASP:HB3	2.02	0.41
46:HN:32:PRO:HB3	46:HN:81:PHE:HA	2.03	0.41
45:IA:164:LYS:HD3	45:IA:164:LYS:HA	1.83	0.41
45:IA:214:ARG:HH21	45:IA:215:ARG:HG2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:IB:247:ASN:C	46:IB:247:ASN:ND2	2.73	0.41
45:IE:171:ILE:HG23	45:IE:204:LEU:O	2.21	0.41
45:IG:422:ARG:NH1	45:IG:426:ALA:HB2	2.36	0.41
46:IH:285:THR:O	46:IH:288:GLU:HG3	2.20	0.41
45:IK:384:ILE:O	45:IK:387:VAL:HG22	2.21	0.41
45:JE:181:VAL:O	45:JE:184:PRO:HD2	2.21	0.41
45:JK:52:PHE:HZ	45:JK:239:THR:HG21	1.85	0.41
45:JM:70:LEU:HB3	45:JM:97:GLU:O	2.21	0.41
45:JM:207:GLU:HA	45:JM:210:TYR:HD2	1.85	0.41
46:JN:51:TYR:HE2	46:JN:61:PRO:HG3	1.85	0.41
45:KA:296:PHE:CE2	45:KA:377:MET:HE2	2.56	0.41
45:KC:210:TYR:CE1	45:KC:227:LEU:HD11	2.56	0.41
45:KG:75:ILE:O	45:KG:79:ARG:HG3	2.21	0.41
45:KM:319:TYR:O	45:KM:356:ASN:N	2.52	0.41
46:LB:233:MET:O	46:LB:236:VAL:HG12	2.20	0.41
46:LB:391:ARG:HA	46:LB:391:ARG:HD2	1.90	0.41
45:LC:75:ILE:HG21	45:LC:94:SER:HB2	2.03	0.41
45:LC:174:SER:HB2	45:LC:177:VAL:O	2.20	0.41
46:LH:217:LEU:H	46:LH:217:LEU:HD23	1.85	0.41
46:LJ:206:ALA:O	46:LJ:210:ILE:HG12	2.21	0.41
45:LK:66:VAL:HG11	45:LK:122:ILE:HD11	2.02	0.41
46:LL:163:ILE:HD13	46:LL:250:LEU:HB3	2.03	0.41
46:LN:150:LEU:O	46:LN:154:LYS:HG2	2.21	0.41
46:LN:178:THR:HG22	46:LN:180:VAL:H	1.85	0.41
46:LN:336:LYS:HE2	46:LN:336:LYS:HB3	1.93	0.41
46:MB:16:ILE:HD13	46:MB:226:ASN:OD1	2.21	0.41
45:MC:73:THR:OG1	46:MD:2:ARG:NH2	2.50	0.41
45:MM:179:THR:O	46:MN:350:LYS:HA	2.21	0.41
45:NA:113:GLU:N	45:NA:113:GLU:OE1	2.53	0.41
46:NF:406:MET:SD	46:NF:407:GLU:N	2.94	0.41
46:NH:385:PHE:CE2	46:NH:412:GLU:HB3	2.55	0.41
46:NJ:345:ILE:HG23	46:NJ:345:ILE:O	2.21	0.41
45:NM:235:ILE:O	45:NM:239:THR:HG22	2.21	0.41
45:OA:223:THR:HG23	45:OA:225:THR:H	1.86	0.41
46:OB:22:GLU:OE2	46:OB:81:PHE:HB2	2.21	0.41
46:OF:55:THR:HG23	46:PF:283:ALA:HA	2.03	0.41
46:OF:64:ILE:HA	46:OF:89:ASN:HB3	2.02	0.41
46:OF:265:PHE:HD2	46:OF:378:PHE:HZ	1.69	0.41
46:OF:329:GLN:HA	46:OF:332:ASN:HD21	1.84	0.41
45:OG:414:GLU:CD	45:OG:416:GLY:H	2.25	0.41
45:OM:76:ASP:OD1	45:OM:77:GLU:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OM:409:VAL:HA	45:OM:413:MET:O	2.21	0.41
46:ON:94:GLN:HG2	46:ON:95:THR:HG23	2.03	0.41
45:PA:141:VAL:HG12	45:PA:171:ILE:O	2.21	0.41
45:PA:221:ARG:NH1	46:PB:325:GLU:OE1	2.54	0.41
45:PE:320:ARG:HB2	45:PE:358:GLN:O	2.21	0.41
45:PG:171:ILE:HG23	45:PG:204:LEU:O	2.21	0.41
46:PJ:68:LEU:HD11	46:PJ:108:GLU:OE1	2.21	0.41
46:PJ:198:GLU:HG2	46:PJ:266:PHE:HE2	1.85	0.41
46:PL:21:TRP:CZ2	46:PL:63:ALA:HB2	2.56	0.41
46:PN:286:VAL:HG12	46:PN:329:GLN:HE22	1.86	0.41
46:QD:67:ASP:OD1	46:QD:68:LEU:N	2.52	0.41
45:QK:310:GLY:HA3	45:QK:383:ALA:HB2	2.03	0.41
46:QL:335:ASN:OD1	46:QL:336:LYS:N	2.54	0.41
45:RA:329:ASN:HB3	46:RB:175:VAL:HG12	2.02	0.41
46:RB:247:ASN:OD1	46:RB:248:SER:N	2.53	0.41
46:RD:238:CYS:SG	46:RD:239:CYS:N	2.94	0.41
46:RJ:405:GLU:HA	46:RJ:408:PHE:CD2	2.56	0.41
45:RK:7:ILE:N	45:RK:136:LEU:O	2.38	0.41
45:RK:31:GLN:HG2	45:RK:35:GLN:O	2.21	0.41
46:RL:149:THR:HA	46:RL:152:ILE:HD12	2.03	0.41
45:SA:68:LEU:HD22	45:SA:153:LEU:HD11	2.03	0.41
45:SC:185:TYR:HA	45:SC:395:PHE:HE2	1.86	0.41
45:SC:260:VAL:HG13	45:SC:260:VAL:O	2.21	0.41
46:SD:324:LYS:HD3	46:SD:324:LYS:HA	1.90	0.41
45:SE:287:SER:O	45:SE:290:GLU:HG3	2.21	0.41
46:SJ:3:GLU:HG3	46:SJ:62:ARG:NH1	2.36	0.41
45:SK:102:ASN:HB3	45:SK:105:ARG:HB2	2.03	0.41
45:TC:90:GLU:HG2	45:TC:90:GLU:O	2.20	0.41
45:TC:203:MET:HE3	45:TC:267:PHE:HB3	2.02	0.41
45:TC:414:GLU:HG3	45:TC:417:GLU:HG2	2.02	0.41
45:TE:169:PHE:HE2	45:TE:235:ILE:HD12	1.85	0.41
45:TG:3:GLU:OE2	45:TG:129:CYS:HB3	2.20	0.41
45:TI:132:LEU:HD21	45:TI:135:PHE:CZ	2.56	0.41
46:TJ:106:TYR:OH	46:TJ:407:GLU:OE1	2.31	0.41
46:TL:87:PRO:HA	46:TL:90:PHE:CD2	2.56	0.41
46:TL:262:ARG:HH21	46:TL:418:LEU:HD22	1.85	0.41
45:TM:174:SER:HB2	45:TM:177:VAL:O	2.20	0.41
45:TM:343:PHE:HZ	45:TM:351:PHE:HE1	1.69	0.41
45:TM:429:GLU:HA	45:TM:429:GLU:OE2	2.20	0.41
45:UA:105:ARG:HA	45:UA:109:THR:HB	2.02	0.41
45:UA:326:LYS:HE2	46:UB:220:PRO:CD	2.47	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UA:352:LYS:NZ	46:UB:179:VAL:H	2.20	0.41
46:UB:201:VAL:HG23	46:UB:301:CYS:SG	2.61	0.41
45:UC:347:CYS:HA	46:UD:388:MET:HE1	2.03	0.41
45:UC:399:TYR:OH	45:UC:415:GLU:OE2	2.21	0.41
45:UE:10:GLY:O	45:UE:14:ILE:HG12	2.21	0.41
45:UI:251:ASP:OD1	45:UI:254:GLU:HG2	2.21	0.41
46:UJ:200:MET:HE1	46:UJ:268:ILE:HD12	2.03	0.41
45:UK:154:LEU:HD11	45:UK:193:SER:OG	2.21	0.41
45:UM:385:ALA:HB2	45:UM:432:TYR:HD2	1.86	0.41
45:VE:222:PRO:HG2	46:VF:324:LYS:HZ1	1.86	0.41
45:VK:283:HIS:CD2	45:VK:283:HIS:N	2.88	0.41
46:VL:211:CYS:HB3	46:VL:220:PRO:HG3	2.02	0.41
46:VL:309:ARG:H	46:VL:372:THR:HG1	1.63	0.41
45:WC:175:PRO:HG3	45:WC:390:ARG:HH12	1.85	0.41
46:WD:178:THR:HB	46:WD:181:GLU:OE1	2.21	0.41
46:WD:318:ARG:HB2	46:WD:364:ALA:HB3	2.03	0.41
45:WE:183:GLU:N	45:WE:184:PRO:HD2	2.36	0.41
46:WF:12:CYS:O	46:WF:16:ILE:HG12	2.21	0.41
45:WG:36:MET:HA	45:WG:37:PRO:HD3	1.95	0.41
46:WJ:3:GLU:HA	46:WJ:49:VAL:HG23	2.03	0.41
46:WJ:68:LEU:HD23	46:WJ:68:LEU:HA	1.87	0.41
46:WJ:350:LYS:NZ	46:WJ:352:SER:OG	2.36	0.41
46:WL:221:THR:O	46:WL:225:LEU:HG	2.21	0.41
46:WL:390:ARG:O	46:WL:392:LYS:NZ	2.54	0.41
45:WM:209:ILE:HG12	45:WM:302:MET:HG3	2.03	0.41
46:WN:284:LEU:HA	46:WN:288:GLU:OE2	2.21	0.41
6:OF:204:PHE:HB2	46:FD:322:SER:HB3	2.02	0.40
21:1L:894:ARG:HH12	45:CC:364:PRO:HB2	1.85	0.40
16:2B:214:LEU:O	16:2B:218:ILE:HG12	2.21	0.40
16:2B:227:ASP:OD1	16:2B:227:ASP:N	2.54	0.40
4:2D:166:ARG:C	4:2D:168:GLY:H	2.23	0.40
4:2D:187:PHE:HZ	46:FJ:320:ARG:HE	1.70	0.40
20:2K:209:VAL:HA	20:2K:212:ARG:NH2	2.36	0.40
20:2K:254:LYS:O	20:2K:258:GLU:N	2.34	0.40
20:2K:298:ARG:O	20:2K:301:THR:OG1	2.35	0.40
21:2L:306:PHE:O	21:2L:310:LEU:HG	2.21	0.40
21:2L:523:GLN:NE2	21:2L:525:LEU:HD12	2.37	0.40
21:2L:792:LYS:HB3	21:2L:792:LYS:HE3	1.88	0.40
23:2O:138:ASP:N	23:2O:138:ASP:OD2	2.53	0.40
26:2W:195:TRP:NE1	26:2W:197:GLY:O	2.54	0.40
15:2X:87:ASP:O	15:2X:91:LYS:HG3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3A:88:VAL:HG12	1:3A:88:VAL:O	2.21	0.40
16:3B:65:LEU:O	16:3B:68:VAL:HG22	2.22	0.40
16:3B:273:SER:O	16:3B:279:ARG:NH2	2.51	0.40
32:3D:110:LYS:HD2	32:3D:110:LYS:HA	1.83	0.40
21:3L:47:ARG:HB3	21:3L:51:TYR:CE2	2.56	0.40
25:3R:448:VAL:HB	25:3R:464:LEU:HB2	2.03	0.40
13:3U:181:LYS:NZ	45:VK:59:GLY:HA3	2.36	0.40
14:3V:133:TYR:HD1	46:LD:421:GLU:CD	2.24	0.40
35:4S:180:VAL:CG2	35:4S:181:PRO:HD3	2.51	0.40
37:5E:63:HIS:CD2	46:OB:280:GLN:HE22	2.39	0.40
37:5H:44:ARG:HG2	45:OK:285:GLN:HB2	2.03	0.40
34:5R:309:LEU:HD23	34:5R:329:TYR:CD1	2.55	0.40
34:5R:416:MET:O	34:5R:420:ASP:HB2	2.21	0.40
35:5S:90:LYS:HD3	35:5S:90:LYS:HA	1.70	0.40
10:6Q:73:LEU:HD22	10:6Q:169:ASP:OD1	2.21	0.40
34:6R:335:VAL:HG23	34:6R:368:GLN:NE2	2.36	0.40
34:6R:536:ARG:NH1	34:6R:609:LEU:O	2.34	0.40
34:7R:389:ASN:OD1	34:7R:390:GLY:N	2.54	0.40
45:AA:104:ALA:HB2	45:AA:413:MET:HE3	2.03	0.40
45:AE:264:ARG:HD3	45:AE:431:ASP:OD2	2.21	0.40
46:AF:3:GLU:HG3	46:AF:127:CYS:HB2	2.03	0.40
45:AG:76:ASP:OD1	45:AG:79:ARG:NH2	2.34	0.40
46:AH:68:LEU:HD12	46:AH:68:LEU:HA	1.92	0.40
45:AK:152:LEU:HD12	45:AK:152:LEU:HA	1.92	0.40
46:AN:391:ARG:HA	46:AN:391:ARG:HD2	1.76	0.40
45:BA:68:LEU:HD13	45:BA:93:ILE:HB	2.03	0.40
45:BC:210:TYR:HE1	45:BC:227:LEU:HD11	1.86	0.40
45:BC:241:SER:OG	45:BC:250:VAL:O	2.29	0.40
46:BF:117:LEU:HD23	46:BF:117:LEU:HA	1.86	0.40
46:BF:190:HIS:ND1	46:BF:411:ALA:HA	2.37	0.40
45:BI:317:MET:HA	45:BI:377:MET:HA	2.04	0.40
46:BJ:202:ILE:HD11	46:BJ:268:ILE:HD11	2.04	0.40
46:BN:289:LEU:HD11	46:BN:363:MET:HB3	2.02	0.40
46:CB:386:THR:HG1	46:CB:390:ARG:HH11	1.66	0.40
45:CE:98:ASP:OD1	45:CE:99:ALA:N	2.54	0.40
45:CG:255:PHE:HA	45:CG:259:LEU:HD13	2.03	0.40
46:CH:322:SER:HB3	46:CH:325:GLU:OE1	2.21	0.40
46:CH:379:LYS:HE2	46:CH:379:LYS:HB2	1.89	0.40
46:CL:362:LYS:HD3	46:CL:362:LYS:HA	1.83	0.40
45:CM:196:GLU:HG2	45:CM:197:HIS:ND1	2.37	0.40
46:CN:414:ASN:O	46:CN:418:LEU:N	2.44	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DA:20:CYS:HA	45:DA:232:ALA:HB1	2.03	0.40
45:DC:68:LEU:HD22	45:DC:153:LEU:HD11	2.03	0.40
46:DD:135:ILE:O	46:DD:167:PHE:N	2.52	0.40
45:DE:145:THR:O	45:DE:149:LEU:HB2	2.21	0.40
46:DH:247:ASN:HD21	45:DI:73:THR:HG21	1.86	0.40
46:DJ:108:GLU:O	46:DJ:111:GLU:HG3	2.20	0.40
45:DK:26:LEU:HD11	45:DK:364:PRO:HD2	2.02	0.40
45:DM:147:SER:HB2	45:DM:190:SER:OG	2.20	0.40
45:DM:246:GLY:HA2	45:DM:357:TYR:CD2	2.56	0.40
45:DM:254:GLU:OE2	46:DN:98:GLY:HA2	2.21	0.40
46:DN:4:ILE:HG22	46:DN:132:GLY:H	1.86	0.40
46:EB:405:GLU:HA	46:EB:408:PHE:CD2	2.56	0.40
45:EC:141:VAL:HG12	45:EC:187:SER:HA	2.03	0.40
45:EC:143:GLY:HA3	47:EC:501:GTP:O2B	2.21	0.40
45:EG:62:VAL:HG21	45:FE:283:HIS:O	2.21	0.40
45:EG:261:PRO:HG2	45:EG:313:MET:SD	2.61	0.40
46:EH:58:ARG:CZ	46:FH:281:TYR:HE1	2.34	0.40
46:EJ:7:ILE:CG2	46:EJ:135:ILE:HG13	2.51	0.40
46:EJ:272:PRO:HA	46:EJ:292:GLN:OE1	2.21	0.40
45:EK:102:ASN:OD1	45:EK:105:ARG:N	2.45	0.40
45:EK:370:LYS:HE3	45:EK:370:LYS:HB2	1.82	0.40
46:EN:28:HIS:CB	46:EN:30:ILE:HG12	2.51	0.40
46:EN:86:ARG:HG3	46:EN:88:ASP:OD1	2.21	0.40
46:EN:207:LEU:HB3	46:EN:225:LEU:HD11	2.03	0.40
45:FA:137:VAL:HG13	45:FA:168:GLY:HA2	2.03	0.40
45:FA:238:LEU:HD11	45:FA:255:PHE:HE2	1.86	0.40
45:FA:395:PHE:HE2	45:FA:422:ARG:HD3	1.86	0.40
46:FH:334:GLN:NE2	46:FH:347:ASN:HA	2.33	0.40
46:FJ:247:ASN:O	46:FJ:247:ASN:ND2	2.45	0.40
46:FJ:326:VAL:O	46:FJ:330:MET:HG2	2.21	0.40
45:FM:74:VAL:HA	45:FM:77:GLU:OE2	2.19	0.40
46:FN:378:PHE:HA	46:FN:381:VAL:HG22	2.02	0.40
45:GC:326:LYS:HD3	46:GF:220:PRO:HG2	2.03	0.40
46:GN:67:ASP:OD1	46:GN:69:GLU:N	2.54	0.40
46:GN:276:ARG:O	46:GN:279:GLN:HG3	2.22	0.40
45:HA:260:VAL:HG13	45:HA:265:ILE:O	2.21	0.40
46:HF:122:LYS:HE3	46:HF:122:LYS:HB2	1.74	0.40
46:HF:146:GLY:O	46:HF:149:THR:HG22	2.21	0.40
45:HG:98:ASP:OD1	45:HG:99:ALA:N	2.55	0.40
46:HN:19:LYS:HE3	46:HN:19:LYS:HB3	1.84	0.40
46:HN:167:PHE:CE2	46:HN:233:MET:HG2	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:HN:260:PHE:HB2	46:HN:263:LEU:HD13	2.02	0.40
45:IA:170:THR:HB	45:IA:172:TYR:CZ	2.56	0.40
46:ID:185:ALA:O	46:ID:189:VAL:HG12	2.22	0.40
46:IH:423:GLN:NE2	46:IH:427:ASP:OD2	2.54	0.40
45:II:340:THR:HG23	45:II:341:ILE:HG13	2.02	0.40
46:IJ:74:ASP:OD1	46:IJ:77:ARG:NH2	2.51	0.40
45:IK:397:LEU:HD23	45:IK:397:LEU:HA	1.97	0.40
46:IL:344:TRP:CE3	46:IL:345:ILE:HG23	2.57	0.40
46:IN:372:THR:HG21	46:IN:426:GLN:HB2	2.03	0.40
45:JA:420:GLU:HA	45:JA:423:GLU:HG3	2.03	0.40
45:JC:3:GLU:HG2	45:JC:64:ARG:CZ	2.51	0.40
45:JC:184:PRO:O	45:JC:188:ILE:HG12	2.22	0.40
45:JG:107:HIS:ND1	45:JG:107:HIS:O	2.53	0.40
45:JG:394:LYS:HG2	46:JH:346:PRO:HG3	2.02	0.40
45:JK:205:ASP:OD1	45:JK:303:ALA:HA	2.21	0.40
46:KF:40:SER:OG	46:KF:41:ASP:N	2.54	0.40
46:KF:418:LEU:HD12	46:KF:418:LEU:HA	1.92	0.40
45:KG:152:LEU:HD12	45:KG:152:LEU:HA	1.93	0.40
45:KG:288:VAL:HG11	45:KG:327:ASP:HB3	2.03	0.40
46:KJ:265:PHE:HB3	46:KJ:374:ILE:HD13	2.03	0.40
45:KK:88:HIS:ND1	45:KK:90:GLU:HG2	2.37	0.40
46:KL:60:VAL:HB	46:KL:86:ARG:CZ	2.51	0.40
46:KL:391:ARG:HA	46:KL:391:ARG:HD2	1.95	0.40
45:LA:188:ILE:HD11	45:LA:391:LEU:HG	2.04	0.40
45:LA:237:SER:HG	45:LA:272:TYR:HE1	1.69	0.40
45:LC:339:ARG:HA	45:LC:339:ARG:NH1	2.36	0.40
45:LE:328:VAL:O	45:LE:332:ILE:HG12	2.20	0.40
45:LG:71:GLU:OE2	46:LH:2:ARG:NH2	2.55	0.40
46:LN:69:GLU:HA	46:LN:70:PRO:HD3	1.88	0.40
46:MF:405:GLU:HA	46:MF:408:PHE:CD1	2.56	0.40
46:MH:221:THR:HG23	46:MH:223:GLY:H	1.86	0.40
46:MH:274:THR:HG22	46:MH:282:ARG:NH1	2.36	0.40
45:MK:26:LEU:HD23	45:MK:363:VAL:HG22	2.02	0.40
46:ML:238:CYS:SG	46:ML:239:CYS:N	2.94	0.40
46:NB:101:TRP:HB2	46:NB:184:ASN:HB3	2.02	0.40
46:NB:299:MET:HG3	46:NB:301:CYS:N	2.30	0.40
46:NH:105:HIS:CD2	46:NH:150:LEU:HB2	2.56	0.40
45:NK:116:ASP:OD1	45:NK:117:LEU:N	2.54	0.40
46:OB:19:LYS:O	46:OB:23:VAL:HG23	2.21	0.40
46:OB:325:GLU:HA	46:OB:328:GLU:OE2	2.20	0.40
45:OC:84:ARG:H	45:OC:84:ARG:HG2	1.65	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:OF:86:ARG:HG3	46:OF:88:ASP:H	1.86	0.40
45:OK:244:PHE:CE2	45:OK:358:GLN:HG2	2.57	0.40
45:OM:176:GLN:OE1	45:OM:176:GLN:N	2.54	0.40
46:ON:86:ARG:HB2	46:ON:89:ASN:OD1	2.20	0.40
46:PB:152:ILE:O	46:PB:156:ARG:HG2	2.21	0.40
46:PB:156:ARG:HH21	46:PB:160:PRO:HA	1.85	0.40
46:PB:238:CYS:SG	46:PB:239:CYS:N	2.94	0.40
45:PE:97:GLU:OE1	45:PE:97:GLU:HA	2.20	0.40
46:PH:275:SER:OG	46:PH:278:SER:HB3	2.21	0.40
45:QA:404:PHE:HA	45:QA:407:TRP:CZ3	2.57	0.40
46:QB:156:ARG:NH1	46:QB:159:TYR:O	2.54	0.40
46:QB:217:LEU:HD23	46:QB:219:THR:H	1.86	0.40
46:QB:336:LYS:HD2	46:QB:336:LYS:HA	1.82	0.40
45:QC:21:TRP:CH2	45:QC:63:PRO:HB3	2.57	0.40
46:QD:69:GLU:HA	46:QD:70:PRO:HD3	1.94	0.40
46:QD:178:THR:N	46:QD:181:GLU:OE2	2.53	0.40
46:QD:190:HIS:CE1	46:QD:414:ASN:HD22	2.39	0.40
45:QE:430:LYS:HE2	45:QE:430:LYS:HB3	1.67	0.40
45:QG:188:ILE:HG23	45:QG:425:LEU:HD11	2.02	0.40
46:QJ:254:ALA:O	46:QJ:258:ILE:HG12	2.20	0.40
45:QM:22:GLU:HG3	45:QM:83:TYR:OH	2.20	0.40
45:RA:280:LYS:O	45:RA:280:LYS:HD3	2.21	0.40
46:RB:151:LEU:O	46:RB:155:VAL:HG12	2.21	0.40
46:RD:296:ALA:HB1	46:RD:305:PRO:HD2	2.03	0.40
46:RF:258:ILE:HG13	45:RG:407:TRP:CZ2	2.56	0.40
45:RI:91:GLN:HG3	45:RI:92:LEU:HD12	2.03	0.40
46:RJ:46:ARG:HA	46:RJ:46:ARG:HD3	1.81	0.40
46:RJ:183:TYR:HD1	46:RJ:385:PHE:CE1	2.40	0.40
46:RL:285:THR:HB	46:RL:287:PRO:HD2	2.03	0.40
45:SA:174:SER:OG	45:SA:207:GLU:HB2	2.21	0.40
45:SA:223:THR:HG22	45:SA:226:ASN:OD1	2.21	0.40
46:SF:100:ASN:ND2	46:SF:103:LYS:HG3	2.35	0.40
45:SG:243:ARG:HG3	45:SG:244:PHE:CD2	2.56	0.40
46:SH:15:GLN:C	46:SH:226:ASN:HD21	2.24	0.40
45:SI:3:GLU:HA	45:SI:51:THR:HG23	2.03	0.40
46:SJ:374:ILE:O	46:SJ:377:MET:HG3	2.21	0.40
45:SM:9:VAL:HG21	45:SM:149:LEU:HB2	2.03	0.40
45:SM:90:GLU:HB2	45:SM:121:ARG:NH2	2.35	0.40
46:SN:276:ARG:HD3	46:SN:276:ARG:HA	1.87	0.40
46:TD:345:ILE:HG23	46:TD:348:ASN:HD22	1.86	0.40
46:TF:86:ARG:HH21	46:UF:282:ARG:NH2	2.19	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TG:103:PHE:H	45:TG:408:TYR:HE2	1.68	0.40
46:TH:175:VAL:HG23	46:TH:175:VAL:O	2.21	0.40
45:TI:245:ASP:OD1	45:TI:245:ASP:N	2.55	0.40
46:TJ:102:ALA:HB2	46:TJ:398:TYR:CD1	2.55	0.40
45:TK:317:MET:HB3	45:TK:377:MET:SD	2.61	0.40
46:TN:6:HIS:NE2	46:TN:8:GLN:OE1	2.46	0.40
46:UB:173:PRO:HG3	46:UB:380:ARG:HD3	2.03	0.40
46:UB:316:LEU:HB3	46:UB:366:THR:OG1	2.21	0.40
45:UC:311:LYS:O	45:UC:381:SER:HB2	2.21	0.40
45:UE:216:ASN:HB3	45:UE:275:ILE:O	2.21	0.40
45:UG:268:MET:SD	45:UG:268:MET:N	2.94	0.40
45:UI:88:HIS:O	45:UI:91:GLN:HG2	2.21	0.40
45:UI:186:ASN:OD1	45:UI:187:SER:N	2.54	0.40
46:UL:237:THR:HG23	46:UL:241:ARG:HE	1.86	0.40
46:UL:251:ARG:HD3	45:UM:105:ARG:HH12	1.85	0.40
45:UM:75:ILE:HG21	45:UM:94:SER:HB3	2.02	0.40
45:VE:93:ILE:H	45:VE:93:ILE:HD12	1.85	0.40
45:VE:422:ARG:HD2	45:VE:422:ARG:HA	1.78	0.40
45:VG:105:ARG:O	45:VG:110:ILE:HG22	2.21	0.40
45:VK:320:ARG:HB2	45:VK:358:GLN:O	2.21	0.40
46:VL:8:GLN:HG3	46:VL:14:ASN:ND2	2.35	0.40
45:VM:101:ASN:HA	45:VM:144:GLY:H	1.87	0.40
45:VM:246:GLY:HA3	45:VM:356:ASN:HA	2.03	0.40
45:WA:422:ARG:NH1	45:WA:426:ALA:HB2	2.36	0.40
46:WB:19:LYS:HA	46:WB:22:GLU:OE1	2.20	0.40
45:WC:222:PRO:O	46:WD:322:SER:HB2	2.21	0.40
46:WD:391:ARG:HA	46:WD:391:ARG:HD2	1.86	0.40
45:WE:166:LYS:HD2	45:WE:197:HIS:O	2.21	0.40
45:WE:325:PRO:HG3	45:WE:355:ILE:HD13	2.04	0.40
45:WG:149:LEU:HD23	45:WG:149:LEU:HA	1.86	0.40
46:WH:131:GLN:OE1	46:WH:250:LEU:HD12	2.21	0.40
46:WH:379:LYS:HZ2	46:WH:419:VAL:CG1	2.35	0.40
45:WM:174:SER:HB3	45:WM:207:GLU:HG2	2.03	0.40
3:1C:95:VAL:HG23	45:EM:364:PRO:HB2	2.02	0.40
8:1H:172:GLN:OE1	46:HJ:276:ARG:HG2	2.21	0.40
18:1I:11:TYR:OH	46:ID:47:ILE:HG23	2.20	0.40
12:1T:250:LEU:H	12:1T:250:LEU:HD23	1.86	0.40
15:1X:8:TYR:HB2	45:ME:357:TYR:CD1	2.56	0.40
1:2A:88:VAL:O	1:2A:88:VAL:HG12	2.22	0.40
16:2B:90:ARG:HG2	16:2B:175:ALA:HB2	2.03	0.40
16:2B:152:SER:H	16:2B:152:SER:HG	1.68	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:2C:144:LYS:HE2	27:2C:144:LYS:HB2	1.88	0.40
4:2D:27:ILE:HG12	4:2D:29:ILE:HG13	2.03	0.40
4:2D:44:TYR:HA	4:2D:45:ILE:HB	2.01	0.40
29:2G:86:GLU:O	29:2G:89:GLN:NE2	2.54	0.40
31:2I:37:LEU:HD23	31:2I:37:LEU:HA	1.92	0.40
31:2I:73:LYS:HE3	45:FE:132:LEU:CB	2.51	0.40
20:2K:205:ARG:HA	20:2K:208:LYS:HE3	2.03	0.40
9:2N:156:HIS:ND1	46:KB:26:ASP:OD2	2.54	0.40
23:2O:173:GLU:HG2	46:VL:362:LYS:HZ3	1.86	0.40
23:2O:240:LYS:HA	23:2O:240:LYS:HD3	1.93	0.40
23:2O:433:LEU:O	23:2O:437:LYS:HD3	2.21	0.40
11:2S:171:LEU:HD23	11:2S:207:VAL:HG11	2.03	0.40
12:2T:61:GLY:H	12:2T:144:GLY:C	2.24	0.40
12:2T:185:LEU:HD23	12:2T:187:ILE:HD11	2.03	0.40
13:2U:136:GLN:HG2	13:2U:136:GLN:O	2.20	0.40
14:2V:159:ARG:HA	14:2V:159:ARG:HH11	1.81	0.40
14:2V:192:GLU:O	14:2V:196:GLN:OE1	2.40	0.40
26:2W:210:GLN:NE2	26:2W:211:ASP:OD1	2.54	0.40
15:2X:140:PRO:HB2	15:2X:141:PHE:HD1	1.86	0.40
27:3C:217:ILE:HG12	27:3C:263:ILE:HG21	2.02	0.40
23:3O:343:ALA:HB2	46:UJ:359:LYS:HZ1	1.85	0.40
25:3R:265:SER:C	25:3R:267:ILE:H	2.24	0.40
25:3R:503:ASP:O	25:3R:506:THR:OG1	2.26	0.40
12:3T:230:SER:O	12:3T:234:ASN:ND2	2.54	0.40
14:3V:98:LEU:HD11	45:LA:405:VAL:HG23	2.03	0.40
15:3X:27:PHE:C	15:3X:29:GLY:H	2.24	0.40
33:4F:194:MET:CE	33:4F:214:ARG:HB3	2.51	0.40
34:4R:424:LEU:HD12	34:4R:446:PHE:HD2	1.85	0.40
35:4S:186:ILE:HG13	35:4S:187:LEU:HD22	2.03	0.40
36:5A:21:GLN:NE2	46:KB:413:SER:HB3	2.36	0.40
34:5R:381:PHE:CD2	46:DJ:32:PRO:HD2	2.56	0.40
34:5R:566:PHE:CE2	34:5R:585:ILE:HD12	2.56	0.40
42:8N:304:UNK:O	42:8N:308:UNK:N	2.53	0.40
44:8R:206:TYR:HE2	46:PH:276:ARG:HH21	1.68	0.40
46:AB:172:SER:HB2	46:AB:205:GLU:OE2	2.21	0.40
46:AD:32:PRO:HG3	46:AD:81:PHE:CZ	2.57	0.40
45:AK:346:TRP:O	46:AN:388:MET:HG2	2.22	0.40
46:BB:275:SER:O	46:BB:279:GLN:NE2	2.55	0.40
46:BH:322:SER:OG	46:BH:325:GLU:HG2	2.21	0.40
46:BJ:31:ASP:OD1	46:BJ:37:HIS:ND1	2.54	0.40
45:BK:153:LEU:HD23	45:BK:153:LEU:HA	1.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:139:LEU:HD11	46:BN:168:SER:HB3	2.04	0.40
45:CA:326:LYS:HE2	45:CA:326:LYS:H	1.86	0.40
46:CB:229:VAL:O	46:CB:233:MET:HG2	2.21	0.40
46:CB:282:ARG:NH2	46:CB:292:GLN:OE1	2.51	0.40
45:CC:71:GLU:HA	45:CC:72:PRO:HD3	1.88	0.40
45:CC:345:ASP:OD1	45:CC:346:TRP:N	2.55	0.40
45:CE:32:PRO:HB3	45:CE:83:TYR:CE1	2.56	0.40
45:CE:184:PRO:HB3	45:CE:394:LYS:HD2	2.03	0.40
45:CI:187:SER:O	45:CI:191:THR:HG23	2.21	0.40
45:CI:191:THR:OG1	45:CI:425:LEU:HD21	2.21	0.40
45:CK:104:ALA:HB2	45:CK:413:MET:HB2	2.03	0.40
45:CK:185:TYR:CE1	45:CK:398:MET:HB3	2.56	0.40
46:CL:399:THR:HA	46:CL:403:MET:O	2.21	0.40
45:CM:334:THR:O	45:CM:338:LYS:HG3	2.21	0.40
46:CN:145:SER:HB3	46:CN:188:SER:HB3	2.03	0.40
46:DB:345:ILE:O	46:DB:345:ILE:HG13	2.21	0.40
45:DC:55:GLU:OE2	45:DC:56:THR:N	2.54	0.40
45:DC:304:LYS:HA	45:DC:304:LYS:HD3	1.91	0.40
46:DH:132:GLY:HA3	46:DH:163:ILE:HG22	2.03	0.40
45:DI:203:MET:HG2	45:DI:384:ILE:HD11	2.03	0.40
46:DJ:62:ARG:HB2	46:DJ:123:GLU:OE2	2.21	0.40
46:DJ:68:LEU:HB3	46:DJ:96:GLY:HA2	2.03	0.40
46:DJ:116:VAL:HA	46:DJ:119:VAL:HG22	2.03	0.40
46:DJ:238:CYS:SG	46:DJ:239:CYS:N	2.94	0.40
45:DK:66:VAL:HG21	45:DK:122:ILE:HD11	2.03	0.40
46:DL:65:LEU:HD13	46:DL:90:PHE:CE1	2.56	0.40
46:DL:73:MET:SD	46:DL:92:PHE:HB3	2.61	0.40
46:DN:11:GLN:HA	46:DN:14:ASN:OD1	2.22	0.40
46:DN:27:GLU:CD	46:DN:241:ARG:HH21	2.24	0.40
45:EA:56:THR:HG21	45:EA:60:LYS:HG2	2.03	0.40
46:EB:415:MET:O	46:EB:419:VAL:HG23	2.21	0.40
45:EE:256:GLN:H	45:EE:256:GLN:CD	2.25	0.40
46:EF:293:MET:HE2	46:EF:367:PHE:HD1	1.86	0.40
46:EH:303:ALA:HA	46:EH:376:GLU:OE2	2.21	0.40
45:EI:109:THR:HB	45:EI:110:ILE:HD12	2.03	0.40
46:EJ:257:LEU:HD21	46:EJ:368:VAL:HG12	2.02	0.40
46:EN:229:VAL:O	46:EN:233:MET:HG3	2.21	0.40
46:FH:69:GLU:HG3	46:FH:71:GLY:H	1.87	0.40
46:FH:152:ILE:HG22	46:FH:195:ASN:HB2	2.03	0.40
46:FJ:222:TYR:O	46:FJ:226:ASN:ND2	2.33	0.40
45:FK:259:LEU:HB3	45:FK:268:MET:CE	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FK:276:ILE:HD12	45:FK:281:ALA:HA	2.02	0.40
45:FM:147:SER:HB2	45:FM:190:SER:HB3	2.02	0.40
45:FM:176:GLN:HE21	45:FM:177:VAL:HG23	1.86	0.40
45:FM:212:ILE:HD11	45:FM:300:ASN:HA	2.03	0.40
46:FN:332:ASN:HA	46:FN:335:ASN:HD22	1.86	0.40
45:GC:62:VAL:HA	45:GC:63:PRO:HD3	1.98	0.40
46:GD:36:TYR:CD1	46:GD:44:LEU:HD21	2.56	0.40
46:GD:105:HIS:CE1	46:GD:150:LEU:HD12	2.57	0.40
46:GH:87:PRO:HA	46:GH:90:PHE:HD2	1.84	0.40
46:GL:296:ALA:HB3	46:GL:306:ARG:HH21	1.86	0.40
45:HA:288:VAL:HG21	45:HA:327:ASP:CB	2.45	0.40
45:HA:338:LYS:NZ	45:HA:341:ILE:HD13	2.36	0.40
46:HD:86:ARG:HB3	46:HD:89:ASN:ND2	2.36	0.40
46:HF:210:ILE:HD11	46:HF:299:MET:O	2.22	0.40
45:HG:113:GLU:N	45:HG:113:GLU:OE1	2.55	0.40
46:HH:287:PRO:HG3	46:HH:329:GLN:NE2	2.35	0.40
46:HH:303:ALA:HB2	46:HH:377:MET:HG3	2.03	0.40
45:HI:21:TRP:CZ2	45:HI:65:ALA:HB2	2.55	0.40
45:HM:194:LEU:O	45:HM:198:THR:HG22	2.21	0.40
45:HM:208:ALA:O	45:HM:212:ILE:HG12	2.21	0.40
45:IA:244:PHE:HB2	45:IA:356:ASN:HD21	1.86	0.40
45:IA:324:VAL:HB	45:IA:327:ASP:OD1	2.22	0.40
46:IB:99:ASN:HA	46:IB:142:GLY:H	1.86	0.40
46:ID:117:LEU:HA	46:ID:120:VAL:HG12	2.04	0.40
46:ID:206:ALA:O	46:ID:210:ILE:HG13	2.22	0.40
45:IK:434:GLU:O	45:IK:437:ILE:HG12	2.21	0.40
45:JA:100:ALA:O	46:JB:255:VAL:HG11	2.21	0.40
45:JI:118:CYS:O	45:JI:122:ILE:HG12	2.21	0.40
46:JJ:64:ILE:HG21	46:JJ:116:VAL:HG23	2.03	0.40
46:JL:237:THR:HG22	46:JL:250:LEU:HD21	2.03	0.40
45:JM:219:ILE:HD12	45:JM:222:PRO:HB3	2.02	0.40
46:JN:67:ASP:O	46:JN:92:PHE:HA	2.21	0.40
46:JN:342:VAL:HG23	46:JN:345:ILE:HG22	2.03	0.40
46:KB:258:ILE:O	46:KB:258:ILE:HG13	2.20	0.40
46:KD:103:LYS:HE2	46:KD:103:LYS:HB3	1.89	0.40
45:KE:166:LYS:N	45:KE:199:ASP:OD2	2.49	0.40
45:KI:335:ILE:HD13	45:KI:335:ILE:HA	1.94	0.40
45:KK:69:ASP:OD1	45:KK:70:LEU:N	2.54	0.40
45:KK:141:VAL:HG21	45:KK:172:TYR:HE1	1.86	0.40
46:KL:73:MET:HE1	46:KL:91:VAL:O	2.22	0.40
45:LA:7:ILE:HB	45:LA:137:VAL:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:LA:225:THR:O	45:LA:229:ARG:HG3	2.21	0.40
46:LB:380:ARG:O	46:LB:383:GLU:HG2	2.20	0.40
45:LE:333:ALA:O	45:LE:337:THR:HG23	2.22	0.40
46:LH:386:THR:O	46:LH:390:ARG:HB2	2.21	0.40
46:LJ:156:ARG:HG3	46:LJ:195:ASN:HB3	2.04	0.40
45:MA:36:MET:HG3	45:MA:37:PRO:HD2	2.03	0.40
46:MB:65:LEU:HD13	46:MB:90:PHE:CE1	2.56	0.40
45:ME:221:ARG:HH11	45:ME:221:ARG:HG2	1.87	0.40
46:MH:325:GLU:O	46:MH:328:GLU:HG3	2.21	0.40
46:MJ:42:LEU:H	46:MJ:42:LEU:HD23	1.86	0.40
45:MM:422:ARG:NH1	45:MM:422:ARG:O	2.54	0.40
46:MN:105:HIS:CE1	46:MN:150:LEU:HD12	2.56	0.40
45:NA:60:LYS:HZ1	45:OA:283:HIS:CD2	2.38	0.40
46:ND:325:GLU:HA	46:ND:328:GLU:HG3	2.03	0.40
45:NG:115:VAL:O	45:NG:119:LEU:HD23	2.22	0.40
46:NH:2:ARG:HB2	46:NH:131:GLN:HG3	2.03	0.40
45:NK:220:GLU:OE2	45:NK:220:GLU:HA	2.21	0.40
45:NM:85:GLN:H	45:NM:85:GLN:HG3	1.71	0.40
46:NN:268:ILE:HG22	46:NN:368:VAL:HG22	2.03	0.40
45:OA:217:LEU:HB3	45:OA:219:ILE:HG23	2.04	0.40
45:OA:377:MET:HE2	45:OA:379:SER:HB3	2.03	0.40
45:OG:76:ASP:OD2	46:OH:46:ARG:NH2	2.43	0.40
45:OI:10:GLY:O	45:OI:14:ILE:HG12	2.20	0.40
46:PD:375:GLN:HE21	46:PD:423:GLN:HB3	1.86	0.40
46:PF:154:LYS:O	46:PF:157:GLU:HG2	2.21	0.40
46:PF:239:CYS:SG	46:PF:247:ASN:HA	2.61	0.40
45:PG:223:THR:HG22	45:PG:224:TYR:N	2.33	0.40
45:PK:133:GLN:NE2	45:PK:251:ASP:OD2	2.54	0.40
45:PK:260:VAL:HG23	46:PN:397:TRP:HH2	1.85	0.40
46:PN:384:GLN:O	46:PN:388:MET:HG2	2.21	0.40
45:QA:226:ASN:O	45:QA:230:LEU:HD23	2.21	0.40
46:QD:83:GLN:O	46:RD:281:TYR:OH	2.25	0.40
46:QD:174:LYS:HB2	46:QD:205:GLU:OE1	2.21	0.40
46:QF:68:LEU:HG	46:QF:143:THR:OG1	2.21	0.40
46:QJ:151:LEU:O	46:QJ:155:VAL:HG22	2.21	0.40
46:QJ:248:SER:HA	46:QJ:252:LYS:HD2	2.02	0.40
45:QK:244:PHE:CE2	45:QK:358:GLN:HG2	2.55	0.40
46:QL:334:GLN:HE21	46:QL:334:GLN:HB2	1.68	0.40
45:QM:75:ILE:H	45:QM:75:ILE:HD12	1.86	0.40
45:QM:93:ILE:H	45:QM:93:ILE:HD12	1.86	0.40
46:QN:173:PRO:HD2	46:QN:380:ARG:NH1	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:RA:188:ILE:HD12	45:RA:425:LEU:HD11	2.03	0.40
46:RB:50:TYR:OH	46:RB:237:THR:HG21	2.20	0.40
46:RB:375:GLN:HG2	46:RB:379:LYS:NZ	2.37	0.40
45:RC:64:ARG:NH1	45:RC:129:CYS:SG	2.95	0.40
46:RF:12:CYS:O	46:RF:16:ILE:HG12	2.21	0.40
45:RI:316:SER:O	45:RI:378:ILE:N	2.43	0.40
46:RJ:131:GLN:O	46:RJ:163:ILE:HG22	2.22	0.40
46:RN:40:SER:H	46:RN:43:GLN:NE2	2.19	0.40
45:SA:401:LYS:HB2	45:SA:401:LYS:HE3	1.74	0.40
45:SC:118:CYS:O	45:SC:122:ILE:HG12	2.21	0.40
46:SD:284:LEU:HD13	46:SD:362:LYS:HE2	2.02	0.40
46:SD:372:THR:O	46:SD:375:GLN:HG2	2.21	0.40
45:SE:88:HIS:CE1	45:SE:90:GLU:HG2	2.56	0.40
45:SI:383:ALA:O	45:SI:386:GLU:HG2	2.21	0.40
45:SM:280:LYS:HA	45:SM:283:HIS:CD2	2.47	0.40
45:TA:88:HIS:HB3	45:TA:91:GLN:HG2	2.02	0.40
46:TB:317:PHE:HB3	46:TB:321:MET:HE3	2.02	0.40
45:TC:221:ARG:HG3	45:TC:221:ARG:O	2.21	0.40
45:TC:326:LYS:HG3	45:TC:327:ASP:N	2.36	0.40
45:TC:399:TYR:O	45:TC:402:ARG:NH2	2.54	0.40
45:TE:312:TYR:HE2	45:TE:379:SER:HG	1.64	0.40
46:TF:143:THR:O	46:TF:147:MET:HB3	2.21	0.40
45:TK:288:VAL:HG11	45:TK:327:ASP:HB3	2.02	0.40
45:UA:88:HIS:NE2	45:UA:90:GLU:HG2	2.37	0.40
46:UD:68:LEU:HD12	46:UD:68:LEU:HA	1.90	0.40
45:UG:98:ASP:O	45:UG:105:ARG:NH1	2.55	0.40
45:UI:326:LYS:HD2	46:UJ:212:PHE:HZ	1.86	0.40
46:UJ:253:LEU:HD12	46:UJ:257:LEU:HD13	2.02	0.40
45:UM:135:PHE:HB2	45:UM:166:LYS:HG2	2.03	0.40
46:UN:77:ARG:NH1	46:UN:77:ARG:HB2	2.36	0.40
45:VA:372:MET:N	45:VA:372:MET:SD	2.94	0.40
45:VE:195:LEU:O	45:VE:266:HIS:NE2	2.47	0.40
45:VG:11:GLN:HE21	45:VG:15:GLN:NE2	2.19	0.40
45:VG:257:THR:HA	46:VJ:397:TRP:NE1	2.36	0.40
45:VG:426:ALA:HA	45:VG:429:GLU:HG2	2.03	0.40
46:VH:173:PRO:HD2	46:VH:174:LYS:HZ3	1.86	0.40
45:VI:223:THR:HG22	45:VI:224:TYR:N	2.36	0.40
46:VJ:130:LEU:HD12	46:VJ:130:LEU:HA	1.93	0.40
46:VJ:226:ASN:HD21	49:VJ:501:GDP:HN1	1.69	0.40
45:VK:10:GLY:O	45:VK:14:ILE:HG12	2.21	0.40
45:VK:132:LEU:O	45:VK:164:LYS:NZ	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:VM:141:VAL:HG22	45:VM:187:SER:HA	2.02	0.40
46:VN:262:ARG:HA	46:VN:262:ARG:HH11	1.83	0.40
45:WE:340:THR:HG23	45:WE:341:ILE:HG13	2.03	0.40
45:WI:66:VAL:HG11	45:WI:122:ILE:HD11	2.02	0.40
46:WL:361:LEU:HD23	46:WL:361:LEU:HA	1.93	0.40
45:WM:358:GLN:NE2	45:WM:359:PRO:O	2.53	0.40
45:WM:397:LEU:HD21	46:WN:344:TRP:HA	2.02	0.40
7:0G:157:VAL:HG22	26:2W:189:ARG:HH21	1.85	0.40
18:1I:169:GLN:HE21	46:KH:15:GLN:HB3	1.86	0.40
21:1L:285:ARG:NH2	46:BH:284:LEU:O	2.45	0.40
24:1P:119:ARG:HB3	23:3O:342:ARG:NE	2.36	0.40
13:1U:555:LYS:O	13:1U:574:HIS:HB3	2.21	0.40
26:1W:167:TYR:O	26:1W:171:ASN:ND2	2.55	0.40
15:1X:96:ARG:O	15:1X:99:VAL:HG12	2.21	0.40
27:2C:169:GLU:HA	27:2C:172:SER:HB3	2.03	0.40
28:2F:46:GLN:NE2	28:2F:48:ILE:HD11	2.36	0.40
20:2K:456:GLU:O	20:2K:460:LEU:HD23	2.21	0.40
22:2M:160:GLU:HB3	22:2M:216:LEU:HD11	2.03	0.40
9:2N:142:ILE:HG22	9:2N:144:ARG:HG2	2.02	0.40
23:2O:339:ARG:HA	23:2O:339:ARG:CZ	2.51	0.40
25:2R:101:ARG:HD3	25:2R:126:PHE:CE2	2.56	0.40
12:2T:97:ARG:NH2	45:MG:414:GLU:OE2	2.54	0.40
14:2V:229:ILE:HG13	14:2V:229:ILE:O	2.21	0.40
5:3E:175:ILE:HG13	5:3E:177:ASN:H	1.87	0.40
30:3H:201:ASN:HA	30:3H:205:GLN:HB3	2.03	0.40
10:3Q:51:GLY:HA3	10:3Q:57:ASN:ND2	2.35	0.40
25:3R:299:LEU:HA	46:CL:78:ALA:O	2.21	0.40
11:3S:111:LYS:NZ	46:MN:157:GLU:HG2	2.37	0.40
11:3S:127:ARG:HB3	11:3S:221:THR:HA	2.03	0.40
12:3T:116:PHE:HD1	12:3T:175:VAL:HG12	1.87	0.40
13:3U:11:ILE:O	13:3U:599:ILE:N	2.43	0.40
13:3U:54:HIS:CE1	13:3U:85:ILE:HD13	2.56	0.40
27:4C:43:ASP:O	27:4C:45:GLN:N	2.54	0.40
27:4C:250:THR:OG1	27:4C:252:ASP:OD1	2.32	0.40
34:4R:12:LEU:HB2	34:4R:15:HIS:ND1	2.36	0.40
34:4R:45:ILE:HG22	46:MF:276:ARG:HH21	1.87	0.40
15:4X:49:ILE:O	15:4X:53:ILE:HG12	2.22	0.40
37:5E:142:TYR:HE2	46:OD:276:ARG:HG2	1.87	0.40
37:5G:123:ARG:CA	45:OI:370:LYS:HE2	2.50	0.40
41:6H:174:MET:H	41:6H:174:MET:HG3	1.63	0.40
34:7R:117:THR:HG1	34:7R:119:TYR:HE1	1.68	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:AB:21:TRP:CZ3	46:AB:61:PRO:HB3	2.56	0.40
45:AC:256:GLN:HB3	46:AF:397:TRP:CZ2	2.56	0.40
46:AD:67:ASP:O	46:AD:92:PHE:HA	2.21	0.40
45:AE:210:TYR:CE1	45:AE:227:LEU:HD11	2.56	0.40
45:AG:150:GLY:O	45:AG:154:LEU:HD23	2.21	0.40
46:AJ:66:MET:HA	46:AJ:91:VAL:HG23	2.04	0.40
45:AK:223:THR:HG23	45:AK:225:THR:H	1.86	0.40
46:BB:345:ILE:HG22	46:BB:348:ASN:HB3	2.02	0.40
46:BD:3:GLU:HG3	46:BD:62:ARG:NH1	2.37	0.40
46:BF:101:TRP:HB3	46:BF:398:TYR:HE2	1.86	0.40
45:BI:279:GLU:N	45:BI:279:GLU:OE2	2.53	0.40
46:BL:192:LEU:HD12	46:BL:192:LEU:HA	1.95	0.40
45:CA:334:THR:HG22	45:CA:338:LYS:HZ2	1.86	0.40
46:CB:326:VAL:O	46:CB:330:MET:HG2	2.21	0.40
45:CC:35:GLN:HG3	45:CC:60:LYS:HB3	2.04	0.40
45:CG:287:SER:O	45:CG:291:ILE:HG23	2.22	0.40
46:CL:148:GLY:O	46:CL:152:ILE:HG12	2.22	0.40
46:CL:273:LEU:H	46:CL:292:GLN:NE2	2.12	0.40
46:DB:179:VAL:O	46:DB:182:PRO:HD2	2.21	0.40
45:DE:384:ILE:O	45:DE:387:VAL:HG22	2.21	0.40
45:DG:36:MET:HG3	45:DG:37:PRO:HD2	2.02	0.40
45:DG:287:SER:HB2	45:DG:290:GLU:OE1	2.21	0.40
46:DH:86:ARG:HG2	46:DH:88:ASP:H	1.86	0.40
46:DJ:318:ARG:HB3	46:DJ:357:PRO:HA	2.03	0.40
46:DL:193:VAL:HG21	46:DL:418:LEU:HD22	2.03	0.40
46:DL:409:THR:O	46:DL:412:GLU:HG2	2.21	0.40
45:DM:141:VAL:HG12	45:DM:187:SER:HA	2.02	0.40
45:DM:195:LEU:HD21	45:DM:424:ASP:OD2	2.21	0.40
46:DN:292:GLN:HA	46:DN:295:ASP:OD2	2.21	0.40
46:EB:69:GLU:HA	46:EB:70:PRO:HD3	1.87	0.40
45:EC:208:ALA:HB1	45:EC:301:MET:O	2.21	0.40
45:EC:363:VAL:HG13	45:EC:366:GLY:HA3	2.03	0.40
46:ED:173:PRO:CG	46:ED:380:ARG:HD3	2.52	0.40
45:EG:241:SER:OG	45:EG:250:VAL:O	2.28	0.40
46:EJ:99:ASN:HA	46:EJ:142:GLY:H	1.86	0.40
45:EM:52:PHE:CZ	45:EM:239:THR:HG21	2.55	0.40
46:EN:109:GLY:HA3	46:EN:147:MET:HG3	2.04	0.40
45:FA:105:ARG:HG2	45:FA:411:GLU:OE2	2.22	0.40
45:FA:221:ARG:NH2	46:FB:324:LYS:HB2	2.36	0.40
45:FC:205:ASP:OD1	45:FC:303:ALA:HA	2.21	0.40
45:FC:265:ILE:HD11	45:FC:435:VAL:HG21	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:FE:88:HIS:HA	45:GE:283:HIS:CE1	2.56	0.40
45:FG:188:ILE:HG22	45:FG:421:ALA:HB1	2.03	0.40
45:FG:269:LEU:HD21	45:FG:305:CYS:HB3	2.04	0.40
45:FI:434:GLU:O	45:FI:437:ILE:HG12	2.21	0.40
46:FJ:11:GLN:O	46:FJ:15:GLN:HG2	2.20	0.40
45:FK:419:SER:O	45:FK:422:ARG:N	2.51	0.40
45:FK:430:LYS:O	45:FK:433:GLU:HG3	2.21	0.40
46:FL:174:LYS:HD3	46:FL:174:LYS:C	2.41	0.40
46:FN:65:LEU:HD11	46:FN:85:PHE:CD2	2.56	0.40
45:GC:8:HIS:HB3	45:GC:14:ILE:HD13	2.02	0.40
46:GD:105:HIS:CD2	46:GD:150:LEU:HB2	2.56	0.40
45:GE:384:ILE:O	45:GE:387:VAL:HG22	2.22	0.40
46:GH:284:LEU:HD12	46:GH:284:LEU:HA	1.91	0.40
46:GL:161:ASP:OD1	46:GL:161:ASP:N	2.52	0.40
45:GM:31:GLN:NE2	45:GM:35:GLN:O	2.55	0.40
45:HE:223:THR:HG22	45:HE:224:TYR:N	2.37	0.40
45:HG:93:ILE:HD12	45:HG:117:LEU:HD22	2.04	0.40
46:HH:268:ILE:HG22	46:HH:368:VAL:HG22	2.02	0.40
46:HL:179:VAL:HG23	46:HL:180:VAL:HG13	2.03	0.40
45:IA:189:LEU:HD21	45:IA:418:PHE:HD1	1.86	0.40
46:IB:69:GLU:HA	46:IB:70:PRO:HD3	1.82	0.40
46:IB:173:PRO:HG2	46:IB:380:ARG:HD3	2.03	0.40
46:IB:200:MET:HG2	46:IB:266:PHE:HB2	2.03	0.40
45:IC:42:ILE:O	45:IC:42:ILE:HG13	2.20	0.40
45:IC:272:TYR:HD1	45:IC:376:CYS:HB2	1.86	0.40
46:ID:39:ASP:OD2	46:ID:40:SER:N	2.54	0.40
46:ID:123:GLU:HA	46:ID:123:GLU:OE2	2.21	0.40
45:IE:31:GLN:OE1	45:IE:37:PRO:HD3	2.21	0.40
46:IF:236:VAL:HG13	46:IF:237:THR:HG23	2.03	0.40
46:IH:121:ARG:NH2	46:IH:158:GLU:OE2	2.40	0.40
45:IK:51:THR:HG21	45:IK:243:ARG:HD3	2.03	0.40
46:IL:257:LEU:O	46:IL:259:PRO:HD3	2.22	0.40
45:IM:9:VAL:HG13	45:IM:139:ASN:HB3	2.04	0.40
45:IM:192:HIS:C	45:IM:192:HIS:ND1	2.72	0.40
45:IM:233:GLN:HA	45:IM:233:GLN:OE1	2.21	0.40
46:JD:274:THR:HG21	46:JD:279:GLN:HA	2.03	0.40
45:JE:296:PHE:CE2	45:JE:335:ILE:HG21	2.56	0.40
46:JF:30:ILE:HD11	46:JF:47:ILE:HD11	2.03	0.40
45:JG:41:THR:O	45:JG:44:GLY:N	2.55	0.40
45:JI:145:THR:HG22	47:JI:501:GTP:PG	2.62	0.40
45:JK:141:VAL:HG12	45:JK:171:ILE:O	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:JL:391:ARG:HA	46:JL:391:ARG:HD2	1.90	0.40
45:JM:172:TYR:HB2	45:JM:203:MET:CE	2.51	0.40
46:JN:372:THR:HA	46:JN:422:TYR:CE2	2.56	0.40
45:KA:215:ARG:NH1	45:KA:299:ALA:HB1	2.37	0.40
45:KA:223:THR:OG1	45:KA:224:TYR:N	2.55	0.40
46:KB:145:SER:HB2	46:KB:188:SER:OG	2.21	0.40
46:KF:391:ARG:HA	46:KF:391:ARG:HD2	1.93	0.40
45:KG:27:GLU:OE2	45:KG:243:ARG:NH1	2.50	0.40
46:KH:407:GLU:HA	46:KH:410:GLU:HG2	2.04	0.40
45:KI:194:LEU:O	45:KI:198:THR:HG22	2.21	0.40
45:KK:306:ASP:OD1	45:KK:308:ARG:HG2	2.22	0.40
45:KM:55:GLU:HG3	45:KM:57:GLY:H	1.86	0.40
45:LC:19:ALA:HA	45:LC:22:GLU:HG2	2.04	0.40
45:LC:223:THR:HG22	45:LC:224:TYR:N	2.36	0.40
45:LG:311:LYS:H	45:LG:382:THR:HB	1.86	0.40
45:LG:422:ARG:NH1	45:LG:426:ALA:HB2	2.36	0.40
45:LM:406:HIS:CD2	45:LM:407:TRP:CD1	3.10	0.40
45:MA:36:MET:CG	45:MA:37:PRO:HD2	2.51	0.40
45:MA:112:LYS:HE3	45:MA:112:LYS:HB3	1.82	0.40
45:MA:285:GLN:HG2	45:MA:287:SER:H	1.86	0.40
46:MF:289:LEU:HD12	46:MF:363:MET:HE3	2.04	0.40
45:MG:184:PRO:O	45:MG:188:ILE:HG12	2.21	0.40
46:MJ:73:MET:HE3	46:MJ:90:PHE:CD1	2.55	0.40
45:NA:405:VAL:HG23	45:NA:418:PHE:CE2	2.56	0.40
46:NB:116:VAL:HA	46:NB:119:VAL:HG12	2.04	0.40
46:NB:303:ALA:HB2	46:NB:377:MET:SD	2.61	0.40
46:ND:68:LEU:HD23	46:ND:143:THR:OG1	2.21	0.40
46:NH:418:LEU:O	46:NH:422:TYR:HB2	2.21	0.40
46:NN:31:ASP:HB2	46:NN:32:PRO:HD2	2.02	0.40
46:NN:134:GLN:HA	46:NN:165:GLU:O	2.21	0.40
46:NN:297:LYS:O	46:NN:297:LYS:HG2	2.22	0.40
46:NN:309:ARG:H	46:NN:372:THR:HG1	1.68	0.40
46:NN:316:LEU:HD23	46:NN:352:SER:HB3	2.03	0.40
45:OC:209:ILE:HB	45:OC:227:LEU:HD23	2.03	0.40
45:OC:306:ASP:OD2	45:OC:309:HIS:ND1	2.55	0.40
46:OD:399:THR:HA	46:OD:403:MET:O	2.21	0.40
45:OE:430:LYS:HD2	45:OE:430:LYS:HA	1.80	0.40
45:OG:312:TYR:CE2	45:OG:341:ILE:HG23	2.56	0.40
46:OH:101:TRP:HB3	46:OH:398:TYR:HE1	1.85	0.40
46:OH:152:ILE:HD12	46:OH:164:MET:CE	2.51	0.40
46:OL:163:ILE:HG13	46:OL:164:MET:H	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:OM:141:VAL:HG12	45:OM:171:ILE:O	2.21	0.40
46:ON:272:PRO:HB3	46:ON:289:LEU:HD21	2.02	0.40
45:PA:67:PHE:HB2	45:PA:92:LEU:HD23	2.03	0.40
46:PD:325:GLU:HA	46:PD:328:GLU:HB3	2.02	0.40
45:PE:22:GLU:O	45:PE:26:LEU:HD23	2.22	0.40
46:PH:203:ASP:OD2	46:PH:377:MET:HE1	2.22	0.40
46:PN:175:VAL:O	46:PN:175:VAL:HG23	2.20	0.40
45:QA:268:MET:HB2	45:QA:379:SER:O	2.22	0.40
45:QC:384:ILE:O	45:QC:387:VAL:HG22	2.21	0.40
46:QD:292:GLN:HG2	46:QD:298:ASN:HD22	1.87	0.40
45:QE:52:PHE:HZ	45:QE:239:THR:HG21	1.86	0.40
46:QH:6:HIS:HE1	46:QH:8:GLN:HB3	1.86	0.40
45:QI:123:ARG:HE	45:RI:338:LYS:NZ	2.20	0.40
46:QJ:110:ALA:O	46:QJ:113:ILE:HG22	2.21	0.40
45:QK:311:LYS:HD2	45:QK:343:PHE:C	2.42	0.40
45:RA:53:PHE:HE1	45:RA:63:PRO:HG3	1.86	0.40
45:RA:280:LYS:HA	45:RA:283:HIS:CD2	2.56	0.40
45:RA:288:VAL:HA	45:RA:291:ILE:HG12	2.02	0.40
46:RB:309:ARG:NE	46:RB:426:GLN:O	2.54	0.40
45:RC:88:HIS:NE2	45:SC:284:GLU:OE1	2.50	0.40
46:RD:274:THR:HB	46:RD:282:ARG:NH1	2.34	0.40
46:RD:383:GLU:HA	46:RD:386:THR:HG22	2.03	0.40
46:RF:50:TYR:O	46:RF:62:ARG:HG2	2.22	0.40
46:RJ:6:HIS:CE1	46:RJ:233:MET:HE1	2.56	0.40
46:RN:101:TRP:CE3	46:RN:187:LEU:HD13	2.56	0.40
46:SB:113:ILE:HD13	46:SB:150:LEU:HD22	2.04	0.40
46:SD:201:VAL:HG12	46:SD:266:PHE:O	2.21	0.40
46:SD:330:MET:SD	46:SD:349:ILE:HG21	2.62	0.40
45:SE:141:VAL:HG12	45:SE:171:ILE:O	2.21	0.40
45:SE:184:PRO:O	45:SE:188:ILE:HG12	2.22	0.40
45:SE:339:ARG:NE	45:SE:339:ARG:HA	2.35	0.40
46:SF:8:GLN:OE1	46:SF:17:GLY:HA3	2.21	0.40
46:SF:121:ARG:NH2	46:SF:158:GLU:OE2	2.45	0.40
46:SF:253:LEU:HD13	46:SF:350:LYS:HE2	2.04	0.40
46:SH:276:ARG:HA	46:SH:276:ARG:HD3	1.86	0.40
46:SJ:86:ARG:HH12	46:TJ:281:TYR:HB3	1.86	0.40
45:SK:238:LEU:HD11	45:SK:255:PHE:HE2	1.86	0.40
46:SL:47:ILE:HG22	46:SL:51:TYR:HB2	2.03	0.40
45:SM:60:LYS:HZ3	45:TM:283:HIS:HA	1.85	0.40
46:SN:73:MET:HA	46:SN:76:VAL:HG12	2.03	0.40
45:TA:97:GLU:HG2	45:TA:105:ARG:HH22	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:TA:155:GLU:HG2	45:TA:197:HIS:CD2	2.56	0.40
46:TB:26:ASP:O	46:TB:359:LYS:NZ	2.54	0.40
46:TF:226:ASN:HD21	49:TF:501:GDP:HN1	1.68	0.40
46:TH:148:GLY:O	46:TH:152:ILE:HG12	2.21	0.40
45:TK:31:GLN:HG2	45:TK:37:PRO:HD3	2.04	0.40
45:TK:68:LEU:HD11	45:TK:118:CYS:HB2	2.04	0.40
45:TK:141:VAL:HG22	45:TK:187:SER:HA	2.03	0.40
46:TL:86:ARG:HH21	46:UL:282:ARG:NH1	2.20	0.40
45:TM:258:ASN:HB3	45:TM:352:LYS:CE	2.41	0.40
45:UA:82:THR:HG23	45:UA:83:TYR:CD1	2.56	0.40
46:UB:46:ARG:HH21	45:UC:73:THR:HA	1.86	0.40
45:UG:10:GLY:O	45:UG:14:ILE:HG12	2.21	0.40
46:UL:105:HIS:CD2	46:UL:150:LEU:HB2	2.56	0.40
45:UM:97:GLU:HG2	45:UM:105:ARG:NH2	2.36	0.40
45:UM:115:VAL:HG11	45:UM:152:LEU:HD23	2.02	0.40
45:VA:320:ARG:HB2	45:VA:358:GLN:O	2.22	0.40
45:VC:119:LEU:HA	45:VC:119:LEU:HD23	1.89	0.40
45:VC:206:ASN:ND2	47:VC:501:GTP:O2'	2.54	0.40
46:VD:278:SER:HA	46:VD:281:TYR:HD1	1.85	0.40
46:VF:67:ASP:OD2	46:VF:69:GLU:HG2	2.21	0.40
45:VG:111:GLY:O	45:VG:115:VAL:HG23	2.20	0.40
46:VH:238:CYS:SG	46:VH:239:CYS:N	2.95	0.40
45:VI:102:ASN:ND2	45:VI:105:ARG:HG3	2.37	0.40
45:VI:328:VAL:O	45:VI:332:ILE:HG12	2.22	0.40
45:VK:221:ARG:NH2	46:VL:325:GLU:H	2.13	0.40
45:VK:387:VAL:O	45:VK:391:LEU:HD23	2.22	0.40
46:VL:55:THR:HG23	46:WL:283:ALA:HA	2.03	0.40
45:WA:221:ARG:NH2	46:WB:322:SER:HG	2.18	0.40
46:WB:41:ASP:N	46:WB:41:ASP:OD1	2.54	0.40
45:WC:21:TRP:CZ2	45:WC:65:ALA:HB2	2.57	0.40
46:WD:404:ASP:OD1	46:WD:404:ASP:N	2.55	0.40
45:WE:21:TRP:CZ2	45:WE:65:ALA:HB2	2.57	0.40
45:WE:433:GLU:O	45:WE:437:ILE:HG23	2.22	0.40
45:WK:422:ARG:HD2	45:WK:422:ARG:HA	1.93	0.40
1:1A:102:TYR:CZ	46:MF:80:PRO:HG3	2.56	0.40
13:1U:543:LYS:H	13:1U:587:GLN:HE22	1.69	0.40
26:1W:103:LYS:NZ	26:1W:107:GLU:OE2	2.55	0.40
1:2A:130:SER:O	1:2A:132:ASP:N	2.48	0.40
1:2A:152:LYS:O	34:5R:82:GLN:NE2	2.54	0.40
16:2B:238:TYR:O	45:JK:84:ARG:HD2	2.22	0.40
16:2B:265:ASP:N	16:2B:265:ASP:OD1	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:2E:83:GLU:O	5:2E:87:VAL:HG12	2.21	0.40
21:2L:849:PRO:HB2	21:2L:851:GLU:OE1	2.21	0.40
22:2M:180:LEU:HA	22:2M:183:ARG:NH1	2.37	0.40
22:2M:273:ASP:HA	22:2M:299:THR:HG23	2.04	0.40
9:2N:164:LYS:HA	46:KB:276:ARG:NH2	2.36	0.40
24:2P:375:ALA:O	24:2P:379:LYS:HG2	2.22	0.40
24:2P:388:THR:HG22	24:2P:391:ARG:NH2	2.37	0.40
11:2S:21:VAL:O	11:2S:21:VAL:HG23	2.22	0.40
14:2V:178:GLU:O	14:2V:181:MET:HG3	2.22	0.40
1:3A:139:GLN:OE1	1:3A:139:GLN:HA	2.22	0.40
16:3B:95:GLU:HG3	16:3B:201:TYR:CE2	2.57	0.40
5:3E:13:ARG:NE	5:3E:89:ARG:HG3	2.37	0.40
23:3O:288:LYS:NZ	23:3O:292:TYR:HE2	2.19	0.40
25:3R:471:ASN:N	25:3R:477:GLU:O	2.52	0.40
13:3U:170:VAL:O	13:3U:187:VAL:HG12	2.22	0.40
13:3U:390:LEU:HD23	13:3U:395:LYS:HG3	2.03	0.40
30:4H:201:ASN:HA	30:4H:205:GLN:HB2	2.04	0.40
15:4X:78:ASN:CG	46:LJ:279:GLN:HE21	2.22	0.40
37:5G:126:LEU:HD13	45:OI:285:GLN:HE21	1.87	0.40
10:5Q:15:TYR:CE2	10:5Q:17:ILE:HB	2.56	0.40
34:5R:414:ASN:O	34:5R:418:THR:HG22	2.22	0.40
40:6G:169:GLN:HE21	46:VH:213:ARG:HH22	1.68	0.40
40:6G:268:VAL:HG22	40:6G:269:GLY:N	2.37	0.40
41:6H:319:MET:SD	41:6H:319:MET:N	2.94	0.40
45:AC:109:THR:HG22	45:AC:110:ILE:HG23	2.03	0.40
46:AF:11:GLN:O	46:AF:15:GLN:HG2	2.21	0.40
45:AI:205:ASP:OD1	45:AI:303:ALA:HA	2.20	0.40
45:AI:284:GLU:CD	45:MI:88:HIS:HE2	2.23	0.40
46:AJ:87:PRO:HA	46:AJ:90:PHE:CD2	2.53	0.40
46:AJ:282:ARG:HE	46:AJ:282:ARG:HB3	1.61	0.40
46:AJ:309:ARG:NH1	46:AJ:426:GLN:O	2.54	0.40
45:AM:231:ILE:O	45:AM:235:ILE:HG12	2.21	0.40
46:AN:1:MET:HA	46:AN:1:MET:HE3	2.03	0.40
46:AN:287:PRO:HG3	46:AN:329:GLN:NE2	2.37	0.40
46:AN:288:GLU:O	46:AN:291:GLN:HG3	2.22	0.40
45:BA:387:VAL:O	45:BA:391:LEU:HD23	2.21	0.40
46:BB:326:VAL:O	46:BB:330:MET:HG2	2.20	0.40
45:BC:164:LYS:HD3	45:BC:164:LYS:HA	1.84	0.40
45:BC:221:ARG:NH1	46:BD:322:SER:OG	2.50	0.40
46:BD:158:GLU:HG2	46:BD:159:TYR:CD1	2.56	0.40
46:BF:117:LEU:HD11	46:BF:154:LYS:HB3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BG:101:ASN:OD1	46:BH:252:LYS:HE3	2.22	0.40
46:BJ:55:THR:HG23	46:CH:283:ALA:HA	2.03	0.40
45:BM:322:ASP:OD1	45:BM:322:ASP:N	2.54	0.40
46:BN:69:GLU:HG3	46:BN:71:GLY:H	1.86	0.40
45:CA:335:ILE:HA	45:CA:338:LYS:HG2	2.03	0.40
45:CA:349:THR:O	46:CB:179:VAL:HG23	2.20	0.40
45:CC:210:TYR:CE1	45:CC:227:LEU:HD11	2.56	0.40
45:CE:205:ASP:OD1	45:CE:303:ALA:HA	2.20	0.40
46:CF:372:THR:HA	46:CF:422:TYR:HE2	1.85	0.40
45:CI:93:ILE:HD11	45:CI:121:ARG:HG3	2.03	0.40
46:CL:16:ILE:HD13	46:CL:226:ASN:OD1	2.22	0.40
45:CM:21:TRP:CZ2	45:CM:65:ALA:HB2	2.56	0.40
46:CN:91:VAL:HG21	46:CN:115:SER:OG	2.22	0.40
46:DD:341:PHE:HD1	46:DD:348:ASN:HD21	1.70	0.40
45:DK:356:ASN:HD22	45:DK:356:ASN:HA	1.67	0.40
46:DN:287:PRO:HA	46:DN:290:THR:HG22	2.03	0.40
45:EA:289:ALA:O	45:EA:292:THR:HG22	2.22	0.40
45:EA:352:LYS:HD2	46:EB:177:ASP:O	2.22	0.40
45:EC:170:THR:HG1	45:EC:172:TYR:HE2	1.68	0.40
46:ED:12:CYS:SG	46:ED:138:SER:HB2	2.61	0.40
45:EE:70:LEU:HD12	45:EE:145:THR:HB	2.02	0.40
45:EG:107:HIS:O	45:EG:107:HIS:ND1	2.55	0.40
46:EH:69:GLU:HA	46:EH:70:PRO:HD3	1.91	0.40
46:EH:334:GLN:HE22	46:EH:348:ASN:N	2.17	0.40
46:EJ:238:CYS:HB2	46:EJ:318:ARG:NH2	2.33	0.40
46:EL:391:ARG:HA	46:EL:391:ARG:HD2	1.95	0.40
45:EM:265:ILE:O	45:EM:265:ILE:HG13	2.21	0.40
46:EN:86:ARG:NE	46:FN:281:TYR:HB3	2.36	0.40
45:FA:221:ARG:NH1	46:FB:324:LYS:HB2	2.36	0.40
46:FD:201:VAL:HG23	46:FD:301:CYS:SG	2.62	0.40
46:FF:201:VAL:HG23	46:FF:301:CYS:SG	2.62	0.40
46:FH:247:ASN:OD1	46:FH:247:ASN:N	2.54	0.40
45:FM:226:ASN:HA	45:FM:229:ARG:HE	1.85	0.40
46:FN:113:ILE:HA	46:FN:116:VAL:HG22	2.02	0.40
46:FN:179:VAL:HG23	46:FN:180:VAL:HG13	2.02	0.40
46:FN:331:LEU:O	46:FN:334:GLN:HG3	2.20	0.40
46:GB:212:PHE:HE1	46:GB:220:PRO:HG2	1.85	0.40
46:GB:294:PHE:CD2	46:GB:333:VAL:HG21	2.55	0.40
45:GC:121:ARG:NH1	45:GC:124:LYS:HD2	2.36	0.40
45:GE:22:GLU:HG3	45:GE:83:TYR:OH	2.21	0.40
45:GG:288:VAL:HA	45:GG:291:ILE:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:GH:201:VAL:HG23	46:GH:301:CYS:SG	2.60	0.40
45:GI:2:ARG:H	45:GI:2:ARG:HD3	1.87	0.40
45:GM:89:PRO:HD2	45:HM:280:LYS:NZ	2.32	0.40
45:HA:328:VAL:O	45:HA:332:ILE:HG12	2.22	0.40
46:HD:69:GLU:CD	46:HD:71:GLY:H	2.24	0.40
46:HD:175:VAL:O	46:HD:175:VAL:HG23	2.21	0.40
45:HE:391:LEU:HD23	45:HE:391:LEU:HA	1.94	0.40
45:HG:195:LEU:O	45:HG:266:HIS:NE2	2.47	0.40
46:HH:3:GLU:OE1	46:HH:3:GLU:N	2.53	0.40
46:HJ:69:GLU:HA	46:HJ:70:PRO:HD3	1.94	0.40
45:HM:320:ARG:HD3	45:HM:360:PRO:HG3	2.02	0.40
45:HM:397:LEU:HD23	46:HN:346:PRO:HG3	2.02	0.40
45:IA:107:HIS:O	45:IA:107:HIS:ND1	2.54	0.40
46:IB:97:ALA:HA	46:IB:103:LYS:HE3	2.03	0.40
46:IB:268:ILE:HG13	46:IB:300:MET:CG	2.51	0.40
45:IC:39:ASP:OD1	45:IC:40:ARG:N	2.55	0.40
45:IC:402:ARG:HD2	45:IC:402:ARG:HA	1.92	0.40
46:ID:359:LYS:HE3	46:ID:359:LYS:HB3	1.78	0.40
45:IE:439:THR:HB	46:IH:391:ARG:HH11	1.86	0.40
46:IF:47:ILE:HG12	46:IF:51:TYR:HB2	2.04	0.40
46:IH:201:VAL:HG23	46:IH:301:CYS:SG	2.62	0.40
45:IK:172:TYR:CD1	45:IK:173:PRO:HD2	2.53	0.40
45:IK:220:GLU:CD	45:IK:220:GLU:H	2.24	0.40
46:IL:239:CYS:SG	46:IL:247:ASN:HA	2.61	0.40
46:JB:11:GLN:O	46:JB:15:GLN:HG2	2.21	0.40
46:JD:139:LEU:CD1	46:JD:168:SER:HB3	2.51	0.40
45:JI:62:VAL:HA	45:JI:63:PRO:HD3	1.95	0.40
46:JJ:4:ILE:HG22	46:JJ:131:GLN:HB3	2.04	0.40
46:JJ:67:ASP:O	46:JJ:92:PHE:HA	2.22	0.40
45:KC:17:GLY:HA2	45:KC:20:CYS:SG	2.62	0.40
45:KC:71:GLU:HA	45:KC:72:PRO:HD3	1.96	0.40
45:KC:84:ARG:HG3	45:KC:85:GLN:HG2	2.03	0.40
45:KG:71:GLU:HA	45:KG:72:PRO:HD3	1.89	0.40
45:KG:109:THR:HG22	45:KG:110:ILE:HG23	2.03	0.40
46:KH:16:ILE:HD13	46:KH:226:ASN:OD1	2.22	0.40
45:KI:256:GLN:O	45:KI:260:VAL:HG22	2.21	0.40
46:KJ:201:VAL:HG21	46:KJ:374:ILE:HD11	2.04	0.40
46:KJ:253:LEU:HD21	46:KJ:316:LEU:HD11	2.04	0.40
46:KJ:380:ARG:O	46:KJ:383:GLU:HG3	2.21	0.40
46:LL:39:ASP:OD1	46:LL:39:ASP:N	2.53	0.40
45:LM:370:LYS:HA	45:LM:370:LYS:HD3	1.93	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:LN:153:SER:O	46:LN:157:GLU:OE1	2.38	0.40
46:LN:286:VAL:N	46:LN:287:PRO:HD2	2.37	0.40
45:MC:272:TYR:HD1	45:MC:275:ILE:HD11	1.87	0.40
45:MI:102:ASN:ND2	45:MI:411:GLU:HG3	2.36	0.40
46:MJ:276:ARG:HG3	46:MJ:277:GLY:N	2.37	0.40
46:ML:31:ASP:HB2	46:ML:32:PRO:HD2	2.02	0.40
46:ML:134:GLN:HA	46:ML:165:GLU:O	2.22	0.40
45:MM:31:GLN:HG3	45:MM:37:PRO:HA	2.03	0.40
45:MM:66:VAL:HG11	45:MM:122:ILE:HD11	2.03	0.40
46:MN:172:SER:OG	46:MN:175:VAL:O	2.38	0.40
46:NB:21:TRP:CZ3	46:NB:61:PRO:HB3	2.57	0.40
46:NB:114:ASP:HA	46:NB:117:LEU:HD12	2.04	0.40
46:ND:58:ARG:NH1	46:OD:281:TYR:HE1	2.19	0.40
46:ND:270:PHE:HD2	46:ND:273:LEU:HD21	1.87	0.40
46:NH:58:ARG:HH22	46:OH:280:GLN:HG3	1.85	0.40
46:NJ:67:ASP:O	46:NJ:92:PHE:HA	2.22	0.40
46:NJ:87:PRO:HA	46:NJ:90:PHE:CD2	2.57	0.40
46:NJ:324:LYS:O	46:NJ:327:ASP:N	2.50	0.40
46:NL:228:LEU:HD23	46:NL:228:LEU:HA	1.95	0.40
45:NM:31:GLN:HB2	45:NM:32:PRO:HD2	2.02	0.40
45:OC:70:LEU:HA	45:OC:95:GLY:HA3	2.02	0.40
45:OG:217:LEU:HD23	45:OG:217:LEU:HA	1.88	0.40
45:OI:80:THR:O	45:OI:84:ARG:NH2	2.54	0.40
45:OK:21:TRP:CZ2	45:OK:65:ALA:HB2	2.57	0.40
45:OK:224:TYR:CE2	46:OL:323:THR:HG21	2.56	0.40
45:OK:254:GLU:OE1	46:ON:99:ASN:HB2	2.21	0.40
46:OL:117:LEU:HA	46:OL:120:VAL:HG12	2.04	0.40
45:OM:141:VAL:HG12	45:OM:172:TYR:HA	2.03	0.40
45:OM:184:PRO:O	45:OM:188:ILE:HG12	2.21	0.40
45:PA:2:ARG:HH21	45:PA:131:GLY:HA3	1.86	0.40
46:PB:69:GLU:HA	46:PB:70:PRO:HD3	1.84	0.40
46:PB:113:ILE:HA	46:PB:116:VAL:HG12	2.04	0.40
45:PC:17:GLY:HA2	45:PC:20:CYS:SG	2.61	0.40
45:PE:21:TRP:CZ3	45:PE:63:PRO:HB3	2.56	0.40
45:PE:143:GLY:HA3	47:PE:501:GTP:O2B	2.22	0.40
45:PE:328:VAL:O	45:PE:332:ILE:HG12	2.22	0.40
46:PH:310:TYR:CD1	46:PH:371:SER:HB2	2.57	0.40
46:PJ:3:GLU:CD	46:PJ:3:GLU:H	2.24	0.40
46:PJ:47:ILE:HD13	46:PJ:59:TYR:CE2	2.57	0.40
46:PL:238:CYS:SG	46:PL:239:CYS:N	2.94	0.40
45:PM:224:TYR:HD1	45:PM:227:LEU:HD12	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:PN:253:LEU:H	46:PN:253:LEU:HD12	1.86	0.40
45:QC:313:MET:HB3	45:QC:313:MET:HE2	1.89	0.40
46:QD:359:LYS:HD3	46:QD:359:LYS:HA	1.82	0.40
45:QE:339:ARG:NH1	45:QE:340:THR:HB	2.36	0.40
45:QK:167:LEU:HG	45:QK:200:VAL:HB	2.03	0.40
45:QK:188:ILE:HG22	45:QK:421:ALA:HB1	2.03	0.40
47:QK:501:GTP:H8	47:QK:501:GTP:O2A	2.05	0.40
46:QL:68:LEU:HB3	46:QL:96:GLY:HA2	2.03	0.40
45:QM:288:VAL:HA	45:QM:291:ILE:HG22	2.03	0.40
45:RA:215:ARG:CZ	45:RA:299:ALA:HB1	2.51	0.40
46:RB:187:LEU:HD21	46:RB:408:PHE:CD1	2.55	0.40
45:RC:206:ASN:OD1	47:RC:501:GTP:N2	2.54	0.40
45:RC:253:THR:HA	45:RC:256:GLN:NE2	2.37	0.40
46:RD:394:PHE:HA	46:RD:397:TRP:HD1	1.80	0.40
46:RF:101:TRP:HB2	46:RF:184:ASN:HB3	2.03	0.40
45:RG:27:GLU:CD	45:RG:243:ARG:HH12	2.25	0.40
45:RG:168:GLY:N	45:RG:200:VAL:O	2.38	0.40
46:RH:165:GLU:HG2	46:RH:198:GLU:OE1	2.21	0.40
45:RI:248:LEU:O	45:RI:355:ILE:N	2.43	0.40
45:RI:304:LYS:HA	45:RI:304:LYS:HD3	1.89	0.40
46:RJ:336:LYS:HD2	46:RJ:337:ASN:OD1	2.22	0.40
46:RJ:391:ARG:HD2	46:RJ:391:ARG:HA	1.89	0.40
45:SA:147:SER:HB2	45:SA:190:SER:HB3	2.04	0.40
45:SC:427:ALA:O	45:SC:431:ASP:N	2.53	0.40
46:SF:101:TRP:HB2	46:SF:184:ASN:HB3	2.03	0.40
45:SG:196:GLU:HG3	45:SG:197:HIS:ND1	2.36	0.40
46:SH:258:ILE:HG13	46:SH:258:ILE:O	2.22	0.40
45:SK:223:THR:HG23	45:SK:225:THR:H	1.86	0.40
46:SN:406:MET:O	46:SN:409:THR:OG1	2.24	0.40
46:TB:221:THR:HG23	46:TB:224:ASP:H	1.85	0.40
46:TD:67:ASP:O	46:TD:92:PHE:HA	2.21	0.40
46:TD:200:MET:HE3	46:TD:268:ILE:HD13	2.02	0.40
45:TE:88:HIS:HB3	45:TE:91:GLN:OE1	2.22	0.40
46:TF:65:LEU:HD12	46:TF:90:PHE:CE1	2.56	0.40
45:TG:152:LEU:HD12	45:TG:152:LEU:HA	1.94	0.40
45:TI:304:LYS:HD3	45:TI:304:LYS:HA	1.90	0.40
45:TK:260:VAL:H	46:TL:397:TRP:HZ2	1.68	0.40
46:TN:344:TRP:HB3	46:TN:430:ALA:HB2	2.03	0.40
46:UB:325:GLU:OE2	45:UC:221:ARG:NH1	2.55	0.40
46:UB:362:LYS:HD3	46:UB:362:LYS:HA	1.91	0.40
45:UC:84:ARG:HB3	45:UC:85:GLN:OE1	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:UE:223:THR:OG1	45:UE:224:TYR:N	2.53	0.40
45:UG:150:GLY:O	45:UG:154:LEU:HD23	2.21	0.40
46:UH:280:GLN:HE21	46:UH:280:GLN:HB2	1.71	0.40
46:UH:289:LEU:HD23	46:UH:289:LEU:HA	1.88	0.40
46:UJ:257:LEU:O	46:UJ:259:PRO:HD3	2.21	0.40
46:UN:47:ILE:HG21	46:UN:59:TYR:CE2	2.57	0.40
45:VA:112:LYS:HA	45:VA:115:VAL:HG12	2.03	0.40
45:VC:170:THR:O	45:VC:204:LEU:HB2	2.21	0.40
45:VE:132:LEU:HD12	45:VE:132:LEU:HA	1.97	0.40
45:VE:221:ARG:NH1	46:VF:325:GLU:OE1	2.55	0.40
46:VH:226:ASN:ND2	49:VH:501:GDP:HN1	2.17	0.40
46:VJ:376:GLU:O	46:VJ:380:ARG:HG2	2.22	0.40
46:VL:7:ILE:HB	46:VL:135:ILE:CD1	2.51	0.40
46:VN:183:TYR:CZ	46:VN:388:MET:HB3	2.56	0.40
45:WA:11:GLN:NE2	46:WB:245:GLN:O	2.54	0.40
45:WA:174:SER:OG	45:WA:207:GLU:OE1	2.25	0.40
45:WA:280:LYS:HG2	45:WA:283:HIS:CD2	2.56	0.40
46:WD:140:GLY:HA2	46:WD:181:GLU:OE2	2.22	0.40
45:WE:332:ILE:HG12	45:WE:351:PHE:CD2	2.57	0.40
45:WG:56:THR:HG23	45:WG:58:ALA:H	1.85	0.40
46:WH:73:MET:HA	46:WH:76:VAL:HG12	2.02	0.40
46:WH:335:ASN:OD1	46:WH:336:LYS:N	2.55	0.40
45:WI:147:SER:HB2	45:WI:190:SER:HB3	2.03	0.40
21:1L:479:VAL:HG11	34:4R:323:LEU:H	1.84	0.40
9:1N:482:VAL:HG23	45:II:41:THR:HG22	2.02	0.40
13:1U:84:ILE:HB	13:1U:98:LEU:HB2	2.04	0.40
13:1U:458:LYS:NZ	13:1U:460:ASN:HB2	2.34	0.40
14:1V:70:THR:HB	46:MJ:337:ASN:ND2	2.36	0.40
1:2A:36:ARG:HD3	45:MI:77:GLU:OE2	2.22	0.40
16:2B:4:ILE:HG22	16:2B:5:ASN:H	1.87	0.40
29:2G:14:TYR:HD1	45:KG:339:ARG:NE	2.17	0.40
29:2G:46:ASN:O	29:2G:47:LYS:HB3	2.22	0.40
21:2L:302:SER:HA	21:2L:338:GLN:H	1.87	0.40
9:2N:10:TYR:CD1	9:2N:16:ILE:HG13	2.56	0.40
24:2P:384:SER:O	24:2P:388:THR:HG23	2.22	0.40
25:2R:266:GLU:O	25:2R:267:ILE:HG12	2.20	0.40
11:2S:18:ARG:HH12	11:2S:27:VAL:HG21	1.86	0.40
13:2U:7:ILE:HD11	13:2U:602:TRP:CZ3	2.56	0.40
13:2U:207:TYR:CE1	13:2U:221:ASN:HB3	2.57	0.40
13:2U:348:ASN:HB3	13:2U:351:ASN:O	2.20	0.40
14:2V:203:GLU:HG3	14:2V:207:GLN:HE22	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:3E:21:GLN:O	5:3E:25:ARG:HD2	2.22	0.40
21:3L:95:GLN:OE1	21:3L:95:GLN:HA	2.21	0.40
23:3O:410:ILE:O	23:3O:414:ILE:HG12	2.21	0.40
10:3Q:41:ASP:HB2	10:3Q:129:TRP:HE1	1.86	0.40
11:3S:146:LYS:HZ3	45:WK:123:ARG:HG2	1.85	0.40
13:3U:212:THR:OG1	13:3U:216:ASP:O	2.37	0.40
13:3U:266:ILE:O	13:3U:266:ILE:HG23	2.22	0.40
27:4C:220:LYS:HG3	27:4C:263:ILE:HD11	2.04	0.40
33:4F:22:LEU:HB3	33:4F:23:LYS:H	1.47	0.40
35:4S:147:LYS:HE3	46:AD:413:SER:HB2	2.02	0.40
36:5C:142:GLN:HE22	45:NK:225:THR:CG2	2.34	0.40
37:5E:56:VAL:HG23	46:OB:276:ARG:NH1	2.37	0.40
37:5E:154:TYR:CE2	37:5F:11:TRP:HD1	2.39	0.40
34:5R:33:LEU:H	45:LG:1:MET:HE2	1.86	0.40
39:6F:49:ASN:OD1	39:6F:52:GLN:HB2	2.22	0.40
40:6G:286:LEU:HB3	45:VA:176:GLN:HE22	1.86	0.40
34:6R:509:ASP:O	34:6R:513:HIS:ND1	2.51	0.40
34:7R:253:ARG:HG2	34:7R:253:ARG:O	2.22	0.40
34:7R:524:LYS:NZ	34:7R:530:TYR:OH	2.48	0.40
46:AB:238:CYS:SG	46:AB:239:CYS:N	2.94	0.40
46:AJ:262:ARG:HH12	46:AJ:421:GLU:HG3	1.87	0.40
45:AM:102:ASN:HB3	45:AM:105:ARG:HB2	2.02	0.40
46:AN:20:PHE:HA	46:AN:230:SER:HB2	2.03	0.40
45:BA:219:ILE:HD12	45:BA:222:PRO:HB3	2.02	0.40
45:BC:215:ARG:NH1	45:BC:216:ASN:OD1	2.54	0.40
45:BE:56:THR:HG23	45:BE:58:ALA:H	1.86	0.40
45:BE:370:LYS:HE2	45:BE:370:LYS:HB2	1.92	0.40
45:BG:256:GLN:O	46:BJ:397:TRP:NE1	2.55	0.40
45:BG:384:ILE:O	45:BG:387:VAL:HG22	2.22	0.40
46:BJ:11:GLN:O	46:BJ:15:GLN:HG2	2.22	0.40
45:BK:19:ALA:HA	45:BK:22:GLU:OE1	2.21	0.40
45:CA:429:GLU:HG2	45:CA:430:LYS:HD3	2.03	0.40
46:CB:21:TRP:HA	46:CB:24:ILE:HG22	2.02	0.40
46:CD:310:TYR:CD2	46:CD:371:SER:HB2	2.56	0.40
45:CE:220:GLU:O	45:CE:221:ARG:HD3	2.21	0.40
45:CG:70:LEU:HA	45:CG:95:GLY:HA3	2.03	0.40
45:CG:339:ARG:HA	45:CG:339:ARG:HD2	1.81	0.40
46:CJ:208:TYR:CZ	46:CJ:225:LEU:HD11	2.56	0.40
46:DB:8:GLN:NE2	46:DB:136:THR:OG1	2.54	0.40
46:DB:152:ILE:HG22	46:DB:195:ASN:ND2	2.37	0.40
46:DD:350:LYS:HA	45:DE:179:THR:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DF:361:LEU:HD23	46:DF:361:LEU:HA	1.89	0.40
45:DG:352:LYS:HD3	46:DH:178:THR:HG23	2.04	0.40
46:DH:247:ASN:ND2	45:DI:73:THR:HG21	2.37	0.40
46:DJ:69:GLU:HA	46:DJ:70:PRO:HD3	1.92	0.40
45:DM:182:VAL:O	45:DM:182:VAL:HG12	2.21	0.40
45:DM:252:ILE:HD12	45:DM:252:ILE:H	1.87	0.40
46:DN:18:ALA:O	46:DN:22:GLU:HG3	2.21	0.40
46:DN:101:TRP:HB2	46:DN:184:ASN:HB3	2.03	0.40
46:EB:371:SER:O	46:EB:422:TYR:OH	2.29	0.40
46:EF:254:ALA:O	46:EF:258:ILE:HG12	2.21	0.40
45:EG:306:ASP:OD2	45:EG:308:ARG:NH2	2.51	0.40
45:EG:326:LYS:HZ2	46:EH:208:TYR:HB3	1.86	0.40
46:EH:135:ILE:HB	46:EH:166:THR:HA	2.04	0.40
45:EK:284:GLU:HB2	45:EK:286:LEU:HD22	2.03	0.40
46:EL:101:TRP:HB2	46:EL:184:ASN:HB3	2.03	0.40
45:EM:21:TRP:HZ2	45:EM:65:ALA:HB2	1.87	0.40
45:EM:39:ASP:O	45:EM:41:THR:HG23	2.21	0.40
46:EN:324:LYS:HE2	46:EN:324:LYS:HB2	1.80	0.40
45:FA:272:TYR:HD2	45:FA:275:ILE:HD11	1.87	0.40
46:FD:359:LYS:HE2	46:FD:359:LYS:HB2	1.86	0.40
45:FE:296:PHE:CE2	45:FE:335:ILE:HG21	2.57	0.40
45:FG:90:GLU:HG3	45:FG:121:ARG:NH1	2.36	0.40
46:FH:133:PHE:HB2	46:FH:164:MET:SD	2.62	0.40
46:FJ:173:PRO:HD2	46:FJ:174:LYS:HZ3	1.86	0.40
45:FM:30:ILE:HG12	45:FM:36:MET:HE1	2.03	0.40
46:FN:268:ILE:HG22	46:FN:368:VAL:HG22	2.03	0.40
46:FN:295:ASP:OD2	46:FN:297:LYS:HG2	2.22	0.40
46:GD:114:ASP:OD1	46:GD:115:SER:N	2.54	0.40
46:GD:318:ARG:NH1	46:GD:358:PRO:HG3	2.36	0.40
46:GJ:117:LEU:HD23	46:GJ:117:LEU:HA	1.90	0.40
45:GK:108:TYR:O	45:GK:112:LYS:NZ	2.37	0.40
45:GK:377:MET:SD	45:GK:379:SER:HB2	2.61	0.40
45:GM:191:THR:HA	45:GM:194:LEU:HG	2.03	0.40
45:GM:434:GLU:O	45:GM:437:ILE:HG12	2.22	0.40
46:GN:259:PRO:C	46:GN:260:PHE:HD1	2.24	0.40
45:HA:345:ASP:N	45:HA:345:ASP:OD1	2.54	0.40
46:HB:345:ILE:HD12	46:HB:345:ILE:HA	1.98	0.40
46:HB:372:THR:HA	46:HB:422:TYR:CE2	2.57	0.40
45:HC:245:ASP:OD1	45:HC:246:GLY:N	2.55	0.40
45:HE:105:ARG:CZ	45:HE:110:ILE:HD11	2.52	0.40
45:HG:390:ARG:HG3	45:HG:391:LEU:HD12	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:HH:67:ASP:O	46:HH:92:PHE:HA	2.22	0.40
45:HI:223:THR:HG22	45:HI:224:TYR:N	2.37	0.40
45:HI:292:THR:HG21	45:HI:331:SER:HB2	2.04	0.40
46:HJ:139:LEU:HA	46:HJ:145:SER:HB3	2.04	0.40
46:HL:409:THR:O	46:HL:412:GLU:HG3	2.22	0.40
46:ID:232:ALA:HB1	46:ID:268:ILE:HD12	2.03	0.40
45:IG:115:VAL:HG23	45:IG:153:LEU:HD23	2.03	0.40
45:IG:276:ILE:HD11	45:IG:280:LYS:HG3	2.02	0.40
46:IH:139:LEU:HD22	46:IH:170:VAL:HG12	2.03	0.40
45:IK:392:ASP:OD1	45:IK:422:ARG:NE	2.54	0.40
46:IL:130:LEU:HB3	46:IL:162:ARG:HD2	2.04	0.40
46:IN:68:LEU:HD23	46:IN:143:THR:OG1	2.21	0.40
45:JC:155:GLU:HG2	45:JC:197:HIS:CE1	2.56	0.40
46:JJ:361:LEU:HD23	46:JJ:361:LEU:HA	1.91	0.40
45:JM:296:PHE:HD2	45:JM:335:ILE:HD12	1.87	0.40
46:JN:399:THR:HA	46:JN:403:MET:O	2.22	0.40
45:KA:35:GLN:N	45:KA:35:GLN:OE1	2.55	0.40
45:KA:431:ASP:O	45:KA:435:VAL:HG23	2.22	0.40
46:KD:294:PHE:CD2	46:KD:333:VAL:HG21	2.56	0.40
46:KH:207:LEU:HD13	46:KH:225:LEU:HB3	2.03	0.40
45:KM:164:LYS:HD3	45:KM:164:LYS:HA	1.91	0.40
46:KN:294:PHE:CD1	46:KN:333:VAL:HG21	2.57	0.40
45:LA:287:SER:O	45:LA:291:ILE:HG23	2.21	0.40
45:LC:210:TYR:CE1	45:LC:227:LEU:HD11	2.56	0.40
45:LE:52:PHE:HZ	45:LE:239:THR:HG21	1.87	0.40
45:LE:430:LYS:HD2	45:LE:430:LYS:HA	1.82	0.40
45:LG:214:ARG:HE	46:LH:324:LYS:HE3	1.87	0.40
46:LH:201:VAL:HG21	46:LH:374:ILE:HD11	2.03	0.40
46:LH:233:MET:O	46:LH:236:VAL:HG12	2.22	0.40
45:LM:328:VAL:HG11	45:LM:353:VAL:HG21	2.03	0.40
46:LN:334:GLN:NE2	46:LN:348:ASN:OD1	2.54	0.40
46:MF:86:ARG:HD2	46:MF:87:PRO:HD2	2.04	0.40
46:MH:50:TYR:OH	46:MH:237:THR:HG21	2.22	0.40
46:MH:157:GLU:OE1	46:MH:157:GLU:HA	2.22	0.40
45:MI:188:ILE:HG22	45:MI:421:ALA:HB1	2.04	0.40
45:MK:155:GLU:HG2	45:MK:197:HIS:NE2	2.37	0.40
45:MK:220:GLU:OE1	45:MK:220:GLU:N	2.54	0.40
45:MK:326:LYS:HE3	46:MN:220:PRO:CG	2.51	0.40
45:NA:33:ASP:HB2	45:NA:85:GLN:HE21	1.87	0.40
45:NA:42:ILE:HG23	45:NA:43:GLY:N	2.35	0.40
46:NH:114:ASP:N	46:NH:114:ASP:OD1	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:NK:88:HIS:CE1	45:NK:90:GLU:HB2	2.57	0.40
45:NK:24:PHE:O	45:NK:28:HIS:HB2	2.21	0.40
45:NK:70:LEU:HA	45:NK:95:GLY:HA3	2.03	0.40
45:OC:71:GLU:HA	45:OC:72:PRO:HD3	1.88	0.40
45:OC:156:ARG:HD3	45:OC:156:ARG:HA	1.83	0.40
46:OF:175:VAL:O	46:OF:175:VAL:HG23	2.22	0.40
45:OG:11:GLN:N	47:OG:501:GTP:O1B	2.44	0.40
45:OM:245:ASP:OD1	45:OM:245:ASP:N	2.47	0.40
46:ON:95:THR:OG1	46:ON:108:GLU:OE2	2.38	0.40
45:PA:79:ARG:HB3	45:PA:84:ARG:NH1	2.36	0.40
45:PA:88:HIS:O	45:PA:91:GLN:HG3	2.21	0.40
46:PB:110:ALA:O	46:PB:113:ILE:HG22	2.21	0.40
46:PB:237:THR:HG23	46:PB:241:ARG:HH12	1.87	0.40
45:PC:96:LYS:HZ3	46:PD:1:MET:HA	1.86	0.40
45:PC:324:VAL:HG12	45:PC:326:LYS:H	1.86	0.40
46:PD:69:GLU:HA	46:PD:70:PRO:HD3	1.96	0.40
45:PE:152:LEU:O	45:PE:156:ARG:HG2	2.22	0.40
45:PG:282:TYR:N	45:PG:282:TYR:CD1	2.88	0.40
46:PL:86:ARG:HB3	46:PL:89:ASN:ND2	2.36	0.40
46:PL:178:THR:HG22	46:PL:180:VAL:H	1.87	0.40
45:PM:222:PRO:O	46:PN:324:LYS:HD2	2.22	0.40
45:PM:223:THR:OG1	45:PM:224:TYR:N	2.54	0.40
45:PM:385:ALA:HA	45:PM:388:PHE:HD2	1.86	0.40
46:PN:8:GLN:NE2	46:PN:65:LEU:HG	2.36	0.40
45:QA:387:VAL:HA	45:QA:390:ARG:HG2	2.02	0.40
46:QB:285:THR:HG23	46:QB:287:PRO:HD2	2.04	0.40
46:QF:8:GLN:HE22	46:QF:17:GLY:HA3	1.85	0.40
46:QF:318:ARG:NH1	46:QF:358:PRO:HG3	2.37	0.40
46:QH:347:ASN:O	45:QI:181:VAL:HG12	2.20	0.40
45:QI:246:GLY:HA2	45:QI:357:TYR:CE1	2.57	0.40
46:QJ:3:GLU:HB2	46:QJ:62:ARG:NH2	2.37	0.40
46:QJ:30:ILE:HG13	46:QJ:51:TYR:CE2	2.56	0.40
46:QL:322:SER:OG	46:QL:325:GLU:HG2	2.21	0.40
45:RC:315:CYS:HB2	45:RC:351:PHE:CD1	2.57	0.40
46:RF:386:THR:O	46:RF:390:ARG:HG2	2.22	0.40
46:RH:32:PRO:HA	46:RH:84:LEU:HD11	2.03	0.40
46:RH:167:PHE:HD2	46:RH:202:ILE:HD11	1.85	0.40
46:RJ:408:PHE:O	46:RJ:412:GLU:HG3	2.22	0.40
46:RL:12:CYS:O	46:RL:16:ILE:HG12	2.21	0.40
46:RL:86:ARG:HE	46:SL:281:TYR:HB3	1.86	0.40
46:RL:162:ARG:HH21	46:RL:251:ARG:HH22	1.70	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:RL:315:ALA:N	46:RL:350:LYS:O	2.52	0.40
46:RL:414:ASN:O	46:RL:414:ASN:ND2	2.54	0.40
46:SB:206:ALA:HB3	46:SB:300:MET:O	2.21	0.40
45:SE:291:ILE:HG13	45:SE:292:THR:N	2.37	0.40
46:SF:258:ILE:HG22	46:SF:263:LEU:O	2.22	0.40
46:SH:304:ASP:OD2	46:SH:306:ARG:NH1	2.55	0.40
46:SH:396:HIS:CE1	46:SH:397:TRP:HD1	2.40	0.40
45:SK:322:ASP:OD1	45:SK:373:ARG:NH1	2.55	0.40
45:TA:78:VAL:HG12	45:TA:79:ARG:HH22	1.86	0.40
46:TD:113:ILE:HA	46:TD:116:VAL:HG12	2.03	0.40
45:TI:261:PRO:HB3	45:TI:346:TRP:CH2	2.55	0.40
46:TJ:107:THR:OG1	46:TJ:108:GLU:N	2.54	0.40
45:TK:171:ILE:HG23	45:TK:204:LEU:O	2.22	0.40
45:TK:402:ARG:HH12	45:TK:406:HIS:H	1.69	0.40
46:TL:314:SER:HA	46:TL:350:LYS:HB2	2.03	0.40
45:TM:205:ASP:OD1	45:TM:206:ASN:N	2.55	0.40
45:TM:332:ILE:HA	45:TM:335:ILE:HG22	2.03	0.40
45:TM:338:LYS:HG3	45:TM:340:THR:HG22	2.03	0.40
45:TM:402:ARG:HG2	45:TM:405:VAL:HG21	2.04	0.40
46:TN:36:TYR:CD2	46:TN:44:LEU:HD21	2.56	0.40
46:TN:86:ARG:HH11	46:UN:281:TYR:HB2	1.86	0.40
46:TN:212:PHE:HB3	46:TN:213:ARG:NH2	2.37	0.40
45:UA:210:TYR:OH	45:UA:227:LEU:HD11	2.20	0.40
45:UA:320:ARG:NH1	45:UA:320:ARG:O	2.54	0.40
46:UB:385:PHE:HE2	46:UB:412:GLU:HB2	1.87	0.40
45:UC:396:ASP:OD1	45:UC:422:ARG:NH1	2.55	0.40
46:UD:270:PHE:HD2	46:UD:273:LEU:HD21	1.87	0.40
45:UE:259:LEU:HD21	45:UE:316:SER:HB2	2.02	0.40
46:UH:345:ILE:HG22	46:UH:348:ASN:HB3	2.04	0.40
46:UL:148:GLY:O	46:UL:152:ILE:HD12	2.22	0.40
46:UL:310:TYR:CD1	46:UL:371:SER:HB2	2.57	0.40
45:UM:275:ILE:HG23	45:UM:368:LEU:HD11	2.03	0.40
46:UN:66:MET:HE1	46:UN:147:MET:HG2	2.02	0.40
46:VB:3:GLU:HG2	46:VB:48:ASN:O	2.22	0.40
46:VD:20:PHE:O	46:VD:24:ILE:HG12	2.22	0.40
46:VD:51:TYR:HE1	46:VD:61:PRO:HG3	1.86	0.40
45:VG:175:PRO:HB2	45:VG:176:GLN:OE1	2.21	0.40
46:VH:131:GLN:HE22	46:VH:240:LEU:HD11	1.87	0.40
45:VI:32:PRO:HB3	45:VI:83:TYR:CE1	2.57	0.40
46:VJ:97:ALA:HB2	46:VJ:143:THR:HB	2.04	0.40
45:VM:203:MET:HG3	45:VM:384:ILE:HD11	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:WB:100:ASN:HD22	46:WB:103:LYS:HB2	1.86	0.40
45:WC:31:GLN:NE2	45:WC:37:PRO:HG3	2.37	0.40
45:WC:210:TYR:CD1	46:WD:324:LYS:HD2	2.56	0.40
46:WD:168:SER:O	46:WD:202:ILE:N	2.52	0.40
45:WE:261:PRO:HA	46:WH:394:PHE:CD1	2.56	0.40
46:WF:260:PHE:HD2	46:WF:425:TYR:HH	1.65	0.40
46:WF:294:PHE:CD2	46:WF:333:VAL:HG21	2.53	0.40
46:WH:73:MET:HE2	46:WH:73:MET:HB2	1.92	0.40
46:WH:203:ASP:OD1	46:WH:377:MET:HE1	2.22	0.40
46:WJ:105:HIS:CE1	46:WJ:150:LEU:HD12	2.56	0.40
45:WK:71:GLU:OE1	45:WK:73:THR:OG1	2.39	0.40
45:WM:88:HIS:O	45:WM:91:GLN:HG3	2.21	0.40
45:WM:384:ILE:O	45:WM:387:VAL:HG22	2.22	0.40
46:WN:384:GLN:O	46:WN:388:MET:HG2	2.21	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	0A	150/236 (64%)	112 (75%)	31 (21%)	7 (5%)	2	19
1	1A	150/236 (64%)	115 (77%)	28 (19%)	7 (5%)	2	19
1	2A	150/236 (64%)	118 (79%)	27 (18%)	5 (3%)	3	26
1	3A	150/236 (64%)	114 (76%)	31 (21%)	5 (3%)	3	26
2	0B	317/329 (96%)	256 (81%)	56 (18%)	5 (2%)	8	37
3	0C	93/156 (60%)	77 (83%)	13 (14%)	3 (3%)	3	27
3	1C	93/156 (60%)	74 (80%)	14 (15%)	5 (5%)	1	17
4	0D	198/225 (88%)	145 (73%)	43 (22%)	10 (5%)	1	18
4	1D	198/225 (88%)	145 (73%)	43 (22%)	10 (5%)	1	18

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	2D	198/225 (88%)	143 (72%)	46 (23%)	9 (4%)	2	19
5	0E	187/191 (98%)	172 (92%)	13 (7%)	2 (1%)	12	43
5	1E	187/191 (98%)	174 (93%)	12 (6%)	1 (0%)	25	57
5	2E	187/191 (98%)	174 (93%)	11 (6%)	2 (1%)	12	43
5	3E	187/191 (98%)	177 (95%)	8 (4%)	2 (1%)	12	43
6	0F	202/219 (92%)	159 (79%)	35 (17%)	8 (4%)	2	22
7	0G	162/183 (88%)	121 (75%)	36 (22%)	5 (3%)	3	27
7	1G	127/183 (69%)	97 (76%)	26 (20%)	4 (3%)	3	27
8	0H	114/447 (26%)	105 (92%)	8 (7%)	1 (1%)	14	47
8	1H	420/447 (94%)	404 (96%)	14 (3%)	2 (0%)	25	57
9	0N	278/492 (56%)	265 (95%)	13 (5%)	0	100	100
9	1N	457/492 (93%)	441 (96%)	15 (3%)	1 (0%)	44	72
9	2N	278/492 (56%)	271 (98%)	7 (2%)	0	100	100
10	0Q	184/195 (94%)	173 (94%)	11 (6%)	0	100	100
10	1Q	184/195 (94%)	173 (94%)	11 (6%)	0	100	100
10	2Q	184/195 (94%)	172 (94%)	12 (6%)	0	100	100
10	3Q	184/195 (94%)	172 (94%)	12 (6%)	0	100	100
10	4Q	184/195 (94%)	170 (92%)	14 (8%)	0	100	100
10	5Q	184/195 (94%)	172 (94%)	12 (6%)	0	100	100
10	6Q	184/195 (94%)	170 (92%)	14 (8%)	0	100	100
11	0S	284/319 (89%)	268 (94%)	15 (5%)	1 (0%)	30	62
11	1S	284/319 (89%)	262 (92%)	21 (7%)	1 (0%)	30	62
11	2S	284/319 (89%)	266 (94%)	18 (6%)	0	100	100
11	3S	284/319 (89%)	266 (94%)	18 (6%)	0	100	100
12	0T	245/298 (82%)	226 (92%)	19 (8%)	0	100	100
12	1T	283/298 (95%)	266 (94%)	17 (6%)	0	100	100
12	2T	283/298 (95%)	257 (91%)	26 (9%)	0	100	100
12	3T	283/298 (95%)	260 (92%)	23 (8%)	0	100	100
13	0U	605/656 (92%)	555 (92%)	50 (8%)	0	100	100
13	1U	605/656 (92%)	548 (91%)	57 (9%)	0	100	100
13	2U	605/656 (92%)	545 (90%)	60 (10%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	3U	605/656 (92%)	545 (90%)	60 (10%)	0	100	100
14	0V	203/269 (76%)	178 (88%)	24 (12%)	1 (0%)	25	57
14	1V	259/269 (96%)	223 (86%)	33 (13%)	3 (1%)	11	41
14	2V	259/269 (96%)	223 (86%)	33 (13%)	3 (1%)	11	41
14	3V	259/269 (96%)	225 (87%)	29 (11%)	5 (2%)	6	35
15	0X	104/142 (73%)	100 (96%)	4 (4%)	0	100	100
15	1X	139/142 (98%)	132 (95%)	6 (4%)	1 (1%)	19	51
15	2X	139/142 (98%)	133 (96%)	5 (4%)	1 (1%)	19	51
15	3X	139/142 (98%)	135 (97%)	3 (2%)	1 (1%)	19	51
15	4X	139/142 (98%)	131 (94%)	7 (5%)	1 (1%)	19	51
16	1B	496/498 (100%)	466 (94%)	27 (5%)	3 (1%)	22	54
16	2B	293/498 (59%)	270 (92%)	22 (8%)	1 (0%)	37	67
16	3B	295/498 (59%)	273 (92%)	22 (8%)	0	100	100
17	1F	132/173 (76%)	120 (91%)	8 (6%)	4 (3%)	3	27
18	1I	182/263 (69%)	151 (83%)	28 (15%)	3 (2%)	8	37
19	1J	364/422 (86%)	316 (87%)	40 (11%)	8 (2%)	5	32
20	1K	271/489 (55%)	267 (98%)	4 (2%)	0	100	100
20	2K	280/489 (57%)	277 (99%)	3 (1%)	0	100	100
21	1L	808/940 (86%)	711 (88%)	90 (11%)	7 (1%)	14	47
21	2L	610/940 (65%)	553 (91%)	54 (9%)	3 (0%)	25	57
21	3L	198/940 (21%)	176 (89%)	18 (9%)	4 (2%)	6	34
22	1M	367/372 (99%)	345 (94%)	21 (6%)	1 (0%)	37	67
22	2M	367/372 (99%)	351 (96%)	15 (4%)	1 (0%)	37	67
23	1O	229/494 (46%)	225 (98%)	4 (2%)	0	100	100
23	2O	368/494 (74%)	363 (99%)	5 (1%)	0	100	100
23	3O	271/494 (55%)	271 (100%)	0	0	100	100
24	1P	349/507 (69%)	347 (99%)	2 (1%)	0	100	100
24	2P	184/507 (36%)	184 (100%)	0	0	100	100
25	1R	502/516 (97%)	474 (94%)	27 (5%)	1 (0%)	44	72
25	2R	502/516 (97%)	480 (96%)	20 (4%)	2 (0%)	30	62
25	3R	502/516 (97%)	478 (95%)	23 (5%)	1 (0%)	44	72

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	1W	218/280 (78%)	213 (98%)	5 (2%)	0	100	100
26	2W	109/280 (39%)	100 (92%)	8 (7%)	1 (1%)	14	47
27	2C	298/300 (99%)	279 (94%)	17 (6%)	2 (1%)	19	51
27	3C	298/300 (99%)	275 (92%)	22 (7%)	1 (0%)	37	67
27	4C	298/300 (99%)	278 (93%)	20 (7%)	0	100	100
28	2F	85/96 (88%)	72 (85%)	13 (15%)	0	100	100
29	2G	97/99 (98%)	91 (94%)	6 (6%)	0	100	100
30	2H	59/229 (26%)	50 (85%)	8 (14%)	1 (2%)	7	36
30	3H	59/229 (26%)	52 (88%)	5 (8%)	2 (3%)	3	26
30	4H	59/229 (26%)	50 (85%)	8 (14%)	1 (2%)	7	36
31	2I	134/293 (46%)	113 (84%)	18 (13%)	3 (2%)	5	32
31	3I	83/293 (28%)	70 (84%)	10 (12%)	3 (4%)	3	24
32	3D	235/237 (99%)	225 (96%)	10 (4%)	0	100	100
33	4F	194/276 (70%)	173 (89%)	19 (10%)	2 (1%)	13	44
34	4R	607/613 (99%)	584 (96%)	23 (4%)	0	100	100
34	5R	607/613 (99%)	580 (96%)	27 (4%)	0	100	100
34	6R	607/613 (99%)	583 (96%)	24 (4%)	0	100	100
34	7R	607/613 (99%)	590 (97%)	17 (3%)	0	100	100
35	4S	186/249 (75%)	180 (97%)	6 (3%)	0	100	100
35	5S	186/249 (75%)	181 (97%)	5 (3%)	0	100	100
36	5A	155/175 (89%)	131 (84%)	24 (16%)	0	100	100
36	5B	155/175 (89%)	126 (81%)	29 (19%)	0	100	100
36	5C	155/175 (89%)	127 (82%)	27 (17%)	1 (1%)	22	54
36	5D	107/175 (61%)	88 (82%)	18 (17%)	1 (1%)	14	47
37	5E	183/247 (74%)	156 (85%)	24 (13%)	3 (2%)	8	37
37	5F	208/247 (84%)	168 (81%)	38 (18%)	2 (1%)	13	44
37	5G	208/247 (84%)	173 (83%)	33 (16%)	2 (1%)	13	44
37	5H	136/247 (55%)	113 (83%)	22 (16%)	1 (1%)	19	51
39	6F	130/145 (90%)	112 (86%)	17 (13%)	1 (1%)	16	49
40	6G	210/364 (58%)	184 (88%)	25 (12%)	1 (0%)	25	57
41	6H	151/518 (29%)	115 (76%)	32 (21%)	4 (3%)	4	29

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	8R	178/361 (49%)	176 (99%)	2 (1%)	0	100	100
45	AA	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	AC	437/449 (97%)	428 (98%)	9 (2%)	0	100	100
45	AE	437/449 (97%)	428 (98%)	9 (2%)	0	100	100
45	AG	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	AI	437/449 (97%)	425 (97%)	12 (3%)	0	100	100
45	AK	437/449 (97%)	428 (98%)	9 (2%)	0	100	100
45	AM	437/449 (97%)	430 (98%)	7 (2%)	0	100	100
45	BA	428/449 (95%)	418 (98%)	10 (2%)	0	100	100
45	BC	428/449 (95%)	418 (98%)	10 (2%)	0	100	100
45	BE	428/449 (95%)	415 (97%)	13 (3%)	0	100	100
45	BG	428/449 (95%)	416 (97%)	12 (3%)	0	100	100
45	BI	428/449 (95%)	418 (98%)	10 (2%)	0	100	100
45	BK	428/449 (95%)	417 (97%)	11 (3%)	0	100	100
45	BM	428/449 (95%)	414 (97%)	14 (3%)	0	100	100
45	CA	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	CC	437/449 (97%)	428 (98%)	9 (2%)	0	100	100
45	CE	437/449 (97%)	429 (98%)	8 (2%)	0	100	100
45	CG	437/449 (97%)	429 (98%)	8 (2%)	0	100	100
45	CI	437/449 (97%)	426 (98%)	11 (2%)	0	100	100
45	CK	437/449 (97%)	429 (98%)	8 (2%)	0	100	100
45	CM	437/449 (97%)	424 (97%)	13 (3%)	0	100	100
45	DA	429/449 (96%)	416 (97%)	13 (3%)	0	100	100
45	DC	432/449 (96%)	420 (97%)	11 (2%)	1 (0%)	44	72
45	DE	429/449 (96%)	415 (97%)	14 (3%)	0	100	100
45	DG	432/449 (96%)	420 (97%)	11 (2%)	1 (0%)	44	72
45	DI	429/449 (96%)	419 (98%)	10 (2%)	0	100	100
45	DK	432/449 (96%)	422 (98%)	10 (2%)	0	100	100
45	DM	429/449 (96%)	421 (98%)	8 (2%)	0	100	100
45	EA	437/449 (97%)	418 (96%)	19 (4%)	0	100	100
45	EC	437/449 (97%)	422 (97%)	15 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	EE	437/449 (97%)	423 (97%)	13 (3%)	1 (0%)	44	72
45	EG	437/449 (97%)	430 (98%)	7 (2%)	0	100	100
45	EI	437/449 (97%)	418 (96%)	18 (4%)	1 (0%)	44	72
45	EK	437/449 (97%)	425 (97%)	12 (3%)	0	100	100
45	EM	437/449 (97%)	425 (97%)	12 (3%)	0	100	100
45	FA	425/449 (95%)	412 (97%)	13 (3%)	0	100	100
45	FC	428/449 (95%)	417 (97%)	11 (3%)	0	100	100
45	FE	430/449 (96%)	419 (97%)	11 (3%)	0	100	100
45	FG	437/449 (97%)	424 (97%)	12 (3%)	1 (0%)	44	72
45	FI	429/449 (96%)	416 (97%)	13 (3%)	0	100	100
45	FK	428/449 (95%)	418 (98%)	10 (2%)	0	100	100
45	FM	425/449 (95%)	420 (99%)	5 (1%)	0	100	100
45	GA	425/449 (95%)	412 (97%)	13 (3%)	0	100	100
45	GC	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	GE	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	GG	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	GI	427/449 (95%)	413 (97%)	14 (3%)	0	100	100
45	GK	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	GM	425/449 (95%)	411 (97%)	14 (3%)	0	100	100
45	HA	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	HC	427/449 (95%)	418 (98%)	9 (2%)	0	100	100
45	HE	427/449 (95%)	420 (98%)	7 (2%)	0	100	100
45	HG	427/449 (95%)	414 (97%)	13 (3%)	0	100	100
45	HI	427/449 (95%)	410 (96%)	17 (4%)	0	100	100
45	HK	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
45	HM	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	IA	428/449 (95%)	415 (97%)	13 (3%)	0	100	100
45	IC	437/449 (97%)	427 (98%)	10 (2%)	0	100	100
45	IE	428/449 (95%)	416 (97%)	12 (3%)	0	100	100
45	IG	437/449 (97%)	426 (98%)	11 (2%)	0	100	100
45	II	437/449 (97%)	422 (97%)	15 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	IK	428/449 (95%)	415 (97%)	13 (3%)	0	100	100
45	IM	428/449 (95%)	417 (97%)	11 (3%)	0	100	100
45	JA	428/449 (95%)	421 (98%)	7 (2%)	0	100	100
45	JC	430/449 (96%)	422 (98%)	8 (2%)	0	100	100
45	JE	437/449 (97%)	422 (97%)	15 (3%)	0	100	100
45	JG	437/449 (97%)	420 (96%)	17 (4%)	0	100	100
45	JI	437/449 (97%)	419 (96%)	17 (4%)	1 (0%)	44	72
45	JK	437/449 (97%)	427 (98%)	10 (2%)	0	100	100
45	JM	428/449 (95%)	419 (98%)	9 (2%)	0	100	100
45	KA	430/449 (96%)	418 (97%)	12 (3%)	0	100	100
45	KC	429/449 (96%)	419 (98%)	10 (2%)	0	100	100
45	KE	431/449 (96%)	416 (96%)	15 (4%)	0	100	100
45	KG	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	KI	437/449 (97%)	420 (96%)	17 (4%)	0	100	100
45	KK	437/449 (97%)	418 (96%)	19 (4%)	0	100	100
45	KM	430/449 (96%)	416 (97%)	13 (3%)	1 (0%)	44	72
45	LA	437/449 (97%)	423 (97%)	12 (3%)	2 (0%)	25	57
45	LC	437/449 (97%)	420 (96%)	17 (4%)	0	100	100
45	LE	434/449 (97%)	420 (97%)	14 (3%)	0	100	100
45	LG	437/449 (97%)	419 (96%)	18 (4%)	0	100	100
45	LI	430/449 (96%)	414 (96%)	16 (4%)	0	100	100
45	LK	437/449 (97%)	422 (97%)	15 (3%)	0	100	100
45	LM	437/449 (97%)	425 (97%)	10 (2%)	2 (0%)	25	57
45	MA	432/449 (96%)	416 (96%)	16 (4%)	0	100	100
45	MC	429/449 (96%)	422 (98%)	7 (2%)	0	100	100
45	ME	429/449 (96%)	413 (96%)	15 (4%)	1 (0%)	44	72
45	MG	433/449 (96%)	420 (97%)	13 (3%)	0	100	100
45	MI	437/449 (97%)	423 (97%)	14 (3%)	0	100	100
45	MK	432/449 (96%)	418 (97%)	14 (3%)	0	100	100
45	MM	432/449 (96%)	417 (96%)	15 (4%)	0	100	100
45	NA	437/449 (97%)	421 (96%)	15 (3%)	1 (0%)	44	72

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	NC	428/449 (95%)	414 (97%)	14 (3%)	0	100	100
45	NE	437/449 (97%)	425 (97%)	10 (2%)	2 (0%)	25	57
45	NG	428/449 (95%)	417 (97%)	11 (3%)	0	100	100
45	NI	437/449 (97%)	422 (97%)	14 (3%)	1 (0%)	44	72
45	NK	428/449 (95%)	411 (96%)	17 (4%)	0	100	100
45	NM	437/449 (97%)	424 (97%)	12 (3%)	1 (0%)	44	72
45	OA	429/449 (96%)	415 (97%)	14 (3%)	0	100	100
45	OC	429/449 (96%)	417 (97%)	12 (3%)	0	100	100
45	OE	429/449 (96%)	421 (98%)	8 (2%)	0	100	100
45	OG	429/449 (96%)	423 (99%)	6 (1%)	0	100	100
45	OI	429/449 (96%)	419 (98%)	10 (2%)	0	100	100
45	OK	429/449 (96%)	417 (97%)	12 (3%)	0	100	100
45	OM	429/449 (96%)	413 (96%)	16 (4%)	0	100	100
45	PA	425/449 (95%)	416 (98%)	9 (2%)	0	100	100
45	PC	425/449 (95%)	415 (98%)	10 (2%)	0	100	100
45	PE	425/449 (95%)	415 (98%)	10 (2%)	0	100	100
45	PG	425/449 (95%)	412 (97%)	13 (3%)	0	100	100
45	PI	425/449 (95%)	415 (98%)	10 (2%)	0	100	100
45	PK	425/449 (95%)	416 (98%)	9 (2%)	0	100	100
45	PM	425/449 (95%)	417 (98%)	8 (2%)	0	100	100
45	QA	427/449 (95%)	411 (96%)	16 (4%)	0	100	100
45	QC	427/449 (95%)	418 (98%)	9 (2%)	0	100	100
45	QE	427/449 (95%)	420 (98%)	7 (2%)	0	100	100
45	QG	427/449 (95%)	419 (98%)	8 (2%)	0	100	100
45	QI	427/449 (95%)	418 (98%)	9 (2%)	0	100	100
45	QK	427/449 (95%)	420 (98%)	7 (2%)	0	100	100
45	QM	427/449 (95%)	414 (97%)	13 (3%)	0	100	100
45	RA	427/449 (95%)	421 (99%)	6 (1%)	0	100	100
45	RC	427/449 (95%)	414 (97%)	13 (3%)	0	100	100
45	RE	427/449 (95%)	412 (96%)	15 (4%)	0	100	100
45	RG	427/449 (95%)	412 (96%)	15 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	RI	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
45	RK	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
45	RM	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	SA	426/449 (95%)	416 (98%)	10 (2%)	0	100	100
45	SC	426/449 (95%)	412 (97%)	14 (3%)	0	100	100
45	SE	426/449 (95%)	412 (97%)	14 (3%)	0	100	100
45	SG	426/449 (95%)	408 (96%)	18 (4%)	0	100	100
45	SI	426/449 (95%)	413 (97%)	13 (3%)	0	100	100
45	SK	426/449 (95%)	414 (97%)	12 (3%)	0	100	100
45	SM	426/449 (95%)	414 (97%)	12 (3%)	0	100	100
45	TA	426/449 (95%)	414 (97%)	12 (3%)	0	100	100
45	TC	426/449 (95%)	416 (98%)	10 (2%)	0	100	100
45	TE	426/449 (95%)	414 (97%)	12 (3%)	0	100	100
45	TG	426/449 (95%)	418 (98%)	8 (2%)	0	100	100
45	TI	426/449 (95%)	412 (97%)	14 (3%)	0	100	100
45	TK	426/449 (95%)	412 (97%)	14 (3%)	0	100	100
45	TM	426/449 (95%)	417 (98%)	9 (2%)	0	100	100
45	UA	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	UC	427/449 (95%)	414 (97%)	13 (3%)	0	100	100
45	UE	427/449 (95%)	415 (97%)	12 (3%)	0	100	100
45	UG	427/449 (95%)	418 (98%)	9 (2%)	0	100	100
45	UI	427/449 (95%)	417 (98%)	10 (2%)	0	100	100
45	UK	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
45	UM	427/449 (95%)	412 (96%)	15 (4%)	0	100	100
45	VA	429/449 (96%)	418 (97%)	11 (3%)	0	100	100
45	VC	437/449 (97%)	421 (96%)	16 (4%)	0	100	100
45	VE	429/449 (96%)	417 (97%)	12 (3%)	0	100	100
45	VG	437/449 (97%)	426 (98%)	11 (2%)	0	100	100
45	VI	429/449 (96%)	417 (97%)	12 (3%)	0	100	100
45	VK	437/449 (97%)	425 (97%)	12 (3%)	0	100	100
45	VM	429/449 (96%)	418 (97%)	11 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	WA	427/449 (95%)	414 (97%)	13 (3%)	0	100	100
45	WC	437/449 (97%)	424 (97%)	12 (3%)	1 (0%)	44	72
45	WE	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
45	WG	437/449 (97%)	421 (96%)	15 (3%)	1 (0%)	44	72
45	WI	427/449 (95%)	412 (96%)	15 (4%)	0	100	100
45	WK	437/449 (97%)	419 (96%)	17 (4%)	1 (0%)	44	72
45	WM	427/449 (95%)	416 (97%)	11 (3%)	0	100	100
46	AB	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	AD	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	AF	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	AH	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	AJ	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	AL	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	AN	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	BB	416/443 (94%)	408 (98%)	8 (2%)	0	100	100
46	BD	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	BF	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	BH	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	BJ	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	BL	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	BN	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	CB	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	CD	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	CF	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	CH	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	CJ	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	CL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	CN	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	DB	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	DD	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	DF	428/443 (97%)	415 (97%)	13 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	DH	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	DJ	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	DL	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	DN	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	EB	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	ED	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	EF	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	EH	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	EJ	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	EL	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	EN	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	FB	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	FD	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	FF	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	FH	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	FJ	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	FL	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	FN	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	GB	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	GD	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	GF	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	GH	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	GJ	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	GL	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	GN	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	HB	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	HD	428/443 (97%)	425 (99%)	3 (1%)	0	100	100
46	HF	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	HH	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	HJ	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	HL	428/443 (97%)	421 (98%)	7 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	HN	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	IB	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	ID	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	IF	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	IH	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	IJ	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	IL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	IN	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	JB	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	JD	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	JF	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	JH	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	JJ	428/443 (97%)	412 (96%)	16 (4%)	0	100	100
46	JL	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	JN	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	KB	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	KD	428/443 (97%)	422 (99%)	6 (1%)	0	100	100
46	KF	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	KH	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	KJ	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	KL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	KN	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	LB	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	LD	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	LF	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	LH	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	LJ	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	LL	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	LN	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	MB	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	MD	428/443 (97%)	416 (97%)	12 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	MF	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	MH	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	MJ	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	ML	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	MN	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	NB	419/443 (95%)	410 (98%)	9 (2%)	0	100	100
46	ND	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	NF	419/443 (95%)	408 (97%)	11 (3%)	0	100	100
46	NH	428/443 (97%)	410 (96%)	18 (4%)	0	100	100
46	NJ	419/443 (95%)	408 (97%)	11 (3%)	0	100	100
46	NL	428/443 (97%)	412 (96%)	16 (4%)	0	100	100
46	NN	419/443 (95%)	410 (98%)	9 (2%)	0	100	100
46	OB	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	OD	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	OF	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	OH	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	OJ	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	OL	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	ON	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	PB	428/443 (97%)	422 (99%)	6 (1%)	0	100	100
46	PD	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	PF	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	PH	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	PJ	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	PL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	PN	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	QB	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	QD	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	QF	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
46	QH	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
46	QJ	428/443 (97%)	421 (98%)	7 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	QL	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
46	QN	428/443 (97%)	424 (99%)	4 (1%)	0	100	100
46	RB	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	RD	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	RF	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	RH	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	RJ	428/443 (97%)	413 (96%)	15 (4%)	0	100	100
46	RL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	RN	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
46	SB	428/443 (97%)	415 (97%)	13 (3%)	0	100	100
46	SD	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	SF	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	SH	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	SJ	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	SL	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	SN	428/443 (97%)	422 (99%)	6 (1%)	0	100	100
46	TB	428/443 (97%)	422 (99%)	6 (1%)	0	100	100
46	TD	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	TF	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	TH	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	TJ	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	TL	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	TN	428/443 (97%)	424 (99%)	4 (1%)	0	100	100
46	UB	428/443 (97%)	416 (97%)	12 (3%)	0	100	100
46	UD	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	UF	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	UH	428/443 (97%)	418 (98%)	10 (2%)	0	100	100
46	UJ	428/443 (97%)	414 (97%)	14 (3%)	0	100	100
46	UL	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	UN	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	VB	428/443 (97%)	421 (98%)	7 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
46	VD	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	VF	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	VH	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	VJ	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	VL	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	VN	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	WB	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	WD	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
46	WF	428/443 (97%)	419 (98%)	9 (2%)	0	100	100
46	WH	428/443 (97%)	421 (98%)	7 (2%)	0	100	100
46	WJ	428/443 (97%)	417 (97%)	11 (3%)	0	100	100
46	WL	428/443 (97%)	420 (98%)	8 (2%)	0	100	100
46	WN	428/443 (97%)	423 (99%)	5 (1%)	0	100	100
All	All	164812/178239 (92%)	158863 (96%)	5746 (4%)	203 (0%)	50	78

All (203) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	0A	20	PRO
1	0A	90	GLN
2	0B	44	ILE
2	0B	67	THR
2	0B	208	VAL
3	0C	45	PRO
3	0C	57	TYR
3	0C	84	THR
4	0D	39	PRO
4	0D	74	GLN
4	0D	85	VAL
4	0D	167	ILE
4	0D	218	GLN
6	0F	8	PRO
6	0F	33	PRO
6	0F	86	ARG
6	0F	185	GLU
7	0G	22	PHE
8	0H	335	ALA

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Mol	Chain	Res	Type
1	1A	20	PRO
16	1B	202	VAL
16	1B	315	SER
3	1C	45	PRO
3	1C	84	THR
4	1D	39	PRO
4	1D	85	VAL
4	1D	96	VAL
4	1D	167	ILE
4	1D	220	ILE
17	1F	30	PRO
17	1F	169	ALA
8	1H	335	ALA
18	1I	38	ILE
19	1J	221	ASP
19	1J	262	VAL
19	1J	332	ILE
21	1L	28	ASN
21	1L	60	VAL
21	1L	117	GLU
21	1L	368	PHE
21	1L	795	ASN
21	1L	802	ASP
22	1M	139	LYS
14	1V	165	PRO
1	2A	20	PRO
1	2A	90	GLN
16	2B	202	VAL
27	2C	99	LEU
4	2D	39	PRO
4	2D	74	GLN
4	2D	85	VAL
4	2D	96	VAL
4	2D	167	ILE
4	2D	218	GLN
4	2D	220	ILE
30	2H	207	LYS
31	2I	76	PRO
31	2I	78	PRO
21	2L	368	PHE
21	2L	802	ASP
22	2M	291	PHE

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Mol	Chain	Res	Type
14	2V	46	PRO
14	2V	165	PRO
1	3A	20	PRO
31	3I	199	VAL
21	3L	28	ASN
21	3L	60	VAL
21	3L	129	SER
14	3V	165	PRO
33	4F	28	VAL
30	4H	207	LYS
37	5E	164	LYS
37	5F	164	LYS
39	6F	39	LYS
41	6H	243	LYS
45	JI	42	ILE
45	ME	37	PRO
4	0D	96	VAL
4	0D	122	ASP
4	0D	191	PHE
4	0D	220	ILE
6	0F	72	ASP
7	0G	139	ILE
14	0V	125	MET
1	1A	90	GLN
16	1B	306	VAL
3	1C	57	TYR
4	1D	74	GLN
4	1D	191	PHE
17	1F	161	ILE
7	1G	139	ILE
8	1H	420	GLN
14	1V	265	VAL
4	2D	122	ASP
4	2D	191	PHE
21	2L	795	ASN
14	2V	265	VAL
5	3E	39	ARG
30	3H	207	LYS
31	3I	212	THR
21	3L	215	VAL
11	0S	7	GLN
1	1A	119	PHE

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Mol	Chain	Res	Type
4	1D	122	ASP
17	1F	158	ASN
25	1R	43	PRO
1	2A	119	PHE
5	2E	39	ARG
31	2I	212	THR
25	2R	43	PRO
14	3V	265	VAL
15	3X	31	ASP
15	4X	31	ASP
37	5G	164	LYS
40	6G	116	ILE
45	KM	47	ASP
45	NA	42	ILE
45	NE	42	ILE
1	0A	119	PHE
7	0G	119	ILE
1	1A	59	ALA
1	1A	88	VAL
7	1G	119	ILE
19	1J	150	THR
19	1J	223	PHE
1	2A	88	VAL
1	3A	88	VAL
1	3A	119	PHE
25	3R	43	PRO
14	3V	125	MET
37	5E	50	GLU
37	5E	119	GLU
45	LA	41	THR
45	LM	38	SER
45	LM	41	THR
45	NI	42	ILE
45	NM	42	ILE
1	0A	113	THR
5	0E	43	VAL
5	0E	44	ASP
3	1C	71	LYS
5	1E	43	VAL
18	1I	160	THR
19	1J	326	LYS
21	1L	215	VAL

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Mol	Chain	Res	Type
9	1N	428	HIS
1	3A	59	ALA
30	3H	208	ASN
31	3I	272	ARG
14	3V	198	PHE
33	4F	110	ASN
41	6H	170	TYR
41	6H	248	LEU
45	DC	38	SER
45	EE	36	MET
45	LA	38	SER
45	WC	42	ILE
45	WG	42	ILE
1	0A	59	ALA
1	0A	88	VAL
1	0A	116	THR
2	0B	24	PRO
2	0B	66	ASP
4	0D	57	THR
6	0F	208	PHE
1	1A	116	THR
1	1A	131	ILE
3	1C	35	SER
4	1D	57	THR
11	1S	7	GLN
14	1V	108	ASP
15	1X	31	ASP
1	2A	59	ALA
5	2E	43	VAL
25	2R	266	GLU
15	2X	31	ASP
1	3A	122	GLN
14	3V	108	ASP
36	5C	43	CYS
36	5D	43	CYS
45	DG	38	SER
45	FG	48	ALA
45	NE	284	GLU
45	WK	42	ILE
7	0G	66	ILE
18	1I	193	GLN
7	1G	66	ILE

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Mol	Chain	Res	Type
5	3E	43	VAL
37	5G	35	LEU
7	0G	85	ILE
19	1J	247	PRO
37	5H	35	LEU
45	EI	36	MET
6	0F	129	ILE
6	0F	183	PRO
7	1G	85	ILE
19	1J	145	ILE
26	2W	187	PRO
27	3C	95	ILE
37	5F	35	LEU
41	6H	215	ASN
4	1D	163	ASP
27	2C	95	ILE

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	0A	133/213 (62%)	132 (99%)	1 (1%)	79	85
1	1A	133/213 (62%)	132 (99%)	1 (1%)	79	85
1	2A	133/213 (62%)	132 (99%)	1 (1%)	79	85
1	3A	133/213 (62%)	131 (98%)	2 (2%)	60	75
2	0B	291/301 (97%)	291 (100%)	0	100	100
3	0C	81/137 (59%)	80 (99%)	1 (1%)	67	79
3	1C	81/137 (59%)	81 (100%)	0	100	100
4	0D	176/198 (89%)	175 (99%)	1 (1%)	84	90
4	1D	176/198 (89%)	176 (100%)	0	100	100
4	2D	176/198 (89%)	176 (100%)	0	100	100
5	0E	172/175 (98%)	170 (99%)	2 (1%)	67	79

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	1E	172/175 (98%)	170 (99%)	2 (1%)	67	79
5	2E	172/175 (98%)	171 (99%)	1 (1%)	84	90
5	3E	172/175 (98%)	168 (98%)	4 (2%)	45	64
6	0F	182/194 (94%)	182 (100%)	0	100	100
7	0G	153/167 (92%)	151 (99%)	2 (1%)	65	77
7	1G	123/167 (74%)	123 (100%)	0	100	100
8	0H	107/413 (26%)	104 (97%)	3 (3%)	38	60
8	1H	390/413 (94%)	386 (99%)	4 (1%)	73	82
9	0N	256/451 (57%)	256 (100%)	0	100	100
9	1N	423/451 (94%)	423 (100%)	0	100	100
9	2N	256/451 (57%)	256 (100%)	0	100	100
10	0Q	174/182 (96%)	174 (100%)	0	100	100
10	1Q	174/182 (96%)	174 (100%)	0	100	100
10	2Q	174/182 (96%)	174 (100%)	0	100	100
10	3Q	174/182 (96%)	174 (100%)	0	100	100
10	4Q	174/182 (96%)	173 (99%)	1 (1%)	84	90
10	5Q	174/182 (96%)	173 (99%)	1 (1%)	84	90
10	6Q	174/182 (96%)	174 (100%)	0	100	100
11	0S	257/286 (90%)	257 (100%)	0	100	100
11	1S	257/286 (90%)	256 (100%)	1 (0%)	89	93
11	2S	257/286 (90%)	256 (100%)	1 (0%)	89	93
11	3S	257/286 (90%)	257 (100%)	0	100	100
12	0T	222/264 (84%)	220 (99%)	2 (1%)	75	84
12	1T	251/264 (95%)	249 (99%)	2 (1%)	79	85
12	2T	251/264 (95%)	250 (100%)	1 (0%)	89	93
12	3T	251/264 (95%)	249 (99%)	2 (1%)	79	85
13	0U	528/571 (92%)	527 (100%)	1 (0%)	92	96
13	1U	528/571 (92%)	526 (100%)	2 (0%)	89	93
13	2U	528/571 (92%)	523 (99%)	5 (1%)	75	84
13	3U	528/571 (92%)	524 (99%)	4 (1%)	79	85
14	0V	196/249 (79%)	194 (99%)	2 (1%)	73	82

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	1V	244/249 (98%)	242 (99%)	2 (1%)	79	85
14	2V	244/249 (98%)	243 (100%)	1 (0%)	89	93
14	3V	244/249 (98%)	243 (100%)	1 (0%)	89	93
15	0X	94/129 (73%)	94 (100%)	0	100	100
15	1X	128/129 (99%)	128 (100%)	0	100	100
15	2X	128/129 (99%)	127 (99%)	1 (1%)	79	85
15	3X	128/129 (99%)	128 (100%)	0	100	100
15	4X	128/129 (99%)	128 (100%)	0	100	100
16	1B	441/441 (100%)	440 (100%)	1 (0%)	92	96
16	2B	264/441 (60%)	263 (100%)	1 (0%)	89	93
16	3B	265/441 (60%)	264 (100%)	1 (0%)	89	93
17	1F	121/157 (77%)	117 (97%)	4 (3%)	33	57
18	1I	172/239 (72%)	170 (99%)	2 (1%)	67	79
19	1J	328/370 (89%)	327 (100%)	1 (0%)	91	94
20	1K	259/463 (56%)	258 (100%)	1 (0%)	89	93
20	2K	271/463 (58%)	269 (99%)	2 (1%)	81	88
21	1L	771/878 (88%)	769 (100%)	2 (0%)	91	94
21	2L	580/878 (66%)	575 (99%)	5 (1%)	75	84
21	3L	191/878 (22%)	189 (99%)	2 (1%)	73	82
22	1M	323/325 (99%)	322 (100%)	1 (0%)	91	94
22	2M	323/325 (99%)	323 (100%)	0	100	100
23	1O	223/458 (49%)	219 (98%)	4 (2%)	54	71
23	2O	346/458 (76%)	341 (99%)	5 (1%)	62	76
23	3O	254/458 (56%)	252 (99%)	2 (1%)	79	85
24	1P	325/471 (69%)	319 (98%)	6 (2%)	54	71
24	2P	169/471 (36%)	167 (99%)	2 (1%)	67	79
25	1R	466/475 (98%)	465 (100%)	1 (0%)	92	96
25	2R	466/475 (98%)	466 (100%)	0	100	100
25	3R	466/475 (98%)	466 (100%)	0	100	100
26	1W	207/265 (78%)	206 (100%)	1 (0%)	86	92
26	2W	104/265 (39%)	102 (98%)	2 (2%)	52	70

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
27	2C	271/271 (100%)	271 (100%)	0	100	100
27	3C	271/271 (100%)	271 (100%)	0	100	100
27	4C	271/271 (100%)	270 (100%)	1 (0%)	89	93
28	2F	81/90 (90%)	81 (100%)	0	100	100
29	2G	91/91 (100%)	91 (100%)	0	100	100
30	2H	59/212 (28%)	59 (100%)	0	100	100
30	3H	59/212 (28%)	58 (98%)	1 (2%)	56	73
30	4H	59/212 (28%)	59 (100%)	0	100	100
31	2I	122/259 (47%)	121 (99%)	1 (1%)	79	85
31	3I	80/259 (31%)	77 (96%)	3 (4%)	28	53
32	3D	195/195 (100%)	195 (100%)	0	100	100
33	4F	180/245 (74%)	180 (100%)	0	100	100
34	4R	561/568 (99%)	560 (100%)	1 (0%)	92	96
34	5R	561/568 (99%)	559 (100%)	2 (0%)	89	93
34	6R	561/568 (99%)	561 (100%)	0	100	100
34	7R	561/568 (99%)	560 (100%)	1 (0%)	92	96
35	4S	169/222 (76%)	167 (99%)	2 (1%)	67	79
35	5S	169/222 (76%)	167 (99%)	2 (1%)	67	79
36	5A	140/159 (88%)	138 (99%)	2 (1%)	62	76
36	5B	140/159 (88%)	140 (100%)	0	100	100
36	5C	140/159 (88%)	139 (99%)	1 (1%)	81	88
36	5D	97/159 (61%)	97 (100%)	0	100	100
37	5E	171/227 (75%)	170 (99%)	1 (1%)	84	90
37	5F	194/227 (86%)	193 (100%)	1 (0%)	86	92
37	5G	194/227 (86%)	192 (99%)	2 (1%)	73	82
37	5H	125/227 (55%)	125 (100%)	0	100	100
39	6F	128/141 (91%)	127 (99%)	1 (1%)	79	85
40	6G	194/329 (59%)	193 (100%)	1 (0%)	86	92
41	6H	150/474 (32%)	150 (100%)	0	100	100
44	8R	31/31 (100%)	31 (100%)	0	100	100
45	AA	370/376 (98%)	369 (100%)	1 (0%)	91	94

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	AC	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	AE	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	AG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	AI	370/376 (98%)	370 (100%)	0	100	100
45	AK	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	AM	370/376 (98%)	370 (100%)	0	100	100
45	BA	366/376 (97%)	363 (99%)	3 (1%)	79	85
45	BC	366/376 (97%)	364 (100%)	2 (0%)	86	92
45	BE	366/376 (97%)	366 (100%)	0	100	100
45	BG	366/376 (97%)	366 (100%)	0	100	100
45	BI	366/376 (97%)	366 (100%)	0	100	100
45	BK	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	BM	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	CA	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	CC	370/376 (98%)	370 (100%)	0	100	100
45	CE	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	CG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	CI	370/376 (98%)	370 (100%)	0	100	100
45	CK	370/376 (98%)	370 (100%)	0	100	100
45	CM	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	DA	367/376 (98%)	367 (100%)	0	100	100
45	DC	368/376 (98%)	367 (100%)	1 (0%)	91	94
45	DE	367/376 (98%)	367 (100%)	0	100	100
45	DG	368/376 (98%)	367 (100%)	1 (0%)	91	94
45	DI	367/376 (98%)	365 (100%)	2 (0%)	86	92
45	DK	368/376 (98%)	367 (100%)	1 (0%)	91	94
45	DM	367/376 (98%)	367 (100%)	0	100	100
45	EA	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	EC	370/376 (98%)	370 (100%)	0	100	100
45	EE	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	EG	370/376 (98%)	367 (99%)	3 (1%)	79	85

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	EI	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	EK	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	EM	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	FA	363/376 (96%)	360 (99%)	3 (1%)	79	85
45	FC	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	FE	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	FG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	FI	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	FK	366/376 (97%)	364 (100%)	2 (0%)	86	92
45	FM	363/376 (96%)	362 (100%)	1 (0%)	91	94
45	GA	363/376 (96%)	362 (100%)	1 (0%)	91	94
45	GC	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	GE	365/376 (97%)	365 (100%)	0	100	100
45	GG	365/376 (97%)	365 (100%)	0	100	100
45	GI	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	GK	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	GM	363/376 (96%)	360 (99%)	3 (1%)	79	85
45	HA	365/376 (97%)	365 (100%)	0	100	100
45	HC	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	HE	365/376 (97%)	365 (100%)	0	100	100
45	HG	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	HI	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	HK	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	HM	365/376 (97%)	365 (100%)	0	100	100
45	IA	366/376 (97%)	364 (100%)	2 (0%)	86	92
45	IC	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	IE	366/376 (97%)	366 (100%)	0	100	100
45	IG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	II	370/376 (98%)	370 (100%)	0	100	100
45	IK	366/376 (97%)	366 (100%)	0	100	100
45	IM	366/376 (97%)	363 (99%)	3 (1%)	79	85

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	JA	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	JC	367/376 (98%)	367 (100%)	0	100	100
45	JE	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	JG	370/376 (98%)	367 (99%)	3 (1%)	79	85
45	JI	369/376 (98%)	369 (100%)	0	100	100
45	JK	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	JM	366/376 (97%)	366 (100%)	0	100	100
45	KA	367/376 (98%)	364 (99%)	3 (1%)	79	85
45	KC	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	KE	368/376 (98%)	367 (100%)	1 (0%)	91	94
45	KG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	KI	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	KK	370/376 (98%)	370 (100%)	0	100	100
45	KM	367/376 (98%)	365 (100%)	2 (0%)	86	92
45	LA	370/376 (98%)	370 (100%)	0	100	100
45	LC	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	LE	369/376 (98%)	368 (100%)	1 (0%)	91	94
45	LG	370/376 (98%)	367 (99%)	3 (1%)	79	85
45	LI	368/376 (98%)	367 (100%)	1 (0%)	91	94
45	LK	370/376 (98%)	370 (100%)	0	100	100
45	LM	370/376 (98%)	370 (100%)	0	100	100
45	MA	369/376 (98%)	368 (100%)	1 (0%)	91	94
45	MC	366/376 (97%)	366 (100%)	0	100	100
45	ME	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	MG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	MI	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	MK	367/376 (98%)	367 (100%)	0	100	100
45	MM	369/376 (98%)	368 (100%)	1 (0%)	91	94
45	NA	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	NC	366/376 (97%)	364 (100%)	2 (0%)	86	92
45	NE	370/376 (98%)	370 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	NG	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	NI	370/376 (98%)	370 (100%)	0	100	100
45	NK	366/376 (97%)	366 (100%)	0	100	100
45	NM	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	OA	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	OC	366/376 (97%)	364 (100%)	2 (0%)	86	92
45	OE	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	OG	366/376 (97%)	366 (100%)	0	100	100
45	OI	366/376 (97%)	366 (100%)	0	100	100
45	OK	366/376 (97%)	365 (100%)	1 (0%)	91	94
45	OM	366/376 (97%)	363 (99%)	3 (1%)	79	85
45	PA	363/376 (96%)	363 (100%)	0	100	100
45	PC	363/376 (96%)	363 (100%)	0	100	100
45	PE	363/376 (96%)	363 (100%)	0	100	100
45	PG	363/376 (96%)	361 (99%)	2 (1%)	84	90
45	PI	363/376 (96%)	362 (100%)	1 (0%)	91	94
45	PK	363/376 (96%)	362 (100%)	1 (0%)	91	94
45	PM	363/376 (96%)	361 (99%)	2 (1%)	84	90
45	QA	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	QC	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	QE	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	QG	365/376 (97%)	365 (100%)	0	100	100
45	QI	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	QK	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	QM	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	RA	365/376 (97%)	365 (100%)	0	100	100
45	RC	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	RE	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	RG	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	RI	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	RK	365/376 (97%)	364 (100%)	1 (0%)	91	94

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	RM	365/376 (97%)	365 (100%)	0	100	100
45	SA	364/376 (97%)	363 (100%)	1 (0%)	91	94
45	SC	364/376 (97%)	359 (99%)	5 (1%)	62	76
45	SE	364/376 (97%)	364 (100%)	0	100	100
45	SG	364/376 (97%)	362 (100%)	2 (0%)	86	92
45	SI	364/376 (97%)	362 (100%)	2 (0%)	86	92
45	SK	364/376 (97%)	362 (100%)	2 (0%)	86	92
45	SM	364/376 (97%)	361 (99%)	3 (1%)	79	85
45	TA	364/376 (97%)	364 (100%)	0	100	100
45	TC	364/376 (97%)	362 (100%)	2 (0%)	86	92
45	TE	364/376 (97%)	363 (100%)	1 (0%)	91	94
45	TG	364/376 (97%)	363 (100%)	1 (0%)	91	94
45	TI	364/376 (97%)	364 (100%)	0	100	100
45	TK	364/376 (97%)	363 (100%)	1 (0%)	91	94
45	TM	364/376 (97%)	361 (99%)	3 (1%)	79	85
45	UA	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	UC	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	UE	365/376 (97%)	365 (100%)	0	100	100
45	UG	365/376 (97%)	365 (100%)	0	100	100
45	UI	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	UK	365/376 (97%)	363 (100%)	2 (0%)	86	92
45	UM	365/376 (97%)	365 (100%)	0	100	100
45	VA	367/376 (98%)	365 (100%)	2 (0%)	86	92
45	VC	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	VE	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	VG	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	VI	367/376 (98%)	364 (99%)	3 (1%)	79	85
45	VK	370/376 (98%)	370 (100%)	0	100	100
45	VM	367/376 (98%)	366 (100%)	1 (0%)	91	94
45	WA	365/376 (97%)	365 (100%)	0	100	100
45	WC	370/376 (98%)	369 (100%)	1 (0%)	91	94

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
45	WE	365/376 (97%)	362 (99%)	3 (1%)	79	85
45	WG	370/376 (98%)	369 (100%)	1 (0%)	91	94
45	WI	365/376 (97%)	364 (100%)	1 (0%)	91	94
45	WK	370/376 (98%)	368 (100%)	2 (0%)	86	92
45	WM	365/376 (97%)	361 (99%)	4 (1%)	70	80
46	AB	365/376 (97%)	365 (100%)	0	100	100
46	AD	365/376 (97%)	365 (100%)	0	100	100
46	AF	365/376 (97%)	365 (100%)	0	100	100
46	AH	365/376 (97%)	365 (100%)	0	100	100
46	AJ	365/376 (97%)	365 (100%)	0	100	100
46	AL	365/376 (97%)	365 (100%)	0	100	100
46	AN	365/376 (97%)	365 (100%)	0	100	100
46	BB	360/376 (96%)	358 (99%)	2 (1%)	84	90
46	BD	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	BF	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	BH	365/376 (97%)	365 (100%)	0	100	100
46	BJ	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	BL	365/376 (97%)	365 (100%)	0	100	100
46	BN	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	CB	365/376 (97%)	365 (100%)	0	100	100
46	CD	365/376 (97%)	365 (100%)	0	100	100
46	CF	365/376 (97%)	365 (100%)	0	100	100
46	CH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	CJ	365/376 (97%)	365 (100%)	0	100	100
46	CL	365/376 (97%)	365 (100%)	0	100	100
46	CN	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	DB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	DD	365/376 (97%)	365 (100%)	0	100	100
46	DF	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	DH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	DJ	365/376 (97%)	365 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	DL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	DN	365/376 (97%)	362 (99%)	3 (1%)	79	85
46	EB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	ED	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	EF	365/376 (97%)	365 (100%)	0	100	100
46	EH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	EJ	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	EL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	EN	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	FB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	FD	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	FF	365/376 (97%)	365 (100%)	0	100	100
46	FH	365/376 (97%)	365 (100%)	0	100	100
46	FJ	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	FL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	FN	365/376 (97%)	365 (100%)	0	100	100
46	GB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	GD	365/376 (97%)	365 (100%)	0	100	100
46	GF	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	GH	365/376 (97%)	365 (100%)	0	100	100
46	GJ	365/376 (97%)	365 (100%)	0	100	100
46	GL	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	GN	365/376 (97%)	365 (100%)	0	100	100
46	HB	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	HD	365/376 (97%)	365 (100%)	0	100	100
46	HF	365/376 (97%)	365 (100%)	0	100	100
46	HH	365/376 (97%)	365 (100%)	0	100	100
46	HJ	365/376 (97%)	365 (100%)	0	100	100
46	HL	365/376 (97%)	365 (100%)	0	100	100
46	HN	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	IB	365/376 (97%)	363 (100%)	2 (0%)	86	92

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	ID	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	IF	365/376 (97%)	365 (100%)	0	100	100
46	IH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	IJ	365/376 (97%)	365 (100%)	0	100	100
46	IL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	IN	365/376 (97%)	365 (100%)	0	100	100
46	JB	365/376 (97%)	365 (100%)	0	100	100
46	JD	365/376 (97%)	365 (100%)	0	100	100
46	JF	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	JH	365/376 (97%)	365 (100%)	0	100	100
46	JJ	365/376 (97%)	365 (100%)	0	100	100
46	JL	365/376 (97%)	365 (100%)	0	100	100
46	JN	365/376 (97%)	365 (100%)	0	100	100
46	KB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	KD	365/376 (97%)	365 (100%)	0	100	100
46	KF	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	KH	365/376 (97%)	365 (100%)	0	100	100
46	KJ	365/376 (97%)	365 (100%)	0	100	100
46	KL	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	KN	365/376 (97%)	365 (100%)	0	100	100
46	LB	365/376 (97%)	365 (100%)	0	100	100
46	LD	365/376 (97%)	365 (100%)	0	100	100
46	LF	365/376 (97%)	361 (99%)	4 (1%)	70	80
46	LH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	LJ	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	LL	365/376 (97%)	365 (100%)	0	100	100
46	LN	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	MB	365/376 (97%)	365 (100%)	0	100	100
46	MD	365/376 (97%)	365 (100%)	0	100	100
46	MF	365/376 (97%)	365 (100%)	0	100	100
46	MH	365/376 (97%)	365 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	MJ	365/376 (97%)	365 (100%)	0	100	100
46	ML	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	MN	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	NB	359/376 (96%)	358 (100%)	1 (0%)	91	94
46	ND	365/376 (97%)	365 (100%)	0	100	100
46	NF	359/376 (96%)	359 (100%)	0	100	100
46	NH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	NJ	359/376 (96%)	358 (100%)	1 (0%)	91	94
46	NL	365/376 (97%)	365 (100%)	0	100	100
46	NN	359/376 (96%)	359 (100%)	0	100	100
46	OB	365/376 (97%)	361 (99%)	4 (1%)	70	80
46	OD	365/376 (97%)	365 (100%)	0	100	100
46	OF	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	OH	365/376 (97%)	365 (100%)	0	100	100
46	OJ	365/376 (97%)	365 (100%)	0	100	100
46	OL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	ON	365/376 (97%)	365 (100%)	0	100	100
46	PB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	PD	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	PF	365/376 (97%)	365 (100%)	0	100	100
46	PH	365/376 (97%)	365 (100%)	0	100	100
46	PJ	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	PL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	PN	365/376 (97%)	365 (100%)	0	100	100
46	QB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	QD	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	QF	365/376 (97%)	365 (100%)	0	100	100
46	QH	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	QJ	365/376 (97%)	365 (100%)	0	100	100
46	QL	365/376 (97%)	365 (100%)	0	100	100
46	QN	365/376 (97%)	363 (100%)	2 (0%)	86	92

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	RB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	RD	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	RF	365/376 (97%)	365 (100%)	0	100	100
46	RH	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	RJ	365/376 (97%)	362 (99%)	3 (1%)	79	85
46	RL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	RN	365/376 (97%)	365 (100%)	0	100	100
46	SB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	SD	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	SF	365/376 (97%)	365 (100%)	0	100	100
46	SH	365/376 (97%)	365 (100%)	0	100	100
46	SJ	365/376 (97%)	365 (100%)	0	100	100
46	SL	365/376 (97%)	365 (100%)	0	100	100
46	SN	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	TB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	TD	365/376 (97%)	365 (100%)	0	100	100
46	TF	365/376 (97%)	365 (100%)	0	100	100
46	TH	365/376 (97%)	365 (100%)	0	100	100
46	TJ	365/376 (97%)	365 (100%)	0	100	100
46	TL	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	TN	365/376 (97%)	362 (99%)	3 (1%)	79	85
46	UB	365/376 (97%)	363 (100%)	2 (0%)	86	92
46	UD	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	UF	365/376 (97%)	365 (100%)	0	100	100
46	UH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	UJ	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	UL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	UN	365/376 (97%)	365 (100%)	0	100	100
46	VB	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	VD	365/376 (97%)	365 (100%)	0	100	100
46	VF	365/376 (97%)	364 (100%)	1 (0%)	91	94

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	VH	365/376 (97%)	365 (100%)	0	100	100
46	VJ	365/376 (97%)	365 (100%)	0	100	100
46	VL	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	VN	365/376 (97%)	365 (100%)	0	100	100
46	WB	365/376 (97%)	365 (100%)	0	100	100
46	WD	365/376 (97%)	365 (100%)	0	100	100
46	WF	365/376 (97%)	365 (100%)	0	100	100
46	WH	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	WJ	365/376 (97%)	364 (100%)	1 (0%)	91	94
46	WL	365/376 (97%)	365 (100%)	0	100	100
46	WN	365/376 (97%)	365 (100%)	0	100	100
All	All	142117/152292 (93%)	141699 (100%)	418 (0%)	90	94

All (418) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0A	136	ASN
3	0C	122	ARG
4	0D	224	ARG
5	0E	11	ARG
5	0E	39	ARG
7	0G	12	LYS
7	0G	99	ARG
8	0H	349	ARG
8	0H	388	LYS
8	0H	396	ARG
12	0T	12	LYS
12	0T	252	ARG
13	0U	75	LYS
14	0V	22	ARG
14	0V	24	ARG
1	1A	127	ASN
16	1B	266	LYS
5	1E	39	ARG
5	1E	89	ARG
17	1F	94	LYS
17	1F	110	LYS
17	1F	135	ASN

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Mol	Chain	Res	Type
17	1F	168	ARG
8	1H	129	ARG
8	1H	189	LYS
8	1H	206	ARG
8	1H	382	ARG
18	1I	120	HIS
18	1I	136	ARG
19	1J	384	LYS
20	1K	51	ARG
21	1L	892	ARG
21	1L	933	LYS
22	1M	47	LYS
23	1O	106	LYS
23	1O	122	LYS
23	1O	198	LYS
23	1O	215	LYS
24	1P	89	ARG
24	1P	91	LYS
24	1P	128	ARG
24	1P	158	LYS
24	1P	273	GLN
24	1P	345	LYS
25	1R	219	LYS
11	1S	37	LYS
12	1T	117	ARG
12	1T	216	LYS
13	1U	48	GLN
13	1U	512	ARG
14	1V	231	LYS
14	1V	257	LYS
26	1W	272	LYS
1	2A	137	GLN
16	2B	76	ARG
5	2E	89	ARG
31	2I	63	LYS
20	2K	227	ARG
20	2K	264	LYS
21	2L	618	ARG
21	2L	667	ARG
21	2L	780	GLN
21	2L	861	ARG
21	2L	933	LYS

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Mol	Chain	Res	Type
23	2O	128	ARG
23	2O	159	GLN
23	2O	225	LYS
23	2O	341	LYS
23	2O	397	ARG
24	2P	370	LYS
24	2P	431	ARG
11	2S	32	LYS
12	2T	216	LYS
13	2U	46	ARG
13	2U	167	ASN
13	2U	350	ARG
13	2U	372	ASN
13	2U	512	ARG
14	2V	253	LYS
26	2W	203	LYS
26	2W	233	ASN
15	2X	135	ARG
1	3A	36	ARG
1	3A	127	ASN
16	3B	266	LYS
5	3E	39	ARG
5	3E	89	ARG
5	3E	102	LYS
5	3E	121	ARG
30	3H	207	LYS
31	3I	220	LYS
31	3I	255	LYS
31	3I	276	LYS
21	3L	67	ARG
21	3L	180	GLN
23	3O	341	LYS
23	3O	349	ARG
12	3T	117	ARG
12	3T	216	LYS
13	3U	48	GLN
13	3U	75	LYS
13	3U	387	ARG
13	3U	436	LYS
14	3V	24	ARG
27	4C	198	LYS
10	4Q	100	ARG

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Mol	Chain	Res	Type
34	4R	380	ARG
35	4S	86	LYS
35	4S	197	ARG
36	5A	30	LYS
36	5A	54	ARG
36	5C	142	GLN
37	5E	129	ARG
37	5F	48	ARG
37	5G	183	LYS
37	5G	185	LYS
10	5Q	100	ARG
34	5R	325	LYS
34	5R	379	LYS
35	5S	86	LYS
35	5S	197	ARG
39	6F	98	LYS
40	6G	301	ARG
34	7R	440	ARG
45	AA	221	ARG
45	AC	2	ARG
45	AE	326	LYS
45	AG	326	LYS
45	AK	2	ARG
45	AK	326	LYS
45	BA	163	LYS
45	BA	221	ARG
45	BA	401	LYS
46	BB	298	ASN
46	BB	359	LYS
45	BC	112	LYS
45	BC	304	LYS
46	BD	247	ASN
46	BD	347	ASN
46	BF	245	GLN
46	BJ	122	LYS
46	BJ	347	ASN
45	BK	221	ARG
45	BM	2	ARG
46	BN	321	MET
45	CA	256	GLN
45	CE	2	ARG
45	CE	84	ARG

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Mol	Chain	Res	Type
45	CG	2	ARG
46	CH	321	MET
45	CM	121	ARG
46	CN	241	ARG
46	DB	390	ARG
45	DC	326	LYS
46	DF	298	ASN
46	DF	347	ASN
45	DG	326	LYS
46	DH	306	ARG
45	DI	2	ARG
45	DI	300	ASN
45	DK	326	LYS
46	DL	347	ASN
46	DN	241	ARG
46	DN	377	MET
46	DN	390	ARG
45	EA	221	ARG
46	EB	216	LYS
46	ED	298	ASN
46	ED	321	MET
45	EE	326	LYS
45	EG	2	ARG
45	EG	128	ASN
45	EG	308	ARG
46	EH	414	ASN
45	EI	2	ARG
45	EI	326	LYS
46	EJ	414	ASN
45	EK	163	LYS
46	EL	306	ARG
45	EM	2	ARG
46	EN	162	ARG
46	EN	216	LYS
45	FA	2	ARG
45	FA	64	ARG
45	FA	326	LYS
46	FB	122	LYS
45	FC	300	ASN
46	FD	298	ASN
45	FE	326	LYS
45	FG	326	LYS

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Mol	Chain	Res	Type
45	FI	304	LYS
46	FJ	247	ASN
46	FJ	298	ASN
45	FK	280	LYS
45	FK	326	LYS
46	FL	321	MET
45	FM	326	LYS
45	GA	2	ARG
46	GB	276	ARG
45	GC	2	ARG
45	GC	221	ARG
45	GC	370	LYS
46	GF	276	ARG
45	GI	2	ARG
45	GI	326	LYS
45	GK	370	LYS
46	GL	247	ASN
46	GL	347	ASN
45	GM	105	ARG
45	GM	243	ARG
45	GM	326	LYS
46	HB	62	ARG
46	HB	241	ARG
45	HC	308	ARG
45	HG	85	GLN
45	HI	2	ARG
45	HK	2	ARG
46	HN	347	ASN
45	IA	2	ARG
45	IA	320	ARG
46	IB	137	HIS
46	IB	247	ASN
45	IC	372	MET
46	ID	48	ASN
45	IG	133	GLN
46	IH	347	ASN
46	IL	306	ARG
45	IM	18	ASN
45	IM	192	HIS
45	IM	326	LYS
45	JA	308	ARG
45	JE	300	ASN

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Mol	Chain	Res	Type
46	JF	414	ASN
45	JG	2	ARG
45	JG	300	ASN
45	JG	308	ARG
45	JK	2	ARG
45	KA	2	ARG
45	KA	326	LYS
45	KA	339	ARG
46	KB	11	GLN
45	KC	326	LYS
45	KE	339	ARG
46	KF	298	ASN
45	KG	326	LYS
45	KI	326	LYS
45	KI	339	ARG
46	KL	297	LYS
46	KL	298	ASN
45	KM	2	ARG
45	KM	326	LYS
45	LC	79	ARG
45	LE	326	LYS
46	LF	298	ASN
46	LF	321	MET
46	LF	347	ASN
46	LF	390	ARG
45	LG	79	ARG
45	LG	300	ASN
45	LG	339	ARG
46	LH	247	ASN
45	LI	326	LYS
46	LJ	347	ASN
46	LN	320	ARG
45	MA	2	ARG
45	ME	308	ARG
45	MG	326	LYS
45	MI	308	ARG
45	MI	326	LYS
46	ML	279	GLN
46	ML	298	ASN
45	MM	35	GLN
46	MN	204	ASN
45	NA	2	ARG

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Mol	Chain	Res	Type
45	NA	40	ARG
46	NB	262	ARG
45	NC	64	ARG
45	NC	373	ARG
45	NG	64	ARG
46	NH	347	ASN
46	NJ	347	ASN
45	NM	300	ASN
45	OA	401	LYS
46	OB	122	LYS
46	OB	298	ASN
46	OB	306	ARG
46	OB	391	ARG
45	OC	221	ARG
45	OC	370	LYS
45	OE	300	ASN
46	OF	306	ARG
45	OK	370	LYS
46	OL	122	LYS
45	OM	2	ARG
45	OM	64	ARG
45	OM	370	LYS
46	PB	121	ARG
46	PD	276	ARG
45	PG	112	LYS
45	PG	221	ARG
45	PI	430	LYS
46	PJ	414	ASN
45	PK	329	ASN
46	PL	227	HIS
45	PM	156	ARG
45	PM	326	LYS
45	QA	60	LYS
45	QA	214	ARG
45	QA	258	ASN
46	QB	200	MET
45	QC	2	ARG
45	QC	84	ARG
45	QC	221	ARG
46	QD	347	ASN
46	QD	390	ARG
45	QE	233	GLN

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Mol	Chain	Res	Type
45	QE	339	ARG
46	QH	298	ASN
46	QH	414	ASN
45	QI	249	ASN
45	QI	339	ARG
45	QK	11	GLN
45	QM	215	ARG
45	QM	326	LYS
45	QM	329	ASN
46	QN	77	ARG
46	QN	390	ARG
46	RB	414	ASN
45	RC	2	ARG
45	RC	233	GLN
46	RD	414	ASN
45	RE	128	ASN
45	RE	280	LYS
45	RE	300	ASN
45	RG	221	ARG
45	RG	233	GLN
45	RG	372	MET
46	RH	292	GLN
46	RH	414	ASN
45	RI	2	ARG
45	RI	233	GLN
46	RJ	83	GLN
46	RJ	298	ASN
46	RJ	347	ASN
45	RK	233	GLN
46	RL	414	ASN
45	SA	229	ARG
46	SB	11	GLN
45	SC	2	ARG
45	SC	84	ARG
45	SC	326	LYS
45	SC	356	ASN
45	SC	402	ARG
46	SD	247	ASN
45	SG	2	ARG
45	SG	326	LYS
45	SI	2	ARG
45	SI	326	LYS

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Mol	Chain	Res	Type
45	SK	2	ARG
45	SK	326	LYS
45	SM	2	ARG
45	SM	233	GLN
45	SM	373	ARG
46	SN	227	HIS
46	SN	390	ARG
46	TB	276	ARG
45	TC	2	ARG
45	TC	401	LYS
45	TE	326	LYS
45	TG	326	LYS
45	TK	2	ARG
46	TL	46	ARG
46	TL	156	ARG
45	TM	2	ARG
45	TM	308	ARG
45	TM	401	LYS
46	TN	252	LYS
46	TN	370	ASN
46	TN	414	ASN
45	UA	264	ARG
46	UB	191	GLN
46	UB	359	LYS
45	UC	2	ARG
46	UD	347	ASN
46	UH	276	ARG
45	UI	283	HIS
46	UJ	247	ASN
45	UK	2	ARG
45	UK	326	LYS
46	UL	306	ARG
45	VA	2	ARG
45	VA	300	ASN
46	VB	359	LYS
45	VC	300	ASN
45	VC	339	ARG
45	VE	112	LYS
46	VF	276	ARG
45	VG	300	ASN
45	VG	430	LYS
45	VI	2	ARG

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Mol	Chain	Res	Type
45	VI	176	GLN
45	VI	308	ARG
46	VL	347	ASN
45	VM	326	LYS
45	WC	339	ARG
45	WE	280	LYS
45	WE	372	MET
45	WE	430	LYS
45	WG	221	ARG
46	WH	204	ASN
45	WI	280	LYS
46	WJ	414	ASN
45	WK	40	ARG
45	WK	163	LYS
45	WM	214	ARG
45	WM	243	ARG
45	WM	326	LYS
45	WM	390	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (508) such sidechains are listed below:

Mol	Chain	Res	Type
1	0A	17	GLN
1	0A	105	HIS
2	0B	91	ASN
2	0B	210	GLN
4	0D	93	GLN
4	0D	95	GLN
4	0D	212	ASN
6	0F	61	ASN
6	0F	216	ASN
7	0G	72	GLN
9	0N	88	ASN
11	0S	94	GLN
11	0S	235	GLN
11	0S	266	ASN
11	0S	277	GLN
13	0U	29	HIS
13	0U	42	HIS
13	0U	274	GLN
14	0V	96	ASN
14	0V	224	GLN

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Mol	Chain	Res	Type
15	0X	89	ASN
1	1A	17	GLN
1	1A	103	GLN
16	1B	17	GLN
16	1B	410	GLN
5	1E	62	GLN
5	1E	64	GLN
8	1H	176	ASN
8	1H	302	GLN
8	1H	307	GLN
8	1H	315	GLN
19	1J	396	GLN
20	1K	15	ASN
20	1K	91	HIS
21	1L	108	GLN
21	1L	651	GLN
24	1P	226	HIS
10	1Q	4	ASN
10	1Q	131	GLN
11	1S	24	GLN
11	1S	33	ASN
11	1S	42	ASN
11	1S	91	ASN
11	1S	266	ASN
13	1U	42	HIS
13	1U	316	ASN
13	1U	587	GLN
26	1W	69	ASN
26	1W	252	GLN
1	2A	17	GLN
1	2A	105	HIS
16	2B	17	GLN
16	2B	87	GLN
27	2C	192	GLN
27	2C	194	GLN
5	2E	105	GLN
28	2F	12	GLN
29	2G	5	GLN
20	2K	219	GLN
20	2K	429	HIS
21	2L	523	GLN
23	2O	159	GLN

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Mol	Chain	Res	Type
23	2O	207	HIS
23	2O	217	ASN
23	2O	363	GLN
23	2O	385	GLN
23	2O	413	GLN
23	2O	440	GLN
23	2O	459	GLN
24	2P	355	GLN
24	2P	394	GLN
25	2R	516	GLN
11	2S	150	GLN
11	2S	235	GLN
12	2T	102	HIS
12	2T	104	HIS
14	2V	64	HIS
26	2W	210	GLN
1	3A	17	GLN
16	3B	79	GLN
21	3L	104	GLN
23	3O	269	GLN
23	3O	363	GLN
23	3O	375	GLN
23	3O	423	HIS
25	3R	30	GLN
25	3R	302	GLN
11	3S	296	GLN
13	3U	42	HIS
13	3U	274	GLN
13	3U	587	GLN
15	3X	105	GLN
15	3X	109	GLN
34	4R	293	HIS
34	4R	294	ASN
34	4R	513	HIS
36	5A	90	GLN
36	5B	21	GLN
36	5D	90	GLN
37	5E	211	ASN
37	5F	63	HIS
37	5F	79	ASN
37	5H	13	ASN
34	5R	246	GLN

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Mol	Chain	Res	Type
35	5S	208	GLN
40	6G	169	GLN
41	6H	295	GLN
10	6Q	92	GLN
34	6R	128	HIS
34	7R	403	ASN
45	AA	8	HIS
45	AA	11	GLN
45	AA	31	GLN
45	AA	226	ASN
46	AB	100	ASN
46	AD	347	ASN
46	AD	414	ASN
46	AF	245	GLN
45	AI	11	GLN
45	AI	102	ASN
46	AJ	279	GLN
45	AK	11	GLN
45	AM	11	GLN
45	AM	15	GLN
45	BA	11	GLN
46	BB	256	ASN
46	BB	414	ASN
46	BD	6	HIS
46	BD	134	GLN
45	BE	226	ASN
46	BF	8	GLN
45	BG	329	ASN
46	BH	334	GLN
46	BJ	329	GLN
46	BJ	334	GLN
46	BL	347	ASN
46	BN	347	ASN
45	CA	258	ASN
46	CB	347	ASN
45	CC	101	ASN
46	CD	332	ASN
46	CD	347	ASN
45	CE	18	ASN
45	CE	85	GLN
45	CE	101	ASN
45	CE	197	HIS

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Mol	Chain	Res	Type
45	CE	329	ASN
46	CF	280	GLN
45	CG	258	ASN
46	CH	227	HIS
46	CJ	191	GLN
46	CJ	347	ASN
46	CL	227	HIS
45	CM	133	GLN
45	CM	226	ASN
46	CN	15	GLN
46	CN	105	HIS
46	CN	307	HIS
45	DA	8	HIS
46	DB	8	GLN
46	DB	264	HIS
46	DB	347	ASN
46	DB	423	GLN
45	DC	258	ASN
46	DD	6	HIS
46	DD	43	GLN
46	DF	190	HIS
46	DF	414	ASN
46	DH	99	ASN
46	DJ	6	HIS
46	DJ	8	GLN
46	DJ	134	GLN
46	DL	191	GLN
45	DM	197	HIS
46	DN	11	GLN
46	DN	226	ASN
46	DN	256	ASN
46	DN	329	GLN
45	EA	91	GLN
45	EA	285	GLN
45	EA	293	ASN
46	EB	8	GLN
46	EB	14	ASN
45	EC	31	GLN
45	EE	91	GLN
46	EH	247	ASN
46	EH	292	GLN
46	EH	298	ASN

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Mol	Chain	Res	Type
46	EH	334	GLN
45	EI	11	GLN
46	EJ	414	ASN
45	EK	11	GLN
46	EL	99	ASN
45	EM	258	ASN
46	EN	6	HIS
46	EN	8	GLN
46	EN	134	GLN
46	EN	334	GLN
46	EN	384	GLN
45	FA	15	GLN
46	FB	100	ASN
46	FB	134	GLN
45	FC	31	GLN
46	FD	247	ASN
46	FF	134	GLN
45	FG	88	HIS
46	FH	414	ASN
45	FI	11	GLN
46	FJ	94	GLN
46	FJ	247	ASN
45	FK	11	GLN
45	FK	258	ASN
45	FK	380	ASN
46	FL	8	GLN
46	FL	134	GLN
45	FM	11	GLN
46	FN	134	GLN
46	FN	137	HIS
46	FN	191	GLN
46	FN	334	GLN
46	FN	335	ASN
45	GA	31	GLN
46	GB	134	GLN
46	GB	137	HIS
46	GB	195	ASN
45	GC	283	HIS
46	GD	94	GLN
46	GD	204	ASN
46	GD	334	GLN
45	GE	11	GLN

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Mol	Chain	Res	Type
46	GF	247	ASN
46	GH	334	GLN
45	GI	11	GLN
45	GI	28	HIS
45	GK	11	GLN
46	GL	94	GLN
46	GL	247	ASN
45	GM	283	HIS
46	HB	14	ASN
46	HB	52	ASN
46	HB	131	GLN
45	HC	88	HIS
45	HC	258	ASN
45	HE	128	ASN
46	HF	99	ASN
46	HF	347	ASN
46	HJ	134	GLN
45	HK	88	HIS
46	HL	100	ASN
46	HL	191	GLN
46	IB	100	ASN
46	IB	131	GLN
46	ID	334	GLN
46	ID	347	ASN
45	IE	11	GLN
45	IE	285	GLN
46	IF	334	GLN
46	IF	347	ASN
45	IG	133	GLN
46	IH	227	HIS
46	IH	334	GLN
45	II	329	ASN
46	IJ	334	GLN
46	IL	334	GLN
46	IN	94	GLN
46	IN	291	GLN
45	JA	11	GLN
45	JA	85	GLN
46	JB	190	HIS
45	JC	15	GLN
45	JC	91	GLN
45	JC	101	ASN

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Mol	Chain	Res	Type
46	JD	279	GLN
46	JD	347	ASN
45	JG	101	ASN
45	JG	256	GLN
46	JH	347	ASN
45	JI	88	HIS
46	JJ	334	GLN
46	JJ	347	ASN
45	JK	31	GLN
45	JK	101	ASN
45	JM	393	HIS
46	JN	227	HIS
46	JN	347	ASN
46	KB	14	ASN
45	KE	11	GLN
45	KE	88	HIS
46	KF	334	GLN
46	KF	347	ASN
45	KG	226	ASN
46	KH	416	ASN
46	KJ	43	GLN
46	KL	99	ASN
46	KL	280	GLN
46	KN	99	ASN
46	KN	334	GLN
46	LB	334	GLN
45	LC	11	GLN
45	LC	258	ASN
45	LC	329	ASN
46	LD	384	GLN
46	LF	99	ASN
46	LF	279	GLN
46	LF	334	GLN
46	LF	347	ASN
45	LG	258	ASN
46	LH	334	GLN
46	LH	384	GLN
46	LJ	334	GLN
45	LK	11	GLN
46	LL	247	ASN
46	LL	298	ASN
46	LL	384	GLN

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Mol	Chain	Res	Type
45	LM	11	GLN
45	LM	226	ASN
46	LN	334	GLN
46	MB	191	GLN
46	MB	337	ASN
46	MB	347	ASN
46	MD	94	GLN
46	MF	347	ASN
46	MF	414	ASN
45	MG	11	GLN
45	MG	258	ASN
45	MI	11	GLN
45	MI	102	ASN
46	MJ	134	GLN
45	MK	85	GLN
46	ML	414	ASN
45	MM	380	ASN
45	NA	31	GLN
45	NA	258	ASN
45	NA	283	HIS
46	NB	15	GLN
46	NB	226	ASN
46	ND	14	ASN
45	NG	329	ASN
46	NH	14	ASN
46	NH	190	HIS
45	NK	8	HIS
46	NL	6	HIS
46	NL	8	GLN
46	NL	190	HIS
46	NL	226	ASN
46	NL	334	GLN
46	NL	414	ASN
46	NN	256	ASN
45	OA	61	HIS
46	OB	11	GLN
46	OB	15	GLN
46	OB	280	GLN
46	OB	332	ASN
45	OC	128	ASN
45	OC	285	GLN
46	OF	99	ASN

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Mol	Chain	Res	Type
46	OH	43	GLN
46	OH	334	GLN
46	OJ	8	GLN
46	OJ	332	ASN
45	OK	31	GLN
46	OL	279	GLN
46	OL	334	GLN
46	ON	6	HIS
46	ON	134	GLN
46	ON	329	GLN
46	ON	332	ASN
46	PB	226	ASN
46	PB	329	GLN
46	PB	347	ASN
46	PB	384	GLN
46	PD	100	ASN
46	PF	131	GLN
46	PF	347	ASN
45	PG	256	GLN
45	PG	283	HIS
46	PH	347	ASN
46	PJ	134	GLN
46	PJ	190	HIS
46	PJ	414	ASN
46	PL	329	GLN
46	PL	396	HIS
46	PN	190	HIS
46	QB	6	HIS
46	QB	11	GLN
46	QB	347	ASN
46	QB	375	GLN
45	QC	258	ASN
45	QE	342	GLN
46	QF	334	GLN
46	QF	347	ASN
45	QG	256	GLN
46	QH	334	GLN
45	QI	285	GLN
46	QJ	8	GLN
46	QJ	37	HIS
46	QJ	134	GLN
46	QJ	375	GLN

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Mol	Chain	Res	Type
45	QK	11	GLN
45	QK	88	HIS
45	QK	197	HIS
46	QL	190	HIS
46	QL	256	ASN
46	QL	334	GLN
46	QL	347	ASN
46	QL	384	GLN
45	QM	88	HIS
45	QM	101	ASN
45	QM	285	GLN
45	QM	329	ASN
46	QN	190	HIS
45	RA	228	ASN
45	RE	91	GLN
46	RF	414	ASN
45	RG	11	GLN
46	RH	256	ASN
46	RH	347	ASN
45	RI	101	ASN
46	RJ	247	ASN
46	RJ	414	ASN
45	RK	11	GLN
45	RK	128	ASN
45	RK	380	ASN
46	RL	6	HIS
46	RL	8	GLN
46	RL	226	ASN
46	RL	264	HIS
46	RL	291	GLN
46	RL	292	GLN
46	RL	334	GLN
45	RM	256	GLN
45	RM	300	ASN
46	RN	43	GLN
45	SA	15	GLN
46	SB	6	HIS
46	SB	8	GLN
46	SB	14	ASN
46	SB	100	ASN
46	SB	134	GLN
45	SC	11	GLN

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Mol	Chain	Res	Type
45	SC	61	HIS
45	SC	258	ASN
45	SE	283	HIS
45	SE	380	ASN
46	SH	8	GLN
46	SH	100	ASN
46	SH	396	HIS
45	SI	61	HIS
46	SJ	8	GLN
46	SJ	298	ASN
45	SK	329	ASN
46	SL	375	GLN
46	SL	423	GLN
46	SN	375	GLN
46	TB	6	HIS
46	TB	8	GLN
46	TB	100	ASN
46	TB	134	GLN
46	TB	190	HIS
45	TC	11	GLN
45	TC	15	GLN
46	TD	14	ASN
46	TD	100	ASN
46	TD	256	ASN
45	TG	283	HIS
46	TL	8	GLN
46	UB	6	HIS
46	UB	8	GLN
46	UB	131	GLN
46	UB	190	HIS
46	UD	99	ASN
46	UD	226	ASN
46	UH	280	GLN
46	UH	347	ASN
46	UJ	43	GLN
46	UJ	99	ASN
46	UJ	100	ASN
46	UN	191	GLN
46	UN	375	GLN
46	VB	190	HIS
46	VB	375	GLN
45	VC	11	GLN

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Mol	Chain	Res	Type
45	VC	101	ASN
46	VD	334	GLN
46	VF	347	ASN
45	VG	11	GLN
46	VH	334	GLN
45	VI	101	ASN
46	VL	8	GLN
46	VL	14	ASN
46	VL	134	GLN
45	VM	293	ASN
46	VN	334	GLN
46	VN	347	ASN
45	WA	283	HIS
46	WB	100	ASN
46	WB	190	HIS
45	WC	128	ASN
46	WF	99	ASN
46	WH	94	GLN
46	WH	204	ASN
46	WH	347	ASN
46	WJ	279	GLN
46	WJ	298	ASN
45	WK	258	ASN
46	WL	329	GLN
46	WL	375	GLN
45	WM	266	HIS

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

### 5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

There are no non-standard protein/DNA/RNA residues in this entry.

### 5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.



## 5.6 Ligand geometry

Of 483 ligands modelled in this entry, 161 are monoatomic - leaving 322 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	LD	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	WK	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	IH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	QH	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	TA	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	EF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	OK	501	48	29,34,34	1.25	3 (10%)	35,54,54	1.27	4 (11%)
47	GTP	IK	502	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	HJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	EE	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	UM	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.28	3 (8%)
49	GDP	MD	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	CH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	OJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.05	1 (3%)
49	GDP	TH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	NC	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	IC	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.31	4 (11%)
49	GDP	GN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	CK	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.27	4 (11%)
49	GDP	CN	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	FG	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	RI	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.31	4 (11%)
47	GTP	KM	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	GA	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	WA	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.24	4 (11%)
49	GDP	WH	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.11	2 (6%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
47	GTP	FM	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.33	4 (11%)
47	GTP	VG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.30	3 (8%)
47	GTP	PA	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	JK	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	GB	502	-	25,30,30	0.99	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	KL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	QI	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	IB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.04	2 (6%)
47	GTP	IM	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	CL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	GL	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	PE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.30	4 (11%)
47	GTP	UA	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.25	4 (11%)
49	GDP	FL	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	AD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.03	2 (6%)
47	GTP	DG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	VD	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	FH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	BJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	SK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	TI	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.28	3 (8%)
47	GTP	OE	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	VM	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	JJ	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	OF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	EL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	KA	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	AI	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	TM	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	BG	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.31	4 (11%)
49	GDP	JF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	CJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	RA	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	IL	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	PG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.26	4 (11%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	VB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	AA	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.28	4 (11%)
49	GDP	QN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	OA	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	WE	501	48	29,34,34	1.24	3 (10%)	35,54,54	1.30	4 (11%)
47	GTP	LM	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	FE	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	NA	501	48	29,34,34	1.28	3 (10%)	35,54,54	1.26	4 (11%)
49	GDP	WF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	NE	501	48	29,34,34	1.26	3 (10%)	35,54,54	1.27	4 (11%)
49	GDP	IF	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	NN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	UG	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.30	3 (8%)
47	GTP	BM	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.30	4 (11%)
47	GTP	FK	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	CA	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.24	4 (11%)
47	GTP	HM	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	RD	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.11	2 (6%)
47	GTP	HE	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	CC	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.31	4 (11%)
47	GTP	WI	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	DF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	TK	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	BA	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	UK	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	FD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.03	2 (6%)
47	GTP	DC	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.30	4 (11%)
49	GDP	UN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	QG	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.25	4 (11%)
47	GTP	UE	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	TB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	OH	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	QB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	WC	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.29	4 (11%)
47	GTP	QE	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.27	4 (11%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
47	GTP	RG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.25	4 (11%)
49	GDP	MJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	MK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	HH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	HA	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	JH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	EA	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.24	4 (11%)
49	GDP	ED	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	EJ	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.10	2 (6%)
49	GDP	LB	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	GM	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	MI	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	PN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	AB	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	NJ	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	RC	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.25	4 (11%)
49	GDP	MB	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	SA	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	MF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	SC	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	SL	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	HC	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.30	4 (11%)
49	GDP	UF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	QL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	AJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.04	2 (6%)
47	GTP	LG	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	PL	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	DM	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.29	3 (8%)
49	GDP	GF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	SN	501	-	25,30,30	1.01	1 (4%)	30,47,47	1.11	2 (6%)
49	GDP	PB	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	GK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	PK	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.30	3 (8%)
47	GTP	HI	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	KC	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.29	4 (11%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	LJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	ON	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	GE	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.30	4 (11%)
47	GTP	VK	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.31	4 (11%)
47	GTP	HK	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	SD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.11	3 (10%)
49	GDP	UD	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	AK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	SI	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	FI	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.29	4 (11%)
47	GTP	HG	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	EM	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	VN	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	LF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.11	3 (10%)
47	GTP	AM	501	48	29,34,34	1.27	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	QJ	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	KJ	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	PI	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	GH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	NI	501	48	29,34,34	1.26	3 (10%)	35,54,54	1.27	4 (11%)
49	GDP	OB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.10	2 (6%)
47	GTP	LK	501	48	29,34,34	1.25	3 (10%)	35,54,54	1.28	4 (11%)
49	GDP	WJ	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	OC	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.29	3 (8%)
47	GTP	EK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	ND	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	JN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	1 (3%)
49	GDP	KF	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	EC	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	II	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	GC	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	AG	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	WM	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.28	5 (14%)
49	GDP	KN	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	TG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.26	4 (11%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
47	GTP	EI	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	SE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.25	4 (11%)
47	GTP	WG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.29	4 (11%)
47	GTP	VI	501	48	29,34,34	1.27	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	SB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	FA	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.29	3 (8%)
47	GTP	GG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	NF	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	MC	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	IJ	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	RN	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	PJ	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	NL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.10	2 (6%)
47	GTP	QK	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	JD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	IA	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	SH	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	LE	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	OG	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.30	3 (8%)
49	GDP	OL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	VH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	CI	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.32	4 (11%)
49	GDP	KD	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	FF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	BB	502	-	25,30,30	0.99	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	TN	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	LC	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	CD	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	TL	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	MH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.10	2 (6%)
49	GDP	FN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.04	2 (6%)
47	GTP	IE	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	VL	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.04	2 (6%)
47	GTP	RE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	JE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.29	4 (11%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	QD	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.11	2 (6%)
49	GDP	GD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.10	2 (6%)
47	GTP	JI	501	48	29,34,34	1.19	2 (6%)	35,54,54	1.30	3 (8%)
49	GDP	VJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	DE	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.30	4 (11%)
49	GDP	RJ	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	OD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.04	2 (6%)
47	GTP	QC	501	48	29,34,34	1.25	3 (10%)	35,54,54	1.28	3 (8%)
47	GTP	RK	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.24	4 (11%)
49	GDP	WD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	QA	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	AE	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.30	4 (11%)
47	GTP	SG	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.25	4 (11%)
47	GTP	UI	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	IG	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	AN	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	DI	501	48	29,34,34	1.27	4 (13%)	35,54,54	1.32	4 (11%)
47	GTP	BE	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	KG	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	VF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	TE	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	ME	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	CE	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.30	4 (11%)
47	GTP	UC	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	AC	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.29	4 (11%)
47	GTP	EG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	ML	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	EB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	ID	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	MA	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	VE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	KK	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	GJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	UB	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	KH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	LN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	PM	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.26	4 (11%)
47	GTP	KE	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	CF	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	UH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	PC	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	3 (8%)
49	GDP	PH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	BI	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	BF	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.04	1 (3%)
49	GDP	LH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	LA	501	48	29,34,34	1.27	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	JC	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	PF	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	MG	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	BH	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	QM	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	CG	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.30	3 (8%)
49	GDP	JB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	EN	501	-	25,30,30	1.01	2 (8%)	30,47,47	1.10	2 (6%)
49	GDP	KB	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	RB	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	WB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	NG	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	UL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	JA	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	JL	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	TD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	DD	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	NB	502	-	25,30,30	1.00	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	DA	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.25	4 (11%)
49	GDP	RH	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	TC	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	EH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	HN	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	AH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.04	2 (6%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
49	GDP	HF	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	OI	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	AF	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	WL	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	BD	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	BL	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.07	2 (6%)
47	GTP	JG	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	SF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	NK	501	48	29,34,34	1.26	3 (10%)	35,54,54	1.26	4 (11%)
49	GDP	HB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	DN	501	-	25,30,30	1.00	1 (4%)	30,47,47	1.08	3 (10%)
49	GDP	DB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.03	2 (6%)
47	GTP	BC	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	TF	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	DJ	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.11	2 (6%)
49	GDP	RF	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.12	2 (6%)
47	GTP	CM	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	HD	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	PD	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	NM	501	48	29,34,34	1.27	3 (10%)	35,54,54	1.27	4 (11%)
49	GDP	BN	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	RM	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	WN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	TJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	UJ	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.05	2 (6%)
49	GDP	HL	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	OM	501	48	29,34,34	1.26	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	LL	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.07	2 (6%)
49	GDP	FJ	501	-	25,30,30	0.94	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	QF	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.08	2 (6%)
49	GDP	MN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.11	2 (6%)
47	GTP	BK	501	48	29,34,34	1.25	3 (10%)	35,54,54	1.26	4 (11%)
49	GDP	IN	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.10	2 (6%)
47	GTP	FC	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.27	4 (11%)
47	GTP	VC	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.30	3 (8%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
47	GTP	LI	501	48	29,34,34	1.24	2 (6%)	35,54,54	1.28	4 (11%)
47	GTP	SM	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.31	4 (11%)
49	GDP	NH	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.06	2 (6%)
49	GDP	CB	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.06	2 (6%)
47	GTP	VA	501	48	29,34,34	1.25	2 (6%)	35,54,54	1.27	4 (11%)
49	GDP	FB	501	-	25,30,30	0.99	1 (4%)	30,47,47	1.09	2 (6%)
49	GDP	DL	501	-	25,30,30	0.98	1 (4%)	30,47,47	1.09	2 (6%)
47	GTP	GI	501	48	29,34,34	1.21	2 (6%)	35,54,54	1.29	4 (11%)
49	GDP	AL	502	-	25,30,30	0.95	1 (4%)	30,47,47	1.05	2 (6%)
47	GTP	MM	501	48	29,34,34	1.23	2 (6%)	35,54,54	1.28	4 (11%)
49	GDP	RL	501	-	25,30,30	0.97	1 (4%)	30,47,47	1.08	2 (6%)
47	GTP	DK	501	48	29,34,34	1.22	2 (6%)	35,54,54	1.29	4 (11%)
47	GTP	JM	501	48	29,34,34	1.27	4 (13%)	35,54,54	1.28	3 (8%)
47	GTP	KI	501	48	29,34,34	1.20	2 (6%)	35,54,54	1.26	4 (11%)
49	GDP	DH	501	-	25,30,30	0.96	1 (4%)	30,47,47	1.13	3 (10%)
49	GDP	SJ	501	-	25,30,30	0.95	1 (4%)	30,47,47	1.09	2 (6%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '–' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	LD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	WK	501	48	-	8/18/38/38	0/3/3/3
49	GDP	IH	501	-	-	2/12/32/32	0/3/3/3
49	GDP	QH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	TA	501	48	-	8/18/38/38	0/3/3/3
49	GDP	EF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	OK	501	48	-	5/18/38/38	0/3/3/3
47	GTP	IK	502	48	-	7/18/38/38	0/3/3/3
49	GDP	HJ	501	-	-	0/12/32/32	0/3/3/3
47	GTP	EE	501	48	-	9/18/38/38	0/3/3/3
47	GTP	UM	501	48	-	7/18/38/38	0/3/3/3
49	GDP	MD	501	-	-	2/12/32/32	0/3/3/3
49	GDP	CH	501	-	-	2/12/32/32	0/3/3/3
49	GDP	OJ	501	-	-	0/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	TH	501	-	-	1/12/32/32	0/3/3/3
47	GTP	NC	501	48	-	5/18/38/38	0/3/3/3
47	GTP	IC	501	48	-	8/18/38/38	0/3/3/3
49	GDP	GN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	CK	501	48	-	5/18/38/38	0/3/3/3
49	GDP	CN	501	-	-	0/12/32/32	0/3/3/3
47	GTP	FG	501	48	-	8/18/38/38	0/3/3/3
47	GTP	RI	501	48	-	8/18/38/38	0/3/3/3
47	GTP	KM	501	48	-	5/18/38/38	0/3/3/3
47	GTP	GA	501	48	-	7/18/38/38	0/3/3/3
47	GTP	WA	501	48	-	8/18/38/38	0/3/3/3
49	GDP	WH	501	-	-	2/12/32/32	0/3/3/3
47	GTP	FM	501	48	-	6/18/38/38	0/3/3/3
47	GTP	VG	501	48	-	8/18/38/38	0/3/3/3
47	GTP	PA	501	48	-	8/18/38/38	0/3/3/3
47	GTP	JK	501	48	-	6/18/38/38	0/3/3/3
49	GDP	GB	502	-	-	1/12/32/32	0/3/3/3
49	GDP	KL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	QI	501	48	-	5/18/38/38	0/3/3/3
49	GDP	IB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	IM	501	48	-	9/18/38/38	0/3/3/3
49	GDP	CL	501	-	-	1/12/32/32	0/3/3/3
49	GDP	GL	501	-	-	0/12/32/32	0/3/3/3
47	GTP	PE	501	48	-	8/18/38/38	0/3/3/3
47	GTP	UA	501	48	-	5/18/38/38	0/3/3/3
49	GDP	FL	501	-	-	1/12/32/32	0/3/3/3
49	GDP	AD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	DG	501	48	-	7/18/38/38	0/3/3/3
49	GDP	VD	501	-	-	0/12/32/32	0/3/3/3
49	GDP	FH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	BJ	501	-	-	1/12/32/32	0/3/3/3
47	GTP	SK	501	48	-	5/18/38/38	0/3/3/3
47	GTP	TI	501	48	-	9/18/38/38	0/3/3/3
47	GTP	OE	501	48	-	3/18/38/38	0/3/3/3
47	GTP	VM	501	48	-	5/18/38/38	0/3/3/3
49	GDP	JJ	501	-	-	2/12/32/32	0/3/3/3
49	GDP	OF	501	-	-	0/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	EL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	KA	501	48	-	7/18/38/38	0/3/3/3
47	GTP	AI	501	48	-	9/18/38/38	0/3/3/3
47	GTP	TM	501	48	-	8/18/38/38	0/3/3/3
47	GTP	BG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	JF	501	-	-	2/12/32/32	0/3/3/3
49	GDP	CJ	501	-	-	1/12/32/32	0/3/3/3
47	GTP	RA	501	48	-	7/18/38/38	0/3/3/3
49	GDP	IL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	PG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	VB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	AA	501	48	-	4/18/38/38	0/3/3/3
49	GDP	QN	501	-	-	0/12/32/32	0/3/3/3
47	GTP	OA	501	48	-	3/18/38/38	0/3/3/3
47	GTP	WE	501	48	-	3/18/38/38	0/3/3/3
47	GTP	LM	501	48	-	6/18/38/38	0/3/3/3
47	GTP	FE	501	48	-	9/18/38/38	0/3/3/3
47	GTP	NA	501	48	-	8/18/38/38	0/3/3/3
49	GDP	WF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	NE	501	48	-	5/18/38/38	0/3/3/3
49	GDP	IF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	NN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	UG	501	48	-	7/18/38/38	0/3/3/3
47	GTP	BM	501	48	-	8/18/38/38	0/3/3/3
47	GTP	FK	501	48	-	7/18/38/38	0/3/3/3
47	GTP	CA	501	48	-	6/18/38/38	0/3/3/3
47	GTP	HM	501	48	-	8/18/38/38	0/3/3/3
49	GDP	RD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	HE	501	48	-	8/18/38/38	0/3/3/3
47	GTP	CC	501	48	-	5/18/38/38	0/3/3/3
47	GTP	WI	501	48	-	6/18/38/38	0/3/3/3
49	GDP	DF	501	-	-	0/12/32/32	0/3/3/3
47	GTP	TK	501	48	-	5/18/38/38	0/3/3/3
47	GTP	BA	501	48	-	7/18/38/38	0/3/3/3
47	GTP	UK	501	48	-	5/18/38/38	0/3/3/3
49	GDP	FD	501	-	-	0/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
47	GTP	DC	501	48	-	6/18/38/38	0/3/3/3
49	GDP	UN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	QG	501	48	-	8/18/38/38	0/3/3/3
47	GTP	UE	501	48	-	8/18/38/38	0/3/3/3
49	GDP	TB	501	-	-	1/12/32/32	0/3/3/3
49	GDP	OH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	QB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	WC	501	48	-	6/18/38/38	0/3/3/3
47	GTP	QE	501	48	-	7/18/38/38	0/3/3/3
47	GTP	RG	501	48	-	7/18/38/38	0/3/3/3
49	GDP	MJ	501	-	-	1/12/32/32	0/3/3/3
47	GTP	MK	501	48	-	8/18/38/38	0/3/3/3
49	GDP	HH	501	-	-	1/12/32/32	0/3/3/3
47	GTP	HA	501	48	-	6/18/38/38	0/3/3/3
49	GDP	JH	501	-	-	1/12/32/32	0/3/3/3
47	GTP	EA	501	48	-	6/18/38/38	0/3/3/3
49	GDP	ED	501	-	-	2/12/32/32	0/3/3/3
49	GDP	EJ	501	-	-	2/12/32/32	0/3/3/3
49	GDP	LB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	GM	501	48	-	6/18/38/38	0/3/3/3
47	GTP	MI	501	48	-	8/18/38/38	0/3/3/3
49	GDP	PN	501	-	-	0/12/32/32	0/3/3/3
49	GDP	AB	501	-	-	1/12/32/32	0/3/3/3
49	GDP	NJ	501	-	-	1/12/32/32	0/3/3/3
47	GTP	RC	501	48	-	7/18/38/38	0/3/3/3
49	GDP	MB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	SA	501	48	-	6/18/38/38	0/3/3/3
49	GDP	MF	501	-	-	0/12/32/32	0/3/3/3
47	GTP	SC	501	48	-	6/18/38/38	0/3/3/3
49	GDP	SL	501	-	-	3/12/32/32	0/3/3/3
47	GTP	HC	501	48	-	5/18/38/38	0/3/3/3
49	GDP	UF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	QL	501	-	-	0/12/32/32	0/3/3/3
49	GDP	AJ	501	-	-	0/12/32/32	0/3/3/3
47	GTP	LG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	PL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	DM	501	48	-	6/18/38/38	0/3/3/3
49	GDP	GF	501	-	-	1/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	SN	501	-	-	1/12/32/32	0/3/3/3
49	GDP	PB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	GK	501	48	-	7/18/38/38	0/3/3/3
47	GTP	PK	501	48	-	7/18/38/38	0/3/3/3
47	GTP	HI	501	48	-	4/18/38/38	0/3/3/3
47	GTP	KC	501	48	-	5/18/38/38	0/3/3/3
49	GDP	LJ	501	-	-	2/12/32/32	0/3/3/3
49	GDP	ON	501	-	-	0/12/32/32	0/3/3/3
47	GTP	GE	501	48	-	5/18/38/38	0/3/3/3
47	GTP	VK	501	48	-	7/18/38/38	0/3/3/3
47	GTP	HK	501	48	-	5/18/38/38	0/3/3/3
49	GDP	SD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	UD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	AK	501	48	-	9/18/38/38	0/3/3/3
47	GTP	SI	501	48	-	7/18/38/38	0/3/3/3
47	GTP	FI	501	48	-	5/18/38/38	0/3/3/3
47	GTP	HG	501	48	-	4/18/38/38	0/3/3/3
47	GTP	EM	501	48	-	8/18/38/38	0/3/3/3
49	GDP	VN	501	-	-	0/12/32/32	0/3/3/3
49	GDP	LF	501	-	-	0/12/32/32	0/3/3/3
47	GTP	AM	501	48	-	4/18/38/38	0/3/3/3
49	GDP	QJ	501	-	-	0/12/32/32	0/3/3/3
49	GDP	KJ	501	-	-	1/12/32/32	0/3/3/3
47	GTP	PI	501	48	-	6/18/38/38	0/3/3/3
49	GDP	GH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	NI	501	48	-	7/18/38/38	0/3/3/3
49	GDP	OB	501	-	-	0/12/32/32	0/3/3/3
47	GTP	LK	501	48	-	5/18/38/38	0/3/3/3
49	GDP	WJ	501	-	-	0/12/32/32	0/3/3/3
47	GTP	OC	501	48	-	2/18/38/38	0/3/3/3
47	GTP	EK	501	48	-	6/18/38/38	0/3/3/3
49	GDP	ND	501	-	-	1/12/32/32	0/3/3/3
49	GDP	JN	501	-	-	1/12/32/32	0/3/3/3
49	GDP	KF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	EC	501	48	-	8/18/38/38	0/3/3/3
47	GTP	II	501	48	-	8/18/38/38	0/3/3/3
47	GTP	GC	501	48	-	5/18/38/38	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
47	GTP	AG	501	48	-	6/18/38/38	0/3/3/3
47	GTP	WM	501	48	-	3/18/38/38	0/3/3/3
49	GDP	KN	501	-	-	0/12/32/32	0/3/3/3
47	GTP	TG	501	48	-	7/18/38/38	0/3/3/3
47	GTP	EI	501	48	-	5/18/38/38	0/3/3/3
47	GTP	SE	501	48	-	5/18/38/38	0/3/3/3
47	GTP	WG	501	48	-	8/18/38/38	0/3/3/3
47	GTP	VI	501	48	-	8/18/38/38	0/3/3/3
49	GDP	SB	501	-	-	3/12/32/32	0/3/3/3
47	GTP	FA	501	48	-	8/18/38/38	0/3/3/3
47	GTP	GG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	NF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	MC	501	48	-	7/18/38/38	0/3/3/3
49	GDP	IJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	RN	501	-	-	0/12/32/32	0/3/3/3
49	GDP	PJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	NL	501	-	-	3/12/32/32	0/3/3/3
47	GTP	QK	501	48	-	7/18/38/38	0/3/3/3
49	GDP	JD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	IA	501	48	-	7/18/38/38	0/3/3/3
49	GDP	SH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	LE	501	48	-	8/18/38/38	0/3/3/3
47	GTP	OG	501	48	-	5/18/38/38	0/3/3/3
49	GDP	OL	501	-	-	0/12/32/32	0/3/3/3
49	GDP	VH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	CI	501	48	-	7/18/38/38	0/3/3/3
49	GDP	KD	501	-	-	0/12/32/32	0/3/3/3
49	GDP	FF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	BB	502	-	-	0/12/32/32	0/3/3/3
49	GDP	TN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	LC	501	48	-	7/18/38/38	0/3/3/3
49	GDP	CD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	TL	501	-	-	1/12/32/32	0/3/3/3
49	GDP	MH	501	-	-	3/12/32/32	0/3/3/3
49	GDP	FN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	IE	501	48	-	8/18/38/38	0/3/3/3
49	GDP	VL	501	-	-	1/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
47	GTP	RE	501	48	-	7/18/38/38	0/3/3/3
47	GTP	JE	501	48	-	6/18/38/38	0/3/3/3
49	GDP	QD	501	-	-	0/12/32/32	0/3/3/3
49	GDP	GD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	JI	501	48	-	7/18/38/38	0/3/3/3
49	GDP	VJ	501	-	-	0/12/32/32	0/3/3/3
47	GTP	DE	501	48	-	7/18/38/38	0/3/3/3
49	GDP	RJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	OD	501	-	-	1/12/32/32	0/3/3/3
47	GTP	QC	501	48	-	7/18/38/38	0/3/3/3
47	GTP	RK	501	48	-	7/18/38/38	0/3/3/3
49	GDP	WD	501	-	-	0/12/32/32	0/3/3/3
47	GTP	QA	501	48	-	8/18/38/38	0/3/3/3
47	GTP	AE	501	48	-	5/18/38/38	0/3/3/3
47	GTP	SG	501	48	-	4/18/38/38	0/3/3/3
47	GTP	UI	501	48	-	5/18/38/38	0/3/3/3
47	GTP	IG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	AN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	DI	501	48	-	6/18/38/38	0/3/3/3
47	GTP	BE	501	48	-	5/18/38/38	0/3/3/3
47	GTP	KG	501	48	-	7/18/38/38	0/3/3/3
49	GDP	VF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	TE	501	48	-	9/18/38/38	0/3/3/3
47	GTP	ME	501	48	-	8/18/38/38	0/3/3/3
47	GTP	CE	501	48	-	7/18/38/38	0/3/3/3
47	GTP	UC	501	48	-	7/18/38/38	0/3/3/3
47	GTP	AC	501	48	-	9/18/38/38	0/3/3/3
47	GTP	EG	501	48	-	4/18/38/38	0/3/3/3
49	GDP	ML	501	-	-	3/12/32/32	0/3/3/3
49	GDP	EB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	ID	501	-	-	0/12/32/32	0/3/3/3
47	GTP	MA	501	48	-	7/18/38/38	0/3/3/3
47	GTP	VE	501	48	-	6/18/38/38	0/3/3/3
47	GTP	KK	501	48	-	4/18/38/38	0/3/3/3
49	GDP	GJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	UB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	KH	501	-	-	1/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	LN	501	-	-	0/12/32/32	0/3/3/3
47	GTP	PM	501	48	-	8/18/38/38	0/3/3/3
47	GTP	KE	501	48	-	7/18/38/38	0/3/3/3
49	GDP	CF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	UH	501	-	-	1/12/32/32	0/3/3/3
47	GTP	PC	501	48	-	7/18/38/38	0/3/3/3
49	GDP	PH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	BI	501	48	-	7/18/38/38	0/3/3/3
49	GDP	BF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	LH	501	-	-	2/12/32/32	0/3/3/3
47	GTP	LA	501	48	-	5/18/38/38	0/3/3/3
47	GTP	JC	501	48	-	6/18/38/38	0/3/3/3
49	GDP	PF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	MG	501	48	-	7/18/38/38	0/3/3/3
49	GDP	BH	501	-	-	1/12/32/32	0/3/3/3
47	GTP	QM	501	48	-	8/18/38/38	0/3/3/3
47	GTP	CG	501	48	-	7/18/38/38	0/3/3/3
49	GDP	JB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	EN	501	-	-	0/12/32/32	0/3/3/3
49	GDP	KB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	RB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	WB	501	-	-	1/12/32/32	0/3/3/3
47	GTP	NG	501	48	-	6/18/38/38	0/3/3/3
49	GDP	UL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	JA	501	48	-	5/18/38/38	0/3/3/3
49	GDP	JL	501	-	-	2/12/32/32	0/3/3/3
49	GDP	TD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	DD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	NB	502	-	-	0/12/32/32	0/3/3/3
47	GTP	DA	501	48	-	5/18/38/38	0/3/3/3
49	GDP	RH	501	-	-	0/12/32/32	0/3/3/3
47	GTP	TC	501	48	-	9/18/38/38	0/3/3/3
49	GDP	EH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	HN	501	-	-	1/12/32/32	0/3/3/3
49	GDP	AH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	HF	501	-	-	1/12/32/32	0/3/3/3
47	GTP	OI	501	48	-	4/18/38/38	0/3/3/3
49	GDP	AF	501	-	-	0/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	WL	501	-	-	1/12/32/32	0/3/3/3
49	GDP	BD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	BL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	JG	501	48	-	8/18/38/38	0/3/3/3
49	GDP	SF	501	-	-	2/12/32/32	0/3/3/3
47	GTP	NK	501	48	-	6/18/38/38	0/3/3/3
49	GDP	HB	501	-	-	0/12/32/32	0/3/3/3
49	GDP	DN	501	-	-	1/12/32/32	0/3/3/3
49	GDP	DB	501	-	-	1/12/32/32	0/3/3/3
47	GTP	BC	501	48	-	8/18/38/38	0/3/3/3
49	GDP	TF	501	-	-	1/12/32/32	0/3/3/3
49	GDP	DJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	RF	501	-	-	3/12/32/32	0/3/3/3
47	GTP	CM	501	48	-	8/18/38/38	0/3/3/3
49	GDP	HD	501	-	-	1/12/32/32	0/3/3/3
49	GDP	PD	501	-	-	0/12/32/32	0/3/3/3
47	GTP	NM	501	48	-	8/18/38/38	0/3/3/3
49	GDP	BN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	RM	501	48	-	7/18/38/38	0/3/3/3
49	GDP	WN	501	-	-	0/12/32/32	0/3/3/3
49	GDP	TJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	UJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	HL	501	-	-	0/12/32/32	0/3/3/3
47	GTP	OM	501	48	-	3/18/38/38	0/3/3/3
49	GDP	LL	501	-	-	1/12/32/32	0/3/3/3
49	GDP	FJ	501	-	-	1/12/32/32	0/3/3/3
49	GDP	QF	501	-	-	0/12/32/32	0/3/3/3
49	GDP	MN	501	-	-	2/12/32/32	0/3/3/3
47	GTP	BK	501	48	-	4/18/38/38	0/3/3/3
49	GDP	IN	501	-	-	1/12/32/32	0/3/3/3
47	GTP	FC	501	48	-	7/18/38/38	0/3/3/3
47	GTP	VC	501	48	-	7/18/38/38	0/3/3/3
47	GTP	LI	501	48	-	7/18/38/38	0/3/3/3
47	GTP	SM	501	48	-	8/18/38/38	0/3/3/3
49	GDP	NH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	CB	501	-	-	1/12/32/32	0/3/3/3
47	GTP	VA	501	48	-	5/18/38/38	0/3/3/3
49	GDP	FB	501	-	-	0/12/32/32	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	GDP	DL	501	-	-	0/12/32/32	0/3/3/3
47	GTP	GI	501	48	-	7/18/38/38	0/3/3/3
49	GDP	AL	502	-	-	1/12/32/32	0/3/3/3
47	GTP	MM	501	48	-	6/18/38/38	0/3/3/3
49	GDP	RL	501	-	-	1/12/32/32	0/3/3/3
47	GTP	DK	501	48	-	6/18/38/38	0/3/3/3
47	GTP	JM	501	48	-	6/18/38/38	0/3/3/3
47	GTP	KI	501	48	-	5/18/38/38	0/3/3/3
49	GDP	DH	501	-	-	1/12/32/32	0/3/3/3
49	GDP	SJ	501	-	-	1/12/32/32	0/3/3/3

All (503) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	EA	501	GTP	C5-C6	-4.32	1.38	1.47
47	AE	501	GTP	C5-C6	-4.31	1.38	1.47
47	AM	501	GTP	C5-C6	-4.29	1.39	1.47
47	AA	501	GTP	C5-C6	-4.28	1.39	1.47
47	AG	501	GTP	C5-C6	-4.28	1.39	1.47
47	FE	501	GTP	C5-C6	-4.27	1.39	1.47
47	FI	501	GTP	C5-C6	-4.27	1.39	1.47
47	GE	501	GTP	C5-C6	-4.26	1.39	1.47
47	HE	501	GTP	C5-C6	-4.26	1.39	1.47
47	KK	501	GTP	C5-C6	-4.25	1.39	1.47
47	SM	501	GTP	C5-C6	-4.25	1.39	1.47
47	IG	501	GTP	C5-C6	-4.25	1.39	1.47
47	LA	501	GTP	C5-C6	-4.25	1.39	1.47
47	GI	501	GTP	C5-C6	-4.24	1.39	1.47
47	AK	501	GTP	C5-C6	-4.24	1.39	1.47
47	EE	501	GTP	C5-C6	-4.24	1.39	1.47
47	UI	501	GTP	C5-C6	-4.24	1.39	1.47
47	FG	501	GTP	C5-C6	-4.24	1.39	1.47
47	UC	501	GTP	C5-C6	-4.24	1.39	1.47
47	MI	501	GTP	C5-C6	-4.24	1.39	1.47
47	GC	501	GTP	C5-C6	-4.23	1.39	1.47
47	II	501	GTP	C5-C6	-4.23	1.39	1.47
47	AI	501	GTP	C5-C6	-4.23	1.39	1.47
47	GK	501	GTP	C5-C6	-4.23	1.39	1.47
47	AC	501	GTP	C5-C6	-4.23	1.39	1.47
47	SA	501	GTP	C5-C6	-4.23	1.39	1.47
47	KE	501	GTP	C5-C6	-4.23	1.39	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	LI	501	GTP	C5-C6	-4.23	1.39	1.47
47	DI	501	GTP	C5-C6	-4.23	1.39	1.47
47	TK	501	GTP	C5-C6	-4.23	1.39	1.47
47	LG	501	GTP	C5-C6	-4.22	1.39	1.47
47	MA	501	GTP	C5-C6	-4.22	1.39	1.47
47	KA	501	GTP	C5-C6	-4.22	1.39	1.47
47	FC	501	GTP	C5-C6	-4.22	1.39	1.47
47	WG	501	GTP	C5-C6	-4.22	1.39	1.47
47	EK	501	GTP	C5-C6	-4.22	1.39	1.47
47	KC	501	GTP	C5-C6	-4.21	1.39	1.47
47	BK	501	GTP	C5-C6	-4.21	1.39	1.47
47	GG	501	GTP	C5-C6	-4.21	1.39	1.47
47	MM	501	GTP	C5-C6	-4.21	1.39	1.47
47	VE	501	GTP	C5-C6	-4.21	1.39	1.47
47	KG	501	GTP	C5-C6	-4.21	1.39	1.47
47	NE	501	GTP	C5-C6	-4.21	1.39	1.47
47	HK	501	GTP	C5-C6	-4.21	1.39	1.47
47	UA	501	GTP	C5-C6	-4.20	1.39	1.47
47	BC	501	GTP	C5-C6	-4.20	1.39	1.47
47	RG	501	GTP	C5-C6	-4.20	1.39	1.47
47	SE	501	GTP	C5-C6	-4.20	1.39	1.47
47	TG	501	GTP	C5-C6	-4.20	1.39	1.47
47	ME	501	GTP	C5-C6	-4.20	1.39	1.47
47	SG	501	GTP	C5-C6	-4.20	1.39	1.47
47	KM	501	GTP	C5-C6	-4.20	1.39	1.47
47	RC	501	GTP	C5-C6	-4.20	1.39	1.47
47	MK	501	GTP	C5-C6	-4.20	1.39	1.47
47	UE	501	GTP	C5-C6	-4.20	1.39	1.47
47	DE	501	GTP	C5-C6	-4.20	1.39	1.47
47	TE	501	GTP	C5-C6	-4.19	1.39	1.47
47	MC	501	GTP	C5-C6	-4.19	1.39	1.47
47	MG	501	GTP	C5-C6	-4.19	1.39	1.47
47	CA	501	GTP	C5-C6	-4.19	1.39	1.47
47	HA	501	GTP	C5-C6	-4.19	1.39	1.47
47	LC	501	GTP	C5-C6	-4.19	1.39	1.47
47	BG	501	GTP	C5-C6	-4.19	1.39	1.47
47	FK	501	GTP	C5-C6	-4.19	1.39	1.47
47	EG	501	GTP	C5-C6	-4.18	1.39	1.47
47	QE	501	GTP	C5-C6	-4.18	1.39	1.47
47	NK	501	GTP	C5-C6	-4.18	1.39	1.47
47	VI	501	GTP	C5-C6	-4.18	1.39	1.47
47	IA	501	GTP	C5-C6	-4.18	1.39	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	OM	501	GTP	C5-C6	-4.18	1.39	1.47
47	JE	501	GTP	C5-C6	-4.18	1.39	1.47
47	PG	501	GTP	C5-C6	-4.18	1.39	1.47
47	VK	501	GTP	C5-C6	-4.18	1.39	1.47
47	QM	501	GTP	C5-C6	-4.18	1.39	1.47
47	IE	501	GTP	C5-C6	-4.18	1.39	1.47
47	UK	501	GTP	C5-C6	-4.18	1.39	1.47
47	DG	501	GTP	C5-C6	-4.18	1.39	1.47
47	SK	501	GTP	C5-C6	-4.18	1.39	1.47
47	NG	501	GTP	C5-C6	-4.18	1.39	1.47
47	WM	501	GTP	C5-C6	-4.18	1.39	1.47
47	QG	501	GTP	C5-C6	-4.17	1.39	1.47
47	BI	501	GTP	C5-C6	-4.17	1.39	1.47
47	CE	501	GTP	C5-C6	-4.17	1.39	1.47
47	EI	501	GTP	C5-C6	-4.17	1.39	1.47
47	VC	501	GTP	C5-C6	-4.17	1.39	1.47
47	WC	501	GTP	C5-C6	-4.17	1.39	1.47
47	LK	501	GTP	C5-C6	-4.17	1.39	1.47
47	IM	501	GTP	C5-C6	-4.17	1.39	1.47
47	KI	501	GTP	C5-C6	-4.17	1.39	1.47
47	PA	501	GTP	C5-C6	-4.17	1.39	1.47
47	TM	501	GTP	C5-C6	-4.17	1.39	1.47
47	CM	501	GTP	C5-C6	-4.17	1.39	1.47
47	JK	501	GTP	C5-C6	-4.17	1.39	1.47
47	GA	501	GTP	C5-C6	-4.17	1.39	1.47
47	NM	501	GTP	C5-C6	-4.17	1.39	1.47
47	BA	501	GTP	C5-C6	-4.17	1.39	1.47
47	UG	501	GTP	C5-C6	-4.17	1.39	1.47
47	VM	501	GTP	C5-C6	-4.17	1.39	1.47
47	RE	501	GTP	C5-C6	-4.16	1.39	1.47
47	IK	502	GTP	C5-C6	-4.16	1.39	1.47
47	LE	501	GTP	C5-C6	-4.16	1.39	1.47
47	NC	501	GTP	C5-C6	-4.16	1.39	1.47
47	EM	501	GTP	C5-C6	-4.16	1.39	1.47
47	IC	501	GTP	C5-C6	-4.16	1.39	1.47
47	QI	501	GTP	C5-C6	-4.16	1.39	1.47
47	HC	501	GTP	C5-C6	-4.16	1.39	1.47
47	FM	501	GTP	C5-C6	-4.16	1.39	1.47
47	QK	501	GTP	C5-C6	-4.16	1.39	1.47
47	NA	501	GTP	C5-C6	-4.16	1.39	1.47
47	OK	501	GTP	C5-C6	-4.16	1.39	1.47
47	RA	501	GTP	C5-C6	-4.16	1.39	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	NI	501	GTP	C5-C6	-4.16	1.39	1.47
47	JC	501	GTP	C5-C6	-4.15	1.39	1.47
47	JG	501	GTP	C5-C6	-4.15	1.39	1.47
47	OI	501	GTP	C5-C6	-4.15	1.39	1.47
47	CI	501	GTP	C5-C6	-4.15	1.39	1.47
47	LM	501	GTP	C5-C6	-4.15	1.39	1.47
47	PE	501	GTP	C5-C6	-4.15	1.39	1.47
47	VG	501	GTP	C5-C6	-4.15	1.39	1.47
47	PI	501	GTP	C5-C6	-4.15	1.39	1.47
47	QA	501	GTP	C5-C6	-4.15	1.39	1.47
47	OE	501	GTP	C5-C6	-4.14	1.39	1.47
47	TC	501	GTP	C5-C6	-4.14	1.39	1.47
47	RM	501	GTP	C5-C6	-4.14	1.39	1.47
47	DA	501	GTP	C5-C6	-4.14	1.39	1.47
47	HI	501	GTP	C5-C6	-4.14	1.39	1.47
47	CK	501	GTP	C5-C6	-4.14	1.39	1.47
47	RK	501	GTP	C5-C6	-4.14	1.39	1.47
47	WK	501	GTP	C5-C6	-4.14	1.39	1.47
47	CG	501	GTP	C5-C6	-4.14	1.39	1.47
47	CC	501	GTP	C5-C6	-4.13	1.39	1.47
47	BM	501	GTP	C5-C6	-4.13	1.39	1.47
47	SI	501	GTP	C5-C6	-4.13	1.39	1.47
47	BE	501	GTP	C5-C6	-4.13	1.39	1.47
47	RI	501	GTP	C5-C6	-4.13	1.39	1.47
47	GM	501	GTP	C5-C6	-4.13	1.39	1.47
47	HG	501	GTP	C5-C6	-4.12	1.39	1.47
47	SC	501	GTP	C5-C6	-4.12	1.39	1.47
47	VA	501	GTP	C5-C6	-4.12	1.39	1.47
47	OA	501	GTP	C5-C6	-4.12	1.39	1.47
47	JA	501	GTP	C5-C6	-4.12	1.39	1.47
47	HM	501	GTP	C5-C6	-4.12	1.39	1.47
47	WE	501	GTP	C5-C6	-4.12	1.39	1.47
47	WI	501	GTP	C5-C6	-4.12	1.39	1.47
47	TI	501	GTP	C5-C6	-4.11	1.39	1.47
47	DC	501	GTP	C5-C6	-4.11	1.39	1.47
47	WA	501	GTP	C5-C6	-4.11	1.39	1.47
47	DK	501	GTP	C5-C6	-4.11	1.39	1.47
47	DM	501	GTP	C5-C6	-4.11	1.39	1.47
47	OG	501	GTP	C5-C6	-4.10	1.39	1.47
47	PM	501	GTP	C5-C6	-4.09	1.39	1.47
47	OC	501	GTP	C5-C6	-4.09	1.39	1.47
47	JM	501	GTP	C5-C6	-4.09	1.39	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	EC	501	GTP	C5-C6	-4.08	1.39	1.47
47	PC	501	GTP	C5-C6	-4.08	1.39	1.47
47	TA	501	GTP	C5-C6	-4.08	1.39	1.47
47	UM	501	GTP	C5-C6	-4.08	1.39	1.47
47	FA	501	GTP	C5-C6	-4.08	1.39	1.47
47	PK	501	GTP	C5-C6	-4.08	1.39	1.47
47	QC	501	GTP	C5-C6	-4.06	1.39	1.47
47	JI	501	GTP	C5-C6	-4.05	1.39	1.47
49	CF	501	GDP	C6-N1	-2.43	1.34	1.37
47	FM	501	GTP	C2-N3	2.43	1.39	1.33
49	SL	501	GDP	C6-N1	-2.43	1.34	1.37
49	RJ	501	GDP	C6-N1	-2.43	1.34	1.37
49	FD	501	GDP	C6-N1	-2.42	1.34	1.37
49	SH	501	GDP	C6-N1	-2.42	1.34	1.37
49	AH	501	GDP	C6-N1	-2.41	1.34	1.37
49	HF	501	GDP	C6-N1	-2.41	1.34	1.37
49	JH	501	GDP	C6-N1	-2.41	1.34	1.37
49	FH	501	GDP	C6-N1	-2.41	1.34	1.37
49	UF	501	GDP	C6-N1	-2.41	1.34	1.37
49	JJ	501	GDP	C6-N1	-2.40	1.34	1.37
49	LH	501	GDP	C6-N1	-2.40	1.34	1.37
49	MN	501	GDP	C6-N1	-2.39	1.34	1.37
49	BD	501	GDP	C6-N1	-2.39	1.34	1.37
49	ED	501	GDP	C6-N1	-2.39	1.34	1.37
49	LD	501	GDP	C6-N1	-2.39	1.34	1.37
49	JN	501	GDP	C6-N1	-2.39	1.34	1.37
49	LN	501	GDP	C6-N1	-2.39	1.34	1.37
49	AL	502	GDP	C6-N1	-2.38	1.34	1.37
49	LJ	501	GDP	C6-N1	-2.38	1.34	1.37
49	DF	501	GDP	C6-N1	-2.38	1.34	1.37
49	HN	501	GDP	C6-N1	-2.38	1.34	1.37
49	MF	501	GDP	C6-N1	-2.38	1.34	1.37
49	RH	501	GDP	C6-N1	-2.38	1.34	1.37
49	QD	501	GDP	C6-N1	-2.38	1.34	1.37
49	JL	501	GDP	C6-N1	-2.37	1.34	1.37
49	SF	501	GDP	C6-N1	-2.37	1.34	1.37
49	MJ	501	GDP	C6-N1	-2.37	1.34	1.37
49	JF	501	GDP	C6-N1	-2.37	1.34	1.37
49	KH	501	GDP	C6-N1	-2.37	1.34	1.37
49	CB	501	GDP	C6-N1	-2.37	1.34	1.37
49	DJ	501	GDP	C6-N1	-2.37	1.34	1.37
49	DH	501	GDP	C6-N1	-2.37	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	DD	501	GDP	C6-N1	-2.37	1.34	1.37
49	HH	501	GDP	C6-N1	-2.37	1.34	1.37
49	VD	501	GDP	C6-N1	-2.37	1.34	1.37
49	MD	501	GDP	C6-N1	-2.36	1.34	1.37
49	NL	501	GDP	C6-N1	-2.36	1.34	1.37
49	RD	501	GDP	C6-N1	-2.36	1.34	1.37
49	TH	501	GDP	C6-N1	-2.36	1.34	1.37
49	RF	501	GDP	C6-N1	-2.36	1.34	1.37
49	WF	501	GDP	C6-N1	-2.36	1.34	1.37
49	VF	501	GDP	C6-N1	-2.36	1.34	1.37
49	WN	501	GDP	C6-N1	-2.36	1.34	1.37
49	QF	501	GDP	C6-N1	-2.36	1.34	1.37
49	HL	501	GDP	C6-N1	-2.36	1.34	1.37
49	UH	501	GDP	C6-N1	-2.35	1.34	1.37
49	UJ	501	GDP	C6-N1	-2.35	1.34	1.37
49	HD	501	GDP	C6-N1	-2.35	1.34	1.37
49	HJ	501	GDP	C6-N1	-2.35	1.34	1.37
49	WH	501	GDP	C6-N1	-2.35	1.34	1.37
49	NB	502	GDP	C6-N1	-2.35	1.34	1.37
49	VL	501	GDP	C6-N1	-2.35	1.34	1.37
49	KL	501	GDP	C6-N1	-2.35	1.34	1.37
49	NJ	501	GDP	C6-N1	-2.35	1.34	1.37
49	ML	501	GDP	C6-N1	-2.35	1.34	1.37
49	NN	501	GDP	C6-N1	-2.35	1.34	1.37
49	VN	501	GDP	C6-N1	-2.35	1.34	1.37
49	BJ	501	GDP	C6-N1	-2.35	1.34	1.37
49	BF	501	GDP	C6-N1	-2.35	1.34	1.37
49	EH	501	GDP	C6-N1	-2.35	1.34	1.37
49	EF	501	GDP	C6-N1	-2.35	1.34	1.37
49	PD	501	GDP	C6-N1	-2.35	1.34	1.37
49	EJ	501	GDP	C6-N1	-2.34	1.34	1.37
49	MB	501	GDP	C6-N1	-2.34	1.34	1.37
49	QJ	501	GDP	C6-N1	-2.34	1.34	1.37
49	BH	501	GDP	C6-N1	-2.34	1.34	1.37
49	QH	501	GDP	C6-N1	-2.34	1.34	1.37
49	WL	501	GDP	C6-N1	-2.34	1.34	1.37
49	IL	501	GDP	C6-N1	-2.34	1.34	1.37
49	PJ	501	GDP	C6-N1	-2.34	1.34	1.37
49	WJ	501	GDP	C6-N1	-2.34	1.34	1.37
49	FJ	501	GDP	C6-N1	-2.33	1.34	1.37
49	VJ	501	GDP	C6-N1	-2.33	1.34	1.37
49	GH	501	GDP	C6-N1	-2.33	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	GN	501	GDP	C6-N1	-2.33	1.34	1.37
49	FF	501	GDP	C6-N1	-2.33	1.34	1.37
49	KF	501	GDP	C6-N1	-2.33	1.34	1.37
49	TJ	501	GDP	C6-N1	-2.33	1.34	1.37
49	WD	501	GDP	C6-N1	-2.33	1.34	1.37
49	GJ	501	GDP	C6-N1	-2.33	1.34	1.37
49	IH	501	GDP	C6-N1	-2.33	1.34	1.37
49	NF	501	GDP	C6-N1	-2.33	1.34	1.37
49	TD	501	GDP	C6-N1	-2.33	1.34	1.37
49	SN	501	GDP	C6-N1	-2.33	1.34	1.37
49	IN	501	GDP	C6-N1	-2.33	1.34	1.37
49	OF	501	GDP	C6-N1	-2.33	1.34	1.37
49	ON	501	GDP	C6-N1	-2.33	1.34	1.37
49	AN	501	GDP	C6-N1	-2.33	1.34	1.37
49	OL	501	GDP	C6-N1	-2.32	1.34	1.37
49	TL	501	GDP	C6-N1	-2.32	1.34	1.37
49	FB	501	GDP	C6-N1	-2.32	1.34	1.37
49	DL	501	GDP	C6-N1	-2.32	1.34	1.37
49	ND	501	GDP	C6-N1	-2.32	1.34	1.37
49	OH	501	GDP	C6-N1	-2.32	1.34	1.37
49	BL	501	GDP	C6-N1	-2.32	1.34	1.37
49	LL	501	GDP	C6-N1	-2.32	1.34	1.37
49	VH	501	GDP	C6-N1	-2.32	1.34	1.37
49	MH	501	GDP	C6-N1	-2.32	1.34	1.37
49	AJ	501	GDP	C6-N1	-2.31	1.34	1.37
49	CJ	501	GDP	C6-N1	-2.31	1.34	1.37
49	PB	501	GDP	C6-N1	-2.31	1.34	1.37
49	OJ	501	GDP	C6-N1	-2.31	1.34	1.37
49	BN	501	GDP	C6-N1	-2.31	1.34	1.37
49	AF	501	GDP	C6-N1	-2.31	1.34	1.37
49	GL	501	GDP	C6-N1	-2.31	1.34	1.37
49	LF	501	GDP	C6-N1	-2.31	1.34	1.37
49	KN	501	GDP	C6-N1	-2.31	1.34	1.37
49	GD	501	GDP	C6-N1	-2.31	1.34	1.37
49	PH	501	GDP	C6-N1	-2.31	1.34	1.37
49	DB	501	GDP	C6-N1	-2.31	1.34	1.37
49	IF	501	GDP	C6-N1	-2.31	1.34	1.37
49	FL	501	GDP	C6-N1	-2.31	1.34	1.37
49	OD	501	GDP	C6-N1	-2.31	1.34	1.37
49	RB	501	GDP	C6-N1	-2.31	1.34	1.37
49	AD	501	GDP	C6-N1	-2.31	1.34	1.37
49	DN	501	GDP	C6-N1	-2.31	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	RL	501	GDP	C6-N1	-2.30	1.34	1.37
49	CD	501	GDP	C6-N1	-2.30	1.34	1.37
49	IJ	501	GDP	C6-N1	-2.30	1.34	1.37
49	UD	501	GDP	C6-N1	-2.30	1.34	1.37
49	EL	501	GDP	C6-N1	-2.30	1.34	1.37
49	CH	501	GDP	C6-N1	-2.30	1.34	1.37
49	PL	501	GDP	C6-N1	-2.30	1.34	1.37
47	SA	501	GTP	C2-N3	2.30	1.38	1.33
49	GF	501	GDP	C6-N1	-2.30	1.34	1.37
49	QB	501	GDP	C6-N1	-2.30	1.34	1.37
49	TF	501	GDP	C6-N1	-2.30	1.34	1.37
49	WB	501	GDP	C6-N1	-2.30	1.34	1.37
49	JB	501	GDP	C6-N1	-2.29	1.34	1.37
49	ID	501	GDP	C6-N1	-2.29	1.34	1.37
49	FN	501	GDP	C6-N1	-2.29	1.34	1.37
49	TB	501	GDP	C6-N1	-2.29	1.34	1.37
49	SD	501	GDP	C6-N1	-2.29	1.34	1.37
49	BB	502	GDP	C6-N1	-2.29	1.34	1.37
49	NH	501	GDP	C6-N1	-2.29	1.34	1.37
49	KD	501	GDP	C6-N1	-2.29	1.34	1.37
49	KJ	501	GDP	C6-N1	-2.29	1.34	1.37
49	PF	501	GDP	C6-N1	-2.28	1.34	1.37
49	VB	501	GDP	C6-N1	-2.28	1.34	1.37
49	JD	501	GDP	C6-N1	-2.28	1.34	1.37
49	AB	501	GDP	C6-N1	-2.28	1.34	1.37
49	QL	501	GDP	C6-N1	-2.28	1.34	1.37
49	GB	502	GDP	C6-N1	-2.28	1.34	1.37
49	UL	501	GDP	C6-N1	-2.28	1.34	1.37
49	KB	501	GDP	C6-N1	-2.27	1.34	1.37
49	QN	501	GDP	C6-N1	-2.27	1.34	1.37
49	SJ	501	GDP	C6-N1	-2.27	1.34	1.37
47	CK	501	GTP	PB-O3B	2.27	1.61	1.59
47	RA	501	GTP	C2-N3	2.27	1.38	1.33
49	SB	501	GDP	C6-N1	-2.26	1.34	1.37
49	OB	501	GDP	C6-N1	-2.26	1.34	1.37
49	CL	501	GDP	C6-N1	-2.26	1.34	1.37
49	RN	501	GDP	C6-N1	-2.26	1.34	1.37
49	EN	501	GDP	C6-N1	-2.26	1.34	1.37
49	UB	501	GDP	C6-N1	-2.26	1.34	1.37
47	EA	501	GTP	C2-N3	2.25	1.38	1.33
47	SM	501	GTP	C2-N3	2.25	1.38	1.33
49	HB	501	GDP	C6-N1	-2.25	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	UA	501	GTP	C2-N3	2.25	1.38	1.33
47	CA	501	GTP	C2-N3	2.25	1.38	1.33
49	CN	501	GDP	C6-N1	-2.25	1.34	1.37
49	UN	501	GDP	C6-N1	-2.25	1.34	1.37
49	LB	501	GDP	C6-N1	-2.25	1.34	1.37
49	PN	501	GDP	C6-N1	-2.24	1.34	1.37
47	QA	501	GTP	C2-N3	2.24	1.38	1.33
47	PG	501	GTP	C2-N3	2.23	1.38	1.33
47	BA	501	GTP	C2-N3	2.23	1.38	1.33
47	GE	501	GTP	C2-N3	2.23	1.38	1.33
47	RM	501	GTP	C2-N3	2.23	1.38	1.33
49	EB	501	GDP	C6-N1	-2.23	1.34	1.37
47	JG	501	GTP	C2-N3	2.22	1.38	1.33
47	HG	501	GTP	C2-N3	2.22	1.38	1.33
47	TM	501	GTP	C2-N3	2.22	1.38	1.33
47	RK	501	GTP	C2-N3	2.22	1.38	1.33
49	TN	501	GDP	C6-N1	-2.22	1.34	1.37
47	TA	501	GTP	C2-N3	2.21	1.38	1.33
49	IB	501	GDP	C6-N1	-2.21	1.34	1.37
47	DA	501	GTP	C2-N3	2.21	1.38	1.33
47	QC	501	GTP	C2-N3	2.21	1.38	1.33
47	QK	501	GTP	C2-N3	2.21	1.38	1.33
47	PC	501	GTP	C2-N3	2.21	1.38	1.33
49	EN	501	GDP	PA-O3A	2.21	1.61	1.59
47	QG	501	GTP	C2-N3	2.21	1.38	1.33
47	VG	501	GTP	C2-N3	2.21	1.38	1.33
47	BG	501	GTP	C2-N3	2.20	1.38	1.33
47	TC	501	GTP	C2-N3	2.20	1.38	1.33
47	CG	501	GTP	C2-N3	2.20	1.38	1.33
47	GM	501	GTP	C2-N3	2.20	1.38	1.33
47	LA	501	GTP	C2-N3	2.20	1.38	1.33
47	VM	501	GTP	C2-N3	2.20	1.38	1.33
47	DM	501	GTP	C2-N3	2.20	1.38	1.33
47	TG	501	GTP	C2-N3	2.20	1.38	1.33
47	PI	501	GTP	C2-N3	2.20	1.38	1.33
47	GC	501	GTP	C2-N3	2.20	1.38	1.33
47	RE	501	GTP	C2-N3	2.19	1.38	1.33
47	IA	501	GTP	C2-N3	2.19	1.38	1.33
47	HA	501	GTP	C2-N3	2.19	1.38	1.33
47	AC	501	GTP	C2-N3	2.19	1.38	1.33
47	RG	501	GTP	C2-N3	2.19	1.38	1.33
47	RI	501	GTP	C2-N3	2.19	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	PK	501	GTP	C2-N3	2.19	1.38	1.33
47	AE	501	GTP	C2-N3	2.19	1.38	1.33
47	OA	501	GTP	C2-N3	2.19	1.38	1.33
47	WM	501	GTP	C2-N3	2.19	1.38	1.33
47	PA	501	GTP	C2-N3	2.19	1.38	1.33
47	HC	501	GTP	C2-N3	2.19	1.38	1.33
47	MA	501	GTP	C2-N3	2.19	1.38	1.33
47	FE	501	GTP	C2-N3	2.19	1.38	1.33
47	GA	501	GTP	C2-N3	2.18	1.38	1.33
47	NA	501	GTP	C2-N3	2.18	1.38	1.33
47	SI	501	GTP	C2-N3	2.18	1.38	1.33
47	VC	501	GTP	C2-N3	2.18	1.38	1.33
47	EM	501	GTP	C2-N3	2.18	1.38	1.33
47	CK	501	GTP	C2-N3	2.18	1.38	1.33
47	BC	501	GTP	C2-N3	2.18	1.38	1.33
47	CM	501	GTP	C2-N3	2.18	1.38	1.33
47	CI	501	GTP	C2-N3	2.18	1.38	1.33
47	IC	501	GTP	C2-N3	2.18	1.38	1.33
47	JM	501	GTP	C2-N3	2.18	1.38	1.33
47	BM	501	GTP	C2-N3	2.18	1.38	1.33
47	HI	501	GTP	C2-N3	2.18	1.38	1.33
47	UI	501	GTP	C2-N3	2.18	1.38	1.33
47	LG	501	GTP	C2-N3	2.18	1.38	1.33
47	PE	501	GTP	C2-N3	2.18	1.38	1.33
47	TE	501	GTP	C2-N3	2.18	1.38	1.33
47	UE	501	GTP	C2-N3	2.18	1.38	1.33
47	VI	501	GTP	C2-N3	2.18	1.38	1.33
47	JA	501	GTP	C2-N3	2.18	1.38	1.33
47	DG	501	GTP	C2-N3	2.18	1.38	1.33
47	CE	501	GTP	C2-N3	2.18	1.38	1.33
47	VA	501	GTP	C2-N3	2.18	1.38	1.33
47	WA	501	GTP	C2-N3	2.18	1.38	1.33
47	LK	501	GTP	C2-N3	2.18	1.38	1.33
47	GK	501	GTP	C2-N3	2.17	1.38	1.33
47	ME	501	GTP	C2-N3	2.17	1.38	1.33
47	PM	501	GTP	C2-N3	2.17	1.38	1.33
47	AG	501	GTP	C2-N3	2.17	1.38	1.33
47	KC	501	GTP	C2-N3	2.17	1.38	1.33
47	QE	501	GTP	C2-N3	2.17	1.38	1.33
47	SE	501	GTP	C2-N3	2.17	1.38	1.33
47	NA	501	GTP	PB-O3B	2.17	1.61	1.59
47	II	501	GTP	C2-N3	2.17	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	FK	501	GTP	C2-N3	2.17	1.38	1.33
47	FG	501	GTP	C2-N3	2.17	1.38	1.33
47	HM	501	GTP	C2-N3	2.17	1.38	1.33
47	KA	501	GTP	C2-N3	2.17	1.38	1.33
47	AA	501	GTP	C2-N3	2.16	1.38	1.33
47	IE	501	GTP	C2-N3	2.16	1.38	1.33
47	AM	501	GTP	C2-N3	2.16	1.38	1.33
47	NK	501	GTP	C2-N3	2.16	1.38	1.33
47	GG	501	GTP	C2-N3	2.16	1.38	1.33
47	LM	501	GTP	C2-N3	2.16	1.38	1.33
47	NG	501	GTP	C2-N3	2.16	1.38	1.33
47	BE	501	GTP	C2-N3	2.16	1.38	1.33
47	IK	502	GTP	C2-N3	2.16	1.38	1.33
47	VK	501	GTP	C2-N3	2.16	1.38	1.33
47	WI	501	GTP	C2-N3	2.16	1.38	1.33
47	DI	501	GTP	C2-N3	2.16	1.38	1.33
47	SG	501	GTP	C2-N3	2.16	1.38	1.33
47	OM	501	GTP	C2-N3	2.16	1.38	1.33
47	TK	501	GTP	C2-N3	2.16	1.38	1.33
47	BI	501	GTP	C2-N3	2.16	1.38	1.33
47	EI	501	GTP	C2-N3	2.16	1.38	1.33
47	CC	501	GTP	C2-N3	2.16	1.38	1.33
47	QM	501	GTP	C2-N3	2.16	1.38	1.33
47	WK	501	GTP	C2-N3	2.16	1.38	1.33
47	FI	501	GTP	C2-N3	2.16	1.38	1.33
47	NM	501	GTP	C2-N3	2.16	1.38	1.33
47	OE	501	GTP	C2-N3	2.16	1.38	1.33
47	UK	501	GTP	C2-N3	2.16	1.38	1.33
47	JC	501	GTP	C2-N3	2.16	1.38	1.33
47	AI	501	GTP	C2-N3	2.16	1.38	1.33
47	MI	501	GTP	C2-N3	2.16	1.38	1.33
47	DE	501	GTP	C2-N3	2.16	1.38	1.33
47	TI	501	GTP	C2-N3	2.15	1.38	1.33
47	FA	501	GTP	C2-N3	2.15	1.38	1.33
47	RC	501	GTP	C2-N3	2.15	1.38	1.33
47	JE	501	GTP	C2-N3	2.15	1.38	1.33
47	WC	501	GTP	C2-N3	2.15	1.38	1.33
47	AK	501	GTP	C2-N3	2.15	1.38	1.33
47	GI	501	GTP	C2-N3	2.15	1.38	1.33
47	KG	501	GTP	C2-N3	2.15	1.38	1.33
47	KK	501	GTP	C2-N3	2.15	1.38	1.33
47	NI	501	GTP	C2-N3	2.15	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	UG	501	GTP	C2-N3	2.15	1.38	1.33
47	FC	501	GTP	C2-N3	2.15	1.38	1.33
47	MM	501	GTP	C2-N3	2.14	1.38	1.33
47	OG	501	GTP	C2-N3	2.14	1.38	1.33
47	VE	501	GTP	C2-N3	2.14	1.38	1.33
47	IM	501	GTP	C2-N3	2.14	1.38	1.33
47	JK	501	GTP	C2-N3	2.14	1.38	1.33
47	JI	501	GTP	C2-N3	2.14	1.38	1.33
47	OI	501	GTP	C2-N3	2.14	1.38	1.33
47	HE	501	GTP	C2-N3	2.14	1.38	1.33
47	KM	501	GTP	C2-N3	2.14	1.38	1.33
47	OK	501	GTP	C2-N3	2.14	1.38	1.33
47	DC	501	GTP	C2-N3	2.14	1.38	1.33
47	HK	501	GTP	C2-N3	2.14	1.38	1.33
47	MK	501	GTP	C2-N3	2.14	1.38	1.33
47	BK	501	GTP	C2-N3	2.14	1.38	1.33
47	LE	501	GTP	C2-N3	2.14	1.38	1.33
47	OC	501	GTP	C2-N3	2.13	1.38	1.33
47	EE	501	GTP	C2-N3	2.13	1.38	1.33
47	UC	501	GTP	C2-N3	2.13	1.38	1.33
47	SK	501	GTP	C2-N3	2.13	1.38	1.33
47	IG	501	GTP	C2-N3	2.13	1.38	1.33
47	KI	501	GTP	C2-N3	2.13	1.38	1.33
47	LC	501	GTP	C2-N3	2.13	1.38	1.33
47	NE	501	GTP	C2-N3	2.13	1.38	1.33
47	MG	501	GTP	C2-N3	2.12	1.38	1.33
47	UM	501	GTP	C2-N3	2.12	1.38	1.33
47	NC	501	GTP	C2-N3	2.12	1.38	1.33
47	WG	501	GTP	C2-N3	2.12	1.38	1.33
47	EG	501	GTP	C2-N3	2.12	1.38	1.33
47	DK	501	GTP	C2-N3	2.12	1.38	1.33
47	EC	501	GTP	C2-N3	2.12	1.38	1.33
47	EK	501	GTP	C2-N3	2.12	1.38	1.33
47	LI	501	GTP	C2-N3	2.11	1.38	1.33
47	SC	501	GTP	C2-N3	2.11	1.38	1.33
47	MC	501	GTP	C2-N3	2.11	1.38	1.33
47	QI	501	GTP	C2-N3	2.11	1.38	1.33
47	LK	501	GTP	PB-O3B	2.10	1.61	1.59
47	NM	501	GTP	PB-O3B	2.10	1.61	1.59
47	WE	501	GTP	C2-N3	2.10	1.38	1.33
47	DI	501	GTP	PA-O3A	2.10	1.61	1.59
47	KE	501	GTP	C2-N3	2.09	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	UA	501	GTP	PB-O3B	2.09	1.61	1.59
47	NI	501	GTP	PB-O3B	2.09	1.61	1.59
47	JM	501	GTP	PB-O3B	2.08	1.61	1.59
47	HC	501	GTP	PB-O3B	2.07	1.61	1.59
47	WM	501	GTP	PA-O3A	2.05	1.61	1.59
47	JM	501	GTP	PA-O3A	2.05	1.61	1.59
47	BK	501	GTP	PB-O3B	2.03	1.61	1.59
47	AA	501	GTP	PB-O3B	2.02	1.61	1.59
47	WE	501	GTP	PB-O3B	2.02	1.61	1.59
47	NE	501	GTP	PB-O3B	2.01	1.61	1.59
47	NK	501	GTP	PB-O3B	2.01	1.61	1.59
47	DI	501	GTP	PB-O3A	2.01	1.61	1.59
47	QC	501	GTP	PA-O3A	2.01	1.61	1.59
47	OK	501	GTP	PB-O3B	2.00	1.61	1.59

All (953) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	RI	501	GTP	C8-N7-C5	3.72	108.89	102.55
47	FM	501	GTP	C8-N7-C5	3.72	108.88	102.55
47	DC	501	GTP	C8-N7-C5	3.71	108.87	102.55
47	RK	501	GTP	C8-N7-C5	3.71	108.86	102.55
47	VC	501	GTP	C8-N7-C5	3.69	108.83	102.55
47	JI	501	GTP	C8-N7-C5	3.68	108.82	102.55
47	JE	501	GTP	C8-N7-C5	3.68	108.82	102.55
47	OC	501	GTP	C8-N7-C5	3.68	108.82	102.55
47	OK	501	GTP	C8-N7-C5	3.68	108.82	102.55
47	VA	501	GTP	C8-N7-C5	3.68	108.81	102.55
47	OG	501	GTP	C8-N7-C5	3.68	108.81	102.55
47	PK	501	GTP	C8-N7-C5	3.67	108.81	102.55
47	VG	501	GTP	C8-N7-C5	3.67	108.80	102.55
47	VK	501	GTP	C8-N7-C5	3.67	108.80	102.55
47	WE	501	GTP	C8-N7-C5	3.67	108.80	102.55
47	JK	501	GTP	C8-N7-C5	3.67	108.80	102.55
47	KE	501	GTP	C8-N7-C5	3.67	108.80	102.55
47	OA	501	GTP	C8-N7-C5	3.67	108.79	102.55
47	WC	501	GTP	C8-N7-C5	3.67	108.79	102.55
47	VI	501	GTP	C8-N7-C5	3.67	108.79	102.55
47	WI	501	GTP	C8-N7-C5	3.66	108.78	102.55
47	NA	501	GTP	C8-N7-C5	3.66	108.78	102.55
47	HC	501	GTP	C8-N7-C5	3.66	108.78	102.55
47	DK	501	GTP	C8-N7-C5	3.66	108.78	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	CK	501	GTP	C8-N7-C5	3.66	108.78	102.55
47	GI	501	GTP	C8-N7-C5	3.66	108.78	102.55
47	VE	501	GTP	C8-N7-C5	3.66	108.77	102.55
47	FG	501	GTP	C8-N7-C5	3.65	108.77	102.55
47	BE	501	GTP	C8-N7-C5	3.65	108.77	102.55
47	CC	501	GTP	C8-N7-C5	3.65	108.76	102.55
47	UM	501	GTP	C8-N7-C5	3.65	108.76	102.55
47	JM	501	GTP	C8-N7-C5	3.65	108.76	102.55
47	BM	501	GTP	C8-N7-C5	3.65	108.76	102.55
47	FA	501	GTP	C8-N7-C5	3.65	108.76	102.55
47	NG	501	GTP	C8-N7-C5	3.64	108.75	102.55
47	OE	501	GTP	C8-N7-C5	3.64	108.75	102.55
47	IK	502	GTP	C8-N7-C5	3.64	108.75	102.55
47	DI	501	GTP	C8-N7-C5	3.64	108.75	102.55
47	OI	501	GTP	C8-N7-C5	3.64	108.75	102.55
47	BG	501	GTP	C8-N7-C5	3.64	108.75	102.55
47	LC	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	UK	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	DE	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	NC	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	II	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	UC	501	GTP	C8-N7-C5	3.64	108.74	102.55
47	GM	501	GTP	C8-N7-C5	3.63	108.74	102.55
47	HI	501	GTP	C8-N7-C5	3.63	108.74	102.55
47	KI	501	GTP	C8-N7-C5	3.63	108.74	102.55
47	OM	501	GTP	C8-N7-C5	3.63	108.74	102.55
47	DM	501	GTP	C8-N7-C5	3.63	108.73	102.55
47	NM	501	GTP	C8-N7-C5	3.63	108.73	102.55
47	RE	501	GTP	C8-N7-C5	3.63	108.73	102.55
47	IE	501	GTP	C8-N7-C5	3.63	108.73	102.55
47	KC	501	GTP	C8-N7-C5	3.63	108.73	102.55
47	MK	501	GTP	C8-N7-C5	3.63	108.72	102.55
47	HG	501	GTP	C8-N7-C5	3.62	108.72	102.55
47	LE	501	GTP	C8-N7-C5	3.62	108.72	102.55
47	PM	501	GTP	C8-N7-C5	3.62	108.72	102.55
47	GK	501	GTP	C8-N7-C5	3.62	108.72	102.55
47	QC	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	TI	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	TC	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	JA	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	NK	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	MG	501	GTP	C8-N7-C5	3.62	108.71	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	NI	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	IC	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	LK	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	LM	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	MC	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	SI	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	KA	501	GTP	C8-N7-C5	3.62	108.71	102.55
47	EC	501	GTP	C8-N7-C5	3.62	108.70	102.55
47	HK	501	GTP	C8-N7-C5	3.61	108.70	102.55
47	WM	501	GTP	C8-N7-C5	3.61	108.70	102.55
47	HM	501	GTP	C8-N7-C5	3.61	108.70	102.55
47	AI	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	ME	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	AA	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	QM	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	TA	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	NE	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	TM	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	MM	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	TE	501	GTP	C8-N7-C5	3.61	108.69	102.55
47	PE	501	GTP	C8-N7-C5	3.60	108.69	102.55
47	SE	501	GTP	C8-N7-C5	3.60	108.69	102.55
47	EI	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	GA	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	QI	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	WG	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	RA	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	CM	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	BA	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	FK	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	QA	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	RC	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	SC	501	GTP	C8-N7-C5	3.60	108.68	102.55
47	EK	501	GTP	C8-N7-C5	3.60	108.67	102.55
47	KK	501	GTP	C8-N7-C5	3.60	108.67	102.55
47	FI	501	GTP	C8-N7-C5	3.60	108.67	102.55
47	PC	501	GTP	C8-N7-C5	3.59	108.67	102.55
47	IA	501	GTP	C8-N7-C5	3.59	108.67	102.55
47	KM	501	GTP	C8-N7-C5	3.59	108.66	102.55
47	MI	501	GTP	C8-N7-C5	3.59	108.66	102.55
47	BK	501	GTP	C8-N7-C5	3.59	108.66	102.55
47	GG	501	GTP	C8-N7-C5	3.59	108.66	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	WK	501	GTP	C8-N7-C5	3.59	108.66	102.55
47	UG	501	GTP	C8-N7-C5	3.59	108.66	102.55
47	CG	501	GTP	C8-N7-C5	3.58	108.65	102.55
47	DG	501	GTP	C8-N7-C5	3.58	108.65	102.55
47	KG	501	GTP	C8-N7-C5	3.58	108.65	102.55
47	SG	501	GTP	C8-N7-C5	3.58	108.65	102.55
47	EM	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	QE	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	HA	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	BI	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	CI	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	JC	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	RG	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	IG	501	GTP	C8-N7-C5	3.58	108.64	102.55
47	RM	501	GTP	C8-N7-C5	3.57	108.63	102.55
47	AC	501	GTP	C8-N7-C5	3.57	108.63	102.55
47	EG	501	GTP	C8-N7-C5	3.57	108.63	102.55
47	BC	501	GTP	C8-N7-C5	3.57	108.63	102.55
47	SK	501	GTP	C8-N7-C5	3.57	108.62	102.55
47	LG	501	GTP	C8-N7-C5	3.56	108.62	102.55
47	EE	501	GTP	C8-N7-C5	3.56	108.61	102.55
47	TG	501	GTP	C8-N7-C5	3.56	108.61	102.55
47	UE	501	GTP	C8-N7-C5	3.56	108.61	102.55
47	QK	501	GTP	C8-N7-C5	3.56	108.60	102.55
47	GC	501	GTP	C8-N7-C5	3.55	108.60	102.55
47	IM	501	GTP	C8-N7-C5	3.55	108.59	102.55
47	PI	501	GTP	C8-N7-C5	3.55	108.59	102.55
47	LA	501	GTP	C8-N7-C5	3.55	108.59	102.55
47	UI	501	GTP	C8-N7-C5	3.54	108.57	102.55
47	JG	501	GTP	C8-N7-C5	3.54	108.57	102.55
47	FC	501	GTP	C8-N7-C5	3.53	108.57	102.55
47	PA	501	GTP	C8-N7-C5	3.53	108.57	102.55
47	LI	501	GTP	C8-N7-C5	3.53	108.56	102.55
47	CE	501	GTP	C8-N7-C5	3.53	108.55	102.55
47	HE	501	GTP	C8-N7-C5	3.52	108.55	102.55
47	MA	501	GTP	C8-N7-C5	3.52	108.54	102.55
47	QG	501	GTP	C8-N7-C5	3.52	108.54	102.55
47	SM	501	GTP	C8-N7-C5	3.52	108.54	102.55
47	TK	501	GTP	C8-N7-C5	3.52	108.54	102.55
47	WA	501	GTP	C8-N7-C5	3.52	108.54	102.55
47	FE	501	GTP	C8-N7-C5	3.51	108.53	102.55
47	AK	501	GTP	C8-N7-C5	3.51	108.53	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	SA	501	GTP	C8-N7-C5	3.51	108.52	102.55
47	AM	501	GTP	C8-N7-C5	3.51	108.52	102.55
47	VM	501	GTP	C8-N7-C5	3.50	108.51	102.55
47	DA	501	GTP	C8-N7-C5	3.50	108.51	102.55
47	CA	501	GTP	C8-N7-C5	3.50	108.50	102.55
47	GE	501	GTP	C8-N7-C5	3.49	108.49	102.55
47	UA	501	GTP	C8-N7-C5	3.48	108.48	102.55
47	AG	501	GTP	C8-N7-C5	3.47	108.46	102.55
47	PG	501	GTP	C8-N7-C5	3.47	108.45	102.55
47	AE	501	GTP	C8-N7-C5	3.40	108.34	102.55
47	EA	501	GTP	C8-N7-C5	3.39	108.32	102.55
47	FM	501	GTP	C5-C6-N1	3.27	120.31	114.07
47	FM	501	GTP	C2-N1-C6	-3.11	119.41	125.11
47	GE	501	GTP	C2-N1-C6	-3.10	119.43	125.11
47	DG	501	GTP	C5-C6-N1	3.05	119.88	114.07
47	BG	501	GTP	C5-C6-N1	3.04	119.87	114.07
47	AA	501	GTP	C5-C6-N1	3.04	119.87	114.07
47	BE	501	GTP	C5-C6-N1	3.04	119.87	114.07
47	HG	501	GTP	C5-C6-N1	3.04	119.86	114.07
47	DE	501	GTP	C5-C6-N1	3.03	119.84	114.07
47	CC	501	GTP	C5-C6-N1	3.02	119.84	114.07
47	SM	501	GTP	C5-C6-N1	3.02	119.84	114.07
47	VK	501	GTP	C5-C6-N1	3.02	119.83	114.07
47	OE	501	GTP	C5-C6-N1	3.02	119.83	114.07
47	GE	501	GTP	C5-C6-N1	3.01	119.81	114.07
47	BG	501	GTP	C2-N1-C6	-3.01	119.60	125.11
47	QG	501	GTP	C2-N1-C6	-3.01	119.60	125.11
47	AC	501	GTP	C5-C6-N1	3.01	119.81	114.07
47	SM	501	GTP	C2-N1-C6	-3.01	119.60	125.11
47	BI	501	GTP	C5-C6-N1	3.01	119.81	114.07
47	WC	501	GTP	C5-C6-N1	3.01	119.80	114.07
47	VG	501	GTP	C5-C6-N1	3.00	119.80	114.07
47	WE	501	GTP	C5-C6-N1	3.00	119.80	114.07
47	WG	501	GTP	C2-N1-C6	-3.00	119.61	125.11
47	CM	501	GTP	C5-C6-N1	3.00	119.80	114.07
47	QE	501	GTP	C5-C6-N1	3.00	119.79	114.07
47	GK	501	GTP	C5-C6-N1	3.00	119.79	114.07
47	WC	501	GTP	C2-N1-C6	-3.00	119.62	125.11
47	GI	501	GTP	C5-C6-N1	3.00	119.79	114.07
47	UM	501	GTP	C5-C6-N1	3.00	119.79	114.07
47	VC	501	GTP	C5-C6-N1	3.00	119.79	114.07
47	CE	501	GTP	C2-N1-C6	-3.00	119.63	125.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	DK	501	GTP	C5-C6-N1	2.99	119.78	114.07
47	LC	501	GTP	C5-C6-N1	2.99	119.78	114.07
47	CE	501	GTP	C5-C6-N1	2.99	119.78	114.07
47	OC	501	GTP	C5-C6-N1	2.99	119.78	114.07
47	BI	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	JE	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	DG	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	SA	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	SA	501	GTP	C5-C6-N1	2.99	119.77	114.07
47	FA	501	GTP	C5-C6-N1	2.99	119.77	114.07
47	AE	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	BE	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	AA	501	GTP	C2-N1-C6	-2.99	119.64	125.11
47	MK	501	GTP	C2-N1-C6	-2.98	119.65	125.11
47	FE	501	GTP	C2-N1-C6	-2.98	119.65	125.11
47	CG	501	GTP	C5-C6-N1	2.98	119.76	114.07
47	JI	501	GTP	C5-C6-N1	2.98	119.76	114.07
47	IA	501	GTP	C2-N1-C6	-2.98	119.65	125.11
47	BA	501	GTP	C5-C6-N1	2.98	119.76	114.07
47	JE	501	GTP	C5-C6-N1	2.98	119.76	114.07
47	DE	501	GTP	C2-N1-C6	-2.98	119.65	125.11
47	LA	501	GTP	C2-N1-C6	-2.98	119.65	125.11
47	MK	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	GI	501	GTP	C2-N1-C6	-2.98	119.66	125.11
47	BM	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	ME	501	GTP	C2-N1-C6	-2.98	119.66	125.11
47	PG	501	GTP	C2-N1-C6	-2.98	119.66	125.11
47	IA	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	UA	501	GTP	C2-N1-C6	-2.98	119.66	125.11
47	DI	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	IC	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	MC	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	AG	501	GTP	C2-N1-C6	-2.98	119.66	125.11
47	QG	501	GTP	C5-C6-N1	2.98	119.75	114.07
47	HC	501	GTP	C5-C6-N1	2.97	119.75	114.07
47	QE	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	KC	501	GTP	C5-C6-N1	2.97	119.75	114.07
47	GA	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	JC	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	UK	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	VK	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	KK	501	GTP	C5-C6-N1	2.97	119.74	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	ME	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	JC	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	RE	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	IE	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	JG	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	PA	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	PK	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	AK	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	AM	501	GTP	C5-C6-N1	2.97	119.74	114.07
47	CM	501	GTP	C2-N1-C6	-2.97	119.67	125.11
47	PE	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	VA	501	GTP	C2-N1-C6	-2.97	119.68	125.11
47	NI	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	UA	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	EE	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	HA	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	QK	501	GTP	C5-C6-N1	2.97	119.73	114.07
47	HG	501	GTP	C2-N1-C6	-2.97	119.68	125.11
47	WE	501	GTP	C2-N1-C6	-2.97	119.68	125.11
47	HE	501	GTP	C5-C6-N1	2.96	119.73	114.07
47	UC	501	GTP	C5-C6-N1	2.96	119.73	114.07
47	LG	501	GTP	C2-N1-C6	-2.96	119.68	125.11
47	QC	501	GTP	C2-N1-C6	-2.96	119.68	125.11
47	UK	501	GTP	C2-N1-C6	-2.96	119.68	125.11
47	EM	501	GTP	C5-C6-N1	2.96	119.73	114.07
47	JI	501	GTP	C2-N1-C6	-2.96	119.68	125.11
47	BM	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	VC	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	TG	501	GTP	C5-C6-N1	2.96	119.72	114.07
47	DK	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	UM	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	GK	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	GG	501	GTP	C5-C6-N1	2.96	119.72	114.07
47	GA	501	GTP	C5-C6-N1	2.96	119.72	114.07
47	MI	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	FG	501	GTP	C5-C6-N1	2.96	119.72	114.07
47	RK	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	QK	501	GTP	C2-N1-C6	-2.96	119.69	125.11
47	IE	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	PC	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	VI	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	DI	501	GTP	C2-N1-C6	-2.96	119.70	125.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	RG	501	GTP	C2-N1-C6	-2.96	119.70	125.11
47	KA	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	MM	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	AC	501	GTP	C2-N1-C6	-2.96	119.70	125.11
47	EE	501	GTP	C2-N1-C6	-2.96	119.70	125.11
47	BC	501	GTP	C2-N1-C6	-2.96	119.70	125.11
47	OM	501	GTP	C5-C6-N1	2.96	119.71	114.07
47	OG	501	GTP	C5-C6-N1	2.95	119.71	114.07
47	VM	501	GTP	C5-C6-N1	2.95	119.71	114.07
47	GM	501	GTP	C2-N1-C6	-2.95	119.70	125.11
47	HC	501	GTP	C2-N1-C6	-2.95	119.70	125.11
47	GC	501	GTP	C5-C6-N1	2.95	119.71	114.07
47	QC	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	AI	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	TE	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	WI	501	GTP	C2-N1-C6	-2.95	119.70	125.11
47	PC	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	LC	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	CC	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	GC	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	WG	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	HA	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	LK	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	HK	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	PI	501	GTP	C2-N1-C6	-2.95	119.71	125.11
49	CF	501	GDP	C8-N7-C5	2.95	107.57	102.55
47	NE	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	NG	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	HE	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	AM	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	UE	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	JM	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	SC	501	GTP	C5-C6-N1	2.95	119.70	114.07
47	RI	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	BA	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	UC	501	GTP	C2-N1-C6	-2.95	119.71	125.11
47	AK	501	GTP	C2-N1-C6	-2.95	119.72	125.11
47	JA	501	GTP	C5-C6-N1	2.95	119.69	114.07
47	VE	501	GTP	C5-C6-N1	2.95	119.69	114.07
47	LI	501	GTP	C2-N1-C6	-2.95	119.72	125.11
47	LM	501	GTP	C2-N1-C6	-2.95	119.72	125.11
47	PA	501	GTP	C2-N1-C6	-2.95	119.72	125.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	GG	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	FG	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	VI	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	EI	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	FE	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	NK	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	RM	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	BK	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	CA	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	FI	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	AE	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	DC	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	AI	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	TG	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	VE	501	GTP	C2-N1-C6	-2.94	119.72	125.11
47	AG	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	JK	501	GTP	C5-C6-N1	2.94	119.69	114.07
47	GM	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	HK	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	IG	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	MI	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	SE	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	SK	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	JK	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	OE	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	VA	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	HI	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	MM	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	TC	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	QA	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	CI	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	IC	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	PK	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	LE	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	UG	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	EA	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	MA	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	TA	501	GTP	C5-C6-N1	2.94	119.68	114.07
47	JM	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	UI	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	CI	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	IM	501	GTP	C5-C6-N1	2.94	119.67	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	SI	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	UG	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	WI	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	RE	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	SK	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	EK	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	QI	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	II	501	GTP	C2-N1-C6	-2.94	119.73	125.11
47	KG	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	MC	501	GTP	C2-N1-C6	-2.94	119.74	125.11
47	RG	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	UE	501	GTP	C5-C6-N1	2.94	119.67	114.07
47	LA	501	GTP	C5-C6-N1	2.93	119.67	114.07
47	LK	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	EA	501	GTP	C5-C6-N1	2.93	119.67	114.07
47	KE	501	GTP	C5-C6-N1	2.93	119.67	114.07
49	CJ	501	GDP	C8-N7-C5	2.93	107.54	102.55
49	VJ	501	GDP	C8-N7-C5	2.93	107.54	102.55
47	FK	501	GTP	C5-C6-N1	2.93	119.67	114.07
47	QM	501	GTP	C5-C6-N1	2.93	119.67	114.07
47	SG	501	GTP	C5-C6-N1	2.93	119.67	114.07
49	VH	501	GDP	C8-N7-C5	2.93	107.54	102.55
47	IG	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	PE	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	TI	501	GTP	C5-C6-N1	2.93	119.67	114.07
47	KA	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	CG	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	KC	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	KK	501	GTP	C2-N1-C6	-2.93	119.74	125.11
47	TC	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	EI	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	RI	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	OA	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	PG	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	TM	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	RK	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	RM	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	FI	501	GTP	C5-C6-N1	2.93	119.66	114.07
47	HM	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	VG	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	KI	501	GTP	C5-C6-N1	2.93	119.65	114.07
47	KM	501	GTP	C5-C6-N1	2.93	119.65	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	WK	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	CK	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	IM	501	GTP	C2-N1-C6	-2.93	119.75	125.11
47	KE	501	GTP	C2-N1-C6	-2.92	119.76	125.11
47	PM	501	GTP	C2-N1-C6	-2.92	119.76	125.11
47	NA	501	GTP	C5-C6-N1	2.92	119.65	114.07
49	LF	501	GDP	C8-N7-C5	2.92	107.53	102.55
47	FA	501	GTP	C2-N1-C6	-2.92	119.76	125.11
47	UI	501	GTP	C5-C6-N1	2.92	119.65	114.07
47	II	501	GTP	C5-C6-N1	2.92	119.65	114.07
47	HI	501	GTP	C5-C6-N1	2.92	119.65	114.07
47	LG	501	GTP	C5-C6-N1	2.92	119.65	114.07
47	BK	501	GTP	C2-N1-C6	-2.92	119.76	125.11
49	CD	501	GDP	C8-N7-C5	2.92	107.52	102.55
47	LE	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	NM	501	GTP	C5-C6-N1	2.92	119.64	114.07
49	JH	501	GDP	C8-N7-C5	2.92	107.52	102.55
47	WK	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	WM	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	DM	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	NC	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	SG	501	GTP	C2-N1-C6	-2.92	119.76	125.11
47	LM	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	WA	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	EC	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	NI	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	NM	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	TE	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	OK	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	CK	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	LI	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	DA	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	MA	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	TK	501	GTP	C5-C6-N1	2.92	119.64	114.07
47	IK	502	GTP	C5-C6-N1	2.92	119.63	114.07
47	EM	501	GTP	C2-N1-C6	-2.92	119.77	125.11
47	PI	501	GTP	C5-C6-N1	2.91	119.63	114.07
47	QM	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	NC	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	OK	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	OM	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	SC	501	GTP	C2-N1-C6	-2.91	119.78	125.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	MG	501	GTP	C5-C6-N1	2.91	119.63	114.07
47	FC	501	GTP	C5-C6-N1	2.91	119.63	114.07
49	CH	501	GDP	C8-N7-C5	2.91	107.51	102.55
47	DC	501	GTP	C2-N1-C6	-2.91	119.78	125.11
49	TN	501	GDP	C8-N7-C5	2.91	107.50	102.55
47	EC	501	GTP	C5-C6-N1	2.91	119.62	114.07
47	TK	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	DA	501	GTP	C2-N1-C6	-2.91	119.78	125.11
47	KG	501	GTP	C2-N1-C6	-2.91	119.78	125.11
49	JL	501	GDP	C8-N7-C5	2.91	107.50	102.55
49	PF	501	GDP	C8-N7-C5	2.91	107.50	102.55
47	FC	501	GTP	C2-N1-C6	-2.91	119.79	125.11
47	KM	501	GTP	C2-N1-C6	-2.91	119.79	125.11
49	HJ	501	GDP	C8-N7-C5	2.91	107.50	102.55
47	JA	501	GTP	C2-N1-C6	-2.91	119.79	125.11
47	IK	502	GTP	C2-N1-C6	-2.91	119.79	125.11
47	EK	501	GTP	C2-N1-C6	-2.91	119.79	125.11
49	ND	501	GDP	C8-N7-C5	2.90	107.50	102.55
47	QI	501	GTP	C2-N1-C6	-2.90	119.79	125.11
47	JG	501	GTP	C5-C6-N1	2.90	119.61	114.07
47	EG	501	GTP	C5-C6-N1	2.90	119.61	114.07
47	OC	501	GTP	C2-N1-C6	-2.90	119.79	125.11
47	RA	501	GTP	C2-N1-C6	-2.90	119.79	125.11
47	NE	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	OA	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	FK	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	RA	501	GTP	C5-C6-N1	2.90	119.61	114.07
47	TM	501	GTP	C5-C6-N1	2.90	119.61	114.07
47	QA	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	MG	501	GTP	C2-N1-C6	-2.90	119.80	125.11
49	CL	501	GDP	C8-N7-C5	2.90	107.49	102.55
47	WM	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	SE	501	GTP	C2-N1-C6	-2.90	119.80	125.11
47	RC	501	GTP	C5-C6-N1	2.90	119.60	114.07
47	KI	501	GTP	C2-N1-C6	-2.90	119.81	125.11
49	IJ	501	GDP	C8-N7-C5	2.90	107.48	102.55
49	PH	501	GDP	C8-N7-C5	2.90	107.48	102.55
47	TA	501	GTP	C2-N1-C6	-2.90	119.81	125.11
49	JD	501	GDP	C8-N7-C5	2.90	107.48	102.55
49	KN	501	GDP	C8-N7-C5	2.90	107.48	102.55
47	NK	501	GTP	C2-N1-C6	-2.90	119.81	125.11
49	KJ	501	GDP	C8-N7-C5	2.90	107.48	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	HM	501	GTP	C5-C6-N1	2.90	119.60	114.07
49	BJ	501	GDP	C8-N7-C5	2.90	107.48	102.55
47	RC	501	GTP	C2-N1-C6	-2.89	119.81	125.11
49	MJ	501	GDP	C8-N7-C5	2.89	107.48	102.55
49	UF	501	GDP	C8-N7-C5	2.89	107.48	102.55
49	QN	501	GDP	C8-N7-C5	2.89	107.47	102.55
47	EG	501	GTP	C2-N1-C6	-2.89	119.81	125.11
47	OI	501	GTP	C2-N1-C6	-2.89	119.81	125.11
49	PL	501	GDP	C8-N7-C5	2.89	107.47	102.55
49	WL	501	GDP	C8-N7-C5	2.89	107.47	102.55
47	WA	501	GTP	C5-C6-N1	2.89	119.58	114.07
47	SI	501	GTP	C2-N1-C6	-2.89	119.82	125.11
49	HH	501	GDP	C8-N7-C5	2.89	107.47	102.55
47	NG	501	GTP	C2-N1-C6	-2.89	119.82	125.11
49	NH	501	GDP	C8-N7-C5	2.89	107.47	102.55
49	CN	501	GDP	C8-N7-C5	2.89	107.47	102.55
47	OI	501	GTP	C5-C6-N1	2.89	119.58	114.07
47	PM	501	GTP	C5-C6-N1	2.89	119.58	114.07
47	DM	501	GTP	C2-N1-C6	-2.89	119.83	125.11
49	JB	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	KF	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	WJ	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	UB	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	GF	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	DJ	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	PD	501	GDP	C8-N7-C5	2.89	107.46	102.55
49	BF	501	GDP	C8-N7-C5	2.88	107.46	102.55
49	HF	501	GDP	C8-N7-C5	2.88	107.46	102.55
49	DL	501	GDP	C8-N7-C5	2.88	107.46	102.55
49	QJ	501	GDP	C8-N7-C5	2.88	107.46	102.55
47	BC	501	GTP	C5-C6-N1	2.88	119.57	114.07
49	WB	501	GDP	C8-N7-C5	2.88	107.46	102.55
49	HD	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	KL	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	VF	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	UL	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	UJ	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	CB	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	DF	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	GN	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	LJ	501	GDP	C8-N7-C5	2.88	107.45	102.55
49	JN	501	GDP	C8-N7-C5	2.88	107.45	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	OB	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	PJ	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	AB	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	IN	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	WH	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	VN	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	GL	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	QB	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	WD	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	BN	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	HL	501	GDP	C8-N7-C5	2.87	107.44	102.55
49	TJ	501	GDP	C8-N7-C5	2.87	107.44	102.55
47	CA	501	GTP	C5-C6-N1	2.87	119.55	114.07
49	VL	501	GDP	C8-N7-C5	2.87	107.43	102.55
47	TI	501	GTP	C2-N1-C6	-2.87	119.86	125.11
49	NL	501	GDP	C8-N7-C5	2.87	107.43	102.55
47	NA	501	GTP	C2-N1-C6	-2.87	119.86	125.11
49	MF	501	GDP	C8-N7-C5	2.87	107.43	102.55
49	AD	501	GDP	C8-N7-C5	2.87	107.43	102.55
49	PN	501	GDP	C8-N7-C5	2.87	107.43	102.55
49	IB	501	GDP	C8-N7-C5	2.87	107.43	102.55
47	OG	501	GTP	C2-N1-C6	-2.86	119.87	125.11
47	VM	501	GTP	C2-N1-C6	-2.86	119.87	125.11
49	NJ	501	GDP	C8-N7-C5	2.86	107.43	102.55
49	LB	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	RB	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	TD	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	FJ	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	BD	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	IH	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	QH	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	OH	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	HN	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	OJ	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	JF	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	JJ	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	MN	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	BH	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	EN	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	LD	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	VD	501	GDP	C8-N7-C5	2.86	107.42	102.55
49	DB	501	GDP	C8-N7-C5	2.86	107.41	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	NN	501	GDP	C8-N7-C5	2.86	107.41	102.55
49	KD	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	BL	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	QL	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	NF	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	TH	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	EH	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	HB	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	LN	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	TF	501	GDP	C8-N7-C5	2.85	107.41	102.55
49	GJ	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	GH	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	UH	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	TB	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	VB	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	ED	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	OL	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	IF	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	WN	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	FL	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	ML	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	RH	501	GDP	C8-N7-C5	2.85	107.40	102.55
49	KB	501	GDP	C8-N7-C5	2.85	107.39	102.55
49	QD	501	GDP	C8-N7-C5	2.85	107.39	102.55
49	OF	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	SD	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	UD	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	ID	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	DD	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	FN	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	ON	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	PB	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	GB	502	GDP	C8-N7-C5	2.84	107.39	102.55
49	RF	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	WF	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	IL	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	MB	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	MD	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	KH	501	GDP	C8-N7-C5	2.84	107.39	102.55
49	AH	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	AF	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	DN	501	GDP	C8-N7-C5	2.84	107.38	102.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	DH	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	EB	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	FB	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	RD	501	GDP	C8-N7-C5	2.84	107.38	102.55
49	NB	502	GDP	C8-N7-C5	2.84	107.38	102.55
49	FF	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	OD	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	FD	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	QF	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	AJ	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	BB	502	GDP	C8-N7-C5	2.83	107.37	102.55
49	RN	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	MH	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	EL	501	GDP	C8-N7-C5	2.83	107.37	102.55
49	SB	501	GDP	C8-N7-C5	2.83	107.36	102.55
49	SF	501	GDP	C8-N7-C5	2.83	107.36	102.55
49	GD	501	GDP	C8-N7-C5	2.82	107.36	102.55
49	LH	501	GDP	C8-N7-C5	2.82	107.35	102.55
49	TL	501	GDP	C8-N7-C5	2.82	107.35	102.55
49	EJ	501	GDP	C8-N7-C5	2.82	107.35	102.55
49	AN	501	GDP	C8-N7-C5	2.82	107.35	102.55
49	SL	501	GDP	C8-N7-C5	2.82	107.35	102.55
49	SJ	501	GDP	C8-N7-C5	2.82	107.34	102.55
49	FH	501	GDP	C8-N7-C5	2.81	107.34	102.55
49	LL	501	GDP	C8-N7-C5	2.81	107.33	102.55
49	SN	501	GDP	C8-N7-C5	2.81	107.33	102.55
49	RL	501	GDP	C8-N7-C5	2.81	107.33	102.55
49	UN	501	GDP	C8-N7-C5	2.81	107.33	102.55
49	SH	501	GDP	C8-N7-C5	2.80	107.32	102.55
49	AL	502	GDP	C8-N7-C5	2.80	107.32	102.55
49	RJ	501	GDP	C8-N7-C5	2.79	107.29	102.55
49	EF	501	GDP	C8-N7-C5	2.75	107.23	102.55
47	AE	501	GTP	O6-C6-C5	-2.31	119.75	124.32
49	DH	501	GDP	C4'-O4'-C1'	2.27	112.01	109.92
47	EA	501	GTP	O6-C6-C5	-2.25	119.87	124.32
47	VM	501	GTP	O6-C6-C5	-2.24	119.89	124.32
47	FE	501	GTP	O6-C6-C5	-2.20	119.96	124.32
47	AM	501	GTP	O6-C6-C5	-2.20	119.96	124.32
47	ME	501	GTP	O6-C6-C5	-2.17	120.02	124.32
47	UA	501	GTP	O6-C6-C5	-2.16	120.03	124.32
47	PA	501	GTP	O6-C6-C5	-2.16	120.03	124.32
47	AA	501	GTP	O6-C6-C5	-2.15	120.05	124.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	GI	501	GTP	O6-C6-C5	-2.15	120.05	124.32
47	LA	501	GTP	O6-C6-C5	-2.15	120.05	124.32
47	NE	501	GTP	O6-C6-C5	-2.15	120.05	124.32
47	GE	501	GTP	O6-C6-C5	-2.15	120.06	124.32
49	MF	501	GDP	C5-C6-N1	2.15	118.17	114.07
47	CA	501	GTP	O6-C6-C5	-2.15	120.06	124.32
47	AC	501	GTP	O6-C6-C5	-2.15	120.06	124.32
47	NI	501	GTP	O6-C6-C5	-2.15	120.07	124.32
47	DA	501	GTP	O6-C6-C5	-2.14	120.07	124.32
47	MK	501	GTP	O6-C6-C5	-2.14	120.08	124.32
47	NK	501	GTP	O6-C6-C5	-2.14	120.08	124.32
47	QG	501	GTP	O6-C6-C5	-2.14	120.08	124.32
47	FC	501	GTP	O6-C6-C5	-2.14	120.08	124.32
47	EE	501	GTP	O6-C6-C5	-2.14	120.09	124.32
47	AK	501	GTP	O6-C6-C5	-2.13	120.09	124.32
47	AG	501	GTP	O6-C6-C5	-2.13	120.09	124.32
47	SA	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	SG	501	GTP	O6-C6-C5	-2.13	120.10	124.32
49	SF	501	GDP	C5-C6-N1	2.13	118.13	114.07
47	MI	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	FK	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	GG	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	KM	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	MC	501	GTP	O6-C6-C5	-2.13	120.10	124.32
47	IG	501	GTP	O6-C6-C5	-2.13	120.11	124.32
47	KC	501	GTP	O6-C6-C5	-2.13	120.11	124.32
47	KG	501	GTP	O6-C6-C5	-2.13	120.11	124.32
49	MH	501	GDP	C5-C6-N1	2.13	118.12	114.07
47	KK	501	GTP	O6-C6-C5	-2.12	120.11	124.32
47	CM	501	GTP	O6-C6-C5	-2.12	120.11	124.32
47	NG	501	GTP	O6-C6-C5	-2.12	120.11	124.32
47	BA	501	GTP	O6-C6-C5	-2.12	120.12	124.32
47	IK	502	GTP	O6-C6-C5	-2.12	120.12	124.32
49	KB	501	GDP	C5-C6-N1	2.12	118.11	114.07
47	II	501	GTP	O6-C6-C5	-2.12	120.12	124.32
49	DF	501	GDP	C5-C6-N1	2.12	118.11	114.07
47	NC	501	GTP	O6-C6-C5	-2.12	120.13	124.32
49	JJ	501	GDP	C5-C6-N1	2.12	118.11	114.07
47	LI	501	GTP	O6-C6-C5	-2.11	120.13	124.32
49	LF	501	GDP	C5-C6-N1	2.11	118.10	114.07
49	MN	501	GDP	C5-C6-N1	2.11	118.10	114.07
47	SC	501	GTP	O6-C6-C5	-2.11	120.14	124.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	EG	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	TC	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	QK	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	UI	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	SE	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	GK	501	GTP	O6-C6-C5	-2.11	120.14	124.32
49	CF	501	GDP	C5-C6-N1	2.11	118.09	114.07
49	PH	501	GDP	C5-C6-N1	2.11	118.09	114.07
47	DE	501	GTP	O6-C6-C5	-2.11	120.14	124.32
49	ND	501	GDP	C5-C6-N1	2.11	118.09	114.07
47	EK	501	GTP	O6-C6-C5	-2.11	120.14	124.32
47	LK	501	GTP	O6-C6-C5	-2.11	120.14	124.32
49	DD	501	GDP	C5-C6-N1	2.10	118.08	114.07
47	JC	501	GTP	O6-C6-C5	-2.10	120.15	124.32
47	IA	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	SI	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	TM	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	KE	501	GTP	O6-C6-C5	-2.10	120.16	124.32
49	DJ	501	GDP	C5-C6-N1	2.10	118.08	114.07
49	HN	501	GDP	C5-C6-N1	2.10	118.08	114.07
47	MA	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	RG	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	BK	501	GTP	O6-C6-C5	-2.10	120.16	124.32
47	OE	501	GTP	O6-C6-C5	-2.10	120.16	124.32
49	LD	501	GDP	C5-C6-N1	2.10	118.07	114.07
47	NA	501	GTP	O6-C6-C5	-2.09	120.17	124.32
49	AN	501	GDP	C5-C6-N1	2.09	118.06	114.07
47	TK	501	GTP	O6-C6-C5	-2.09	120.17	124.32
49	PB	501	GDP	C5-C6-N1	2.09	118.06	114.07
47	LG	501	GTP	O6-C6-C5	-2.09	120.17	124.32
47	IC	501	GTP	O6-C6-C5	-2.09	120.17	124.32
47	MM	501	GTP	O6-C6-C5	-2.09	120.17	124.32
47	RI	501	GTP	O6-C6-C5	-2.09	120.17	124.32
47	LM	501	GTP	O6-C6-C5	-2.09	120.18	124.32
49	JF	501	GDP	C5-C6-N1	2.09	118.06	114.07
49	HF	501	GDP	C5-C6-N1	2.09	118.06	114.07
47	KA	501	GTP	O6-C6-C5	-2.09	120.18	124.32
47	EI	501	GTP	O6-C6-C5	-2.09	120.18	124.32
47	RA	501	GTP	O6-C6-C5	-2.09	120.18	124.32
47	HE	501	GTP	O6-C6-C5	-2.09	120.18	124.32
49	BB	502	GDP	C5-C6-N1	2.09	118.05	114.07
49	CB	501	GDP	C5-C6-N1	2.09	118.05	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	NN	501	GDP	C5-C6-N1	2.09	118.05	114.07
49	WH	501	GDP	C5-C6-N1	2.09	118.05	114.07
49	EF	501	GDP	C5-C6-N1	2.09	118.05	114.07
49	FJ	501	GDP	C5-C6-N1	2.09	118.05	114.07
47	QI	501	GTP	O6-C6-C5	-2.09	120.18	124.32
49	GN	501	GDP	C5-C6-N1	2.09	118.05	114.07
47	WM	501	GTP	O6-C6-C5	-2.09	120.19	124.32
49	BJ	501	GDP	C5-C6-N1	2.08	118.05	114.07
49	HB	501	GDP	C5-C6-N1	2.08	118.05	114.07
49	SN	501	GDP	C5-C6-N1	2.08	118.05	114.07
47	SK	501	GTP	O6-C6-C5	-2.08	120.19	124.32
49	DL	501	GDP	C5-C6-N1	2.08	118.05	114.07
49	BD	501	GDP	C5-C6-N1	2.08	118.04	114.07
47	QA	501	GTP	O6-C6-C5	-2.08	120.19	124.32
47	MG	501	GTP	O6-C6-C5	-2.08	120.19	124.32
49	NJ	501	GDP	C5-C6-N1	2.08	118.04	114.07
47	OM	501	GTP	O6-C6-C5	-2.08	120.19	124.32
47	RC	501	GTP	O6-C6-C5	-2.08	120.19	124.32
49	HD	501	GDP	C5-C6-N1	2.08	118.04	114.07
47	HK	501	GTP	O6-C6-C5	-2.08	120.20	124.32
49	GF	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	NF	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	QN	501	GDP	C5-C6-N1	2.08	118.04	114.07
47	KI	501	GTP	O6-C6-C5	-2.08	120.20	124.32
49	AD	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	NH	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	QD	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	KD	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	VJ	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	WF	501	GDP	C5-C6-N1	2.08	118.04	114.07
49	WL	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	RJ	501	GDP	C5-C6-N1	2.08	118.03	114.07
47	FG	501	GTP	O6-C6-C5	-2.08	120.20	124.32
47	NM	501	GTP	O6-C6-C5	-2.08	120.20	124.32
49	VH	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	MJ	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	KF	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	MD	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	IH	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	BH	501	GDP	C5-C6-N1	2.08	118.03	114.07
49	LN	501	GDP	C5-C6-N1	2.07	118.03	114.07
49	ML	501	GDP	C5-C6-N1	2.07	118.03	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	DG	501	GTP	O6-C6-C5	-2.07	120.21	124.32
49	DH	501	GDP	C5-C6-N1	2.07	118.02	114.07
49	GH	501	GDP	C5-C6-N1	2.07	118.02	114.07
47	BG	501	GTP	O6-C6-C5	-2.07	120.21	124.32
49	IJ	501	GDP	C5-C6-N1	2.07	118.02	114.07
47	OK	501	GTP	O6-C6-C5	-2.07	120.22	124.32
49	FF	501	GDP	C5-C6-N1	2.07	118.02	114.07
49	FL	501	GDP	C5-C6-N1	2.07	118.02	114.07
49	LH	501	GDP	C5-C6-N1	2.07	118.02	114.07
47	FI	501	GTP	O6-C6-C5	-2.07	120.22	124.32
47	LE	501	GTP	O6-C6-C5	-2.07	120.22	124.32
49	AL	502	GDP	C5-C6-N1	2.07	118.02	114.07
49	IL	501	GDP	C5-C6-N1	2.07	118.02	114.07
49	RF	501	GDP	C5-C6-N1	2.07	118.02	114.07
49	UN	501	GDP	C5-C6-N1	2.07	118.02	114.07
47	HG	501	GTP	O6-C6-C5	-2.07	120.22	124.32
47	UE	501	GTP	O6-C6-C5	-2.07	120.22	124.32
49	LJ	501	GDP	C5-C6-N1	2.07	118.01	114.07
47	HI	501	GTP	O6-C6-C5	-2.07	120.22	124.32
49	ED	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	HH	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	JH	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	UJ	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	BL	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	WN	501	GDP	C5-C6-N1	2.07	118.01	114.07
47	TE	501	GTP	O6-C6-C5	-2.07	120.22	124.32
49	CJ	501	GDP	C5-C6-N1	2.07	118.01	114.07
49	VN	501	GDP	C5-C6-N1	2.07	118.01	114.07
47	AI	501	GTP	O6-C6-C5	-2.07	120.23	124.32
47	OI	501	GTP	O6-C6-C5	-2.07	120.23	124.32
47	IE	501	GTP	O6-C6-C5	-2.06	120.23	124.32
49	QL	501	GDP	C5-C6-N1	2.06	118.01	114.07
49	RH	501	GDP	C5-C6-N1	2.06	118.01	114.07
47	IM	501	GTP	O6-C6-C5	-2.06	120.23	124.32
47	TA	501	GTP	O6-C6-C5	-2.06	120.23	124.32
47	QE	501	GTP	O6-C6-C5	-2.06	120.23	124.32
49	VB	501	GDP	C5-C6-N1	2.06	118.01	114.07
47	RM	501	GTP	O6-C6-C5	-2.06	120.23	124.32
47	GA	501	GTP	O6-C6-C5	-2.06	120.23	124.32
49	CN	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	DN	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	JL	501	GDP	C5-C6-N1	2.06	118.00	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	SL	501	GDP	C5-C6-N1	2.06	118.00	114.07
47	OA	501	GTP	O6-C6-C5	-2.06	120.23	124.32
49	PL	501	GDP	C5-C6-N1	2.06	118.00	114.07
47	LC	501	GTP	O6-C6-C5	-2.06	120.23	124.32
49	HL	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	HJ	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	NB	502	GDP	C5-C6-N1	2.06	118.00	114.07
49	TH	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	VD	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	TB	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	PD	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	CL	501	GDP	C5-C6-N1	2.06	118.00	114.07
49	NL	501	GDP	C5-C6-N1	2.06	118.00	114.07
47	HC	501	GTP	O6-C6-C5	-2.06	120.24	124.32
47	UC	501	GTP	O6-C6-C5	-2.06	120.24	124.32
49	AJ	501	GDP	C5-C6-N1	2.06	117.99	114.07
49	WB	501	GDP	C5-C6-N1	2.06	117.99	114.07
47	EC	501	GTP	O6-C6-C5	-2.06	120.24	124.32
49	AF	501	GDP	C5-C6-N1	2.06	117.99	114.07
49	LB	501	GDP	C5-C6-N1	2.06	117.99	114.07
47	EM	501	GTP	O6-C6-C5	-2.06	120.24	124.32
49	KH	501	GDP	C5-C6-N1	2.06	117.99	114.07
49	AB	501	GDP	C5-C6-N1	2.06	117.99	114.07
47	GC	501	GTP	O6-C6-C5	-2.05	120.25	124.32
49	RL	501	GDP	C5-C6-N1	2.05	117.99	114.07
47	BC	501	GTP	O6-C6-C5	-2.05	120.25	124.32
47	BE	501	GTP	O6-C6-C5	-2.05	120.25	124.32
49	AH	501	GDP	C5-C6-N1	2.05	117.99	114.07
49	UF	501	GDP	C5-C6-N1	2.05	117.99	114.07
49	BN	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	EJ	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	GD	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	GL	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	RB	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	RD	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	IF	501	GDP	C5-C6-N1	2.05	117.98	114.07
47	CE	501	GTP	O6-C6-C5	-2.05	120.25	124.32
47	JE	501	GTP	O6-C6-C5	-2.05	120.26	124.32
47	CI	501	GTP	O6-C6-C5	-2.05	120.26	124.32
47	HA	501	GTP	O6-C6-C5	-2.05	120.26	124.32
47	VA	501	GTP	O6-C6-C5	-2.05	120.26	124.32
49	TN	501	GDP	C5-C6-N1	2.05	117.98	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	LL	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	SH	501	GDP	C5-C6-N1	2.05	117.98	114.07
49	KL	501	GDP	C5-C6-N1	2.05	117.98	114.07
47	SM	501	GTP	O6-C6-C5	-2.05	120.26	124.32
47	VE	501	GTP	O6-C6-C5	-2.05	120.26	124.32
49	CD	501	GDP	C5-C6-N1	2.05	117.97	114.07
49	PF	501	GDP	C5-C6-N1	2.05	117.97	114.07
49	GJ	501	GDP	C5-C6-N1	2.05	117.97	114.07
47	DI	501	GTP	O6-C6-C5	-2.05	120.27	124.32
49	SB	501	GDP	C5-C6-N1	2.04	117.97	114.07
47	WA	501	GTP	O6-C6-C5	-2.04	120.27	124.32
49	KJ	501	GDP	C5-C6-N1	2.04	117.97	114.07
47	TG	501	GTP	O6-C6-C5	-2.04	120.27	124.32
49	SD	501	GDP	C4'-O4'-C1'	2.04	111.80	109.92
49	IN	501	GDP	C5-C6-N1	2.04	117.97	114.07
47	RE	501	GTP	O6-C6-C5	-2.04	120.27	124.32
49	SJ	501	GDP	C5-C6-N1	2.04	117.96	114.07
47	VK	501	GTP	O6-C6-C5	-2.04	120.27	124.32
49	GB	502	GDP	C5-C6-N1	2.04	117.96	114.07
49	OB	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	RN	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	UB	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	WJ	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	FH	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	QB	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	TJ	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	EH	501	GDP	C5-C6-N1	2.04	117.96	114.07
47	CK	501	GTP	O6-C6-C5	-2.04	120.28	124.32
47	QM	501	GTP	O6-C6-C5	-2.04	120.28	124.32
49	EL	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	TD	501	GDP	C5-C6-N1	2.04	117.96	114.07
47	PM	501	GTP	O6-C6-C5	-2.04	120.28	124.32
49	JD	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	OF	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	QF	501	GDP	C5-C6-N1	2.04	117.96	114.07
49	UL	501	GDP	C5-C6-N1	2.04	117.95	114.07
47	FM	501	GTP	O6-C6-C5	-2.04	120.28	124.32
49	ID	501	GDP	C5-C6-N1	2.04	117.95	114.07
47	BI	501	GTP	O6-C6-C5	-2.04	120.28	124.32
47	WK	501	GTP	O6-C6-C5	-2.04	120.29	124.32
49	WD	501	GDP	C5-C6-N1	2.04	117.95	114.07
47	JK	501	GTP	O6-C6-C5	-2.03	120.29	124.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	GM	501	GTP	O6-C6-C5	-2.03	120.29	124.32
49	IB	501	GDP	C5-C6-N1	2.03	117.95	114.07
47	DK	501	GTP	O6-C6-C5	-2.03	120.29	124.32
49	KN	501	GDP	C5-C6-N1	2.03	117.95	114.07
49	CH	501	GDP	C5-C6-N1	2.03	117.95	114.07
49	ON	501	GDP	C5-C6-N1	2.03	117.95	114.07
49	TF	501	GDP	C5-C6-N1	2.03	117.94	114.07
47	RK	501	GTP	O6-C6-C5	-2.03	120.30	124.32
49	MB	501	GDP	C5-C6-N1	2.03	117.94	114.07
49	OH	501	GDP	C5-C6-N1	2.03	117.94	114.07
49	DB	501	GDP	C5-C6-N1	2.03	117.94	114.07
49	FD	501	GDP	C5-C6-N1	2.03	117.94	114.07
47	DC	501	GTP	O6-C6-C5	-2.03	120.31	124.32
47	VI	501	GTP	O6-C6-C5	-2.03	120.31	124.32
47	PG	501	GTP	O6-C6-C5	-2.02	120.31	124.32
47	PI	501	GTP	O6-C6-C5	-2.02	120.31	124.32
47	WG	501	GTP	O6-C6-C5	-2.02	120.31	124.32
49	OL	501	GDP	C5-C6-N1	2.02	117.93	114.07
49	QH	501	GDP	C5-C6-N1	2.02	117.93	114.07
47	WC	501	GTP	O6-C6-C5	-2.02	120.31	124.32
49	EB	501	GDP	C5-C6-N1	2.02	117.93	114.07
49	UH	501	GDP	C5-C6-N1	2.02	117.93	114.07
47	BM	501	GTP	O6-C6-C5	-2.02	120.31	124.32
47	JG	501	GTP	O6-C6-C5	-2.02	120.31	124.32
49	QJ	501	GDP	C5-C6-N1	2.02	117.92	114.07
49	PN	501	GDP	C5-C6-N1	2.02	117.92	114.07
47	JA	501	GTP	O6-C6-C5	-2.02	120.32	124.32
49	JB	501	GDP	C5-C6-N1	2.02	117.92	114.07
47	HM	501	GTP	O6-C6-C5	-2.02	120.32	124.32
49	LF	501	GDP	C2'-C3'-C4'	2.02	106.51	102.61
49	FB	501	GDP	C5-C6-N1	2.02	117.92	114.07
49	OD	501	GDP	C5-C6-N1	2.02	117.92	114.07
49	PJ	501	GDP	C5-C6-N1	2.02	117.92	114.07
49	UD	501	GDP	C5-C6-N1	2.02	117.92	114.07
49	SD	501	GDP	C5-C6-N1	2.01	117.91	114.07
47	UK	501	GTP	O6-C6-C5	-2.01	120.33	124.32
47	PE	501	GTP	O6-C6-C5	-2.01	120.33	124.32
47	WM	501	GTP	O3G-PG-O3B	2.01	111.38	104.64
49	VL	501	GDP	C5-C6-N1	2.01	117.91	114.07
49	FN	501	GDP	C5-C6-N1	2.01	117.91	114.07
49	TL	501	GDP	C5-C6-N1	2.00	117.89	114.07
49	EN	501	GDP	C5-C6-N1	2.00	117.89	114.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
49	VF	501	GDP	C5-C6-N1	2.00	117.89	114.07
47	CC	501	GTP	O6-C6-C5	-2.00	120.35	124.32
47	WI	501	GTP	O6-C6-C5	-2.00	120.35	124.32
47	WE	501	GTP	O6-C6-C5	-2.00	120.35	124.32
49	DN	501	GDP	O2B-PB-O3A	2.00	111.35	104.64

There are no chirality outliers.

All (1178) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
47	AC	501	GTP	C5'-O5'-PA-O3A
47	AC	501	GTP	C5'-O5'-PA-O1A
47	AC	501	GTP	C5'-O5'-PA-O2A
47	AG	501	GTP	PB-O3A-PA-O5'
47	AI	501	GTP	PB-O3A-PA-O5'
47	AI	501	GTP	C5'-O5'-PA-O3A
47	AI	501	GTP	C5'-O5'-PA-O1A
47	AI	501	GTP	C5'-O5'-PA-O2A
47	AK	501	GTP	C5'-O5'-PA-O3A
47	AK	501	GTP	C5'-O5'-PA-O2A
47	BA	501	GTP	C5'-O5'-PA-O3A
47	BA	501	GTP	C5'-O5'-PA-O1A
47	BA	501	GTP	C5'-O5'-PA-O2A
47	BC	501	GTP	C5'-O5'-PA-O3A
47	BC	501	GTP	C5'-O5'-PA-O1A
47	BC	501	GTP	C5'-O5'-PA-O2A
47	BE	501	GTP	PB-O3A-PA-O5'
47	BG	501	GTP	C5'-O5'-PA-O3A
47	BG	501	GTP	C5'-O5'-PA-O1A
47	BG	501	GTP	C5'-O5'-PA-O2A
47	BI	501	GTP	PB-O3A-PA-O5'
47	BI	501	GTP	C5'-O5'-PA-O3A
47	BI	501	GTP	C5'-O5'-PA-O2A
47	BK	501	GTP	PB-O3A-PA-O5'
47	BM	501	GTP	C5'-O5'-PA-O3A
47	BM	501	GTP	C5'-O5'-PA-O1A
47	BM	501	GTP	C5'-O5'-PA-O2A
47	CA	501	GTP	C5'-O5'-PA-O3A
47	CC	501	GTP	C5'-O5'-PA-O3A
47	CC	501	GTP	C5'-O5'-PA-O2A
47	CG	501	GTP	PB-O3A-PA-O5'
47	CG	501	GTP	C5'-O5'-PA-O3A

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Mol	Chain	Res	Type	Atoms
47	CG	501	GTP	C5'-O5'-PA-O2A
47	CK	501	GTP	PB-O3B-PG-O3G
47	CK	501	GTP	C5'-O5'-PA-O3A
47	CK	501	GTP	C5'-O5'-PA-O1A
47	CM	501	GTP	C5'-O5'-PA-O3A
47	CM	501	GTP	C5'-O5'-PA-O2A
47	DC	501	GTP	C5'-O5'-PA-O3A
47	DC	501	GTP	C5'-O5'-PA-O1A
47	DC	501	GTP	C5'-O5'-PA-O2A
47	DE	501	GTP	C5'-O5'-PA-O3A
47	DE	501	GTP	C5'-O5'-PA-O1A
47	DE	501	GTP	C5'-O5'-PA-O2A
47	DG	501	GTP	C5'-O5'-PA-O3A
47	DG	501	GTP	C5'-O5'-PA-O1A
47	DG	501	GTP	C5'-O5'-PA-O2A
47	DI	501	GTP	C5'-O5'-PA-O3A
47	DI	501	GTP	C5'-O5'-PA-O1A
47	DI	501	GTP	C5'-O5'-PA-O2A
47	DK	501	GTP	C5'-O5'-PA-O3A
47	DK	501	GTP	C5'-O5'-PA-O1A
47	DK	501	GTP	C5'-O5'-PA-O2A
47	DM	501	GTP	C5'-O5'-PA-O3A
47	DM	501	GTP	C5'-O5'-PA-O1A
47	DM	501	GTP	C5'-O5'-PA-O2A
47	EC	501	GTP	C5'-O5'-PA-O3A
47	EC	501	GTP	C5'-O5'-PA-O2A
47	EE	501	GTP	C5'-O5'-PA-O3A
47	EE	501	GTP	C5'-O5'-PA-O1A
47	EE	501	GTP	C5'-O5'-PA-O2A
47	EG	501	GTP	C5'-O5'-PA-O3A
47	EG	501	GTP	C5'-O5'-PA-O2A
47	EI	501	GTP	C5'-O5'-PA-O3A
47	EI	501	GTP	C5'-O5'-PA-O2A
47	EK	501	GTP	C5'-O5'-PA-O3A
47	EK	501	GTP	C5'-O5'-PA-O2A
47	EM	501	GTP	C5'-O5'-PA-O3A
47	EM	501	GTP	C5'-O5'-PA-O1A
47	EM	501	GTP	C5'-O5'-PA-O2A
47	FA	501	GTP	C5'-O5'-PA-O3A
47	FA	501	GTP	C5'-O5'-PA-O1A
47	FA	501	GTP	C5'-O5'-PA-O2A
47	FC	501	GTP	C5'-O5'-PA-O3A

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Mol	Chain	Res	Type	Atoms
47	FC	501	GTP	C5'-O5'-PA-O2A
47	FE	501	GTP	C5'-O5'-PA-O3A
47	FE	501	GTP	C5'-O5'-PA-O2A
47	FG	501	GTP	C5'-O5'-PA-O3A
47	FG	501	GTP	C5'-O5'-PA-O1A
47	FG	501	GTP	C5'-O5'-PA-O2A
47	FK	501	GTP	C5'-O5'-PA-O3A
47	FK	501	GTP	C5'-O5'-PA-O2A
47	FM	501	GTP	C5'-O5'-PA-O3A
47	FM	501	GTP	C5'-O5'-PA-O2A
47	GA	501	GTP	C5'-O5'-PA-O3A
47	GA	501	GTP	C5'-O5'-PA-O2A
47	GC	501	GTP	PB-O3A-PA-O5'
47	GE	501	GTP	PB-O3A-PA-O5'
47	GG	501	GTP	C5'-O5'-PA-O3A
47	GG	501	GTP	C5'-O5'-PA-O1A
47	GG	501	GTP	C5'-O5'-PA-O2A
47	GI	501	GTP	C5'-O5'-PA-O3A
47	GI	501	GTP	C5'-O5'-PA-O1A
47	GI	501	GTP	C5'-O5'-PA-O2A
47	GK	501	GTP	C5'-O5'-PA-O3A
47	GK	501	GTP	C5'-O5'-PA-O1A
47	GK	501	GTP	C5'-O5'-PA-O2A
47	GM	501	GTP	C5'-O5'-PA-O3A
47	GM	501	GTP	C5'-O5'-PA-O2A
47	HA	501	GTP	C5'-O5'-PA-O3A
47	HA	501	GTP	C5'-O5'-PA-O2A
47	HC	501	GTP	C5'-O5'-PA-O1A
47	HE	501	GTP	C5'-O5'-PA-O3A
47	HE	501	GTP	C5'-O5'-PA-O2A
47	HG	501	GTP	C5'-O5'-PA-O3A
47	HG	501	GTP	C5'-O5'-PA-O1A
47	HG	501	GTP	C5'-O5'-PA-O2A
47	HK	501	GTP	PB-O3A-PA-O5'
47	HK	501	GTP	C5'-O5'-PA-O1A
47	HM	501	GTP	C5'-O5'-PA-O3A
47	HM	501	GTP	C5'-O5'-PA-O1A
47	HM	501	GTP	C5'-O5'-PA-O2A
47	IA	501	GTP	C5'-O5'-PA-O3A
47	IA	501	GTP	C5'-O5'-PA-O1A
47	IA	501	GTP	C5'-O5'-PA-O2A
47	IA	501	GTP	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	IC	501	GTP	C5'-O5'-PA-O3A
47	IC	501	GTP	C5'-O5'-PA-O1A
47	IC	501	GTP	C5'-O5'-PA-O2A
47	IE	501	GTP	C5'-O5'-PA-O3A
47	IE	501	GTP	C5'-O5'-PA-O1A
47	IE	501	GTP	C5'-O5'-PA-O2A
47	IG	501	GTP	C5'-O5'-PA-O3A
47	IG	501	GTP	C5'-O5'-PA-O1A
47	IG	501	GTP	C5'-O5'-PA-O2A
47	II	501	GTP	C5'-O5'-PA-O3A
47	II	501	GTP	C5'-O5'-PA-O1A
47	II	501	GTP	C5'-O5'-PA-O2A
47	IK	502	GTP	C5'-O5'-PA-O3A
47	IK	502	GTP	C5'-O5'-PA-O2A
47	IM	501	GTP	PB-O3A-PA-O5'
47	IM	501	GTP	C5'-O5'-PA-O3A
47	IM	501	GTP	C5'-O5'-PA-O1A
47	IM	501	GTP	C5'-O5'-PA-O2A
47	JA	501	GTP	C5'-O5'-PA-O3A
47	JA	501	GTP	C5'-O5'-PA-O2A
47	JC	501	GTP	C5'-O5'-PA-O3A
47	JC	501	GTP	C5'-O5'-PA-O2A
47	JE	501	GTP	C5'-O5'-PA-O3A
47	JE	501	GTP	C5'-O5'-PA-O1A
47	JE	501	GTP	C5'-O5'-PA-O2A
47	JG	501	GTP	C5'-O5'-PA-O3A
47	JG	501	GTP	C5'-O5'-PA-O2A
47	JI	501	GTP	C5'-O5'-PA-O3A
47	JI	501	GTP	C5'-O5'-PA-O1A
47	JI	501	GTP	C5'-O5'-PA-O2A
47	JK	501	GTP	C5'-O5'-PA-O3A
47	JK	501	GTP	C5'-O5'-PA-O1A
47	JM	501	GTP	C5'-O5'-PA-O3A
47	JM	501	GTP	C5'-O5'-PA-O1A
47	KA	501	GTP	PB-O3A-PA-O5'
47	KA	501	GTP	C5'-O5'-PA-O3A
47	KA	501	GTP	C5'-O5'-PA-O2A
47	KC	501	GTP	C5'-O5'-PA-O3A
47	KC	501	GTP	C5'-O5'-PA-O2A
47	KE	501	GTP	C5'-O5'-PA-O3A
47	KE	501	GTP	C5'-O5'-PA-O1A
47	KE	501	GTP	C5'-O5'-PA-O2A

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Mol	Chain	Res	Type	Atoms
47	KG	501	GTP	C5'-O5'-PA-O3A
47	KG	501	GTP	C5'-O5'-PA-O2A
47	KI	501	GTP	C5'-O5'-PA-O3A
47	KI	501	GTP	C5'-O5'-PA-O2A
47	KK	501	GTP	C5'-O5'-PA-O3A
47	KK	501	GTP	C5'-O5'-PA-O2A
47	KM	501	GTP	C5'-O5'-PA-O3A
47	KM	501	GTP	C5'-O5'-PA-O2A
47	LC	501	GTP	PB-O3B-PG-O2G
47	LC	501	GTP	PB-O3B-PG-O3G
47	LE	501	GTP	PB-O3A-PA-O5'
47	LE	501	GTP	C5'-O5'-PA-O3A
47	LE	501	GTP	C5'-O5'-PA-O2A
47	LG	501	GTP	PB-O3A-PA-O5'
47	LG	501	GTP	C5'-O5'-PA-O3A
47	LG	501	GTP	C5'-O5'-PA-O2A
47	LM	501	GTP	C5'-O5'-PA-O3A
47	LM	501	GTP	C5'-O5'-PA-O2A
47	MC	501	GTP	C5'-O5'-PA-O3A
47	MC	501	GTP	C5'-O5'-PA-O1A
47	MC	501	GTP	C5'-O5'-PA-O2A
47	ME	501	GTP	C5'-O5'-PA-O3A
47	ME	501	GTP	C5'-O5'-PA-O1A
47	ME	501	GTP	C5'-O5'-PA-O2A
47	MG	501	GTP	C5'-O5'-PA-O3A
47	MG	501	GTP	C5'-O5'-PA-O1A
47	MG	501	GTP	C5'-O5'-PA-O2A
47	MI	501	GTP	C5'-O5'-PA-O3A
47	MI	501	GTP	C5'-O5'-PA-O1A
47	MI	501	GTP	C5'-O5'-PA-O2A
47	MK	501	GTP	C5'-O5'-PA-O3A
47	MK	501	GTP	C5'-O5'-PA-O1A
47	MK	501	GTP	C5'-O5'-PA-O2A
47	MM	501	GTP	C5'-O5'-PA-O3A
47	MM	501	GTP	C5'-O5'-PA-O1A
47	MM	501	GTP	C5'-O5'-PA-O2A
47	NA	501	GTP	PB-O3B-PG-O3G
47	NA	501	GTP	PB-O3A-PA-O5'
47	NA	501	GTP	C5'-O5'-PA-O1A
47	NC	501	GTP	C5'-O5'-PA-O3A
47	NC	501	GTP	C5'-O5'-PA-O1A
47	NE	501	GTP	PB-O3A-PA-O5'

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Mol	Chain	Res	Type	Atoms
47	NG	501	GTP	C5'-O5'-PA-O3A
47	NG	501	GTP	C5'-O5'-PA-O1A
47	NI	501	GTP	PB-O3B-PG-O3G
47	NI	501	GTP	PB-O3A-PA-O5'
47	NI	501	GTP	C5'-O5'-PA-O1A
47	NK	501	GTP	PB-O3A-PA-O5'
47	NK	501	GTP	C5'-O5'-PA-O3A
47	NK	501	GTP	C5'-O5'-PA-O1A
47	NM	501	GTP	C5'-O5'-PA-O3A
47	NM	501	GTP	C5'-O5'-PA-O1A
47	OA	501	GTP	C5'-O5'-PA-O3A
47	OA	501	GTP	C5'-O5'-PA-O1A
47	OA	501	GTP	C5'-O5'-PA-O2A
47	OC	501	GTP	C5'-O5'-PA-O3A
47	OE	501	GTP	C5'-O5'-PA-O3A
47	OG	501	GTP	C5'-O5'-PA-O3A
47	OG	501	GTP	C5'-O5'-PA-O1A
47	OI	501	GTP	C5'-O5'-PA-O3A
47	OK	501	GTP	C5'-O5'-PA-O3A
47	OK	501	GTP	C5'-O5'-PA-O1A
47	OM	501	GTP	C5'-O5'-PA-O3A
47	OM	501	GTP	C5'-O5'-PA-O1A
47	OM	501	GTP	C5'-O5'-PA-O2A
47	PA	501	GTP	C5'-O5'-PA-O3A
47	PA	501	GTP	C5'-O5'-PA-O1A
47	PA	501	GTP	C5'-O5'-PA-O2A
47	PC	501	GTP	C5'-O5'-PA-O3A
47	PC	501	GTP	C5'-O5'-PA-O2A
47	PE	501	GTP	C5'-O5'-PA-O3A
47	PE	501	GTP	C5'-O5'-PA-O1A
47	PE	501	GTP	C5'-O5'-PA-O2A
47	PG	501	GTP	C5'-O5'-PA-O3A
47	PG	501	GTP	C5'-O5'-PA-O2A
47	PI	501	GTP	C5'-O5'-PA-O3A
47	PI	501	GTP	C5'-O5'-PA-O2A
47	PK	501	GTP	PB-O3B-PG-O3G
47	PK	501	GTP	C5'-O5'-PA-O1A
47	PM	501	GTP	C5'-O5'-PA-O3A
47	PM	501	GTP	C5'-O5'-PA-O1A
47	PM	501	GTP	C5'-O5'-PA-O2A
47	QA	501	GTP	PB-O3A-PA-O5'
47	QA	501	GTP	C5'-O5'-PA-O3A

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Mol	Chain	Res	Type	Atoms
47	QA	501	GTP	C5'-O5'-PA-O2A
47	QC	501	GTP	C5'-O5'-PA-O3A
47	QC	501	GTP	C5'-O5'-PA-O1A
47	QC	501	GTP	C5'-O5'-PA-O2A
47	QE	501	GTP	C5'-O5'-PA-O3A
47	QE	501	GTP	C5'-O5'-PA-O2A
47	QG	501	GTP	C5'-O5'-PA-O3A
47	QG	501	GTP	C5'-O5'-PA-O1A
47	QG	501	GTP	C5'-O5'-PA-O2A
47	QI	501	GTP	C5'-O5'-PA-O3A
47	QI	501	GTP	C5'-O5'-PA-O2A
47	QK	501	GTP	PB-O3A-PA-O5'
47	QK	501	GTP	C5'-O5'-PA-O3A
47	QM	501	GTP	C5'-O5'-PA-O3A
47	QM	501	GTP	C5'-O5'-PA-O1A
47	QM	501	GTP	C5'-O5'-PA-O2A
47	RA	501	GTP	C5'-O5'-PA-O3A
47	RA	501	GTP	C5'-O5'-PA-O1A
47	RA	501	GTP	C5'-O5'-PA-O2A
47	RC	501	GTP	C5'-O5'-PA-O3A
47	RC	501	GTP	C5'-O5'-PA-O2A
47	RE	501	GTP	C5'-O5'-PA-O3A
47	RE	501	GTP	C5'-O5'-PA-O2A
47	RG	501	GTP	C5'-O5'-PA-O3A
47	RI	501	GTP	C5'-O5'-PA-O3A
47	RI	501	GTP	C5'-O5'-PA-O1A
47	RI	501	GTP	C5'-O5'-PA-O2A
47	RK	501	GTP	C5'-O5'-PA-O3A
47	RK	501	GTP	C5'-O5'-PA-O2A
47	RM	501	GTP	C5'-O5'-PA-O3A
47	RM	501	GTP	C5'-O5'-PA-O2A
47	SA	501	GTP	PB-O3A-PA-O5'
47	SC	501	GTP	C5'-O5'-PA-O3A
47	SC	501	GTP	C5'-O5'-PA-O2A
47	SI	501	GTP	C5'-O5'-PA-O3A
47	SI	501	GTP	C5'-O5'-PA-O2A
47	SM	501	GTP	C5'-O5'-PA-O3A
47	SM	501	GTP	C5'-O5'-PA-O1A
47	SM	501	GTP	C5'-O5'-PA-O2A
47	TA	501	GTP	C5'-O5'-PA-O3A
47	TA	501	GTP	C5'-O5'-PA-O1A
47	TA	501	GTP	C5'-O5'-PA-O2A

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Mol	Chain	Res	Type	Atoms
47	TC	501	GTP	PB-O3A-PA-O5'
47	TC	501	GTP	C5'-O5'-PA-O3A
47	TC	501	GTP	C5'-O5'-PA-O1A
47	TC	501	GTP	C5'-O5'-PA-O2A
47	TE	501	GTP	PB-O3A-PA-O5'
47	TE	501	GTP	C5'-O5'-PA-O3A
47	TE	501	GTP	C5'-O5'-PA-O1A
47	TE	501	GTP	C5'-O5'-PA-O2A
47	TG	501	GTP	C5'-O5'-PA-O3A
47	TG	501	GTP	C5'-O5'-PA-O2A
47	TI	501	GTP	PB-O3A-PA-O5'
47	TI	501	GTP	C5'-O5'-PA-O3A
47	TI	501	GTP	C5'-O5'-PA-O1A
47	TI	501	GTP	C5'-O5'-PA-O2A
47	TM	501	GTP	C5'-O5'-PA-O3A
47	TM	501	GTP	C5'-O5'-PA-O1A
47	TM	501	GTP	C5'-O5'-PA-O2A
47	UC	501	GTP	C5'-O5'-PA-O3A
47	UC	501	GTP	C5'-O5'-PA-O1A
47	UC	501	GTP	C5'-O5'-PA-O2A
47	UE	501	GTP	C5'-O5'-PA-O3A
47	UE	501	GTP	C5'-O5'-PA-O2A
47	UG	501	GTP	C5'-O5'-PA-O3A
47	UG	501	GTP	C5'-O5'-PA-O2A
47	UG	501	GTP	O4'-C4'-C5'-O5'
47	UM	501	GTP	C5'-O5'-PA-O3A
47	UM	501	GTP	C5'-O5'-PA-O2A
47	VC	501	GTP	C5'-O5'-PA-O3A
47	VC	501	GTP	C5'-O5'-PA-O2A
47	VE	501	GTP	C5'-O5'-PA-O3A
47	VE	501	GTP	C5'-O5'-PA-O1A
47	VE	501	GTP	C5'-O5'-PA-O2A
47	VG	501	GTP	PB-O3A-PA-O5'
47	VG	501	GTP	C5'-O5'-PA-O3A
47	VG	501	GTP	C5'-O5'-PA-O2A
47	VI	501	GTP	PB-O3B-PG-O2G
47	VI	501	GTP	PB-O3B-PG-O3G
47	VK	501	GTP	PB-O3B-PG-O2G
47	VK	501	GTP	PB-O3B-PG-O3G
47	VK	501	GTP	C5'-O5'-PA-O1A
47	VM	501	GTP	C5'-O5'-PA-O3A
47	VM	501	GTP	C5'-O5'-PA-O2A

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Mol	Chain	Res	Type	Atoms
47	WA	501	GTP	PB-O3A-PA-O5'
47	WA	501	GTP	C5'-O5'-PA-O3A
47	WA	501	GTP	C5'-O5'-PA-O2A
47	WC	501	GTP	C5'-O5'-PA-O3A
47	WC	501	GTP	C5'-O5'-PA-O1A
47	WC	501	GTP	C5'-O5'-PA-O2A
47	WE	501	GTP	PB-O3A-PA-O5'
47	WG	501	GTP	C5'-O5'-PA-O3A
47	WG	501	GTP	C5'-O5'-PA-O2A
47	WI	501	GTP	C5'-O5'-PA-O3A
47	WI	501	GTP	C5'-O5'-PA-O1A
47	WI	501	GTP	C5'-O5'-PA-O2A
47	WK	501	GTP	PB-O3A-PA-O5'
47	WK	501	GTP	C5'-O5'-PA-O3A
47	WK	501	GTP	C5'-O5'-PA-O2A
49	CF	501	GDP	C5'-O5'-PA-O1A
49	DJ	501	GDP	C5'-O5'-PA-O1A
49	GD	501	GDP	C5'-O5'-PA-O1A
49	GJ	501	GDP	C5'-O5'-PA-O1A
49	HH	501	GDP	C5'-O5'-PA-O1A
49	HN	501	GDP	C5'-O5'-PA-O1A
49	IF	501	GDP	C5'-O5'-PA-O1A
49	IH	501	GDP	C5'-O5'-PA-O3A
49	IH	501	GDP	C5'-O5'-PA-O1A
49	JD	501	GDP	C5'-O5'-PA-O1A
49	JF	501	GDP	C5'-O5'-PA-O1A
49	JJ	501	GDP	C5'-O5'-PA-O1A
49	JL	501	GDP	C5'-O5'-PA-O1A
49	JN	501	GDP	C5'-O5'-PA-O1A
49	MH	501	GDP	C5'-O5'-PA-O1A
49	MH	501	GDP	O4'-C4'-C5'-O5'
49	ML	501	GDP	C5'-O5'-PA-O1A
49	VF	501	GDP	C5'-O5'-PA-O1A
47	AA	501	GTP	C3'-C4'-C5'-O5'
47	AC	501	GTP	O4'-C4'-C5'-O5'
47	AC	501	GTP	C3'-C4'-C5'-O5'
47	AG	501	GTP	C3'-C4'-C5'-O5'
47	AI	501	GTP	O4'-C4'-C5'-O5'
47	AM	501	GTP	O4'-C4'-C5'-O5'
47	AM	501	GTP	C3'-C4'-C5'-O5'
47	BA	501	GTP	O4'-C4'-C5'-O5'
47	BA	501	GTP	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	BC	501	GTP	O4'-C4'-C5'-O5'
47	BC	501	GTP	C3'-C4'-C5'-O5'
47	BE	501	GTP	O4'-C4'-C5'-O5'
47	BE	501	GTP	C3'-C4'-C5'-O5'
47	BG	501	GTP	C3'-C4'-C5'-O5'
47	BK	501	GTP	C3'-C4'-C5'-O5'
47	CG	501	GTP	O4'-C4'-C5'-O5'
47	CG	501	GTP	C3'-C4'-C5'-O5'
47	FI	501	GTP	C3'-C4'-C5'-O5'
47	FM	501	GTP	O4'-C4'-C5'-O5'
47	FM	501	GTP	C3'-C4'-C5'-O5'
47	GA	501	GTP	O4'-C4'-C5'-O5'
47	GA	501	GTP	C3'-C4'-C5'-O5'
47	GE	501	GTP	O4'-C4'-C5'-O5'
47	GI	501	GTP	O4'-C4'-C5'-O5'
47	HM	501	GTP	C3'-C4'-C5'-O5'
47	IA	501	GTP	C3'-C4'-C5'-O5'
47	IG	501	GTP	O4'-C4'-C5'-O5'
47	IG	501	GTP	C3'-C4'-C5'-O5'
47	II	501	GTP	O4'-C4'-C5'-O5'
47	IM	501	GTP	O4'-C4'-C5'-O5'
47	LA	501	GTP	C3'-C4'-C5'-O5'
47	NA	501	GTP	C3'-C4'-C5'-O5'
47	PI	501	GTP	C3'-C4'-C5'-O5'
47	QM	501	GTP	O4'-C4'-C5'-O5'
47	RI	501	GTP	C3'-C4'-C5'-O5'
47	TA	501	GTP	O4'-C4'-C5'-O5'
47	TA	501	GTP	C3'-C4'-C5'-O5'
47	TC	501	GTP	C3'-C4'-C5'-O5'
47	TE	501	GTP	O4'-C4'-C5'-O5'
47	TE	501	GTP	C3'-C4'-C5'-O5'
47	TG	501	GTP	O4'-C4'-C5'-O5'
47	UC	501	GTP	O4'-C4'-C5'-O5'
47	UC	501	GTP	C3'-C4'-C5'-O5'
47	UE	501	GTP	C3'-C4'-C5'-O5'
47	UG	501	GTP	C3'-C4'-C5'-O5'
47	UM	501	GTP	O4'-C4'-C5'-O5'
47	WE	501	GTP	O4'-C4'-C5'-O5'
47	WE	501	GTP	C3'-C4'-C5'-O5'
47	WG	501	GTP	C3'-C4'-C5'-O5'
47	WK	501	GTP	C3'-C4'-C5'-O5'
49	MH	501	GDP	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	AA	501	GTP	O4'-C4'-C5'-O5'
47	AG	501	GTP	O4'-C4'-C5'-O5'
47	AI	501	GTP	C3'-C4'-C5'-O5'
47	AK	501	GTP	O4'-C4'-C5'-O5'
47	AK	501	GTP	C3'-C4'-C5'-O5'
47	BG	501	GTP	O4'-C4'-C5'-O5'
47	BK	501	GTP	O4'-C4'-C5'-O5'
47	FI	501	GTP	O4'-C4'-C5'-O5'
47	GE	501	GTP	C3'-C4'-C5'-O5'
47	GI	501	GTP	C3'-C4'-C5'-O5'
47	HM	501	GTP	O4'-C4'-C5'-O5'
47	II	501	GTP	C3'-C4'-C5'-O5'
47	IM	501	GTP	C3'-C4'-C5'-O5'
47	JI	501	GTP	O4'-C4'-C5'-O5'
47	JI	501	GTP	C3'-C4'-C5'-O5'
47	JK	501	GTP	O4'-C4'-C5'-O5'
47	JK	501	GTP	C3'-C4'-C5'-O5'
47	LA	501	GTP	O4'-C4'-C5'-O5'
47	LC	501	GTP	O4'-C4'-C5'-O5'
47	LC	501	GTP	C3'-C4'-C5'-O5'
47	LE	501	GTP	O4'-C4'-C5'-O5'
47	LE	501	GTP	C3'-C4'-C5'-O5'
47	LG	501	GTP	O4'-C4'-C5'-O5'
47	LG	501	GTP	C3'-C4'-C5'-O5'
47	NA	501	GTP	O4'-C4'-C5'-O5'
47	NE	501	GTP	O4'-C4'-C5'-O5'
47	NE	501	GTP	C3'-C4'-C5'-O5'
47	PE	501	GTP	O4'-C4'-C5'-O5'
47	PI	501	GTP	O4'-C4'-C5'-O5'
47	PM	501	GTP	O4'-C4'-C5'-O5'
47	PM	501	GTP	C3'-C4'-C5'-O5'
47	QM	501	GTP	C3'-C4'-C5'-O5'
47	RI	501	GTP	O4'-C4'-C5'-O5'
47	SC	501	GTP	O4'-C4'-C5'-O5'
47	SC	501	GTP	C3'-C4'-C5'-O5'
47	SM	501	GTP	O4'-C4'-C5'-O5'
47	SM	501	GTP	C3'-C4'-C5'-O5'
47	TC	501	GTP	O4'-C4'-C5'-O5'
47	TG	501	GTP	C3'-C4'-C5'-O5'
47	TI	501	GTP	O4'-C4'-C5'-O5'
47	TI	501	GTP	C3'-C4'-C5'-O5'
47	TM	501	GTP	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	TM	501	GTP	C3'-C4'-C5'-O5'
47	UE	501	GTP	O4'-C4'-C5'-O5'
47	UM	501	GTP	C3'-C4'-C5'-O5'
47	WG	501	GTP	O4'-C4'-C5'-O5'
47	WK	501	GTP	O4'-C4'-C5'-O5'
49	ED	501	GDP	O4'-C4'-C5'-O5'
49	ED	501	GDP	C3'-C4'-C5'-O5'
47	GC	501	GTP	O4'-C4'-C5'-O5'
47	OG	501	GTP	O4'-C4'-C5'-O5'
47	OG	501	GTP	C3'-C4'-C5'-O5'
47	PE	501	GTP	C3'-C4'-C5'-O5'
47	BI	501	GTP	C3'-C4'-C5'-O5'
47	CI	501	GTP	C3'-C4'-C5'-O5'
47	CM	501	GTP	C3'-C4'-C5'-O5'
47	EE	501	GTP	C3'-C4'-C5'-O5'
47	FC	501	GTP	C3'-C4'-C5'-O5'
47	FE	501	GTP	C3'-C4'-C5'-O5'
47	GC	501	GTP	C3'-C4'-C5'-O5'
47	HA	501	GTP	C3'-C4'-C5'-O5'
47	HE	501	GTP	C3'-C4'-C5'-O5'
47	HI	501	GTP	C3'-C4'-C5'-O5'
47	JG	501	GTP	C3'-C4'-C5'-O5'
47	MI	501	GTP	C3'-C4'-C5'-O5'
47	MK	501	GTP	C3'-C4'-C5'-O5'
47	NI	501	GTP	C3'-C4'-C5'-O5'
47	OK	501	GTP	C3'-C4'-C5'-O5'
47	PA	501	GTP	O4'-C4'-C5'-O5'
47	PA	501	GTP	C3'-C4'-C5'-O5'
47	PC	501	GTP	C3'-C4'-C5'-O5'
47	PG	501	GTP	C3'-C4'-C5'-O5'
47	QK	501	GTP	C3'-C4'-C5'-O5'
47	RA	501	GTP	C3'-C4'-C5'-O5'
47	SI	501	GTP	C3'-C4'-C5'-O5'
47	SK	501	GTP	C3'-C4'-C5'-O5'
47	VC	501	GTP	C3'-C4'-C5'-O5'
47	VG	501	GTP	C3'-C4'-C5'-O5'
47	VI	501	GTP	C3'-C4'-C5'-O5'
47	VK	501	GTP	C3'-C4'-C5'-O5'
47	WA	501	GTP	C3'-C4'-C5'-O5'
47	BI	501	GTP	O4'-C4'-C5'-O5'
47	CE	501	GTP	C3'-C4'-C5'-O5'
47	CM	501	GTP	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	EE	501	GTP	O4'-C4'-C5'-O5'
47	FC	501	GTP	O4'-C4'-C5'-O5'
47	FG	501	GTP	C3'-C4'-C5'-O5'
47	HA	501	GTP	O4'-C4'-C5'-O5'
47	HI	501	GTP	O4'-C4'-C5'-O5'
47	IK	502	GTP	C3'-C4'-C5'-O5'
47	JG	501	GTP	O4'-C4'-C5'-O5'
47	LK	501	GTP	C3'-C4'-C5'-O5'
47	MI	501	GTP	O4'-C4'-C5'-O5'
47	NI	501	GTP	O4'-C4'-C5'-O5'
47	QA	501	GTP	C3'-C4'-C5'-O5'
47	QG	501	GTP	C3'-C4'-C5'-O5'
47	QK	501	GTP	O4'-C4'-C5'-O5'
47	RA	501	GTP	O4'-C4'-C5'-O5'
47	SK	501	GTP	O4'-C4'-C5'-O5'
49	MD	501	GDP	C3'-C4'-C5'-O5'
47	CI	501	GTP	O4'-C4'-C5'-O5'
47	FE	501	GTP	O4'-C4'-C5'-O5'
47	NC	501	GTP	C3'-C4'-C5'-O5'
47	NG	501	GTP	C3'-C4'-C5'-O5'
47	PK	501	GTP	C3'-C4'-C5'-O5'
47	RE	501	GTP	C3'-C4'-C5'-O5'
47	RM	501	GTP	C3'-C4'-C5'-O5'
47	SI	501	GTP	O4'-C4'-C5'-O5'
47	UK	501	GTP	C3'-C4'-C5'-O5'
47	VA	501	GTP	C3'-C4'-C5'-O5'
47	VC	501	GTP	O4'-C4'-C5'-O5'
47	VG	501	GTP	O4'-C4'-C5'-O5'
47	EA	501	GTP	C3'-C4'-C5'-O5'
47	EM	501	GTP	C3'-C4'-C5'-O5'
47	PC	501	GTP	O4'-C4'-C5'-O5'
47	RG	501	GTP	C3'-C4'-C5'-O5'
47	TK	501	GTP	C3'-C4'-C5'-O5'
47	AK	501	GTP	PA-O3A-PB-O1B
47	AK	501	GTP	PB-O3A-PA-O1A
47	CA	501	GTP	PB-O3A-PA-O1A
47	CE	501	GTP	PA-O3A-PB-O1B
47	DG	501	GTP	PB-O3A-PA-O1A
47	DM	501	GTP	PB-O3A-PA-O1A
47	FE	501	GTP	PA-O3A-PB-O1B
47	HA	501	GTP	PA-O3A-PB-O1B
47	HM	501	GTP	PA-O3A-PB-O1B

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Mol	Chain	Res	Type	Atoms
47	IC	501	GTP	PB-O3A-PA-O1A
47	KM	501	GTP	PB-O3A-PA-O1A
47	LI	501	GTP	PA-O3A-PB-O1B
47	MA	501	GTP	PA-O3A-PB-O1B
47	MA	501	GTP	PB-O3A-PA-O1A
47	QA	501	GTP	PA-O3A-PB-O1B
47	RM	501	GTP	PA-O3A-PB-O1B
47	TE	501	GTP	PA-O3A-PB-O1B
47	UM	501	GTP	PB-O3A-PA-O1A
47	BM	501	GTP	C4'-C5'-O5'-PA
47	CC	501	GTP	C4'-C5'-O5'-PA
47	VM	501	GTP	C4'-C5'-O5'-PA
47	HE	501	GTP	O4'-C4'-C5'-O5'
47	MK	501	GTP	O4'-C4'-C5'-O5'
47	OK	501	GTP	O4'-C4'-C5'-O5'
47	PG	501	GTP	O4'-C4'-C5'-O5'
47	VI	501	GTP	O4'-C4'-C5'-O5'
47	VK	501	GTP	O4'-C4'-C5'-O5'
47	WA	501	GTP	O4'-C4'-C5'-O5'
47	DI	501	GTP	C4'-C5'-O5'-PA
47	DK	501	GTP	C4'-C5'-O5'-PA
47	FA	501	GTP	C4'-C5'-O5'-PA
47	FG	501	GTP	C4'-C5'-O5'-PA
47	GG	501	GTP	C4'-C5'-O5'-PA
47	HG	501	GTP	C4'-C5'-O5'-PA
47	IC	501	GTP	C4'-C5'-O5'-PA
47	JA	501	GTP	C4'-C5'-O5'-PA
47	KC	501	GTP	C4'-C5'-O5'-PA
47	KK	501	GTP	C4'-C5'-O5'-PA
47	KM	501	GTP	C4'-C5'-O5'-PA
47	TE	501	GTP	C4'-C5'-O5'-PA
47	TI	501	GTP	C4'-C5'-O5'-PA
47	EC	501	GTP	C3'-C4'-C5'-O5'
47	IK	502	GTP	O4'-C4'-C5'-O5'
47	QA	501	GTP	O4'-C4'-C5'-O5'
47	AA	501	GTP	PB-O3A-PA-O5'
47	AC	501	GTP	PB-O3A-PA-O5'
47	AE	501	GTP	PB-O3A-PA-O5'
47	AK	501	GTP	PB-O3A-PA-O5'
47	AM	501	GTP	PB-O3A-PA-O5'
47	BA	501	GTP	PB-O3A-PA-O5'
47	BC	501	GTP	PB-O3A-PA-O5'

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Mol	Chain	Res	Type	Atoms
47	CA	501	GTP	PB-O3A-PA-O5'
47	CE	501	GTP	PB-O3A-PA-O5'
47	CI	501	GTP	PB-O3A-PA-O5'
47	CK	501	GTP	PB-O3A-PA-O5'
47	CM	501	GTP	PB-O3A-PA-O5'
47	DA	501	GTP	PB-O3A-PA-O5'
47	EA	501	GTP	PB-O3A-PA-O5'
47	EC	501	GTP	PB-O3A-PA-O5'
47	EE	501	GTP	PB-O3A-PA-O5'
47	FC	501	GTP	PB-O3A-PA-O5'
47	FE	501	GTP	PB-O3A-PA-O5'
47	FI	501	GTP	PB-O3A-PA-O5'
47	FM	501	GTP	PB-O3A-PA-O5'
47	GA	501	GTP	PB-O3A-PA-O5'
47	HC	501	GTP	PB-O3A-PA-O5'
47	HE	501	GTP	PB-O3A-PA-O5'
47	HI	501	GTP	PB-O3A-PA-O5'
47	IG	501	GTP	PB-O3A-PA-O5'
47	JG	501	GTP	PB-O3A-PA-O5'
47	LA	501	GTP	PB-O3A-PA-O5'
47	LC	501	GTP	PB-O3A-PA-O5'
47	LK	501	GTP	PB-O3A-PA-O5'
47	MA	501	GTP	PB-O3A-PA-O5'
47	NG	501	GTP	PB-O3A-PA-O5'
47	NM	501	GTP	PB-O3A-PA-O5'
47	PG	501	GTP	PB-O3A-PA-O5'
47	PK	501	GTP	PB-O3A-PA-O5'
47	RG	501	GTP	PB-O3A-PA-O5'
47	SC	501	GTP	PB-O3A-PA-O5'
47	SE	501	GTP	PB-O3A-PA-O5'
47	SG	501	GTP	PB-O3A-PA-O5'
47	SI	501	GTP	PB-O3A-PA-O5'
47	SK	501	GTP	PB-O3A-PA-O5'
47	TG	501	GTP	PB-O3A-PA-O5'
47	TK	501	GTP	PB-O3A-PA-O5'
47	UA	501	GTP	PB-O3A-PA-O5'
47	UC	501	GTP	PB-O3A-PA-O5'
47	UE	501	GTP	PB-O3A-PA-O5'
47	UG	501	GTP	PB-O3A-PA-O5'
47	UI	501	GTP	PB-O3A-PA-O5'
47	UK	501	GTP	PB-O3A-PA-O5'
47	UM	501	GTP	PB-O3A-PA-O5'

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Mol	Chain	Res	Type	Atoms
47	VA	501	GTP	PB-O3A-PA-O5'
47	VC	501	GTP	PB-O3A-PA-O5'
47	VI	501	GTP	PB-O3A-PA-O5'
47	VK	501	GTP	PB-O3A-PA-O5'
47	WG	501	GTP	PB-O3A-PA-O5'
47	AC	501	GTP	C4'-C5'-O5'-PA
47	BG	501	GTP	C4'-C5'-O5'-PA
47	DC	501	GTP	C4'-C5'-O5'-PA
47	IE	501	GTP	C4'-C5'-O5'-PA
47	II	501	GTP	C4'-C5'-O5'-PA
47	ME	501	GTP	C4'-C5'-O5'-PA
47	MG	501	GTP	C4'-C5'-O5'-PA
47	PA	501	GTP	C4'-C5'-O5'-PA
47	PE	501	GTP	C4'-C5'-O5'-PA
47	TC	501	GTP	C4'-C5'-O5'-PA
47	TM	501	GTP	C4'-C5'-O5'-PA
47	CE	501	GTP	O4'-C4'-C5'-O5'
47	LI	501	GTP	C3'-C4'-C5'-O5'
47	LK	501	GTP	O4'-C4'-C5'-O5'
47	LM	501	GTP	C3'-C4'-C5'-O5'
47	NK	501	GTP	C3'-C4'-C5'-O5'
47	QG	501	GTP	O4'-C4'-C5'-O5'
49	SB	501	GDP	C3'-C4'-C5'-O5'
47	HK	501	GTP	PB-O3B-PG-O3G
47	JM	501	GTP	PB-O3B-PG-O3G
47	NA	501	GTP	PB-O3B-PG-O2G
47	NI	501	GTP	PB-O3B-PG-O2G
47	NM	501	GTP	PB-O3B-PG-O3G
47	BM	501	GTP	C3'-C4'-C5'-O5'
47	CA	501	GTP	C3'-C4'-C5'-O5'
47	DA	501	GTP	C3'-C4'-C5'-O5'
47	DG	501	GTP	C3'-C4'-C5'-O5'
47	DK	501	GTP	C3'-C4'-C5'-O5'
47	EK	501	GTP	C3'-C4'-C5'-O5'
47	FG	501	GTP	O4'-C4'-C5'-O5'
47	GK	501	GTP	C3'-C4'-C5'-O5'
47	GM	501	GTP	C3'-C4'-C5'-O5'
47	IE	501	GTP	C3'-C4'-C5'-O5'
47	MA	501	GTP	C3'-C4'-C5'-O5'
47	ME	501	GTP	C3'-C4'-C5'-O5'
47	NM	501	GTP	C3'-C4'-C5'-O5'
47	OI	501	GTP	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	QC	501	GTP	C3'-C4'-C5'-O5'
47	QI	501	GTP	C3'-C4'-C5'-O5'
47	RK	501	GTP	C3'-C4'-C5'-O5'
47	SA	501	GTP	C3'-C4'-C5'-O5'
47	SE	501	GTP	C3'-C4'-C5'-O5'
47	UA	501	GTP	C3'-C4'-C5'-O5'
47	WC	501	GTP	C3'-C4'-C5'-O5'
47	WI	501	GTP	C3'-C4'-C5'-O5'
49	MD	501	GDP	O4'-C4'-C5'-O5'
49	ML	501	GDP	C3'-C4'-C5'-O5'
49	SL	501	GDP	C3'-C4'-C5'-O5'
47	DM	501	GTP	C4'-C5'-O5'-PA
47	IA	501	GTP	C4'-C5'-O5'-PA
47	IM	501	GTP	C4'-C5'-O5'-PA
47	RK	501	GTP	C4'-C5'-O5'-PA
47	TG	501	GTP	C4'-C5'-O5'-PA
47	BC	501	GTP	PA-O3A-PB-O2B
47	BI	501	GTP	PA-O3A-PB-O2B
47	CC	501	GTP	PB-O3A-PA-O2A
47	CG	501	GTP	PA-O3A-PB-O2B
47	EE	501	GTP	PA-O3A-PB-O1B
47	EG	501	GTP	PA-O3A-PB-O2B
47	EK	501	GTP	PA-O3A-PB-O2B
47	EM	501	GTP	PA-O3A-PB-O2B
47	FG	501	GTP	PA-O3A-PB-O2B
47	FK	501	GTP	PA-O3A-PB-O2B
47	GA	501	GTP	PA-O3A-PB-O1B
47	GM	501	GTP	PA-O3A-PB-O2B
47	HE	501	GTP	PA-O3A-PB-O2B
47	IA	501	GTP	PA-O3A-PB-O2B
47	IG	501	GTP	PA-O3A-PB-O2B
47	IM	501	GTP	PA-O3A-PB-O2B
47	LM	501	GTP	PA-O3A-PB-O2B
47	MK	501	GTP	PA-O3A-PB-O2B
47	PI	501	GTP	PA-O3A-PB-O2B
47	PM	501	GTP	PA-O3A-PB-O2B
47	QC	501	GTP	PA-O3A-PB-O2B
47	QK	501	GTP	PA-O3A-PB-O2B
47	QM	501	GTP	PA-O3A-PB-O2B
47	RA	501	GTP	PA-O3A-PB-O2B
47	RI	501	GTP	PA-O3A-PB-O2B
47	SE	501	GTP	PB-O3A-PA-O1A

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Mol	Chain	Res	Type	Atoms
47	TC	501	GTP	PA-O3A-PB-O1B
47	VC	501	GTP	PA-O3A-PB-O2B
47	GG	501	GTP	C3'-C4'-C5'-O5'
47	QE	501	GTP	C3'-C4'-C5'-O5'
47	RC	501	GTP	C3'-C4'-C5'-O5'
47	AG	501	GTP	C4'-C5'-O5'-PA
47	AI	501	GTP	C4'-C5'-O5'-PA
47	AK	501	GTP	C4'-C5'-O5'-PA
47	BC	501	GTP	C4'-C5'-O5'-PA
47	BI	501	GTP	C4'-C5'-O5'-PA
47	CG	501	GTP	C4'-C5'-O5'-PA
47	CM	501	GTP	C4'-C5'-O5'-PA
47	EC	501	GTP	C4'-C5'-O5'-PA
47	FC	501	GTP	C4'-C5'-O5'-PA
47	FK	501	GTP	C4'-C5'-O5'-PA
47	IG	501	GTP	C4'-C5'-O5'-PA
47	JG	501	GTP	C4'-C5'-O5'-PA
47	JI	501	GTP	C4'-C5'-O5'-PA
47	LI	501	GTP	C4'-C5'-O5'-PA
47	MA	501	GTP	C4'-C5'-O5'-PA
47	MM	501	GTP	C4'-C5'-O5'-PA
47	PG	501	GTP	C4'-C5'-O5'-PA
47	PI	501	GTP	C4'-C5'-O5'-PA
47	PM	501	GTP	C4'-C5'-O5'-PA
47	QM	501	GTP	C4'-C5'-O5'-PA
47	RE	501	GTP	C4'-C5'-O5'-PA
47	UG	501	GTP	C4'-C5'-O5'-PA
47	WG	501	GTP	C4'-C5'-O5'-PA
47	WK	501	GTP	C4'-C5'-O5'-PA
47	EA	501	GTP	O4'-C4'-C5'-O5'
47	EM	501	GTP	O4'-C4'-C5'-O5'
47	FA	501	GTP	C3'-C4'-C5'-O5'
47	NC	501	GTP	O4'-C4'-C5'-O5'
47	NG	501	GTP	O4'-C4'-C5'-O5'
47	PK	501	GTP	O4'-C4'-C5'-O5'
47	RE	501	GTP	O4'-C4'-C5'-O5'
47	RG	501	GTP	O4'-C4'-C5'-O5'
47	RM	501	GTP	O4'-C4'-C5'-O5'
47	UI	501	GTP	C3'-C4'-C5'-O5'
47	UK	501	GTP	O4'-C4'-C5'-O5'
47	VA	501	GTP	O4'-C4'-C5'-O5'
47	AG	501	GTP	C5'-O5'-PA-O3A

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Mol	Chain	Res	Type	Atoms
47	BE	501	GTP	C5'-O5'-PA-O1A
47	EA	501	GTP	C5'-O5'-PA-O3A
47	LC	501	GTP	C5'-O5'-PA-O1A
47	LK	501	GTP	C5'-O5'-PA-O1A
47	NA	501	GTP	C5'-O5'-PA-O3A
47	NE	501	GTP	C5'-O5'-PA-O1A
47	OC	501	GTP	C5'-O5'-PA-O1A
47	OE	501	GTP	C5'-O5'-PA-O1A
47	OE	501	GTP	C5'-O5'-PA-O2A
47	OI	501	GTP	C5'-O5'-PA-O1A
47	QK	501	GTP	C5'-O5'-PA-O2A
47	UI	501	GTP	C5'-O5'-PA-O1A
47	UK	501	GTP	C5'-O5'-PA-O1A
47	VA	501	GTP	C5'-O5'-PA-O1A
47	VI	501	GTP	C5'-O5'-PA-O1A
49	AD	501	GDP	C5'-O5'-PA-O1A
49	AH	501	GDP	C5'-O5'-PA-O1A
49	AL	502	GDP	C5'-O5'-PA-O1A
49	AN	501	GDP	C5'-O5'-PA-O1A
49	BD	501	GDP	C5'-O5'-PA-O1A
49	BF	501	GDP	C5'-O5'-PA-O1A
49	BH	501	GDP	C5'-O5'-PA-O1A
49	BJ	501	GDP	C5'-O5'-PA-O1A
49	BL	501	GDP	C5'-O5'-PA-O1A
49	BN	501	GDP	C5'-O5'-PA-O1A
49	CB	501	GDP	C5'-O5'-PA-O1A
49	CD	501	GDP	C5'-O5'-PA-O1A
49	CH	501	GDP	C5'-O5'-PA-O1A
49	CJ	501	GDP	C5'-O5'-PA-O1A
49	CL	501	GDP	C5'-O5'-PA-O1A
49	DB	501	GDP	C5'-O5'-PA-O1A
49	DD	501	GDP	C5'-O5'-PA-O1A
49	DH	501	GDP	C5'-O5'-PA-O1A
49	EF	501	GDP	C5'-O5'-PA-O1A
49	EJ	501	GDP	C5'-O5'-PA-O1A
49	EL	501	GDP	C5'-O5'-PA-O1A
49	FF	501	GDP	C5'-O5'-PA-O1A
49	FH	501	GDP	C5'-O5'-PA-O1A
49	FJ	501	GDP	C5'-O5'-PA-O1A
49	FL	501	GDP	C5'-O5'-PA-O1A
49	FN	501	GDP	C5'-O5'-PA-O1A
49	GB	502	GDP	C5'-O5'-PA-O1A

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Mol	Chain	Res	Type	Atoms
49	GF	501	GDP	C5'-O5'-PA-O1A
49	GN	501	GDP	C5'-O5'-PA-O1A
49	HD	501	GDP	C5'-O5'-PA-O1A
49	HF	501	GDP	C5'-O5'-PA-O1A
49	IJ	501	GDP	C5'-O5'-PA-O1A
49	IL	501	GDP	C5'-O5'-PA-O1A
49	IN	501	GDP	C5'-O5'-PA-O1A
49	JF	501	GDP	C5'-O5'-PA-O3A
49	JH	501	GDP	C5'-O5'-PA-O1A
49	JJ	501	GDP	C5'-O5'-PA-O3A
49	JL	501	GDP	C5'-O5'-PA-O3A
49	KF	501	GDP	C5'-O5'-PA-O1A
49	KH	501	GDP	C5'-O5'-PA-O1A
49	KJ	501	GDP	C5'-O5'-PA-O1A
49	KL	501	GDP	C5'-O5'-PA-O1A
49	LD	501	GDP	C5'-O5'-PA-O1A
49	LH	501	GDP	C5'-O5'-PA-O1A
49	LJ	501	GDP	C5'-O5'-PA-O1A
49	LL	501	GDP	C5'-O5'-PA-O1A
49	MJ	501	GDP	C5'-O5'-PA-O1A
49	MN	501	GDP	C5'-O5'-PA-O1A
49	NF	501	GDP	C5'-O5'-PA-O1A
49	NH	501	GDP	C5'-O5'-PA-O1A
49	NJ	501	GDP	C5'-O5'-PA-O1A
49	NL	501	GDP	C5'-O5'-PA-O1A
49	NN	501	GDP	C5'-O5'-PA-O1A
49	OD	501	GDP	C5'-O5'-PA-O1A
49	OH	501	GDP	C5'-O5'-PA-O1A
49	PF	501	GDP	C5'-O5'-PA-O1A
49	PJ	501	GDP	C5'-O5'-PA-O1A
49	PL	501	GDP	C5'-O5'-PA-O1A
49	RD	501	GDP	C5'-O5'-PA-O1A
49	RF	501	GDP	C5'-O5'-PA-O1A
49	RL	501	GDP	C5'-O5'-PA-O1A
49	SB	501	GDP	C5'-O5'-PA-O1A
49	SD	501	GDP	C5'-O5'-PA-O1A
49	SF	501	GDP	C5'-O5'-PA-O1A
49	SJ	501	GDP	C5'-O5'-PA-O1A
49	SL	501	GDP	C5'-O5'-PA-O1A
49	SN	501	GDP	C5'-O5'-PA-O1A
49	TB	501	GDP	C5'-O5'-PA-O1A
49	TD	501	GDP	C5'-O5'-PA-O1A

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Mol	Chain	Res	Type	Atoms
49	TF	501	GDP	C5'-O5'-PA-O1A
49	TH	501	GDP	C5'-O5'-PA-O1A
49	TJ	501	GDP	C5'-O5'-PA-O1A
49	TL	501	GDP	C5'-O5'-PA-O1A
49	TN	501	GDP	C5'-O5'-PA-O1A
49	UD	501	GDP	C5'-O5'-PA-O1A
49	UF	501	GDP	C5'-O5'-PA-O1A
49	UH	501	GDP	C5'-O5'-PA-O1A
49	UJ	501	GDP	C5'-O5'-PA-O1A
49	UL	501	GDP	C5'-O5'-PA-O1A
49	UN	501	GDP	C5'-O5'-PA-O1A
49	VL	501	GDP	C5'-O5'-PA-O1A
49	WB	501	GDP	C5'-O5'-PA-O1A
49	WF	501	GDP	C5'-O5'-PA-O1A
49	WH	501	GDP	C5'-O5'-PA-O1A
49	WL	501	GDP	C5'-O5'-PA-O1A
47	AE	501	GTP	C4'-C5'-O5'-PA
47	BA	501	GTP	C4'-C5'-O5'-PA
47	CE	501	GTP	C4'-C5'-O5'-PA
47	CI	501	GTP	C4'-C5'-O5'-PA
47	DA	501	GTP	C4'-C5'-O5'-PA
47	DE	501	GTP	C4'-C5'-O5'-PA
47	DG	501	GTP	C4'-C5'-O5'-PA
47	EA	501	GTP	C4'-C5'-O5'-PA
47	EE	501	GTP	C4'-C5'-O5'-PA
47	EG	501	GTP	C4'-C5'-O5'-PA
47	EI	501	GTP	C4'-C5'-O5'-PA
47	EK	501	GTP	C4'-C5'-O5'-PA
47	EM	501	GTP	C4'-C5'-O5'-PA
47	FE	501	GTP	C4'-C5'-O5'-PA
47	FI	501	GTP	C4'-C5'-O5'-PA
47	FM	501	GTP	C4'-C5'-O5'-PA
47	GA	501	GTP	C4'-C5'-O5'-PA
47	GC	501	GTP	C4'-C5'-O5'-PA
47	GE	501	GTP	C4'-C5'-O5'-PA
47	GI	501	GTP	C4'-C5'-O5'-PA
47	GK	501	GTP	C4'-C5'-O5'-PA
47	GM	501	GTP	C4'-C5'-O5'-PA
47	HA	501	GTP	C4'-C5'-O5'-PA
47	HE	501	GTP	C4'-C5'-O5'-PA
47	HM	501	GTP	C4'-C5'-O5'-PA
47	IK	502	GTP	C4'-C5'-O5'-PA

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Mol	Chain	Res	Type	Atoms
47	JC	501	GTP	C4'-C5'-O5'-PA
47	JE	501	GTP	C4'-C5'-O5'-PA
47	KA	501	GTP	C4'-C5'-O5'-PA
47	KE	501	GTP	C4'-C5'-O5'-PA
47	KG	501	GTP	C4'-C5'-O5'-PA
47	KI	501	GTP	C4'-C5'-O5'-PA
47	LE	501	GTP	C4'-C5'-O5'-PA
47	LG	501	GTP	C4'-C5'-O5'-PA
47	LM	501	GTP	C4'-C5'-O5'-PA
47	MC	501	GTP	C4'-C5'-O5'-PA
47	MI	501	GTP	C4'-C5'-O5'-PA
47	MK	501	GTP	C4'-C5'-O5'-PA
47	PC	501	GTP	C4'-C5'-O5'-PA
47	QA	501	GTP	C4'-C5'-O5'-PA
47	QC	501	GTP	C4'-C5'-O5'-PA
47	QE	501	GTP	C4'-C5'-O5'-PA
47	QG	501	GTP	C4'-C5'-O5'-PA
47	QI	501	GTP	C4'-C5'-O5'-PA
47	QK	501	GTP	C4'-C5'-O5'-PA
47	RA	501	GTP	C4'-C5'-O5'-PA
47	RC	501	GTP	C4'-C5'-O5'-PA
47	RG	501	GTP	C4'-C5'-O5'-PA
47	RI	501	GTP	C4'-C5'-O5'-PA
47	RM	501	GTP	C4'-C5'-O5'-PA
47	SC	501	GTP	C4'-C5'-O5'-PA
47	SE	501	GTP	C4'-C5'-O5'-PA
47	SI	501	GTP	C4'-C5'-O5'-PA
47	SK	501	GTP	C4'-C5'-O5'-PA
47	SM	501	GTP	C4'-C5'-O5'-PA
47	TA	501	GTP	C4'-C5'-O5'-PA
47	TK	501	GTP	C4'-C5'-O5'-PA
47	UC	501	GTP	C4'-C5'-O5'-PA
47	UE	501	GTP	C4'-C5'-O5'-PA
47	UM	501	GTP	C4'-C5'-O5'-PA
47	VC	501	GTP	C4'-C5'-O5'-PA
47	VE	501	GTP	C4'-C5'-O5'-PA
47	VG	501	GTP	C4'-C5'-O5'-PA
47	WA	501	GTP	C4'-C5'-O5'-PA
47	WC	501	GTP	C4'-C5'-O5'-PA
47	WI	501	GTP	C4'-C5'-O5'-PA
49	DN	501	GDP	PA-O3A-PB-O1B
47	FK	501	GTP	C3'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	KE	501	GTP	C3'-C4'-C5'-O5'
47	TK	501	GTP	O4'-C4'-C5'-O5'
49	RF	501	GDP	C3'-C4'-C5'-O5'
47	CA	501	GTP	C4'-C5'-O5'-PA
47	AC	501	GTP	PA-O3A-PB-O2B
47	AI	501	GTP	PA-O3A-PB-O2B
47	BG	501	GTP	PA-O3A-PB-O2B
47	CI	501	GTP	PA-O3A-PB-O2B
47	CM	501	GTP	PA-O3A-PB-O2B
47	DE	501	GTP	PB-O3A-PA-O1A
47	DI	501	GTP	PA-O3A-PB-O2B
47	EC	501	GTP	PA-O3A-PB-O2B
47	EI	501	GTP	PA-O3A-PB-O2B
47	FA	501	GTP	PA-O3A-PB-O2B
47	FC	501	GTP	PB-O3A-PA-O1A
47	GG	501	GTP	PA-O3A-PB-O2B
47	GK	501	GTP	PA-O3A-PB-O2B
47	II	501	GTP	PA-O3A-PB-O2B
47	IK	502	GTP	PA-O3A-PB-O2B
47	JA	501	GTP	PA-O3A-PB-O2B
47	JE	501	GTP	PB-O3A-PA-O1A
47	JG	501	GTP	PA-O3A-PB-O2B
47	KA	501	GTP	PA-O3A-PB-O2B
47	KI	501	GTP	PA-O3A-PB-O2B
47	LE	501	GTP	PA-O3A-PB-O2B
47	LG	501	GTP	PA-O3A-PB-O2B
47	MC	501	GTP	PA-O3A-PB-O2B
47	ME	501	GTP	PA-O3A-PB-O2B
47	MG	501	GTP	PA-O3A-PB-O2B
47	MM	501	GTP	PA-O3A-PB-O2B
47	PA	501	GTP	PA-O3A-PB-O2B
47	PG	501	GTP	PA-O3A-PB-O2B
47	QE	501	GTP	PA-O3A-PB-O2B
47	RC	501	GTP	PA-O3A-PB-O2B
47	RE	501	GTP	PA-O3A-PB-O2B
47	RG	501	GTP	PA-O3A-PB-O2B
47	RK	501	GTP	PA-O3A-PB-O2B
47	SM	501	GTP	PA-O3A-PB-O2B
47	TA	501	GTP	PA-O3A-PB-O2B
47	TM	501	GTP	PA-O3A-PB-O2B
47	UE	501	GTP	PA-O3A-PB-O2B
47	VG	501	GTP	PA-O3A-PB-O2B

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Mol	Chain	Res	Type	Atoms
47	VM	501	GTP	PA-O3A-PB-O2B
47	WA	501	GTP	PA-O3A-PB-O2B
47	WG	501	GTP	PA-O3A-PB-O2B
47	WK	501	GTP	PA-O3A-PB-O2B
47	EC	501	GTP	O4'-C4'-C5'-O5'
47	JC	501	GTP	C3'-C4'-C5'-O5'
49	NL	501	GDP	C3'-C4'-C5'-O5'
47	WM	501	GTP	C4'-C5'-O5'-PA
47	AE	501	GTP	C3'-C4'-C5'-O5'
47	KG	501	GTP	C3'-C4'-C5'-O5'
47	BE	501	GTP	C4'-C5'-O5'-PA
47	NA	501	GTP	C4'-C5'-O5'-PA
47	PK	501	GTP	C4'-C5'-O5'-PA
47	KA	501	GTP	C3'-C4'-C5'-O5'
49	EJ	501	GDP	C3'-C4'-C5'-O5'
49	SB	501	GDP	O4'-C4'-C5'-O5'
47	AM	501	GTP	C4'-C5'-O5'-PA
47	JM	501	GTP	C4'-C5'-O5'-PA
47	LC	501	GTP	C4'-C5'-O5'-PA
47	NG	501	GTP	C4'-C5'-O5'-PA
47	NK	501	GTP	C4'-C5'-O5'-PA
47	OK	501	GTP	C4'-C5'-O5'-PA
47	SG	501	GTP	C4'-C5'-O5'-PA
47	UI	501	GTP	C4'-C5'-O5'-PA
47	UK	501	GTP	C4'-C5'-O5'-PA
47	VK	501	GTP	C4'-C5'-O5'-PA
47	EK	501	GTP	O4'-C4'-C5'-O5'
47	GK	501	GTP	O4'-C4'-C5'-O5'
47	LI	501	GTP	O4'-C4'-C5'-O5'
47	LM	501	GTP	O4'-C4'-C5'-O5'
47	NK	501	GTP	O4'-C4'-C5'-O5'
47	OI	501	GTP	O4'-C4'-C5'-O5'
47	QC	501	GTP	O4'-C4'-C5'-O5'
47	RK	501	GTP	O4'-C4'-C5'-O5'
47	SA	501	GTP	O4'-C4'-C5'-O5'
47	UA	501	GTP	O4'-C4'-C5'-O5'
49	AB	501	GDP	C3'-C4'-C5'-O5'
49	LH	501	GDP	C3'-C4'-C5'-O5'
49	SF	501	GDP	C3'-C4'-C5'-O5'
47	CE	501	GTP	PB-O3A-PA-O1A
47	CI	501	GTP	PB-O3A-PA-O1A
47	DA	501	GTP	PB-O3A-PA-O1A

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Mol	Chain	Res	Type	Atoms
47	DE	501	GTP	PB-O3A-PA-O2A
47	EC	501	GTP	PA-O3A-PB-O1B
47	FA	501	GTP	PA-O3A-PB-O1B
47	FE	501	GTP	PB-O3A-PA-O1A
47	IE	501	GTP	PA-O3A-PB-O2B
47	JI	501	GTP	PA-O3A-PB-O2B
47	KA	501	GTP	PA-O3A-PB-O1B
47	KI	501	GTP	PA-O3A-PB-O1B
47	LI	501	GTP	PB-O3A-PA-O1A
47	MG	501	GTP	PA-O3A-PB-O1B
47	MI	501	GTP	PA-O3A-PB-O2B
47	PC	501	GTP	PA-O3A-PB-O2B
47	PE	501	GTP	PA-O3A-PB-O2B
47	RG	501	GTP	PA-O3A-PB-O1B
47	SI	501	GTP	PA-O3A-PB-O1B
47	SK	501	GTP	PB-O3A-PA-O1A
47	TI	501	GTP	PA-O3A-PB-O1B
47	UE	501	GTP	PA-O3A-PB-O1B
47	VE	501	GTP	PB-O3A-PA-O1A
47	JM	501	GTP	PB-O3A-PA-O5'
47	LI	501	GTP	PB-O3A-PA-O5'
47	WM	501	GTP	PB-O3A-PA-O5'
47	AA	501	GTP	C4'-C5'-O5'-PA
47	BK	501	GTP	C4'-C5'-O5'-PA
47	HC	501	GTP	C4'-C5'-O5'-PA
47	HK	501	GTP	C4'-C5'-O5'-PA
47	LA	501	GTP	C4'-C5'-O5'-PA
47	NE	501	GTP	C4'-C5'-O5'-PA
47	SA	501	GTP	C4'-C5'-O5'-PA
47	UA	501	GTP	C4'-C5'-O5'-PA
47	VA	501	GTP	C4'-C5'-O5'-PA
47	VI	501	GTP	C4'-C5'-O5'-PA
47	BM	501	GTP	O4'-C4'-C5'-O5'
47	CA	501	GTP	O4'-C4'-C5'-O5'
47	DA	501	GTP	O4'-C4'-C5'-O5'
47	DC	501	GTP	C3'-C4'-C5'-O5'
47	DG	501	GTP	O4'-C4'-C5'-O5'
47	DK	501	GTP	O4'-C4'-C5'-O5'
47	GM	501	GTP	O4'-C4'-C5'-O5'
47	IE	501	GTP	O4'-C4'-C5'-O5'
47	MA	501	GTP	O4'-C4'-C5'-O5'
47	ME	501	GTP	O4'-C4'-C5'-O5'

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Mol	Chain	Res	Type	Atoms
47	MG	501	GTP	C3'-C4'-C5'-O5'
47	NM	501	GTP	O4'-C4'-C5'-O5'
47	QI	501	GTP	O4'-C4'-C5'-O5'
47	SE	501	GTP	O4'-C4'-C5'-O5'
47	WI	501	GTP	O4'-C4'-C5'-O5'
49	ML	501	GDP	O4'-C4'-C5'-O5'
49	SL	501	GDP	O4'-C4'-C5'-O5'
49	WH	501	GDP	C3'-C4'-C5'-O5'
47	HI	501	GTP	C4'-C5'-O5'-PA
47	NC	501	GTP	C4'-C5'-O5'-PA
47	NI	501	GTP	C4'-C5'-O5'-PA
47	GG	501	GTP	O4'-C4'-C5'-O5'
47	RC	501	GTP	O4'-C4'-C5'-O5'
47	WC	501	GTP	O4'-C4'-C5'-O5'
47	WM	501	GTP	C3'-C4'-C5'-O5'
49	MN	501	GDP	C3'-C4'-C5'-O5'
47	CK	501	GTP	PB-O3B-PG-O2G
47	HC	501	GTP	PB-O3B-PG-O3G
47	HK	501	GTP	PB-O3B-PG-O2G
47	JK	501	GTP	PB-O3B-PG-O2G
47	JK	501	GTP	PB-O3B-PG-O3G
47	JM	501	GTP	PB-O3B-PG-O2G
47	NM	501	GTP	PB-O3B-PG-O2G
47	PK	501	GTP	PB-O3B-PG-O2G
47	LK	501	GTP	C4'-C5'-O5'-PA
47	NM	501	GTP	C4'-C5'-O5'-PA
47	OG	501	GTP	C4'-C5'-O5'-PA
47	FA	501	GTP	O4'-C4'-C5'-O5'
47	QE	501	GTP	O4'-C4'-C5'-O5'
47	UI	501	GTP	O4'-C4'-C5'-O5'
49	RF	501	GDP	O4'-C4'-C5'-O5'
49	RJ	501	GDP	C3'-C4'-C5'-O5'
47	DE	501	GTP	C3'-C4'-C5'-O5'
47	FK	501	GTP	O4'-C4'-C5'-O5'
47	HC	501	GTP	C3'-C4'-C5'-O5'
47	MC	501	GTP	C3'-C4'-C5'-O5'
49	CH	501	GDP	C3'-C4'-C5'-O5'
49	EH	501	GDP	C3'-C4'-C5'-O5'
49	LJ	501	GDP	C3'-C4'-C5'-O5'
47	AE	501	GTP	PB-O3A-PA-O1A
47	AG	501	GTP	PB-O3A-PA-O1A
47	AI	501	GTP	PA-O3A-PB-O1B

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Mol	Chain	Res	Type	Atoms
47	AK	501	GTP	PA-O3A-PB-O2B
47	BG	501	GTP	PA-O3A-PB-O1B
47	BM	501	GTP	PA-O3A-PB-O1B
47	BM	501	GTP	PA-O3A-PB-O2B
47	CC	501	GTP	PB-O3A-PA-O1A
47	CI	501	GTP	PA-O3A-PB-O1B
47	CM	501	GTP	PA-O3A-PB-O1B
47	DI	501	GTP	PA-O3A-PB-O1B
47	DM	501	GTP	PB-O3A-PA-O2A
47	EA	501	GTP	PB-O3A-PA-O1A
47	EE	501	GTP	PA-O3A-PB-O2B
47	EM	501	GTP	PA-O3A-PB-O1B
47	FE	501	GTP	PA-O3A-PB-O2B
47	FG	501	GTP	PA-O3A-PB-O1B
47	FI	501	GTP	PB-O3A-PA-O1A
47	FK	501	GTP	PA-O3A-PB-O1B
47	GC	501	GTP	PB-O3A-PA-O1A
47	GI	501	GTP	PA-O3A-PB-O2B
47	HE	501	GTP	PA-O3A-PB-O1B
47	HM	501	GTP	PA-O3A-PB-O2B
47	IC	501	GTP	PA-O3A-PB-O1B
47	IC	501	GTP	PA-O3A-PB-O2B
47	IC	501	GTP	PB-O3A-PA-O2A
47	IE	501	GTP	PA-O3A-PB-O1B
47	IM	501	GTP	PA-O3A-PB-O1B
47	JA	501	GTP	PA-O3A-PB-O1B
47	JC	501	GTP	PA-O3A-PB-O2B
47	JE	501	GTP	PB-O3A-PA-O2A
47	JG	501	GTP	PA-O3A-PB-O1B
47	KC	501	GTP	PA-O3A-PB-O1B
47	KC	501	GTP	PA-O3A-PB-O2B
47	KG	501	GTP	PA-O3A-PB-O1B
47	KG	501	GTP	PA-O3A-PB-O2B
47	KK	501	GTP	PA-O3A-PB-O2B
47	KM	501	GTP	PB-O3A-PA-O2A
47	LE	501	GTP	PA-O3A-PB-O1B
47	MA	501	GTP	PA-O3A-PB-O2B
47	MC	501	GTP	PA-O3A-PB-O1B
47	MI	501	GTP	PA-O3A-PB-O1B
47	MK	501	GTP	PA-O3A-PB-O1B
47	PA	501	GTP	PA-O3A-PB-O1B
47	PC	501	GTP	PA-O3A-PB-O1B

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Mol	Chain	Res	Type	Atoms
47	PE	501	GTP	PA-O3A-PB-O1B
47	PG	501	GTP	PA-O3A-PB-O1B
47	PM	501	GTP	PA-O3A-PB-O1B
47	QG	501	GTP	PA-O3A-PB-O1B
47	QG	501	GTP	PA-O3A-PB-O2B
47	QM	501	GTP	PA-O3A-PB-O1B
47	RC	501	GTP	PA-O3A-PB-O1B
47	RE	501	GTP	PA-O3A-PB-O1B
47	RI	501	GTP	PA-O3A-PB-O1B
47	RM	501	GTP	PA-O3A-PB-O2B
47	SA	501	GTP	PB-O3A-PA-O1A
47	SG	501	GTP	PB-O3A-PA-O1A
47	SM	501	GTP	PA-O3A-PB-O1B
47	TA	501	GTP	PA-O3A-PB-O1B
47	TC	501	GTP	PA-O3A-PB-O2B
47	TE	501	GTP	PA-O3A-PB-O2B
47	TG	501	GTP	PB-O3A-PA-O2A
47	TI	501	GTP	PA-O3A-PB-O2B
47	TK	501	GTP	PB-O3A-PA-O2A
47	TM	501	GTP	PA-O3A-PB-O1B
47	UG	501	GTP	PB-O3A-PA-O1A
47	VE	501	GTP	PB-O3A-PA-O2A
47	VM	501	GTP	PA-O3A-PB-O1B
47	WA	501	GTP	PA-O3A-PB-O1B
47	WG	501	GTP	PA-O3A-PB-O1B
47	VI	501	GTP	PB-O3B-PG-O1G
47	KE	501	GTP	O4'-C4'-C5'-O5'
49	NL	501	GDP	O4'-C4'-C5'-O5'
47	AC	501	GTP	PA-O3A-PB-O1B
47	CE	501	GTP	PA-O3A-PB-O2B
47	DC	501	GTP	PA-O3A-PB-O2B
47	EI	501	GTP	PA-O3A-PB-O1B
47	GE	501	GTP	PB-O3A-PA-O2A
47	GG	501	GTP	PA-O3A-PB-O1B
47	II	501	GTP	PA-O3A-PB-O1B
47	IK	502	GTP	PA-O3A-PB-O1B
47	KE	501	GTP	PA-O3A-PB-O2B
47	LA	501	GTP	PB-O3A-PA-O2A
47	LG	501	GTP	PA-O3A-PB-O1B
47	LI	501	GTP	PA-O3A-PB-O2B
47	ME	501	GTP	PA-O3A-PB-O1B
47	MM	501	GTP	PA-O3A-PB-O1B

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Mol	Chain	Res	Type	Atoms
47	QA	501	GTP	PA-O3A-PB-O2B
47	QE	501	GTP	PA-O3A-PB-O1B
47	RK	501	GTP	PA-O3A-PB-O1B
47	SA	501	GTP	PB-O3A-PA-O2A
47	SG	501	GTP	PB-O3A-PA-O2A
47	UA	501	GTP	PB-O3A-PA-O2A
47	VG	501	GTP	PA-O3A-PB-O1B
47	WK	501	GTP	PA-O3A-PB-O1B
47	AE	501	GTP	O4'-C4'-C5'-O5'
47	JC	501	GTP	O4'-C4'-C5'-O5'
47	KG	501	GTP	O4'-C4'-C5'-O5'
49	ND	501	GDP	C3'-C4'-C5'-O5'

There are no ring outliers.

196 monomers are involved in 350 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
47	WK	501	GTP	2	0
49	QH	501	GDP	1	0
47	TA	501	GTP	1	0
47	OK	501	GTP	1	0
47	EE	501	GTP	1	0
47	UM	501	GTP	3	0
49	CH	501	GDP	1	0
49	OJ	501	GDP	1	0
49	TH	501	GDP	1	0
47	CK	501	GTP	2	0
49	CN	501	GDP	1	0
47	RI	501	GTP	3	0
47	GA	501	GTP	3	0
47	WA	501	GTP	3	0
49	WH	501	GDP	1	0
47	FM	501	GTP	5	0
47	PA	501	GTP	3	0
47	QI	501	GTP	3	0
49	CL	501	GDP	1	0
49	GL	501	GDP	1	0
47	PE	501	GTP	3	0
47	UA	501	GTP	2	0
49	AD	501	GDP	1	0
47	DG	501	GTP	1	0
49	VD	501	GDP	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
49	FH	501	GDP	2	0
49	BJ	501	GDP	1	0
47	SK	501	GTP	1	0
47	TI	501	GTP	1	0
47	OE	501	GTP	2	0
47	VM	501	GTP	3	0
49	OF	501	GDP	1	0
47	KA	501	GTP	1	0
49	JF	501	GDP	2	0
49	CJ	501	GDP	1	0
47	RA	501	GTP	1	0
47	PG	501	GTP	3	0
49	VB	501	GDP	1	0
47	AA	501	GTP	2	0
47	OA	501	GTP	4	0
47	WE	501	GTP	1	0
47	LM	501	GTP	2	0
47	FE	501	GTP	1	0
47	NA	501	GTP	2	0
49	WF	501	GDP	1	0
47	NE	501	GTP	2	0
49	IF	501	GDP	1	0
47	UG	501	GTP	2	0
47	BM	501	GTP	1	0
47	FK	501	GTP	1	0
47	CA	501	GTP	4	0
47	HM	501	GTP	1	0
49	RD	501	GDP	1	0
47	CC	501	GTP	1	0
47	WI	501	GTP	1	0
47	TK	501	GTP	1	0
47	BA	501	GTP	2	0
47	UK	501	GTP	4	0
49	FD	501	GDP	2	0
47	DC	501	GTP	1	0
47	QG	501	GTP	2	0
47	UE	501	GTP	2	0
49	QB	501	GDP	2	0
47	QE	501	GTP	2	0
47	RG	501	GTP	3	0
49	HH	501	GDP	1	0
49	JH	501	GDP	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
47	EA	501	GTP	3	0
49	ED	501	GDP	1	0
47	GM	501	GTP	3	0
49	PN	501	GDP	2	0
49	NJ	501	GDP	1	0
47	RC	501	GTP	2	0
47	SA	501	GTP	5	0
49	MF	501	GDP	1	0
47	SC	501	GTP	1	0
47	HC	501	GTP	2	0
49	UF	501	GDP	3	0
49	AJ	501	GDP	1	0
49	PL	501	GDP	1	0
47	DM	501	GTP	1	0
49	GF	501	GDP	2	0
49	SN	501	GDP	2	0
49	PB	501	GDP	1	0
47	PK	501	GTP	3	0
47	HI	501	GTP	1	0
49	ON	501	GDP	1	0
47	VK	501	GTP	2	0
47	HK	501	GTP	1	0
47	AK	501	GTP	1	0
47	SI	501	GTP	2	0
47	EM	501	GTP	2	0
49	LF	501	GDP	1	0
47	AM	501	GTP	2	0
49	QJ	501	GDP	1	0
47	PI	501	GTP	4	0
49	GH	501	GDP	2	0
47	NI	501	GTP	3	0
49	OB	501	GDP	2	0
47	LK	501	GTP	1	0
49	WJ	501	GDP	2	0
47	EK	501	GTP	2	0
49	JN	501	GDP	2	0
47	EC	501	GTP	2	0
47	II	501	GTP	1	0
47	WM	501	GTP	3	0
47	TG	501	GTP	1	0
47	EI	501	GTP	2	0
47	SE	501	GTP	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
47	WG	501	GTP	1	0
47	VI	501	GTP	1	0
47	GG	501	GTP	1	0
49	PJ	501	GDP	4	0
49	NL	501	GDP	2	0
47	QK	501	GTP	2	0
47	OG	501	GTP	1	0
49	OL	501	GDP	1	0
49	VH	501	GDP	2	0
47	CI	501	GTP	3	0
49	TN	501	GDP	1	0
47	LC	501	GTP	2	0
49	CD	501	GDP	1	0
49	TL	501	GDP	1	0
49	FN	501	GDP	1	0
49	VL	501	GDP	3	0
47	RE	501	GTP	2	0
49	GD	501	GDP	2	0
47	JI	501	GTP	2	0
49	VJ	501	GDP	1	0
47	DE	501	GTP	2	0
47	QC	501	GTP	3	0
47	RK	501	GTP	2	0
49	WD	501	GDP	1	0
47	QA	501	GTP	2	0
47	SG	501	GTP	1	0
47	UI	501	GTP	3	0
47	IG	501	GTP	1	0
47	DI	501	GTP	2	0
47	BE	501	GTP	2	0
47	KG	501	GTP	1	0
49	VF	501	GDP	4	0
47	CE	501	GTP	2	0
47	UC	501	GTP	2	0
47	AC	501	GTP	1	0
47	EG	501	GTP	2	0
49	EB	501	GDP	2	0
49	ID	501	GDP	1	0
47	MA	501	GTP	1	0
49	GJ	501	GDP	1	0
49	LN	501	GDP	2	0
47	PM	501	GTP	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
47	KE	501	GTP	1	0
49	CF	501	GDP	5	0
49	UH	501	GDP	2	0
47	PC	501	GTP	1	0
49	BF	501	GDP	2	0
47	LA	501	GTP	3	0
47	JC	501	GTP	2	0
49	PF	501	GDP	1	0
49	BH	501	GDP	1	0
47	QM	501	GTP	2	0
47	CG	501	GTP	2	0
47	JA	501	GTP	2	0
49	TD	501	GDP	1	0
49	NB	502	GDP	1	0
47	DA	501	GTP	2	0
49	EH	501	GDP	2	0
49	HN	501	GDP	2	0
49	HF	501	GDP	1	0
47	OI	501	GTP	1	0
49	AF	501	GDP	1	0
49	WL	501	GDP	2	0
49	BD	501	GDP	1	0
47	JG	501	GTP	1	0
49	DN	501	GDP	1	0
49	DB	501	GDP	1	0
49	TF	501	GDP	1	0
49	DJ	501	GDP	1	0
47	CM	501	GTP	1	0
49	HD	501	GDP	2	0
47	NM	501	GTP	1	0
49	BN	501	GDP	1	0
49	WN	501	GDP	1	0
49	UJ	501	GDP	1	0
49	HL	501	GDP	3	0
47	OM	501	GTP	3	0
49	QF	501	GDP	3	0
47	BK	501	GTP	2	0
47	FC	501	GTP	1	0
47	VC	501	GTP	1	0
47	LI	501	GTP	2	0
47	SM	501	GTP	1	0
49	CB	501	GDP	3	0

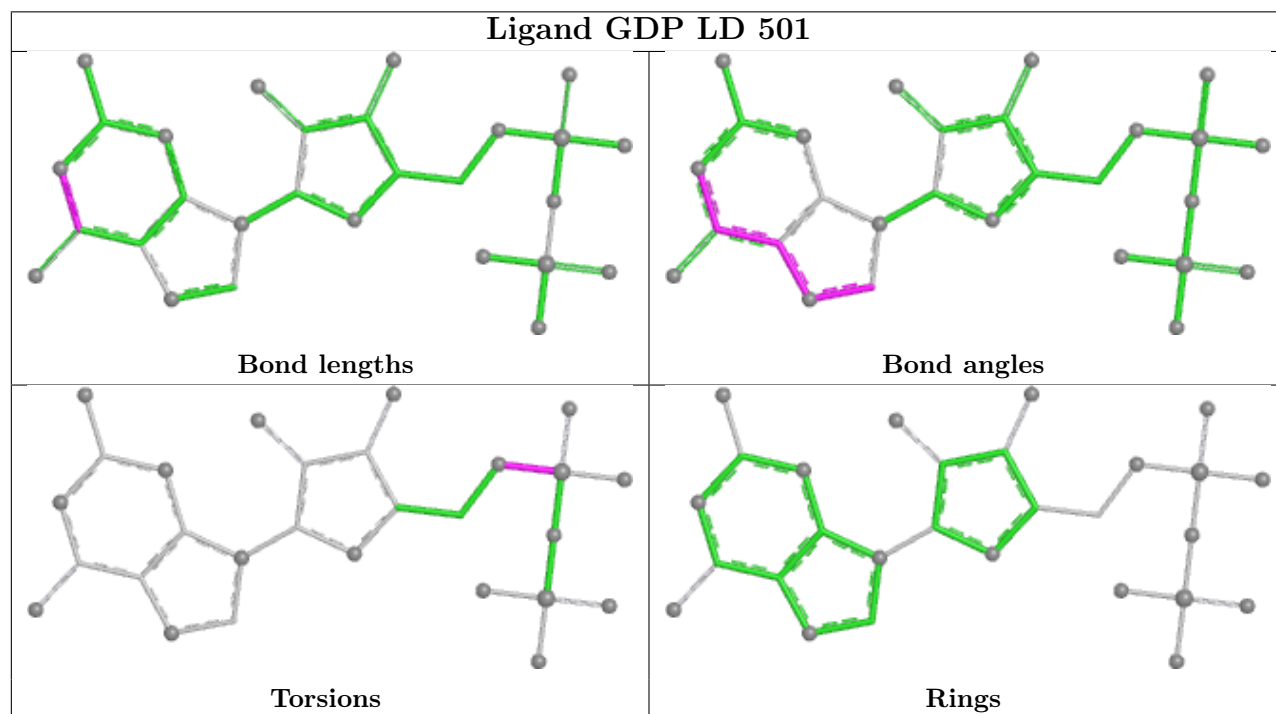
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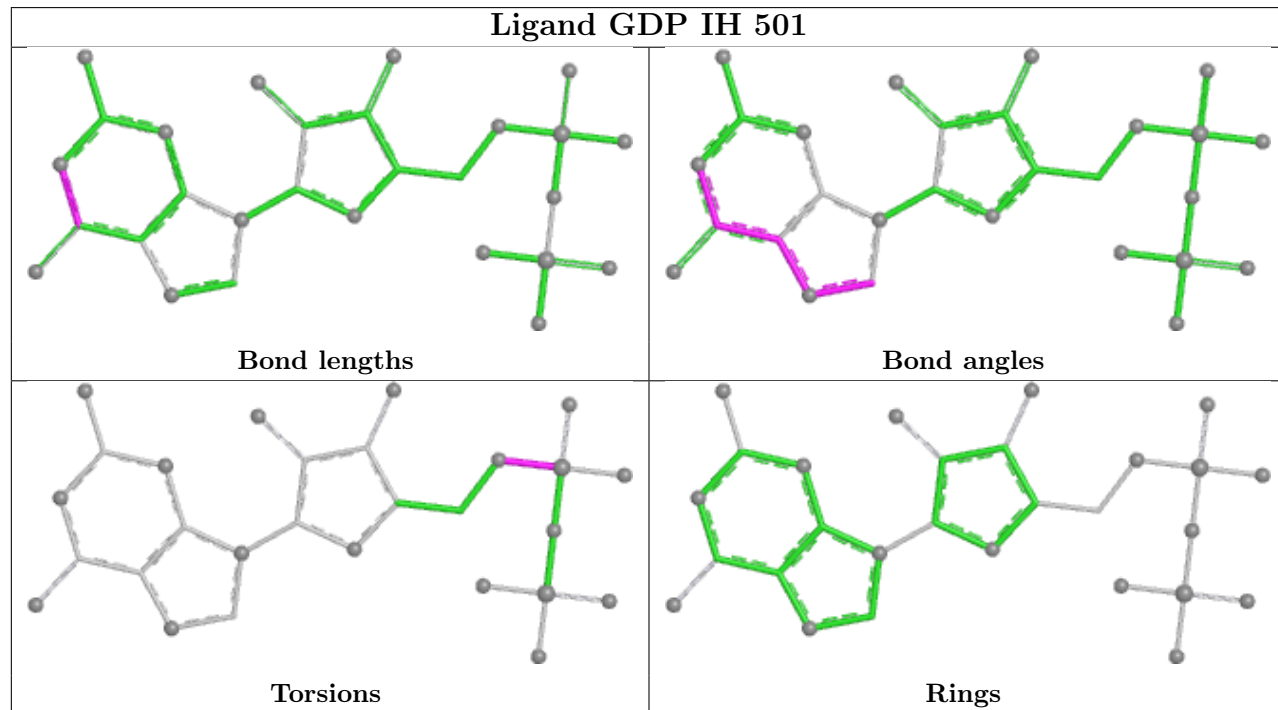
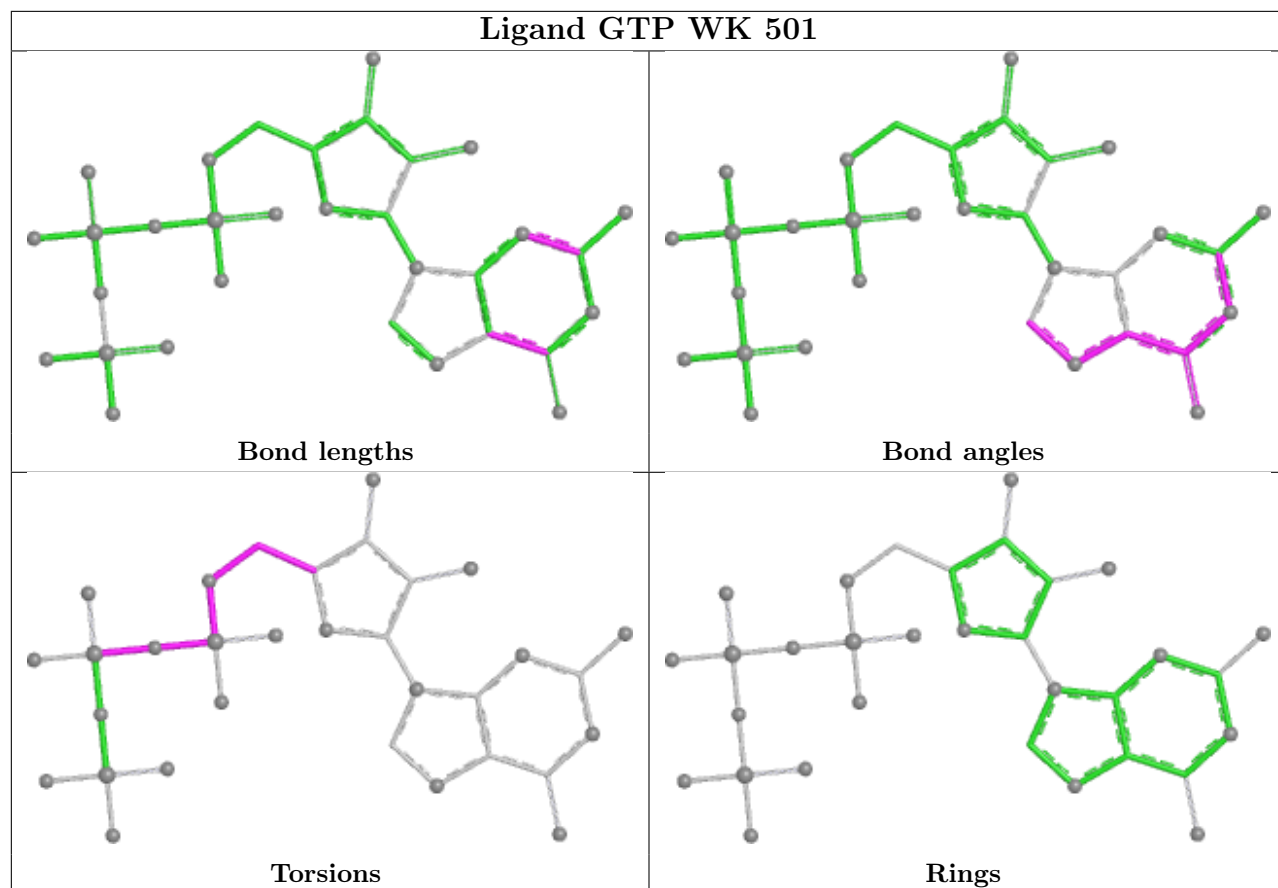
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
47	VA	501	GTP	2	0
47	DK	501	GTP	2	0
47	JM	501	GTP	5	0

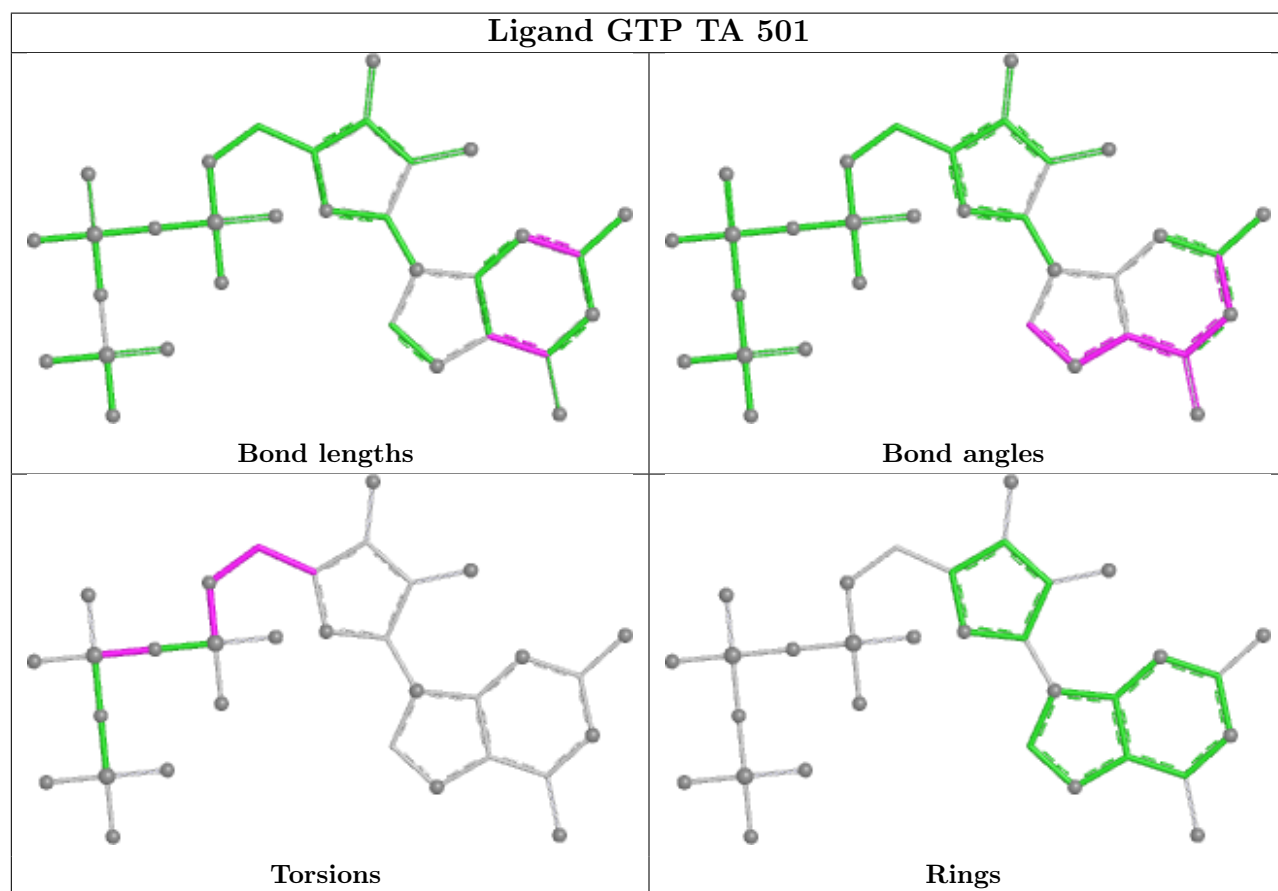
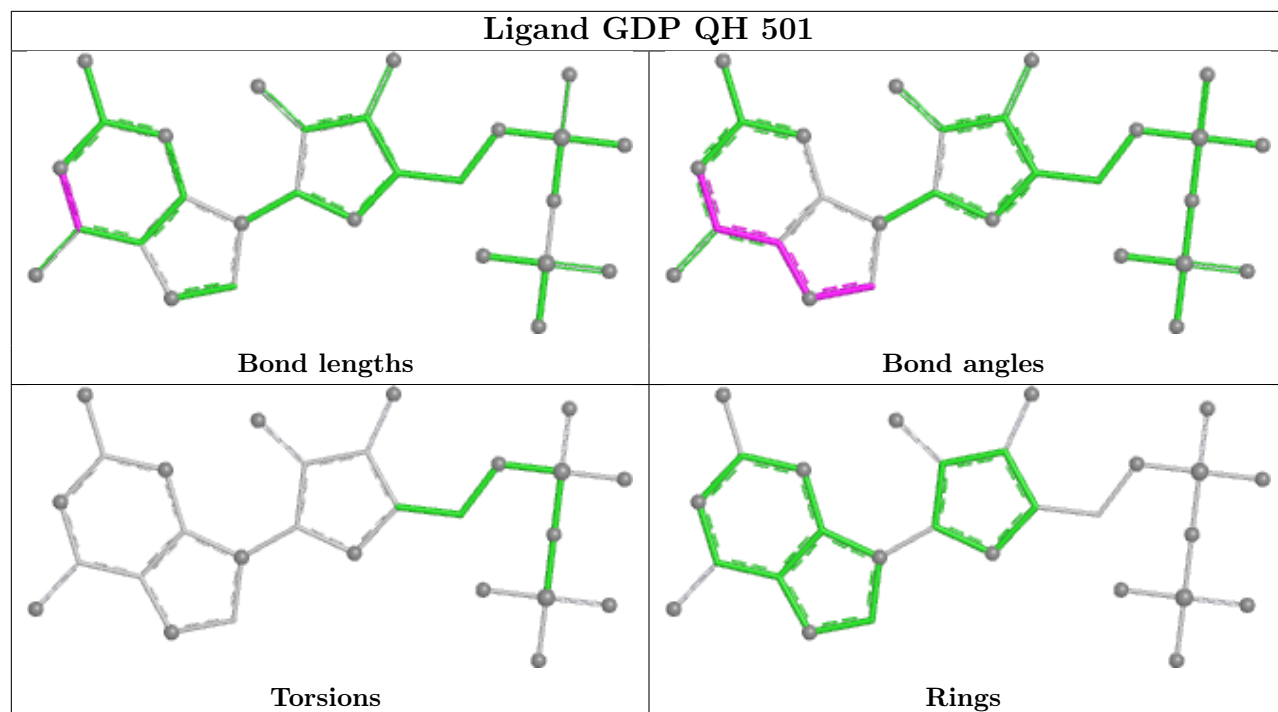
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



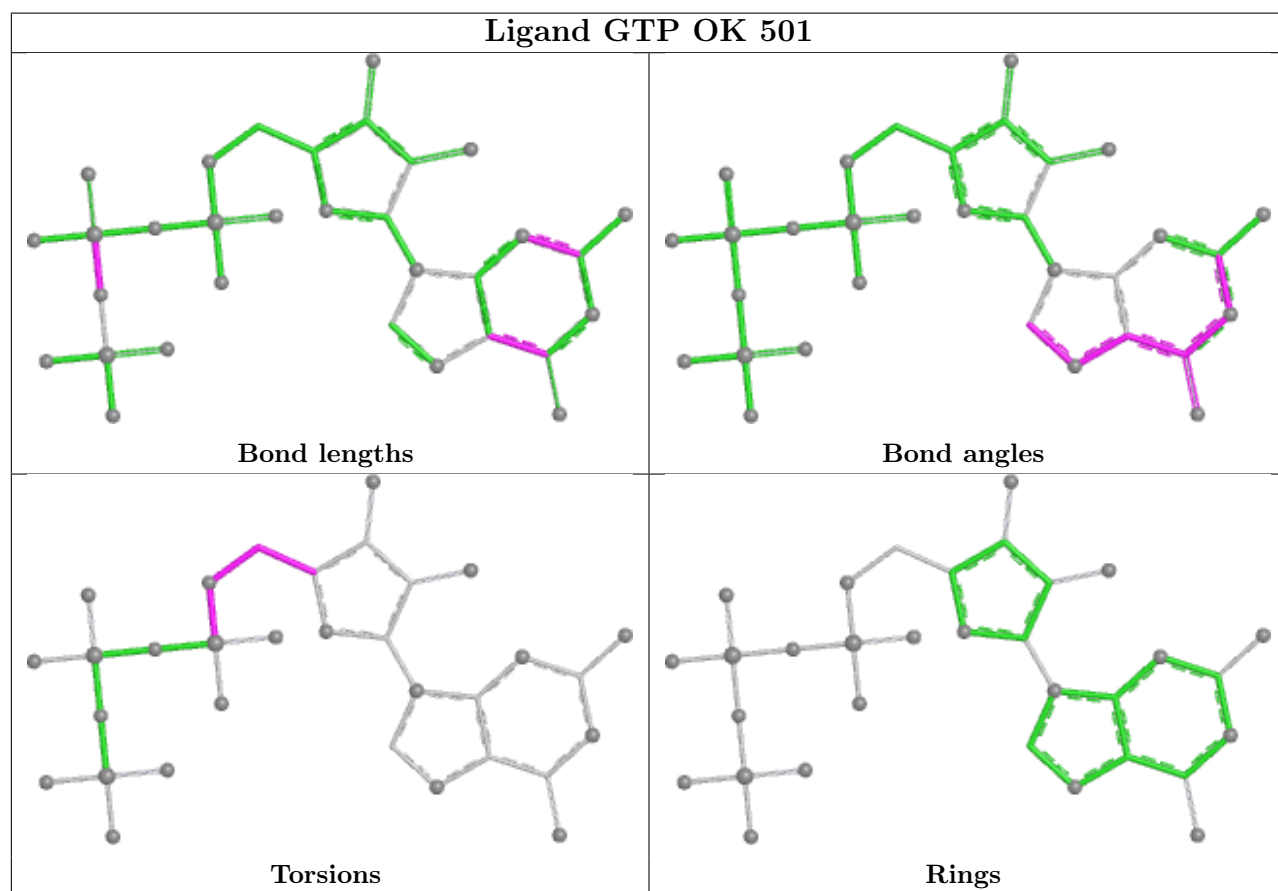
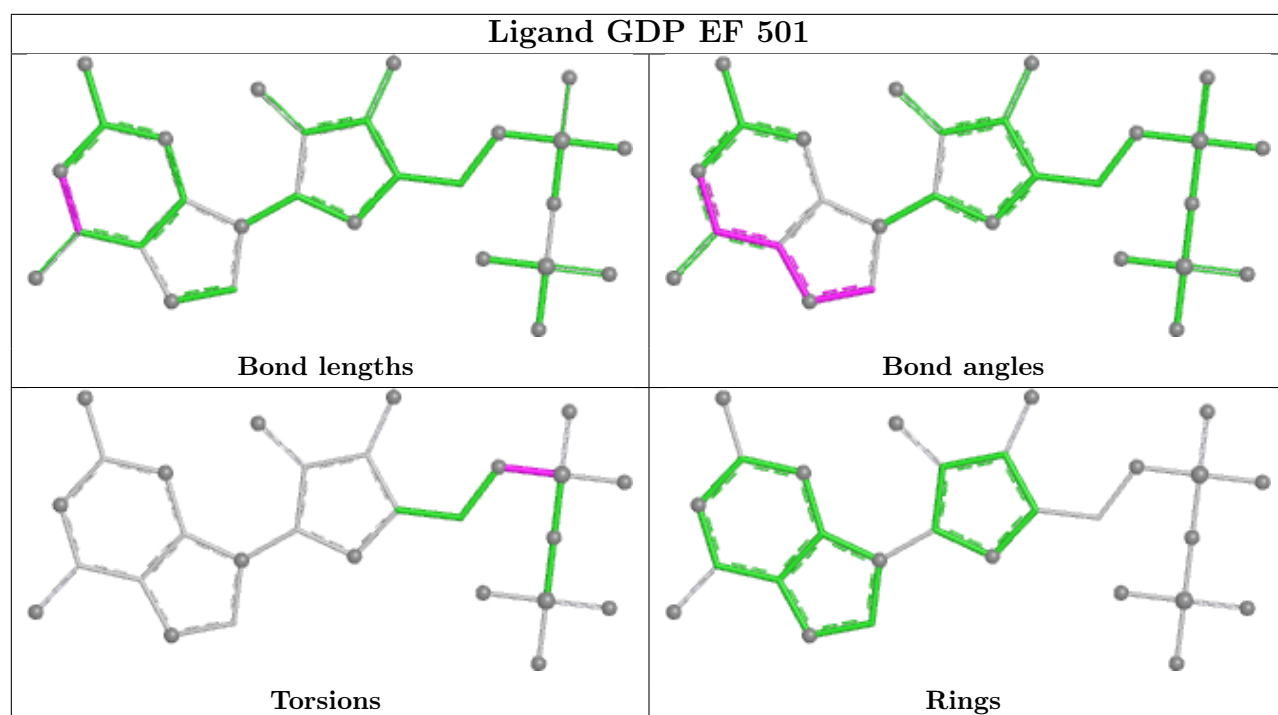




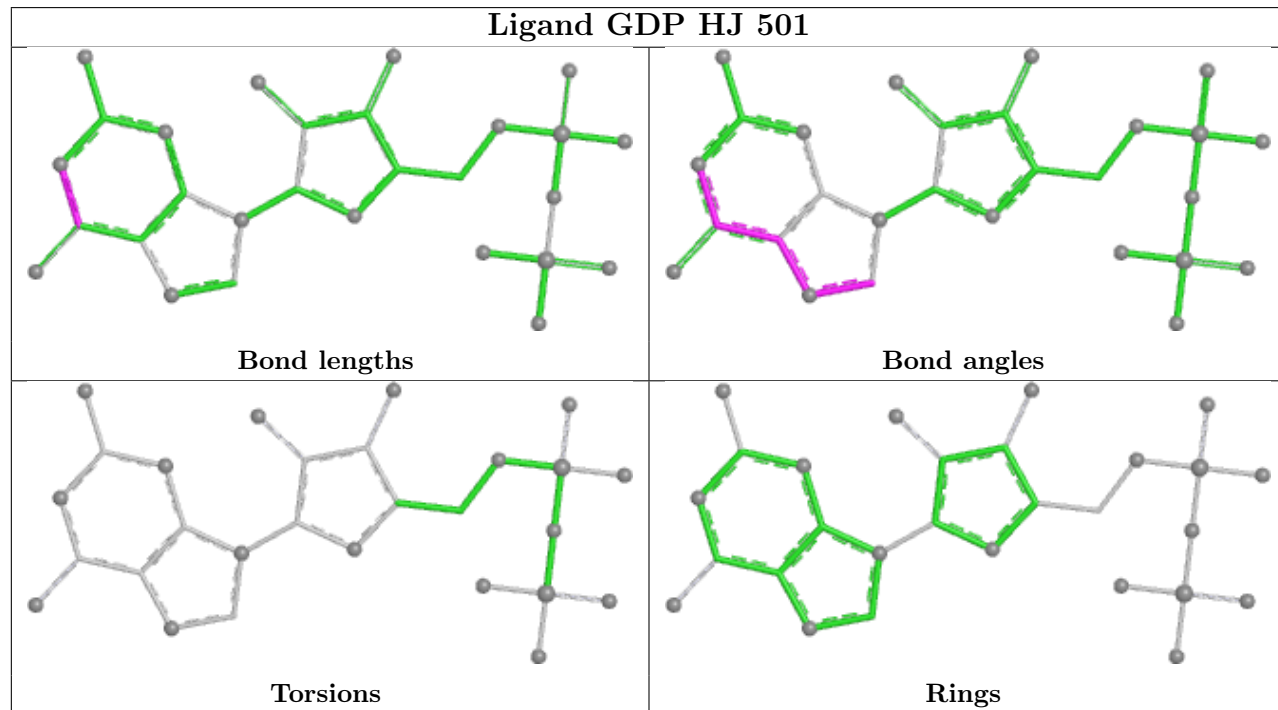
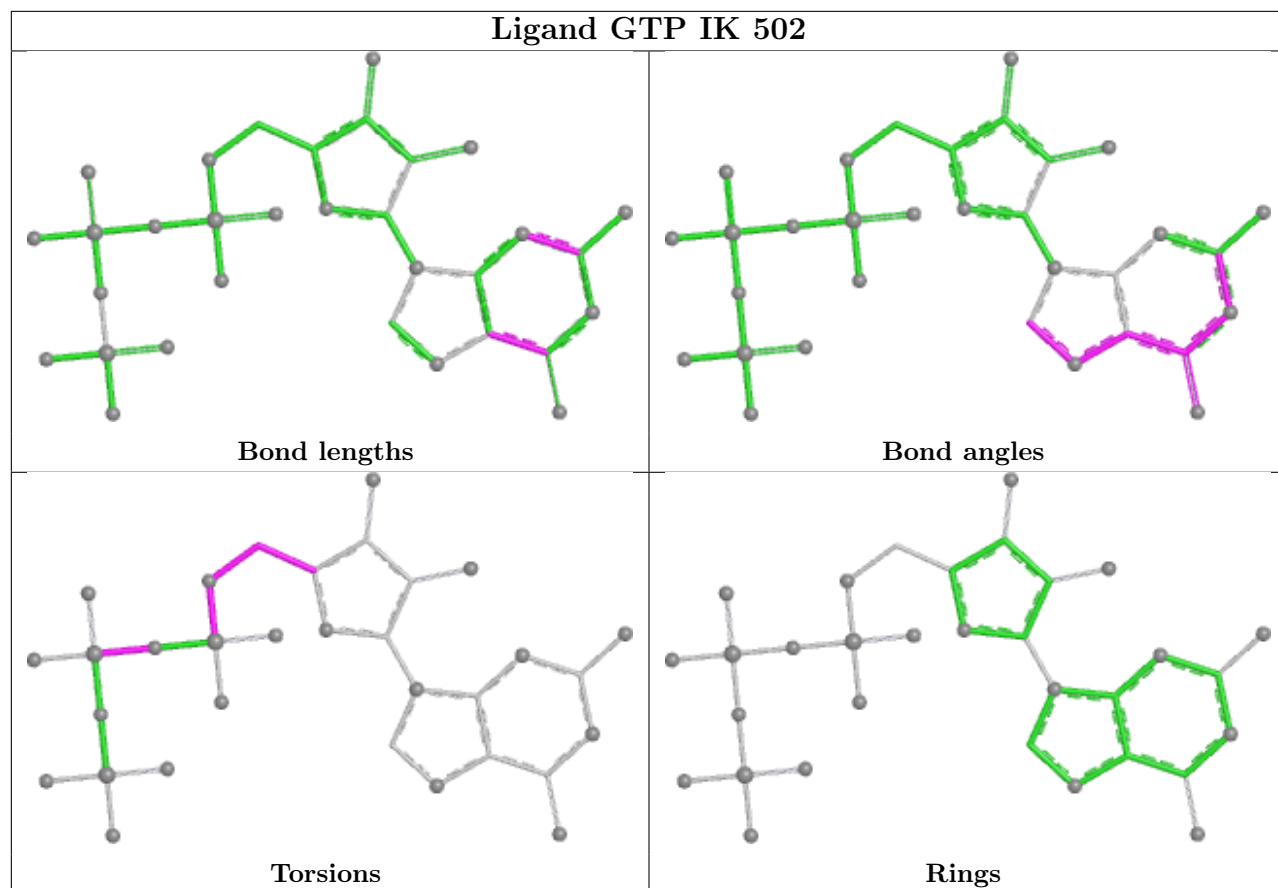






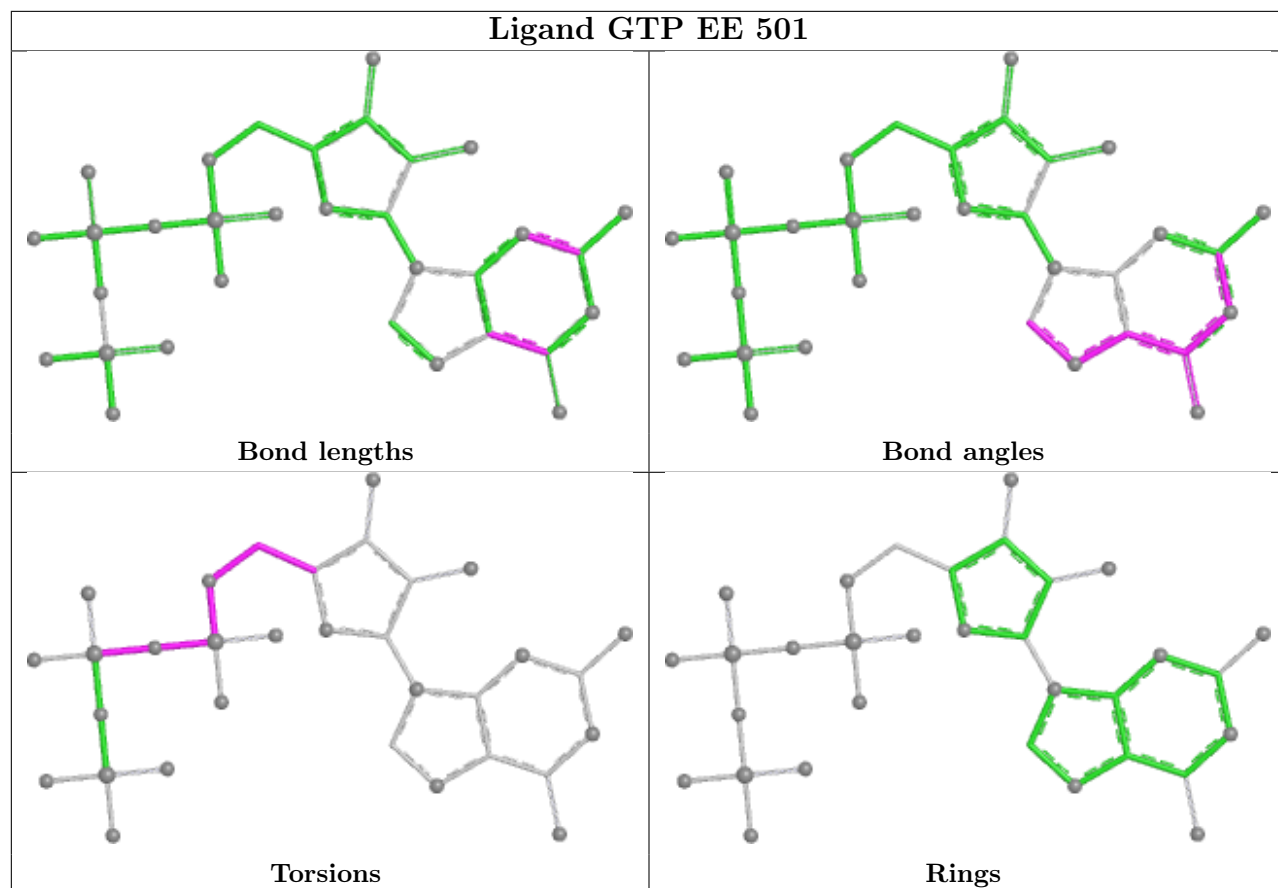




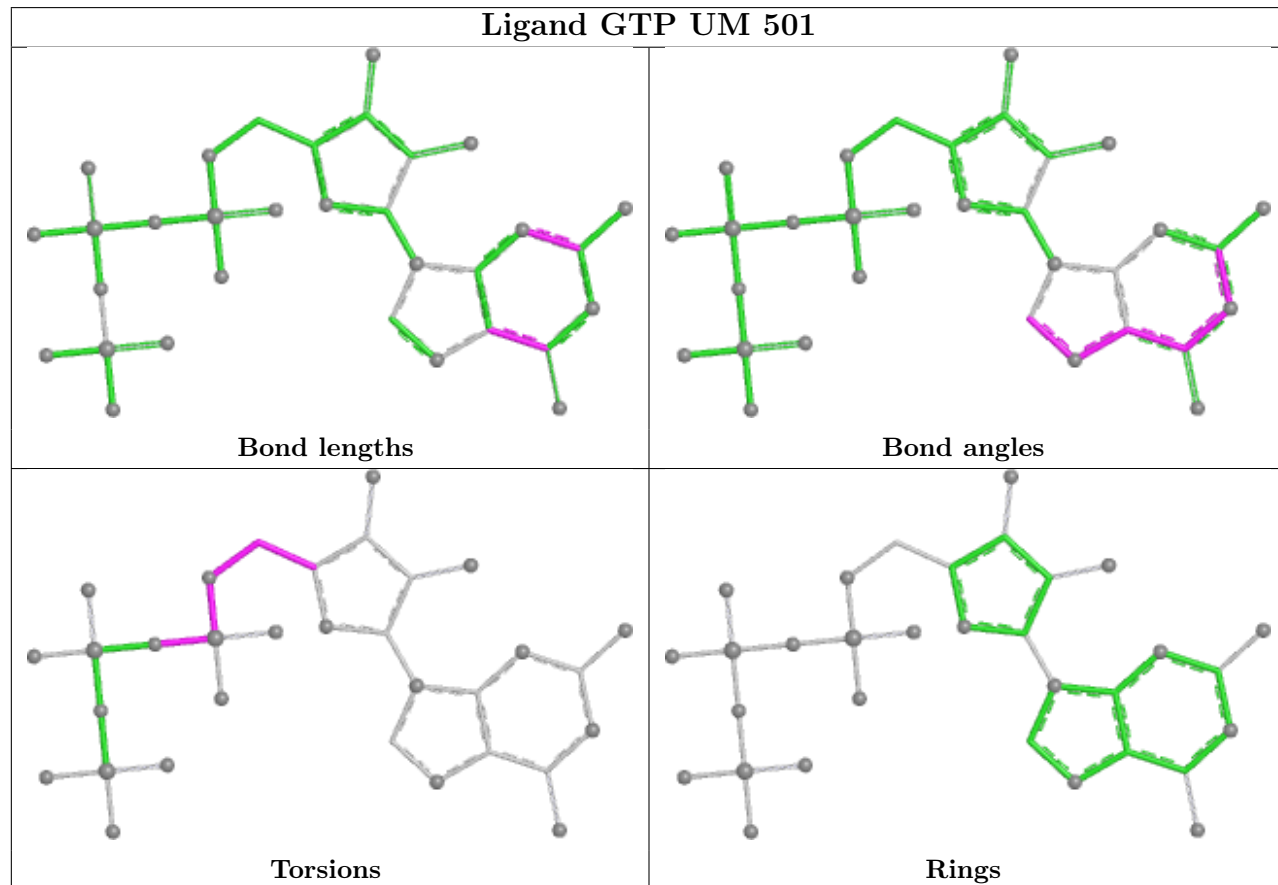




## Ligand GTP EE 501

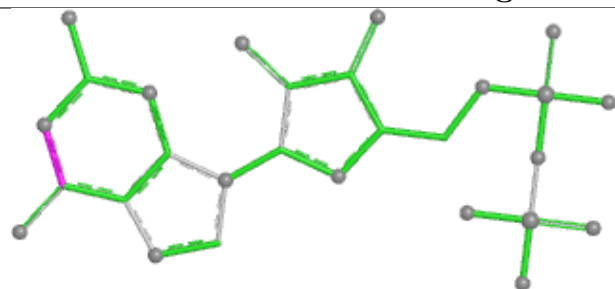


## Ligand GTP UM 501

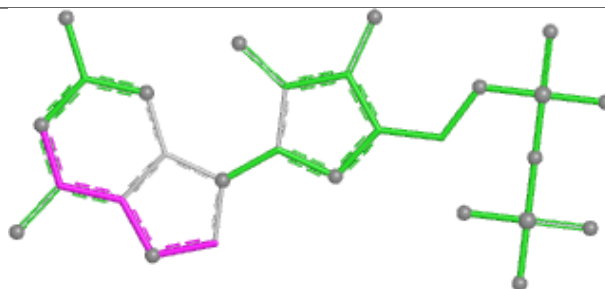




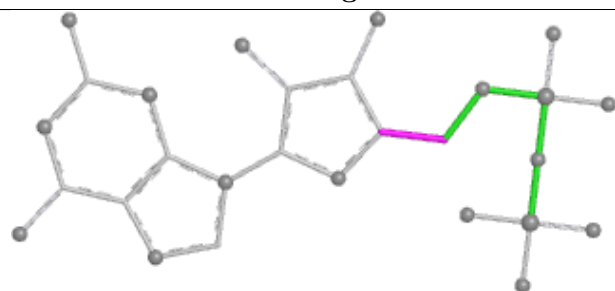
## Ligand GDP MD 501



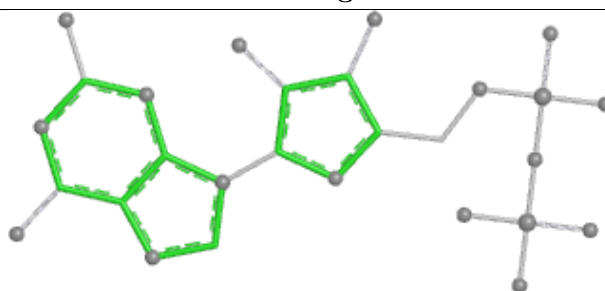
Bond lengths



Bond angles

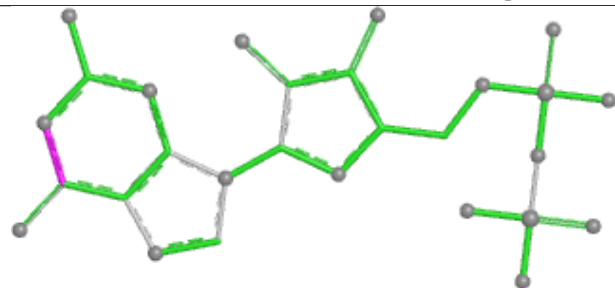


Torsions

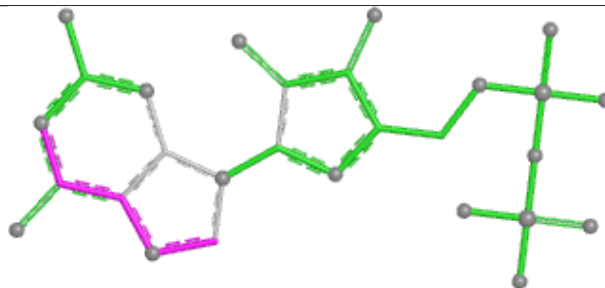


Rings

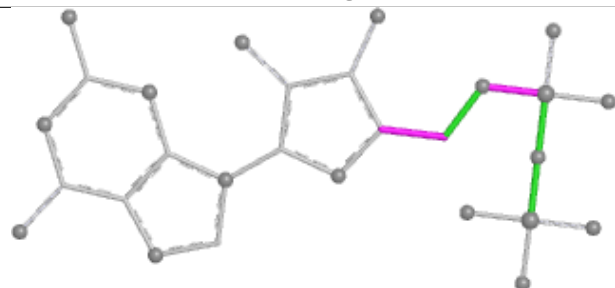
## Ligand GDP CH 501



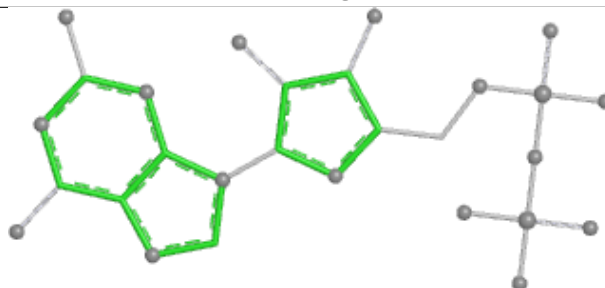
Bond lengths



Bond angles

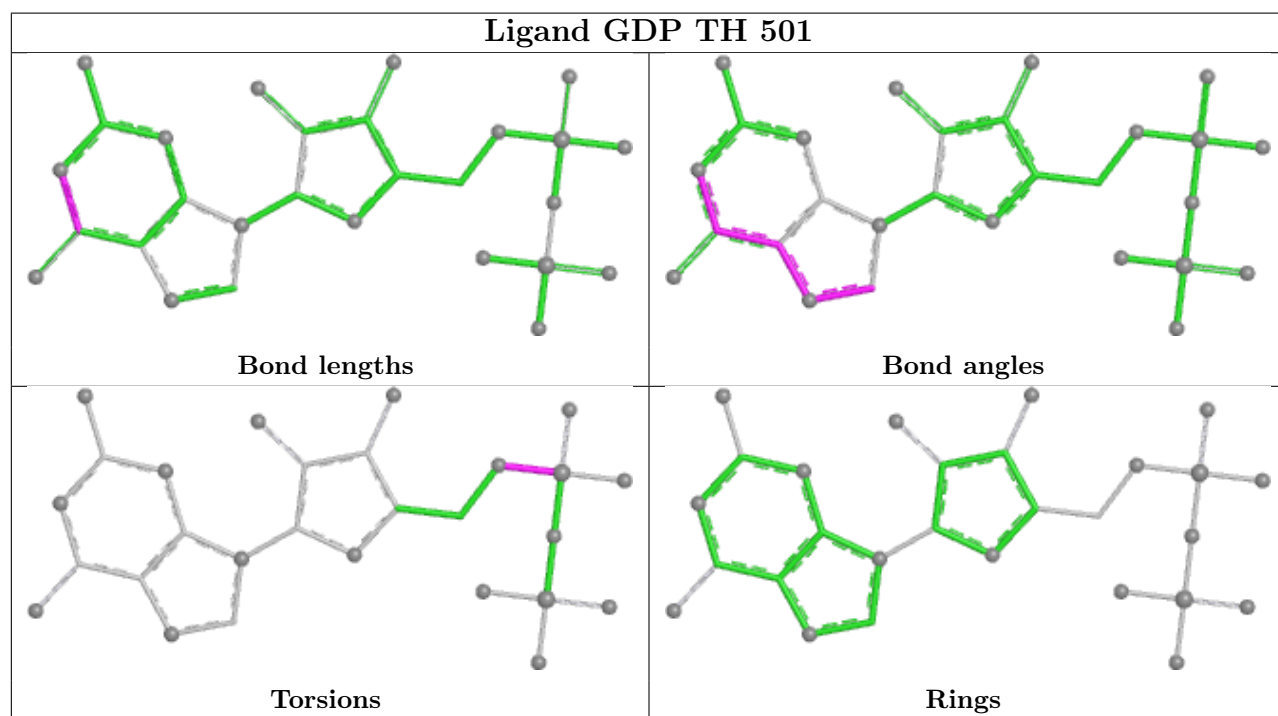
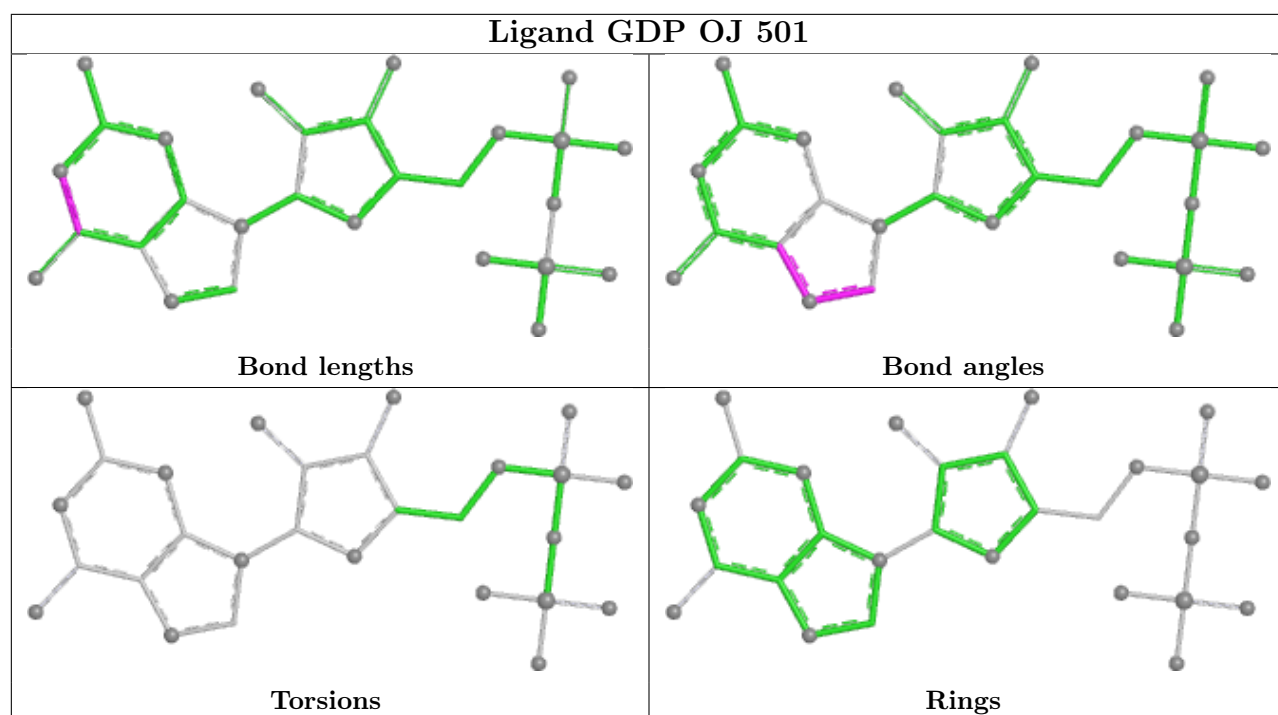


Torsions



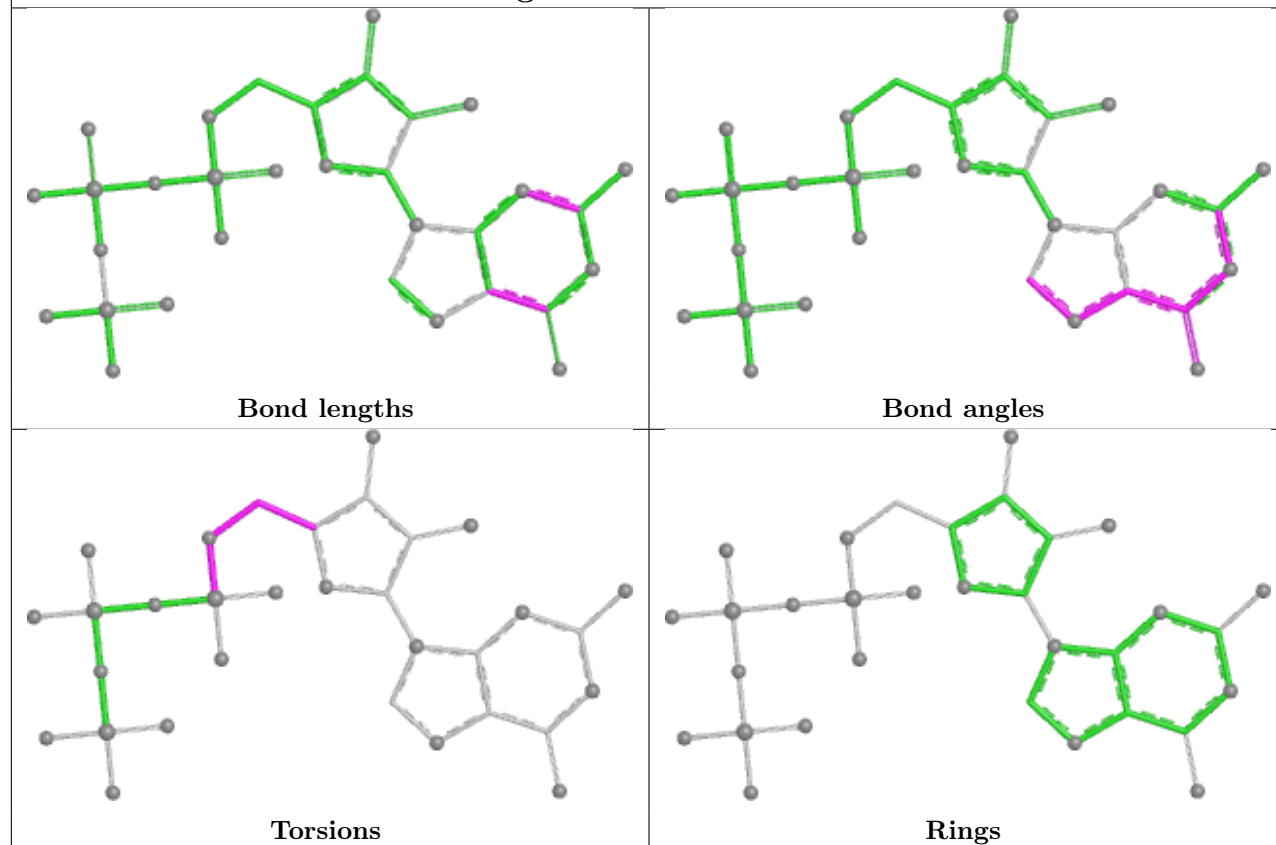
Rings



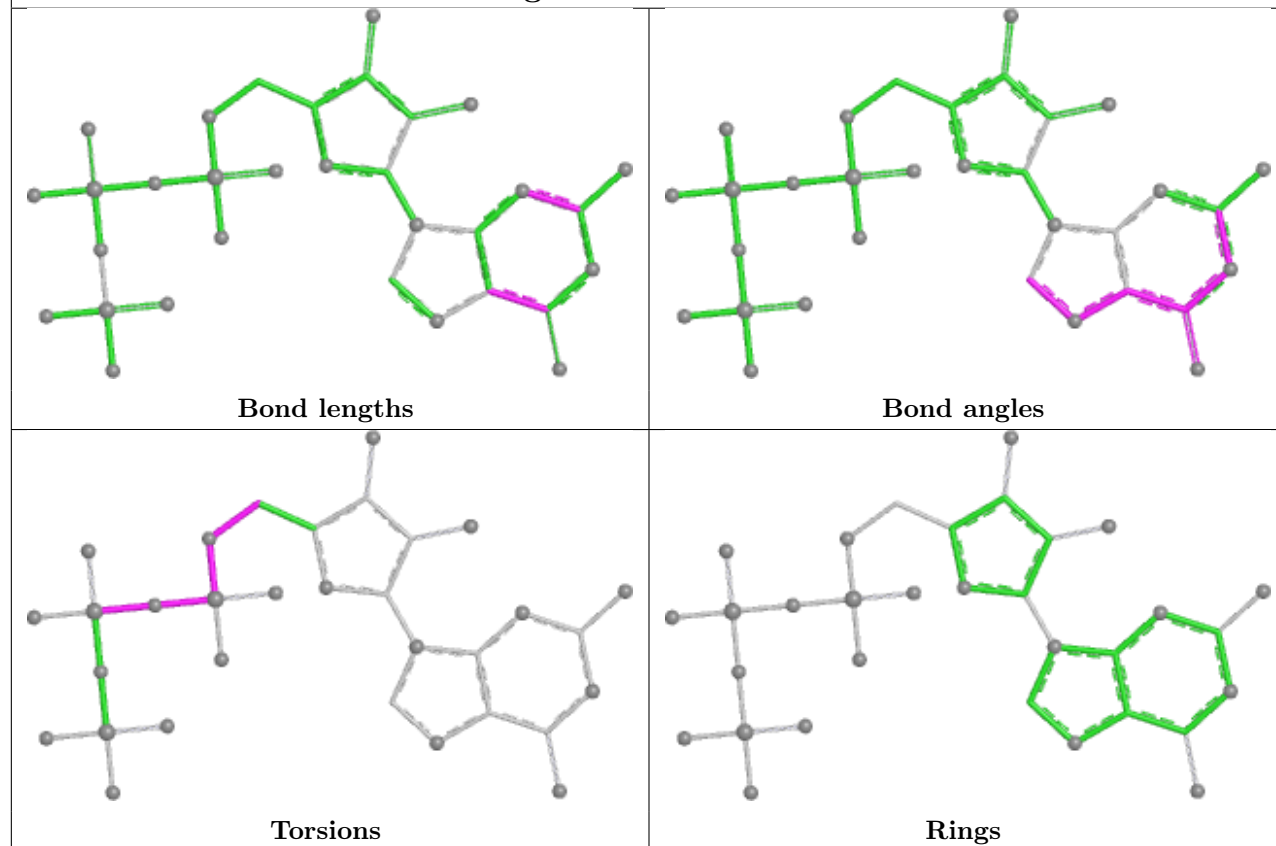




## Ligand GTP NC 501

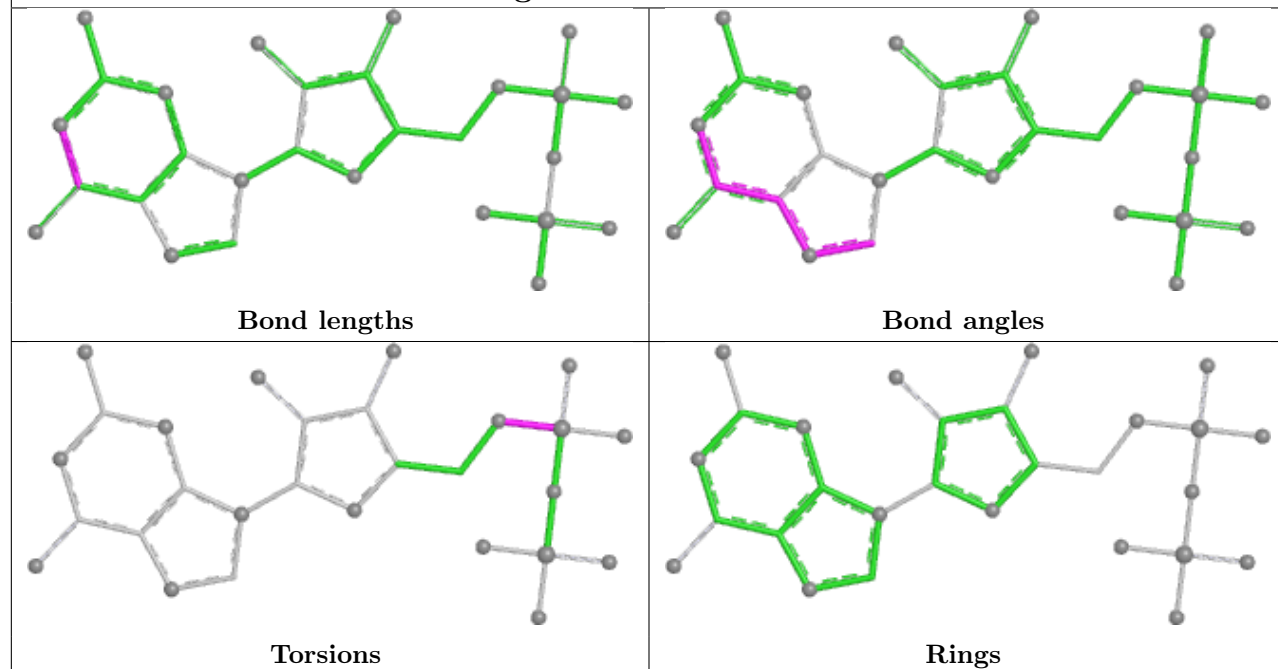


## Ligand GTP IC 501

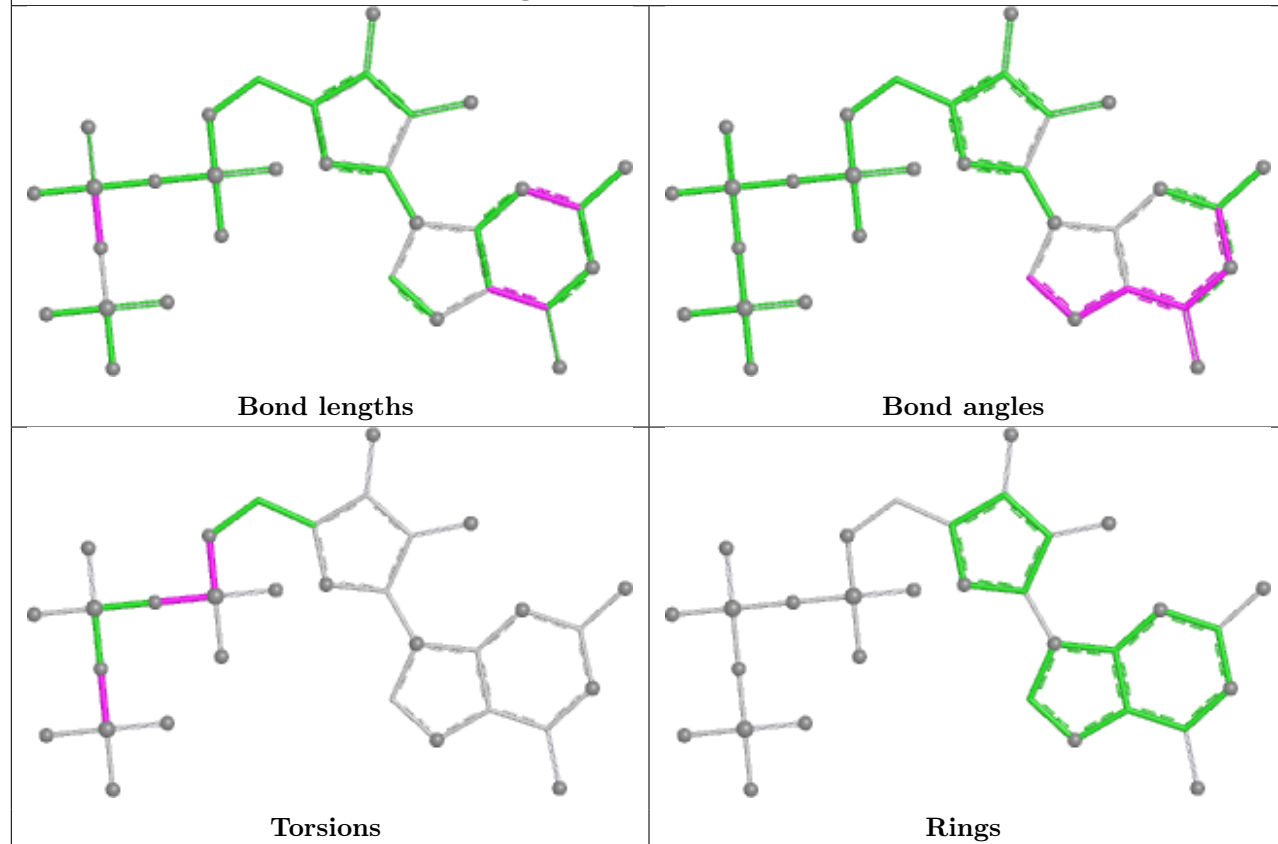




## Ligand GDP GN 501

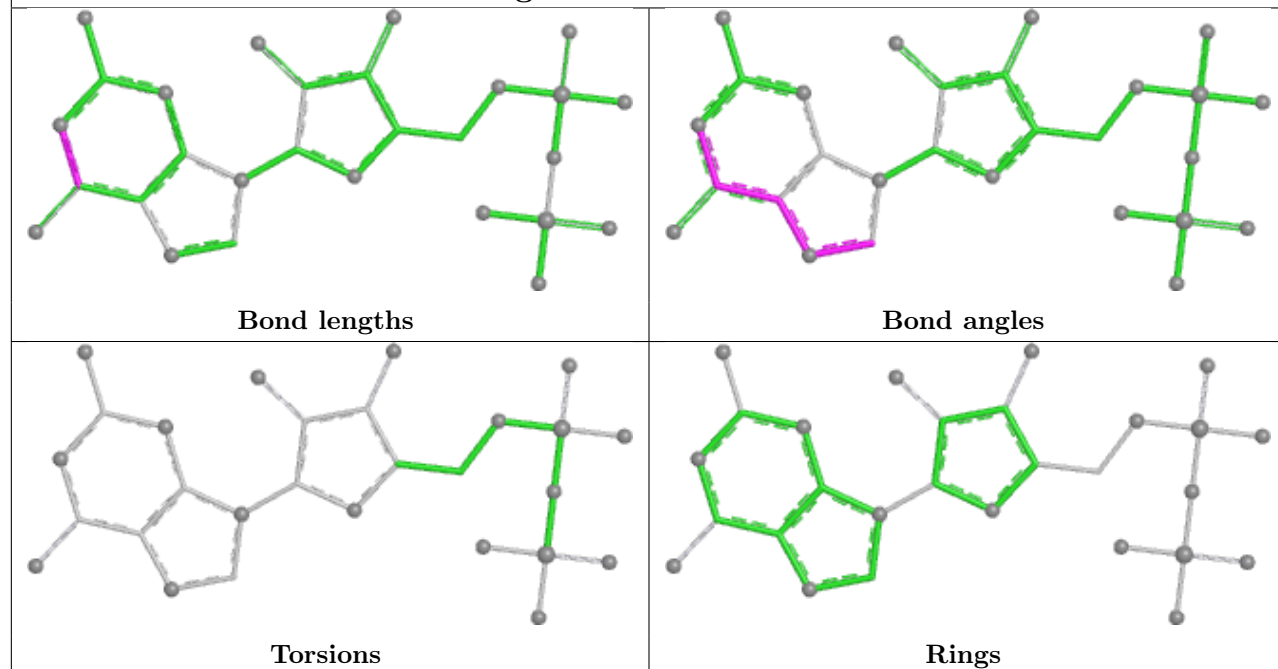


## Ligand GTP CK 501

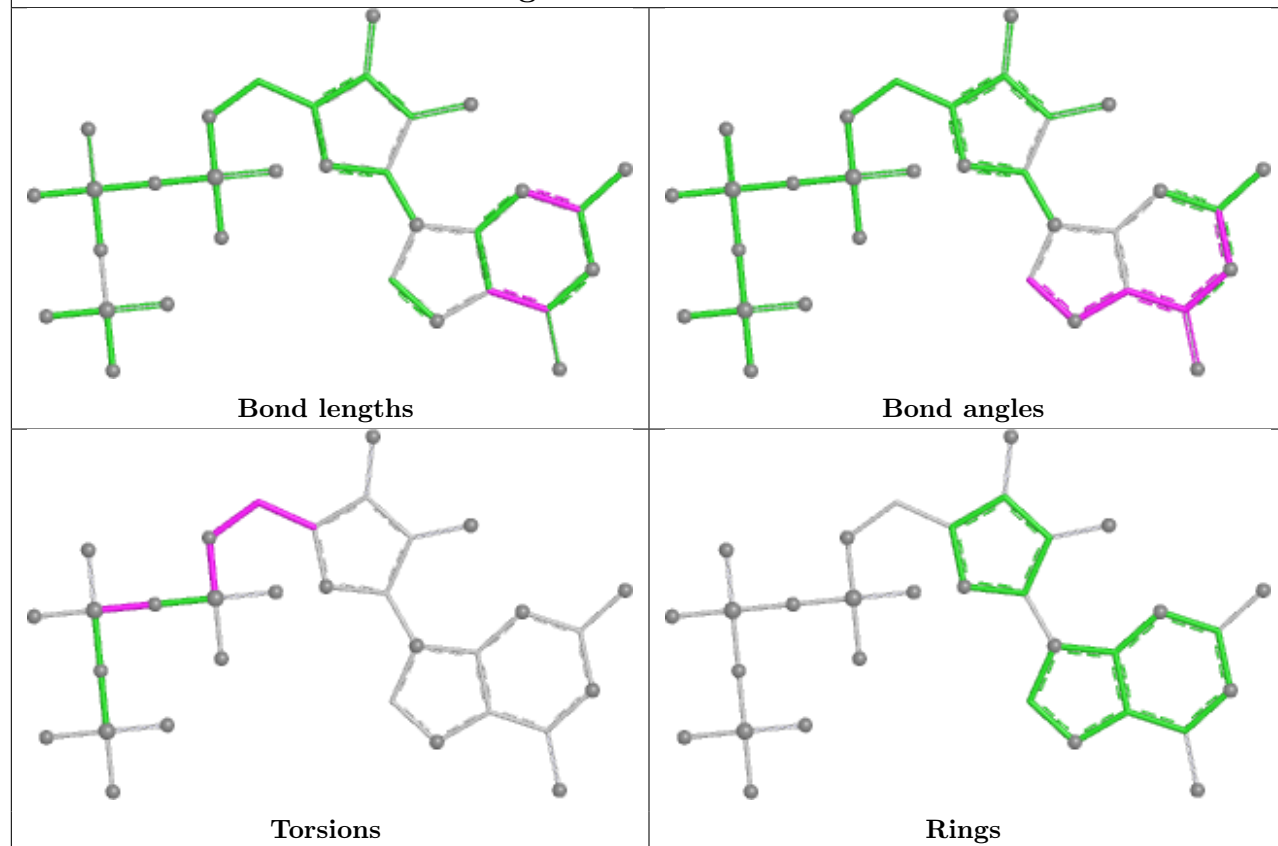




## Ligand GDP CN 501

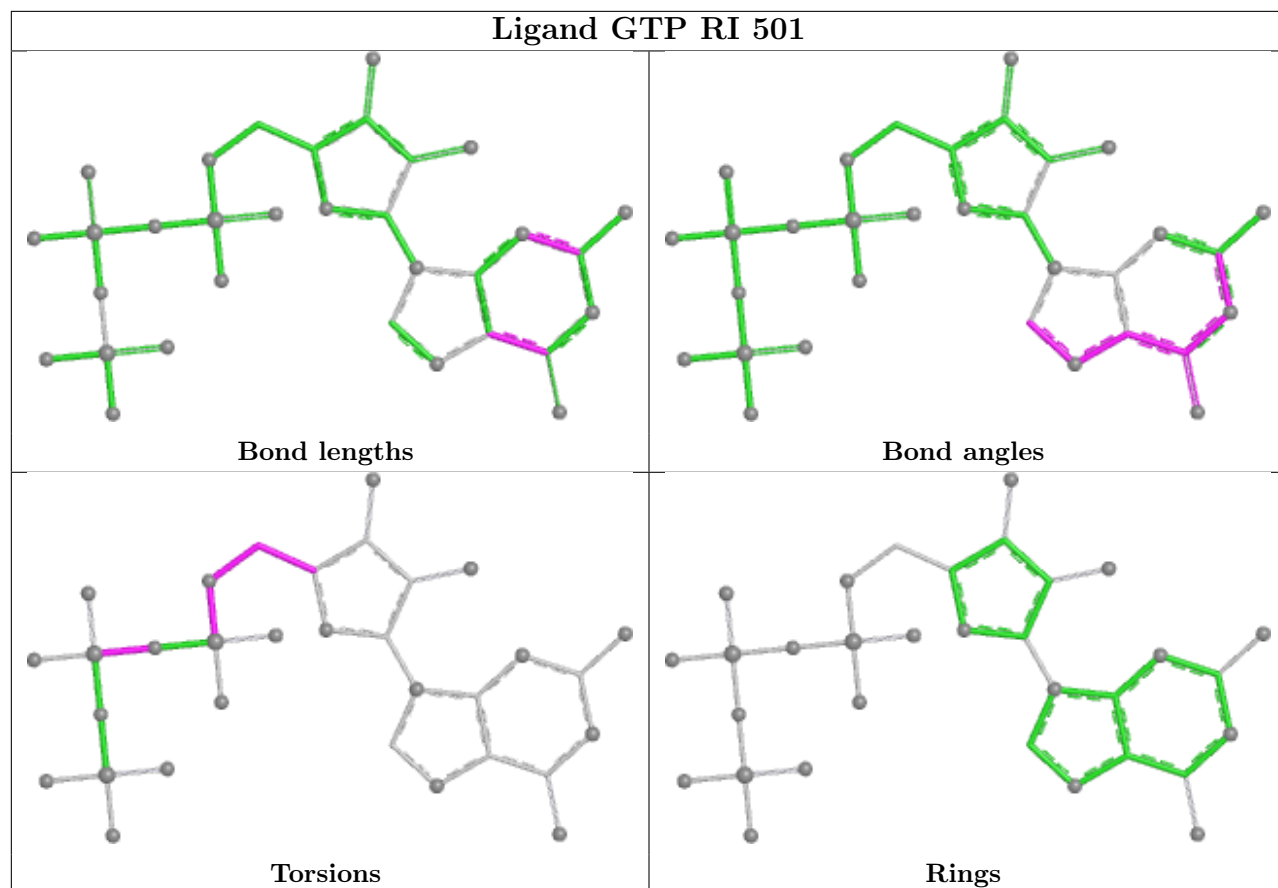


## Ligand GTP FG 501

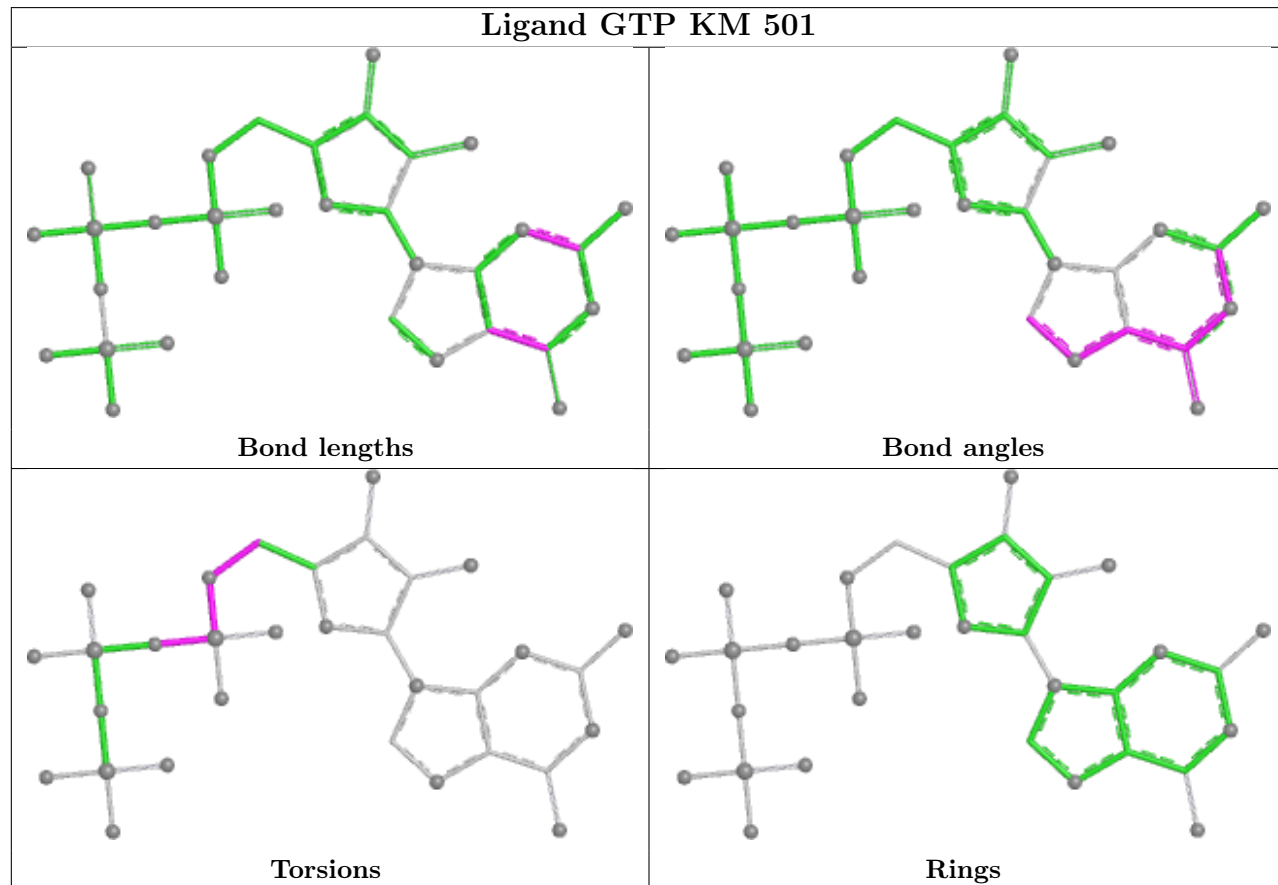




## Ligand GTP RI 501

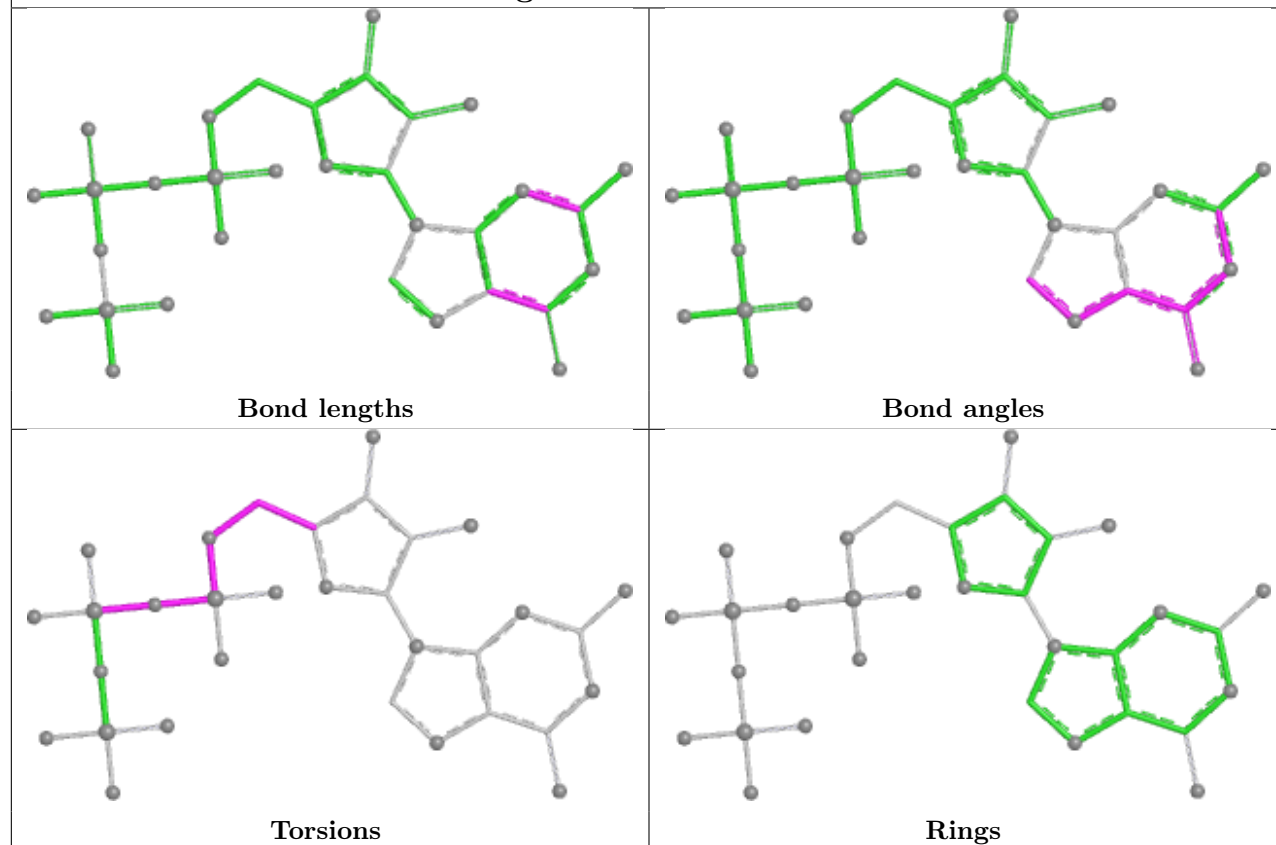


## Ligand GTP KM 501

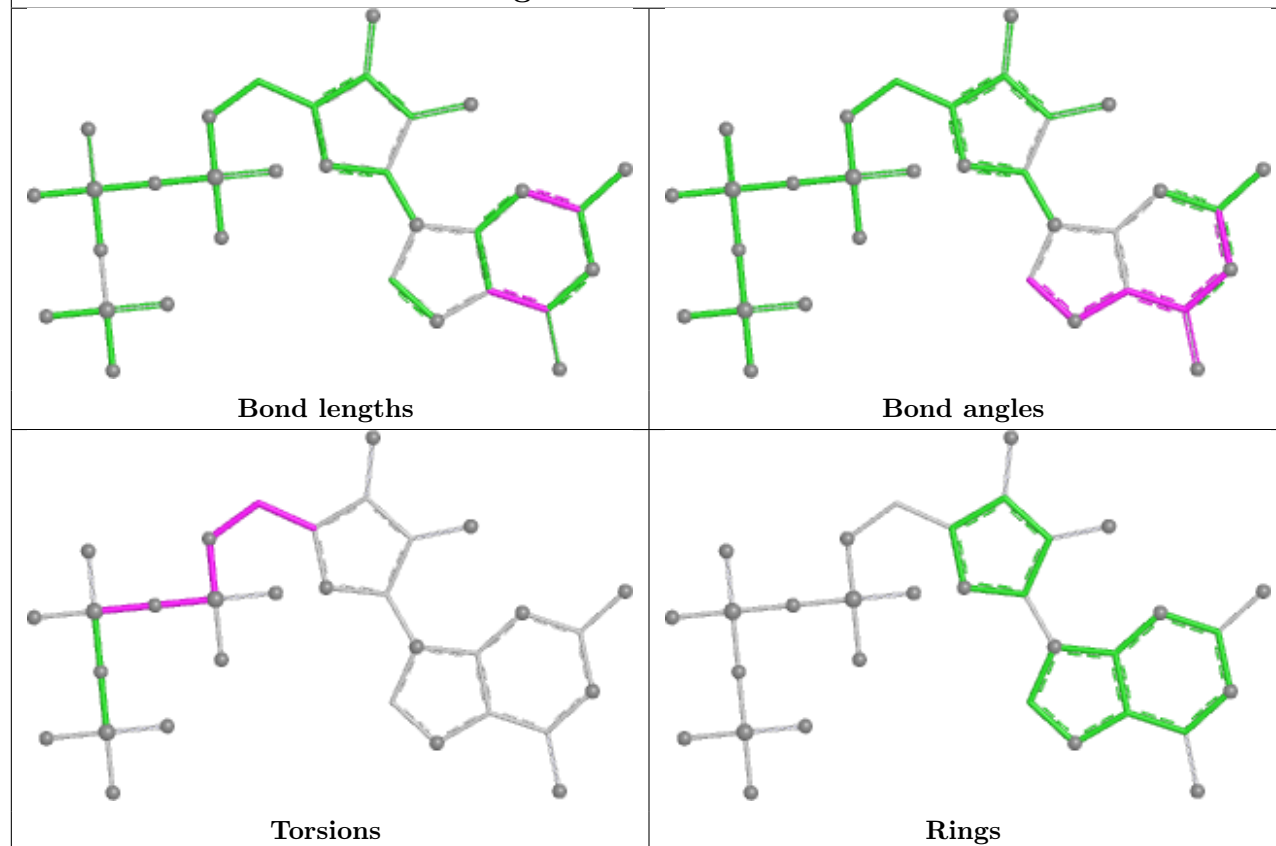




## Ligand GTP GA 501

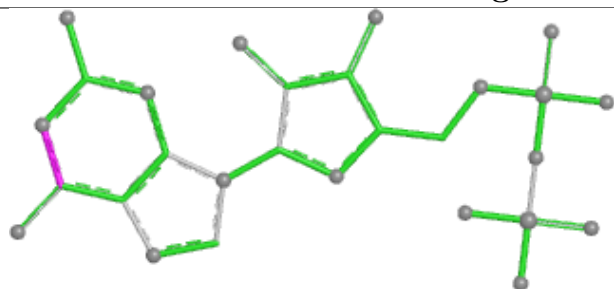


## Ligand GTP WA 501

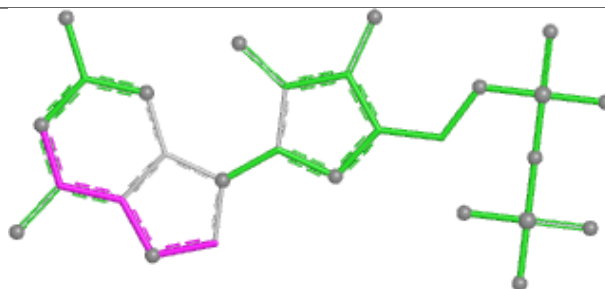




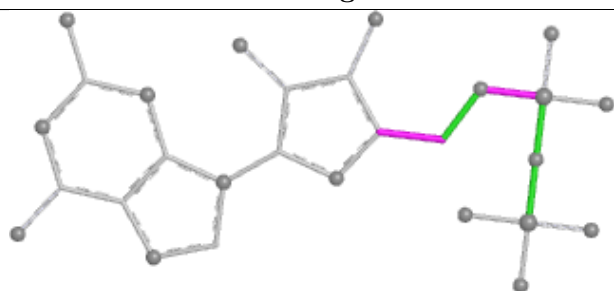
## Ligand GDP WH 501



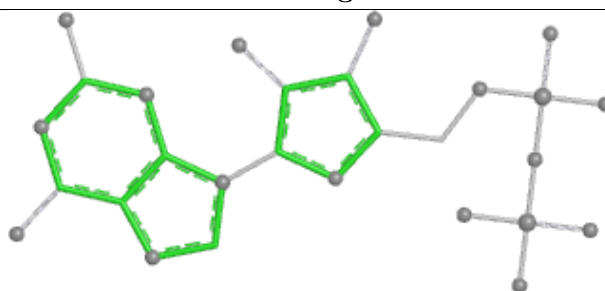
Bond lengths



Bond angles

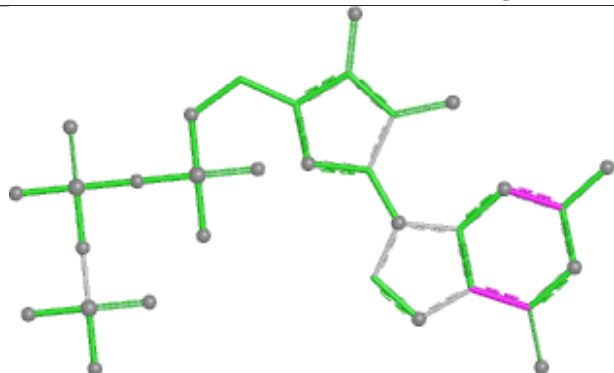


Torsions

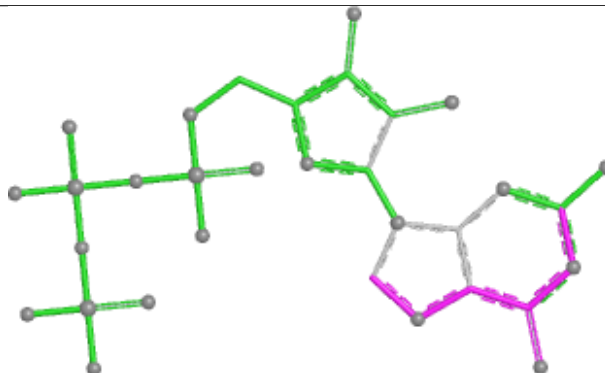


Rings

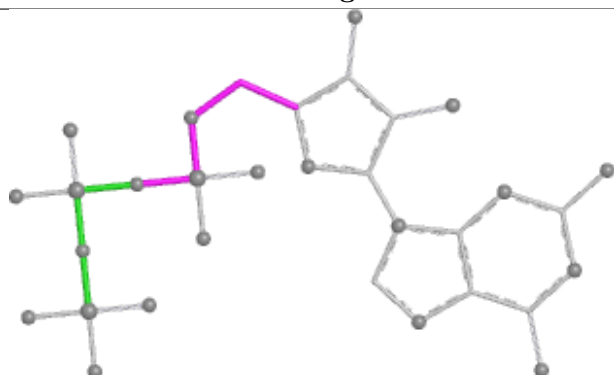
## Ligand GTP FM 501



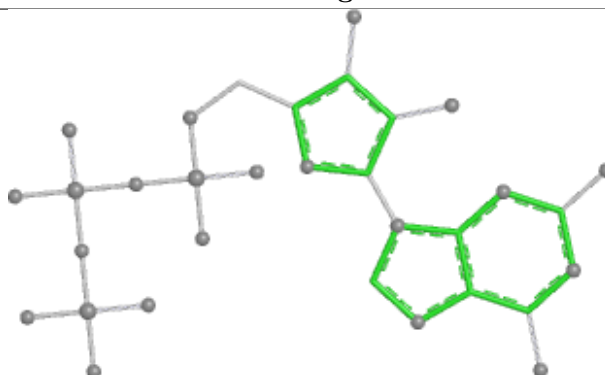
Bond lengths



Bond angles



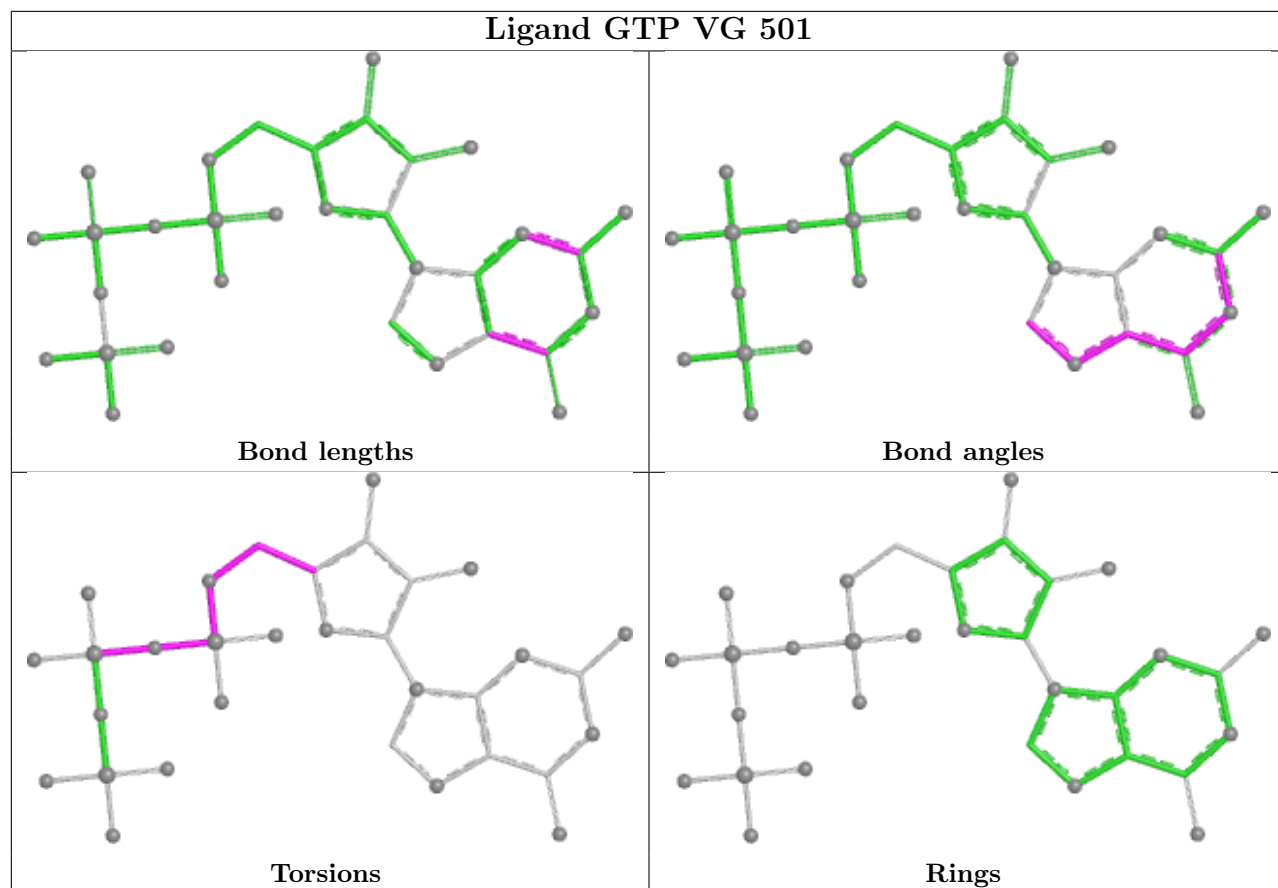
Torsions



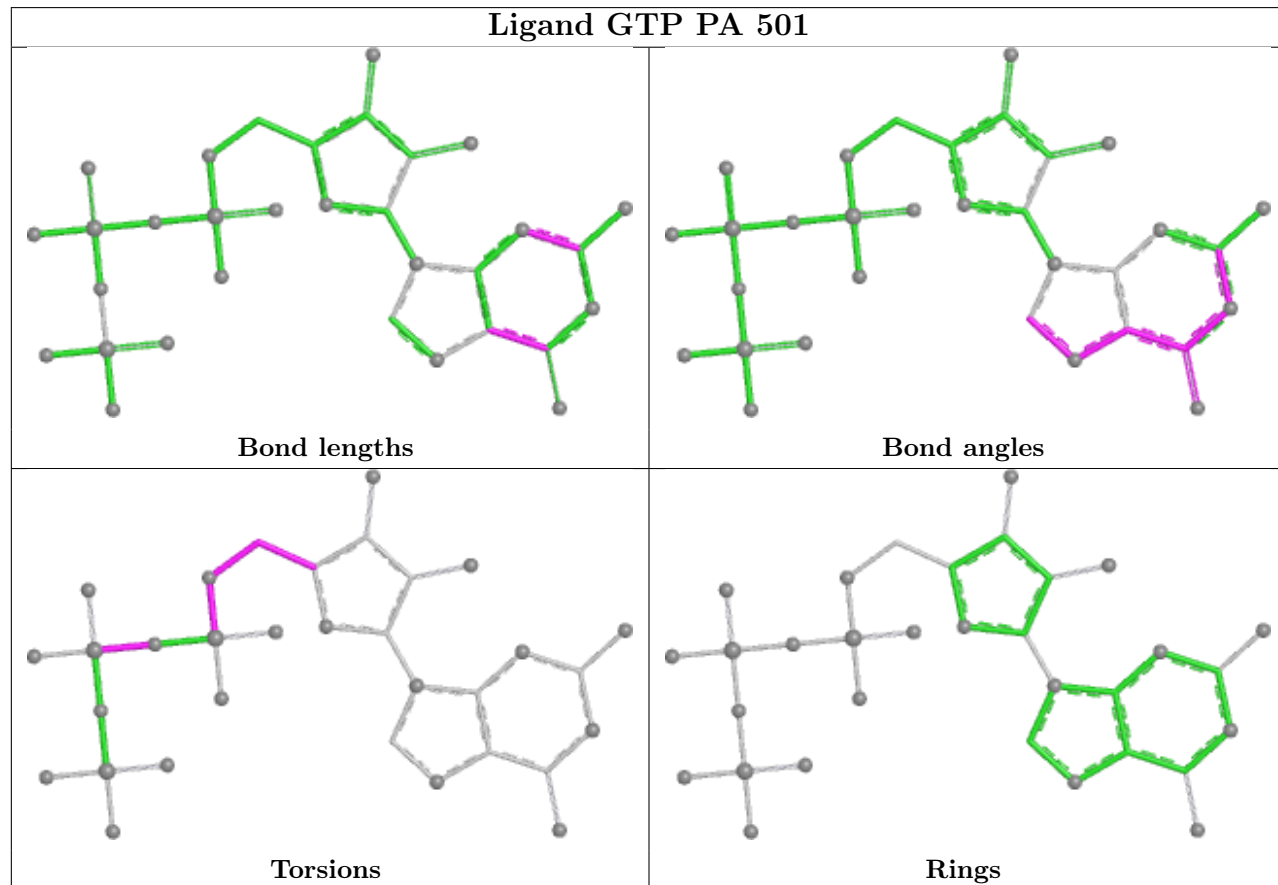
Rings



## Ligand GTP VG 501

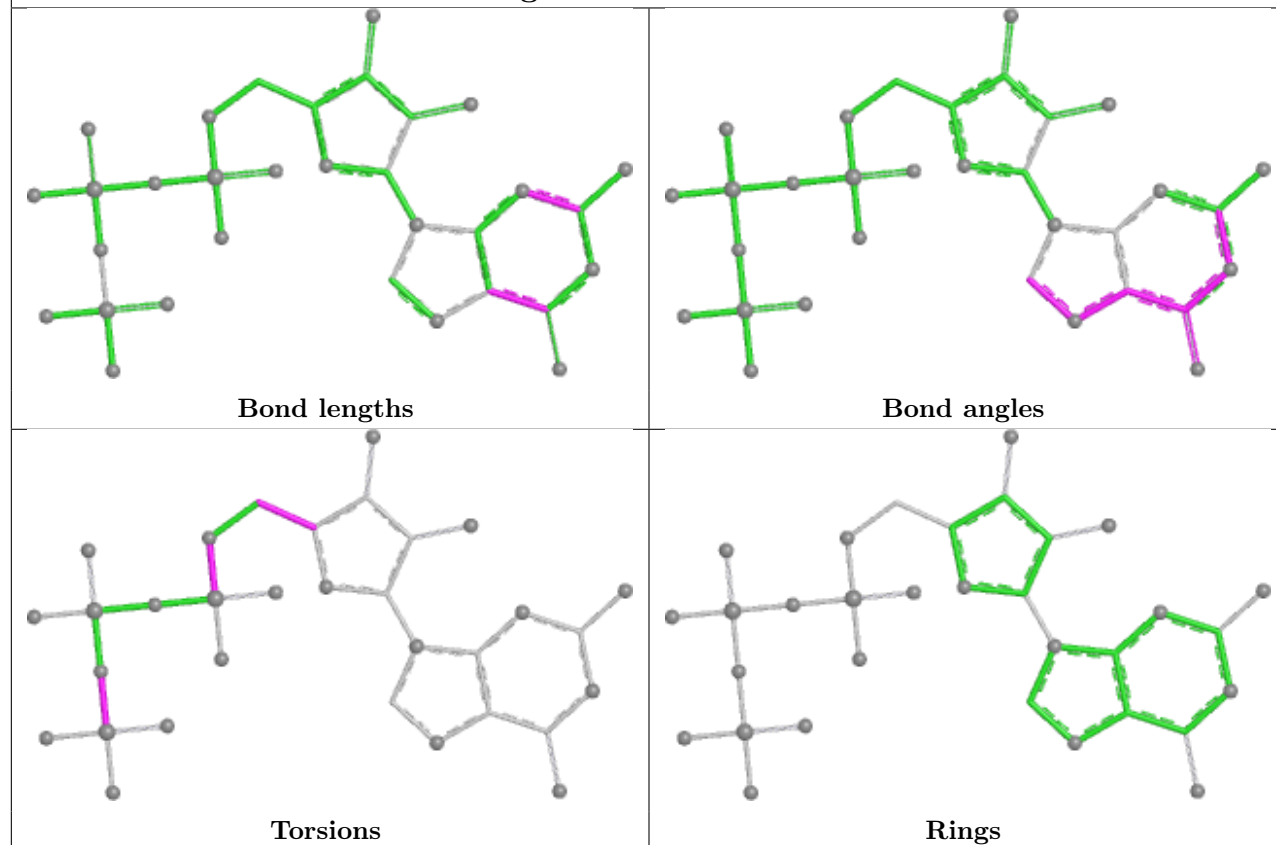


## Ligand GTP PA 501

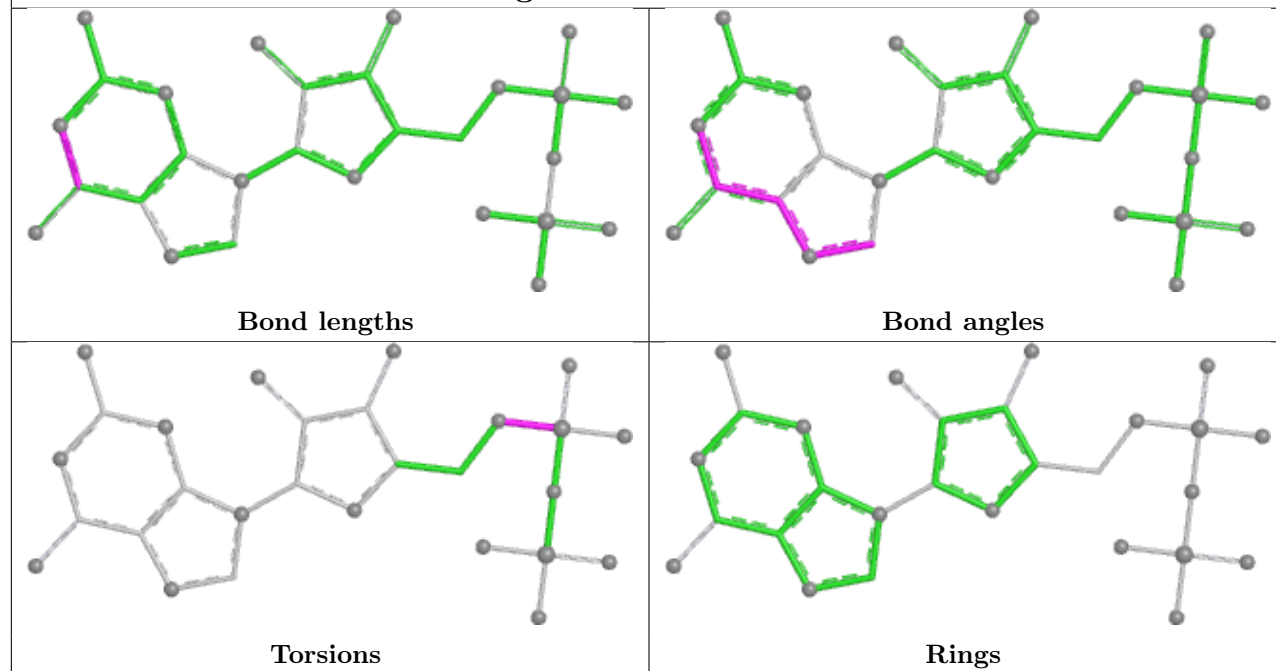




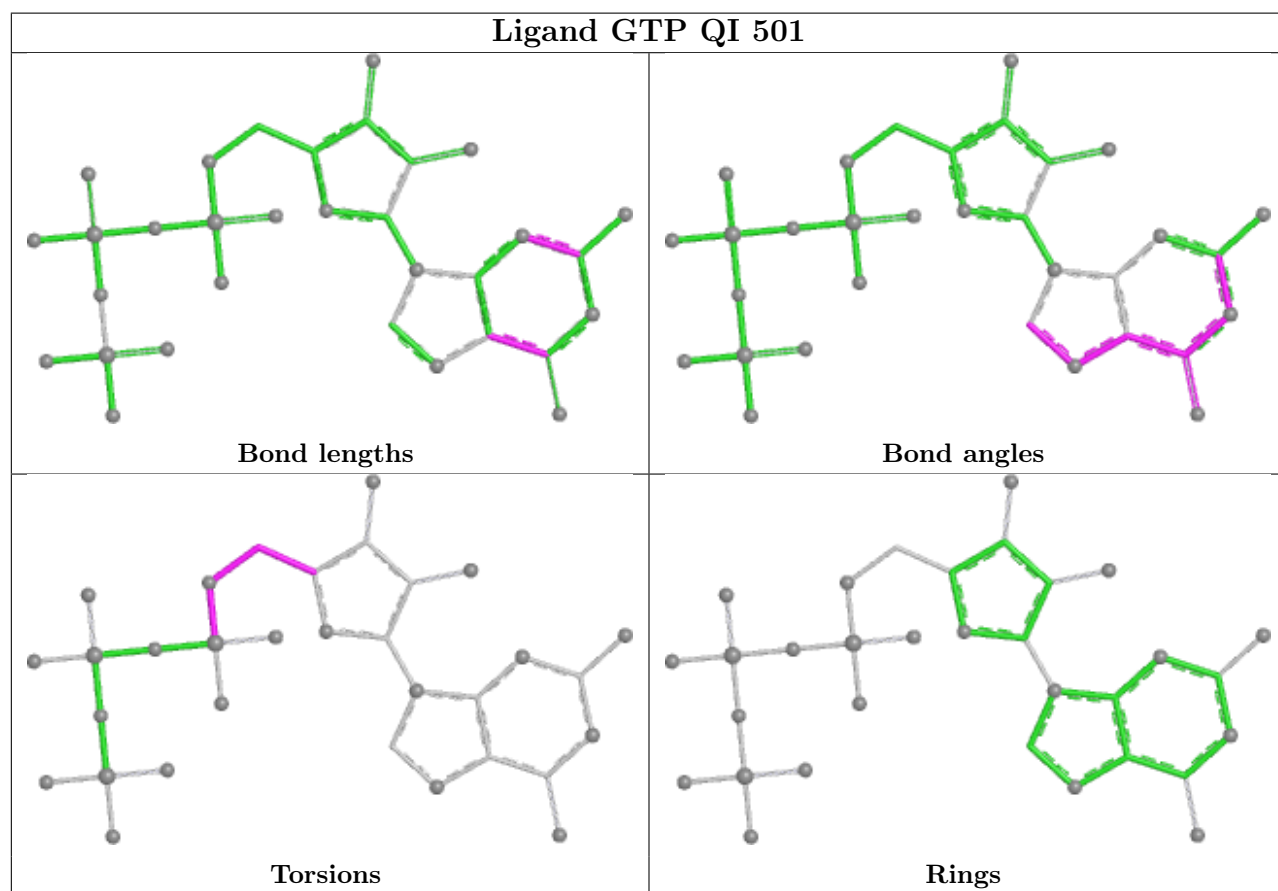
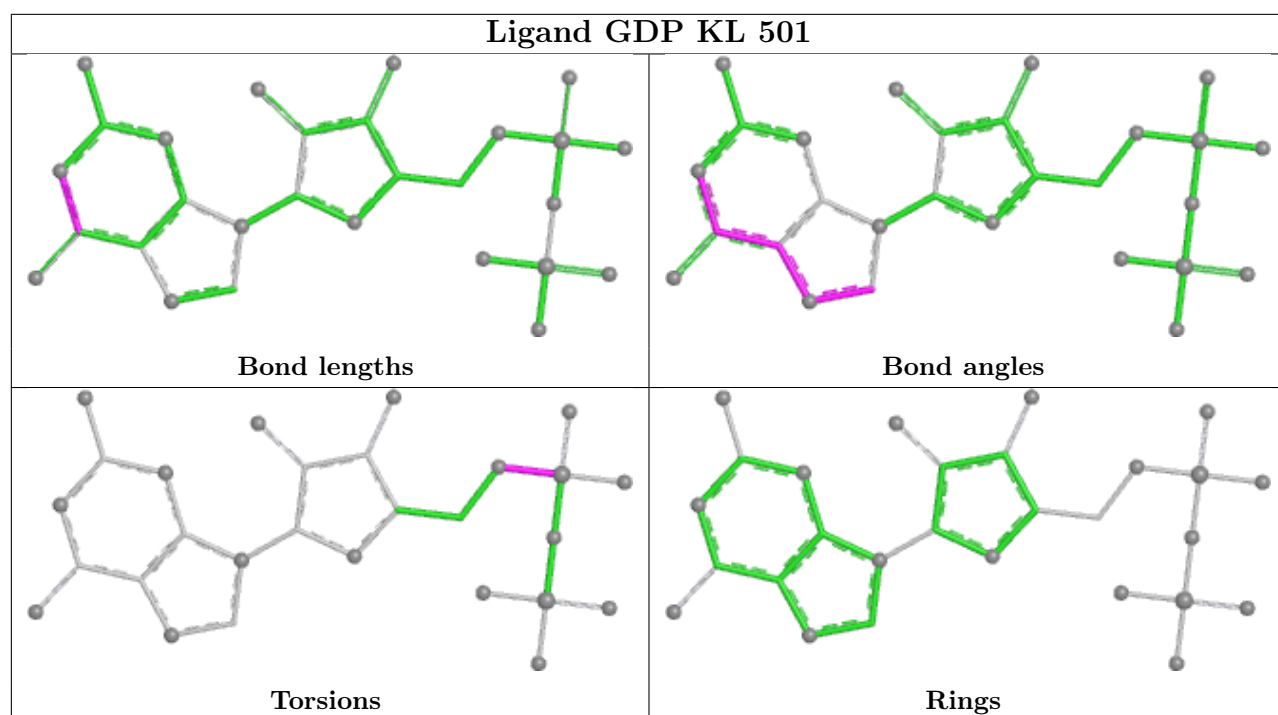
## Ligand GTP JK 501



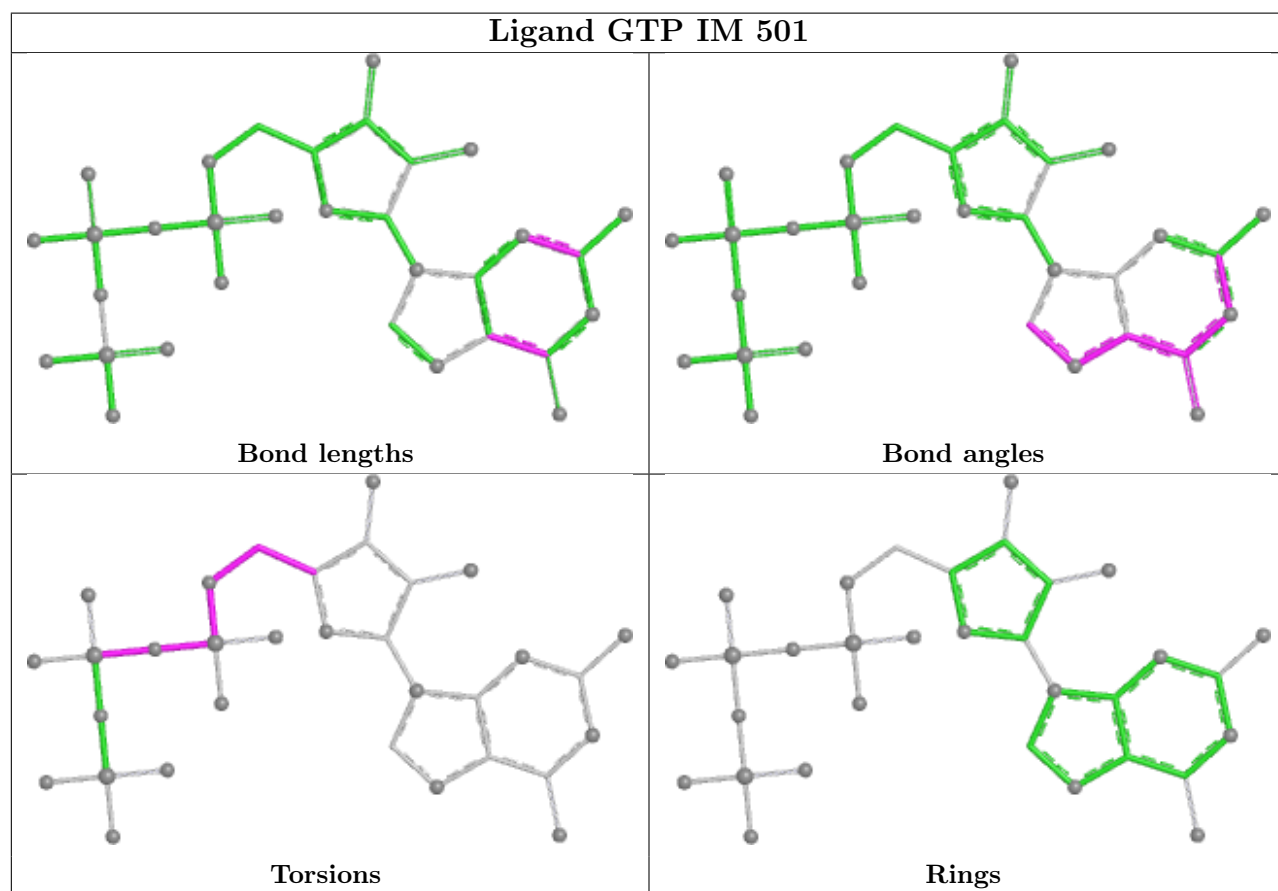
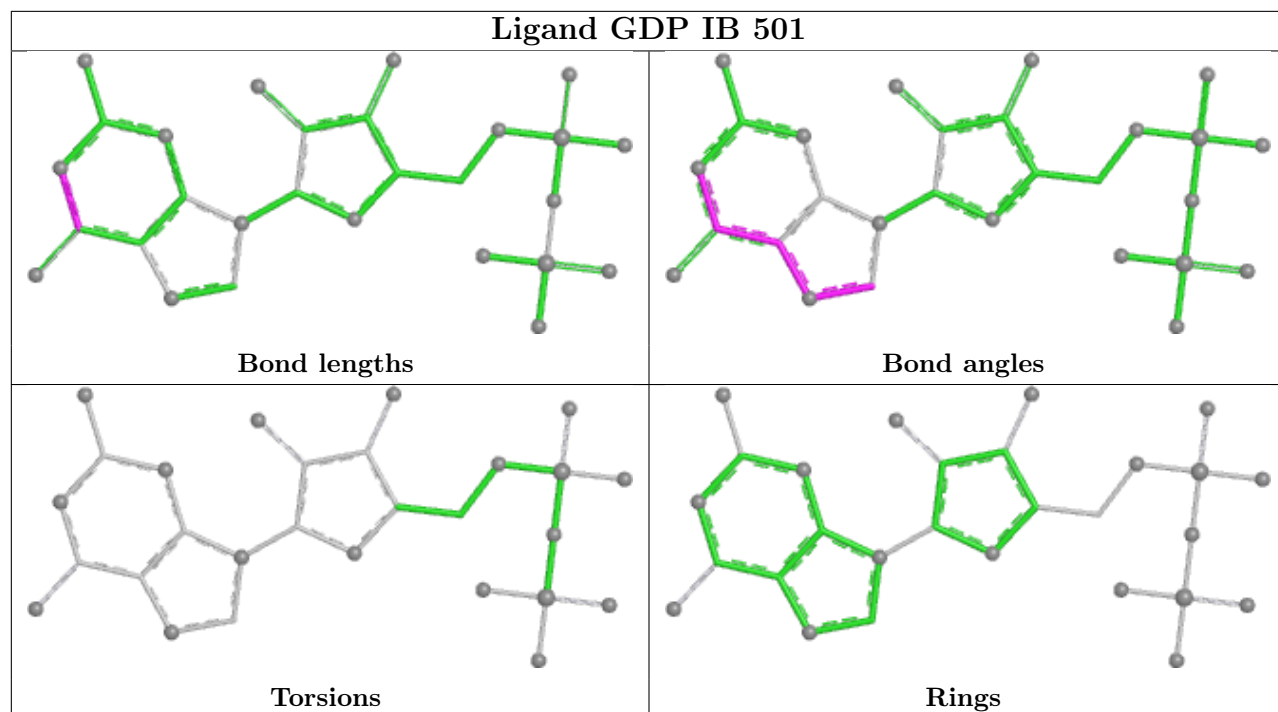
## Ligand GDP GB 502



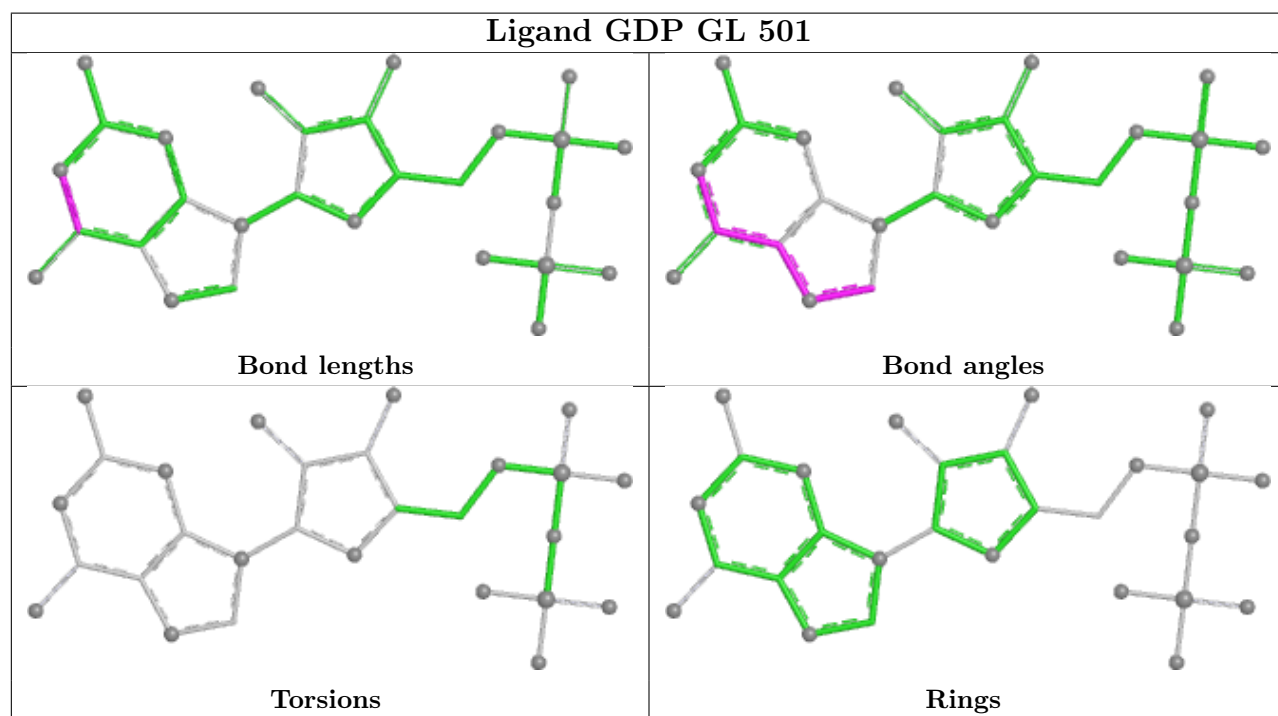
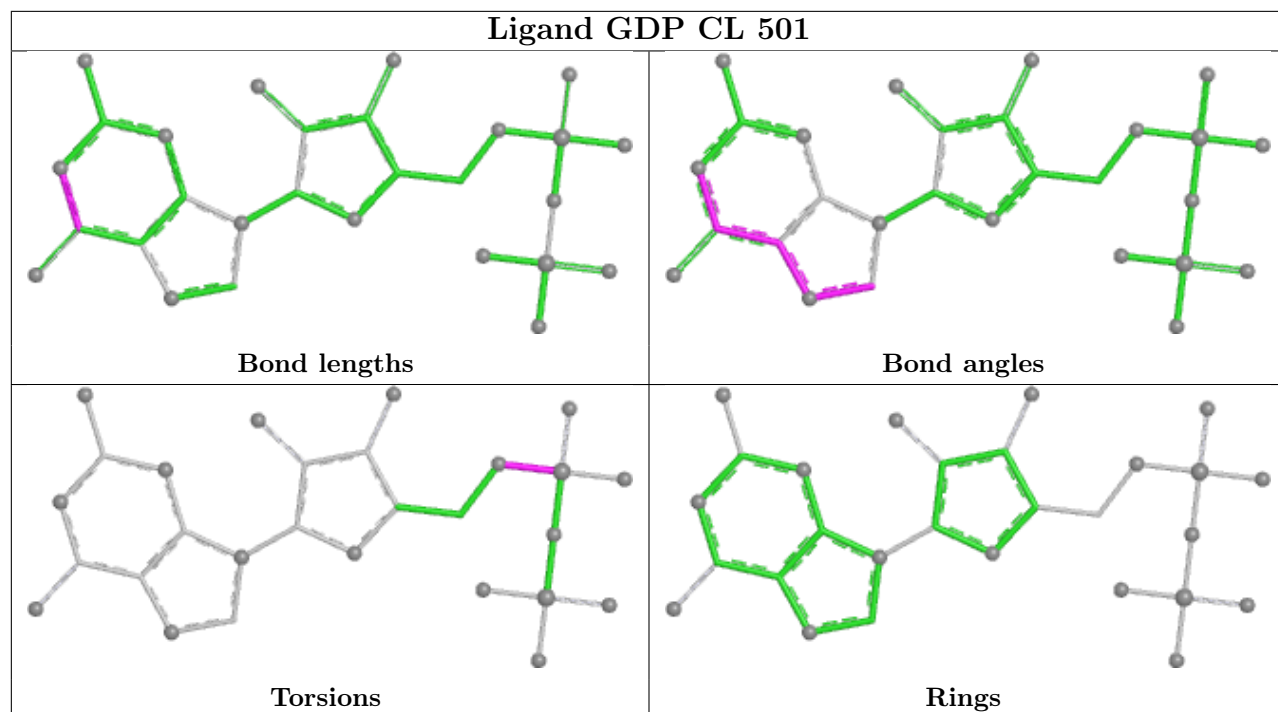






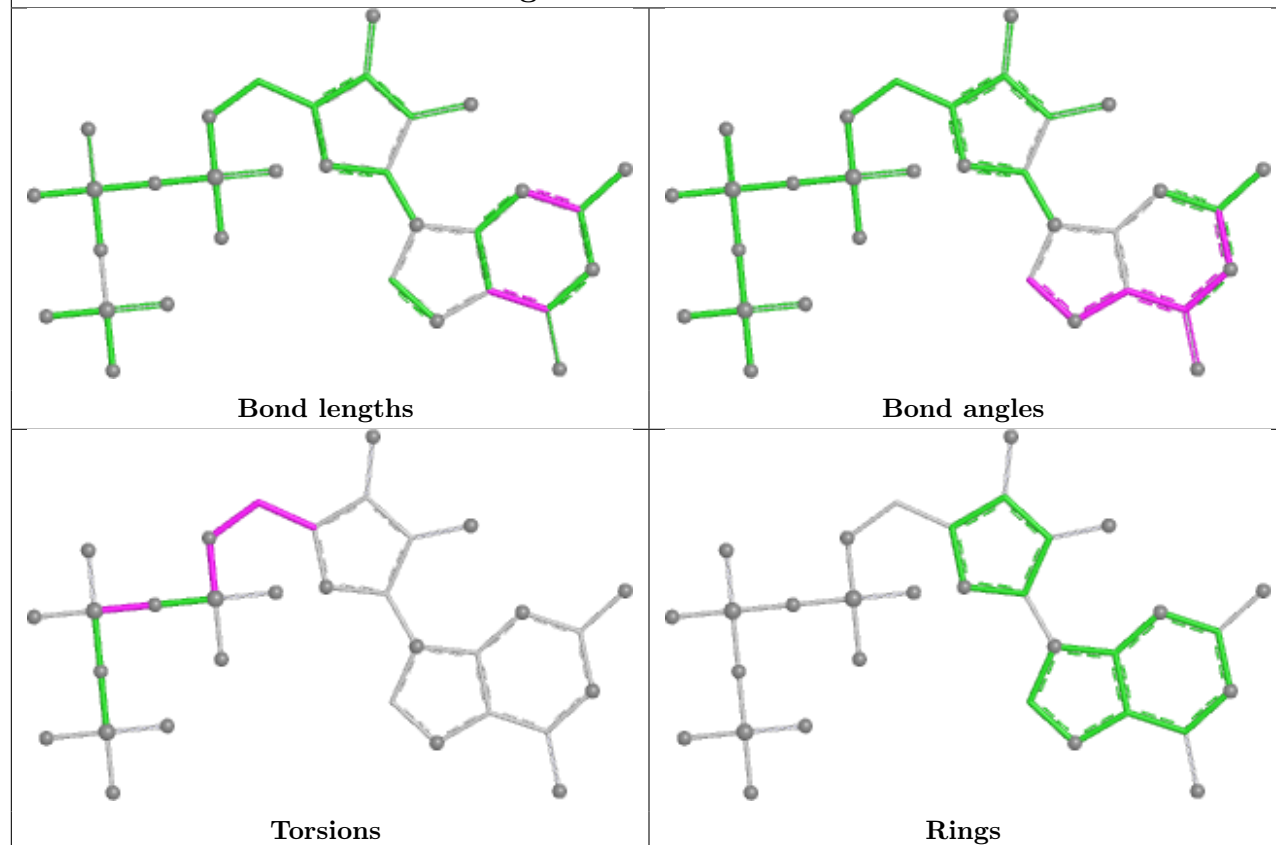




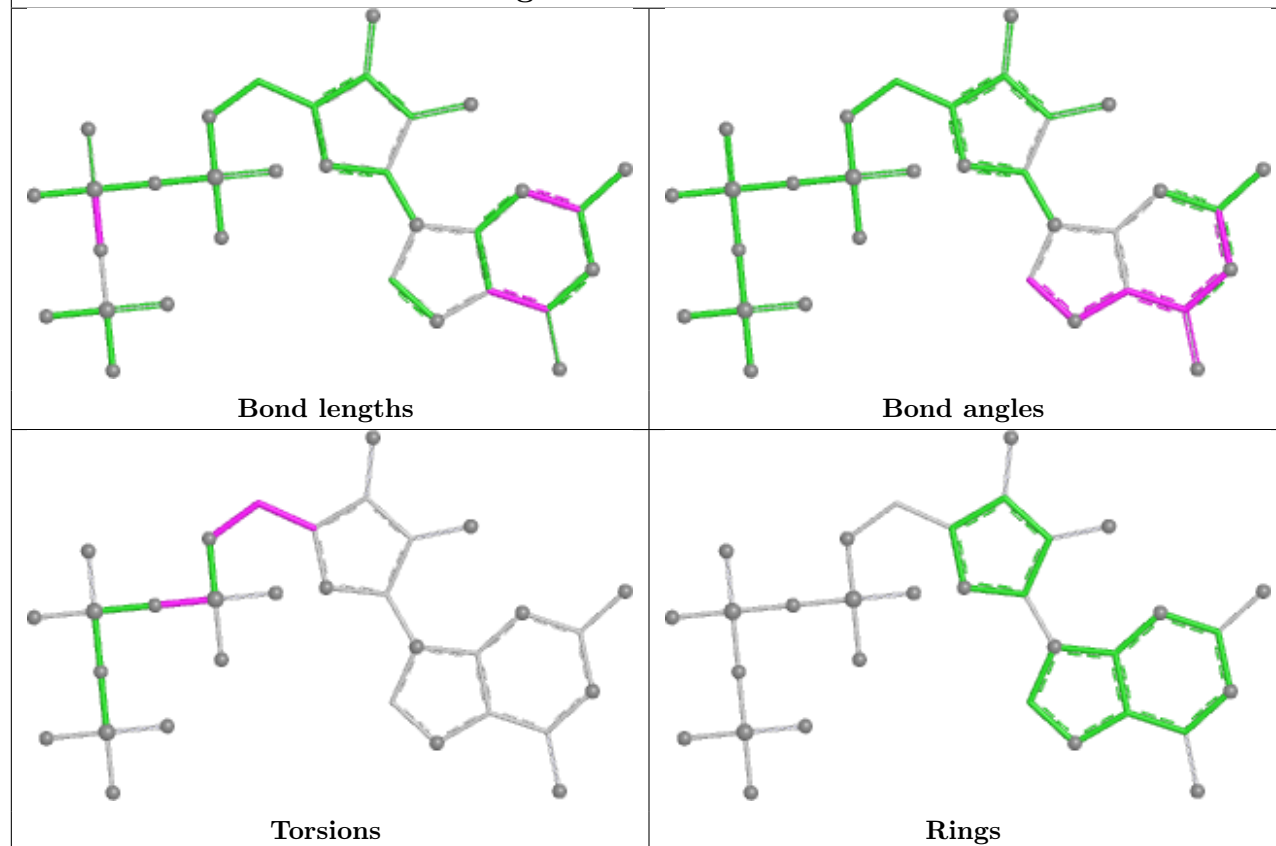




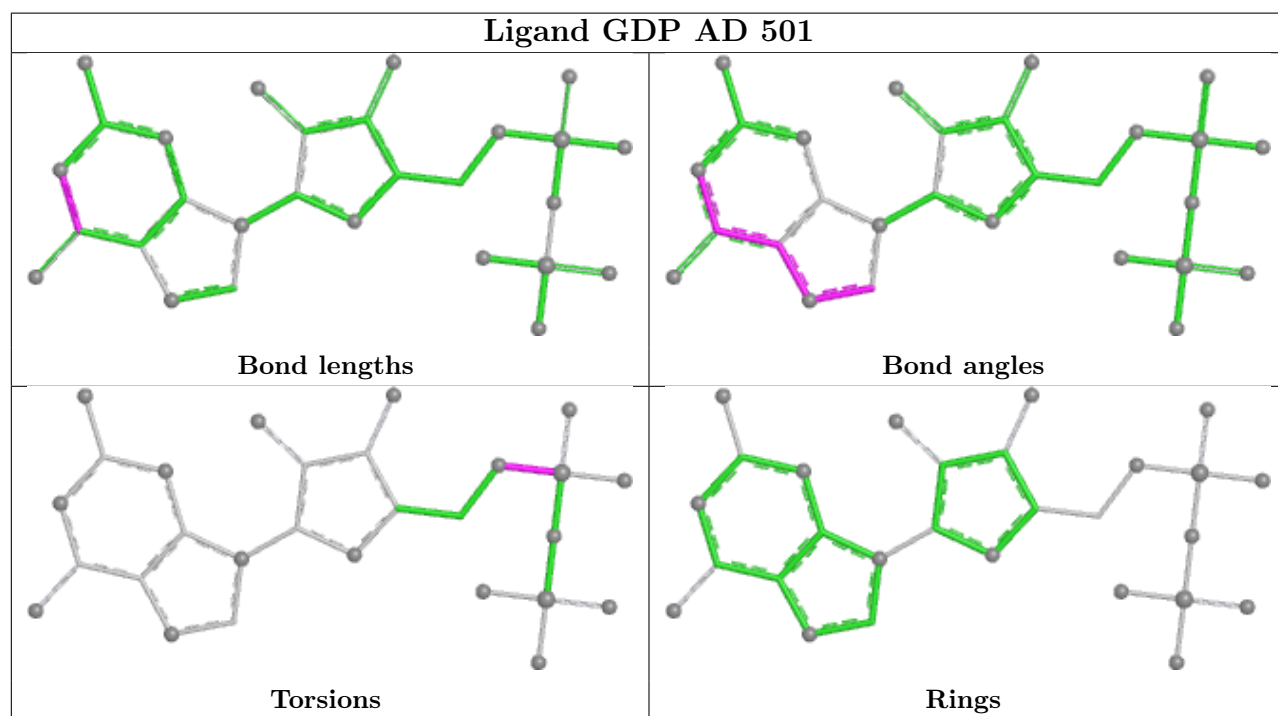
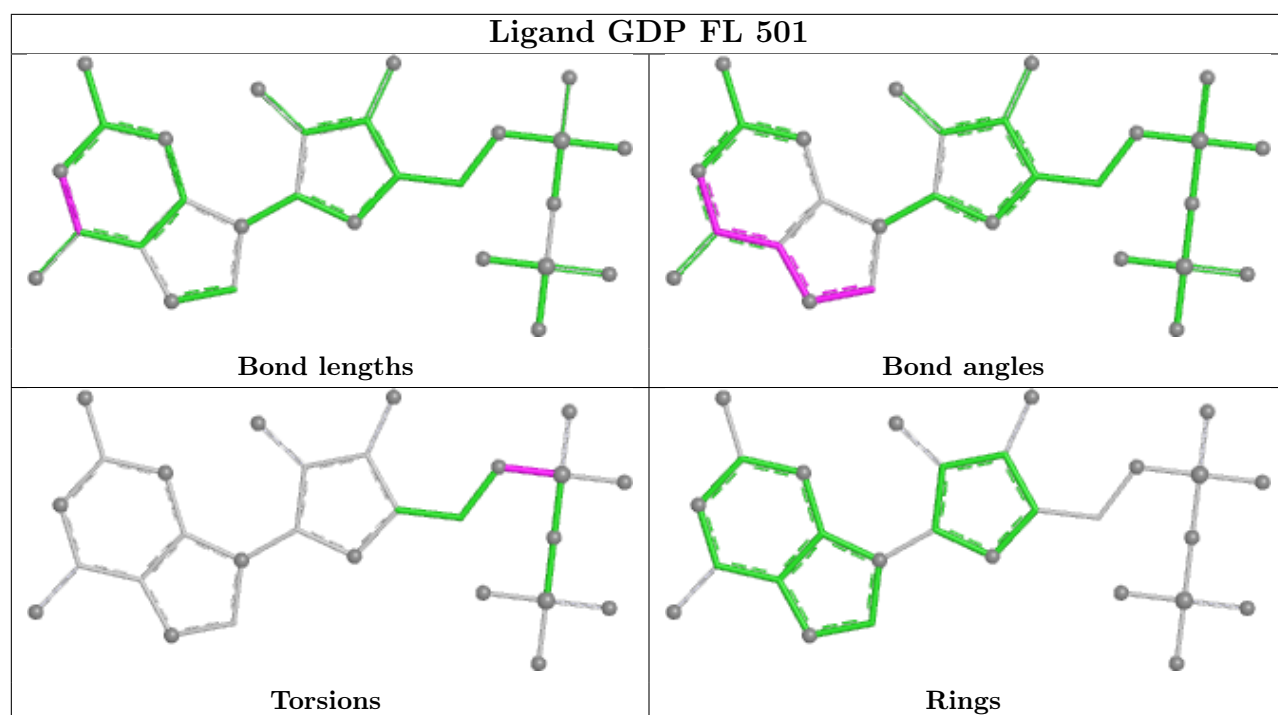
## Ligand GTP PE 501



## Ligand GTP UA 501

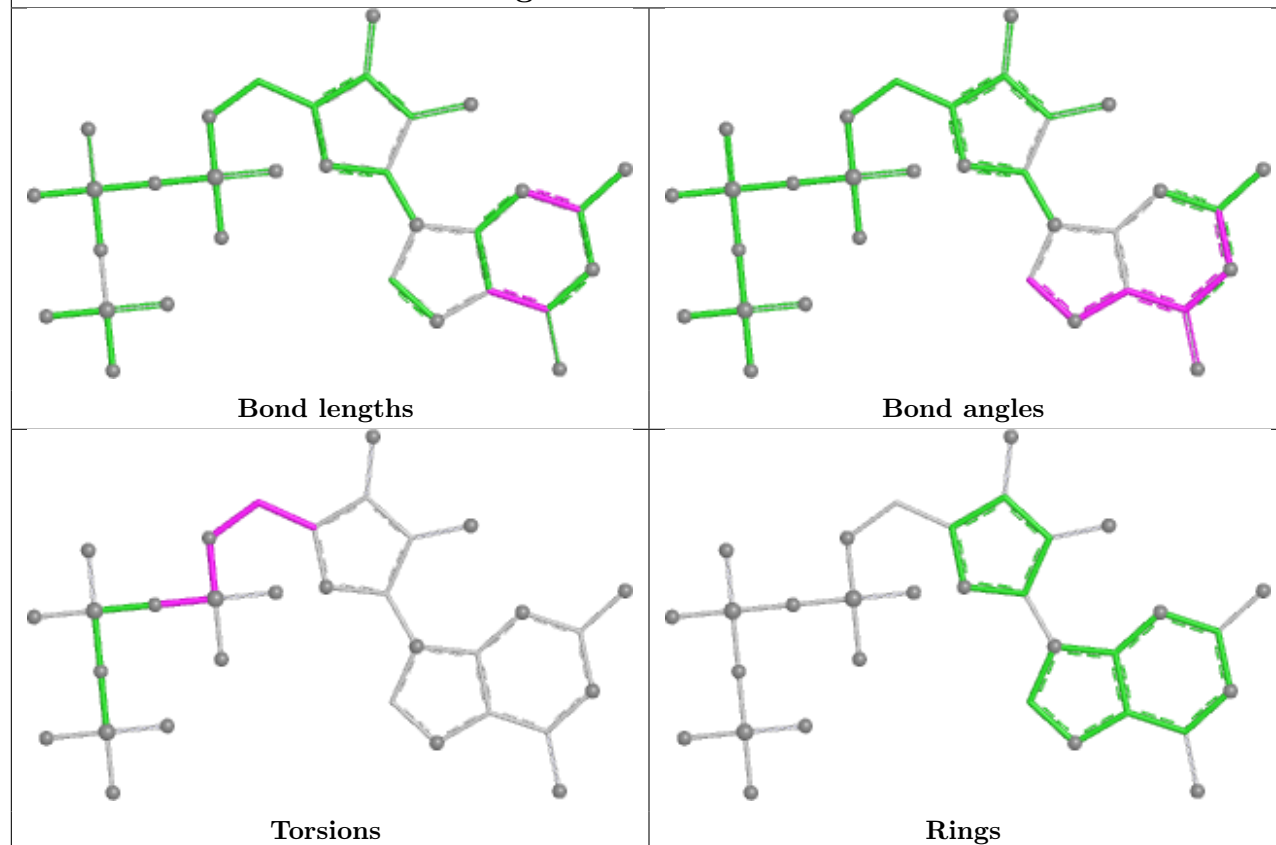




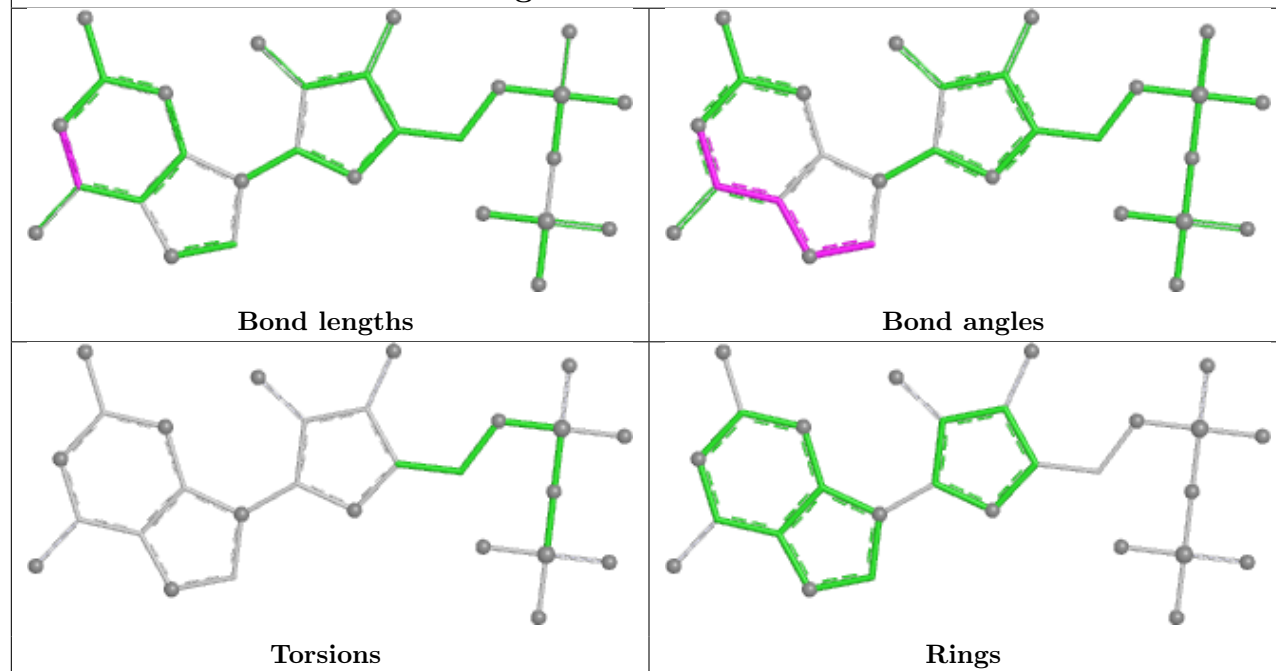




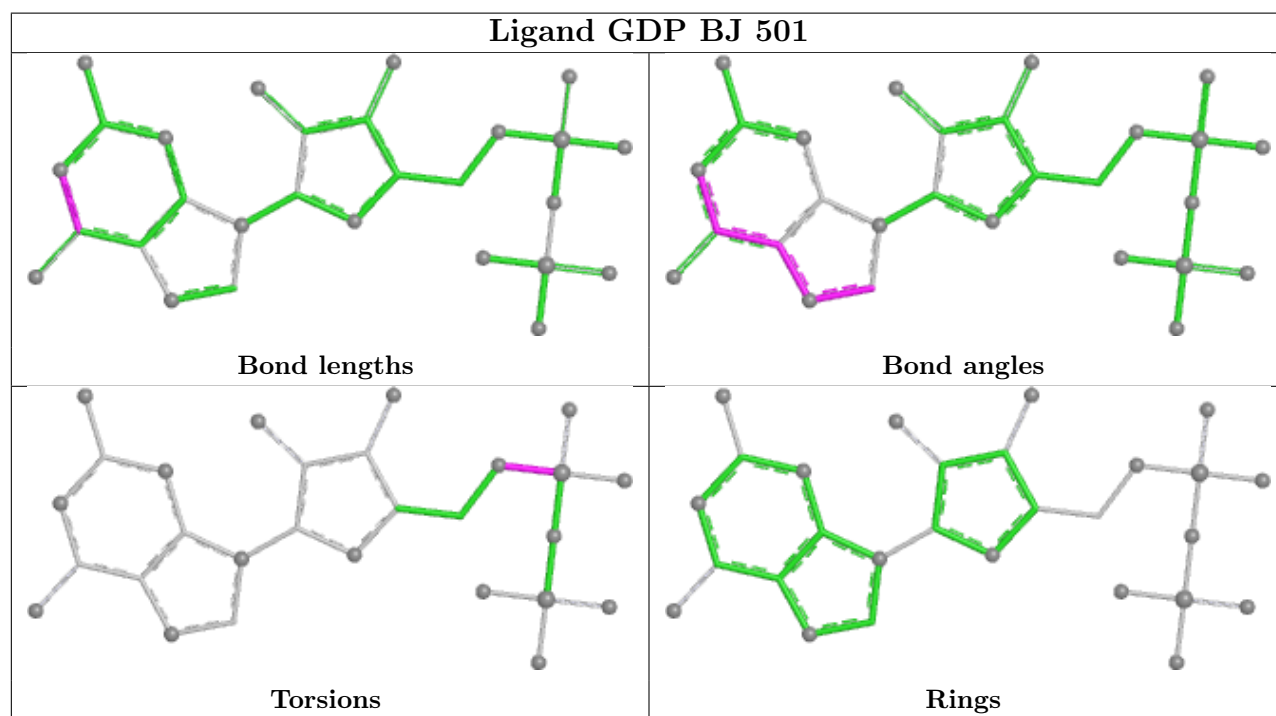
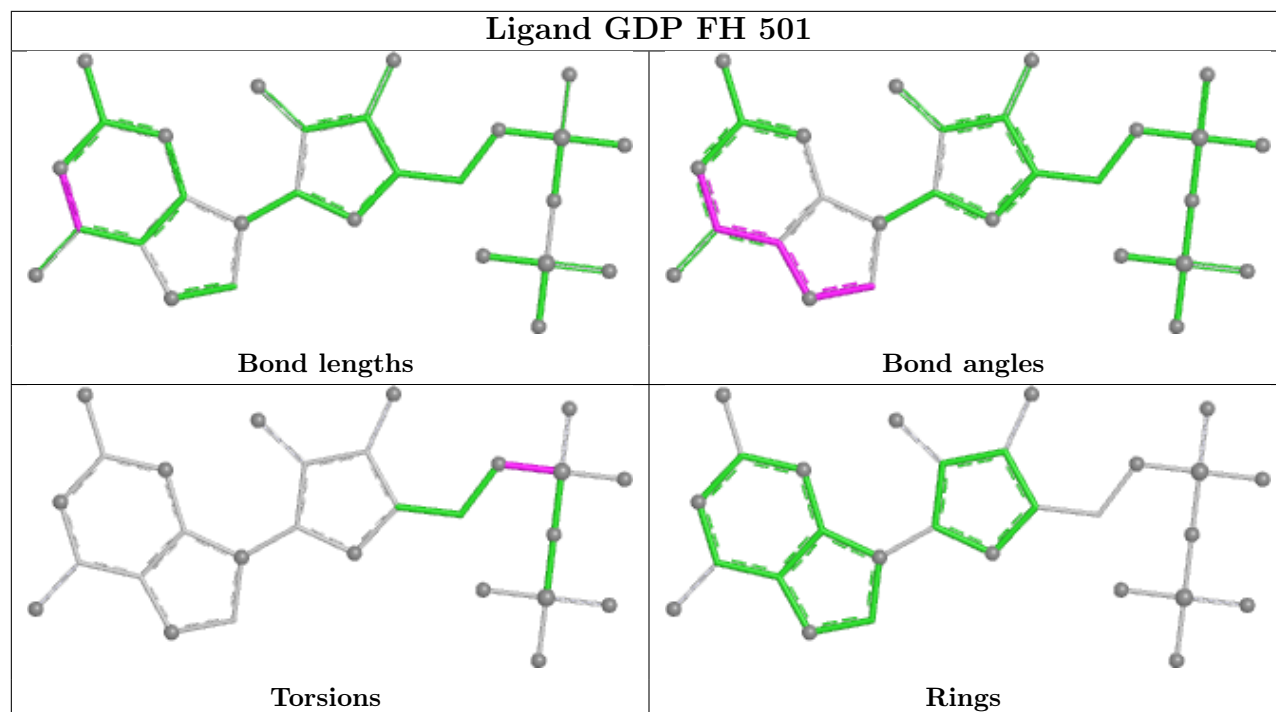
## Ligand GTP DG 501



## Ligand GDP VD 501

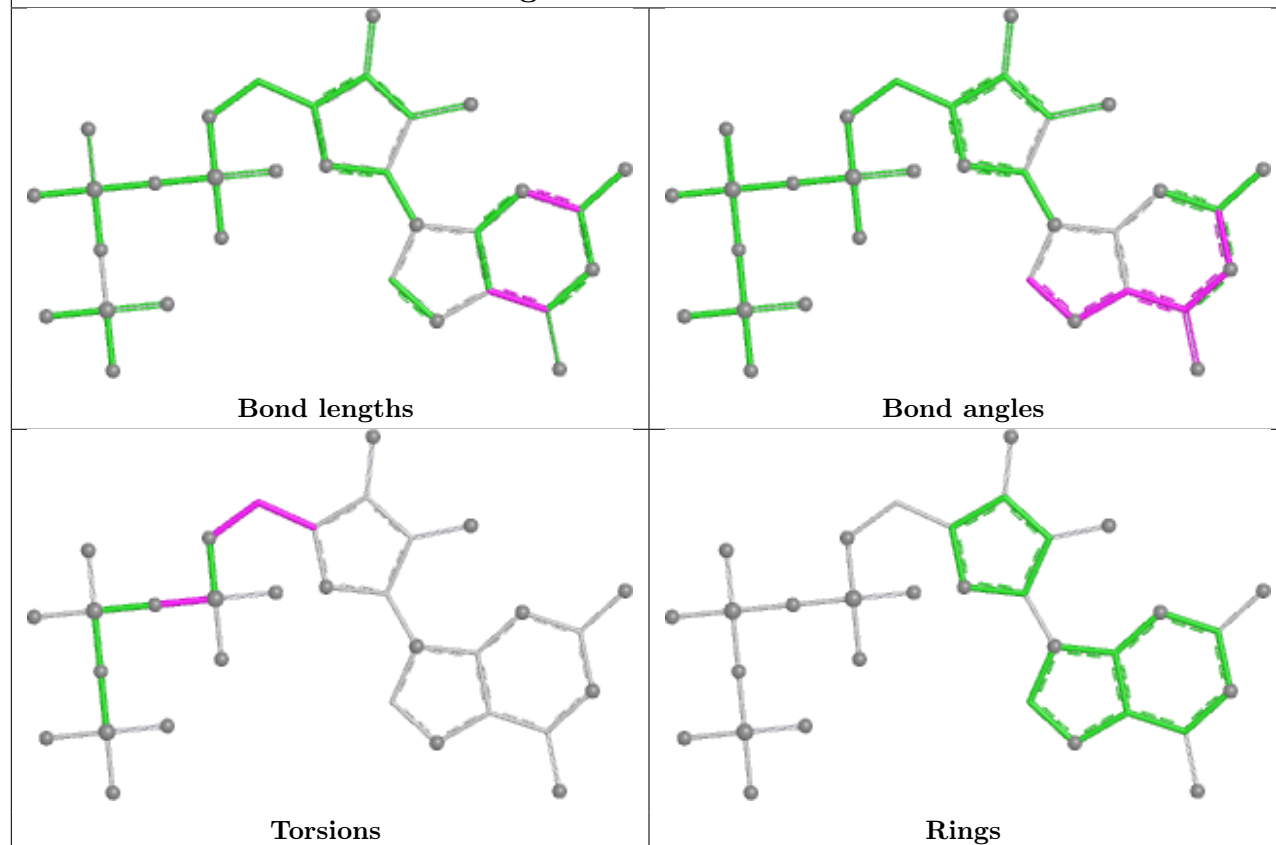




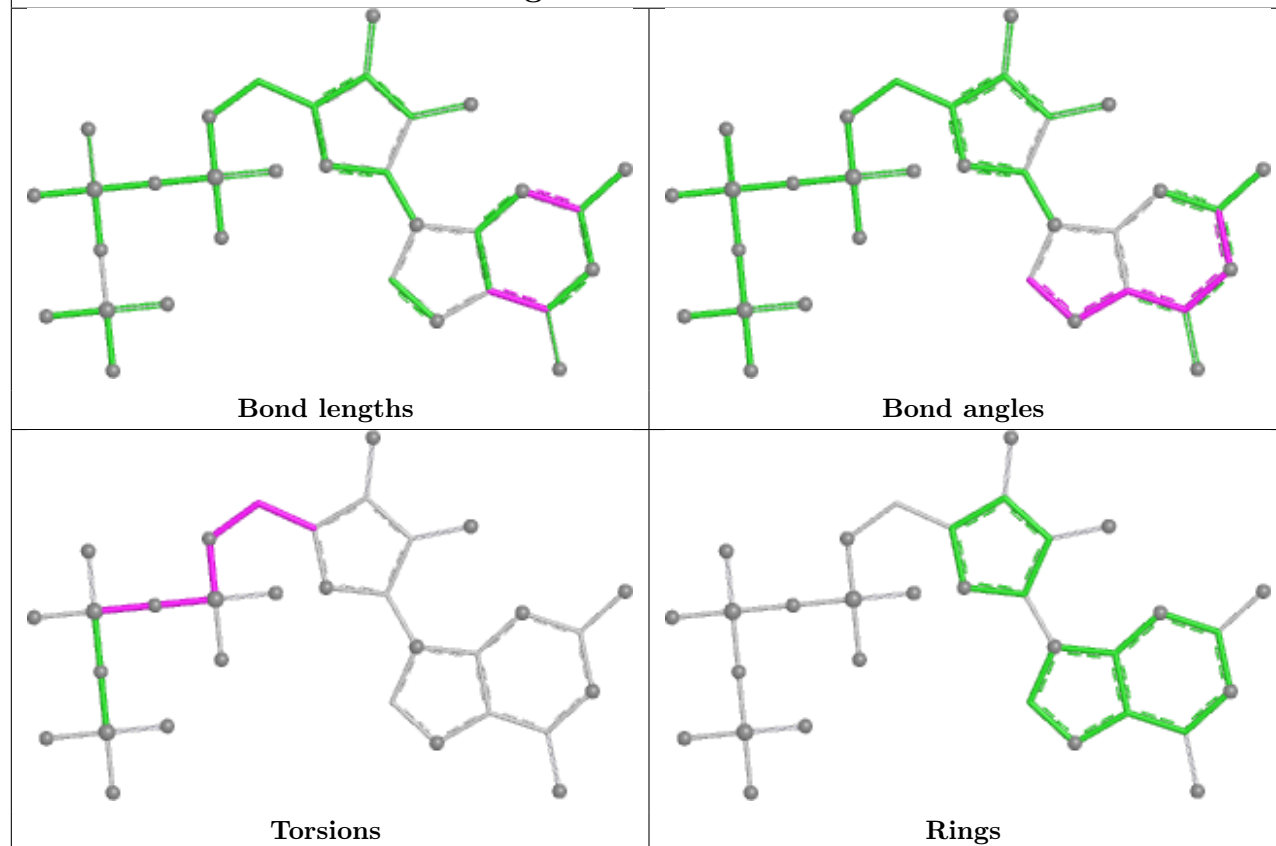




## Ligand GTP SK 501

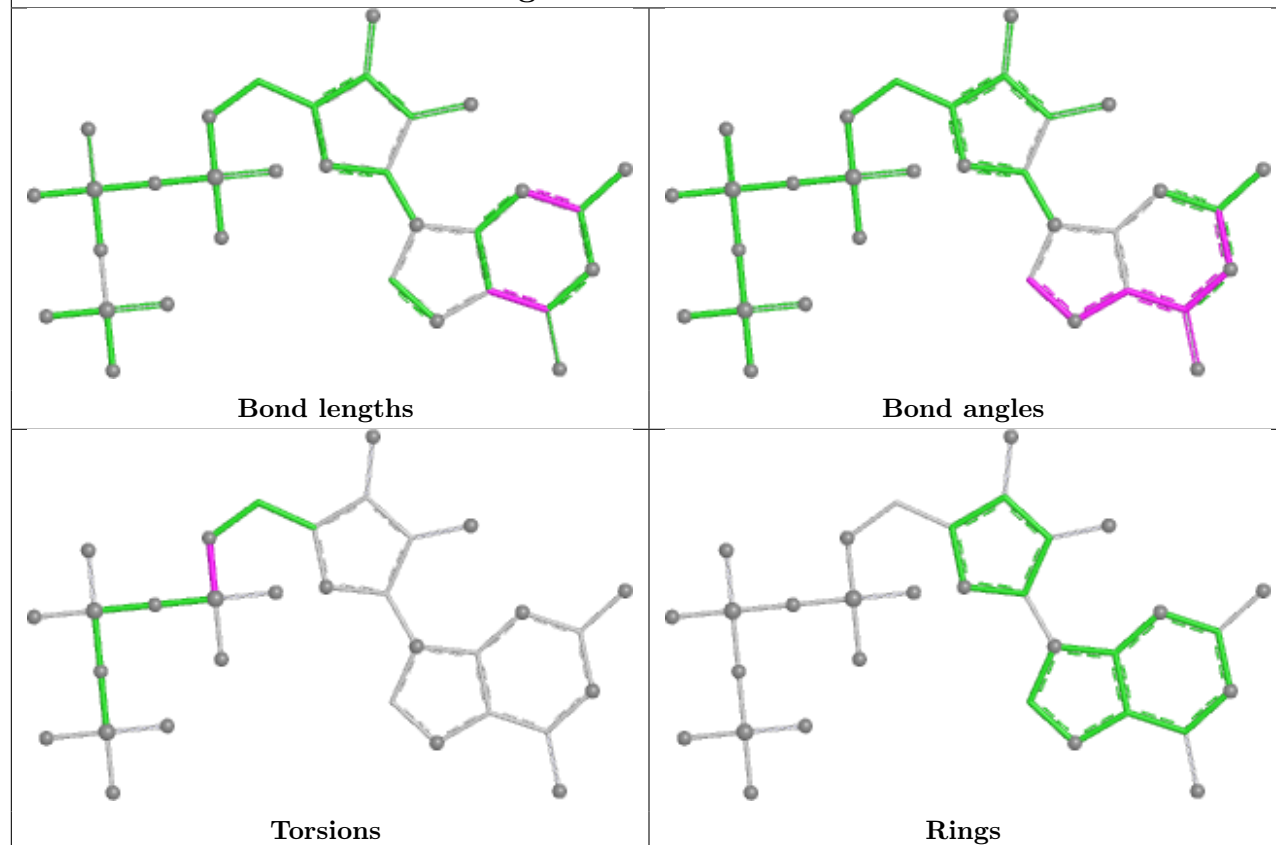


## Ligand GTP TI 501

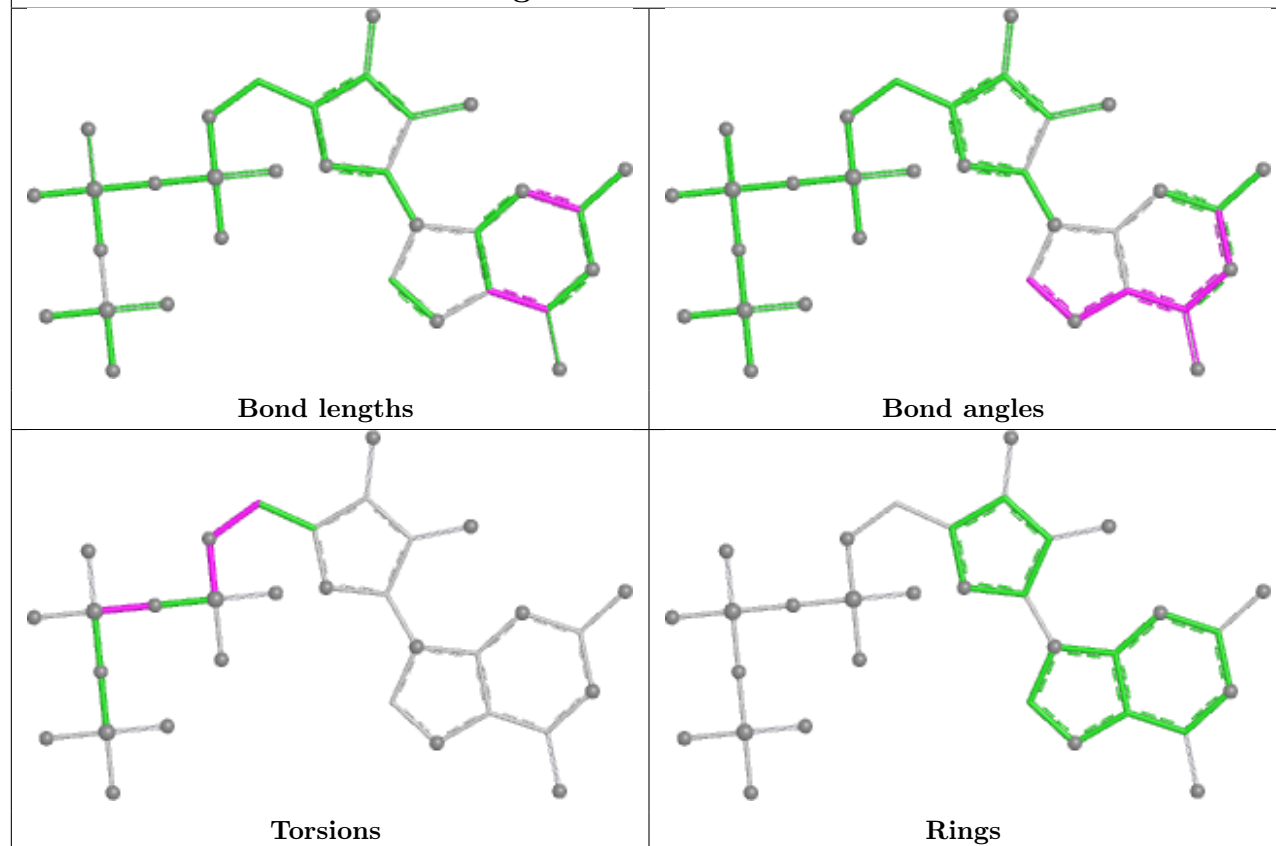




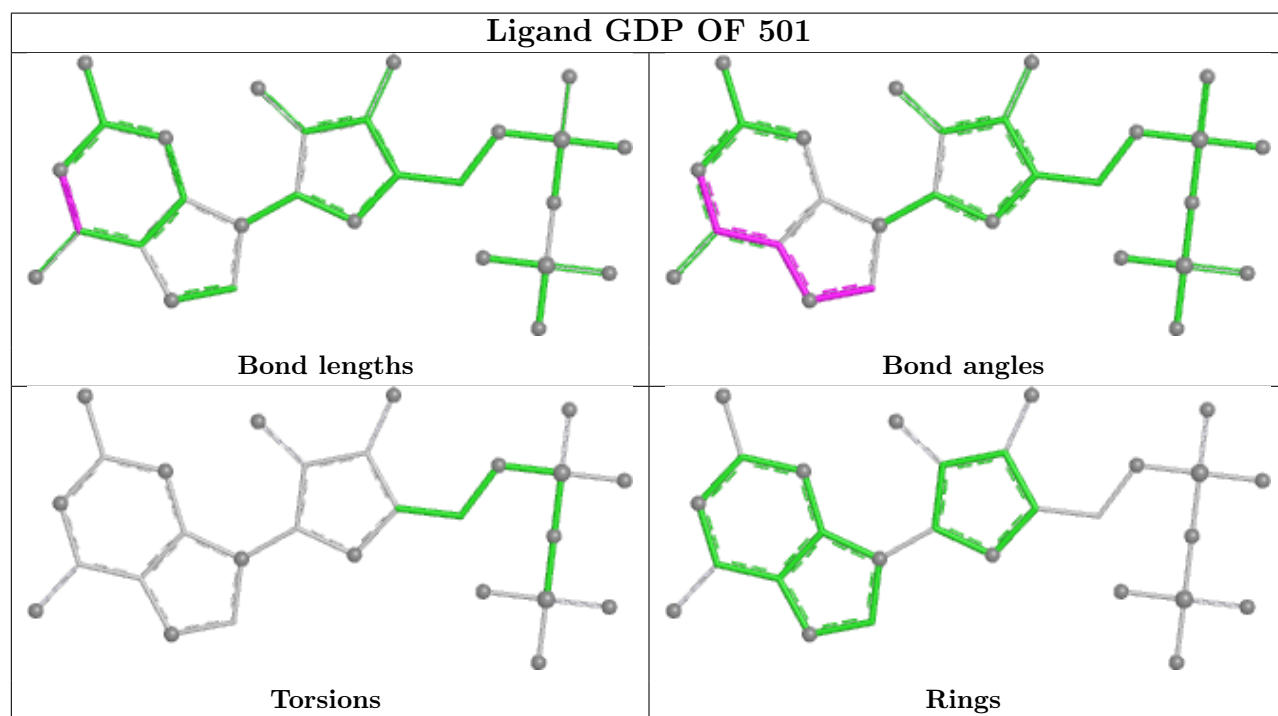
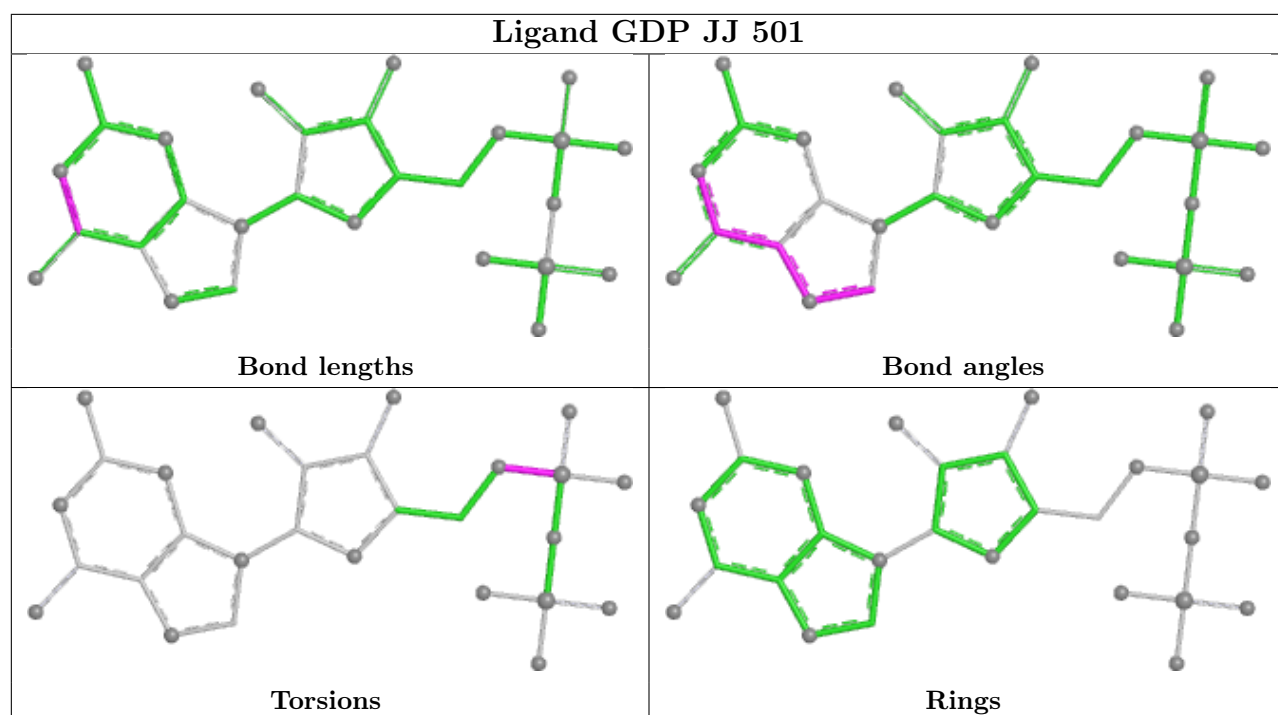
## Ligand GTP OE 501



## Ligand GTP VM 501

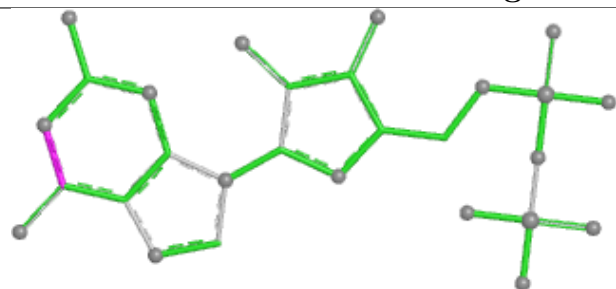




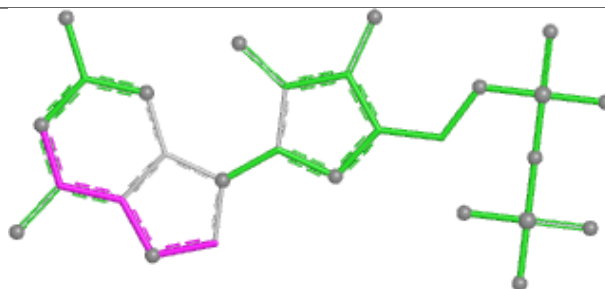




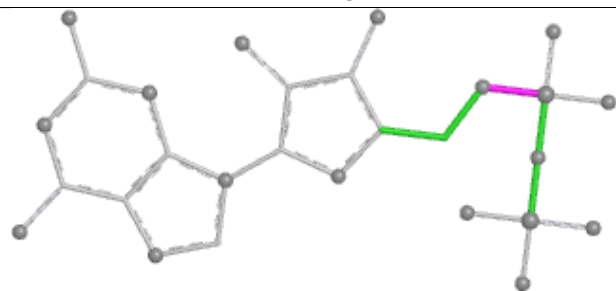
## Ligand GDP EL 501



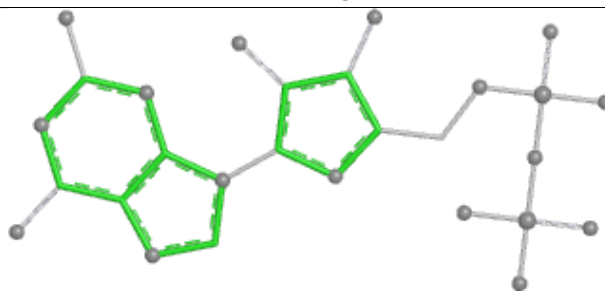
Bond lengths



Bond angles

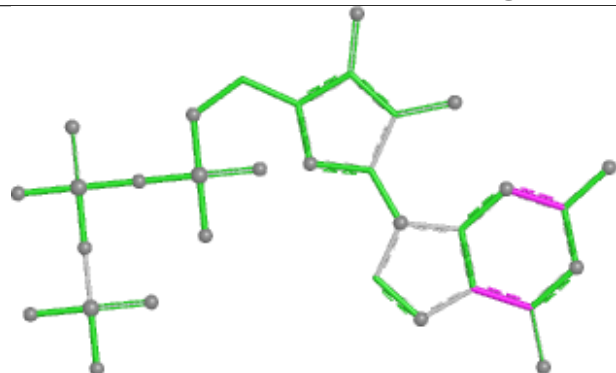


Torsions

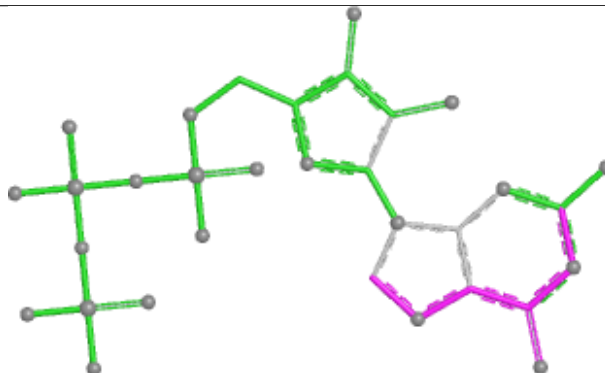


Rings

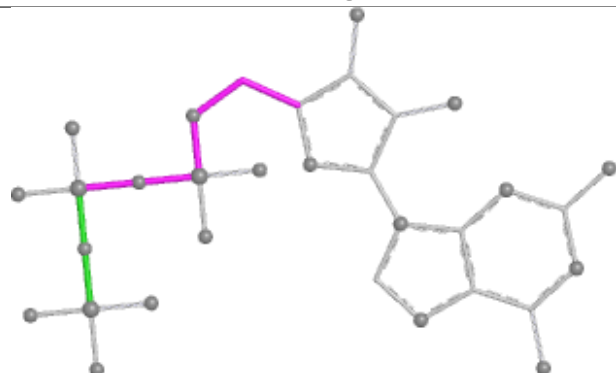
## Ligand GTP KA 501



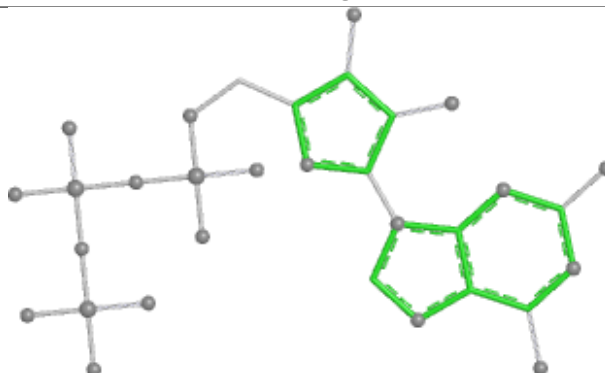
Bond lengths



Bond angles



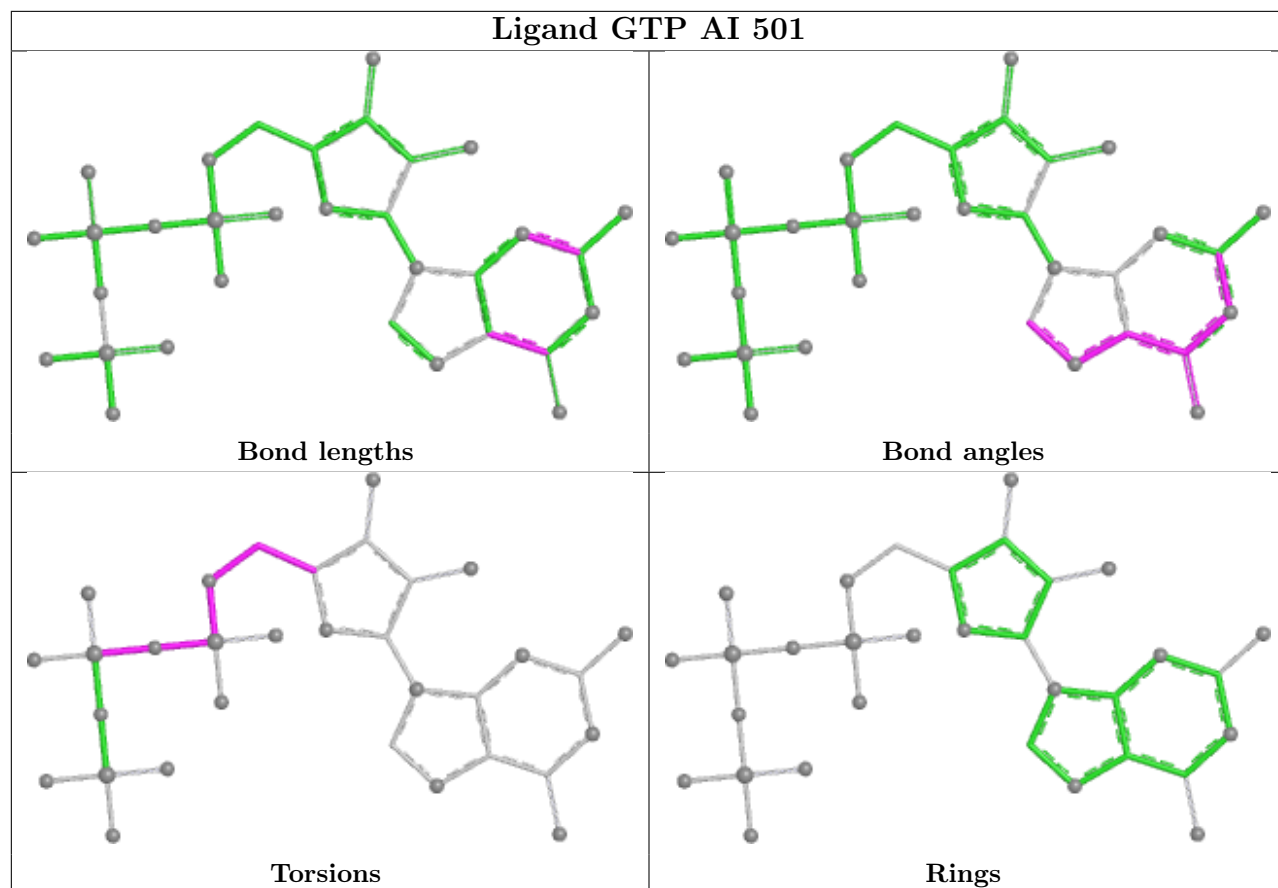
Torsions



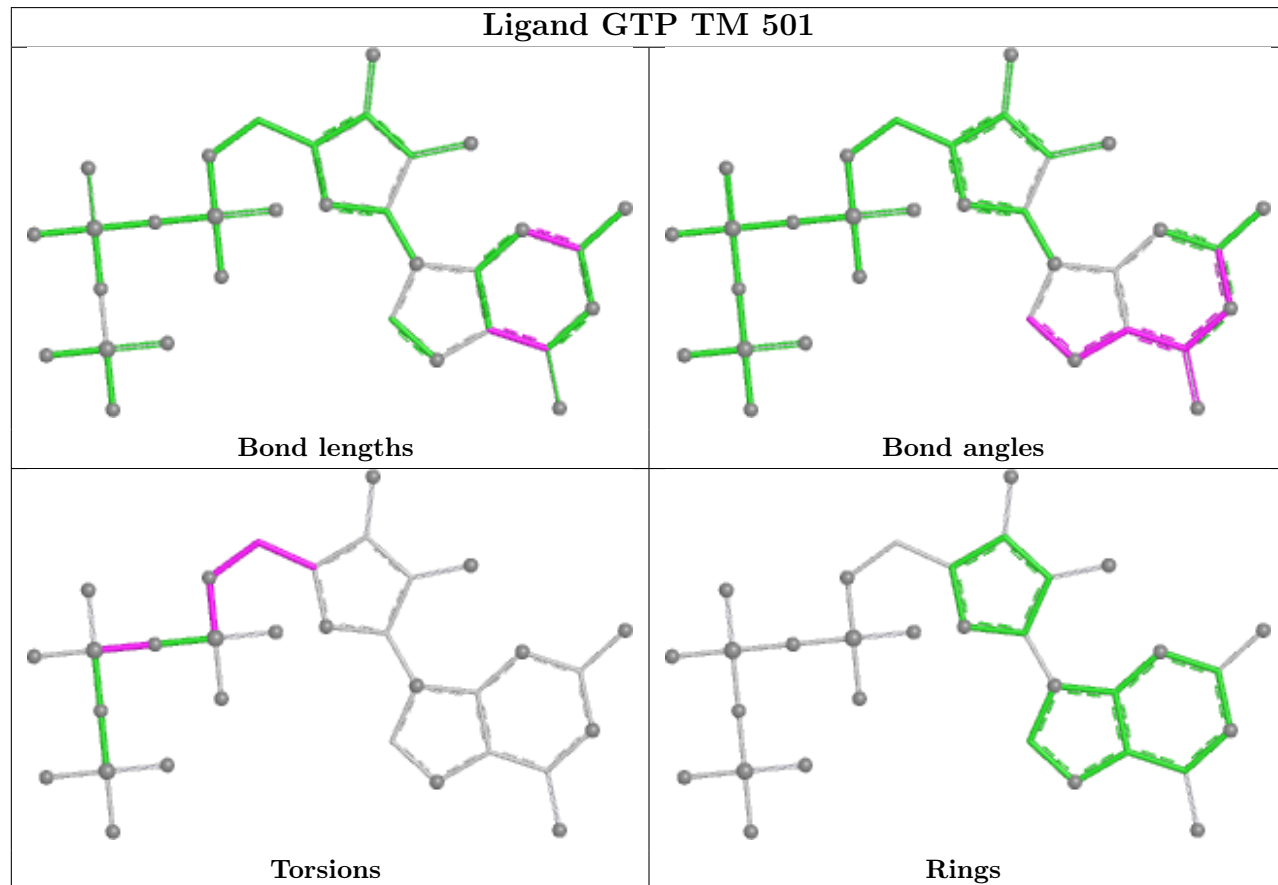
Rings



## Ligand GTP AI 501

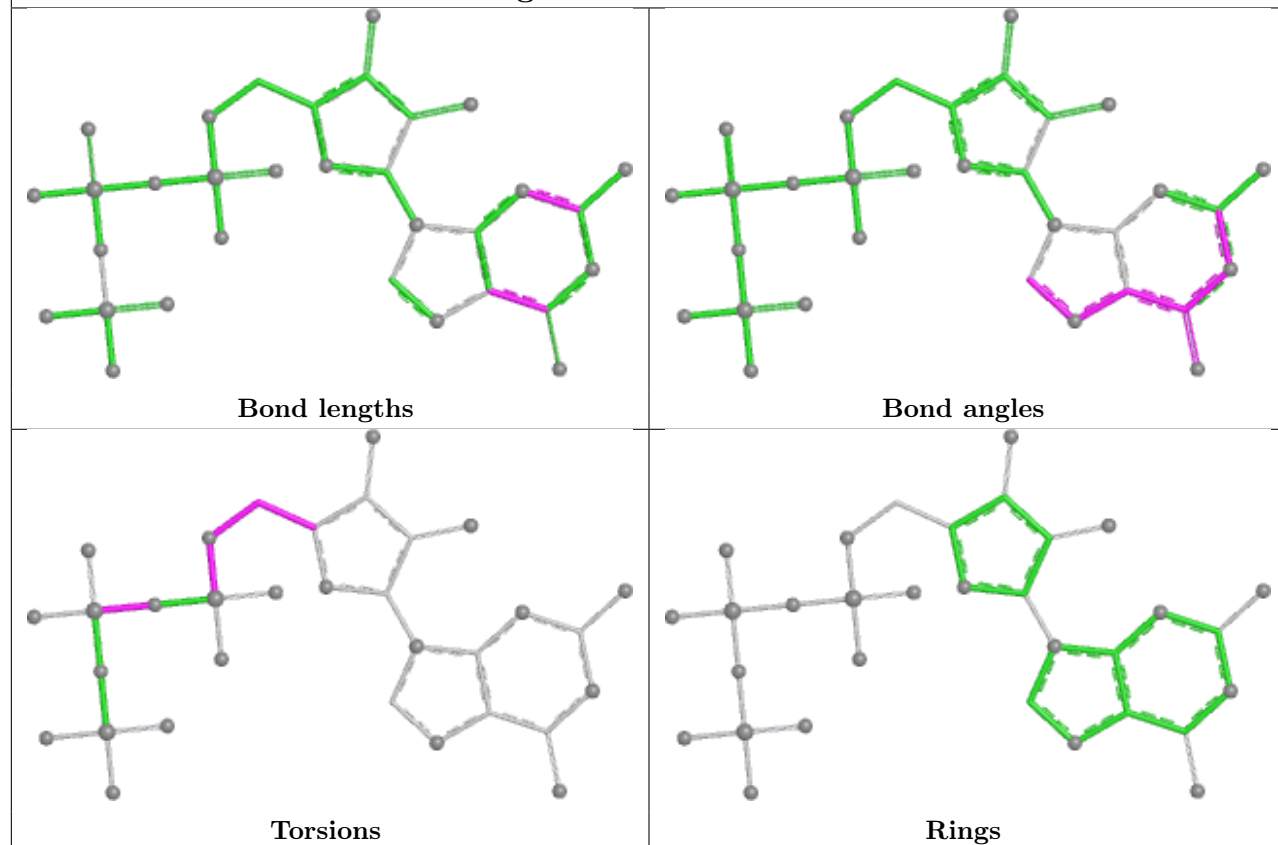


## Ligand GTP TM 501

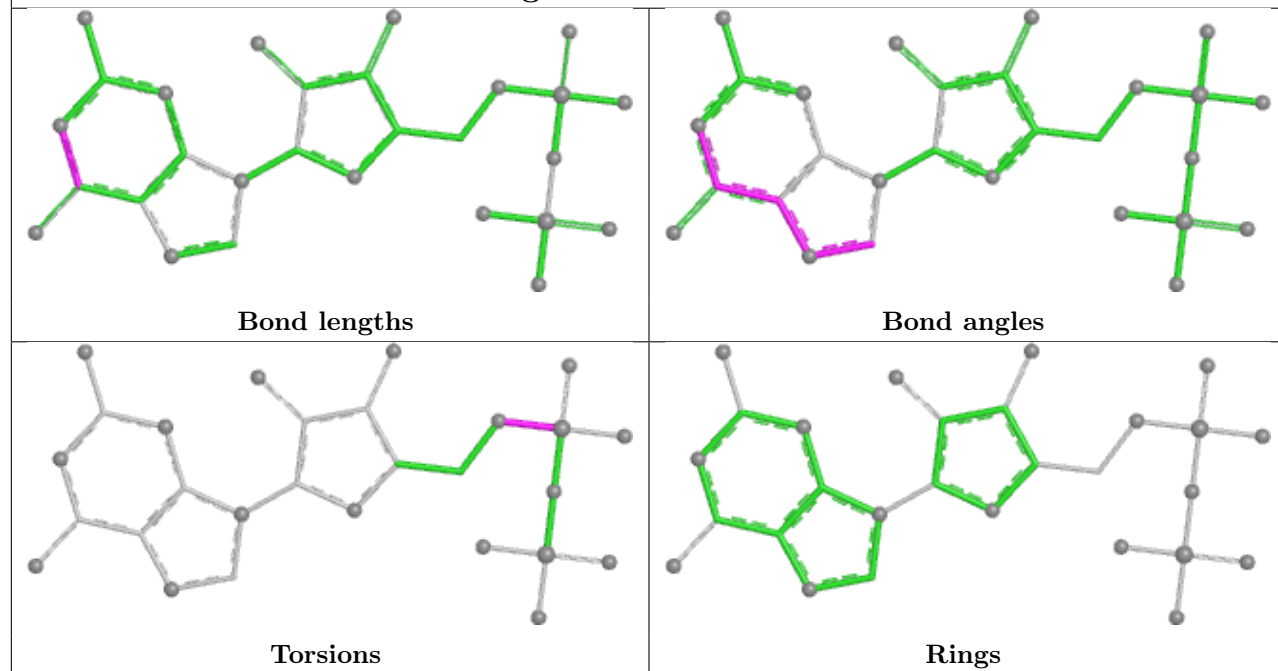




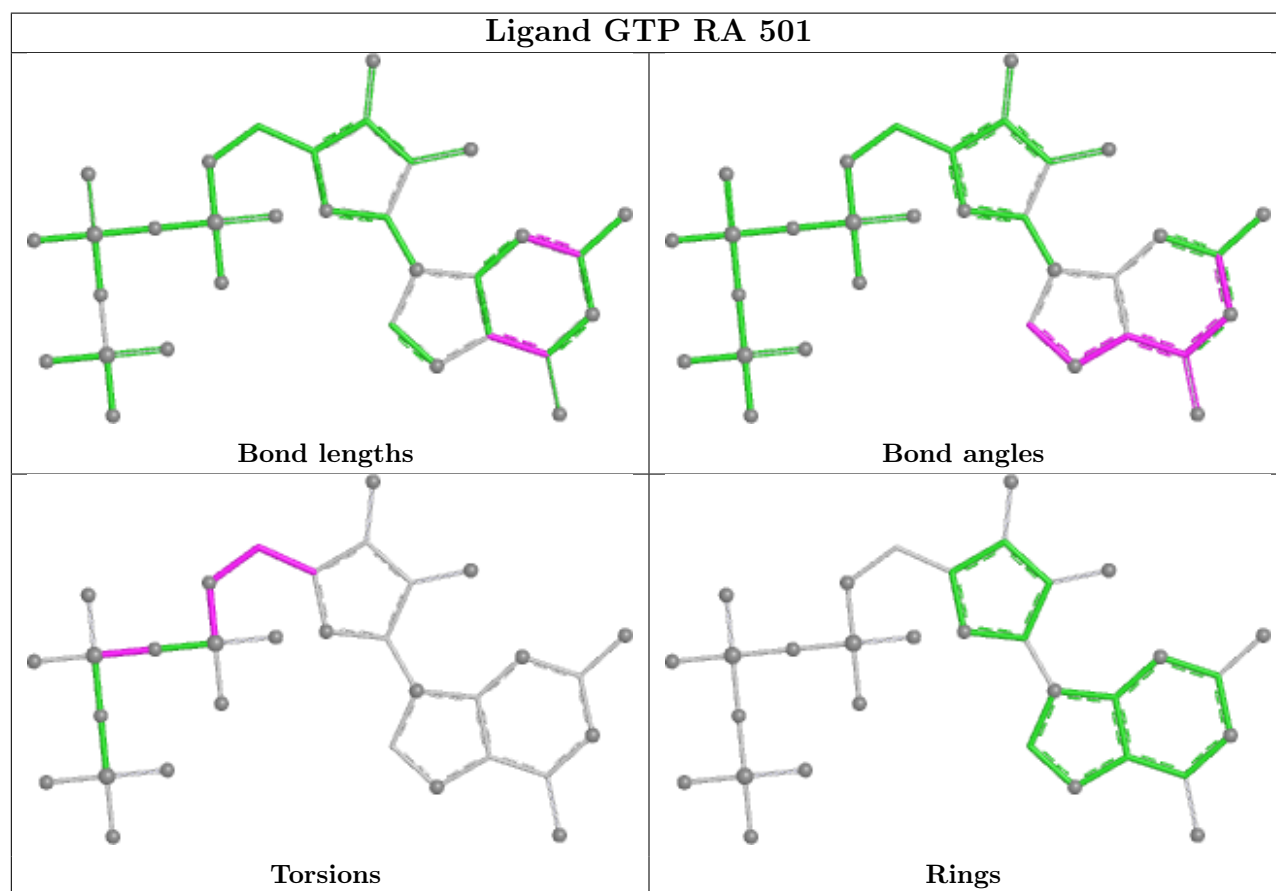
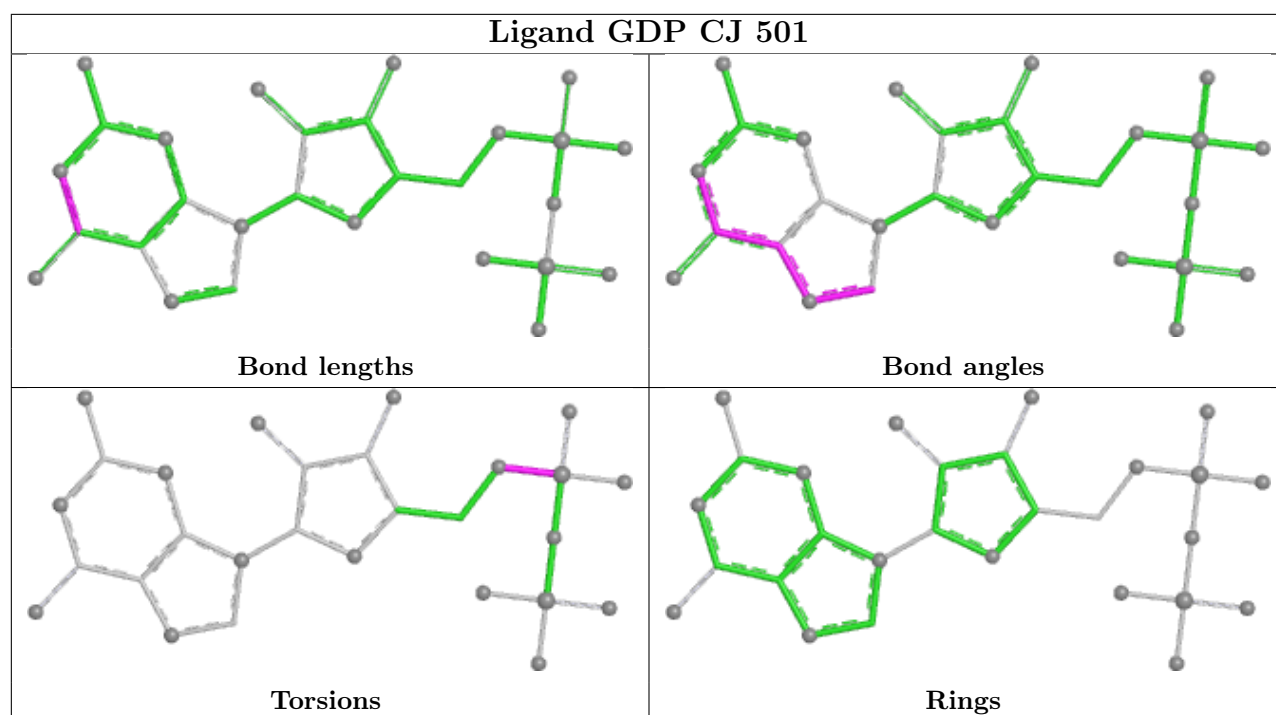
## Ligand GTP BG 501



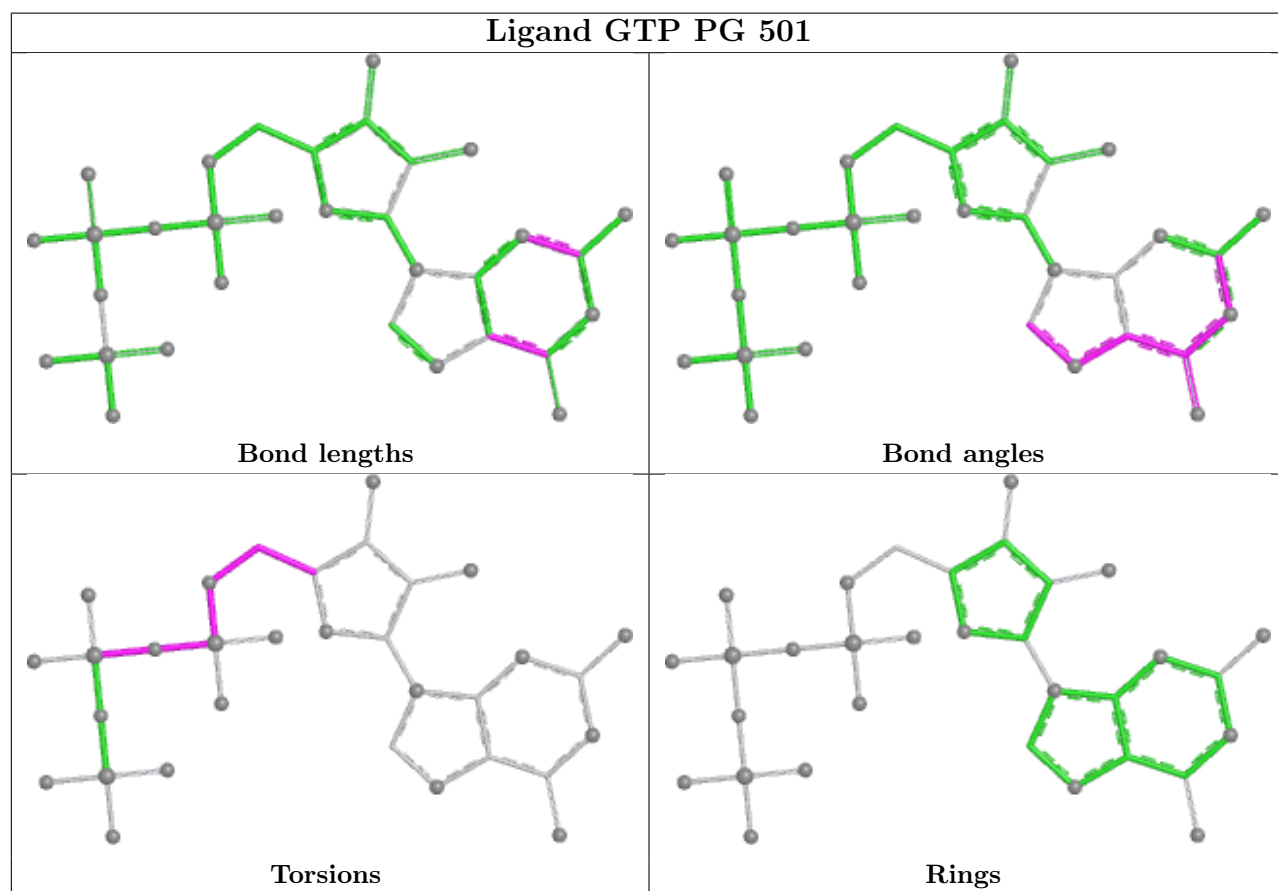
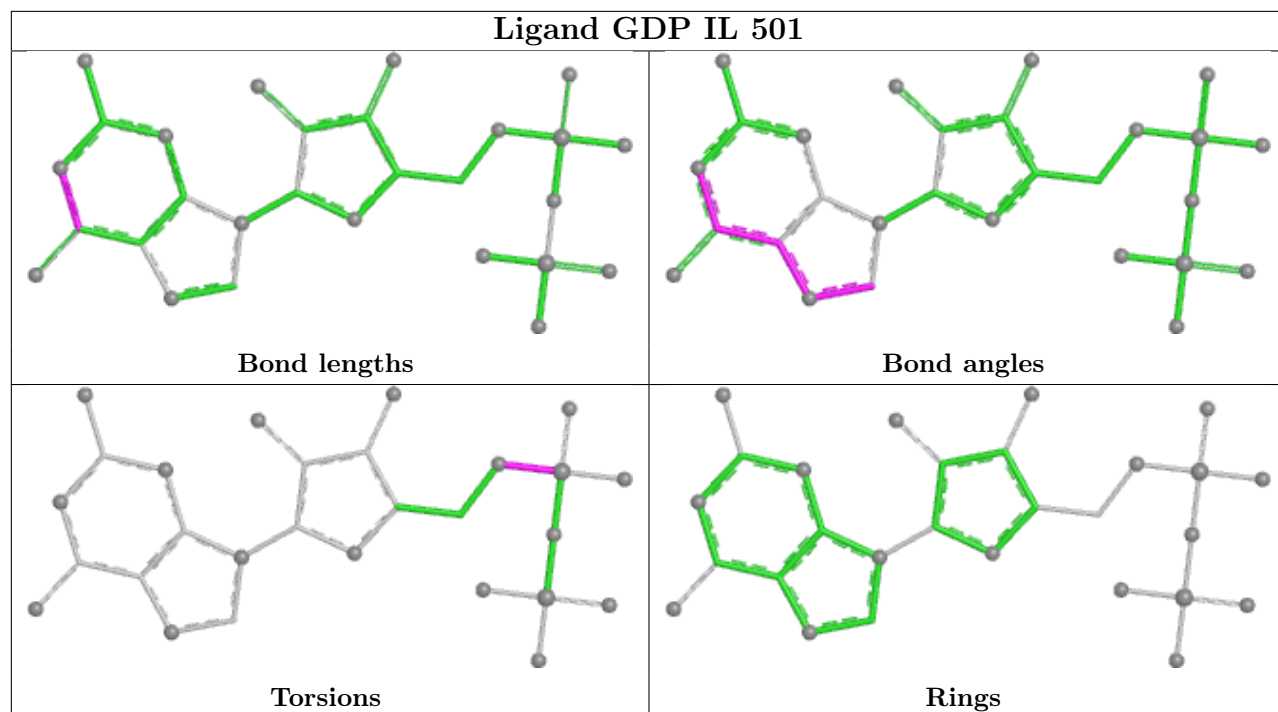
## Ligand GDP JF 501





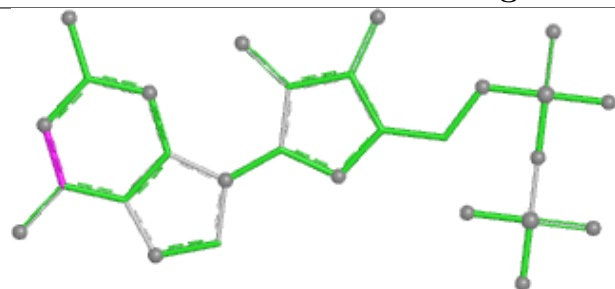




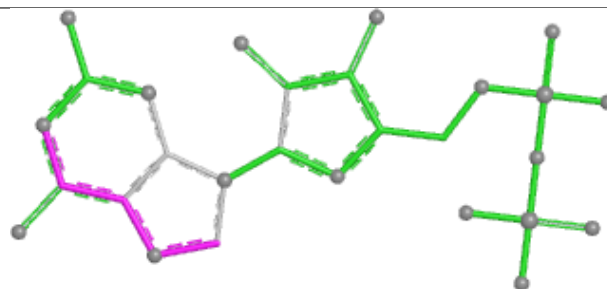




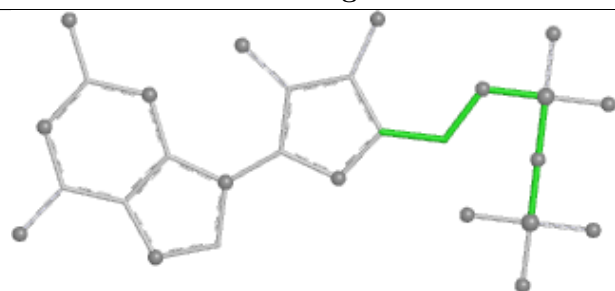
## Ligand GDP VB 501



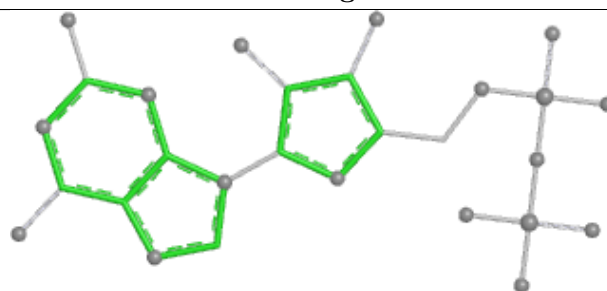
Bond lengths



Bond angles

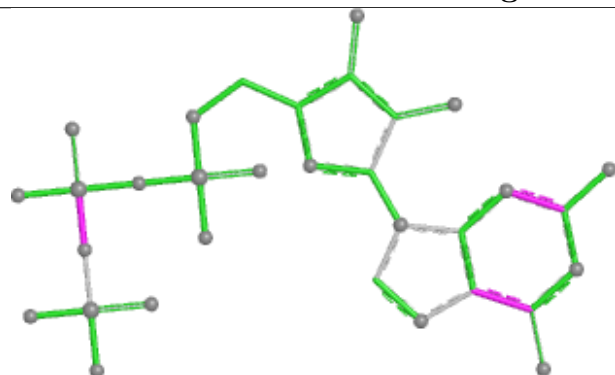


Torsions

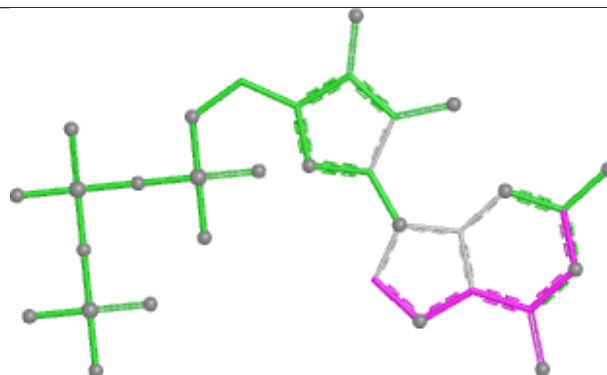


Rings

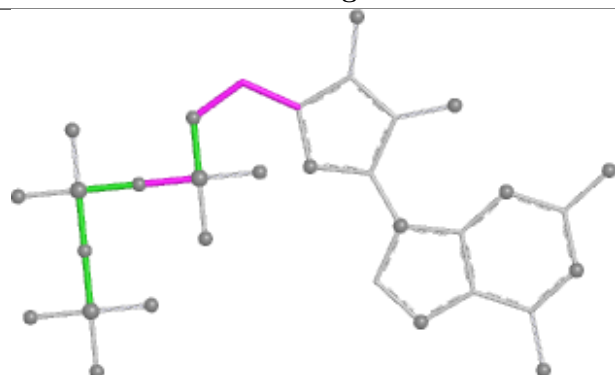
## Ligand GTP AA 501



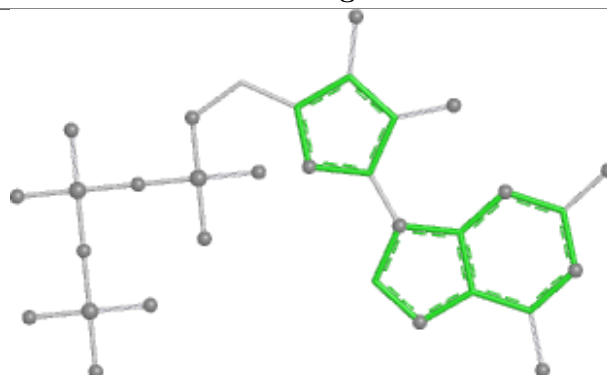
Bond lengths



Bond angles



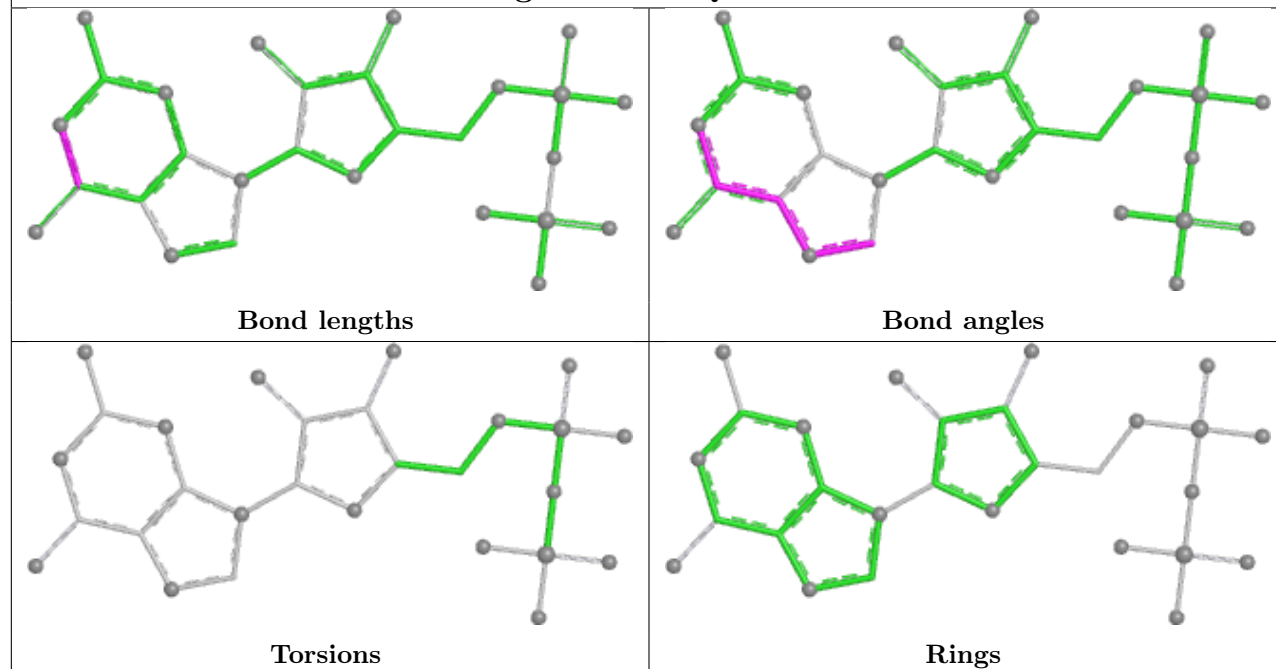
Torsions



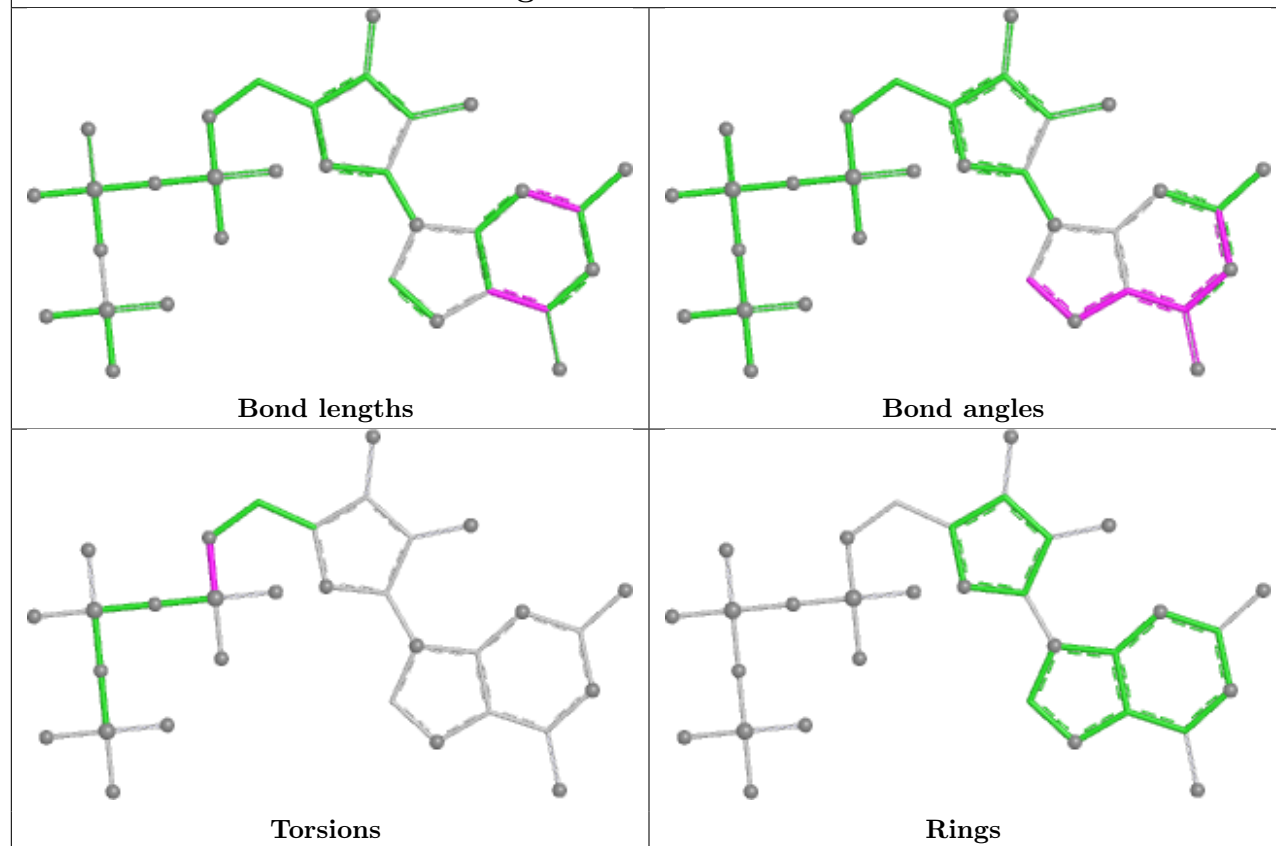
Rings



## Ligand GDP QN 501

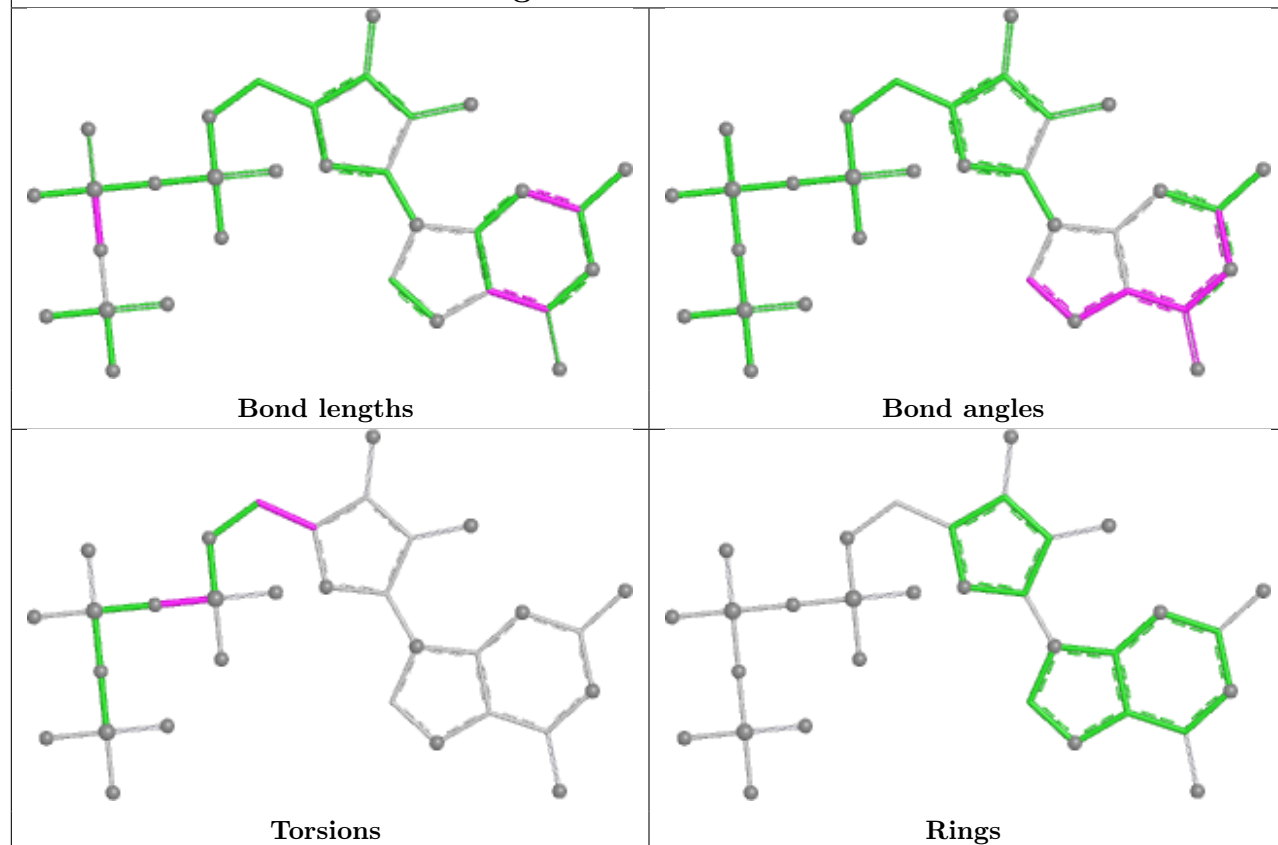


## Ligand GTP OA 501

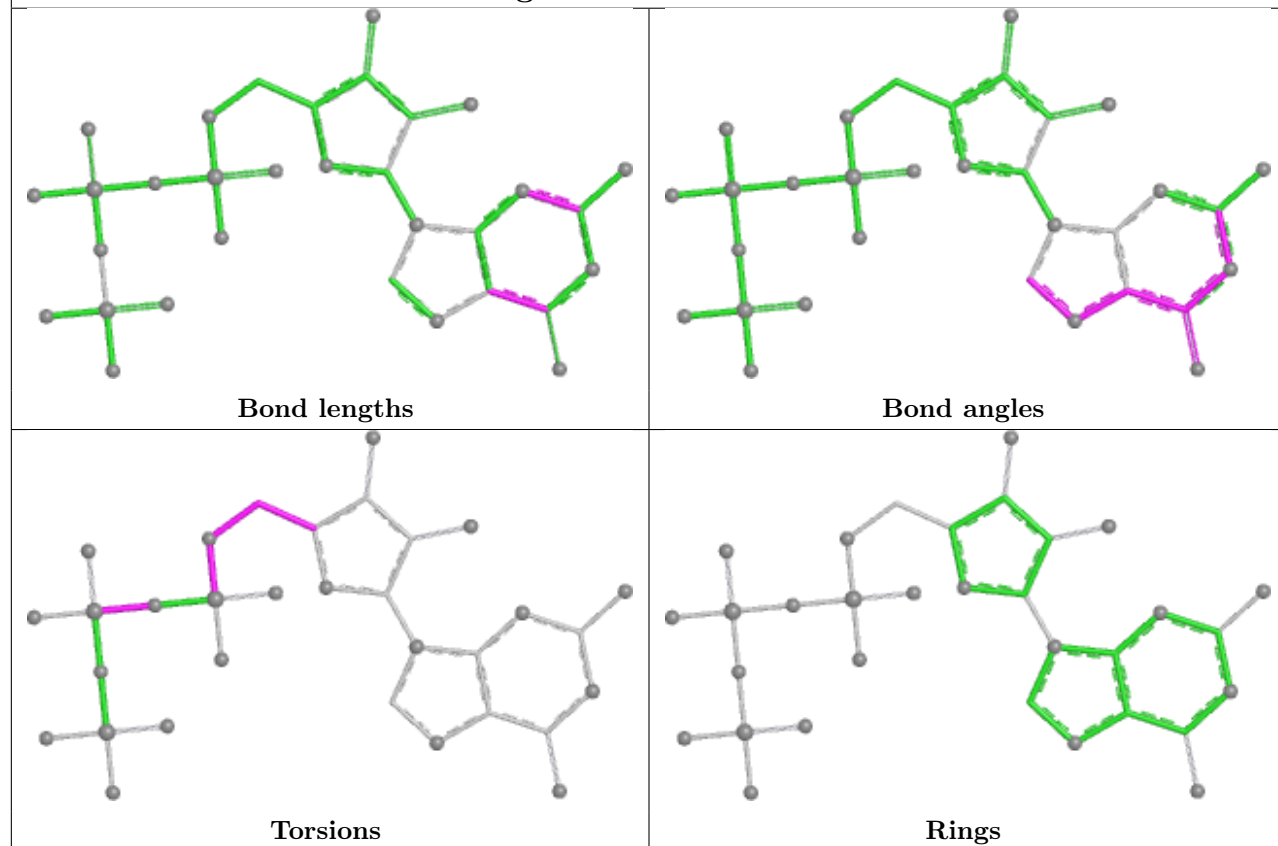




## Ligand GTP WE 501

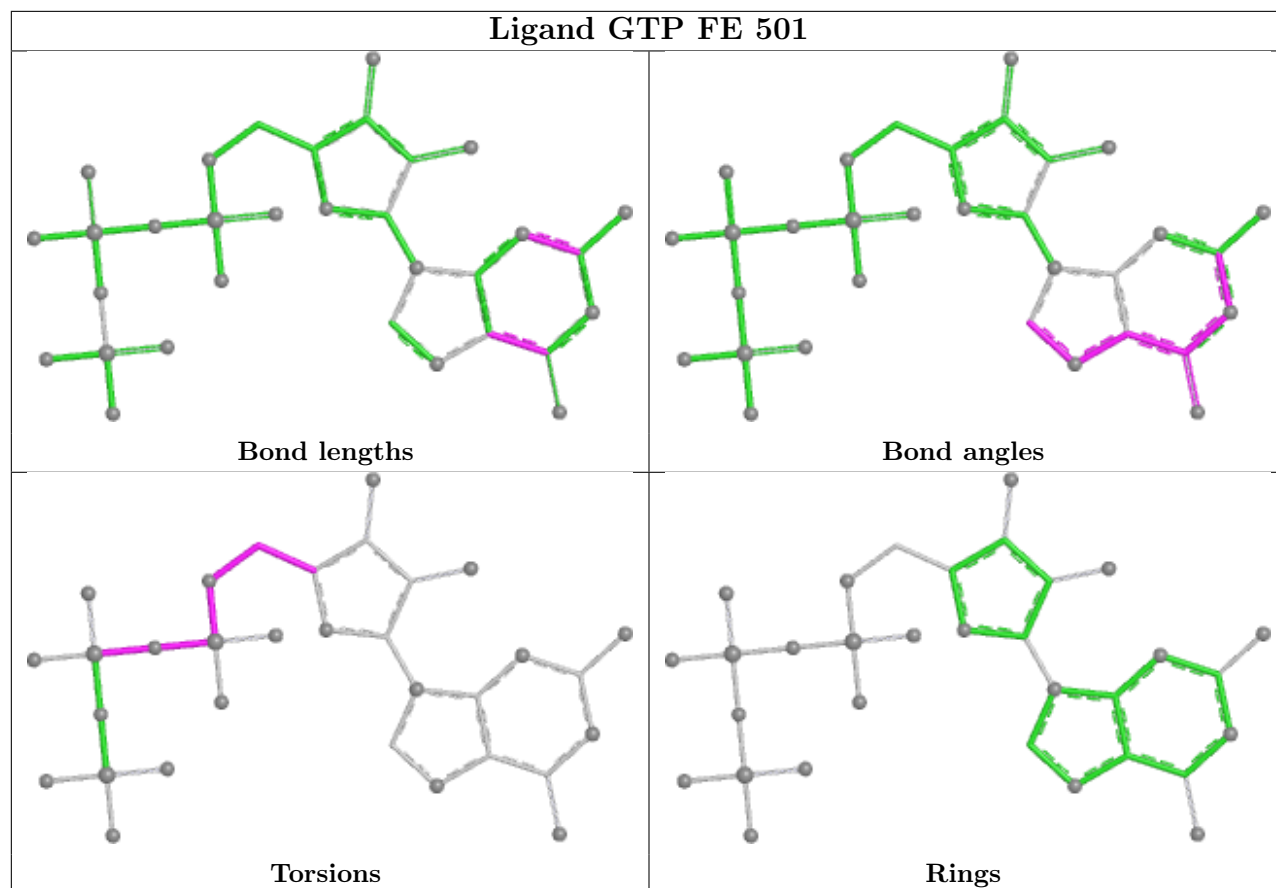


## Ligand GTP LM 501

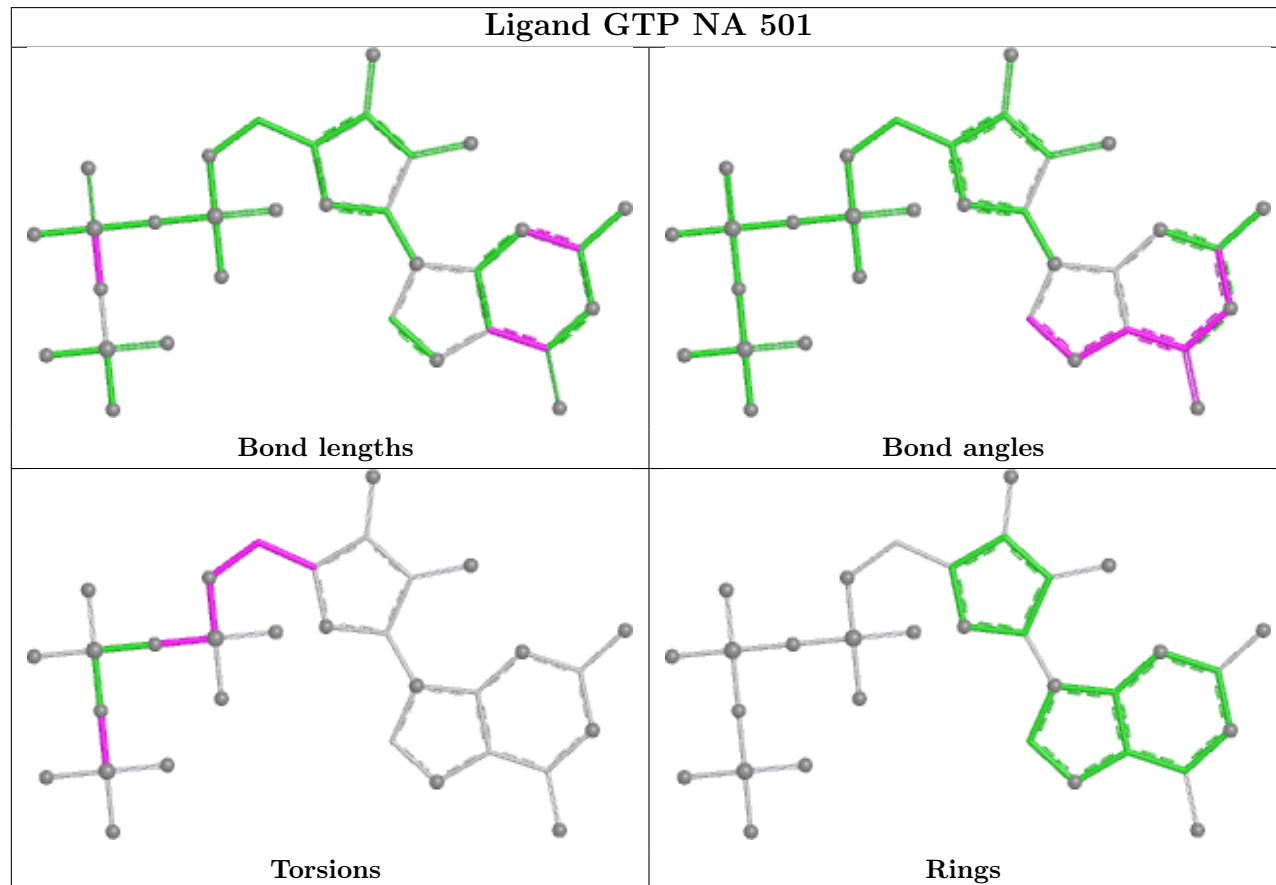




## Ligand GTP FE 501

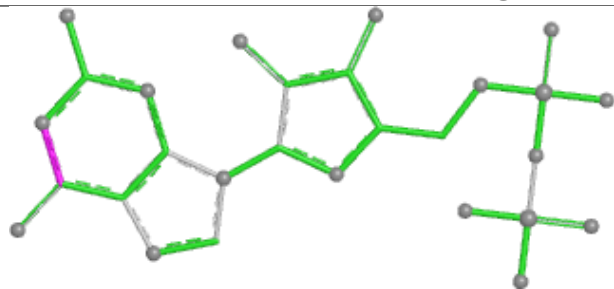


## Ligand GTP NA 501

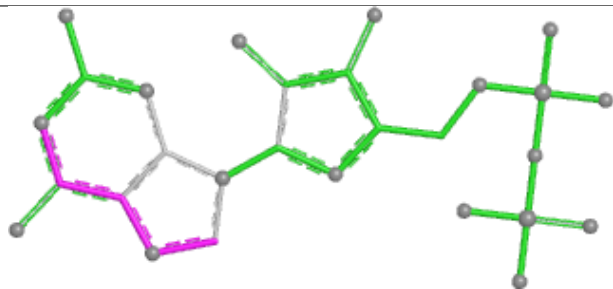




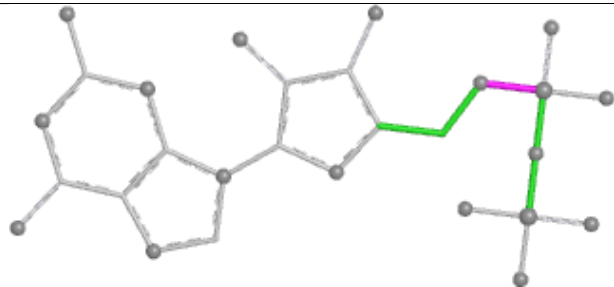
## Ligand GDP WF 501



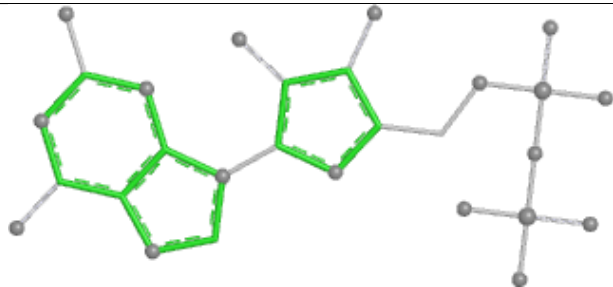
Bond lengths



Bond angles

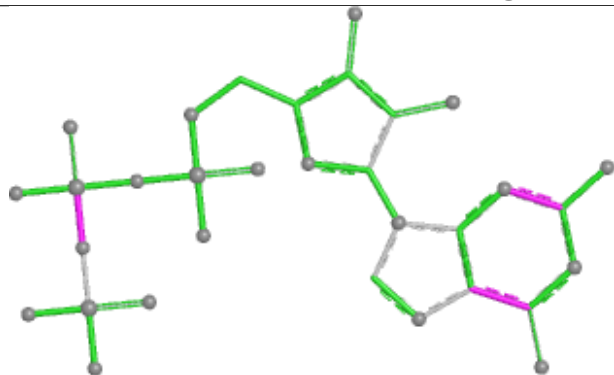


Torsions

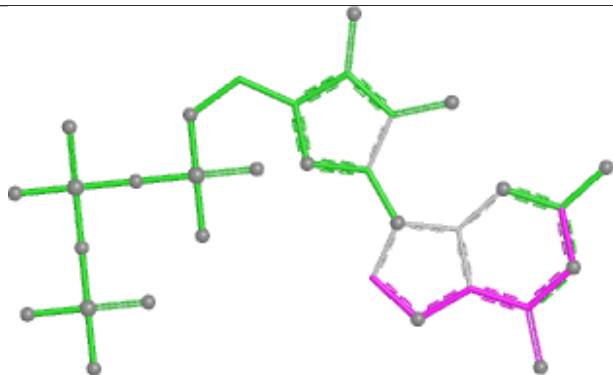


Rings

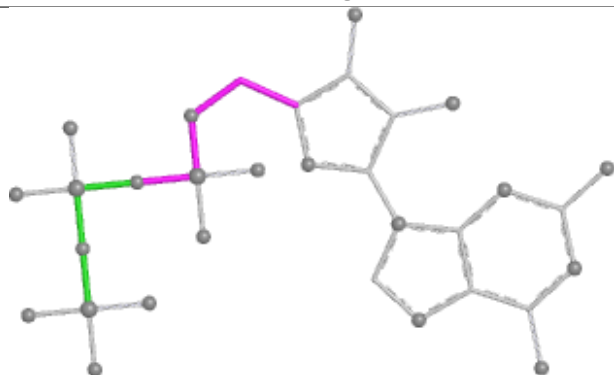
## Ligand GTP NE 501



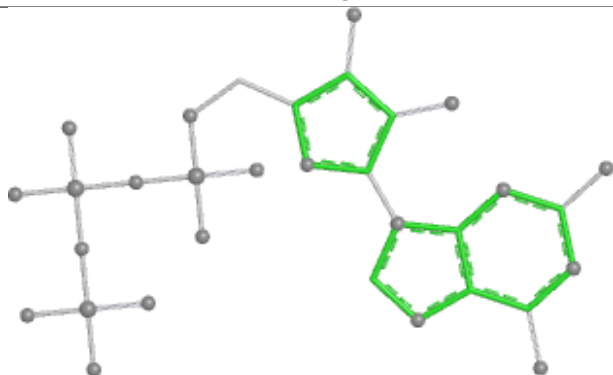
Bond lengths



Bond angles

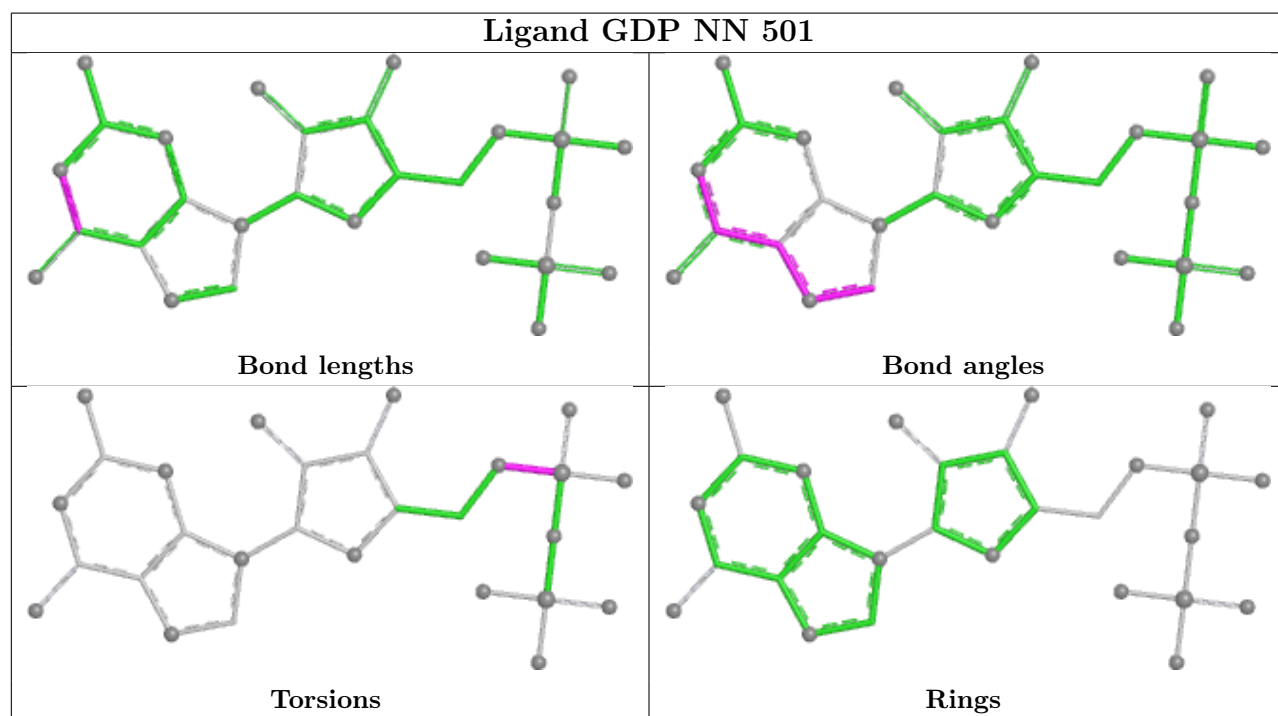
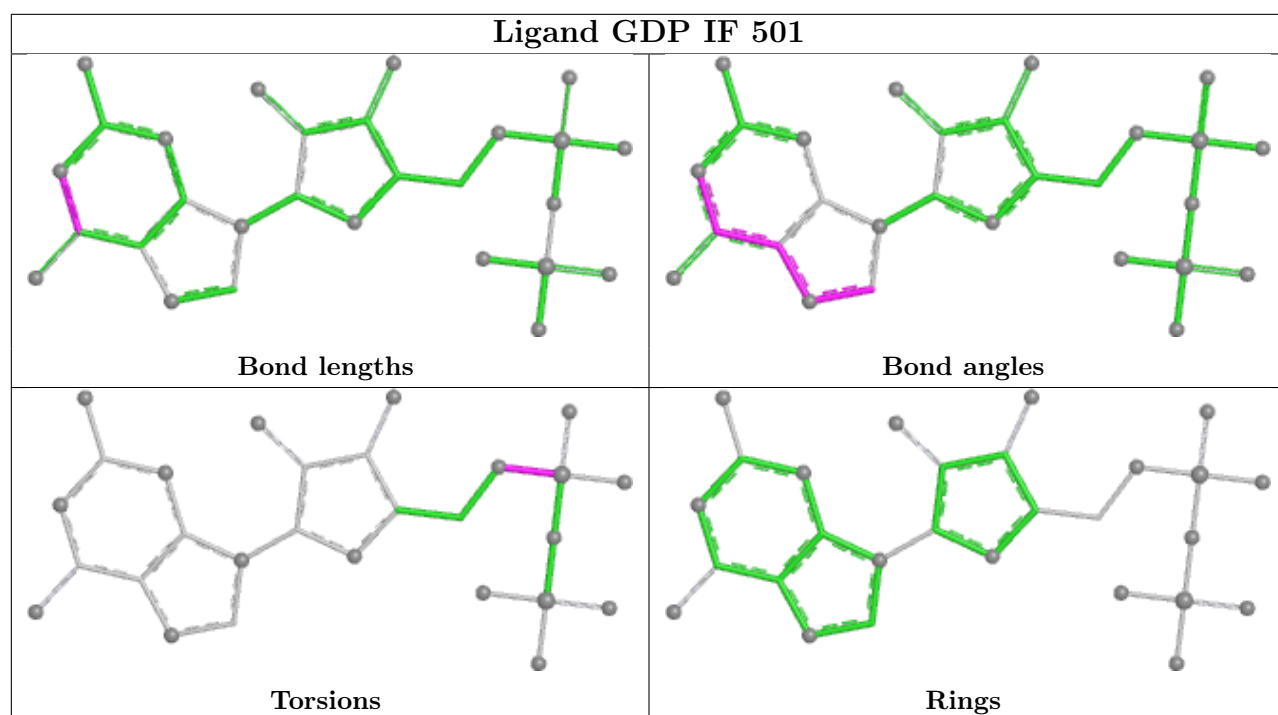


Torsions



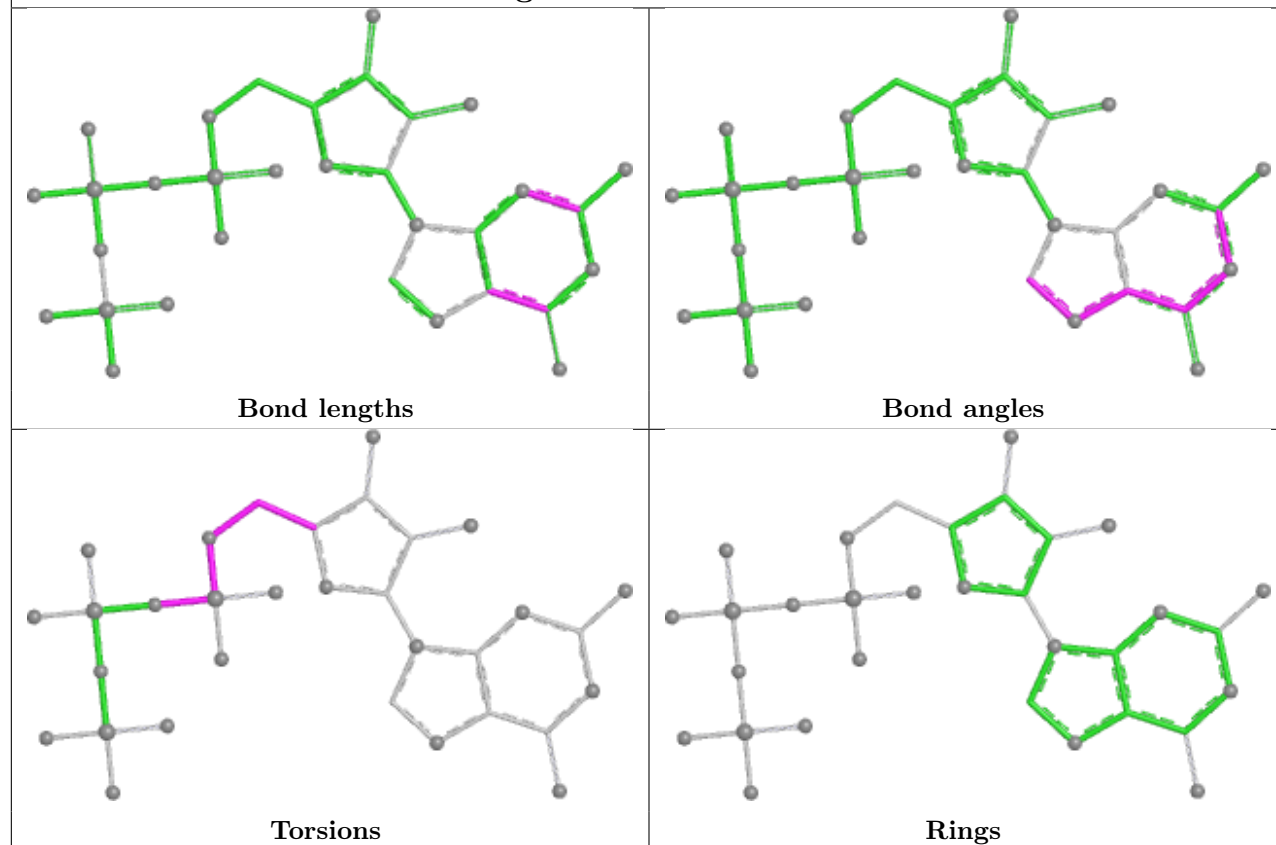
Rings



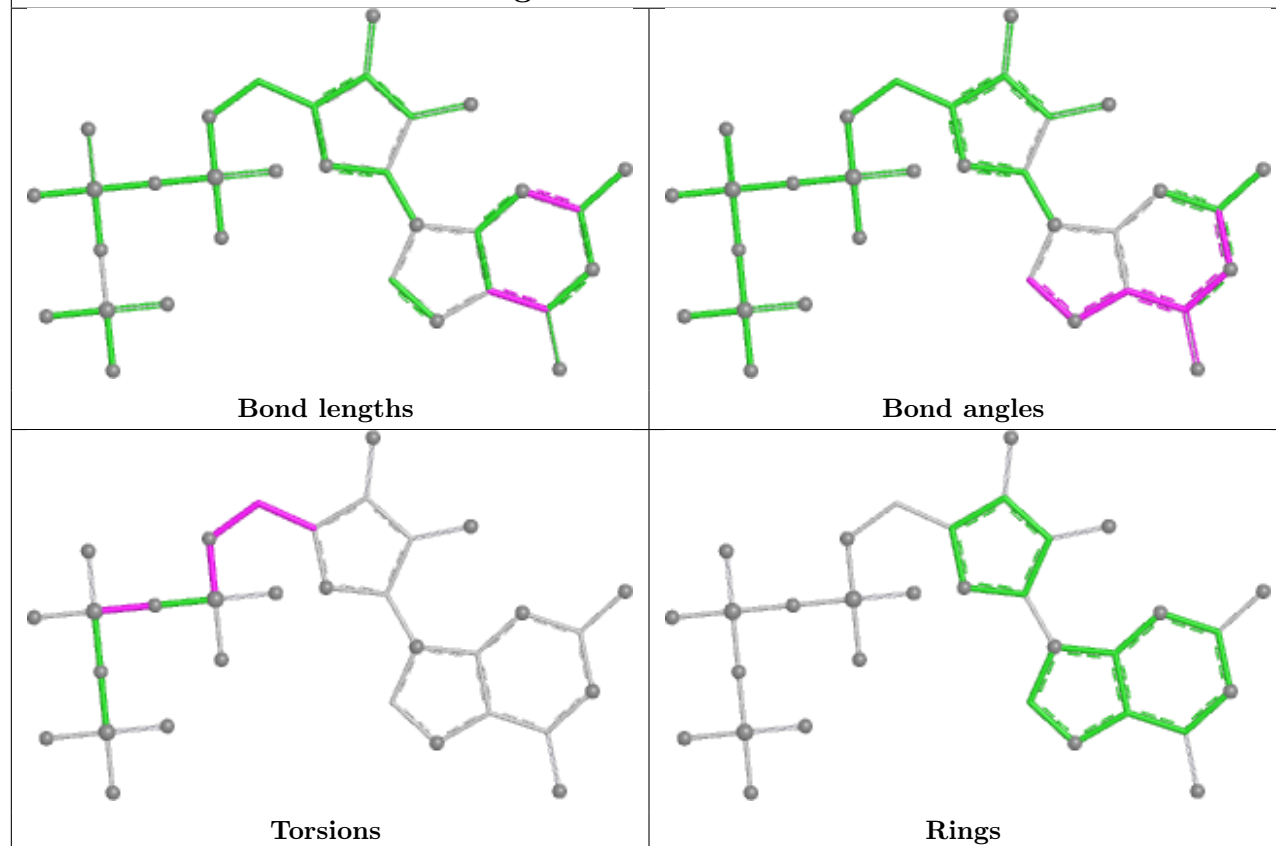




## Ligand GTP UG 501

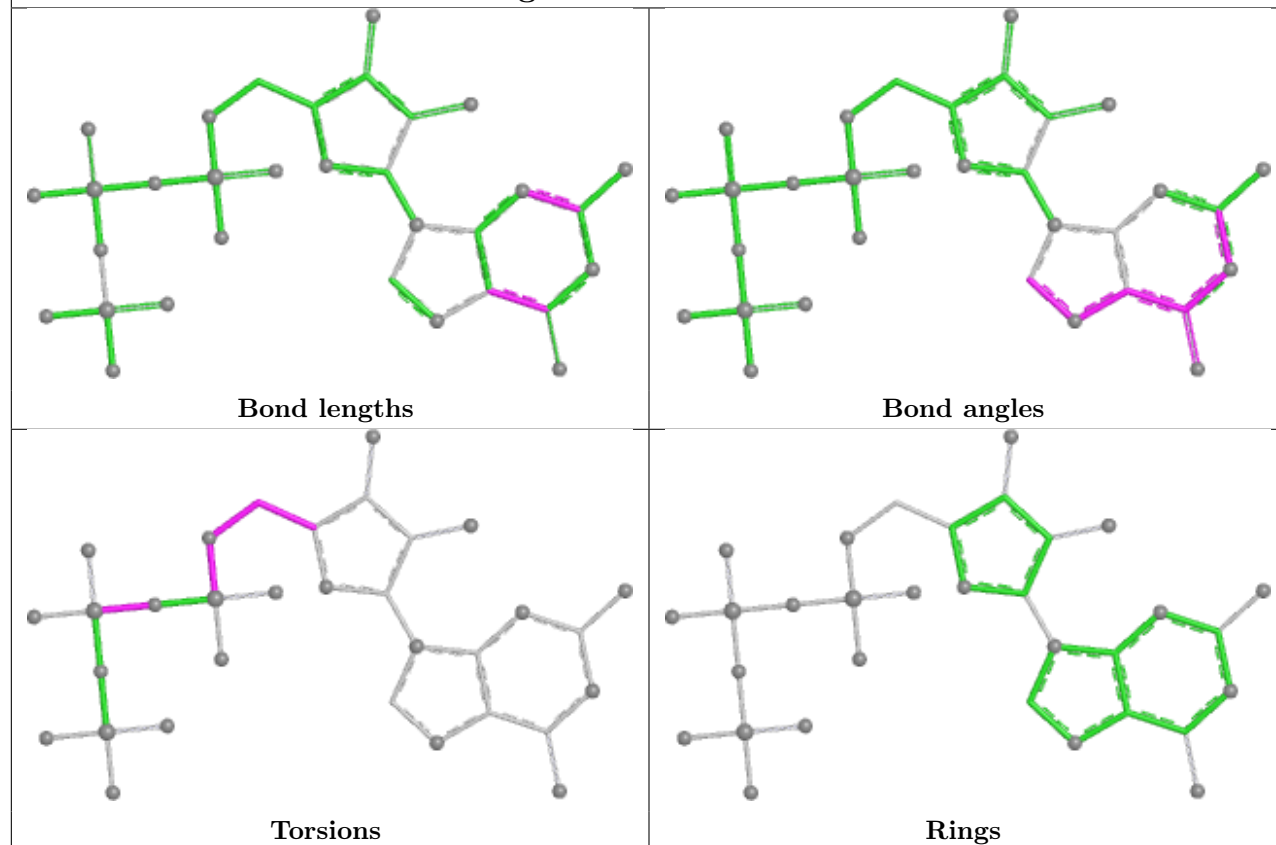


## Ligand GTP BM 501

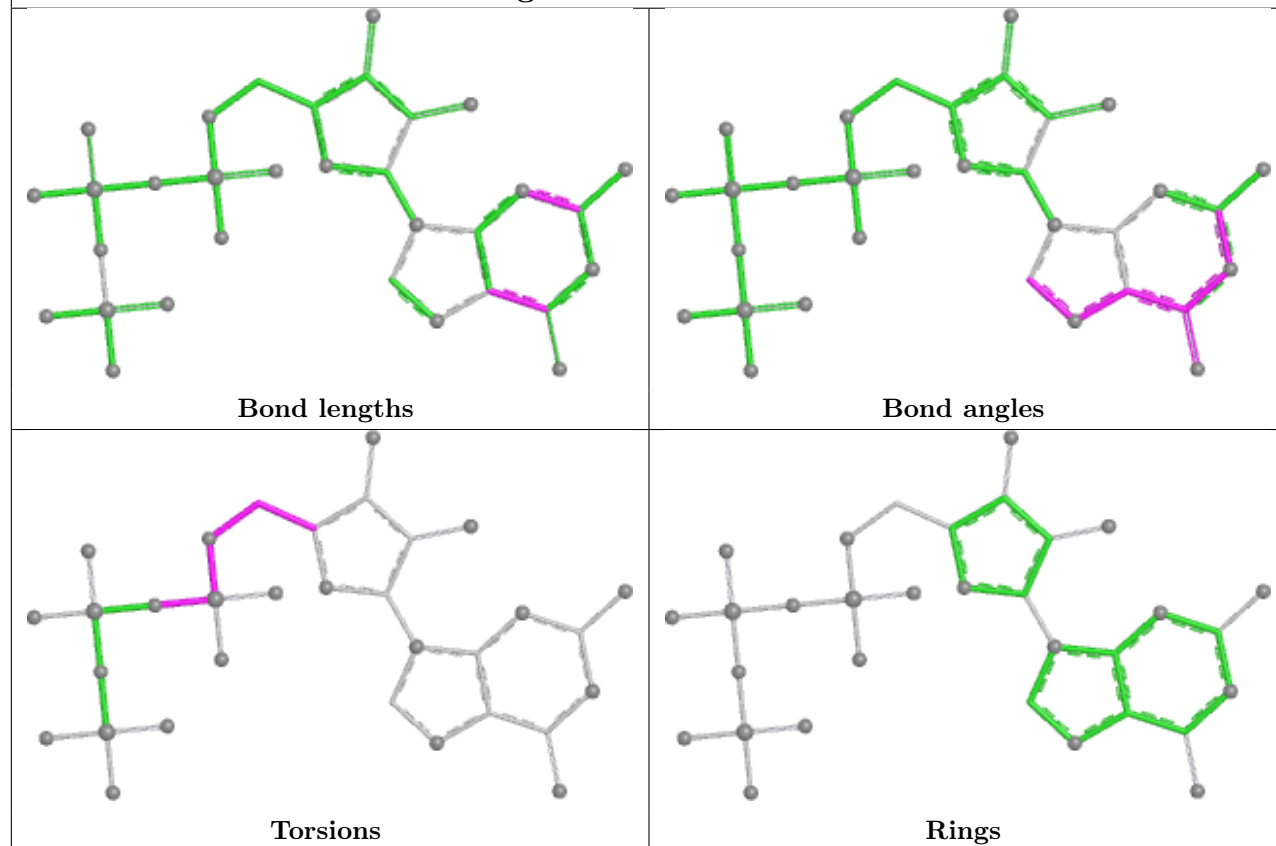




## Ligand GTP FK 501

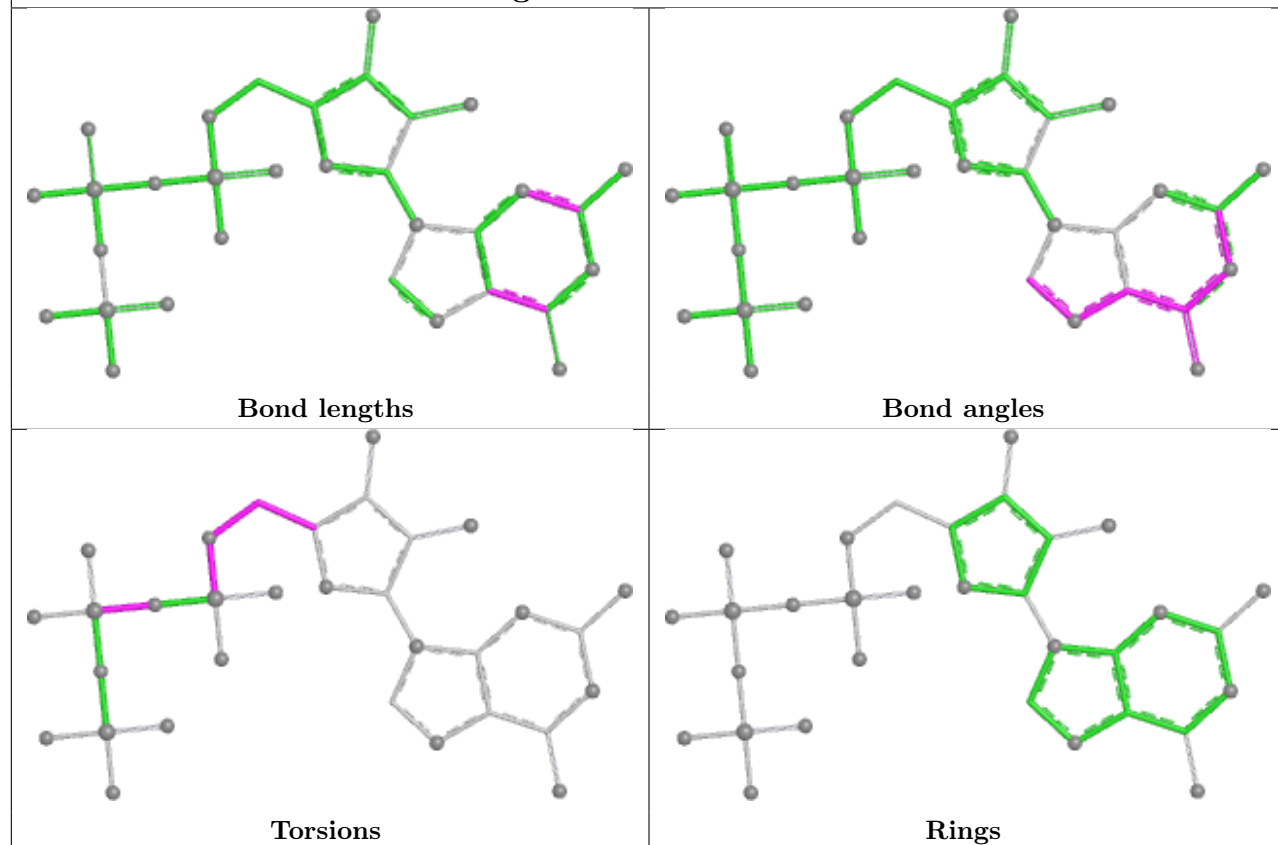


## Ligand GTP CA 501

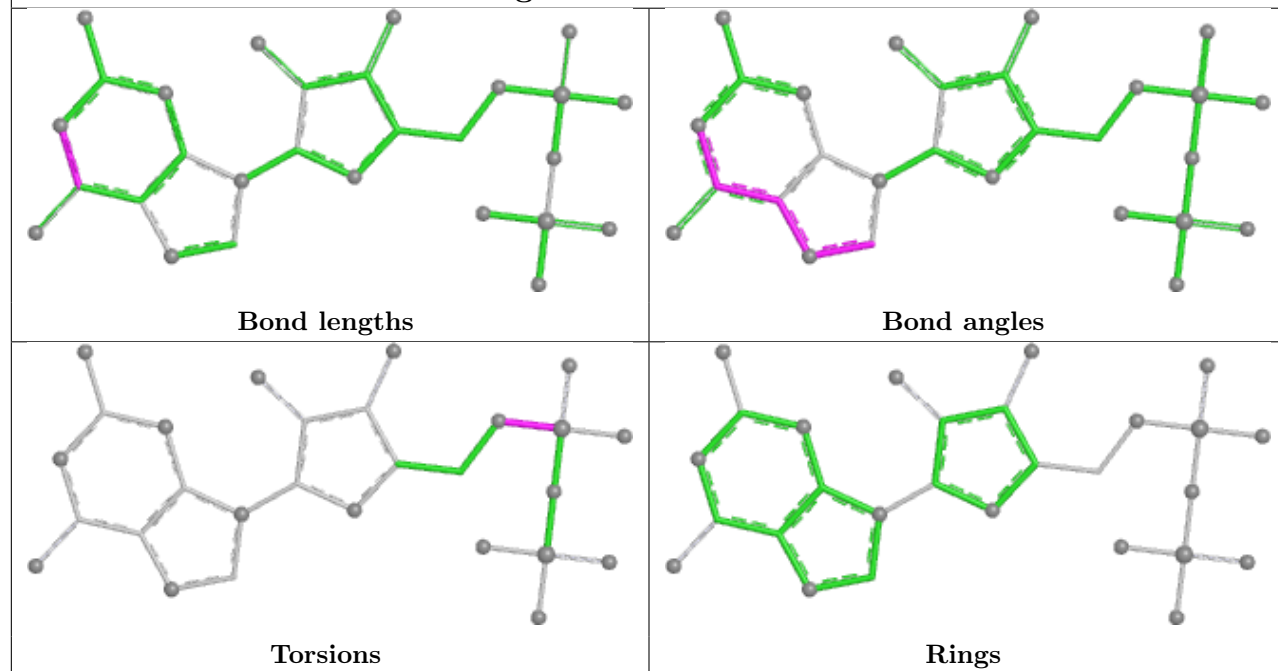




## Ligand GTP HM 501

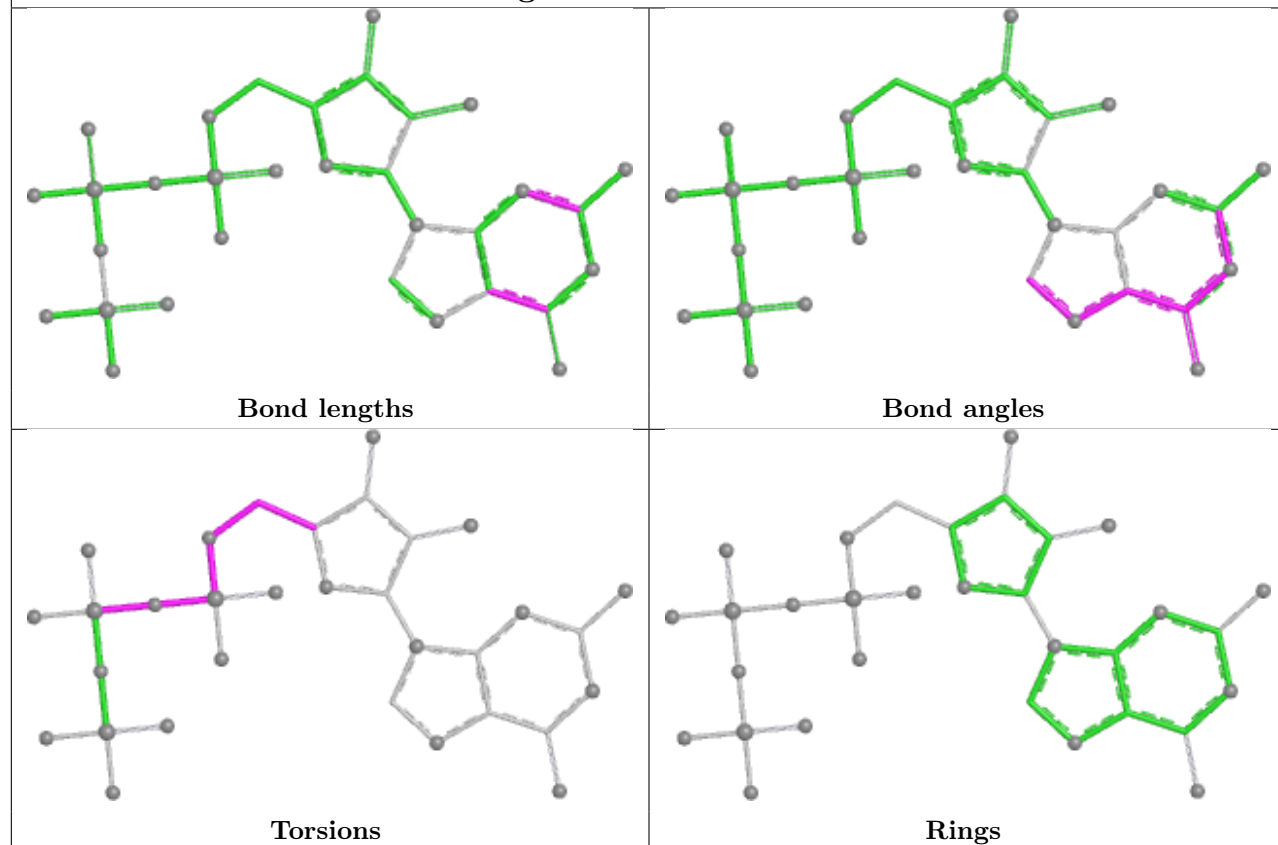


## Ligand GDP RD 501

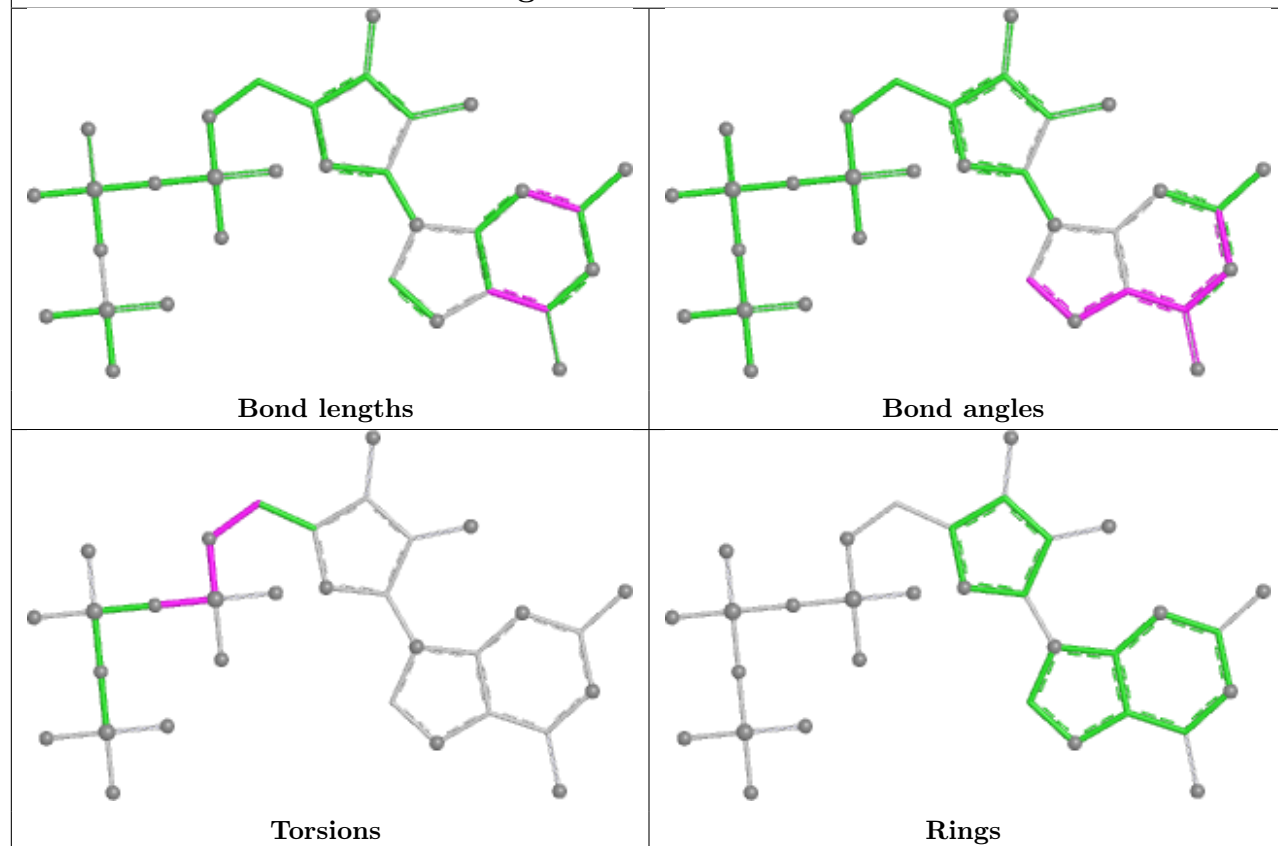




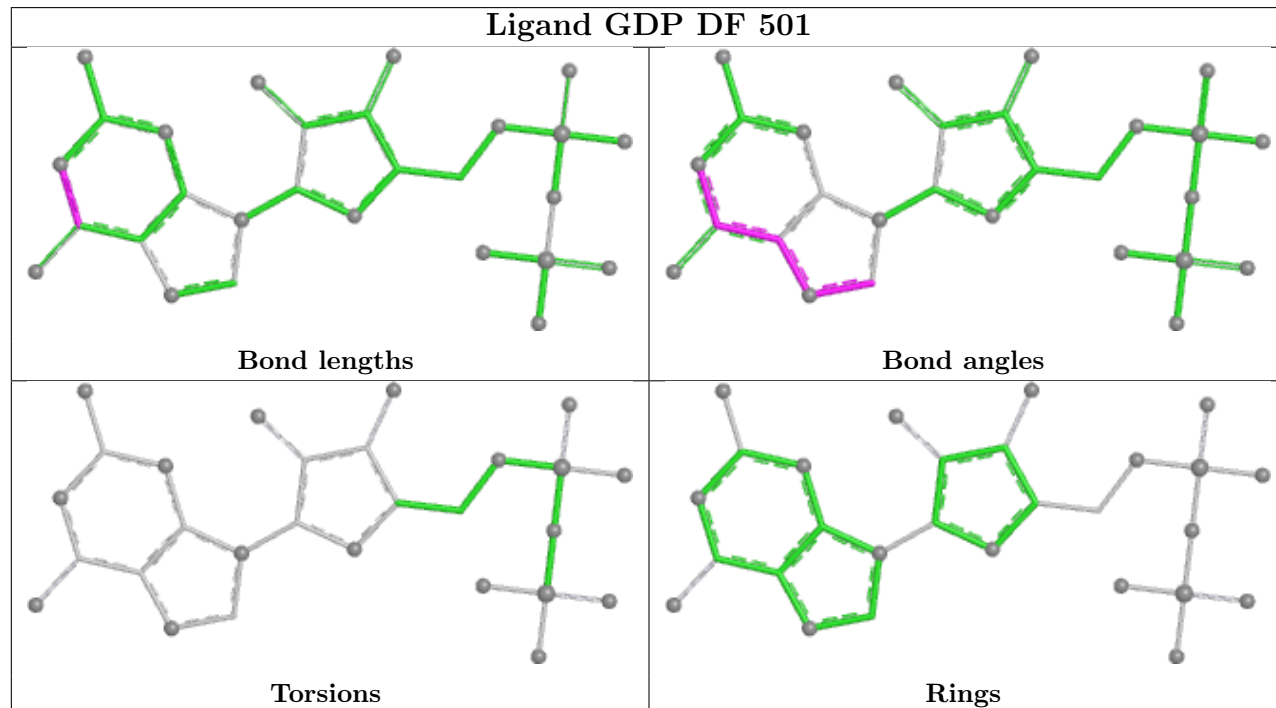
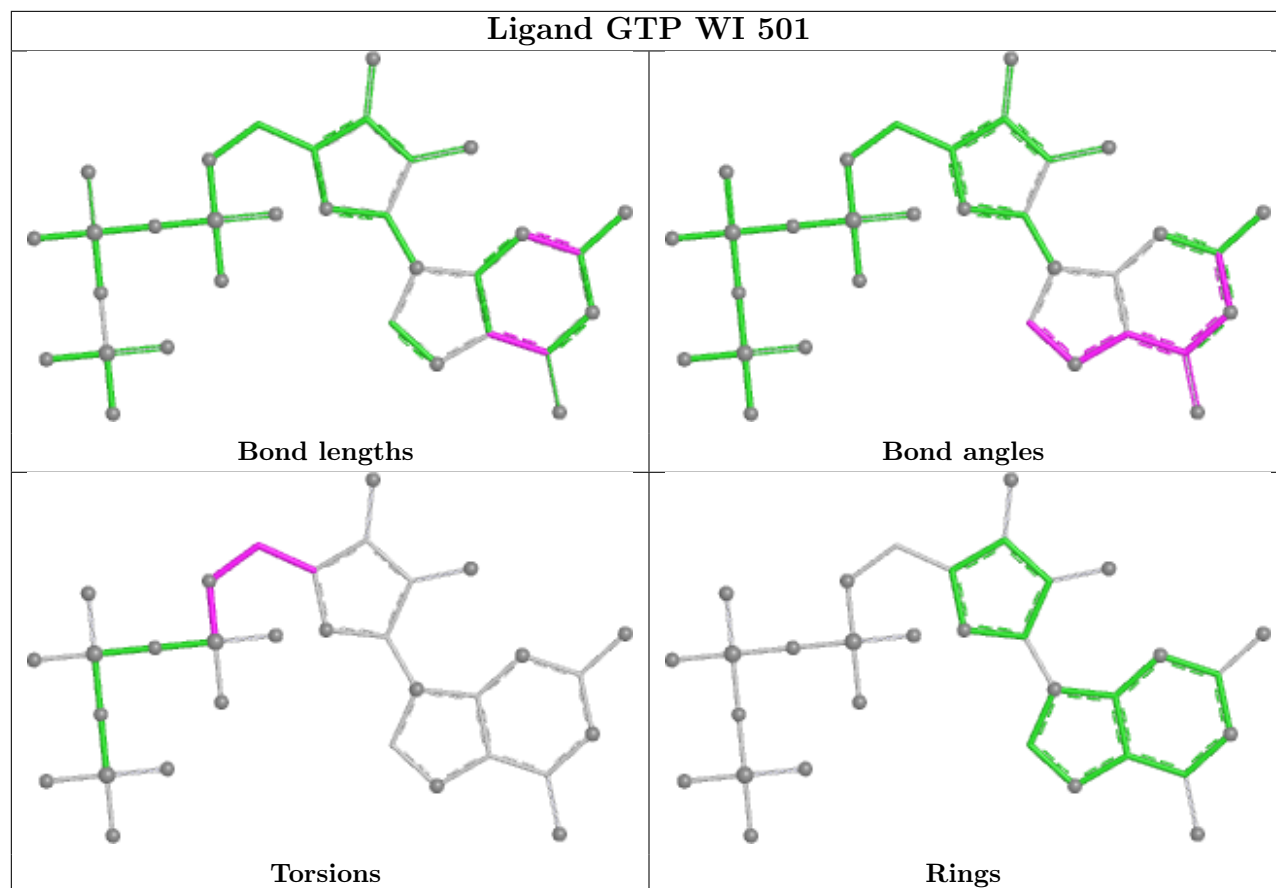
## Ligand GTP HE 501



## Ligand GTP CC 501

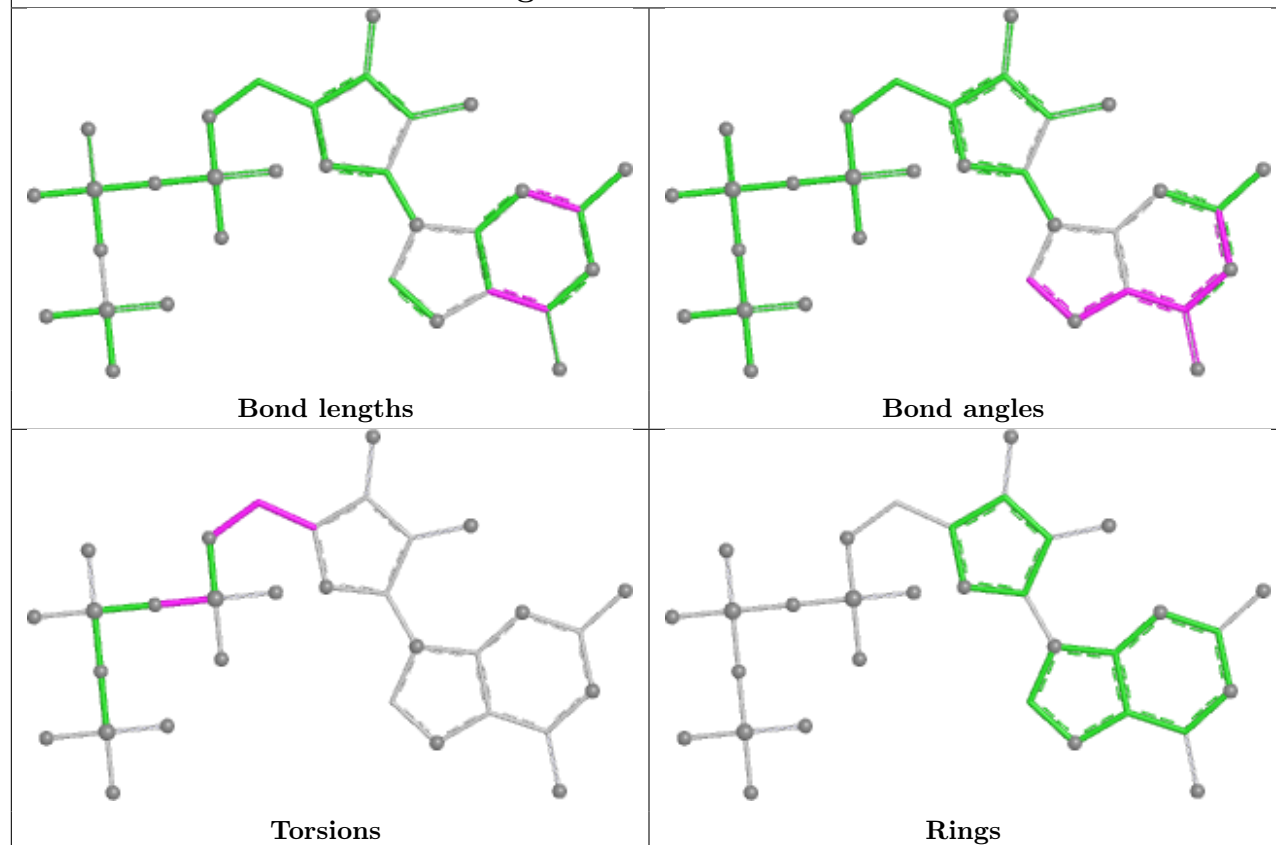




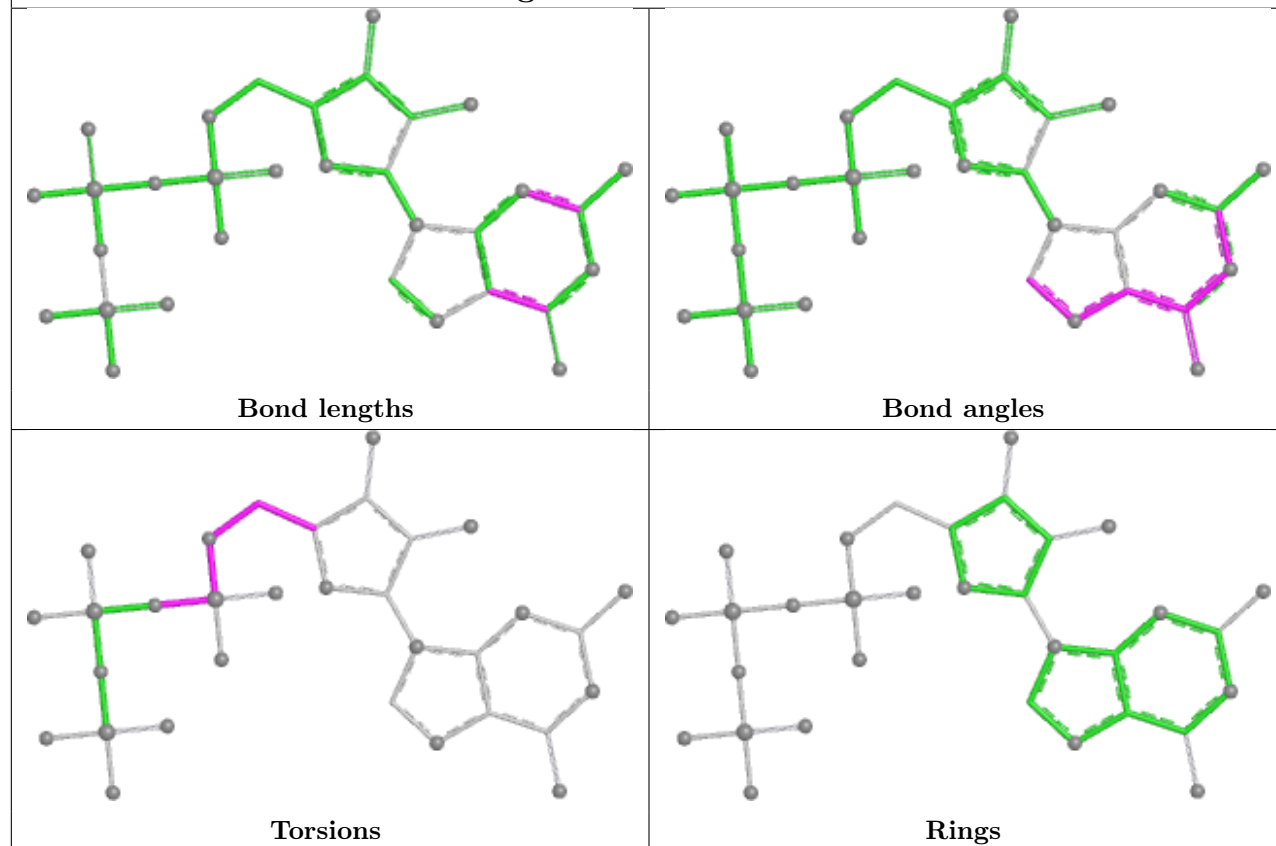




## Ligand GTP TK 501

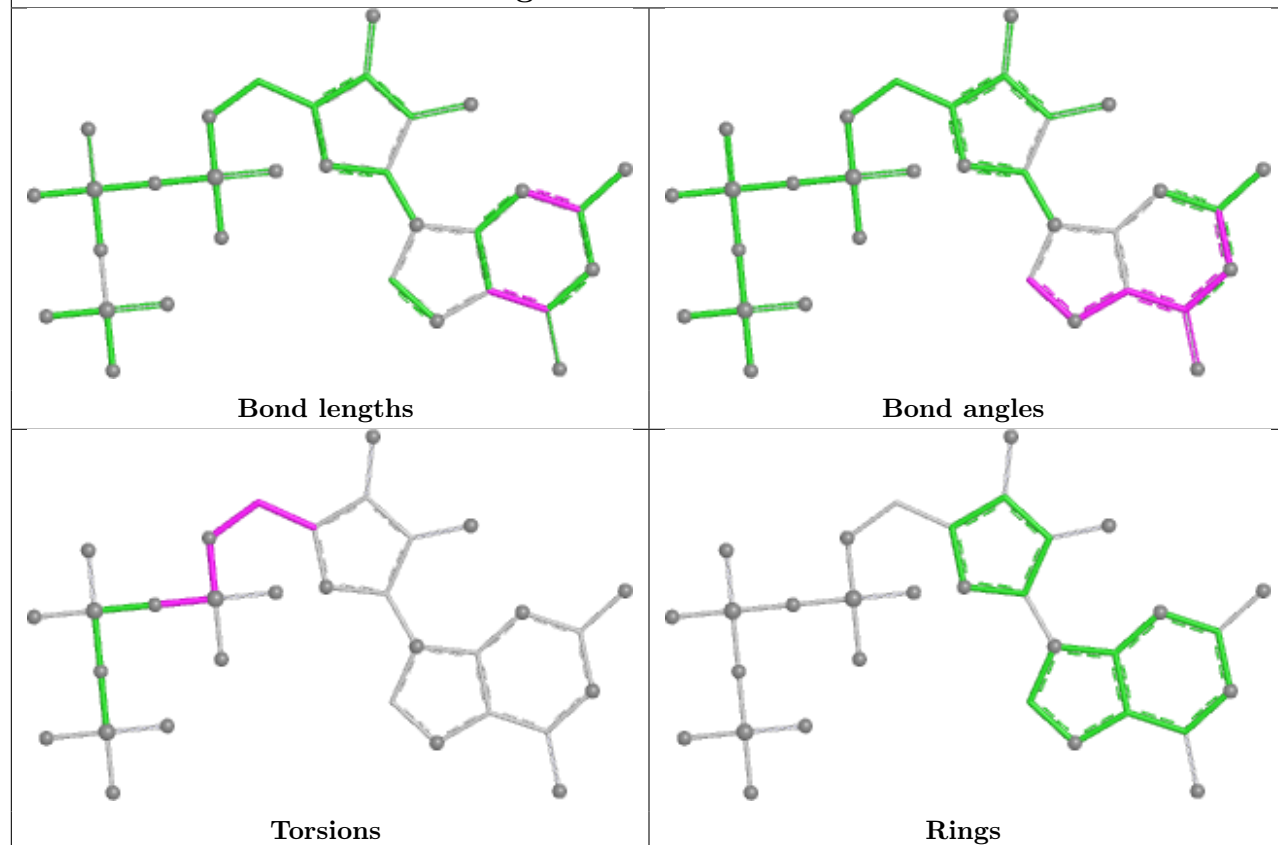


## Ligand GTP BA 501

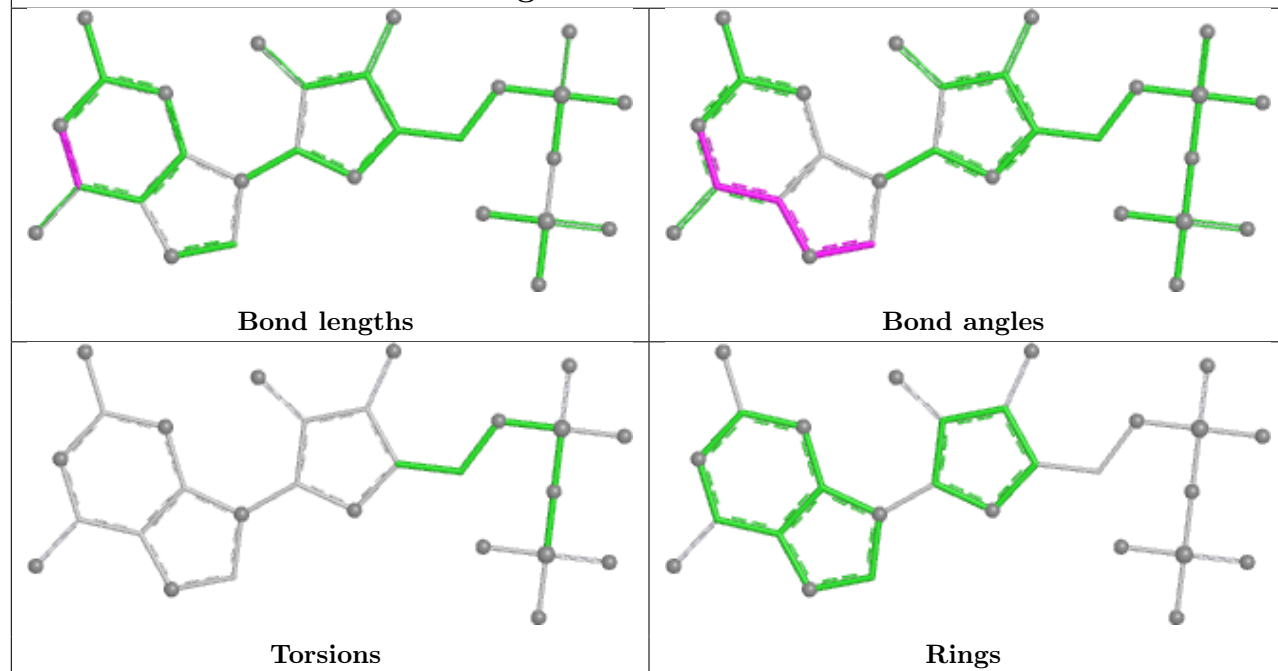




## Ligand GTP UK 501

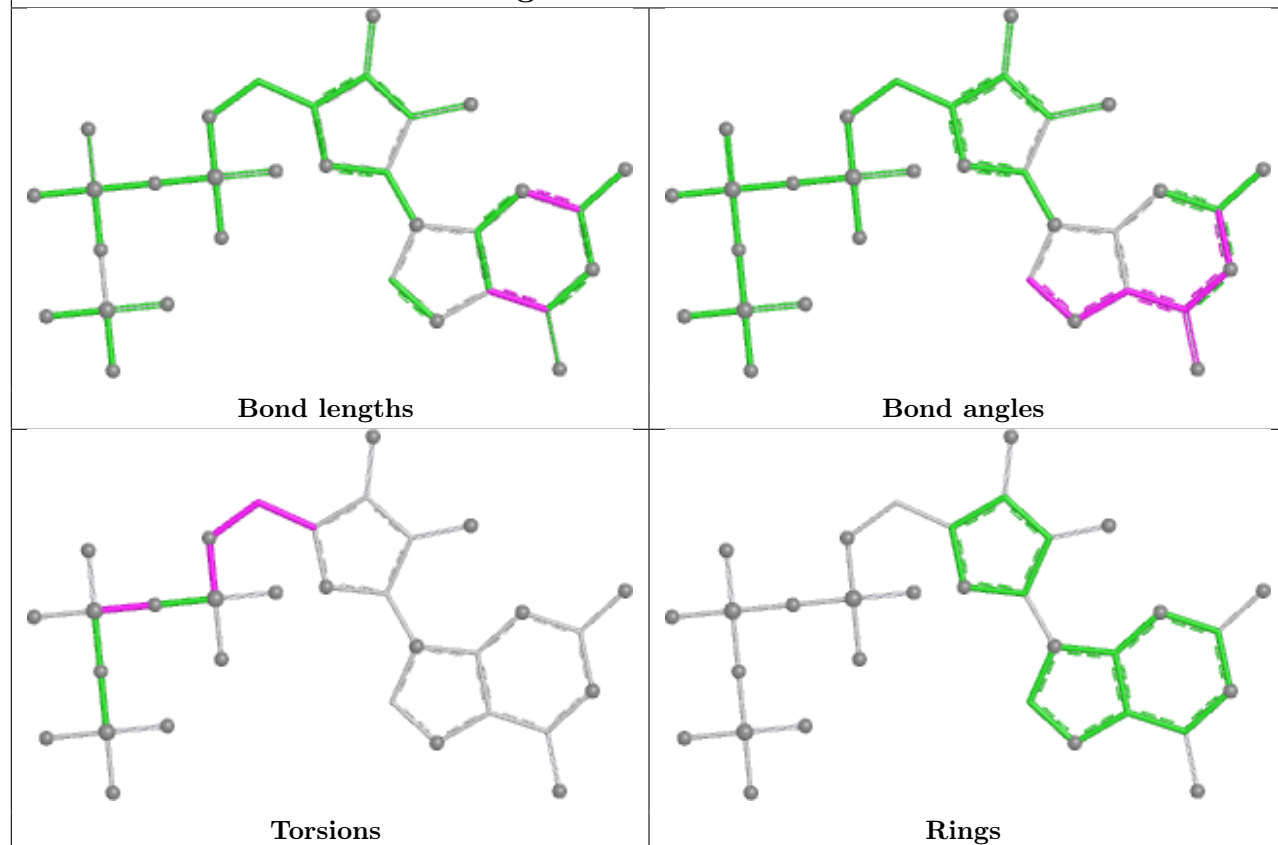


## Ligand GDP FD 501

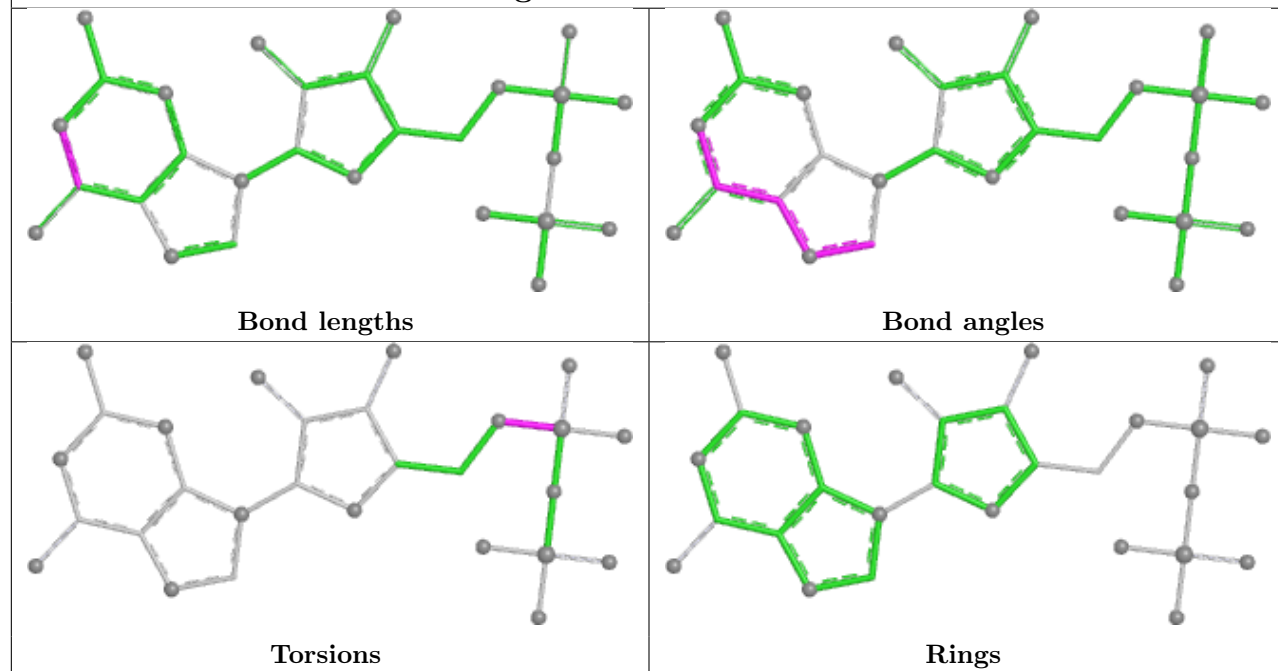




## Ligand GTP DC 501

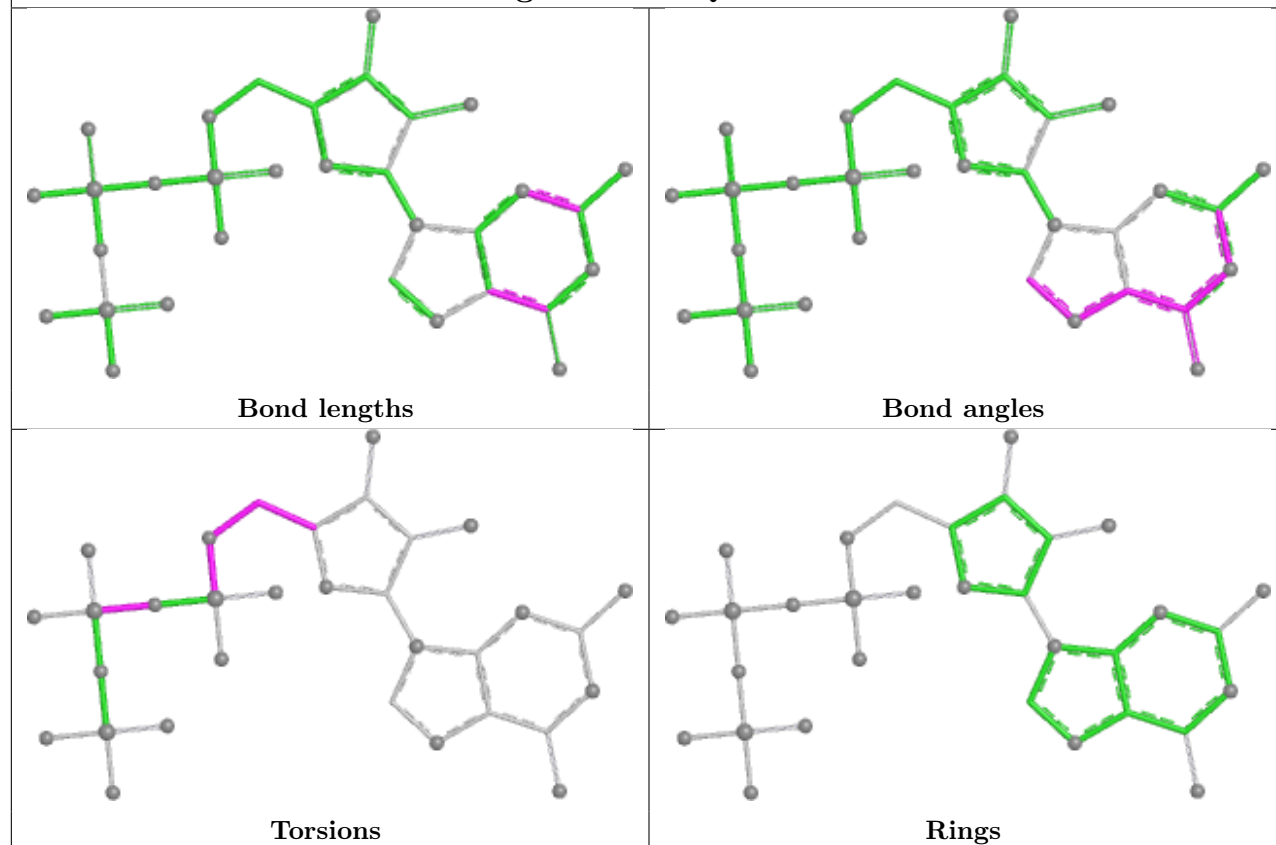


## Ligand GDP UN 501

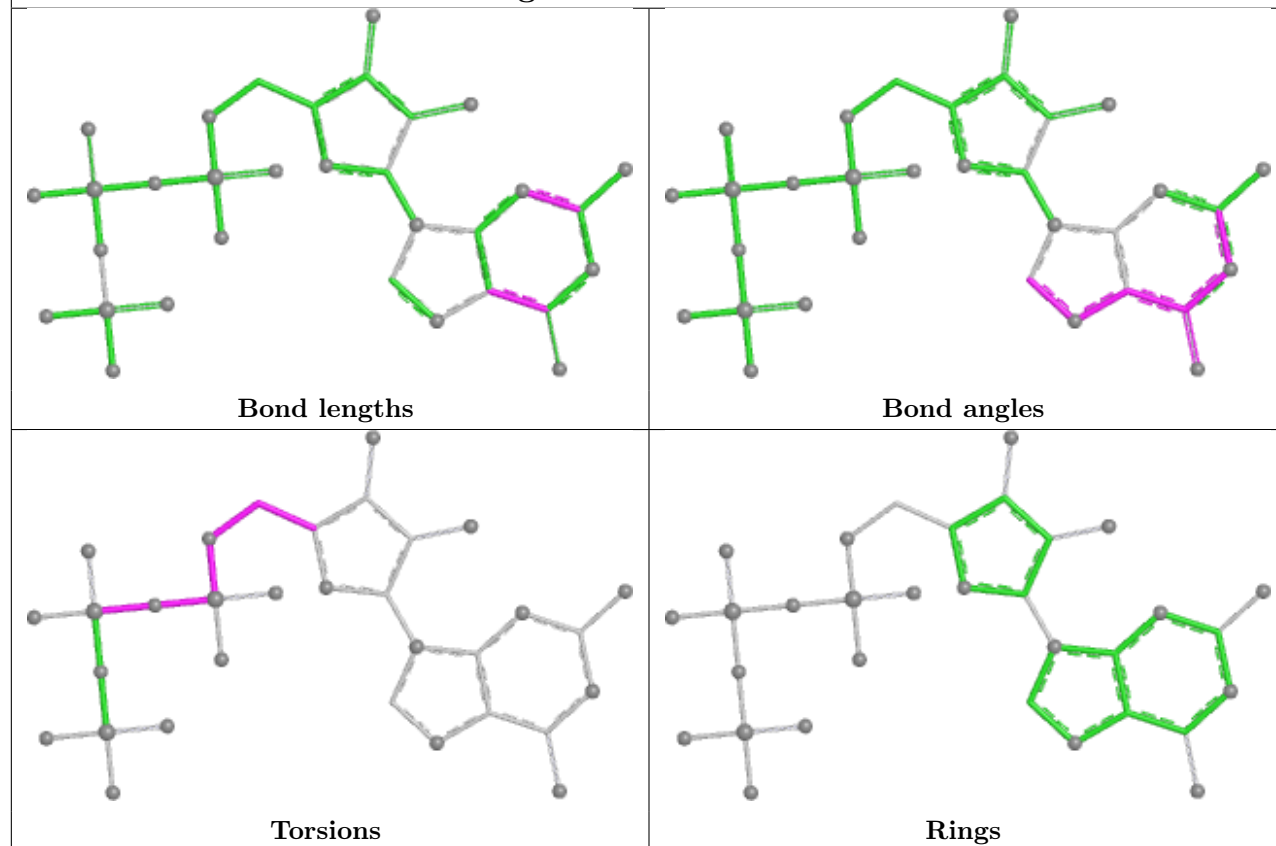




## Ligand GTP QG 501

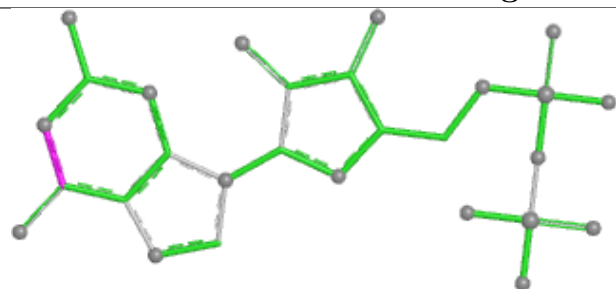


## Ligand GTP UE 501

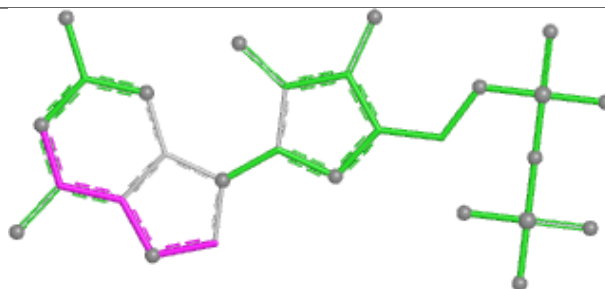




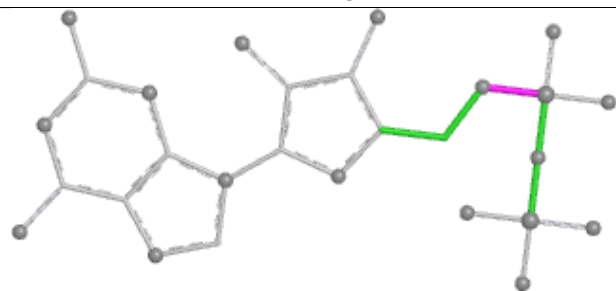
## Ligand GDP TB 501



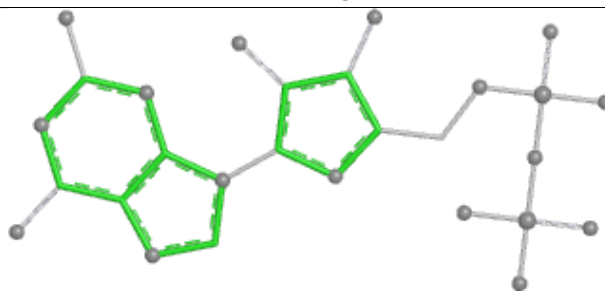
Bond lengths



Bond angles

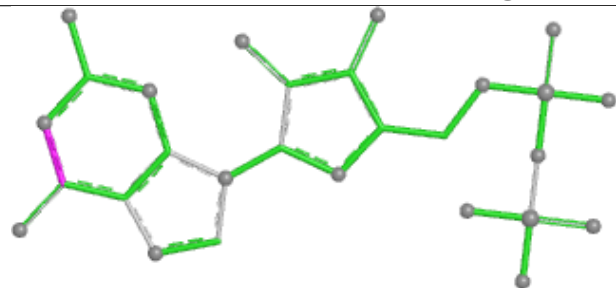


Torsions

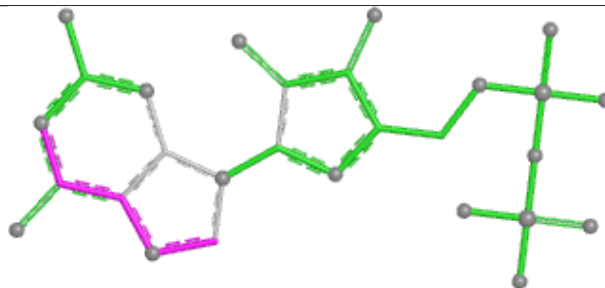


Rings

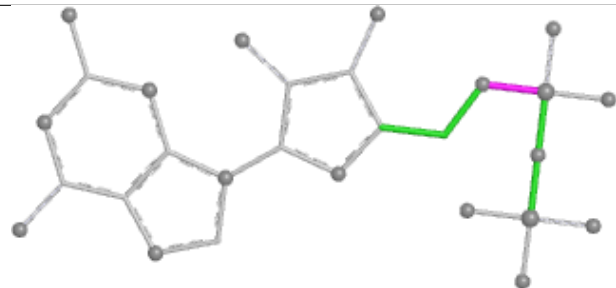
## Ligand GDP OH 501



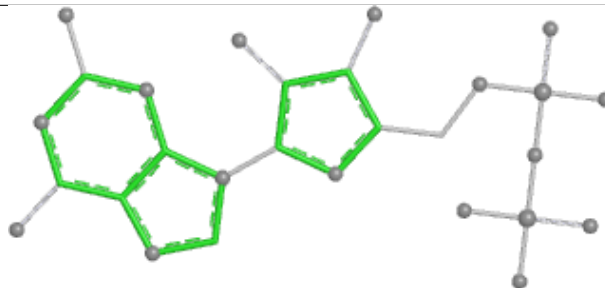
Bond lengths



Bond angles



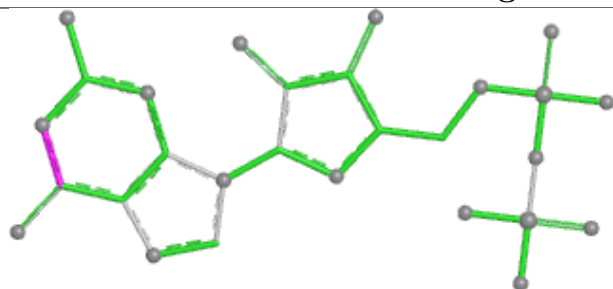
Torsions



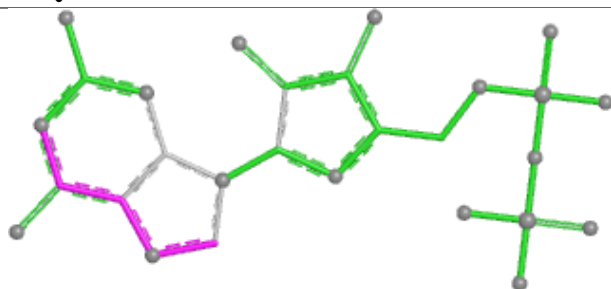
Rings



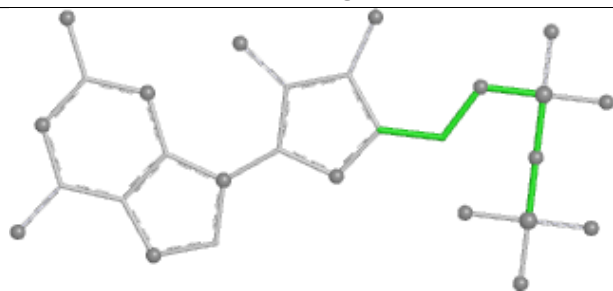
## Ligand GDP QB 501



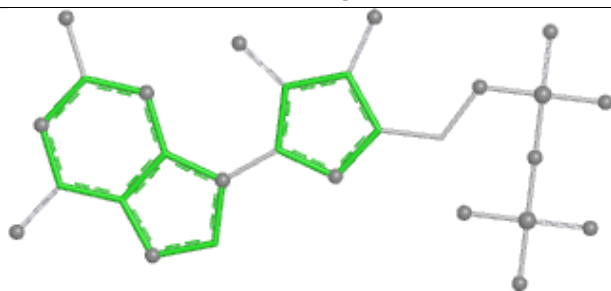
Bond lengths



Bond angles

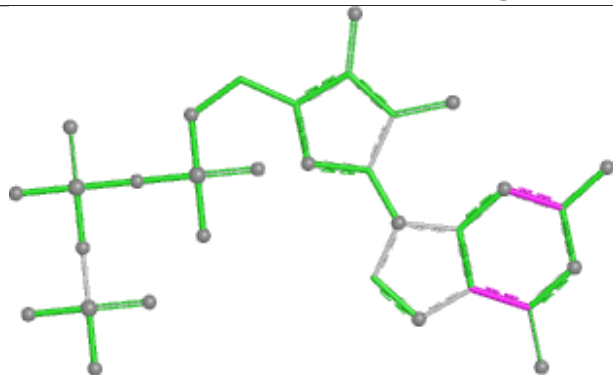


Torsions

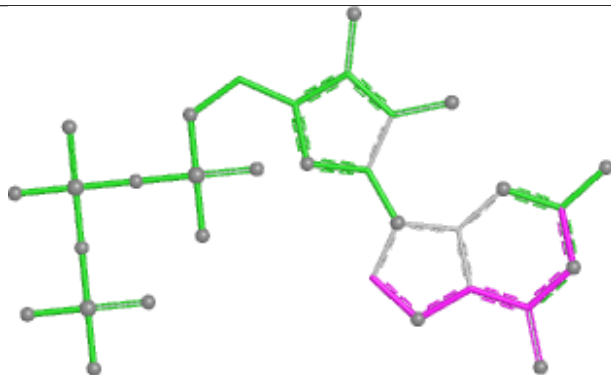


Rings

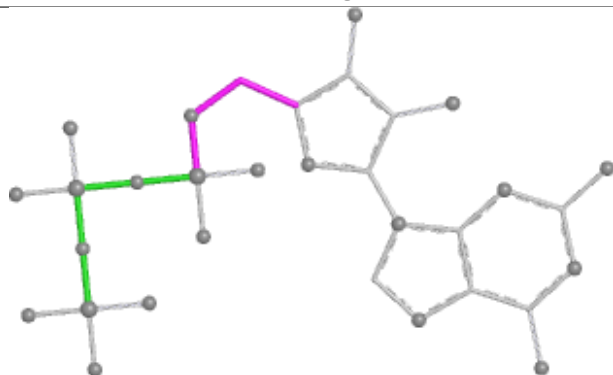
## Ligand GTP WC 501



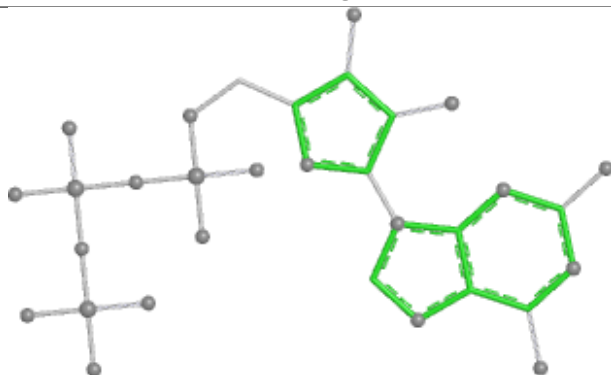
Bond lengths



Bond angles



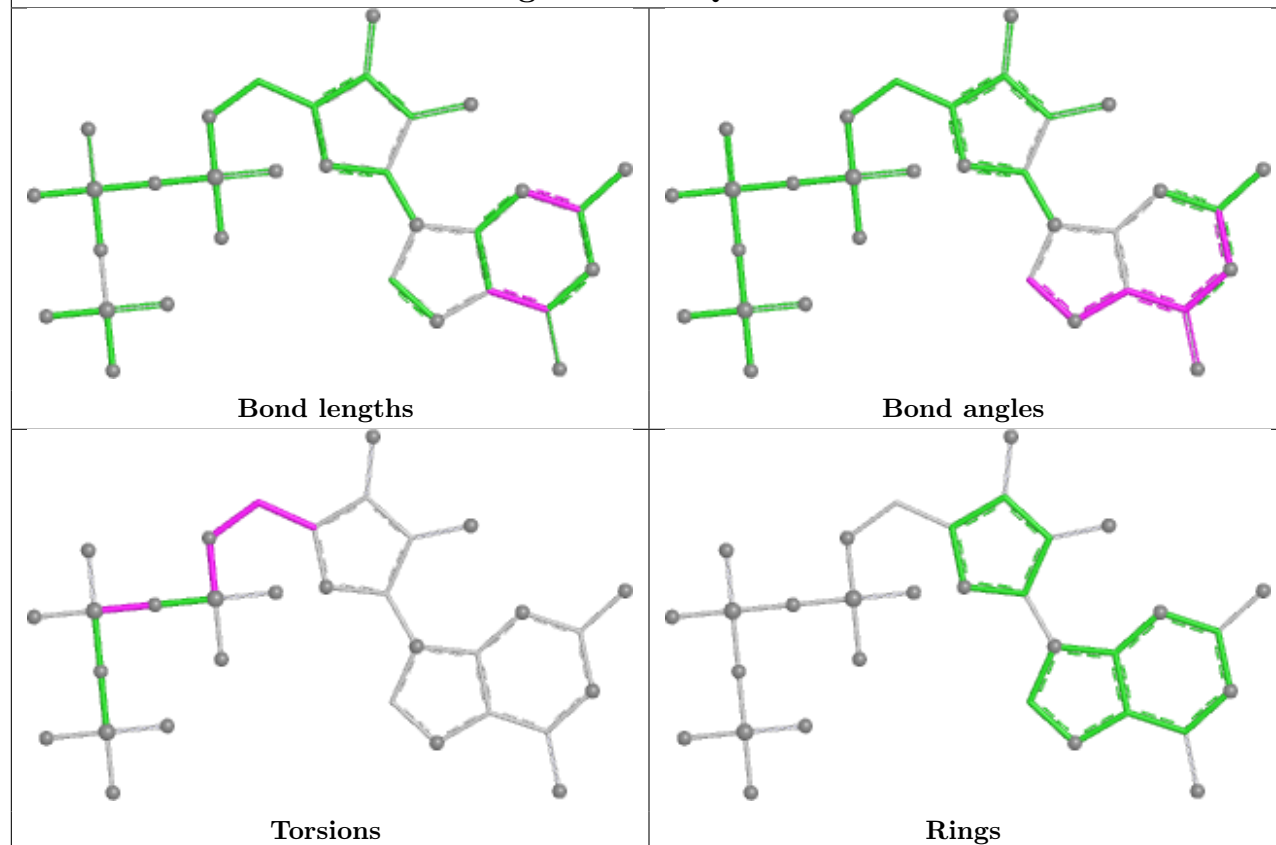
Torsions



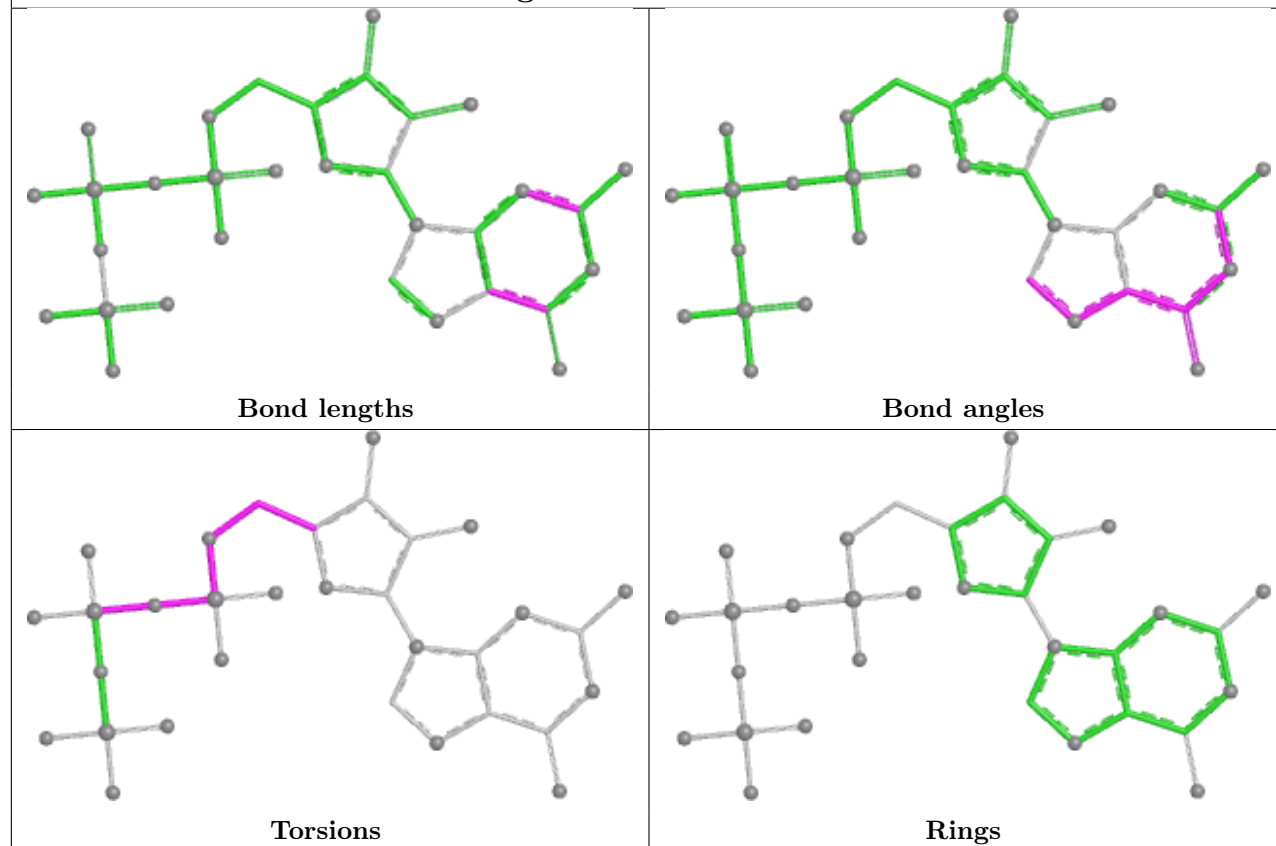
Rings



## Ligand GTP QE 501

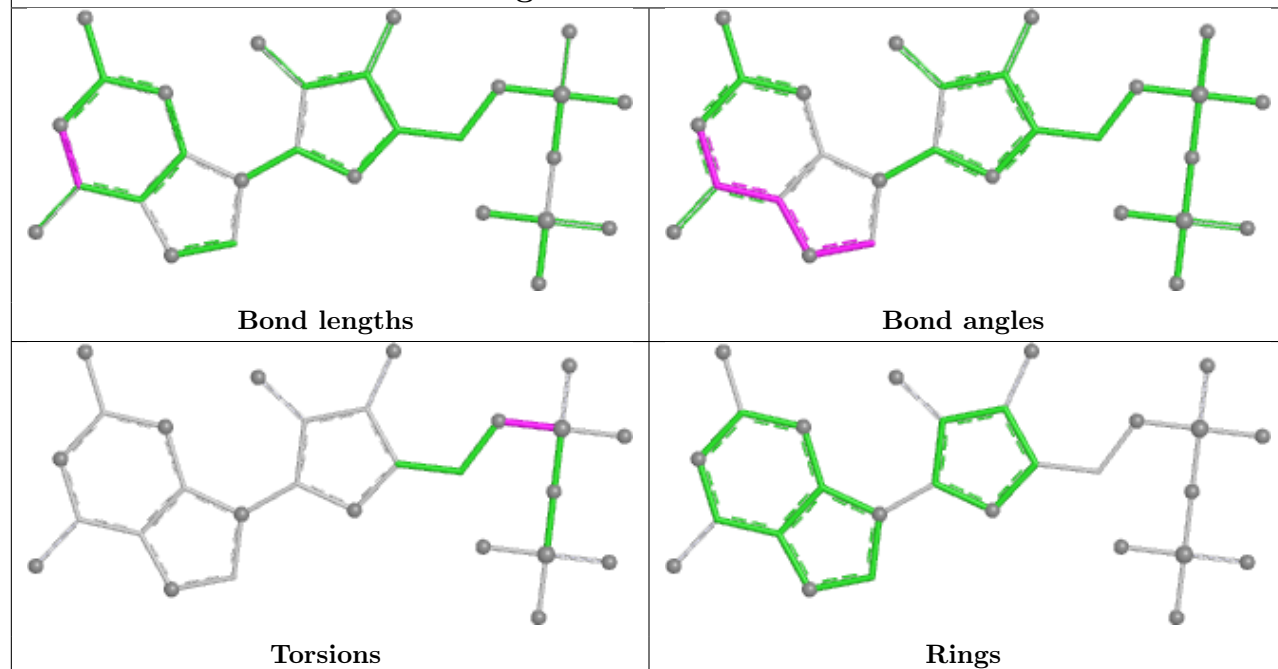


## Ligand GTP RG 501

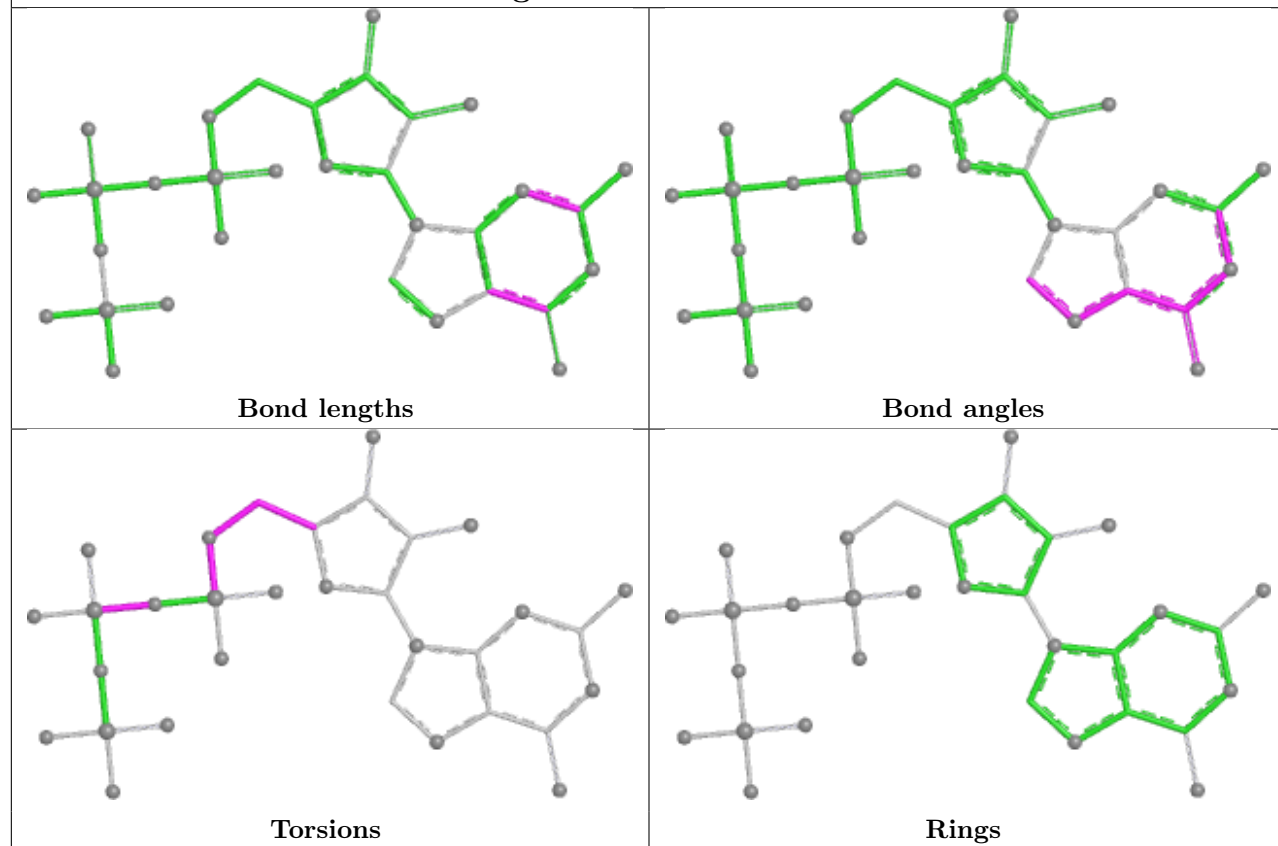




## Ligand GDP MJ 501

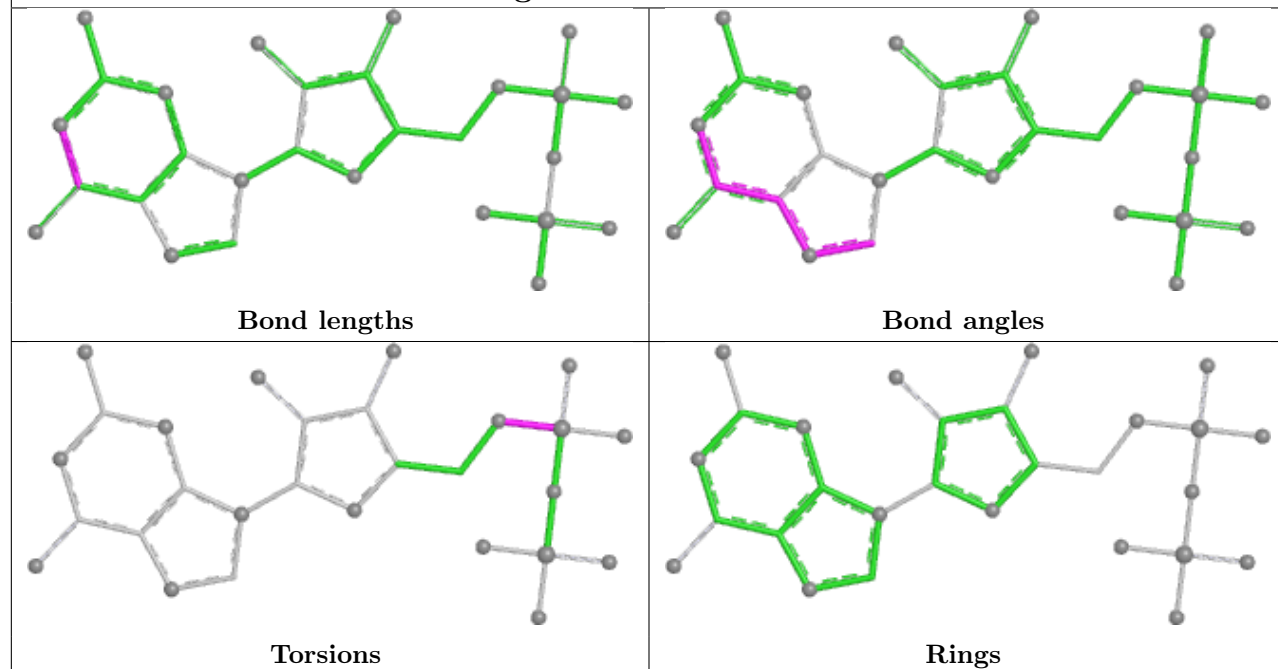


## Ligand GTP MK 501

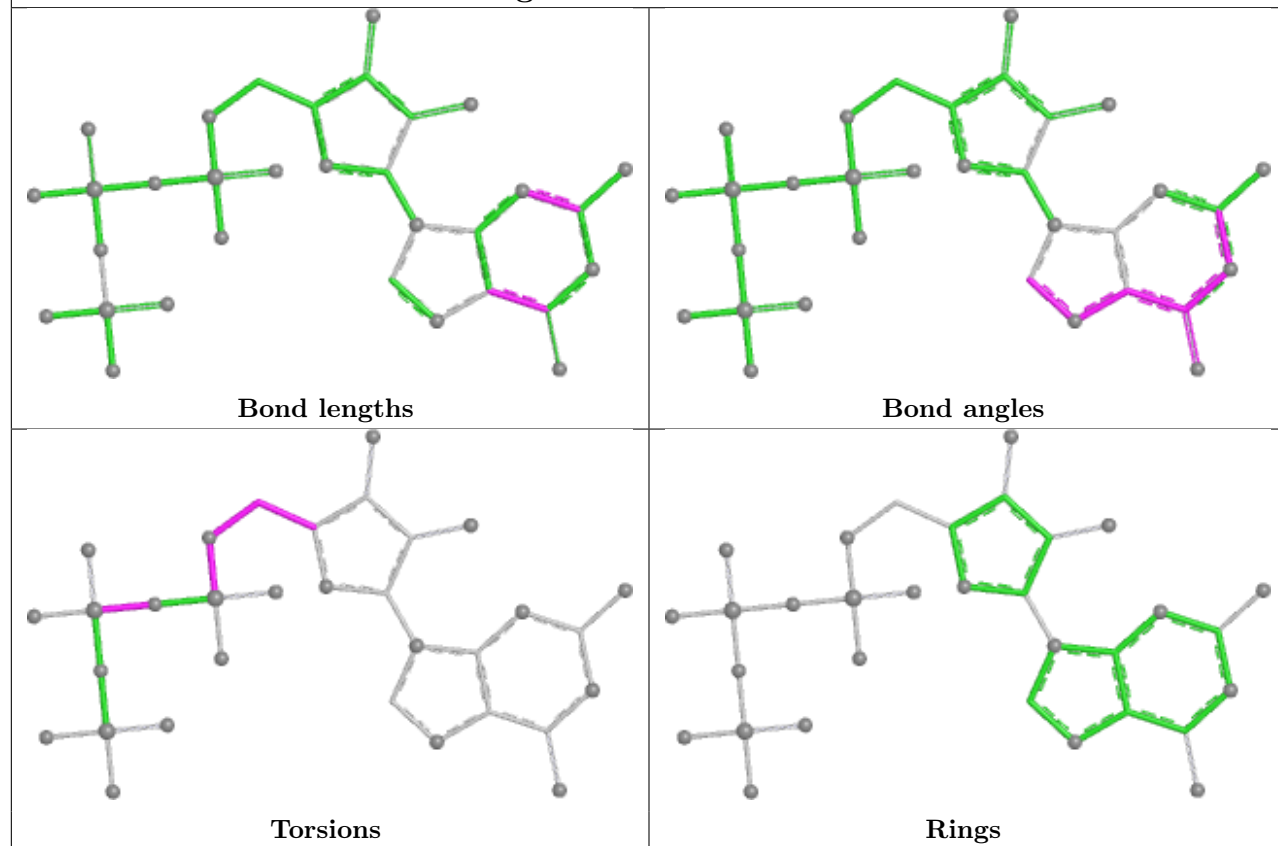




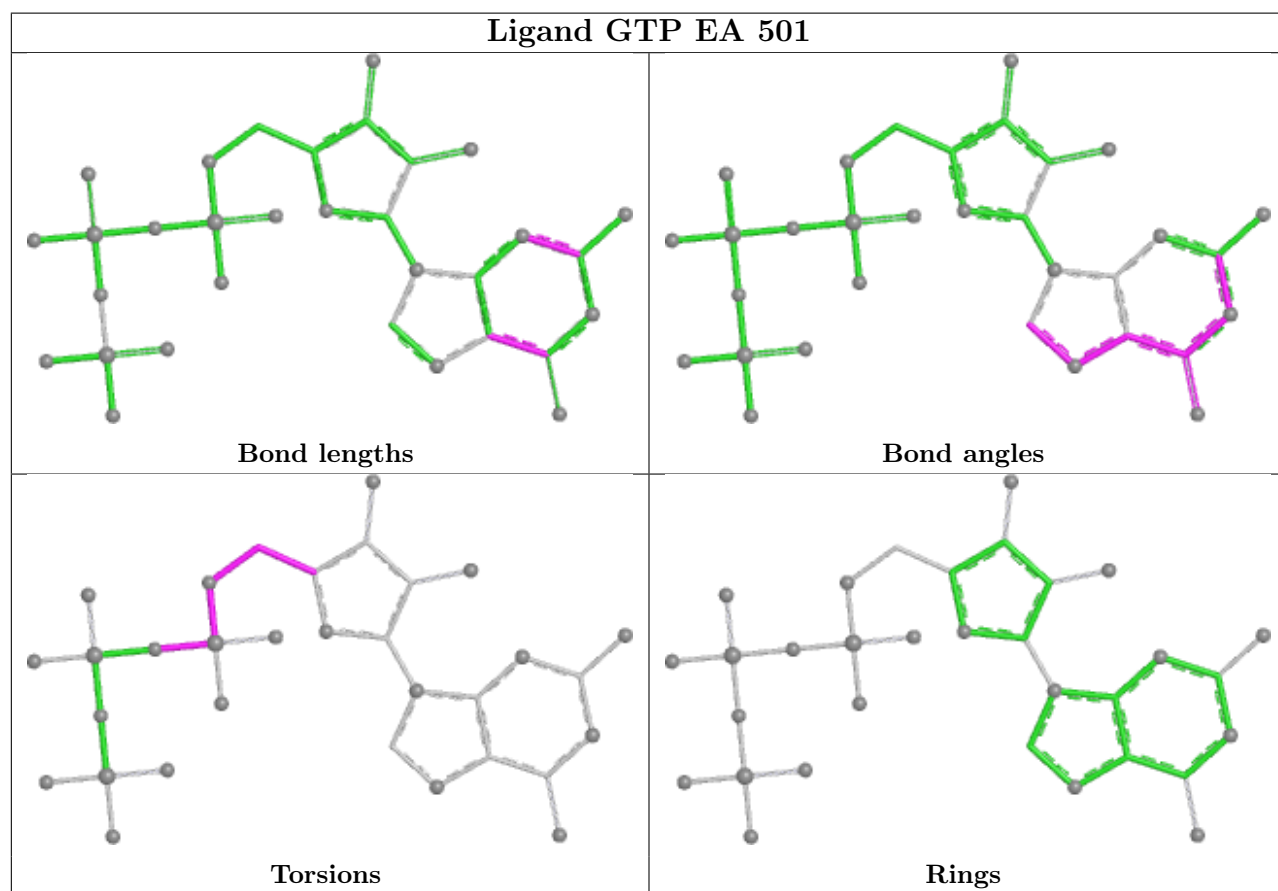
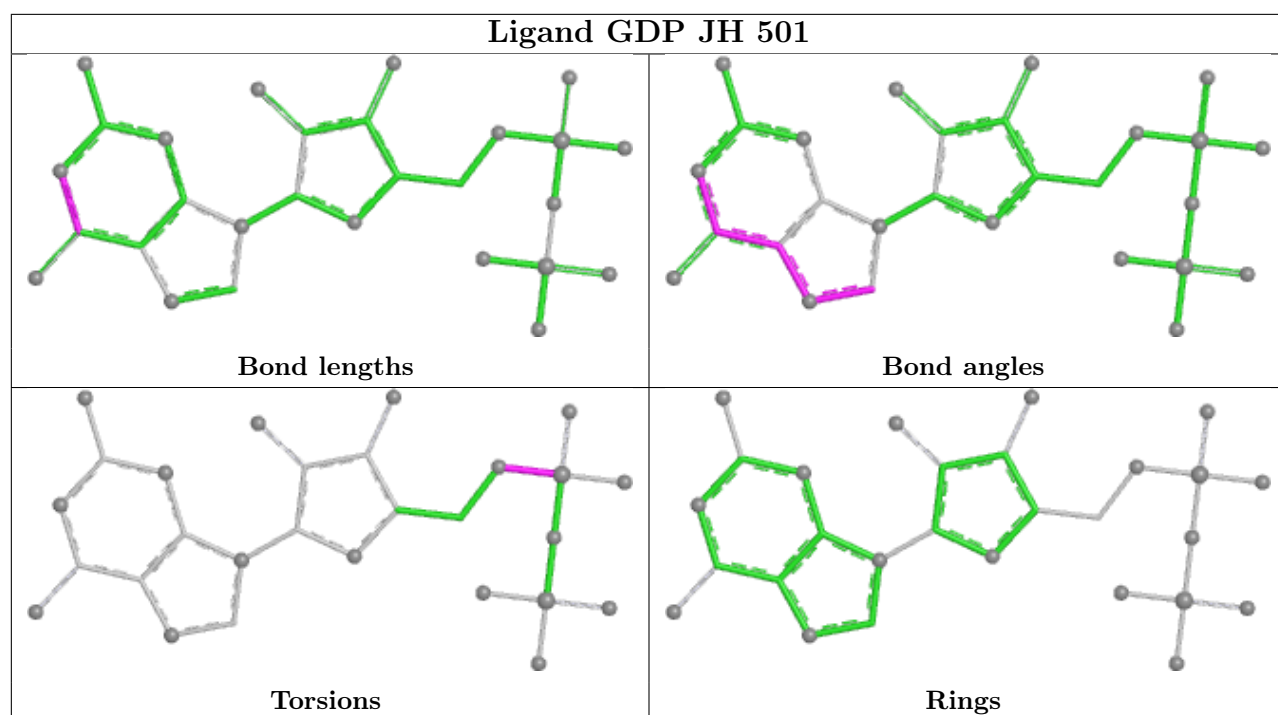
## Ligand GDP HH 501



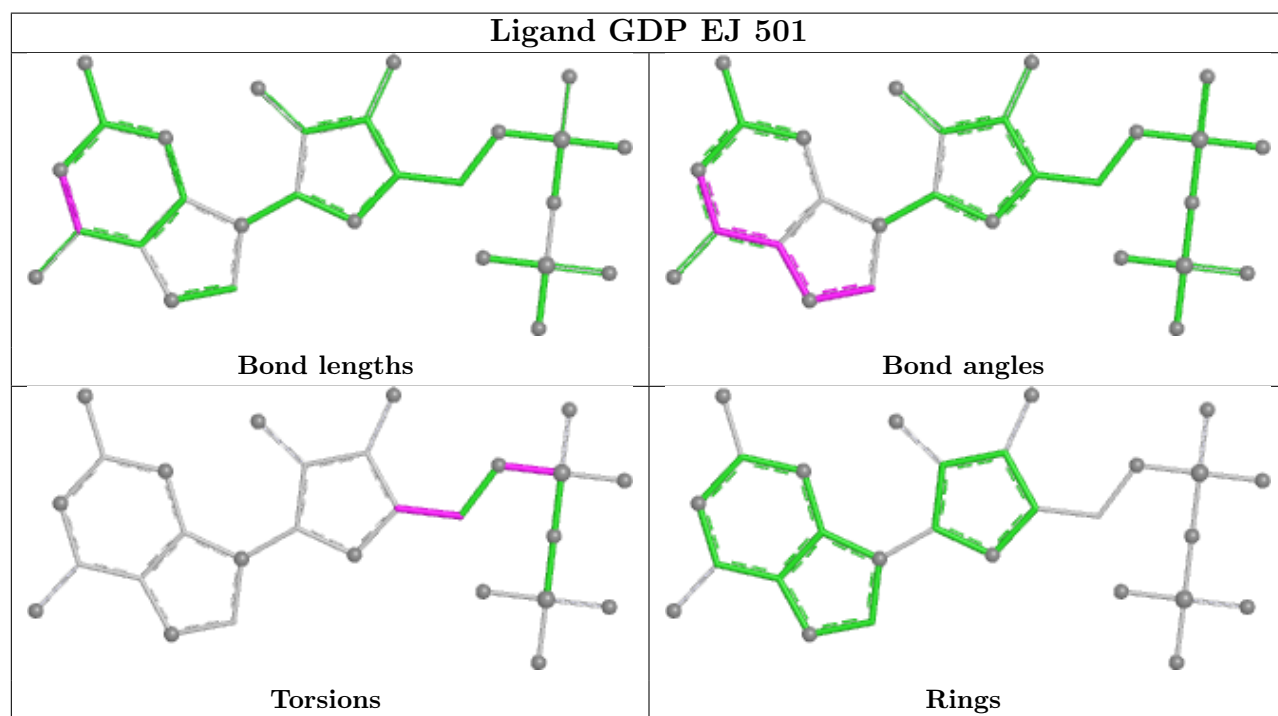
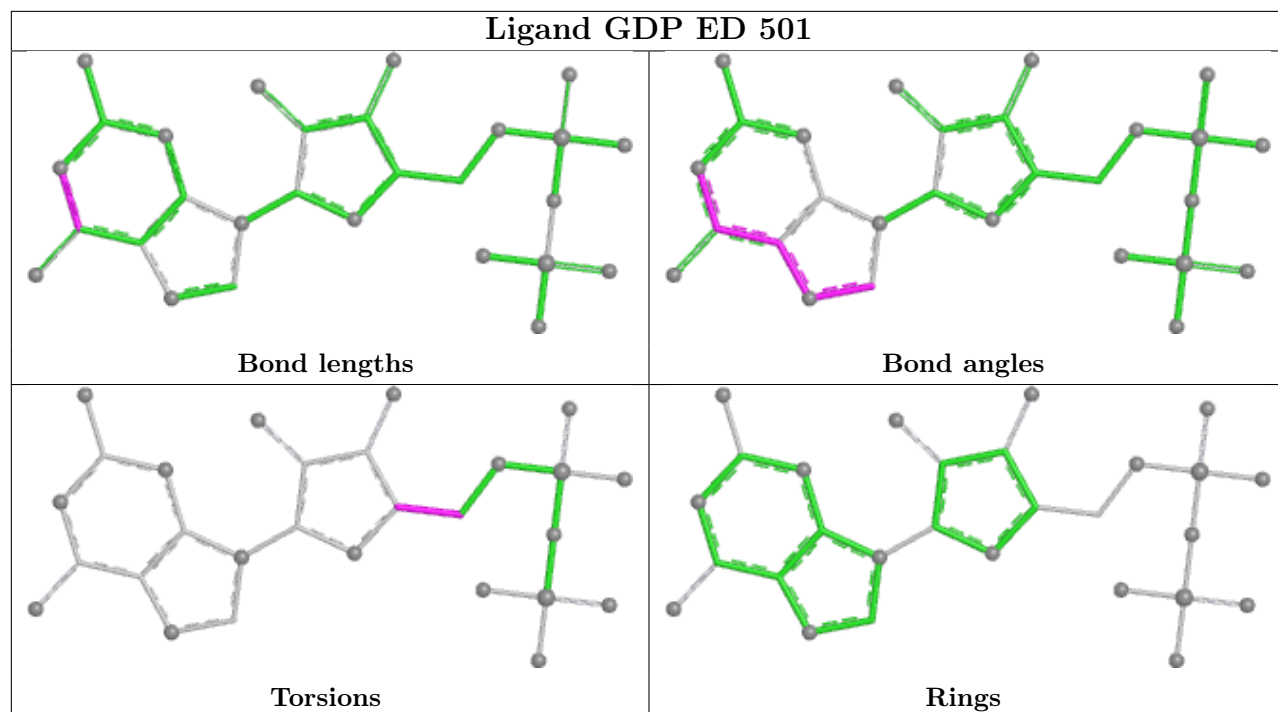
## Ligand GTP HA 501



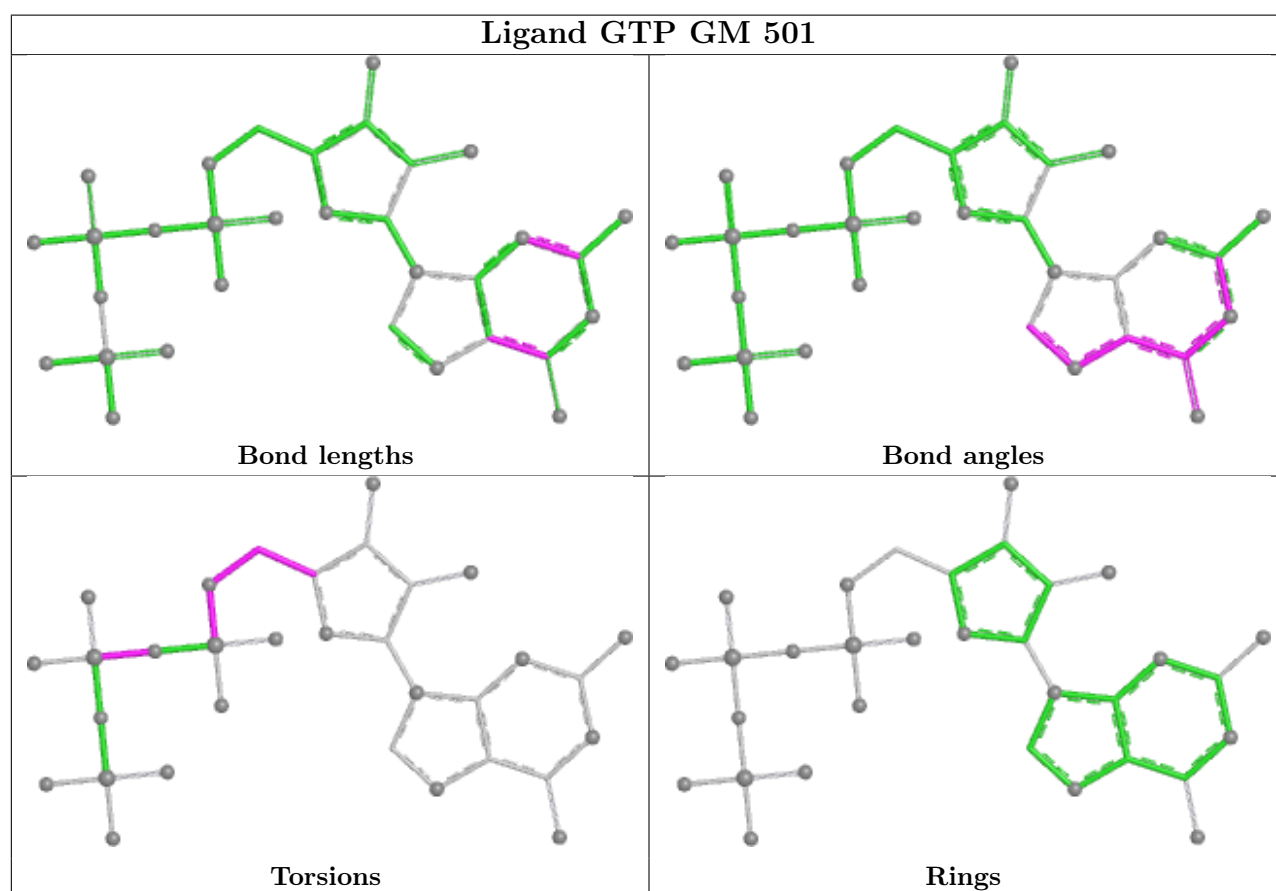
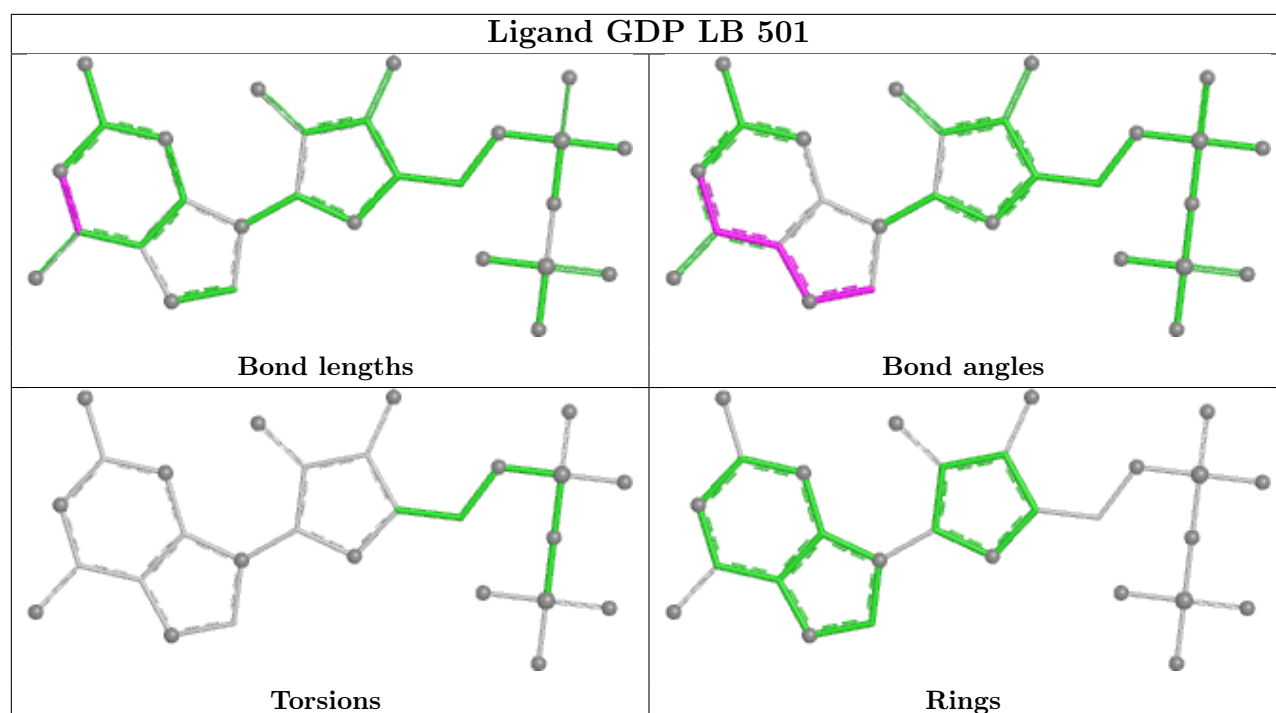






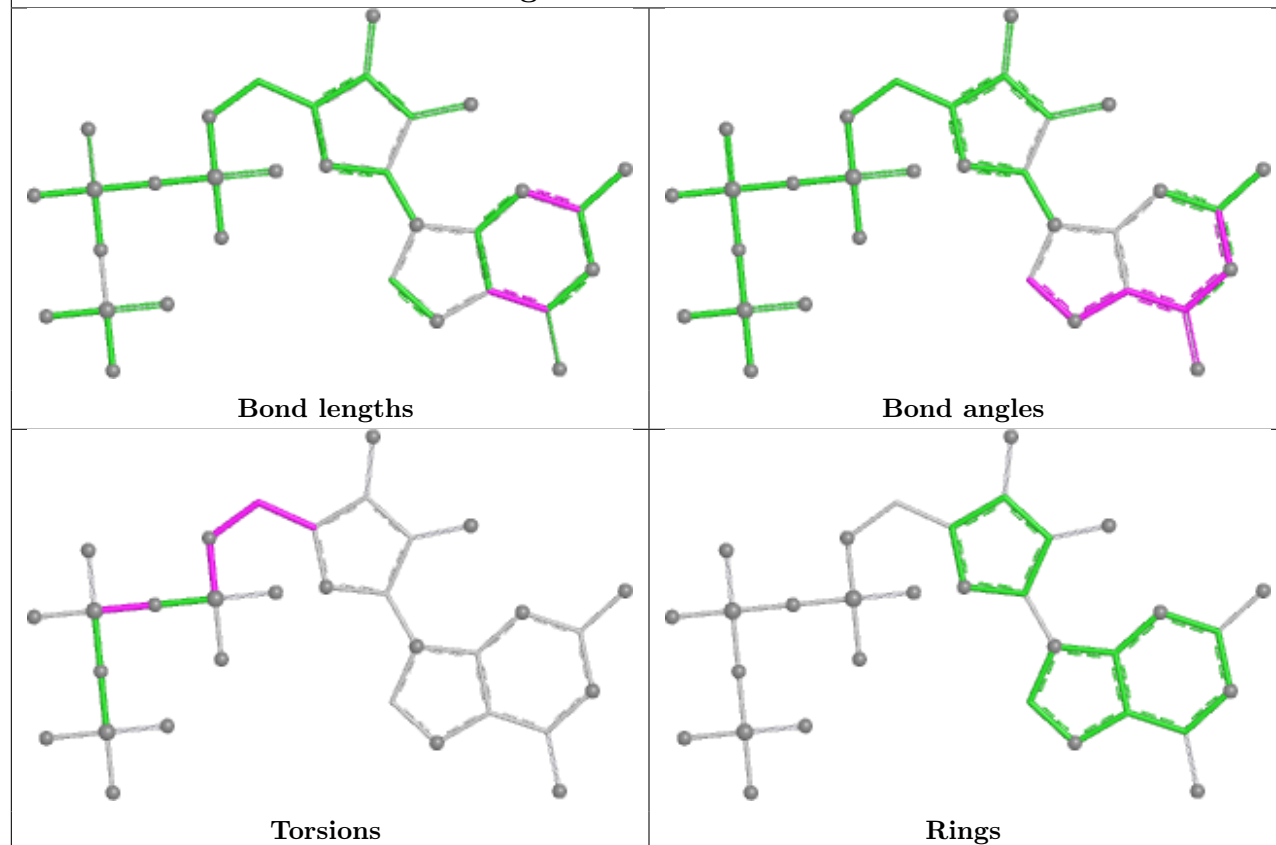




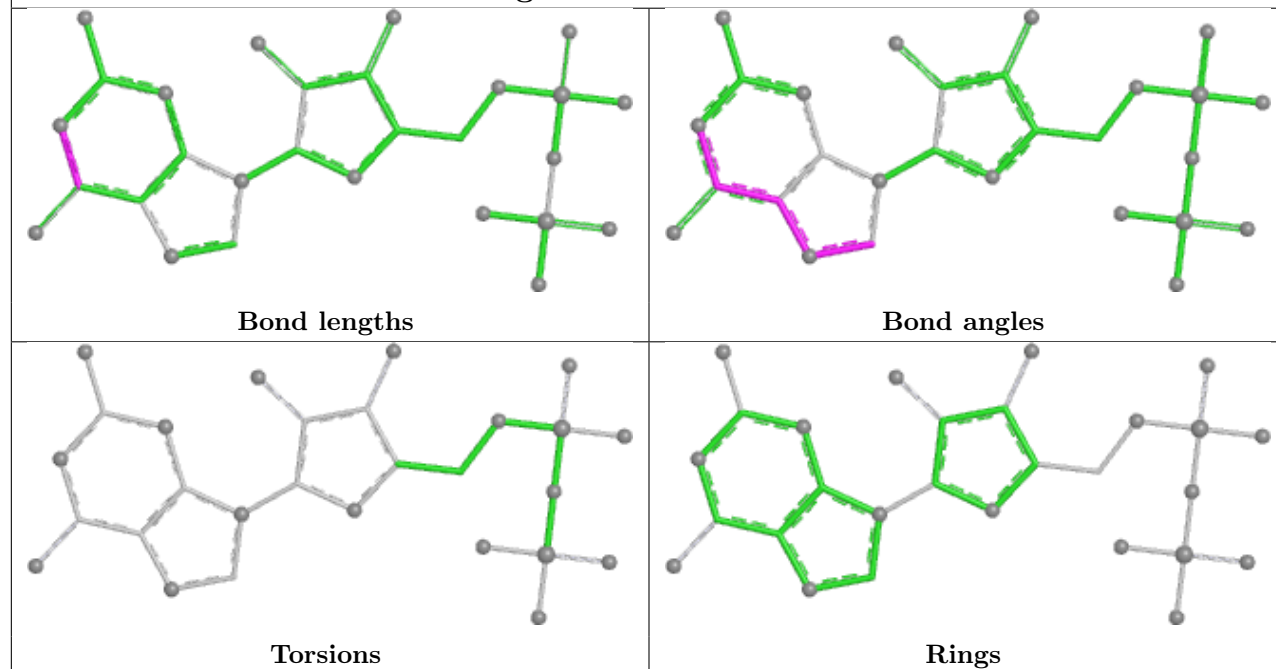




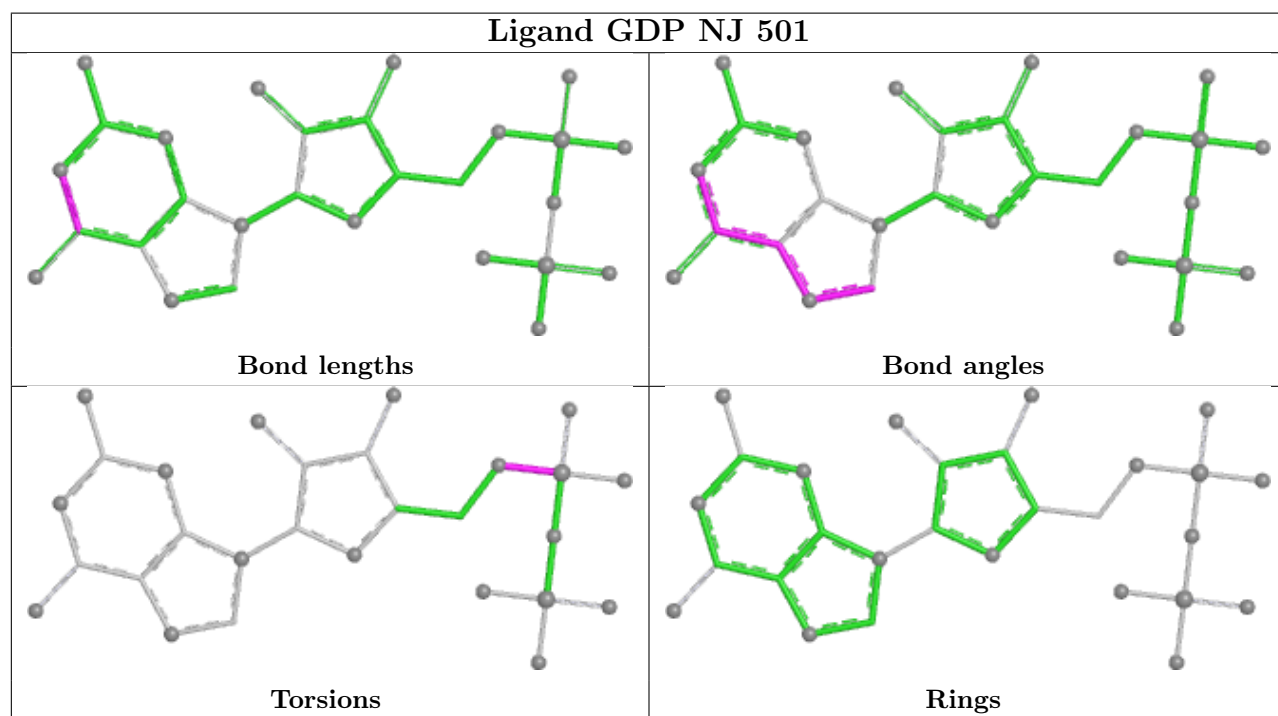
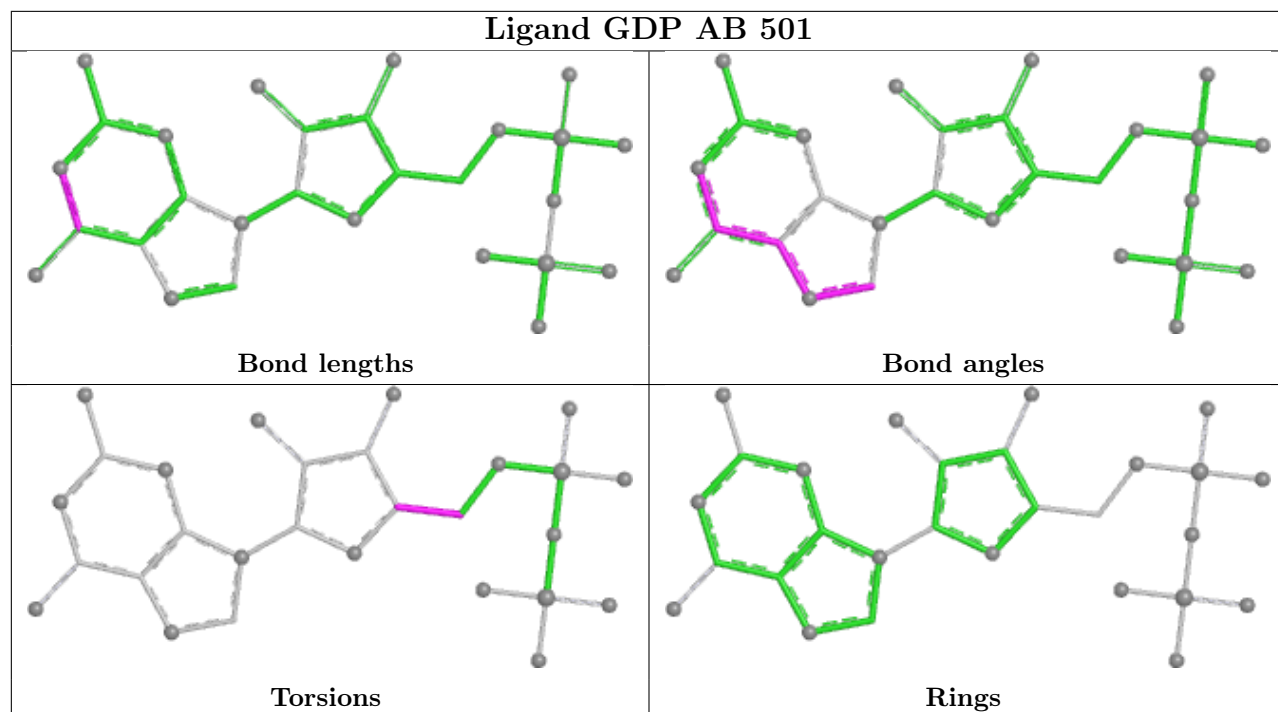
## Ligand GTP MI 501



## Ligand GDP PN 501

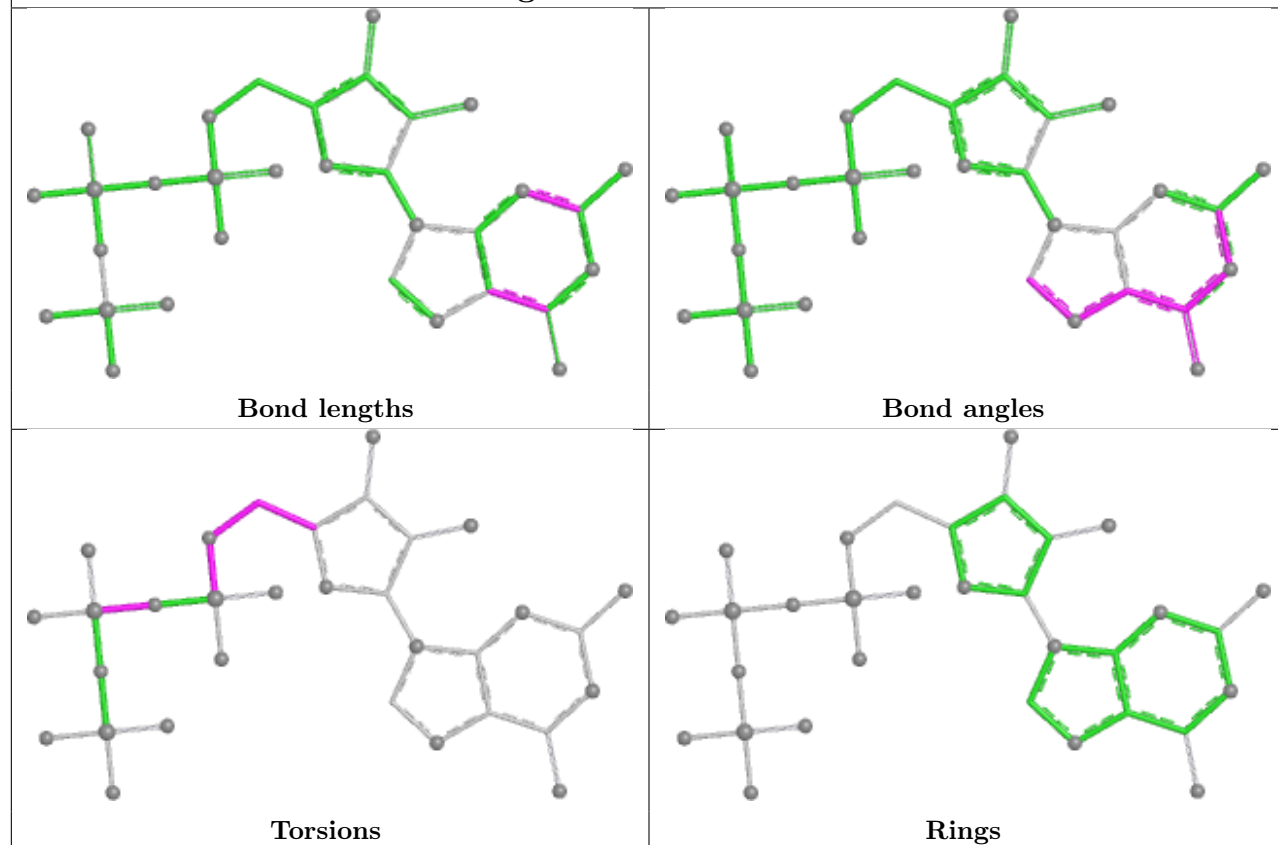




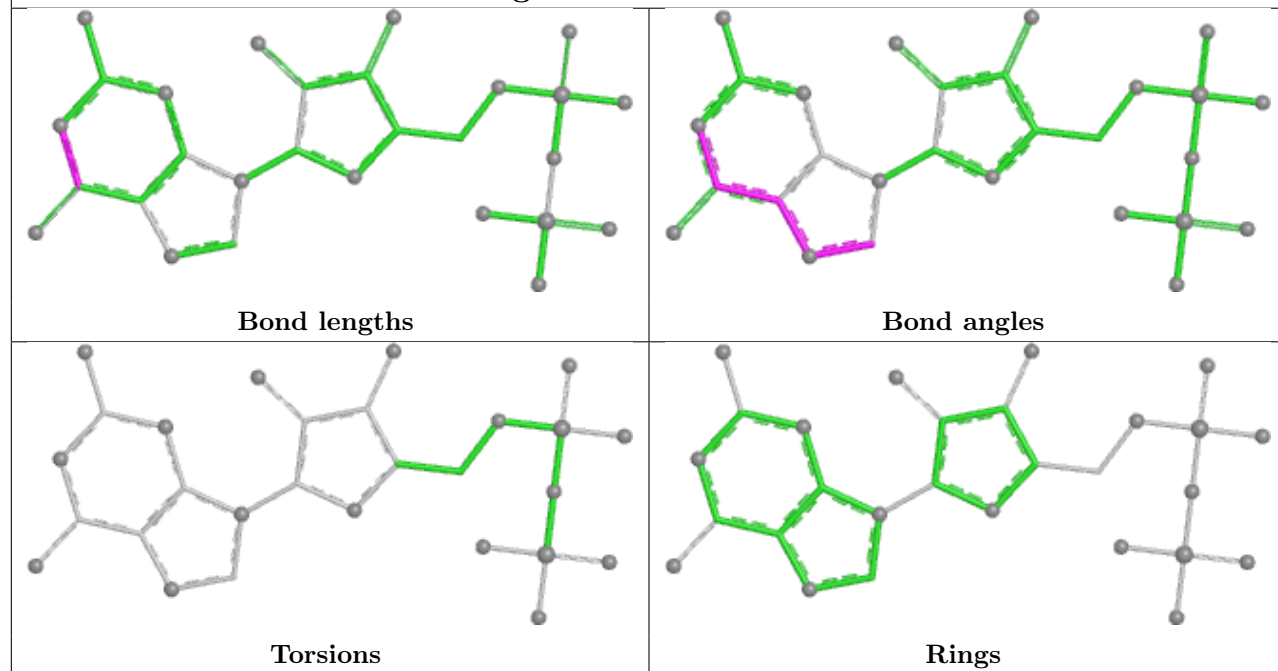




## Ligand GTP RC 501

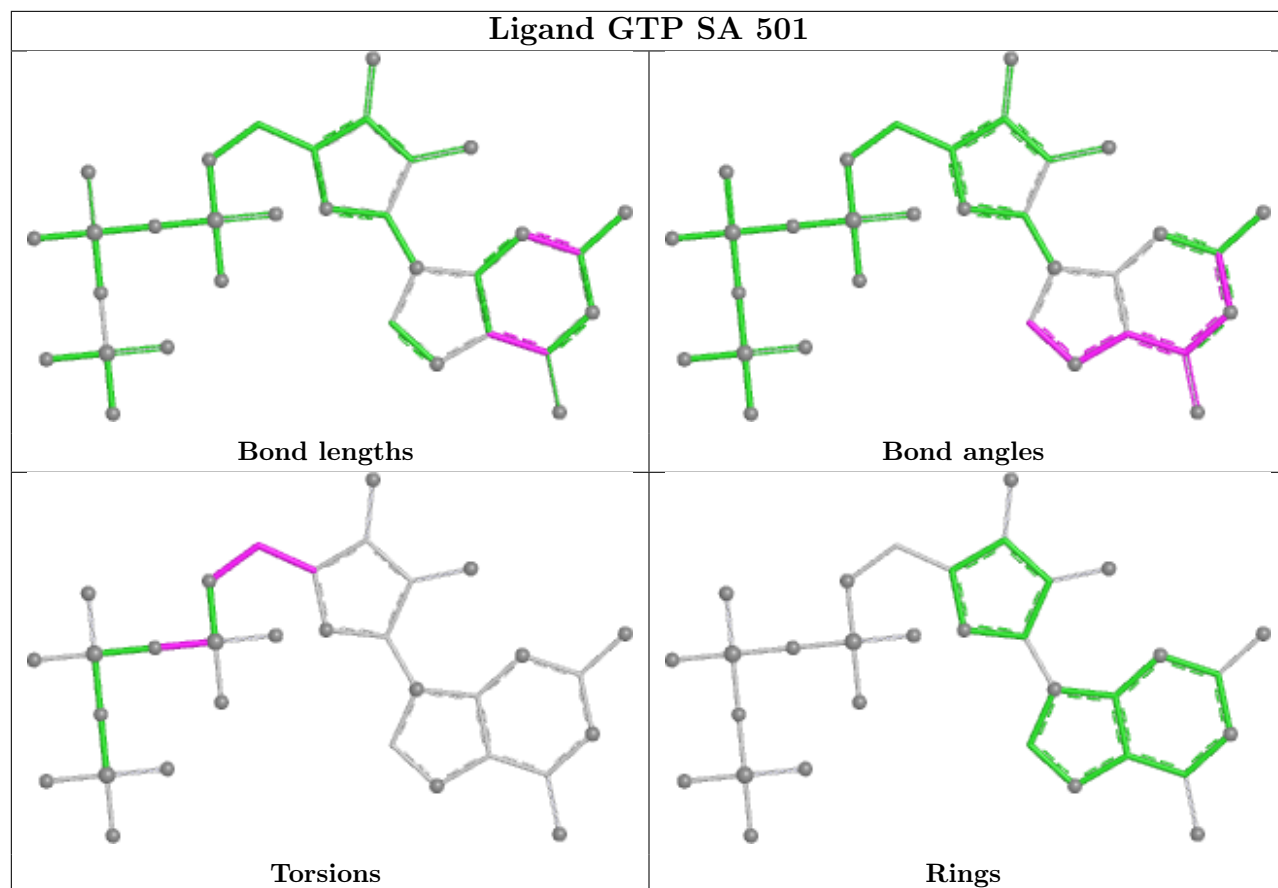


## Ligand GDP MB 501

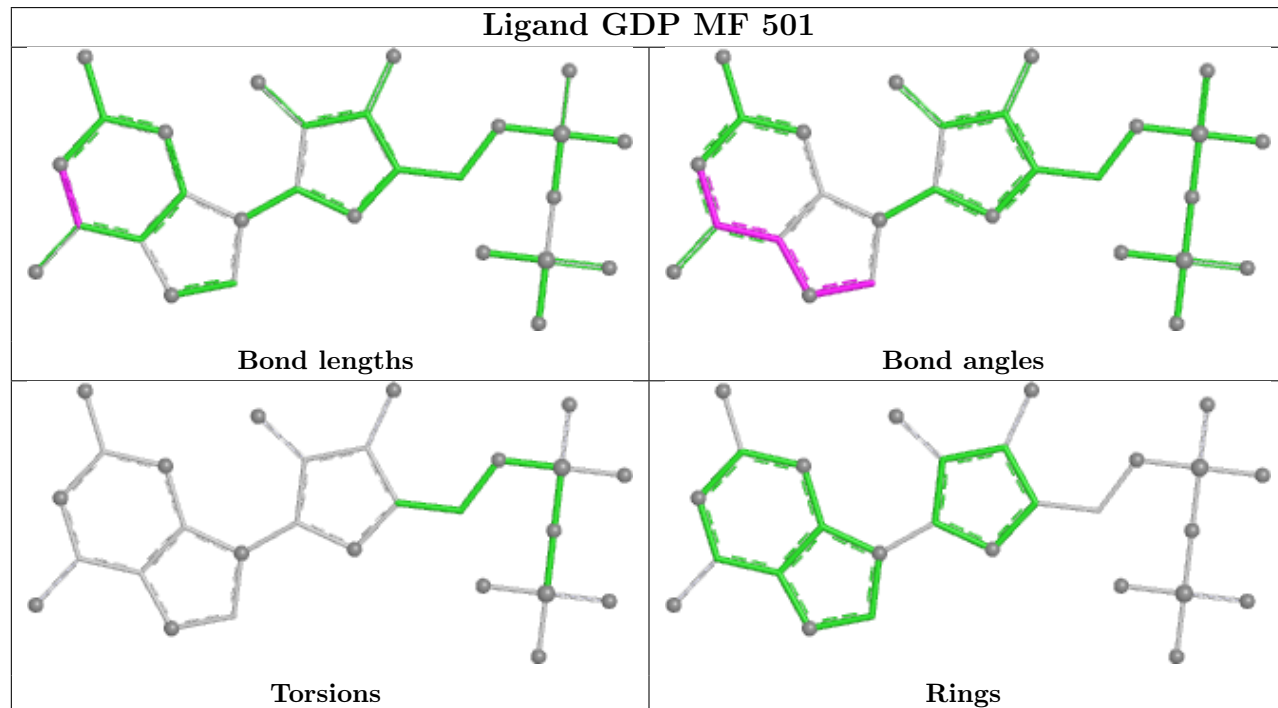




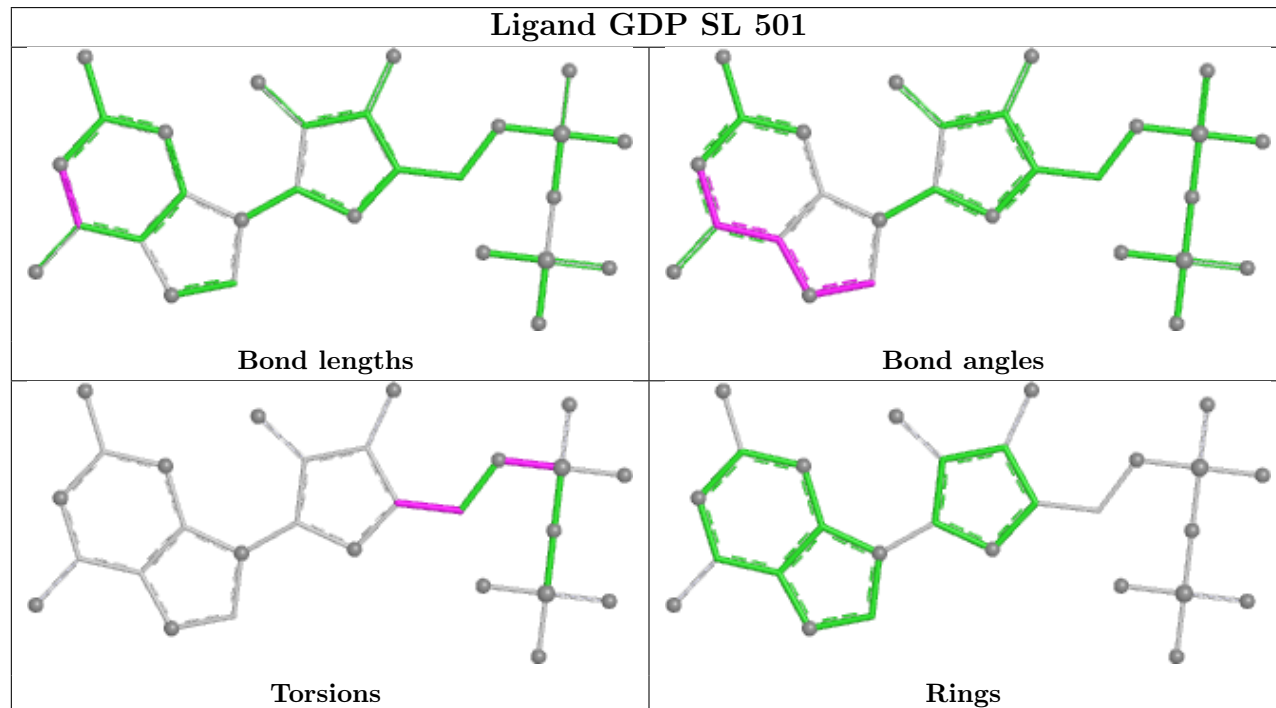
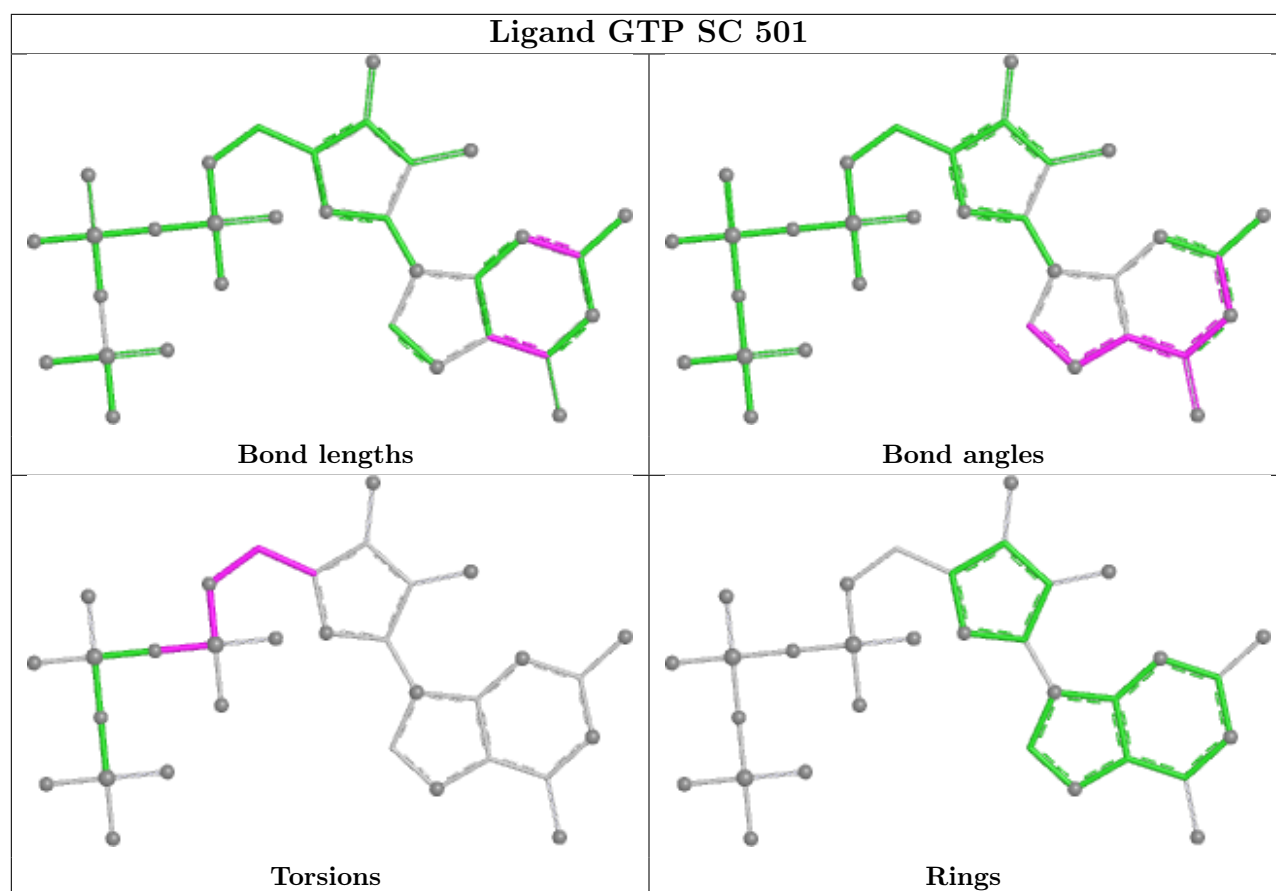
## Ligand GTP SA 501



## Ligand GDP MF 501

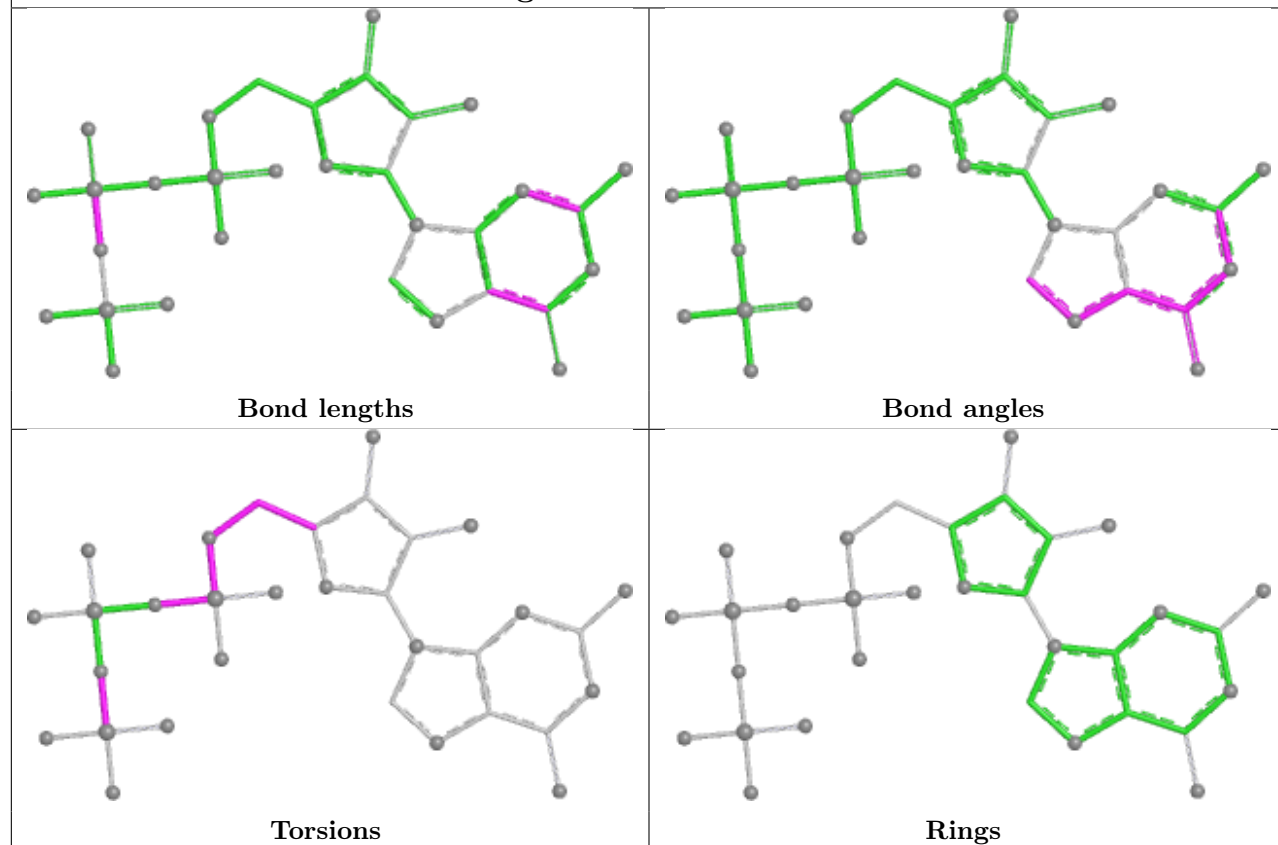




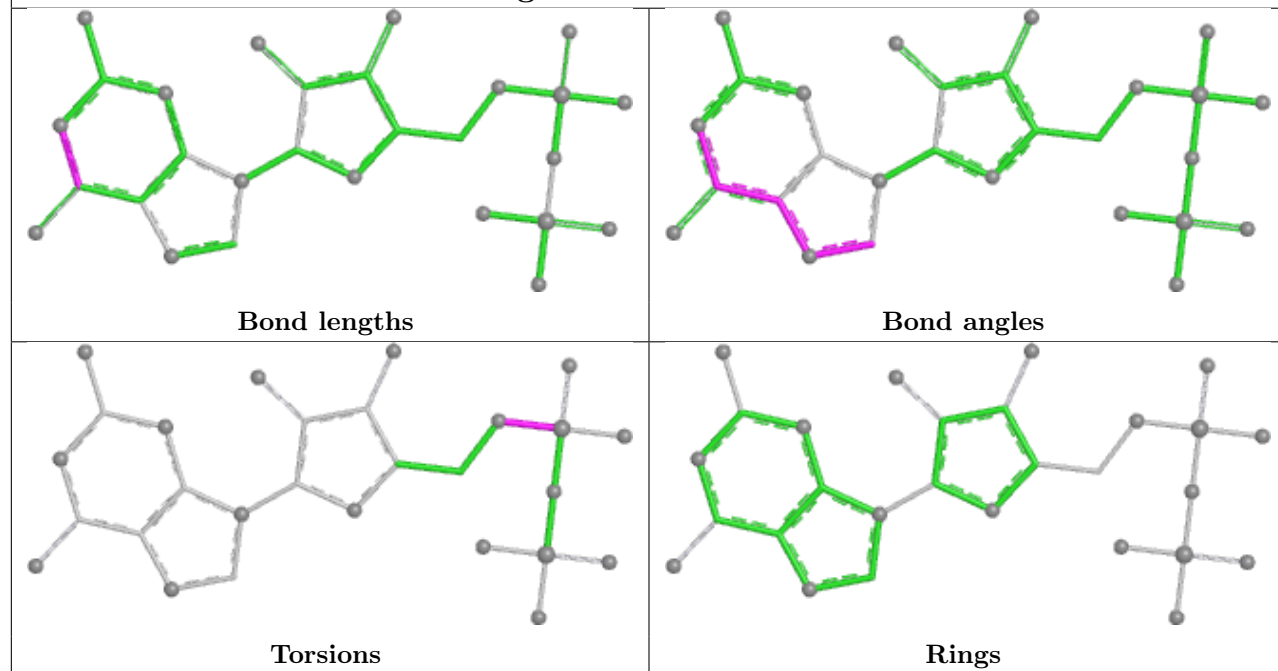




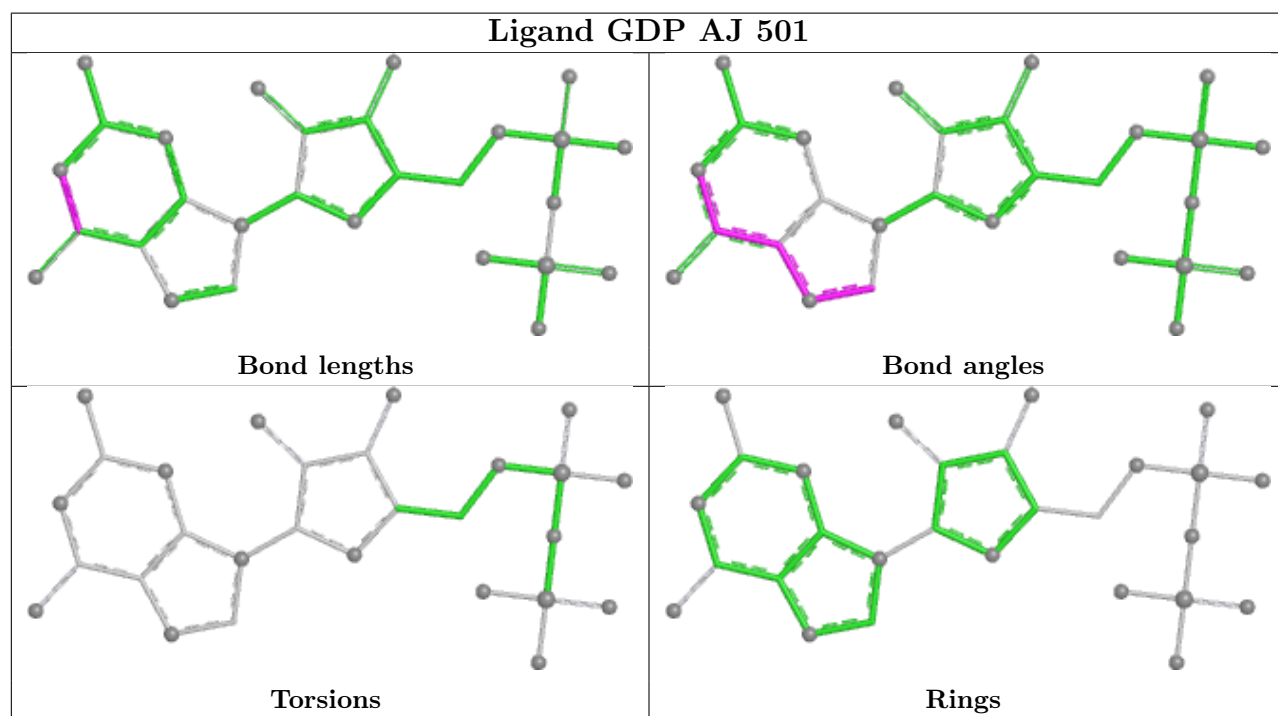
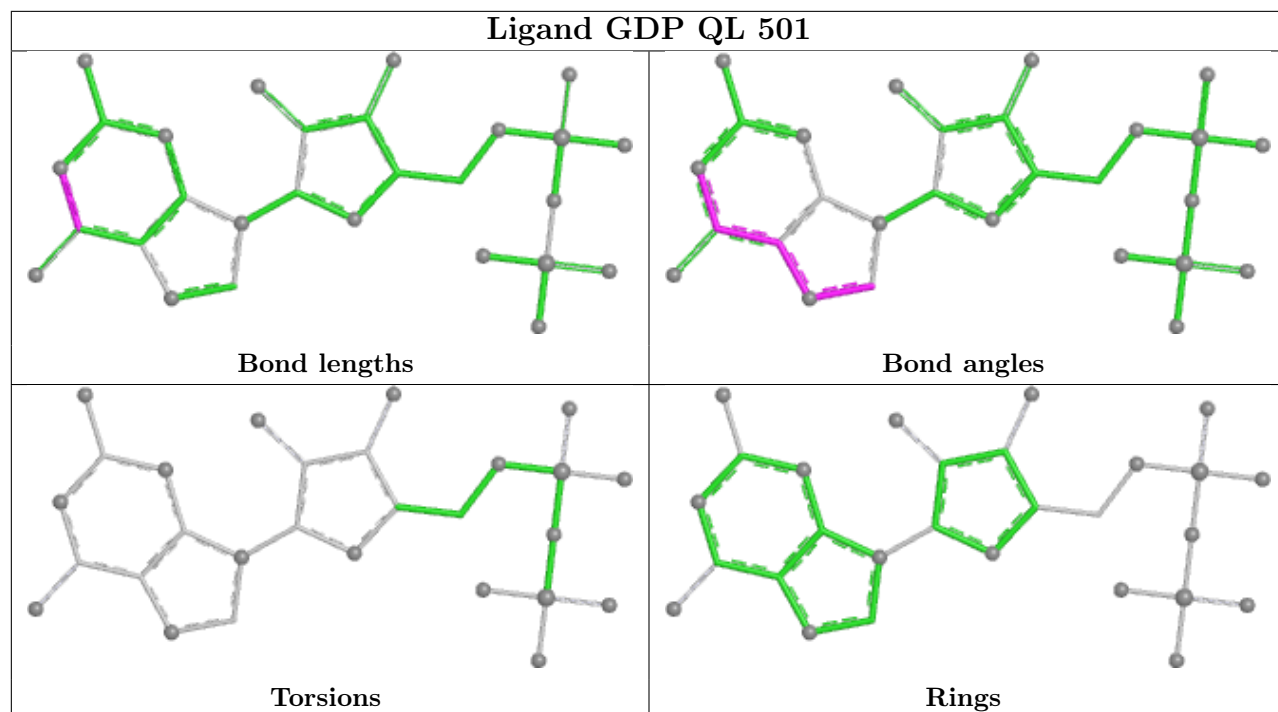
## Ligand GTP HC 501



## Ligand GDP UF 501

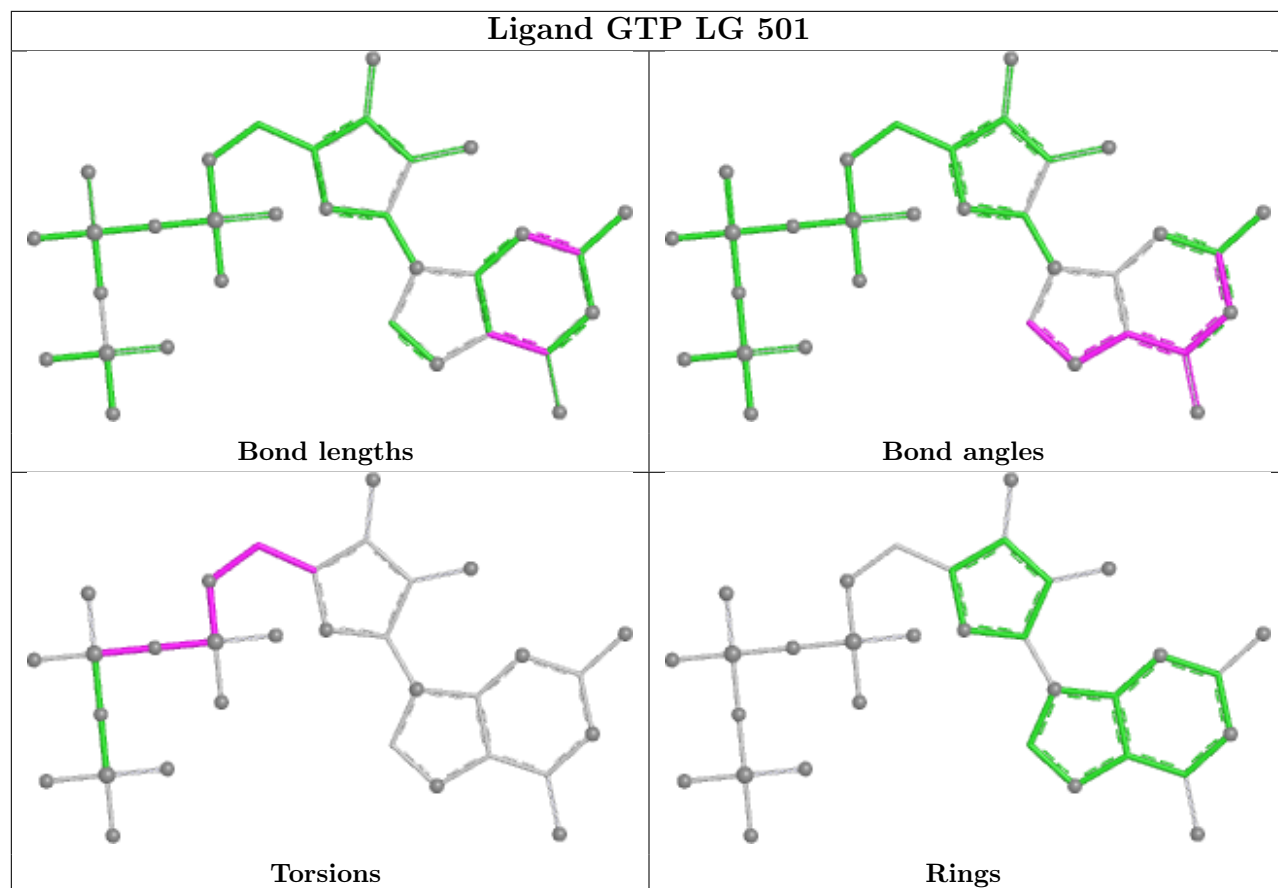




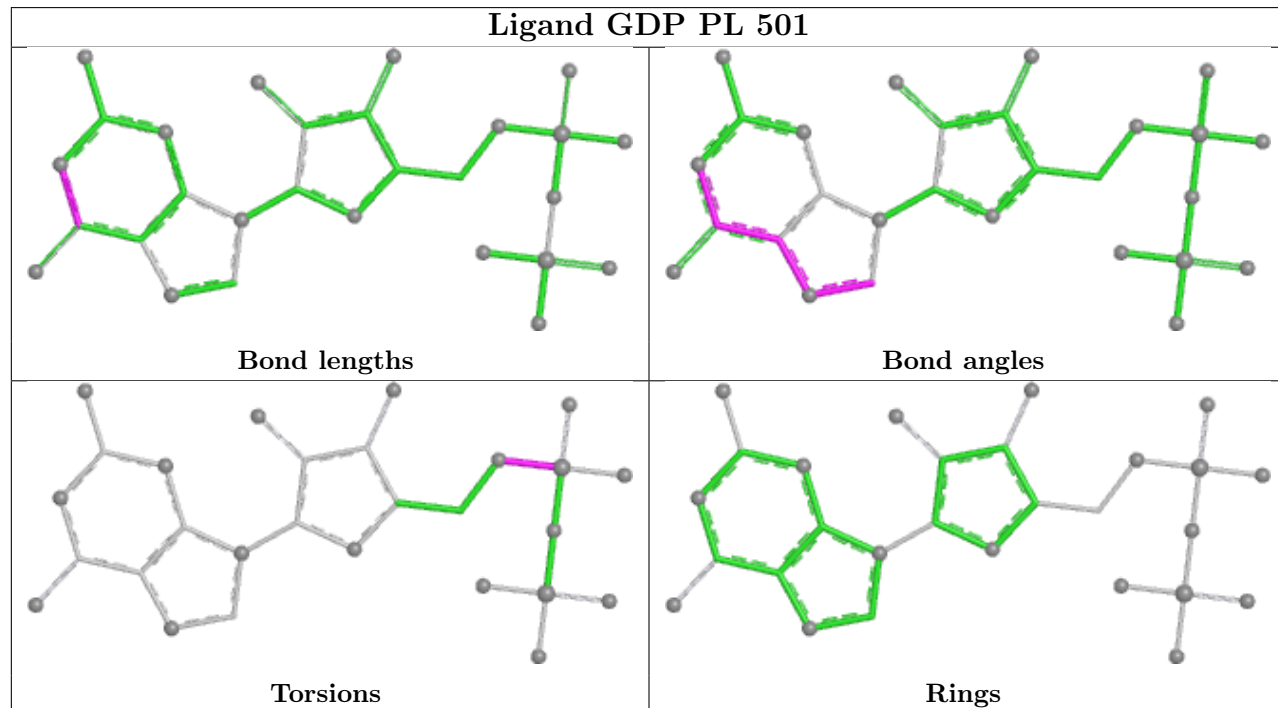




## Ligand GTP LG 501

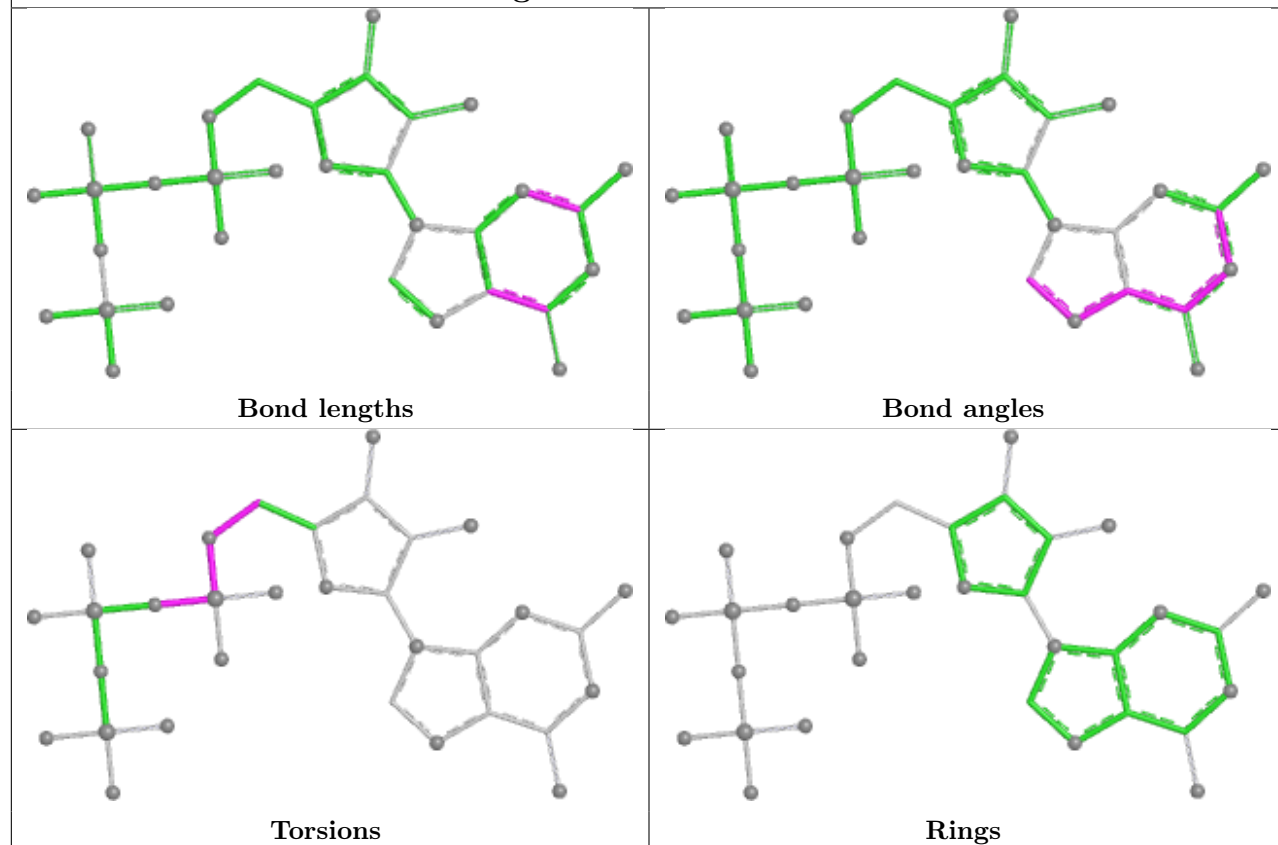


## Ligand GDP PL 501

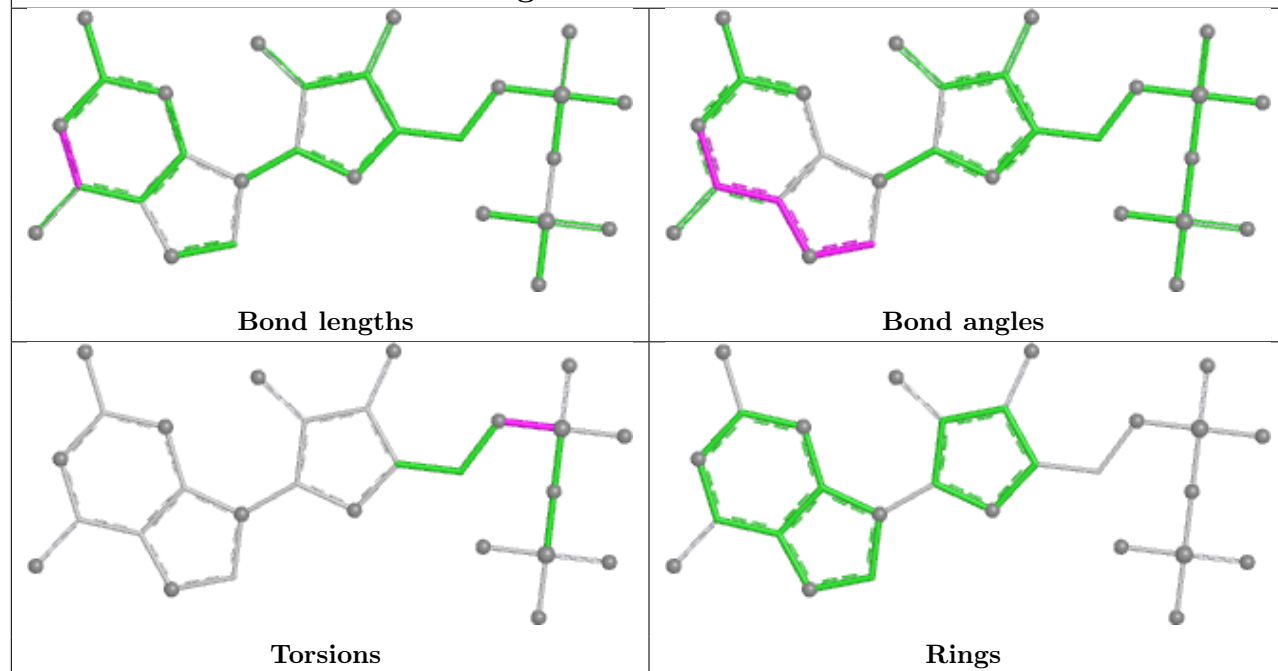




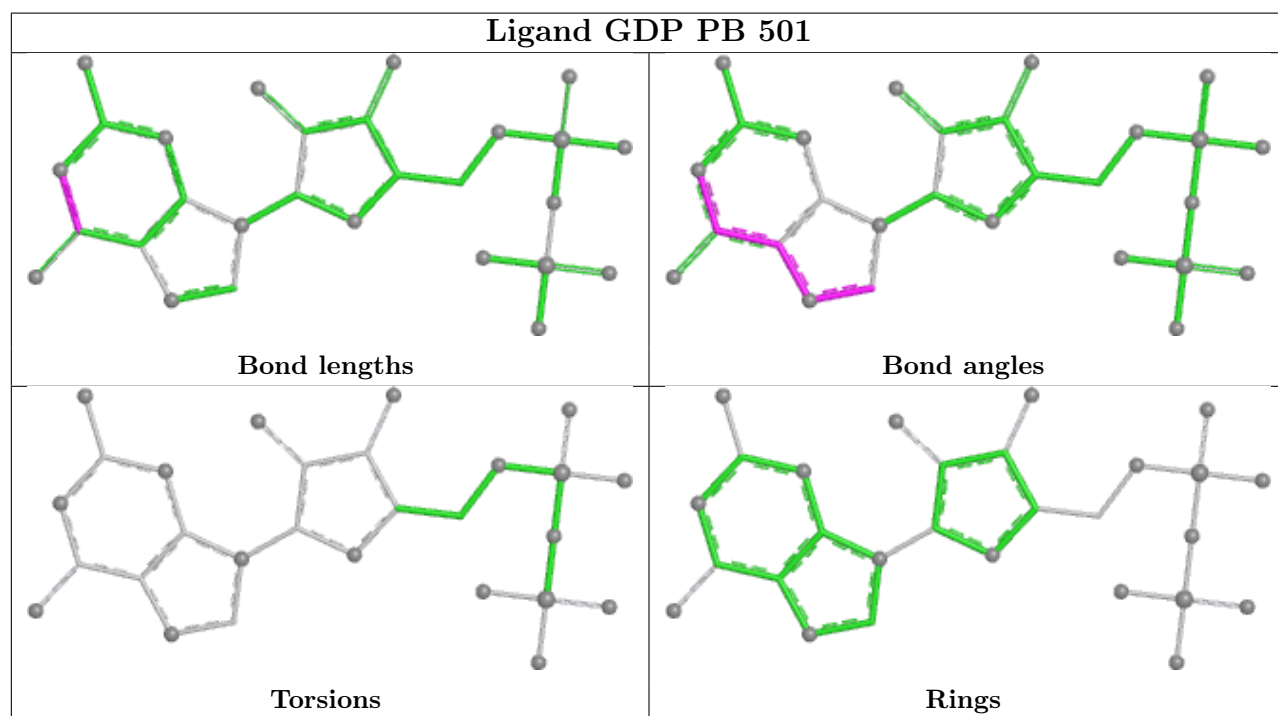
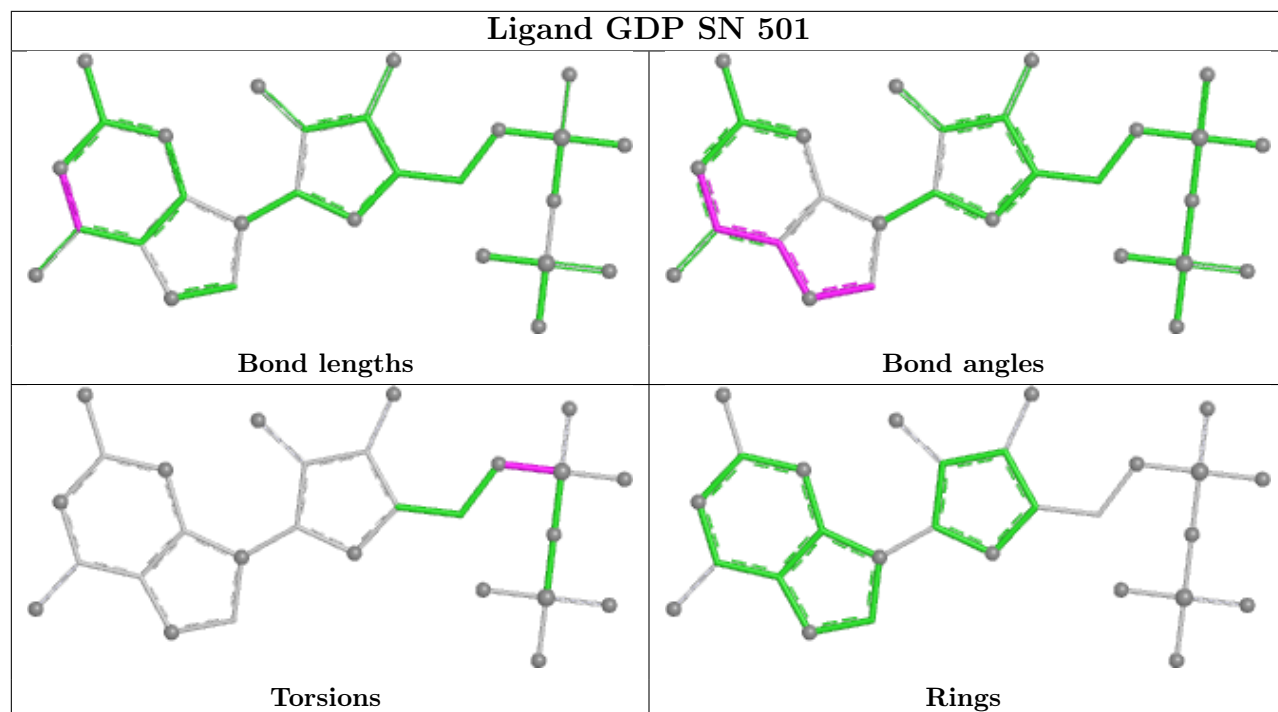
## Ligand GTP DM 501



## Ligand GDP GF 501

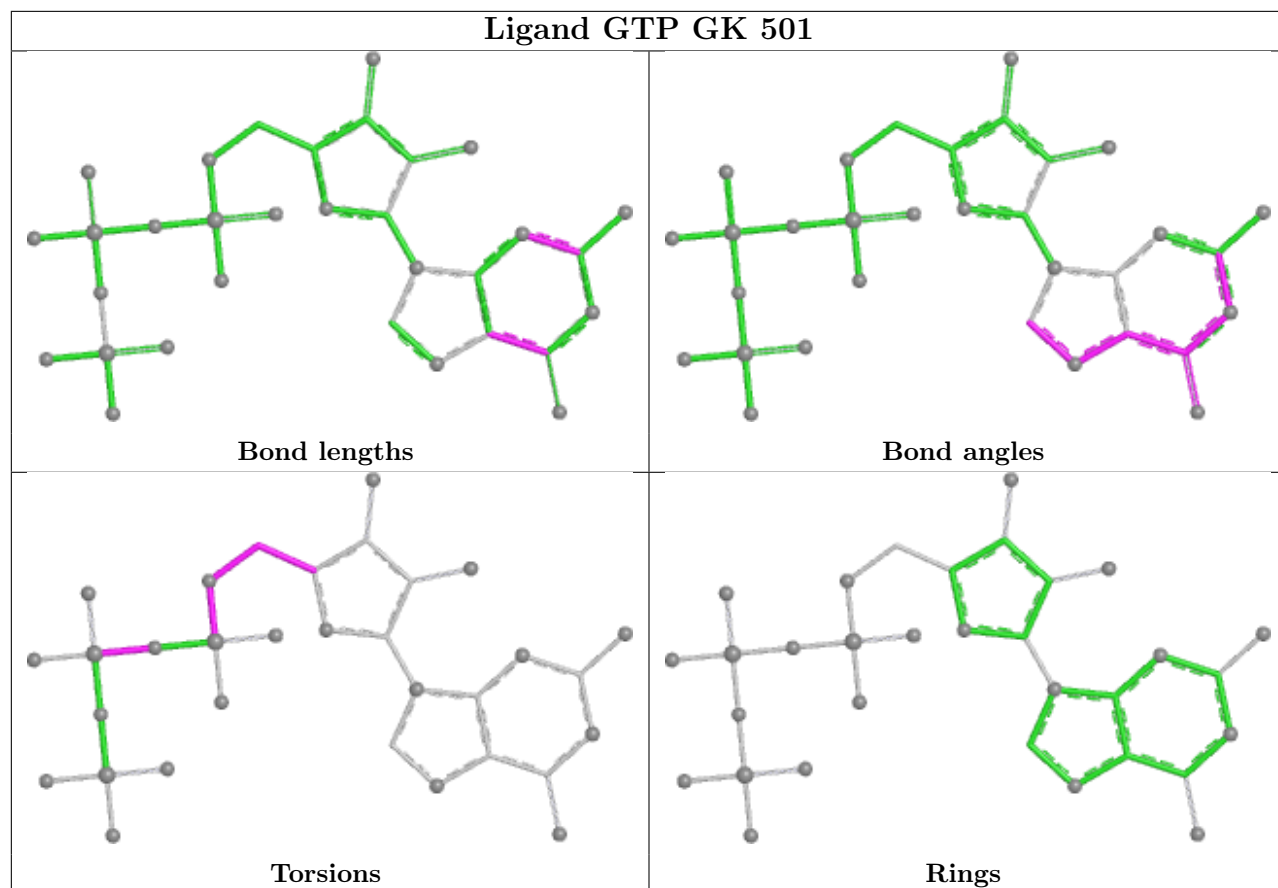




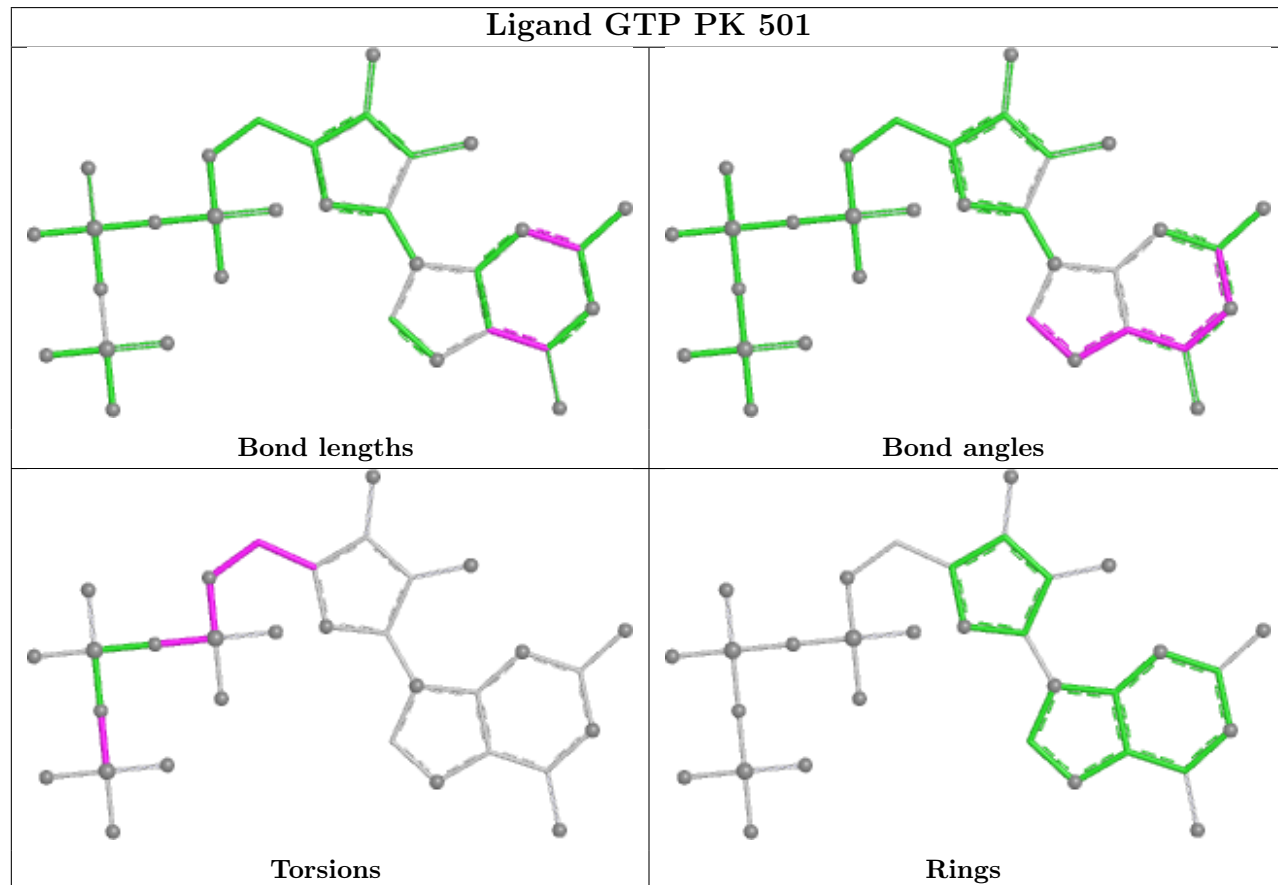




## Ligand GTP GK 501

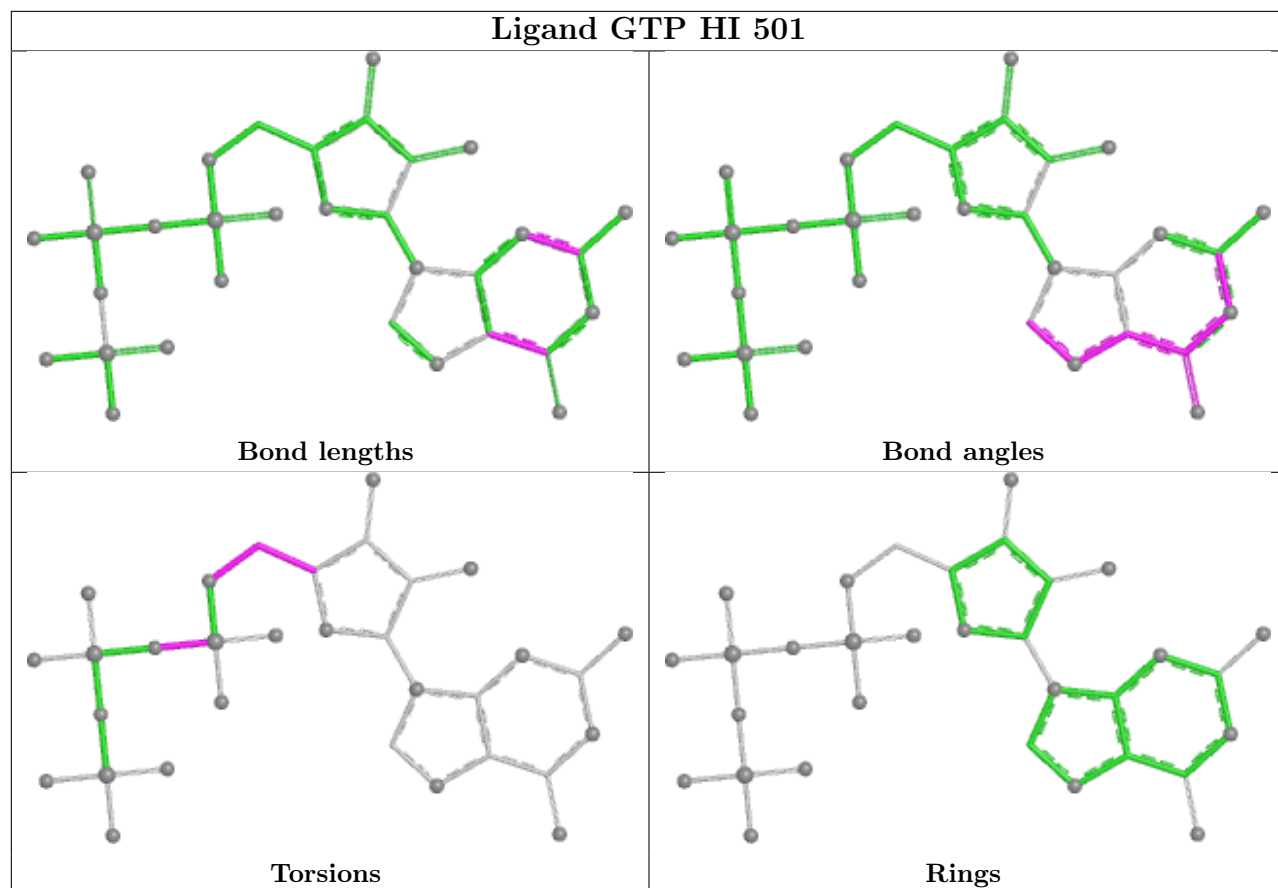


## Ligand GTP PK 501

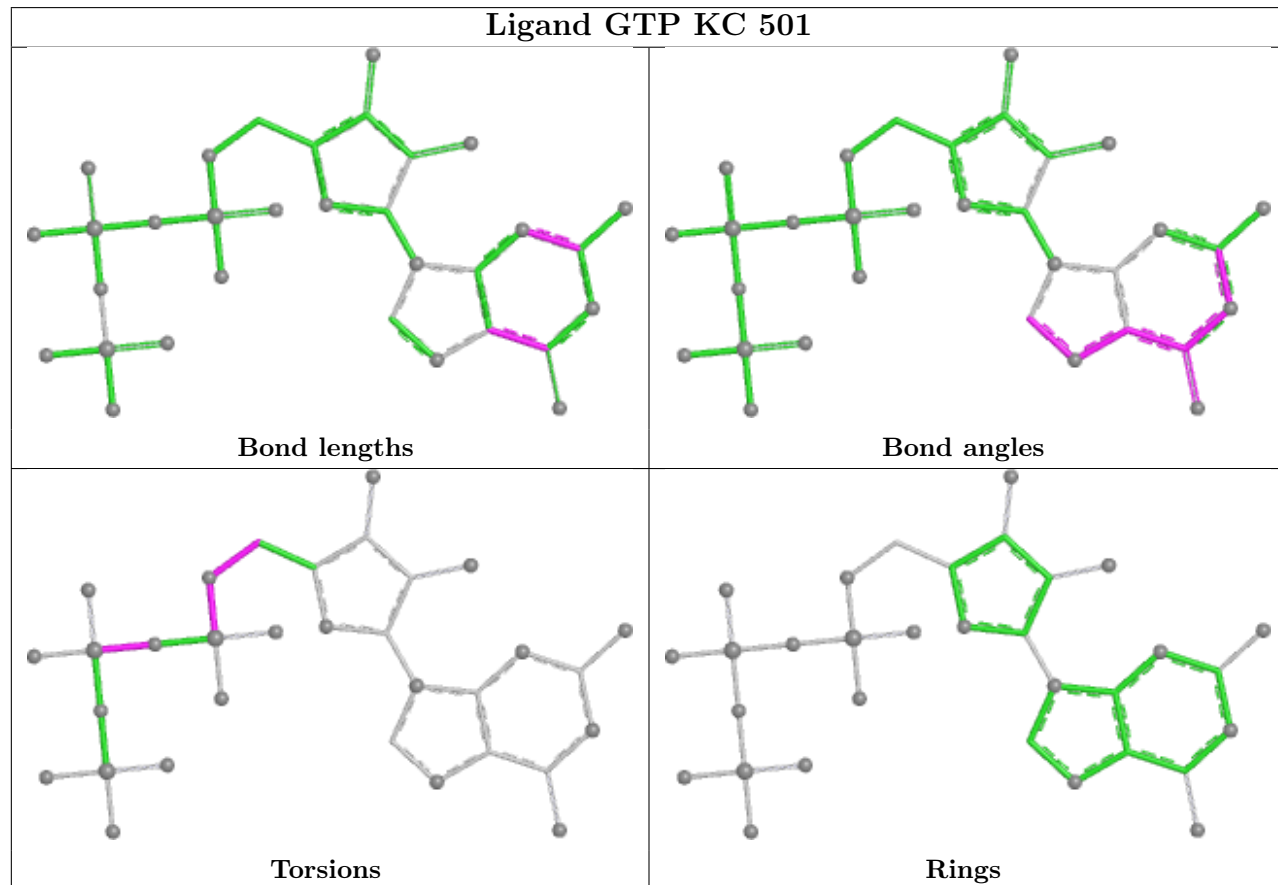




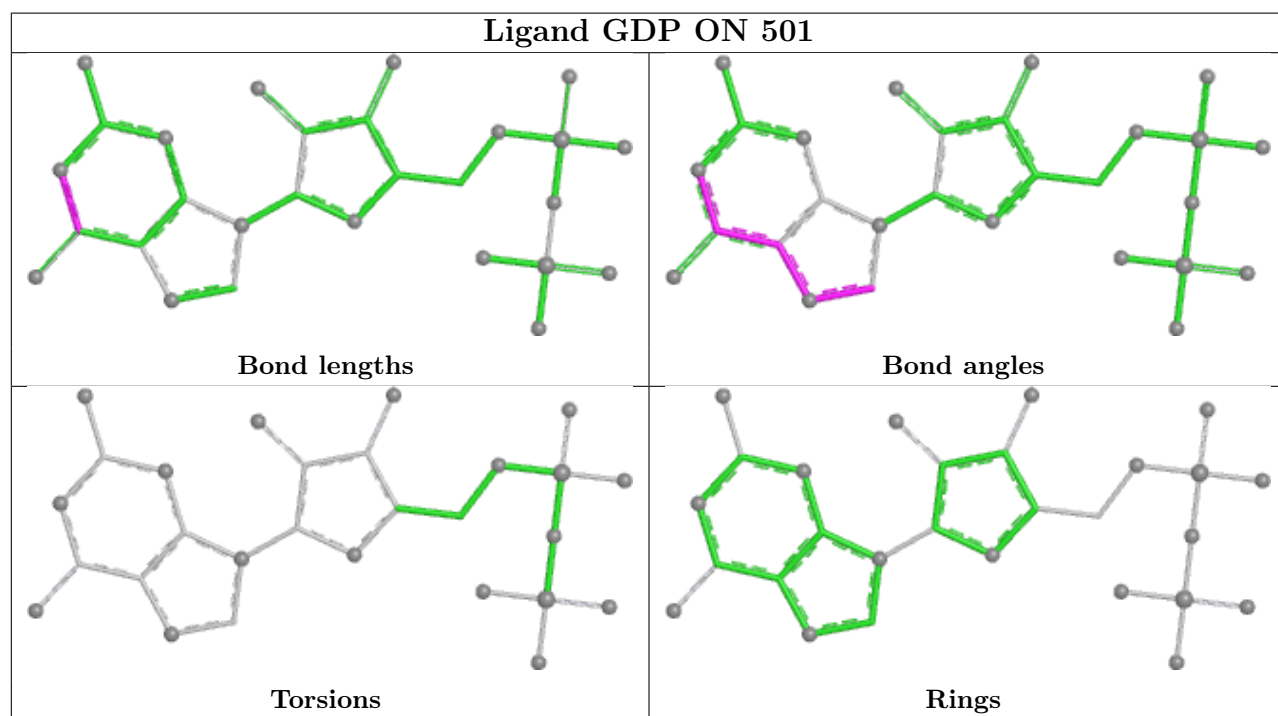
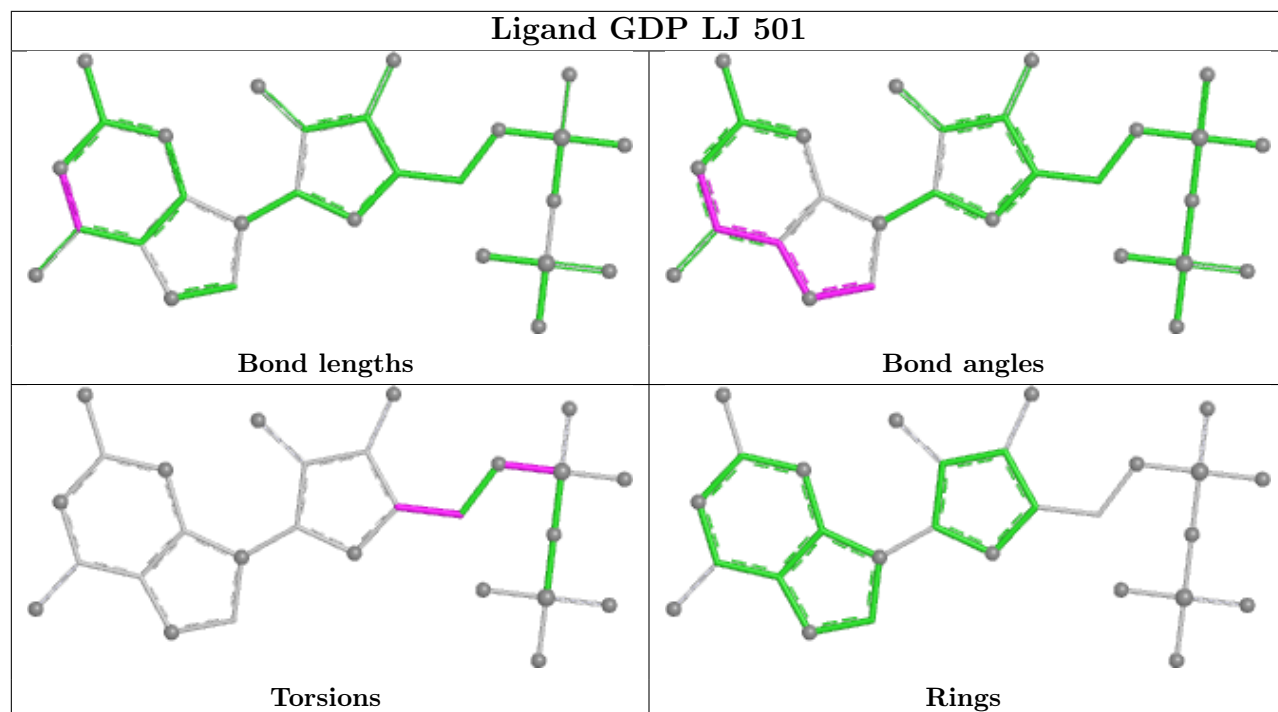
## Ligand GTP HI 501



## Ligand GTP KC 501

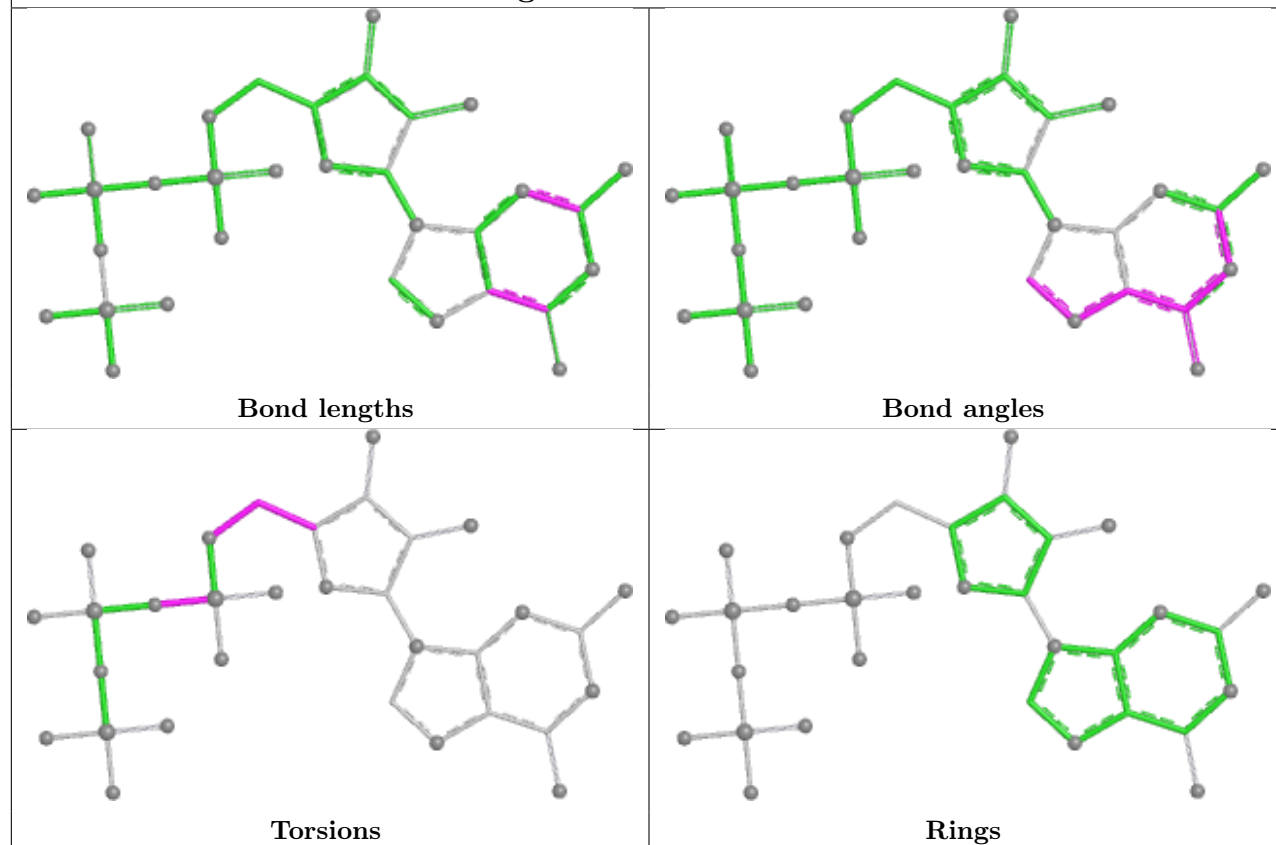




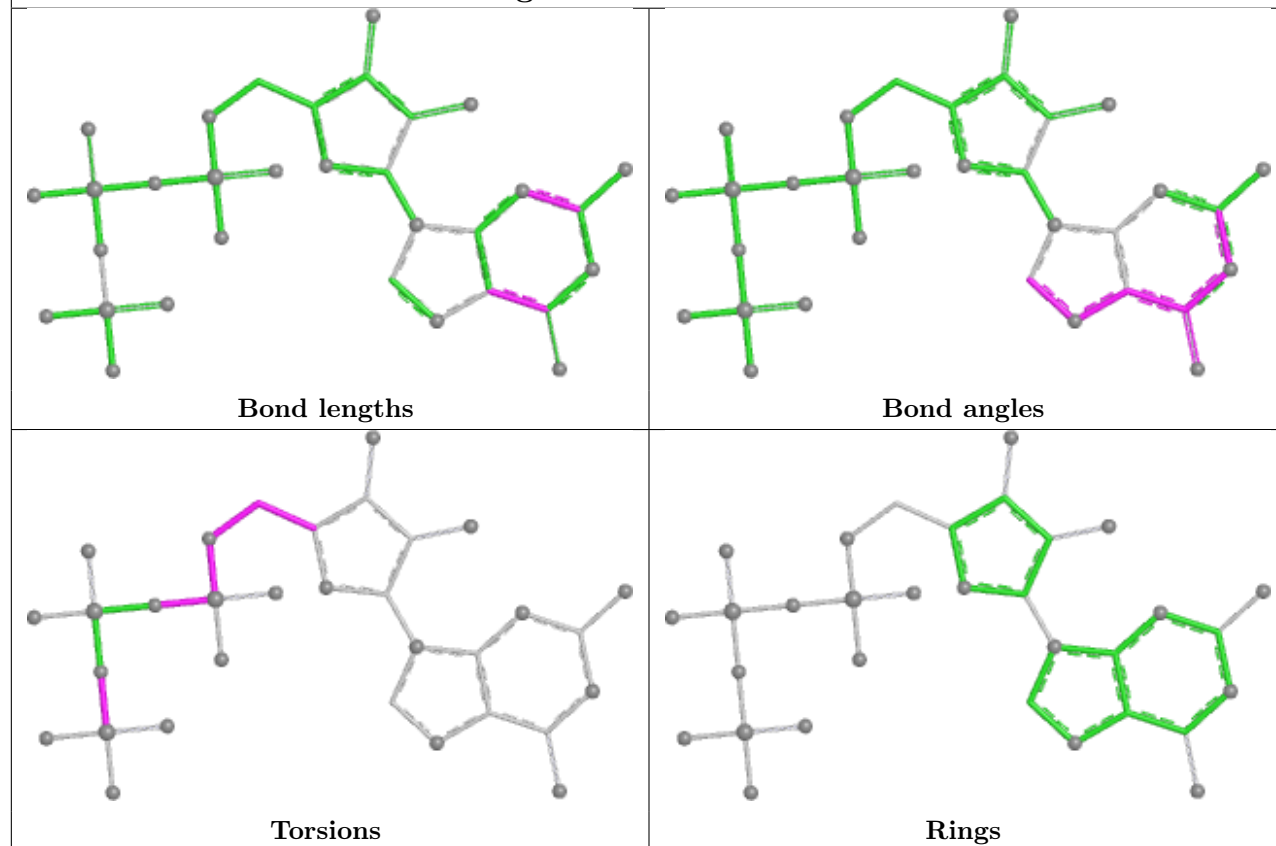




## Ligand GTP GE 501

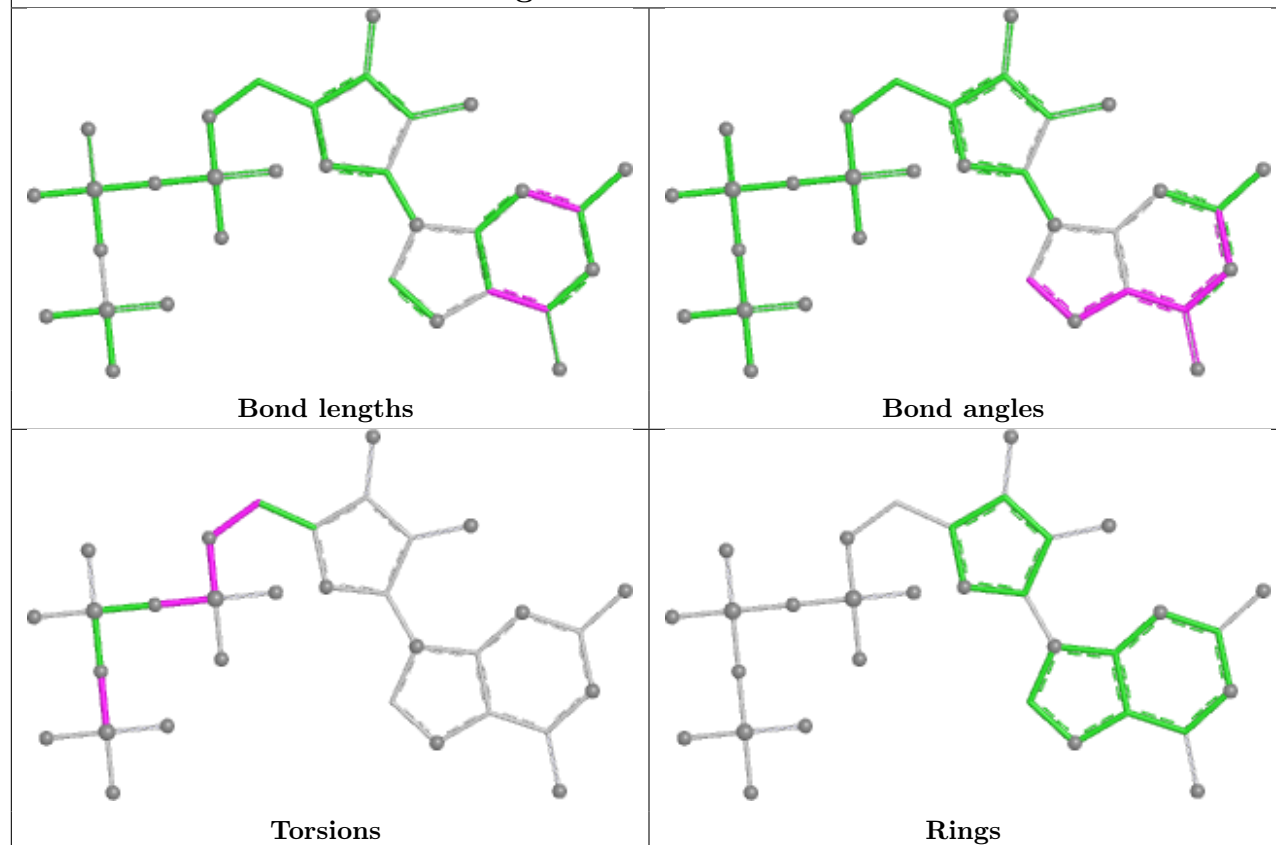


## Ligand GTP VK 501

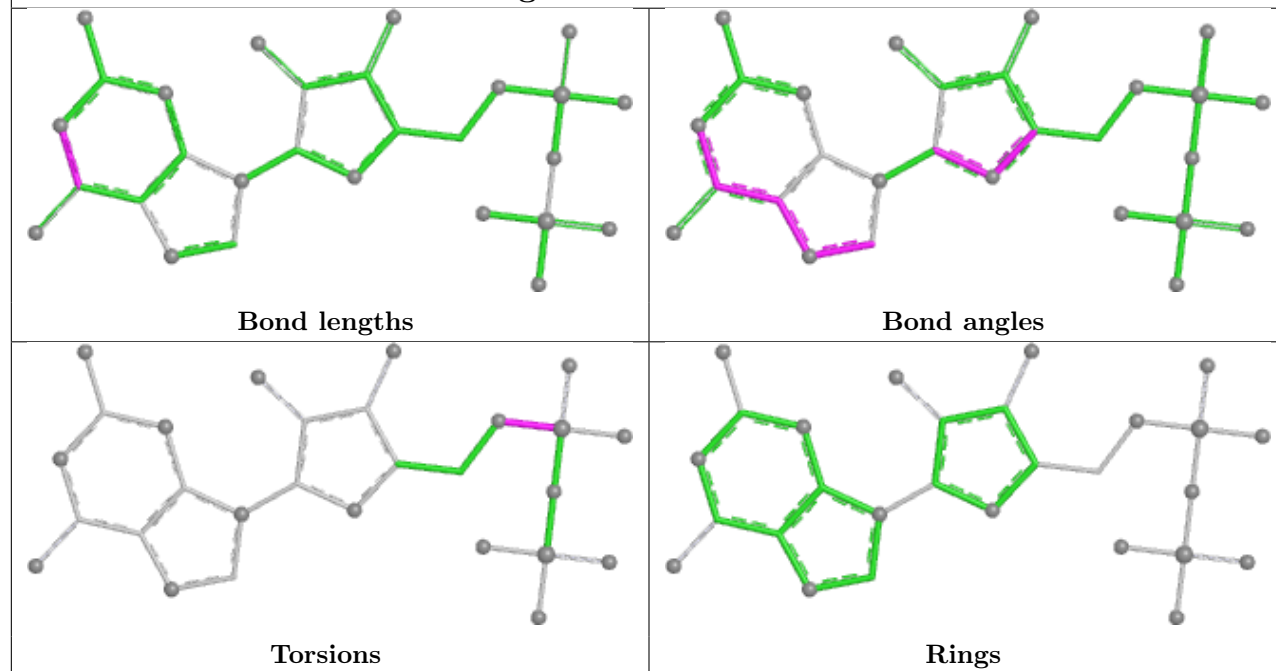




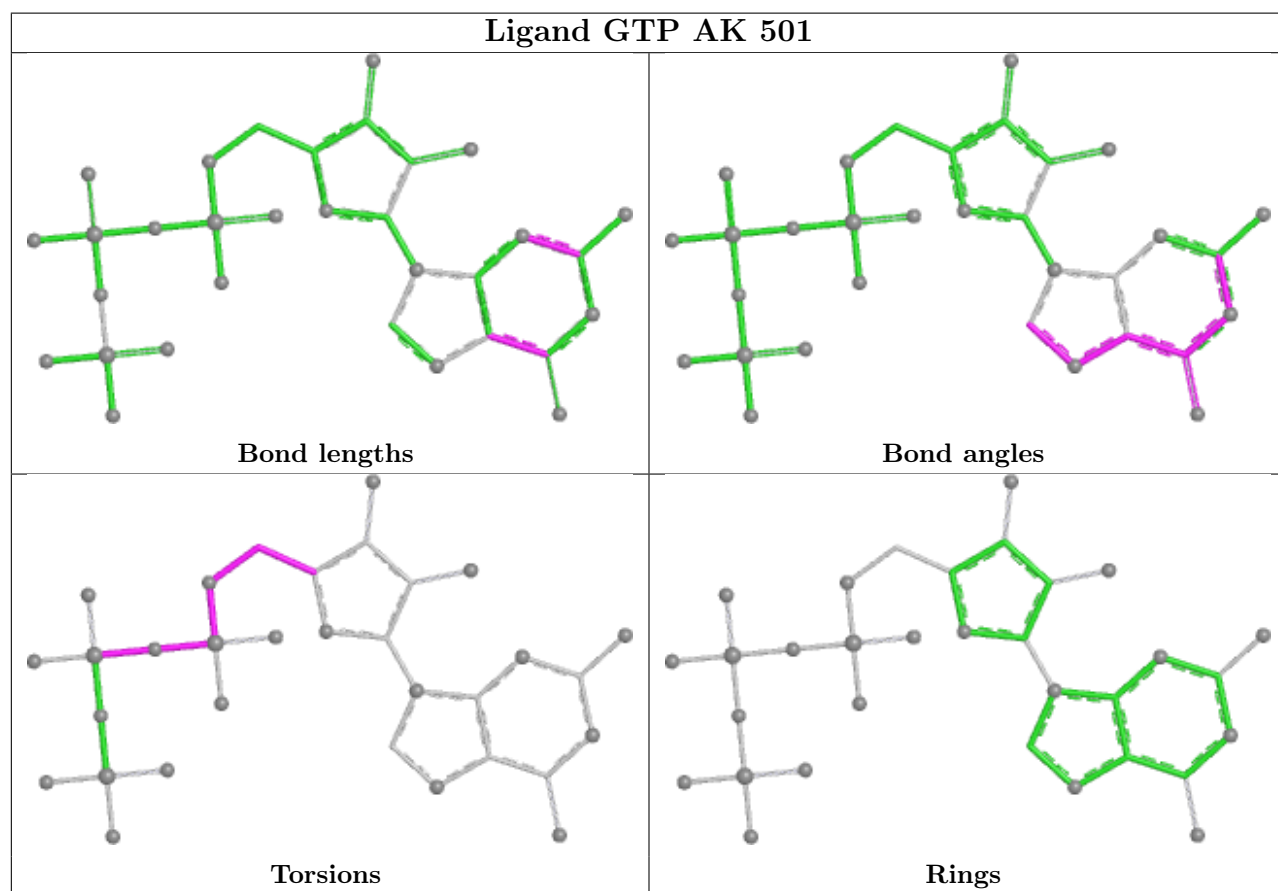
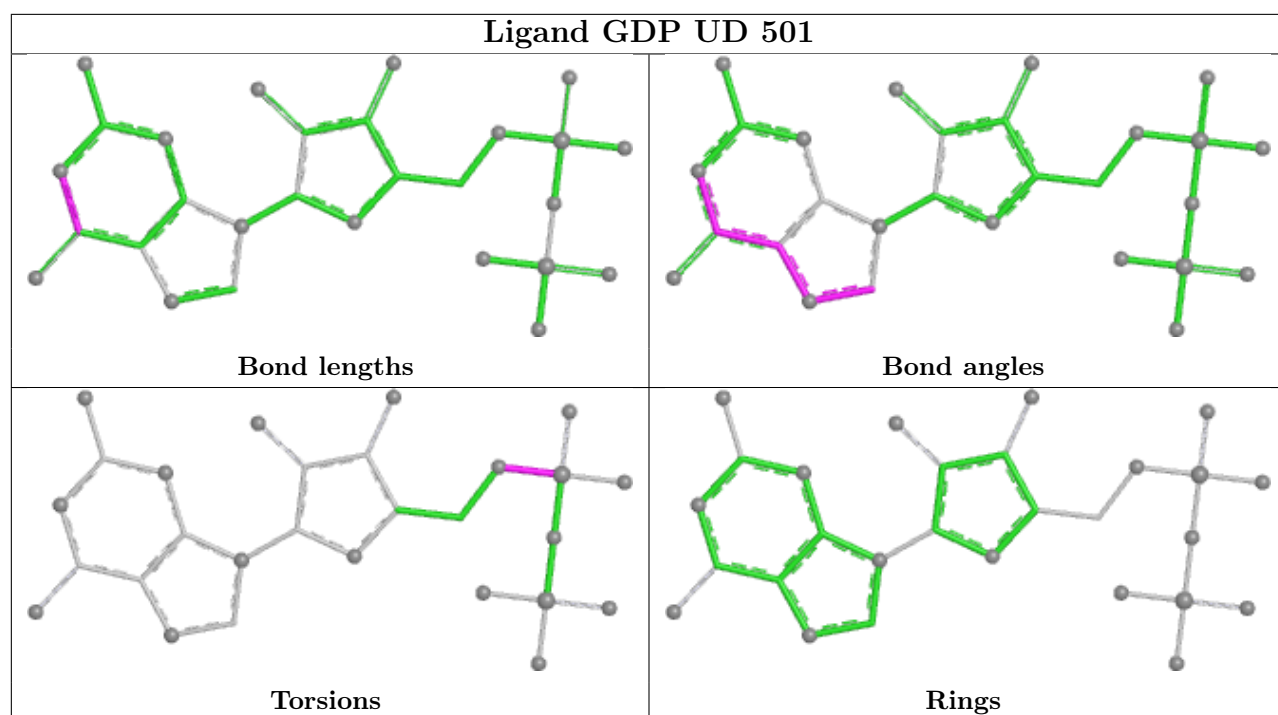
## Ligand GTP HK 501



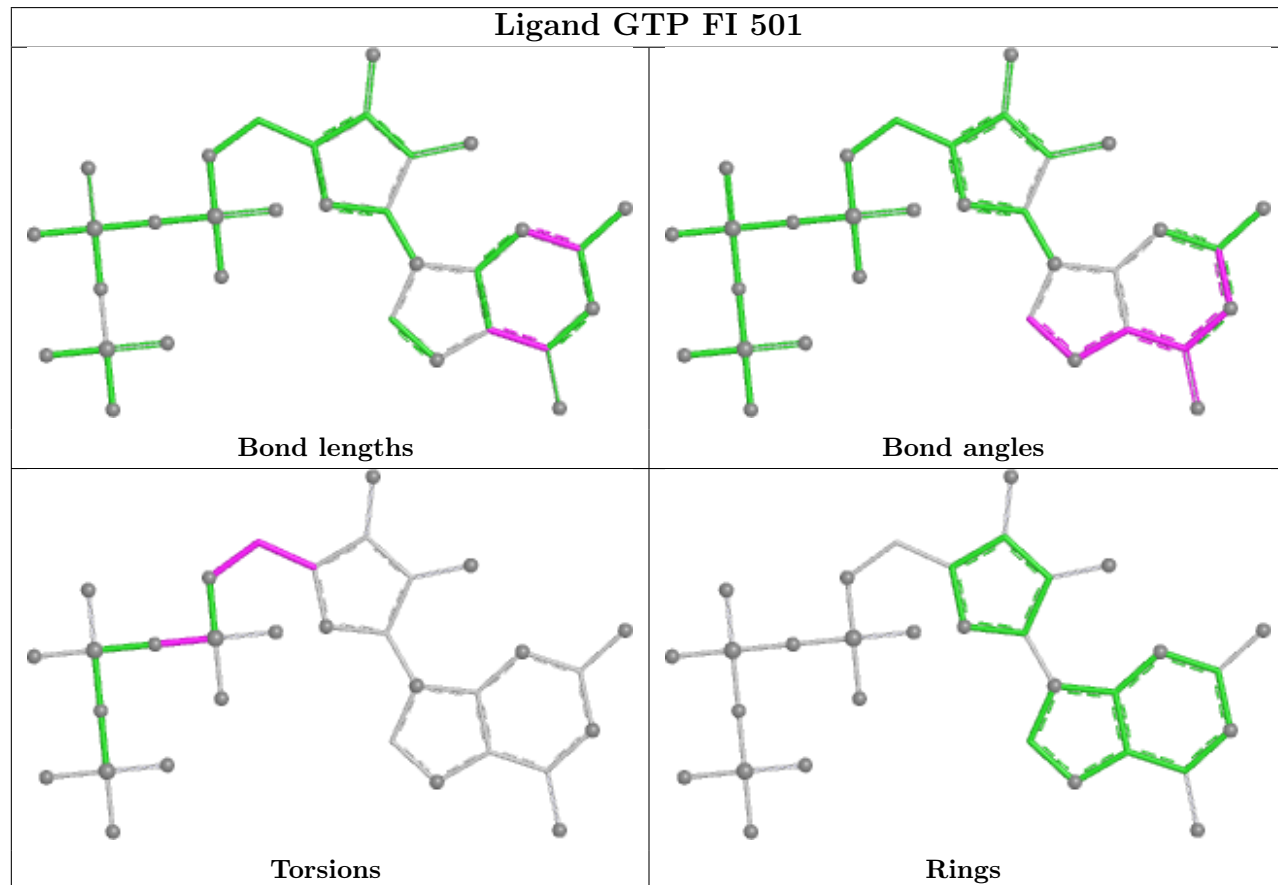
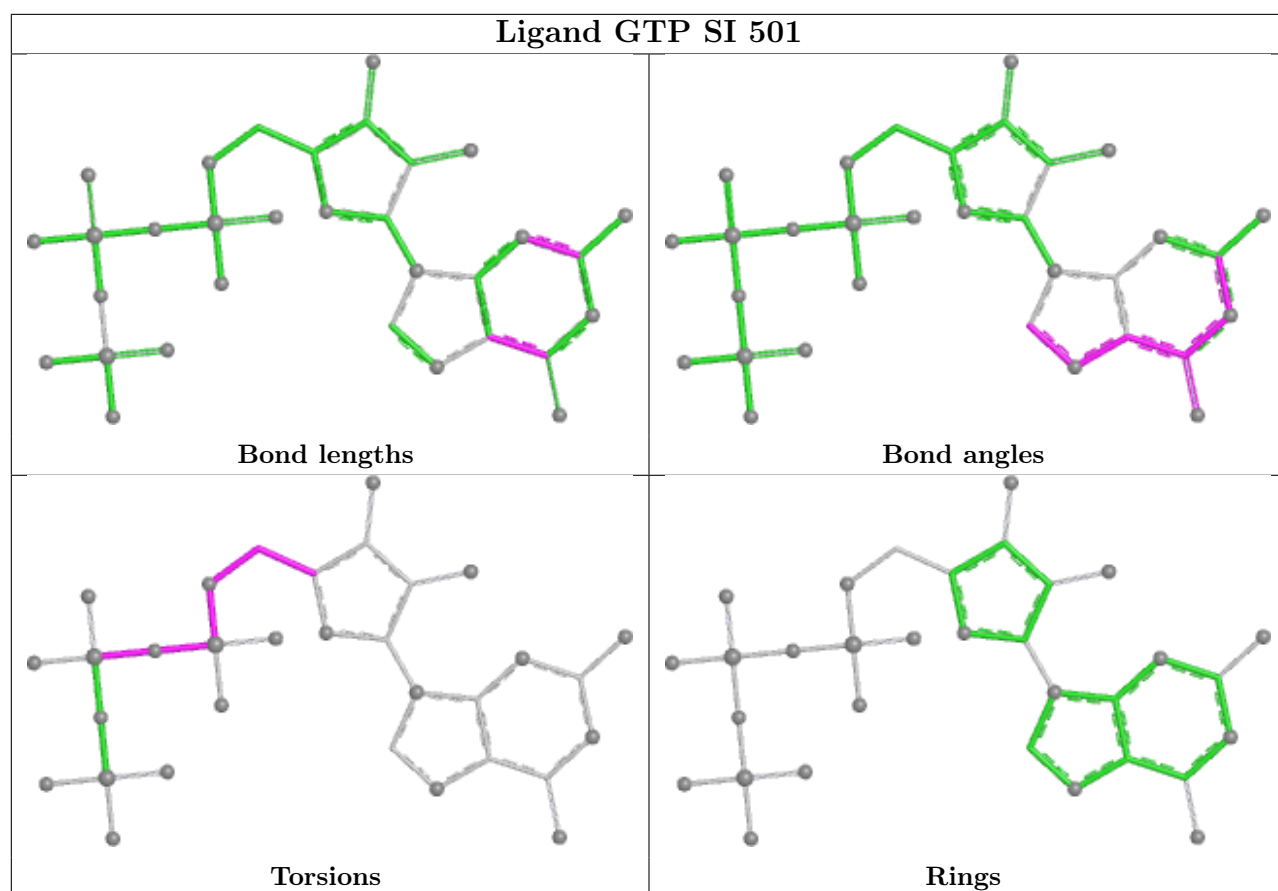
## Ligand GDP SD 501





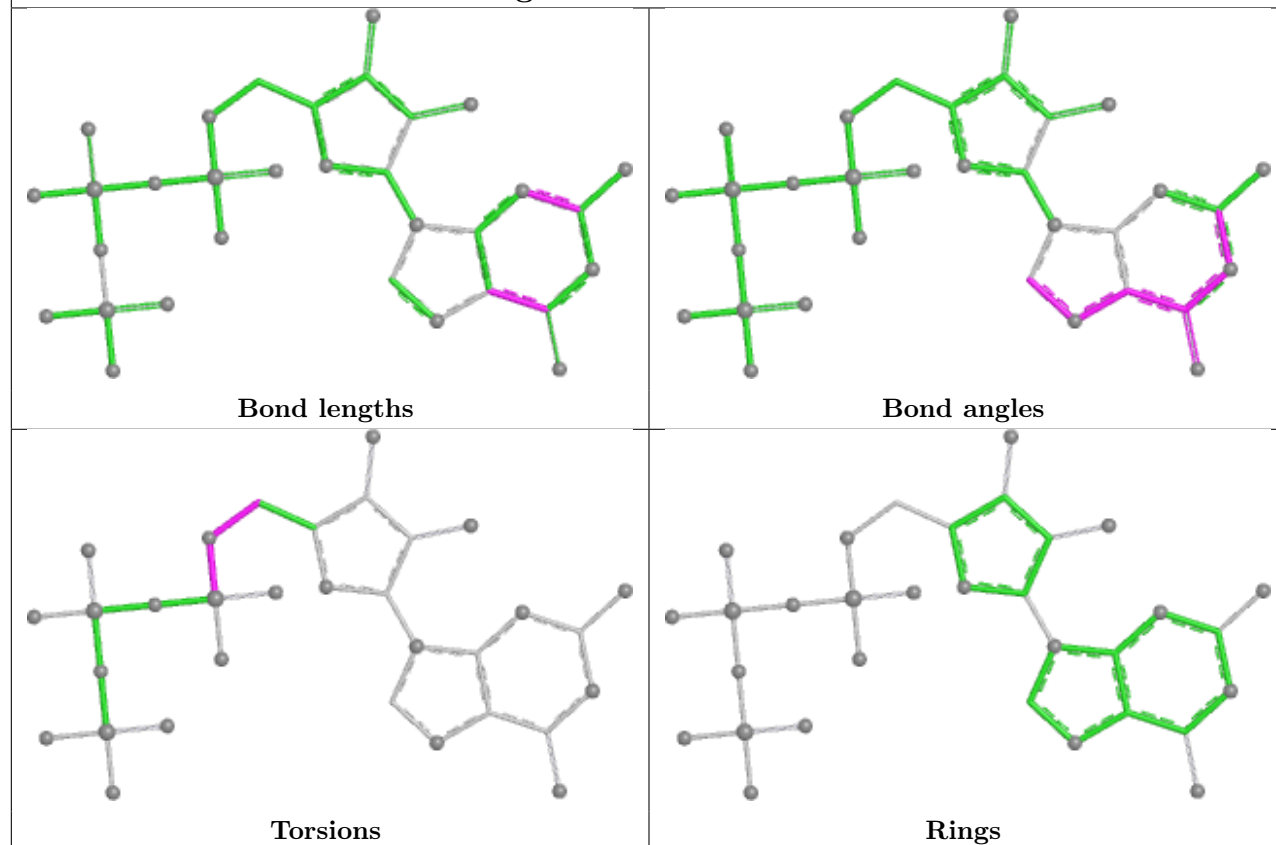




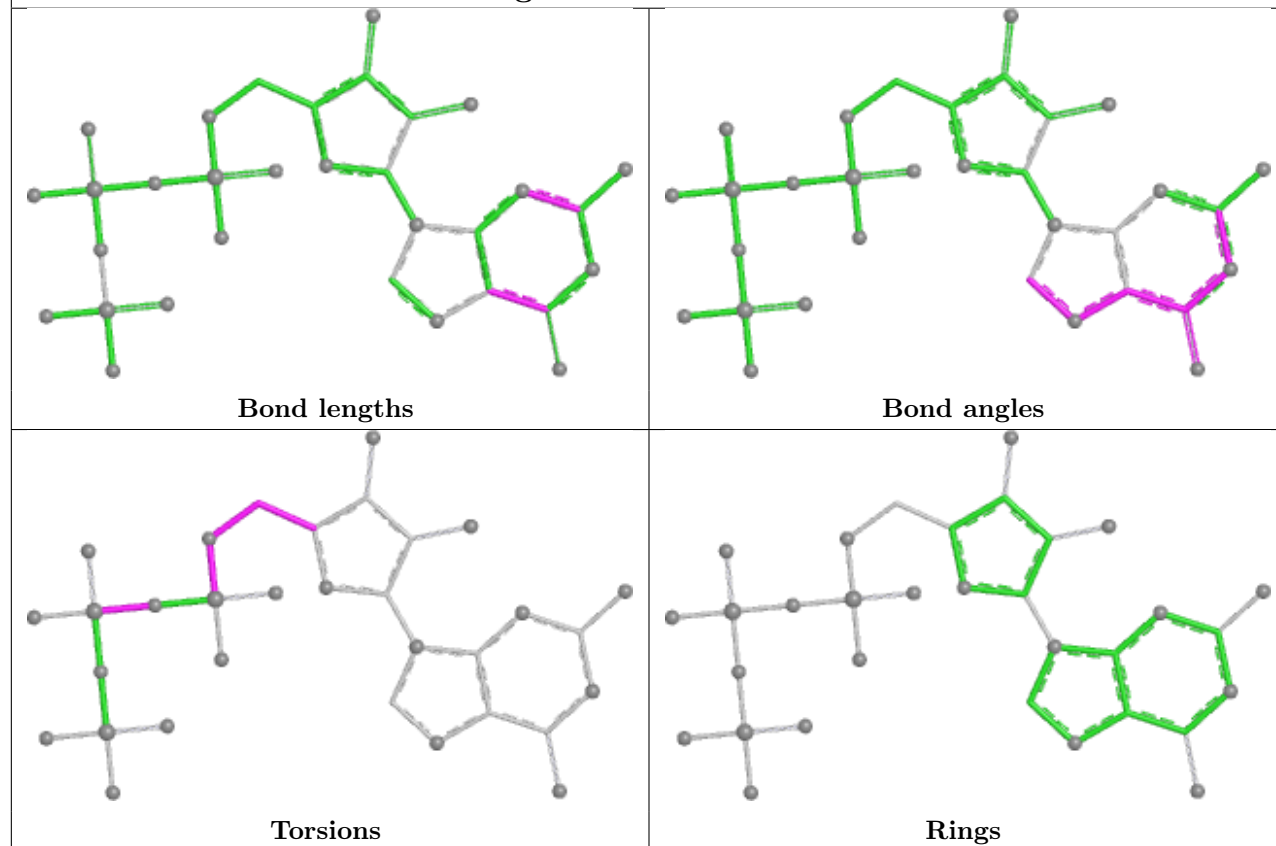




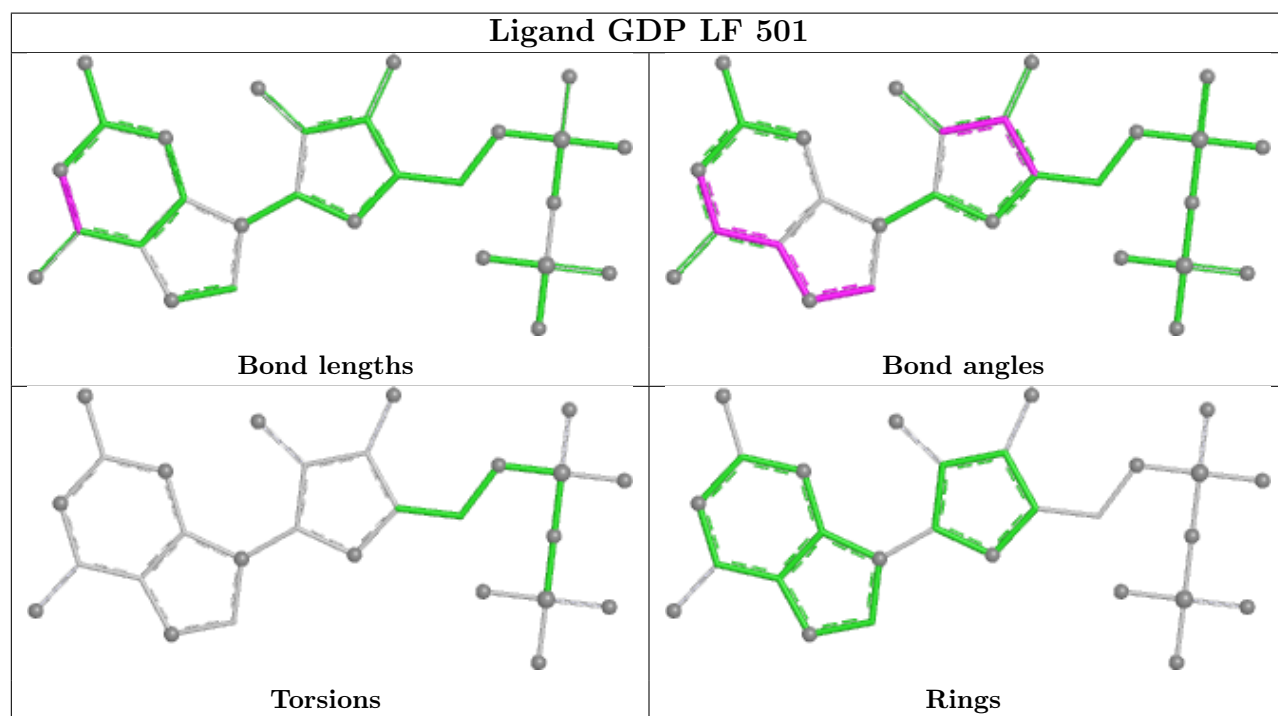
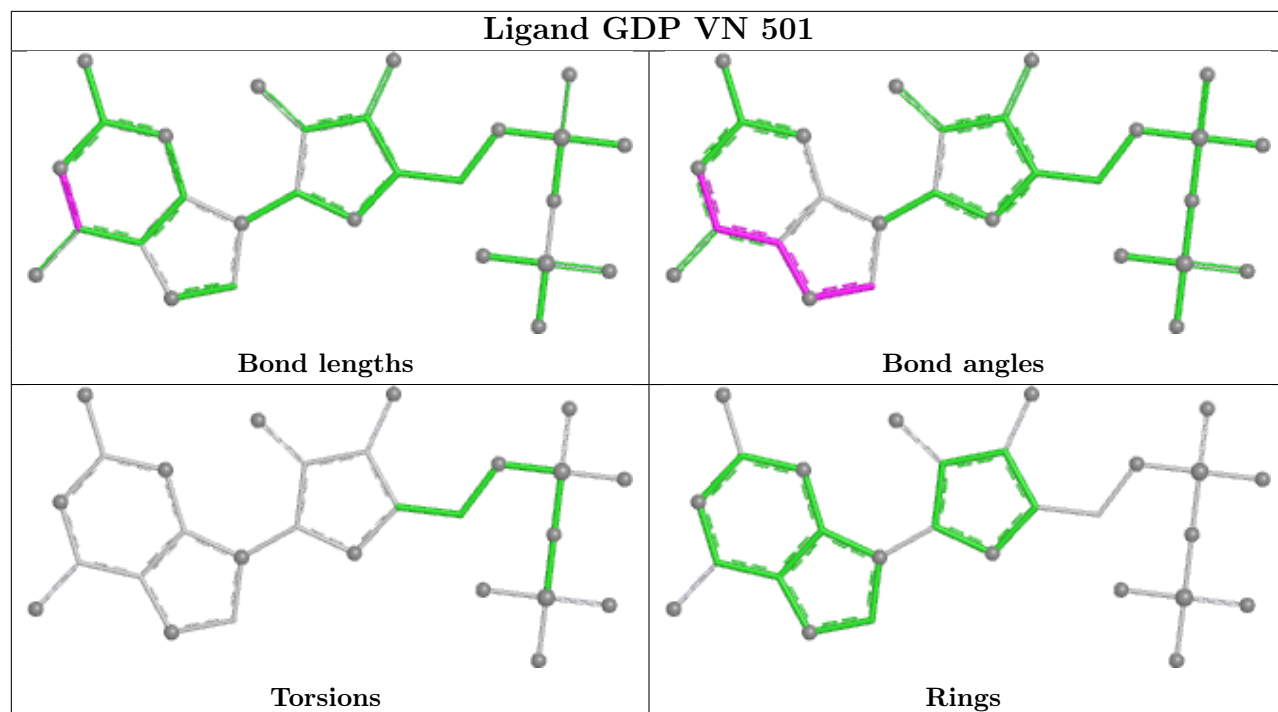
## Ligand GTP HG 501



## Ligand GTP EM 501

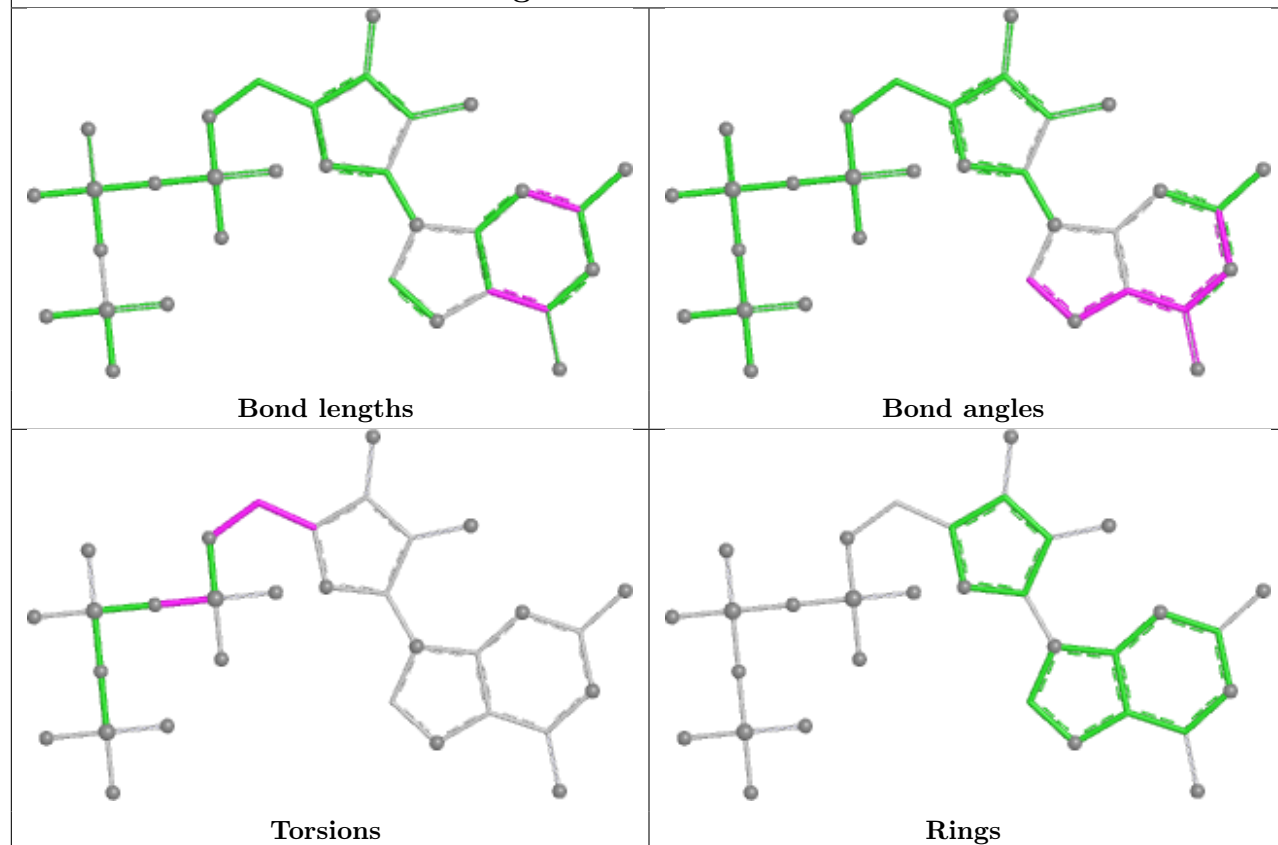




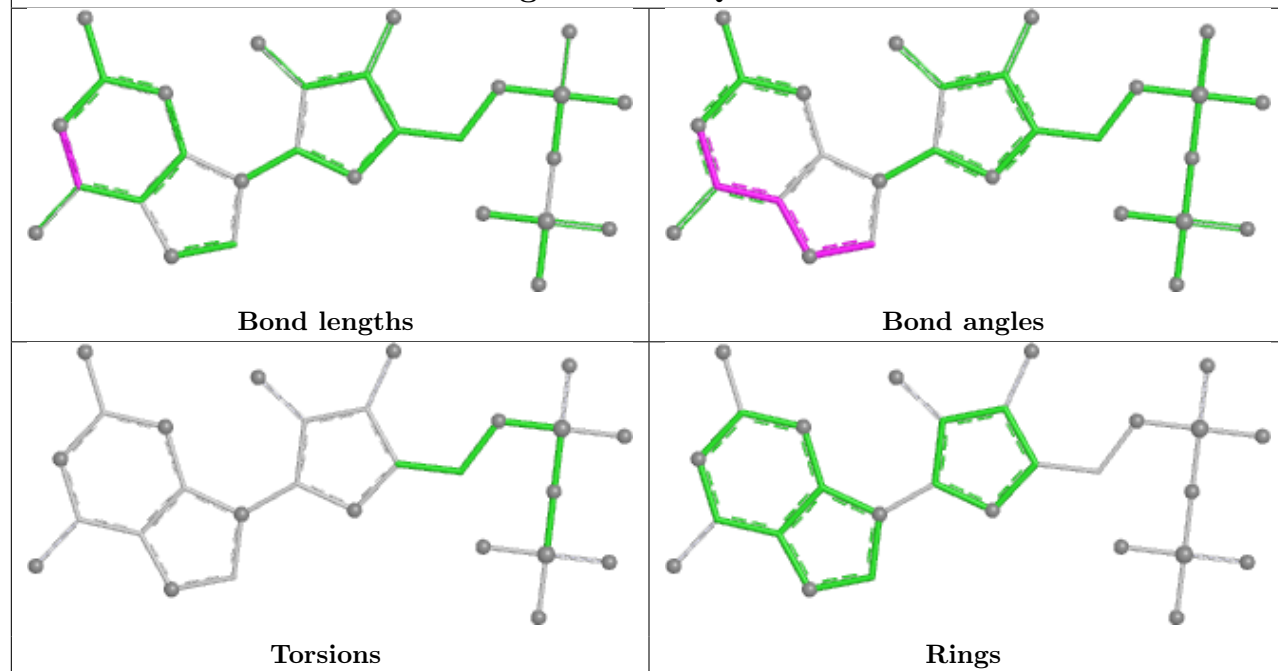




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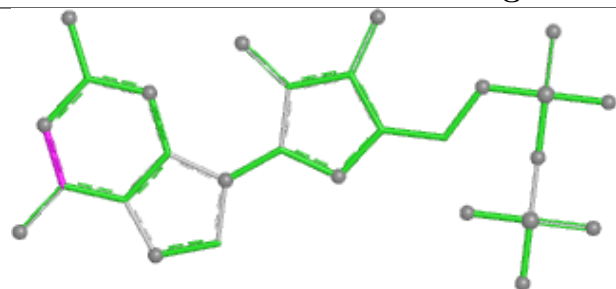


## Ligand GDP QJ 501

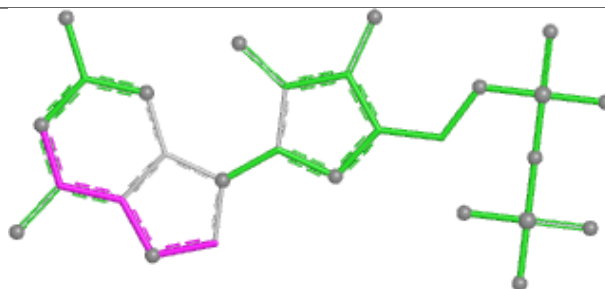




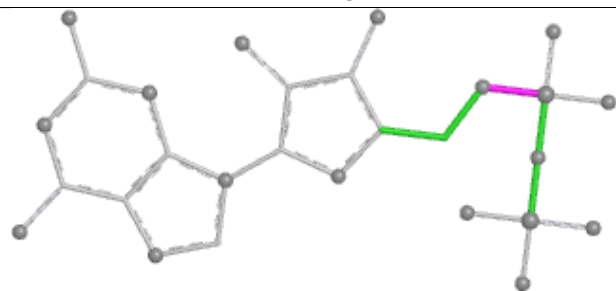
## Ligand GDP KJ 501



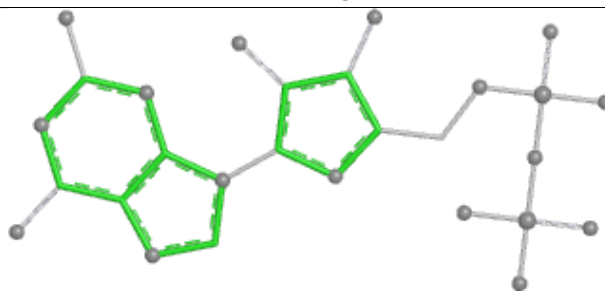
Bond lengths



Bond angles

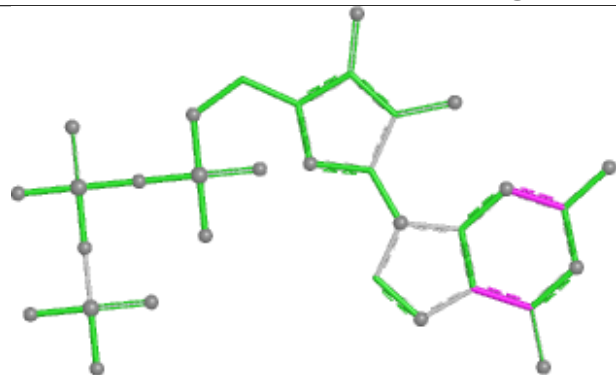


Torsions

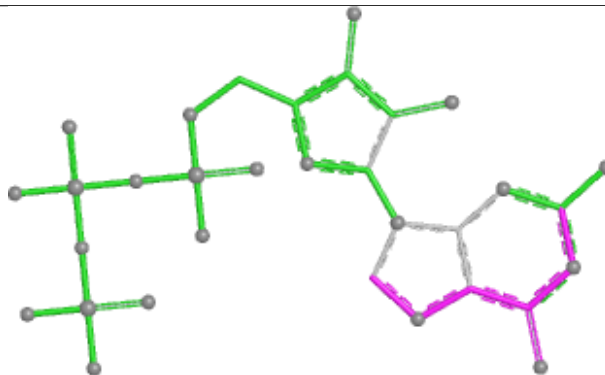


Rings

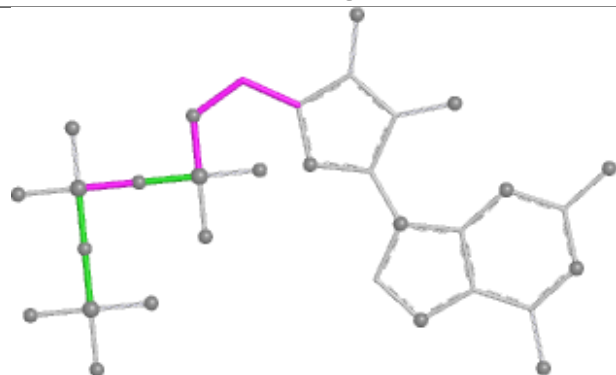
## Ligand GTP PI 501



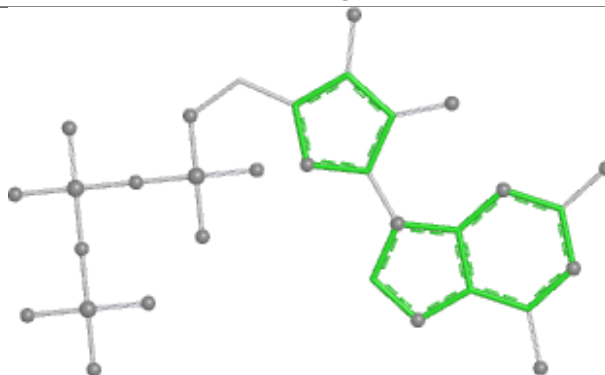
Bond lengths



Bond angles

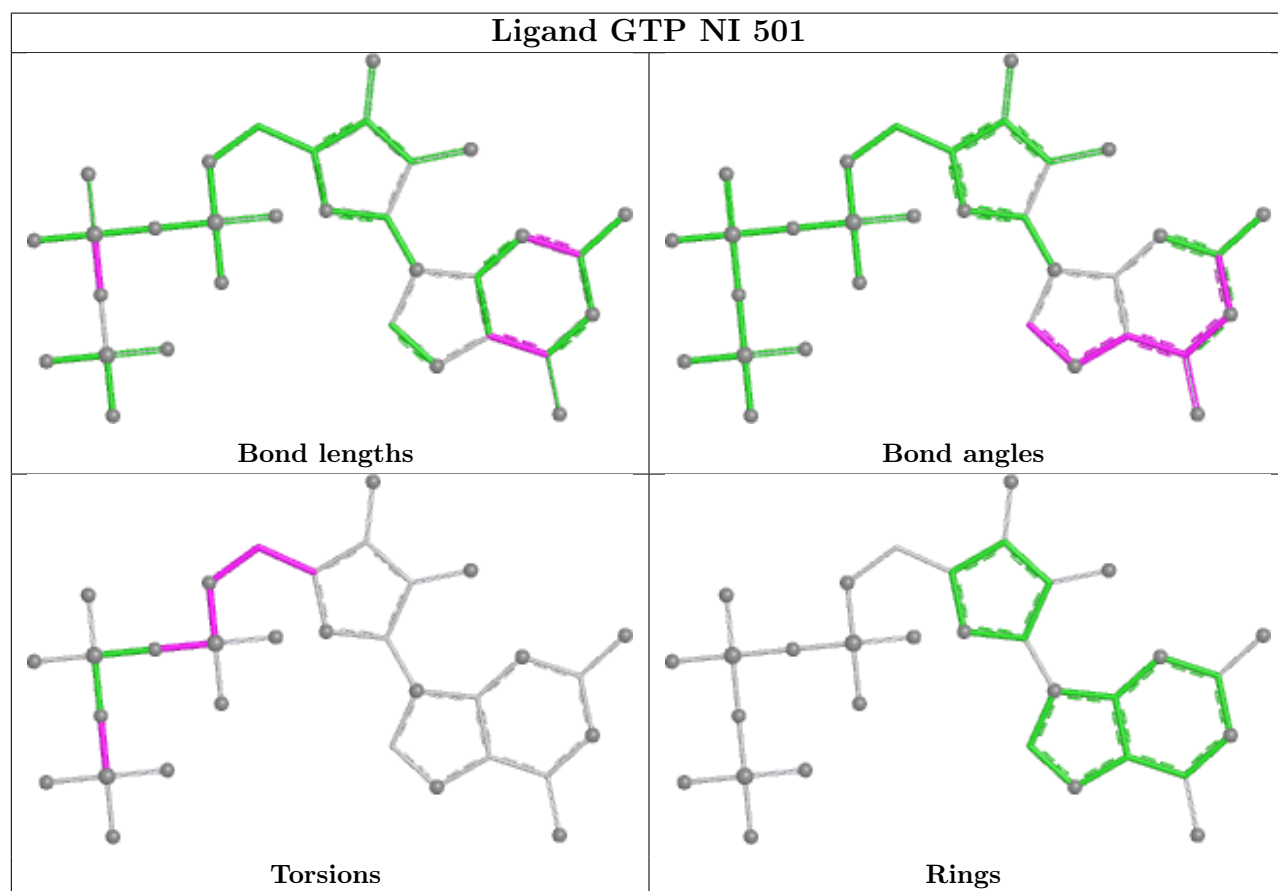
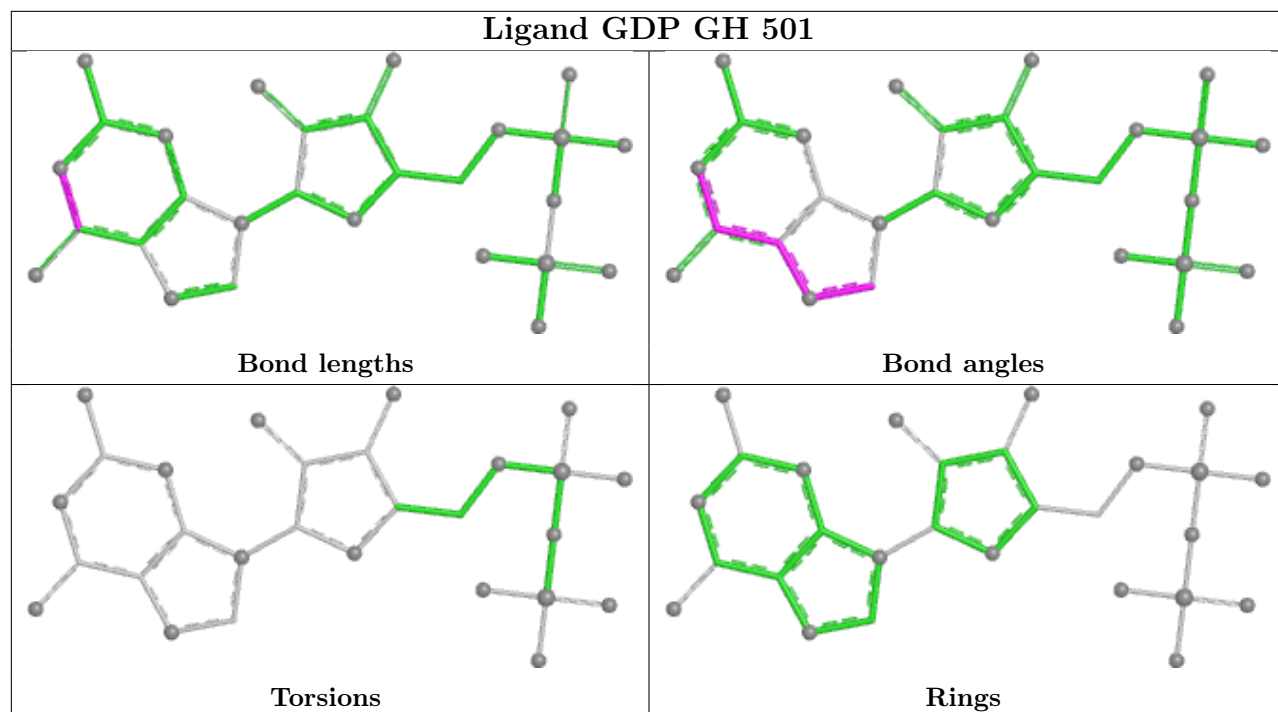


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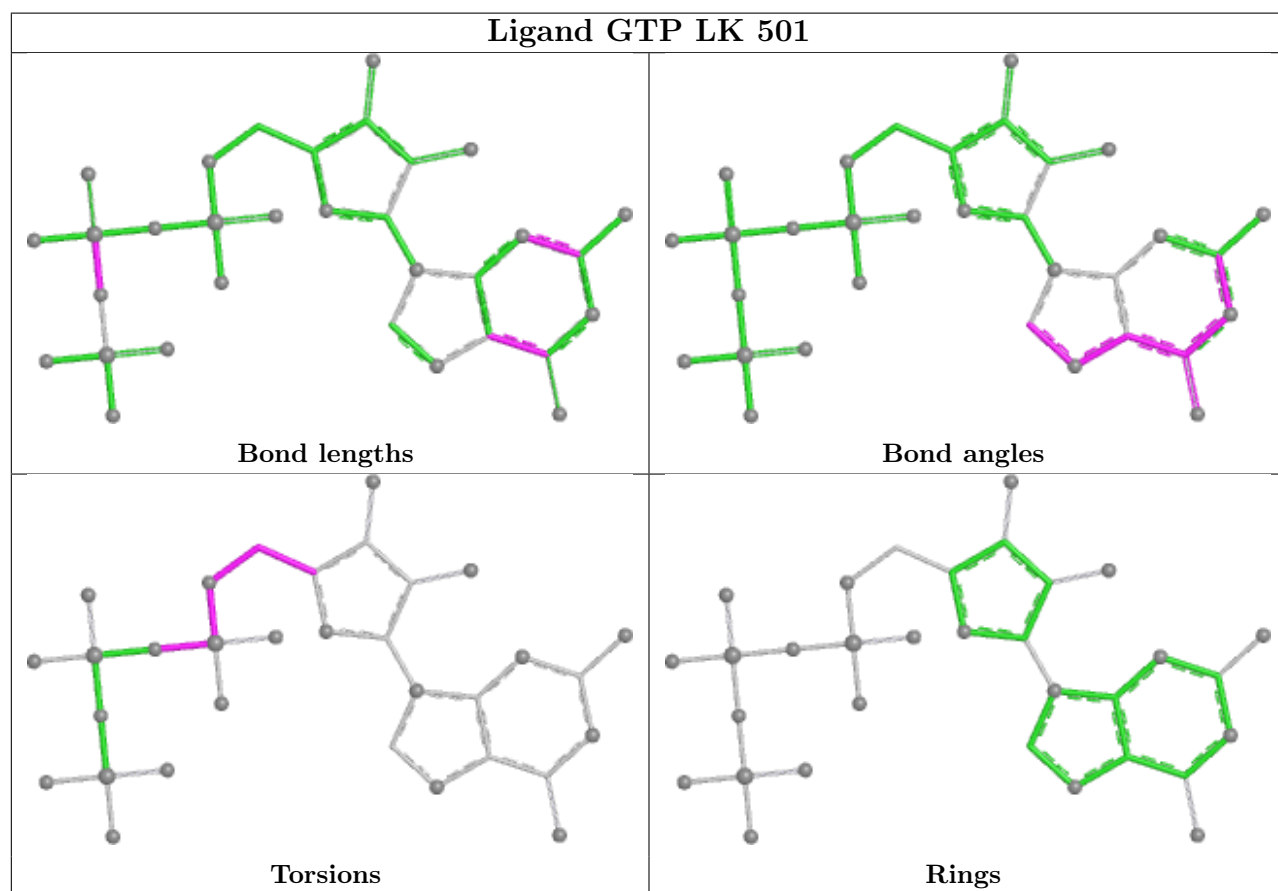
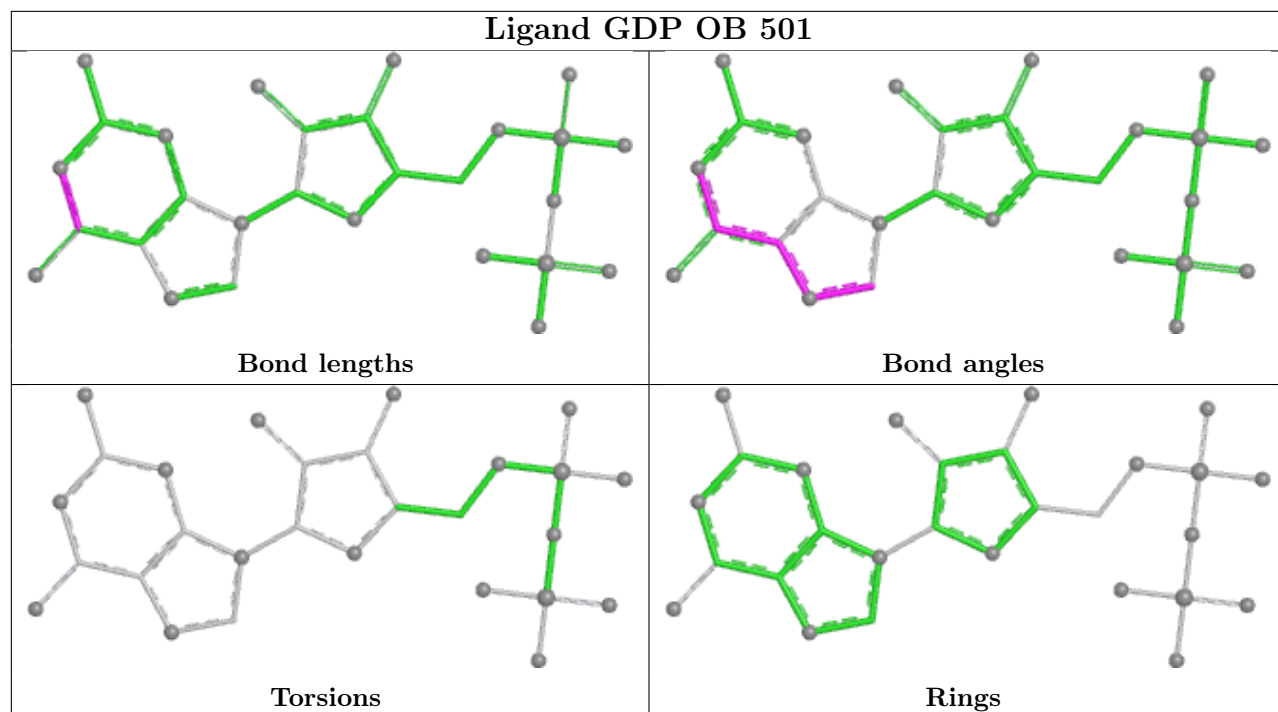


Rings



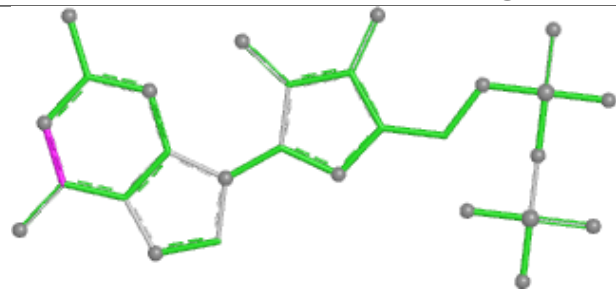




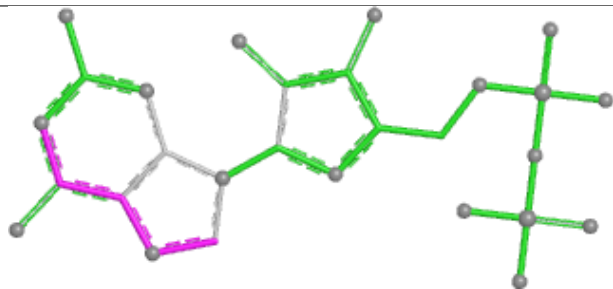




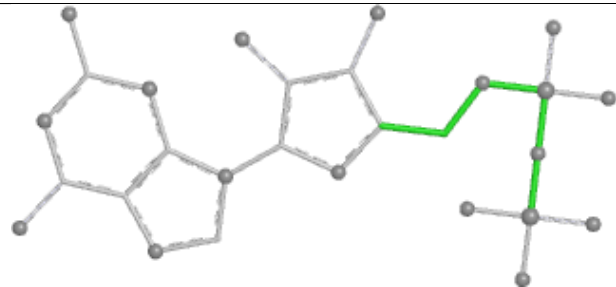
## Ligand GDP WJ 501



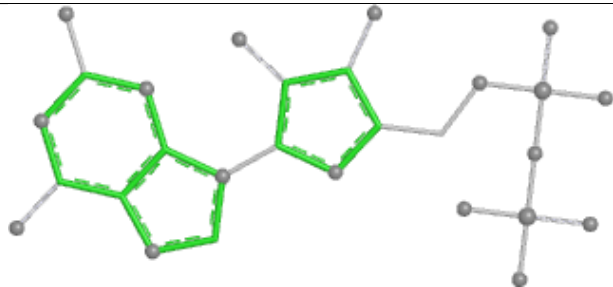
Bond lengths



Bond angles

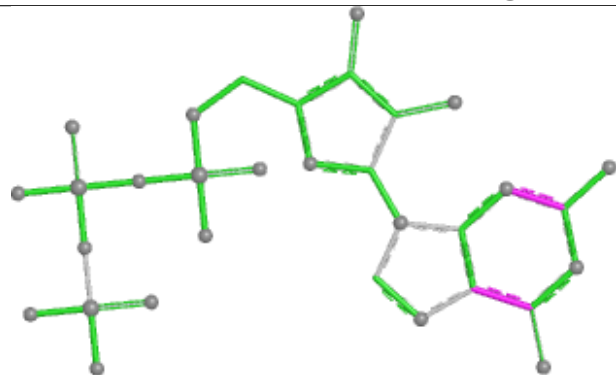


Torsions

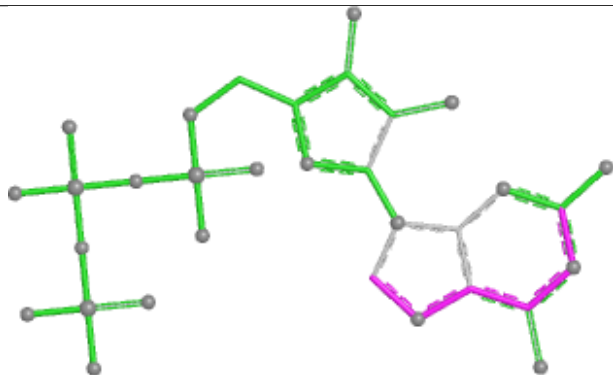


Rings

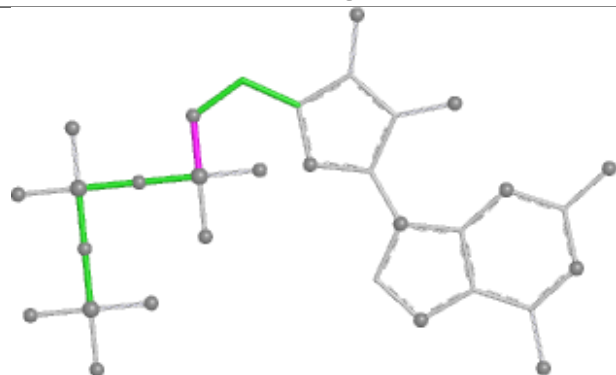
## Ligand GTP OC 501



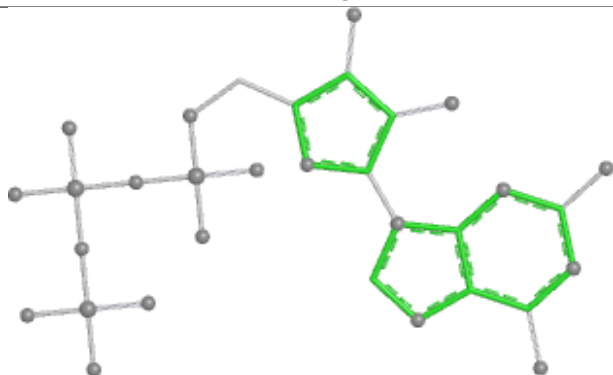
Bond lengths



Bond angles



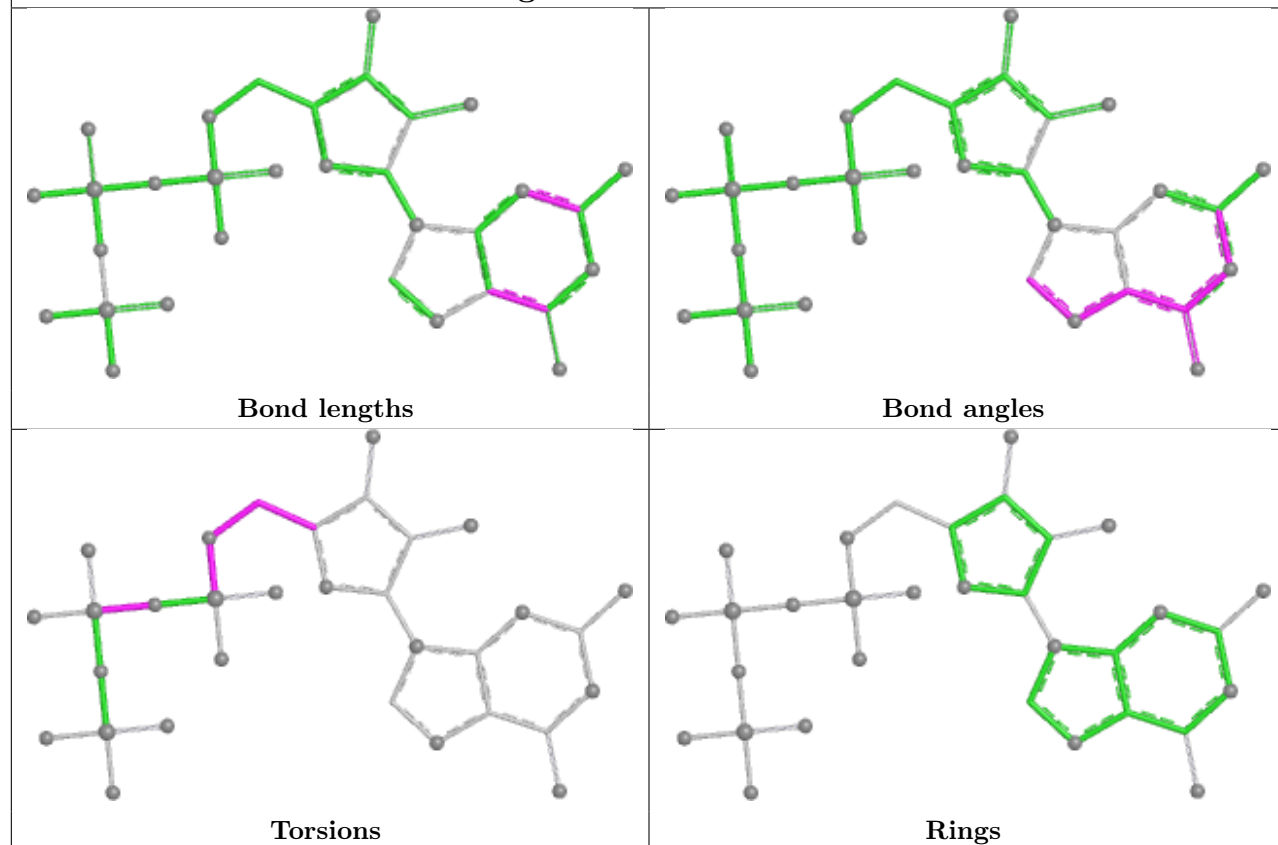
Torsions



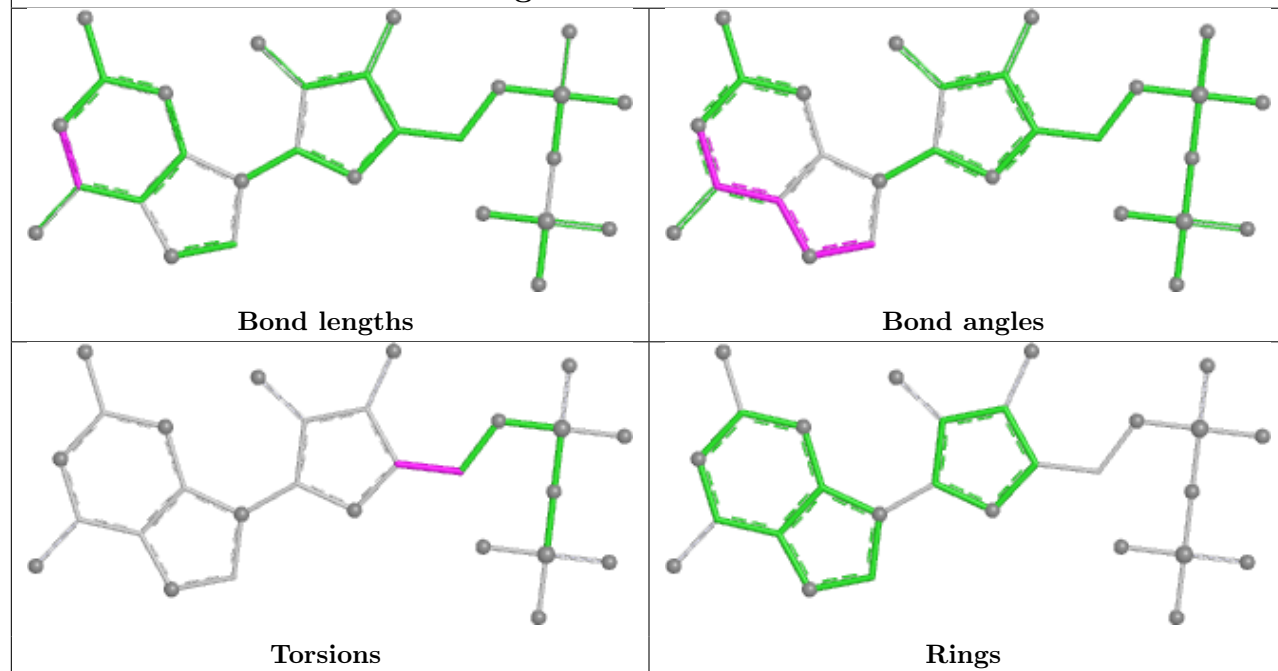
Rings



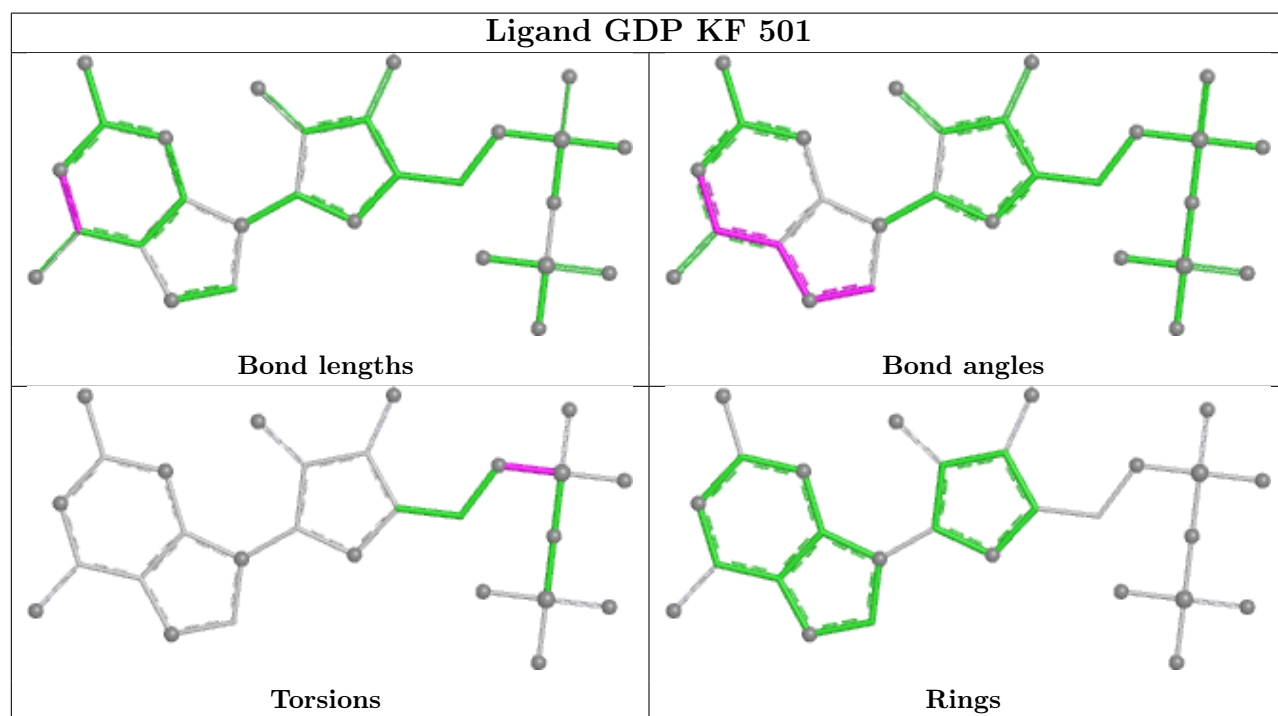
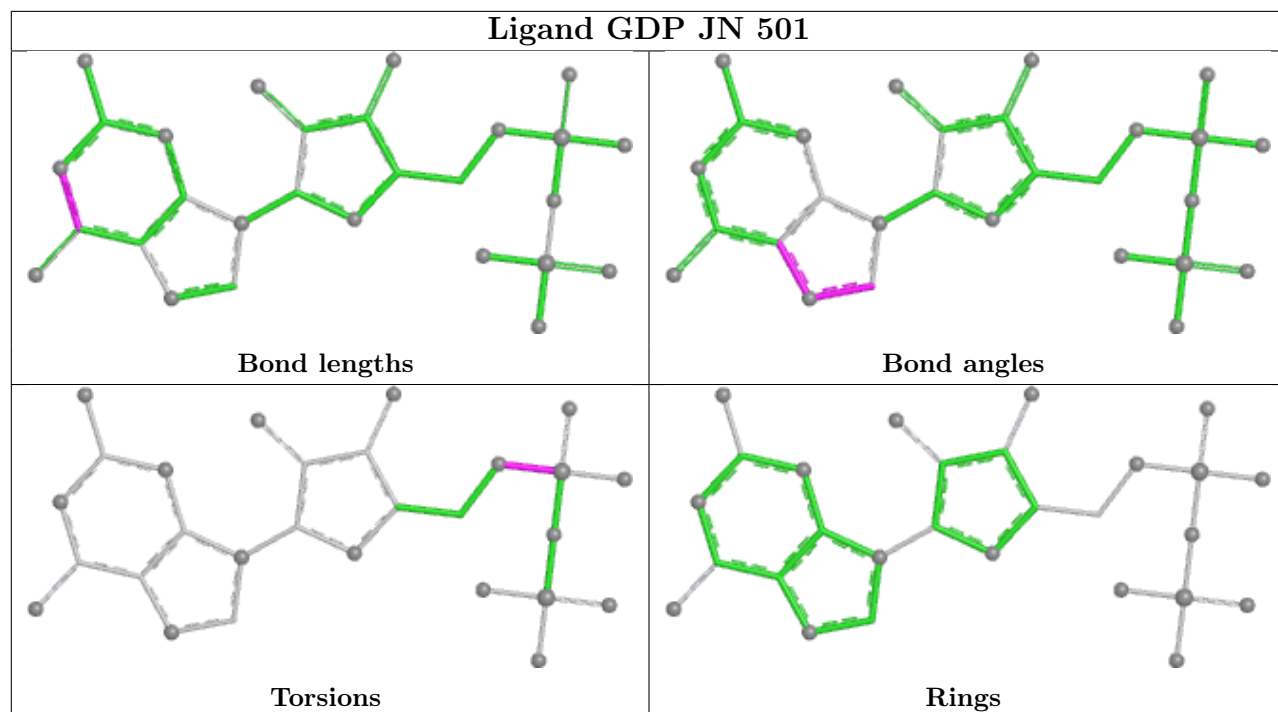
## Ligand GTP EK 501



## Ligand GDP ND 501

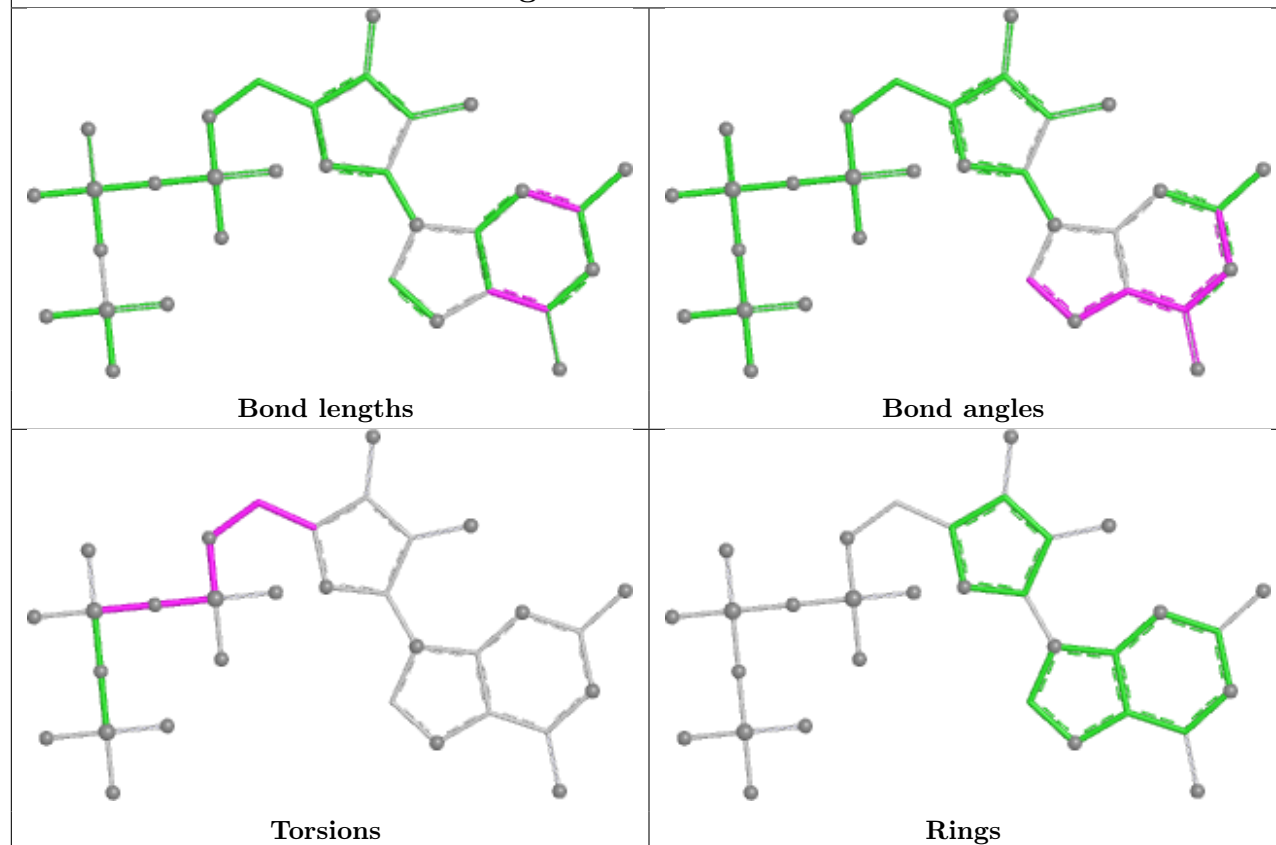




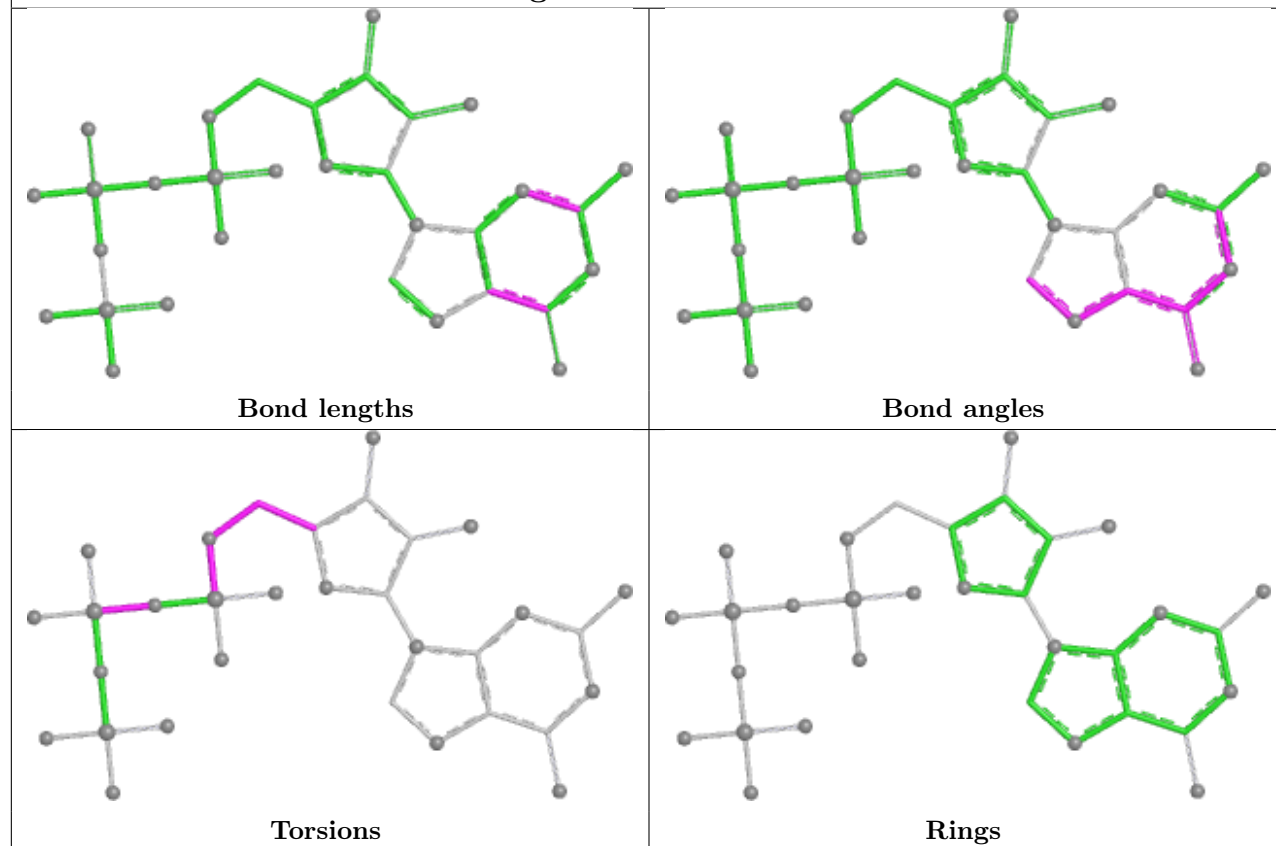




## Ligand GTP EC 501

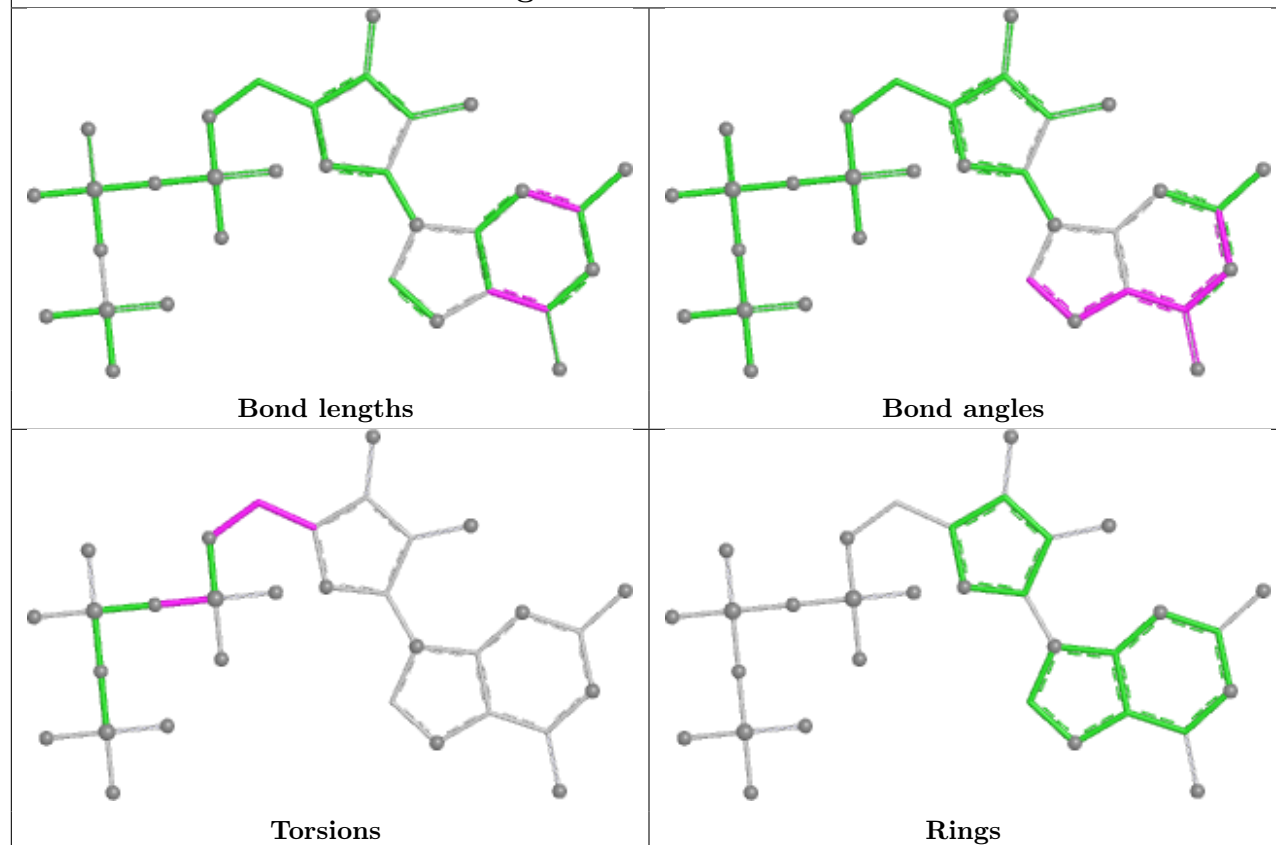


## Ligand GTP II 501

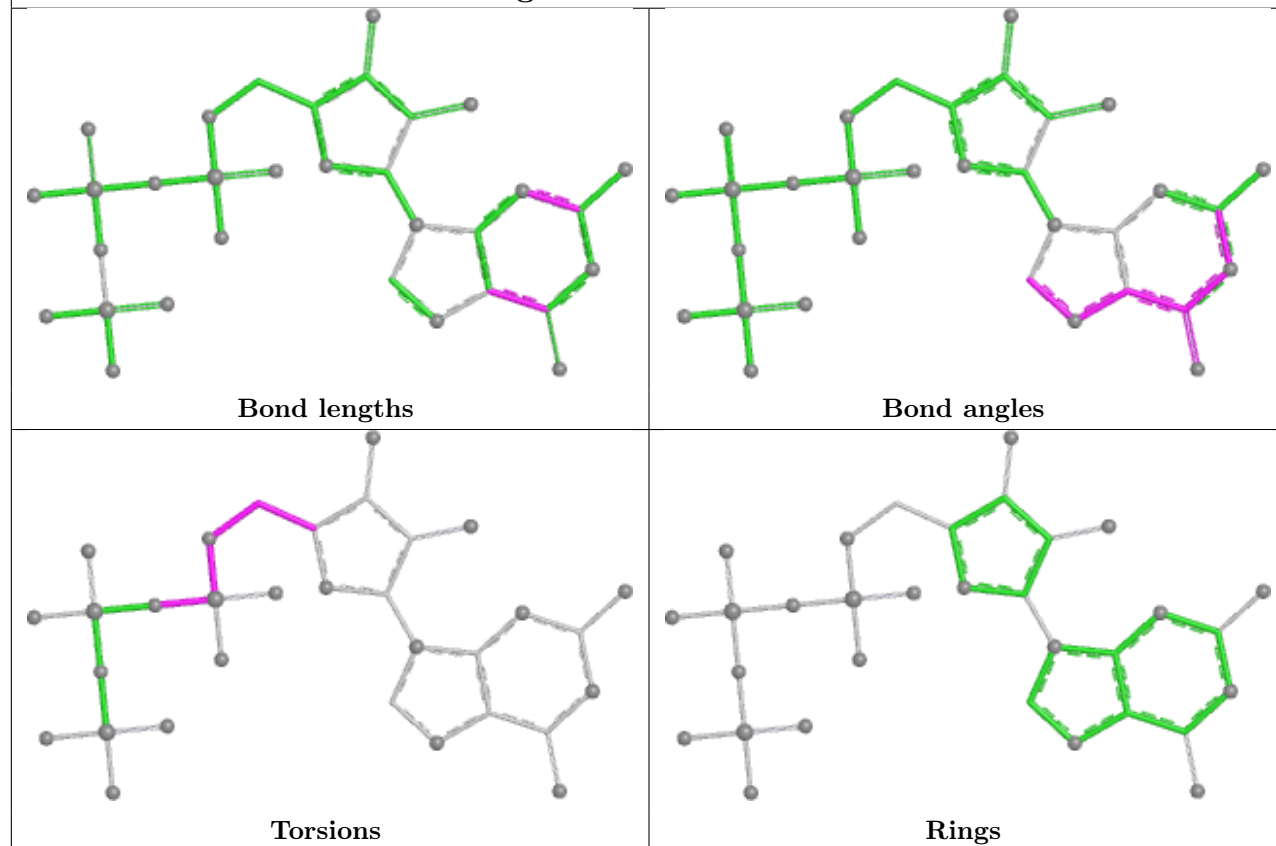




## Ligand GTP GC 501

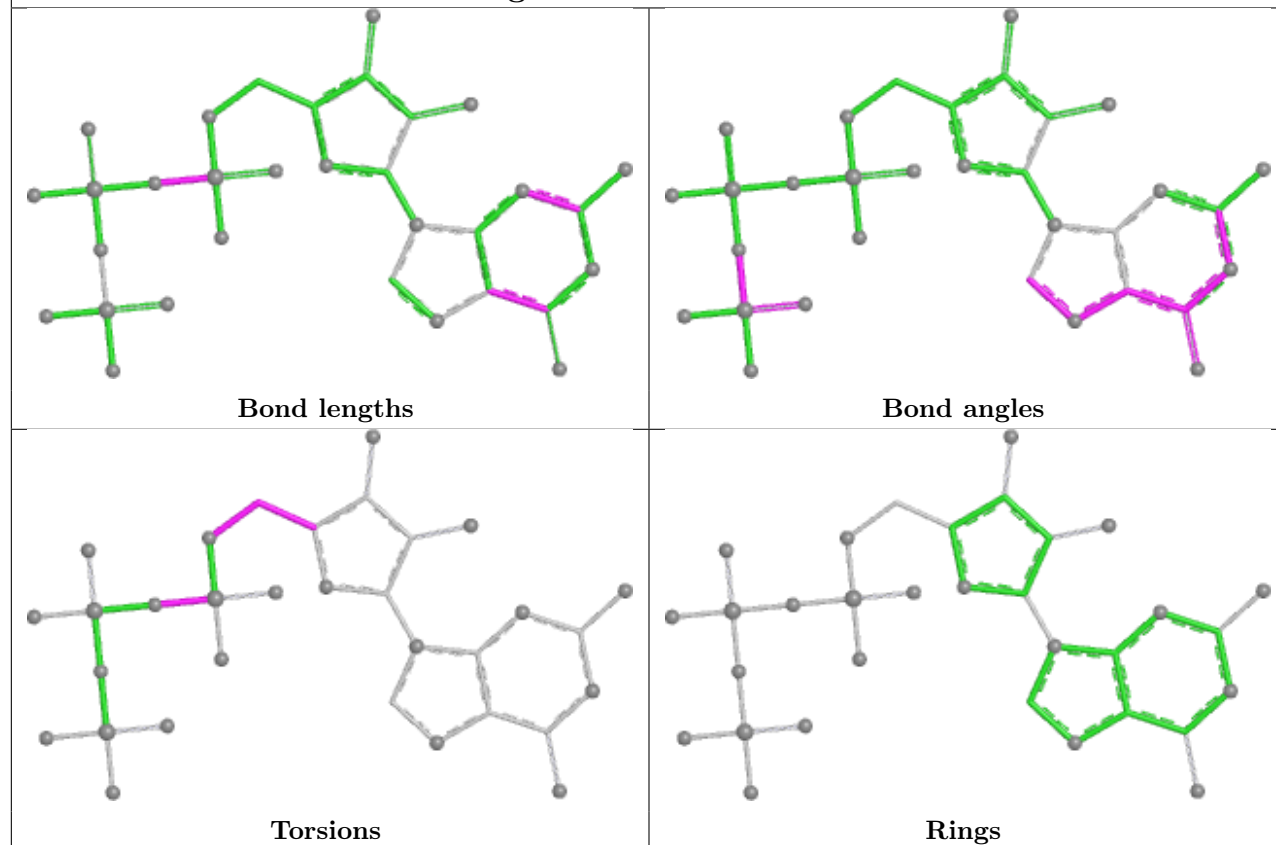


## Ligand GTP AG 501

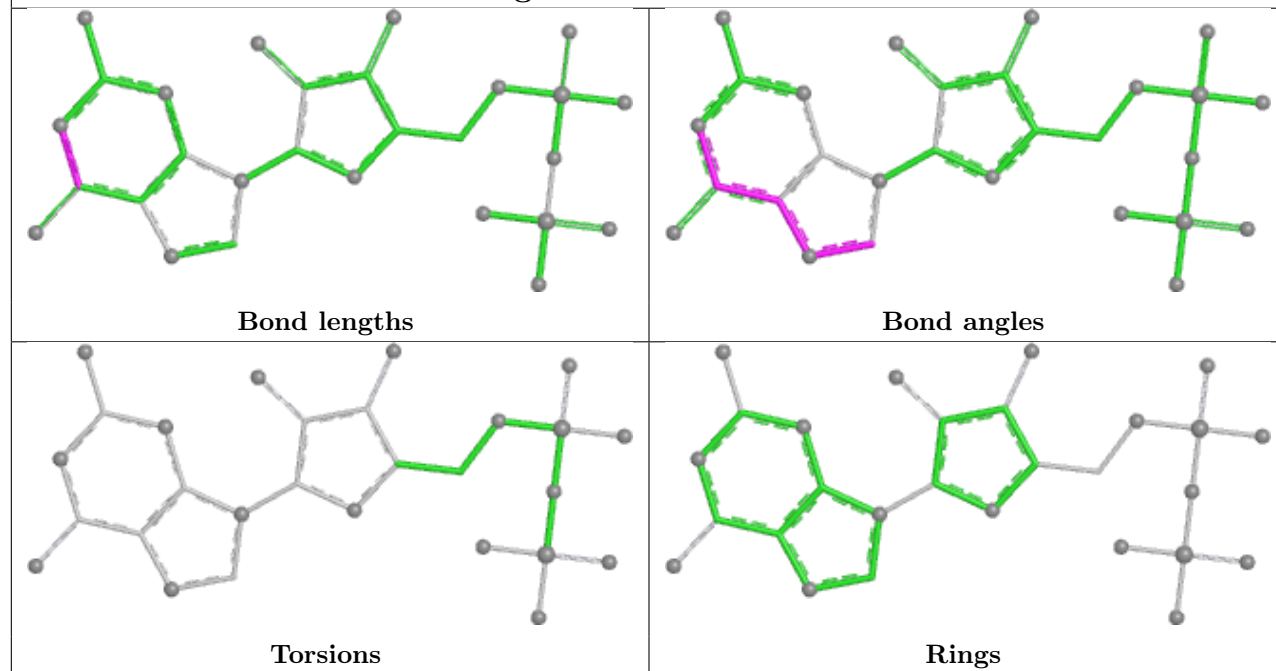




## Ligand GTP WM 501

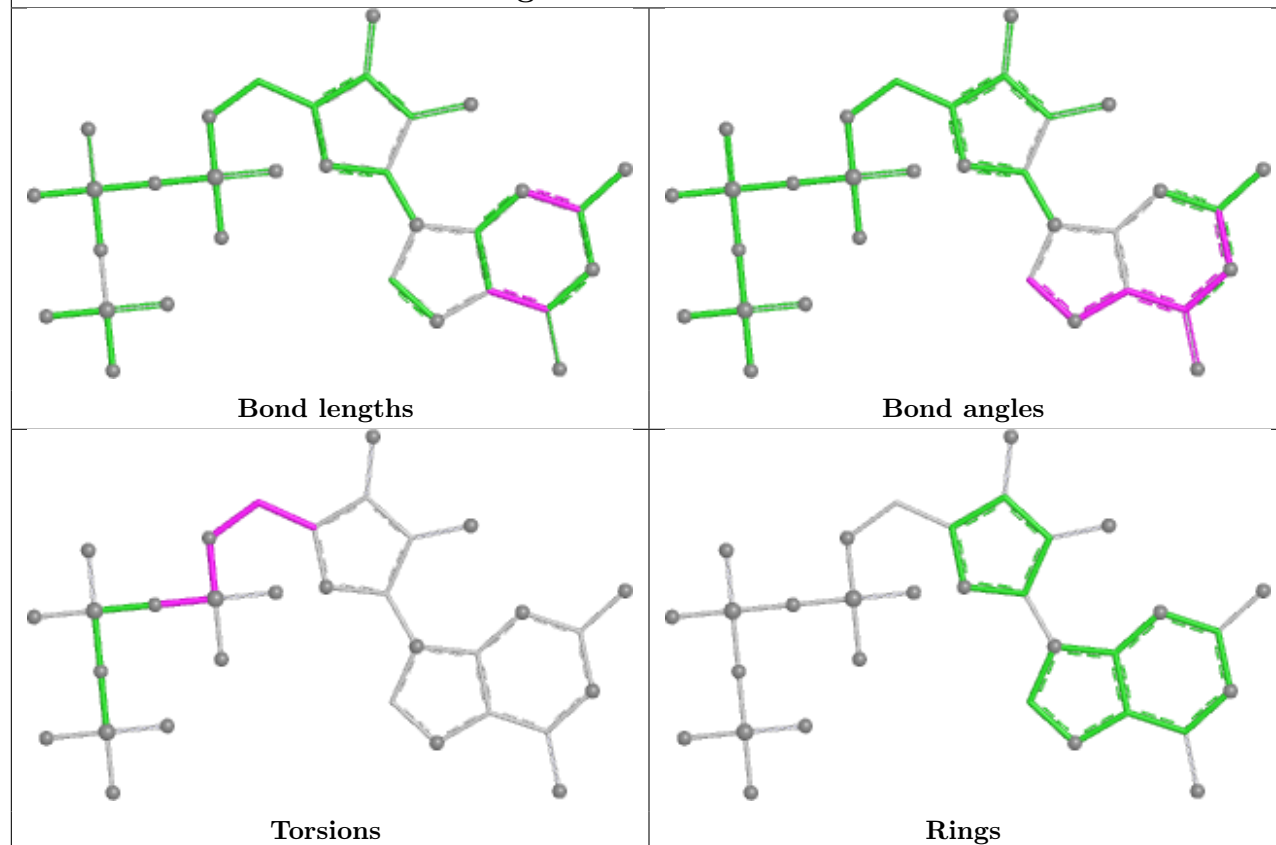


## Ligand GDP KN 501

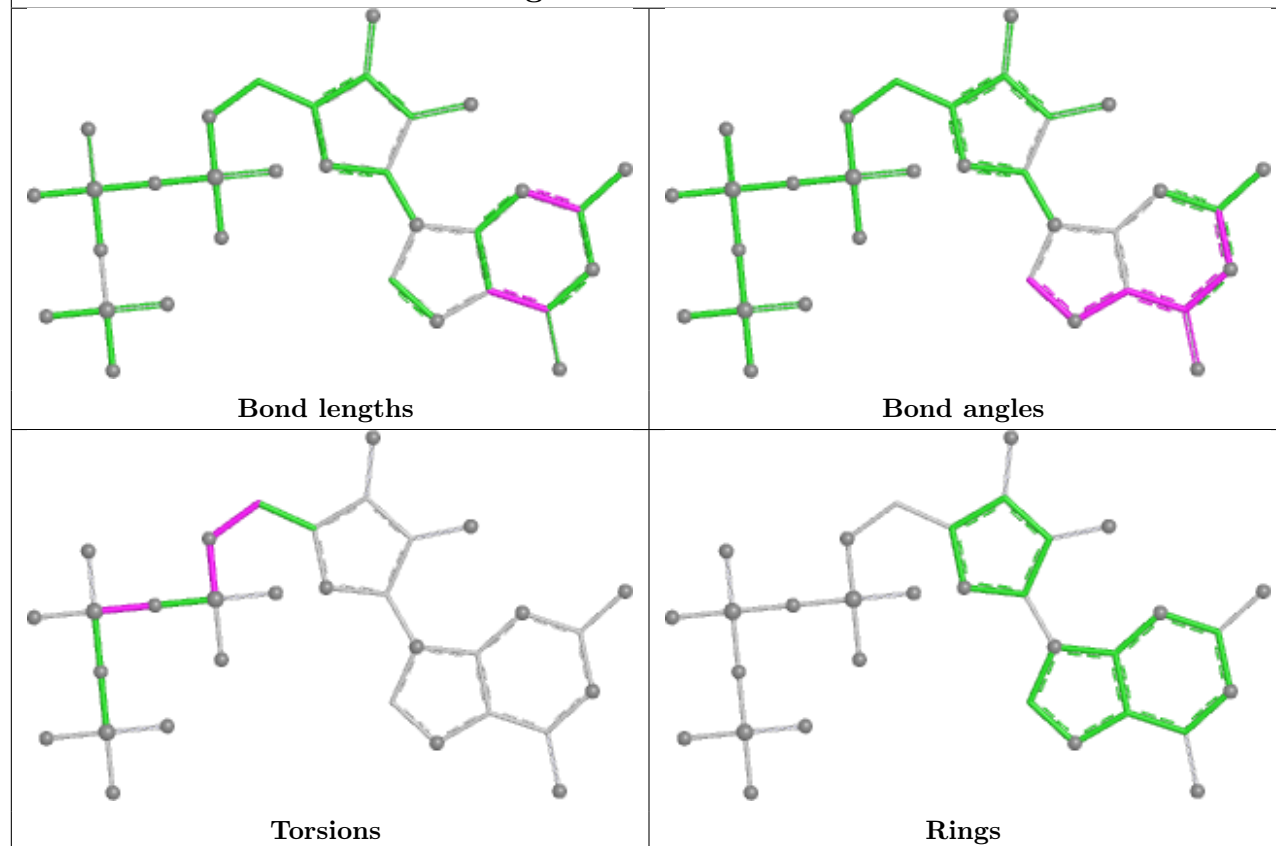




## Ligand GTP TG 501

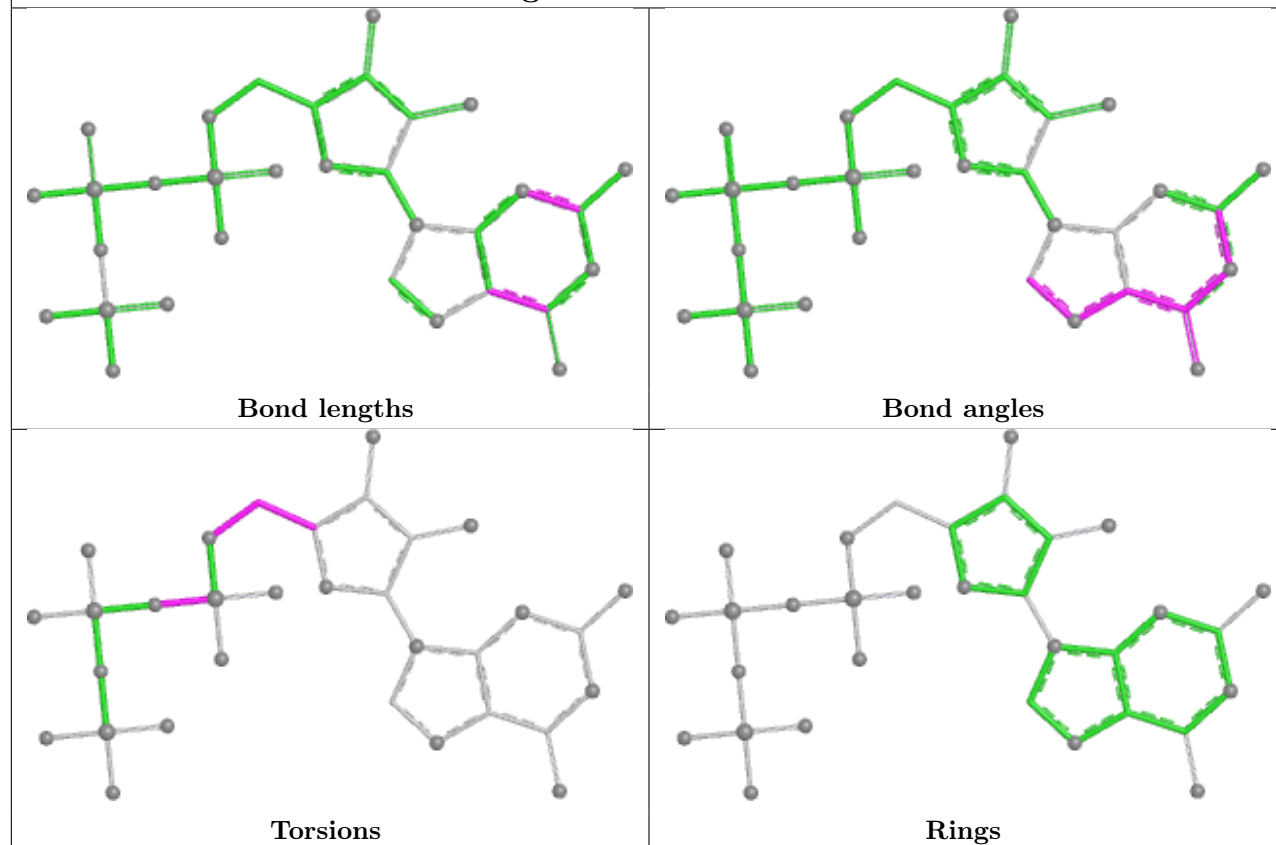


## Ligand GTP EI 501

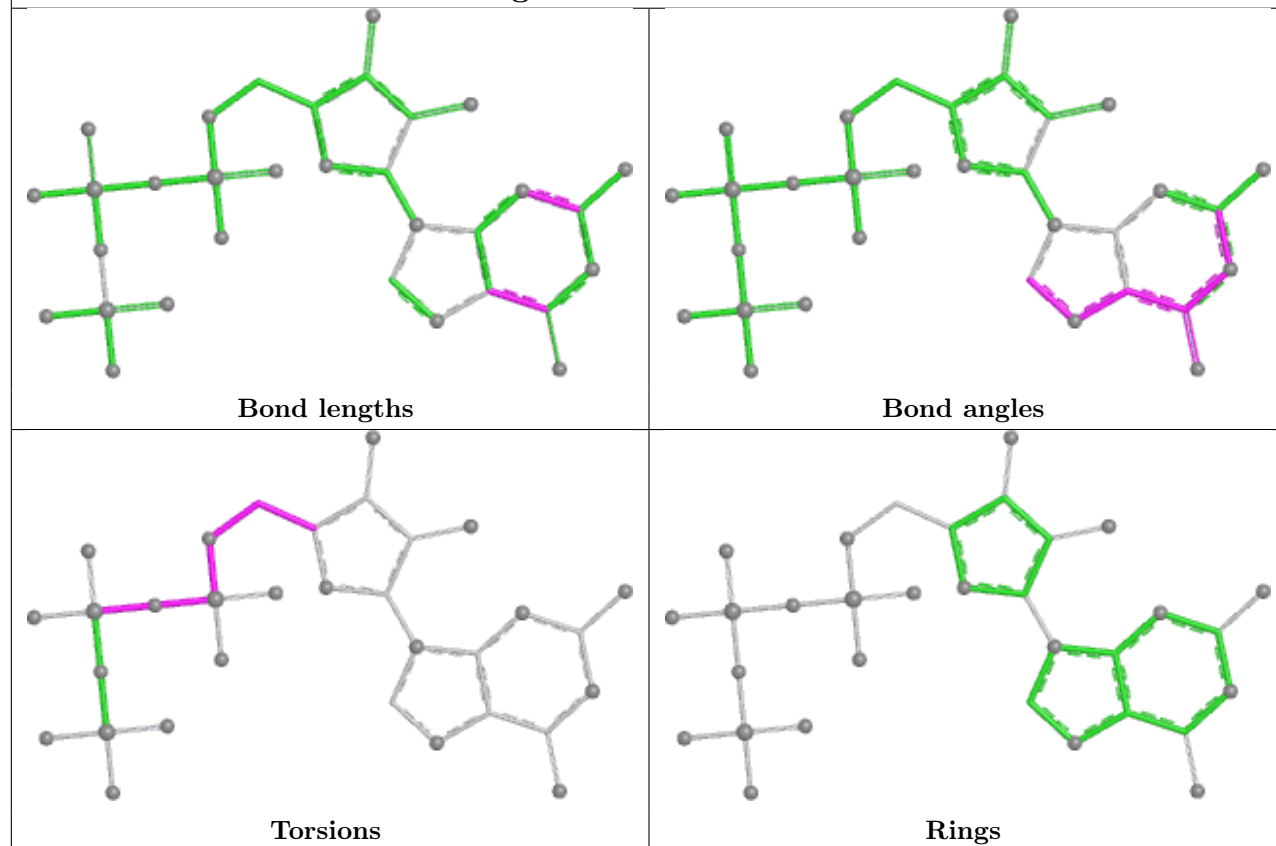




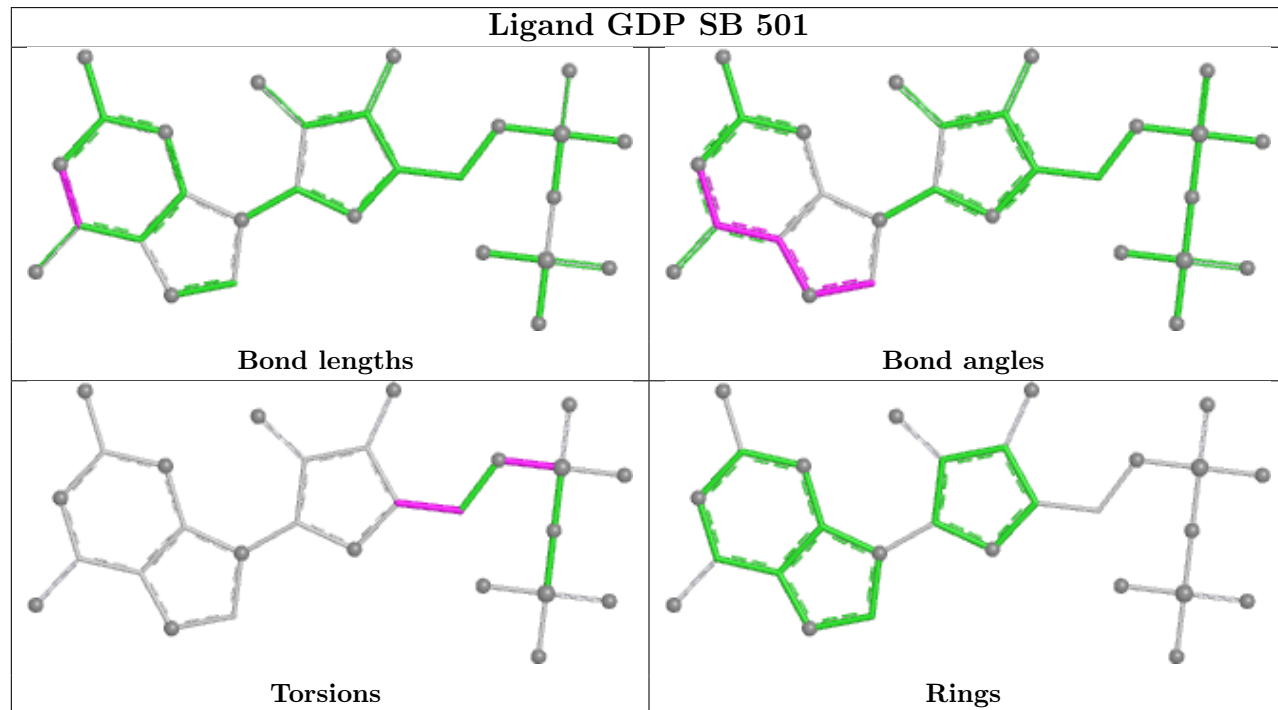
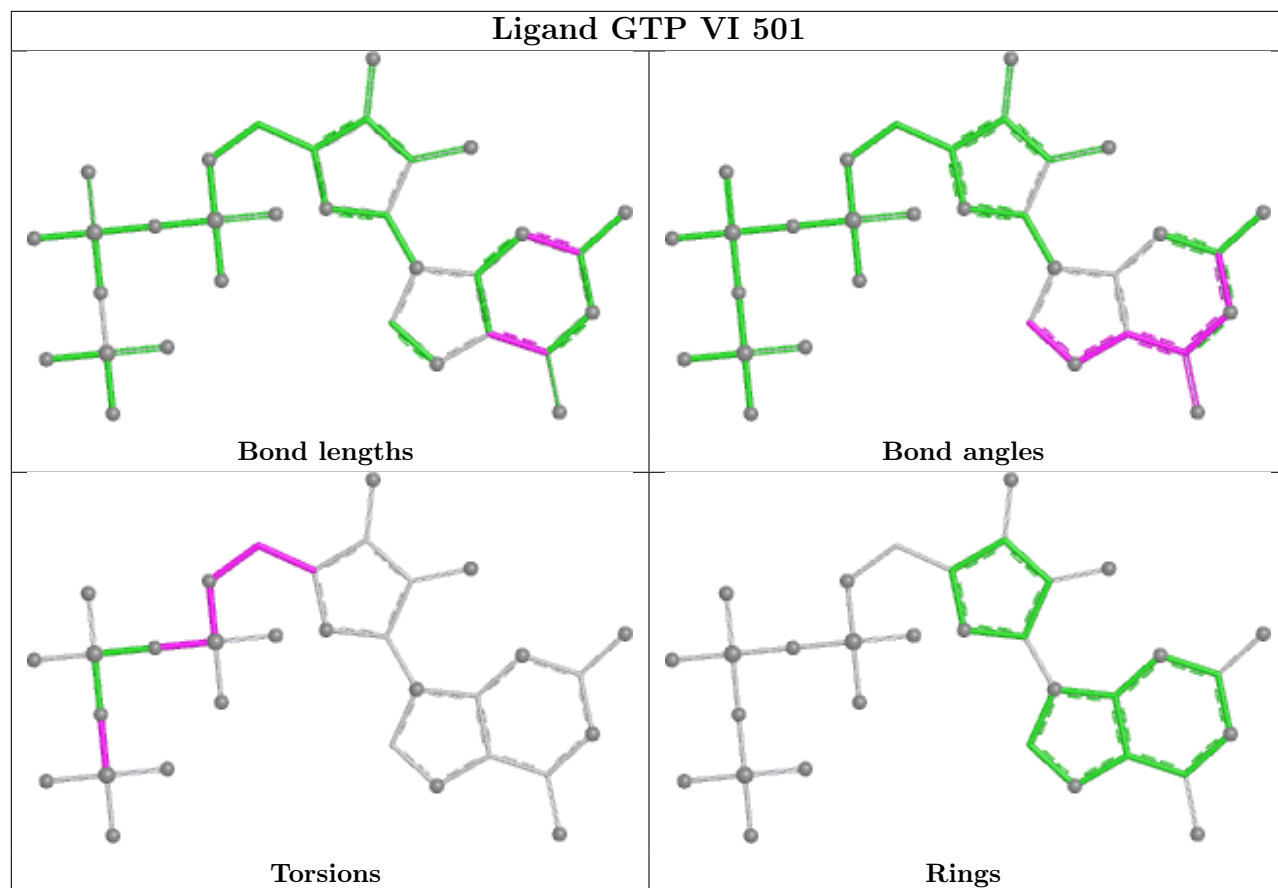
## Ligand GTP SE 501



## Ligand GTP WG 501

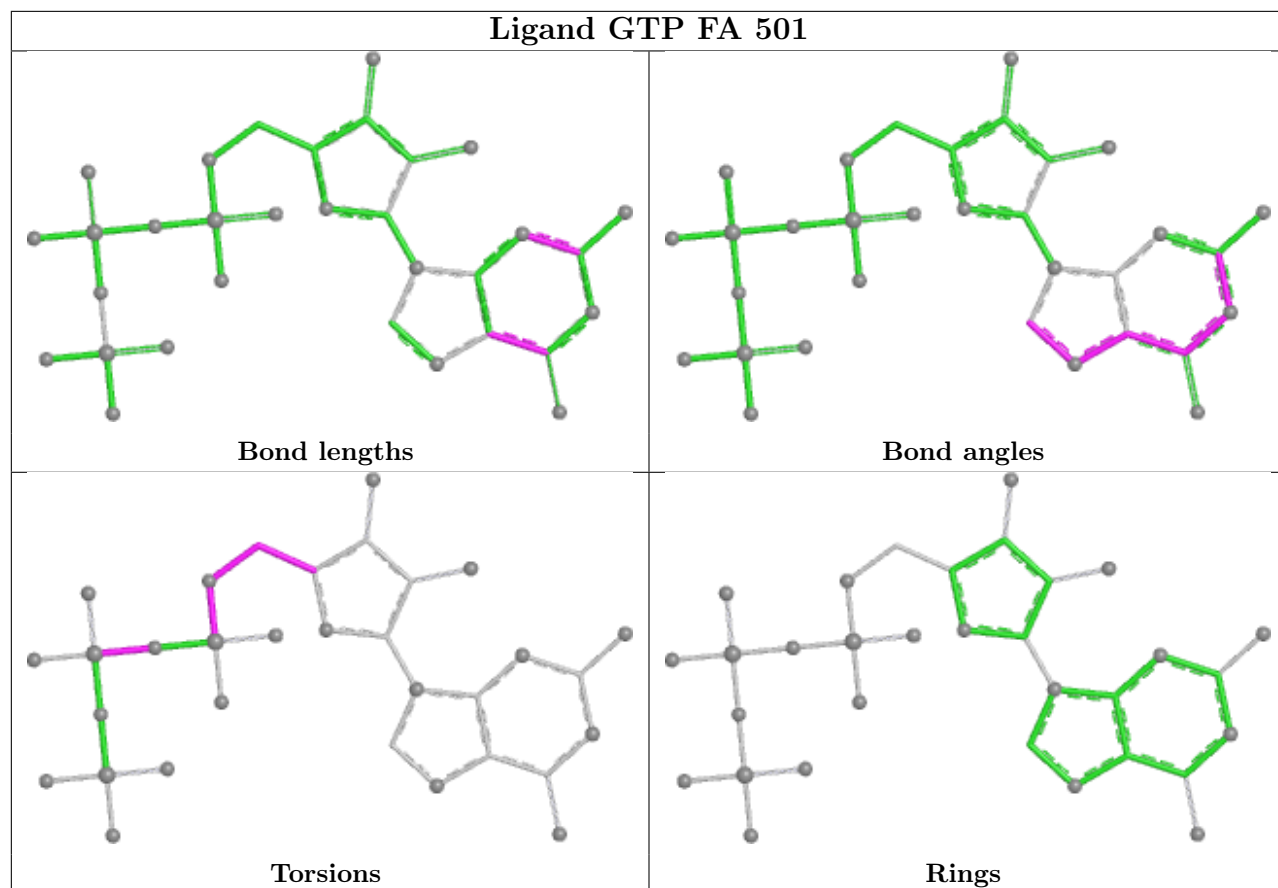




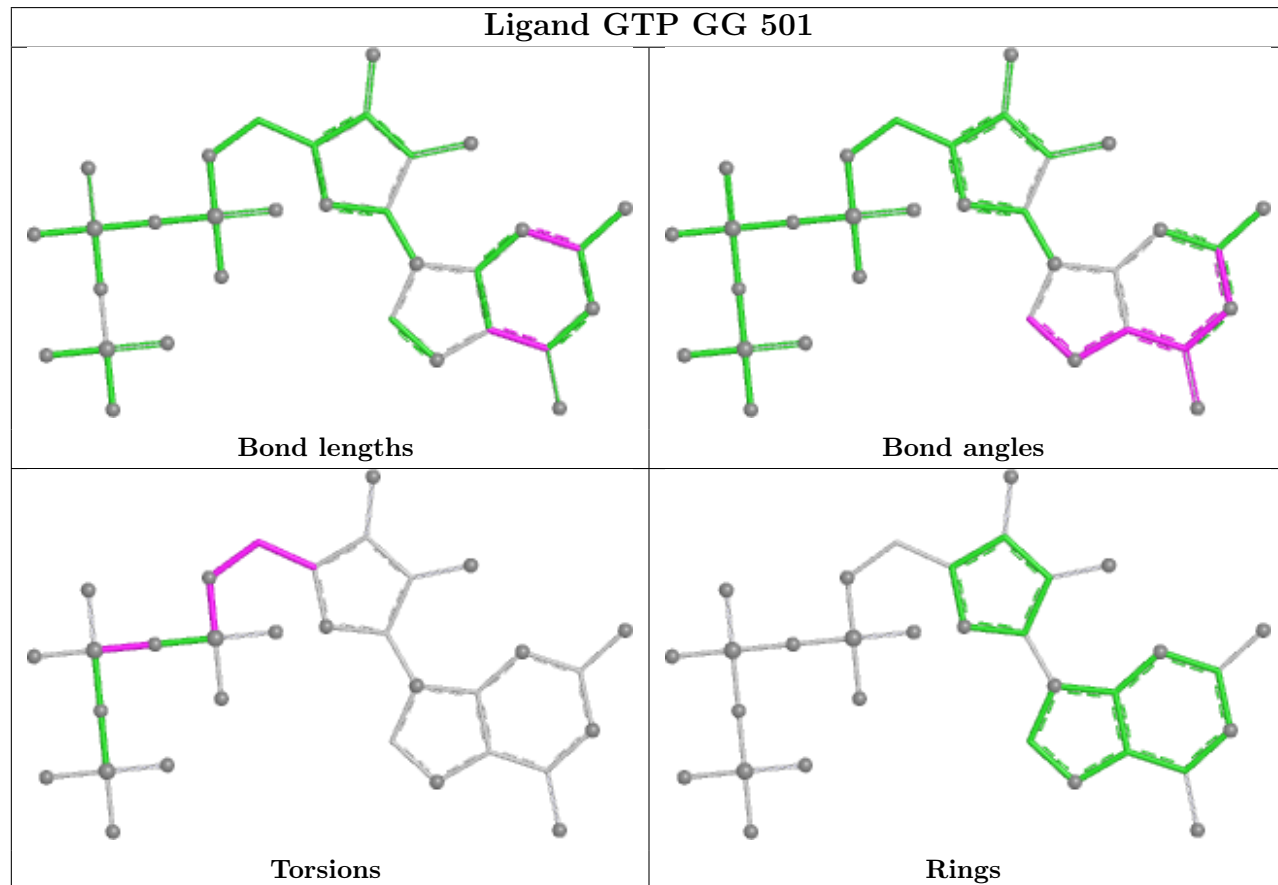




## Ligand GTP FA 501

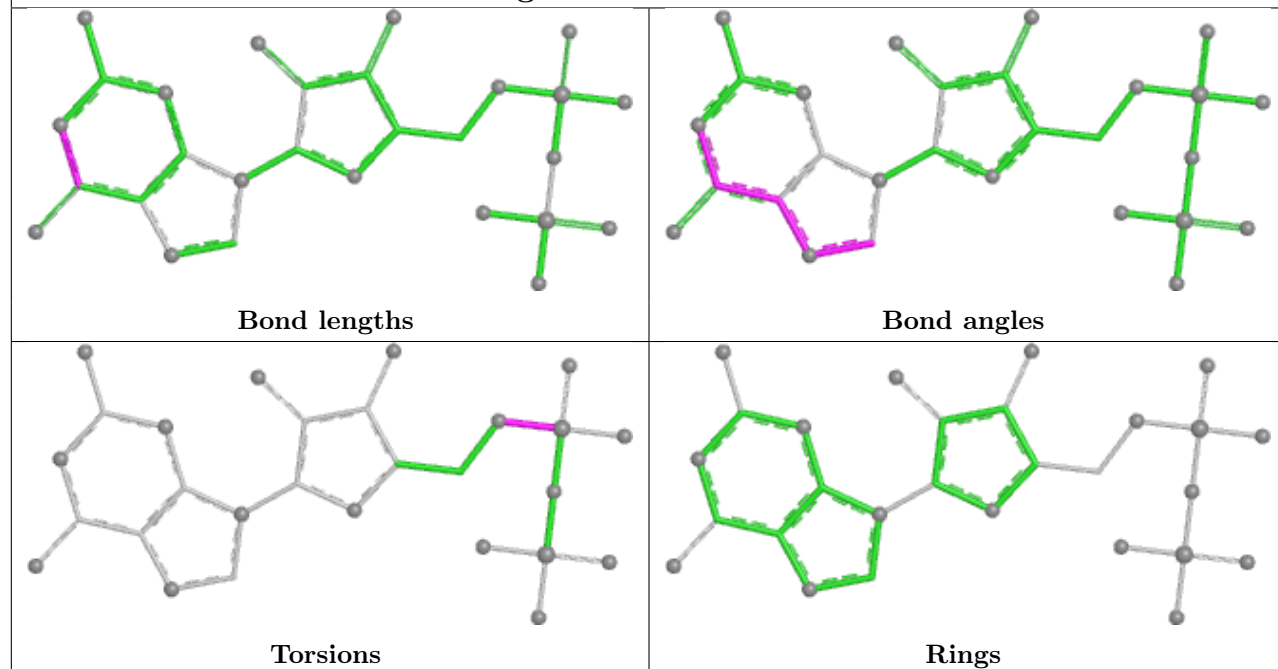


## Ligand GTP GG 501

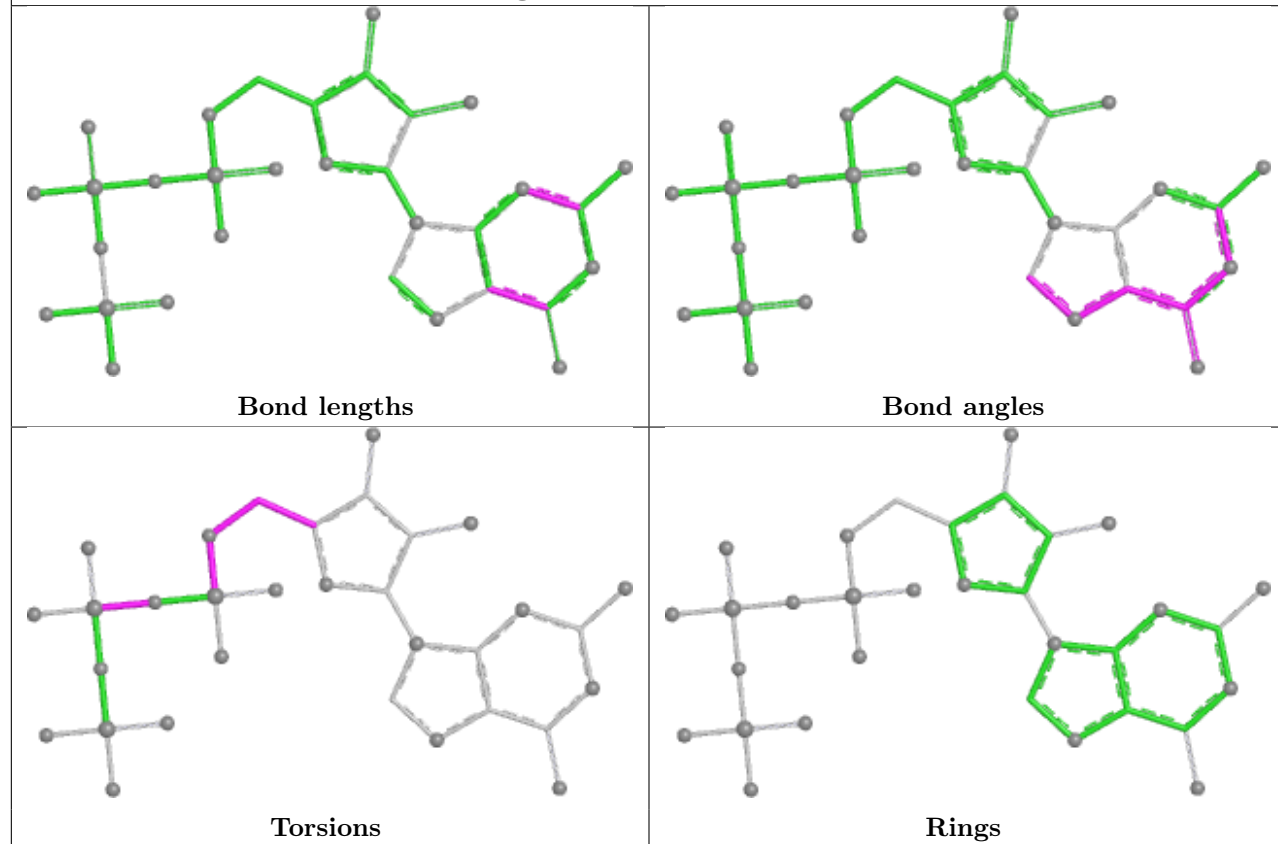




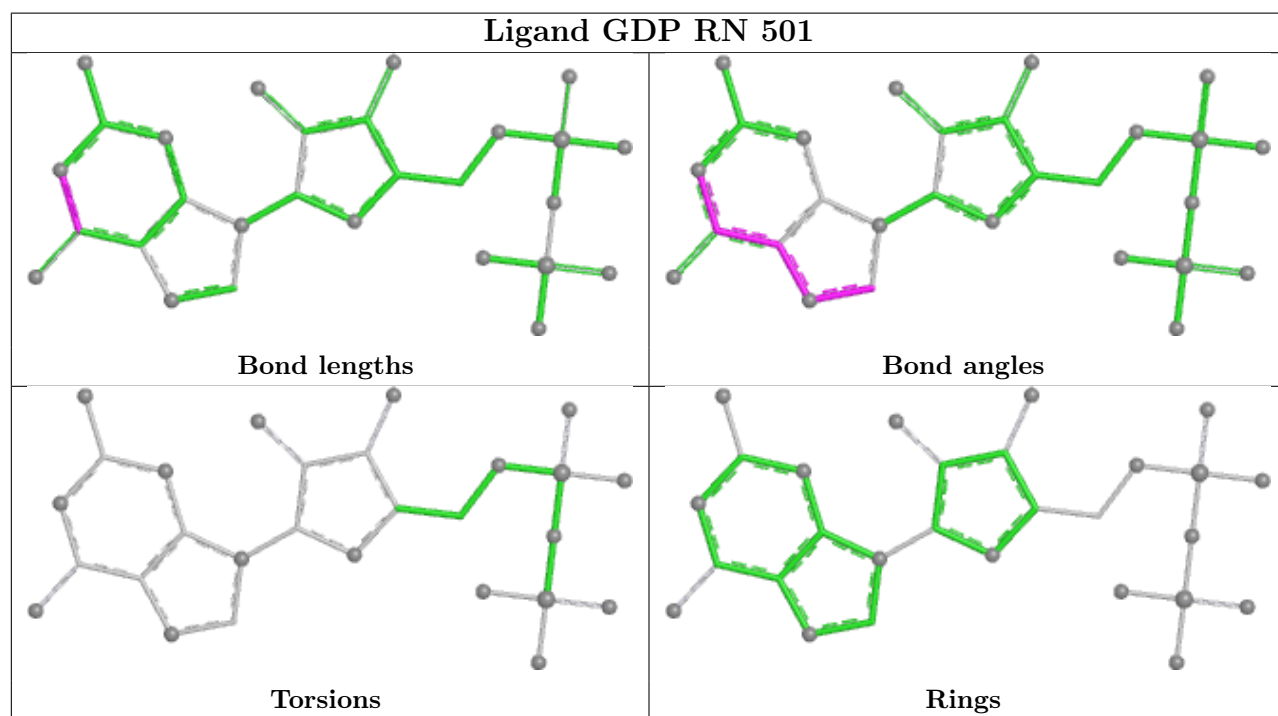
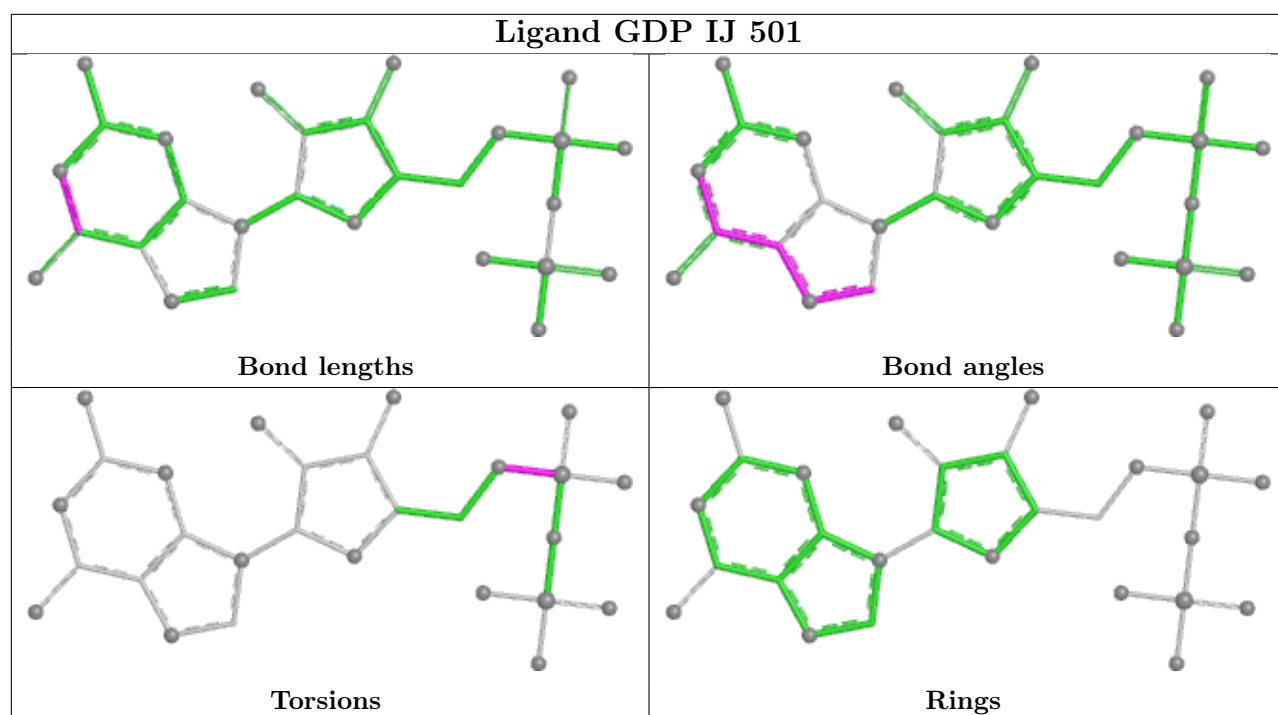
## Ligand GDP NF 501



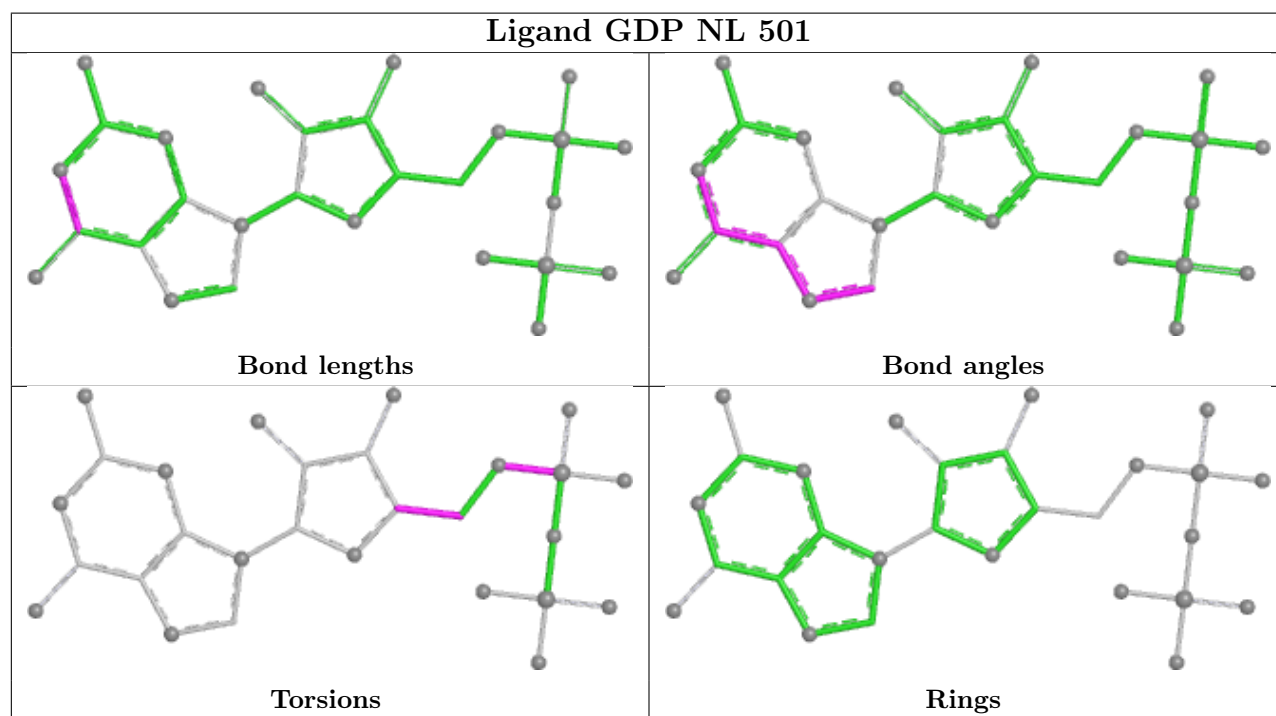
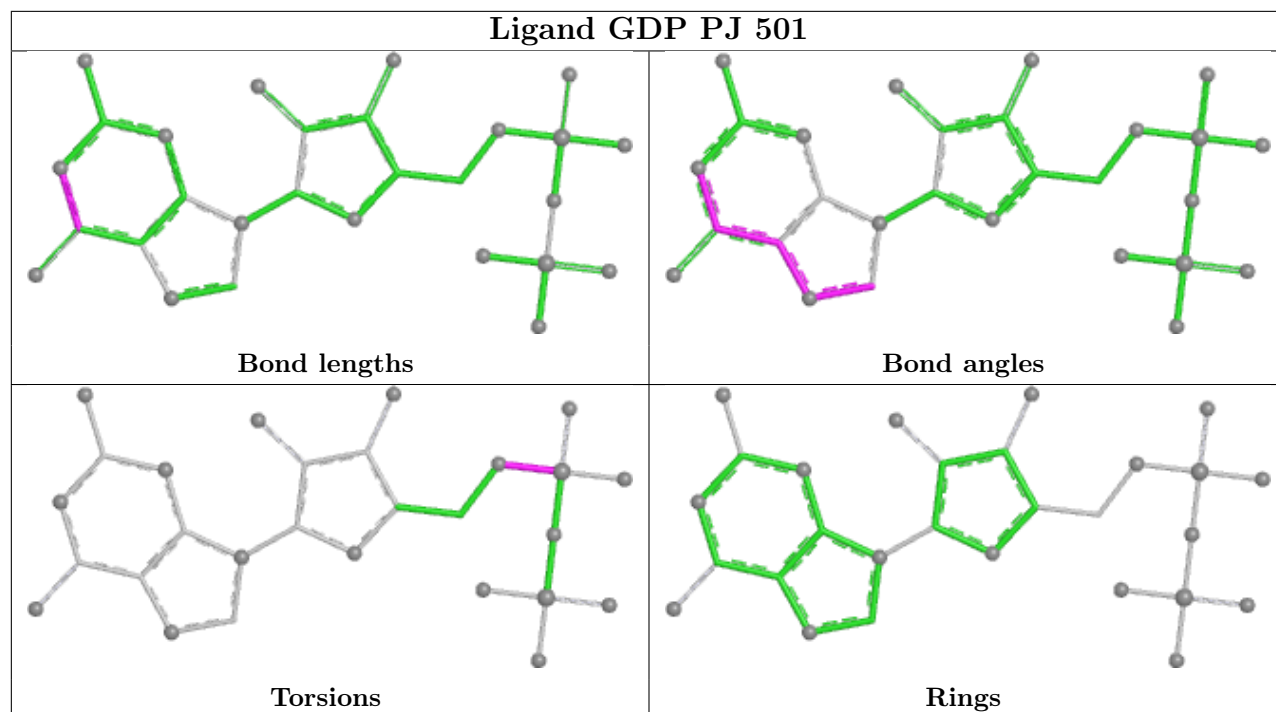
## Ligand GTP MC 501





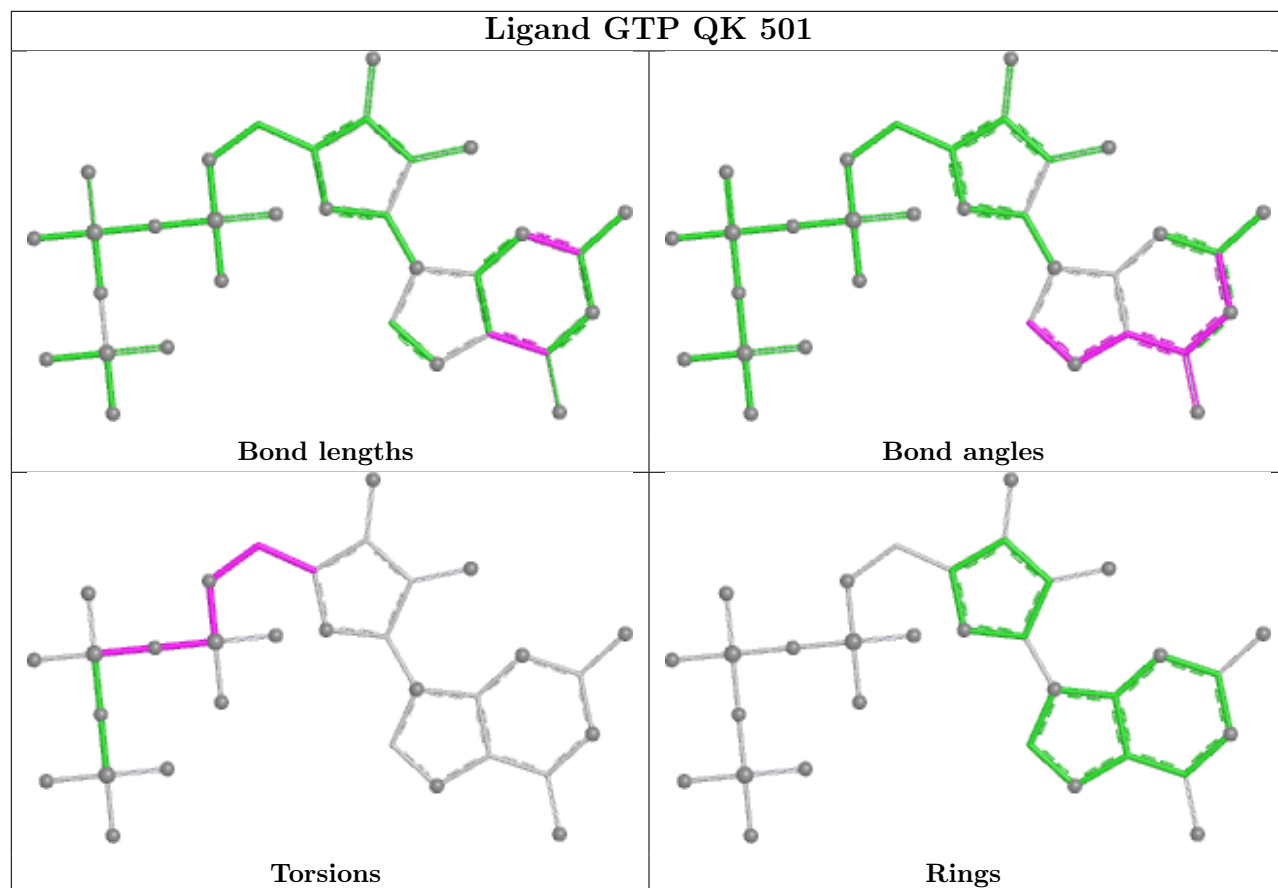




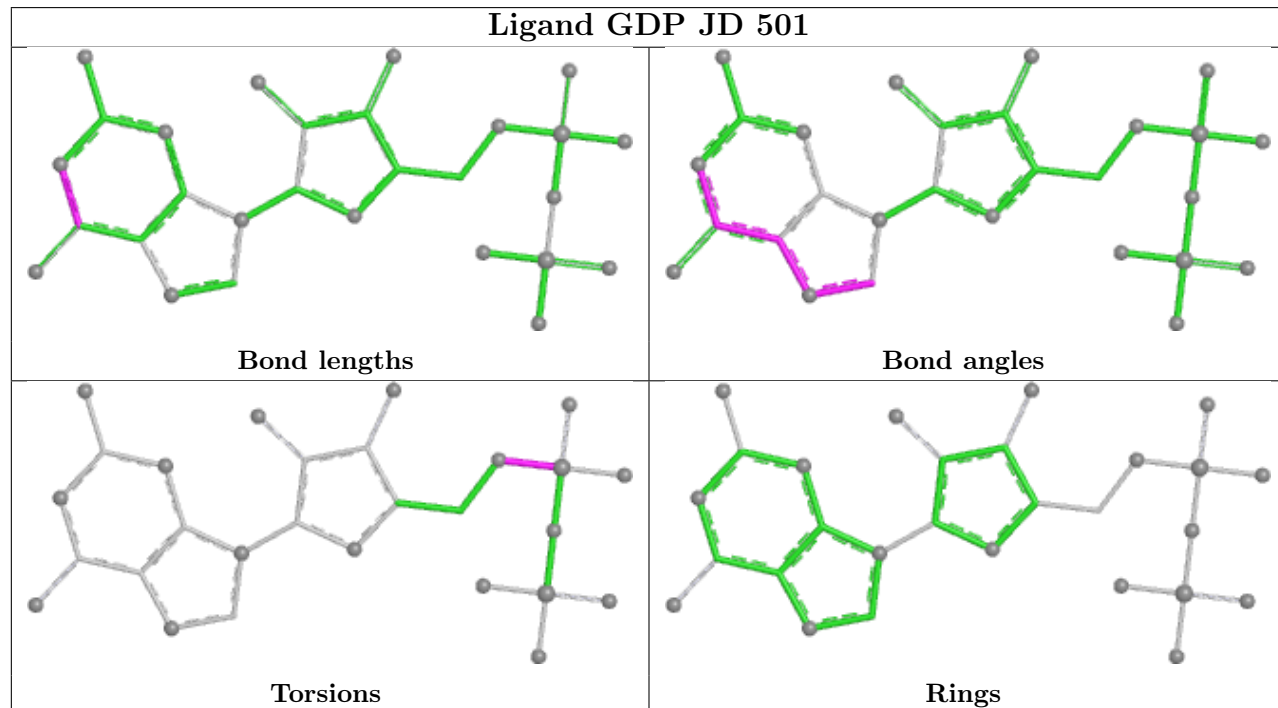




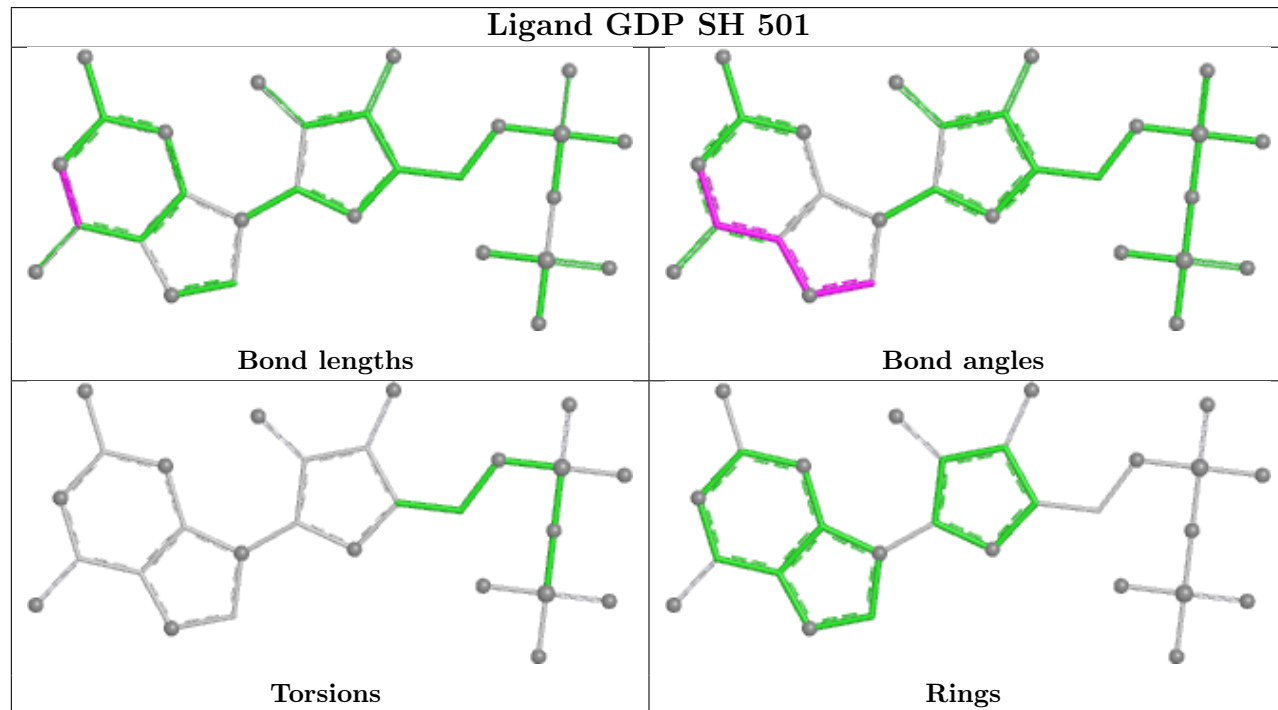
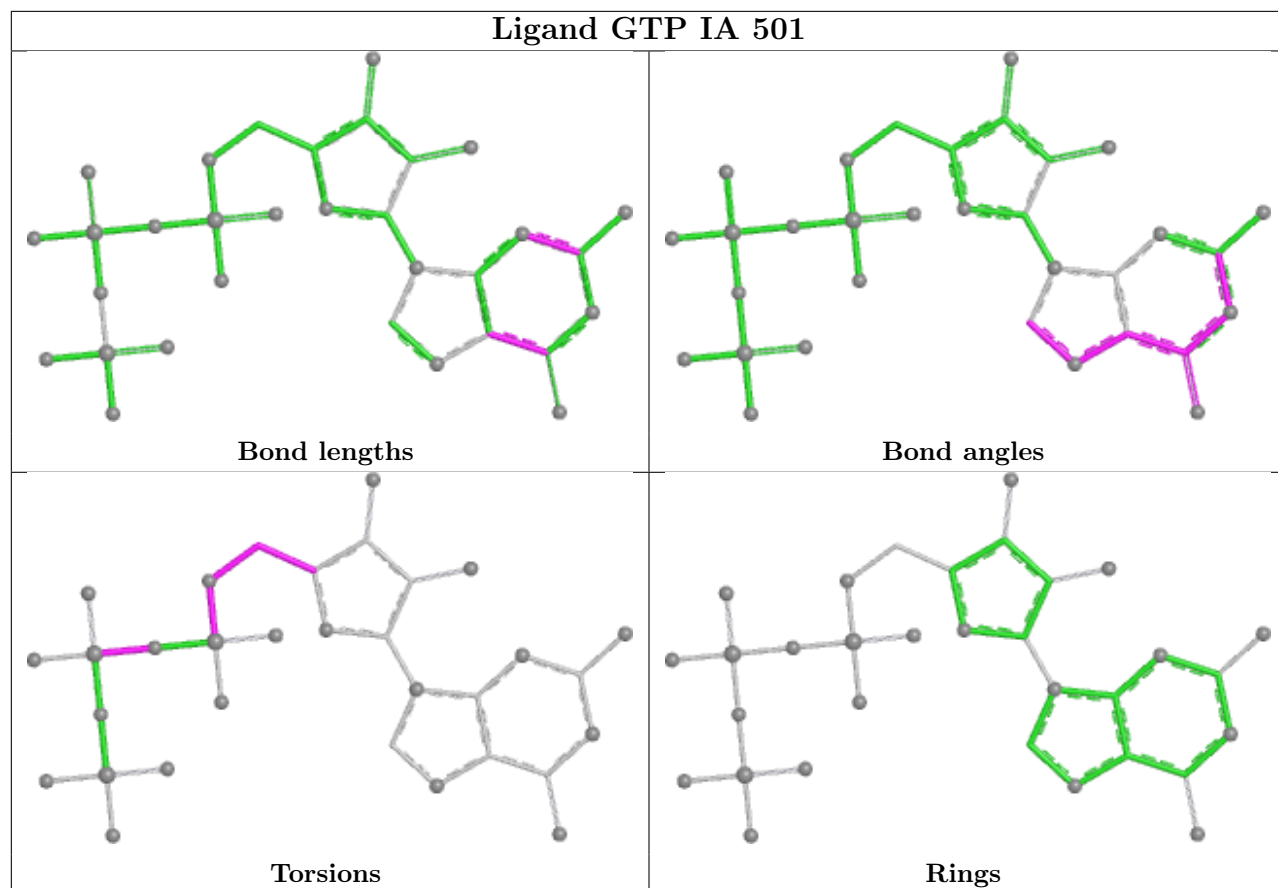
## Ligand GTP QK 501



## Ligand GDP JD 501

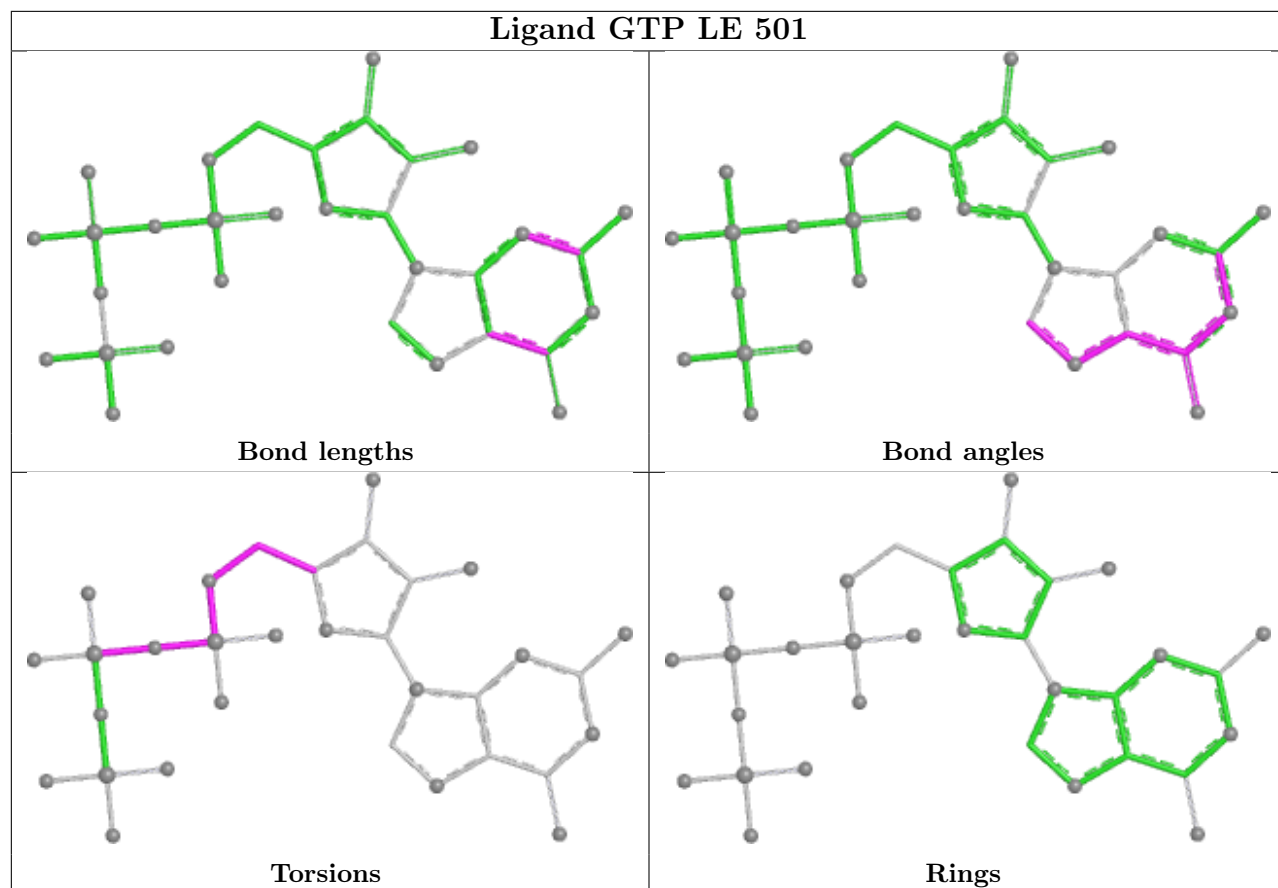




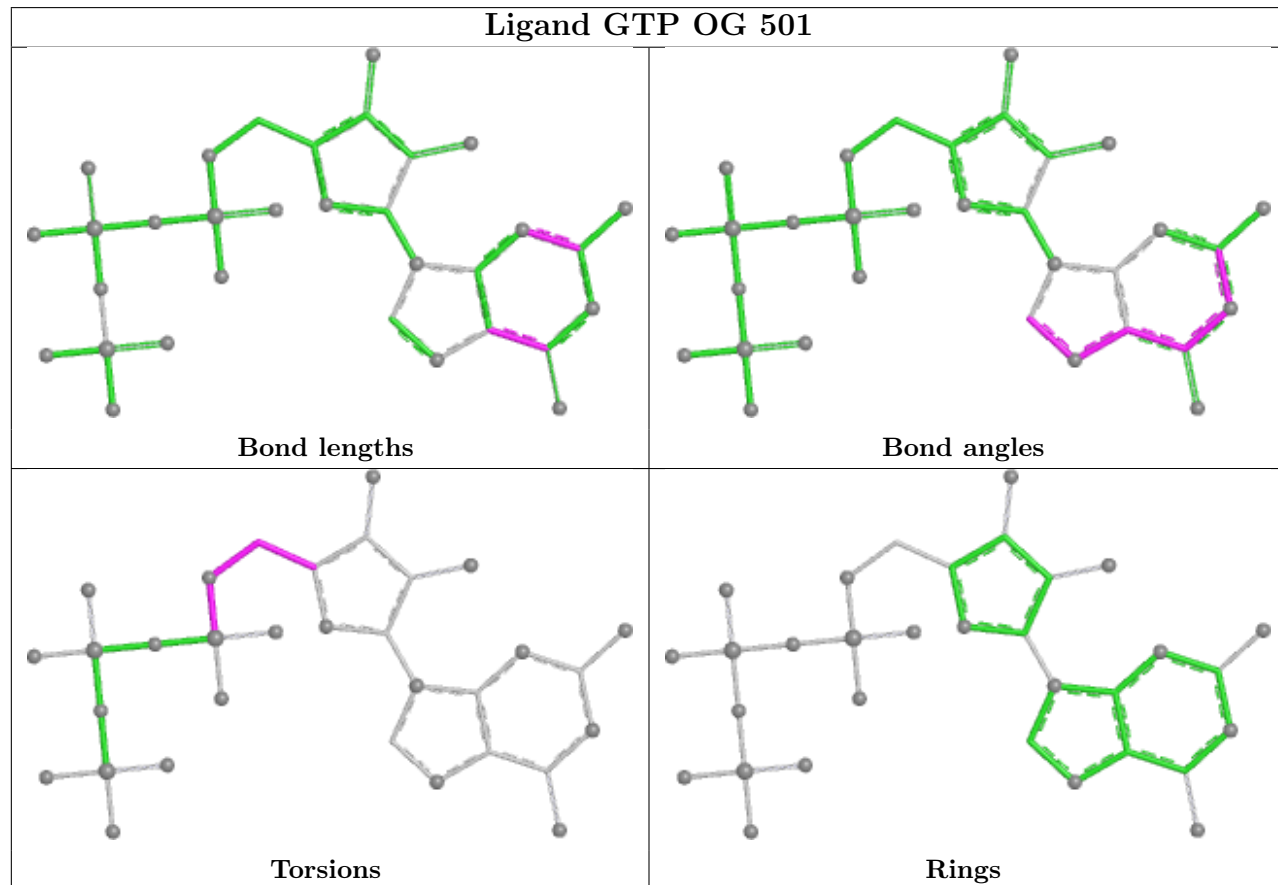




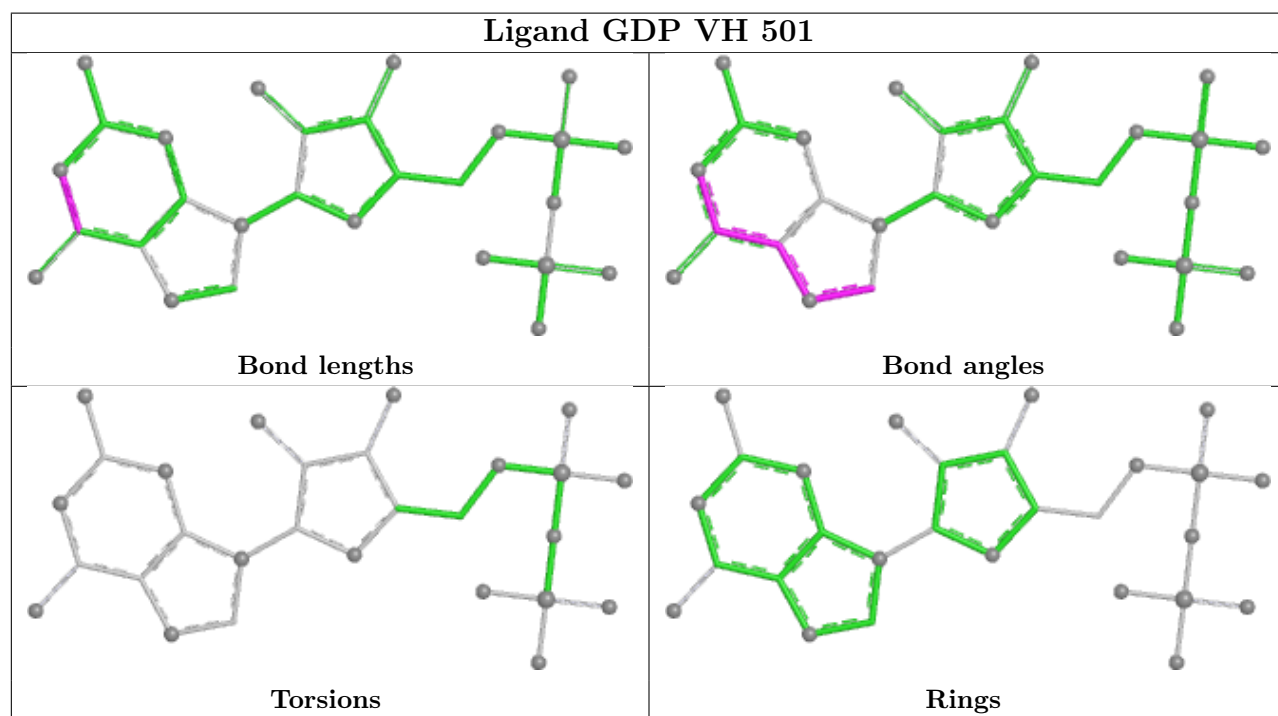
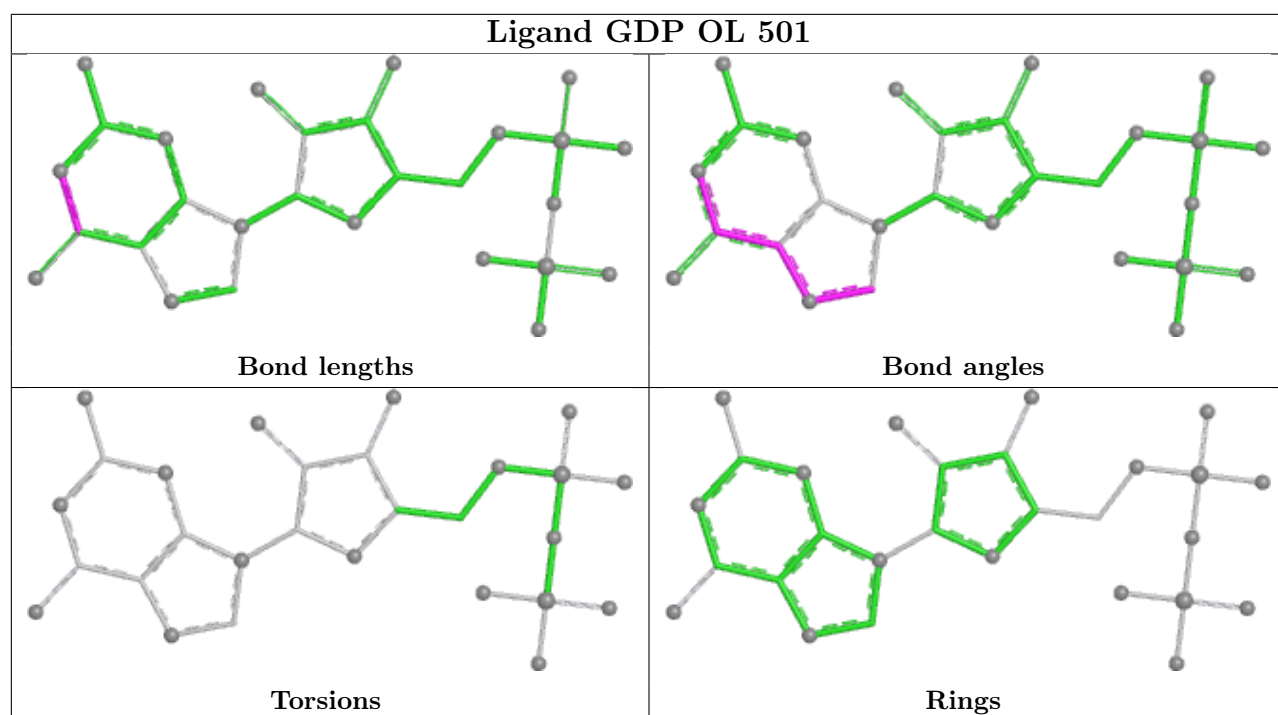
## Ligand GTP LE 501



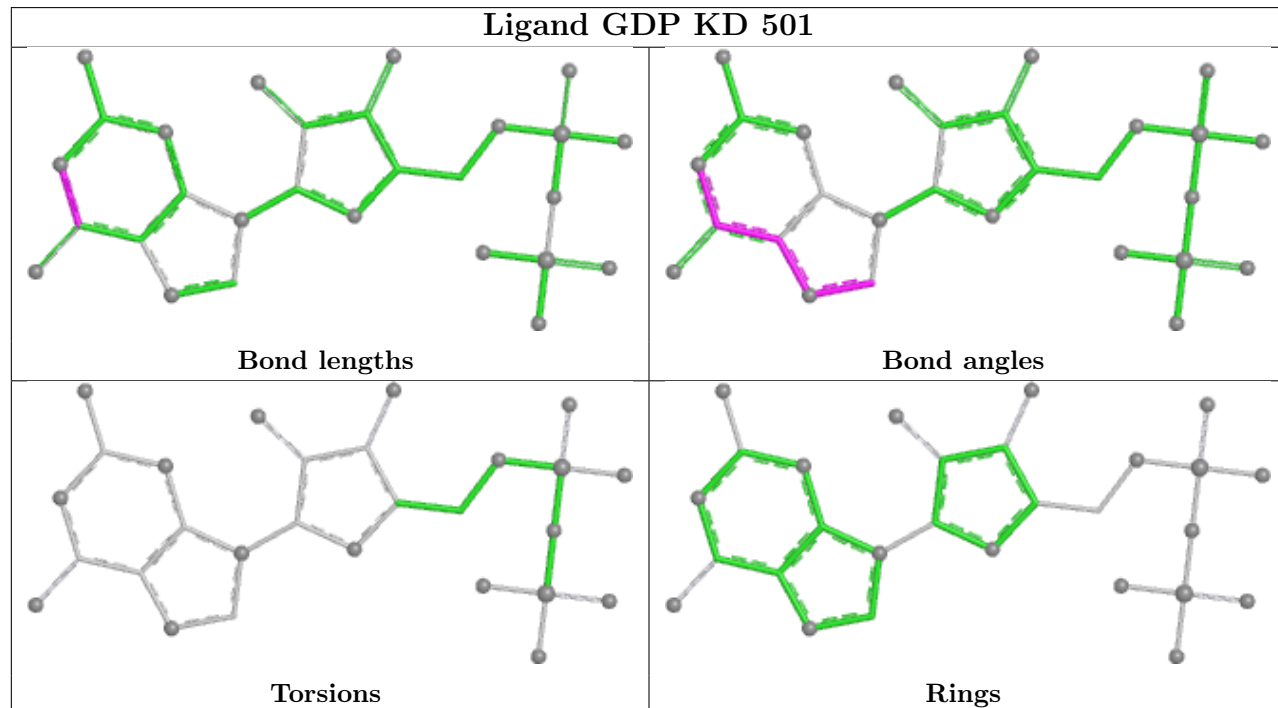
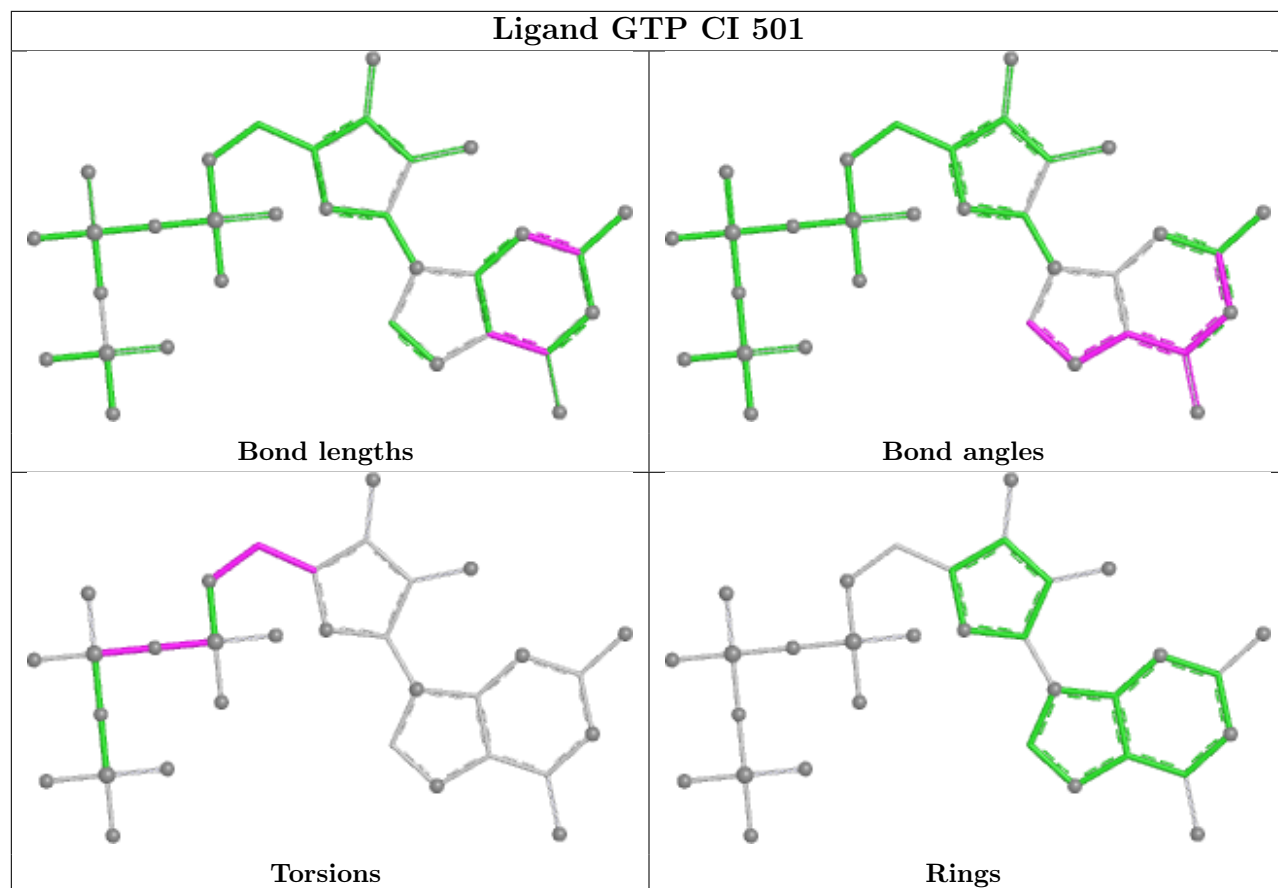
## Ligand GTP OG 501



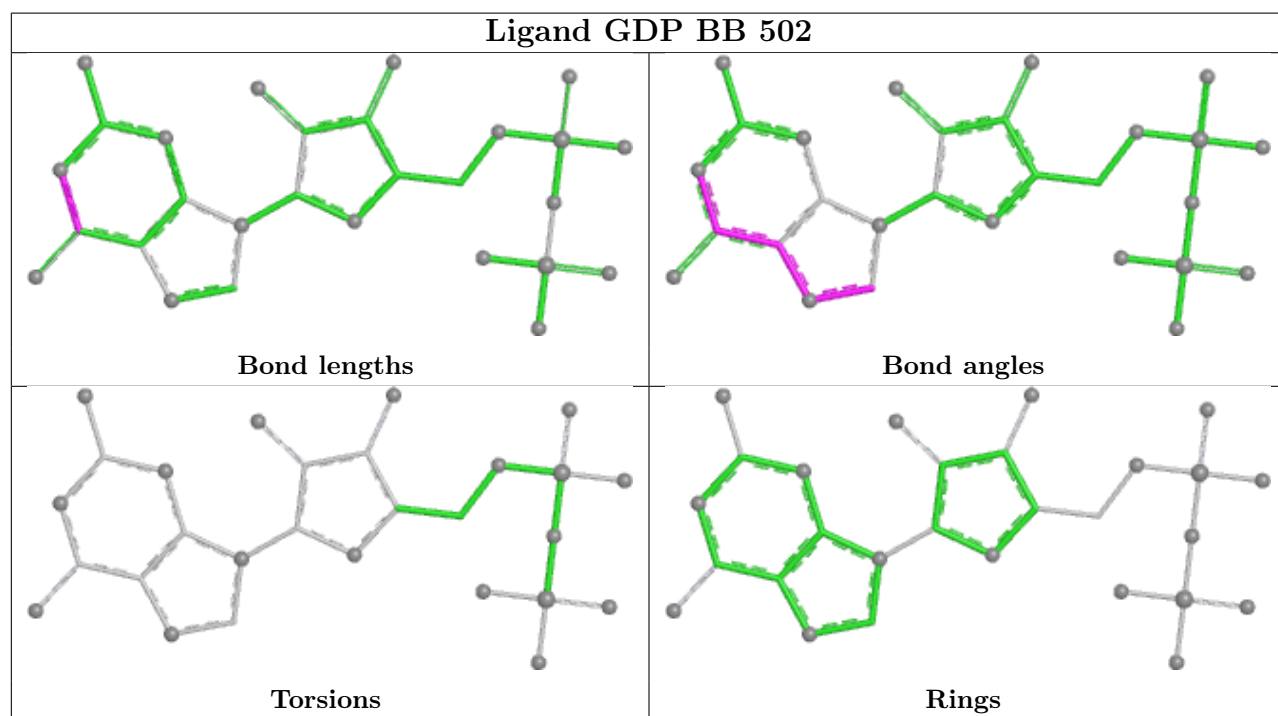
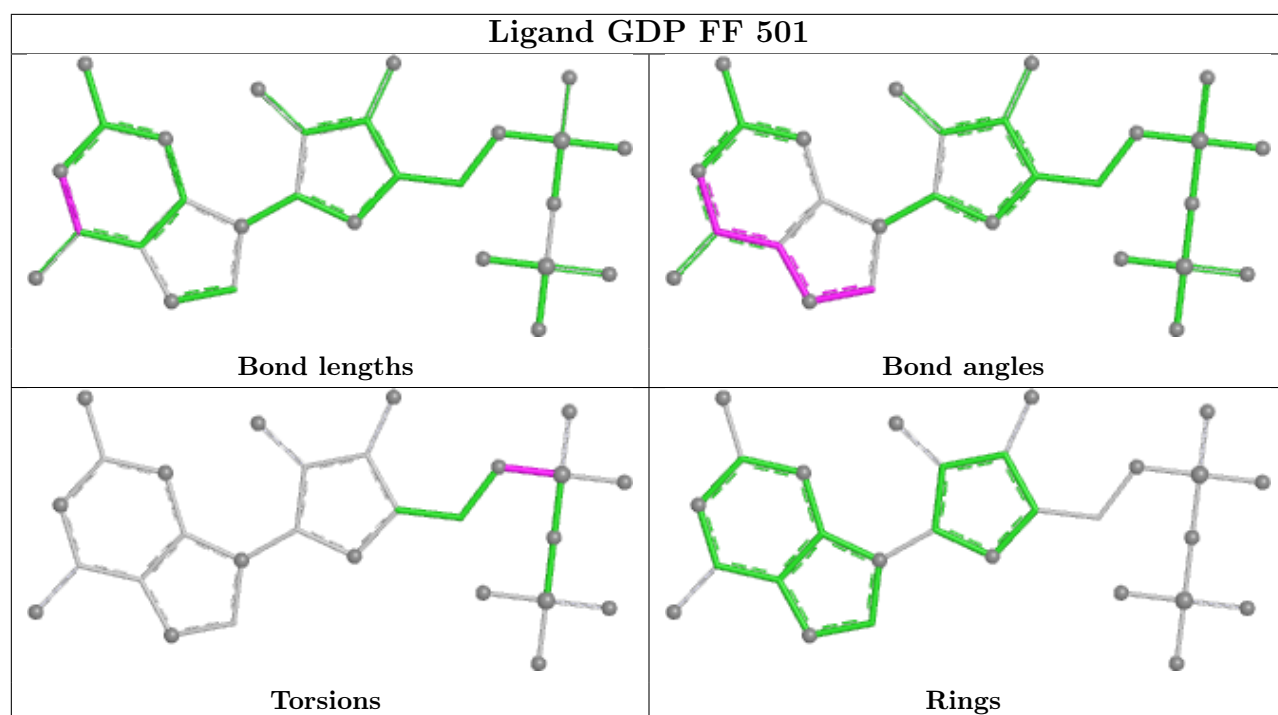






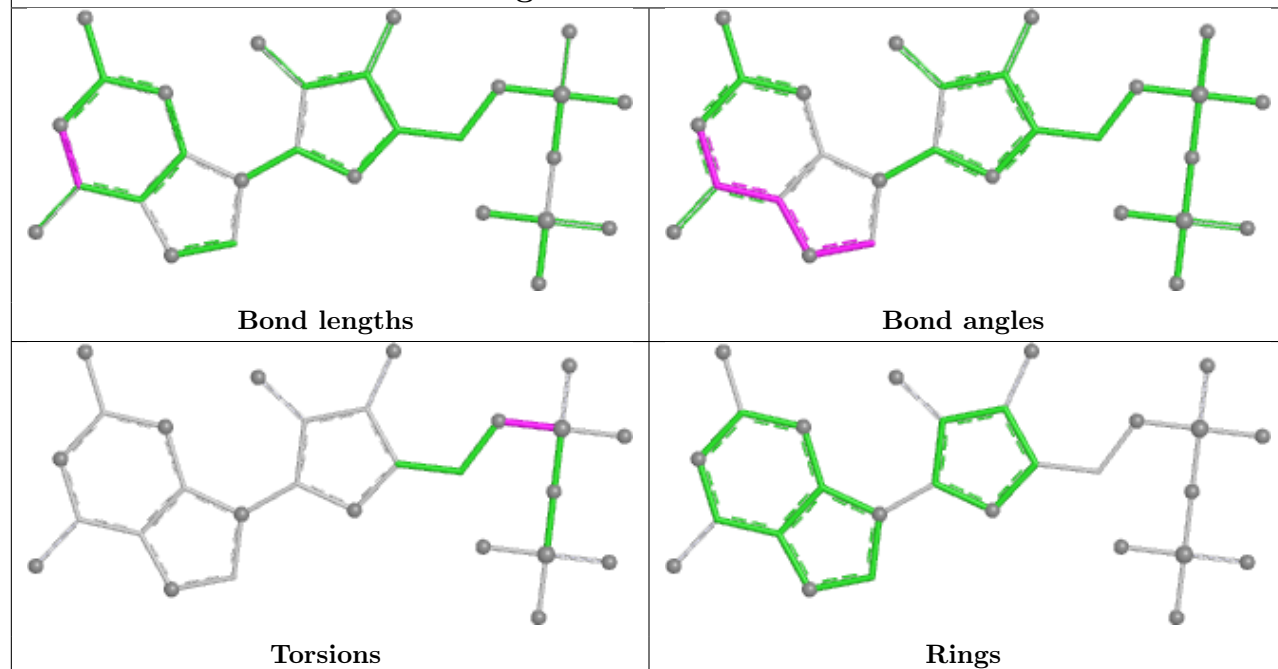




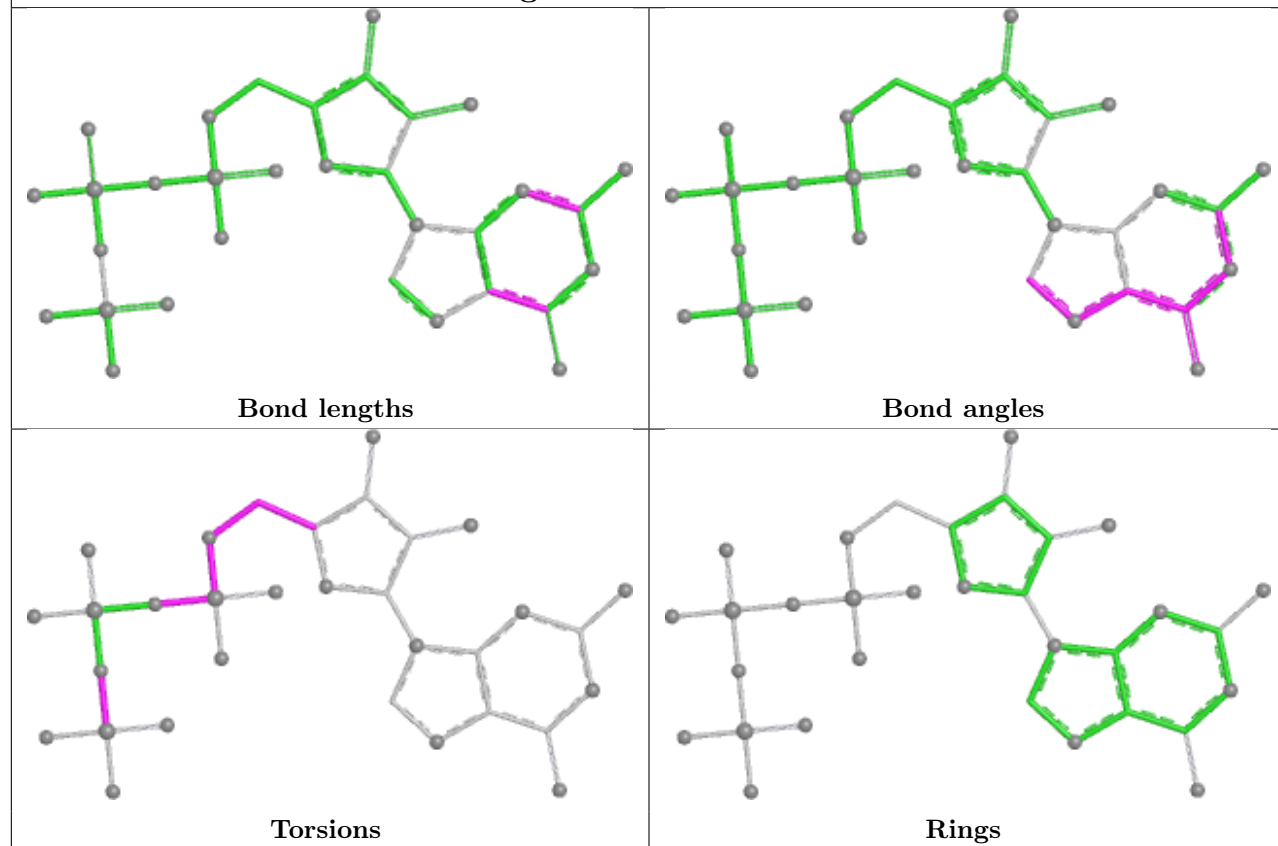




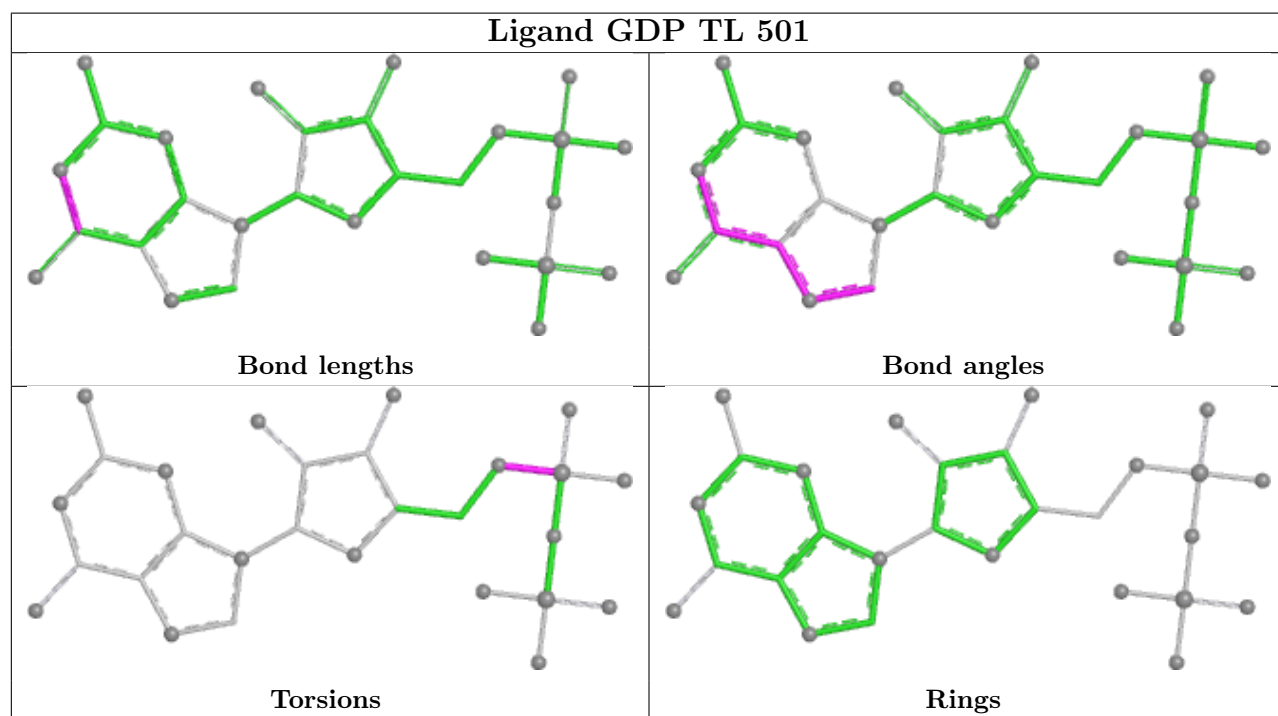
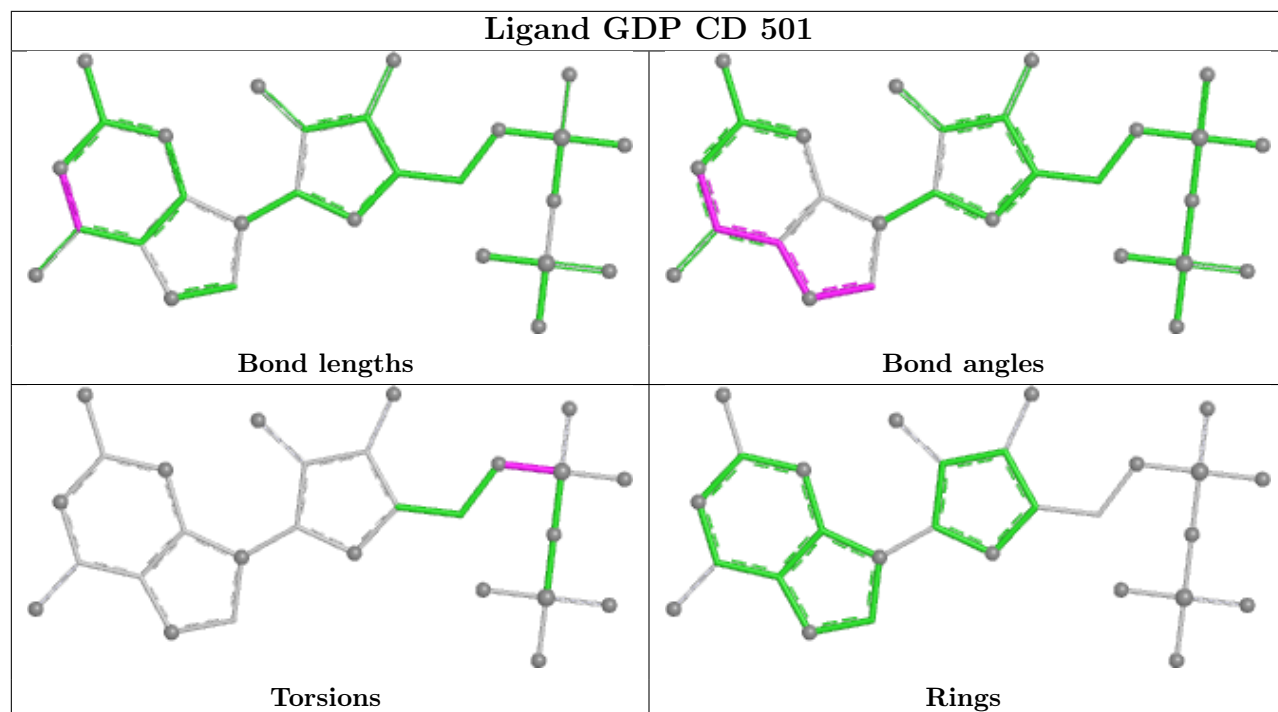
## Ligand GDP TN 501



## Ligand GTP LC 501

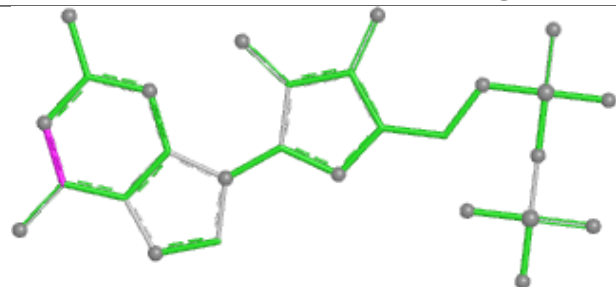




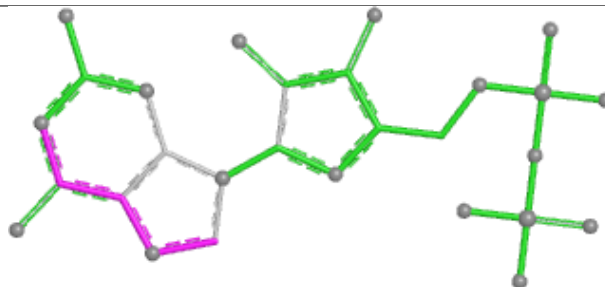




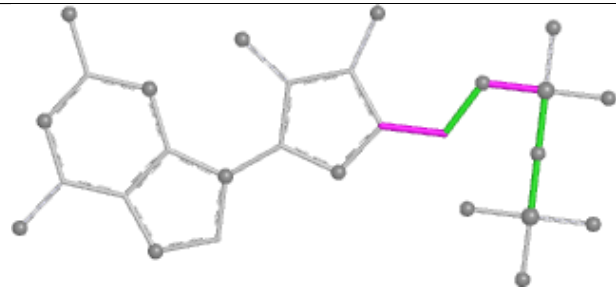
## Ligand GDP MH 501



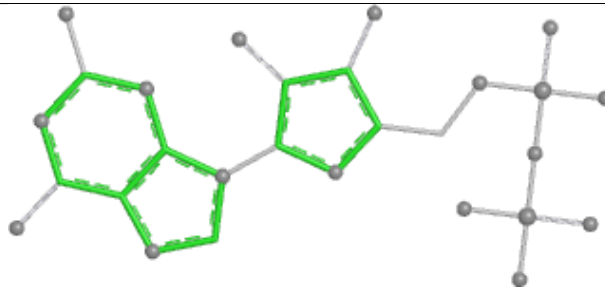
Bond lengths



Bond angles

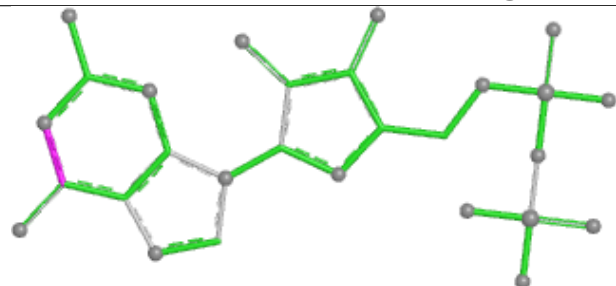


Torsions

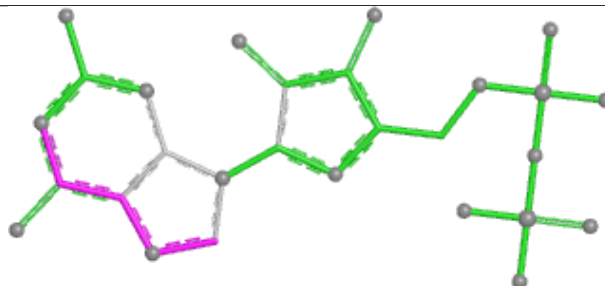


Rings

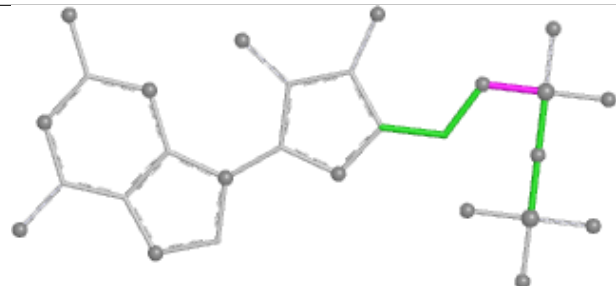
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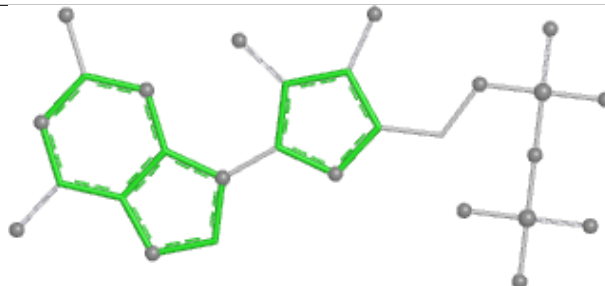
Bond lengths



Bond angles

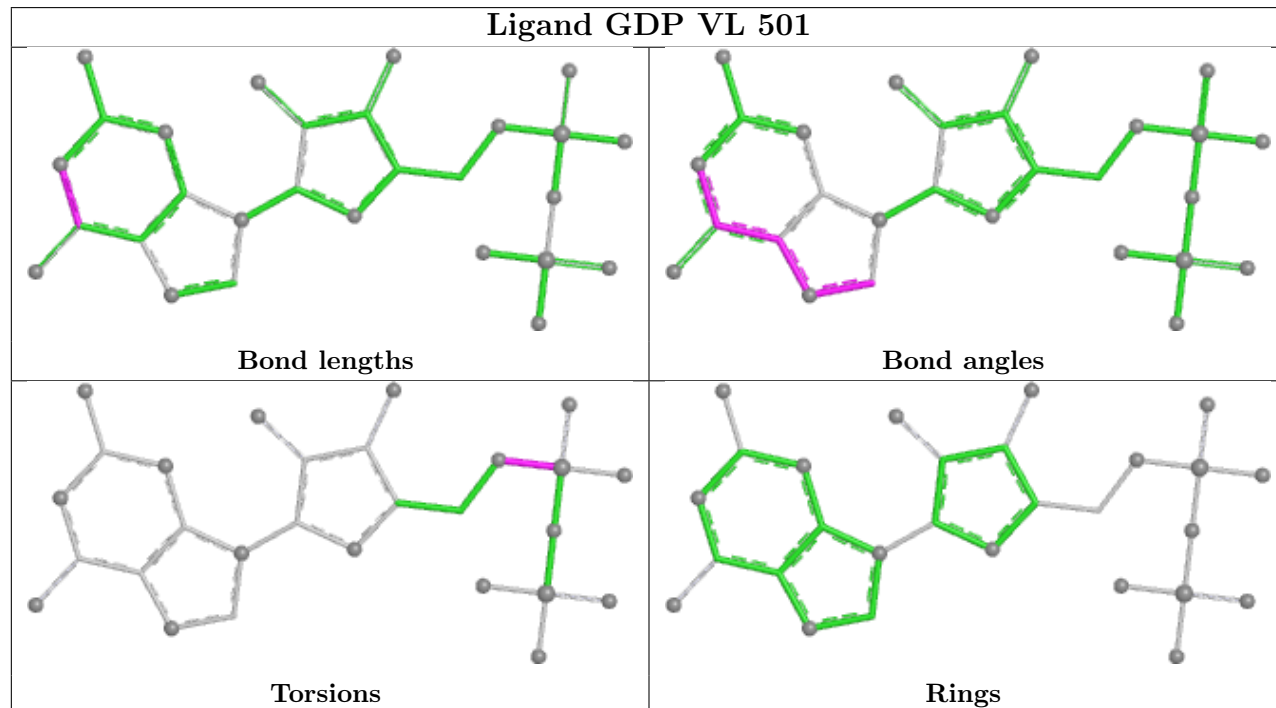
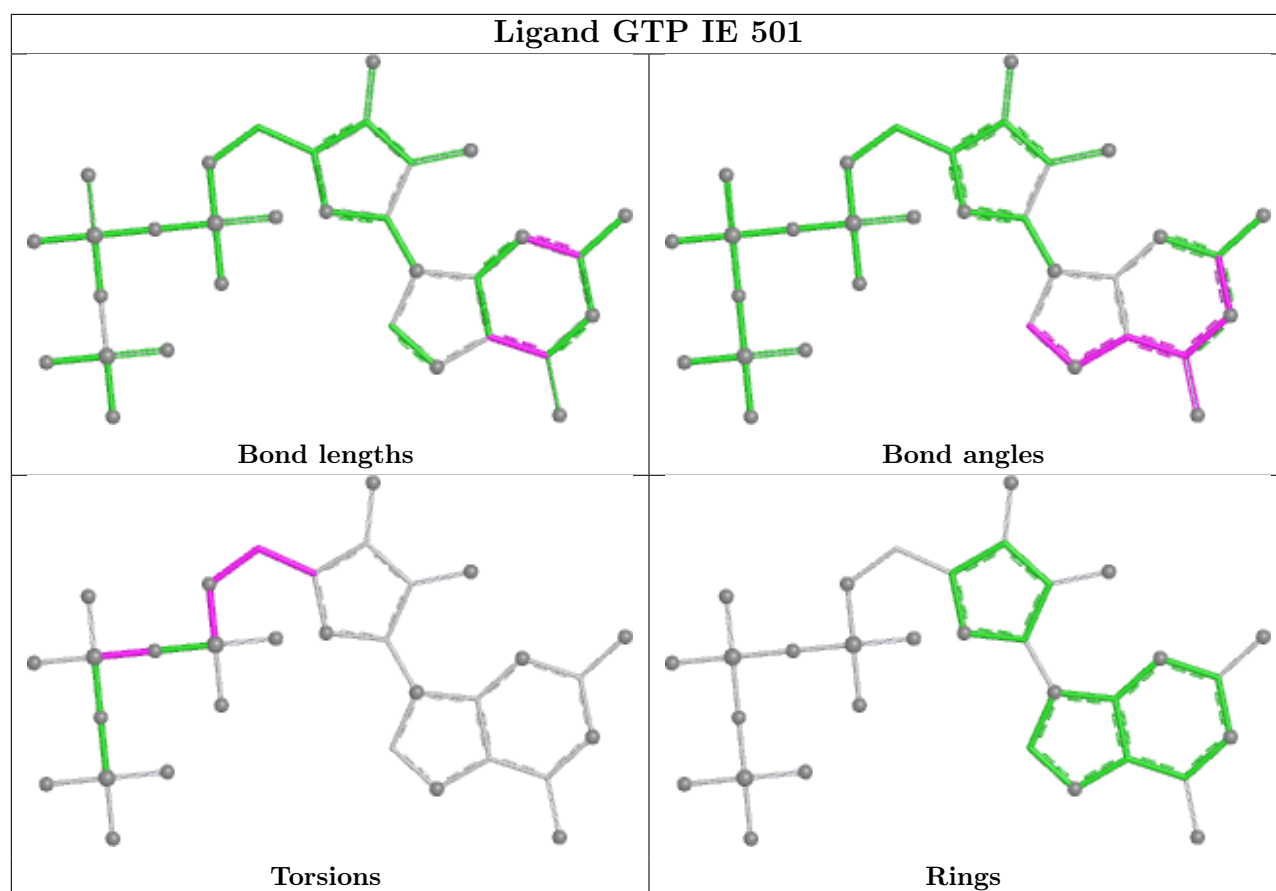


Torsions



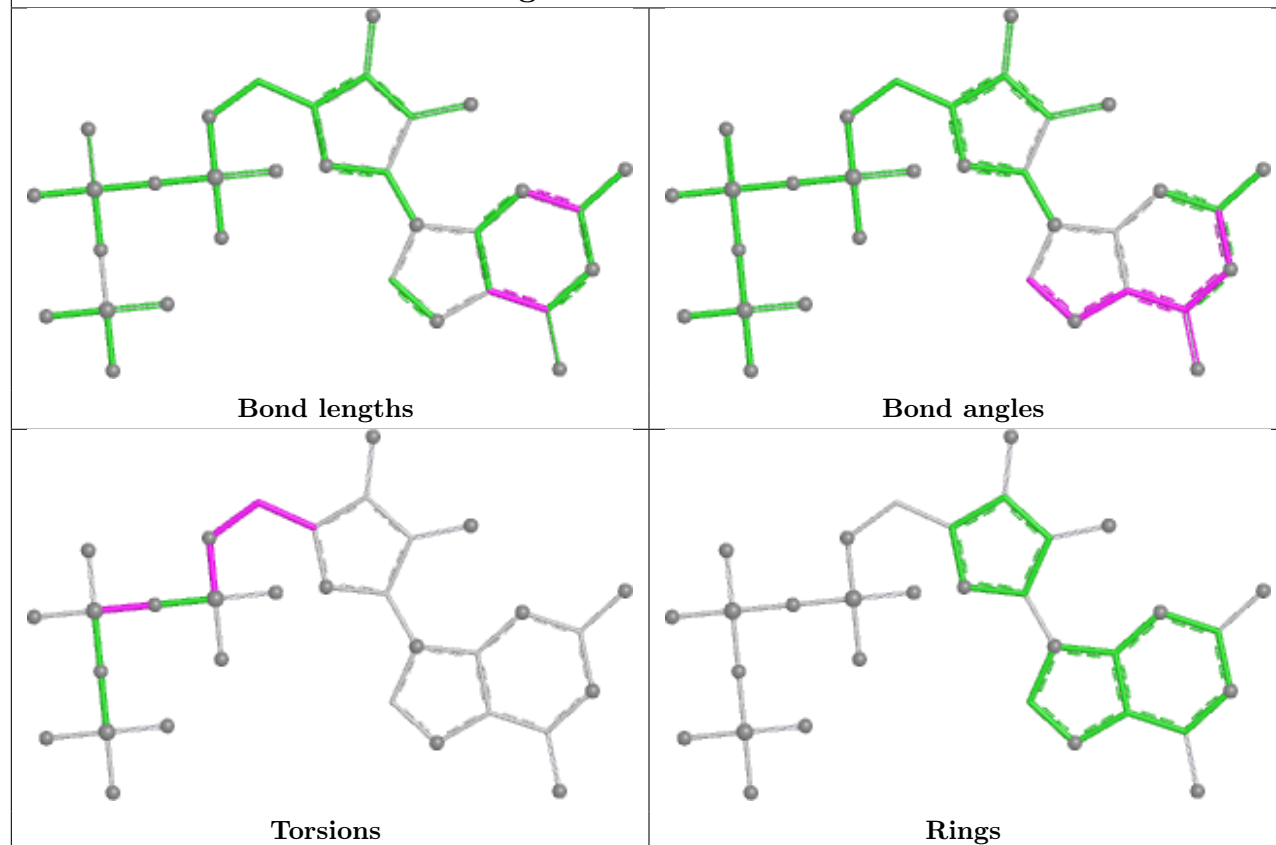
Rings



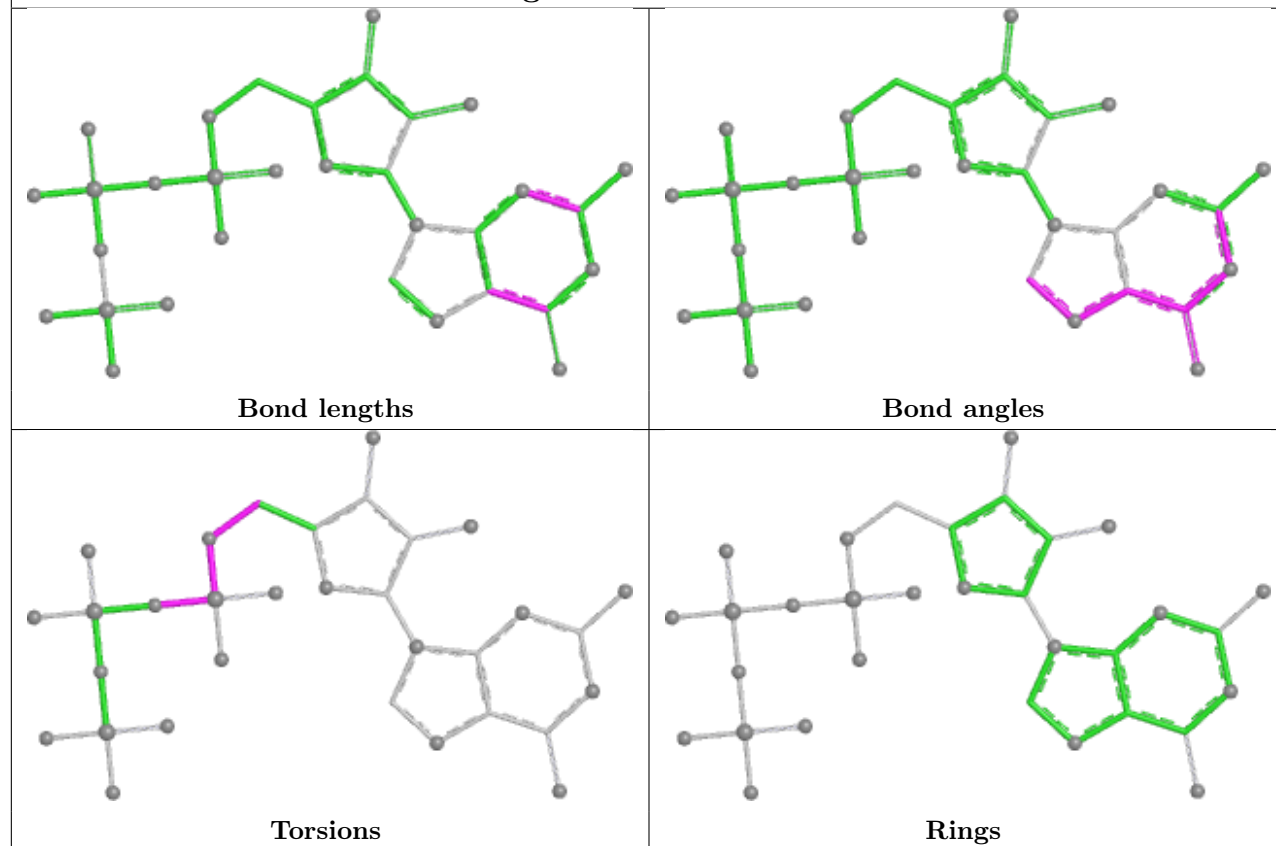




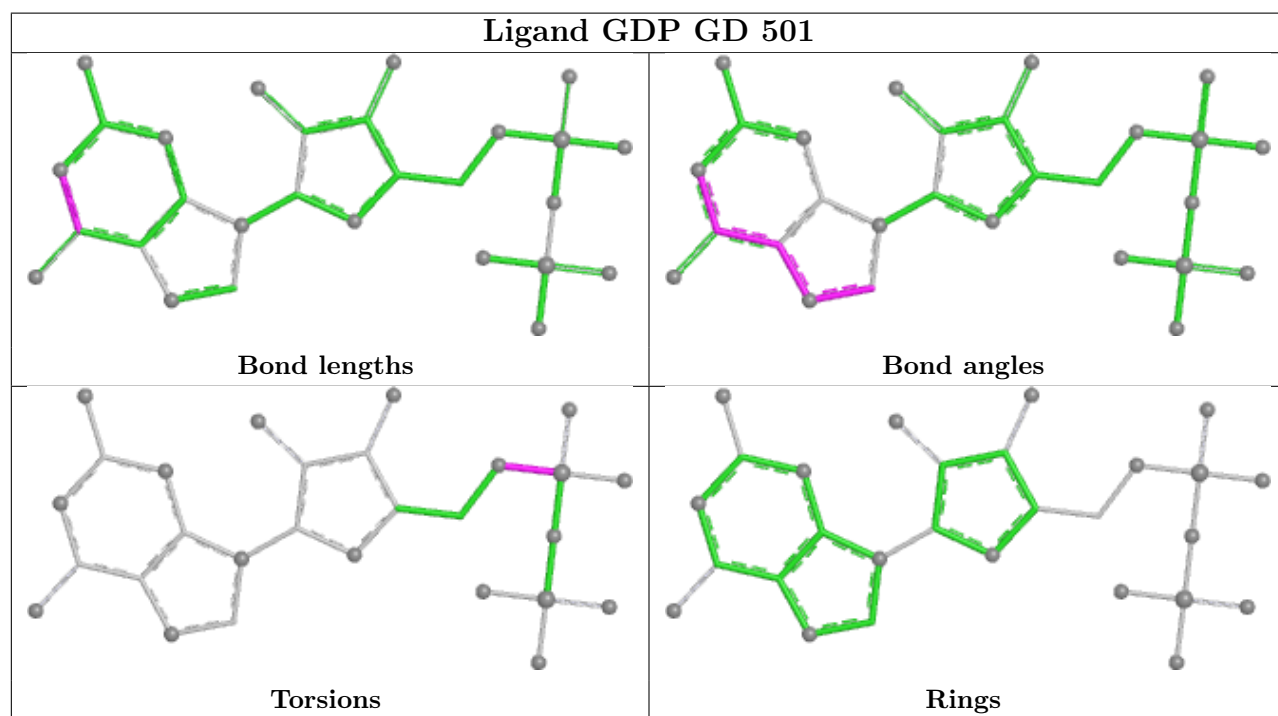
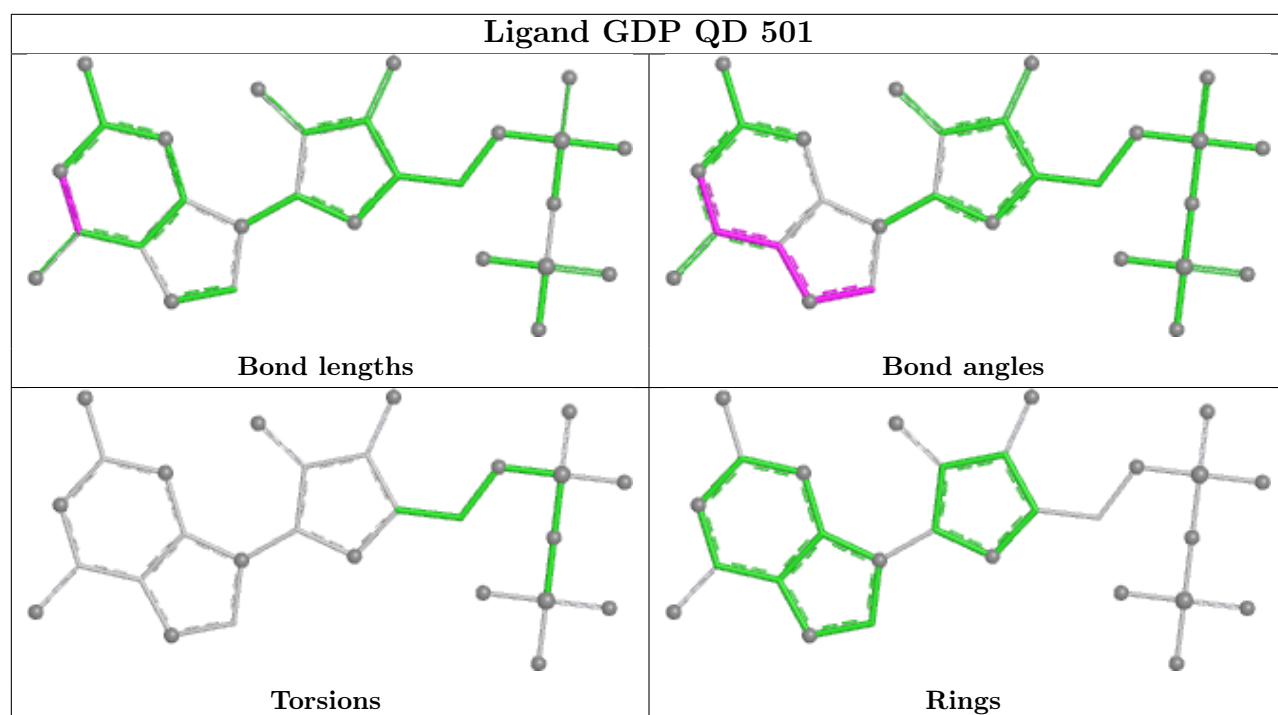
## Ligand GTP RE 501



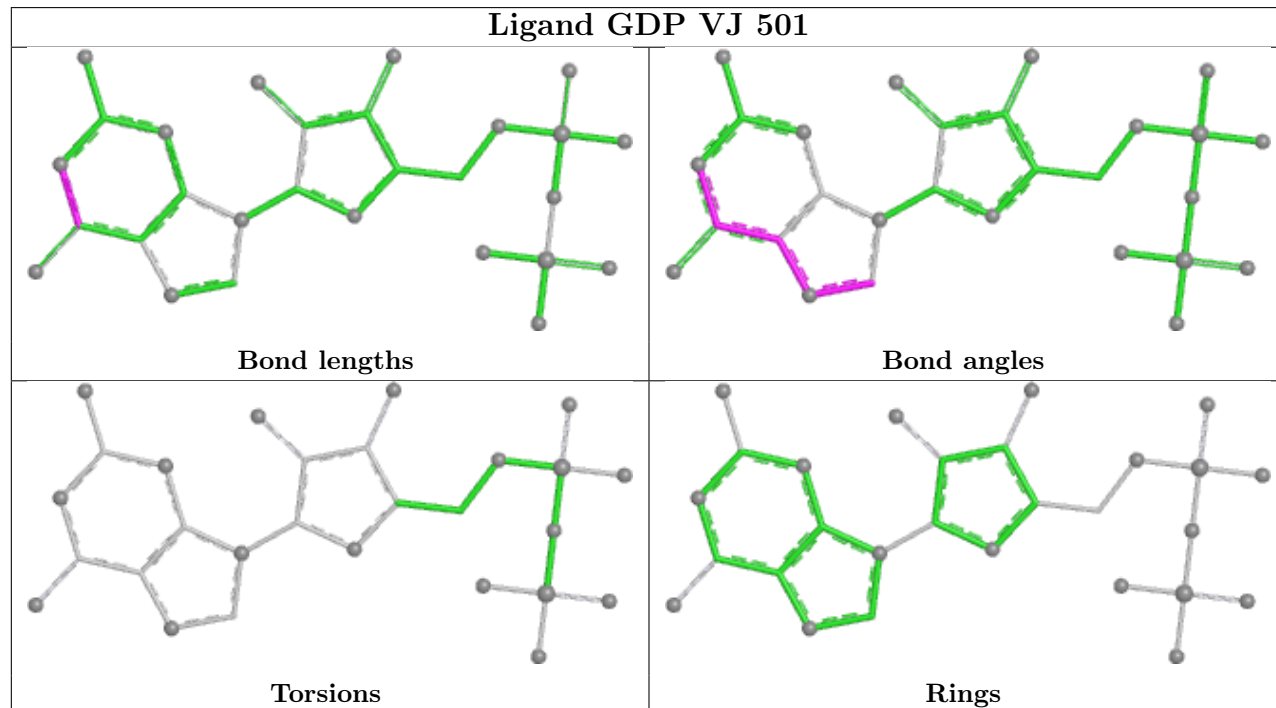
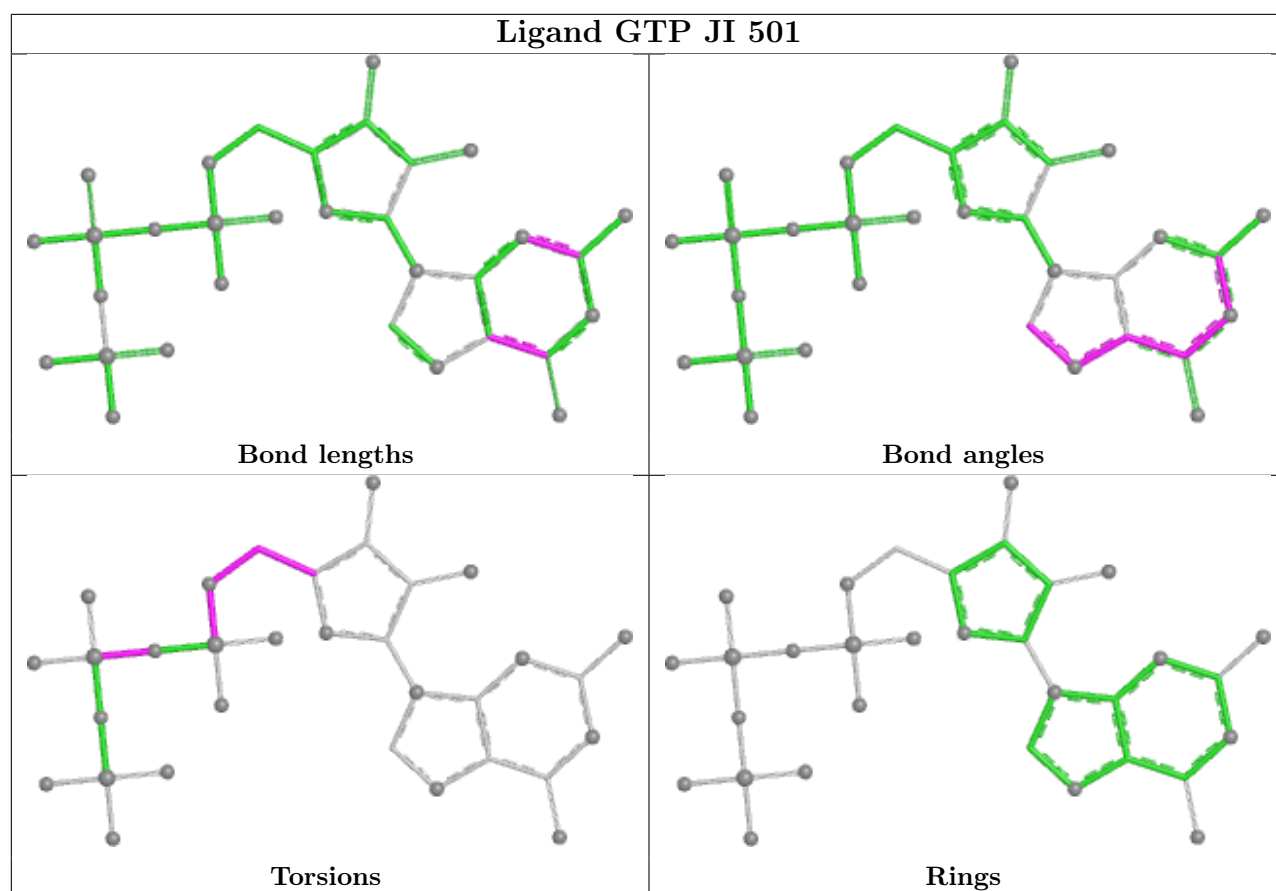
## Ligand GTP JE 501





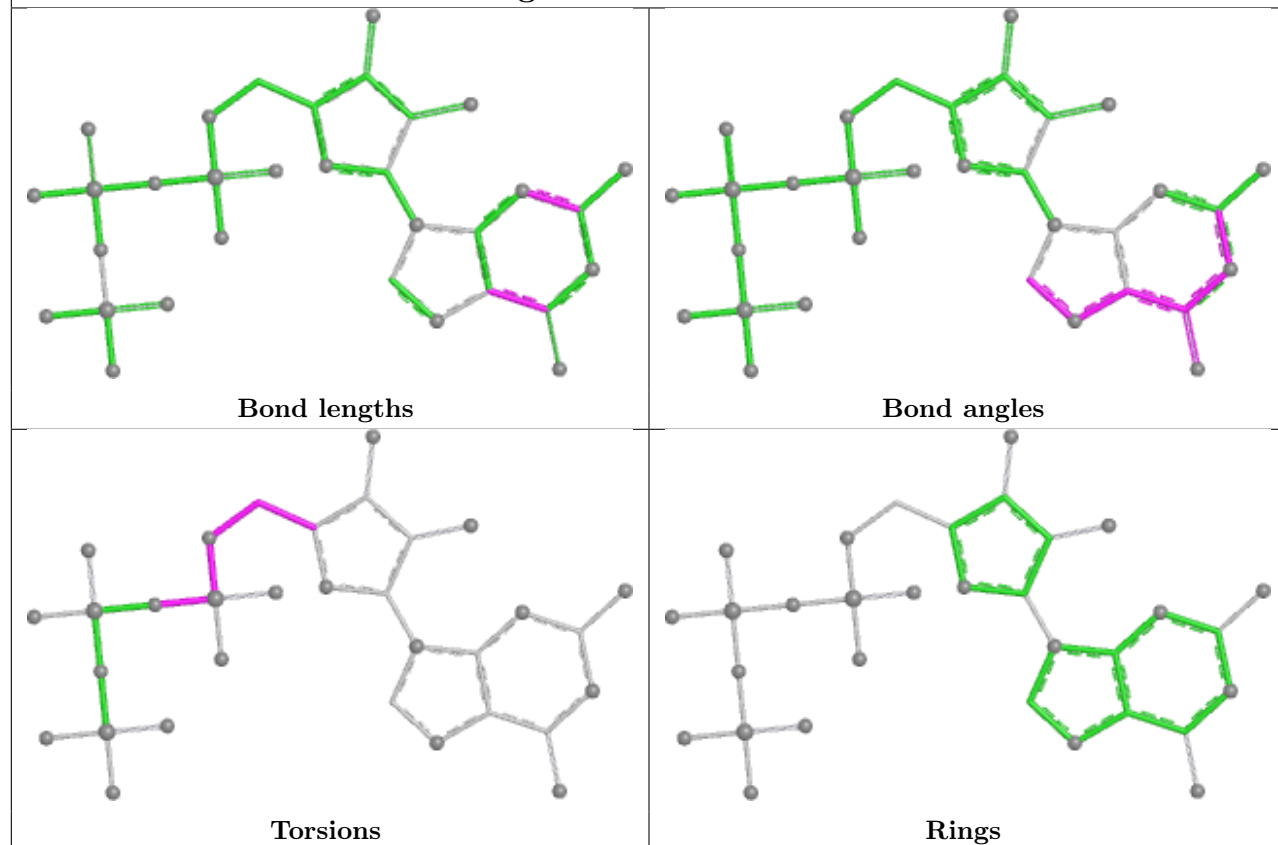




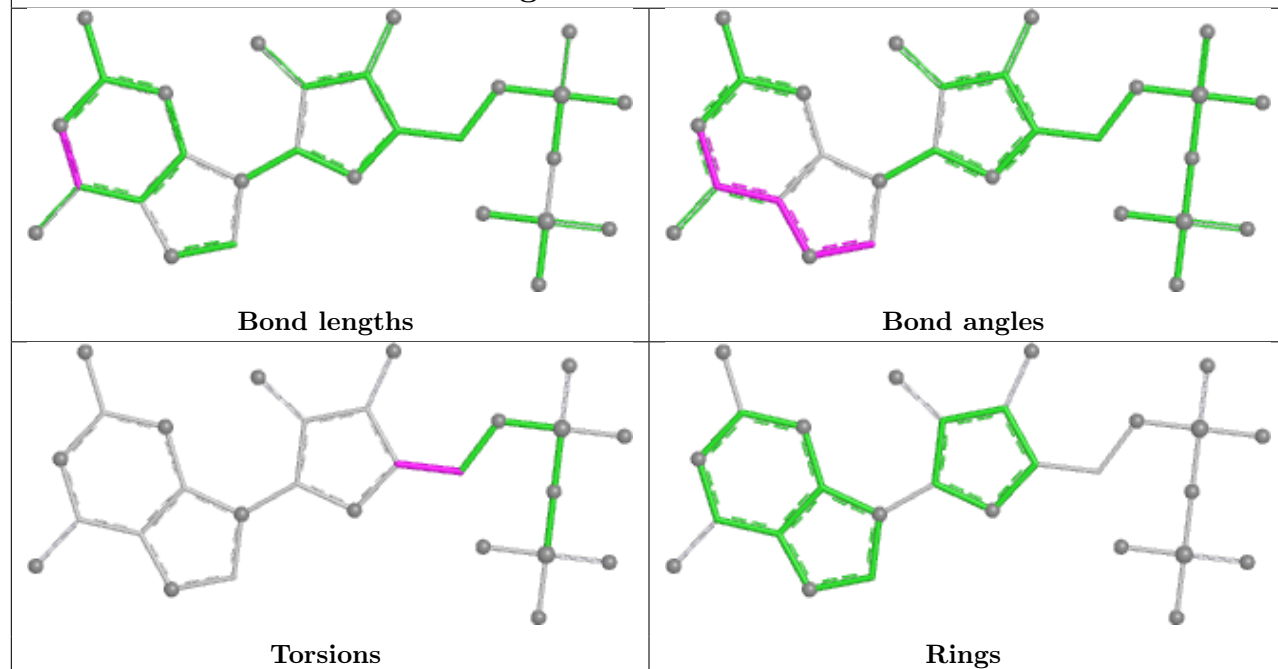




## Ligand GTP DE 501

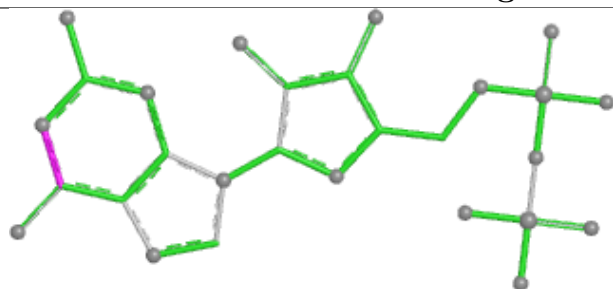


## Ligand GDP RJ 501

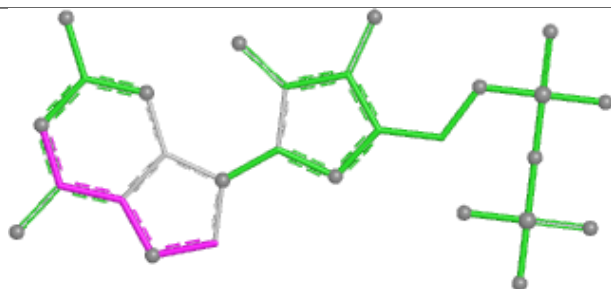




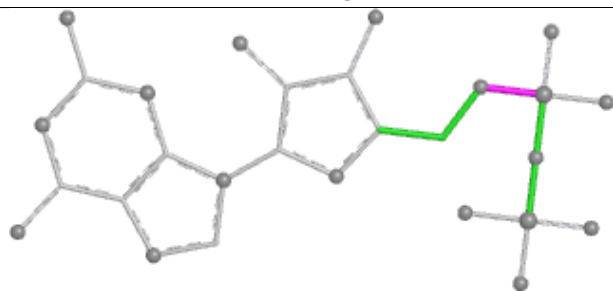
## Ligand GDP OD 501



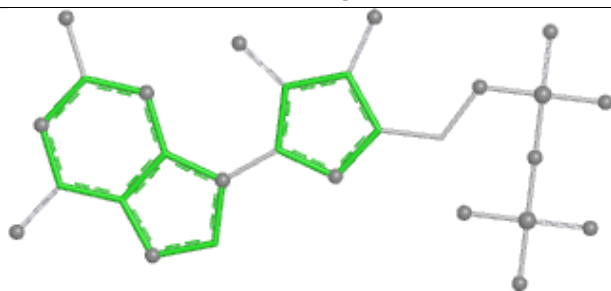
Bond lengths



Bond angles

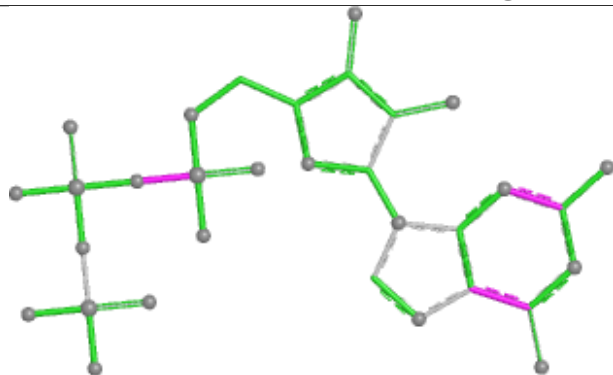


Torsions

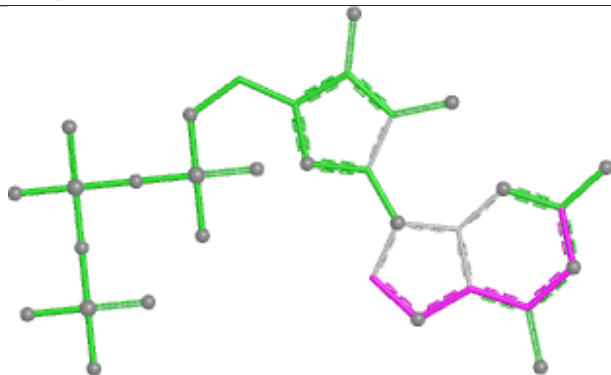


Rings

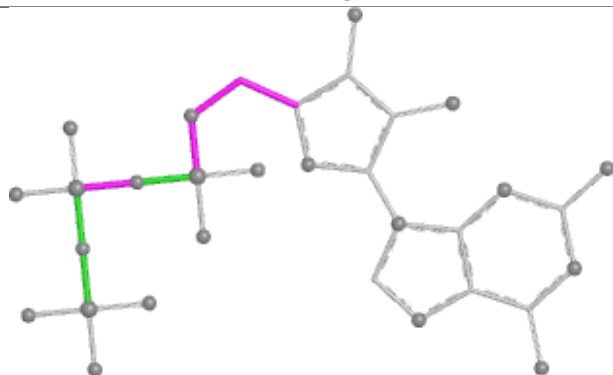
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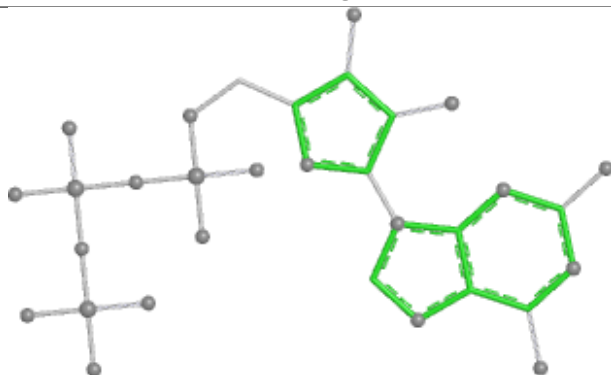
Bond lengths



Bond angles



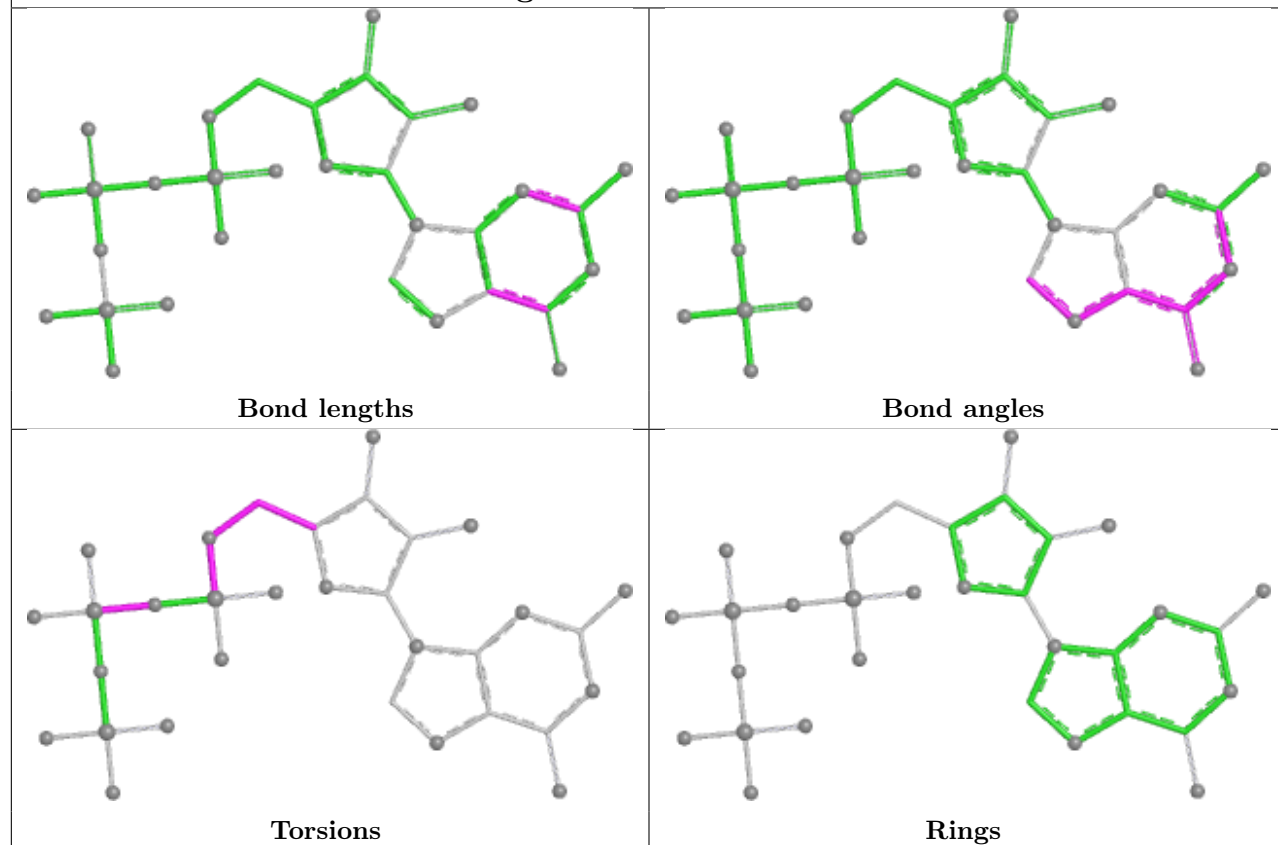
Torsions



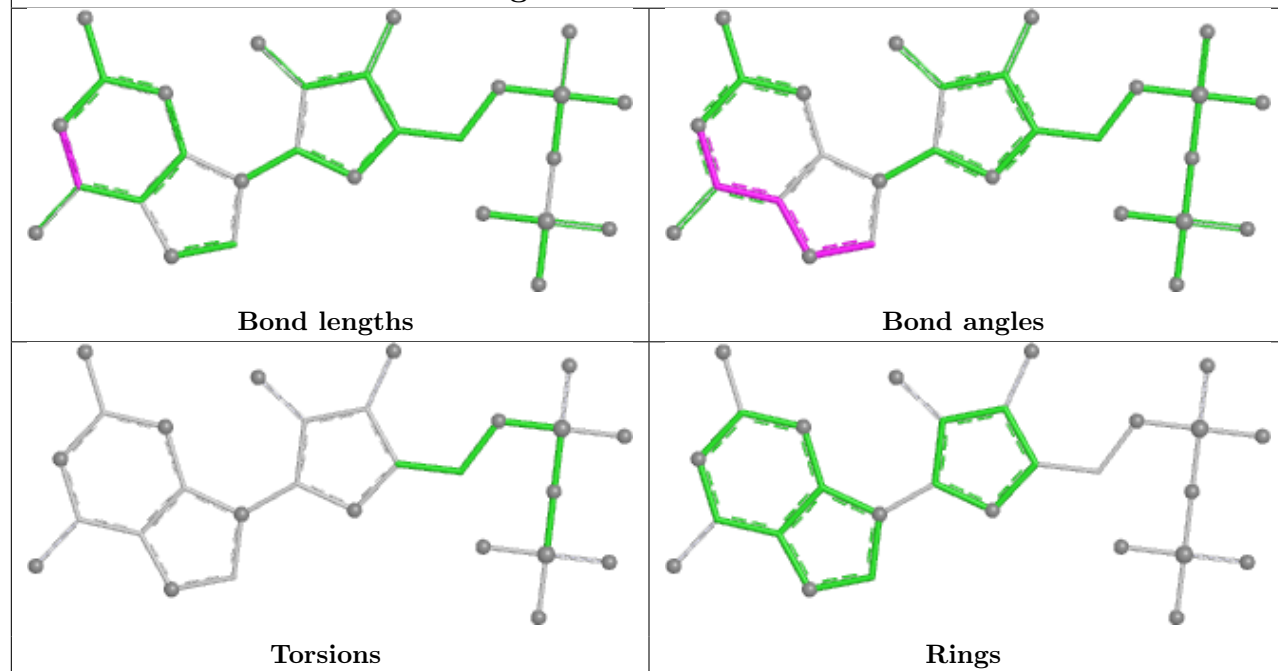
Rings



## Ligand GTP RK 501

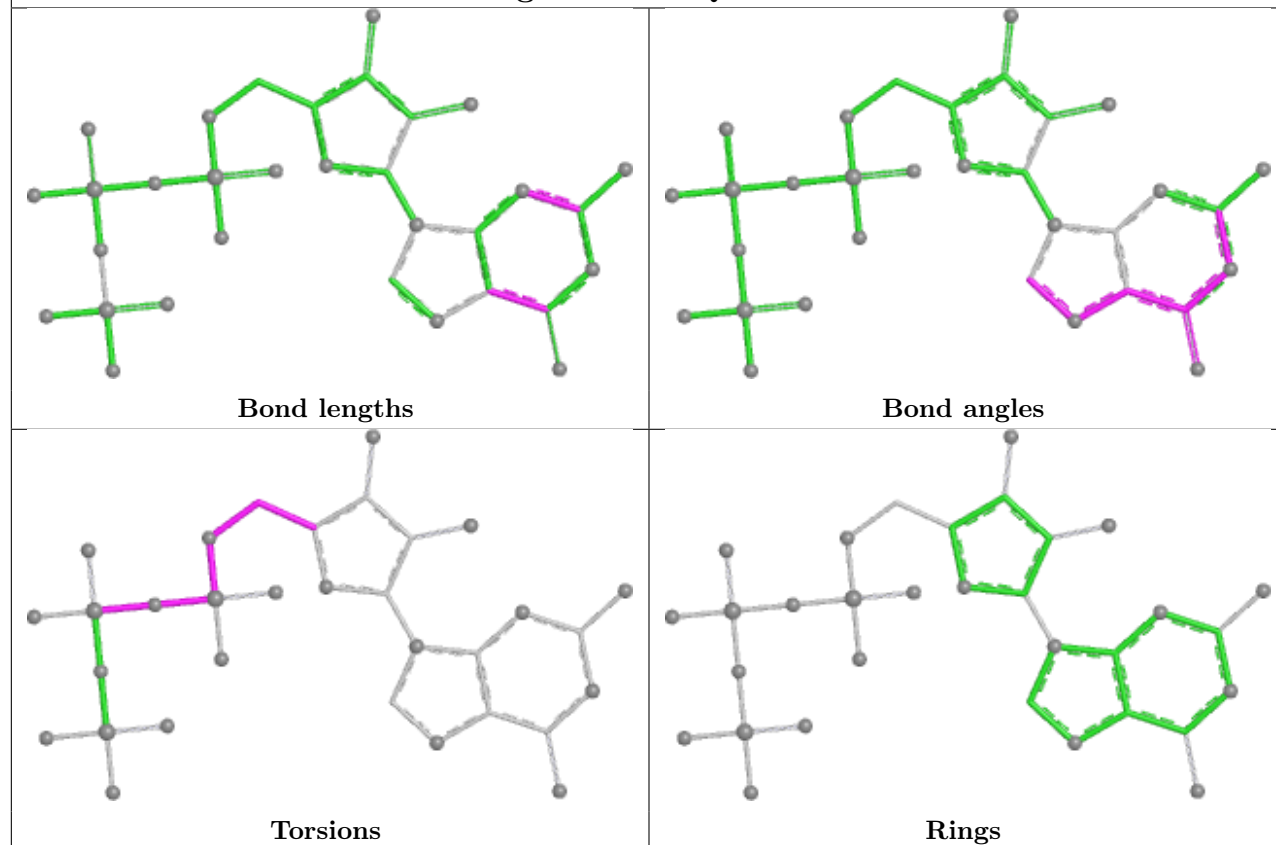


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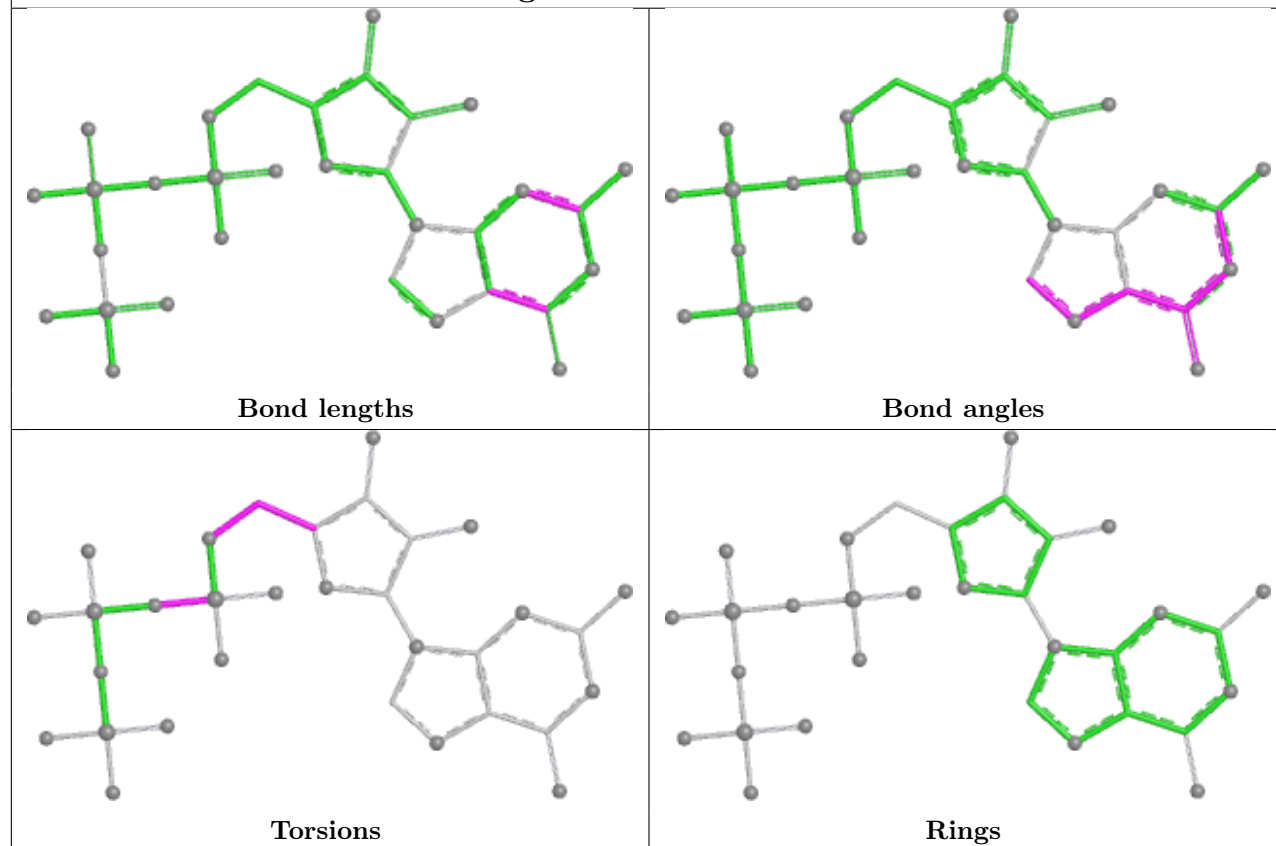




## Ligand GTP QA 501

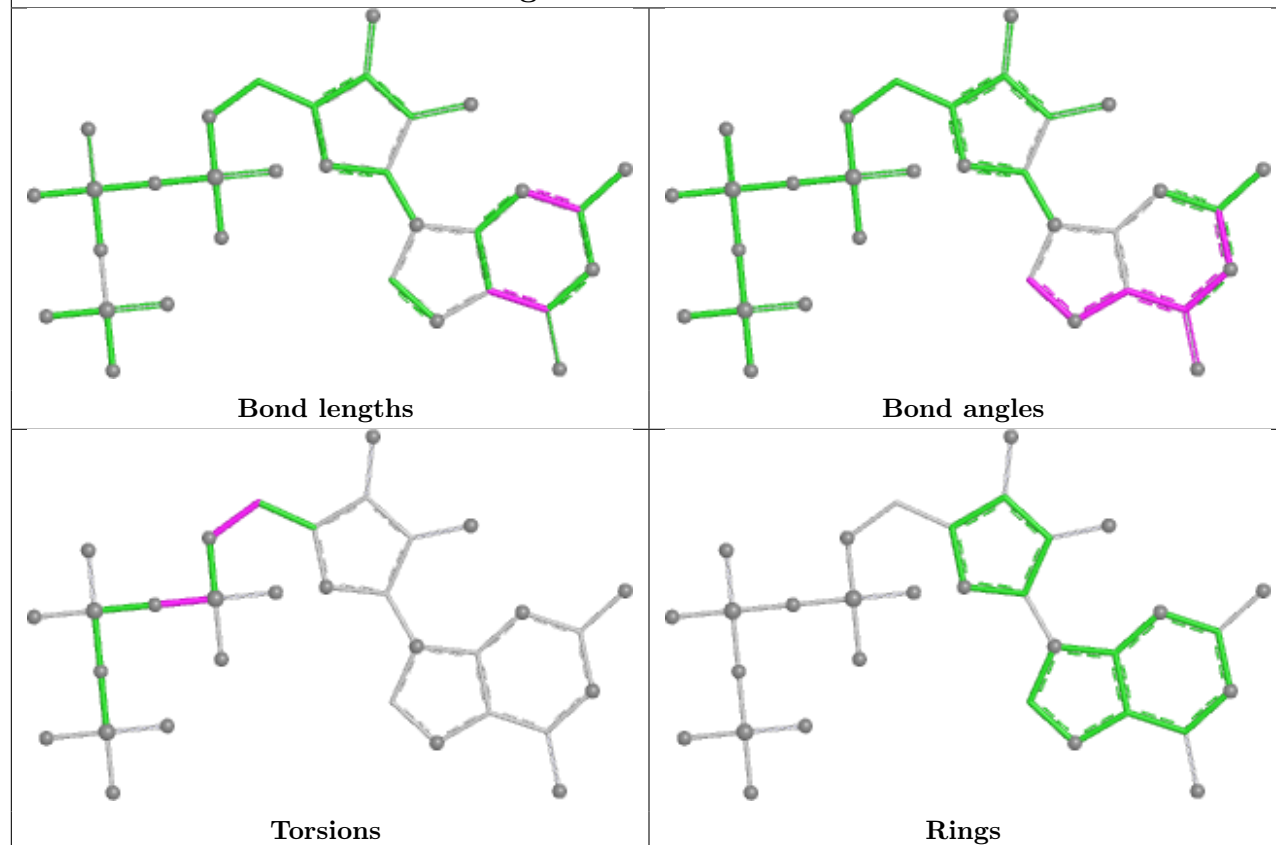


## Ligand GTP AE 501

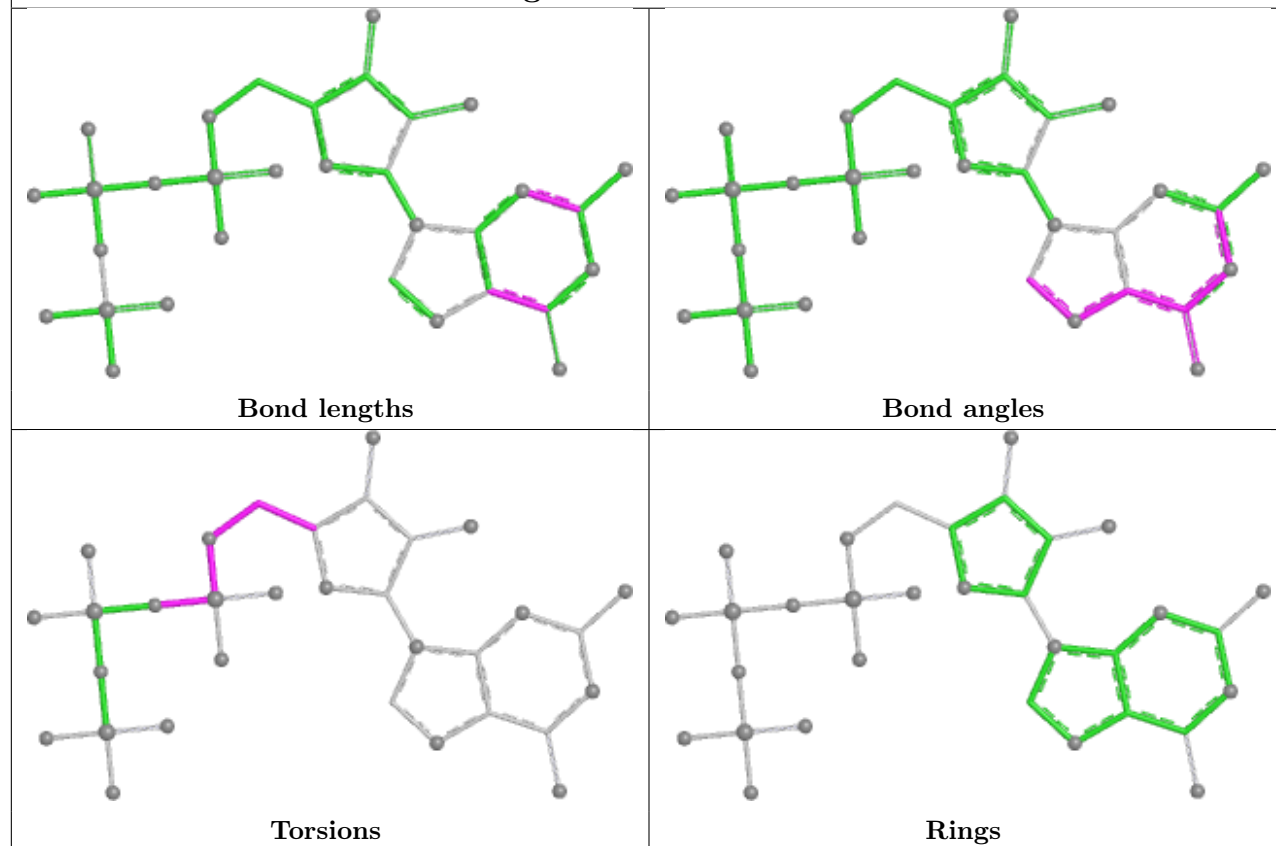




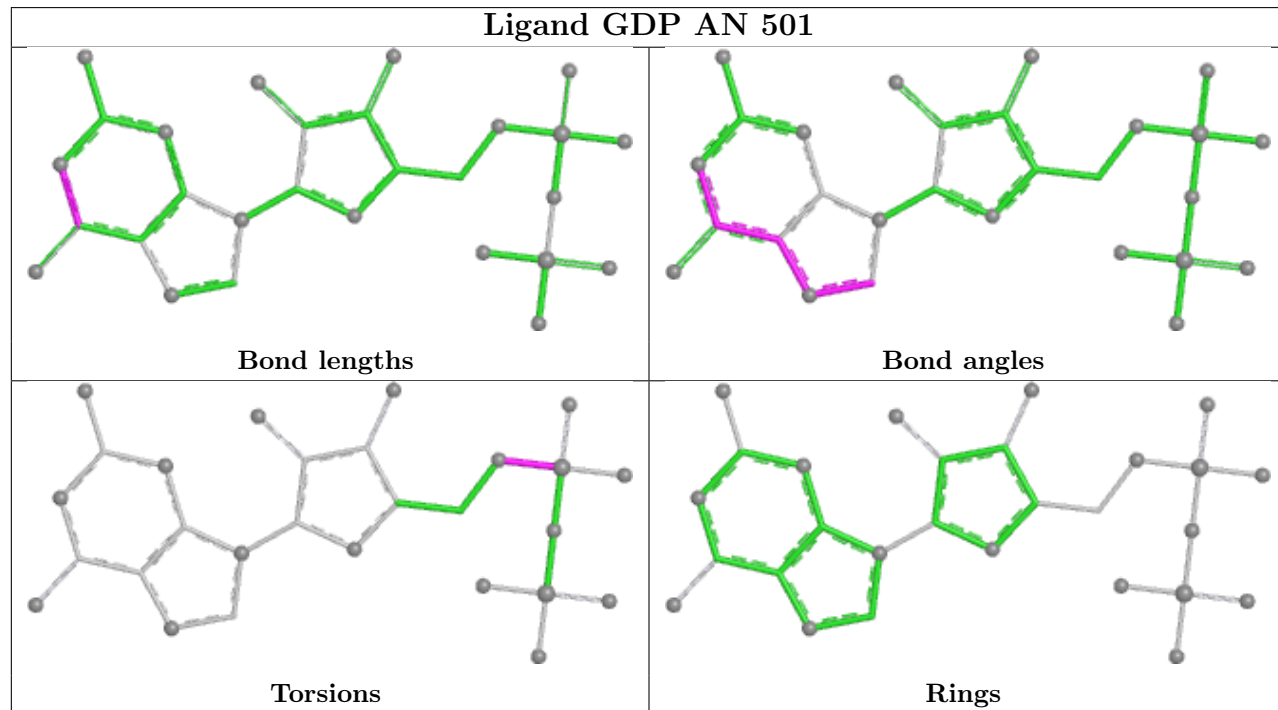
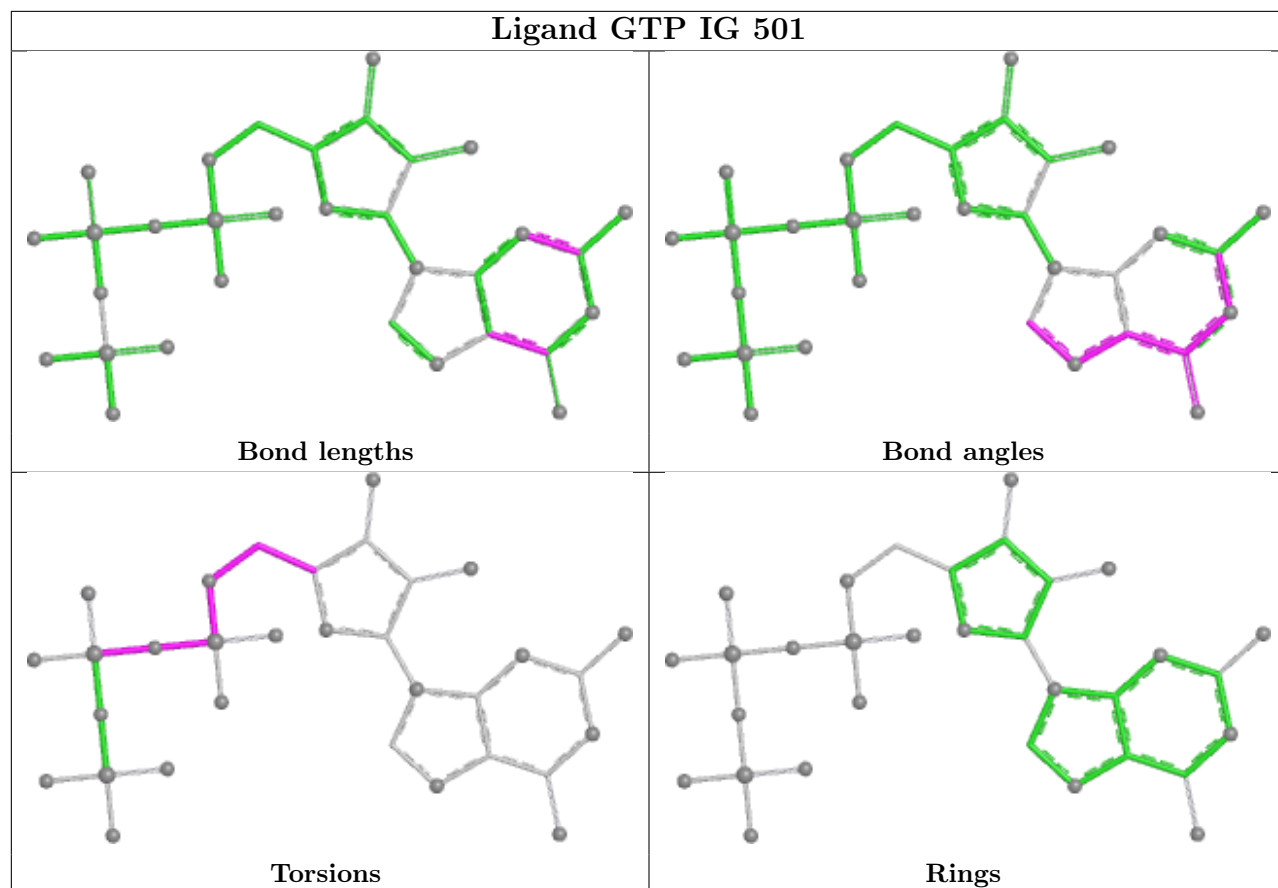
## Ligand GTP SG 501



## Ligand GTP UI 501

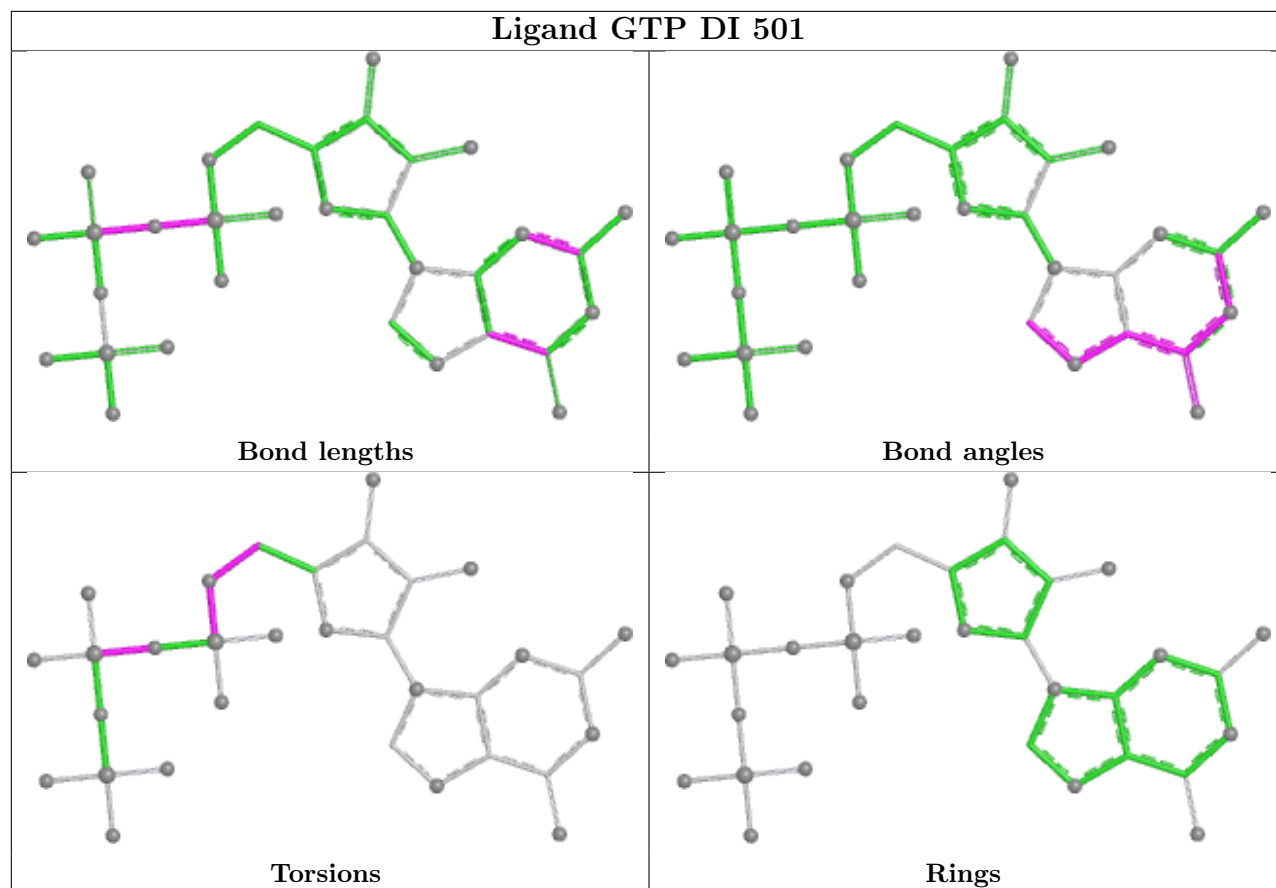




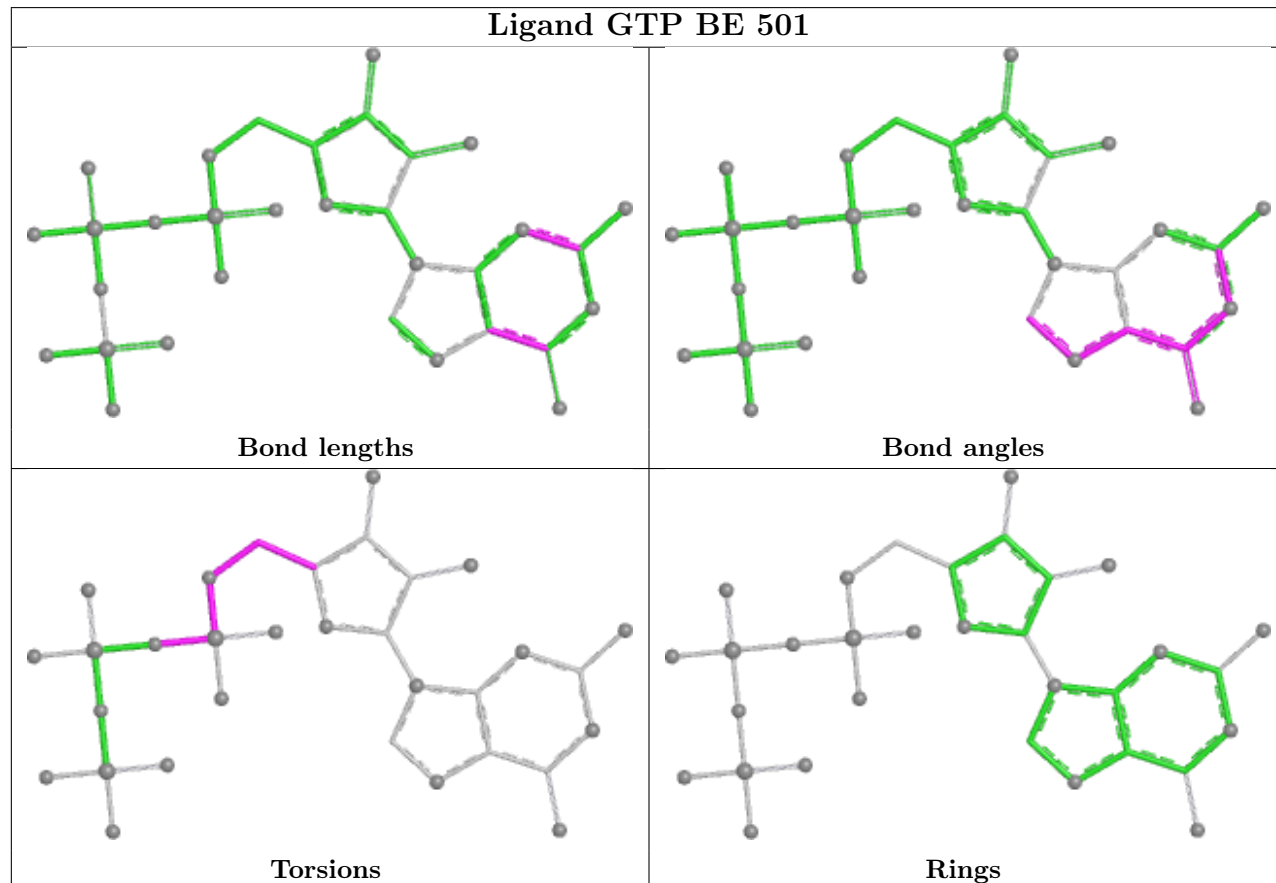




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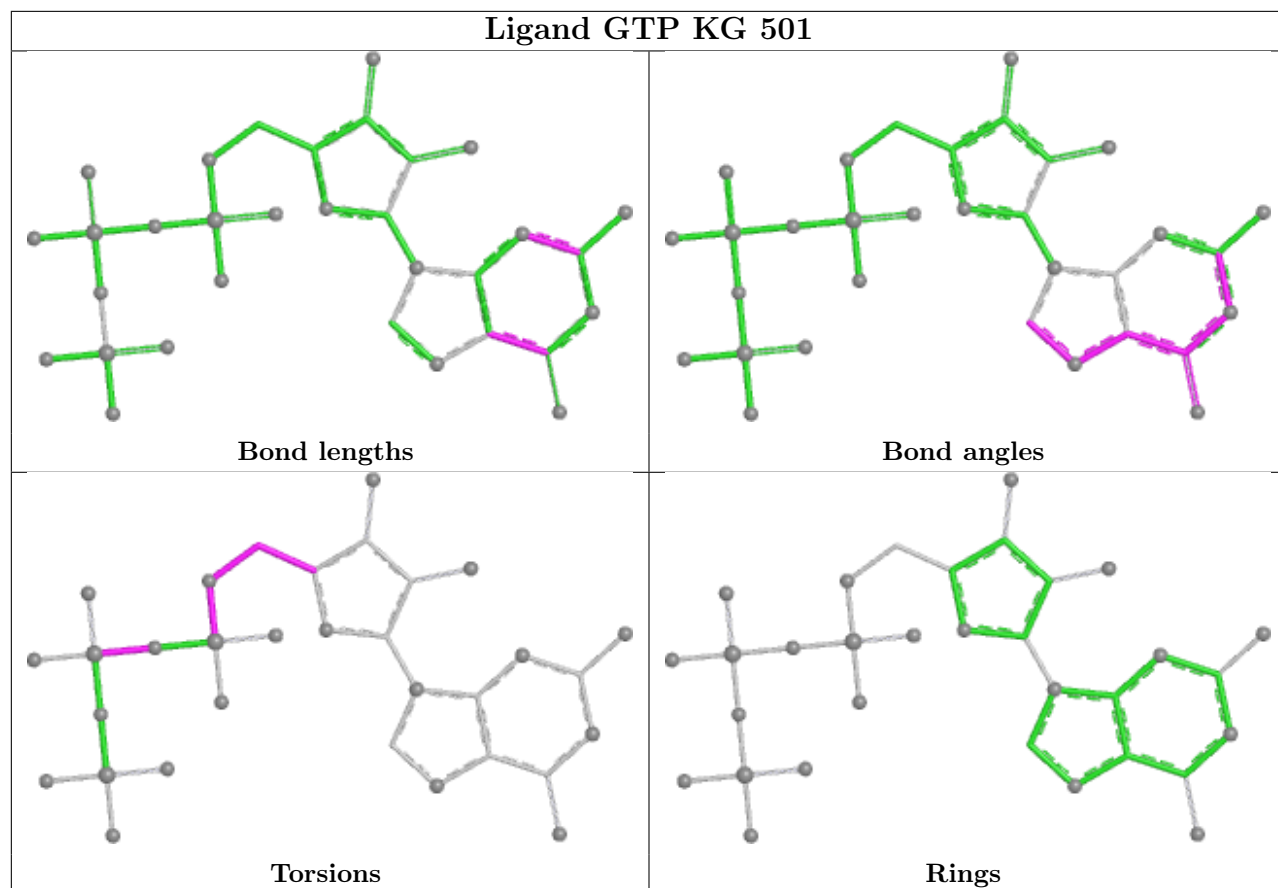


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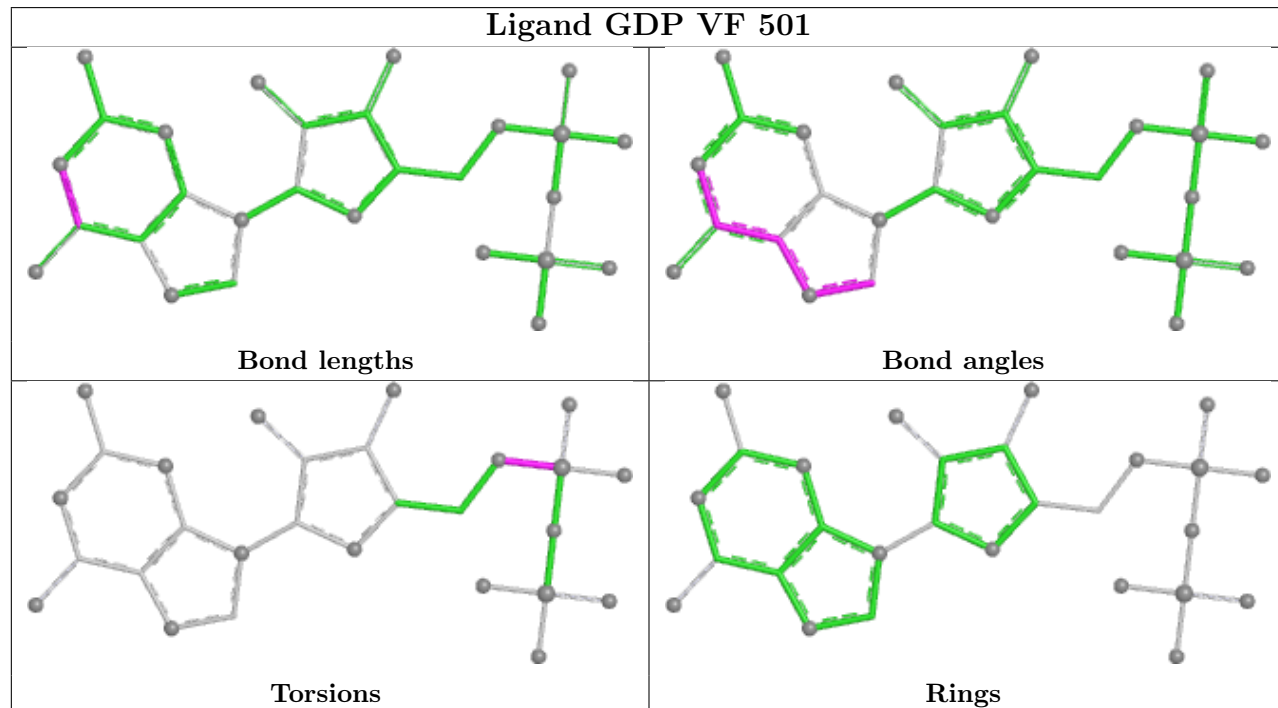




## Ligand GTP KG 501

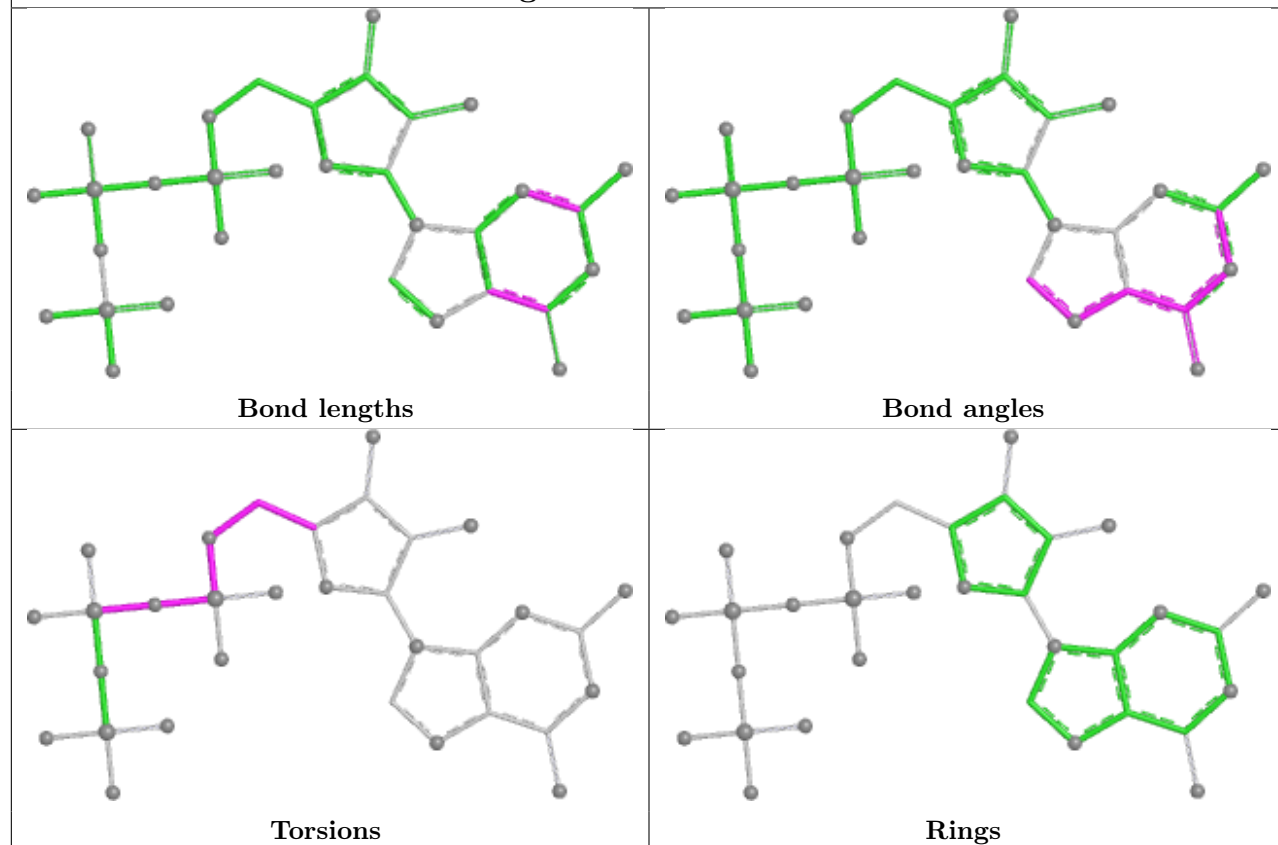


## Ligand GDP VF 501

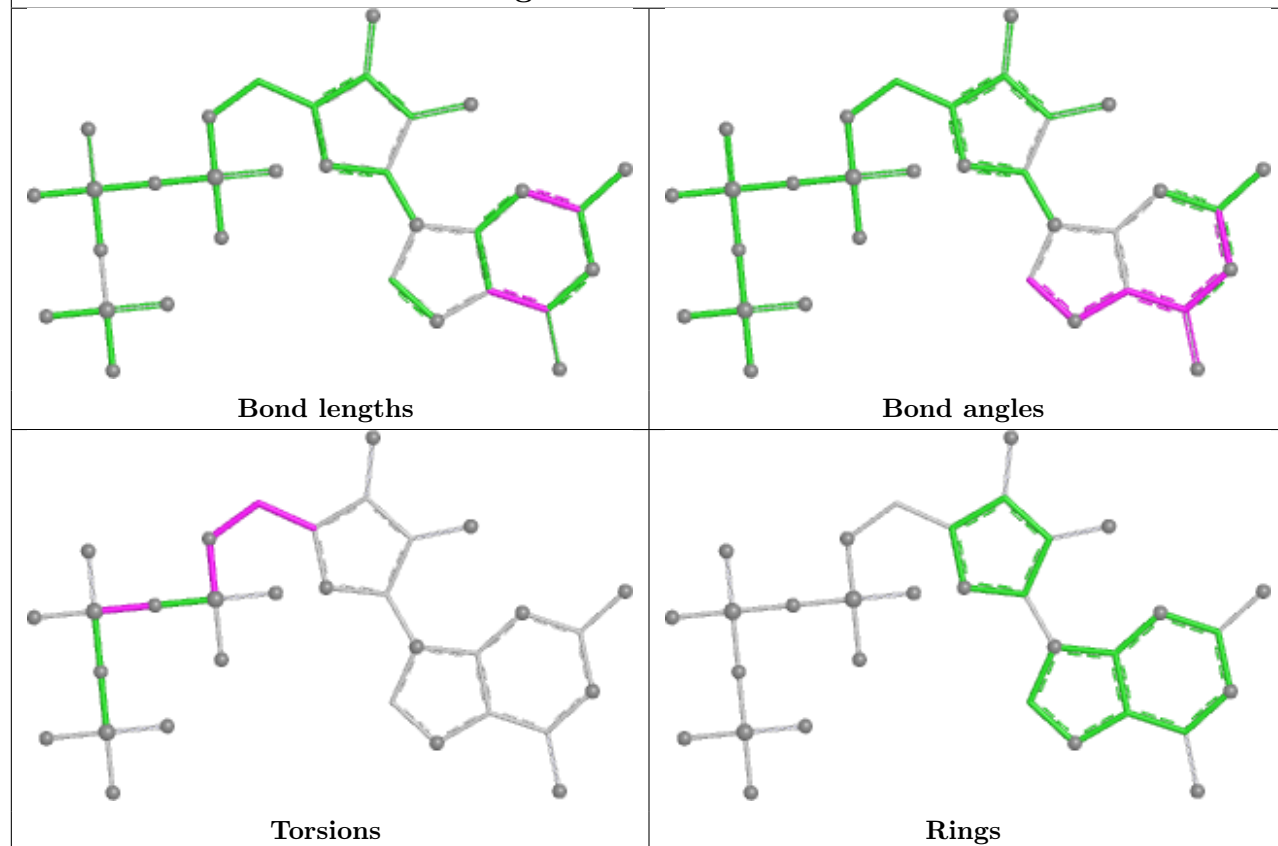




## Ligand GTP TE 501

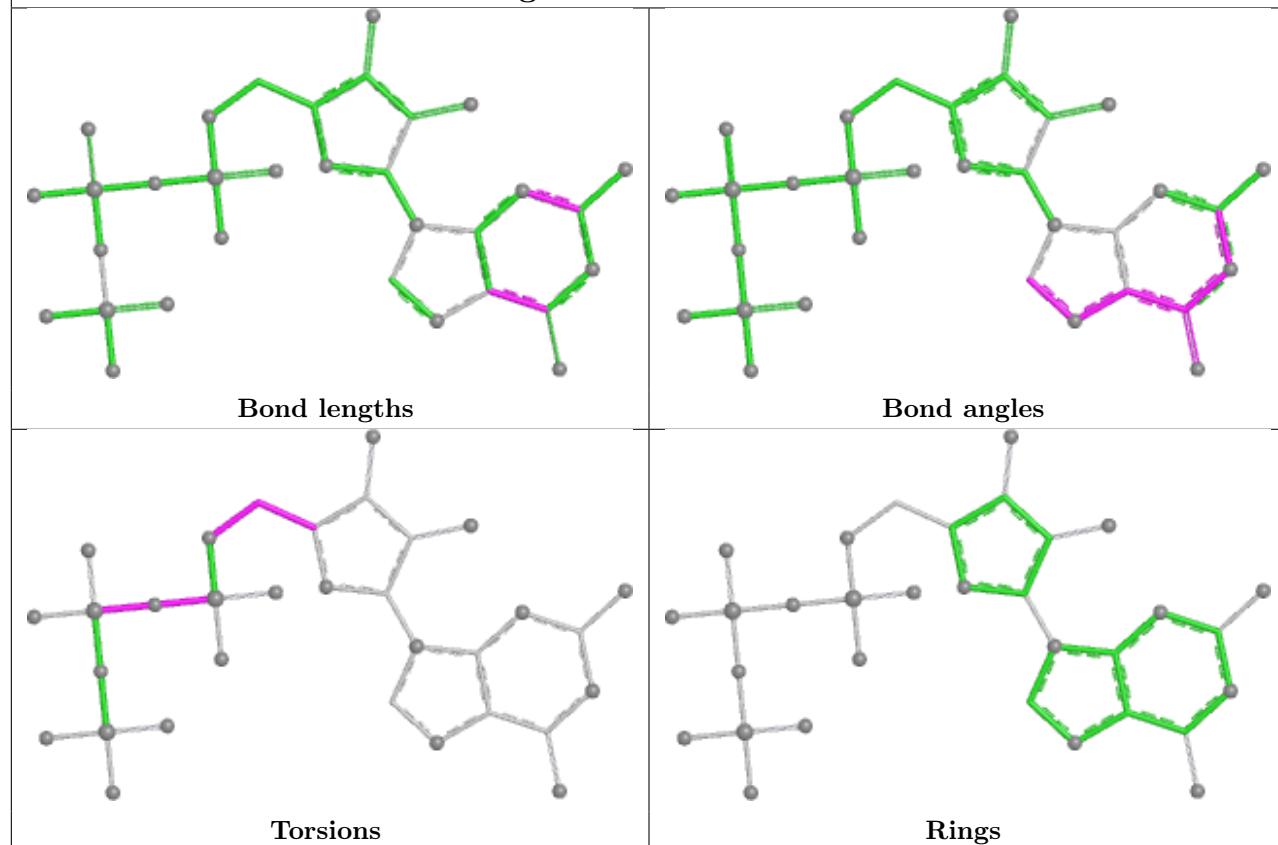


## Ligand GTP ME 501

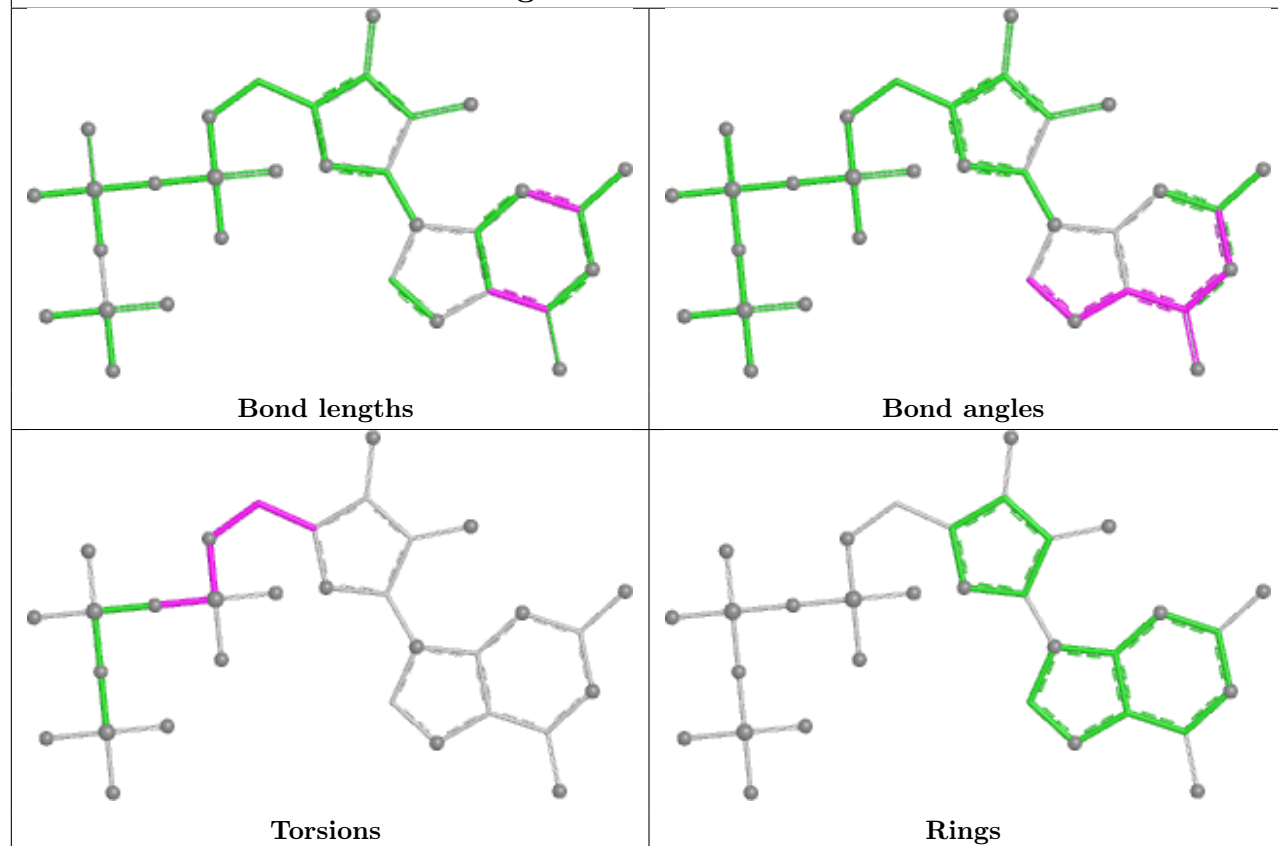




## Ligand GTP CE 501

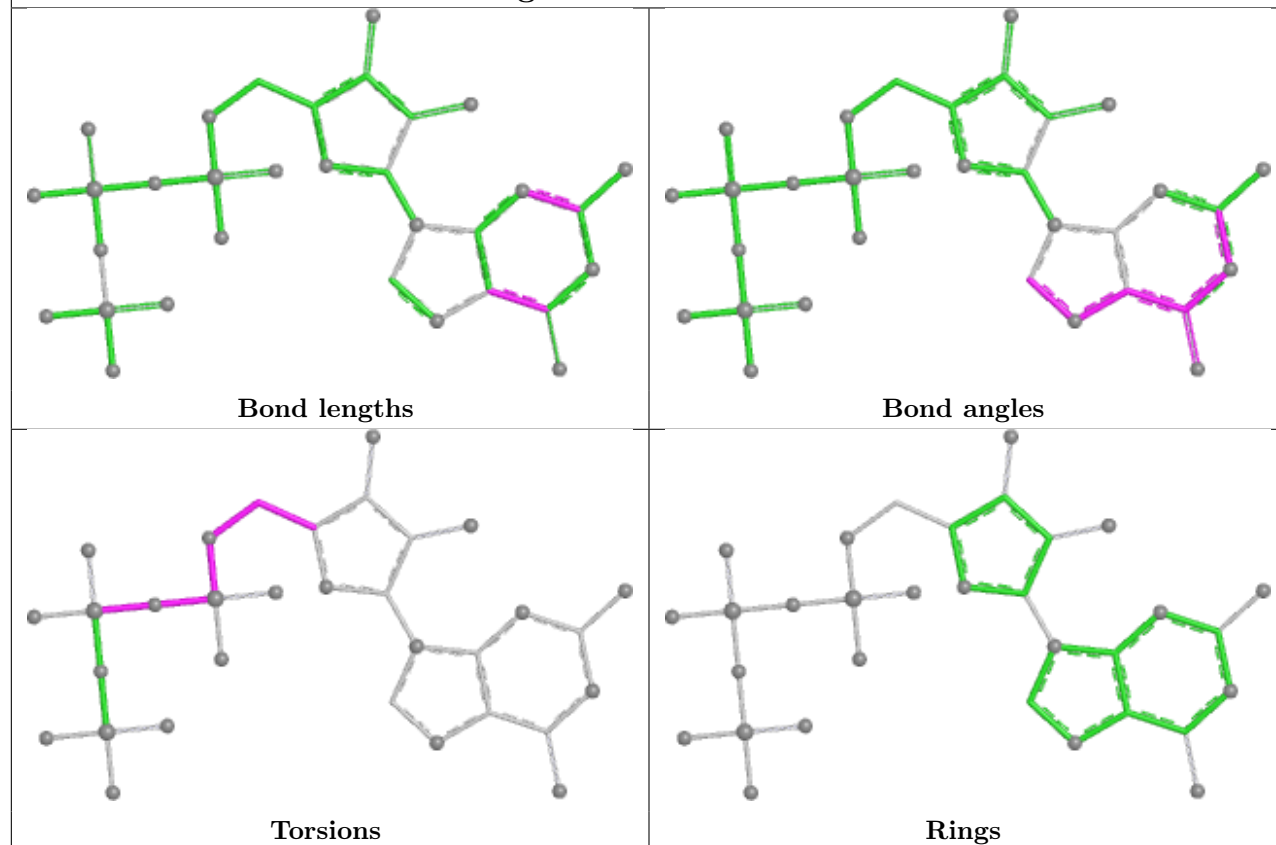


## Ligand GTP UC 501

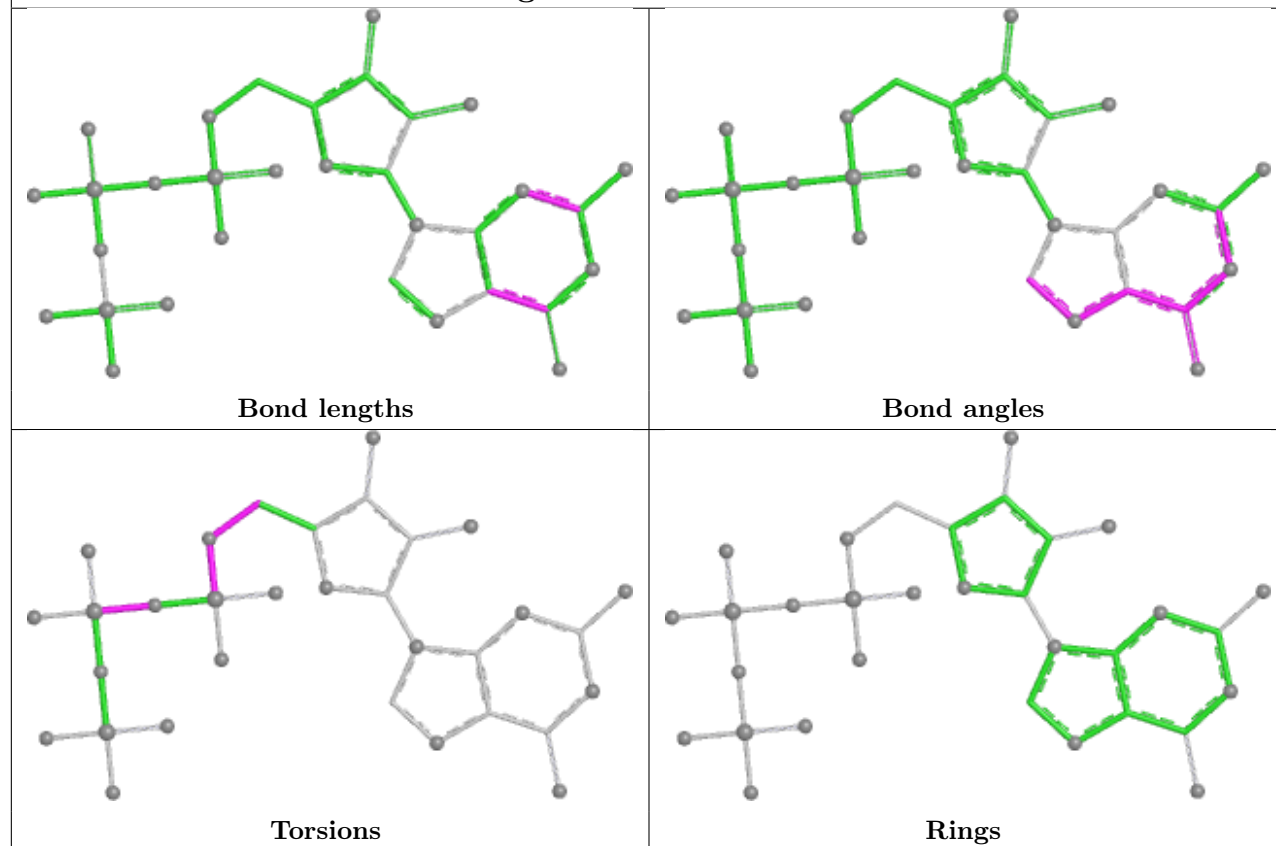




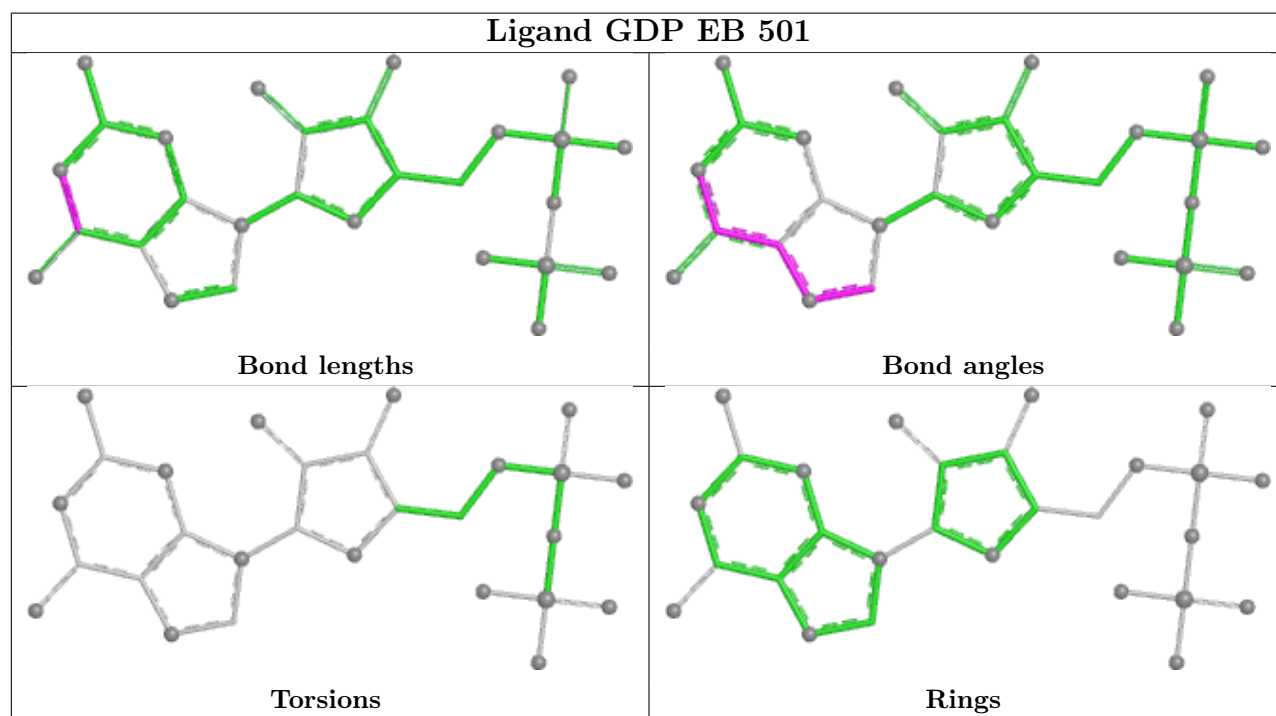
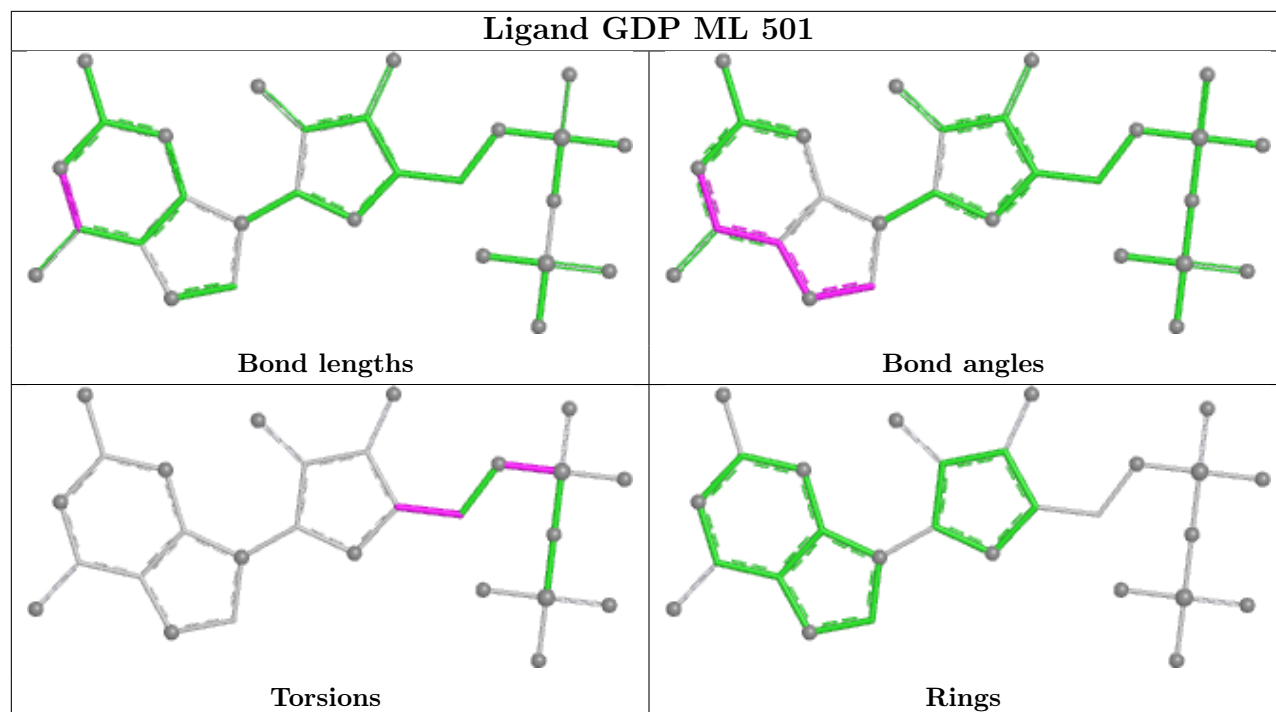
## Ligand GTP AC 501



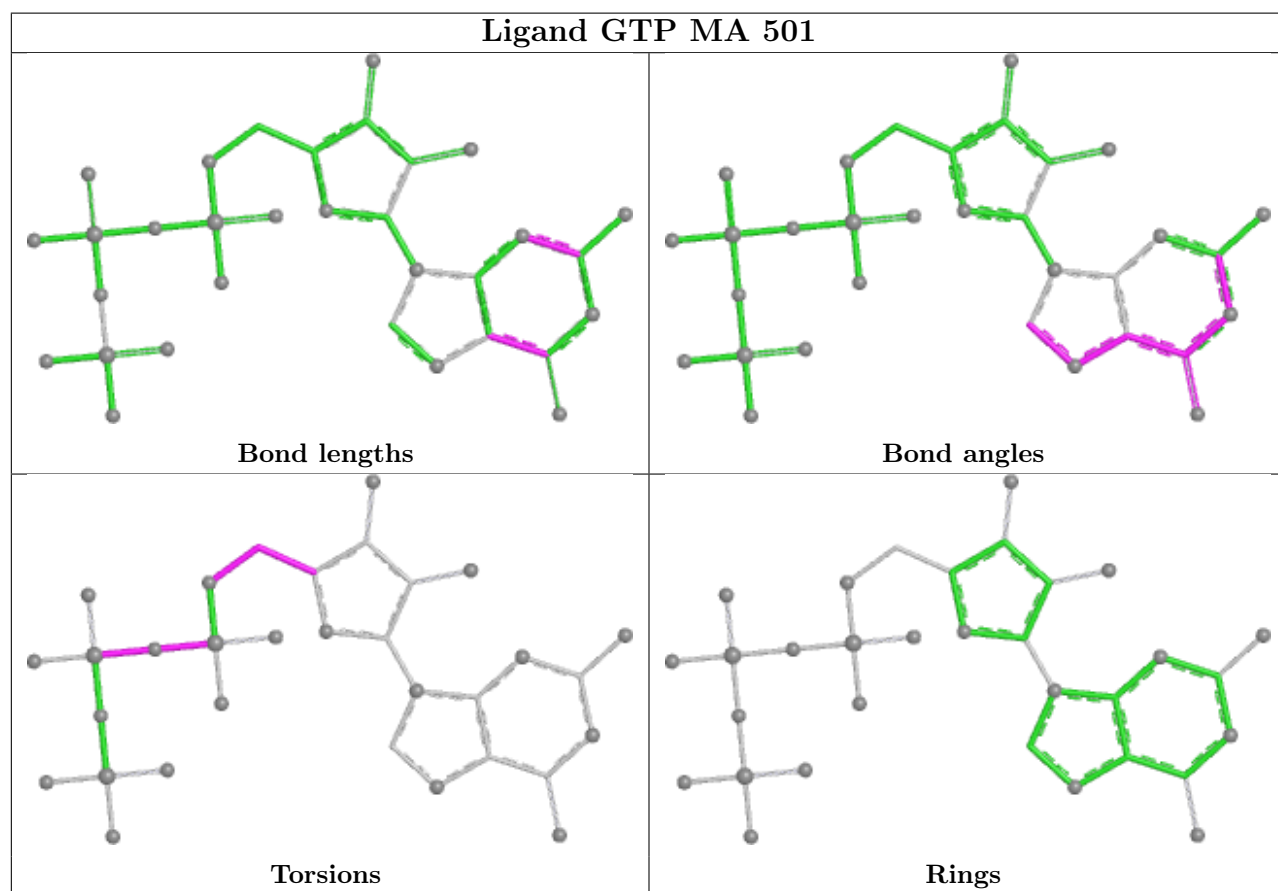
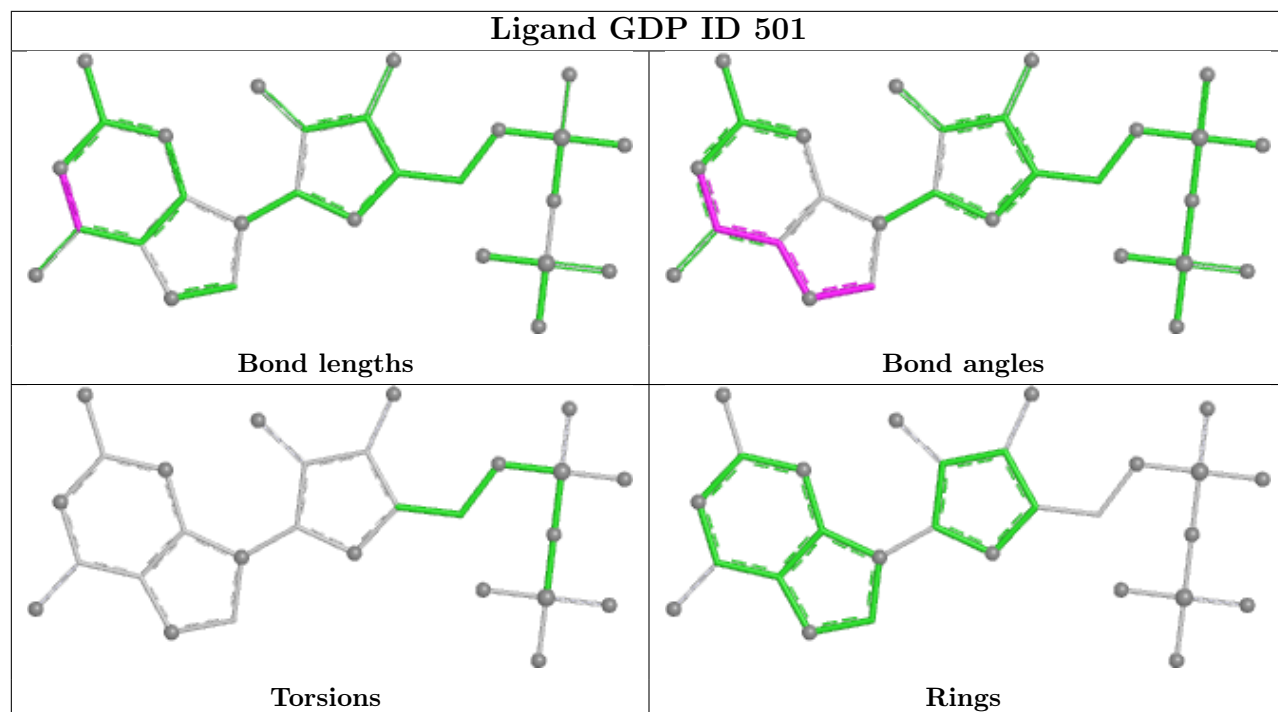
## Ligand GTP EG 501





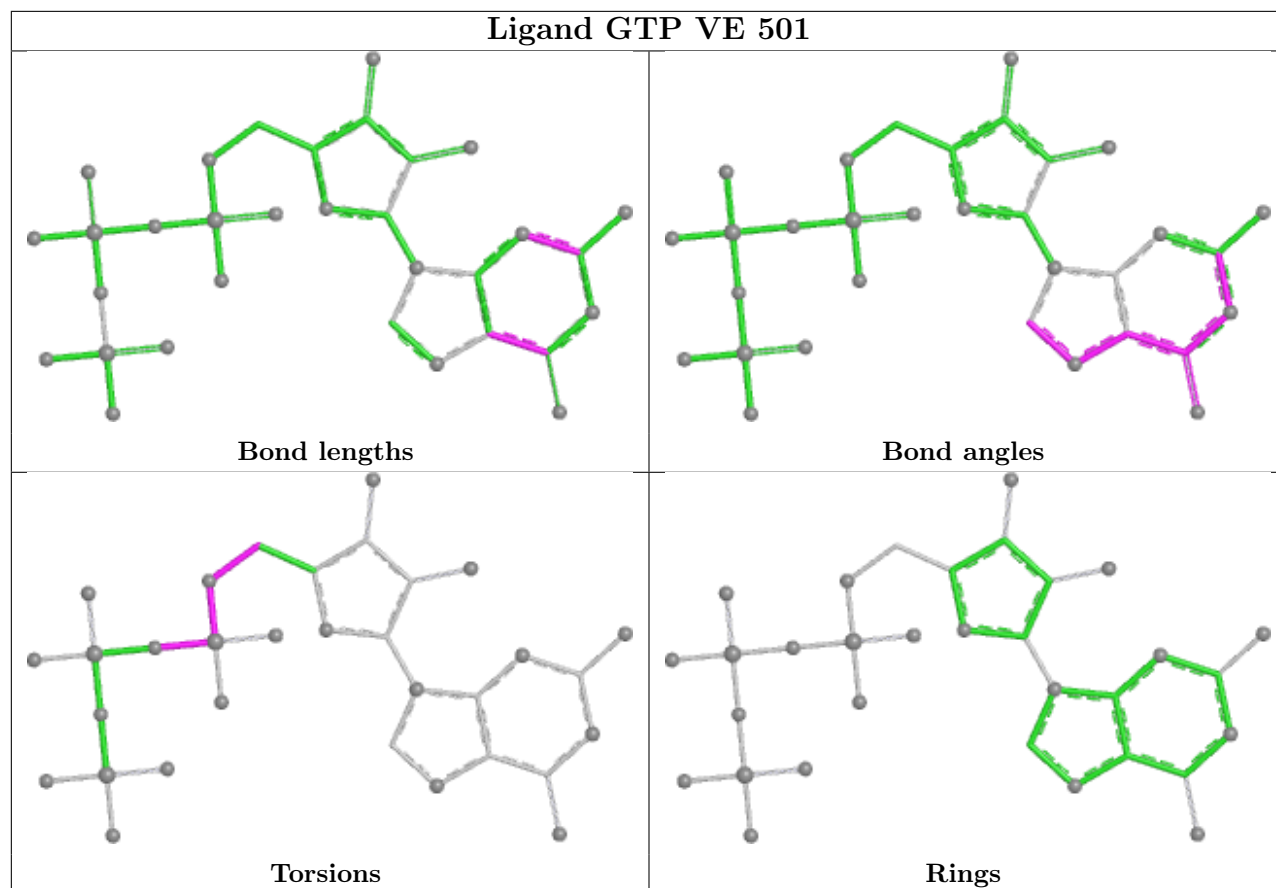




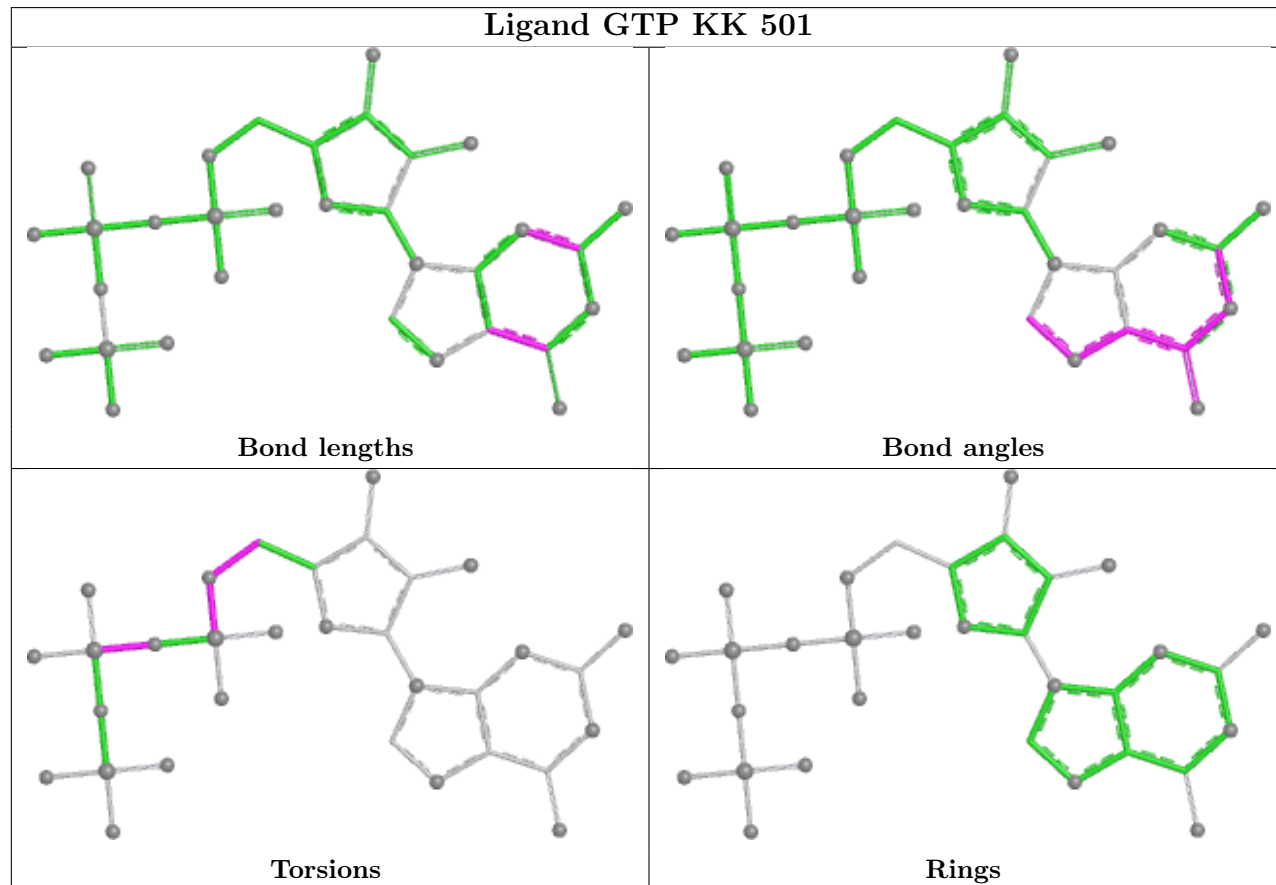




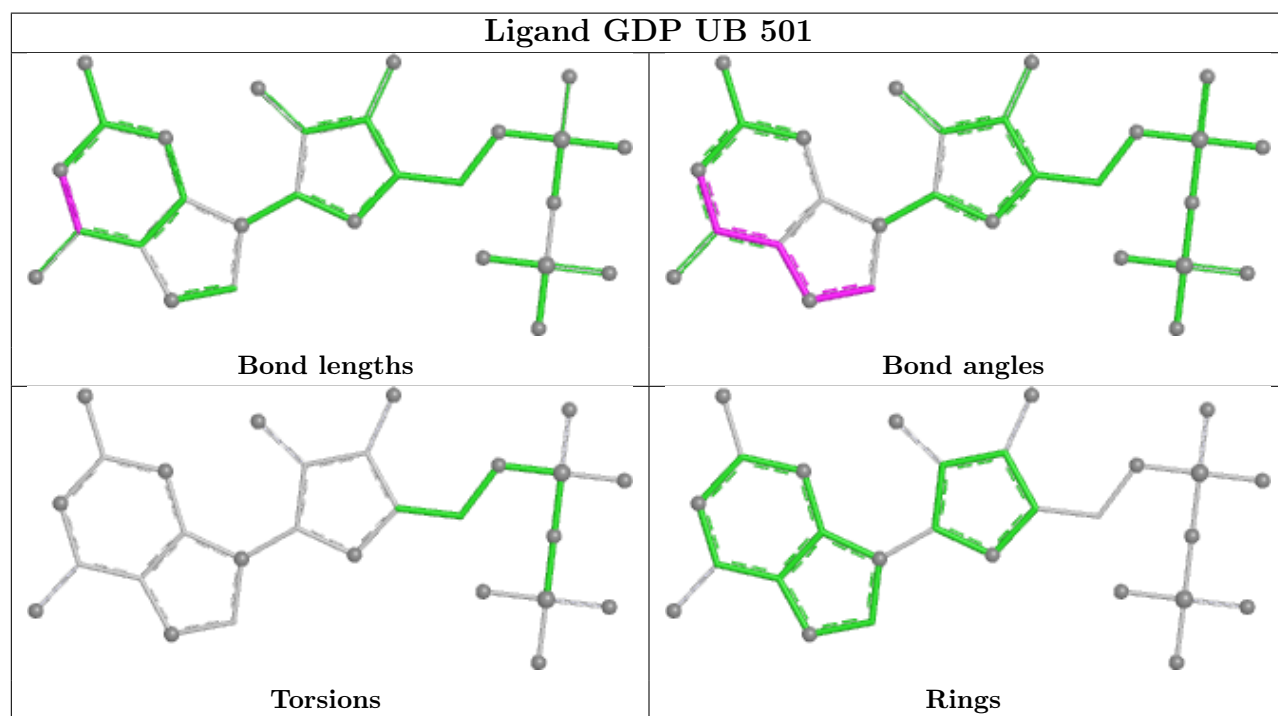
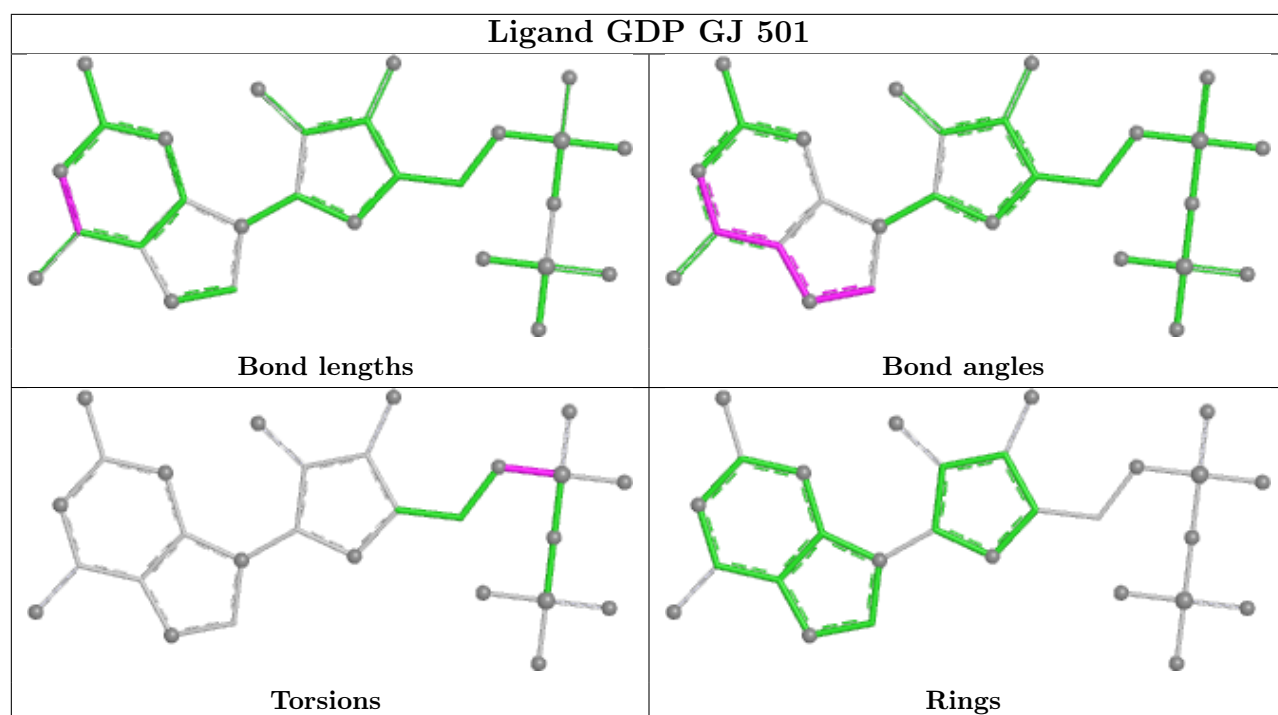
## Ligand GTP VE 501



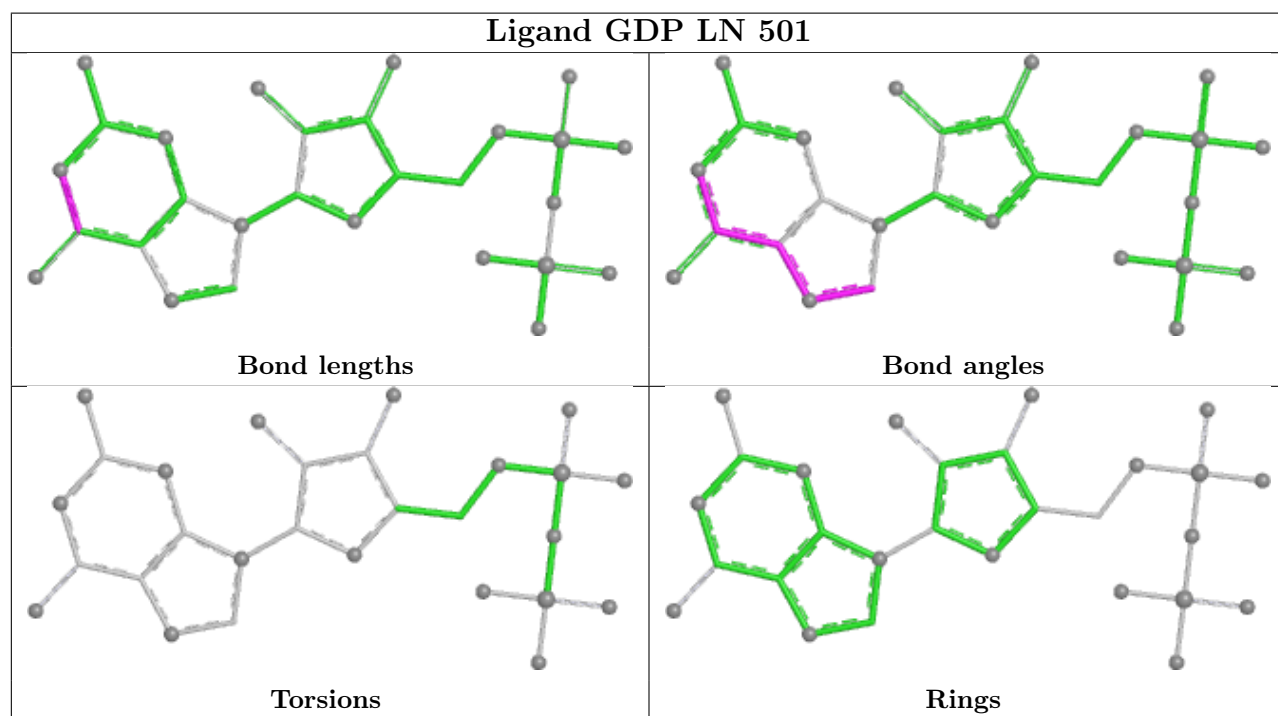
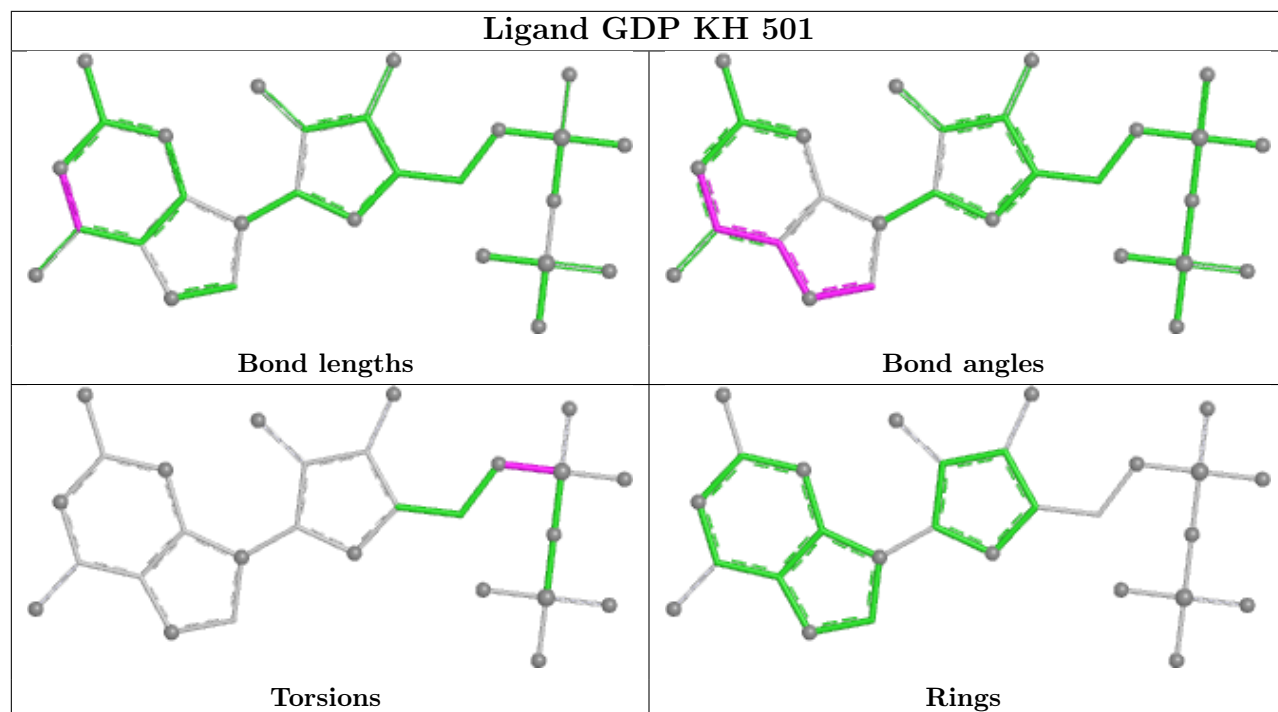
## Ligand GTP KK 501





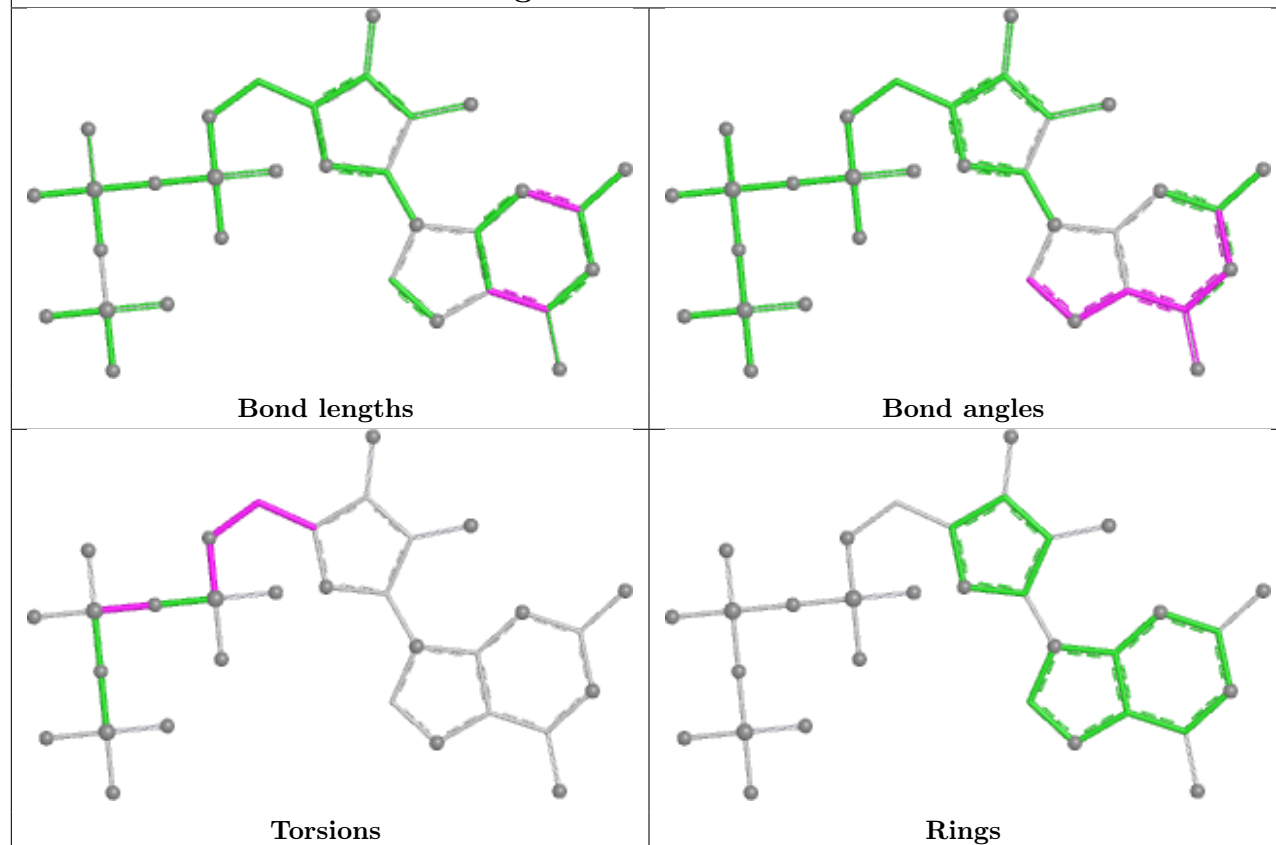




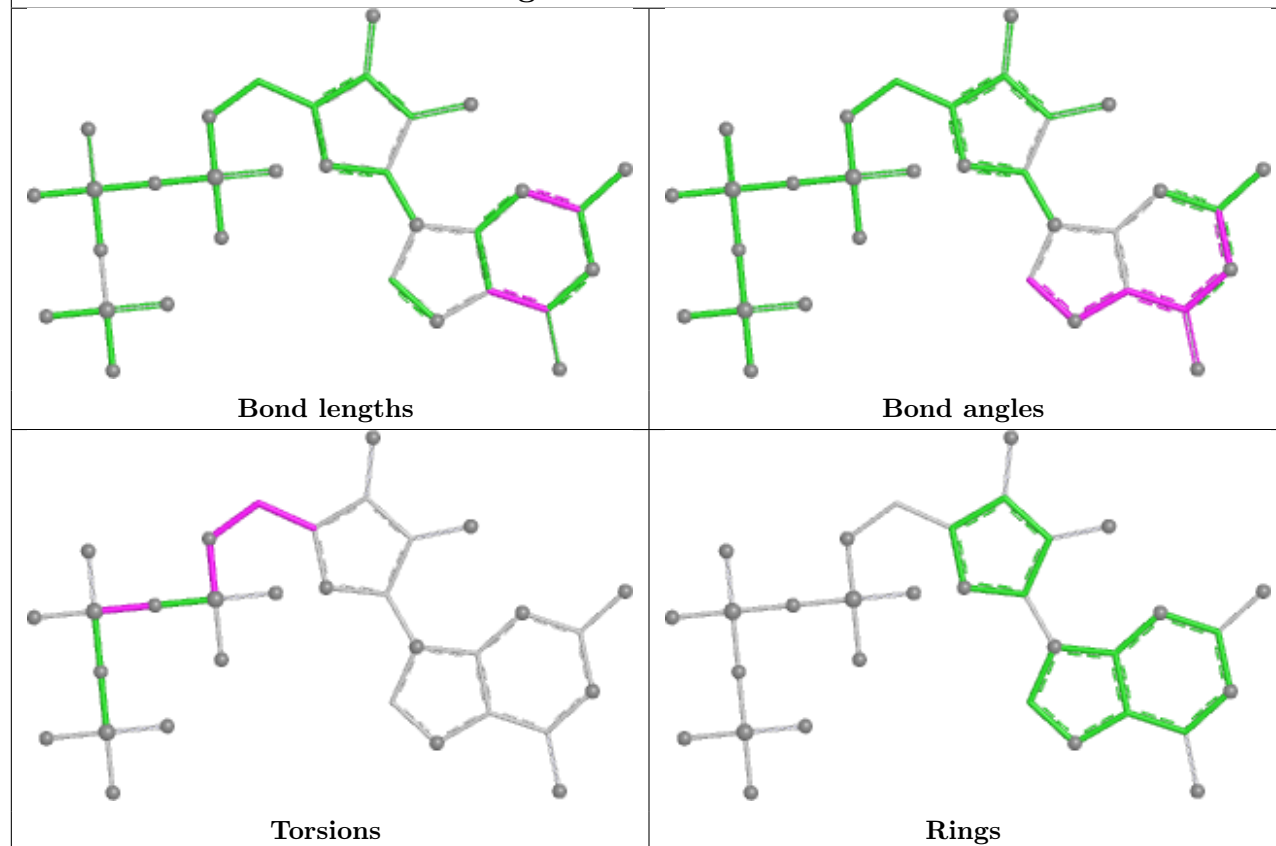




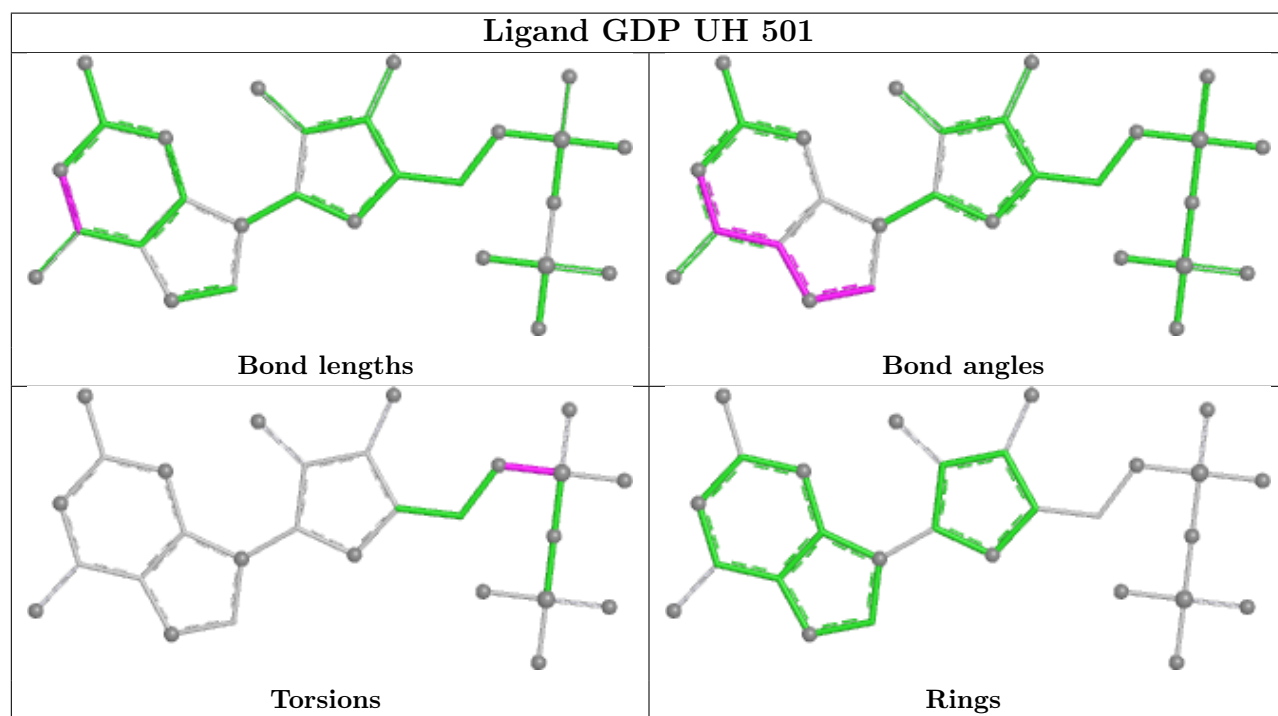
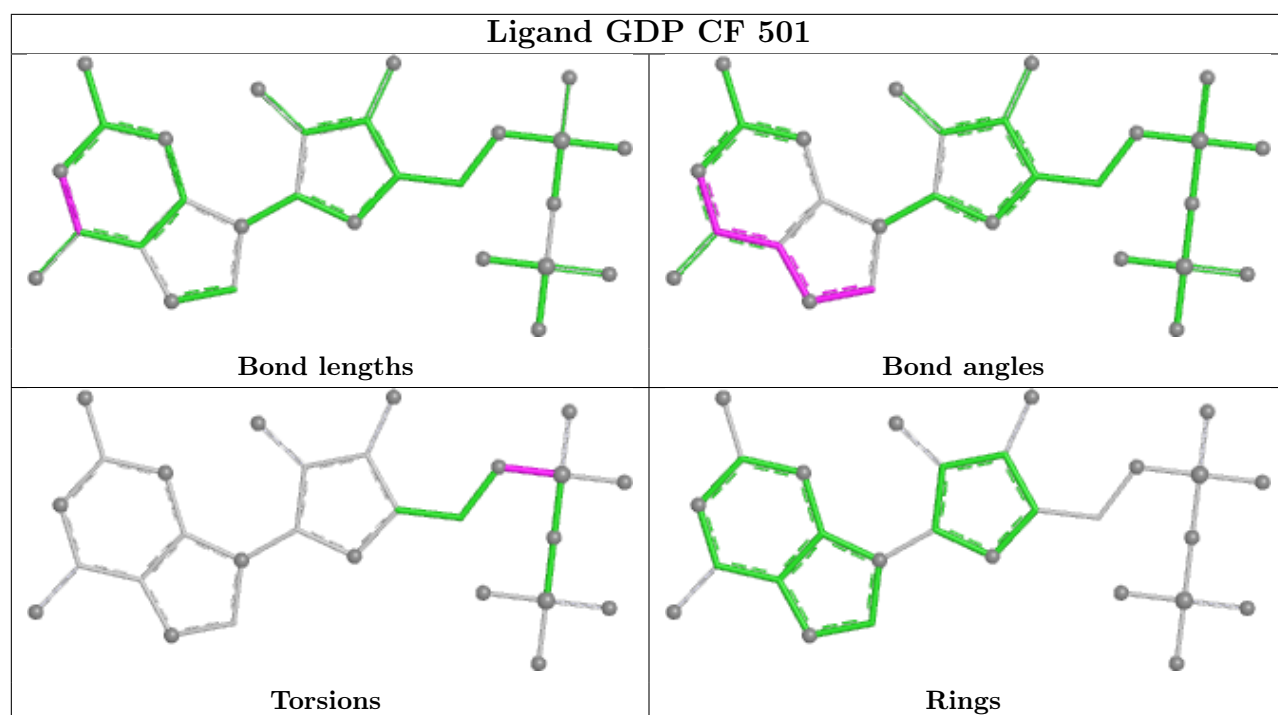
## Ligand GTP PM 501



## Ligand GTP KE 501

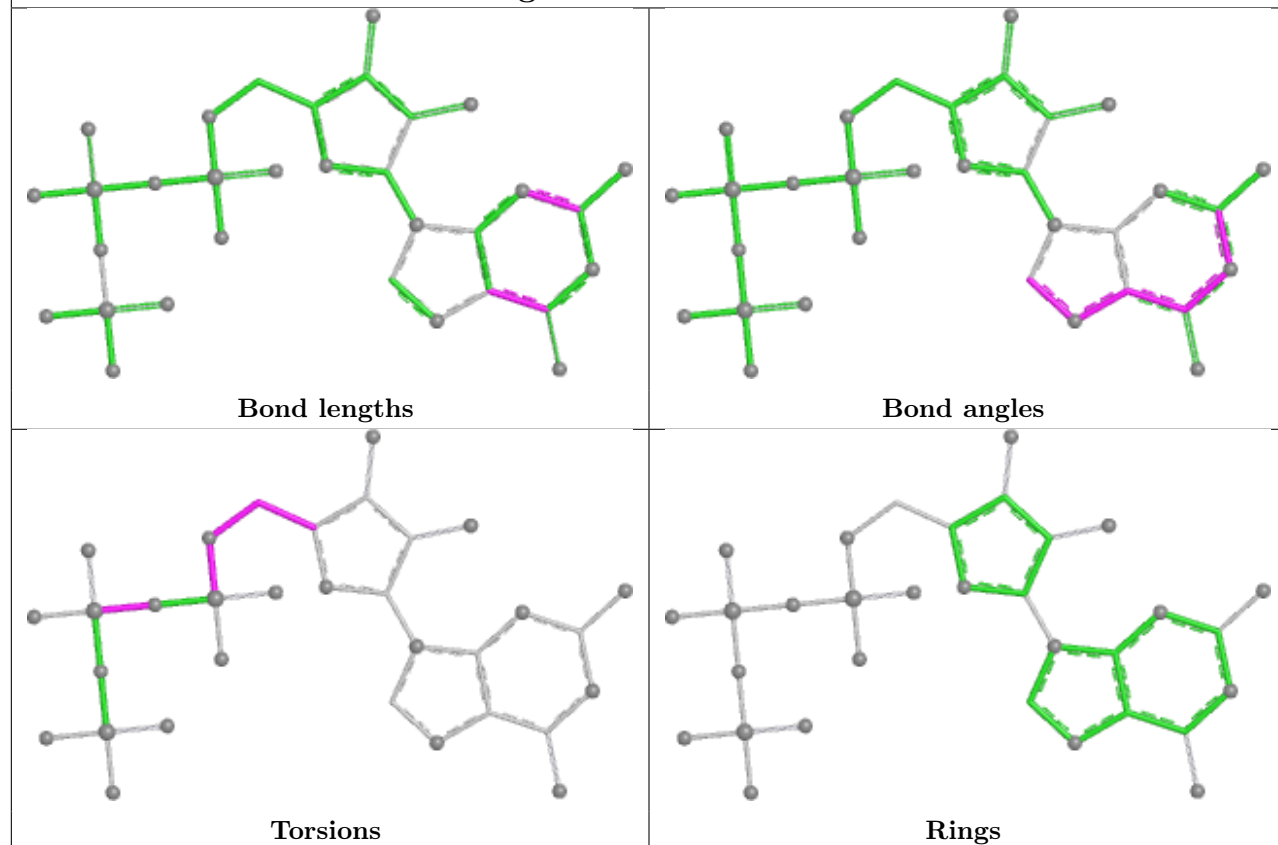




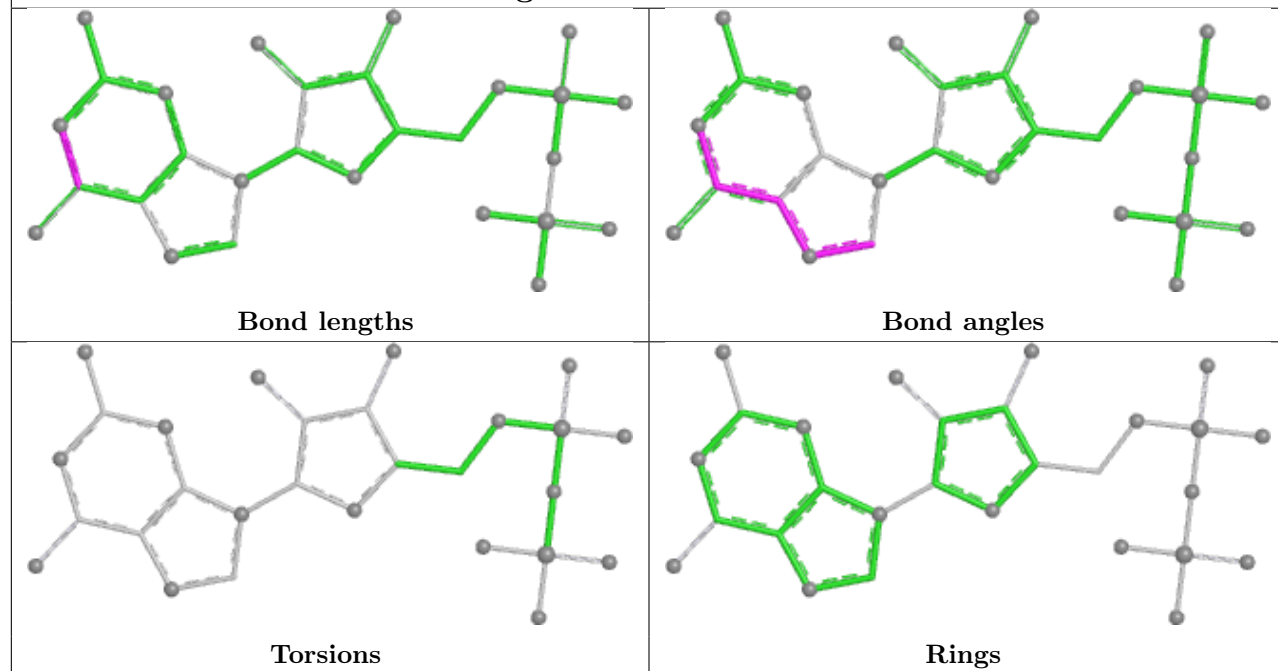




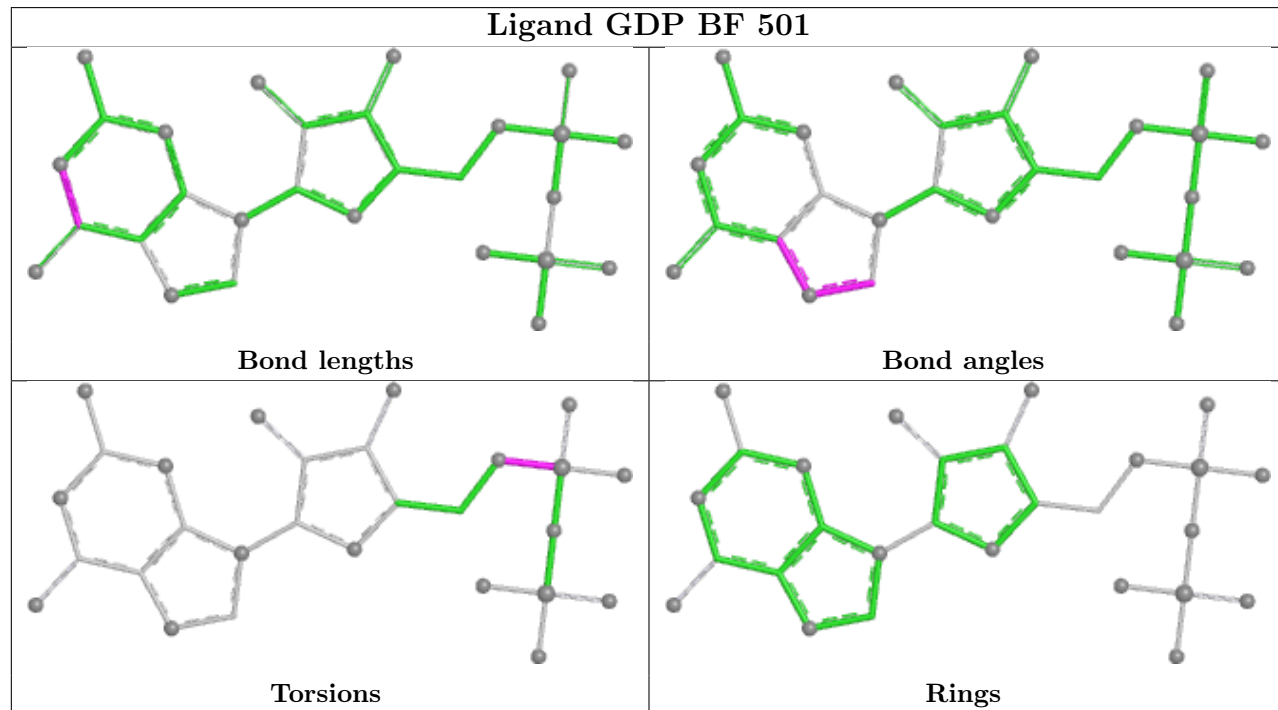
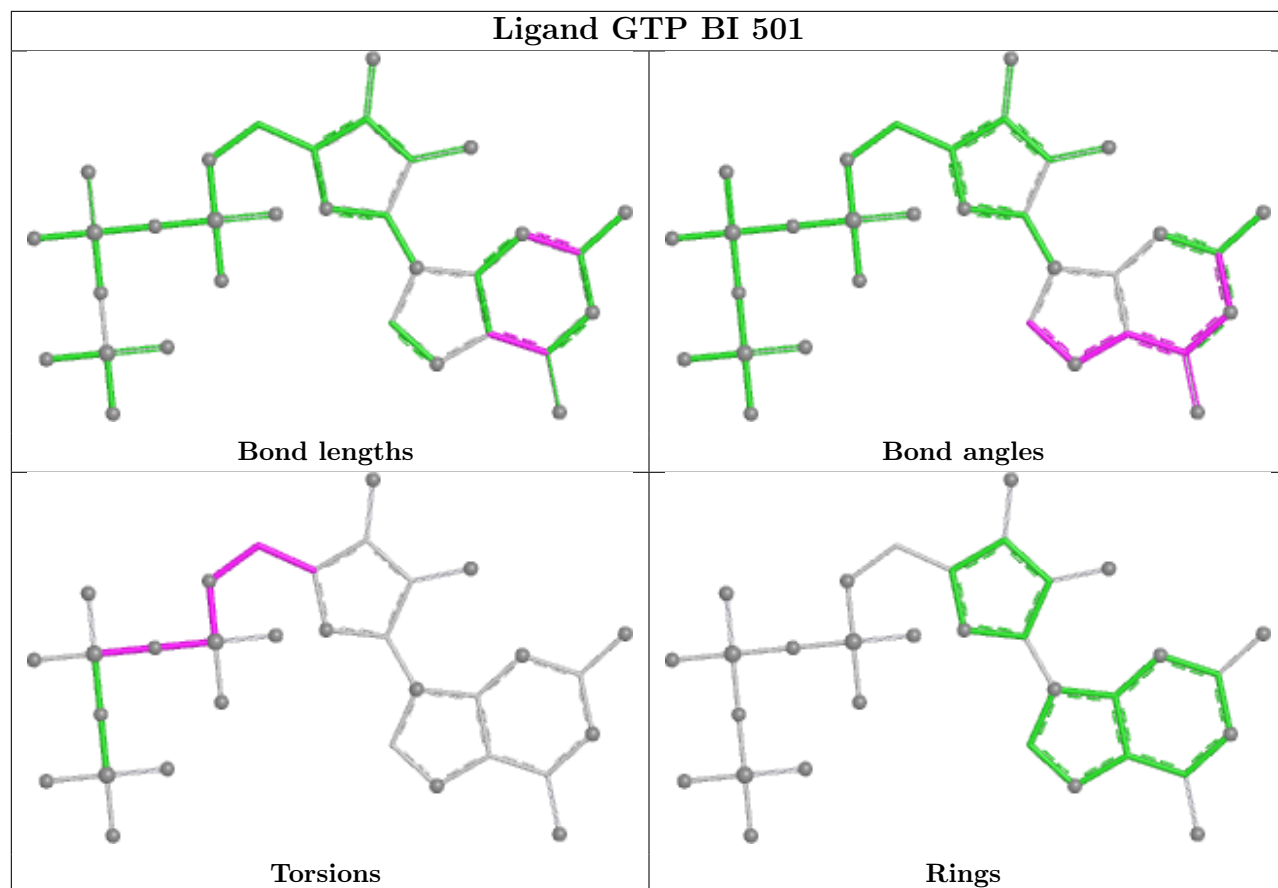
## Ligand GTP PC 501



## Ligand GDP PH 501

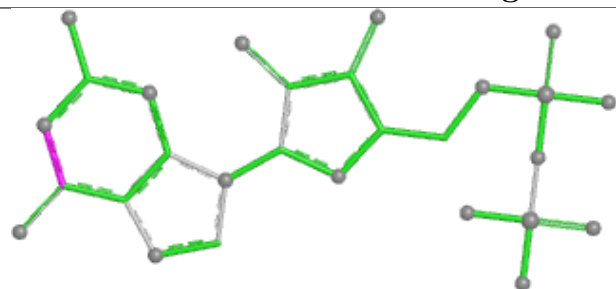




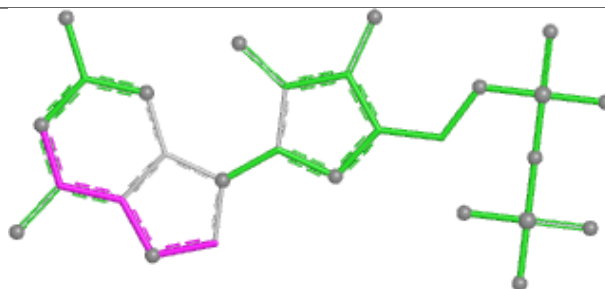




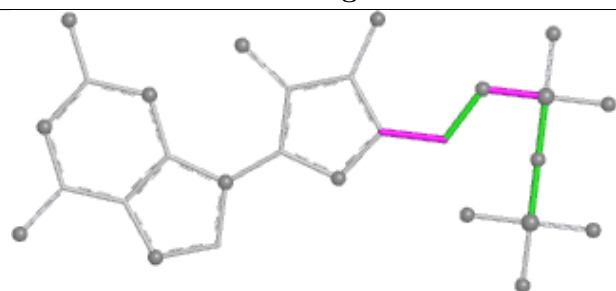
## Ligand GDP LH 501



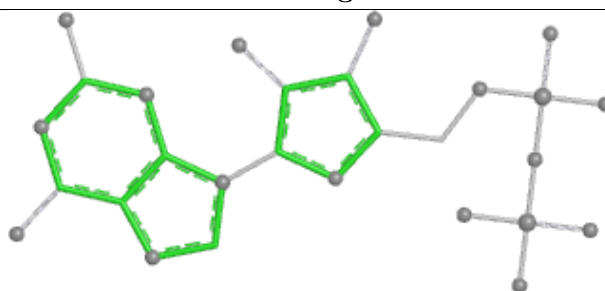
Bond lengths



Bond angles

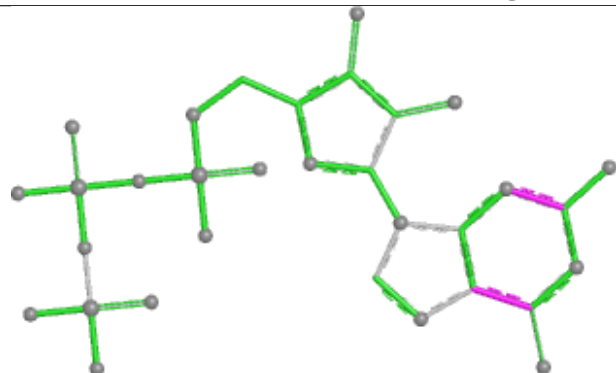


Torsions

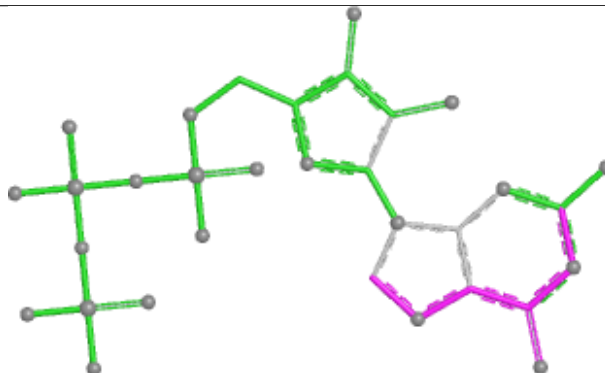


Rings

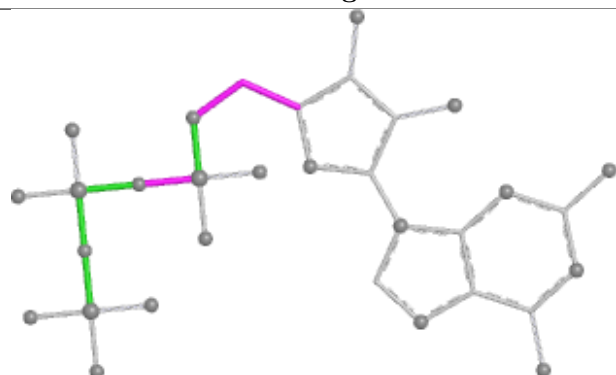
## Ligand GTP LA 501



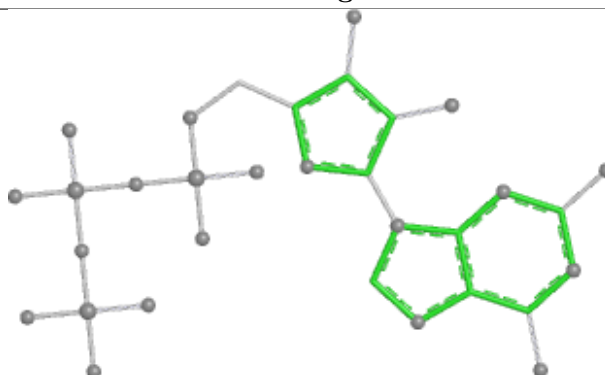
Bond lengths



Bond angles



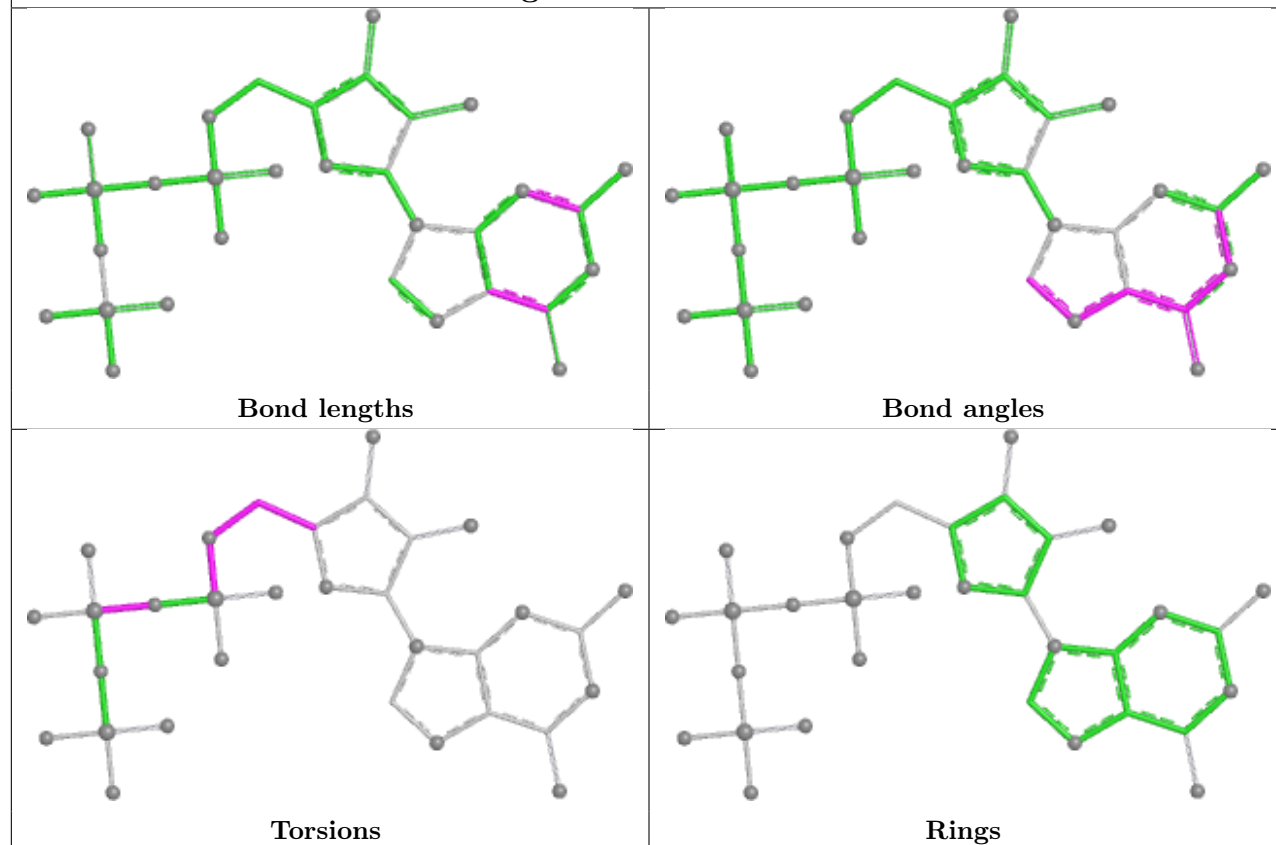
Torsions



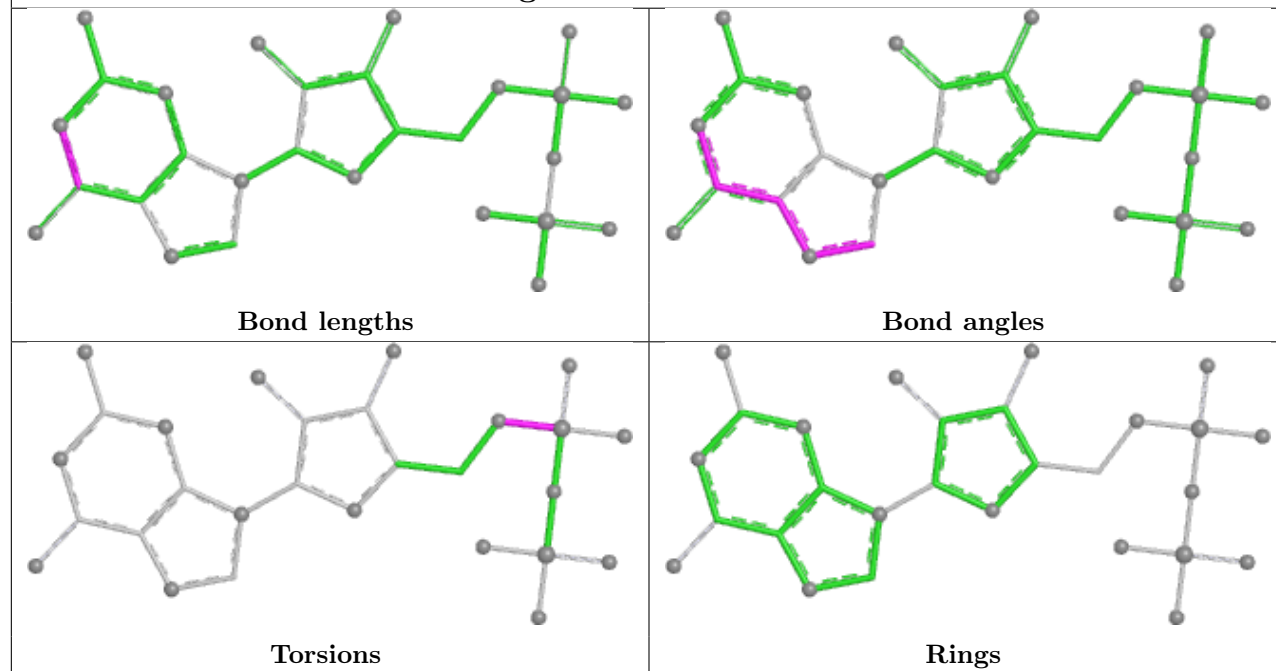
Rings



## Ligand GTP JC 501

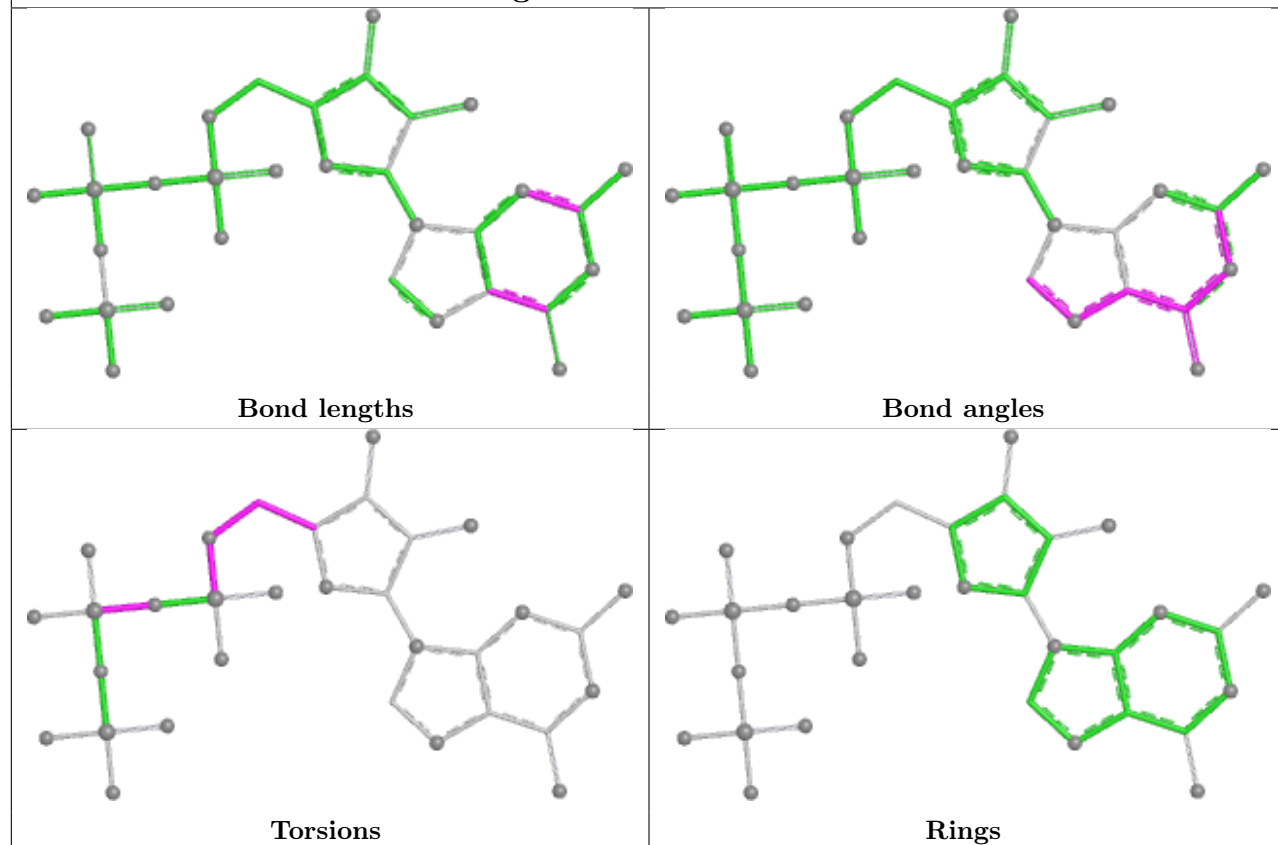


## Ligand GDP PF 501

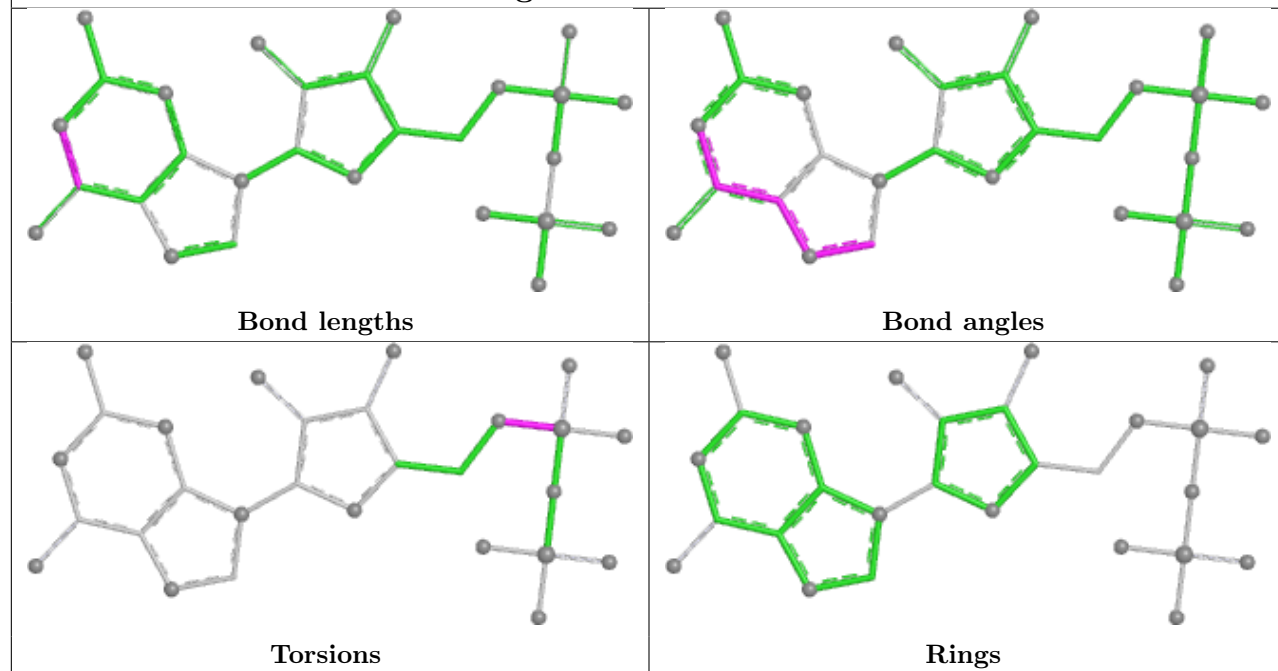




## Ligand GTP MG 501

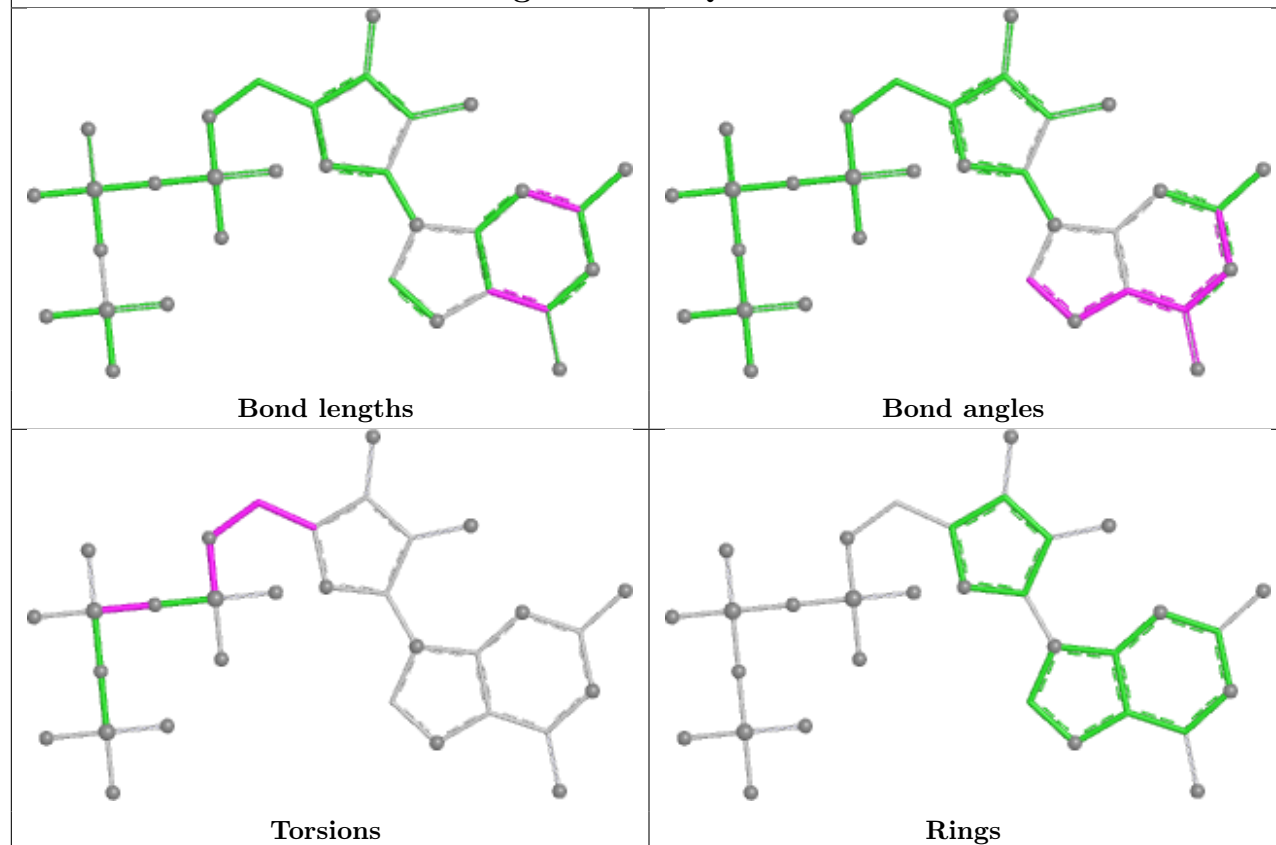


## Ligand GDP BH 501

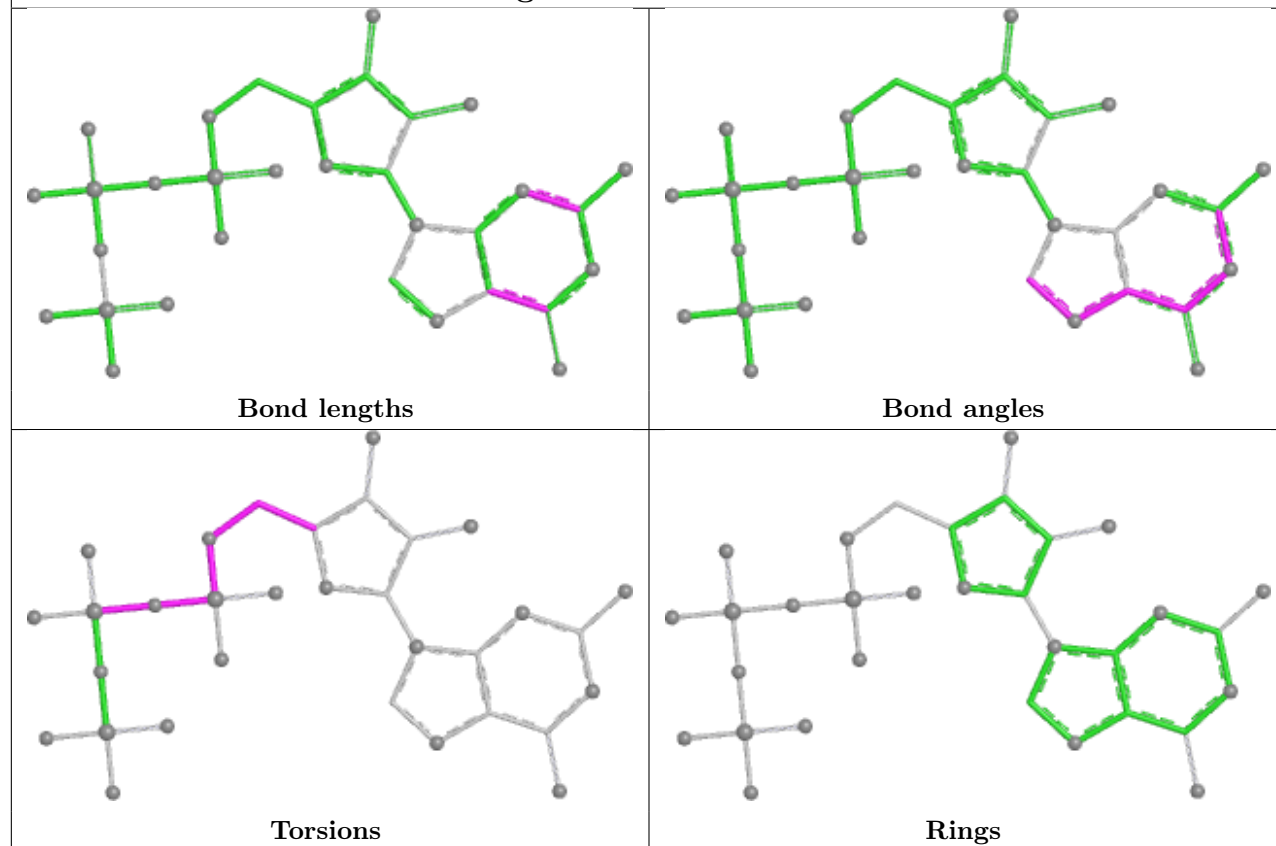




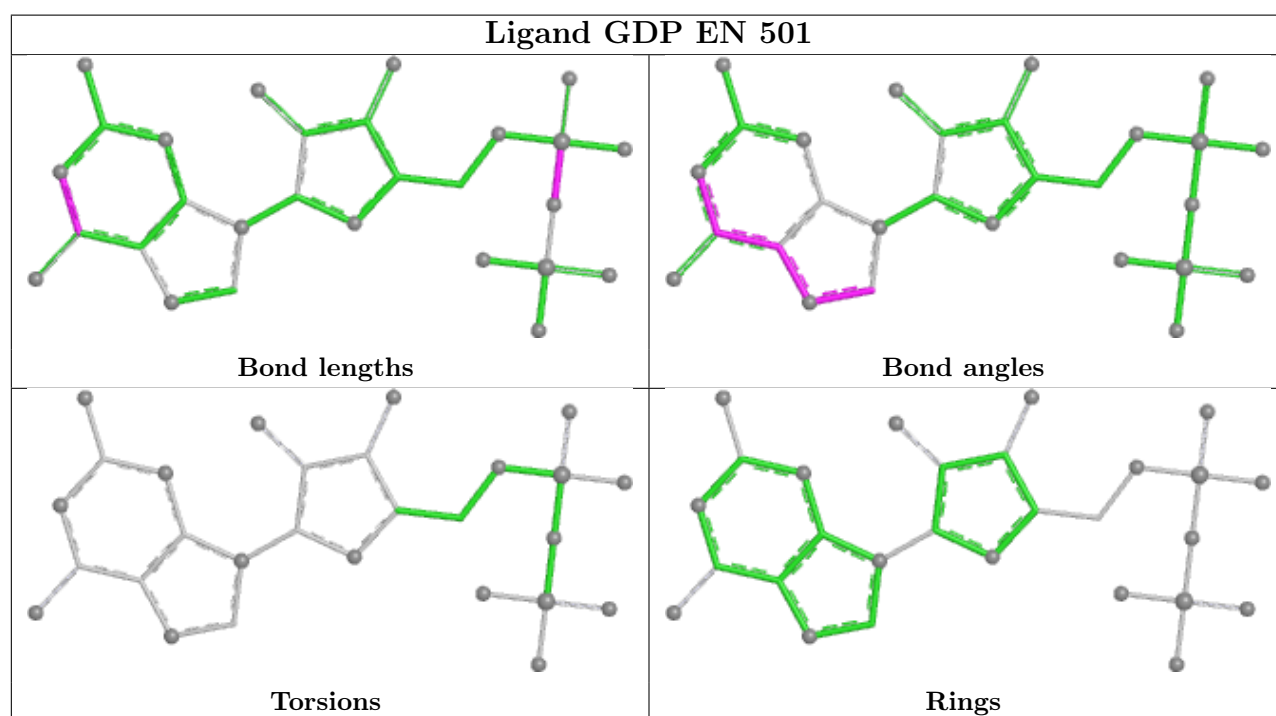
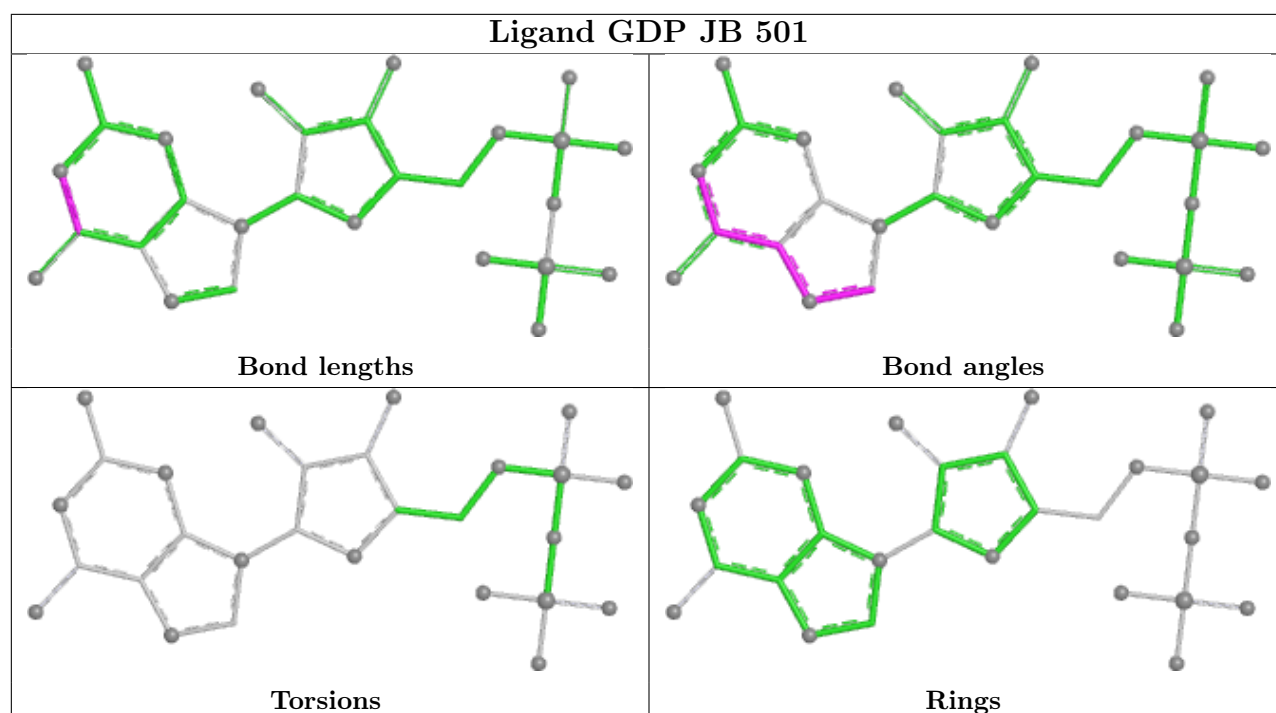
## Ligand GTP QM 501



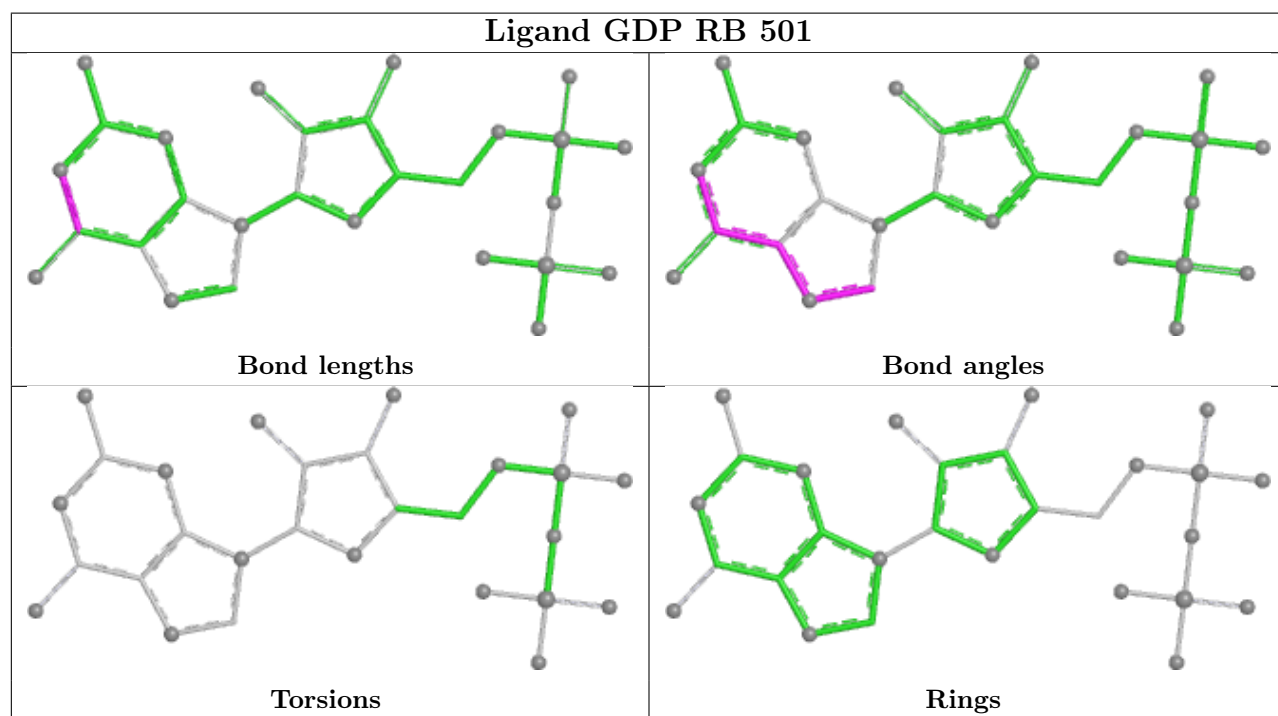
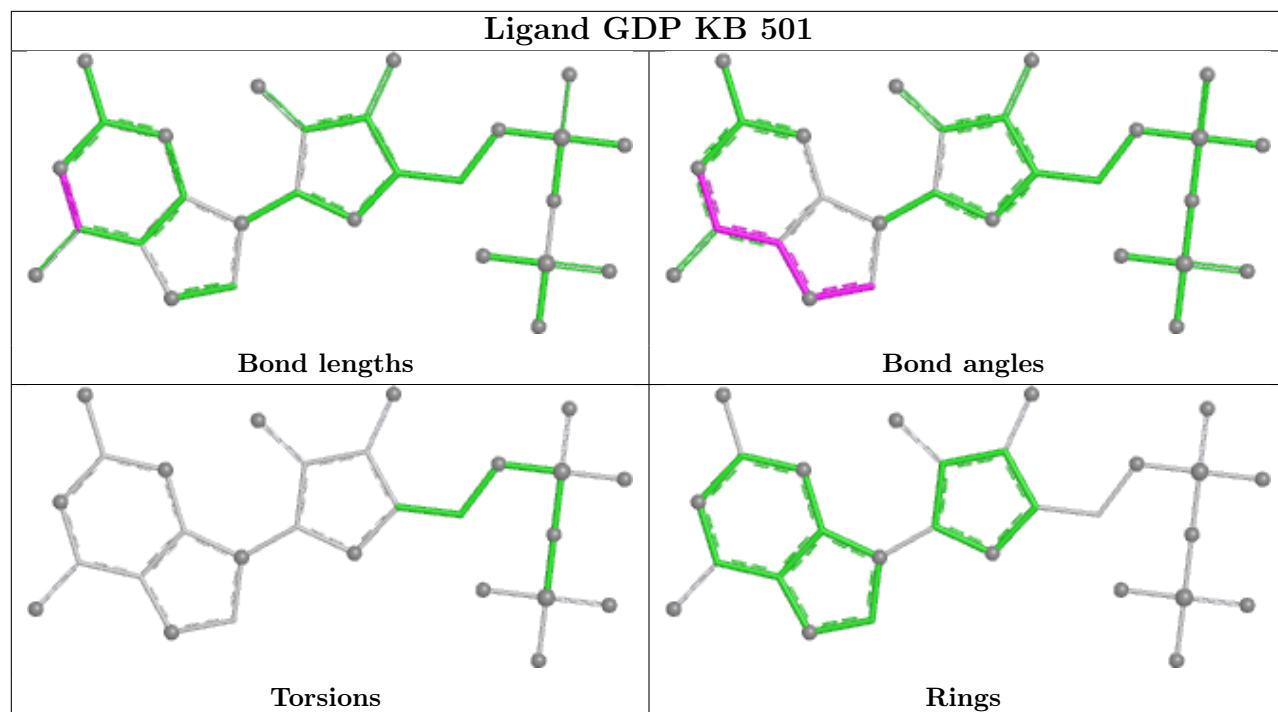
## Ligand GTP CG 501





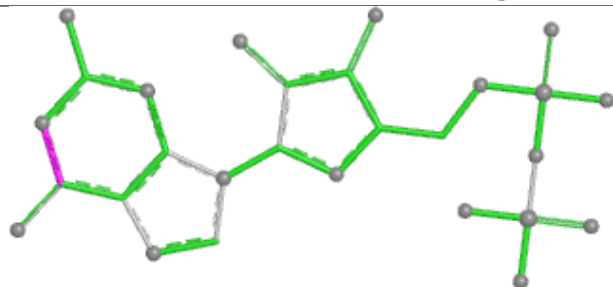




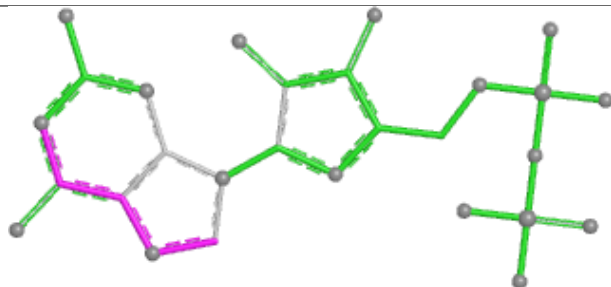




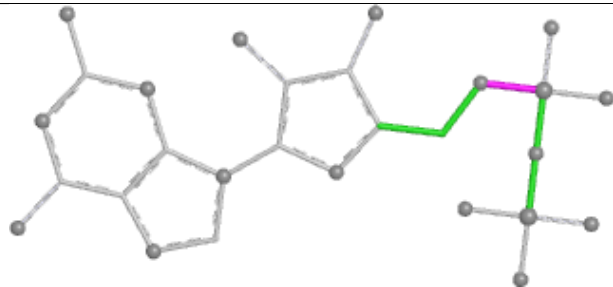
## Ligand GDP WB 501



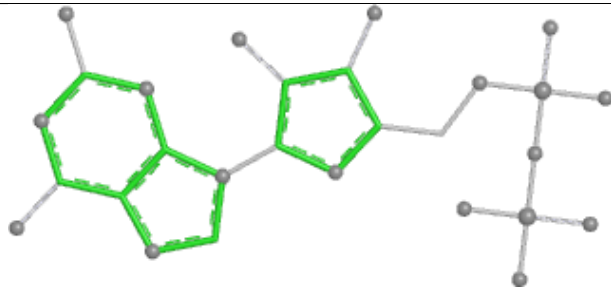
Bond lengths



Bond angles

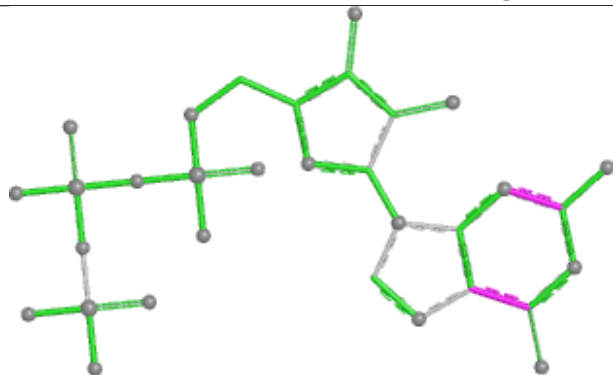


Torsions

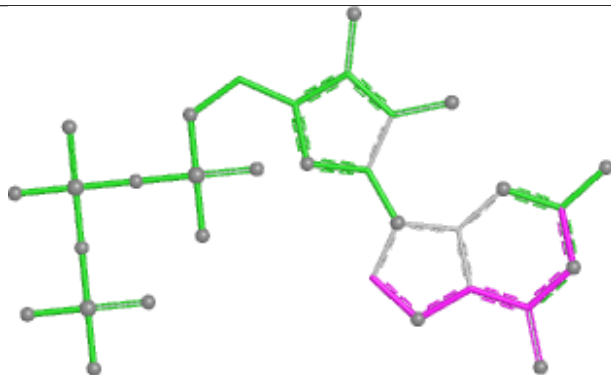


Rings

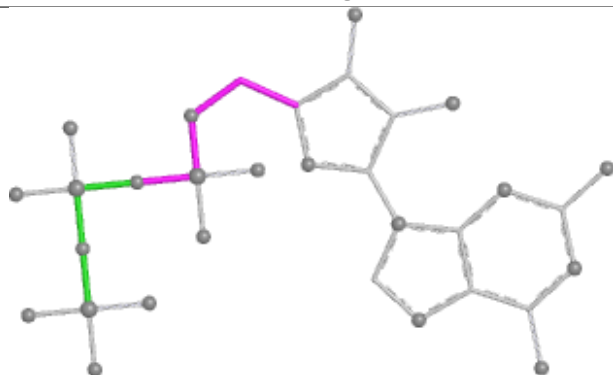
## Ligand GTP NG 501



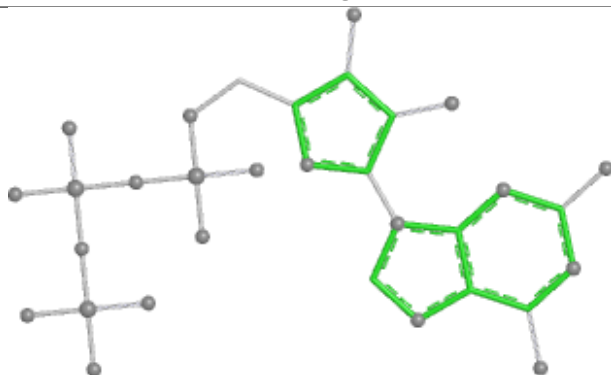
Bond lengths



Bond angles



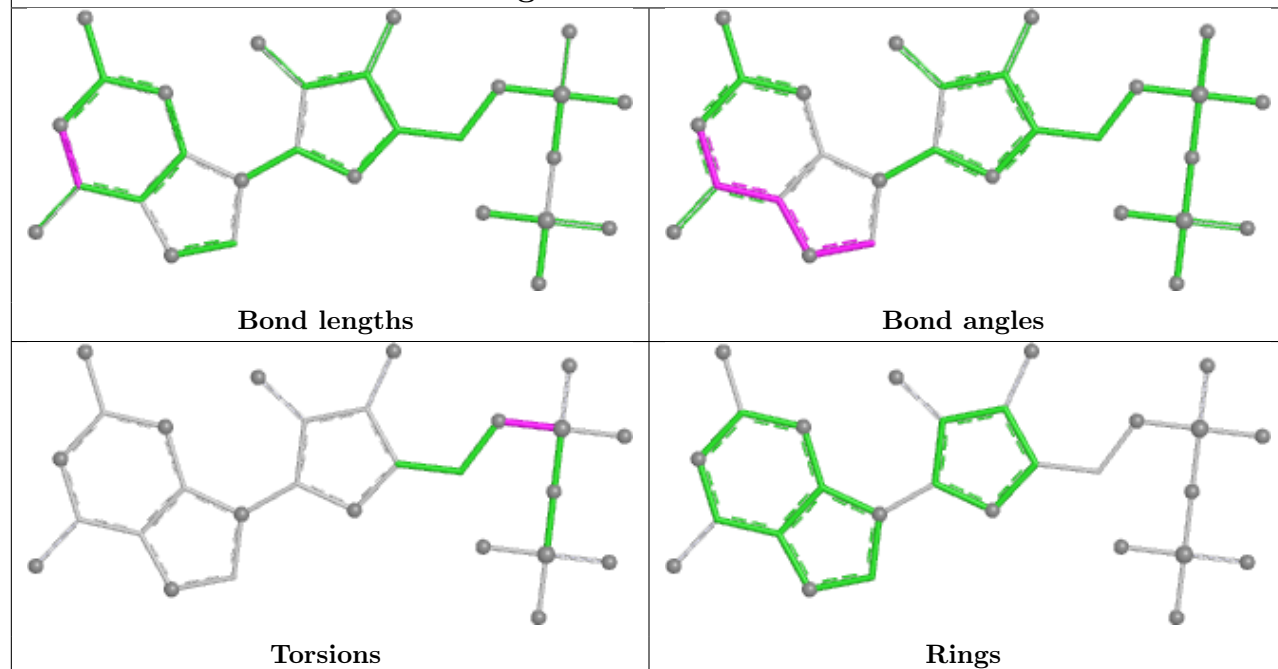
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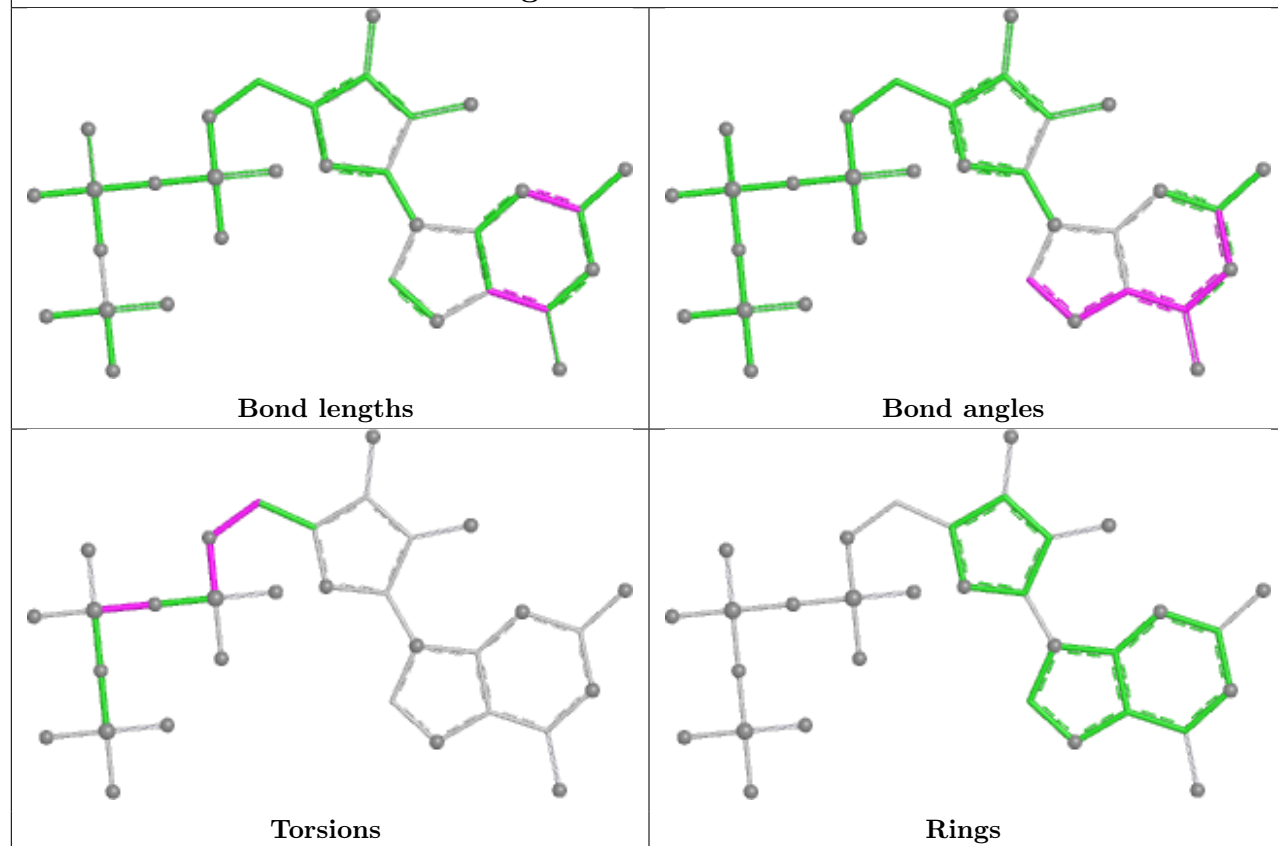
Rings



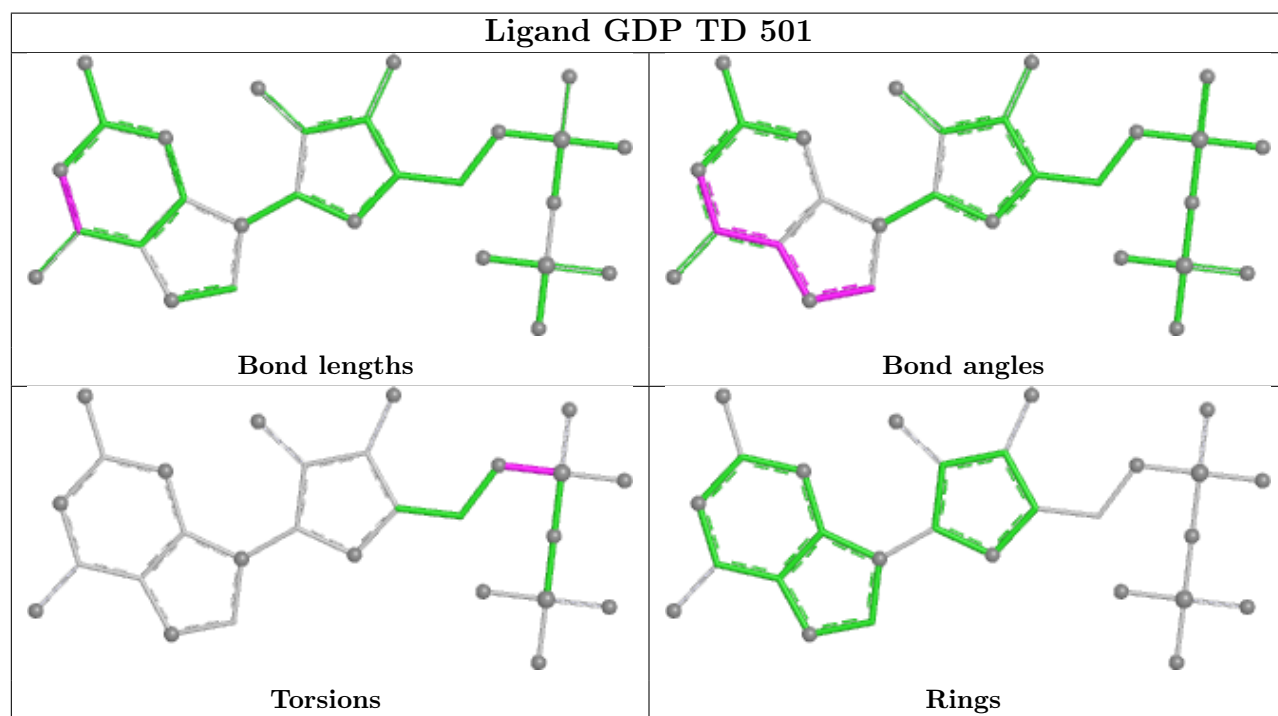
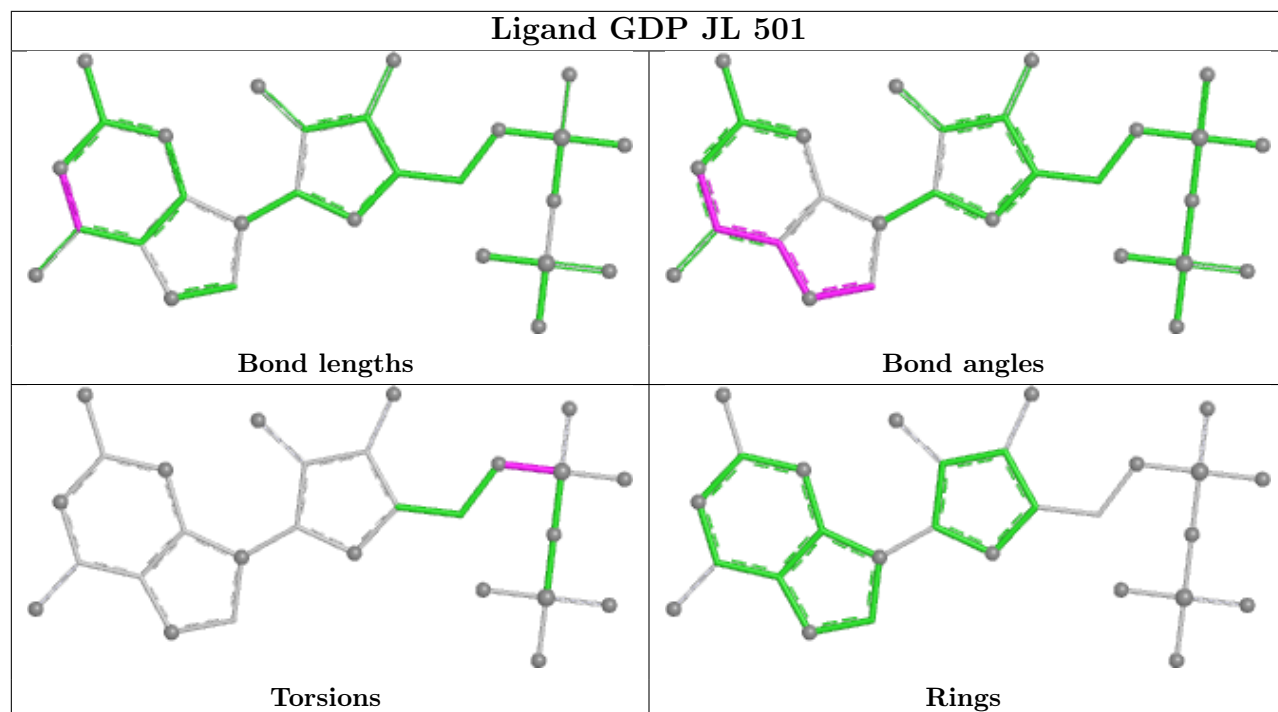
## Ligand GDP UL 501



## Ligand GTP JA 501

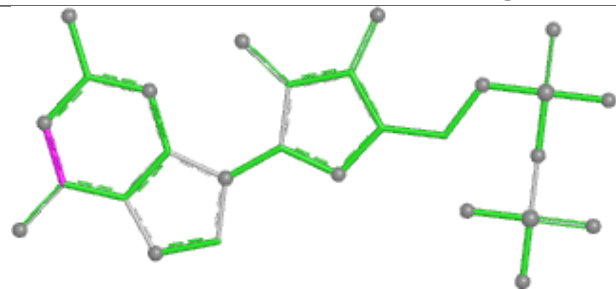




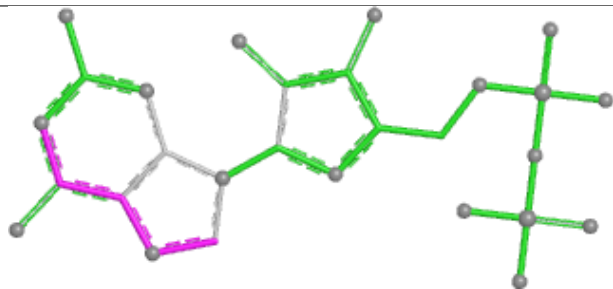




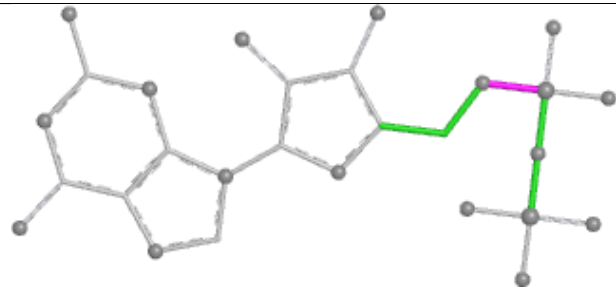
## Ligand GDP DD 501



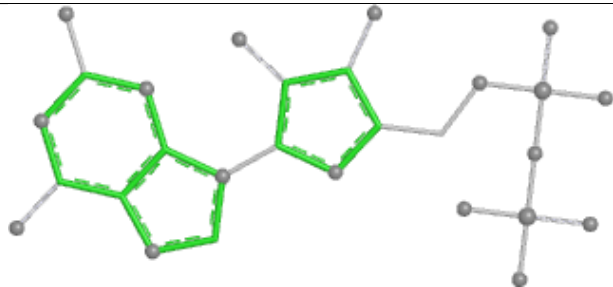
Bond lengths



Bond angles

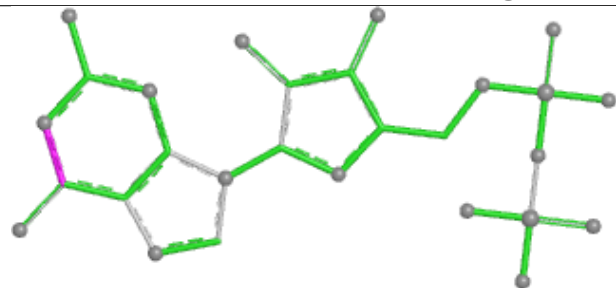


Torsions

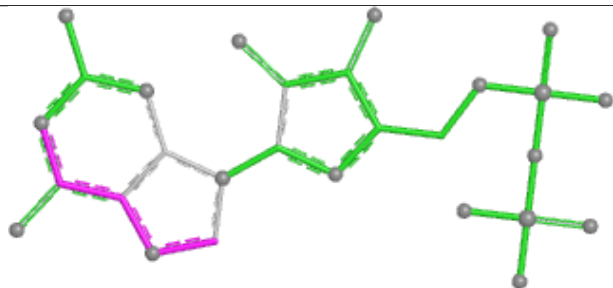


Rings

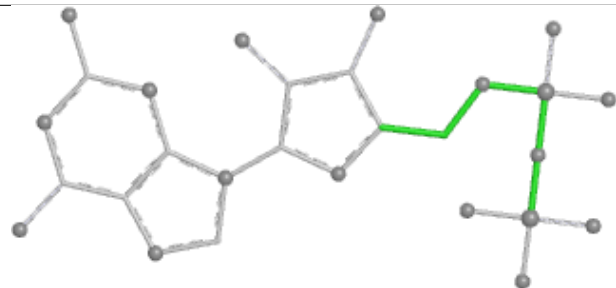
## Ligand GDP NB 502



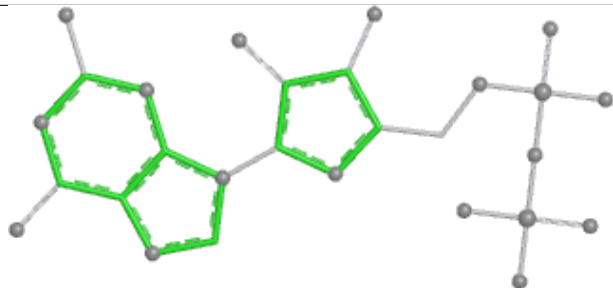
Bond lengths



Bond angles



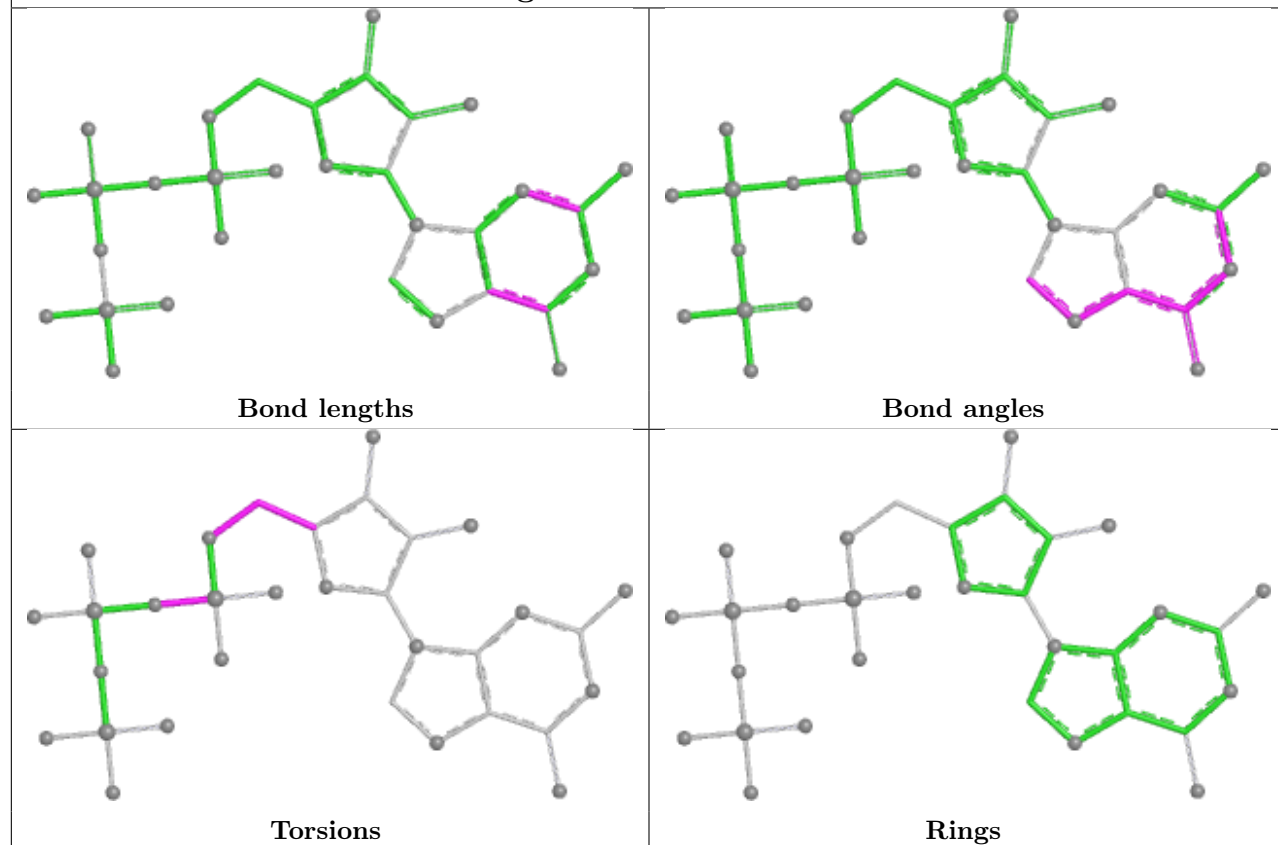
Torsions



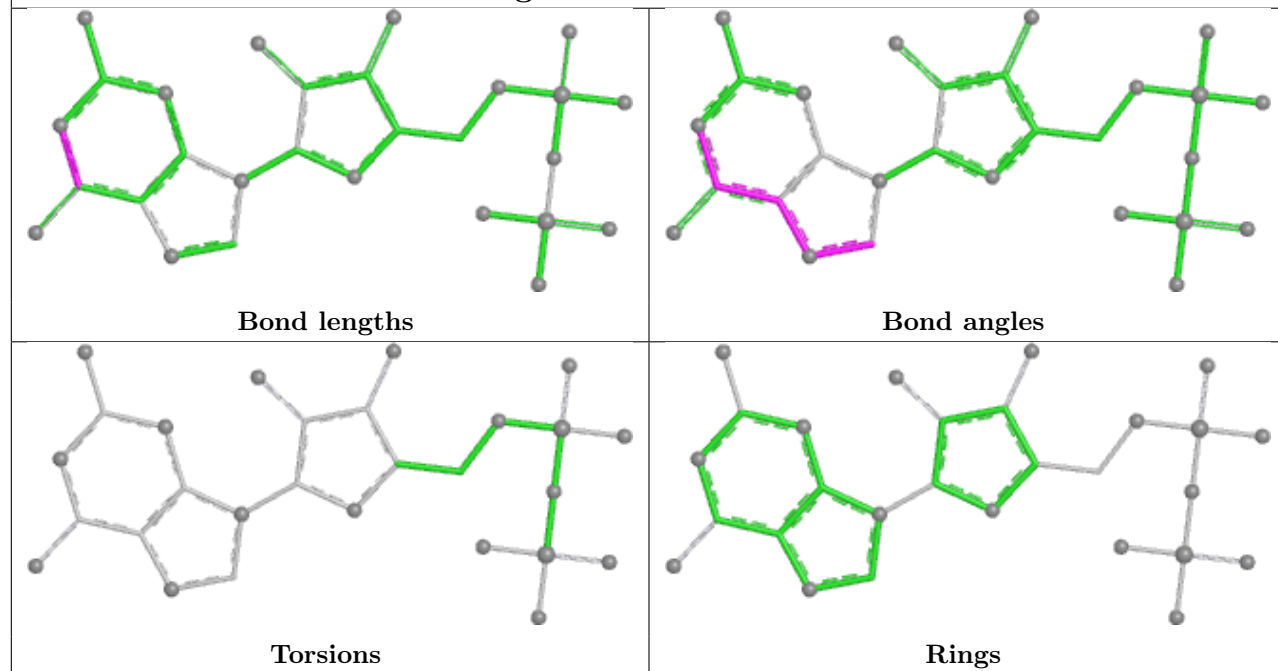
Rings



## Ligand GTP DA 501

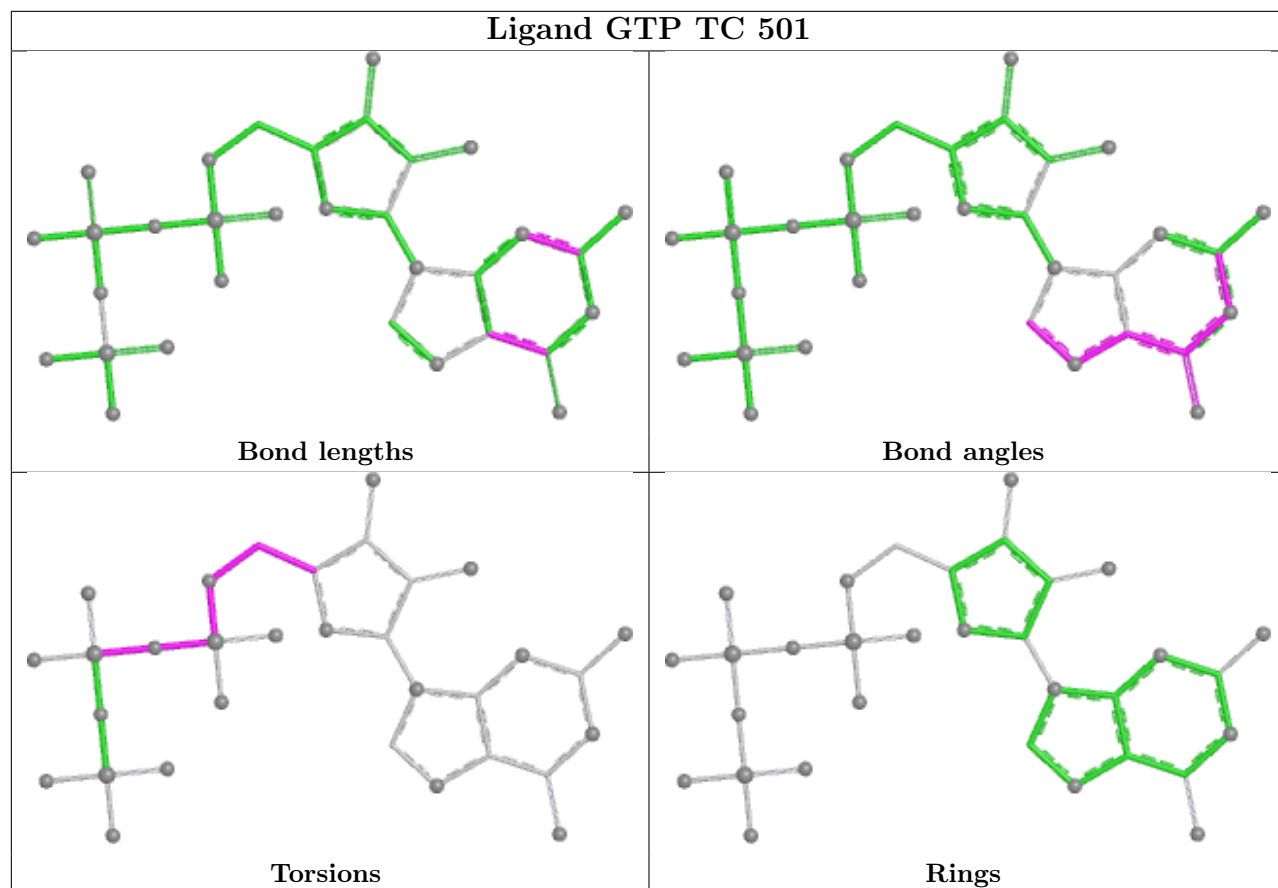


## Ligand GDP RH 501

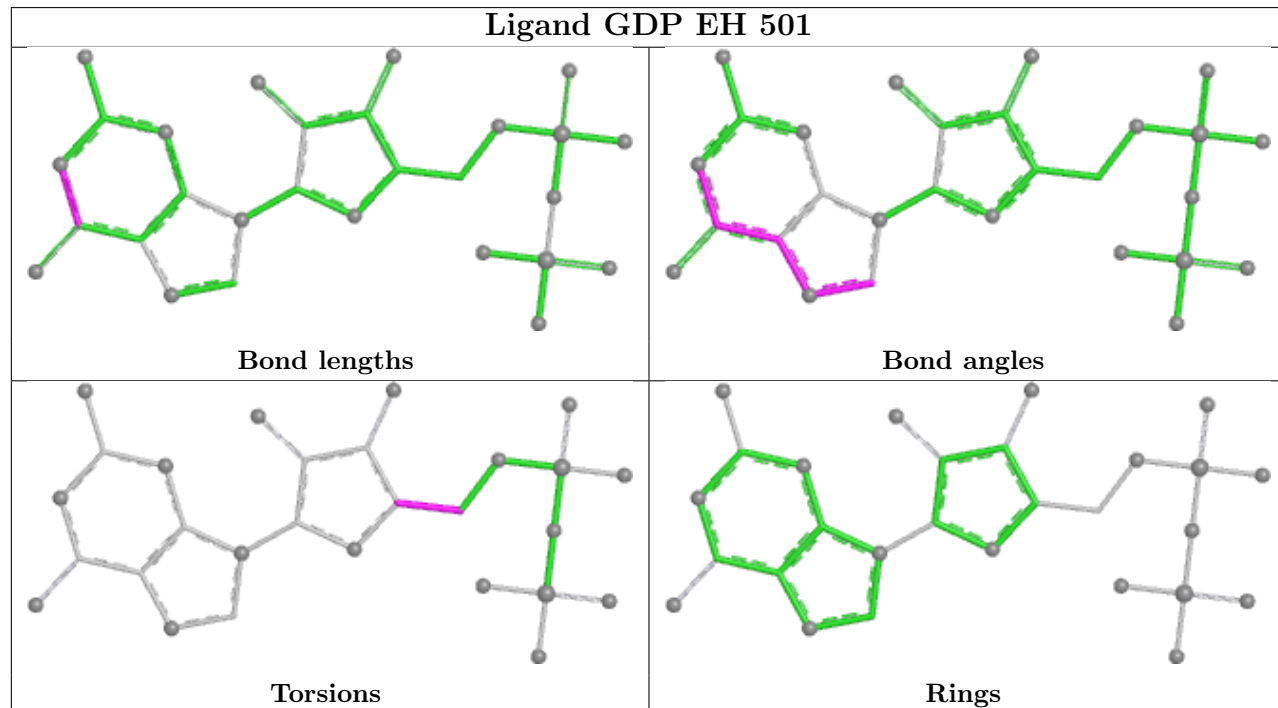




## Ligand GTP TC 501

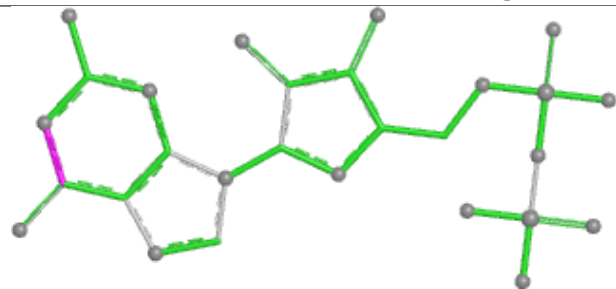


## Ligand GDP EH 501

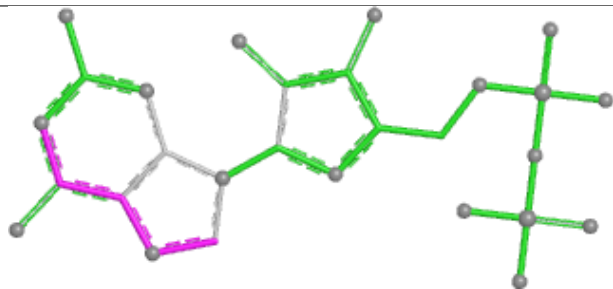




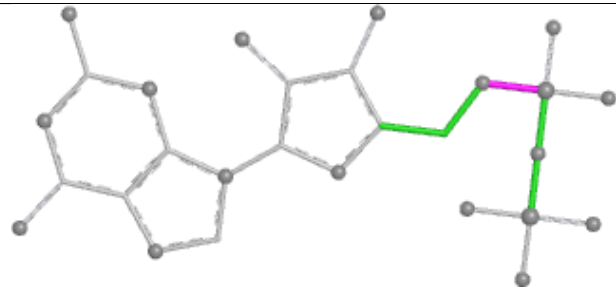
## Ligand GDP HN 501



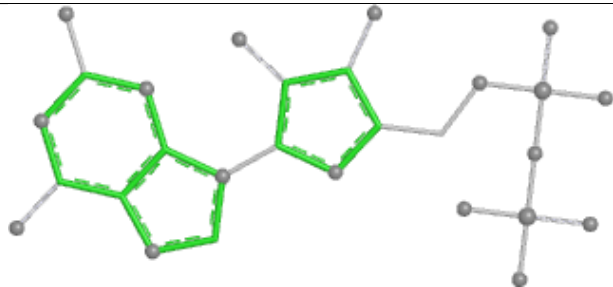
Bond lengths



Bond angles

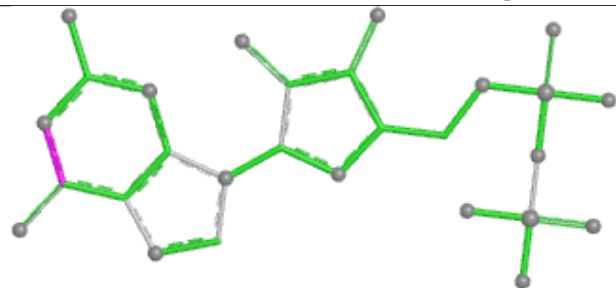


Torsions

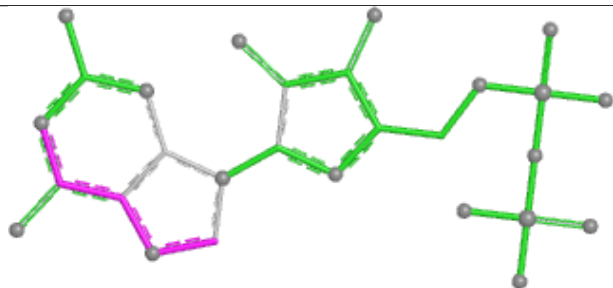


Rings

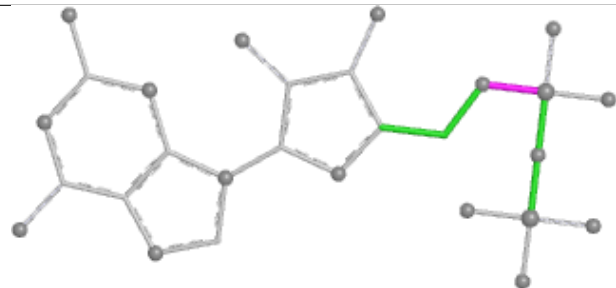
## Ligand GDP AH 501



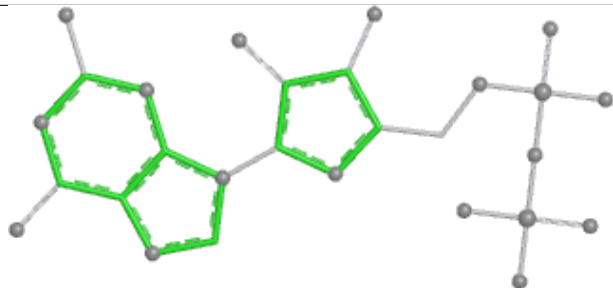
Bond lengths



Bond angles



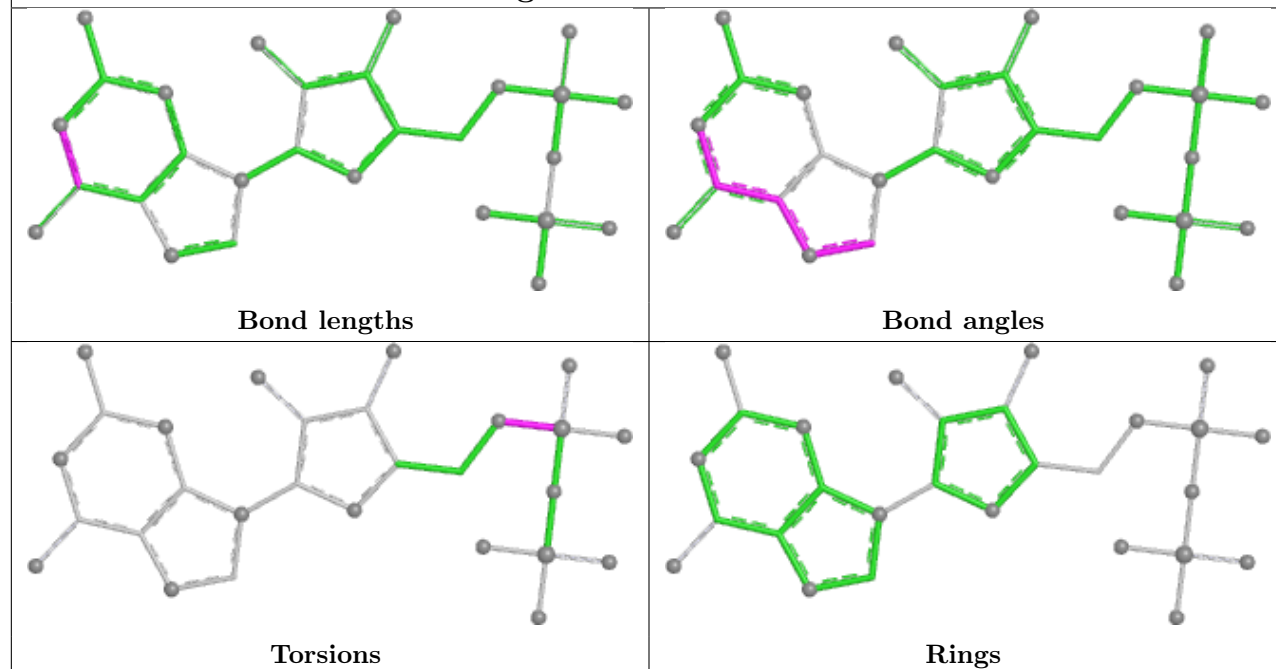
Torsions



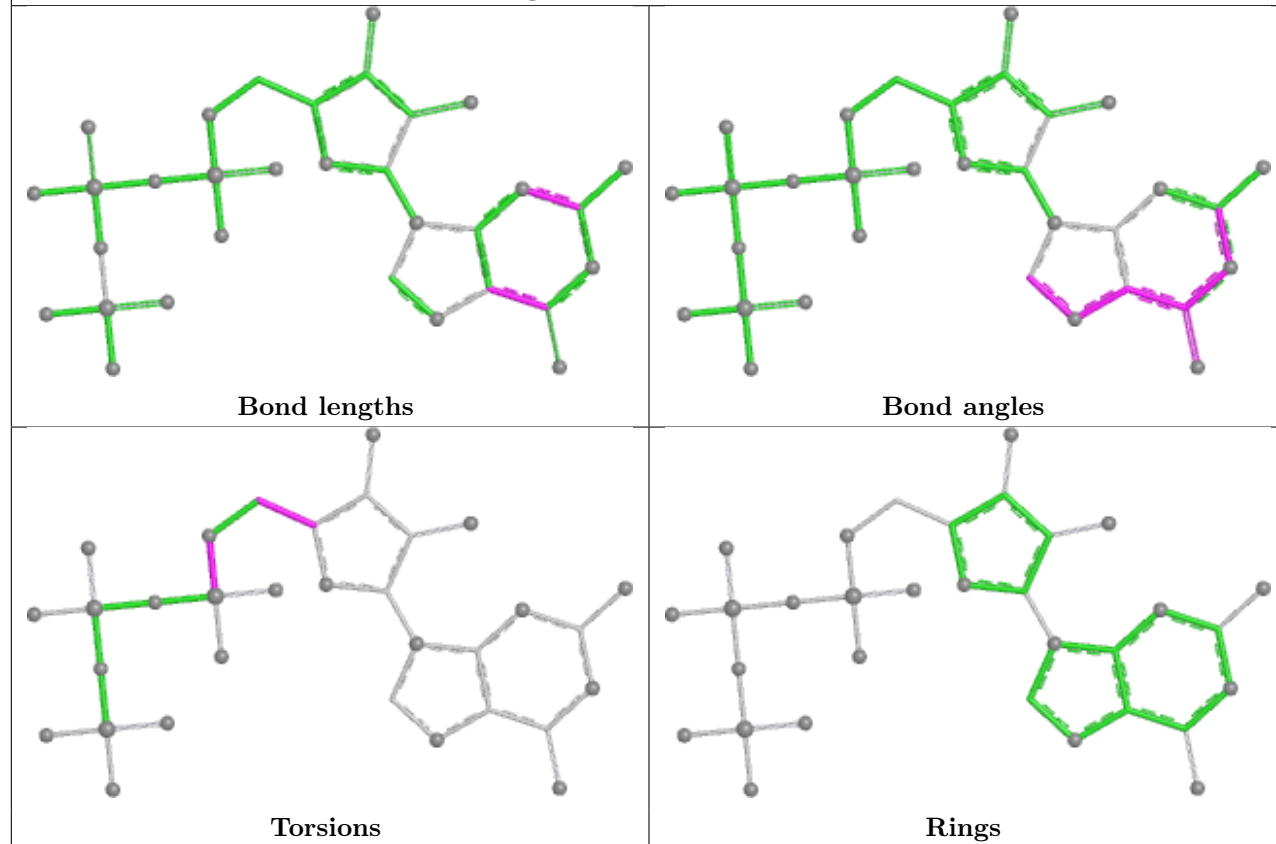
Rings



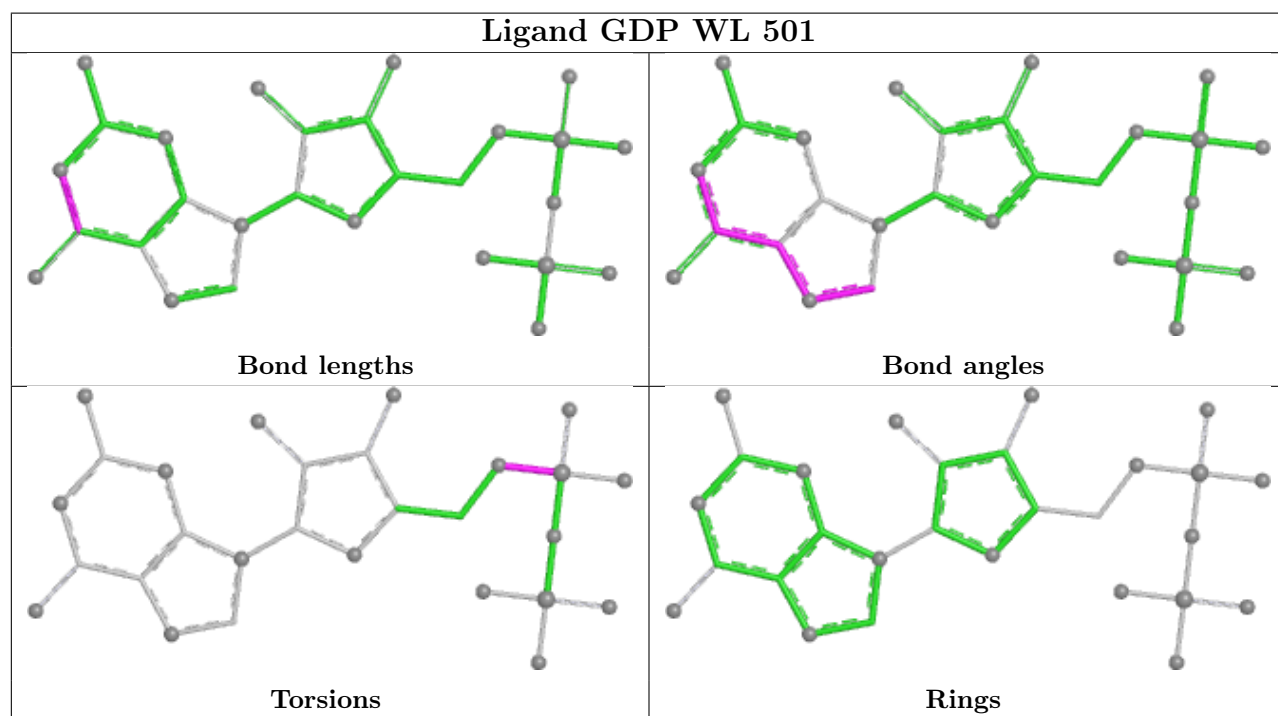
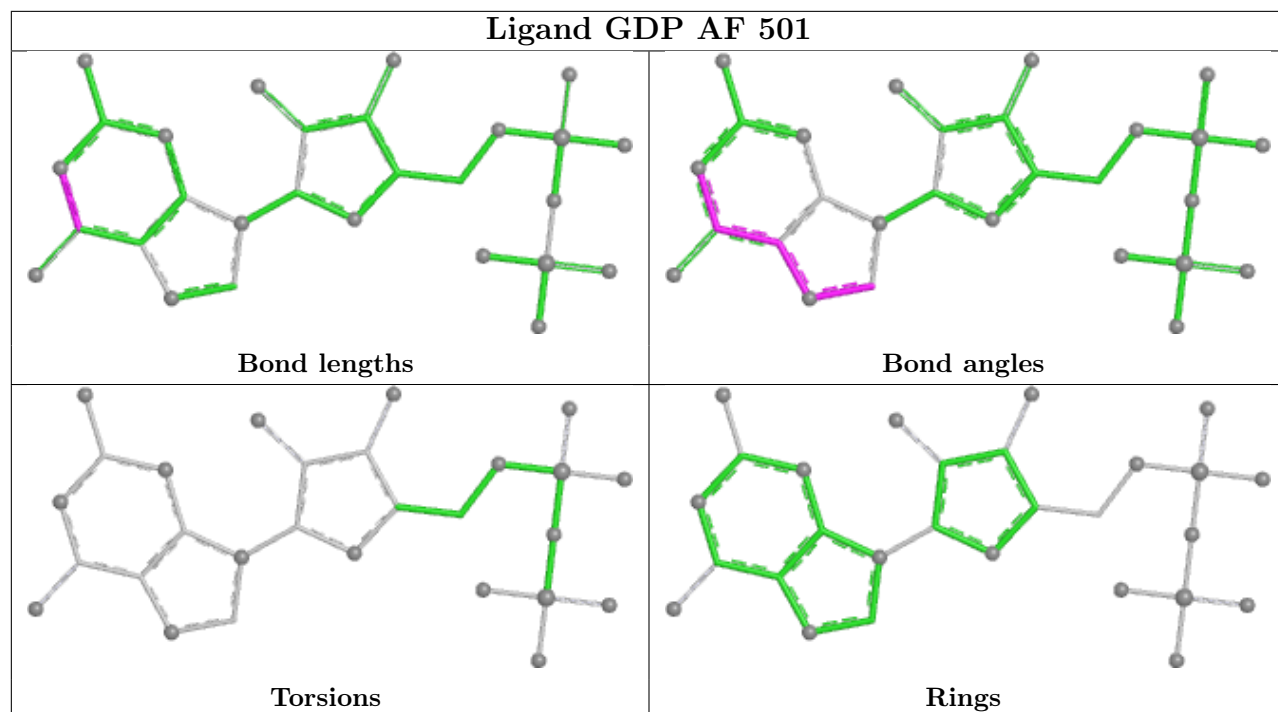
## Ligand GDP HF 501



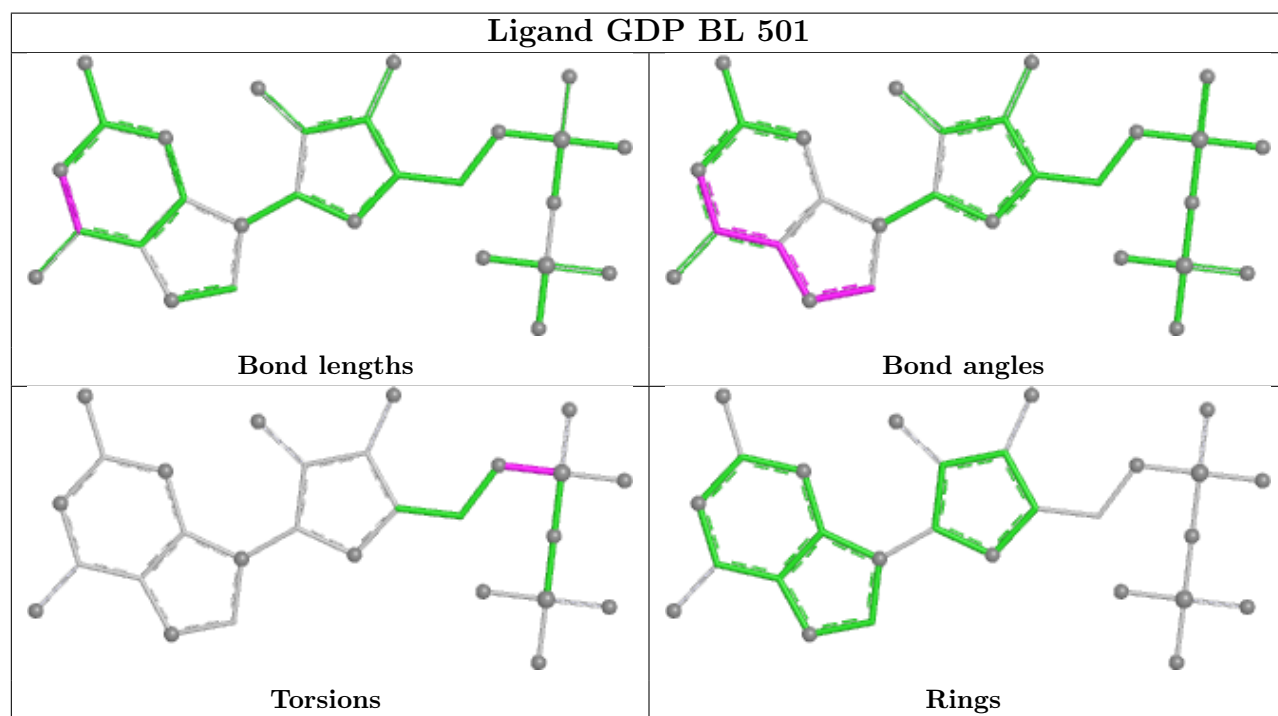
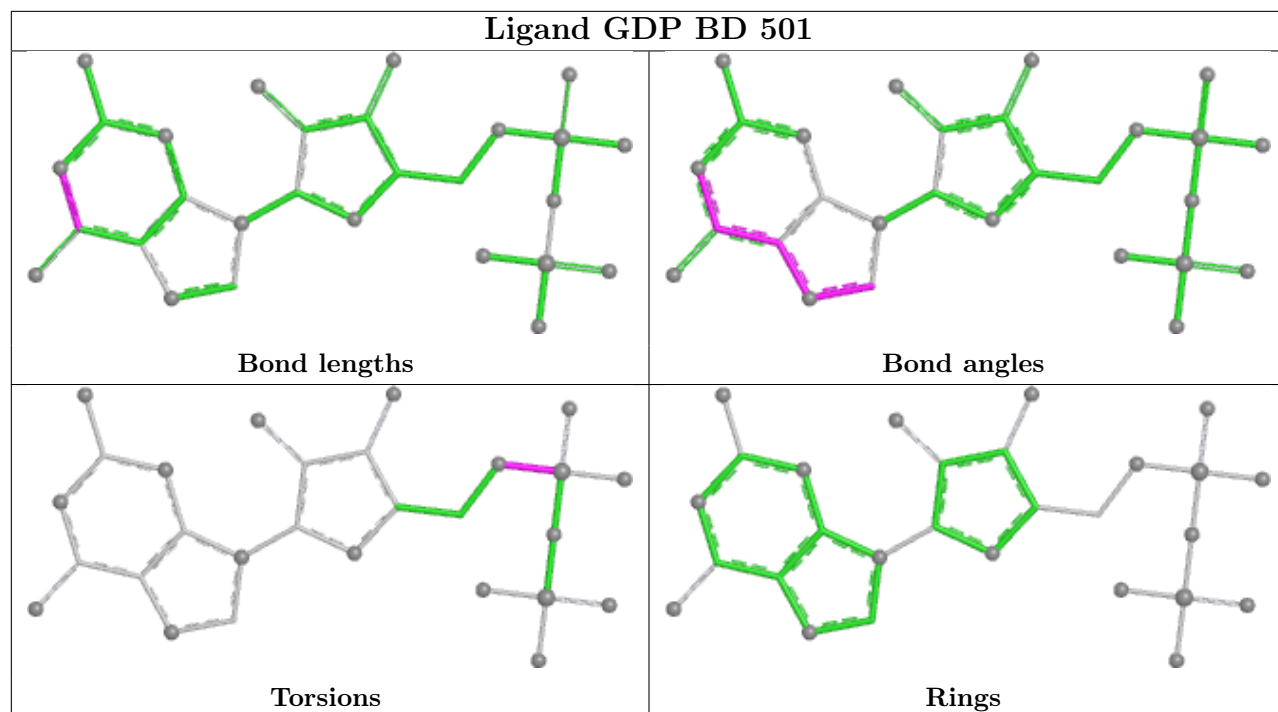
## Ligand GTP OI 501





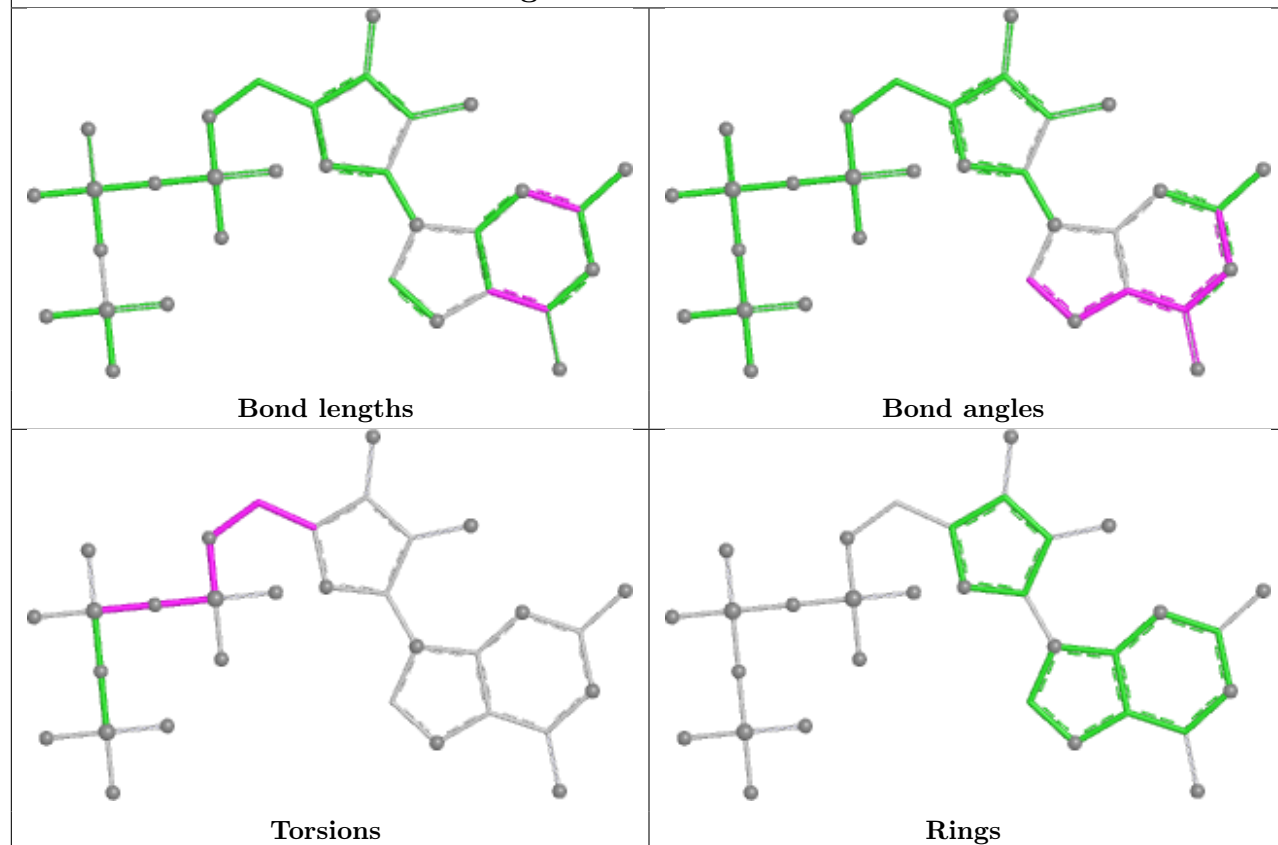




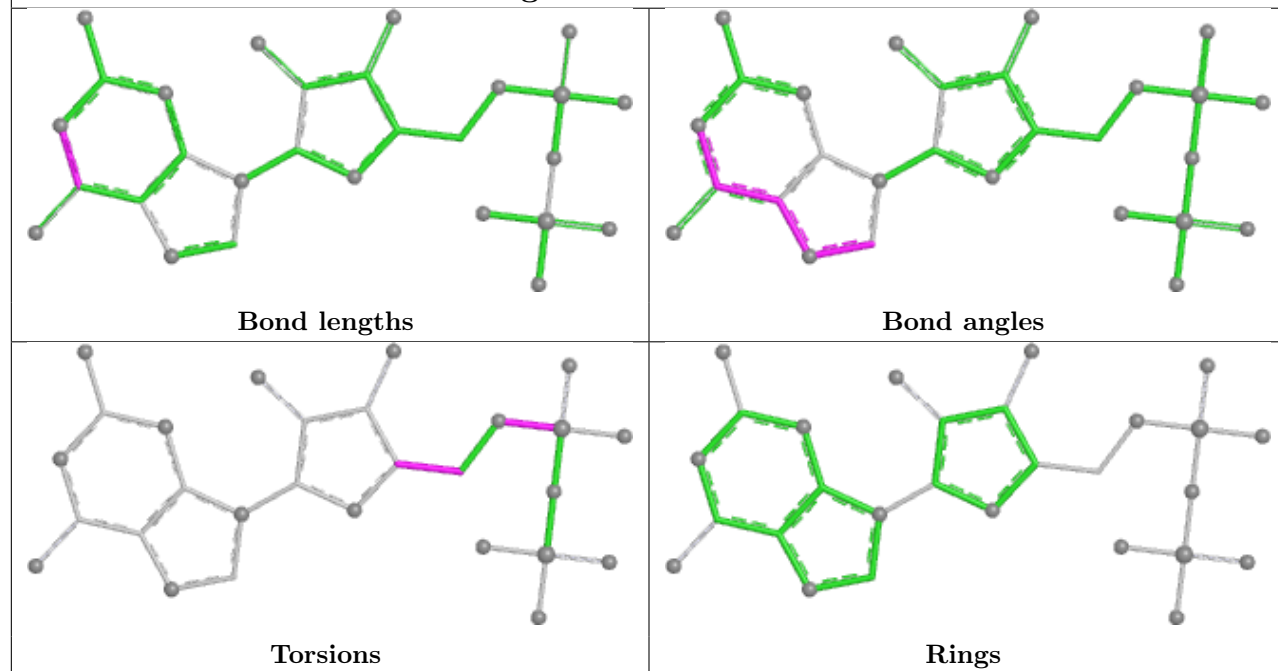




## Ligand GTP JG 501

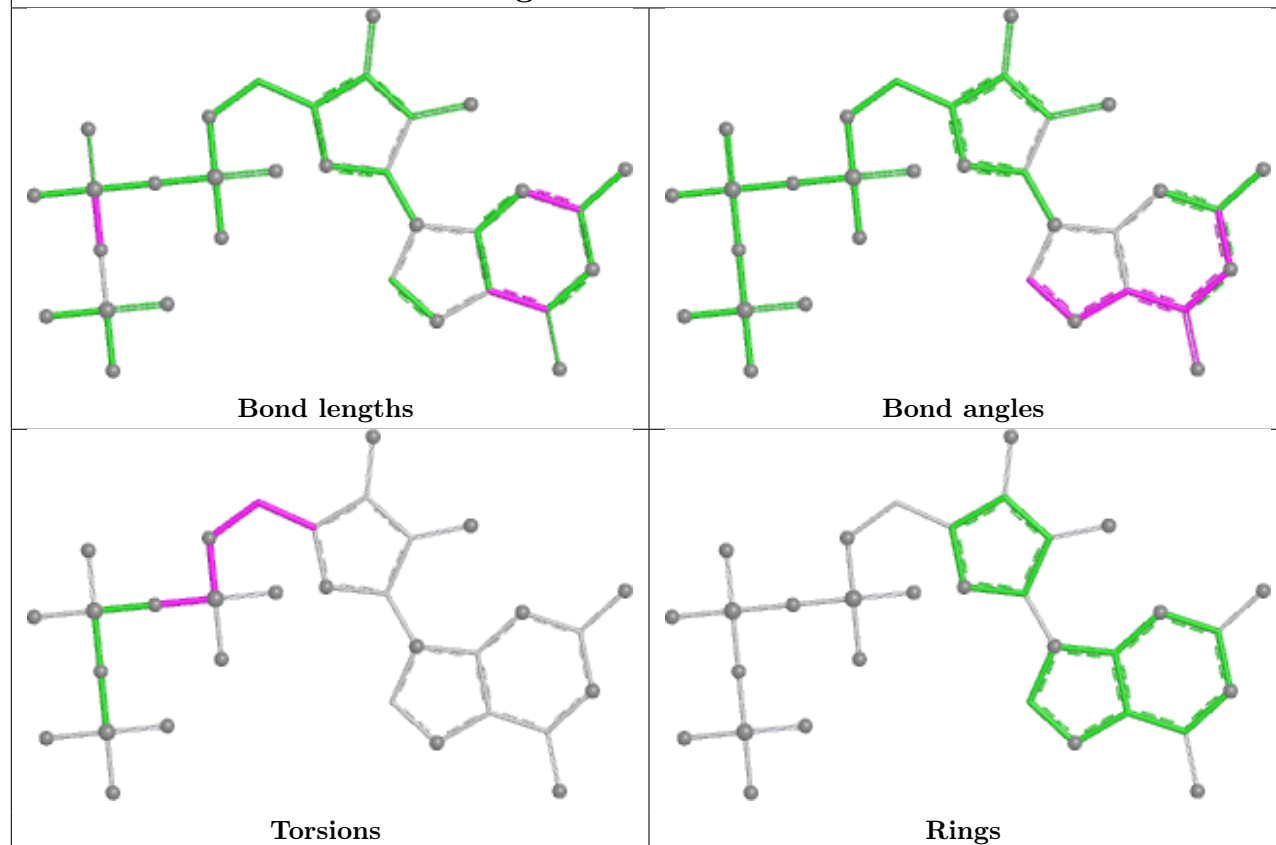


## Ligand GDP SF 501

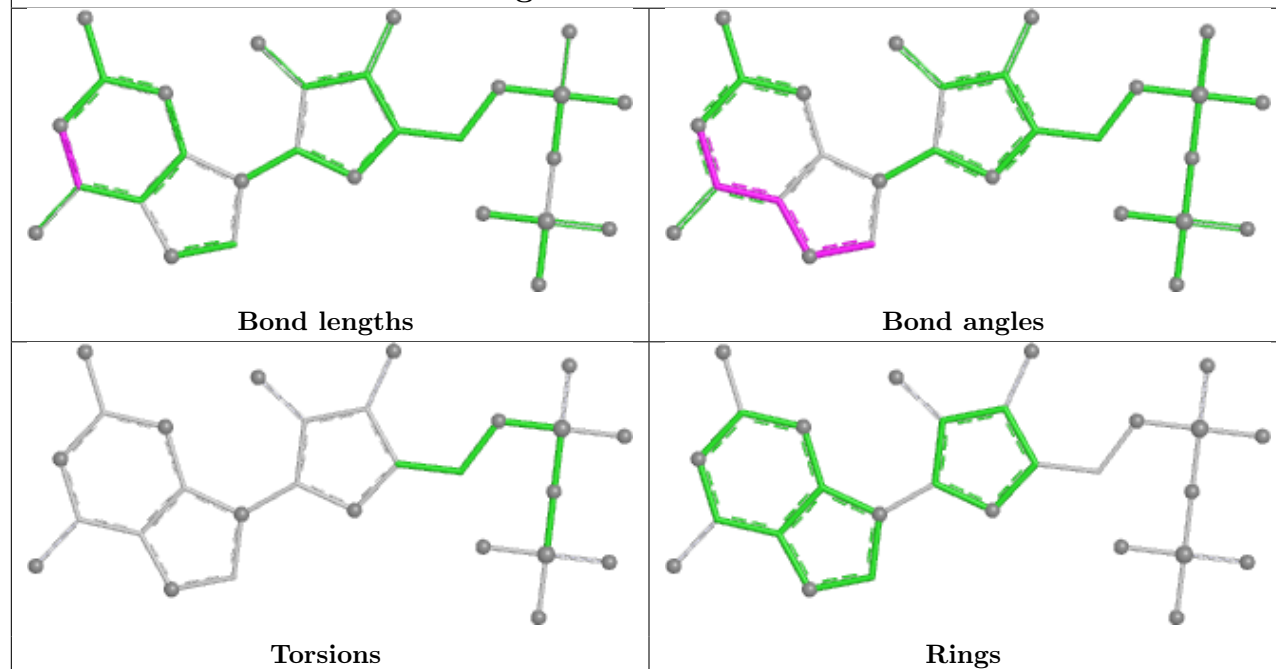




## Ligand GTP NK 501

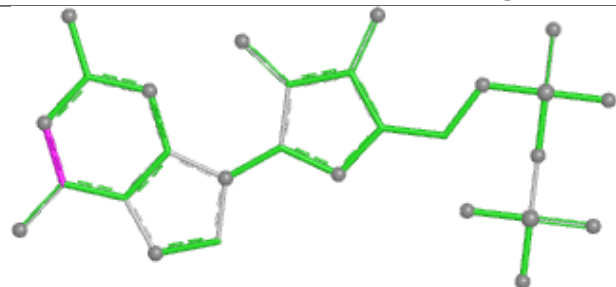


## Ligand GDP HB 501

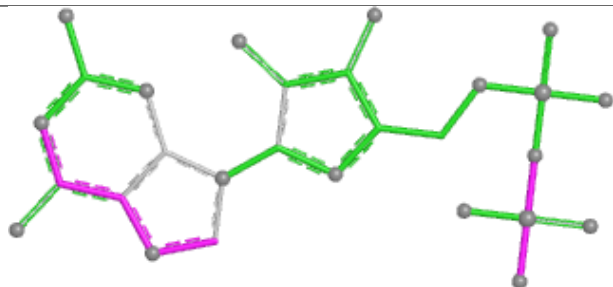




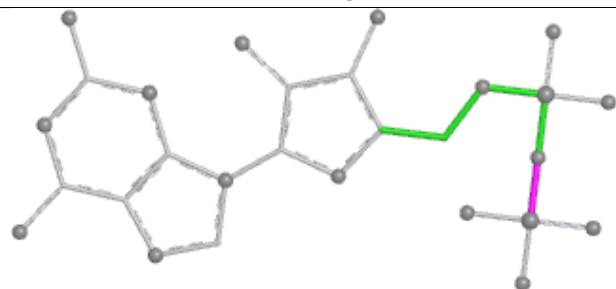
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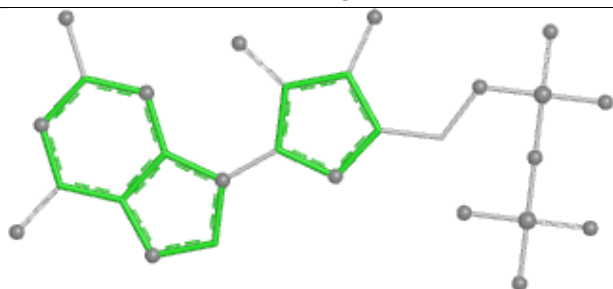
Bond lengths



Bond angles

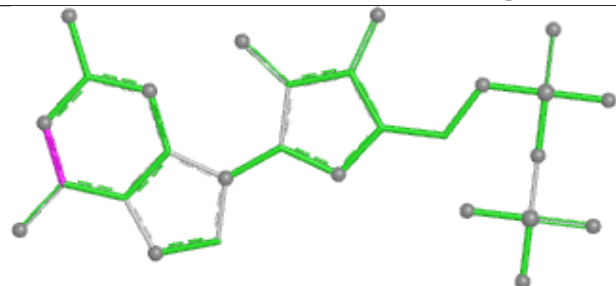


Torsions

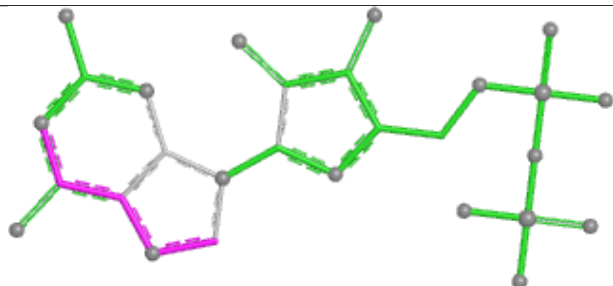


Rings

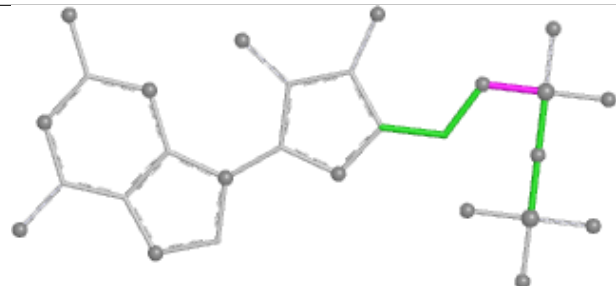
## Ligand GDP DB 501



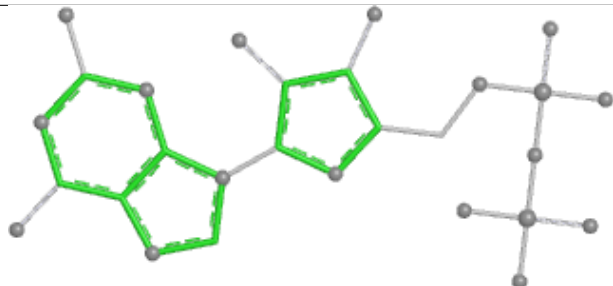
Bond lengths



Bond angles



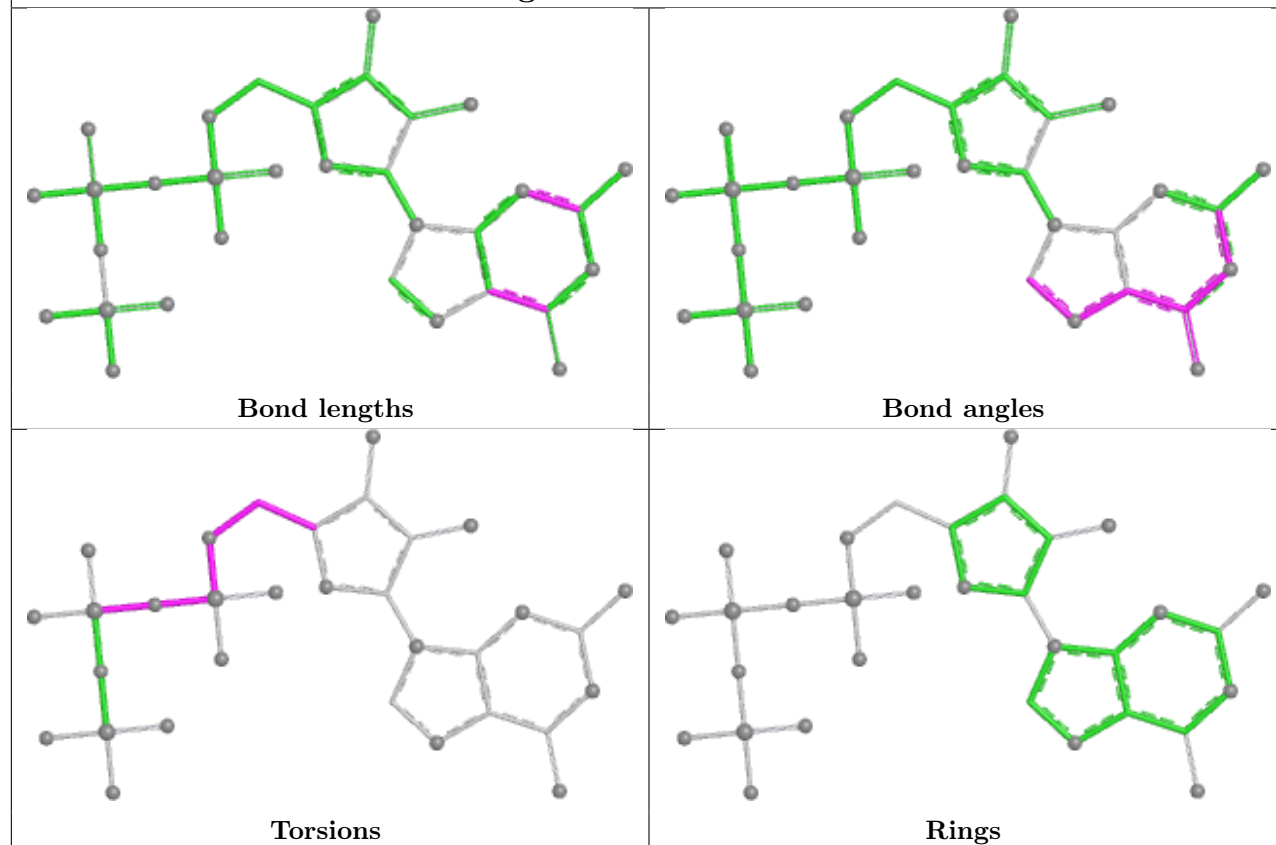
Torsions



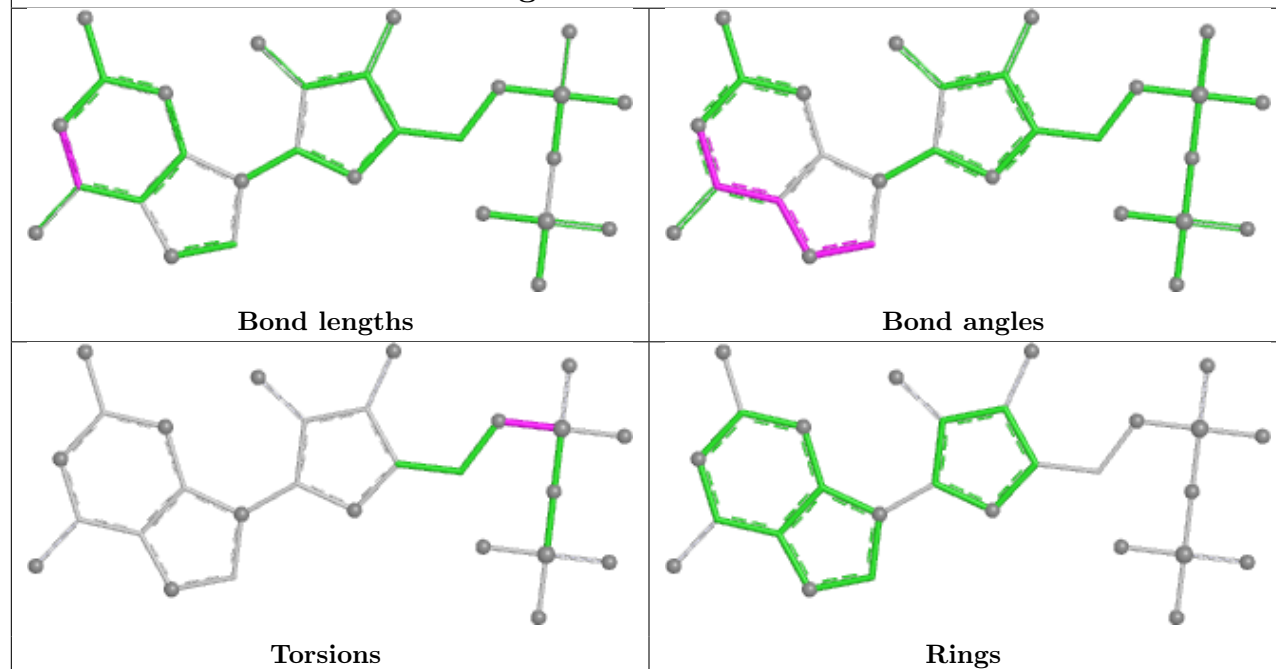
Rings



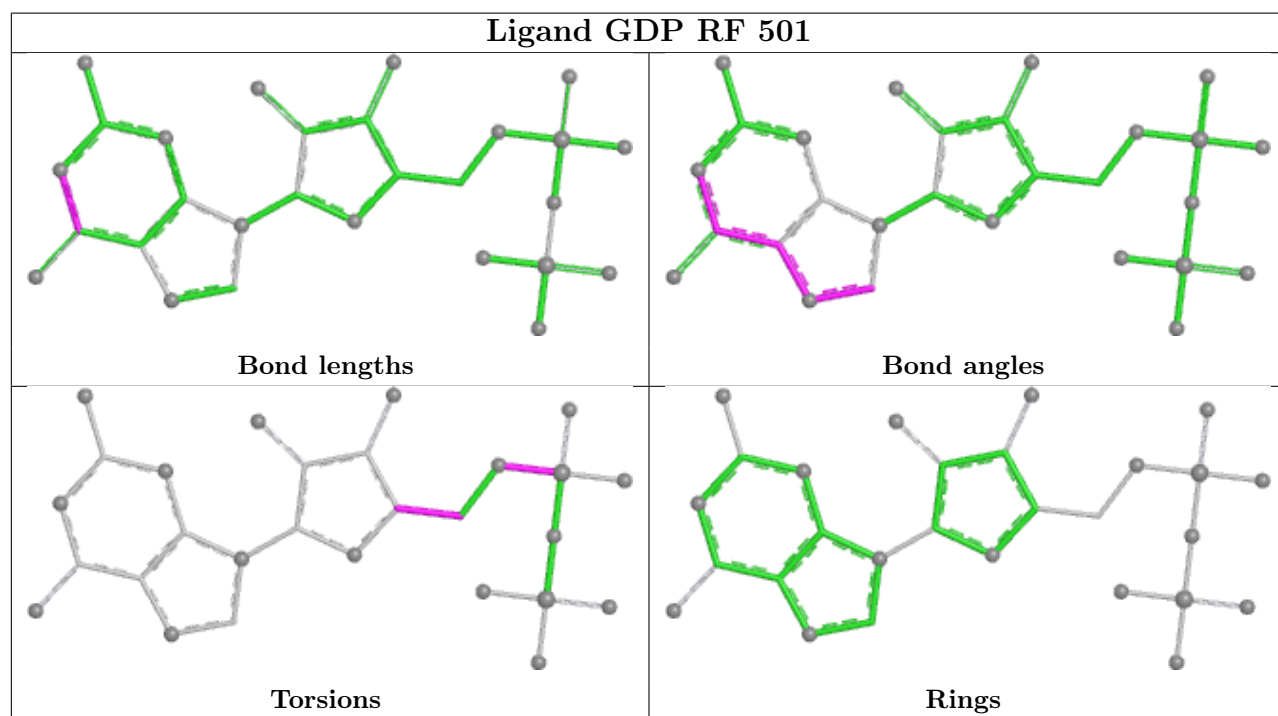
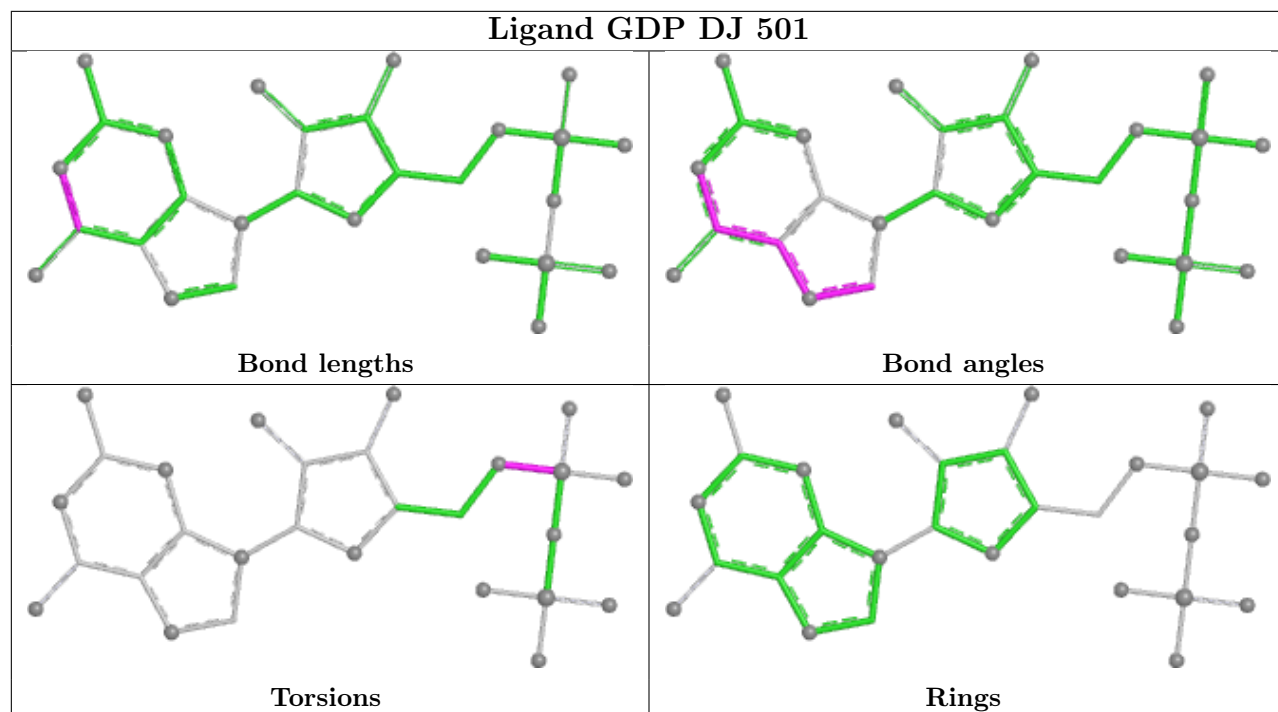
## Ligand GTP BC 501



## Ligand GDP TF 501

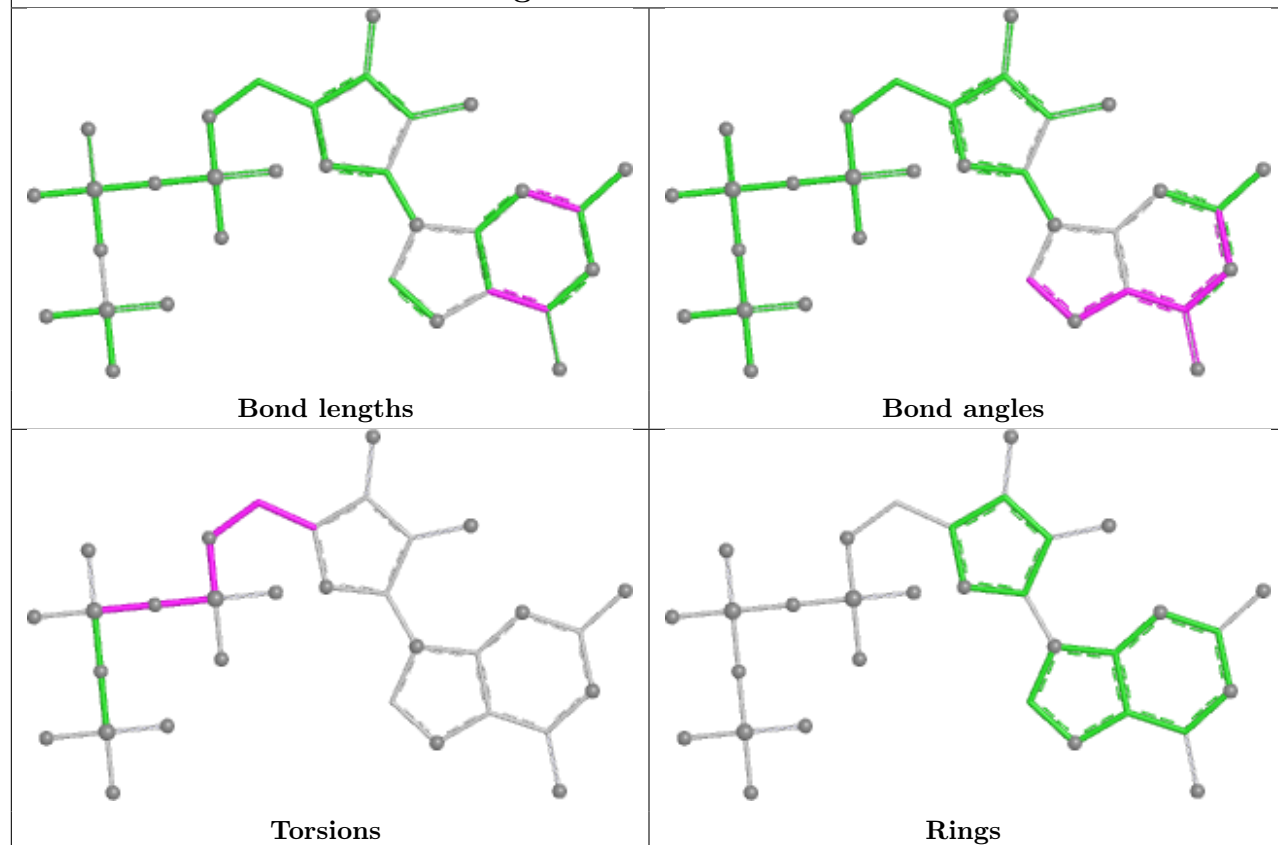




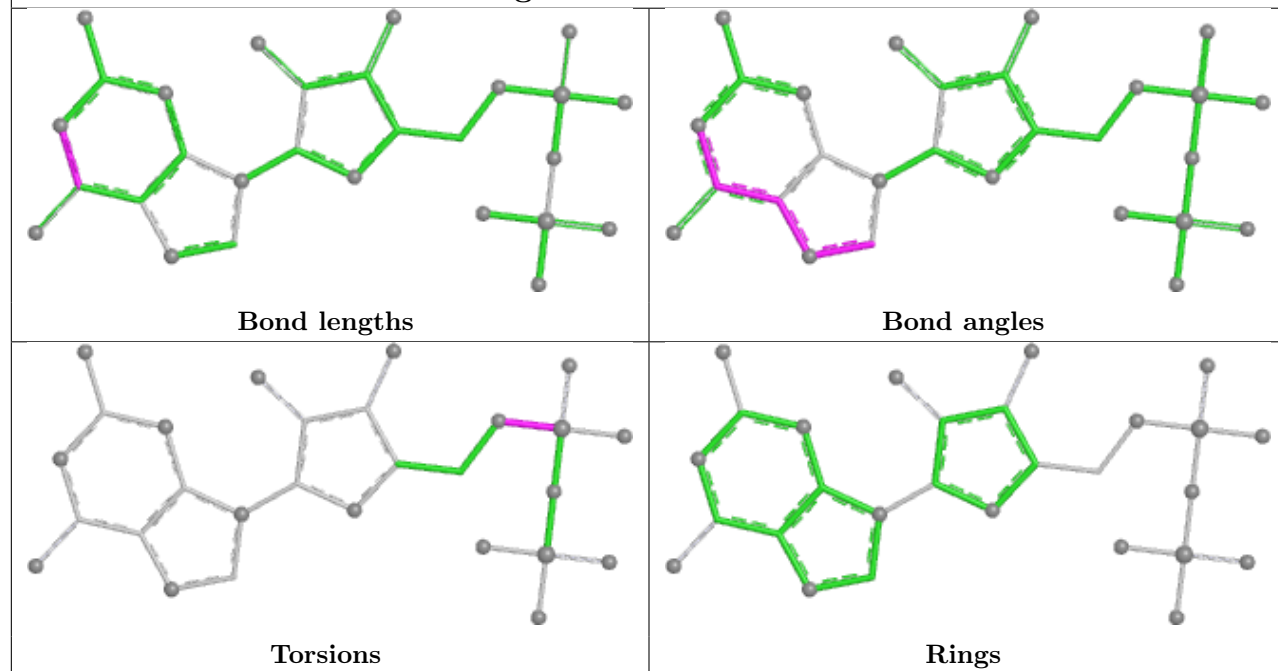




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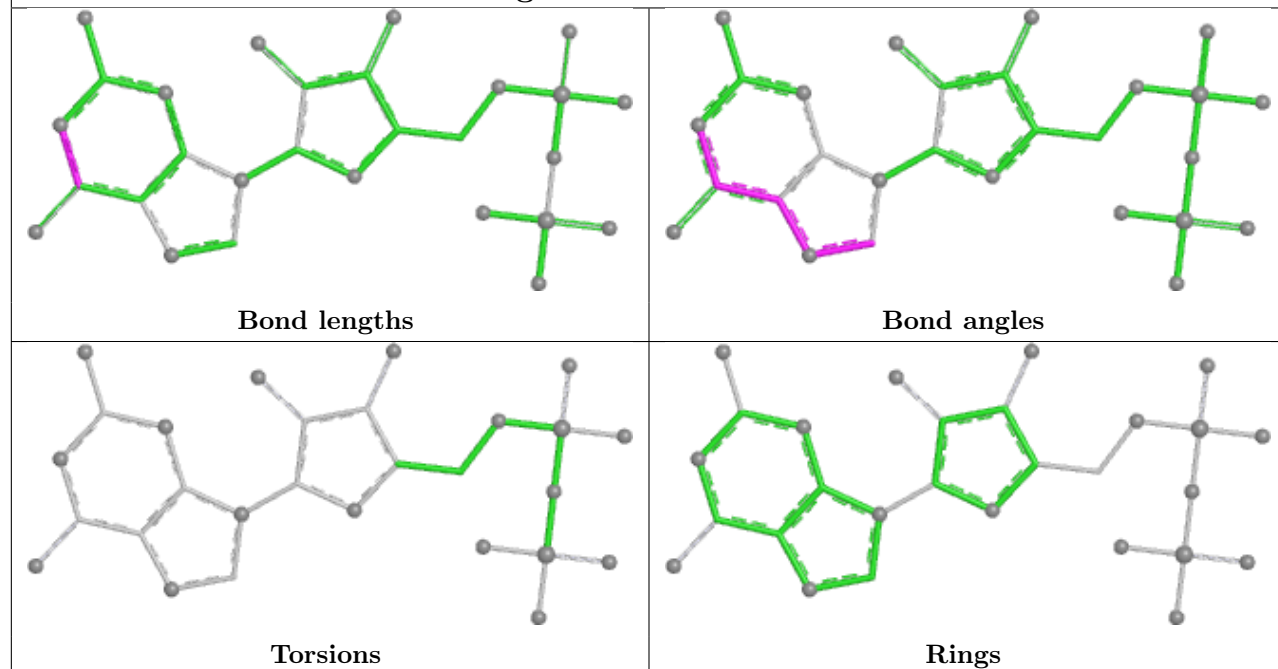


## Ligand GDP HD 501

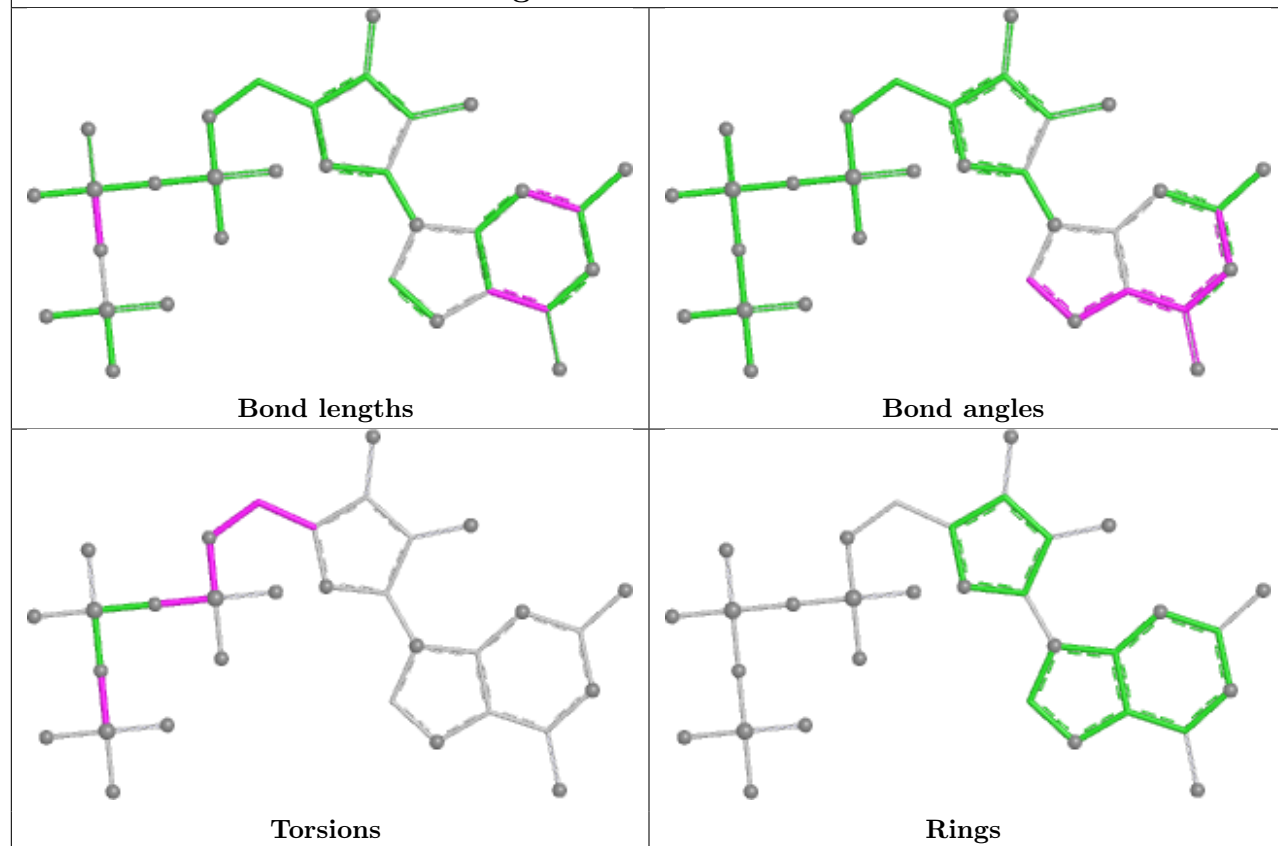




## Ligand GDP PD 501

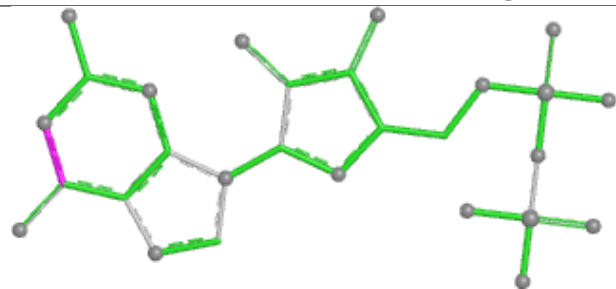


## Ligand GTP NM 501

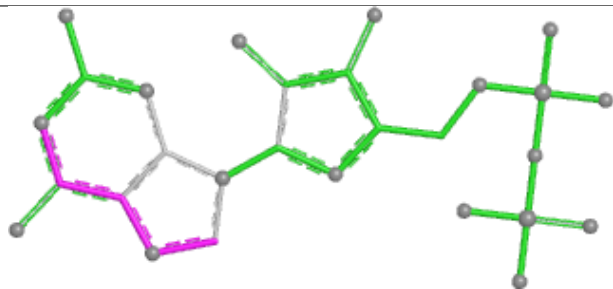




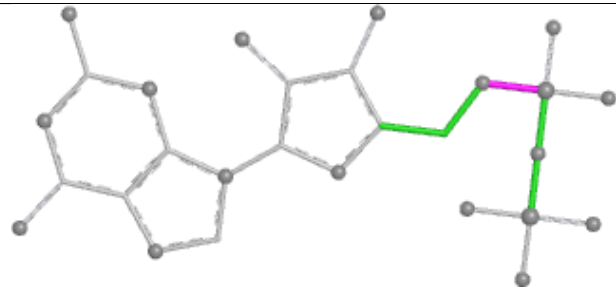
## Ligand GDP BN 501



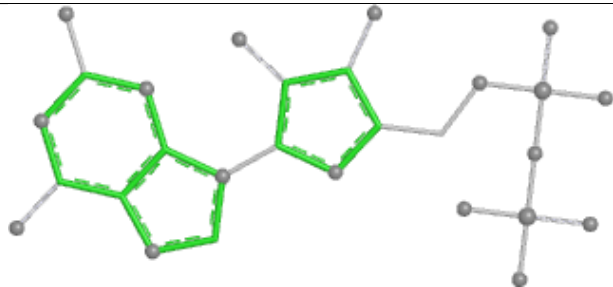
Bond lengths



Bond angles

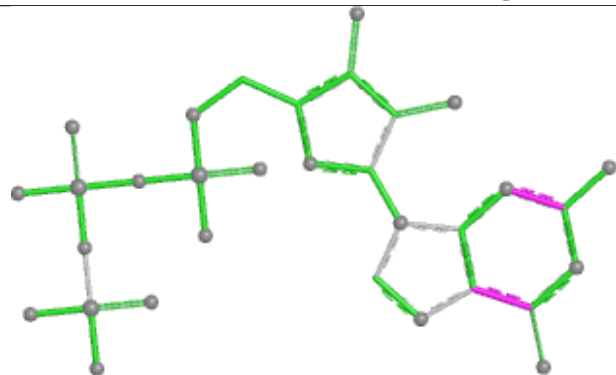


Torsions

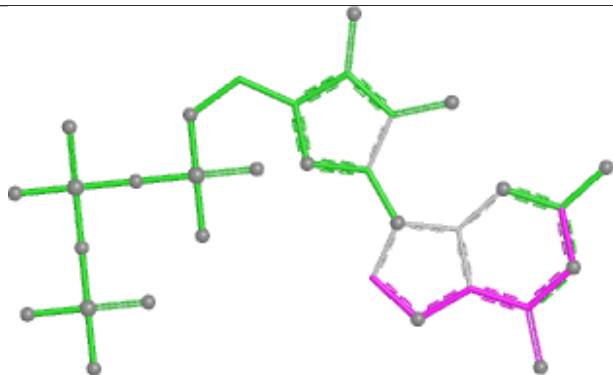


Rings

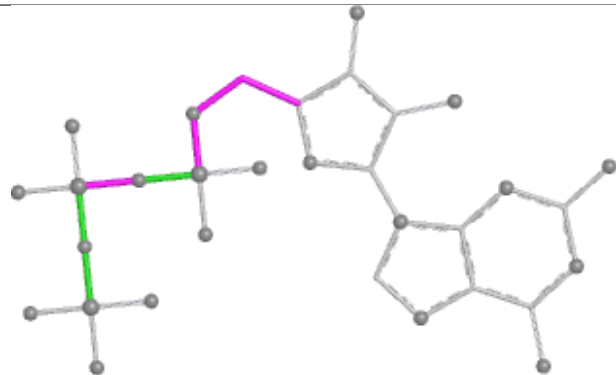
## Ligand GTP RM 501



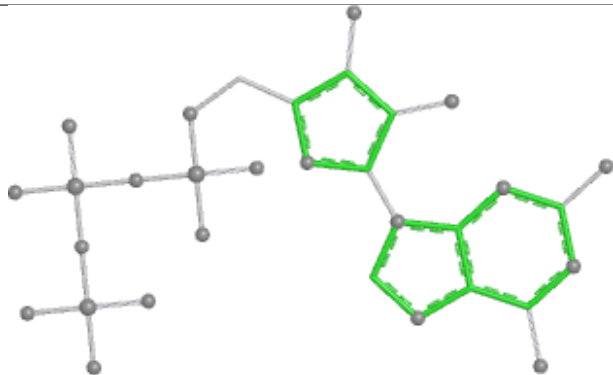
Bond lengths



Bond angles

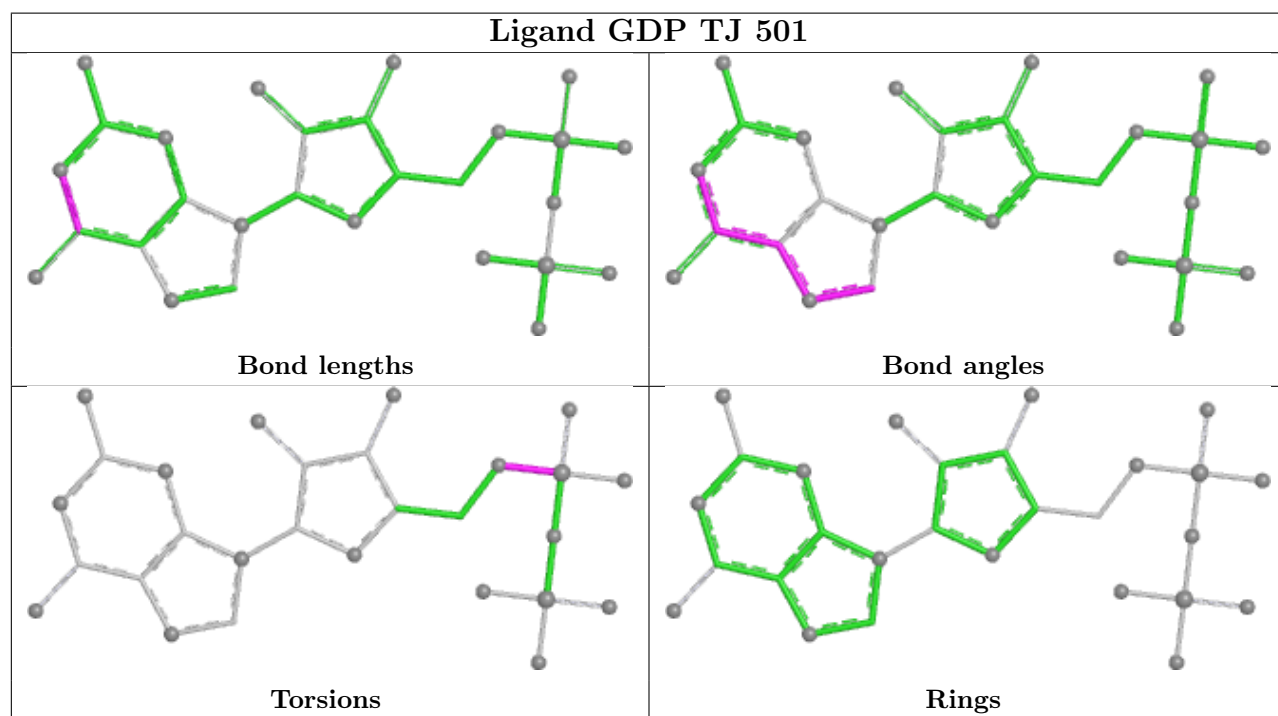
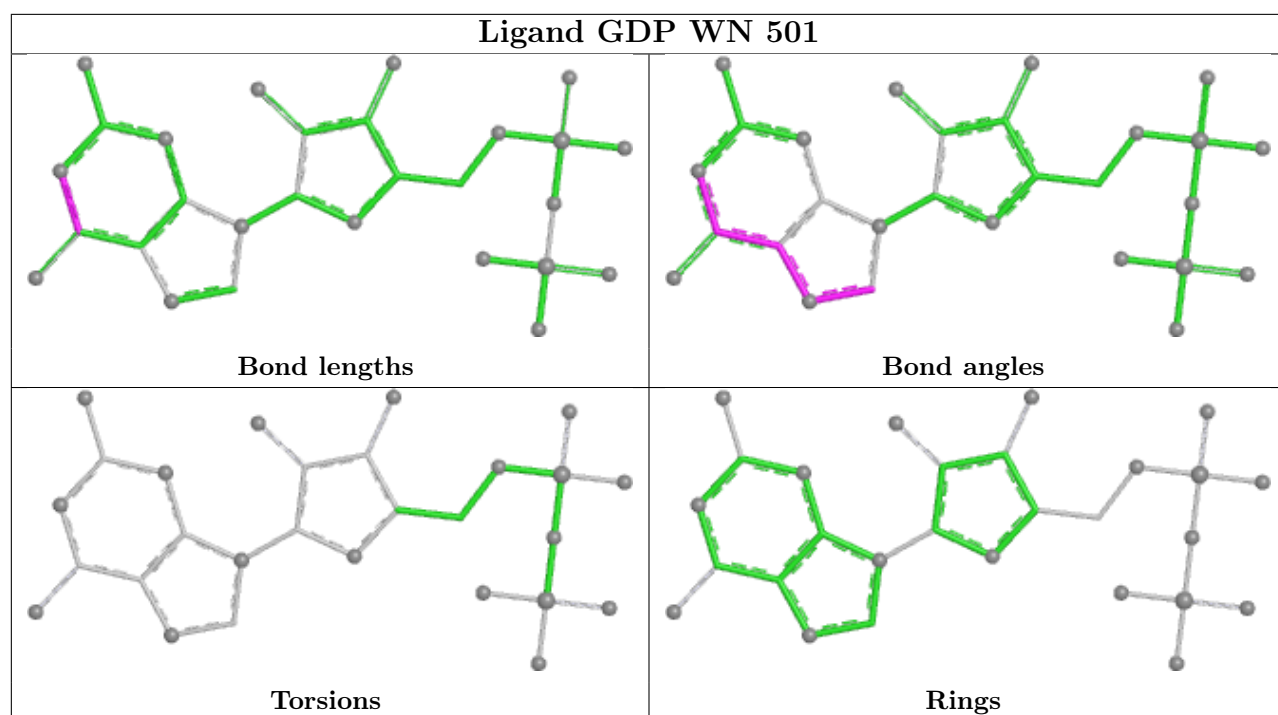


Torsions

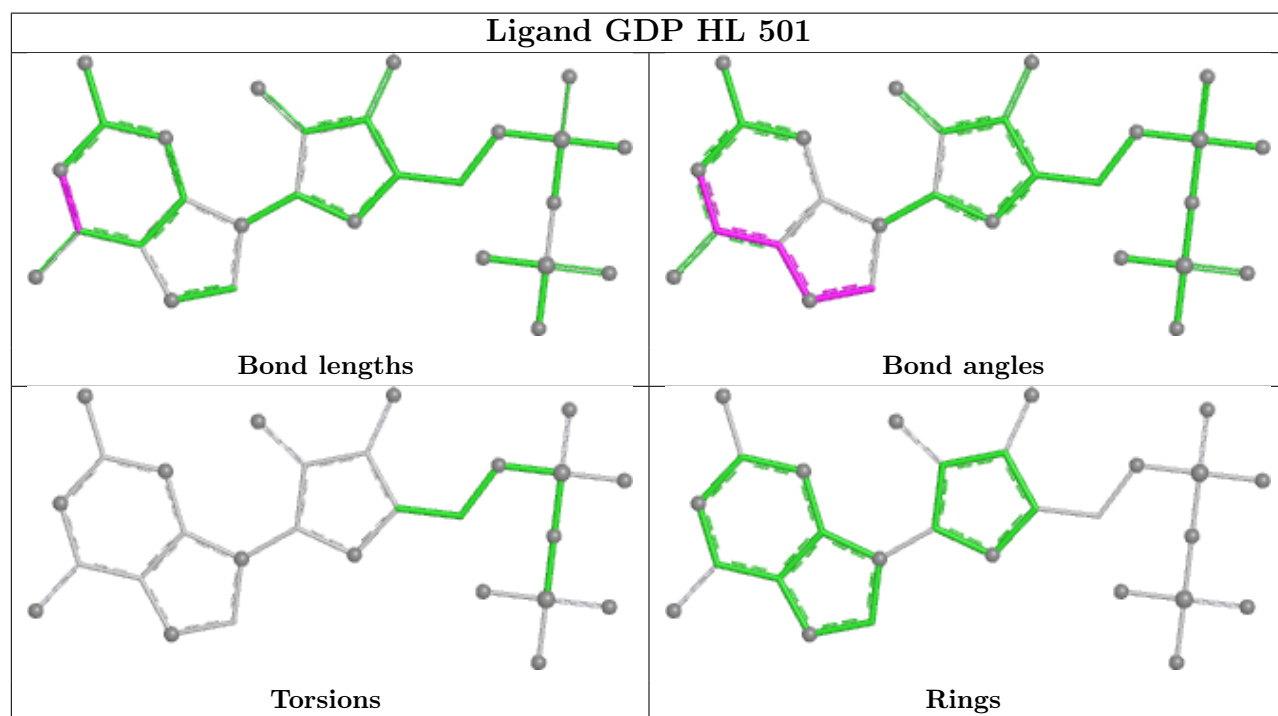
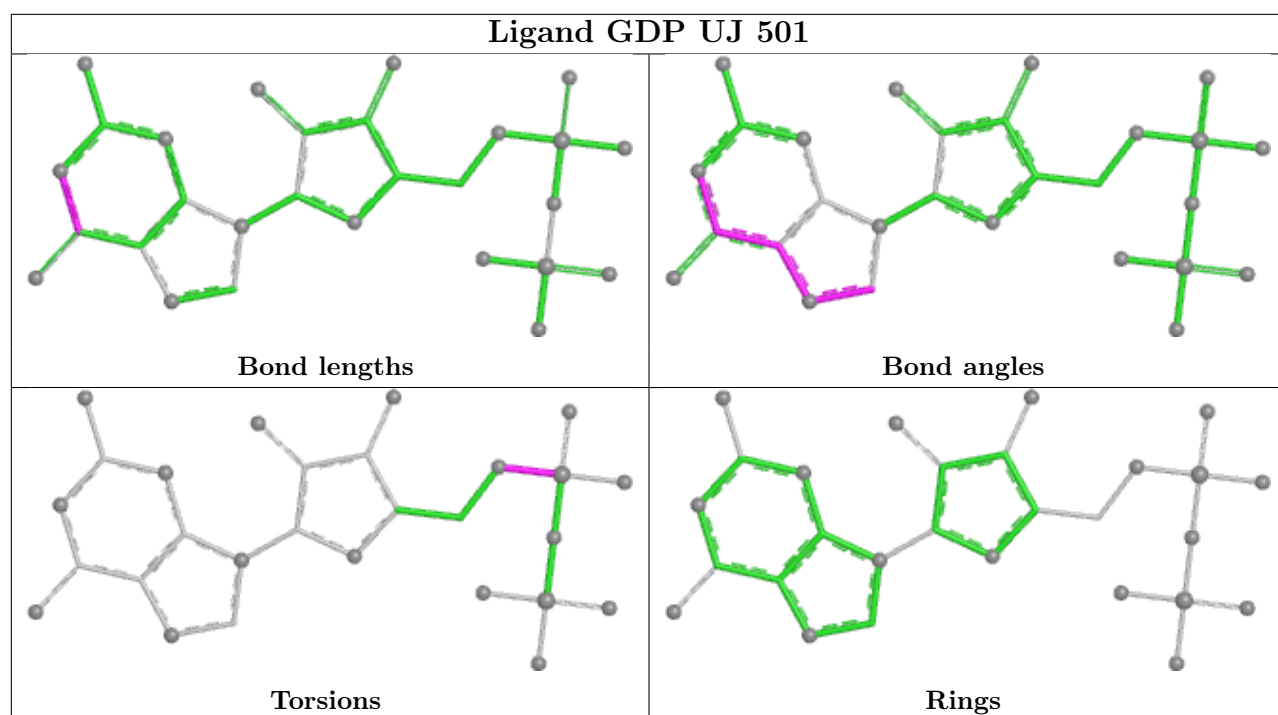


Rings



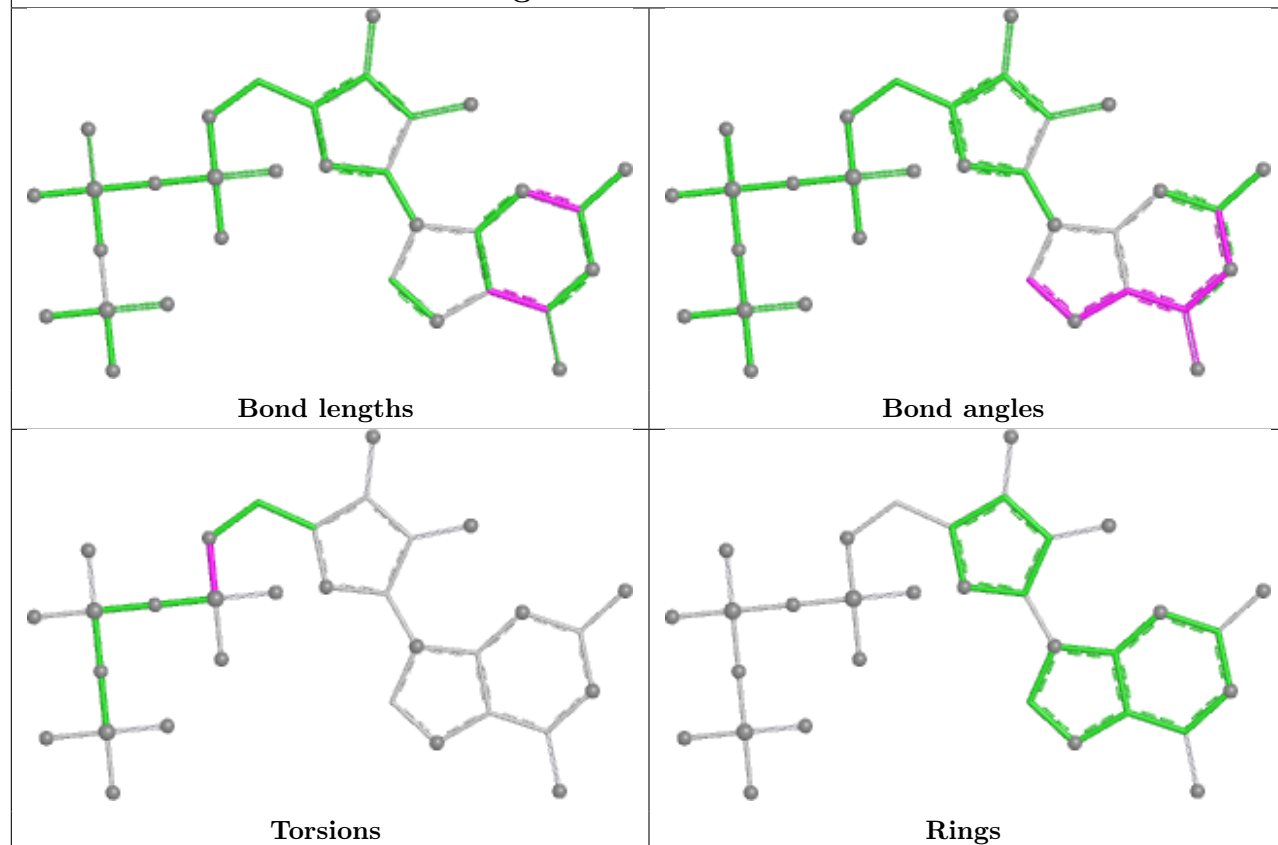




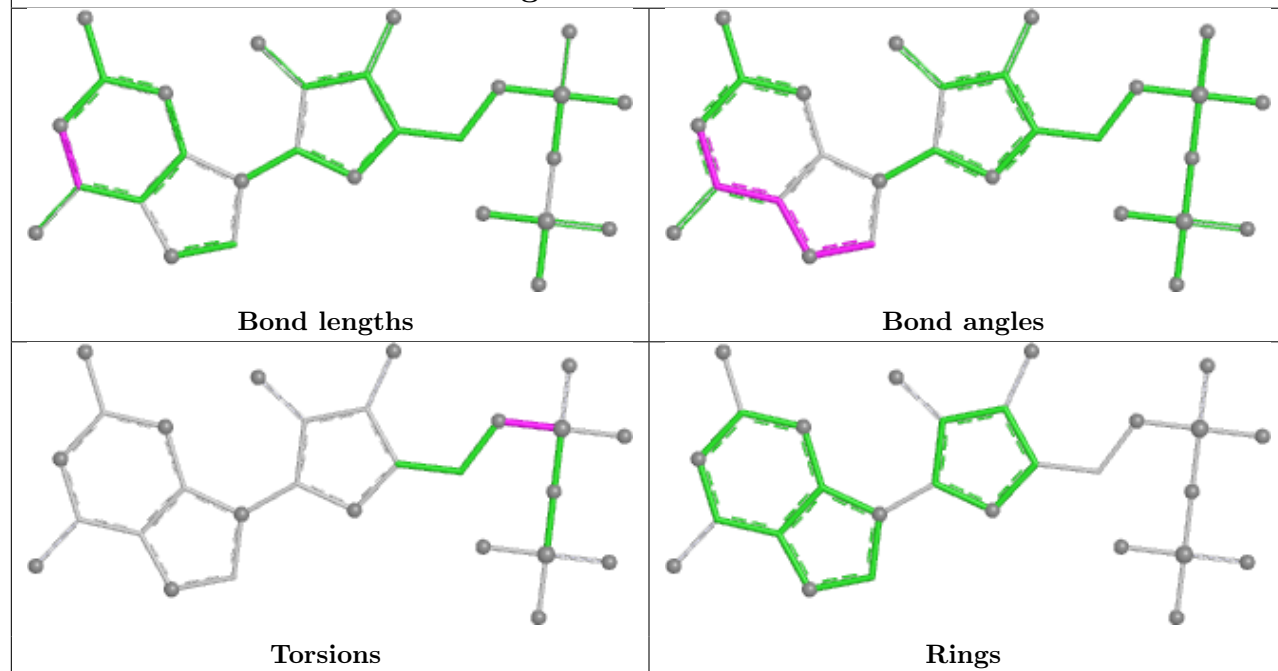




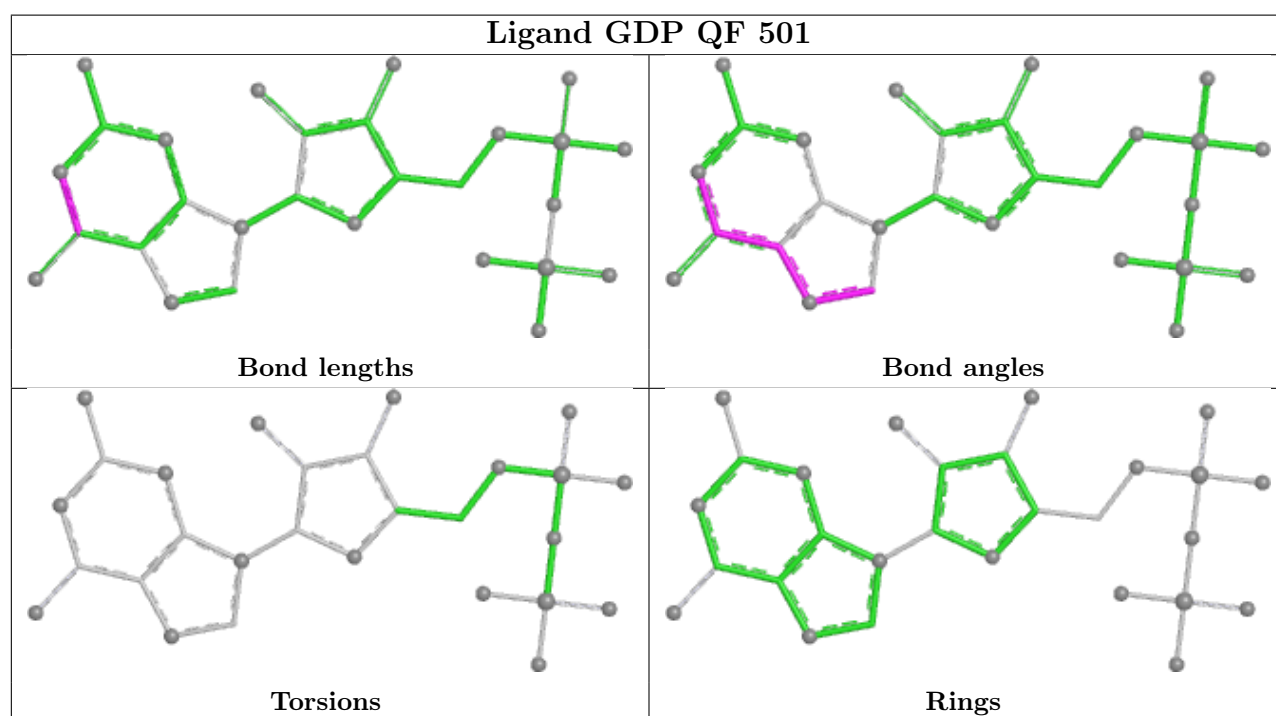
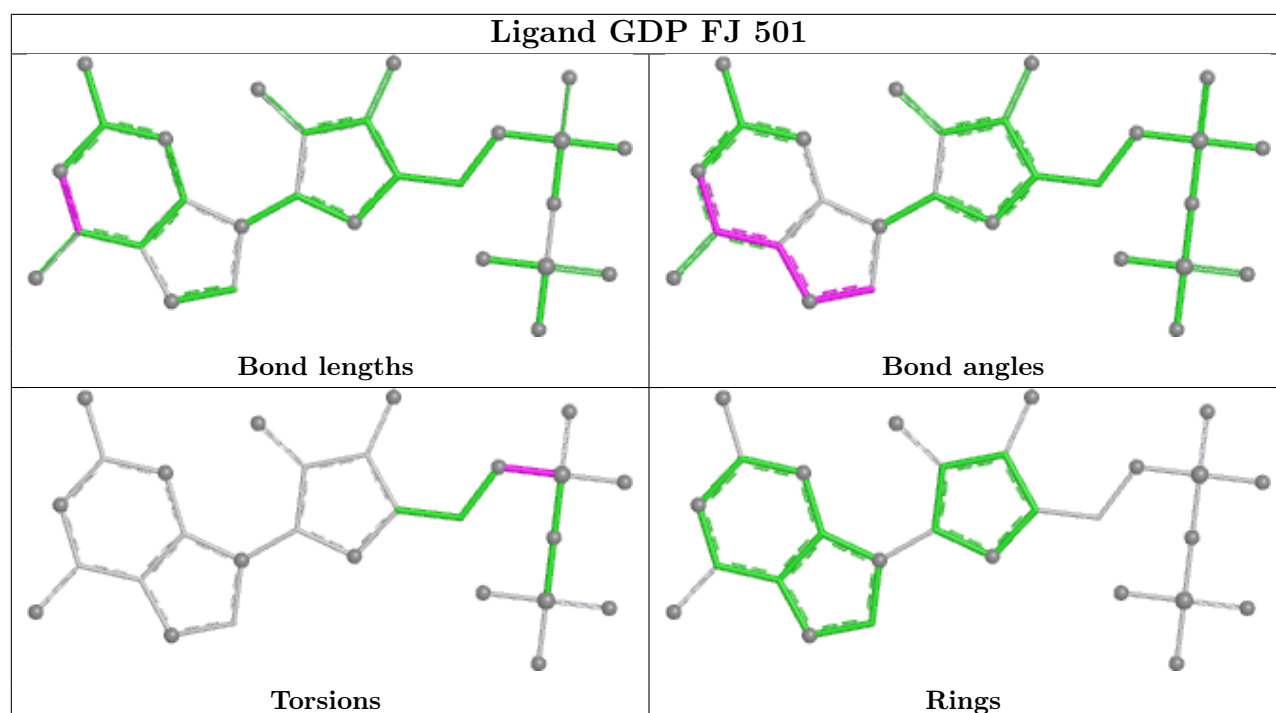
## Ligand GTP OM 501



## Ligand GDP LL 501

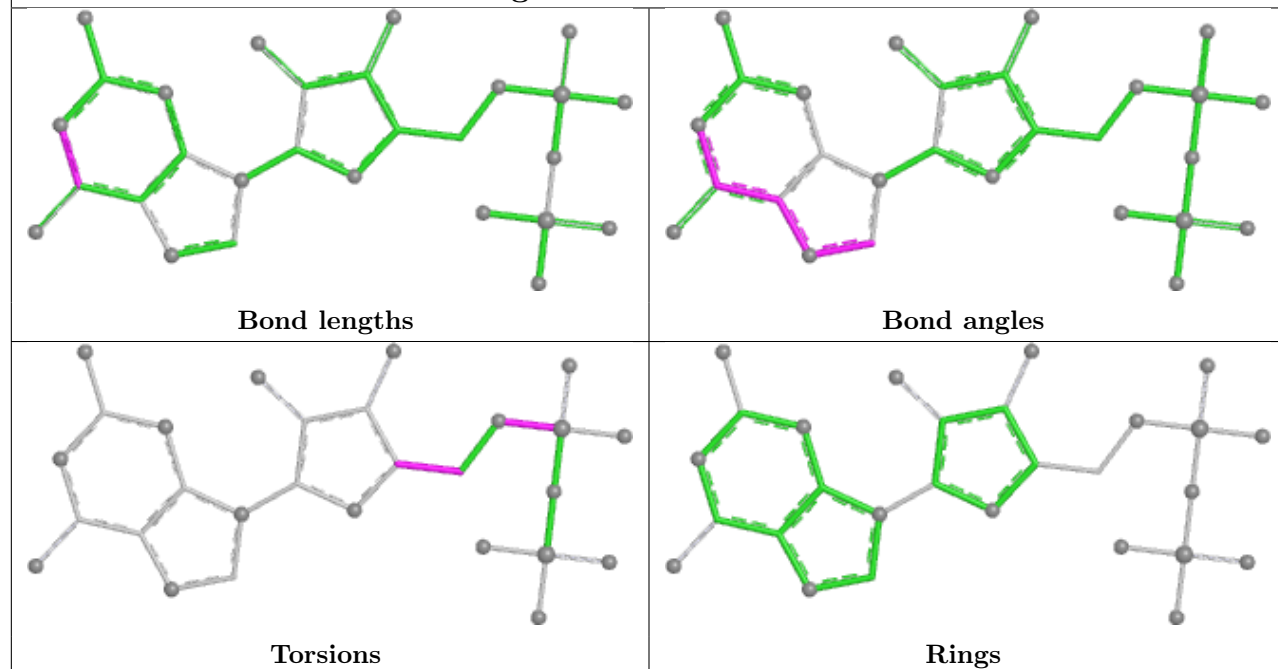




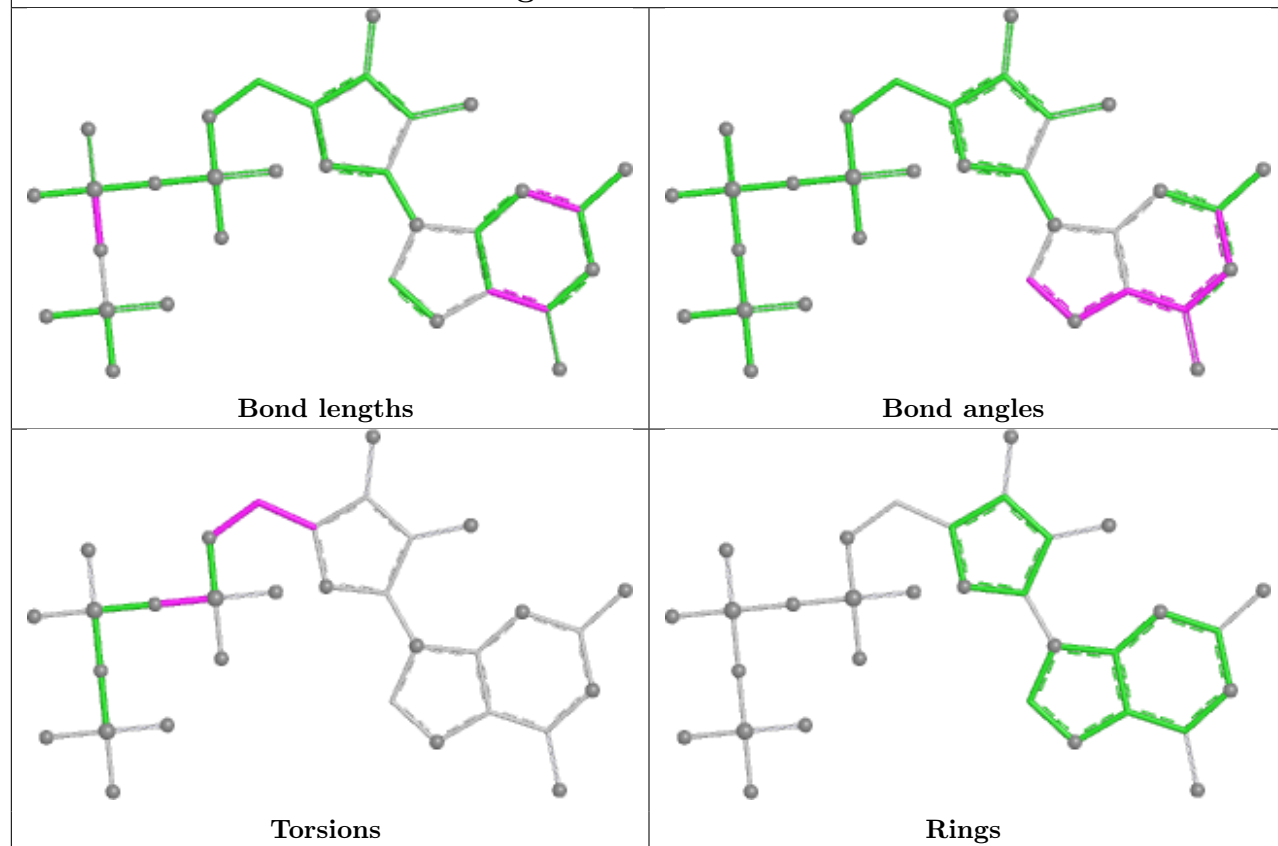




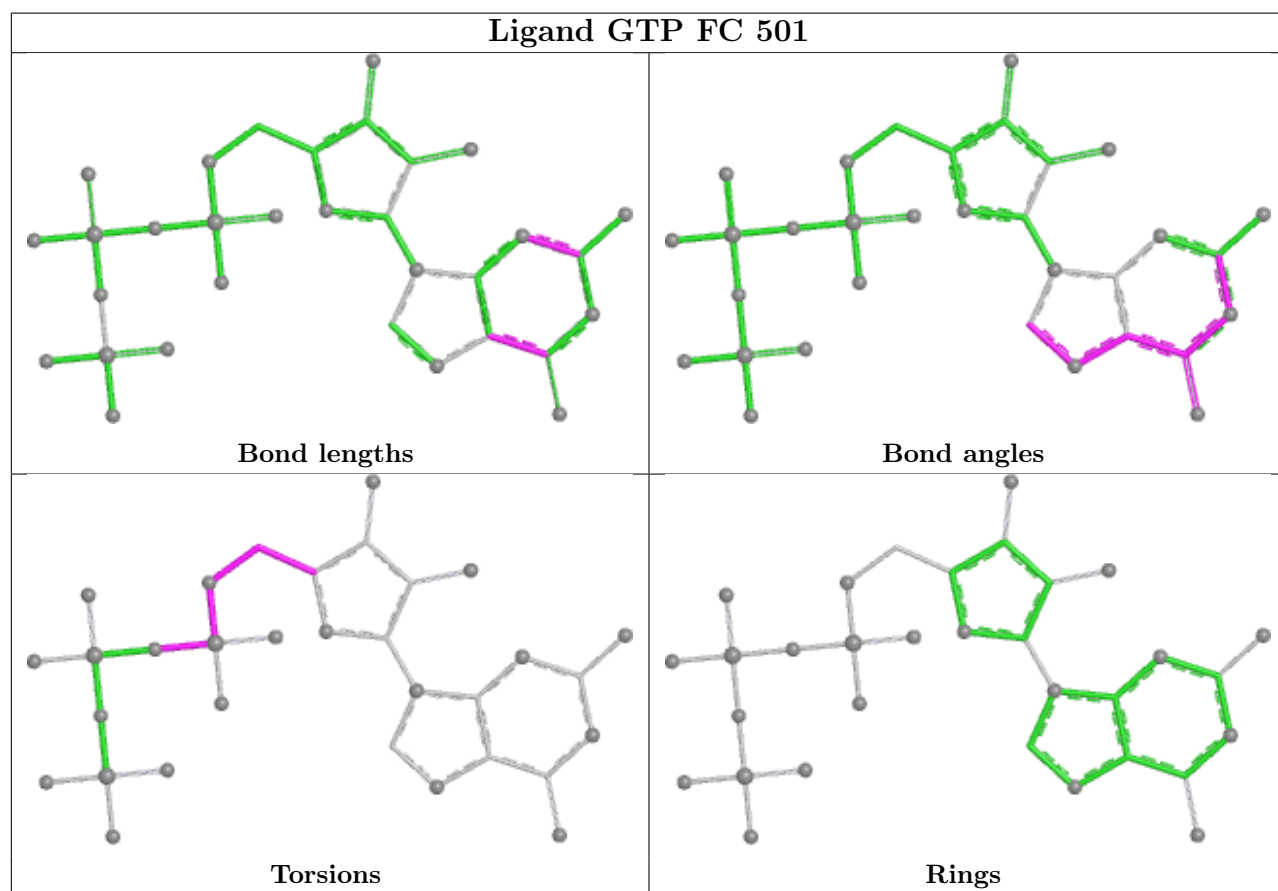
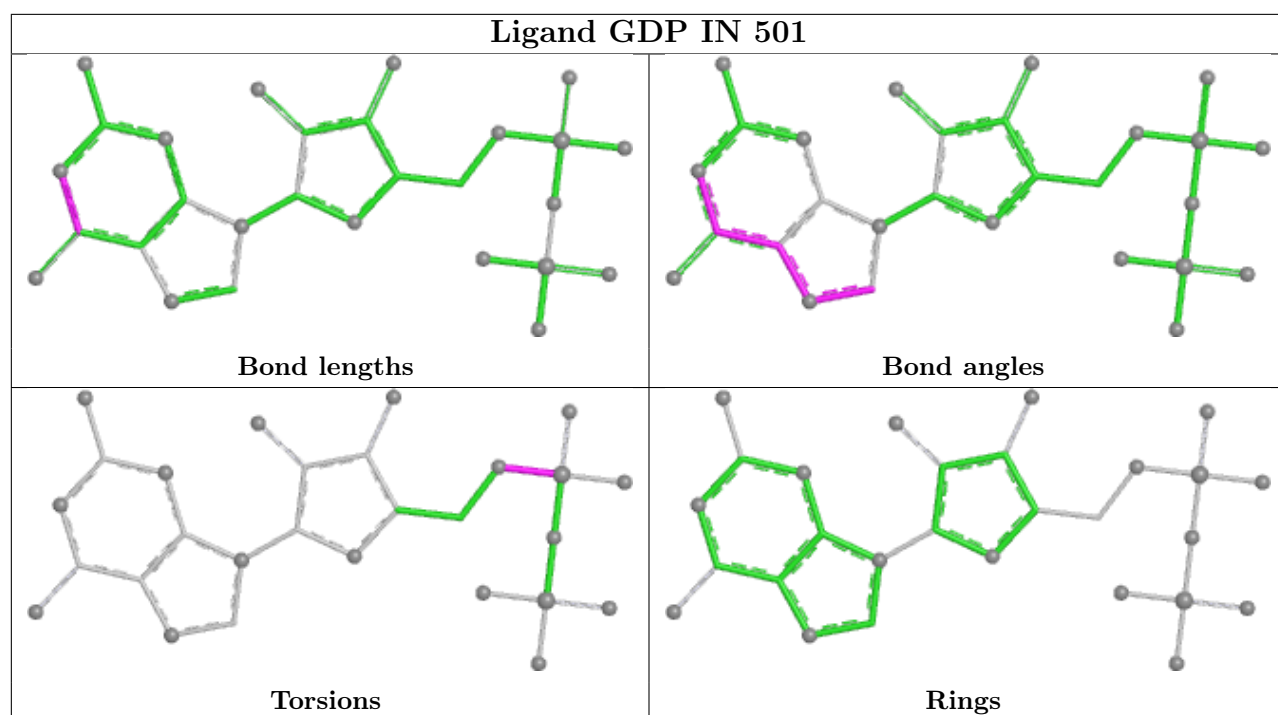
## Ligand GDP MN 501



## Ligand GTP BK 501

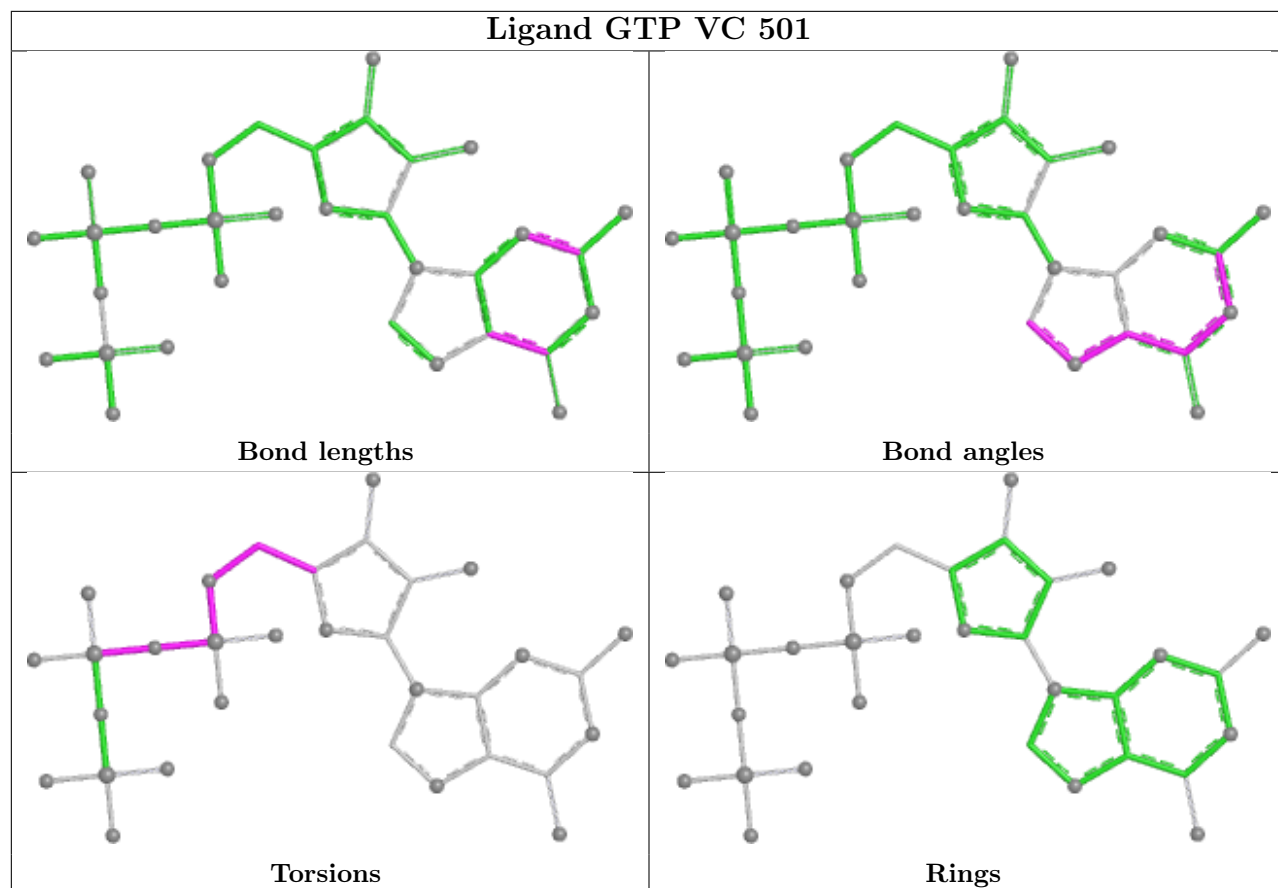




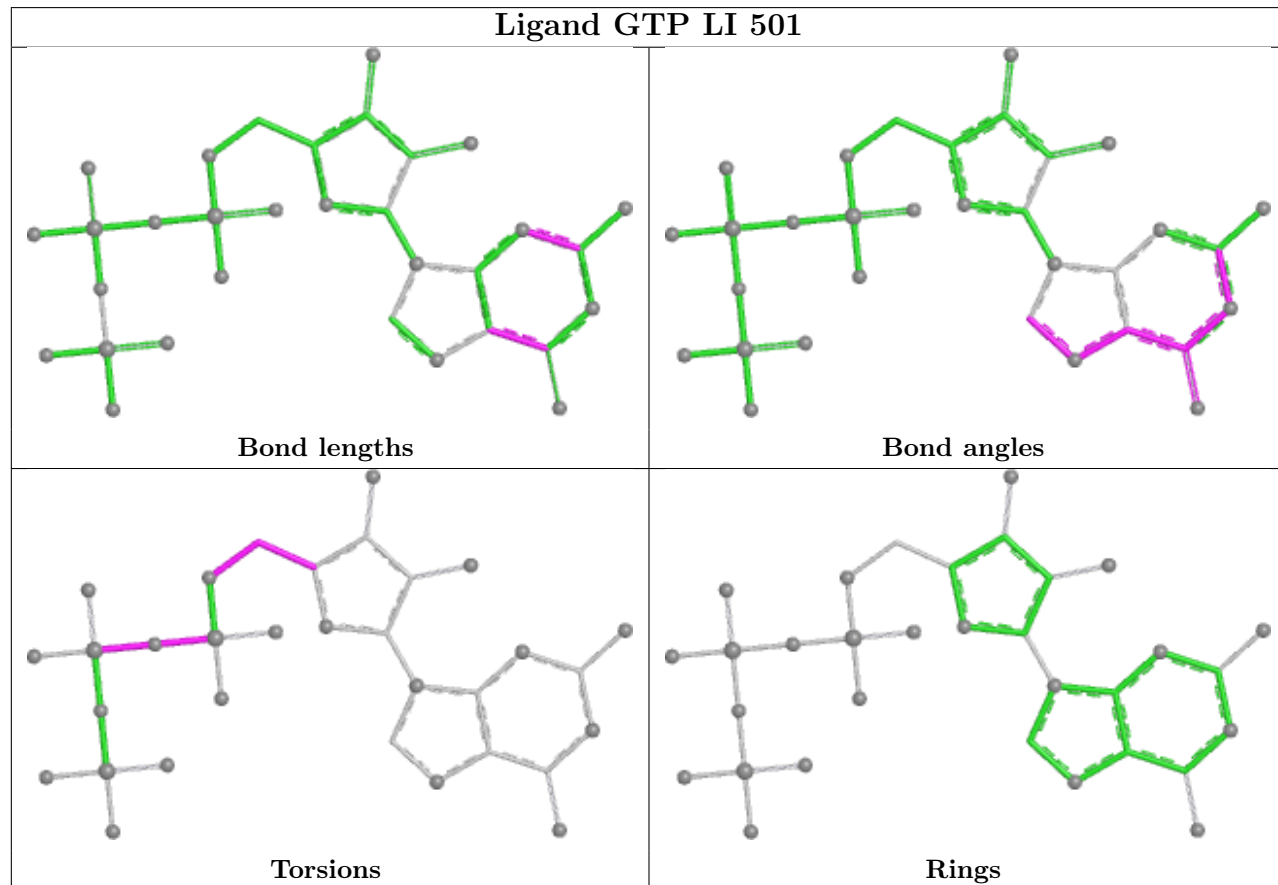




## Ligand GTP VC 501

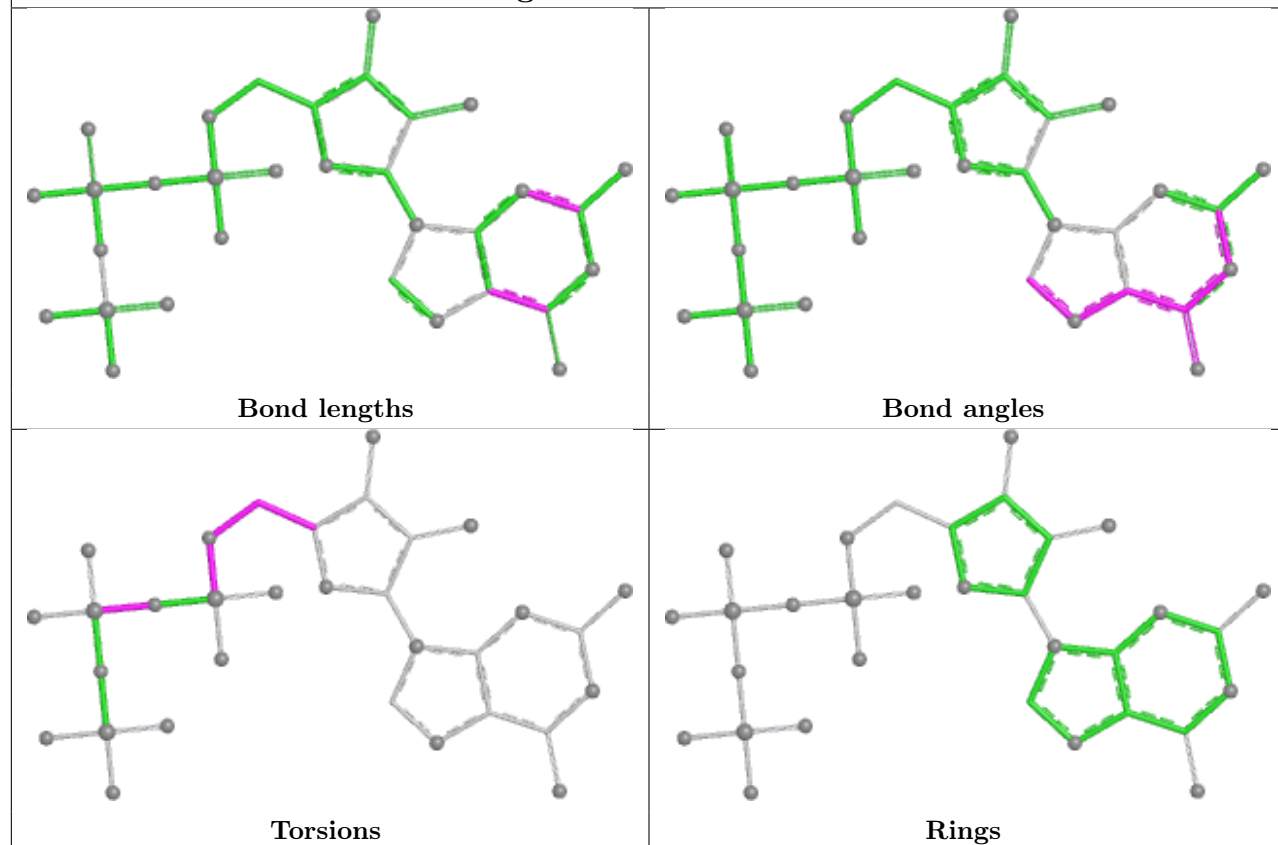


## Ligand GTP LI 501

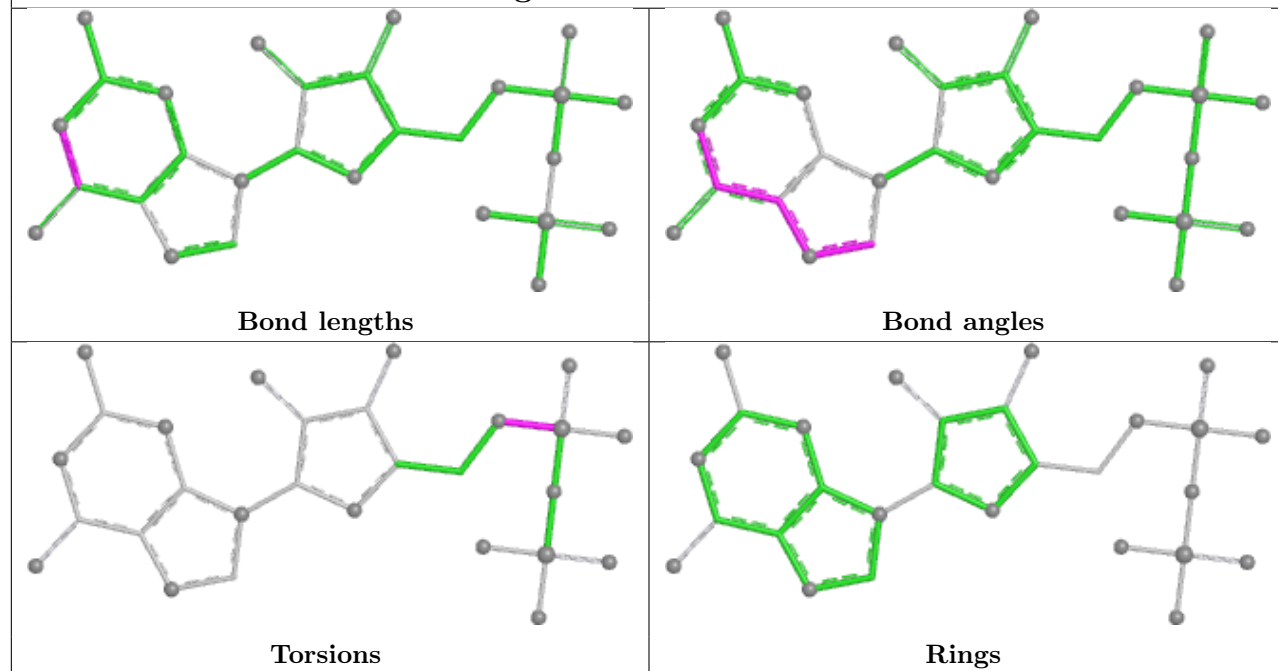




## Ligand GTP SM 501

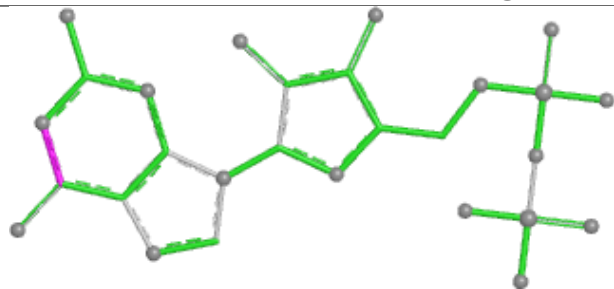


## Ligand GDP NH 501

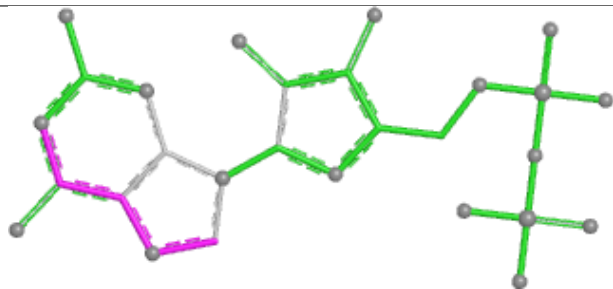




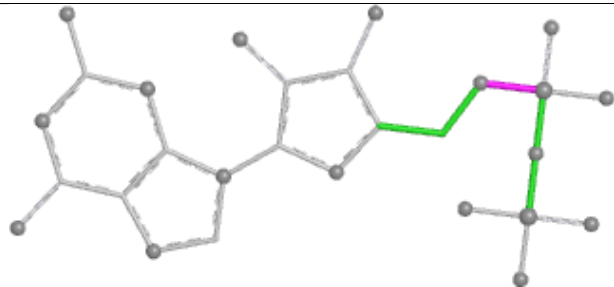
## Ligand GDP CB 501



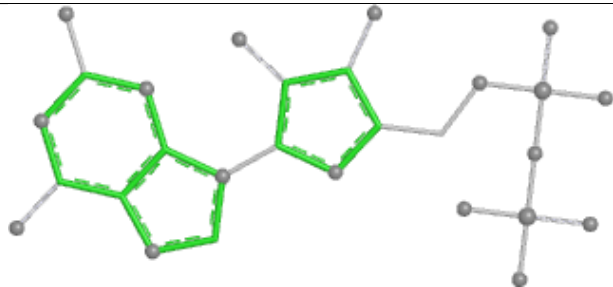
Bond lengths



Bond angles

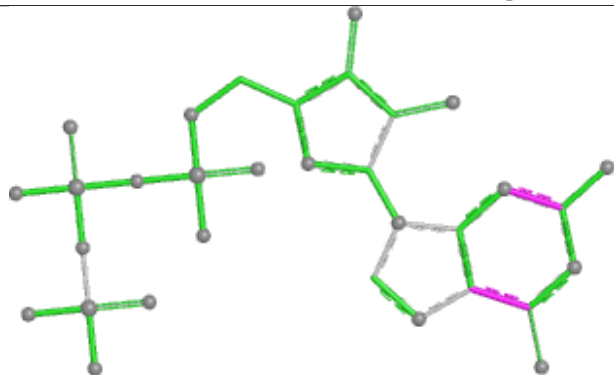


Torsions

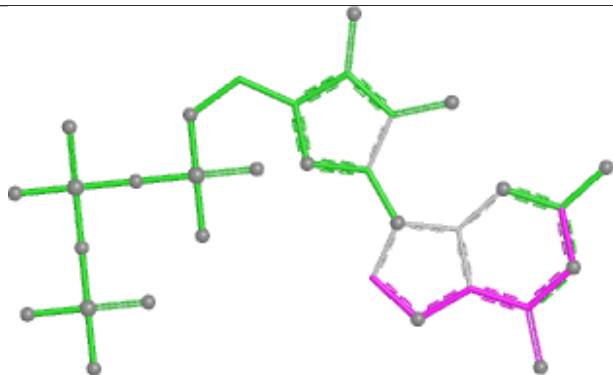


Rings

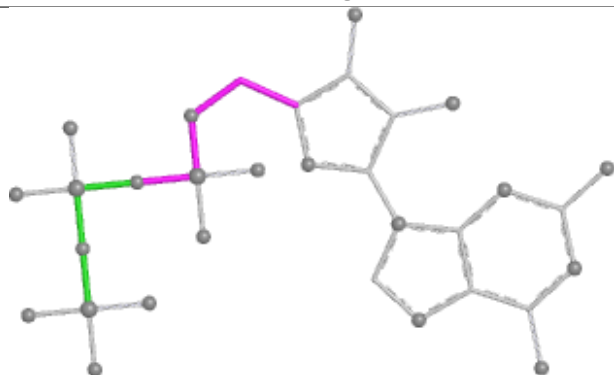
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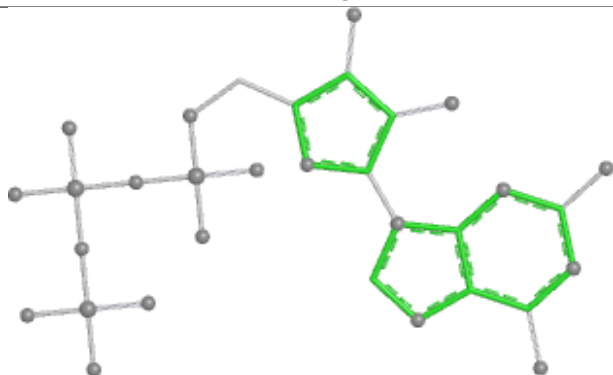
Bond lengths



Bond angles

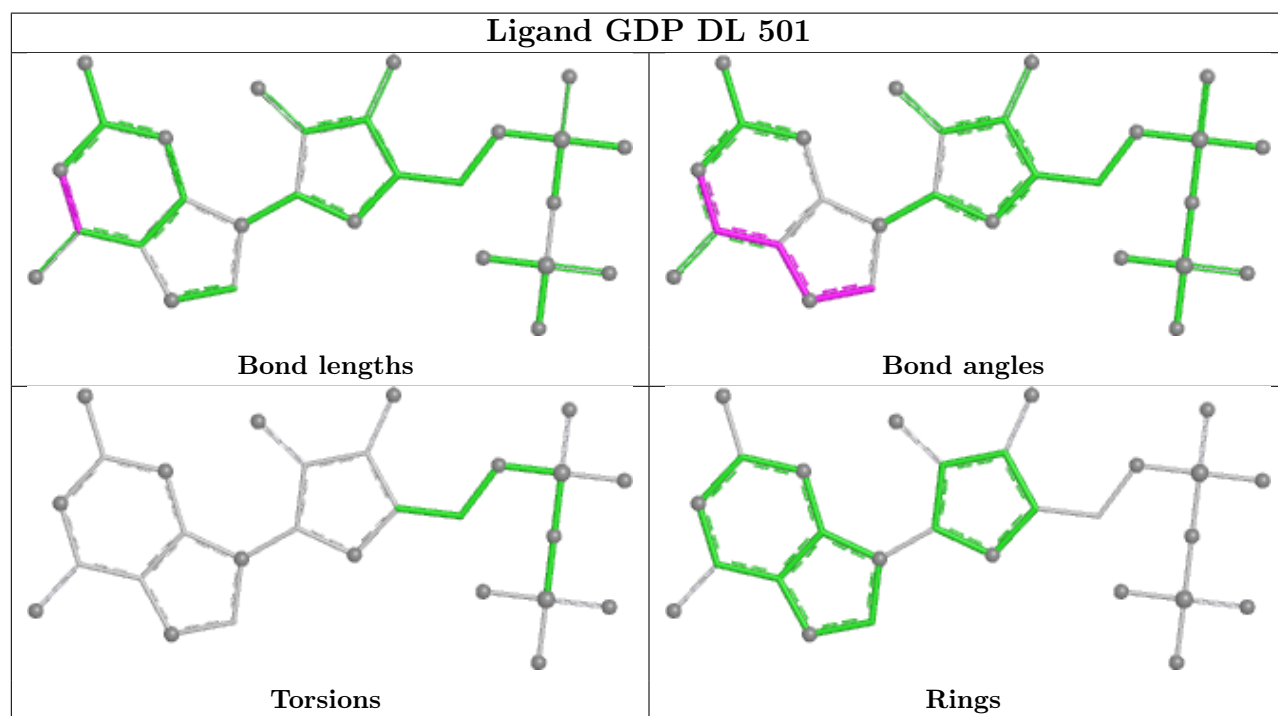
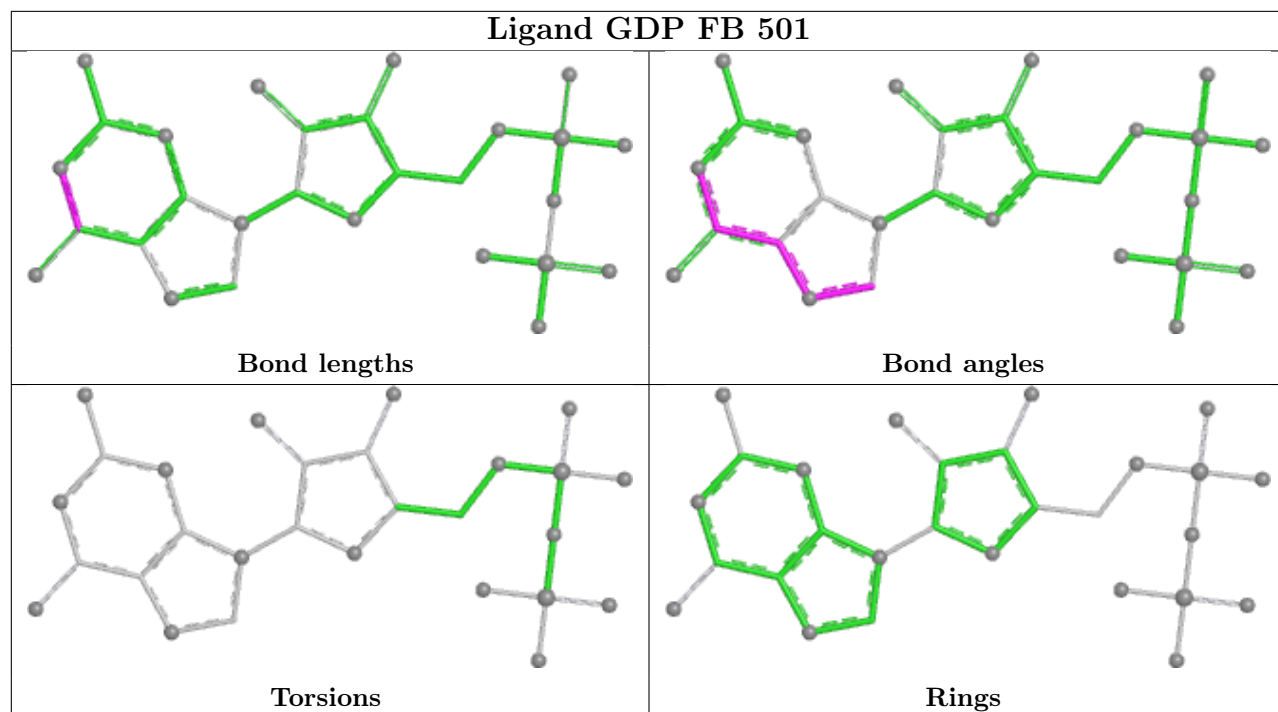


Torsions



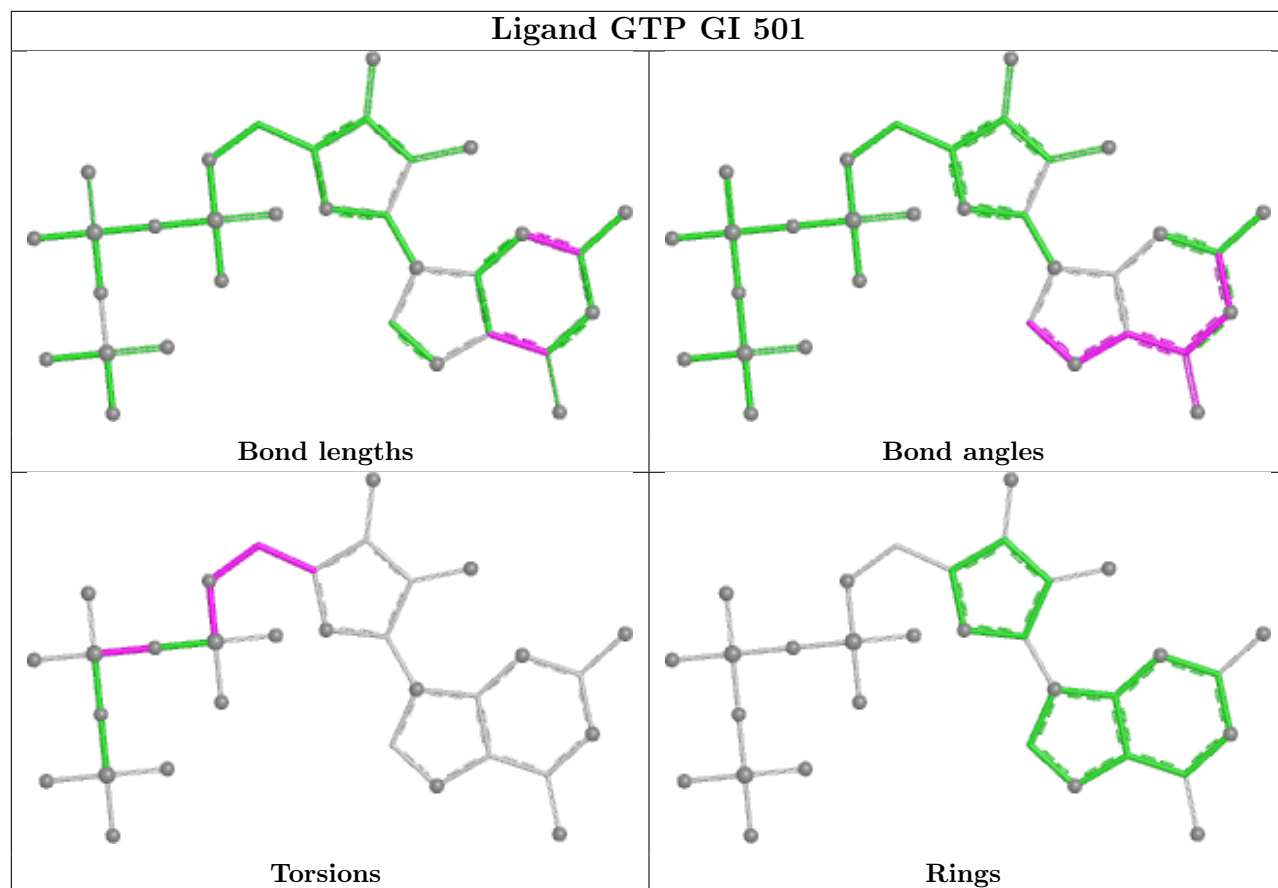
Rings



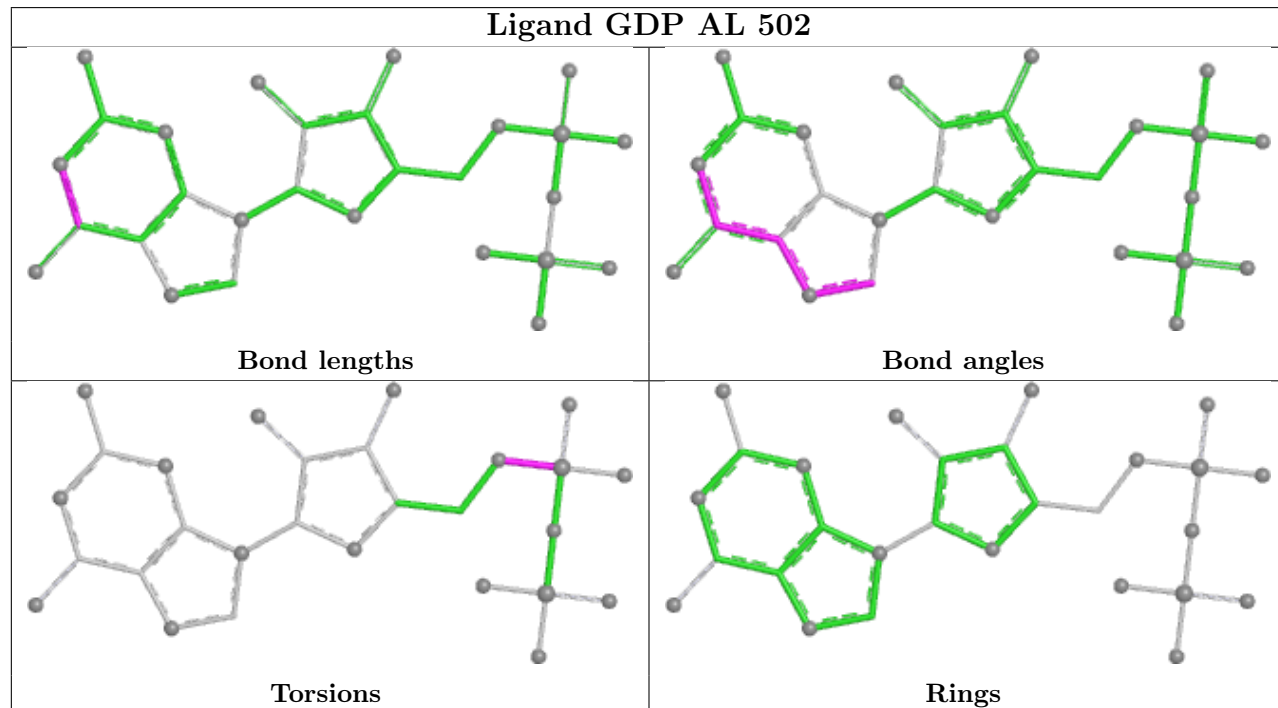




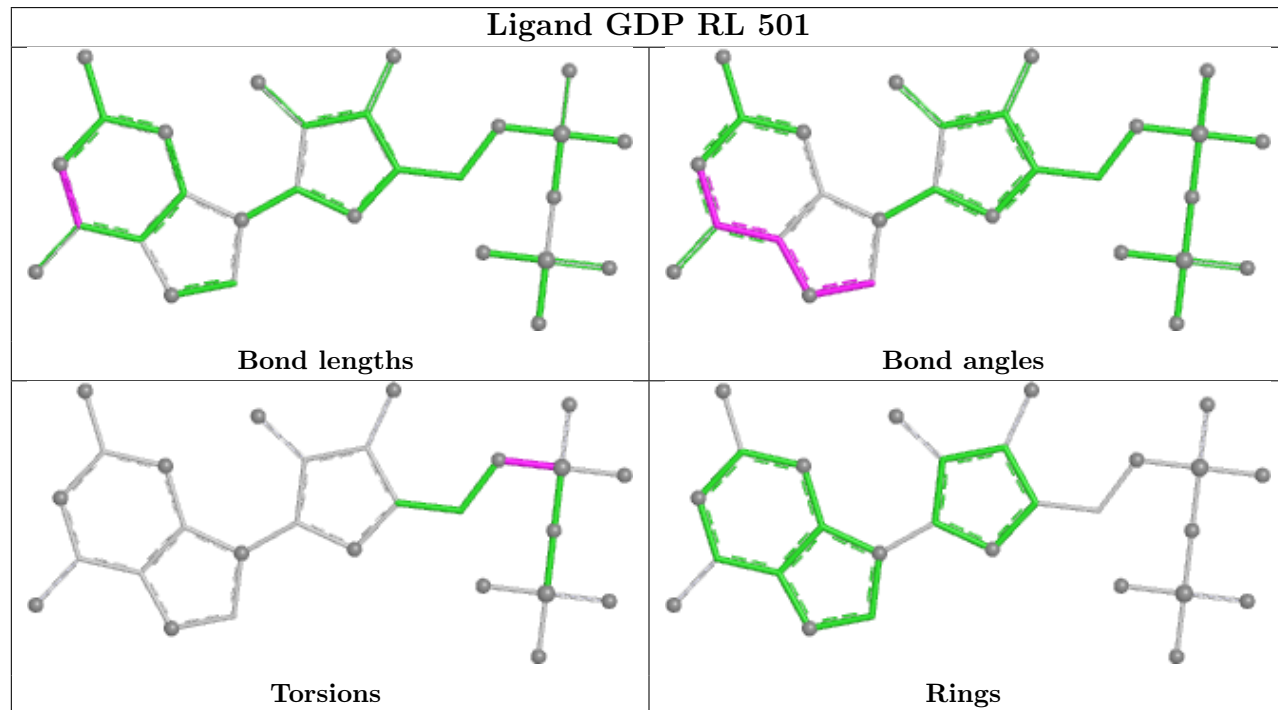
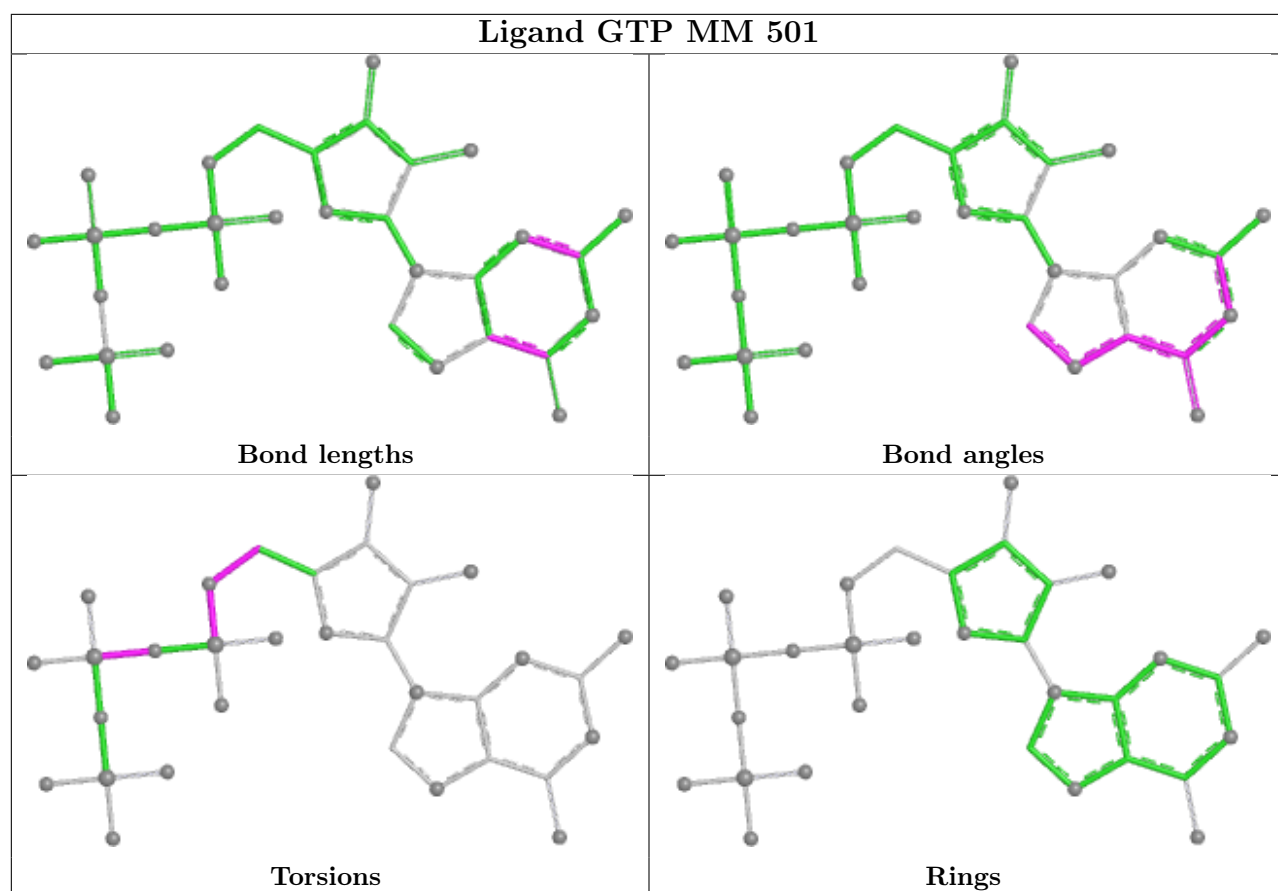
## Ligand GTP GI 501



## Ligand GDP AL 502

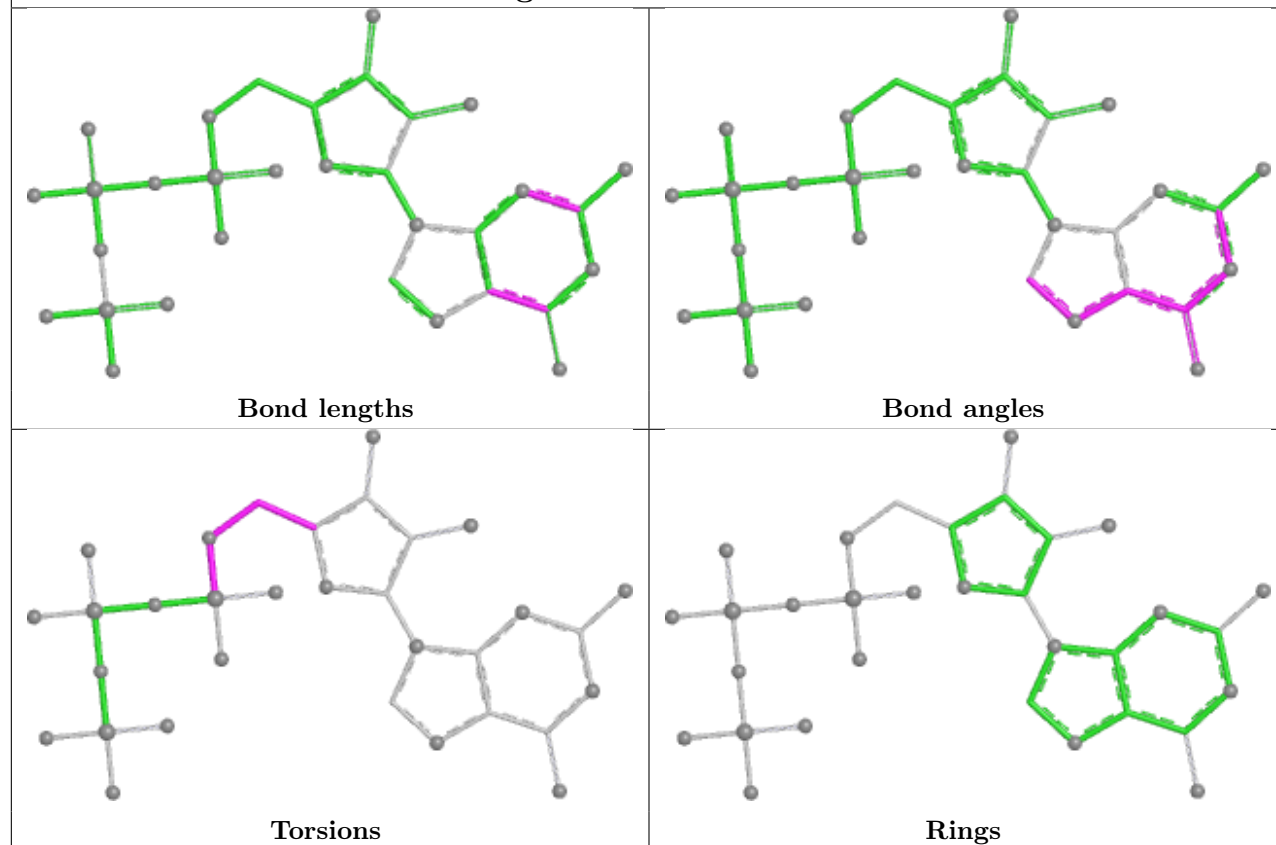




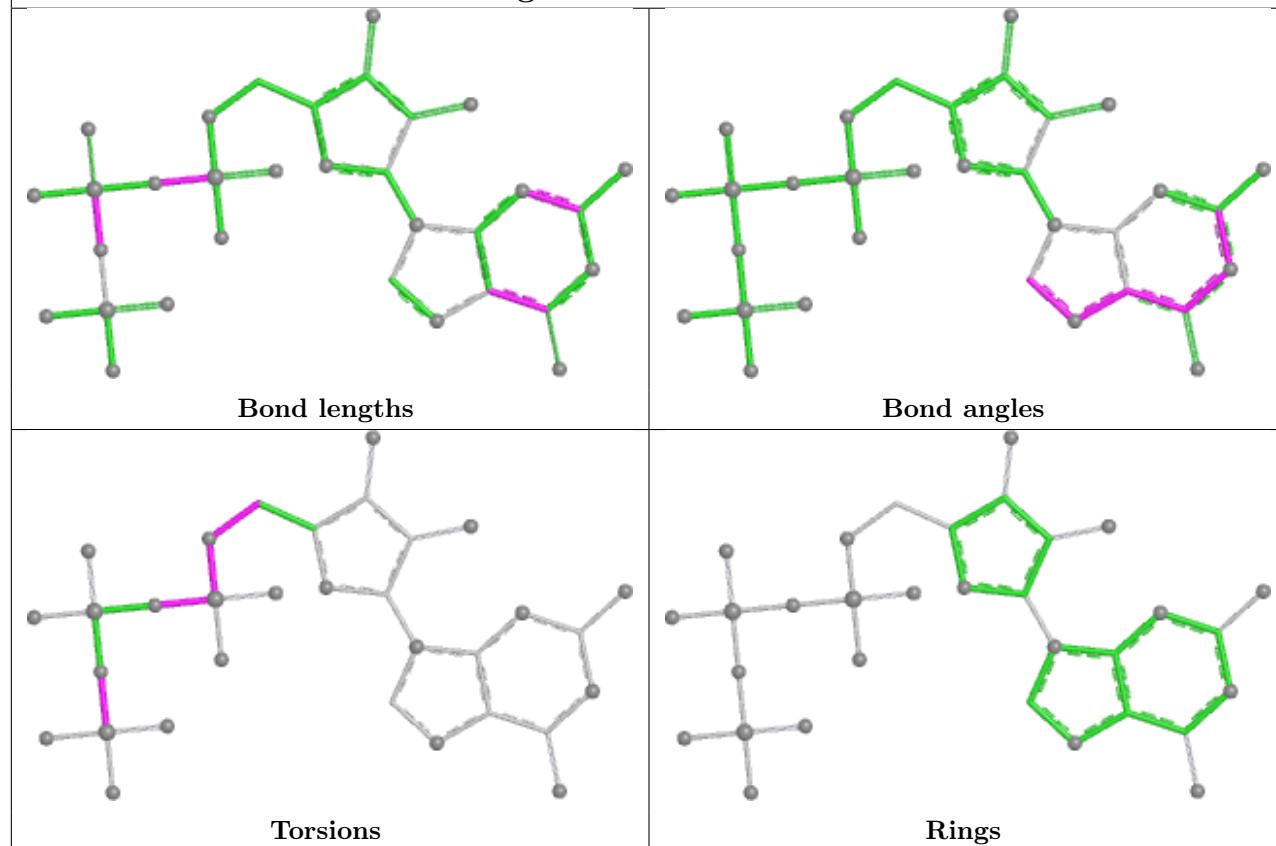




## Ligand GTP DK 501

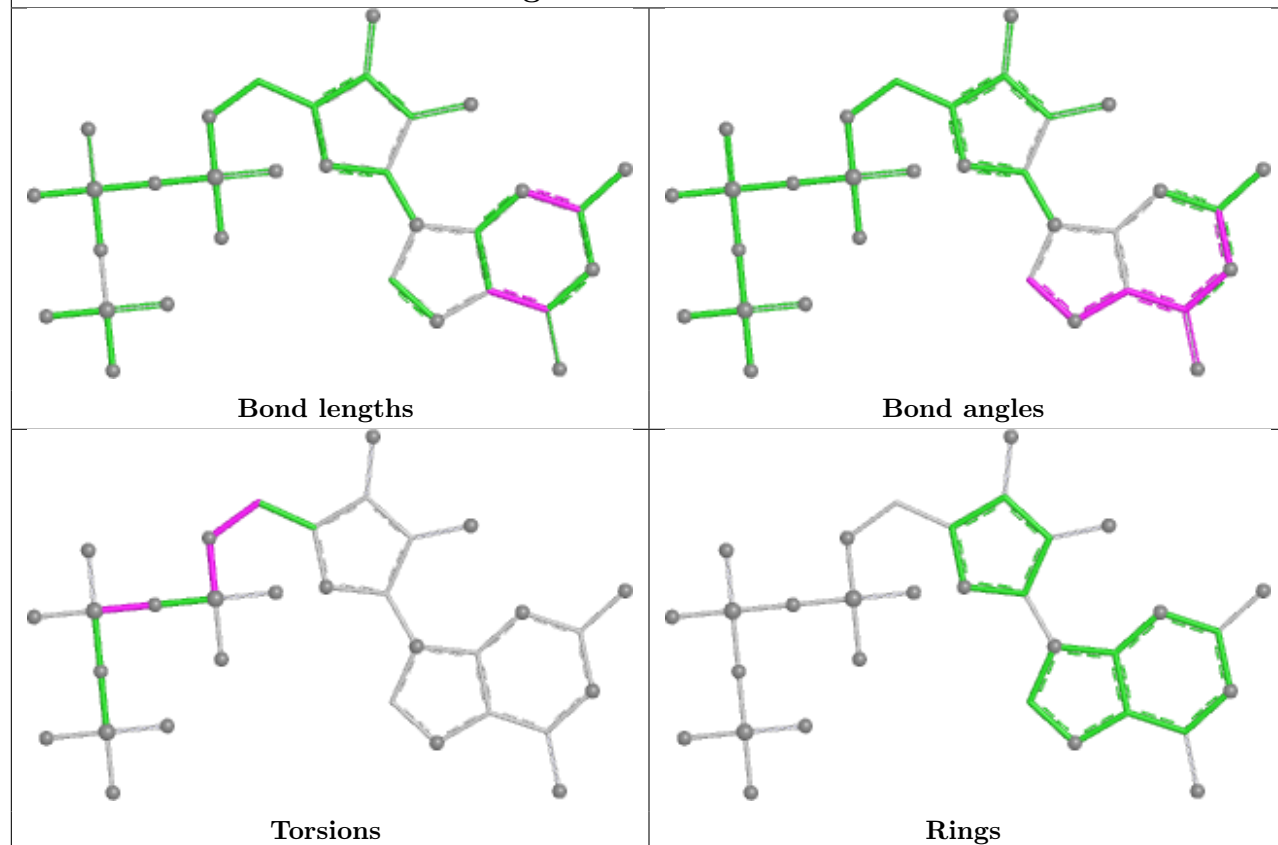


## Ligand GTP JM 501

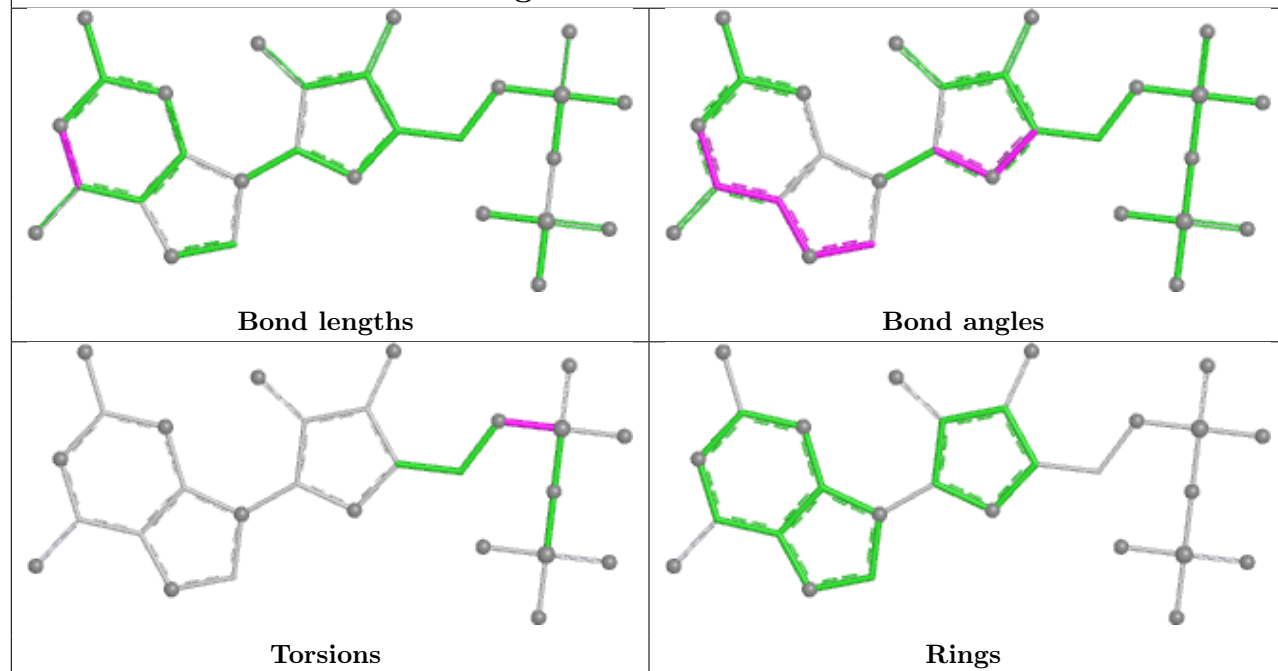




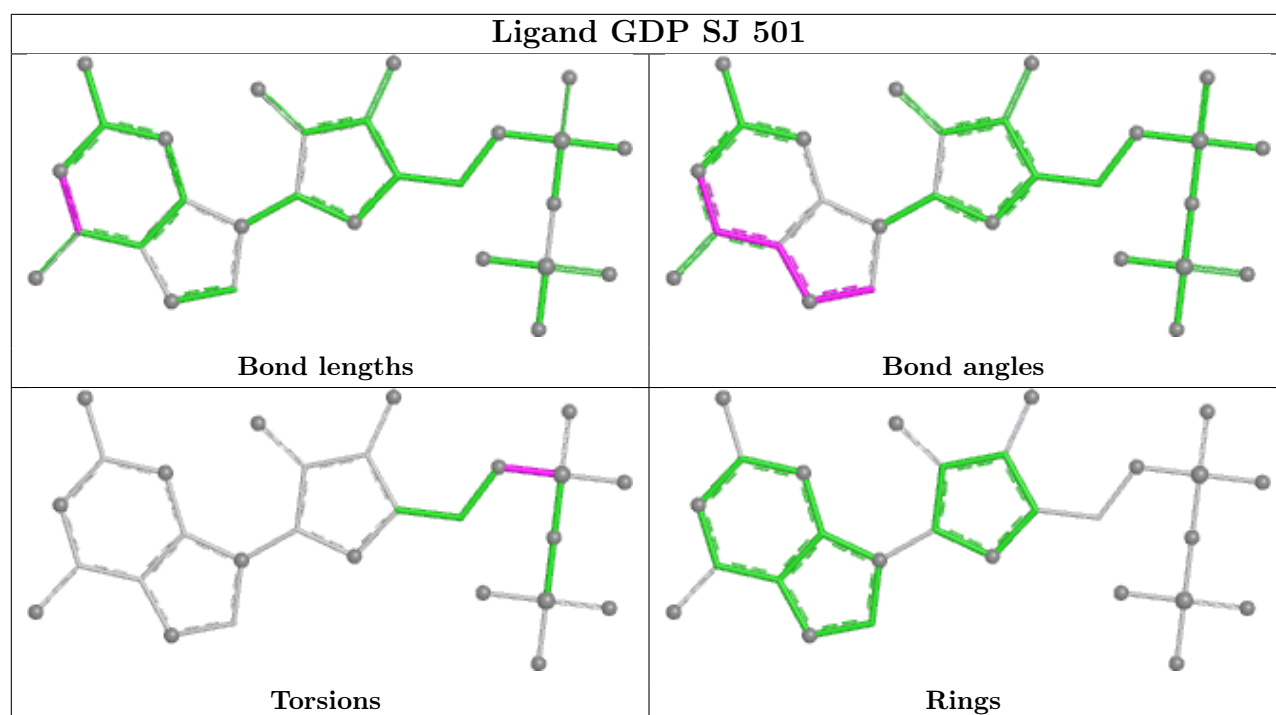
## Ligand GTP KI 501



## Ligand GDP DH 501







## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.



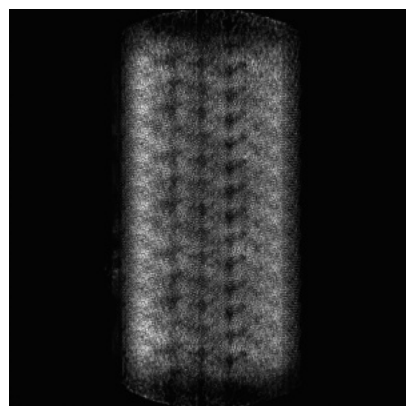
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-29692. These allow visual inspection of the internal detail of the map and identification of artifacts.

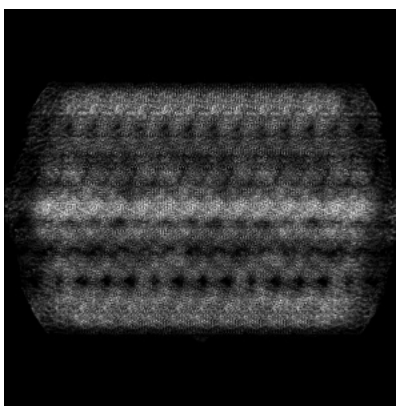
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

### 6.1 Orthogonal projections [i](#)

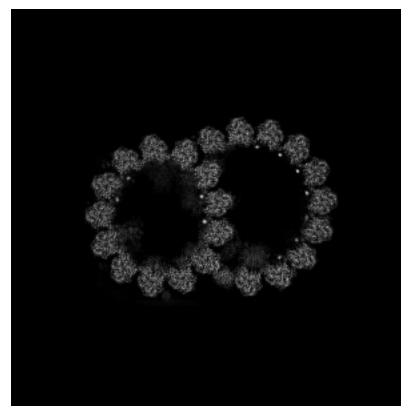
#### 6.1.1 Primary map



X

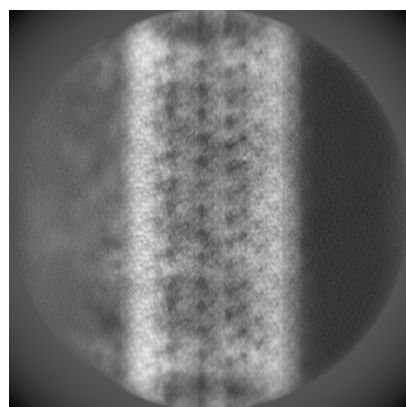


Y

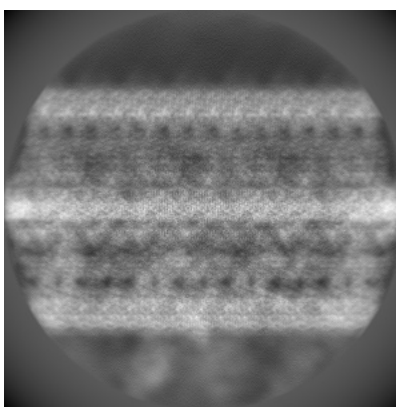


Z

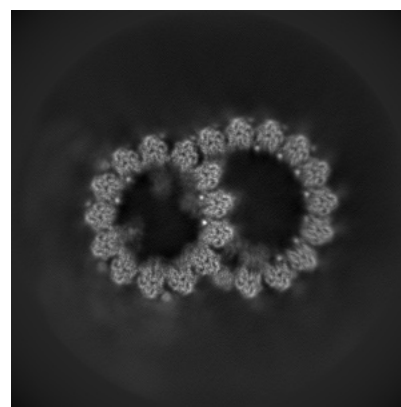
#### 6.1.2 Raw map



X



Y



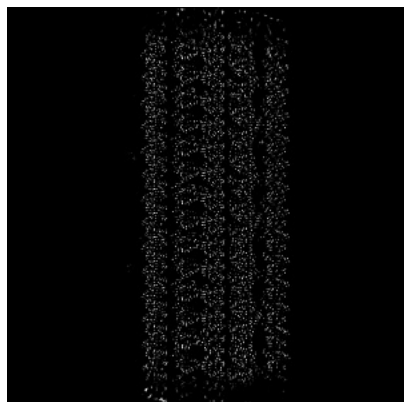
Z

The images above show the map projected in three orthogonal directions.



## 6.2 Central slices [i](#)

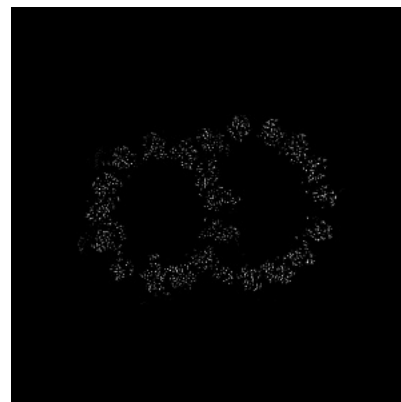
### 6.2.1 Primary map



X Index: 256

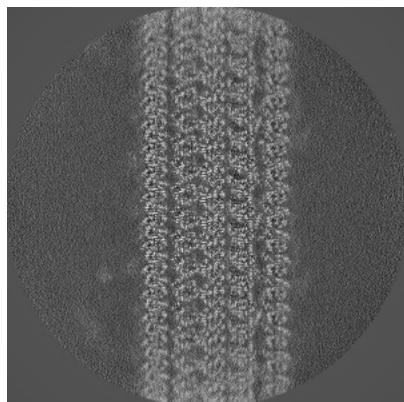


Y Index: 256

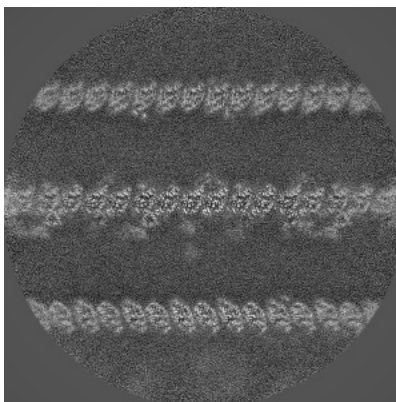


Z Index: 256

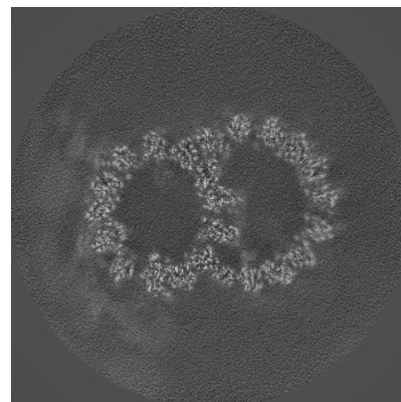
### 6.2.2 Raw map



X Index: 256



Y Index: 256



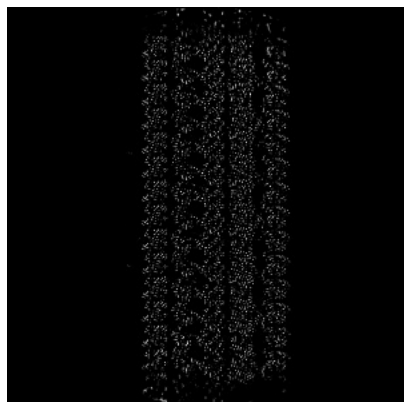
Z Index: 256

The images above show central slices of the map in three orthogonal directions.

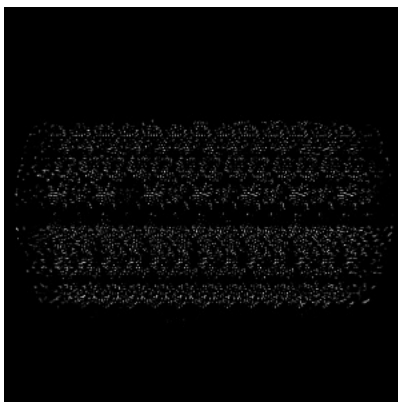


## 6.3 Largest variance slices [i](#)

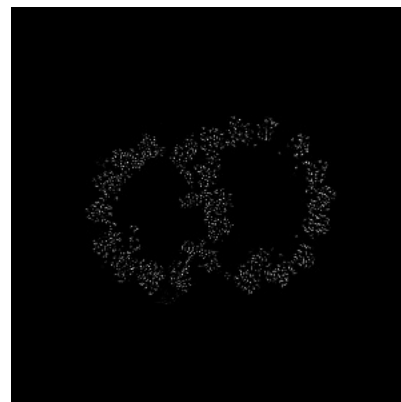
### 6.3.1 Primary map



X Index: 255

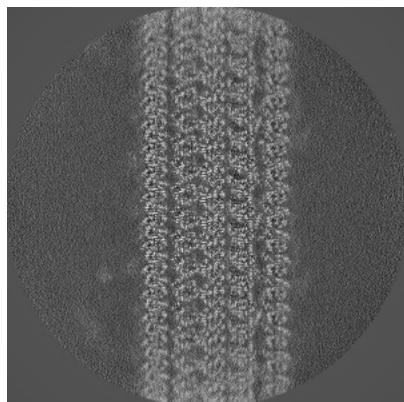


Y Index: 172

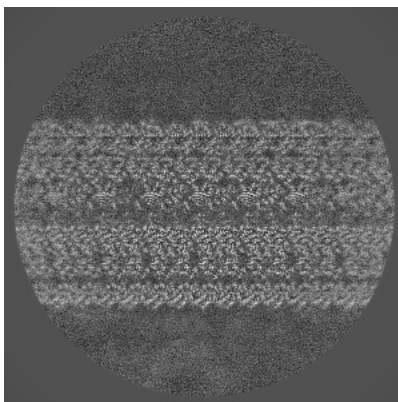


Z Index: 421

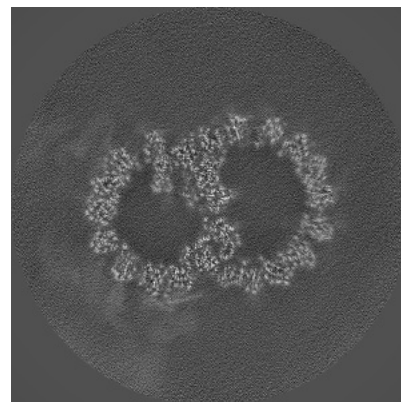
### 6.3.2 Raw map



X Index: 256



Y Index: 172



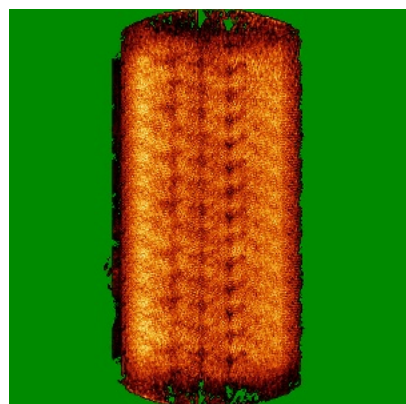
Z Index: 228

The images above show the largest variance slices of the map in three orthogonal directions.

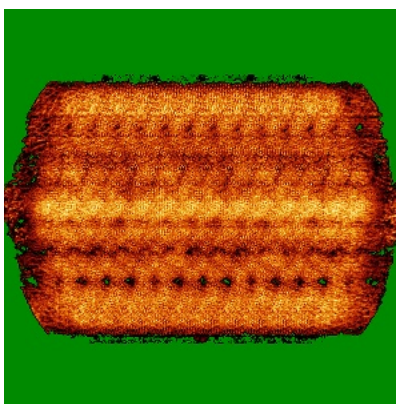


## 6.4 Orthogonal standard-deviation projections (False-color) [i](#)

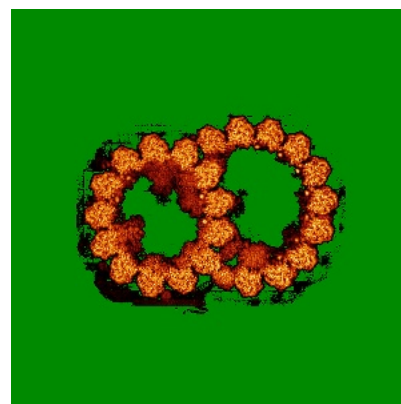
### 6.4.1 Primary map



X

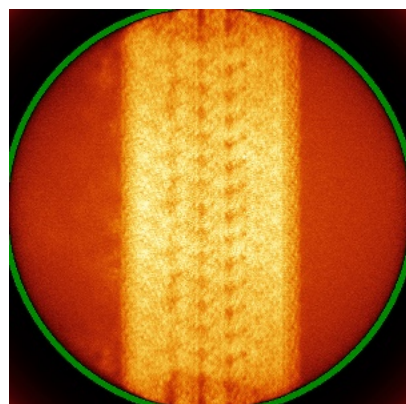


Y

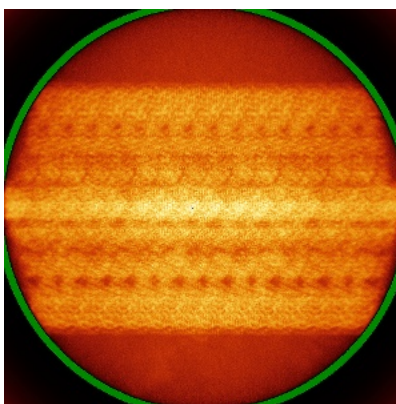


Z

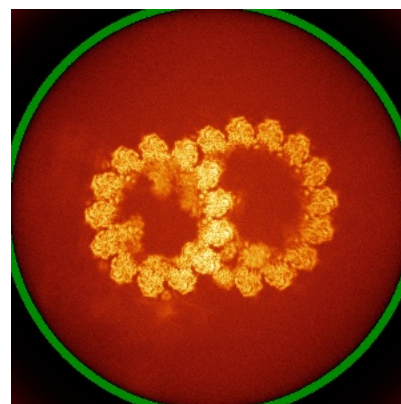
### 6.4.2 Raw map



X



Y



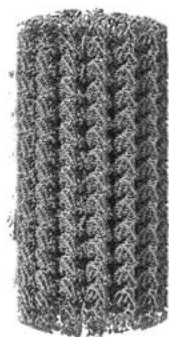
Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

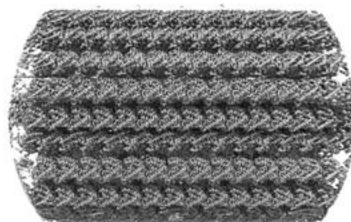


## 6.5 Orthogonal surface views [i](#)

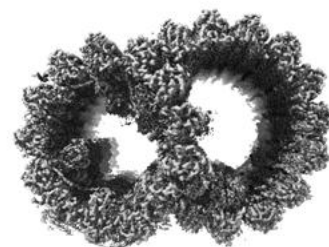
### 6.5.1 Primary map



X



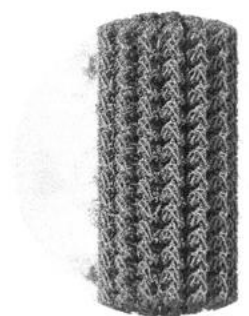
Y



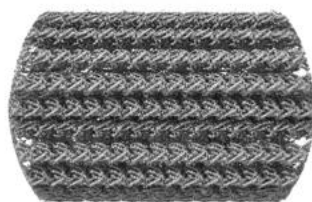
Z

The images above show the 3D surface view of the map at the recommended contour level 0.12. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

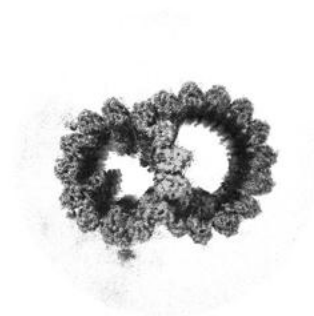
### 6.5.2 Raw map



X



Y



Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.



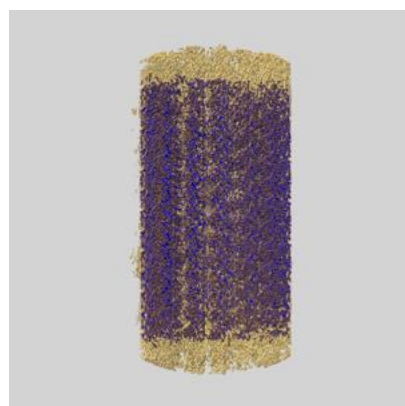
## 6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

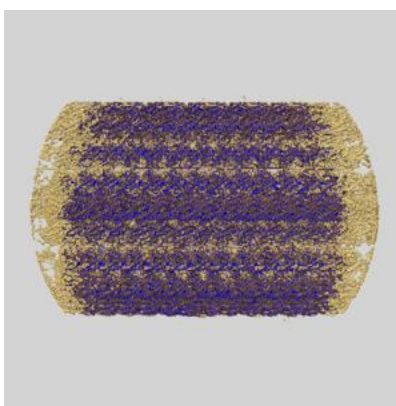
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

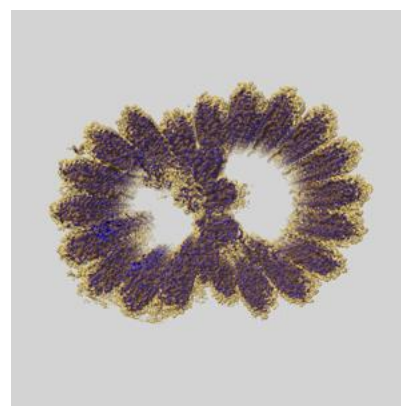
### 6.6.1 emd\_29692\_msk\_1.map [i](#)



X



Y



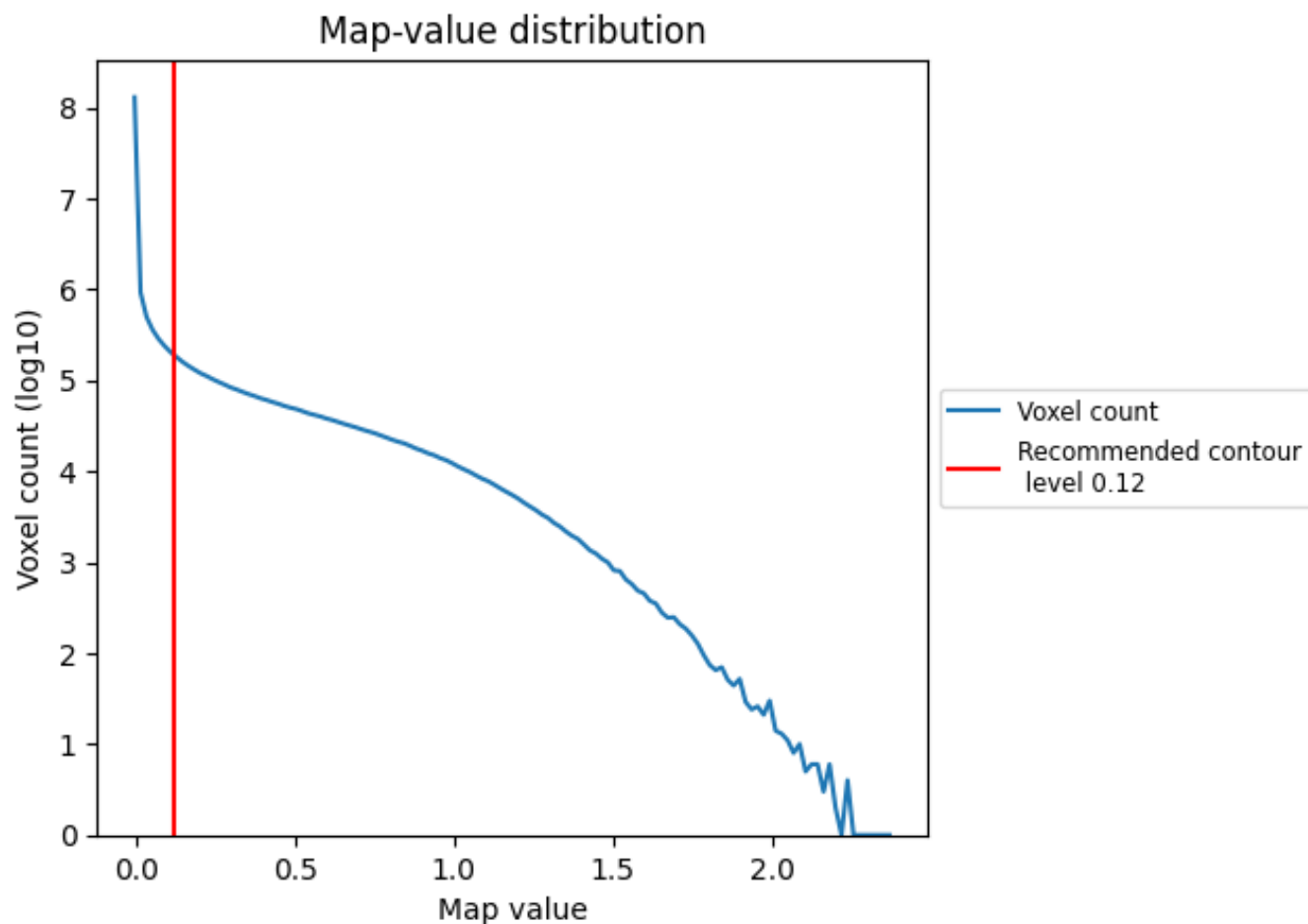
Z



## 7 Map analysis [i](#)

This section contains the results of statistical analysis of the map.

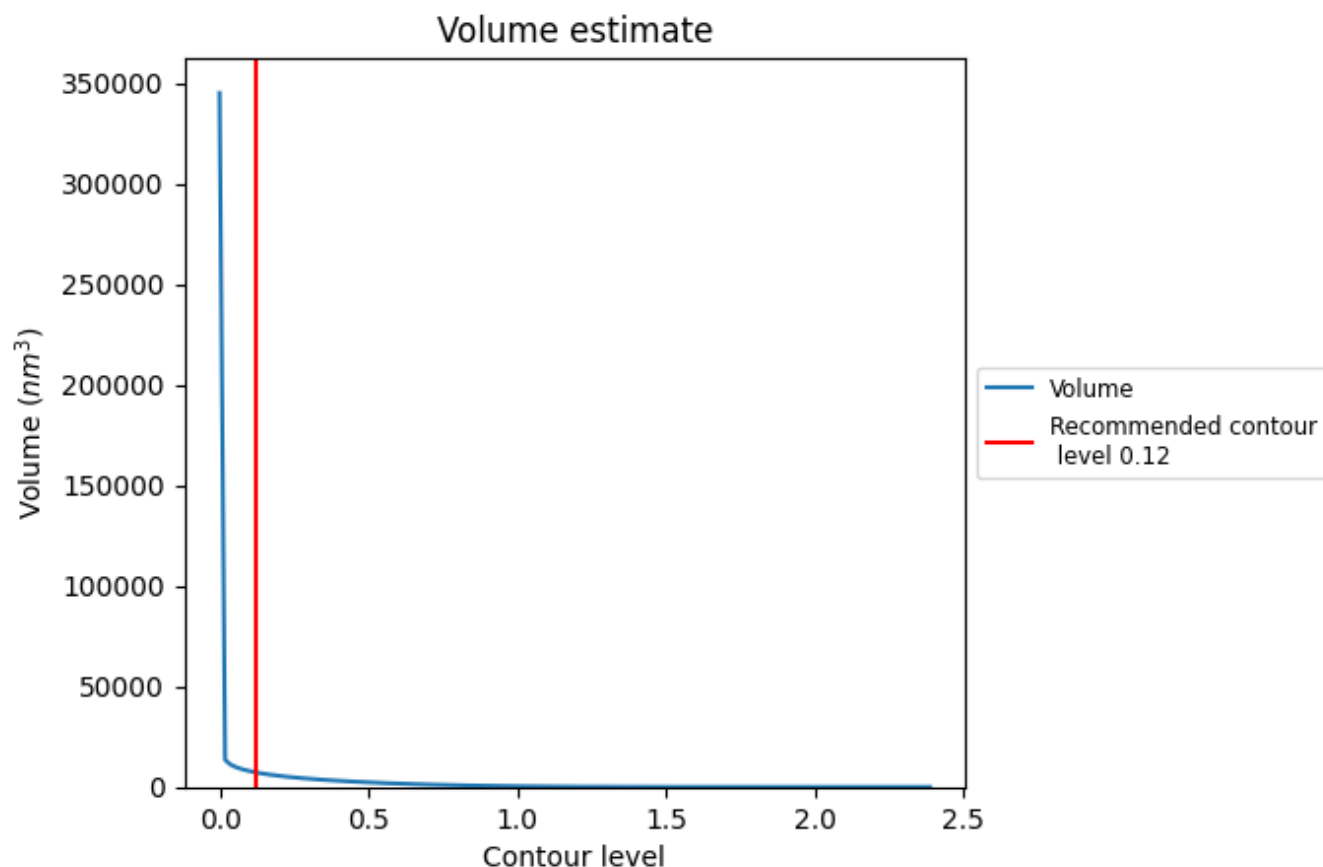
### 7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.



## 7.2 Volume estimate [i](#)

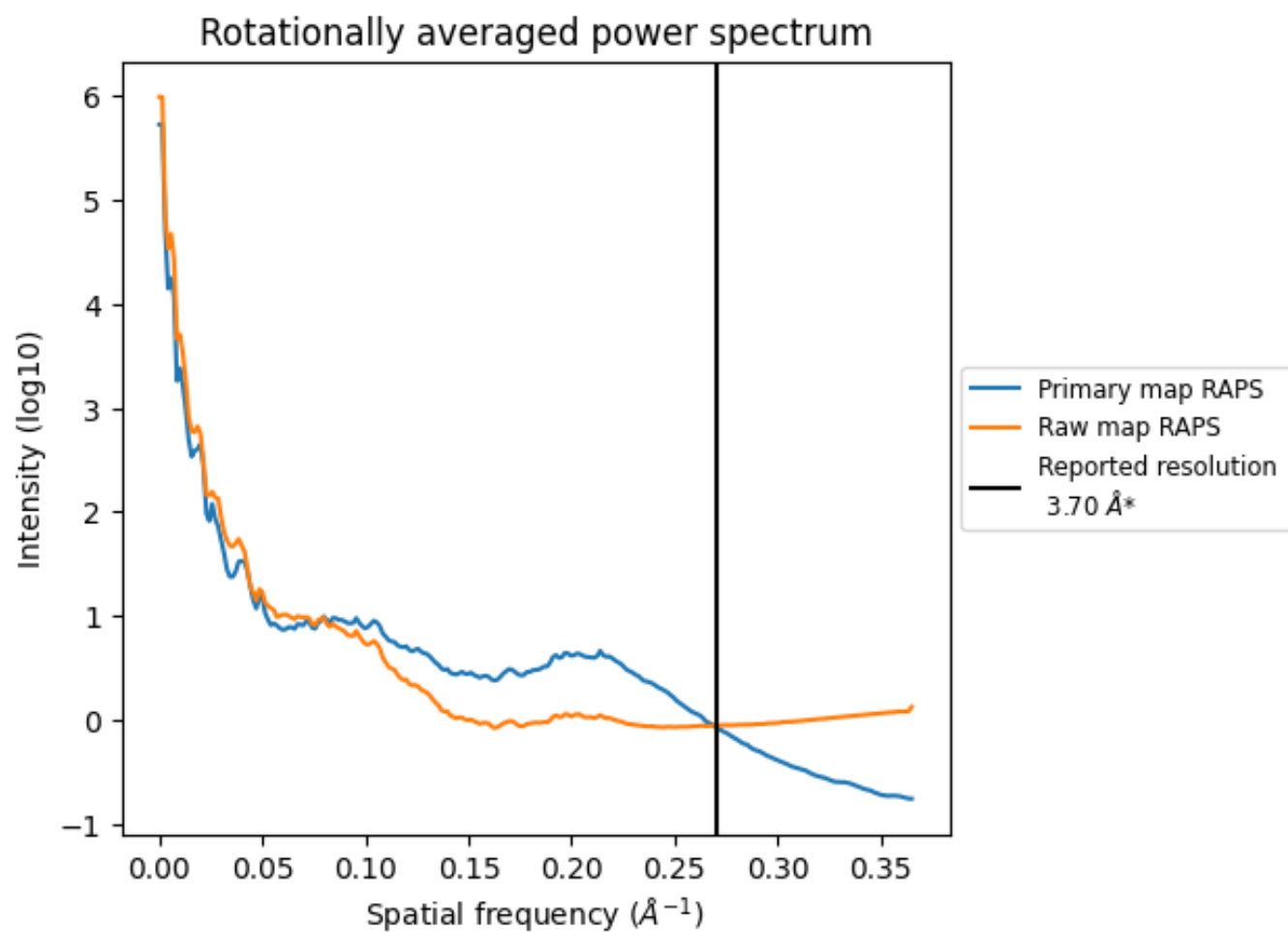


The volume at the recommended contour level is 7236  $\text{nm}^3$ ; this corresponds to an approximate mass of 6536 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.



### 7.3 Rotationally averaged power spectrum ⓘ



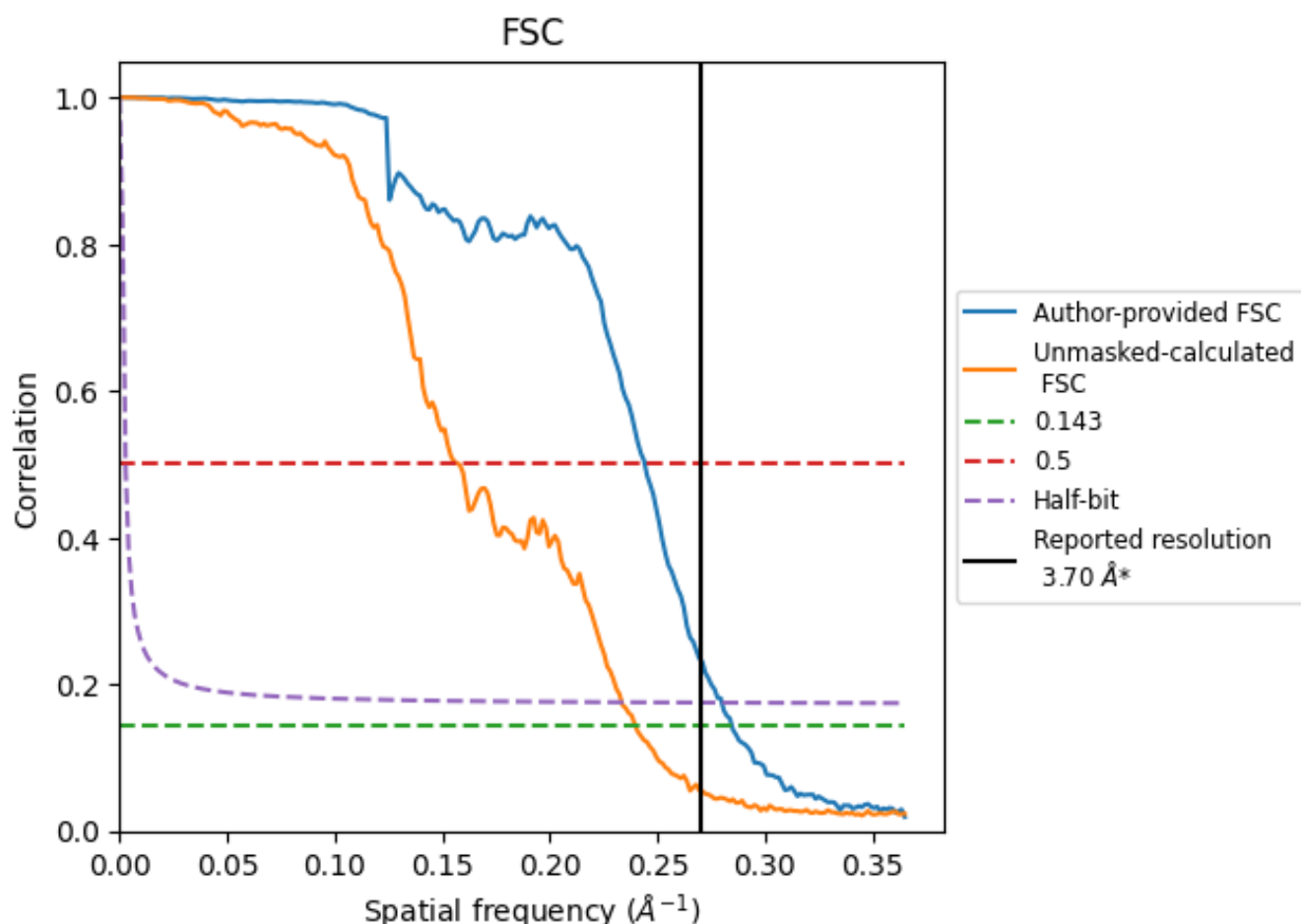
\*Reported resolution corresponds to spatial frequency of 0.270 Å<sup>-1</sup>



## 8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.270 Å<sup>-1</sup>



## 8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.70	-	-
Author-provided FSC curve	3.51	4.10	3.57
Unmasked-calculated*	4.17	6.34	4.28

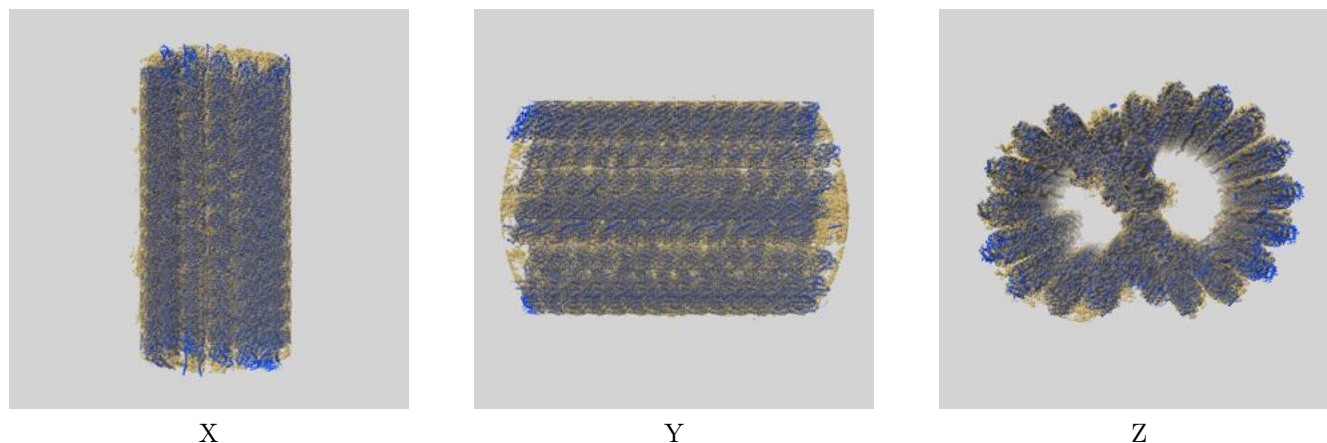
\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 4.17 differs from the reported value 3.7 by more than 10 %



## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-29692 and PDB model 8G3D. Per-residue inclusion information can be found in section [3](#) on page [73](#).

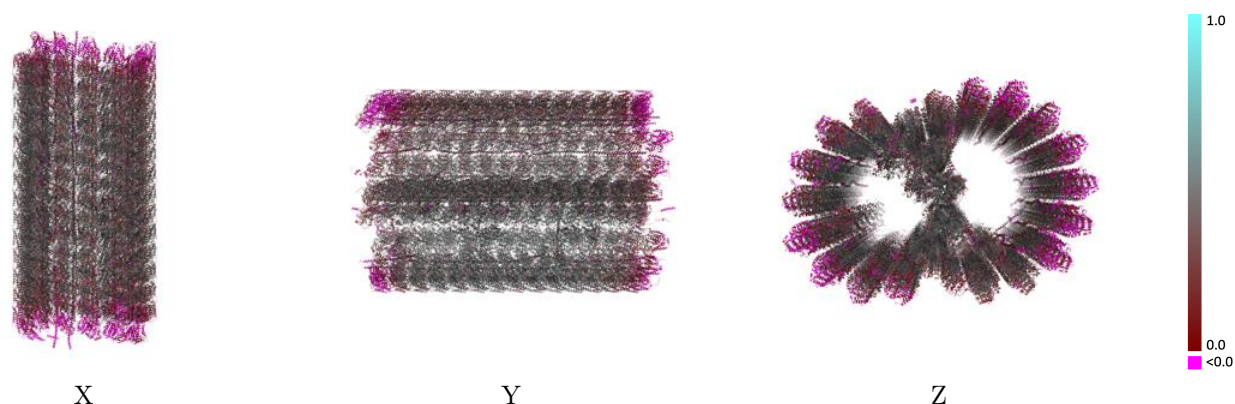
### 9.1 Map-model overlay [i](#)



The images above show the 3D surface view of the map at the recommended contour level 0.12 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

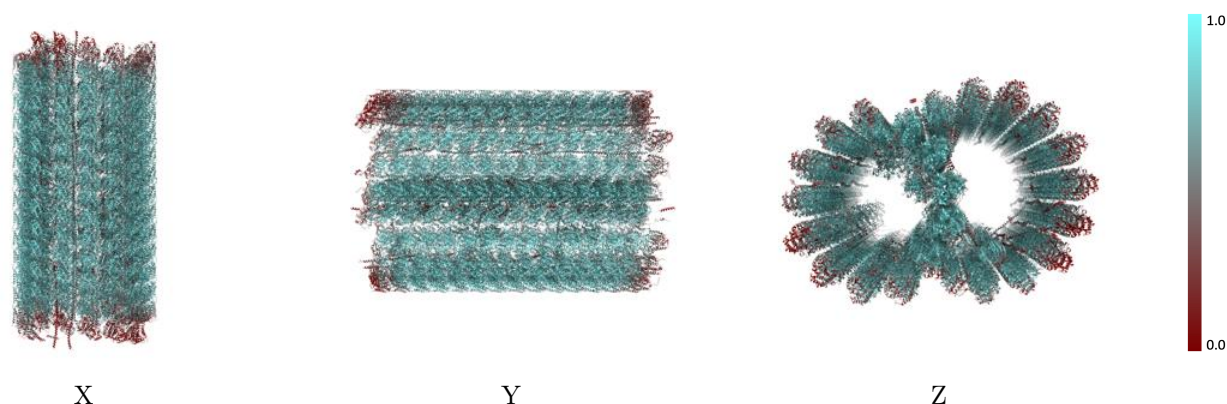


## 9.2 Q-score mapped to coordinate model [i](#)



The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

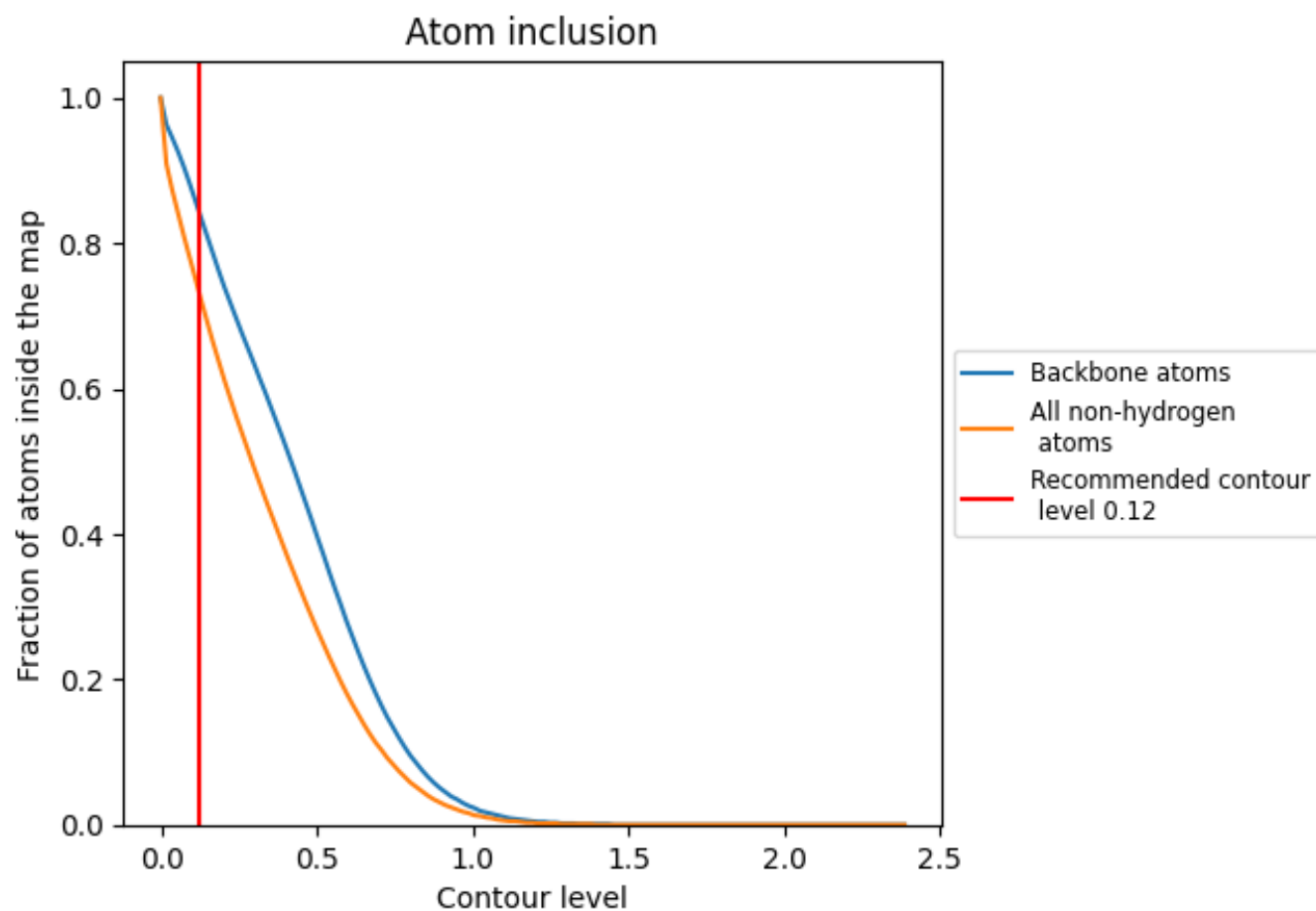
## 9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.12).



## 9.4 Atom inclusion [i](#)









































































At the recommended contour level, 84% of all backbone atoms, 73% of all non-hydrogen atoms, are inside the map.



## 9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.12) and Q-score for the entire model and for each chain.





















































































Chain	Atom inclusion	Q-score
All	 0.7330	 0.3750
0A	 0.6480	 0.3110
0B	 0.6760	 0.4100
0C	 0.7220	 0.3910
0D	 0.6170	 0.2560
0E	 0.5970	 0.2200
0F	 0.7420	 0.3900
0G	 0.6560	 0.3440
0H	 0.4610	 0.1240
0N	 0.7200	 0.3390
0Q	 0.7640	 0.3630
0S	 0.4210	 0.2380
0T	 0.5000	 0.2970
0U	 0.6910	 0.3150
0V	 0.3380	 0.1270
0X	 0.7270	 0.4000
1A	 0.6510	 0.3700
1B	 0.6980	 0.3840
1C	 0.7160	 0.3200
1D	 0.6440	 0.3160
1E	 0.6600	 0.3320
1F	 0.7210	 0.4220
1G	 0.6060	 0.2790
1H	 0.4680	 0.1810
1I	 0.7620	 0.4350
1J	 0.6640	 0.3700
1K	 0.6190	 0.3230
1L	 0.6440	 0.3360
1M	 0.8170	 0.4520
1N	 0.7590	 0.4500
1O	 0.3520	 0.1010
1P	 0.4340	 0.1370
1Q	 0.8080	 0.4410
1R	 0.7860	 0.4410
1S	 0.7500	 0.4240



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

































































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Chain	Atom inclusion	Q-score
1T	 0.7500	 0.4370
1U	 0.7610	 0.3980
1V	 0.5250	 0.2990
1W	 0.7070	 0.4040
1X	 0.7480	 0.4440
2A	 0.6810	 0.3780
2B	 0.4370	 0.2970
2C	 0.5630	 0.2820
2D	 0.6260	 0.2940
2E	 0.6860	 0.3580
2F	 0.7180	 0.4100
2G	 0.7240	 0.4260
2H	 0.6420	 0.3780
2I	 0.5970	 0.3360
2K	 0.5270	 0.2680
2L	 0.4680	 0.2170
2M	 0.8120	 0.4580
2N	 0.6260	 0.2640
2O	 0.3730	 0.0880
2P	 0.4590	 0.1770
2Q	 0.7920	 0.4350
2R	 0.7720	 0.4480
2S	 0.7480	 0.4140
2T	 0.7600	 0.4300
2U	 0.7670	 0.3900
2V	 0.5640	 0.3040
2W	 0.4770	 0.2110
2X	 0.7470	 0.4330
3A	 0.6610	 0.3380
3B	 0.3860	 0.2130
3C	 0.7240	 0.3560
3D	 0.7610	 0.4200
3E	 0.4810	 0.1490
3H	 0.6240	 0.3980
3I	 0.7050	 0.4080
3L	 0.4770	 0.1650
3O	 0.3560	 0.1200
3Q	 0.8000	 0.4350
3R	 0.7770	 0.4320
3S	 0.7380	 0.3850
3T	 0.7400	 0.4020
3U	 0.7210	 0.3300

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Chain	Atom inclusion	Q-score
3V	 0.5190	 0.2670
3X	 0.6780	 0.3790
4C	 0.6980	 0.3540
4F	 0.7090	 0.4140
4H	 0.6840	 0.4140
4Q	 0.7980	 0.4300
4R	 0.7760	 0.4350
4S	 0.7180	 0.3780
4X	 0.5340	 0.3180
5A	 0.4880	 0.2770
5B	 0.6180	 0.3920
5C	 0.5970	 0.3620
5D	 0.5640	 0.3170
5E	 0.3540	 0.1830
5F	 0.5020	 0.2980
5G	 0.4920	 0.2900
5H	 0.5040	 0.2600
5I	 0.2930	 0.1980
5J	 0.3450	 0.3140
5K	 0.2470	 0.1430
5Q	 0.7900	 0.4150
5R	 0.7940	 0.4460
5S	 0.7240	 0.4110
6F	 0.7330	 0.4310
6G	 0.6600	 0.3210
6H	 0.6700	 0.3570
6Q	 0.7490	 0.3690
6R	 0.6920	 0.3330
7R	 0.6850	 0.3280
8L	 0.7020	 0.2430
8N	 0.6540	 0.1780
8P	 0.6670	 0.2070
8R	 0.6250	 0.2020
AA	 0.8240	 0.4360
AB	 0.6240	 0.3510
AC	 0.8310	 0.4750
AD	 0.8350	 0.4700
AE	 0.8360	 0.4850
AF	 0.8340	 0.4850
AG	 0.8320	 0.4890
AH	 0.8400	 0.4870
AI	 0.8420	 0.4910

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Chain	Atom inclusion	Q-score
AJ	 0.8300	 0.4790
AK	 0.8340	 0.4780
AL	 0.8270	 0.4770
AM	 0.8190	 0.4300
AN	 0.8320	 0.4640
BA	 0.7480	 0.3540
BB	 0.4340	 0.1290
BC	 0.8210	 0.4480
BD	 0.8260	 0.4330
BE	 0.8210	 0.4600
BF	 0.8170	 0.4580
BG	 0.8210	 0.4550
BH	 0.8240	 0.4630
BI	 0.8280	 0.4650
BJ	 0.8200	 0.4580
BK	 0.8280	 0.4590
BL	 0.8330	 0.4710
BM	 0.8120	 0.4080
BN	 0.8240	 0.4350
CA	 0.4990	 0.1790
CB	 0.7800	 0.3760
CC	 0.7950	 0.4090
CD	 0.8250	 0.4470
CE	 0.8190	 0.4500
CF	 0.8090	 0.4510
CG	 0.8190	 0.4460
CH	 0.8230	 0.4580
CI	 0.8320	 0.4600
CJ	 0.8350	 0.4630
CK	 0.8370	 0.4550
CL	 0.8220	 0.4170
CM	 0.7680	 0.3560
CN	 0.4020	 0.0980
DA	 0.3160	 0.0290
DB	 0.6960	 0.2900
DC	 0.7790	 0.3630
DD	 0.8360	 0.4470
DE	 0.8330	 0.4480
DF	 0.8260	 0.4520
DG	 0.8190	 0.4470
DH	 0.8340	 0.4570
DI	 0.8150	 0.4390

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Chain	Atom inclusion	Q-score
DJ	 0.8310	 0.4440
DK	 0.8170	 0.4260
DL	 0.7970	 0.3900
DM	 0.7310	 0.3280
DN	 0.3610	 0.0690
EA	 0.2500	 0.0270
EB	 0.5730	 0.2210
EC	 0.7810	 0.3580
ED	 0.8160	 0.4220
EE	 0.8260	 0.4430
EF	 0.8070	 0.4320
EG	 0.8090	 0.4340
EH	 0.8080	 0.4250
EI	 0.8150	 0.4350
EJ	 0.8050	 0.4310
EK	 0.8140	 0.4390
EL	 0.7970	 0.3970
EM	 0.7650	 0.3550
EN	 0.4180	 0.1220
FA	 0.7740	 0.3540
FB	 0.5270	 0.2070
FC	 0.8240	 0.4540
FD	 0.8270	 0.4300
FE	 0.8220	 0.4590
FF	 0.8200	 0.4510
FG	 0.8130	 0.4470
FH	 0.8270	 0.4600
FI	 0.8260	 0.4620
FJ	 0.8400	 0.4620
FK	 0.8200	 0.4220
FL	 0.8170	 0.4360
FM	 0.1680	 -0.0030
FN	 0.5420	 0.2460
GA	 0.7520	 0.3390
GB	 0.4480	 0.1510
GC	 0.8260	 0.4610
GD	 0.8300	 0.4350
GE	 0.8340	 0.4780
GF	 0.8340	 0.4730
GG	 0.8280	 0.4700
GH	 0.8280	 0.4750
GI	 0.8300	 0.4700

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


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Chain	Atom inclusion	Q-score
GJ	 0.8310	 0.4750
GK	 0.8280	 0.4440
GL	 0.8250	 0.4570
GM	 0.3100	 0.0560
GN	 0.7090	 0.3620
HA	 0.7590	 0.3620
HB	 0.4410	 0.1400
HC	 0.8130	 0.4600
HD	 0.8240	 0.4410
HE	 0.8390	 0.4850
HF	 0.8370	 0.4710
HG	 0.8140	 0.4680
HH	 0.8210	 0.4600
HI	 0.8290	 0.4740
HJ	 0.8230	 0.4680
HK	 0.8320	 0.4620
HL	 0.8250	 0.4700
HM	 0.5100	 0.2400
HN	 0.7870	 0.4130
IA	 0.7770	 0.3670
IB	 0.4800	 0.2120
IC	 0.8220	 0.4570
ID	 0.8320	 0.4480
IE	 0.8370	 0.4840
IF	 0.8360	 0.4800
IG	 0.8290	 0.4790
IH	 0.8570	 0.4890
II	 0.8400	 0.4890
IJ	 0.8530	 0.4950
IK	 0.8390	 0.4740
IL	 0.8370	 0.4730
IM	 0.7080	 0.3950
IN	 0.8320	 0.4500
JA	 0.8230	 0.4340
JB	 0.8090	 0.3960
JC	 0.8370	 0.4780
JD	 0.8500	 0.4750
JE	 0.8350	 0.4790
JF	 0.8410	 0.4830
JG	 0.8280	 0.4700
JH	 0.8360	 0.4760
JI	 0.8370	 0.4660

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Chain	Atom inclusion	Q-score
JJ	 0.8400	 0.4720
JK	 0.8140	 0.4440
JL	 0.8400	 0.4780
JM	 0.5030	 0.2960
JN	 0.8170	 0.4350
KA	 0.8420	 0.4500
KB	 0.8240	 0.4080
KC	 0.8410	 0.4840
KD	 0.8530	 0.4830
KE	 0.8390	 0.4820
KF	 0.8540	 0.4910
KG	 0.8310	 0.4730
KH	 0.8350	 0.4810
KI	 0.8300	 0.4750
KJ	 0.8470	 0.4840
KK	 0.8480	 0.4830
KL	 0.8460	 0.4920
KM	 0.7500	 0.4160
KN	 0.8550	 0.4690
LA	 0.8170	 0.4420
LB	 0.7960	 0.4120
LC	 0.8350	 0.4860
LD	 0.8460	 0.4800
LE	 0.8310	 0.4840
LF	 0.8360	 0.4850
LG	 0.8410	 0.4860
LH	 0.8420	 0.4890
LI	 0.8260	 0.4790
LJ	 0.8420	 0.4860
LK	 0.8330	 0.4860
LL	 0.8340	 0.4790
LM	 0.7960	 0.4180
LN	 0.8400	 0.4650
MA	 0.8200	 0.4430
MB	 0.8050	 0.4240
MC	 0.8410	 0.4960
MD	 0.8450	 0.4950
ME	 0.8230	 0.4870
MF	 0.8410	 0.4960
MG	 0.8320	 0.4850
MH	 0.8350	 0.4870
MI	 0.8210	 0.4700

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Chain	Atom inclusion	Q-score
MJ	 0.8470	 0.4940
MK	 0.8330	 0.4820
ML	 0.8180	 0.4790
MM	 0.8070	 0.4250
MN	 0.8460	 0.4840
NA	 0.7420	 0.3530
NB	 0.6380	 0.2690
NC	 0.8010	 0.4360
ND	 0.7780	 0.4050
NE	 0.7930	 0.4360
NF	 0.7850	 0.4310
NG	 0.7950	 0.4290
NH	 0.7680	 0.4160
NI	 0.7780	 0.4210
NJ	 0.8000	 0.4330
NK	 0.7900	 0.4210
NL	 0.7710	 0.4220
NM	 0.5910	 0.3350
NN	 0.7700	 0.4070
OA	 0.6790	 0.2760
OB	 0.4700	 0.1150
OC	 0.8070	 0.4110
OD	 0.7980	 0.3820
OE	 0.8110	 0.4340
OF	 0.8220	 0.4310
OG	 0.8110	 0.4220
OH	 0.7990	 0.4140
OI	 0.8100	 0.4250
OJ	 0.8110	 0.4200
OK	 0.8040	 0.4120
OL	 0.8020	 0.4200
OM	 0.5880	 0.2970
ON	 0.7930	 0.3800
PA	 0.5030	 0.1510
PB	 0.3080	 0.0130
PC	 0.7860	 0.3730
PD	 0.7300	 0.3180
PE	 0.7950	 0.3900
PF	 0.7950	 0.3900
PG	 0.7910	 0.3970
PH	 0.7910	 0.3930
PI	 0.7980	 0.4000

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Chain	Atom inclusion	Q-score
PJ	 0.7890	 0.3890
PK	 0.8010	 0.3900
PL	 0.7910	 0.3910
PM	 0.5140	 0.2230
PN	 0.7570	 0.3380
QA	 0.3770	 0.0860
QB	 0.7180	 0.3050
QC	 0.7650	 0.3460
QD	 0.7860	 0.3760
QE	 0.7760	 0.3730
QF	 0.7910	 0.3780
QG	 0.7740	 0.3670
QH	 0.7850	 0.3820
QI	 0.7850	 0.3670
QJ	 0.7870	 0.3710
QK	 0.7650	 0.3570
QL	 0.7160	 0.3020
QM	 0.4560	 0.1380
QN	 0.1310	 -0.0040
RA	 0.2780	 0.0410
RB	 0.6570	 0.2830
RC	 0.7570	 0.3470
RD	 0.7580	 0.3640
RE	 0.7600	 0.3720
RF	 0.7620	 0.3690
RG	 0.7660	 0.3710
RH	 0.7650	 0.3650
RI	 0.7480	 0.3600
RJ	 0.7530	 0.3560
RK	 0.7420	 0.3370
RL	 0.6520	 0.2620
RM	 0.4230	 0.0620
RN	 0.1440	 -0.0230
SA	 0.2440	 0.0110
SB	 0.6460	 0.2670
SC	 0.7760	 0.3420
SD	 0.7810	 0.3690
SE	 0.7840	 0.3820
SF	 0.7810	 0.3840
SG	 0.7980	 0.3860
SH	 0.7810	 0.3770
SI	 0.7850	 0.3860

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Chain	Atom inclusion	Q-score
SJ	 0.7720	 0.3620
SK	 0.7750	 0.3550
SL	 0.7650	 0.3220
SM	 0.6080	 0.2230
SN	 0.2210	 -0.0100
TA	 0.2060	 0.0060
TB	 0.5180	 0.2280
TC	 0.7400	 0.3240
TD	 0.7860	 0.3630
TE	 0.7860	 0.3820
TF	 0.7910	 0.3800
TG	 0.7690	 0.3650
TH	 0.7640	 0.3540
TI	 0.7680	 0.3650
TJ	 0.7790	 0.3660
TK	 0.7790	 0.3590
TL	 0.7530	 0.3100
TM	 0.6470	 0.2460
TN	 0.2170	 0.0080
UA	 0.2230	 0.0110
UB	 0.5200	 0.2270
UC	 0.7490	 0.3300
UD	 0.7910	 0.3850
UE	 0.8030	 0.4130
UF	 0.8020	 0.4060
UG	 0.8020	 0.4020
UH	 0.7790	 0.3880
UI	 0.8030	 0.4010
UJ	 0.7860	 0.3910
UK	 0.8020	 0.3930
UL	 0.7510	 0.3400
UM	 0.7120	 0.2950
UN	 0.3860	 0.1030
VA	 0.7890	 0.3830
VB	 0.6350	 0.3080
VC	 0.8070	 0.4370
VD	 0.8140	 0.4240
VE	 0.8160	 0.4290
VF	 0.8030	 0.4260
VG	 0.7910	 0.4090
VH	 0.7920	 0.4140
VI	 0.8090	 0.4190

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Chain	Atom inclusion	Q-score
VJ	 0.8040	 0.4170
VK	 0.7860	 0.3700
VL	 0.8010	 0.3930
VM	 0.3210	 0.0300
VN	 0.6710	 0.2870
WA	 0.7860	 0.3850
WB	 0.6300	 0.3150
WC	 0.8060	 0.4280
WD	 0.8160	 0.4310
WE	 0.8050	 0.4250
WF	 0.8010	 0.4340
WG	 0.7970	 0.4080
WH	 0.7990	 0.4240
WI	 0.8030	 0.4300
WJ	 0.8050	 0.4280
WK	 0.7980	 0.3840
WL	 0.7990	 0.4100
WM	 0.4440	 0.1380
WN	 0.7340	 0.3270