



Full wwPDB EM Validation Report ⓘ

Nov 10, 2024 – 09:40 AM EST

PDB ID : 7K5B
EMDB ID : EMD-22679
Title : Structure of outer-arm dynein bound to microtubule doublet in microtubule binding state 2 (MTBS-2)
Authors : Rao, Q.; Zhang, K.
Deposited on : 2020-09-16
Resolution : 4.50 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

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>.

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) : 2.39

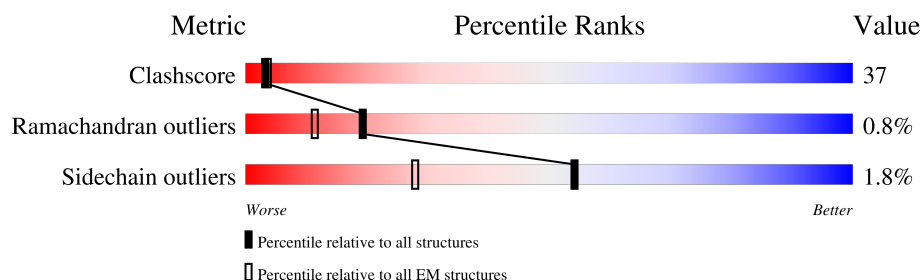
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

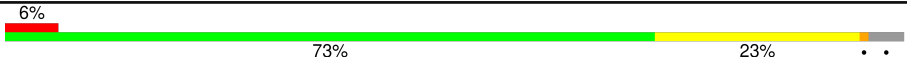


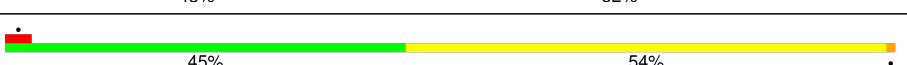

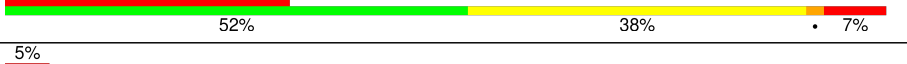
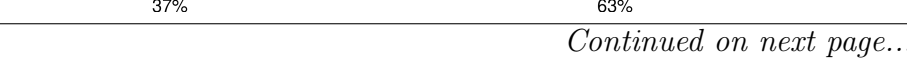

The reported resolution of this entry is 4.50 Å.

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.




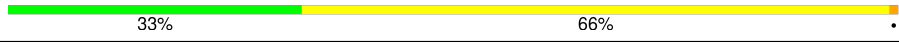
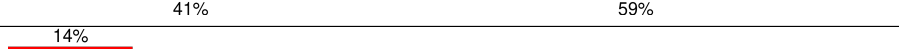




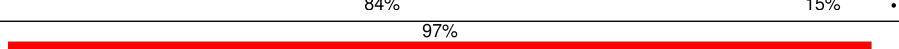

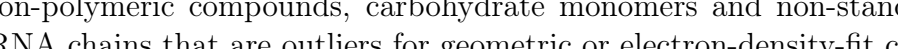
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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 ≥ 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	A	4615	
2	B	4588	
3	C	3947	
4	D	595	
5	E	557	
6	F	128	
7	G	151	
8	H	91	

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Mol	Chain	Length	Quality of chain
9	I	106	
10	J	95	
11	K	90	
12	L	111	
13	M	87	
14	N	114	
15	O	120	
16	P	112	
17	Q	192	
18	R	150	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
19	ADP	A	4701	-	-	X	-
19	ADP	A	4901	-	-	X	-
19	ADP	B	5501	-	-	X	-
19	ADP	C	4702	-	-	X	-
20	ATP	A	4801	-	-	X	-
20	ATP	B	5601	-	-	X	-
21	MG	A	5002	-	-	X	-

2 Entry composition

There are 21 unique types of molecules in this entry. The entry contains 119573 atoms, of which 156 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 Dynein heavy chain, outer arm protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	4453	Total	C	N	O	S	0	0
			33975	21575	5802	6440	158		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	3238	ASN	ASP	conflict	UNP Q22A67

- Molecule 2 is a protein called Outer arm dynein beta heavy chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	4524	Total	C	N	O	S	0	0
			34751	22080	5950	6571	150		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	36	ALA	GLN	conflict	UNP I7M9J2
B	1287	ALA	LEU	conflict	UNP I7M9J2
B	3977	ALA	SER	conflict	UNP I7M9J2

- Molecule 3 is a protein called gamma heavy chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	3947	Total	C	N	O	S	0	0
			30427	19395	5159	5724	149		

- Molecule 4 is a protein called Dynein intermediate chain 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	579	Total	C	N	O	S	0	0
			4680	2975	791	883	31		

- Molecule 5 is a protein called Flagellar outer dynein arm intermediate protein, putative.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	555	Total	C	N	O	S	0	0
			4440	2798	762	858	22		

- Molecule 6 is a protein called Dynein light chain roadblock-type 2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	128	Total	C	N	O	S	0	0
			996	625	176	193	2		

- Molecule 7 is a protein called Dynein light chain roadblock-type 2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	151	Total	C	N	O	S	0	0
			1024	636	184	203	1		

- Molecule 8 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	91	Total	C	N	O	S	0	0
			750	483	124	139	4		

- Molecule 9 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	106	Total	C	N	O	S	0	0
			827	526	134	161	6		

- Molecule 10 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	J	95	Total	C	N	O	S	0	0
			807	527	135	140	5		

- Molecule 11 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	90	Total	C	N	O	S	0	0
			754	489	124	137	4		

- Molecule 12 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	111	Total	C	N	O	S	0	0
			855	555	145	152	3		

- Molecule 13 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	M	87	Total	C	N	O	S	0	0
			735	477	123	130	5		

- Molecule 14 is a protein called Dynein light chain tctex-type 1 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	N	114	Total	C	N	O	S	0	0
			852	542	142	165	3		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
N	92	ALA	ASN	conflict	UNP A4VEB3

- Molecule 15 is a protein called Dynein light chain 2A.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	O	120	Total	C	N	O	S	0	0
			994	639	173	179	3		

- Molecule 16 is a protein called Thioredoxin.

Mol	Chain	Residues	Atoms				AltConf	Trace
16	P	109	Total	C	N	O	0	0
			541	323	109	109		

- Molecule 17 is a protein called Dynein light chain 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
17	Q	192	Total	C	N	O	0	0
			1006	610	203	193		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
Q	2	ALA	SER	conflict	UNP Q1HGH9

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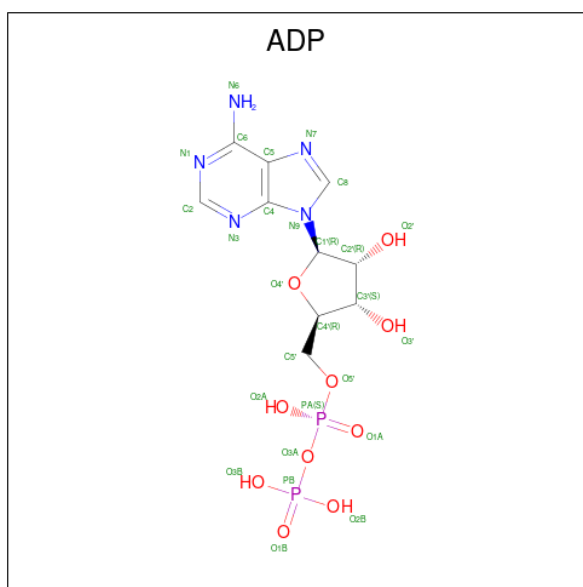
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Chain	Residue	Modelled	Actual	Comment	Reference
Q	179	MET	TYR	conflict	UNP Q1HGH9

- Molecule 18 is a protein called Dynein light chain 4A.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	R	150	Total	C	H	N	O	0	0
			895	439	156	150	150		

- Molecule 19 is ADENOSINE-5'-DIPHOSPHATE (three-letter code: ADP) (formula: $C_{10}H_{15}N_5O_{10}P_2$).



Mol	Chain	Residues	Atoms					AltConf
19	A	1	Total	C	N	O	P	0
			27	10	5	10	2	
19	A	1	Total	C	N	O	P	0
			27	10	5	10	2	
19	B	1	Total	C	N	O	P	0
			27	10	5	10	2	
19	B	1	Total	C	N	O	P	0
			27	10	5	10	2	
19	C	1	Total	C	N	O	P	0
			27	10	5	10	2	
19	C	1	Total	C	N	O	P	0
			27	10	5	10	2	

- Molecule 20 is ADENOSINE-5'-TRIPHOSPHATE (three-letter code: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$).



Mol	Chain	Residues	Atoms					AltConf
20	A	1	Total 31	C 10	N 5	O 13	P 3	0
20	B	1	Total 31	C 10	N 5	O 13	P 3	0
20	C	1	Total 31	C 10	N 5	O 13	P 3	0

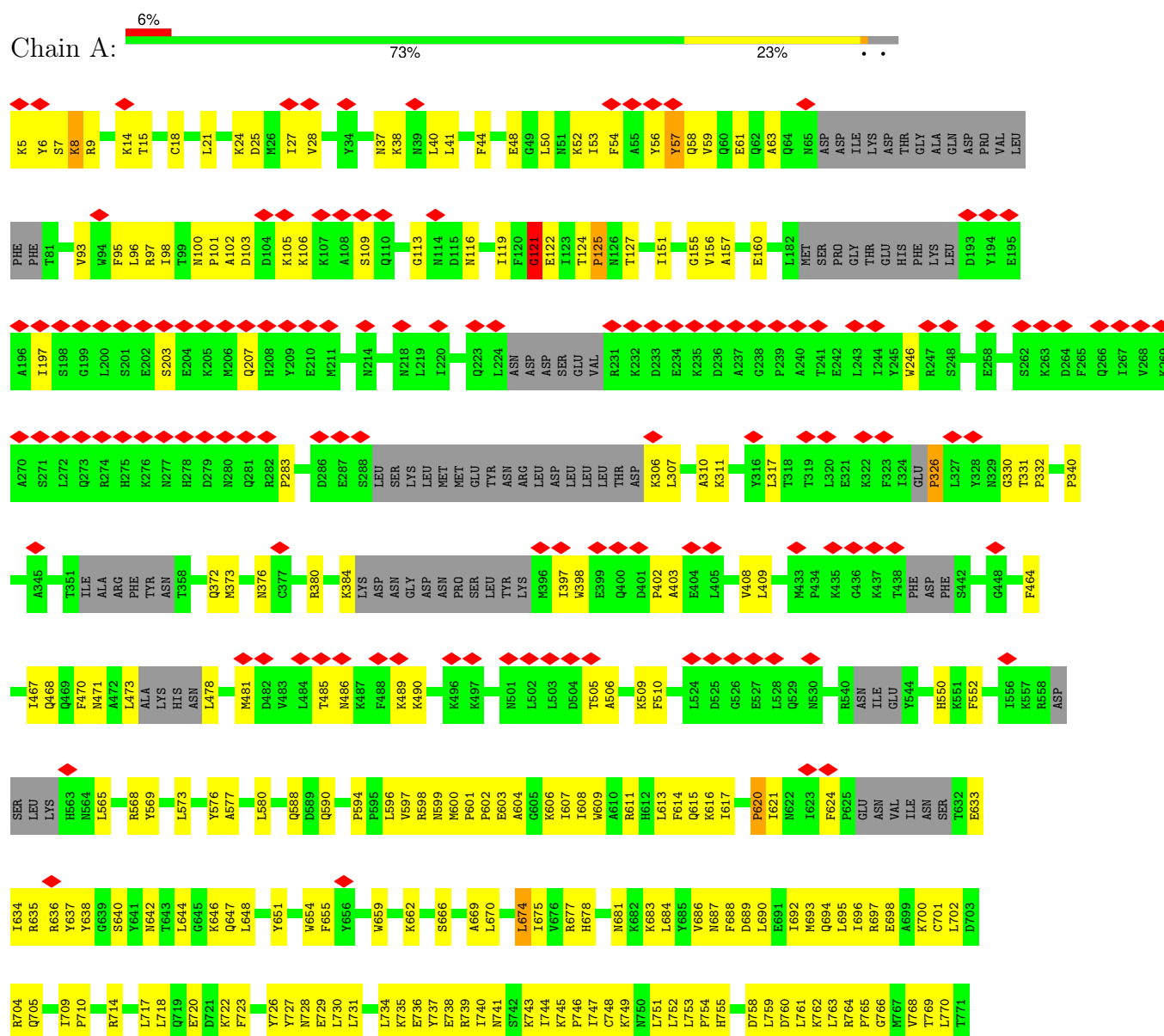
- Molecule 21 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	AltConf
21	A	3	Total Mg 3 3	0
21	B	3	Total Mg 3 3	0
21	C	3	Total Mg 3 3	0

3 Residue-property plots

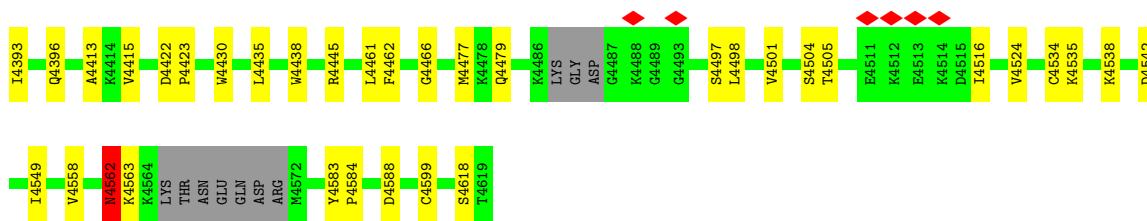
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Dynein heavy chain, outer arm protein



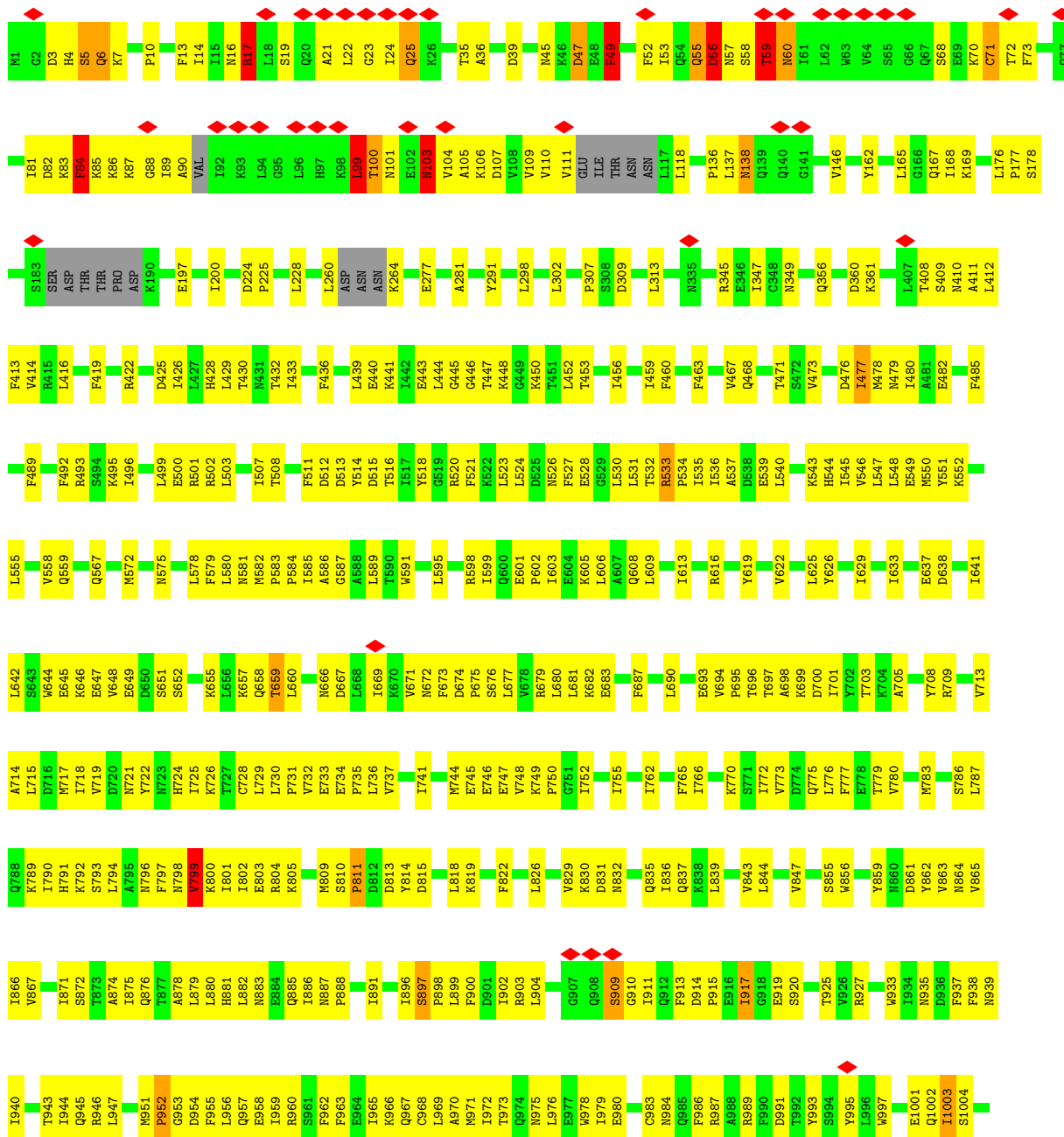
F1892	W1683	G1528	I1449	ALA	T1138	E1059	ASP	ILE	D846	W772
T1896	L1684	M1534	W1450	GLU	L1139	E1060	LYS	PRO	F847	T773
K1909	L1687	P1535	ALA	ILE	Q1141	E1061	A983	GLY	L848	S774
I1910	E1688	L1452	MET	MET	Q1142	E1063	T984	ASN	T849	I777
L1914	L1711	ASP	E1247	Y1263	R1143	V1066	Y986	THR	K851	Y780
V1915	Q1540	VAL	Y1263	Y1263	Q1146	T1067	T989	GLN	W852	L761
Q1916	F1541	PRO	K1390	K1284	T1149	T1068	D992	ASN	V853	L761
S1917	L1610	CYS	L1391	I1265	Y1153	Y1069	K993	LYS	A858	G787
G1918	I1544	M1458	N1392	R1268	K1152	I1071	E994	LYS	K789	L788
L1919	D1545	M1460	Y1393	G1269	F1153	A1073	I996	PRO	D860	K790
W1920	G1461	G1461	E1394	E1270	N1154	M1074	Y996	F830	L791	E792
C1921	L1468	L1468	N1271	N1271	P1156	E1075	K997	V933	Q793	Q793
F1923	K1550	L1471	L1272	L1272	Q1157	L1076	V998	Q936	L794	L794
L1924	I1551	L1471	F1273	F1273	E1158	T1077	S1005	L937	I795	I795
T1925	M1552	D1474	L1275	L1275	M1159	T1078	I1006	L937	D800	D800
F1926	E1553	D1474	Q1276	Q1276	L1162	I1078	Q1007	N938	I801	I801
W1934	K1554	L1478	N1277	N1277	L1163	I1081	G1008	G939	I802	I802
Q1935	A1555	L1478	Y1280	Y1280	Y1166	C1082	T1009	D940	E803	E803
H1936	V1556	F1481	P1281	P1281	L1167	S1086	K1010	K941	N804	N804
V1937	E1557	M1482	E1282	E1282	T1171	T1087	N1011	V942	P873	P873
I1938	T1558	K1408	L1283	L1283	E1176	W1088	K1012	T943	H874	H874
L1939	K1559	L1410	E1284	E1284	W1187	L1100	V1013	N945	I806	I806
Q1940	K1560	LEU	K1285	K1285	W1187	H1101	F1016	PRO	E807	E807
F1941	V1561	D1411	K1285	K1285	W1187	H1101	L1017	SER	N808	N808
T1942	I1562	D1411	K1285	K1285	W1187	H1101	F1016	PRO	K811	K811
L1943	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	T812	T812
Q1944	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	W812	W812
F1945	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	S814	S814
T1946	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	K815	K815
L1947	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	V816	V816
Q1948	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	W817	W817
F1949	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	L818	L818
T1950	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	V819	V819
L1951	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	H820	H820
Q1952	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	L821	L821
F1953	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	P822	P822
T1954	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	GLN	GLN
L1955	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	THR	THR
Q1956	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	LYS	LYS
F1957	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	PRO	PRO
T1958	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	LEU	LEU
L1959	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	SER	SER
Q1960	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	L830	L830
F1961	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	D831	D831
T1962	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	S832	S832
L1963	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	A968	A968
Q1964	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	M909	M909
F1965	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	K910	K910
T1966	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	Y911	Y911
L1967	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	R912	R912
Q1968	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	V913	V913
F1969	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	CYS	CYS
T1970	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	GLY	GLY
L1971	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	LYS	LYS
Q1972	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	K844	K844
F1973	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER	T845	T845
T1974	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1975	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1976	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1977	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1978	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1979	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1980	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1981	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1982	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1983	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1984	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1985	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1986	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1987	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1988	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1989	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1990	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1991	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1992	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1993	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1994	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1995	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q1996	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F1997	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T1998	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L1999	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2000	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2001	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2002	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2003	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2004	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2005	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2006	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2007	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2008	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2009	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2010	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2011	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2012	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2013	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2014	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2015	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2016	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2017	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2018	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2019	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2020	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2021	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2022	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2023	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2024	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2025	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2026	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2027	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2028	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2029	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2030	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2031	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2032	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2033	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2034	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2035	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2036	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2037	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2038	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2039	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2040	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2041	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2042	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2043	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
Q2044	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
F2045	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
T2046	P1563	D1411	K1285	K1285	W1187	H1101	L1017	SER		
L2047	P1563	D1411	K1285	K1285	W1187	H110				

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D3854	D3854	K3622	S3455	I3346	D3283	K3216	L3121	L2951	E2772	S2488	L2278	S2084
A3855	A3855	K3622	Y3456	K3349	M3284	D3219	I3124	R2956	K2776	A2489	L2298	S2084
A3879	A3879	C3627	C3457	K3350	N3285	I3200	I3125	R2956	C2786	R2311	R2311	D2089
E3895	E3895	A3630	T3485	P3352	F3286	E3222	E3126	L2960	A2496	R2316	R2316	R2095
L3896	L3896	E3637	L3488	K3353	K3287	E3222	A3127	I2963	T2497	E2498	E2498	G2096
P3897	P3897	L3638	Q3355	K3288	K3288	K3224	T3128	I2963	A2498	E2499	E2499	G2096
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I3900	I3900	K3641	E3360	F3293	F3293	N3226	I3131	I2963	D2511	D2511	D2511	I2101
S3903	S3903	F3647	L3377	K3294	K3294	P3229	E3140	I2976	F2336	F2336	F2336	I2101
N3914	N3914	T3648	A3378	K3295	K3295	L3230	E3141	I2976	Q2340	Q2340	Q2340	K2106
Q3651	Q3651	Q3379	Q3379	D3296	D3296	I3232	L3145	F2987	S2341	S2341	S2341	E2117
L3654	L3654	I3380	I3380	S3297	S3297	I3233	L3145	R2992	V2357	V2357	V2357	I2120
N3684	N3684	Y3383	Y3383	K3298	K3298	K3234	N3146	L2999	E2801	E2801	E2801	F2121
L3684	L3684	I3384	K3385	N3299	N3299	I3236	E3147	C3000	E2802	E2802	E2802	E2122
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L3696	L3696	L3387	L3387	E3301	E3301	M3237	T3149	L3018	A2804	A2804	A2804	I2141
S3702	S3702	K3388	K3388	I3302	I3302	N3238	E3162	C3022	K2836	K2836	K2836	I2142
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D3709	D3709	V3390	V3390	I3306	I3306	V3242	K3164	T3041	V2840	V2840	V2840	I2155
T3710	T3710	K3391	K3391	E3307	E3307	F3243	K3165	F3042	L2850	L2850	L2850	G2162
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V3715	V3715	E3396	E3396	K3310	K3310	F3244	K3169	F3046	G2863	G2863	G2863	S2164
N3716	N3716	N3399	N3399	I3312	I3312	I3248	G3170	L3049	V2866	V2866	V2866	L2170
N3718	N3718	E3402	E3402	S3313	S3313	I3249	G3171	L3049	G2870	G2870	G2870	T2171
T3719	T3719	A3406	A3406	E3314	E3314	P3250	E3172	L3049	S2871	S2871	S2871	T2175
V3726	V3726	K3410	K3410	D3315	D3315	I3251	Q3179	L3059	G2872	G2872	G2872	T2183
R3748	R3748	S3421	S3421	W3316	W3316	I3252	E3185	M3060	S2875	S2875	S2875	M2196
P3749	P3749	L3422	L3422	N3318	N3318	I3255	E3186	H3067	L2868	L2868	L2868	M2196
L3568	L3568	E3425	E3425	F3321	F3321	K3256	Q3186	R3083	E2426	E2426	E2426	M2196
E3573	E3573	W3429	W3429	A3322	A3322	F3257	I3187	F3092	T2427	T2427	T2427	E2202
T3577	T3577	I3436	I3436	T3323	T3323	F3258	S3188	F3092	V2428	V2428	V2428	I2203
I3583	I3583	K3440	K3440	K3324	K3324	K3260	K3189	Y3095	F2429	F2429	F2429	S2204
E3584	E3584	R3441	R3441	A3328	A3328	K3261	K3190	Y3095	D2430	D2430	D2430	D2205
N3585	N3585	L3442	L3442	A3329	A3329	E3262	E3191	Y3095	D2436	D2436	D2436	D2206
E3586	E3586	V3444	V3444	A3330	A3330	G3263	E3192	Y3095	C2443	C2443	C2443	V2211
V3587	V3587	G3445	G3445	I3332	I3332	K3264	E3193	Y3095	W2448	W2448	W2448	W2220
D3592	D3592	N3446	N3446	K3333	K3333	V3266	E3194	Y3095	V2449	V2449	V2449	L2224
P3593	P3593	V3447	V3447	L3334	L3334	L3267	A3194	Y3095	P2450	P2450	P2450	P2451
K3604	K3604	S3448	S3448	A3338	A3338	F3268	E3195	Y3095	L2728	L2728	L2728	Q2452
L3824	L3824	L3449	L3449	A3339	A3339	L3269	R3196	Y3095	L2729	L2729	L2729	S2453
K3833	K3833	S3450	S3450	Y3340	Y3340	K3270	R3206	Y3095	L2745	L2745	L2745	G2259
T3837	T3837	T3451	T3451	E3341	E3341	E3271	R3207	Y3095	V2746	V2746	V2746	G2259
		L3452	L3452	E3342	E3342	S3272	A3208	Y3095	V2754	V2754	V2754	W2267
		S3453	S3453	Y3342	Y3342	E3275	R3209	Y3095	Q2768	Q2768	Q2768	E2276
		F3453	F3453	H3343	H3343	G3276	E3210	Y3095				
				K3344	K3344	G3277	A3211	Y3095				
				L3345	L3345	I3276	E3212	Y3095				
				S3346	S3346	Q3279	E3213	Y3095				
							I3215	Y3095				
							E3216	Y3095				

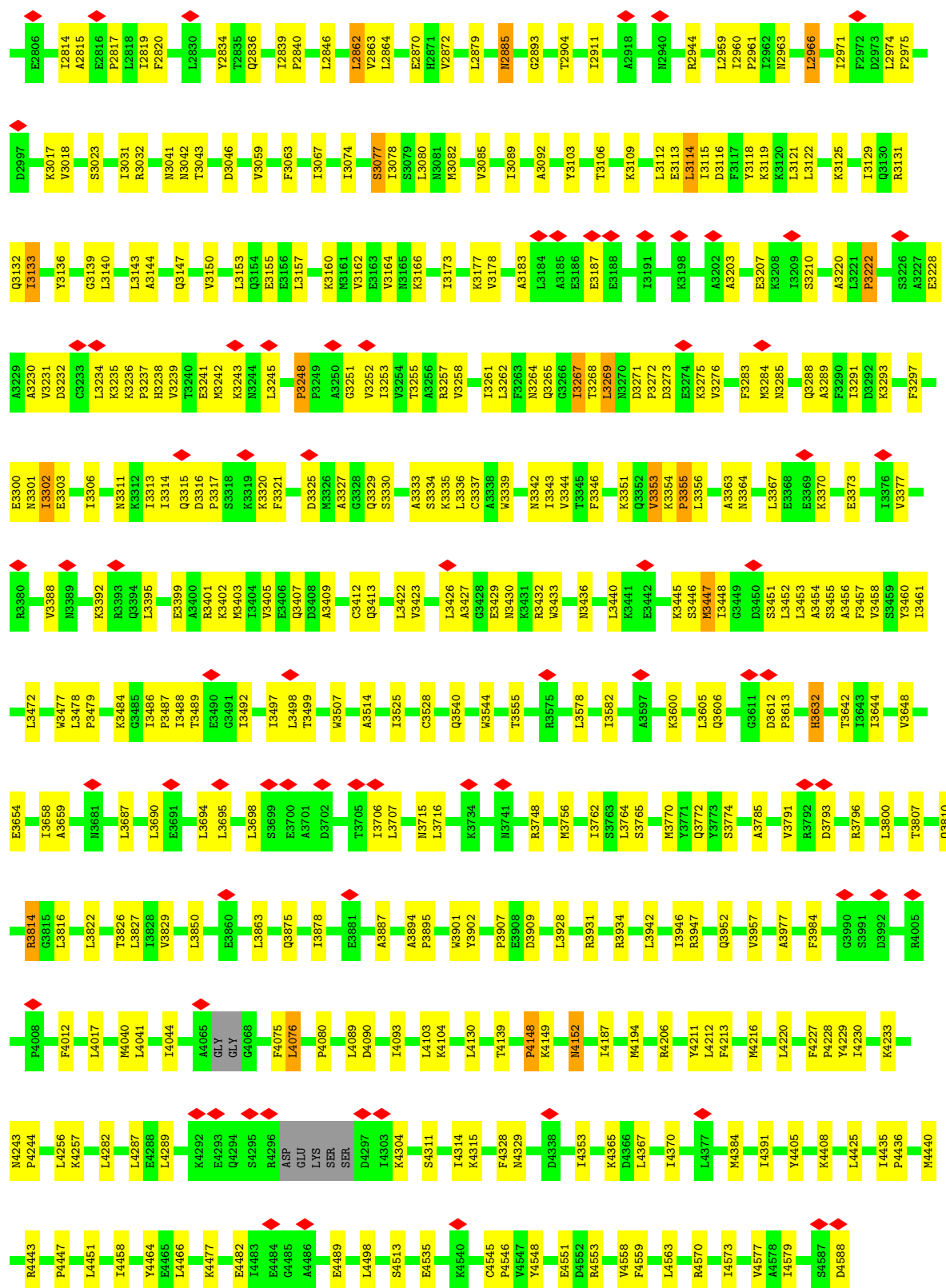


• Molecule 2: Outer arm dynein beta heavy chain

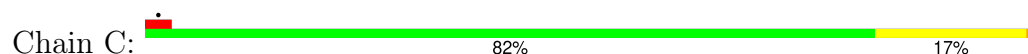
Chain B: 72% 25%

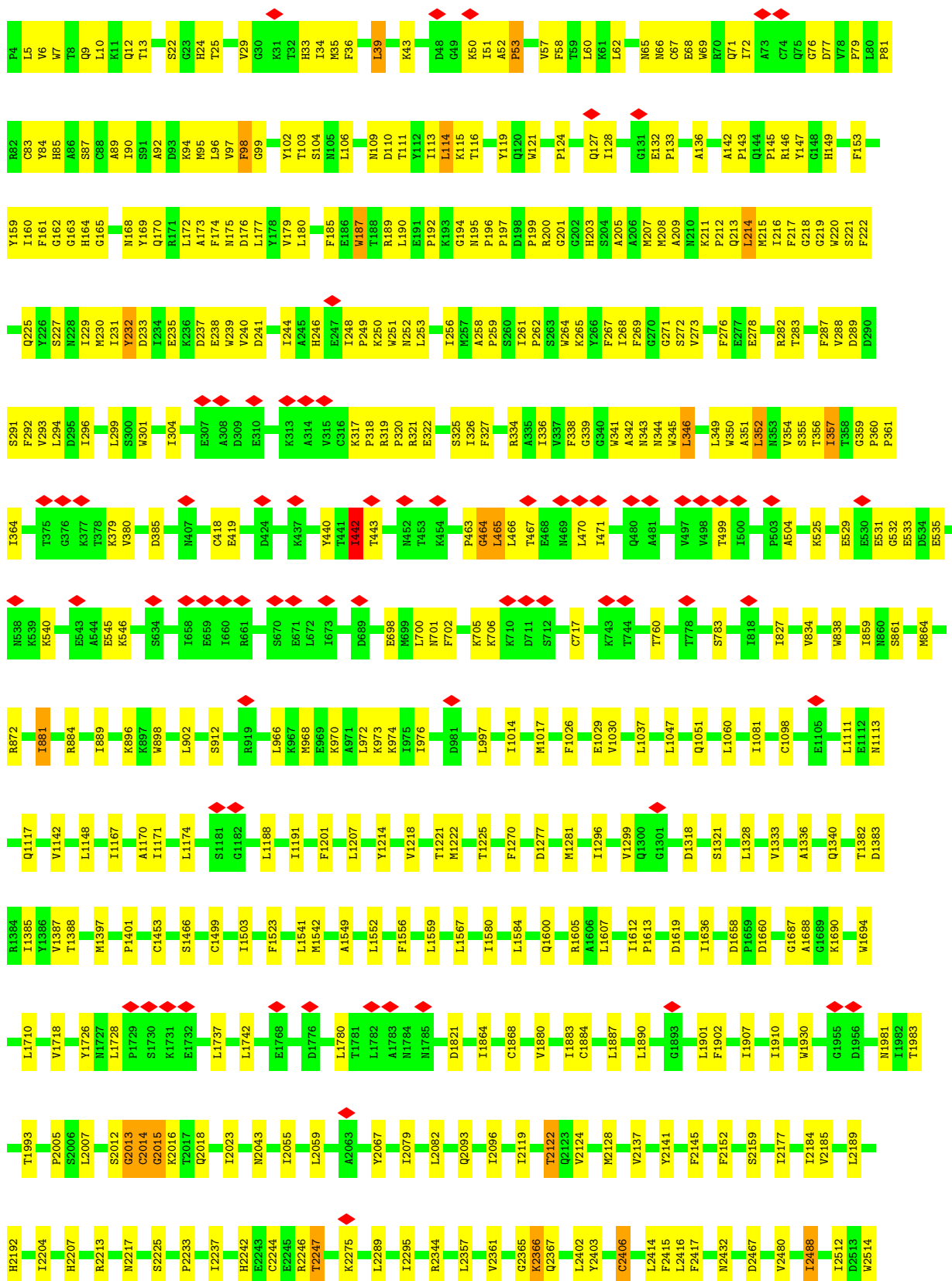


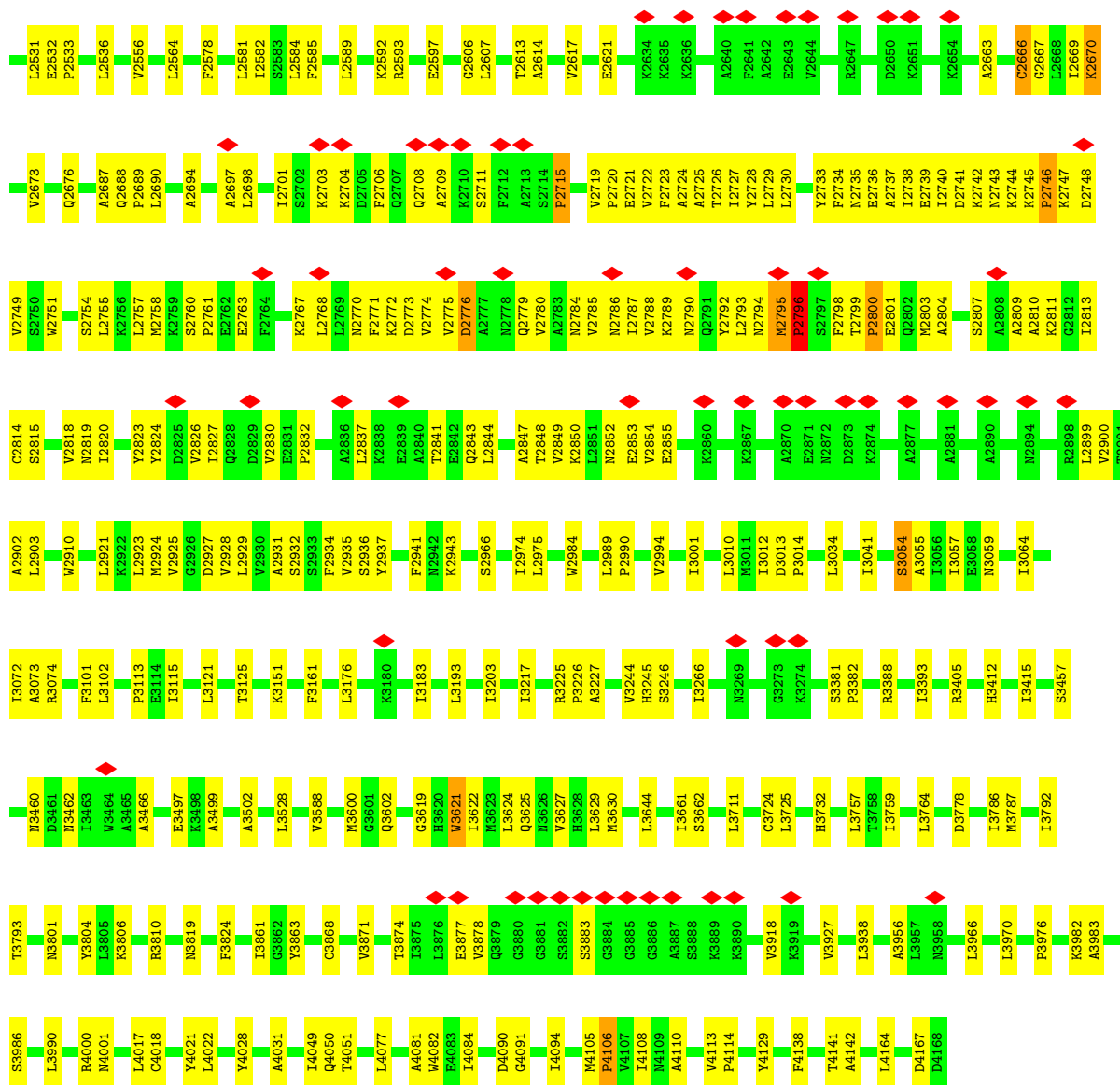
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N2462	K2470	C2479	E2488	N2492	T2493	V2494	D2503	V2512	A2513	T2514	L2515	H2516	R2519	T2526	R2531	A2540	G2543	K2544	T2545	A2546	V2560	S2568	S2569	L2574	Q2577	K2586	N2591	Y2592	T2601	M2609	P2610	Y2615	G2616	T2617	Q2618	S2619	P2620	I2621	Q2622														
W2260	D2264	L2267	D2268	P2269	E2270	W2271	R2300	L2301	L2302	F2303	E2304	L2308	R2309	W2310	A2311	E2326	N2332	P2333	Y2334	M2335	E2352	D2363	D2364	W2365	A2366	L2382	D2383	P2395	L2409	D2410	A2411	L2412	L2413	L2417	P2418	D2427	L2432	F2436	L2441	G2445													
L2040	G2044	R2049	L2058	L2066	K2070	L2083	R2084	Q2085	T2116	D2117	D2118	I2121	D2128	L2129	F2130	T2150	T2151	M2155	V2176	R2177	P2185	S2188	G2189	K2190	C2192	N2203	E2206	D2207	N2214	T2219	F2231	V2237	V2240	N2248	Y2252																		
K1758	N1770	L1771	I1772	E1783	L1784	W1785	I1786	I1787	I1788	T1792	I1793	R1798	I1806	S1819	W1825	I1856	V1857	F1860	Y1863	I1868	K1912	V1922	M1923	Y1924	F1925	M1936	G1942	Q1945	S1946	G1947	N1956	V1966	A2009	G2010	R2011	R2023	N2038	R2039															
L1599	K1602	K1603	K1604	S1605	F1606	R1607	R1608	F1609	Y1610	F1611	L1612	L1617	L1618	L1621	S1622	M1623	A1627	P1628	L1634	C1637	F1638	L1641	A1650	M1662	D1666	G1680	A1681	V1682	H1684	L1687	K1705	A1708	W1711	D1715	Q1728	L1731	T1734																
D1503	W1504	E1506	K1507	V1511	V1514	V1515	M1516	K1520	V1521	Q1522	W1525	K1526	I1527	L1528	Y1529	N1530	I1531	F1532	L1533	L1534	T1538	R1539	T1546	F1549	K1557	D1558	M1559	M1560	S1561	E1562	V1563	S1564	A1565	N1566	P1567	S1568	V1569	V1570	E1571	A1572	C1573	R1577	W1584	S1585	C1591	L1595							
K1436	E1437	A1438	K1439	I1440	K1441	K1442	L1443	L1444	N1445	I1447	E1448	Q1449	W1450	Q1454	V1455	F1456	E1457	F1458	T1459	E1460	Y1461	K1462	T1464	K1465	T1466	F1467	S1469	L1470	D1471	M1472	M1473	M1474	L1477	H1480	L1484	M1485	G1486	M1487	K1488	S1489	Q1490	G1491	K1492	Y1493	V1494	E1495	Y1498	D1499	R1500	V1501	E1502		
L1333	K1334	A1335	D1336	I1337	L1338	L1339	D1340	T1341	N1342	K1343	T1344	L1345	G1346	T1347	Q1348	F1349	K1350	N1351	L1352	P1353	K1354	R1357	K1360	T1374	V1375	L1376	P1377	L1378	A1381	M1387	L1395	S1409	F1410	Y1411	F1412	E1413	D1414	L1420	Y1423	E1424	V1427	E1428	N1429	I1430	V1431	D1432	V1433	A1434	Q1435				
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P1010	GLU	ASN	GLU	PRO	LYS	ASP	GLU	ASP	GLY	LYS	GLY	ASP	ASP	GLU	GLY	ASN	THR	GLN	LYS	ASN	PRO	LEU	LEU	LYS	GLY	CYS	ARG	ALA	LYS	ILE	PRO	N1046	L1049	F1050	D1051	I1054	T1055	H1056	L1057	K1058	Q1061	I1067	K1068	T1069	P1070	E1071	W1075	L1076	R1077	I1078			



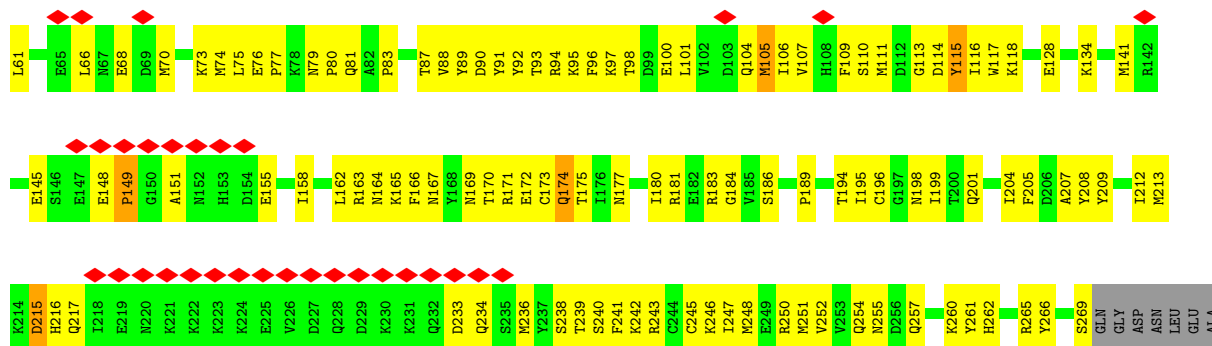
• Molecule 3: gamma heavy chain



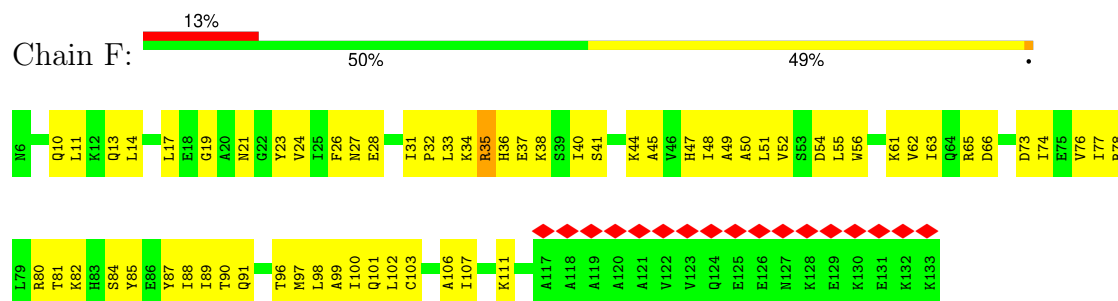




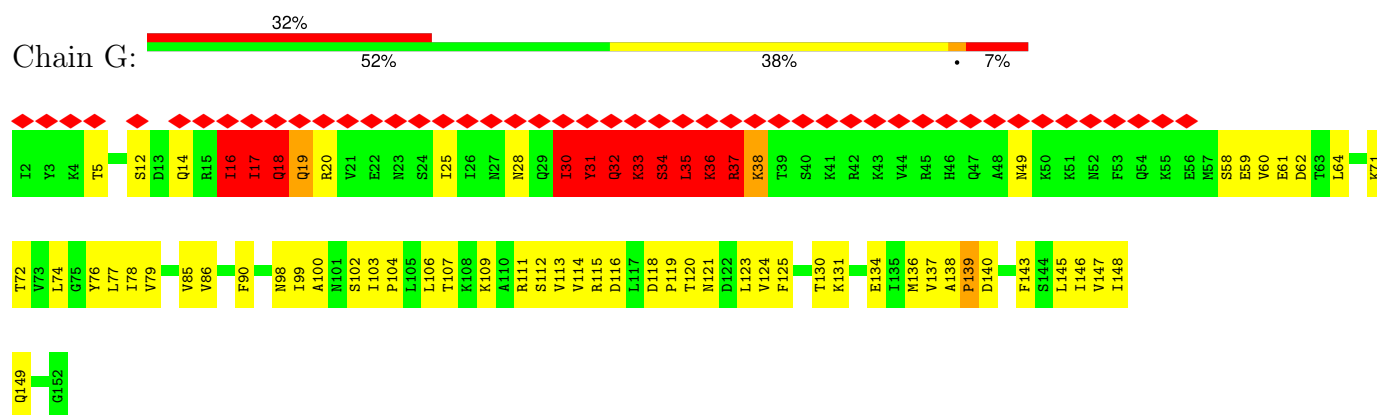
• Molecule 4: Dynein intermediate chain 2



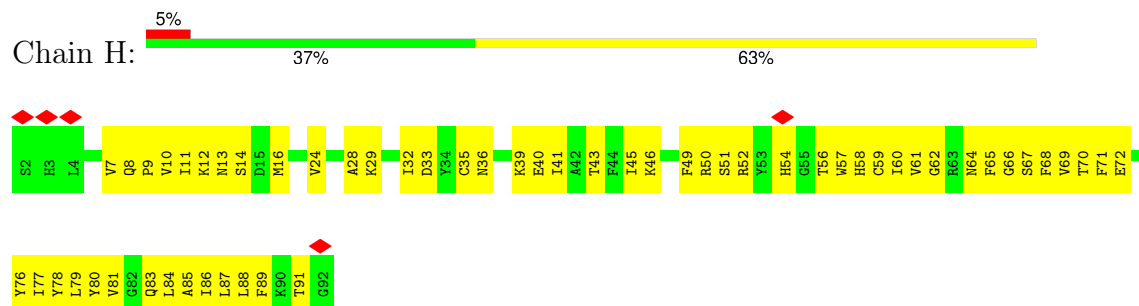
- Molecule 6: Dynein light chain roadblock-type 2 protein



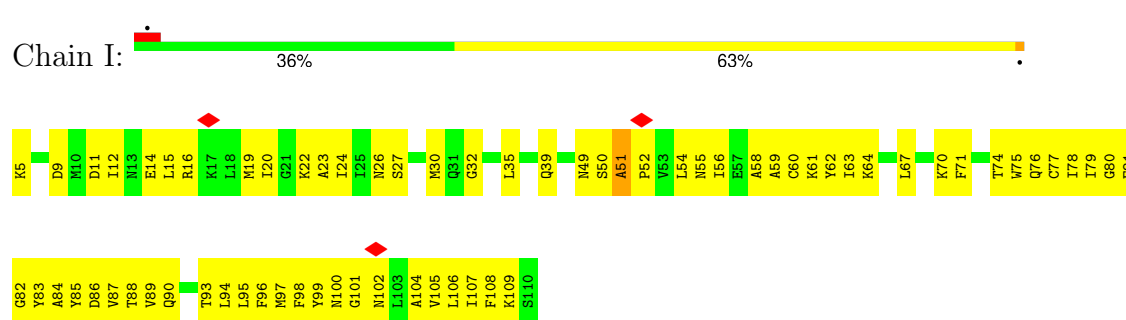
- Molecule 7: Dynein light chain roadblock-type 2 protein



- Molecule 8: Dynein light chain

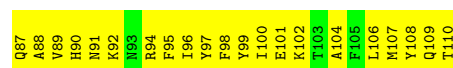
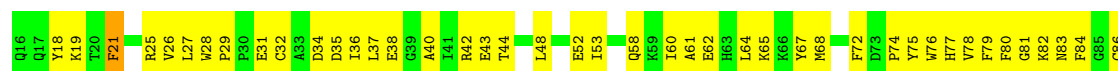


- Molecule 9: Dynein light chain

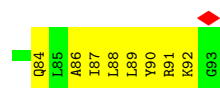
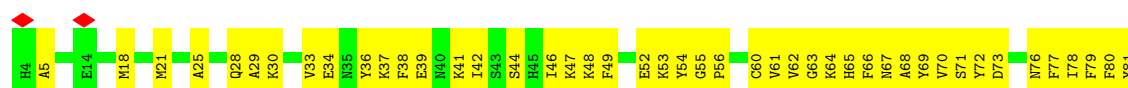


- Molecule 10: Dynein light chain

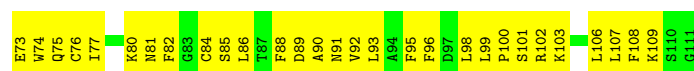




• Molecule 11: Dynein light chain



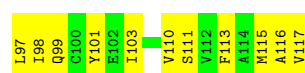
• Molecule 12: Dynein light chain



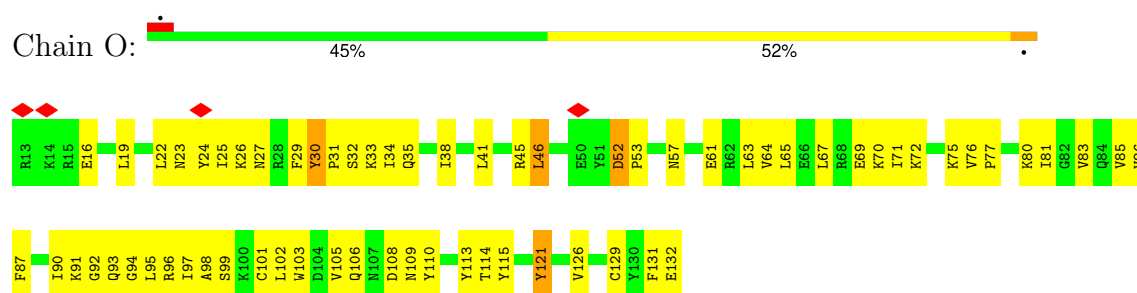
• Molecule 13: Dynein light chain



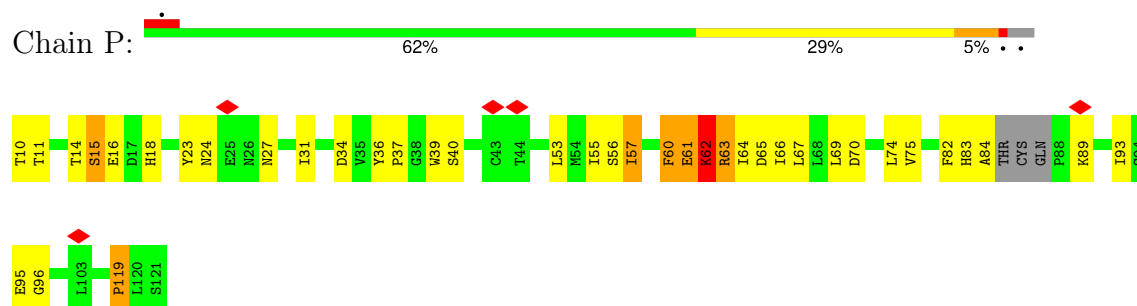
• Molecule 14: Dynein light chain tctex-type 1 protein



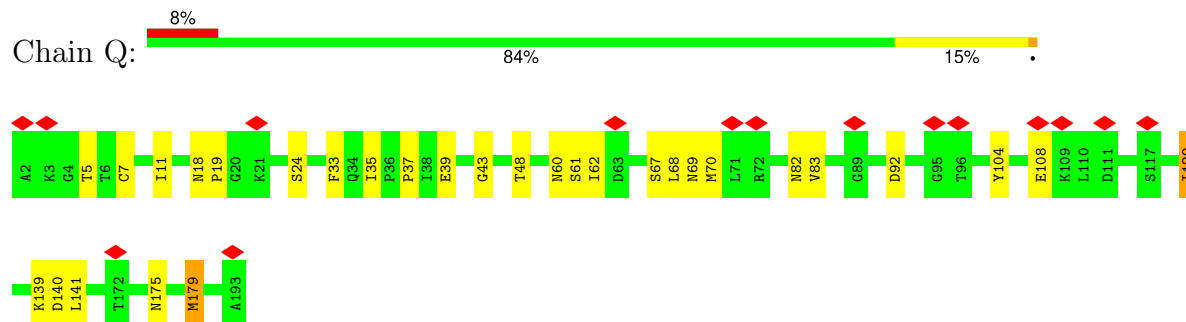
• Molecule 15: Dynein light chain 2A



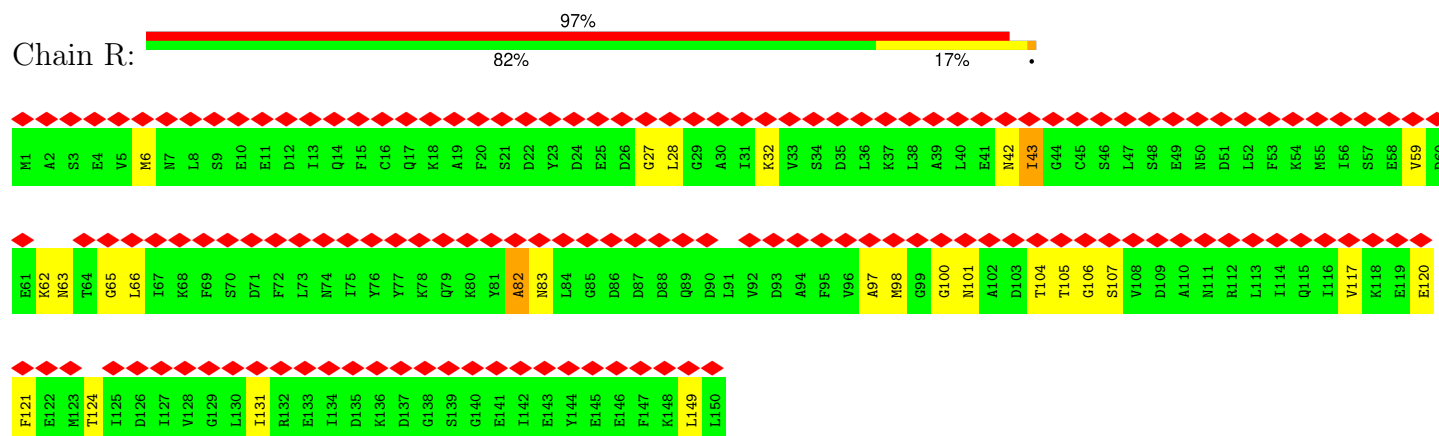
• Molecule 16: Thioredoxin



• Molecule 17: Dynein light chain 1



• Molecule 18: Dynein light chain 4A



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	76936	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	53.3	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	8.594	Depositor
Minimum map value	0.000	Depositor
Average map value	0.029	Depositor
Map value standard deviation	0.189	Depositor
Recommended contour level	0.7	Depositor
Map size (\AA)	527.86786, 493.20984, 462.55084	wwPDB
Map dimensions	396, 370, 347	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.3329996, 1.3329996, 1.3329996	Depositor

5 Model quality

5.1 Standard geometry

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

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	A	0.71	7/34544 (0.0%)	0.81	27/46728 (0.1%)
2	B	0.72	7/35358 (0.0%)	0.82	36/47850 (0.1%)
3	C	0.67	2/31033 (0.0%)	0.77	24/42007 (0.1%)
4	D	0.63	1/4789 (0.0%)	0.74	6/6477 (0.1%)
5	E	0.61	0/4540	0.64	0/6136
6	F	0.57	0/1008	0.58	0/1355
7	G	0.63	0/1030	0.98	11/1403 (0.8%)
8	H	0.63	0/767	0.61	0/1031
9	I	0.65	0/838	0.59	0/1131
10	J	0.61	0/832	0.65	0/1119
11	K	0.62	0/776	0.60	0/1038
12	L	0.60	0/872	0.61	0/1176
13	M	0.61	0/752	0.61	0/1006
14	N	0.66	0/864	0.67	0/1175
15	O	0.64	0/1012	0.64	0/1358
16	P	1.92	3/538 (0.6%)	1.60	15/746 (2.0%)
17	Q	0.33	0/1009	0.59	3/1392 (0.2%)
18	R	0.83	1/738 (0.1%)	0.95	2/1025 (0.2%)
All	All	0.70	21/121300 (0.0%)	0.79	124/164153 (0.1%)

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	A	0	4
2	B	0	11
3	C	0	1
4	D	0	1
7	G	0	12

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Mol	Chain	#Chirality outliers	#Planarity outliers
16	P	0	2
All	All	0	31

All (21) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	1067	PRO	N-CD	51.30	2.19	1.47
2	B	59	THR	C-N	-39.10	0.44	1.34
16	P	62	LYS	C-N	-30.53	0.63	1.34
16	P	15	SER	C-N	20.51	1.81	1.34
1	A	1649	ALA	C-N	-17.37	0.94	1.34
2	B	799	VAL	C-N	16.48	1.72	1.34
18	R	82	ALA	C-N	16.36	1.71	1.34
2	B	56	ASP	C-N	-16.22	0.96	1.34
1	A	943	THR	C-N	15.58	1.69	1.34
1	A	3351	PRO	N-CA	14.08	1.71	1.47
2	B	55	GLN	C-N	11.69	1.60	1.34
16	P	61	GLU	C-N	11.49	1.60	1.34
2	B	17	ARG	N-CA	11.47	1.69	1.46
1	A	1171	ILE	C-N	9.60	1.56	1.34
1	A	620	PRO	N-CD	-9.22	1.34	1.47
2	B	49	PHE	C-N	-6.76	1.18	1.34
2	B	99	LEU	C-N	-6.25	1.19	1.34
1	A	3350	LYS	C-N	6.20	1.46	1.34
3	C	442	ILE	C-N	5.89	1.47	1.34
3	C	364	ILE	C-N	-5.74	1.20	1.34
4	D	105	MET	C-N	5.47	1.46	1.34

All (124) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	1171	ILE	CA-C-N	-49.31	8.71	117.20
1	A	1171	ILE	C-N-CA	-46.87	4.53	121.70
2	B	59	THR	O-C-N	-39.33	59.78	122.70
2	B	49	PHE	O-C-N	-27.89	78.07	122.70
3	C	467	THR	N-CA-CB	23.73	155.38	110.30
2	B	49	PHE	CA-C-N	20.77	162.90	117.20
4	D	105	MET	O-C-N	-20.27	90.26	122.70
16	P	62	LYS	O-C-N	-18.90	92.47	122.70
18	R	82	ALA	C-N-CA	-17.94	76.84	121.70
2	B	49	PHE	C-N-CA	16.81	163.74	121.70
2	B	3222	PRO	CA-N-CD	-16.46	88.45	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1213	PRO	CA-N-CD	-15.77	89.42	111.50
2	B	137	LEU	N-CA-C	15.47	152.77	111.00
4	D	105	MET	CA-C-N	15.37	151.02	117.20
2	B	1186	PRO	CA-N-CD	-13.48	92.63	111.50
3	C	2832	PRO	CA-N-CD	-13.46	92.65	111.50
3	C	467	THR	CB-CA-C	-13.18	76.01	111.60
18	R	82	ALA	CA-C-N	-13.09	88.41	117.20
1	A	3203	PRO	CA-N-CD	-12.91	93.42	111.50
2	B	3355	PRO	CA-N-CD	-12.89	93.45	111.50
2	B	59	THR	C-N-CA	-12.85	89.58	121.70
1	A	1172	THR	O-C-N	-12.81	102.20	122.70
2	B	55	GLN	O-C-N	12.20	142.22	122.70
2	B	138	ASN	N-CA-CB	11.92	132.06	110.60
16	P	56	SER	N-CA-CB	11.56	127.84	110.50
2	B	103	ASN	O-C-N	11.47	141.06	122.70
2	B	799	VAL	O-C-N	11.45	141.02	122.70
16	P	15	SER	C-N-CA	-10.77	94.77	121.70
2	B	137	LEU	CB-CA-C	-10.46	90.33	110.20
2	B	799	VAL	CA-C-N	-10.06	95.07	117.20
3	C	442	ILE	CB-CA-C	-10.06	91.48	111.60
1	A	1172	THR	CA-C-N	9.90	138.97	117.20
16	P	57	ILE	CB-CA-C	-9.85	91.91	111.60
2	B	55	GLN	CA-C-N	-9.79	95.66	117.20
2	B	59	THR	CA-C-N	-9.61	96.06	117.20
3	C	2746	PRO	CA-N-CD	-9.51	98.19	111.50
4	D	398	PRO	CA-N-CD	-9.50	98.20	111.50
3	C	53	PRO	CA-N-CD	-9.40	98.34	111.50
3	C	2800	PRO	CA-N-CD	-9.15	98.69	111.50
3	C	2796	PRO	CA-N-CD	-9.09	98.78	111.50
1	A	3250	PRO	CA-N-CD	-9.03	98.85	111.50
16	P	57	ILE	N-CA-CB	8.89	131.24	110.80
3	C	442	ILE	N-CA-CB	8.80	131.03	110.80
2	B	16	ASN	C-N-CA	8.76	143.59	121.70
1	A	3351	PRO	CA-N-CD	-8.62	99.42	111.50
3	C	364	ILE	O-C-N	-8.31	109.40	122.70
2	B	103	ASN	CA-C-N	-8.16	99.26	117.20
7	G	17	ILE	O-C-N	-8.15	109.66	122.70
7	G	33	LYS	O-C-N	-8.14	109.67	122.70
7	G	32	GLN	O-C-N	-8.11	109.73	122.70
7	G	36	LYS	O-C-N	-8.10	109.73	122.70
7	G	37	ARG	O-C-N	-8.10	109.73	122.70
7	G	18	GLN	O-C-N	-8.09	109.75	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	35	LEU	O-C-N	-8.09	109.75	122.70
7	G	34	SER	O-C-N	-8.08	109.77	122.70
7	G	30	ILE	O-C-N	-8.08	109.78	122.70
7	G	31	TYR	O-C-N	-8.07	109.78	122.70
7	G	16	ILE	O-C-N	-8.07	109.79	122.70
2	B	799	VAL	C-N-CA	-7.91	101.92	121.70
2	B	73	PHE	N-CA-C	-7.81	89.92	111.00
1	A	1171	ILE	O-C-N	-7.70	110.37	122.70
1	A	1067	PRO	N-CD-CG	-7.68	91.68	103.20
4	D	105	MET	C-N-CA	7.38	140.15	121.70
1	A	121	GLY	O-C-N	-7.37	110.91	122.70
1	A	326	PRO	N-CA-CB	7.29	112.05	103.30
2	B	71	CYS	CB-CA-C	7.23	124.87	110.40
16	P	56	SER	CB-CA-C	-7.08	96.65	110.10
2	B	55	GLN	C-N-CA	-6.90	104.45	121.70
1	A	1268	ARG	CB-CA-C	6.88	124.15	110.40
1	A	1067	PRO	CA-N-CD	-6.73	102.08	111.50
16	P	60	PHE	CB-CA-C	-6.61	97.18	110.40
2	B	72	THR	N-CA-CB	6.56	122.77	110.30
3	C	442	ILE	C-N-CA	-6.54	105.34	121.70
16	P	61	GLU	CA-C-N	-6.46	102.98	117.20
2	B	84	PHE	O-C-N	6.40	132.94	122.70
16	P	62	LYS	CA-C-N	-6.39	103.13	117.20
16	P	62	LYS	CB-CA-C	-6.09	98.21	110.40
2	B	99	LEU	CA-C-N	-6.00	104.00	117.20
2	B	84	PHE	C-N-CA	5.90	136.44	121.70
16	P	62	LYS	C-N-CA	-5.86	107.05	121.70
2	B	71	CYS	N-CA-CB	5.85	121.14	110.60
2	B	84	PHE	CA-C-N	-5.80	104.44	117.20
3	C	466	LEU	CB-CA-C	-5.80	99.18	110.20
3	C	470	LEU	N-CA-CB	5.75	121.90	110.40
3	C	465	LEU	N-CA-CB	5.74	121.88	110.40
2	B	103	ASN	C-N-CA	-5.66	107.54	121.70
16	P	60	PHE	N-CA-CB	5.61	120.70	110.60
1	A	340	PRO	N-CA-CB	5.60	110.02	103.30
16	P	61	GLU	O-C-N	5.59	131.64	122.70
3	C	464	GLY	O-C-N	-5.56	113.80	122.70
2	B	99	LEU	O-C-N	5.54	131.57	122.70
1	A	1528	GLY	N-CA-C	5.46	126.75	113.10
3	C	364	ILE	C-N-CA	5.39	135.19	121.70
1	A	1067	PRO	N-CA-CB	5.37	109.75	103.30
3	C	466	LEU	N-CA-CB	5.31	121.03	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	283	PRO	N-CA-CB	5.30	109.67	103.30
16	P	62	LYS	N-CA-CB	5.29	120.13	110.60
4	D	574	ASP	CB-CG-OD2	5.29	123.06	118.30
3	C	470	LEU	CB-CA-C	-5.28	100.17	110.20
3	C	465	LEU	CB-CA-C	-5.28	100.18	110.20
4	D	215	ASP	CB-CG-OD2	5.27	123.04	118.30
1	A	1424	ASP	CB-CG-OD2	5.27	123.04	118.30
2	B	1471	ASP	CB-CG-OD2	5.26	123.03	118.30
1	A	1418	ASP	CB-CG-OD2	5.26	123.03	118.30
3	C	2748	ASP	CB-CG-OD2	5.24	123.02	118.30
3	C	364	ILE	CA-C-N	5.24	128.72	117.20
16	P	61	GLU	CB-CA-C	-5.23	99.93	110.40
2	B	1432	ASP	CB-CG-OD2	5.22	123.00	118.30
2	B	3232	ASP	CB-CG-OD2	5.22	123.00	118.30
1	A	1411	ASP	CB-CG-OD2	5.22	123.00	118.30
1	A	3219	ASP	CB-CG-OD2	5.21	122.99	118.30
3	C	2741	ASP	CB-CG-OD2	5.20	122.98	118.30
1	A	846	ASP	CB-CG-OD2	5.19	122.97	118.30
1	A	1415	ASP	CB-CG-OD2	5.17	122.95	118.30
1	A	3231	ASP	CB-CG-OD2	5.16	122.94	118.30
3	C	2773	ASP	CB-CG-OD2	5.16	122.94	118.30
1	A	940	ASP	CB-CG-OD2	5.15	122.93	118.30
3	C	2776	ASP	CB-CG-OD2	5.14	122.93	118.30
2	B	831	ASP	CB-CG-OD2	5.12	122.91	118.30
1	A	3283	ASP	CB-CG-OD2	5.11	122.90	118.30
1	A	1043	PRO	N-CA-C	5.04	125.21	112.10
17	Q	179	MET	N-CA-C	5.01	124.54	111.00
17	Q	18	ASN	C-N-CA	5.00	143.01	122.00
17	Q	179	MET	CA-C-O	5.00	130.60	120.10

There are no chirality outliers.

All (31) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1171	ILE	Mainchain,Peptide
1	A	121	GLY	Mainchain
1	A	1649	ALA	Mainchain
2	B	109	VAL	Mainchain
2	B	1166	GLU	Mainchain
2	B	1462	LYS	Peptide
2	B	25	GLN	Peptide
2	B	49	PHE	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
2	B	56	ASP	Mainchain
2	B	59	THR	Mainchain
2	B	84	PHE	Mainchain
2	B	909	SER	Mainchain
2	B	99	LEU	Mainchain
3	C	464	GLY	Mainchain
4	D	233	ASP	Peptide
7	G	16	ILE	Mainchain
7	G	17	ILE	Mainchain
7	G	18	GLN	Mainchain
7	G	28	ASN	Peptide
7	G	30	ILE	Mainchain
7	G	31	TYR	Mainchain
7	G	32	GLN	Mainchain
7	G	33	LYS	Mainchain
7	G	34	SER	Mainchain
7	G	35	LEU	Mainchain
7	G	36	LYS	Mainchain
7	G	37	ARG	Mainchain
16	P	62	LYS	Mainchain
16	P	70	ASP	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	A	33975	0	32379	2211	0
2	B	34751	0	33289	2334	0
3	C	30427	0	29352	1238	0
4	D	4680	0	4511	1070	0
5	E	4440	0	4311	909	0
6	F	996	0	1019	263	0
7	G	1024	0	883	189	0
8	H	750	0	734	219	0
9	I	827	0	826	293	0
10	J	807	0	772	268	0
11	K	754	0	716	122	0
12	L	855	0	854	211	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
13	M	735	0	738	192	0
14	N	852	0	799	201	0
15	O	994	0	1017	311	0
16	P	541	0	217	56	0
17	Q	1006	0	512	51	0
18	R	739	156	339	45	0
19	A	54	0	23	31	0
19	B	54	0	24	18	0
19	C	54	0	22	32	0
20	A	31	0	12	10	0
20	B	31	0	12	43	0
20	C	31	0	12	2	0
21	A	3	0	0	2	0
21	B	3	0	0	0	0
21	C	3	0	0	0	0
All	All	119417	156	113373	8535	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 37.

All (8535) 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)
10:J:86:CYS:SG	11:K:61:VAL:HG22	1.24	1.72
1:A:3235:TYR:CE2	1:A:3269:LEU:HD13	1.25	1.71
3:C:196:PRO:HA	3:C:239:TRP:CZ2	1.23	1.67
2:B:3118:TYR:CE2	2:B:3452:LEU:HA	1.25	1.64
4:D:170:THR:CG2	13:M:66:ILE:CG1	1.74	1.64
14:N:25:PHE:CE1	14:N:103:ILE:HG21	1.17	1.64
2:B:1474:MET:SD	2:B:1515:VAL:HG11	1.32	1.64
1:A:3232:ILE:HG12	1:A:3316:TRP:CZ3	1.14	1.63
1:A:3290:LEU:HD22	1:A:3335:TRP:CZ2	1.09	1.62
2:B:58:SER:HA	2:B:83:LYS:CB	1.26	1.62
2:B:544:HIS:CE1	2:B:609:LEU:HD12	1.32	1.62
4:D:172:GLU:CB	13:M:64:HIS:HB3	1.26	1.62
2:B:957:GLN:HG2	3:C:164:HIS:CE1	1.34	1.62
1:A:935:VAL:HG22	1:A:944:LEU:CD2	1.23	1.62
2:B:3:ASP:CB	2:B:7:LYS:HA	1.19	1.61
2:B:864:ASN:HB2	2:B:947:LEU:CD2	1.15	1.61
2:B:429:LEU:HD12	2:B:489:PHE:CE2	1.32	1.60
2:B:744:MET:SD	2:B:772:ILE:HG13	1.40	1.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:997:LYS:CD	18:R:149:LEU:HA	1.18	1.60
1:A:1445:PHE:CE2	1:A:1564:CYS:HB3	1.14	1.60
4:D:177:ASN:HD21	13:M:60:ASN:CB	1.02	1.60
1:A:891:PHE:CE1	1:A:972:TRP:CE3	1.88	1.60
2:B:436:PHE:CE1	2:B:499:LEU:CD2	1.77	1.60
3:C:2745:LYS:CD	3:C:2749:VAL:HG21	1.14	1.60
2:B:970:ALA:CB	3:C:345:TRP:CZ3	1.82	1.60
1:A:3121:LEU:HD21	1:A:3429:TRP:CB	1.16	1.60
5:E:20:PHE:CZ	15:O:80:LYS:HG3	1.10	1.60
2:B:1238:LYS:CE	2:B:1308:LEU:HA	1.22	1.59
5:E:61:VAL:CG2	10:J:106:LEU:HD22	1.32	1.59
5:E:117:GLU:HG3	6:F:17:LEU:CD1	1.17	1.59
1:A:1525:PHE:HB2	1:A:1541:PHE:CD2	1.36	1.59
1:A:2839:LEU:HD12	19:A:4901:ADP:C2	1.07	1.59
1:A:3232:ILE:CG1	1:A:3316:TRP:CZ3	1.79	1.59
2:B:713:VAL:CG1	5:E:258:GLU:HG3	1.15	1.58
4:D:251:MET:HB3	7:G:136:MET:CE	1.15	1.58
6:F:48:ILE:HD11	6:F:98:LEU:CD2	1.12	1.58
6:F:48:ILE:CD1	6:F:98:LEU:HD23	1.26	1.58
2:B:444:LEU:HA	5:E:515:LYS:CG	1.32	1.58
2:B:1329:PRO:HA	2:B:1412:PHE:CB	1.20	1.58
1:A:3257:VAL:HG21	1:A:3266:VAL:CG1	1.16	1.58
3:C:2711:SER:HB3	3:C:2751:TRP:CZ2	1.30	1.58
3:C:2726:THR:HA	3:C:2729:LEU:CD1	1.15	1.57
5:E:117:GLU:CG	6:F:17:LEU:HD11	1.32	1.57
14:N:72:ILE:HG23	15:O:97:ILE:CG1	1.33	1.57
2:B:1511:VAL:CB	2:B:1570:VAL:HG21	1.17	1.56
2:B:555:LEU:CD2	2:B:625:LEU:CD2	1.79	1.56
1:A:3249:ILE:CG1	1:A:3273:TYR:HA	1.32	1.56
2:B:1447:ILE:CG2	2:B:1504:TRP:HE1	0.97	1.56
5:E:20:PHE:CE2	15:O:80:LYS:HE3	1.36	1.56
2:B:10:PRO:CB	2:B:25:GLN:HA	1.32	1.55
2:B:582:MET:HE1	2:B:587:GLY:CA	1.22	1.55
2:B:1058:LYS:CG	2:B:1166:GLU:HB3	1.29	1.55
2:B:501:ARG:NH2	4:D:491:GLN:CG	1.68	1.55
2:B:3:ASP:CB	2:B:7:LYS:CA	1.78	1.55
2:B:1488:LYS:CB	2:B:1501:VAL:HG11	1.35	1.54
5:E:16:ASN:CB	15:O:132:GLU:HG3	1.28	1.54
5:E:20:PHE:CZ	15:O:80:LYS:CG	1.89	1.54
2:B:10:PRO:CA	2:B:25:GLN:CA	1.85	1.54
4:D:207:ALA:CB	9:I:24:ILE:HD11	1.30	1.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:251:MET:CB	7:G:136:MET:HE1	1.12	1.54
2:B:801:ILE:HD12	2:B:878:ALA:CA	1.26	1.54
2:B:3153:LEU:HD13	2:B:3707:LEU:CD1	1.33	1.54
1:A:1422:SER:HB2	1:A:1486:HIS:CE1	1.41	1.54
2:B:864:ASN:CA	2:B:947:LEU:HG	1.32	1.54
3:C:2669:ILE:HD12	3:C:2847:ALA:CB	1.35	1.54
3:C:2745:LYS:HD2	3:C:2749:VAL:CG2	1.07	1.54
6:F:91:GLN:HG2	6:F:96:THR:CG2	1.35	1.54
2:B:10:PRO:HA	2:B:25:GLN:CA	1.35	1.53
3:C:2738:ILE:HA	3:C:2746:PRO:CG	1.35	1.53
1:A:2839:LEU:CD1	19:A:4901:ADP:N1	1.71	1.53
2:B:864:ASN:CB	2:B:947:LEU:CG	1.81	1.53
3:C:2738:ILE:CA	3:C:2746:PRO:HG3	1.31	1.53
2:B:444:LEU:CA	5:E:515:LYS:HG3	1.36	1.53
14:N:25:PHE:CE1	14:N:103:ILE:CG2	1.85	1.53
2:B:582:MET:CE	2:B:587:GLY:HA2	1.11	1.52
2:B:17:ARG:N	2:B:17:ARG:CA	1.69	1.52
3:C:2740:ILE:HG21	3:C:2744:LYS:CB	1.30	1.52
6:F:14:LEU:CD2	6:F:23:TYR:HB3	1.39	1.52
2:B:1607:PRO:CG	2:B:1946:SER:HB3	1.38	1.52
6:F:11:LEU:HD22	6:F:23:TYR:CE1	1.02	1.51
3:C:2720:PRO:HB2	3:C:2798:PHE:CE2	1.46	1.51
2:B:409:SER:CB	2:B:413:PHE:CD1	1.90	1.51
2:B:3118:TYR:HE2	2:B:3452:LEU:CA	1.23	1.51
1:A:3235:TYR:CE2	1:A:3269:LEU:CD1	1.90	1.51
2:B:429:LEU:CD1	2:B:489:PHE:CE2	1.88	1.51
2:B:3153:LEU:CD1	2:B:3707:LEU:HD11	1.07	1.51
2:B:957:GLN:CG	3:C:164:HIS:CE1	1.93	1.50
2:B:3446:SER:CB	2:B:3489:THR:HG23	1.35	1.50
8:H:66:GLY:HA3	9:I:56:ILE:CG2	1.07	1.50
1:A:1132:LEU:C	1:A:1272:LEU:HD11	1.25	1.50
1:A:3232:ILE:HG12	1:A:3316:TRP:CE3	1.45	1.50
1:A:3290:LEU:CD2	1:A:3335:TRP:CZ2	1.91	1.50
2:B:864:ASN:CB	2:B:947:LEU:HG	1.31	1.50
3:C:2740:ILE:CG2	3:C:2744:LYS:HB2	1.40	1.50
4:D:569:TYR:CZ	4:D:578:LYS:HG2	1.43	1.50
6:F:11:LEU:CD2	6:F:23:TYR:CE1	1.94	1.50
17:Q:68:LEU:C	17:Q:92:ASP:CB	1.79	1.50
2:B:555:LEU:HD23	2:B:625:LEU:CD2	1.39	1.49
2:B:2334:TYR:N	20:B:5601:ATP:H2	1.07	1.49
1:A:2839:LEU:CD1	19:A:4901:ADP:C2	1.95	1.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1395:LEU:CB	2:B:1430:ILE:HD13	1.03	1.49
5:E:310:LEU:CG	5:E:358:ARG:NH2	1.71	1.49
5:E:20:PHE:CD2	15:O:80:LYS:CE	1.91	1.49
3:C:165:GLY:O	3:C:174:PHE:CZ	1.65	1.49
2:B:1456:PHE:CZ	2:B:1563:VAL:CG1	1.92	1.49
1:A:3121:LEU:CD2	1:A:3429:TRP:HB3	1.00	1.48
4:D:395:HIS:NE2	4:D:399:VAL:CG1	1.69	1.48
1:A:3257:VAL:CG2	1:A:3266:VAL:CG1	1.90	1.48
1:A:3257:VAL:CB	1:A:3266:VAL:HG13	1.41	1.48
1:A:580:LEU:CD2	1:A:640:SER:HB3	1.41	1.47
1:A:3103:TYR:CE2	1:A:3444:VAL:HG22	1.47	1.47
1:A:3232:ILE:CD1	1:A:3316:TRP:HZ3	1.24	1.47
5:E:16:ASN:HB2	15:O:132:GLU:CA	1.41	1.47
4:D:297:LYS:NZ	4:D:328:LEU:HB2	1.22	1.47
5:E:100:GLU:HB3	5:E:105:PHE:CD2	1.49	1.47
8:H:54:HIS:CE1	18:R:62:LYS:HA	1.49	1.47
1:A:1445:PHE:CE2	1:A:1564:CYS:CB	1.95	1.46
2:B:544:HIS:HE1	2:B:609:LEU:CD1	1.28	1.46
2:B:1456:PHE:CE1	2:B:1563:VAL:HG12	1.47	1.46
1:A:2839:LEU:HD11	19:A:4901:ADP:C6	1.47	1.46
1:A:3106:LYS:HG2	1:A:3443:LEU:CD1	1.46	1.46
3:C:196:PRO:CA	3:C:239:TRP:HZ2	1.24	1.46
4:D:172:GLU:HB3	13:M:64:HIS:CB	1.43	1.46
8:H:66:GLY:CA	9:I:56:ILE:HG21	1.40	1.46
3:C:60:LEU:HD21	3:C:69:TRP:CZ3	1.47	1.46
2:B:1474:MET:CE	2:B:1515:VAL:HG11	1.47	1.45
2:B:1511:VAL:HA	2:B:1570:VAL:CG2	1.41	1.45
2:B:3264:ASN:HB2	2:B:3306:ILE:CD1	1.43	1.45
3:C:2726:THR:CA	3:C:2729:LEU:HD12	1.45	1.45
3:C:2803:MET:CB	3:C:2814:CYS:SG	2.05	1.45
5:E:20:PHE:CD2	15:O:80:LYS:HE3	0.95	1.45
8:H:51:SER:HB2	18:R:32:LYS:CB	1.44	1.45
2:B:1395:LEU:CB	2:B:1430:ILE:CD1	1.95	1.45
2:B:3301:ASN:ND2	2:B:3351:LYS:HZ3	1.15	1.45
6:F:56:TRP:CE2	6:F:91:GLN:OE1	1.67	1.45
18:R:120:GLU:CB	18:R:124:THR:CB	1.93	1.45
5:E:164:VAL:HG22	5:E:181:TYR:CE1	1.51	1.45
1:A:1009:THR:HB	1:A:1074:MET:SD	1.52	1.44
1:A:3121:LEU:CD2	1:A:3429:TRP:CB	1.76	1.44
1:A:943:THR:C	1:A:944:LEU:N	1.69	1.44
3:C:2701:ILE:CD1	3:C:2704:LYS:CD	1.94	1.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:20:PHE:CE2	15:O:80:LYS:HG3	1.51	1.44
2:B:349:ASN:CB	2:B:416:LEU:HD21	1.46	1.44
3:C:2701:ILE:HD11	3:C:2704:LYS:CD	0.98	1.44
4:D:115:TYR:OH	14:N:78:HIS:CD2	1.69	1.44
6:F:14:LEU:HD23	6:F:23:TYR:CD2	1.51	1.44
18:R:82:ALA:C	18:R:83:ASN:N	1.71	1.44
1:A:1513:LYS:CE	1:A:1578:ASN:HD21	1.31	1.43
4:D:294:GLN:NE2	4:D:297:LYS:HE2	1.12	1.43
1:A:1030:SER:O	1:A:1092:TRP:CH2	1.70	1.43
5:E:492:ASP:HA	5:E:495:TYR:CE2	1.54	1.43
1:A:3446:ASN:ND2	1:A:3488:LEU:HD13	1.27	1.43
2:B:682:LYS:NZ	5:E:186:PHE:CD1	1.71	1.43
7:G:120:THR:CG2	9:I:12:ILE:HG23	1.45	1.43
2:B:1447:ILE:HG21	2:B:1504:TRP:NE1	1.25	1.42
2:B:1511:VAL:CA	2:B:1570:VAL:HG21	1.48	1.42
7:G:119:PRO:HD2	9:I:12:ILE:CD1	1.46	1.42
2:B:10:PRO:CA	2:B:25:GLN:HA	0.97	1.42
2:B:1485:MET:CB	2:B:1505:ARG:NE	1.81	1.42
3:C:2709:ALA:HA	3:C:2758:MET:SD	1.56	1.42
4:D:552:PRO:HD2	4:D:595:PHE:CD2	1.53	1.42
8:H:66:GLY:CA	9:I:56:ILE:CG2	1.91	1.42
14:N:25:PHE:CZ	14:N:103:ILE:HG21	1.54	1.42
1:A:3257:VAL:CG1	1:A:3266:VAL:HG13	1.48	1.42
2:B:349:ASN:CA	2:B:416:LEU:HD21	1.43	1.42
2:B:2333:PRO:HB2	20:B:5601:ATP:N1	1.33	1.42
1:A:906:LEU:HD13	1:A:998:VAL:CG1	0.94	1.42
2:B:799:VAL:C	2:B:800:LYS:N	1.72	1.42
6:F:56:TRP:CD1	6:F:91:GLN:NE2	1.80	1.42
1:A:3232:ILE:CG1	1:A:3316:TRP:HZ3	1.20	1.41
1:A:1012:LYS:NZ	1:A:1072:GLY:N	1.67	1.41
2:B:903:ARG:CB	2:B:914:ASP:OD2	1.68	1.41
1:A:1012:LYS:CE	1:A:1071:ILE:HB	1.47	1.41
2:B:798:ASN:HB3	2:B:874:ALA:CB	1.47	1.41
2:B:3446:SER:HB2	2:B:3489:THR:CG2	1.48	1.41
2:B:3178:VAL:CG1	2:B:3395:LEU:HD21	1.47	1.41
3:C:2792:TYR:O	3:C:2796:PRO:CG	1.64	1.41
2:B:444:LEU:HD23	5:E:515:LYS:CE	1.50	1.41
2:B:3150:VAL:HG12	2:B:3423:VAL:CG2	1.50	1.41
1:A:853:VAL:HB	5:E:206:ASN:ND2	1.22	1.40
1:A:3106:LYS:CG	1:A:3443:LEU:HD21	1.47	1.40
2:B:1058:LYS:HG3	2:B:1166:GLU:CB	1.49	1.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1133:GLY:CA	1:A:1268:ARG:O	1.67	1.40
6:F:56:TRP:CZ2	6:F:91:GLN:OE1	1.73	1.40
1:A:755:HIS:CE1	1:A:869:TYR:CD2	2.08	1.40
1:A:997:LYS:HD3	18:R:149:LEU:CA	1.49	1.40
1:A:1525:PHE:CB	1:A:1541:PHE:HD2	1.32	1.40
2:B:1447:ILE:CG2	2:B:1504:TRP:NE1	1.70	1.40
5:E:395:VAL:CG2	5:E:402:ILE:CD1	1.99	1.40
10:J:61:ALA:HB2	10:J:80:PHE:CE2	1.56	1.40
1:A:723:PHE:HE1	1:A:772:TRP:NE1	1.18	1.40
2:B:963:PHE:HE2	3:C:104:SER:N	1.11	1.40
2:B:1329:PRO:CA	2:B:1412:PHE:CB	1.99	1.40
3:C:2721:GLU:HB2	3:C:2803:MET:CE	1.51	1.40
1:A:576:TYR:CE1	1:A:620:PRO:O	1.75	1.39
2:B:1467:PHE:CB	2:B:1470:LEU:HD11	1.52	1.39
3:C:2701:ILE:CD1	3:C:2704:LYS:HD2	1.49	1.39
16:P:11:THR:O	16:P:67:LEU:CB	1.67	1.39
1:A:1020:PHE:CZ	1:A:1069:TYR:CE1	2.09	1.39
1:A:155:GLY:CA	2:B:168:ILE:HA	1.53	1.39
2:B:111:VAL:C	2:B:118:LEU:CB	1.91	1.39
2:B:444:LEU:HD23	5:E:515:LYS:NZ	1.33	1.39
10:J:77:HIS:ND1	11:K:70:VAL:CG2	1.85	1.39
1:A:1273:PHE:CA	4:D:166:PHE:CZ	1.98	1.38
2:B:861:ASP:OD2	3:C:170:GLN:CB	1.68	1.38
2:B:1456:PHE:CD2	2:B:1569:VAL:HG13	1.57	1.38
3:C:2701:ILE:HD11	3:C:2704:LYS:CE	1.52	1.38
1:A:2839:LEU:HD12	19:A:4901:ADP:N1	1.17	1.38
1:A:3257:VAL:CG2	1:A:3266:VAL:HG13	1.46	1.38
2:B:1058:LYS:CE	2:B:1166:GLU:O	1.70	1.38
1:A:1012:LYS:NZ	1:A:1072:GLY:H	0.89	1.38
1:A:1012:LYS:HE2	1:A:1071:ILE:CB	1.54	1.38
2:B:3:ASP:O	2:B:7:LYS:CB	1.71	1.38
10:J:38:GLU:CD	15:O:29:PHE:CE2	1.94	1.38
1:A:906:LEU:CD1	1:A:998:VAL:HG11	0.92	1.38
2:B:1511:VAL:CA	2:B:1570:VAL:CG2	1.98	1.38
2:B:1511:VAL:HG22	2:B:1570:VAL:CB	1.55	1.37
1:A:1422:SER:HB2	1:A:1486:HIS:NE2	1.39	1.37
1:A:3106:LYS:HG3	1:A:3443:LEU:CD2	1.53	1.37
2:B:501:ARG:CZ	4:D:491:GLN:HG3	1.54	1.37
2:B:3228:GLU:HG3	2:B:3346:PHE:CE1	1.58	1.37
1:A:972:TRP:CZ3	1:A:985:PHE:HZ	1.42	1.36
2:B:409:SER:HB2	2:B:413:PHE:CD1	1.56	1.36

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:132:GLU:CD	3:C:133:PRO:HD2	1.44	1.36
14:N:72:ILE:CG2	15:O:97:ILE:HD11	1.53	1.36
1:A:972:TRP:CZ3	1:A:985:PHE:CZ	2.12	1.36
1:A:1513:LYS:CD	1:A:1578:ASN:HD21	1.35	1.36
1:A:1274:GLY:HA3	4:D:164:ASN:CB	1.55	1.36
2:B:433:ILE:HG23	2:B:463:PHE:CZ	1.61	1.36
1:A:1157:GLN:CG	1:A:1180:ARG:HH21	1.38	1.35
2:B:3:ASP:C	2:B:7:LYS:CB	1.91	1.35
1:A:403:ALA:HB2	1:A:471:ASN:CB	1.55	1.35
1:A:3268:PHE:CE1	17:Q:35:ILE:CB	2.08	1.35
2:B:582:MET:CE	2:B:587:GLY:CA	1.86	1.35
6:F:56:TRP:CE2	6:F:91:GLN:CD	1.99	1.35
14:N:25:PHE:HE1	14:N:103:ILE:CG2	1.28	1.35
5:E:20:PHE:CE2	15:O:80:LYS:CE	2.00	1.35
2:B:2333:PRO:CB	20:B:5601:ATP:N1	1.89	1.35
3:C:2669:ILE:O	3:C:2844:LEU:CB	1.73	1.35
2:B:861:ASP:CG	3:C:170:GLN:HB3	1.42	1.35
2:B:1456:PHE:CZ	2:B:1563:VAL:HG12	1.55	1.35
3:C:2793:LEU:O	3:C:2796:PRO:CD	1.73	1.35
1:A:891:PHE:CD1	1:A:972:TRP:CE3	2.16	1.34
4:D:75:LEU:HB2	15:O:102:LEU:CD1	1.54	1.34
16:P:15:SER:C	16:P:16:GLU:N	1.81	1.34
14:N:72:ILE:CG2	15:O:97:ILE:CD1	2.04	1.34
17:Q:69:ASN:N	17:Q:92:ASP:CB	1.91	1.34
1:A:1633:ALA:CB	1:A:1839:LEU:O	1.74	1.34
2:B:1223:LYS:NZ	2:B:1277:ARG:CB	1.91	1.34
4:D:91:TYR:CE2	13:M:80:LEU:HB2	1.61	1.34
10:J:38:GLU:OE1	15:O:29:PHE:CD2	1.78	1.34
10:J:86:CYS:SG	11:K:61:VAL:CG2	2.15	1.34
2:B:3264:ASN:CB	2:B:3306:ILE:HD11	1.56	1.34
3:C:265:LYS:HE2	3:C:356:THR:CG2	1.55	1.34
1:A:801:ILE:CG2	1:A:862:LEU:HD21	1.58	1.33
2:B:864:ASN:CB	2:B:947:LEU:CD2	1.98	1.33
3:C:2720:PRO:CB	3:C:2798:PHE:CE2	2.09	1.33
3:C:2727:ILE:CD1	3:C:2745:LYS:HD3	1.58	1.33
4:D:177:ASN:ND2	13:M:60:ASN:HB2	1.04	1.33
5:E:100:GLU:CB	5:E:105:PHE:HD2	1.39	1.33
1:A:3231:ASP:OD2	1:A:3258:PHE:CD2	1.82	1.33
2:B:3:ASP:CB	2:B:7:LYS:CB	2.03	1.33
2:B:10:PRO:HA	2:B:25:GLN:C	1.47	1.33
2:B:81:ILE:O	2:B:110:VAL:HA	1.22	1.33

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:174:GLN:CA	13:M:62:GLY:HA2	1.58	1.33
6:F:91:GLN:CG	6:F:96:THR:HG22	1.57	1.33
1:A:737:TYR:CE1	1:A:759:LEU:HD23	1.62	1.33
4:D:174:GLN:HA	13:M:62:GLY:CA	1.58	1.33
5:E:395:VAL:HG23	5:E:402:ILE:CD1	1.55	1.33
1:A:686:VAL:CG2	1:A:731:LEU:HD23	1.57	1.32
1:A:755:HIS:CE1	1:A:869:TYR:HD2	1.44	1.32
1:A:970:TYR:O	1:A:983:ALA:HB1	1.18	1.32
6:F:11:LEU:HD22	6:F:23:TYR:CZ	1.64	1.32
1:A:659:TRP:CZ2	1:A:702:LEU:HD11	1.63	1.32
2:B:970:ALA:CB	3:C:345:TRP:HZ3	1.19	1.32
1:A:40:LEU:CB	1:A:41:LEU:N	1.92	1.32
1:A:1157:GLN:HG2	1:A:1180:ARG:NH2	1.01	1.32
1:A:3235:TYR:HE2	1:A:3269:LEU:CD1	1.32	1.32
2:B:444:LEU:HD11	2:B:527:PHE:CE1	1.61	1.32
1:A:3443:LEU:CD1	1:A:3493:PHE:HZ	1.40	1.32
4:D:90:ASP:OD2	13:M:32:LYS:HG3	1.20	1.32
1:A:817:VAL:C	1:A:818:LEU:HD13	1.45	1.32
2:B:801:ILE:CD1	2:B:878:ALA:CA	2.06	1.32
1:A:1632:ASP:HB2	1:A:1892:PHE:CD1	1.62	1.31
1:A:3351:PRO:N	1:A:3351:PRO:CA	1.71	1.31
3:C:2738:ILE:HG22	3:C:2746:PRO:CD	1.60	1.31
1:A:1020:PHE:HZ	1:A:1069:TYR:CE1	1.47	1.31
1:A:3298:ILE:O	1:A:3343:HIS:CE1	1.83	1.31
2:B:3139:GLY:HA3	2:B:3433:TRP:CH2	1.44	1.31
4:D:172:GLU:OE1	12:L:55:LEU:HD12	1.23	1.31
5:E:20:PHE:CE1	14:N:89:GLN:OE1	1.83	1.31
1:A:93:VAL:CB	1:A:125:PRO:CB	2.07	1.31
1:A:3235:TYR:CZ	1:A:3269:LEU:HD13	1.65	1.31
8:H:12:LYS:HG2	8:H:80:TYR:CE2	1.64	1.31
1:A:601:PRO:CG	1:A:698:GLU:HG3	1.58	1.31
2:B:555:LEU:CD2	2:B:625:LEU:HD22	0.84	1.31
2:B:733:GLU:OE2	2:B:783:MET:HG3	1.31	1.31
2:B:801:ILE:HD13	2:B:937:PHE:CE1	1.66	1.31
2:B:3271:ASP:OD1	2:B:3272:PRO:HD2	1.24	1.31
3:C:2669:ILE:CD1	3:C:2847:ALA:HB2	1.59	1.31
1:A:601:PRO:HG2	1:A:698:GLU:CG	1.61	1.30
1:A:1126:VAL:HA	1:A:1131:SER:OG	1.29	1.30
18:R:82:ALA:C	18:R:83:ASN:CA	2.00	1.30
1:A:1051:GLN:NE2	1:A:1096:TYR:OH	1.63	1.30
2:B:744:MET:SD	2:B:772:ILE:CG1	2.19	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:208:TYR:CE1	9:I:100:ASN:HB3	1.64	1.30
8:H:65:PHE:HA	9:I:80:GLY:CA	1.61	1.30
1:A:935:VAL:CG2	1:A:944:LEU:HD22	1.61	1.30
2:B:2333:PRO:C	20:B:5601:ATP:H2	1.35	1.30
4:D:517:ILE:CD1	4:D:527:ILE:HG23	1.61	1.30
5:E:395:VAL:CG2	5:E:402:ILE:HD11	1.57	1.30
8:H:60:ILE:HG12	9:I:85:TYR:CB	1.60	1.30
14:N:85:ILE:CG2	14:N:98:ILE:CD1	2.09	1.30
2:B:957:GLN:HA	3:C:220:TRP:CH2	1.64	1.29
1:A:1273:PHE:HA	4:D:166:PHE:CZ	1.24	1.29
2:B:1488:LYS:CB	2:B:1501:VAL:CG1	2.09	1.29
2:B:2334:TYR:N	20:B:5601:ATP:C2	1.99	1.29
4:D:170:THR:CG2	13:M:66:ILE:HG12	0.82	1.29
5:E:20:PHE:CE2	15:O:80:LYS:CD	2.14	1.29
4:D:367:LEU:CG	4:D:371:THR:OG1	1.80	1.29
2:B:713:VAL:CG1	5:E:258:GLU:CG	2.09	1.29
4:D:294:GLN:HE21	4:D:297:LYS:CE	1.45	1.29
4:D:569:TYR:CE2	4:D:578:LYS:HG2	1.65	1.29
5:E:16:ASN:CB	15:O:132:GLU:CG	2.07	1.29
1:A:1487:VAL:HG23	1:A:1490:PHE:CE1	1.68	1.29
2:B:1511:VAL:CG1	2:B:1570:VAL:HG21	1.61	1.29
5:E:71:ARG:NH1	8:H:71:PHE:HZ	1.26	1.29
10:J:61:ALA:HB2	10:J:80:PHE:CZ	1.64	1.29
1:A:1638:THR:CG2	1:A:1655:GLN:HE21	1.46	1.28
2:B:501:ARG:HH12	4:D:491:GLN:CD	1.33	1.28
4:D:207:ALA:CB	9:I:24:ILE:CD1	2.08	1.28
5:E:70:ASP:OD2	9:I:64:LYS:HE3	1.33	1.28
1:A:1638:THR:HG21	1:A:1655:GLN:NE2	1.43	1.28
3:C:2734:PHE:CZ	3:C:2767:LYS:HD2	1.67	1.28
4:D:163:ARG:NH2	12:L:71:ASP:O	1.63	1.28
4:D:196:CYS:SG	9:I:86:ASP:OD1	1.91	1.28
5:E:259:ASN:ND2	5:E:299:GLY:HA3	1.46	1.28
1:A:3232:ILE:CD1	1:A:3316:TRP:CZ3	2.05	1.28
2:B:500:GLU:OE1	2:B:535:ILE:CD1	1.80	1.28
2:B:1456:PHE:CD1	2:B:1467:PHE:HE1	1.52	1.28
10:J:32:CYS:CB	10:J:96:ILE:HG12	1.60	1.28
1:A:409:LEU:CB	1:A:464:PHE:CB	2.09	1.28
1:A:634:ILE:CG2	1:A:638:TYR:CZ	2.16	1.28
2:B:1492:LYS:CE	2:B:3606:GLN:OE1	1.81	1.28
2:B:1467:PHE:CE2	2:B:1560:MET:SD	2.26	1.28
4:D:174:GLN:OE1	12:L:49:LEU:HD12	1.32	1.28

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:973:THR:OG1	3:C:344:ASN:HB2	1.17	1.27
2:B:1238:LYS:CE	2:B:1308:LEU:CA	2.12	1.27
3:C:535:GLU:CB	3:C:701:ASN:CB	2.12	1.27
3:C:2738:ILE:CG2	3:C:2746:PRO:HD3	1.62	1.27
2:B:957:GLN:CG	3:C:164:HIS:HE1	1.31	1.27
2:B:963:PHE:CE2	3:C:104:SER:N	1.89	1.27
2:B:2333:PRO:C	20:B:5601:ATP:C2	2.08	1.27
5:E:46:ASN:O	12:L:88:PHE:CD1	1.86	1.27
1:A:670:LEU:CB	1:A:692:ILE:HD11	1.65	1.27
1:A:1020:PHE:HA	1:A:1023:PHE:CE2	1.68	1.27
1:A:3106:LYS:CG	1:A:3443:LEU:CD2	2.09	1.27
1:A:3290:LEU:HD22	1:A:3335:TRP:CE2	1.69	1.27
2:B:467:VAL:HG12	2:B:471:THR:OG1	1.29	1.27
2:B:1004:SER:OG	2:B:1094:TRP:HH2	1.17	1.27
2:B:1467:PHE:HB3	2:B:1470:LEU:CD1	1.62	1.27
4:D:552:PRO:CD	4:D:595:PHE:CD2	2.17	1.27
2:B:58:SER:CA	2:B:83:LYS:CB	2.09	1.27
3:C:2669:ILE:CD1	3:C:2847:ALA:CB	2.10	1.27
9:I:26:ASN:HB2	9:I:98:PHE:CE2	1.68	1.27
1:A:634:ILE:HG22	1:A:638:TYR:CZ	1.69	1.26
1:A:3347:LYS:O	1:A:3351:PRO:HD2	1.29	1.26
2:B:1456:PHE:CD1	2:B:1467:PHE:CE1	2.22	1.26
1:A:891:PHE:CE1	1:A:972:TRP:HE3	1.34	1.26
4:D:255:ASN:ND2	7:G:134:GLU:OE1	1.67	1.26
4:D:367:LEU:CD1	4:D:371:THR:OG1	1.82	1.26
1:A:853:VAL:CB	5:E:206:ASN:ND2	1.97	1.26
2:B:864:ASN:HB3	2:B:947:LEU:CB	1.64	1.26
2:B:1474:MET:SD	2:B:1515:VAL:CG1	2.23	1.26
14:N:85:ILE:CG2	14:N:98:ILE:HD11	1.63	1.26
1:A:686:VAL:HG21	1:A:731:LEU:CD2	1.66	1.26
1:A:723:PHE:CE1	1:A:772:TRP:NE1	2.01	1.26
2:B:57:ASN:HA	2:B:70:LYS:O	1.34	1.26
3:C:143:PRO:HD3	3:C:187:TRP:CD1	1.71	1.26
4:D:75:LEU:CB	15:O:102:LEU:HD11	1.65	1.26
4:D:107:VAL:HG23	15:O:97:ILE:O	1.29	1.26
6:F:50:ALA:CA	8:H:83:GLN:HG3	1.63	1.26
8:H:51:SER:CB	18:R:32:LYS:CB	2.14	1.26
1:A:3235:TYR:OH	1:A:3269:LEU:HD12	1.28	1.26
1:A:3347:LYS:O	1:A:3351:PRO:CD	1.83	1.26
2:B:429:LEU:HG	2:B:489:PHE:CZ	1.71	1.26
2:B:798:ASN:CB	2:B:874:ALA:HB1	1.66	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:60:LEU:CD2	3:C:69:TRP:CZ3	2.18	1.26
4:D:170:THR:HG21	13:M:66:ILE:CG1	1.42	1.26
4:D:398:PRO:CD	4:D:419:SER:HB2	1.66	1.26
1:A:870:PRO:O	1:A:871:LEU:HD13	1.35	1.25
2:B:3238:HIS:CE1	2:B:3335:LYS:HG3	1.69	1.25
4:D:90:ASP:CG	13:M:32:LYS:HG3	1.55	1.25
8:H:52:ARG:HA	18:R:63:ASN:CB	1.65	1.25
3:C:265:LYS:CE	3:C:356:THR:HG22	1.65	1.25
4:D:251:MET:CB	7:G:136:MET:CE	1.81	1.25
5:E:61:VAL:CG2	10:J:106:LEU:CD2	2.14	1.25
14:N:85:ILE:CB	14:N:98:ILE:HD11	1.65	1.25
1:A:3306:LEU:O	1:A:3306:LEU:HD13	1.10	1.25
1:A:688:PHE:HE1	1:A:693:MET:CG	1.49	1.25
1:A:817:VAL:O	1:A:818:LEU:CD1	1.82	1.25
1:A:1513:LYS:HE2	1:A:1578:ASN:ND2	1.51	1.25
2:B:1511:VAL:CB	2:B:1570:VAL:CG2	2.12	1.25
4:D:552:PRO:HD2	4:D:595:PHE:CE2	1.70	1.25
5:E:77:GLU:OE2	5:E:87:ASN:ND2	1.67	1.25
14:N:89:GLN:NE2	14:N:94:ASP:OD2	1.66	1.25
1:A:3257:VAL:HG11	1:A:3266:VAL:CB	1.65	1.25
3:C:2734:PHE:CE2	3:C:2767:LYS:HG3	1.72	1.25
5:E:20:PHE:HE1	14:N:89:GLN:OE1	0.95	1.25
1:A:577:ALA:CB	1:A:636:ARG:HD3	1.67	1.25
1:A:1114:GLN:O	1:A:1118:LEU:CD2	1.83	1.25
2:B:444:LEU:HD23	2:B:526:ASN:ND2	1.48	1.25
2:B:1234:GLU:OE1	2:B:1305:LEU:HA	1.33	1.25
2:B:1238:LYS:HE3	2:B:1308:LEU:CA	1.65	1.25
3:C:2743:ASN:ND2	3:C:2785:VAL:HG12	1.52	1.24
6:F:56:TRP:NE1	6:F:91:GLN:NE2	1.82	1.24
1:A:971:ASN:HA	1:A:985:PHE:CE2	1.72	1.24
1:A:1143:ARG:NE	4:D:169:ASN:ND2	1.85	1.24
3:C:2720:PRO:CB	3:C:2798:PHE:HE2	1.45	1.24
4:D:266:TYR:OH	5:E:121:TYR:HB3	1.29	1.24
4:D:414:PHE:HD2	4:D:426:TRP:CD1	1.55	1.24
6:F:81:THR:HG21	7:G:114:VAL:CG2	1.67	1.24
10:J:36:ILE:HG12	10:J:72:PHE:CE1	1.72	1.24
2:B:1450:TRP:O	2:B:1454:GLN:HG3	1.09	1.24
3:C:2740:ILE:CG1	3:C:2744:LYS:HB3	1.65	1.24
4:D:174:GLN:CB	13:M:62:GLY:HA3	1.67	1.24
2:B:794:LEU:HA	2:B:797:PHE:CD2	1.71	1.24
2:B:3139:GLY:CA	2:B:3433:TRP:CH2	2.19	1.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:97:ALA:CB	18:R:101:ASN:O	1.84	1.24
2:B:429:LEU:CD1	2:B:489:PHE:CD2	2.20	1.24
10:J:74:PRO:HG3	12:L:102:ARG:CD	1.65	1.24
14:N:75:GLN:HB3	15:O:93:GLN:CG	1.65	1.24
3:C:2793:LEU:C	3:C:2796:PRO:CD	2.05	1.23
1:A:1632:ASP:HB2	1:A:1892:PHE:CE1	1.71	1.23
2:B:467:VAL:CG1	2:B:471:THR:OG1	1.87	1.23
2:B:794:LEU:HA	2:B:797:PHE:CE2	1.72	1.23
2:B:871:ILE:CG1	2:B:944:ILE:HD11	1.68	1.23
2:B:1109:THR:O	2:B:1113:LEU:HG	1.19	1.23
2:B:1117:ILE:CG1	2:B:1190:ILE:HD11	1.67	1.23
2:B:1492:LYS:HE3	2:B:3606:GLN:CD	1.58	1.23
5:E:46:ASN:O	12:L:88:PHE:CG	1.89	1.23
5:E:99:ILE:CD1	6:F:31:ILE:HD11	1.69	1.23
10:J:61:ALA:CB	10:J:80:PHE:CE2	2.20	1.23
2:B:864:ASN:HB3	2:B:947:LEU:CG	1.49	1.23
2:B:970:ALA:HB2	3:C:345:TRP:CZ3	1.50	1.23
2:B:3153:LEU:CD1	2:B:3707:LEU:CD1	1.98	1.23
3:C:2726:THR:CA	3:C:2729:LEU:CD1	2.04	1.23
3:C:2727:ILE:O	3:C:2730:LEU:CD1	1.87	1.23
4:D:175:THR:OG1	13:M:61:PHE:N	1.69	1.23
5:E:261:HIS:CE1	5:E:283:SER:HG	1.57	1.23
14:N:72:ILE:CD1	15:O:97:ILE:HD13	1.68	1.23
1:A:614:PHE:CD1	1:A:644:LEU:HD22	1.72	1.23
1:A:728:ASN:ND2	4:D:396:THR:HG22	1.51	1.23
2:B:2544:LYS:N	19:B:5501:ADP:O1A	1.72	1.23
2:B:2666:ARG:HD2	20:B:5601:ATP:O1G	1.12	1.23
4:D:80:PRO:HG3	15:O:103:TRP:NE1	1.49	1.23
4:D:585:VAL:HG12	4:D:588:PRO:CD	1.69	1.23
5:E:23:THR:CG2	14:N:88:TYR:HD1	1.52	1.23
1:A:403:ALA:CB	1:A:471:ASN:CB	2.17	1.23
1:A:997:LYS:CE	18:R:149:LEU:HA	1.62	1.23
1:A:3255:GLU:OE1	1:A:3269:LEU:O	1.54	1.23
1:A:3443:LEU:HD12	1:A:3493:PHE:CZ	1.72	1.23
2:B:55:GLN:O	2:B:85:LYS:HA	1.32	1.23
2:B:903:ARG:HB3	2:B:914:ASP:CG	1.57	1.22
7:G:119:PRO:HG2	9:I:12:ILE:CG2	1.69	1.22
1:A:1012:LYS:HZ1	1:A:1072:GLY:N	1.21	1.22
1:A:3257:VAL:HG11	1:A:3266:VAL:CG1	1.69	1.22
3:C:2727:ILE:O	3:C:2730:LEU:HD11	1.33	1.22
3:C:2727:ILE:HD11	3:C:2745:LYS:CG	1.66	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:634:ILE:HG22	1:A:638:TYR:CE2	1.74	1.22
5:E:48:ILE:N	12:L:88:PHE:HE2	1.36	1.22
1:A:3235:TYR:CZ	1:A:3269:LEU:CD1	2.17	1.22
2:B:3118:TYR:CE2	2:B:3452:LEU:CA	2.05	1.22
4:D:172:GLU:HA	13:M:64:HIS:CA	1.70	1.22
4:D:395:HIS:NE2	4:D:399:VAL:HG12	1.35	1.22
5:E:20:PHE:CE2	15:O:80:LYS:CG	2.12	1.22
10:J:26:VAL:CG2	10:J:97:TYR:O	1.87	1.22
14:N:75:GLN:CB	15:O:93:GLN:HG3	1.70	1.22
1:A:993:LYS:HE2	18:R:131:ILE:CB	1.70	1.22
1:A:1418:ASP:OD1	1:A:3604:LYS:NZ	1.71	1.22
2:B:444:LEU:CA	5:E:515:LYS:CG	1.97	1.22
2:B:733:GLU:OE2	2:B:783:MET:CG	1.88	1.22
2:B:1110:GLN:O	2:B:1114:LEU:HG	1.04	1.22
3:C:99:GLY:HA3	3:C:149:HIS:CE1	1.75	1.22
6:F:14:LEU:CD2	6:F:23:TYR:CB	2.16	1.22
4:D:208:TYR:CE1	9:I:100:ASN:CB	2.21	1.21
5:E:61:VAL:HG22	10:J:106:LEU:CD2	1.68	1.21
1:A:1030:SER:O	1:A:1092:TRP:HH2	0.87	1.21
2:B:467:VAL:O	2:B:471:THR:OG1	1.58	1.21
2:B:801:ILE:HD13	2:B:937:PHE:CD1	1.73	1.21
2:B:903:ARG:HB3	2:B:914:ASP:OD2	1.03	1.21
2:B:1117:ILE:HG12	2:B:1190:ILE:CD1	1.70	1.21
2:B:3300:GLU:OE2	2:B:3354:LYS:CE	1.87	1.21
3:C:196:PRO:CA	3:C:239:TRP:CZ2	2.04	1.21
5:E:310:LEU:HG	5:E:358:ARG:NH2	1.35	1.21
1:A:398:TRP:CB	1:A:490:LYS:CB	2.18	1.21
1:A:1126:VAL:HB	1:A:1201:TYR:OH	1.09	1.21
2:B:429:LEU:HD12	2:B:489:PHE:CD2	1.75	1.21
2:B:946:ARG:HA	2:B:955:PHE:CE2	1.75	1.21
4:D:252:VAL:HG13	7:G:149:GLN:NE2	1.54	1.21
2:B:443:GLU:OE1	5:E:514:ARG:NH1	1.74	1.21
1:A:8:LYS:CB	1:A:109:SER:HA	1.70	1.21
1:A:813:VAL:O	1:A:816:VAL:HG12	1.08	1.21
1:A:1513:LYS:CE	1:A:1578:ASN:ND2	2.02	1.21
2:B:58:SER:C	2:B:68:SER:O	1.78	1.21
2:B:1223:LYS:HZ3	2:B:1277:ARG:CB	1.51	1.21
3:C:165:GLY:O	3:C:174:PHE:CE2	1.92	1.21
3:C:2745:LYS:CE	3:C:2749:VAL:HG11	1.70	1.21
5:E:310:LEU:CD2	5:E:358:ARG:NH2	2.04	1.21
1:A:1051:GLN:CD	1:A:1096:TYR:CZ	2.15	1.20

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:90:ASP:OD1	13:M:32:LYS:HA	1.41	1.20
1:A:580:LEU:HD21	1:A:640:SER:CA	1.71	1.20
1:A:3303:ILE:HD11	1:A:3340:TYR:CE2	1.76	1.20
2:B:791:HIS:CE1	2:B:866:ILE:HD13	1.75	1.20
3:C:261:ILE:CG1	3:C:360:PRO:HB3	1.70	1.20
3:C:2723:PHE:CE1	3:C:2749:VAL:CG1	2.24	1.20
14:N:72:ILE:HG23	15:O:97:ILE:CD1	1.65	1.20
2:B:1058:LYS:HE2	2:B:1166:GLU:O	1.04	1.20
4:D:543:MET:CE	4:D:563:MET:HE2	1.71	1.20
1:A:1126:VAL:CB	1:A:1201:TYR:OH	1.88	1.20
4:D:212:ILE:CD1	9:I:19:MET:HE3	1.70	1.20
2:B:3228:GLU:CG	2:B:3346:PHE:CE1	2.23	1.20
5:E:16:ASN:HB2	15:O:132:GLU:CG	1.71	1.20
3:C:2711:SER:CB	3:C:2751:TRP:CZ2	2.24	1.19
3:C:2734:PHE:CE2	3:C:2767:LYS:CD	2.26	1.19
1:A:576:TYR:CD1	1:A:620:PRO:O	1.92	1.19
1:A:801:ILE:CB	1:A:862:LEU:HD21	1.70	1.19
2:B:3178:VAL:HG11	2:B:3395:LEU:CD2	1.71	1.19
6:F:14:LEU:HD23	6:F:23:TYR:CG	1.76	1.19
1:A:935:VAL:HG22	1:A:944:LEU:HD21	1.22	1.19
1:A:3103:TYR:HE2	1:A:3444:VAL:CG2	1.56	1.19
1:A:3443:LEU:CD1	1:A:3493:PHE:CZ	2.23	1.19
2:B:1058:LYS:CB	2:B:1166:GLU:HB3	1.73	1.19
5:E:70:ASP:OD1	8:H:70:THR:OG1	1.56	1.19
16:P:23:TYR:CB	16:P:93:ILE:CB	2.21	1.19
2:B:1447:ILE:HG22	2:B:1504:TRP:CE2	1.75	1.19
5:E:112:LEU:HD21	6:F:97:MET:CG	1.72	1.19
1:A:1132:LEU:HB3	1:A:1272:LEU:CD1	1.73	1.19
2:B:10:PRO:CB	2:B:25:GLN:CA	2.07	1.19
2:B:60:ASN:CA	2:B:81:ILE:HA	1.73	1.19
2:B:1474:MET:CE	2:B:1515:VAL:CG1	2.19	1.19
4:D:172:GLU:CA	13:M:64:HIS:CB	2.20	1.19
4:D:512:HIS:CD2	4:D:513:PRO:HD2	1.76	1.19
5:E:16:ASN:HB2	15:O:132:GLU:CB	1.73	1.19
1:A:1445:PHE:CD2	1:A:1564:CYS:CB	2.26	1.18
4:D:294:GLN:NE2	4:D:297:LYS:CE	2.01	1.18
14:N:72:ILE:CG2	15:O:97:ILE:CG1	2.19	1.18
1:A:700:LYS:HE3	1:A:720:GLU:OE1	1.38	1.18
2:B:518:TYR:CG	5:E:404:ARG:NH1	2.09	1.18
2:B:3373:GLU:O	2:B:3377:VAL:HG13	1.42	1.18
4:D:398:PRO:HD2	4:D:419:SER:CB	1.71	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:569:TYR:CZ	4:D:578:LYS:CG	2.25	1.18
6:F:81:THR:CG2	7:G:114:VAL:HG21	1.71	1.18
8:H:54:HIS:CE1	18:R:62:LYS:CA	2.16	1.18
8:H:66:GLY:HA3	9:I:56:ILE:HG23	1.20	1.18
1:A:3251:ILE:HG13	17:Q:82:ASN:CA	1.72	1.18
2:B:467:VAL:O	2:B:471:THR:CB	1.92	1.18
2:B:467:VAL:O	2:B:471:THR:N	1.75	1.18
2:B:871:ILE:HG13	2:B:944:ILE:CD1	1.72	1.18
2:B:979:ILE:O	2:B:983:CYS:SG	2.01	1.18
4:D:172:GLU:CB	13:M:64:HIS:CB	2.09	1.18
1:A:747:ILE:HD11	1:A:889:TYR:CZ	1.79	1.18
1:A:972:TRP:CE3	1:A:985:PHE:HZ	1.61	1.18
1:A:1133:GLY:HA3	1:A:1268:ARG:C	1.62	1.18
2:B:436:PHE:CD1	2:B:499:LEU:HD21	1.77	1.18
2:B:575:ASN:N	5:E:481:GLN:HE22	1.39	1.18
2:B:1110:GLN:O	2:B:1114:LEU:CG	1.92	1.18
3:C:2738:ILE:HD12	3:C:2740:ILE:O	1.40	1.18
4:D:569:TYR:OH	4:D:578:LYS:HD3	1.40	1.18
1:A:3446:ASN:CG	1:A:3488:LEU:HD13	1.65	1.18
1:A:659:TRP:CZ2	1:A:702:LEU:CD1	2.25	1.17
1:A:1513:LYS:HE2	1:A:1578:ASN:CG	1.64	1.17
2:B:111:VAL:O	2:B:118:LEU:CB	1.91	1.17
2:B:349:ASN:CB	2:B:416:LEU:CD2	2.21	1.17
2:B:1127:ASN:HB3	2:B:1128:PRO:CD	1.73	1.17
5:E:16:ASN:CB	15:O:132:GLU:HA	1.72	1.17
1:A:402:PRO:CB	1:A:485:THR:CB	2.21	1.17
1:A:906:LEU:CG	1:A:998:VAL:HG11	1.75	1.17
1:A:1012:LYS:HD3	1:A:1071:ILE:HD12	1.22	1.17
2:B:445:GLY:HA2	5:E:511:ARG:NH1	1.59	1.17
2:B:1607:PRO:CB	2:B:1946:SER:HB3	1.74	1.17
3:C:2734:PHE:HE2	3:C:2767:LYS:CG	1.57	1.17
3:C:2745:LYS:HE3	3:C:2749:VAL:CG1	1.73	1.17
1:A:3230:LEU:O	1:A:3233:ILE:HG22	1.42	1.17
1:A:3251:ILE:CG1	17:Q:82:ASN:HA	1.72	1.17
1:A:3268:PHE:CD1	17:Q:35:ILE:CB	2.27	1.17
2:B:426:ILE:O	2:B:430:THR:HG23	1.42	1.17
2:B:679:ARG:O	2:B:683:GLU:HG3	1.41	1.17
2:B:1123:GLY:HA2	2:B:1197:PHE:CZ	1.77	1.17
5:E:119:CYS:HB3	6:F:88:ILE:HD13	1.22	1.17
10:J:95:PHE:CZ	10:J:106:LEU:HD11	1.80	1.17
18:R:97:ALA:HB1	18:R:101:ASN:O	0.99	1.17

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:801:ILE:HG21	1:A:862:LEU:CD2	1.73	1.17
2:B:58:SER:O	2:B:68:SER:C	1.82	1.17
2:B:3228:GLU:CG	2:B:3346:PHE:HE1	1.55	1.17
5:E:48:ILE:N	12:L:88:PHE:CE2	2.12	1.17
2:B:444:LEU:C	5:E:515:LYS:HG3	1.66	1.17
2:B:3300:GLU:OE2	2:B:3354:LYS:NZ	1.76	1.17
5:E:46:ASN:N	12:L:88:PHE:O	1.75	1.17
14:N:72:ILE:HD13	15:O:97:ILE:HD13	1.26	1.17
1:A:906:LEU:HD13	1:A:998:VAL:CB	1.75	1.16
1:A:1157:GLN:CG	1:A:1180:ARG:NH2	1.96	1.16
1:A:1449:ILE:HA	1:A:1459:LEU:CD2	1.73	1.16
2:B:3:ASP:CA	2:B:7:LYS:CB	2.23	1.16
2:B:1559:MET:CE	2:B:1577:ARG:HH21	1.58	1.16
1:A:1012:LYS:HB2	1:A:1071:ILE:CD1	1.75	1.16
1:A:3248:LEU:HB2	17:Q:104:TYR:CE1	1.80	1.16
2:B:718:ILE:HD11	2:B:773:VAL:HB	1.26	1.16
4:D:236:MET:CB	7:G:143:PHE:CE2	2.28	1.16
1:A:2839:LEU:CD1	19:A:4901:ADP:C6	2.15	1.16
1:A:3235:TYR:OH	1:A:3269:LEU:CD1	1.93	1.16
3:C:2694:ALA:HB2	3:C:2823:TYR:CB	1.75	1.16
3:C:2726:THR:HA	3:C:2729:LEU:CG	1.75	1.16
1:A:1051:GLN:OE1	1:A:1096:TYR:CZ	1.98	1.16
2:B:60:ASN:HA	2:B:81:ILE:CA	1.73	1.16
2:B:864:ASN:HA	2:B:947:LEU:CG	1.76	1.16
8:H:46:LYS:HE2	9:I:86:ASP:HB2	1.24	1.16
10:J:21:PHE:HZ	10:J:37:LEU:HD22	0.99	1.16
1:A:3252:GLN:O	1:A:3255:GLU:HG2	1.43	1.16
1:A:3349:VAL:O	1:A:3353:ARG:CB	1.93	1.16
2:B:433:ILE:CG2	2:B:463:PHE:HZ	1.58	1.16
2:B:436:PHE:CE1	2:B:499:LEU:HD21	1.55	1.16
2:B:3150:VAL:CG1	2:B:3423:VAL:HG23	1.75	1.16
2:B:3261:ILE:O	2:B:3306:ILE:HG21	1.46	1.16
3:C:2745:LYS:HD2	3:C:2749:VAL:HG22	1.23	1.16
3:C:2803:MET:HB3	3:C:2814:CYS:SG	1.75	1.16
4:D:543:MET:HE3	4:D:563:MET:CE	1.75	1.16
1:A:580:LEU:HD21	1:A:640:SER:CB	1.76	1.15
2:B:3302:ILE:HG22	2:B:3303:GLU:H	1.09	1.15
3:C:2727:ILE:HD13	3:C:2745:LYS:CD	1.73	1.15
4:D:212:ILE:CD1	9:I:19:MET:CE	2.23	1.15
8:H:43:THR:HA	9:I:86:ASP:OD2	1.42	1.15
1:A:21:LEU:O	1:A:25:ASP:CB	1.94	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1143:ARG:NE	4:D:169:ASN:HD21	1.43	1.15
1:A:3257:VAL:HG21	1:A:3266:VAL:HG11	1.20	1.15
2:B:444:LEU:CD2	5:E:515:LYS:HE2	1.76	1.15
5:E:57:SER:N	10:J:90:HIS:O	1.77	1.15
5:E:394:TRP:CD1	5:E:401:PRO:HA	1.80	1.15
7:G:119:PRO:HD2	9:I:12:ILE:HD12	1.18	1.15
10:J:38:GLU:OE1	15:O:29:PHE:CE2	1.96	1.15
1:A:755:HIS:ND1	1:A:869:TYR:CD2	2.15	1.15
1:A:3442:LYS:HB3	1:A:3485:THR:HG23	1.21	1.15
2:B:1456:PHE:CE1	2:B:1563:VAL:CG1	2.22	1.15
2:B:3140:LEU:HB2	2:B:3433:TRP:HE3	0.98	1.15
4:D:107:VAL:CG2	15:O:97:ILE:O	1.95	1.15
4:D:517:ILE:HG12	4:D:550:TRP:CZ2	1.82	1.15
1:A:3236:ILE:HG23	1:A:3333:LEU:HD23	1.17	1.15
2:B:349:ASN:HA	2:B:416:LEU:HD21	1.16	1.15
2:B:660:LEU:HG	2:B:755:ILE:HD13	1.24	1.15
2:B:1485:MET:CB	2:B:1505:ARG:CZ	2.23	1.15
4:D:170:THR:HG22	13:M:66:ILE:CA	1.77	1.15
14:N:25:PHE:HE1	14:N:103:ILE:HG23	1.01	1.15
1:A:600:MET:CE	1:A:697:ARG:HH11	1.60	1.15
1:A:600:MET:HE1	1:A:697:ARG:HH11	1.11	1.15
4:D:68:GLU:CG	5:E:12:LYS:HA	1.75	1.15
4:D:319:TYR:O	4:D:320:ASP:OD1	1.63	1.15
5:E:71:ARG:NH1	8:H:71:PHE:CZ	2.04	1.15
5:E:261:HIS:CE1	5:E:283:SER:OG	1.99	1.15
8:H:66:GLY:HA3	9:I:56:ILE:HG22	1.29	1.15
1:A:613:LEU:HD21	4:D:523:TRP:CH2	1.82	1.14
1:A:813:VAL:O	1:A:816:VAL:CG1	1.95	1.14
2:B:682:LYS:CE	5:E:186:PHE:CE1	2.30	1.14
5:E:384:LEU:HD23	5:E:417:TRP:CE2	1.82	1.14
1:A:155:GLY:CA	2:B:167:GLN:O	1.95	1.14
3:C:2738:ILE:CD1	3:C:2740:ILE:O	1.95	1.14
5:E:310:LEU:CD1	5:E:358:ARG:NH2	2.09	1.14
6:F:11:LEU:HB3	6:F:23:TYR:OH	1.46	1.14
10:J:21:PHE:CZ	10:J:37:LEU:HD22	1.82	1.14
1:A:14:LYS:CB	2:B:19:SER:O	1.94	1.14
1:A:935:VAL:CG2	1:A:944:LEU:CD2	2.16	1.14
1:A:1133:GLY:HA3	1:A:1268:ARG:O	0.98	1.14
2:B:3262:LEU:O	2:B:3297:PHE:HZ	1.29	1.14
14:N:25:PHE:CZ	14:N:103:ILE:HD13	1.82	1.14
14:N:72:ILE:HG12	15:O:97:ILE:CG2	1.77	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:871:LEU:HD23	1:A:875:VAL:CG1	1.76	1.14
1:A:1633:ALA:O	1:A:1838:PHE:HE2	1.30	1.14
2:B:409:SER:CA	2:B:413:PHE:HD1	1.60	1.14
2:B:1559:MET:HE3	2:B:1577:ARG:HH21	1.05	1.14
3:C:2734:PHE:CE2	3:C:2767:LYS:CG	2.30	1.14
4:D:172:GLU:HG3	12:L:51:LYS:HE2	1.29	1.14
4:D:174:GLN:HB2	13:M:62:GLY:HA3	1.16	1.14
11:K:77:PHE:CZ	11:K:88:LEU:HD11	1.82	1.14
16:P:11:THR:O	16:P:67:LEU:CA	1.94	1.14
1:A:580:LEU:CD2	1:A:640:SER:CB	2.25	1.14
2:B:1511:VAL:HA	2:B:1570:VAL:CG1	1.77	1.14
2:B:3301:ASN:ND2	2:B:3351:LYS:NZ	1.96	1.14
4:D:517:ILE:HG12	4:D:550:TRP:CE2	1.83	1.14
5:E:16:ASN:CB	15:O:132:GLU:CA	2.26	1.14
1:A:1504:VAL:HG22	1:A:1565:CYS:CB	1.79	1.13
2:B:87:LYS:O	2:B:103:ASN:CB	1.96	1.13
2:B:501:ARG:NH1	4:D:491:GLN:CD	2.01	1.13
2:B:956:LEU:HD12	2:B:959:ILE:HD11	1.17	1.13
3:C:176:ASP:OD2	3:C:189:ARG:NH1	1.81	1.13
9:I:26:ASN:HB2	9:I:98:PHE:CZ	1.83	1.13
2:B:532:THR:HG22	2:B:536:ILE:HG13	1.27	1.13
2:B:660:LEU:HB2	2:B:755:ILE:HD12	1.30	1.13
2:B:1456:PHE:CE2	2:B:1569:VAL:HG13	1.83	1.13
1:A:936:GLN:HA	1:A:1081:ILE:HG13	1.20	1.13
1:A:1009:THR:CB	1:A:1074:MET:SD	2.35	1.13
1:A:3273:TYR:OH	1:A:3277:GLY:CA	1.97	1.13
2:B:904:LEU:HD11	2:B:911:ILE:CG2	1.79	1.13
2:B:1607:PRO:CB	2:B:1946:SER:CB	2.26	1.13
3:C:2727:ILE:CD1	3:C:2745:LYS:CD	2.24	1.13
4:D:107:VAL:HG23	15:O:97:ILE:C	1.69	1.13
4:D:595:PHE:HD1	4:D:602:LEU:HD21	1.12	1.13
8:H:46:LYS:NZ	9:I:86:ASP:O	1.79	1.13
8:H:51:SER:O	18:R:63:ASN:HA	1.42	1.13
8:H:60:ILE:HG12	9:I:85:TYR:HB2	1.29	1.13
10:J:48:LEU:CD1	10:J:100:ILE:CD1	2.25	1.13
1:A:817:VAL:C	1:A:818:LEU:CD1	2.14	1.13
1:A:1393:TYR:O	1:A:1397:ASP:CB	1.97	1.13
5:E:20:PHE:CG	15:O:80:LYS:HE3	1.84	1.13
5:E:164:VAL:CG2	5:E:181:TYR:CE1	2.30	1.13
8:H:51:SER:C	18:R:63:ASN:HA	1.66	1.13
1:A:601:PRO:HB2	1:A:698:GLU:OE1	1.48	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:891:PHE:CE1	1:A:972:TRP:CZ3	2.38	1.12
1:A:3446:ASN:ND2	1:A:3488:LEU:CD1	2.11	1.12
3:C:2690:LEU:CB	3:C:2826:VAL:HG21	1.76	1.12
5:E:117:GLU:HG3	6:F:17:LEU:HD13	1.30	1.12
11:K:77:PHE:HD1	11:K:90:TYR:HB3	1.07	1.12
14:N:85:ILE:HG21	14:N:98:ILE:CD1	1.74	1.13
2:B:3238:HIS:ND1	2:B:3335:LYS:HG3	1.64	1.12
1:A:1449:ILE:HA	1:A:1459:LEU:HD23	1.20	1.12
2:B:533:ARG:HB3	2:B:534:PRO:CD	1.79	1.12
3:C:2701:ILE:CD1	3:C:2704:LYS:CE	2.19	1.12
4:D:360:ALA:HB3	5:E:133:PHE:CZ	1.83	1.12
5:E:266:THR:HG21	5:E:320:THR:HA	1.18	1.12
2:B:531:LEU:CD2	2:B:540:LEU:HD11	1.79	1.12
2:B:555:LEU:CG	2:B:625:LEU:HD22	1.78	1.12
2:B:762:ILE:CG2	2:B:766:ILE:HG13	1.79	1.12
2:B:1119:LYS:HB3	2:B:1138:LYS:NZ	1.64	1.12
3:C:2673:VAL:O	3:C:2841:THR:HG22	1.49	1.12
3:C:2784:ASN:O	3:C:2787:ILE:HG22	1.47	1.12
4:D:92:TYR:CG	13:M:29:LYS:HB3	1.82	1.12
4:D:238:SER:C	4:D:239:THR:N	2.02	1.12
4:D:398:PRO:CD	4:D:419:SER:CB	2.26	1.12
5:E:99:ILE:HG21	6:F:33:LEU:HD11	1.30	1.12
1:A:155:GLY:CA	2:B:168:ILE:CA	2.28	1.12
1:A:899:LEU:HD13	1:A:992:ASP:OD2	1.49	1.12
1:A:1504:VAL:HG22	1:A:1565:CYS:HB3	1.26	1.12
2:B:409:SER:HB3	2:B:413:PHE:CD1	1.71	1.12
2:B:713:VAL:HG11	5:E:258:GLU:CG	1.76	1.12
2:B:871:ILE:HG13	2:B:944:ILE:HD11	1.20	1.12
3:C:60:LEU:HD21	3:C:69:TRP:CH2	1.82	1.12
3:C:1983:THR:HB	19:C:4702:ADP:HN62	1.14	1.12
4:D:105:MET:HE1	14:N:47:THR:C	1.68	1.12
4:D:114:ASP:OD1	5:E:43:ARG:CZ	1.96	1.12
1:A:807:GLU:HG2	1:A:811:LYS:HE3	1.16	1.12
1:A:1623:ILE:HD11	1:A:1680:ILE:HD13	1.32	1.12
2:B:801:ILE:HD12	2:B:878:ALA:C	1.68	1.12
2:B:1456:PHE:HZ	2:B:1563:VAL:HG13	1.05	1.12
1:A:616:LYS:O	1:A:620:PRO:HD2	1.45	1.11
2:B:713:VAL:HG12	5:E:258:GLU:CG	1.74	1.11
2:B:1612:LEU:HD11	2:B:1637:CYS:SG	1.89	1.11
3:C:2727:ILE:HD11	3:C:2745:LYS:HG2	1.22	1.11
4:D:517:ILE:CG1	4:D:550:TRP:CZ2	2.33	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:595:PHE:CD1	4:D:602:LEU:HD21	1.84	1.11
8:H:64:ASN:HB2	9:I:81:GLU:HB3	1.14	1.11
10:J:32:CYS:HB2	10:J:96:ILE:HG12	1.28	1.11
14:N:72:ILE:CG2	15:O:97:ILE:HG12	1.78	1.11
3:C:2666:CYS:HB2	3:C:2848:THR:HA	1.26	1.11
3:C:2709:ALA:CA	3:C:2758:MET:SD	2.37	1.11
4:D:207:ALA:HB1	9:I:24:ILE:CD1	1.76	1.11
5:E:20:PHE:HA	14:N:90:ASP:OD1	1.51	1.11
6:F:56:TRP:NE1	6:F:91:GLN:CD	2.03	1.11
6:F:56:TRP:NE1	6:F:91:GLN:OE1	1.81	1.11
12:L:77:ILE:CG1	13:M:65:ILE:HD11	1.80	1.11
1:A:944:LEU:HD11	1:A:1017:LEU:HD11	1.21	1.11
1:A:1132:LEU:O	1:A:1272:LEU:HD11	1.47	1.11
5:E:23:THR:CG2	14:N:88:TYR:CD1	2.32	1.11
8:H:65:PHE:HA	9:I:80:GLY:HA2	1.18	1.11
1:A:1051:GLN:CD	1:A:1096:TYR:OH	1.87	1.11
1:A:3257:VAL:CG1	1:A:3266:VAL:HA	1.80	1.11
1:A:3335:TRP:CZ3	1:A:3339:ILE:HD12	1.85	1.11
4:D:115:TYR:OH	14:N:78:HIS:NE2	1.82	1.11
10:J:34:ASP:CB	15:O:31:PRO:HG3	1.80	1.11
16:P:75:VAL:CB	16:P:89:LYS:CB	2.28	1.11
1:A:3223:LEU:HD11	1:A:3332:ILE:HG12	1.27	1.11
2:B:436:PHE:CE1	2:B:499:LEU:HD22	1.72	1.11
2:B:660:LEU:HB2	2:B:755:ILE:CD1	1.78	1.11
2:B:725:ILE:HD11	2:B:777:PHE:HA	1.11	1.11
2:B:1485:MET:CB	2:B:1505:ARG:CD	2.28	1.11
1:A:402:PRO:CB	1:A:467:ILE:O	1.97	1.10
1:A:688:PHE:CE1	1:A:693:MET:SD	2.43	1.10
1:A:761:LEU:HD21	1:A:874:HIS:CE1	1.85	1.10
2:B:1058:LYS:CD	2:B:1166:GLU:O	1.97	1.10
2:B:2543:GLY:HA2	19:B:5501:ADP:O2A	1.48	1.10
3:C:10:LEU:CD2	3:C:65:ASN:O	1.99	1.10
3:C:261:ILE:HG13	3:C:360:PRO:HB3	1.27	1.10
3:C:2018:GLN:HE21	19:C:4702:ADP:H2'	1.15	1.10
3:C:2719:VAL:HG13	3:C:2720:PRO:HD3	1.25	1.10
4:D:111:MET:HE3	15:O:90:ILE:CG2	1.80	1.10
14:N:72:ILE:CG1	15:O:97:ILE:HD13	1.79	1.10
1:A:3249:ILE:CG1	1:A:3273:TYR:CA	2.27	1.10
1:A:3257:VAL:HG21	1:A:3266:VAL:HG12	1.28	1.10
3:C:2585:PHE:CE1	3:C:2929:LEU:HA	1.85	1.10
3:C:2793:LEU:O	3:C:2796:PRO:HD2	0.95	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:78:ILE:HD11	9:I:106:LEU:CD2	1.80	1.10
12:L:16:LEU:HD12	12:L:17:PRO:CD	1.80	1.10
2:B:467:VAL:C	2:B:471:THR:OG1	1.89	1.10
2:B:3314:ILE:HG12	2:B:3321:PHE:HE2	0.96	1.10
5:E:117:GLU:OE2	6:F:17:LEU:HD21	1.51	1.10
2:B:531:LEU:HD22	2:B:540:LEU:HD11	1.29	1.10
2:B:555:LEU:HD21	2:B:625:LEU:HD22	1.15	1.10
2:B:864:ASN:CB	2:B:947:LEU:HD23	1.67	1.10
2:B:1142:SER:O	2:B:1146:VAL:HG23	1.50	1.10
4:D:212:ILE:HD11	9:I:19:MET:HE3	1.17	1.10
4:D:405:ASN:ND2	4:D:406:PRO:HD2	1.66	1.10
10:J:32:CYS:SG	10:J:96:ILE:HD11	1.91	1.10
10:J:48:LEU:HD11	10:J:100:ILE:HD11	1.32	1.10
12:L:74:TRP:NE1	12:L:109:LYS:HD2	1.65	1.10
14:N:85:ILE:HB	14:N:98:ILE:HD11	1.24	1.10
1:A:403:ALA:N	1:A:471:ASN:CB	2.15	1.10
1:A:659:TRP:HZ2	1:A:702:LEU:CD1	1.58	1.10
1:A:837:GLN:HE22	1:A:958:ALA:HB1	1.17	1.10
1:A:1020:PHE:CZ	1:A:1069:TYR:CZ	2.40	1.10
2:B:165:LEU:O	2:B:169:LYS:CB	1.99	1.10
2:B:436:PHE:CZ	2:B:499:LEU:HD22	1.84	1.10
2:B:762:ILE:HG22	2:B:766:ILE:HG13	1.24	1.10
2:B:957:GLN:CA	3:C:220:TRP:CH2	2.34	1.10
2:B:1051:ASP:CG	2:B:1162:THR:HG21	1.72	1.10
4:D:367:LEU:HD11	4:D:371:THR:OG1	1.36	1.10
6:F:50:ALA:CB	8:H:83:GLN:HG3	1.81	1.10
8:H:67:SER:CB	9:I:78:ILE:HG22	1.81	1.10
15:O:45:ARG:HB3	15:O:63:LEU:HD13	1.27	1.10
1:A:3290:LEU:CD2	1:A:3335:TRP:CH2	2.34	1.09
2:B:45:ASN:O	2:B:49:PHE:CB	2.00	1.09
2:B:409:SER:HB2	2:B:413:PHE:CG	1.85	1.09
3:C:205:ALA:HB2	3:C:216:ILE:HG22	1.32	1.09
3:C:2793:LEU:HA	3:C:2796:PRO:HG2	1.33	1.09
3:C:2800:PRO:HD2	3:C:2801:GLU:H	1.13	1.09
3:C:2803:MET:CG	3:C:2814:CYS:SG	2.40	1.09
6:F:91:GLN:CG	6:F:96:THR:CG2	2.21	1.09
10:J:74:PRO:HG3	12:L:102:ARG:HD3	1.11	1.09
10:J:77:HIS:ND1	11:K:70:VAL:HG21	1.59	1.09
1:A:909:MET:CE	1:A:955:ILE:HD11	1.81	1.09
1:A:1638:THR:HB	1:A:1655:GLN:CG	1.83	1.09
2:B:899:LEU:HD12	2:B:900:PHE:N	1.66	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:265:ARG:CG	5:E:125:GLN:HG2	1.80	1.09
8:H:58:HIS:HD2	9:I:87:VAL:HG13	1.18	1.09
1:A:601:PRO:HB2	1:A:698:GLU:CD	1.71	1.09
2:B:501:ARG:NH2	4:D:491:GLN:HG3	0.76	1.09
2:B:682:LYS:NZ	5:E:186:PHE:CE1	1.96	1.09
3:C:2669:ILE:C	3:C:2844:LEU:CB	2.19	1.09
4:D:261:TYR:HE1	5:E:126:ILE:HD13	1.11	1.09
4:D:261:TYR:CE1	5:E:126:ILE:HD13	1.86	1.09
4:D:367:LEU:HG	4:D:371:THR:HG1	1.11	1.09
4:D:397:ASP:HB3	4:D:398:PRO:HD3	1.27	1.09
5:E:82:GLY:HA2	8:H:12:LYS:HZ3	1.08	1.09
1:A:577:ALA:HB2	1:A:636:ARG:CD	1.82	1.09
1:A:601:PRO:CB	1:A:698:GLU:CG	2.31	1.09
1:A:601:PRO:CB	1:A:698:GLU:HG3	1.81	1.09
2:B:1511:VAL:CG2	2:B:1570:VAL:HG21	1.81	1.09
4:D:195:ILE:HG21	9:I:94:LEU:HD22	1.34	1.09
4:D:201:GLN:NE2	9:I:102:ASN:HB3	1.67	1.09
5:E:22:ASP:O	14:N:89:GLN:O	1.70	1.09
5:E:261:HIS:ND1	5:E:283:SER:OG	1.84	1.09
5:E:395:VAL:CG2	5:E:402:ILE:HD12	1.75	1.09
10:J:19:LYS:HE3	15:O:19:LEU:HD13	1.18	1.09
1:A:1540:GLN:O	1:A:1544:ILE:HG13	1.50	1.09
2:B:1492:LYS:CE	2:B:3606:GLN:CD	2.20	1.09
2:B:1492:LYS:NZ	2:B:3606:GLN:OE1	1.85	1.09
4:D:265:ARG:HG2	5:E:125:GLN:HG2	1.14	1.09
6:F:50:ALA:HA	8:H:83:GLN:HG3	1.12	1.09
7:G:119:PRO:CD	9:I:12:ILE:CD1	2.29	1.09
14:N:85:ILE:CG2	14:N:98:ILE:HD12	1.82	1.09
17:Q:39:GLU:O	17:Q:62:ILE:HA	1.51	1.09
1:A:3257:VAL:HG11	1:A:3266:VAL:HG13	1.27	1.08
2:B:3140:LEU:HB2	2:B:3433:TRP:CE3	1.88	1.08
2:B:3150:VAL:HG12	2:B:3423:VAL:HG23	1.13	1.08
3:C:2727:ILE:HD12	3:C:2745:LYS:HB3	1.30	1.08
4:D:111:MET:HE3	15:O:90:ILE:HG21	1.15	1.08
5:E:259:ASN:ND2	5:E:299:GLY:CA	2.15	1.08
1:A:1126:VAL:HG13	1:A:1131:SER:C	1.72	1.08
2:B:429:LEU:CG	2:B:489:PHE:CZ	2.36	1.08
2:B:1375:VAL:CA	2:B:1420:LEU:CB	2.31	1.08
2:B:1531:ILE:HD13	2:B:1595:LEU:HD11	1.32	1.08
4:D:111:MET:CE	15:O:90:ILE:CG2	2.30	1.08
1:A:155:GLY:HA3	2:B:167:GLN:C	1.73	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:429:LEU:CD1	2:B:489:PHE:CZ	2.36	1.08
2:B:900:PHE:CE1	2:B:933:TRP:HH2	1.71	1.08
2:B:1511:VAL:HA	2:B:1570:VAL:CB	1.84	1.08
3:C:159:TYR:CD1	3:C:179:VAL:HG22	1.87	1.08
4:D:170:THR:HG22	13:M:66:ILE:CB	1.82	1.08
1:A:804:ASN:HD21	5:E:148:LYS:HG2	0.95	1.08
2:B:655:LYS:HE3	2:B:708:TYR:OH	1.53	1.08
4:D:106:ILE:HD11	15:O:99:SER:OG	1.52	1.08
4:D:195:ILE:HD13	9:I:94:LEU:HD21	1.12	1.08
5:E:112:LEU:HD21	6:F:97:MET:HG2	1.10	1.08
10:J:19:LYS:HE3	15:O:19:LEU:CD1	1.84	1.08
1:A:634:ILE:HG21	1:A:638:TYR:OH	1.53	1.08
1:A:709:ILE:HG22	1:A:710:PRO:HD2	1.13	1.08
1:A:726:TYR:HE1	1:A:777:ILE:HG23	1.18	1.08
1:A:1513:LYS:HE2	1:A:1578:ASN:OD1	1.53	1.08
1:A:3251:ILE:HD13	17:Q:61:SER:CA	1.84	1.08
2:B:520:ARG:NH1	2:B:550:MET:HG3	1.67	1.08
2:B:789:LYS:HG2	2:B:839:LEU:HD11	1.18	1.08
2:B:1051:ASP:CB	2:B:1162:THR:HG21	1.83	1.08
2:B:1456:PHE:CZ	2:B:1563:VAL:HG13	1.74	1.08
2:B:1573:CYS:O	2:B:1577:ARG:HB3	1.54	1.08
2:B:3230:ALA:CB	2:B:3342:ASN:CG	2.06	1.08
4:D:207:ALA:HB3	9:I:24:ILE:CD1	1.81	1.08
4:D:405:ASN:HD22	4:D:406:PRO:HD2	1.10	1.08
4:D:585:VAL:HG12	4:D:588:PRO:HD3	1.32	1.08
7:G:120:THR:CG2	9:I:12:ILE:CG2	2.30	1.08
8:H:46:LYS:HE3	9:I:86:ASP:HB3	1.30	1.08
1:A:1132:LEU:C	1:A:1272:LEU:CD1	2.21	1.07
1:A:3232:ILE:HD11	1:A:3316:TRP:HZ3	1.19	1.07
2:B:349:ASN:HA	2:B:416:LEU:CD2	1.84	1.07
2:B:1511:VAL:HG13	2:B:1570:VAL:CG2	1.84	1.07
3:C:2743:ASN:HD22	3:C:2785:VAL:CG1	1.65	1.07
4:D:105:MET:SD	14:N:48:GLN:HA	1.93	1.07
4:D:170:THR:HG22	13:M:66:ILE:CG1	1.56	1.07
4:D:177:ASN:OD1	13:M:60:ASN:OD1	1.69	1.07
5:E:263:GLU:HB3	5:E:264:PRO:HD2	1.33	1.07
1:A:155:GLY:HA2	2:B:168:ILE:HA	1.18	1.07
1:A:1444:GLN:HG2	1:A:1560:LYS:HA	1.10	1.07
1:A:2697:ARG:NH1	19:A:4701:ADP:O3B	1.86	1.07
1:A:3215:ILE:HG21	1:A:3219:ASP:OD2	1.53	1.07
2:B:679:ARG:HB2	5:E:186:PHE:HE2	1.18	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:794:LEU:CA	2:B:797:PHE:CE2	2.36	1.07
2:B:970:ALA:HB3	3:C:345:TRP:HZ3	0.96	1.07
2:B:1004:SER:OG	2:B:1094:TRP:CH2	2.08	1.07
2:B:1238:LYS:HE2	2:B:1308:LEU:HA	1.12	1.07
2:B:1450:TRP:O	2:B:1454:GLN:CG	2.02	1.07
2:B:1511:VAL:CG2	2:B:1570:VAL:CB	2.30	1.07
2:B:3262:LEU:O	2:B:3297:PHE:CZ	2.08	1.07
2:B:3264:ASN:ND2	2:B:3303:GLU:OE1	1.87	1.07
2:B:3314:ILE:HG12	2:B:3321:PHE:CE2	1.89	1.07
3:C:53:PRO:HG2	3:C:81:PRO:CB	1.84	1.07
4:D:109:PHE:CE2	15:O:121:TYR:CD2	2.42	1.07
4:D:148:GLU:HG2	4:D:149:PRO:HD2	1.09	1.07
12:L:16:LEU:CD1	12:L:17:PRO:HD2	1.84	1.07
14:N:25:PHE:HZ	14:N:103:ILE:HD13	0.96	1.07
1:A:1273:PHE:CA	4:D:166:PHE:HZ	1.50	1.07
1:A:3303:ILE:HD11	1:A:3340:TYR:HE2	0.91	1.07
2:B:518:TYR:HE1	5:E:407:TYR:CE2	1.71	1.07
2:B:864:ASN:HA	2:B:947:LEU:HG	1.12	1.07
3:C:2708:GLN:NE2	3:C:2809:ALA:O	1.86	1.07
3:C:2727:ILE:CD1	3:C:2745:LYS:CG	2.30	1.07
3:C:2792:TYR:O	3:C:2796:PRO:HG3	0.91	1.07
3:C:2803:MET:HG3	3:C:2814:CYS:SG	1.95	1.07
5:E:46:ASN:CB	12:L:88:PHE:CE1	2.37	1.07
12:L:77:ILE:HG12	13:M:65:ILE:HD11	1.37	1.07
2:B:444:LEU:CD2	5:E:515:LYS:CE	2.31	1.07
4:D:517:ILE:HD13	4:D:527:ILE:HG23	1.33	1.07
6:F:62:VAL:HG21	7:G:106:LEU:HD11	1.22	1.07
1:A:1126:VAL:HG21	1:A:1135:VAL:HG23	1.31	1.07
1:A:1274:GLY:HA3	4:D:164:ASN:HB3	1.09	1.07
1:A:1522:GLU:HG3	1:A:1523:PRO:HD3	1.07	1.07
1:A:3121:LEU:CD2	1:A:3429:TRP:HB2	1.84	1.07
2:B:545:ILE:HD11	2:B:616:ARG:HH11	1.19	1.07
2:B:3150:VAL:CG1	2:B:3423:VAL:CG2	2.33	1.07
4:D:170:THR:HG23	13:M:66:ILE:HG12	1.29	1.07
5:E:16:ASN:HB2	15:O:132:GLU:HA	1.26	1.07
16:P:16:GLU:HA	16:P:74:LEU:CB	1.85	1.07
1:A:601:PRO:HB2	1:A:698:GLU:CG	1.85	1.06
1:A:730:LEU:HD21	1:A:781:LEU:HD21	1.37	1.06
1:A:997:LYS:CD	18:R:149:LEU:CA	2.15	1.06
1:A:1101:HIS:HA	1:A:1163:LEU:CD1	1.85	1.06
1:A:1132:LEU:HB3	1:A:1272:LEU:HD12	1.12	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1422:SER:CB	1:A:1486:HIS:CE1	2.37	1.06
1:A:1633:ALA:O	1:A:1838:PHE:CE2	2.06	1.06
1:A:3106:LYS:CG	1:A:3443:LEU:HD11	1.84	1.06
1:A:3121:LEU:HD23	1:A:3429:TRP:CB	1.71	1.06
1:A:3257:VAL:HG11	1:A:3266:VAL:CA	1.83	1.06
2:B:345:ARG:CB	2:B:412:LEU:HD11	1.85	1.06
2:B:429:LEU:HD11	2:B:489:PHE:CD2	1.90	1.06
2:B:444:LEU:CD2	5:E:515:LYS:NZ	2.18	1.06
3:C:2701:ILE:CD1	3:C:2704:LYS:HE3	1.83	1.06
3:C:2701:ILE:HD11	3:C:2704:LYS:CG	1.85	1.06
3:C:2720:PRO:HB3	3:C:2798:PHE:HE2	1.17	1.06
3:C:2734:PHE:HE2	3:C:2767:LYS:CD	1.66	1.06
4:D:285:PRO:HG3	4:D:584:ILE:HG22	1.35	1.06
5:E:70:ASP:OD2	9:I:64:LYS:CE	2.03	1.06
6:F:56:TRP:CG	6:F:91:GLN:NE2	2.22	1.06
1:A:613:LEU:HD21	4:D:523:TRP:HH2	1.09	1.06
1:A:804:ASN:ND2	5:E:148:LYS:HB3	1.71	1.06
2:B:409:SER:O	2:B:413:PHE:HB2	1.52	1.06
2:B:511:PHE:HE2	2:B:547:LEU:CD2	1.68	1.06
2:B:741:ILE:HD13	2:B:776:LEU:HD11	1.38	1.06
2:B:1238:LYS:HE3	2:B:1308:LEU:CB	1.85	1.06
2:B:1511:VAL:HG22	2:B:1570:VAL:CG2	1.84	1.06
3:C:2721:GLU:OE1	3:C:2814:CYS:HA	1.54	1.06
3:C:2723:PHE:HE1	3:C:2749:VAL:HG12	1.12	1.06
4:D:248:MET:HE1	7:G:147:VAL:HB	1.33	1.06
7:G:120:THR:HG22	9:I:12:ILE:HG23	1.09	1.06
2:B:10:PRO:CB	2:B:25:GLN:CB	2.32	1.06
2:B:533:ARG:HG2	2:B:534:PRO:HD3	1.34	1.06
2:B:3118:TYR:HB2	2:B:3455:SER:CB	1.84	1.06
4:D:80:PRO:HD2	15:O:103:TRP:CZ2	1.90	1.06
4:D:91:TYR:CZ	13:M:80:LEU:HD12	1.89	1.06
4:D:297:LYS:NZ	4:D:328:LEU:CB	2.17	1.06
12:L:73:GLU:HB3	13:M:66:ILE:HD12	1.31	1.06
1:A:1396:PRO:CA	1:A:1400:TYR:CB	2.33	1.06
2:B:970:ALA:HB1	3:C:345:TRP:CZ3	1.90	1.06
4:D:90:ASP:OD2	13:M:32:LYS:CG	2.02	1.06
4:D:111:MET:HB3	15:O:95:LEU:H	1.20	1.06
4:D:148:GLU:HG2	4:D:149:PRO:CD	1.85	1.06
7:G:119:PRO:CD	9:I:12:ILE:HD12	1.86	1.06
1:A:403:ALA:H	1:A:471:ASN:CB	1.67	1.06
1:A:598:ARG:HH12	4:D:546:VAL:CG1	1.67	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:801:ILE:HB	1:A:862:LEU:HD21	1.34	1.06
1:A:1012:LYS:HB2	1:A:1071:ILE:HD13	1.07	1.06
1:A:1445:PHE:CD2	1:A:1564:CYS:SG	2.48	1.06
1:A:3215:ILE:CG2	1:A:3219:ASP:OD2	2.04	1.06
2:B:1238:LYS:HE3	2:B:1308:LEU:HA	1.08	1.06
2:B:1607:PRO:CG	2:B:1946:SER:CB	2.33	1.06
3:C:2719:VAL:CG1	3:C:2720:PRO:HD3	1.86	1.06
3:C:2792:TYR:C	3:C:2796:PRO:HG3	1.75	1.06
4:D:567:GLN:OE1	4:D:578:LYS:HD3	1.56	1.06
8:H:46:LYS:CE	9:I:86:ASP:CB	2.34	1.06
18:R:82:ALA:C	18:R:83:ASN:HA	1.72	1.06
1:A:601:PRO:CG	1:A:698:GLU:CG	2.24	1.05
1:A:817:VAL:O	1:A:818:LEU:HD13	0.89	1.05
1:A:1452:LYS:HA	1:A:1458:MET:N	1.68	1.05
3:C:2721:GLU:CB	3:C:2803:MET:CE	2.34	1.05
4:D:251:MET:CB	7:G:136:MET:HE2	1.86	1.05
5:E:16:ASN:CG	15:O:132:GLU:HA	1.75	1.05
5:E:82:GLY:HA2	8:H:12:LYS:NZ	1.69	1.05
8:H:46:LYS:HE2	9:I:86:ASP:CB	1.84	1.05
11:K:77:PHE:CE1	11:K:88:LEU:HD11	1.91	1.05
1:A:804:ASN:ND2	5:E:148:LYS:CB	2.18	1.05
1:A:971:ASN:HA	1:A:985:PHE:HE2	0.91	1.05
1:A:3298:ILE:C	1:A:3343:HIS:HE1	1.58	1.05
1:A:3386:ASN:O	1:A:3390:VAL:HG23	1.55	1.05
2:B:1242:GLN:O	2:B:1252:MET:N	1.88	1.05
3:C:354:VAL:HG11	3:C:357:ILE:CD1	1.87	1.05
4:D:517:ILE:HD11	4:D:527:ILE:HG23	1.32	1.05
16:P:10:THR:HA	16:P:65:ASP:CB	1.86	1.05
1:A:3222:GLU:HB3	1:A:3328:ALA:HB2	1.37	1.05
2:B:436:PHE:CE1	2:B:499:LEU:HD23	1.86	1.05
3:C:2803:MET:HB2	3:C:2814:CYS:SG	1.90	1.05
4:D:414:PHE:CD2	4:D:426:TRP:CD1	2.44	1.05
4:D:517:ILE:HD12	4:D:527:ILE:HG12	1.33	1.05
4:D:528:TRP:NE1	4:D:535:GLN:HB3	1.72	1.05
4:D:590:LEU:HD23	4:D:604:VAL:CG1	1.86	1.05
5:E:61:VAL:HG23	10:J:106:LEU:HD22	1.34	1.05
5:E:239:LEU:HD21	5:E:257:VAL:HG22	1.11	1.05
14:N:72:ILE:HG23	15:O:97:ILE:HG12	1.13	1.05
1:A:659:TRP:HZ2	1:A:702:LEU:HD11	0.93	1.05
1:A:688:PHE:HE1	1:A:693:MET:SD	1.78	1.05
1:A:1114:GLN:O	1:A:1118:LEU:HD22	1.57	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3306:LEU:O	1:A:3306:LEU:CD1	2.04	1.05
2:B:1106:PHE:CZ	2:B:1160:ILE:HD11	1.92	1.05
2:B:1511:VAL:HA	2:B:1570:VAL:HG22	1.30	1.05
3:C:2746:PRO:HD2	3:C:2747:LYS:H	1.19	1.05
4:D:395:HIS:NE2	4:D:399:VAL:HG11	1.61	1.05
5:E:20:PHE:CE1	14:N:89:GLN:HA	1.91	1.05
5:E:164:VAL:CG2	5:E:181:TYR:HE1	1.66	1.05
7:G:120:THR:HG23	9:I:12:ILE:CG2	1.87	1.05
8:H:58:HIS:CD2	9:I:87:VAL:HG13	1.92	1.05
9:I:26:ASN:CB	9:I:98:PHE:CE2	2.40	1.05
10:J:21:PHE:CZ	10:J:37:LEU:CD2	2.40	1.05
10:J:77:HIS:ND1	11:K:70:VAL:HG22	1.70	1.05
1:A:1422:SER:CB	1:A:1486:HIS:NE2	2.20	1.05
1:A:1505:ASN:O	1:A:1509:ASP:OD2	1.74	1.05
2:B:511:PHE:HE2	2:B:547:LEU:HD21	1.15	1.05
2:B:1492:LYS:HE3	2:B:3606:GLN:NE2	1.72	1.05
4:D:526:ARG:HB2	4:D:528:TRP:CH2	1.92	1.05
5:E:112:LEU:CD2	6:F:97:MET:SD	2.45	1.05
1:A:601:PRO:HG2	1:A:698:GLU:HG3	1.09	1.04
1:A:688:PHE:CE1	1:A:693:MET:CG	2.40	1.04
1:A:1067:PRO:CD	1:A:1067:PRO:N	2.19	1.04
1:A:1505:ASN:O	1:A:1509:ASP:CG	1.95	1.04
1:A:1513:LYS:CD	1:A:1578:ASN:ND2	2.15	1.04
1:A:3249:ILE:HG12	1:A:3273:TYR:HA	1.36	1.04
2:B:946:ARG:CA	2:B:955:PHE:HE2	1.68	1.04
3:C:2725:ALA:O	3:C:2729:LEU:HG	1.57	1.04
3:C:2726:THR:CB	3:C:2729:LEU:HD12	1.86	1.04
4:D:195:ILE:HD13	9:I:94:LEU:CD2	1.86	1.04
4:D:297:LYS:HE3	4:D:316:LEU:CD2	1.86	1.04
5:E:46:ASN:CG	12:L:88:PHE:CE1	2.30	1.04
5:E:282:THR:HG23	5:E:322:LEU:HD12	1.38	1.04
5:E:395:VAL:HG21	5:E:402:ILE:HD11	1.06	1.04
8:H:68:PHE:HB2	9:I:60:CYS:HB3	1.39	1.04
1:A:617:ILE:HD12	1:A:647:GLN:HE22	1.16	1.04
1:A:760:ASP:OD2	1:A:764:ARG:CG	2.05	1.04
1:A:1518:TRP:NE1	1:A:1545:ASP:OD1	1.89	1.04
1:A:3229:PRO:HB2	1:A:3233:ILE:CG2	1.87	1.04
1:A:3308:PRO:HB3	17:Q:33:PHE:CB	1.86	1.04
2:B:673:PHE:CE1	2:B:677:LEU:HD13	1.93	1.04
2:B:789:LYS:HE3	2:B:839:LEU:CD2	1.87	1.04
2:B:1511:VAL:CA	2:B:1570:VAL:CG1	2.35	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1511:VAL:CG2	2:B:1570:VAL:CG2	2.35	1.04
4:D:212:ILE:HD13	9:I:19:MET:HE1	1.37	1.04
8:H:66:GLY:N	9:I:79:ILE:O	1.90	1.04
9:I:51:ALA:HB1	9:I:52:PRO:CD	1.87	1.04
15:O:30:TYR:OH	15:O:126:VAL:HG12	1.53	1.04
1:A:655:PHE:CE2	1:A:659:TRP:NE1	2.25	1.04
2:B:436:PHE:HD2	2:B:463:PHE:CE1	1.73	1.04
2:B:501:ARG:CZ	4:D:491:GLN:CG	2.19	1.04
2:B:794:LEU:O	2:B:797:PHE:CD2	2.11	1.04
2:B:1051:ASP:HB3	2:B:1162:THR:HG21	1.38	1.04
4:D:91:TYR:CE2	13:M:80:LEU:CB	2.38	1.04
4:D:195:ILE:HG21	9:I:94:LEU:CD2	1.88	1.04
10:J:21:PHE:HZ	10:J:37:LEU:CD2	1.69	1.04
15:O:22:LEU:HD12	15:O:23:ASN:CG	1.77	1.04
1:A:3446:ASN:OD1	1:A:3488:LEU:HD22	1.55	1.04
2:B:598:ARG:HB2	5:E:367:LEU:HD13	1.33	1.04
2:B:801:ILE:CD1	2:B:937:PHE:CE1	2.23	1.04
2:B:861:ASP:OD2	3:C:170:GLN:HB3	0.89	1.04
4:D:106:ILE:HG13	15:O:99:SER:O	1.56	1.04
4:D:172:GLU:HA	13:M:64:HIS:HA	1.31	1.04
10:J:34:ASP:HB2	15:O:31:PRO:CG	1.88	1.04
1:A:804:ASN:ND2	5:E:148:LYS:HG2	1.72	1.04
1:A:1052:LEU:HB3	1:A:1166:TYR:CE2	1.93	1.04
1:A:1121:LYS:HB3	1:A:1138:THR:HG21	1.05	1.04
1:A:3249:ILE:HG13	1:A:3273:TYR:HA	1.07	1.04
2:B:533:ARG:CB	2:B:534:PRO:HD2	1.86	1.04
2:B:718:ILE:HD11	2:B:773:VAL:CB	1.88	1.04
2:B:1559:MET:CG	2:B:1577:ARG:HH22	1.71	1.04
2:B:3118:TYR:HB2	2:B:3455:SER:HB2	1.39	1.04
4:D:297:LYS:HE3	4:D:316:LEU:HD23	1.07	1.04
5:E:46:ASN:HB3	12:L:88:PHE:CE1	1.93	1.04
14:N:89:GLN:HG2	14:N:94:ASP:HB2	1.38	1.04
15:O:22:LEU:CD1	15:O:23:ASN:CG	2.26	1.04
1:A:597:VAL:HB	1:A:600:MET:HG3	1.39	1.03
2:B:444:LEU:CA	5:E:515:LYS:HG2	1.84	1.03
2:B:641:ILE:O	2:B:645:GLU:HG3	1.58	1.03
3:C:2742:LYS:CE	3:C:2785:VAL:HG21	1.88	1.03
5:E:310:LEU:HD21	5:E:358:ARG:NH2	1.72	1.03
16:P:11:THR:O	16:P:67:LEU:HA	1.55	1.03
1:A:1445:PHE:CD2	1:A:1564:CYS:HB3	1.88	1.03
1:A:3106:LYS:CG	1:A:3443:LEU:CD1	2.37	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:436:PHE:CD2	2:B:463:PHE:CD1	2.47	1.03
2:B:882:LEU:O	2:B:886:ILE:HG22	1.56	1.03
2:B:1447:ILE:HG22	2:B:1504:TRP:NE1	1.55	1.03
7:G:119:PRO:HD2	9:I:12:ILE:HD13	1.34	1.03
7:G:119:PRO:HG2	9:I:12:ILE:HG21	1.06	1.03
10:J:26:VAL:HG22	10:J:97:TYR:O	1.50	1.03
1:A:1143:ARG:CZ	4:D:169:ASN:ND2	2.21	1.03
2:B:444:LEU:HD23	5:E:515:LYS:HE2	1.26	1.03
2:B:1607:PRO:CB	2:B:1946:SER:OG	2.06	1.03
2:B:1607:PRO:HB3	2:B:1946:SER:OG	1.57	1.03
2:B:3164:VAL:CG1	2:B:3409:ALA:HB2	1.89	1.03
3:C:354:VAL:CG1	3:C:357:ILE:HD12	1.88	1.03
4:D:170:THR:HG22	13:M:66:ILE:HG12	1.12	1.03
4:D:528:TRP:CD1	4:D:535:GLN:CA	2.41	1.03
5:E:46:ASN:ND2	12:L:25:ASP:OD2	1.90	1.03
12:L:74:TRP:CE2	12:L:109:LYS:HD2	1.92	1.03
14:N:72:ILE:HG21	15:O:97:ILE:HD11	1.04	1.03
1:A:3449:LEU:HD23	1:A:3488:LEU:HD23	1.39	1.03
2:B:165:LEU:O	2:B:169:LYS:N	1.91	1.03
2:B:500:GLU:OE1	2:B:535:ILE:HD12	0.85	1.03
2:B:789:LYS:HB3	2:B:839:LEU:HD13	1.40	1.03
2:B:954:ASP:CG	3:C:222:PHE:O	1.96	1.03
3:C:205:ALA:CB	3:C:216:ILE:HG22	1.88	1.03
3:C:261:ILE:HG13	3:C:360:PRO:CB	1.89	1.03
3:C:2721:GLU:HB2	3:C:2803:MET:HE1	1.05	1.03
4:D:80:PRO:CG	15:O:103:TRP:HE1	1.71	1.03
10:J:26:VAL:HG23	10:J:97:TYR:O	1.58	1.03
1:A:801:ILE:CG2	1:A:862:LEU:CD2	2.31	1.03
1:A:804:ASN:HD21	5:E:148:LYS:CG	1.70	1.03
1:A:1126:VAL:CA	1:A:1131:SER:OG	2.06	1.03
2:B:87:LYS:O	2:B:103:ASN:CA	2.07	1.03
2:B:1002:GLN:HA	2:B:1094:TRP:CZ2	1.94	1.03
3:C:2745:LYS:CG	3:C:2749:VAL:HG21	1.87	1.03
3:C:2793:LEU:C	3:C:2796:PRO:HD3	1.76	1.03
5:E:48:ILE:HG12	12:L:88:PHE:HZ	1.19	1.03
6:F:50:ALA:HA	8:H:83:GLN:CG	1.88	1.03
17:Q:68:LEU:O	17:Q:92:ASP:CB	2.06	1.03
1:A:1445:PHE:HD2	1:A:1564:CYS:SG	1.79	1.02
1:A:3251:ILE:HD13	17:Q:61:SER:C	1.78	1.02
2:B:801:ILE:CD1	2:B:937:PHE:CD1	2.42	1.02
2:B:897:SER:HB2	2:B:898:PRO:HD2	1.41	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1127:ASN:HB3	2:B:1128:PRO:HD3	1.38	1.02
2:B:3153:LEU:HD12	2:B:3707:LEU:HD11	1.04	1.02
3:C:24:HIS:NE2	3:C:325:SER:OG	1.66	1.02
4:D:170:THR:HG22	13:M:66:ILE:HA	1.39	1.02
4:D:177:ASN:ND2	13:M:60:ASN:CB	1.77	1.02
7:G:58:SER:O	7:G:62:ASP:N	1.90	1.02
12:L:73:GLU:CB	13:M:66:ILE:HD12	1.87	1.02
1:A:709:ILE:CG2	1:A:710:PRO:HD2	1.89	1.02
2:B:533:ARG:CB	2:B:534:PRO:CD	2.37	1.02
2:B:1123:GLY:HA2	2:B:1197:PHE:CE1	1.94	1.02
2:B:1607:PRO:HG2	2:B:1946:SER:CB	1.90	1.02
3:C:2673:VAL:CB	3:C:2841:THR:HA	1.89	1.02
3:C:2735:ASN:HB3	3:C:2757:LEU:HA	1.40	1.02
4:D:518:SER:OG	4:D:528:TRP:CZ3	2.11	1.02
4:D:584:ILE:HG21	4:D:614:VAL:CG2	1.88	1.02
5:E:16:ASN:HB3	15:O:132:GLU:CG	1.81	1.02
5:E:492:ASP:CA	5:E:495:TYR:CE2	2.42	1.02
6:F:56:TRP:CE2	6:F:91:GLN:NE2	2.23	1.02
8:H:46:LYS:CE	9:I:86:ASP:HB3	1.88	1.02
1:A:1126:VAL:O	1:A:1208:TYR:OH	1.75	1.02
1:A:3099:TYR:HA	1:A:3451:THR:HG21	1.41	1.02
2:B:444:LEU:HD11	2:B:527:PHE:HE1	0.87	1.02
2:B:829:VAL:HG11	2:B:940:ILE:HG23	1.38	1.02
2:B:1437:GLU:HG2	2:B:1493:TYR:CB	1.89	1.02
3:C:2721:GLU:CB	3:C:2803:MET:HE1	1.89	1.02
3:C:2721:GLU:OE2	3:C:2798:PHE:HE1	1.41	1.02
4:D:174:GLN:CB	13:M:62:GLY:CA	2.36	1.02
4:D:528:TRP:CD1	4:D:535:GLN:HA	1.93	1.02
8:H:12:LYS:HG2	8:H:80:TYR:CD2	1.95	1.02
1:A:1513:LYS:HD3	1:A:1578:ASN:ND2	1.72	1.02
2:B:679:ARG:CB	5:E:186:PHE:CE2	2.41	1.02
2:B:1531:ILE:HG21	2:B:1595:LEU:HD11	1.42	1.02
3:C:10:LEU:CD2	3:C:65:ASN:C	2.27	1.02
15:O:45:ARG:CB	15:O:63:LEU:HD13	1.89	1.02
1:A:580:LEU:HD22	1:A:640:SER:HB3	1.02	1.02
1:A:590:GLN:HB2	1:A:609:TRP:CZ2	1.94	1.02
2:B:349:ASN:CA	2:B:416:LEU:CD2	2.37	1.02
2:B:736:LEU:HD12	2:B:859:TYR:CB	1.90	1.02
2:B:1511:VAL:N	2:B:1570:VAL:HG11	1.74	1.02
3:C:60:LEU:CD2	3:C:69:TRP:CH2	2.42	1.02
4:D:172:GLU:HA	13:M:64:HIS:CB	1.86	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:173:CYS:O	13:M:63:SER:N	1.91	1.02
5:E:22:ASP:HB3	14:N:91:THR:HG23	1.05	1.02
5:E:394:TRP:CD1	5:E:401:PRO:CA	2.42	1.02
5:E:492:ASP:HA	5:E:495:TYR:CZ	1.93	1.02
1:A:95:PHE:O	1:A:124:THR:N	1.93	1.01
1:A:804:ASN:ND2	5:E:148:LYS:CG	2.23	1.01
1:A:853:VAL:HB	5:E:206:ASN:CG	1.79	1.01
1:A:1444:GLN:HB3	1:A:1559:LYS:O	1.60	1.01
2:B:533:ARG:HB3	2:B:534:PRO:HD2	1.01	1.01
2:B:946:ARG:HA	2:B:955:PHE:CZ	1.95	1.01
2:B:2666:ARG:CD	20:B:5601:ATP:O1G	2.08	1.01
3:C:2669:ILE:HD12	3:C:2847:ALA:HB1	1.42	1.01
4:D:105:MET:CE	14:N:48:GLN:HA	1.88	1.01
4:D:173:CYS:N	13:M:63:SER:O	1.92	1.01
8:H:76:TYR:HE1	8:H:87:LEU:HD11	1.21	1.01
9:I:78:ILE:HD12	9:I:106:LEU:HB3	1.41	1.01
1:A:670:LEU:HB2	1:A:692:ILE:CD1	1.89	1.01
1:A:1012:LYS:HB3	1:A:1071:ILE:HG21	1.35	1.01
1:A:1396:PRO:HA	1:A:1400:TYR:CB	1.90	1.01
1:A:1504:VAL:HG22	1:A:1565:CYS:SG	2.00	1.01
2:B:883:ASN:HA	2:B:886:ILE:CG2	1.90	1.01
3:C:2585:PHE:HB2	3:C:2932:SER:CB	1.90	1.01
3:C:2723:PHE:CE1	3:C:2749:VAL:HG12	1.87	1.01
4:D:175:THR:N	13:M:61:PHE:O	1.92	1.01
5:E:35:VAL:O	14:N:78:HIS:ND1	1.92	1.01
1:A:580:LEU:HD21	1:A:640:SER:HB3	1.31	1.01
1:A:970:TYR:O	1:A:983:ALA:CB	2.09	1.01
1:A:1121:LYS:CB	1:A:1138:THR:HG21	1.89	1.01
1:A:3273:TYR:OH	1:A:3277:GLY:HA3	1.13	1.01
2:B:444:LEU:CD1	2:B:527:PHE:HE1	1.74	1.01
2:B:3264:ASN:HB2	2:B:3306:ILE:HD11	1.10	1.01
3:C:2792:TYR:O	3:C:2796:PRO:CD	2.08	1.01
4:D:567:GLN:HB3	4:D:578:LYS:HD2	1.38	1.01
5:E:23:THR:HG21	14:N:88:TYR:HD1	1.24	1.01
5:E:119:CYS:CB	6:F:88:ILE:HD13	1.91	1.01
10:J:86:CYS:HB2	11:K:61:VAL:HG13	1.38	1.01
1:A:38:LYS:HA	1:A:44:PHE:CB	1.89	1.01
1:A:2164:SER:OG	20:A:4801:ATP:O1B	1.77	1.01
1:A:3251:ILE:CD1	17:Q:61:SER:HA	1.72	1.01
2:B:3264:ASN:CB	2:B:3306:ILE:CD1	2.24	1.01
2:B:3342:ASN:O	2:B:3346:PHE:CB	2.08	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2740:ILE:CB	3:C:2744:LYS:HB3	1.88	1.01
14:N:70:THR:HG22	15:O:99:SER:CB	1.89	1.01
1:A:891:PHE:HE1	1:A:972:TRP:CE3	1.44	1.01
1:A:1121:LYS:HB3	1:A:1138:THR:CG2	1.91	1.01
1:A:3106:LYS:HG2	1:A:3443:LEU:CG	1.90	1.01
1:A:3121:LEU:HD23	1:A:3429:TRP:HB3	1.31	1.01
2:B:409:SER:CB	2:B:413:PHE:HD1	1.45	1.01
2:B:429:LEU:HD11	2:B:489:PHE:CE2	1.92	1.01
2:B:744:MET:HG3	2:B:776:LEU:HD22	1.43	1.01
6:F:35:ARG:CZ	6:F:41:SER:HB2	1.89	1.01
8:H:54:HIS:NE2	18:R:62:LYS:HA	1.75	1.01
8:H:76:TYR:CE1	8:H:87:LEU:HD11	1.96	1.01
1:A:747:ILE:CD1	1:A:889:TYR:CE1	2.44	1.00
1:A:853:VAL:CB	5:E:206:ASN:HD21	1.64	1.00
1:A:3110:LEU:HD11	1:A:3443:LEU:HD22	1.43	1.00
2:B:1223:LYS:HZ1	2:B:1277:ARG:CB	1.64	1.00
3:C:2690:LEU:CB	3:C:2826:VAL:HG11	1.90	1.00
4:D:201:GLN:CD	9:I:102:ASN:HB3	1.80	1.00
1:A:598:ARG:HH22	4:D:546:VAL:HG11	1.25	1.00
1:A:617:ILE:HD12	1:A:647:GLN:NE2	1.77	1.00
1:A:3298:ILE:CA	1:A:3343:HIS:HE1	1.74	1.00
2:B:87:LYS:O	2:B:103:ASN:HA	1.59	1.00
2:B:1447:ILE:HG22	2:B:1504:TRP:CZ2	1.95	1.00
2:B:1566:ASN:CG	3:C:2275:LYS:HD3	1.80	1.00
10:J:61:ALA:CB	10:J:80:PHE:HE2	1.63	1.00
12:L:84:CYS:CB	13:M:56:ILE:HG12	1.92	1.00
1:A:688:PHE:CE1	1:A:693:MET:HG2	1.95	1.00
1:A:971:ASN:CA	1:A:985:PHE:HE2	1.75	1.00
1:A:1051:GLN:OE1	1:A:1096:TYR:CE1	2.14	1.00
1:A:3194:ALA:HB1	1:A:3356:VAL:CG2	1.91	1.00
1:A:3235:TYR:HE2	1:A:3269:LEU:HD11	1.19	1.00
2:B:725:ILE:HG21	2:B:776:LEU:HG	1.42	1.00
2:B:946:ARG:N	2:B:955:PHE:HE2	1.59	1.00
2:B:1511:VAL:CG2	2:B:1570:VAL:HB	1.89	1.00
2:B:3078:ILE:HD12	2:B:3452:LEU:HD22	1.37	1.00
2:B:3261:ILE:CG2	2:B:3306:ILE:HG23	1.89	1.00
3:C:2740:ILE:HG13	3:C:2744:LYS:HB3	1.05	1.00
3:C:2798:PHE:CD1	3:C:2803:MET:SD	2.55	1.00
1:A:726:TYR:CE1	1:A:777:ILE:HG23	1.95	1.00
1:A:1051:GLN:OE1	1:A:1096:TYR:OH	1.79	1.00
2:B:518:TYR:CE1	5:E:407:TYR:HE2	1.77	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1456:PHE:HZ	2:B:1563:VAL:CG1	1.48	1.00
2:B:3234:LEU:HD13	2:B:3336:LEU:HD23	1.43	1.00
4:D:75:LEU:HD23	4:D:75:LEU:H	1.24	1.00
4:D:251:MET:HB2	7:G:136:MET:CE	1.86	1.00
1:A:21:LEU:O	1:A:25:ASP:CA	2.09	1.00
1:A:867:MET:SD	1:A:878:VAL:HG11	2.01	1.00
1:A:3249:ILE:CD1	1:A:3273:TYR:HA	1.92	1.00
2:B:897:SER:CB	2:B:898:PRO:CD	2.40	1.00
3:C:2606:GLY:C	3:C:2910:TRP:HZ3	1.64	1.00
4:D:569:TYR:CE2	4:D:578:LYS:CG	2.42	1.00
1:A:634:ILE:CG2	1:A:638:TYR:OH	2.07	1.00
1:A:1031:ILE:HG23	1:A:1034:SER:OG	1.60	1.00
1:A:1638:THR:HB	1:A:1655:GLN:HG3	1.42	1.00
1:A:3223:LEU:HD11	1:A:3332:ILE:CG1	1.55	1.00
1:A:3306:LEU:CD1	1:A:3310:LEU:HG	1.91	1.00
4:D:68:GLU:HG3	5:E:12:LYS:HA	1.40	1.00
2:B:433:ILE:HG23	2:B:463:PHE:HZ	0.92	1.00
2:B:1559:MET:HE2	2:B:1577:ARG:HD3	1.44	1.00
3:C:159:TYR:CD1	3:C:179:VAL:CG2	2.44	1.00
3:C:2585:PHE:CD1	3:C:2929:LEU:HA	1.96	1.00
4:D:620:LEU:HD12	4:D:620:LEU:O	1.61	1.00
1:A:1274:GLY:CA	4:D:164:ASN:HB3	1.92	0.99
1:A:1445:PHE:HD2	1:A:1564:CYS:HG	1.04	0.99
2:B:3446:SER:CB	2:B:3489:THR:CG2	2.17	0.99
3:C:2734:PHE:HE2	3:C:2767:LYS:HG3	1.11	0.99
5:E:14:PHE:HZ	15:O:22:LEU:O	1.43	0.99
1:A:155:GLY:HA2	2:B:168:ILE:CA	1.89	0.99
2:B:660:LEU:CG	2:B:755:ILE:HD13	1.92	0.99
2:B:946:ARG:CA	2:B:955:PHE:CE2	2.43	0.99
2:B:973:THR:OG1	3:C:344:ASN:CB	2.10	0.99
4:D:184:GLY:CA	11:K:69:TYR:HD1	1.75	0.99
5:E:310:LEU:HG	5:E:358:ARG:CZ	1.93	0.99
6:F:14:LEU:HD23	6:F:23:TYR:HD2	1.19	0.99
7:G:120:THR:HG23	9:I:12:ILE:HG23	1.36	0.99
1:A:747:ILE:HD11	1:A:889:TYR:CE1	1.97	0.99
2:B:3300:GLU:OE2	2:B:3354:LYS:CD	2.10	0.99
3:C:2745:LYS:CE	3:C:2749:VAL:HG21	1.91	0.99
4:D:174:GLN:NE2	12:L:51:LYS:H	1.59	0.99
17:Q:69:ASN:CA	17:Q:92:ASP:CB	2.40	0.99
1:A:972:TRP:HZ3	1:A:985:PHE:CE1	1.79	0.99
2:B:52:PHE:C	2:B:53:ILE:N	2.15	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3118:TYR:CD2	2:B:3452:LEU:HA	1.97	0.99
5:E:14:PHE:CZ	15:O:22:LEU:O	2.16	0.99
1:A:937:LEU:HD13	1:A:1081:ILE:HG12	1.42	0.99
1:A:3121:LEU:HD21	1:A:3429:TRP:CA	1.91	0.99
14:N:86:THR:OG1	15:O:83:VAL:HG13	1.60	0.99
2:B:679:ARG:HB2	5:E:186:PHE:CE2	1.98	0.99
3:C:143:PRO:HD3	3:C:187:TRP:NE1	1.77	0.99
3:C:2740:ILE:CG2	3:C:2744:LYS:CB	2.11	0.99
4:D:113:GLY:HA3	15:O:92:GLY:O	1.62	0.99
4:D:569:TYR:OH	4:D:578:LYS:CD	2.10	0.99
2:B:528:GLU:CD	5:E:526:GLN:HE21	1.66	0.99
3:C:354:VAL:HG21	3:C:357:ILE:HG13	1.41	0.99
5:E:59:HIS:HD2	10:J:90:HIS:CE1	1.81	0.99
9:I:51:ALA:HB1	9:I:52:PRO:HD3	1.43	0.99
2:B:59:THR:O	2:B:82:ASP:N	1.93	0.99
2:B:532:THR:HG22	2:B:536:ILE:CG1	1.93	0.99
3:C:180:LEU:HD12	3:C:180:LEU:O	1.63	0.99
5:E:80:TRP:HE3	5:E:81:PRO:HD2	1.27	0.99
8:H:51:SER:O	18:R:63:ASN:CA	2.03	0.99
1:A:616:LYS:O	1:A:620:PRO:CD	2.10	0.99
4:D:111:MET:HE1	15:O:90:ILE:HB	1.44	0.99
4:D:242:LYS:HG2	7:G:60:VAL:CG2	1.91	0.99
4:D:571:LEU:HD13	4:D:647:TYR:CE2	1.97	0.99
5:E:446:ILE:HD12	5:E:446:ILE:H	1.23	0.99
8:H:89:PHE:CE2	9:I:76:GLN:OE1	2.16	0.99
1:A:577:ALA:HB2	1:A:636:ARG:HD3	0.99	0.98
1:A:3124:ILE:HD12	1:A:3429:TRP:CD1	1.98	0.98
2:B:713:VAL:HG11	5:E:258:GLU:HG3	1.02	0.98
2:B:1511:VAL:HG22	2:B:1570:VAL:HB	1.02	0.98
2:B:1607:PRO:HG2	2:B:1946:SER:HB3	1.01	0.98
2:B:3445:LYS:HB3	2:B:3487:PRO:HB3	1.45	0.98
3:C:2723:PHE:HE1	3:C:2749:VAL:CG1	1.69	0.98
4:D:174:GLN:CA	13:M:62:GLY:CA	2.28	0.98
8:H:89:PHE:HE2	9:I:76:GLN:OE1	1.45	0.98
1:A:3042:PHE:CZ	1:A:3100:LYS:HE2	1.98	0.98
1:A:3232:ILE:HD11	1:A:3316:TRP:CZ3	1.90	0.98
2:B:598:ARG:HB2	5:E:367:LEU:CD1	1.93	0.98
1:A:598:ARG:HH22	4:D:546:VAL:CG1	1.74	0.98
1:A:1140:GLU:OE2	4:D:165:LYS:CE	2.11	0.98
2:B:582:MET:HE2	2:B:587:GLY:CA	1.89	0.98
4:D:105:MET:SD	14:N:48:GLN:CA	2.51	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:39:TRP:C	16:P:40:SER:N	2.17	0.98
1:A:1114:GLN:O	1:A:1118:LEU:HD23	1.58	0.98
2:B:595:LEU:HD23	5:E:389:TRP:CZ2	1.98	0.98
4:D:529:ASP:OD2	4:D:532:TYR:CD2	2.16	0.98
18:R:82:ALA:CA	18:R:83:ASN:N	2.27	0.98
1:A:670:LEU:HB2	1:A:692:ILE:HD11	1.00	0.98
2:B:555:LEU:HD21	2:B:625:LEU:CD2	1.69	0.98
3:C:2018:GLN:NE2	19:C:4702:ADP:H2'	1.77	0.98
3:C:2725:ALA:HA	3:C:2728:TYR:HE2	1.23	0.98
16:P:57:ILE:CB	16:P:64:ILE:O	2.12	0.98
1:A:686:VAL:CG2	1:A:731:LEU:CD2	2.34	0.98
2:B:436:PHE:CD2	2:B:463:PHE:CE1	2.52	0.98
2:B:1474:MET:HE2	2:B:1515:VAL:CG1	1.91	0.98
3:C:2734:PHE:CE2	3:C:2767:LYS:HD2	1.95	0.98
5:E:61:VAL:HG22	10:J:106:LEU:HD22	1.20	0.98
2:B:724:HIS:CD2	2:B:728:CYS:SG	2.57	0.98
3:C:2669:ILE:HD12	3:C:2847:ALA:HB3	1.44	0.98
3:C:2694:ALA:CB	3:C:2823:TYR:CB	2.42	0.98
4:D:174:GLN:HB3	12:L:51:LYS:HB2	1.44	0.98
5:E:61:VAL:HG21	10:J:106:LEU:HD13	1.44	0.98
7:G:111:ARG:O	7:G:114:VAL:HG12	1.63	0.98
10:J:36:ILE:HG12	10:J:72:PHE:HE1	1.11	0.98
14:N:84:GLN:HG3	15:O:61:GLU:HA	1.42	0.98
1:A:760:ASP:OD2	1:A:764:ARG:HG2	1.61	0.98
2:B:532:THR:H	2:B:536:ILE:HD12	1.26	0.98
2:B:957:GLN:HA	3:C:220:TRP:HH2	1.01	0.98
2:B:1507:LYS:HD3	2:B:1571:GLU:OE1	1.64	0.98
1:A:909:MET:HE1	1:A:955:ILE:HD11	1.45	0.98
1:A:1029:GLU:HA	1:A:1088:TRP:CZ2	1.98	0.98
3:C:165:GLY:CA	3:C:174:PHE:HE2	1.76	0.98
4:D:107:VAL:HA	15:O:98:ALA:HA	1.45	0.98
5:E:61:VAL:CG1	10:J:95:PHE:HZ	1.77	0.98
14:N:84:GLN:NE2	15:O:61:GLU:HB2	1.78	0.98
2:B:575:ASN:CA	5:E:481:GLN:HE22	1.76	0.98
2:B:798:ASN:CB	2:B:874:ALA:CB	2.31	0.98
2:B:3230:ALA:HB3	2:B:3342:ASN:CG	1.77	0.98
4:D:114:ASP:OD1	5:E:43:ARG:NH1	1.97	0.98
4:D:262:HIS:HA	5:E:125:GLN:HE22	1.27	0.98
2:B:1468:ALA:O	2:B:1469:SER:OG	1.82	0.97
3:C:2725:ALA:HA	3:C:2728:TYR:CE2	1.98	0.97
4:D:517:ILE:CD1	4:D:527:ILE:CG2	2.41	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:74:ILE:HD12	6:F:77:ILE:HD11	1.44	0.97
11:K:77:PHE:CD1	11:K:90:TYR:HB3	1.98	0.97
1:A:550:HIS:CB	4:D:654:ASN:OD1	2.12	0.97
3:C:2613:THR:HG21	3:C:3176:LEU:HD22	1.46	0.97
6:F:14:LEU:HD21	6:F:23:TYR:HB3	1.00	0.97
10:J:38:GLU:OE2	15:O:29:PHE:CE2	2.15	0.97
10:J:48:LEU:HD11	10:J:100:ILE:CD1	1.91	0.97
1:A:686:VAL:HG21	1:A:731:LEU:HD23	1.00	0.97
1:A:1513:LYS:HD3	1:A:1578:ASN:HD21	1.22	0.97
1:A:1522:GLU:CG	1:A:1523:PRO:HD3	1.94	0.97
1:A:3298:ILE:C	1:A:3343:HIS:CE1	2.33	0.97
6:F:14:LEU:CD2	6:F:23:TYR:CD2	2.47	0.97
1:A:40:LEU:CA	1:A:41:LEU:N	2.27	0.97
1:A:1013:VAL:HG13	1:A:1076:LEU:CD1	1.93	0.97
2:B:725:ILE:CD1	2:B:777:PHE:HA	1.93	0.97
2:B:1511:VAL:CA	2:B:1570:VAL:HG11	1.93	0.97
2:B:3300:GLU:OE2	2:B:3354:LYS:HD2	1.64	0.97
3:C:2734:PHE:HZ	3:C:2767:LYS:HD2	1.21	0.97
4:D:89:TYR:CD2	11:K:56:PRO:HG3	1.98	0.97
4:D:251:MET:HB2	7:G:136:MET:HE2	1.44	0.97
5:E:420:THR:HG21	5:E:472:SER:O	1.63	0.97
6:F:11:LEU:HD22	6:F:23:TYR:CD1	1.99	0.97
8:H:65:PHE:HA	9:I:80:GLY:HA3	1.41	0.97
9:I:78:ILE:HD11	9:I:106:LEU:HD23	1.00	0.97
14:N:85:ILE:HG22	14:N:98:ILE:HD12	1.46	0.97
1:A:590:GLN:CB	1:A:609:TRP:CZ2	2.47	0.97
1:A:3335:TRP:CH2	1:A:3339:ILE:HD11	1.99	0.97
2:B:409:SER:HA	2:B:413:PHE:HD1	1.25	0.97
2:B:444:LEU:N	5:E:515:LYS:HG2	1.71	0.97
2:B:2304:GLU:OE1	20:B:5601:ATP:O3G	1.82	0.97
6:F:35:ARG:NE	6:F:41:SER:HB2	1.79	0.97
1:A:1633:ALA:HB2	1:A:1839:LEU:O	1.58	0.97
2:B:1234:GLU:HB2	2:B:1308:LEU:CB	1.94	0.97
2:B:1456:PHE:CE1	2:B:1467:PHE:CE1	2.53	0.97
2:B:1456:PHE:CD2	2:B:1569:VAL:CG1	2.48	0.97
3:C:2721:GLU:HB2	3:C:2803:MET:HE2	1.44	0.97
1:A:155:GLY:HA3	2:B:168:ILE:N	1.79	0.97
1:A:891:PHE:CD1	1:A:972:TRP:CZ3	2.51	0.97
2:B:581:ASN:ND2	5:E:184:MET:CE	2.28	0.97
2:B:3150:VAL:HG12	2:B:3423:VAL:HG22	1.43	0.97
4:D:236:MET:CB	7:G:143:PHE:HE2	1.69	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:78:ILE:CD1	9:I:106:LEU:HD23	1.94	0.97
2:B:673:PHE:CZ	2:B:677:LEU:HB3	2.00	0.97
2:B:3118:TYR:CD2	2:B:3455:SER:OG	2.18	0.97
3:C:2711:SER:HB3	3:C:2751:TRP:CH2	1.99	0.97
3:C:2727:ILE:CD1	3:C:2745:LYS:HB3	1.94	0.97
4:D:360:ALA:CB	5:E:133:PHE:HZ	1.77	0.97
1:A:15:THR:HA	2:B:19:SER:HA	1.43	0.97
1:A:871:LEU:HD23	1:A:875:VAL:HG13	1.46	0.97
1:A:3443:LEU:HD12	1:A:3493:PHE:HZ	0.82	0.97
4:D:297:LYS:HZ3	4:D:328:LEU:CB	1.77	0.97
1:A:971:ASN:HB3	1:A:983:ALA:HA	1.45	0.96
1:A:1433:LEU:CD1	1:A:1490:PHE:CD1	2.47	0.96
2:B:445:GLY:HA2	5:E:511:ARG:CZ	1.93	0.96
2:B:798:ASN:HB3	2:B:874:ALA:HB1	0.99	0.96
5:E:70:ASP:CG	9:I:64:LYS:CE	2.33	0.96
1:A:121:GLY:H	2:B:106:LYS:HA	1.27	0.96
1:A:3212:VAL:CG2	1:A:3338:ALA:HB3	1.95	0.96
1:A:3335:TRP:CZ3	1:A:3339:ILE:CD1	2.47	0.96
2:B:511:PHE:CE2	2:B:547:LEU:HD21	1.99	0.96
2:B:1058:LYS:CG	2:B:1166:GLU:CB	2.21	0.96
2:B:1456:PHE:HE1	2:B:1458:PHE:CZ	1.82	0.96
2:B:3153:LEU:HD13	2:B:3707:LEU:HD12	1.42	0.96
2:B:3261:ILE:O	2:B:3306:ILE:CG2	2.13	0.96
3:C:136:ALA:CB	3:C:168:ASN:OD1	2.13	0.96
3:C:165:GLY:C	3:C:174:PHE:CZ	2.37	0.96
4:D:208:TYR:CE1	9:I:100:ASN:HB2	1.99	0.96
1:A:156:VAL:N	2:B:167:GLN:O	1.99	0.96
2:B:1317:LEU:CA	16:P:61:GLU:HA	1.95	0.96
14:N:72:ILE:HD13	15:O:97:ILE:CD1	1.94	0.96
1:A:1536:LEU:H	1:A:1536:LEU:HD12	1.27	0.96
2:B:736:LEU:HA	2:B:855:SER:HB2	1.47	0.96
2:B:794:LEU:CA	2:B:797:PHE:CD2	2.48	0.96
2:B:1174:HIS:O	2:B:1178:ILE:HG13	1.64	0.96
3:C:2740:ILE:HG13	3:C:2744:LYS:CB	1.96	0.96
7:G:58:SER:C	7:G:59:GLU:N	2.19	0.96
10:J:19:LYS:HB2	10:J:28:TRP:HB2	1.43	0.96
1:A:614:PHE:CD1	1:A:644:LEU:CD2	2.47	0.96
2:B:3164:VAL:HG11	2:B:3409:ALA:HB2	1.45	0.96
10:J:75:TYR:CD1	11:K:92:LYS:NZ	2.34	0.96
3:C:2772:LYS:NZ	3:C:2776:ASP:OD2	1.98	0.96
14:N:89:GLN:CG	14:N:94:ASP:HB2	1.95	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3234:LEU:CD1	2:B:3336:LEU:HD23	1.95	0.96
3:C:132:GLU:OE1	3:C:133:PRO:HD2	1.63	0.96
1:A:2496:GLY:HA2	19:A:4701:ADP:O3B	1.64	0.96
2:B:579:PHE:CZ	5:E:369:PRO:HG2	2.01	0.96
2:B:679:ARG:CB	5:E:186:PHE:HE2	1.75	0.96
2:B:1559:MET:HG3	2:B:1577:ARG:HH22	1.28	0.96
2:B:3140:LEU:CB	2:B:3433:TRP:HE3	1.72	0.96
4:D:512:HIS:CD2	4:D:513:PRO:CD	2.49	0.96
4:D:563:MET:O	4:D:564:ASP:OD1	1.82	0.96
5:E:395:VAL:HG23	5:E:402:ILE:HD12	1.32	0.96
6:F:56:TRP:CE3	6:F:74:ILE:HD11	2.00	0.96
1:A:807:GLU:CG	1:A:811:LYS:HE3	1.94	0.96
1:A:1012:LYS:CD	1:A:1071:ILE:HD12	1.94	0.96
1:A:1012:LYS:HZ3	1:A:1072:GLY:N	1.53	0.96
2:B:443:GLU:CD	5:E:514:ARG:NH1	2.18	0.96
2:B:729:LEU:HD23	2:B:734:GLU:HG2	1.46	0.96
2:B:1127:ASN:CB	2:B:1128:PRO:CD	2.43	0.96
3:C:36:PHE:HB3	3:C:57:VAL:HG22	1.48	0.96
3:C:2018:GLN:HE21	19:C:4702:ADP:C2'	1.78	0.96
3:C:2711:SER:O	3:C:2751:TRP:HZ2	1.48	0.96
5:E:310:LEU:HD11	5:E:358:ARG:NH2	1.78	0.96
1:A:853:VAL:CG1	5:E:206:ASN:CG	2.34	0.96
2:B:1102:LEU:H	2:B:1163:ARG:HH22	1.13	0.96
10:J:74:PRO:CG	12:L:102:ARG:HD3	1.93	0.96
1:A:21:LEU:O	1:A:25:ASP:N	1.99	0.95
1:A:737:TYR:HE1	1:A:759:LEU:HD23	0.94	0.95
1:A:872:ASP:OD1	1:A:873:PRO:HD2	1.64	0.95
1:A:1020:PHE:HA	1:A:1023:PHE:HE2	1.25	0.95
1:A:1028:LYS:O	1:A:1088:TRP:HH2	1.46	0.95
1:A:3106:LYS:HG3	1:A:3443:LEU:HD21	1.06	0.95
1:A:3229:PRO:HB2	1:A:3233:ILE:HG21	1.46	0.95
1:A:3335:TRP:CH2	1:A:3339:ILE:CD1	2.49	0.95
2:B:897:SER:HB3	2:B:898:PRO:CD	1.95	0.95
3:C:2581:LEU:CD1	3:C:2936:SER:OG	2.13	0.95
4:D:552:PRO:CD	4:D:595:PHE:HD2	1.64	0.95
1:A:8:LYS:CB	1:A:109:SER:CA	2.44	0.95
2:B:533:ARG:CG	2:B:534:PRO:HD3	1.96	0.95
2:B:444:LEU:CD2	2:B:526:ASN:ND2	2.23	0.95
4:D:115:TYR:CZ	14:N:78:HIS:CD2	2.54	0.95
4:D:398:PRO:HD2	4:D:419:SER:HB2	0.97	0.95
10:J:38:GLU:CD	15:O:29:PHE:CZ	2.38	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:15:THR:CA	2:B:19:SER:HA	1.96	0.95
1:A:972:TRP:HZ3	1:A:985:PHE:CZ	1.60	0.95
1:A:1143:ARG:CD	4:D:169:ASN:HD21	1.79	0.95
1:A:3106:LYS:HG2	1:A:3443:LEU:HD11	0.98	0.95
2:B:5:SER:CB	2:B:47:ASP:CB	2.44	0.95
2:B:794:LEU:CA	2:B:797:PHE:HE2	1.78	0.95
2:B:3314:ILE:CG1	2:B:3321:PHE:HE2	1.79	0.95
5:E:16:ASN:HB2	15:O:132:GLU:C	1.85	0.95
1:A:1101:HIS:HA	1:A:1163:LEU:HD11	1.48	0.95
1:A:3290:LEU:HD22	1:A:3335:TRP:HZ2	1.29	0.95
2:B:713:VAL:HG12	5:E:258:GLU:HG3	0.96	0.95
2:B:3136:TYR:O	2:B:3433:TRP:CZ3	2.19	0.95
4:D:199:ILE:HG21	9:I:104:ALA:CB	1.96	0.95
8:H:51:SER:OG	18:R:63:ASN:O	1.84	0.95
3:C:159:TYR:HD1	3:C:179:VAL:CG2	1.80	0.95
4:D:567:GLN:CB	4:D:578:LYS:HD2	1.95	0.95
4:D:569:TYR:HH	4:D:578:LYS:HD3	1.18	0.95
5:E:56:LEU:HA	10:J:91:ASN:HA	1.47	0.95
5:E:70:ASP:CG	9:I:64:LYS:HE2	1.87	0.95
6:F:84:SER:HB3	6:F:106:ALA:HB2	1.47	0.95
8:H:65:PHE:CB	9:I:80:GLY:HA3	1.96	0.95
14:N:84:GLN:HB2	15:O:64:VAL:HG21	1.46	0.95
2:B:433:ILE:HA	2:B:463:PHE:CZ	2.02	0.95
4:D:517:ILE:HD11	4:D:527:ILE:CG2	1.97	0.95
12:L:77:ILE:HG23	13:M:63:SER:HB3	1.48	0.95
1:A:935:VAL:HG21	1:A:1017:LEU:HD21	1.45	0.95
1:A:1632:ASP:CB	1:A:1892:PHE:CD1	2.50	0.95
1:A:3230:LEU:O	1:A:3233:ILE:CG2	2.15	0.95
1:A:3249:ILE:HG13	1:A:3273:TYR:CA	1.90	0.95
2:B:581:ASN:ND2	5:E:184:MET:HE1	1.80	0.95
2:B:3301:ASN:CG	2:B:3351:LYS:HZ3	1.68	0.95
10:J:25:ARG:O	10:J:99:TYR:N	1.99	0.95
1:A:3106:LYS:HG3	1:A:3443:LEU:HD22	1.45	0.95
4:D:590:LEU:HD23	4:D:604:VAL:HG11	1.48	0.95
5:E:53:ILE:HD13	12:L:81:ASN:ND2	1.67	0.95
5:E:384:LEU:HG	5:E:417:TRP:NE1	1.81	0.95
1:A:1069:TYR:CD1	1:A:1078:THR:HG21	2.02	0.95
1:A:3251:ILE:HD11	17:Q:83:VAL:N	1.81	0.95
2:B:555:LEU:HD23	2:B:625:LEU:CG	1.97	0.95
2:B:891:ILE:HD11	2:B:897:SER:O	1.66	0.95
2:B:1208:LYS:HA	2:B:1208:LYS:HE3	1.45	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:421:GLY:HA3	4:D:441:LEU:HD12	1.45	0.95
5:E:48:ILE:HG12	12:L:88:PHE:CZ	2.02	0.95
1:A:3236:ILE:CG2	1:A:3333:LEU:HD23	1.87	0.94
2:B:897:SER:CB	2:B:898:PRO:HD2	1.95	0.94
3:C:2734:PHE:CZ	3:C:2767:LYS:CD	2.47	0.94
4:D:261:TYR:CE1	5:E:126:ILE:CD1	2.49	0.94
5:E:100:GLU:HB3	5:E:105:PHE:HD2	0.84	0.94
8:H:43:THR:CA	9:I:86:ASP:OD2	2.15	0.94
2:B:789:LYS:HE3	2:B:839:LEU:HD22	1.45	0.94
2:B:935:ASN:HB3	3:C:283:THR:CG2	1.97	0.94
2:B:1456:PHE:CE2	2:B:1569:VAL:CG1	2.50	0.94
4:D:111:MET:CE	15:O:90:ILE:HG21	1.93	0.94
2:B:682:LYS:HE2	5:E:186:PHE:CE1	2.00	0.94
2:B:2191:THR:OG1	20:B:5601:ATP:O1A	1.84	0.94
3:C:2793:LEU:C	3:C:2796:PRO:HD2	1.80	0.94
4:D:297:LYS:HZ2	4:D:328:LEU:HB2	1.24	0.94
8:H:64:ASN:O	9:I:81:GLU:N	2.00	0.94
12:L:86:LEU:HD12	13:M:54:ASN:HB3	1.49	0.94
1:A:688:PHE:HE1	1:A:693:MET:HG2	1.28	0.94
1:A:1126:VAL:HB	1:A:1201:TYR:HH	1.24	0.94
2:B:871:ILE:CD1	2:B:944:ILE:HD11	1.98	0.94
2:B:3210:SER:HB2	2:B:3364:ASN:OD1	1.67	0.94
2:B:419:PHE:HB2	2:B:480:ILE:HD12	1.49	0.94
5:E:50:LEU:HD13	12:L:95:PHE:CB	1.96	0.94
1:A:913:VAL:HG11	1:A:1005:SER:HB2	1.47	0.94
4:D:90:ASP:OD1	13:M:32:LYS:CA	2.15	0.94
12:L:9:GLY:O	12:L:13:GLU:HG3	1.67	0.94
1:A:1273:PHE:C	4:D:166:PHE:CZ	2.40	0.94
4:D:567:GLN:OE1	4:D:578:LYS:CD	2.15	0.94
1:A:870:PRO:C	1:A:871:LEU:HD13	1.88	0.94
1:A:3236:ILE:HG23	1:A:3333:LEU:HA	1.50	0.94
2:B:409:SER:HB3	2:B:413:PHE:CE1	2.03	0.94
2:B:1004:SER:HG	2:B:1094:TRP:HH2	0.98	0.94
3:C:2742:LYS:HE3	3:C:2785:VAL:HG21	1.50	0.94
5:E:164:VAL:HG22	5:E:181:TYR:HE1	1.24	0.94
6:F:11:LEU:HD22	6:F:23:TYR:HE1	1.18	0.94
7:G:118:ASP:OD1	9:I:12:ILE:HD13	1.67	0.94
1:A:50:LEU:O	1:A:102:ALA:HB3	1.65	0.94
2:B:528:GLU:OE1	5:E:526:GLN:NE2	2.01	0.94
2:B:575:ASN:H	5:E:481:GLN:HE22	1.15	0.94
2:B:583:PRO:HB3	2:B:683:GLU:HG2	1.49	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1467:PHE:HE2	2:B:1560:MET:SD	1.81	0.94
2:B:1559:MET:CG	2:B:1577:ARG:NH2	2.29	0.94
4:D:212:ILE:HD11	9:I:19:MET:CE	1.93	0.94
5:E:394:TRP:CE2	5:E:401:PRO:HB3	2.03	0.94
8:H:65:PHE:CA	9:I:80:GLY:HA3	1.98	0.94
2:B:436:PHE:HE1	2:B:499:LEU:HD23	1.23	0.94
2:B:1531:ILE:CD1	2:B:1595:LEU:HD11	1.96	0.94
3:C:2592:LYS:HD2	3:C:2928:VAL:CG2	1.97	0.94
10:J:38:GLU:OE1	15:O:29:PHE:CG	2.21	0.94
1:A:970:TYR:HA	1:A:983:ALA:O	1.68	0.93
1:A:1020:PHE:HZ	1:A:1069:TYR:CD1	1.86	0.93
1:A:1525:PHE:HB2	1:A:1541:PHE:CE2	2.03	0.93
1:A:3121:LEU:CG	1:A:3429:TRP:HB3	1.97	0.93
4:D:184:GLY:CA	11:K:69:TYR:CD1	2.51	0.93
5:E:22:ASP:CB	14:N:91:THR:HG23	1.95	0.93
5:E:310:LEU:CD1	5:E:358:ARG:CZ	2.46	0.93
8:H:56:THR:HG23	9:I:88:THR:OG1	1.67	0.93
1:A:1069:TYR:CE1	1:A:1078:THR:HG21	2.02	0.93
3:C:53:PRO:HG2	3:C:81:PRO:HB2	1.47	0.93
6:F:14:LEU:HD23	6:F:23:TYR:CB	1.90	0.93
1:A:960:THR:HG21	18:R:117:VAL:CB	1.99	0.93
1:A:3261:LYS:HG2	1:A:3262:GLU:H	1.33	0.93
1:A:3442:LYS:HB3	1:A:3485:THR:CG2	1.97	0.93
2:B:861:ASP:CG	3:C:170:GLN:CB	2.23	0.93
3:C:2673:VAL:C	3:C:2841:THR:HG22	1.87	0.93
3:C:2701:ILE:CG1	3:C:2704:LYS:HD2	1.98	0.93
3:C:2740:ILE:HB	3:C:2744:LYS:O	1.68	0.93
9:I:77:CYS:HB2	9:I:107:ILE:HG22	1.50	0.93
1:A:505:THR:O	1:A:509:LYS:CB	2.16	0.93
1:A:1012:LYS:CB	1:A:1071:ILE:HD13	1.98	0.93
1:A:1500:THR:HG23	1:A:1566:GLN:HE22	1.31	0.93
1:A:3222:GLU:CB	1:A:3328:ALA:HB2	1.98	0.93
1:A:3297:SER:O	1:A:3343:HIS:ND1	2.01	0.93
2:B:1531:ILE:CD1	2:B:1618:LEU:HD22	1.98	0.93
1:A:755:HIS:HE1	1:A:869:TYR:CD2	1.68	0.93
1:A:1525:PHE:CB	1:A:1541:PHE:CD2	2.21	0.93
1:A:3236:ILE:HG23	1:A:3333:LEU:CD2	1.96	0.93
2:B:789:LYS:CG	2:B:839:LEU:HD11	1.98	0.93
2:B:1458:PHE:HB3	2:B:1465:LYS:HB3	1.50	0.93
2:B:3231:VAL:HG23	2:B:3342:ASN:HB3	1.50	0.93
3:C:2740:ILE:HD12	3:C:2744:LYS:HD3	1.50	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:91:TYR:HE2	13:M:80:LEU:HB2	1.17	0.93
4:D:172:GLU:CA	13:M:64:HIS:HB2	1.97	0.93
4:D:367:LEU:CG	4:D:371:THR:HG1	1.68	0.93
5:E:99:ILE:HD11	6:F:31:ILE:HD11	1.49	0.93
8:H:64:ASN:CB	9:I:81:GLU:HB3	1.98	0.93
1:A:1444:GLN:HE21	1:A:1560:LYS:HG2	1.33	0.93
3:C:2673:VAL:CA	3:C:2841:THR:HG22	1.98	0.93
4:D:105:MET:HE1	14:N:48:GLN:N	1.82	0.93
9:I:81:GLU:OE2	9:I:102:ASN:HB2	1.66	0.93
10:J:95:PHE:CE2	10:J:106:LEU:HD11	2.02	0.93
1:A:596:LEU:CD2	1:A:602:PRO:HA	1.99	0.93
1:A:766:GLY:HA3	1:A:780:TYR:CE1	2.03	0.93
2:B:900:PHE:CE1	2:B:933:TRP:CH2	2.56	0.93
2:B:1456:PHE:CE1	2:B:1467:PHE:HE1	1.85	0.93
3:C:136:ALA:HB1	3:C:168:ASN:OD1	1.69	0.93
3:C:2720:PRO:C	3:C:2798:PHE:CZ	2.42	0.93
5:E:26:ARG:NH2	14:N:96:SER:O	2.00	0.93
3:C:143:PRO:CD	3:C:187:TRP:CD1	2.52	0.93
3:C:2592:LYS:HB3	3:C:2924:MET:SD	2.08	0.93
5:E:99:ILE:CG2	6:F:33:LEU:HD11	1.98	0.93
5:E:259:ASN:HD21	5:E:299:GLY:HA3	1.27	0.93
9:I:81:GLU:OE1	9:I:102:ASN:ND2	2.00	0.93
13:M:7:VAL:HG12	13:M:75:PHE:HB3	1.50	0.93
17:Q:43:GLY:CA	17:Q:67:SER:CB	2.45	0.93
1:A:1100:LEU:HD21	1:A:1159:MET:HE3	1.49	0.93
1:A:1444:GLN:CG	1:A:1560:LYS:HA	1.99	0.93
1:A:3269:LEU:HD21	1:A:3312:GLN:OE1	1.69	0.93
3:C:2589:LEU:HB2	3:C:2928:VAL:HG11	1.50	0.93
4:D:543:MET:SD	4:D:563:MET:HG3	2.09	0.93
5:E:100:GLU:HB3	5:E:105:PHE:CE2	2.04	0.93
6:F:81:THR:HG21	7:G:114:VAL:HG21	1.30	0.93
9:I:81:GLU:CD	9:I:102:ASN:HB2	1.90	0.93
1:A:3257:VAL:CG1	1:A:3266:VAL:CG1	2.26	0.93
3:C:2581:LEU:HD12	3:C:2936:SER:OG	1.69	0.93
3:C:2581:LEU:HD12	3:C:2936:SER:CB	1.98	0.93
1:A:3293:PHE:HE1	1:A:3335:TRP:CZ2	1.87	0.92
2:B:59:THR:O	2:B:81:ILE:HA	1.69	0.92
2:B:637:GLU:O	2:B:641:ILE:HG22	1.67	0.92
3:C:10:LEU:HD21	3:C:65:ASN:C	1.88	0.92
7:G:119:PRO:CG	9:I:12:ILE:HG21	1.97	0.92
1:A:737:TYR:CE1	1:A:759:LEU:CD2	2.51	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1487:VAL:CG2	1:A:1490:PHE:CE1	2.51	0.92
3:C:2585:PHE:HE1	3:C:2929:LEU:CA	1.82	0.92
3:C:2673:VAL:O	3:C:2841:THR:CG2	2.18	0.92
5:E:43:ARG:O	12:L:90:ALA:HB2	1.70	0.92
1:A:1051:GLN:NE2	1:A:1096:TYR:CZ	2.36	0.92
1:A:3446:ASN:CG	1:A:3488:LEU:CD1	2.33	0.92
2:B:3118:TYR:HD2	2:B:3455:SER:HG	0.93	0.92
3:C:2585:PHE:CE1	3:C:2929:LEU:CA	2.52	0.92
8:H:67:SER:CA	9:I:78:ILE:HG22	1.99	0.92
10:J:26:VAL:CG2	10:J:98:PHE:HB3	1.98	0.92
10:J:26:VAL:HG23	10:J:98:PHE:CA	2.00	0.92
14:N:115:MET:HE2	15:O:129:CYS:HB2	1.52	0.92
16:P:23:TYR:HA	16:P:31:ILE:CB	1.98	0.92
1:A:5:LYS:CB	1:A:48:GLU:CB	2.46	0.92
1:A:14:LYS:C	2:B:19:SER:O	2.08	0.92
2:B:575:ASN:N	5:E:481:GLN:NE2	2.17	0.92
3:C:222:PHE:O	3:C:282:ARG:NH1	2.01	0.92
4:D:212:ILE:HD13	9:I:19:MET:CE	1.90	0.92
6:F:81:THR:HG22	7:G:114:VAL:HG21	1.51	0.92
8:H:66:GLY:HA2	9:I:56:ILE:HG21	1.51	0.92
1:A:598:ARG:HH12	4:D:546:VAL:HG12	1.32	0.92
2:B:1528:LEU:HD21	2:B:1591:CYS:CB	2.00	0.92
3:C:2723:PHE:CZ	3:C:2749:VAL:CG1	2.53	0.92
3:C:2739:GLU:H	3:C:2746:PRO:HB3	1.33	0.92
5:E:61:VAL:HG13	10:J:95:PHE:CZ	2.04	0.92
5:E:22:ASP:HB3	14:N:91:THR:CG2	1.99	0.92
2:B:1456:PHE:HE1	2:B:1563:VAL:HG12	1.20	0.92
2:B:2333:PRO:HB2	20:B:5601:ATP:C2	2.05	0.92
3:C:2927:ASP:CG	3:C:2974:ILE:HD13	1.89	0.92
4:D:174:GLN:HE21	12:L:51:LYS:H	1.04	0.92
5:E:61:VAL:HG13	10:J:95:PHE:HZ	1.32	0.92
4:D:70:MET:HE1	5:E:13:GLU:HB3	1.49	0.92
4:D:172:GLU:OE1	12:L:55:LEU:CD1	2.16	0.92
18:R:105:THR:O	18:R:107:SER:N	2.02	0.92
1:A:755:HIS:HE1	1:A:869:TYR:HD2	1.02	0.92
1:A:872:ASP:O	1:A:875:VAL:HG12	1.68	0.92
1:A:3117:PHE:CD2	1:A:3429:TRP:CZ3	2.57	0.92
2:B:2333:PRO:HB2	20:B:5601:ATP:C6	2.04	0.92
10:J:32:CYS:CB	10:J:96:ILE:CG1	2.47	0.92
10:J:48:LEU:CD1	10:J:100:ILE:HD12	1.97	0.92
14:N:25:PHE:HZ	14:N:103:ILE:CD1	1.82	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1511:TRP:HA	1:A:1574:LEU:HD13	1.52	0.92
2:B:3228:GLU:HG3	2:B:3346:PHE:HE1	0.77	0.92
4:D:105:MET:CE	14:N:47:THR:C	2.38	0.92
4:D:360:ALA:HB3	5:E:133:PHE:HZ	1.19	0.92
1:A:1143:ARG:CZ	4:D:169:ASN:HD21	1.83	0.91
2:B:861:ASP:HA	2:B:864:ASN:ND2	1.84	0.91
4:D:207:ALA:HB3	9:I:24:ILE:HD13	1.50	0.91
4:D:241:PHE:HZ	7:G:78:ILE:HD12	1.32	0.91
8:H:57:TRP:HZ3	8:H:88:LEU:HD13	1.35	0.91
1:A:600:MET:CE	1:A:697:ARG:NH1	2.33	0.91
2:B:532:THR:N	2:B:536:ILE:HD12	1.85	0.91
1:A:155:GLY:C	2:B:167:GLN:O	2.09	0.91
1:A:723:PHE:HD1	1:A:772:TRP:CZ2	1.88	0.91
2:B:861:ASP:O	2:B:864:ASN:OD1	1.86	0.91
2:B:970:ALA:HA	3:C:343:ASN:O	1.70	0.91
4:D:266:TYR:HH	5:E:121:TYR:HB3	1.26	0.91
4:D:543:MET:HE3	4:D:563:MET:HE2	0.94	0.91
5:E:46:ASN:CG	12:L:88:PHE:HE1	1.71	0.91
5:E:48:ILE:H	12:L:88:PHE:HE2	1.15	0.91
7:G:120:THR:HG22	9:I:12:ILE:CG2	1.97	0.91
2:B:59:THR:CB	2:B:82:ASP:O	2.19	0.91
3:C:2774:VAL:HG12	3:C:2780:VAL:CG2	2.00	0.91
5:E:48:ILE:HG21	12:L:23:PHE:CD2	2.05	0.91
1:A:670:LEU:CA	1:A:692:ILE:HD11	2.00	0.91
1:A:1027:CYS:SG	1:A:1027:CYS:O	2.29	0.91
1:A:3110:LEU:HD11	1:A:3443:LEU:CD2	2.01	0.91
1:A:3317:PHE:HD1	1:A:3333:LEU:HD22	1.34	0.91
2:B:789:LYS:HG2	2:B:839:LEU:CD1	2.00	0.91
4:D:248:MET:CE	7:G:147:VAL:HB	2.01	0.91
14:N:66:LYS:HB2	14:N:115:MET:HB2	1.52	0.91
2:B:436:PHE:HE1	2:B:499:LEU:CD2	1.57	0.91
2:B:518:TYR:HE1	5:E:407:TYR:HE2	0.93	0.91
3:C:214:LEU:CD1	3:C:232:TYR:O	2.19	0.91
14:N:70:THR:HG22	15:O:99:SER:HB2	1.50	0.91
1:A:670:LEU:CB	1:A:692:ILE:CD1	2.49	0.91
1:A:2500:THR:HG1	21:A:5002:MG:MG	0.64	0.91
2:B:736:LEU:O	2:B:855:SER:OG	1.89	0.91
2:B:3302:ILE:HG22	2:B:3303:GLU:N	1.80	0.91
5:E:261:HIS:HD1	5:E:283:SER:HG	1.12	0.91
4:D:543:MET:CE	4:D:563:MET:CE	2.41	0.91
7:G:119:PRO:CD	9:I:12:ILE:HD13	1.97	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:32:CYS:HB2	10:J:96:ILE:CG1	1.99	0.91
1:A:1638:THR:CB	1:A:1655:GLN:CG	2.48	0.91
5:E:20:PHE:CZ	15:O:80:LYS:HG2	2.04	0.91
9:I:19:MET:HB2	9:I:22:LYS:HG2	1.52	0.91
14:N:72:ILE:HG12	15:O:97:ILE:HG23	1.51	0.91
1:A:590:GLN:HB2	1:A:609:TRP:HZ2	1.30	0.91
1:A:614:PHE:CE1	1:A:644:LEU:HD22	2.05	0.91
1:A:3110:LEU:HD12	1:A:3443:LEU:HD23	1.53	0.91
1:A:3251:ILE:HD11	17:Q:83:VAL:H	1.30	0.91
2:B:957:GLN:CD	3:C:164:HIS:CE1	2.43	0.91
2:B:1237:ARG:HD3	2:B:1260:ALA:HA	1.51	0.91
2:B:1381:ALA:HB1	2:B:1431:VAL:HG21	1.50	0.91
3:C:2701:ILE:CD1	3:C:2704:LYS:CG	2.46	0.91
5:E:23:THR:HG22	14:N:88:TYR:HA	1.53	0.91
5:E:112:LEU:CD2	6:F:97:MET:HG2	2.01	0.91
8:H:65:PHE:CA	9:I:80:GLY:CA	2.48	0.91
1:A:1157:GLN:HG2	1:A:1180:ARG:HH22	1.34	0.90
2:B:444:LEU:HA	5:E:515:LYS:HG2	1.43	0.90
2:B:1127:ASN:CB	2:B:1128:PRO:HD2	2.02	0.90
3:C:143:PRO:HG3	3:C:187:TRP:CE2	2.06	0.90
4:D:172:GLU:HG3	12:L:51:LYS:CE	2.01	0.90
4:D:177:ASN:CG	13:M:60:ASN:HB2	1.91	0.90
5:E:112:LEU:HD22	6:F:97:MET:SD	2.11	0.90
1:A:1012:LYS:CB	1:A:1071:ILE:HG21	2.00	0.90
2:B:1567:PRO:CD	3:C:2275:LYS:HE3	2.00	0.90
2:B:2191:THR:OG1	20:B:5601:ATP:PA	2.28	0.90
4:D:75:LEU:HD12	15:O:102:LEU:HD12	1.52	0.90
5:E:385:SER:OG	5:E:394:TRP:HZ3	1.55	0.90
6:F:19:GLY:O	6:F:101:GLN:HB2	1.72	0.90
1:A:728:ASN:HD21	4:D:396:THR:HG22	1.17	0.90
1:A:1540:GLN:O	1:A:1544:ILE:CG1	2.18	0.90
2:B:798:ASN:HB3	2:B:874:ALA:HB2	1.53	0.90
2:B:970:ALA:CB	3:C:345:TRP:CE3	2.54	0.90
3:C:268:ILE:HD13	3:C:301:TRP:CZ2	2.07	0.90
6:F:14:LEU:CD2	6:F:23:TYR:CG	2.53	0.90
10:J:34:ASP:HB2	15:O:31:PRO:HG3	0.91	0.90
1:A:332:PRO:HA	1:A:380:ARG:CB	2.01	0.90
1:A:806:ILE:HD13	1:A:890:TYR:CE2	2.07	0.90
2:B:762:ILE:HA	2:B:765:PHE:HB3	1.54	0.90
2:B:888:PRO:O	2:B:891:ILE:HG22	1.72	0.90
2:B:3139:GLY:CA	2:B:3433:TRP:HH2	1.68	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:45:ARG:CB	15:O:63:LEU:CD1	2.49	0.90
1:A:760:ASP:O	1:A:764:ARG:HG2	1.70	0.90
1:A:1642:ALA:CB	1:A:1652:GLN:HB2	2.00	0.90
1:A:3251:ILE:HD13	17:Q:61:SER:HA	1.37	0.90
2:B:1109:THR:O	2:B:1113:LEU:CG	2.15	0.90
3:C:24:HIS:NE2	3:C:325:SER:CB	2.34	0.90
3:C:2730:LEU:HD23	3:C:2738:ILE:HD13	1.52	0.90
5:E:384:LEU:HD12	5:E:384:LEU:O	1.70	0.90
8:H:60:ILE:HG12	9:I:85:TYR:HB3	1.51	0.90
8:H:76:TYR:CE1	8:H:87:LEU:CD1	2.55	0.90
12:L:76:CYS:HB2	12:L:107:LEU:HD13	1.54	0.90
2:B:518:TYR:CD2	5:E:404:ARG:NH1	2.36	0.90
2:B:3251:GLY:HA3	2:B:3329:GLN:OE1	1.71	0.90
8:H:16:MET:HE2	8:H:77:ILE:HD12	1.53	0.90
1:A:3194:ALA:CB	1:A:3356:VAL:HG22	2.01	0.90
2:B:682:LYS:NZ	5:E:186:PHE:HD1	1.41	0.90
2:B:935:ASN:HB3	3:C:283:THR:HG21	1.50	0.90
3:C:99:GLY:HA3	3:C:149:HIS:HE1	1.33	0.90
5:E:58:GLU:CB	10:J:89:VAL:HA	2.01	0.90
6:F:51:LEU:HD21	7:G:116:ASP:CB	2.02	0.90
2:B:1467:PHE:HZ	2:B:1563:VAL:HG11	1.34	0.90
2:B:1511:VAL:CG1	2:B:1570:VAL:CG2	2.35	0.90
2:B:1567:PRO:HD2	3:C:2275:LYS:HE3	1.54	0.90
5:E:112:LEU:HD21	6:F:97:MET:SD	2.09	0.90
1:A:1020:PHE:HZ	1:A:1069:TYR:CZ	1.81	0.90
1:A:1274:GLY:N	4:D:166:PHE:CE1	2.39	0.90
2:B:89:ILE:H	2:B:100:THR:CB	1.84	0.90
2:B:467:VAL:O	2:B:471:THR:CA	2.20	0.90
2:B:3261:ILE:HG22	2:B:3306:ILE:HG23	1.52	0.90
3:C:2669:ILE:HD13	3:C:2847:ALA:HB2	1.50	0.90
4:D:367:LEU:CD2	4:D:371:THR:OG1	2.20	0.90
4:D:518:SER:OG	4:D:528:TRP:HZ3	1.47	0.90
6:F:21:ASN:HD21	6:F:102:LEU:HD11	1.36	0.90
16:P:16:GLU:CB	16:P:74:LEU:HA	2.01	0.90
1:A:403:ALA:CA	1:A:471:ASN:CB	2.50	0.90
1:A:1030:SER:C	1:A:1092:TRP:HH2	1.76	0.90
2:B:1116:PHE:HA	2:B:1119:LYS:NZ	1.87	0.90
2:B:3162:VAL:O	2:B:3166:LYS:HG3	1.71	0.90
6:F:56:TRP:CH2	6:F:74:ILE:HG13	2.06	0.90
1:A:604:ALA:N	1:A:698:GLU:OE1	2.03	0.89
2:B:725:ILE:HG21	2:B:776:LEU:CG	2.01	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:33:HIS:HB2	3:C:60:LEU:HB2	1.52	0.89
3:C:2745:LYS:CD	3:C:2749:VAL:CG2	1.96	0.89
6:F:91:GLN:HG2	6:F:96:THR:HG22	0.90	0.89
1:A:670:LEU:CD2	1:A:772:TRP:CD1	2.54	0.89
1:A:1132:LEU:CB	1:A:1272:LEU:CD1	2.50	0.89
1:A:3443:LEU:HD13	1:A:3493:PHE:CZ	2.04	0.89
2:B:794:LEU:O	2:B:797:PHE:CE2	2.25	0.89
2:B:864:ASN:HB3	2:B:947:LEU:HB2	1.50	0.89
2:B:1058:LYS:HG3	2:B:1166:GLU:CA	2.01	0.89
2:B:1123:GLY:HA2	2:B:1197:PHE:HZ	1.33	0.89
3:C:261:ILE:HG21	3:C:385:ASP:CB	2.01	0.89
4:D:172:GLU:CD	12:L:55:LEU:HD12	1.92	0.89
10:J:26:VAL:HG23	10:J:98:PHE:HB3	1.51	0.89
1:A:907:ASN:O	1:A:911:TYR:CD2	2.25	0.89
1:A:3232:ILE:CG1	1:A:3316:TRP:CE3	2.25	0.89
2:B:1395:LEU:CA	2:B:1430:ILE:HD13	2.01	0.89
2:B:1528:LEU:HD21	2:B:1591:CYS:HB2	1.53	0.89
3:C:359:GLY:O	3:C:440:TYR:CB	2.20	0.89
4:D:564:ASP:CG	4:D:583:LYS:HE2	1.92	0.89
2:B:1531:ILE:CD1	2:B:1595:LEU:CD1	2.51	0.89
3:C:175:ASN:HB2	3:C:199:PRO:HG3	1.50	0.89
4:D:602:LEU:HD12	4:D:616:LEU:HD21	1.54	0.89
5:E:239:LEU:CD2	5:E:257:VAL:HG22	2.01	0.89
17:Q:43:GLY:HA3	17:Q:67:SER:CB	2.02	0.89
1:A:580:LEU:HD21	1:A:640:SER:HA	1.52	0.89
2:B:501:ARG:HH21	4:D:491:GLN:HG3	1.33	0.89
2:B:904:LEU:HD11	2:B:911:ILE:HG23	1.54	0.89
2:B:3342:ASN:O	2:B:3346:PHE:HB3	1.70	0.89
3:C:132:GLU:CD	3:C:133:PRO:CD	2.38	0.89
4:D:80:PRO:CG	15:O:103:TRP:NE1	2.31	0.89
5:E:48:ILE:HG13	12:L:23:PHE:CE2	2.07	0.89
5:E:60:SER:HB3	10:J:87:GLN:HG3	1.54	0.89
2:B:970:ALA:HB1	3:C:345:TRP:CE3	2.08	0.89
2:B:1485:MET:HA	2:B:1505:ARG:HD2	1.54	0.89
3:C:2666:CYS:HB2	3:C:2848:THR:CA	2.03	0.89
4:D:80:PRO:CD	15:O:103:TRP:CZ2	2.56	0.89
4:D:585:VAL:CG1	4:D:588:PRO:CD	2.50	0.89
5:E:310:LEU:HD11	5:E:358:ARG:HH12	1.38	0.89
8:H:60:ILE:CG1	9:I:85:TYR:CB	2.50	0.89
1:A:598:ARG:NH1	4:D:546:VAL:CG1	2.36	0.89
1:A:598:ARG:NH2	4:D:591:THR:O	2.06	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:900:PHE:HE1	2:B:933:TRP:HH2	1.17	0.89
2:B:1420:LEU:O	2:B:1424:GLU:HG3	1.73	0.89
2:B:3264:ASN:HB2	2:B:3306:ILE:HD12	1.53	0.89
3:C:165:GLY:N	3:C:174:PHE:HE2	1.71	0.89
10:J:77:HIS:HE2	11:K:92:LYS:HG2	1.35	0.89
1:A:565:LEU:O	1:A:569:TYR:HD2	1.56	0.89
1:A:722:LYS:O	1:A:726:TYR:HD2	1.54	0.89
1:A:871:LEU:HD22	1:A:872:ASP:N	1.88	0.89
1:A:913:VAL:C	1:A:1073:ALA:CB	2.42	0.89
1:A:1562:ILE:HB	1:A:1563:PRO:HD3	1.55	0.89
2:B:956:LEU:CD1	2:B:959:ILE:HD11	2.01	0.89
2:B:1566:ASN:HB3	3:C:2275:LYS:CE	2.03	0.89
3:C:180:LEU:HD22	3:C:187:TRP:CZ3	2.08	0.89
4:D:68:GLU:HG3	5:E:12:LYS:CA	2.03	0.89
4:D:285:PRO:CG	4:D:584:ILE:HG22	2.03	0.89
1:A:95:PHE:O	1:A:124:THR:CB	2.21	0.89
1:A:972:TRP:CZ3	1:A:985:PHE:CE1	2.57	0.89
1:A:1504:VAL:CG2	1:A:1565:CYS:SG	2.61	0.89
2:B:59:THR:N	2:B:82:ASP:O	2.04	0.89
2:B:3162:VAL:CG1	2:B:3166:LYS:HE3	2.02	0.89
3:C:12:GLN:NE2	3:C:349:LEU:CB	2.35	0.89
5:E:42:GLN:HE22	12:L:91:ASN:HD21	1.17	0.89
5:E:59:HIS:NE2	10:J:31:GLU:OE1	2.05	0.89
10:J:38:GLU:HB2	15:O:29:PHE:CE1	2.08	0.89
1:A:59:VAL:O	1:A:100:ASN:O	1.91	0.89
1:A:470:PHE:CB	1:A:485:THR:CB	2.51	0.89
1:A:3242:VAL:HA	1:A:3248:LEU:HD11	1.53	0.89
4:D:70:MET:HE2	5:E:13:GLU:HG2	1.53	0.89
6:F:51:LEU:HD21	7:G:116:ASP:HB2	1.54	0.89
9:I:78:ILE:CD1	9:I:106:LEU:HB3	2.02	0.89
11:K:55:GLY:HA3	13:M:79:GLU:HG3	1.55	0.89
1:A:1638:THR:HB	1:A:1655:GLN:HG2	1.53	0.88
1:A:3303:ILE:CD1	1:A:3340:TYR:HE2	1.83	0.88
1:A:3446:ASN:HD21	1:A:3488:LEU:HD13	1.37	0.88
2:B:409:SER:O	2:B:413:PHE:N	2.06	0.88
2:B:897:SER:HB3	2:B:898:PRO:HD3	1.55	0.88
3:C:2617:VAL:CG2	3:C:3183:ILE:HD13	2.02	0.88
3:C:2727:ILE:CD1	3:C:2745:LYS:CB	2.51	0.88
4:D:517:ILE:CG1	4:D:550:TRP:CE2	2.53	0.88
5:E:16:ASN:HB3	15:O:132:GLU:HG3	0.89	0.88
5:E:46:ASN:CB	12:L:88:PHE:HE1	1.82	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:61:VAL:CG1	10:J:95:PHE:CZ	2.56	0.88
5:E:99:ILE:CD1	6:F:31:ILE:CD1	2.51	0.88
2:B:429:LEU:CG	2:B:489:PHE:CE2	2.54	0.88
14:N:70:THR:HG22	15:O:99:SER:HB3	1.56	0.88
14:N:72:ILE:CB	15:O:97:ILE:HG12	2.02	0.88
1:A:854:GLU:HG2	5:E:205:PRO:HG2	1.54	0.88
2:B:436:PHE:CZ	2:B:499:LEU:CD2	2.45	0.88
2:B:1330:TRP:O	2:B:1409:SER:O	1.90	0.88
2:B:1559:MET:HE3	2:B:1577:ARG:NH2	1.88	0.88
3:C:196:PRO:N	3:C:239:TRP:HZ2	1.71	0.88
3:C:2734:PHE:CE2	3:C:2767:LYS:HE3	2.07	0.88
5:E:61:VAL:HG22	10:J:106:LEU:HD21	1.55	0.88
5:E:261:HIS:HE1	5:E:283:SER:CB	1.86	0.88
1:A:576:TYR:HE1	1:A:620:PRO:O	1.28	0.88
1:A:598:ARG:HD3	4:D:319:TYR:CE1	2.08	0.88
1:A:3110:LEU:CD1	1:A:3443:LEU:CD2	2.51	0.88
2:B:56:ASP:O	2:B:71:CYS:CB	2.22	0.88
2:B:957:GLN:CB	3:C:220:TRP:CH2	2.56	0.88
3:C:36:PHE:CB	3:C:57:VAL:HG22	2.03	0.88
4:D:92:TYR:CG	13:M:29:LYS:CB	2.56	0.88
4:D:174:GLN:OE1	12:L:49:LEU:CD1	2.19	0.88
4:D:207:ALA:C	9:I:24:ILE:HD12	1.94	0.88
6:F:91:GLN:CB	6:F:96:THR:HG22	2.03	0.88
8:H:7:VAL:HG23	8:H:9:PRO:HD3	1.56	0.88
8:H:12:LYS:CG	8:H:80:TYR:CE2	2.56	0.88
1:A:723:PHE:CD1	1:A:772:TRP:CZ2	2.61	0.88
1:A:3236:ILE:HA	1:A:3333:LEU:HD21	1.54	0.88
2:B:717:MET:SD	5:E:258:GLU:OE2	2.31	0.88
4:D:105:MET:HE3	14:N:48:GLN:HA	1.55	0.88
5:E:266:THR:OG1	5:E:283:SER:HA	1.74	0.88
5:E:386:VAL:HG13	5:E:391:CYS:HB3	1.54	0.88
10:J:32:CYS:SG	10:J:96:ILE:CD1	2.60	0.88
1:A:1430:ARG:HG2	1:A:1490:PHE:CD2	2.09	0.88
1:A:1433:LEU:HD11	1:A:1490:PHE:CE1	2.08	0.88
3:C:12:GLN:NE2	3:C:349:LEU:HB3	1.89	0.88
3:C:2720:PRO:HB2	3:C:2798:PHE:CD2	2.07	0.88
4:D:109:PHE:CD2	15:O:121:TYR:CE2	2.61	0.88
4:D:172:GLU:N	13:M:64:HIS:HB2	1.88	0.88
4:D:584:ILE:CG2	4:D:614:VAL:CG2	2.52	0.88
8:H:62:GLY:CA	9:I:83:TYR:HA	2.02	0.88
1:A:3249:ILE:HD11	1:A:3274:ASP:N	1.88	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:94:ARG:CZ	13:M:78:ASN:ND2	2.36	0.88
4:D:266:TYR:OH	5:E:121:TYR:CB	2.19	0.88
4:D:528:TRP:CE2	4:D:535:GLN:HB3	2.07	0.88
5:E:50:LEU:HD13	12:L:95:PHE:CG	2.07	0.88
7:G:58:SER:O	7:G:62:ASP:CB	2.21	0.88
15:O:30:TYR:N	15:O:31:PRO:HD2	1.89	0.88
17:Q:69:ASN:HA	17:Q:92:ASP:CB	2.03	0.88
3:C:2711:SER:HB3	3:C:2751:TRP:HZ2	1.30	0.88
4:D:105:MET:CE	14:N:48:GLN:CA	2.51	0.88
14:N:72:ILE:CG1	15:O:97:ILE:CD1	2.52	0.88
1:A:972:TRP:CE3	1:A:985:PHE:CZ	2.51	0.88
1:A:3248:LEU:HB2	17:Q:104:TYR:HE1	1.37	0.88
2:B:903:ARG:HB2	2:B:914:ASP:OD2	1.72	0.88
4:D:212:ILE:HD13	9:I:15:LEU:HD22	1.55	0.88
4:D:397:ASP:HB3	4:D:398:PRO:CD	2.02	0.88
4:D:398:PRO:HD3	4:D:419:SER:HB3	1.54	0.88
1:A:614:PHE:CE1	1:A:644:LEU:HB3	2.09	0.88
1:A:944:LEU:CD1	1:A:1013:VAL:HG11	2.04	0.88
2:B:87:LYS:CB	2:B:104:VAL:H	1.86	0.88
5:E:282:THR:CG2	5:E:322:LEU:HD12	2.04	0.88
1:A:1101:HIS:CA	1:A:1163:LEU:HD11	2.03	0.87
1:A:3249:ILE:HD11	1:A:3274:ASP:H	1.36	0.87
2:B:10:PRO:C	2:B:25:GLN:HA	1.93	0.87
2:B:679:ARG:HA	5:E:186:PHE:CZ	2.10	0.87
3:C:2740:ILE:CB	3:C:2744:LYS:CB	2.48	0.87
4:D:172:GLU:CA	13:M:64:HIS:HB3	1.91	0.87
16:P:15:SER:C	16:P:16:GLU:CA	2.42	0.87
1:A:942:VAL:HG21	1:A:1021:THR:HG22	1.56	0.87
2:B:3118:TYR:HE2	2:B:3452:LEU:N	1.71	0.87
3:C:354:VAL:CG2	3:C:357:ILE:HG13	2.03	0.87
3:C:2018:GLN:HG3	19:C:4702:ADP:H2'	1.56	0.87
1:A:604:ALA:HB3	1:A:698:GLU:HG2	1.56	0.87
1:A:1638:THR:CB	1:A:1655:GLN:HG3	2.04	0.87
1:A:3236:ILE:HA	1:A:3333:LEU:CD2	2.05	0.87
2:B:1395:LEU:CA	2:B:1430:ILE:CD1	2.52	0.87
3:C:2617:VAL:HG22	3:C:3183:ILE:HD13	1.56	0.87
3:C:2742:LYS:HE2	3:C:2785:VAL:HG21	1.57	0.87
5:E:24:GLU:OE2	14:N:91:THR:HG22	1.73	0.87
5:E:50:LEU:CD1	12:L:95:PHE:HB2	2.04	0.87
9:I:93:THR:HB	9:I:109:LYS:HB3	1.53	0.87
1:A:1458:MET:CE	1:A:1518:TRP:CH2	2.58	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3236:ILE:HG22	1:A:3332:ILE:HG22	1.56	0.87
2:B:946:ARG:N	2:B:955:PHE:CE2	2.40	0.87
3:C:2734:PHE:CE2	3:C:2767:LYS:CE	2.57	0.87
4:D:172:GLU:CG	12:L:51:LYS:HE2	2.03	0.87
4:D:195:ILE:CD1	9:I:94:LEU:HD21	2.03	0.87
4:D:201:GLN:OE1	9:I:102:ASN:CB	2.23	0.87
4:D:395:HIS:CE1	4:D:399:VAL:HG12	2.09	0.87
6:F:91:GLN:NE2	6:F:96:THR:HG21	1.89	0.87
1:A:891:PHE:CE1	1:A:985:PHE:HZ	1.92	0.87
1:A:1444:GLN:NE2	1:A:1560:LYS:HG2	1.87	0.87
2:B:1119:LYS:HB3	2:B:1138:LYS:CE	2.04	0.87
2:B:1467:PHE:HB3	2:B:1470:LEU:HD11	0.87	0.87
2:B:3301:ASN:HB3	2:B:3351:LYS:HZ1	1.40	0.87
5:E:61:VAL:HG21	10:J:106:LEU:HD22	1.51	0.87
5:E:117:GLU:CG	6:F:17:LEU:CD1	2.09	0.87
5:E:310:LEU:HD11	5:E:358:ARG:NH1	1.88	0.87
6:F:87:TYR:HB3	6:F:98:LEU:HD11	1.55	0.87
9:I:20:ILE:O	9:I:99:TYR:OH	1.92	0.87
10:J:36:ILE:HG23	10:J:72:PHE:CZ	2.09	0.87
1:A:1633:ALA:HB1	1:A:1839:LEU:O	1.72	0.87
1:A:3124:ILE:CD1	1:A:3429:TRP:CD1	2.58	0.87
1:A:3235:TYR:CZ	1:A:3269:LEU:HD12	1.96	0.87
1:A:3293:PHE:CE1	1:A:3335:TRP:CH2	2.63	0.87
2:B:1395:LEU:HA	2:B:1430:ILE:HD11	1.54	0.87
6:F:61:LYS:HE2	8:H:33:ASP:O	1.74	0.87
7:G:118:ASP:OD1	9:I:12:ILE:CD1	2.22	0.87
10:J:26:VAL:HG23	10:J:98:PHE:CB	2.05	0.87
12:L:84:CYS:HB2	13:M:56:ILE:HG12	1.57	0.87
17:Q:43:GLY:HA2	17:Q:67:SER:CB	2.04	0.87
1:A:95:PHE:CB	1:A:124:THR:CB	2.51	0.87
2:B:1145:LYS:O	2:B:1149:ASP:HB2	1.75	0.87
2:B:1531:ILE:HD13	2:B:1618:LEU:HD22	1.57	0.87
2:B:4227:PHE:HB2	2:B:4230:ILE:HD11	1.54	0.87
3:C:2735:ASN:OD1	3:C:2736:GLU:N	2.06	0.87
10:J:75:TYR:HB3	11:K:92:LYS:HE2	1.57	0.87
1:A:40:LEU:N	1:A:41:LEU:N	2.23	0.87
1:A:1044:THR:OG1	1:A:1047:ASN:HB2	1.75	0.87
2:B:444:LEU:O	5:E:515:LYS:HG3	1.75	0.87
2:B:829:VAL:HG11	2:B:940:ILE:CG2	2.04	0.87
2:B:864:ASN:HB2	2:B:947:LEU:HD21	1.50	0.87
2:B:1559:MET:CE	2:B:1577:ARG:NH2	2.36	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:46:ASN:O	12:L:88:PHE:CE1	2.27	0.87
1:A:763:LEU:O	1:A:763:LEU:HD13	1.75	0.86
1:A:3124:ILE:HD13	1:A:3425:GLU:HG3	1.56	0.86
2:B:511:PHE:CE2	2:B:547:LEU:CD2	2.56	0.86
2:B:660:LEU:HD11	2:B:715:LEU:HD21	1.57	0.86
2:B:973:THR:HG21	3:C:343:ASN:CB	2.05	0.86
2:B:3401:ARG:O	2:B:3405:VAL:HG23	1.75	0.86
3:C:2018:GLN:CG	19:C:4702:ADP:H2'	2.04	0.86
2:B:799:VAL:CB	2:B:800:LYS:N	2.38	0.86
2:B:3268:THR:HG22	2:B:3269:LEU:H	1.40	0.86
3:C:12:GLN:HE21	3:C:349:LEU:CB	1.87	0.86
14:N:72:ILE:HG12	15:O:97:ILE:HD13	1.56	0.86
1:A:3298:ILE:O	1:A:3343:HIS:NE2	2.08	0.86
2:B:957:GLN:CA	3:C:220:TRP:HH2	1.81	0.86
2:B:1230:MET:HE2	2:B:1267:TYR:HA	1.55	0.86
3:C:12:GLN:HE21	3:C:349:LEU:HB2	1.37	0.86
4:D:523:TRP:HB3	4:D:544:MET:HA	1.57	0.86
5:E:16:ASN:CA	15:O:132:GLU:HG3	2.06	0.86
8:H:67:SER:CB	9:I:78:ILE:CG2	2.53	0.86
14:N:89:GLN:HE22	14:N:116:ALA:H	1.23	0.86
16:P:39:TRP:CB	16:P:40:SER:N	2.39	0.86
17:Q:24:SER:CB	17:Q:48:THR:O	2.23	0.86
1:A:723:PHE:HE1	1:A:772:TRP:CE2	1.93	0.86
1:A:1028:LYS:O	1:A:1088:TRP:CH2	2.29	0.86
1:A:1459:LEU:O	1:A:1552:MET:SD	2.33	0.86
3:C:504:ALA:HB1	3:C:525:LYS:CB	2.04	0.86
3:C:2774:VAL:HG12	3:C:2780:VAL:HG21	1.56	0.86
4:D:252:VAL:HG13	7:G:149:GLN:HE22	1.35	0.86
6:F:61:LYS:CE	8:H:33:ASP:O	2.24	0.86
1:A:709:ILE:HG22	1:A:710:PRO:CD	2.03	0.86
1:A:871:LEU:HD22	1:A:872:ASP:H	1.40	0.86
2:B:57:ASN:HA	2:B:71:CYS:CB	2.05	0.86
2:B:503:LEU:O	2:B:507:ILE:HG13	1.75	0.86
2:B:658:GLN:CG	2:B:672:ASN:O	2.24	0.86
2:B:3255:THR:OG1	2:B:3337:CYS:SG	2.32	0.86
4:D:248:MET:HE1	7:G:147:VAL:CB	2.05	0.86
4:D:585:VAL:HG12	4:D:588:PRO:HD2	1.57	0.86
5:E:129:LEU:HD11	6:F:80:ARG:HD3	1.55	0.86
5:E:428:VAL:HG12	5:E:434:MET:HG3	1.57	0.86
1:A:1273:PHE:C	4:D:166:PHE:CE1	2.41	0.86
1:A:3128:THR:HG22	1:A:3422:LEU:HB3	1.56	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:679:ARG:HD3	5:E:187:GLN:OE1	1.76	0.86
2:B:1374:THR:O	2:B:1424:GLU:OE2	1.91	0.86
4:D:75:LEU:HB2	15:O:102:LEU:HD11	0.86	0.86
4:D:207:ALA:CA	9:I:24:ILE:HD11	2.06	0.86
14:N:116:ALA:O	15:O:131:PHE:CD1	2.28	0.86
2:B:429:LEU:HD12	2:B:489:PHE:HE2	1.36	0.86
2:B:660:LEU:CB	2:B:755:ILE:CD1	2.53	0.86
5:E:100:GLU:CB	5:E:105:PHE:CD2	2.27	0.86
6:F:91:GLN:HG2	6:F:96:THR:CB	2.04	0.86
1:A:1597:LYS:NZ	1:A:1962:ILE:HD11	1.90	0.86
1:A:3257:VAL:CG1	1:A:3266:VAL:CA	2.46	0.86
2:B:81:ILE:O	2:B:110:VAL:CA	2.18	0.86
2:B:724:HIS:CG	2:B:728:CYS:SG	2.69	0.86
2:B:957:GLN:HB2	3:C:220:TRP:CH2	2.10	0.86
4:D:584:ILE:CG2	4:D:614:VAL:HG21	2.05	0.86
4:D:595:PHE:CD1	4:D:602:LEU:CD2	2.58	0.86
1:A:565:LEU:O	1:A:569:TYR:CD2	2.28	0.86
1:A:686:VAL:HG23	1:A:731:LEU:HD23	1.58	0.86
1:A:1445:PHE:CE2	1:A:1564:CYS:HB2	2.11	0.86
2:B:1175:ASN:O	2:B:1179:THR:HG23	1.74	0.86
2:B:1485:MET:CB	2:B:1505:ARG:HD2	2.05	0.86
4:D:297:LYS:HZ3	4:D:328:LEU:HB2	1.07	0.86
4:D:398:PRO:HD3	4:D:419:SER:CB	2.03	0.86
4:D:529:ASP:OD2	4:D:532:TYR:HD2	1.58	0.86
5:E:391:CYS:SG	5:E:427:LEU:HD11	2.15	0.86
14:N:75:GLN:H	15:O:93:GLN:HE21	1.23	0.86
1:A:807:GLU:HG2	1:A:811:LYS:CE	2.05	0.86
1:A:1013:VAL:HG12	1:A:1017:LEU:HD11	1.56	0.86
2:B:679:ARG:HB3	5:E:186:PHE:CE2	2.09	0.86
2:B:913:PHE:HE2	2:B:1078:ILE:CD1	1.89	0.86
4:D:269:SER:OG	4:D:617:SER:HA	1.75	0.86
8:H:67:SER:HB2	9:I:78:ILE:CG2	2.05	0.86
8:H:70:THR:OG1	9:I:64:LYS:NZ	2.07	0.86
8:H:71:PHE:HB3	8:H:89:PHE:HB2	1.57	0.86
1:A:121:GLY:CA	2:B:105:ALA:O	2.24	0.85
1:A:1426:GLN:CB	1:A:1486:HIS:HB3	2.05	0.85
2:B:162:TYR:CB	2:B:176:LEU:CB	2.53	0.85
2:B:595:LEU:CD2	5:E:389:TRP:HZ2	1.89	0.85
2:B:1317:LEU:CB	16:P:61:GLU:HA	2.05	0.85
2:B:3139:GLY:HA3	2:B:3433:TRP:HH2	0.76	0.85
2:B:3230:ALA:HB1	2:B:3342:ASN:OD1	1.76	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2721:GLU:N	3:C:2798:PHE:CZ	2.44	0.85
5:E:310:LEU:HG	5:E:358:ARG:HH21	1.38	0.85
5:E:395:VAL:HG23	5:E:402:ILE:CG1	2.05	0.85
1:A:744:ILE:HD13	1:A:752:LEU:HD23	1.56	0.85
1:A:1433:LEU:HD12	1:A:1490:PHE:CD1	2.11	0.85
1:A:3194:ALA:CB	1:A:3356:VAL:CG2	2.54	0.85
2:B:660:LEU:HD22	2:B:671:VAL:HA	1.57	0.85
2:B:1139:LEU:HD21	2:B:1198:ILE:CG1	2.06	0.85
2:B:3264:ASN:CG	2:B:3306:ILE:HD11	1.96	0.85
5:E:46:ASN:O	12:L:88:PHE:CD2	2.29	0.85
5:E:53:ILE:HD13	12:L:81:ASN:HD21	1.41	0.85
5:E:64:GLU:OE2	10:J:18:TYR:HE2	1.59	0.85
1:A:3212:VAL:HG22	1:A:3338:ALA:HB3	1.58	0.85
2:B:1123:GLY:CA	2:B:1197:PHE:CZ	2.59	0.85
2:B:1470:LEU:O	2:B:1474:MET:HG2	1.76	0.85
2:B:3445:LYS:HB3	2:B:3487:PRO:CB	2.05	0.85
3:C:2213:ARG:NH2	19:C:4702:ADP:O3A	2.09	0.85
6:F:56:TRP:CD2	6:F:91:GLN:NE2	2.44	0.85
1:A:3251:ILE:CD1	17:Q:83:VAL:N	2.39	0.85
2:B:582:MET:CE	2:B:587:GLY:HA3	2.03	0.85
4:D:115:TYR:CZ	14:N:78:HIS:HD2	1.92	0.85
4:D:175:THR:OG1	13:M:60:ASN:HA	1.76	0.85
4:D:414:PHE:HB3	4:D:426:TRP:HB2	1.58	0.85
5:E:16:ASN:ND2	15:O:132:GLU:HA	1.92	0.85
5:E:239:LEU:HD21	5:E:257:VAL:CG2	2.03	0.85
8:H:67:SER:HB2	9:I:78:ILE:HG22	1.57	0.85
1:A:1487:VAL:HG23	1:A:1490:PHE:CZ	2.10	0.85
2:B:973:THR:HG21	3:C:343:ASN:HB3	1.58	0.85
4:D:626:GLU:OE1	4:D:629:GLN:HG2	1.75	0.85
14:N:72:ILE:HG23	15:O:97:ILE:HG13	1.54	0.85
1:A:948:LEU:HG	1:A:1010:LYS:HG2	1.57	0.85
3:C:165:GLY:CA	3:C:174:PHE:CE2	2.60	0.85
4:D:617:SER:OG	4:D:618:PRO:HD2	1.75	0.85
1:A:3257:VAL:HG11	1:A:3266:VAL:CG2	2.06	0.85
2:B:741:ILE:CD1	2:B:776:LEU:HD11	2.05	0.85
2:B:3143:LEU:HD23	2:B:3698:LEU:CD1	2.06	0.85
3:C:165:GLY:O	3:C:174:PHE:HZ	1.53	0.85
4:D:567:GLN:CD	4:D:578:LYS:HE3	1.97	0.85
8:H:67:SER:HA	9:I:78:ILE:HG22	1.57	0.85
1:A:1263:TYR:HE2	1:A:1280:TYR:O	1.60	0.85
1:A:3303:ILE:CD1	1:A:3340:TYR:CE2	2.58	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:957:GLN:HG3	3:C:164:HIS:CE1	2.06	0.85
2:B:957:GLN:HG3	3:C:164:HIS:HE1	1.39	0.85
2:B:1069:THR:HB	2:B:1070:PRO:HD2	1.56	0.85
14:N:116:ALA:HB3	15:O:131:PHE:CE1	2.11	0.85
1:A:155:GLY:N	2:B:168:ILE:HA	1.91	0.85
1:A:601:PRO:HG2	1:A:698:GLU:HG2	1.58	0.85
1:A:763:LEU:HD13	1:A:763:LEU:C	1.97	0.85
1:A:837:GLN:HE22	1:A:958:ALA:CB	1.89	0.85
1:A:1525:PHE:CG	1:A:1541:PHE:HD2	1.95	0.85
1:A:1633:ALA:HB3	1:A:1839:LEU:O	1.76	0.85
1:A:3299:ASN:HB3	1:A:3302:THR:OG1	1.77	0.85
2:B:1559:MET:HG3	2:B:1577:ARG:NH2	1.90	0.85
2:B:3301:ASN:HD22	2:B:3351:LYS:NZ	1.74	0.85
3:C:165:GLY:C	3:C:174:PHE:CE2	2.49	0.85
3:C:2701:ILE:HD11	3:C:2704:LYS:HD2	0.85	0.85
3:C:2800:PRO:HD2	3:C:2801:GLU:N	1.90	0.85
13:M:12:MET:HG3	13:M:73:ILE:HB	1.58	0.85
15:O:22:LEU:CD1	15:O:23:ASN:OD1	2.24	0.85
1:A:1136:MET:HE2	1:A:1136:MET:HA	1.59	0.85
1:A:1418:ASP:CG	1:A:3604:LYS:NZ	2.30	0.85
1:A:3117:PHE:CD2	1:A:3429:TRP:HZ3	1.94	0.85
1:A:3240:VAL:HG12	1:A:3244:PHE:CE1	2.12	0.85
2:B:682:LYS:CE	5:E:186:PHE:CD1	2.55	0.85
2:B:736:LEU:HD12	2:B:859:TYR:HB2	1.59	0.85
2:B:957:GLN:CB	3:C:220:TRP:CZ3	2.59	0.85
2:B:1447:ILE:CD1	2:B:1484:LEU:CB	2.55	0.85
3:C:2727:ILE:HD13	3:C:2745:LYS:HD3	0.86	0.85
3:C:2793:LEU:CA	3:C:2796:PRO:HG2	2.06	0.85
4:D:107:VAL:HG21	15:O:96:ARG:HG2	1.55	0.85
5:E:110:LYS:HG2	6:F:10:GLN:CD	1.96	0.85
9:I:95:LEU:HD23	9:I:107:ILE:HD11	1.57	0.85
1:A:935:VAL:HG22	1:A:944:LEU:HD22	0.85	0.84
1:A:1140:GLU:OE2	4:D:165:LYS:HE2	1.77	0.84
1:A:1429:ILE:CG2	1:A:1490:PHE:CZ	2.59	0.84
2:B:10:PRO:O	2:B:25:GLN:N	2.10	0.84
2:B:2543:GLY:HA2	19:B:5501:ADP:PA	2.16	0.84
2:B:3136:TYR:O	2:B:3433:TRP:CE3	2.30	0.84
8:H:46:LYS:HE3	9:I:86:ASP:CB	2.04	0.84
14:N:85:ILE:HG22	14:N:98:ILE:CD1	1.96	0.84
1:A:891:PHE:CE1	1:A:985:PHE:CZ	2.64	0.84
1:A:1031:ILE:CG2	1:A:1034:SER:OG	2.24	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:799:VAL:CA	2:B:800:LYS:N	2.40	0.84
2:B:3228:GLU:HG2	2:B:3346:PHE:CE1	2.12	0.84
4:D:70:MET:CE	5:E:13:GLU:HB3	2.07	0.84
4:D:105:MET:SD	14:N:48:GLN:CB	2.64	0.84
4:D:208:TYR:HE1	9:I:100:ASN:HB3	1.09	0.84
1:A:505:THR:O	1:A:509:LYS:N	2.10	0.84
1:A:853:VAL:CG2	5:E:206:ASN:ND2	2.40	0.84
2:B:1058:LYS:CG	2:B:1166:GLU:O	2.25	0.84
5:E:44:ASN:O	12:L:89:ASP:OD1	1.96	0.84
14:N:72:ILE:HG21	15:O:97:ILE:CD1	1.84	0.84
1:A:841:ILE:HD13	1:A:961:ALA:HB1	1.59	0.84
2:B:651:SER:OG	2:B:680:LEU:HD22	1.75	0.84
2:B:864:ASN:CA	2:B:947:LEU:CG	2.21	0.84
2:B:2190:LYS:CE	20:B:5601:ATP:O1B	2.25	0.84
4:D:80:PRO:CG	15:O:103:TRP:CZ2	2.60	0.84
4:D:252:VAL:CG1	7:G:149:GLN:NE2	2.40	0.84
4:D:517:ILE:HG12	4:D:550:TRP:NE1	1.91	0.84
4:D:528:TRP:CD1	4:D:535:GLN:N	2.44	0.84
15:O:22:LEU:HD12	15:O:23:ASN:N	1.92	0.84
1:A:1030:SER:C	1:A:1092:TRP:CH2	2.49	0.84
1:A:1585:GLN:NE2	1:A:1585:GLN:O	2.11	0.84
2:B:520:ARG:HH12	2:B:550:MET:CG	1.91	0.84
2:B:815:ASP:O	2:B:819:LYS:HG3	1.77	0.84
2:B:3162:VAL:HG13	2:B:3166:LYS:HE3	1.59	0.84
5:E:117:GLU:CD	6:F:17:LEU:HD11	1.98	0.84
1:A:801:ILE:CD1	1:A:862:LEU:HD23	2.06	0.84
1:A:1133:GLY:HA2	1:A:1268:ARG:O	1.72	0.84
1:A:3232:ILE:HG23	1:A:3316:TRP:HE3	1.40	0.84
2:B:603:ILE:HD11	2:B:626:TYR:CE1	2.12	0.84
2:B:861:ASP:OD2	3:C:170:GLN:OE1	1.96	0.84
2:B:2190:LYS:HE2	20:B:5601:ATP:O1B	1.76	0.84
3:C:2723:PHE:CZ	3:C:2749:VAL:HG11	2.13	0.84
1:A:723:PHE:CE1	1:A:772:TRP:CE2	2.65	0.84
1:A:1396:PRO:O	1:A:1400:TYR:N	2.11	0.84
2:B:1447:ILE:CG2	2:B:1504:TRP:CE2	2.47	0.84
2:B:3261:ILE:HG23	2:B:3306:ILE:HG23	1.59	0.84
1:A:155:GLY:HA3	2:B:168:ILE:CA	2.05	0.84
1:A:1012:LYS:HB3	1:A:1071:ILE:CG2	2.08	0.84
1:A:1598:LYS:HD3	1:A:1681:GLU:OE2	1.77	0.84
2:B:1051:ASP:HB3	2:B:1162:THR:CG2	2.08	0.84
2:B:1447:ILE:HG21	2:B:1504:TRP:CD1	2.13	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1983:THR:HG22	19:C:4702:ADP:N1	1.92	0.84
4:D:207:ALA:C	9:I:24:ILE:CD1	2.46	0.84
5:E:261:HIS:CE1	5:E:283:SER:CB	2.61	0.84
5:E:323:GLU:HB3	5:E:334:LEU:HB3	1.59	0.84
1:A:1121:LYS:HD3	1:A:1138:THR:CG2	2.07	0.84
2:B:429:LEU:HD11	2:B:489:PHE:CG	2.12	0.84
2:B:1511:VAL:N	2:B:1570:VAL:CG1	2.41	0.84
4:D:398:PRO:CD	4:D:419:SER:HB3	2.06	0.84
8:H:28:ALA:HB1	8:H:86:ILE:HD12	1.60	0.84
1:A:1013:VAL:HG12	1:A:1017:LEU:CD1	2.07	0.84
1:A:598:ARG:HH12	4:D:546:VAL:HG13	1.40	0.83
1:A:935:VAL:CG2	1:A:1017:LEU:HD21	2.07	0.83
1:A:1028:LYS:C	1:A:1088:TRP:HH2	1.81	0.83
1:A:1126:VAL:HA	1:A:1131:SER:CB	2.07	0.83
2:B:409:SER:O	2:B:413:PHE:CB	2.26	0.83
2:B:1058:LYS:HG3	2:B:1166:GLU:HB3	0.84	0.83
2:B:1511:VAL:HG13	2:B:1570:VAL:HG23	1.58	0.83
2:B:2334:TYR:CA	20:B:5601:ATP:H2	1.90	0.83
3:C:2708:GLN:OE1	3:C:2813:ILE:HD11	1.78	0.83
5:E:61:VAL:HG21	10:J:106:LEU:CD1	2.08	0.83
10:J:48:LEU:CD1	10:J:100:ILE:HD11	1.95	0.83
12:L:74:TRP:CD1	12:L:109:LYS:HD2	2.12	0.83
1:A:3442:LYS:CB	1:A:3485:THR:HG23	2.04	0.83
2:B:500:GLU:CG	2:B:532:THR:HG21	2.07	0.83
2:B:744:MET:CE	2:B:772:ILE:HG13	2.08	0.83
2:B:794:LEU:HA	2:B:797:PHE:HD2	1.41	0.83
2:B:900:PHE:CZ	2:B:933:TRP:CH2	2.66	0.83
2:B:2543:GLY:CA	19:B:5501:ADP:O2A	2.25	0.83
2:B:3268:THR:HG22	2:B:3269:LEU:HD12	1.60	0.83
2:B:3271:ASP:OD1	2:B:3272:PRO:CD	2.19	0.83
4:D:90:ASP:OD1	13:M:32:LYS:HG3	1.79	0.83
5:E:64:GLU:OE2	10:J:18:TYR:CE2	2.30	0.83
1:A:871:LEU:CD2	1:A:872:ASP:H	1.90	0.83
2:B:733:GLU:OE2	2:B:783:MET:HG2	1.73	0.83
2:B:910:GLY:HA2	2:B:995:TYR:CD1	2.13	0.83
4:D:208:TYR:N	9:I:24:ILE:HD12	1.93	0.83
4:D:265:ARG:CB	5:E:125:GLN:HG2	2.08	0.83
4:D:545:VAL:HA	4:D:562:THR:HG22	1.58	0.83
1:A:598:ARG:NH2	4:D:546:VAL:CG1	2.41	0.83
2:B:479:ASN:ND2	2:B:482:GLU:OE2	2.10	0.83
2:B:888:PRO:HA	2:B:891:ILE:HG22	1.60	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3133:ILE:HG12	2:B:3440:LEU:CD1	2.09	0.83
3:C:2724:ALA:HB1	3:C:2793:LEU:HD13	1.59	0.83
3:C:2807:SER:OG	3:C:2810:ALA:HB2	1.77	0.83
4:D:441:LEU:HD12	4:D:457:ALA:O	1.76	0.83
4:D:552:PRO:HD3	4:D:595:PHE:CD2	2.13	0.83
5:E:99:ILE:HD12	6:F:31:ILE:HD11	1.59	0.83
6:F:48:ILE:CD1	6:F:98:LEU:CD2	2.08	0.83
1:A:659:TRP:CZ2	1:A:702:LEU:HD12	2.12	0.83
1:A:670:LEU:HD23	1:A:772:TRP:CD1	2.13	0.83
1:A:760:ASP:OD2	1:A:764:ARG:HD3	1.79	0.83
1:A:1121:LYS:HD3	1:A:1138:THR:HG22	1.59	0.83
3:C:1983:THR:HB	19:C:4702:ADP:N6	1.93	0.83
5:E:23:THR:HG21	14:N:88:TYR:CD1	2.07	0.83
2:B:489:PHE:CE1	2:B:493:ARG:HD3	2.13	0.83
2:B:1485:MET:CA	2:B:1505:ARG:HD2	2.08	0.83
2:B:1602:LYS:NZ	2:B:1683:GLU:OE1	2.03	0.83
4:D:68:GLU:CG	5:E:12:LYS:CA	2.57	0.83
4:D:207:ALA:HB1	9:I:24:ILE:HD11	0.85	0.83
4:D:266:TYR:HH	5:E:121:TYR:CB	1.90	0.83
4:D:543:MET:SD	4:D:563:MET:CB	2.67	0.83
6:F:56:TRP:CZ3	6:F:74:ILE:CD1	2.62	0.83
1:A:3231:ASP:OD2	1:A:3258:PHE:CE2	2.31	0.83
2:B:13:PHE:CB	2:B:25:GLN:O	2.27	0.83
2:B:345:ARG:CB	2:B:412:LEU:CD1	2.56	0.83
2:B:3178:VAL:CG1	2:B:3395:LEU:CD2	2.42	0.83
5:E:310:LEU:CD1	5:E:358:ARG:NH1	2.41	0.83
8:H:60:ILE:HD12	9:I:78:ILE:HG12	1.57	0.83
2:B:533:ARG:CG	2:B:534:PRO:CD	2.57	0.83
2:B:799:VAL:HG12	2:B:800:LYS:N	1.93	0.83
3:C:354:VAL:HG11	3:C:357:ILE:HD12	0.93	0.83
5:E:432:GLY:HA2	5:E:457:LEU:HD13	1.61	0.83
10:J:32:CYS:HB3	10:J:96:ILE:HG12	1.56	0.83
10:J:79:PHE:CD2	11:K:68:ALA:CB	2.62	0.83
15:O:22:LEU:HD11	15:O:23:ASN:OD1	1.79	0.83
1:A:3194:ALA:HB1	1:A:3356:VAL:HG21	1.61	0.83
2:B:589:LEU:HD12	2:B:687:PHE:CZ	2.13	0.83
2:B:1531:ILE:HD13	2:B:1595:LEU:CD1	2.07	0.83
4:D:105:MET:CE	14:N:48:GLN:N	2.41	0.83
4:D:265:ARG:HG2	5:E:125:GLN:CG	2.02	0.83
4:D:351:MET:HE2	4:D:351:MET:HA	1.59	0.83
1:A:3110:LEU:CD1	1:A:3443:LEU:HD23	2.08	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:349:ASN:CB	2:B:416:LEU:CG	2.57	0.83
2:B:658:GLN:HE21	2:B:672:ASN:CG	1.82	0.83
2:B:861:ASP:HA	2:B:864:ASN:HD21	1.42	0.83
2:B:973:THR:CG2	3:C:343:ASN:HB3	2.08	0.83
3:C:2738:ILE:CB	3:C:2746:PRO:HG3	2.09	0.83
6:F:56:TRP:CZ3	6:F:74:ILE:HG13	2.14	0.83
1:A:891:PHE:HD1	1:A:972:TRP:CE3	1.97	0.82
1:A:1020:PHE:CZ	1:A:1069:TYR:CD1	2.64	0.82
2:B:762:ILE:O	2:B:766:ILE:N	2.11	0.82
3:C:2730:LEU:HD21	3:C:2744:LYS:H	1.43	0.82
4:D:569:TYR:OH	4:D:578:LYS:CG	2.27	0.82
5:E:384:LEU:HG	5:E:417:TRP:HE1	1.42	0.82
6:F:78:ARG:HD2	6:F:88:ILE:HG12	1.60	0.82
1:A:871:LEU:CD2	1:A:875:VAL:CG1	2.56	0.82
1:A:3421:SER:HB3	1:A:3716:LEU:HG	1.58	0.82
2:B:1123:GLY:CA	2:B:1197:PHE:HZ	1.91	0.82
4:D:177:ASN:HD21	13:M:60:ASN:HB3	1.41	0.82
5:E:420:THR:HG22	5:E:472:SER:HB2	1.58	0.82
14:N:89:GLN:NE2	14:N:116:ALA:H	1.76	0.82
14:N:116:ALA:CB	15:O:131:PHE:CE1	2.62	0.82
2:B:165:LEU:O	2:B:169:LYS:CA	2.26	0.82
2:B:888:PRO:HA	2:B:891:ILE:CG2	2.09	0.82
3:C:2723:PHE:CE1	3:C:2749:VAL:HG13	2.12	0.82
4:D:105:MET:HE2	14:N:51:ILE:HD12	1.61	0.82
4:D:208:TYR:OH	9:I:19:MET:HG3	1.79	0.82
8:H:51:SER:OG	18:R:32:LYS:CB	2.27	0.82
1:A:761:LEU:HD21	1:A:874:HIS:HE1	1.41	0.82
1:A:801:ILE:HG21	1:A:862:LEU:CG	2.09	0.82
1:A:1274:GLY:C	4:D:164:ASN:OD1	2.18	0.82
2:B:3078:ILE:CD1	2:B:3452:LEU:HD22	2.08	0.82
2:B:3230:ALA:CB	2:B:3342:ASN:OD1	2.27	0.82
3:C:360:PRO:HG2	3:C:361:PRO:HD3	1.61	0.82
4:D:174:GLN:HB2	13:M:62:GLY:CA	2.01	0.82
4:D:252:VAL:CG1	7:G:149:GLN:HE22	1.92	0.82
4:D:532:TYR:CE1	4:D:652:MET:HE1	2.15	0.82
5:E:16:ASN:N	15:O:132:GLU:HG2	1.95	0.82
1:A:853:VAL:HG12	5:E:206:ASN:OD1	1.78	0.82
1:A:3106:LYS:CB	1:A:3443:LEU:HD21	2.09	0.82
2:B:445:GLY:CA	5:E:511:ARG:NH1	2.41	0.82
2:B:1492:LYS:NZ	2:B:3606:GLN:CD	2.32	0.82
4:D:583:LYS:HD3	4:D:586:LYS:HA	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:46:ASN:HB3	12:L:88:PHE:HE1	1.40	0.82
5:E:310:LEU:CG	5:E:358:ARG:CZ	2.54	0.82
1:A:614:PHE:CG	1:A:644:LEU:HD22	2.15	0.82
1:A:3215:ILE:CG2	1:A:3219:ASP:CG	2.48	0.82
2:B:1559:MET:CE	2:B:1577:ARG:HD3	2.10	0.82
3:C:10:LEU:HD22	3:C:65:ASN:O	1.76	0.82
3:C:2800:PRO:CB	3:C:2818:VAL:HG21	2.10	0.82
4:D:265:ARG:NE	5:E:125:GLN:HA	1.93	0.82
5:E:402:ILE:HG22	5:E:403:ILE:HG13	1.61	0.82
10:J:36:ILE:CG1	10:J:72:PHE:CE1	2.58	0.82
14:N:84:GLN:HE21	15:O:61:GLU:HB2	1.39	0.82
1:A:730:LEU:CD2	1:A:781:LEU:HD21	2.08	0.82
1:A:879:LEU:HD12	1:A:882:GLU:OE2	1.79	0.82
2:B:900:PHE:HE1	2:B:933:TRP:CH2	1.97	0.82
2:B:1139:LEU:HD21	2:B:1198:ILE:HG12	1.61	0.82
2:B:1242:GLN:O	2:B:1251:SER:N	2.13	0.82
3:C:504:ALA:CB	3:C:525:LYS:CB	2.58	0.82
3:C:2606:GLY:C	3:C:2910:TRP:CZ3	2.52	0.82
7:G:119:PRO:HG2	9:I:12:ILE:CB	2.09	0.82
1:A:1522:GLU:HG3	1:A:1523:PRO:CD	2.02	0.82
3:C:60:LEU:HD21	3:C:69:TRP:HZ3	1.40	0.82
3:C:99:GLY:CA	3:C:149:HIS:CE1	2.61	0.82
1:A:5:LYS:CB	1:A:48:GLU:CA	2.57	0.82
1:A:3229:PRO:HB2	1:A:3233:ILE:HG23	1.62	0.82
2:B:655:LYS:HB2	2:B:677:LEU:HD21	1.62	0.82
3:C:132:GLU:OE2	3:C:133:PRO:HD2	1.80	0.82
4:D:367:LEU:HD11	4:D:371:THR:CB	2.09	0.82
5:E:384:LEU:CD2	5:E:417:TRP:CE2	2.63	0.82
1:A:907:ASN:O	1:A:911:TYR:HD2	1.61	0.82
1:A:3249:ILE:CD1	1:A:3274:ASP:H	1.92	0.82
1:A:3252:GLN:O	1:A:3255:GLU:CG	2.26	0.82
2:B:864:ASN:HA	2:B:947:LEU:CD1	2.09	0.82
2:B:3268:THR:HG22	2:B:3269:LEU:CD1	2.10	0.82
3:C:2793:LEU:CA	3:C:2796:PRO:CG	2.58	0.82
4:D:180:ILE:HG21	10:J:75:TYR:CE1	2.15	0.82
1:A:576:TYR:HD1	1:A:620:PRO:O	1.63	0.81
2:B:579:PHE:CE1	5:E:369:PRO:HG2	2.14	0.81
2:B:789:LYS:HB3	2:B:839:LEU:CD1	2.10	0.81
2:B:3153:LEU:HD13	2:B:3707:LEU:HD11	0.84	0.81
4:D:92:TYR:CD1	13:M:29:LYS:HB3	2.14	0.81
1:A:3212:VAL:HG23	1:A:3338:ALA:CB	2.11	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3251:ILE:CD1	17:Q:61:SER:C	2.48	0.81
2:B:444:LEU:HA	5:E:515:LYS:HG3	0.85	0.81
2:B:520:ARG:NH1	2:B:550:MET:CG	2.43	0.81
2:B:762:ILE:HG22	2:B:766:ILE:CG1	2.09	0.81
2:B:899:LEU:CD1	2:B:900:PHE:HD1	1.93	0.81
2:B:1612:LEU:CD1	2:B:1637:CYS:SG	2.67	0.81
4:D:81:GLN:OE1	15:O:110:TYR:CE2	2.31	0.81
5:E:68:THR:HB	8:H:70:THR:CG2	2.08	0.81
12:L:84:CYS:HB3	13:M:56:ILE:HA	1.62	0.81
14:N:8:TYR:CE1	14:N:13:VAL:HG21	2.15	0.81
1:A:1263:TYR:CE2	1:A:1280:TYR:O	2.34	0.81
1:A:3260:LYS:NZ	1:A:3315:ASP:HB3	1.94	0.81
1:A:3306:LEU:HD13	1:A:3306:LEU:C	2.00	0.81
1:A:3345:LYS:N	1:A:3345:LYS:HE3	1.94	0.81
2:B:733:GLU:CD	2:B:783:MET:HG2	1.99	0.81
2:B:1514:VAL:HG11	2:B:1570:VAL:HA	1.63	0.81
3:C:196:PRO:N	3:C:239:TRP:CZ2	2.46	0.81
3:C:2365:GLY:HA2	19:C:4703:ADP:H3'	1.62	0.81
3:C:2721:GLU:CB	3:C:2803:MET:HE2	2.02	0.81
3:C:2743:ASN:HD22	3:C:2785:VAL:HG12	0.74	0.81
5:E:112:LEU:CD2	6:F:97:MET:CG	2.57	0.81
5:E:310:LEU:HD11	5:E:358:ARG:CZ	2.08	0.81
8:H:60:ILE:CG1	9:I:85:TYR:HB2	2.08	0.81
10:J:94:ARG:HB3	10:J:109:GLN:HB3	1.59	0.81
2:B:913:PHE:HE2	2:B:1078:ILE:HD13	1.44	0.81
3:C:261:ILE:CG2	3:C:385:ASP:CB	2.58	0.81
3:C:2708:GLN:CD	3:C:2813:ILE:HD11	2.01	0.81
1:A:760:ASP:OD2	1:A:764:ARG:CD	2.28	0.81
1:A:853:VAL:CG1	5:E:206:ASN:OD1	2.27	0.81
4:D:595:PHE:HD1	4:D:602:LEU:CD2	1.92	0.81
6:F:35:ARG:NH2	6:F:41:SER:HB2	1.94	0.81
6:F:81:THR:CG2	7:G:114:VAL:CG2	2.42	0.81
14:N:72:ILE:HA	15:O:97:ILE:HG12	1.62	0.81
1:A:841:ILE:CD1	1:A:961:ALA:HB1	2.11	0.81
1:A:1101:HIS:HB2	1:A:1163:LEU:HD11	1.62	0.81
2:B:551:TYR:HD2	2:B:622:VAL:HG11	1.43	0.81
2:B:679:ARG:CB	5:E:186:PHE:CZ	2.64	0.81
2:B:1102:LEU:HA	2:B:1105:GLN:HB2	1.63	0.81
4:D:283:LEU:HB2	4:D:582:GLN:HG3	1.60	0.81
6:F:56:TRP:CZ3	6:F:74:ILE:HD11	2.15	0.81
1:A:1101:HIS:CB	1:A:1163:LEU:HD11	2.10	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3236:ILE:HG23	1:A:3333:LEU:CA	2.10	0.81
2:B:57:ASN:CA	2:B:70:LYS:O	2.25	0.81
2:B:864:ASN:HB2	2:B:947:LEU:HD23	0.83	0.81
2:B:1528:LEU:CD2	2:B:1591:CYS:HB2	2.10	0.81
5:E:145:LEU:HD22	5:E:494:LEU:HG	1.63	0.81
5:E:420:THR:CG2	5:E:472:SER:HB2	2.09	0.81
1:A:594:PRO:HB3	1:A:609:TRP:CE3	2.16	0.81
2:B:993:TYR:OH	2:B:1067:ILE:CG2	2.28	0.81
3:C:2585:PHE:HB2	3:C:2932:SER:HB2	1.62	0.81
4:D:105:MET:SD	14:N:48:GLN:HB2	2.21	0.81
5:E:174:PRO:HD3	5:E:466:GLY:HA2	1.62	0.81
10:J:95:PHE:CZ	10:J:106:LEU:CD1	2.63	0.81
15:O:30:TYR:H	15:O:31:PRO:CD	1.94	0.81
1:A:801:ILE:HD12	1:A:862:LEU:HD23	1.63	0.81
1:A:1013:VAL:HA	1:A:1016:PHE:HE1	1.45	0.81
1:A:1132:LEU:CA	1:A:1272:LEU:HD11	2.10	0.81
3:C:2719:VAL:HG13	3:C:2720:PRO:CD	2.08	0.81
1:A:688:PHE:CZ	1:A:693:MET:SD	2.74	0.81
1:A:944:LEU:HD11	1:A:1013:VAL:CG1	2.11	0.81
1:A:3273:TYR:HH	1:A:3277:GLY:HA3	1.41	0.81
4:D:91:TYR:CZ	13:M:80:LEU:HB2	2.16	0.81
8:H:62:GLY:HA3	9:I:83:TYR:HA	1.61	0.81
8:H:64:ASN:HB2	9:I:81:GLU:CB	2.06	0.81
1:A:1013:VAL:HG13	1:A:1076:LEU:HD13	1.62	0.80
1:A:1396:PRO:O	1:A:1400:TYR:CB	2.30	0.80
1:A:3313:SER:HA	1:A:3317:PHE:HD2	1.46	0.80
2:B:3136:TYR:HE1	2:B:3436:ASN:HD22	1.27	0.80
3:C:143:PRO:CD	3:C:187:TRP:NE1	2.44	0.80
3:C:261:ILE:HG12	3:C:360:PRO:HB3	1.62	0.80
3:C:321:ARG:HA	3:C:342:ALA:HB2	1.61	0.80
3:C:2592:LYS:HD2	3:C:2928:VAL:HG22	1.62	0.80
4:D:148:GLU:CG	4:D:149:PRO:HD2	2.04	0.80
4:D:184:GLY:HA3	11:K:69:TYR:CD1	2.15	0.80
2:B:718:ILE:HD13	2:B:770:LYS:HA	1.64	0.80
5:E:392:LYS:HB2	5:E:394:TRP:CH2	2.17	0.80
1:A:1020:PHE:CA	1:A:1023:PHE:CE2	2.60	0.80
1:A:3106:LYS:HG2	1:A:3443:LEU:CD2	1.91	0.80
1:A:3235:TYR:HH	1:A:3269:LEU:HD12	1.47	0.80
2:B:448:LYS:HE2	2:B:513:ASP:OD2	1.81	0.80
4:D:80:PRO:HB3	15:O:105:VAL:HG13	1.62	0.80
4:D:195:ILE:CD1	9:I:94:LEU:CD2	2.59	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:613:LEU:O	4:D:613:LEU:HD12	1.81	0.80
1:A:121:GLY:HA3	2:B:105:ALA:O	1.82	0.80
1:A:1429:ILE:HG22	1:A:1490:PHE:CZ	2.16	0.80
2:B:58:SER:H	2:B:70:LYS:C	1.85	0.80
2:B:598:ARG:CB	5:E:367:LEU:HD13	2.12	0.80
2:B:794:LEU:CB	2:B:797:PHE:HE2	1.94	0.80
2:B:799:VAL:C	2:B:800:LYS:CA	2.49	0.80
2:B:1378:LEU:CB	2:B:1424:GLU:HG2	2.11	0.80
3:C:2793:LEU:HA	3:C:2796:PRO:CG	2.11	0.80
4:D:196:CYS:SG	9:I:86:ASP:CG	2.59	0.80
4:D:201:GLN:HE22	9:I:102:ASN:N	1.77	0.80
4:D:208:TYR:CE1	9:I:22:LYS:HB2	2.17	0.80
5:E:288:VAL:HG21	5:E:335:ILE:HD13	1.64	0.80
14:N:72:ILE:HG12	15:O:97:ILE:HG21	1.60	0.80
15:O:30:TYR:OH	15:O:126:VAL:CG1	2.29	0.80
1:A:970:TYR:C	1:A:983:ALA:HB1	2.00	0.80
1:A:1012:LYS:NZ	1:A:1072:GLY:CA	2.44	0.80
1:A:1012:LYS:CB	1:A:1071:ILE:CD1	2.58	0.80
1:A:1126:VAL:HG13	1:A:1131:SER:O	1.81	0.80
1:A:3103:TYR:CE2	1:A:3444:VAL:CG2	2.42	0.80
2:B:409:SER:HA	2:B:413:PHE:CD1	2.12	0.80
3:C:2807:SER:OG	3:C:2810:ALA:CB	2.29	0.80
4:D:80:PRO:HG3	15:O:103:TRP:HE1	0.76	0.80
4:D:111:MET:CE	15:O:90:ILE:HB	2.10	0.80
4:D:528:TRP:NE1	4:D:535:GLN:CB	2.45	0.80
5:E:310:LEU:CD2	5:E:358:ARG:HH21	1.88	0.80
6:F:26:PHE:CD1	6:F:49:ALA:HB2	2.16	0.80
6:F:26:PHE:CE1	6:F:49:ALA:HA	2.16	0.80
10:J:26:VAL:HG23	10:J:97:TYR:C	2.01	0.80
1:A:397:ILE:O	1:A:489:LYS:CB	2.30	0.80
1:A:611:ARG:NH2	1:A:705:GLN:HB2	1.96	0.80
1:A:1458:MET:HE1	1:A:1518:TRP:CZ2	2.16	0.80
2:B:861:ASP:CB	3:C:170:GLN:HB3	2.11	0.80
2:B:2333:PRO:C	20:B:5601:ATP:N1	2.35	0.80
4:D:91:TYR:CZ	13:M:80:LEU:CD1	2.63	0.80
4:D:285:PRO:HG3	4:D:584:ILE:CG2	2.12	0.80
5:E:22:ASP:HB2	14:N:91:THR:H	1.46	0.80
7:G:58:SER:C	7:G:59:GLU:CA	2.49	0.80
10:J:61:ALA:CA	10:J:80:PHE:HE2	1.93	0.80
1:A:723:PHE:HD1	1:A:772:TRP:HZ2	1.29	0.80
4:D:367:LEU:HD11	4:D:371:THR:CG2	2.11	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:60:ILE:CD1	9:I:78:ILE:HG12	2.11	0.80
3:C:29:VAL:HG22	3:C:92:ALA:O	1.81	0.80
3:C:2795:MET:N	3:C:2796:PRO:HD3	1.97	0.80
3:C:2799:THR:O	3:C:2803:MET:HG2	1.81	0.80
4:D:184:GLY:HA3	11:K:69:TYR:HD1	1.44	0.80
4:D:208:TYR:CZ	9:I:100:ASN:HB2	2.16	0.80
1:A:761:LEU:C	1:A:761:LEU:HD13	2.02	0.80
1:A:3046:PHE:CE2	1:A:3104:ILE:HD11	2.17	0.80
2:B:861:ASP:OD2	3:C:170:GLN:CG	2.30	0.80
2:B:1466:THR:HB	2:B:1522:GLN:OE1	1.82	0.80
3:C:2721:GLU:OE2	3:C:2798:PHE:CE1	2.33	0.80
4:D:113:GLY:CA	15:O:92:GLY:O	2.29	0.80
5:E:16:ASN:N	15:O:132:GLU:CG	2.44	0.80
1:A:853:VAL:CB	5:E:206:ASN:CG	2.41	0.80
2:B:603:ILE:HD11	2:B:626:TYR:CD1	2.18	0.80
2:B:794:LEU:HD11	2:B:867:VAL:HA	1.63	0.80
2:B:963:PHE:HE1	3:C:83:CYS:HG	1.30	0.80
3:C:2726:THR:HA	3:C:2729:LEU:HD11	1.57	0.80
4:D:265:ARG:CD	5:E:125:GLN:HA	2.12	0.80
5:E:80:TRP:CE3	5:E:81:PRO:HD2	2.16	0.80
6:F:81:THR:HG21	7:G:114:VAL:HG23	1.61	0.80
15:O:22:LEU:CD1	15:O:23:ASN:ND2	2.45	0.80
1:A:1126:VAL:HG21	1:A:1135:VAL:CG2	2.10	0.79
2:B:791:HIS:HE1	2:B:866:ILE:HD13	1.42	0.79
2:B:1119:LYS:HB3	2:B:1138:LYS:HZ2	1.43	0.79
2:B:1467:PHE:CZ	2:B:1563:VAL:HG11	2.17	0.79
3:C:2698:LEU:HD21	3:C:2768:LEU:HB3	1.64	0.79
4:D:378:ARG:HD3	5:E:137:THR:O	1.81	0.79
5:E:20:PHE:CZ	14:N:89:GLN:HA	2.16	0.79
6:F:91:GLN:HG2	6:F:96:THR:HG21	1.55	0.79
12:L:42:ILE:HD12	12:L:98:LEU:HD12	1.64	0.79
3:C:2607:LEU:N	3:C:2910:TRP:HZ3	1.78	0.79
6:F:50:ALA:CB	8:H:83:GLN:CG	2.60	0.79
1:A:1430:ARG:CG	1:A:1490:PHE:CD2	2.65	0.79
2:B:10:PRO:HA	2:B:25:GLN:O	1.81	0.79
2:B:1127:ASN:HB3	2:B:1128:PRO:HD2	1.57	0.79
2:B:1456:PHE:CE1	2:B:1458:PHE:CZ	2.70	0.79
3:C:2676:GLN:CB	3:C:2841:THR:HG23	2.12	0.79
5:E:517:LYS:NZ	5:E:517:LYS:HB3	1.96	0.79
6:F:51:LEU:CD2	7:G:116:ASP:HB2	2.11	0.79
1:A:728:ASN:HD22	4:D:396:THR:HG22	1.47	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2711:SER:HB2	3:C:2755:LEU:HD21	1.64	0.79
3:C:2745:LYS:HD2	3:C:2749:VAL:CB	2.10	0.79
4:D:367:LEU:HD12	4:D:368:TYR:O	1.82	0.79
8:H:61:VAL:O	9:I:84:ALA:N	2.15	0.79
1:A:1013:VAL:HA	1:A:1016:PHE:CE1	2.18	0.79
1:A:3347:LYS:O	1:A:3351:PRO:HD3	1.82	0.79
2:B:443:GLU:CD	5:E:514:ARG:HH12	1.79	0.79
2:B:801:ILE:CG1	2:B:878:ALA:CA	2.60	0.79
2:B:957:GLN:HA	3:C:220:TRP:CZ3	2.16	0.79
2:B:2334:TYR:CA	20:B:5601:ATP:C2	2.66	0.79
3:C:99:GLY:HA3	3:C:149:HIS:NE2	1.97	0.79
5:E:164:VAL:HG22	5:E:181:TYR:CD1	2.15	0.79
1:A:155:GLY:CA	2:B:167:GLN:C	2.45	0.79
1:A:598:ARG:NH1	4:D:546:VAL:HG13	1.97	0.79
1:A:794:LEU:C	1:A:794:LEU:HD13	2.03	0.79
1:A:937:LEU:CD1	1:A:1081:ILE:HG12	2.12	0.79
2:B:1208:LYS:HE3	2:B:1208:LYS:CA	2.12	0.79
2:B:1230:MET:HE1	2:B:1267:TYR:N	1.98	0.79
3:C:2673:VAL:CA	3:C:2841:THR:HA	2.11	0.79
6:F:40:ILE:HB	6:F:44:LYS:HB2	1.64	0.79
1:A:700:LYS:HE3	1:A:720:GLU:CD	2.02	0.79
2:B:444:LEU:HD22	5:E:515:LYS:HE2	1.62	0.79
2:B:595:LEU:CD2	5:E:389:TRP:CZ2	2.66	0.79
4:D:90:ASP:CG	13:M:32:LYS:CG	2.47	0.79
4:D:353:LEU:HG	4:D:363:LEU:HD21	1.64	0.79
4:D:414:PHE:HD2	4:D:426:TRP:HD1	1.23	0.79
4:D:590:LEU:CD2	4:D:604:VAL:HG11	2.12	0.79
5:E:48:ILE:HG13	12:L:23:PHE:HE2	1.44	0.79
5:E:385:SER:OG	5:E:394:TRP:CZ3	2.30	0.79
14:N:18:ASP:OD1	14:N:101:TYR:OH	2.00	0.79
1:A:1504:VAL:HG13	1:A:1565:CYS:SG	2.23	0.79
1:A:1642:ALA:HB2	1:A:1652:GLN:HB2	1.61	0.79
1:A:3345:LYS:HE3	1:A:3345:LYS:CA	2.12	0.79
2:B:429:LEU:HG	2:B:489:PHE:HZ	1.43	0.79
2:B:744:MET:HE1	2:B:772:ILE:C	2.02	0.79
2:B:1212:ILE:HG22	2:B:1213:PRO:CD	2.13	0.79
4:D:70:MET:HE2	5:E:13:GLU:CG	2.12	0.79
4:D:567:GLN:CG	4:D:578:LYS:HD2	2.12	0.79
5:E:112:LEU:O	5:E:116:VAL:HG23	1.83	0.79
15:O:30:TYR:HH	15:O:126:VAL:HG12	1.47	0.79
2:B:60:ASN:CB	2:B:81:ILE:CB	2.61	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:791:HIS:CE1	2:B:866:ILE:CD1	2.64	0.79
2:B:899:LEU:HD11	2:B:900:PHE:HD1	1.48	0.79
2:B:1238:LYS:NZ	2:B:1308:LEU:HA	1.98	0.79
5:E:266:THR:CG2	5:E:320:THR:HA	2.09	0.79
12:L:86:LEU:HD12	13:M:54:ASN:CB	2.13	0.79
15:O:38:ILE:HG22	15:O:67:LEU:HD11	1.63	0.79
1:A:997:LYS:HD3	18:R:149:LEU:CB	2.12	0.79
1:A:1597:LYS:NZ	1:A:1962:ILE:CD1	2.45	0.79
1:A:3298:ILE:HA	1:A:3343:HIS:HE1	1.46	0.79
1:A:3446:ASN:HA	1:A:3488:LEU:CD2	2.13	0.79
2:B:429:LEU:HD11	2:B:489:PHE:CZ	2.14	0.79
2:B:679:ARG:HA	5:E:186:PHE:HZ	1.48	0.79
2:B:1107:ARG:HH21	2:B:1172:LYS:HE2	1.47	0.79
2:B:3178:VAL:HG11	2:B:3395:LEU:HD21	0.80	0.79
4:D:417:ILE:HD12	4:D:474:VAL:HG23	1.64	0.79
8:H:56:THR:CG2	9:I:88:THR:OG1	2.29	0.79
1:A:944:LEU:CD1	1:A:1017:LEU:HD11	2.11	0.78
1:A:1121:LYS:CD	1:A:1138:THR:HG22	2.12	0.78
2:B:444:LEU:HA	5:E:515:LYS:CD	2.13	0.78
2:B:518:TYR:CE1	5:E:407:TYR:CE2	2.60	0.78
2:B:3139:GLY:HA2	2:B:3695:LEU:HD22	1.66	0.78
3:C:99:GLY:CA	3:C:149:HIS:HE1	1.95	0.78
4:D:83:PRO:HG3	10:J:92:LYS:HD2	1.64	0.78
2:B:1237:ARG:CD	2:B:1260:ALA:HA	2.12	0.78
2:B:1573:CYS:HA	2:B:1577:ARG:HD2	1.64	0.78
1:A:670:LEU:HD21	1:A:772:TRP:CD1	2.17	0.78
1:A:1088:TRP:O	1:A:1092:TRP:HD1	1.66	0.78
2:B:555:LEU:HD21	2:B:625:LEU:HD23	1.64	0.78
2:B:1058:LYS:CB	2:B:1166:GLU:CB	2.59	0.78
3:C:2673:VAL:HA	3:C:2841:THR:HA	1.63	0.78
4:D:262:HIS:HA	5:E:125:GLN:NE2	1.99	0.78
5:E:117:GLU:CB	6:F:17:LEU:HD11	2.13	0.78
6:F:84:SER:CB	6:F:106:ALA:HB2	2.13	0.78
12:L:9:GLY:O	12:L:13:GLU:CG	2.31	0.78
1:A:3257:VAL:HG11	1:A:3266:VAL:HA	1.45	0.78
2:B:555:LEU:CG	2:B:625:LEU:CD2	2.50	0.78
3:C:354:VAL:HG22	3:C:357:ILE:H	1.49	0.78
4:D:111:MET:HE1	15:O:90:ILE:CB	2.13	0.78
4:D:201:GLN:NE2	9:I:102:ASN:CB	2.46	0.78
4:D:585:VAL:CG1	4:D:588:PRO:HD3	2.11	0.78
6:F:50:ALA:HB2	8:H:83:GLN:HG3	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:64:LEU:HB3	7:G:76:TYR:CE2	2.18	0.78
9:I:51:ALA:CB	9:I:52:PRO:CD	2.62	0.78
15:O:30:TYR:N	15:O:31:PRO:CD	2.45	0.78
1:A:590:GLN:HB3	1:A:609:TRP:CZ2	2.17	0.78
1:A:670:LEU:CA	1:A:692:ILE:CD1	2.60	0.78
1:A:1126:VAL:CB	1:A:1131:SER:OG	2.31	0.78
1:A:3297:SER:O	1:A:3343:HIS:CE1	2.36	0.78
2:B:1378:LEU:CA	2:B:1424:GLU:HG2	2.12	0.78
2:B:1492:LYS:HE2	2:B:3606:GLN:OE1	1.79	0.78
3:C:62:LEU:HD12	3:C:62:LEU:O	1.83	0.78
3:C:208:MET:HB2	3:C:296:ILE:HD13	1.65	0.78
3:C:2734:PHE:HE2	3:C:2767:LYS:CE	1.96	0.78
4:D:386:TYR:CD1	4:D:433:LEU:HD11	2.18	0.78
4:D:395:HIS:CD2	4:D:399:VAL:CG1	2.65	0.78
7:G:107:THR:HG21	7:G:137:VAL:HG11	1.65	0.78
1:A:751:LEU:HD22	1:A:866:ILE:HD13	1.64	0.78
1:A:1274:GLY:HA3	4:D:164:ASN:CG	2.04	0.78
1:A:1396:PRO:CB	1:A:1400:TYR:CB	2.62	0.78
2:B:875:ILE:HG23	2:B:937:PHE:HB3	1.64	0.78
2:B:957:GLN:HG2	3:C:164:HIS:NE2	1.94	0.78
3:C:253:LEU:HD12	3:C:253:LEU:O	1.83	0.78
5:E:59:HIS:CD2	10:J:90:HIS:NE2	2.51	0.78
5:E:80:TRP:O	8:H:80:TYR:CE1	2.36	0.78
7:G:58:SER:OG	7:G:62:ASP:HB2	1.82	0.78
10:J:77:HIS:CG	11:K:70:VAL:CG2	2.67	0.78
1:A:3446:ASN:HA	1:A:3488:LEU:HD21	1.64	0.78
3:C:2721:GLU:HA	3:C:2798:PHE:CE1	2.18	0.78
4:D:517:ILE:HD12	4:D:527:ILE:CG1	2.12	0.78
16:P:63:ARG:CB	16:P:119:PRO:CB	2.61	0.78
1:A:113:GLY:O	1:A:116:ASN:N	2.17	0.78
1:A:601:PRO:CG	1:A:698:GLU:HG2	2.12	0.78
1:A:3117:PHE:CD2	1:A:3429:TRP:CE3	2.72	0.78
2:B:99:LEU:O	2:B:101:ASN:N	2.17	0.78
2:B:730:LEU:CD1	2:B:787:LEU:HD12	2.13	0.78
2:B:736:LEU:HA	2:B:855:SER:CB	2.14	0.78
3:C:2701:ILE:CD1	3:C:2704:LYS:HG3	2.13	0.78
5:E:259:ASN:HD22	5:E:299:GLY:N	1.81	0.78
1:A:3215:ILE:HG23	1:A:3219:ASP:OD2	1.83	0.78
1:A:3251:ILE:HG12	17:Q:62:ILE:H	1.49	0.78
2:B:533:ARG:HG2	2:B:534:PRO:CD	2.14	0.78
2:B:1081:GLN:HB3	2:B:1082:PRO:HD3	1.66	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1234:GLU:OE1	2:B:1305:LEU:CA	2.26	0.78
3:C:225:GLN:OE1	3:C:225:GLN:N	2.14	0.78
5:E:527:GLU:HA	5:E:530:LYS:HE3	1.63	0.78
12:L:77:ILE:HA	13:M:63:SER:CB	2.13	0.78
18:R:82:ALA:HA	18:R:83:ASN:N	1.98	0.78
1:A:613:LEU:CD2	4:D:523:TRP:CH2	2.66	0.78
1:A:737:TYR:CD1	1:A:759:LEU:HD23	2.19	0.78
1:A:1031:ILE:HA	1:A:1092:TRP:CZ3	2.18	0.78
1:A:1274:GLY:HA3	4:D:164:ASN:CA	2.14	0.78
1:A:3293:PHE:CZ	1:A:3335:TRP:HH2	2.02	0.78
2:B:888:PRO:O	2:B:891:ILE:CG2	2.32	0.78
2:B:1139:LEU:HD21	2:B:1198:ILE:CD1	2.13	0.78
2:B:3203:ALA:HB2	2:B:3370:LYS:CB	2.12	0.78
4:D:68:GLU:HG2	5:E:12:LYS:HA	1.66	0.78
4:D:364:ALA:HB1	4:D:414:PHE:HE1	1.47	0.78
5:E:20:PHE:HE2	15:O:80:LYS:CD	1.95	0.78
10:J:19:LYS:HG2	10:J:28:TRP:CE3	2.18	0.78
1:A:751:LEU:CD2	1:A:866:ILE:HD13	2.14	0.77
1:A:936:GLN:HA	1:A:1081:ILE:CG1	2.08	0.77
1:A:993:LYS:CE	18:R:131:ILE:CB	2.60	0.77
2:B:679:ARG:O	2:B:683:GLU:CG	2.30	0.77
2:B:679:ARG:HB3	5:E:186:PHE:CZ	2.20	0.77
2:B:1117:ILE:O	2:B:1120:THR:OG1	2.00	0.77
2:B:1237:ARG:HD3	2:B:1260:ALA:CA	2.13	0.77
3:C:2666:CYS:CB	3:C:2848:THR:HA	2.11	0.77
4:D:66:LEU:HD22	4:D:66:LEU:H	1.48	0.77
4:D:297:LYS:HZ1	4:D:328:LEU:HB2	1.44	0.77
4:D:386:TYR:CG	4:D:433:LEU:HD11	2.18	0.77
2:B:741:ILE:HG22	2:B:745:GLU:OE2	1.84	0.77
2:B:1139:LEU:CD2	2:B:1198:ILE:CG1	2.61	0.77
2:B:1139:LEU:CD2	2:B:1198:ILE:HG12	2.14	0.77
2:B:2190:LYS:HE3	20:B:5601:ATP:O3G	1.83	0.77
2:B:3261:ILE:HG22	2:B:3306:ILE:CG2	2.13	0.77
3:C:25:THR:HG21	3:C:87:SER:HB2	1.65	0.77
3:C:159:TYR:HB3	3:C:177:LEU:HD11	1.66	0.77
4:D:299:VAL:HG11	4:D:605:GLY:HA3	1.67	0.77
5:E:48:ILE:HB	12:L:88:PHE:CE2	2.19	0.77
6:F:26:PHE:CE1	6:F:49:ALA:CA	2.67	0.77
8:H:66:GLY:N	9:I:56:ILE:HG21	1.99	0.77
14:N:116:ALA:C	15:O:131:PHE:HE1	1.86	0.77
1:A:1140:GLU:OE2	4:D:165:LYS:HE3	1.83	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1531:ILE:HD12	2:B:1595:LEU:CD1	2.13	0.77
3:C:29:VAL:CG1	3:C:95:MET:SD	2.72	0.77
3:C:2690:LEU:CB	3:C:2826:VAL:CG2	2.60	0.77
4:D:640:LYS:HE2	4:D:640:LYS:HA	1.66	0.77
5:E:23:THR:HG22	14:N:88:TYR:HD1	1.48	0.77
1:A:1396:PRO:C	1:A:1400:TYR:CB	2.53	0.77
2:B:1444:LEU:O	2:B:1448:GLU:HG3	1.85	0.77
3:C:2720:PRO:C	3:C:2798:PHE:HZ	1.87	0.77
4:D:553:TYR:HE1	4:D:595:PHE:CZ	2.02	0.77
8:H:88:LEU:O	8:H:88:LEU:HD12	1.82	0.77
1:A:1132:LEU:O	1:A:1272:LEU:CD1	2.29	0.77
2:B:1058:LYS:HG3	2:B:1166:GLU:C	2.04	0.77
2:B:1450:TRP:C	2:B:1454:GLN:HG3	2.05	0.77
2:B:1607:PRO:HB2	2:B:1946:SER:OG	1.83	0.77
2:B:2333:PRO:CB	20:B:5601:ATP:C6	2.66	0.77
2:B:3118:TYR:OH	2:B:3452:LEU:HB2	1.85	0.77
2:B:3133:ILE:HG12	2:B:3440:LEU:HD12	1.64	0.77
3:C:53:PRO:HG2	3:C:81:PRO:HB3	1.65	0.77
1:A:1013:VAL:HG13	1:A:1076:LEU:HD11	1.65	0.77
1:A:1048:TYR:HD1	1:A:1100:LEU:HD12	1.50	0.77
1:A:2872:GLY:HA2	19:A:4901:ADP:O2A	1.85	0.77
2:B:356:GLN:CB	2:B:419:PHE:CE1	2.67	0.77
2:B:581:ASN:OD1	2:B:581:ASN:O	2.01	0.77
2:B:745:GLU:O	2:B:749:LYS:HG3	1.85	0.77
2:B:3118:TYR:HD2	2:B:3455:SER:OG	1.57	0.77
3:C:218:GLY:HA3	3:C:253:LEU:HD21	1.66	0.77
3:C:2725:ALA:O	3:C:2729:LEU:CG	2.31	0.77
5:E:42:GLN:HE22	12:L:91:ASN:ND2	1.82	0.77
10:J:38:GLU:CG	15:O:29:PHE:CZ	2.67	0.77
2:B:578:LEU:H	2:B:578:LEU:HD12	1.48	0.77
2:B:1068:LYS:CB	2:B:1084:LYS:HE2	2.15	0.77
2:B:1455:VAL:HG12	2:B:1456:PHE:N	2.00	0.77
2:B:3119:LYS:NZ	2:B:3119:LYS:HB3	1.99	0.77
3:C:53:PRO:CG	3:C:81:PRO:CB	2.62	0.77
3:C:111:THR:HG21	3:C:187:TRP:CZ3	2.19	0.77
3:C:2745:LYS:HE3	3:C:2749:VAL:HG11	0.84	0.77
14:N:89:GLN:HE21	14:N:94:ASP:CG	1.88	0.77
1:A:552:PHE:HA	1:A:568:ARG:HH12	1.47	0.77
1:A:847:PHE:HZ	1:A:851:LYS:NZ	1.82	0.77
2:B:1058:LYS:HG3	2:B:1166:GLU:O	1.83	0.77
2:B:3230:ALA:HB1	2:B:3342:ASN:CG	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:113:ILE:HD13	3:C:185:PHE:CZ	2.20	0.77
4:D:111:MET:CE	15:O:90:ILE:CB	2.62	0.77
4:D:426:TRP:CZ3	4:D:435:PRO:HB3	2.19	0.77
6:F:48:ILE:HD11	6:F:98:LEU:HD22	1.56	0.77
8:H:12:LYS:HG2	8:H:80:TYR:HE2	1.45	0.77
1:A:1458:MET:SD	1:A:1548:TRP:CD1	2.78	0.77
2:B:581:ASN:ND2	5:E:184:MET:HE3	1.99	0.77
2:B:1604:LYS:O	2:B:1945:GLN:OE1	2.02	0.77
3:C:85:HIS:H	3:C:85:HIS:CD2	2.02	0.77
3:C:3970:LEU:HD23	3:C:3990:LEU:HD21	1.66	0.77
6:F:26:PHE:CD1	6:F:49:ALA:CB	2.67	0.77
1:A:3251:ILE:N	17:Q:60:ASN:H	1.83	0.77
2:B:718:ILE:CD1	2:B:773:VAL:HB	2.12	0.77
2:B:1531:ILE:HG21	2:B:1595:LEU:CD1	2.14	0.77
3:C:180:LEU:HD22	3:C:187:TRP:CE3	2.20	0.77
3:C:2721:GLU:HA	3:C:2798:PHE:CZ	2.20	0.77
4:D:116:ILE:HD11	5:E:43:ARG:NH1	2.00	0.77
4:D:236:MET:CB	7:G:143:PHE:CZ	2.68	0.77
4:D:251:MET:CG	7:G:136:MET:CE	2.63	0.77
1:A:598:ARG:NH1	4:D:546:VAL:HG12	2.00	0.76
1:A:971:ASN:CB	1:A:983:ALA:HA	2.15	0.76
2:B:53:ILE:CB	2:B:90:ALA:HB2	2.16	0.76
3:C:165:GLY:N	3:C:174:PHE:CE2	2.50	0.76
4:D:81:GLN:OE1	15:O:110:TYR:CZ	2.37	0.76
4:D:184:GLY:HA2	11:K:69:TYR:HD1	1.48	0.76
10:J:35:ASP:HB2	15:O:32:SER:HB3	1.65	0.76
1:A:332:PRO:CA	1:A:380:ARG:CB	2.62	0.76
1:A:550:HIS:CB	4:D:654:ASN:O	2.33	0.76
1:A:933:VAL:HG22	1:A:951:ILE:HD11	1.68	0.76
1:A:1031:ILE:HA	1:A:1092:TRP:CH2	2.21	0.76
1:A:1126:VAL:HG22	1:A:1131:SER:OG	1.83	0.76
1:A:3099:TYR:CD1	1:A:3447:VAL:HG12	2.21	0.76
1:A:3236:ILE:HG21	1:A:3333:LEU:N	2.00	0.76
1:A:3257:VAL:CG2	1:A:3266:VAL:HG12	1.90	0.76
2:B:676:SER:O	2:B:679:ARG:HG2	1.84	0.76
2:B:993:TYR:OH	2:B:1067:ILE:HG23	1.84	0.76
3:C:2800:PRO:HA	3:C:2814:CYS:HB3	1.65	0.76
5:E:43:ARG:O	12:L:90:ALA:CB	2.31	0.76
5:E:263:GLU:HB3	5:E:264:PRO:CD	2.12	0.76
1:A:674:LEU:HD12	1:A:675:ILE:HG23	1.65	0.76
1:A:801:ILE:CB	1:A:862:LEU:CD2	2.58	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1139:LEU:HD21	2:B:1198:ILE:HD11	1.68	0.76
2:B:3264:ASN:CG	2:B:3303:GLU:OE1	2.24	0.76
3:C:250:LYS:HG3	3:C:273:VAL:CG1	2.15	0.76
3:C:1014:ILE:HD11	3:C:1037:LEU:HD12	1.67	0.76
5:E:366:HIS:HE1	5:E:394:TRP:HH2	1.32	0.76
11:K:77:PHE:HD1	11:K:90:TYR:CB	1.95	0.76
1:A:723:PHE:CD1	1:A:772:TRP:HZ2	2.01	0.76
2:B:444:LEU:CD1	2:B:527:PHE:CE1	2.56	0.76
2:B:1607:PRO:HB3	2:B:1946:SER:CB	2.06	0.76
2:B:3231:VAL:CG2	2:B:3342:ASN:HB3	2.15	0.76
3:C:2013:GLY:HA2	19:C:4702:ADP:O2A	1.86	0.76
3:C:2735:ASN:HB3	3:C:2757:LEU:CA	2.10	0.76
1:A:53:ILE:HA	1:A:54:PHE:N	2.00	0.76
1:A:806:ILE:HD11	1:A:890:TYR:CD2	2.20	0.76
4:D:238:SER:O	4:D:239:THR:N	2.17	0.76
4:D:248:MET:CE	7:G:147:VAL:CG2	2.62	0.76
4:D:367:LEU:HD21	4:D:371:THR:OG1	1.84	0.76
8:H:57:TRP:CZ3	8:H:88:LEU:HD13	2.19	0.76
14:N:75:GLN:HB3	15:O:93:GLN:HG3	0.81	0.76
1:A:1030:SER:O	1:A:1092:TRP:CZ2	2.38	0.76
1:A:1433:LEU:HD11	1:A:1490:PHE:CD1	2.19	0.76
1:A:1595:LYS:HD2	1:A:1681:GLU:OE1	1.86	0.76
2:B:900:PHE:CZ	2:B:933:TRP:HH2	2.03	0.76
2:B:1395:LEU:HA	2:B:1430:ILE:CD1	2.16	0.76
2:B:1511:VAL:CG2	2:B:1570:VAL:CG1	2.64	0.76
2:B:1610:TYR:CD2	2:B:1942:GLY:HA2	2.20	0.76
2:B:3301:ASN:CB	2:B:3351:LYS:HZ1	1.98	0.76
3:C:379:LYS:HA	3:C:419:GLU:HA	1.66	0.76
3:C:1333:VAL:HG12	3:C:1340:GLN:HE21	1.51	0.76
4:D:177:ASN:ND2	13:M:60:ASN:HB3	1.95	0.76
4:D:247:ILE:HD13	5:E:129:LEU:HD22	1.67	0.76
5:E:50:LEU:HD21	12:L:23:PHE:CB	2.16	0.76
6:F:11:LEU:CD2	6:F:23:TYR:CD1	2.63	0.76
1:A:473:LEU:C	1:A:478:LEU:CB	2.54	0.76
1:A:3120:GLY:HA2	1:A:3696:LEU:HD13	1.67	0.76
1:A:3261:LYS:HG2	1:A:3262:GLU:N	2.01	0.76
2:B:970:ALA:HB2	3:C:345:TRP:CH2	2.19	0.76
2:B:2333:PRO:HB3	20:B:5601:ATP:N1	1.96	0.76
3:C:2727:ILE:HD11	3:C:2745:LYS:CB	2.14	0.76
5:E:46:ASN:C	12:L:88:PHE:CE1	2.59	0.76
6:F:62:VAL:CG2	7:G:106:LEU:HD11	2.10	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:32:ILE:HD11	8:H:81:VAL:HG11	1.67	0.76
14:N:25:PHE:CE1	14:N:103:ILE:HG23	1.87	0.76
1:A:607:ILE:HD11	1:A:655:PHE:HA	1.66	0.76
1:A:801:ILE:HB	1:A:862:LEU:CD2	2.15	0.76
2:B:762:ILE:CG2	2:B:766:ILE:CG1	2.61	0.76
2:B:1566:ASN:HB3	3:C:2275:LYS:HE2	1.66	0.76
3:C:1983:THR:CB	19:C:4702:ADP:HN62	1.96	0.76
4:D:76:GLU:N	15:O:102:LEU:HD21	2.00	0.76
5:E:59:HIS:CD2	10:J:90:HIS:CE1	2.70	0.76
5:E:391:CYS:SG	5:E:427:LEU:CD1	2.74	0.76
5:E:394:TRP:NE1	5:E:401:PRO:HB3	2.00	0.76
6:F:14:LEU:HD21	6:F:23:TYR:CB	1.97	0.76
13:M:7:VAL:HG12	13:M:75:PHE:CB	2.16	0.76
1:A:1041:ASN:HA	1:A:1047:ASN:HD21	1.51	0.76
1:A:3261:LYS:HG3	1:A:3324:LYS:HE3	1.67	0.76
2:B:1465:LYS:HD2	2:B:1561:SER:HA	1.68	0.76
2:B:3445:LYS:CB	2:B:3487:PRO:HB3	2.14	0.76
3:C:217:PHE:CE1	3:C:246:HIS:HB2	2.21	0.76
3:C:2740:ILE:HG21	3:C:2744:LYS:CG	2.14	0.76
1:A:853:VAL:HG11	5:E:206:ASN:CG	2.04	0.76
1:A:1536:LEU:HD12	1:A:1536:LEU:N	2.01	0.76
2:B:1317:LEU:HA	16:P:61:GLU:HA	1.55	0.76
2:B:1467:PHE:HB3	2:B:1470:LEU:CG	2.15	0.76
4:D:80:PRO:CG	15:O:103:TRP:CE2	2.68	0.76
4:D:584:ILE:HG21	4:D:614:VAL:HG21	1.61	0.76
5:E:57:SER:O	10:J:90:HIS:CG	2.39	0.76
5:E:261:HIS:HE1	5:E:283:SER:HB3	1.50	0.76
5:E:355:ILE:HD12	5:E:355:ILE:N	2.01	0.76
1:A:1429:ILE:CG2	1:A:1490:PHE:HZ	1.98	0.75
1:A:1634:ILE:HD13	1:A:1656:ILE:CG2	2.17	0.75
1:A:3232:ILE:CG2	1:A:3316:TRP:HE3	1.98	0.75
1:A:3442:LYS:HD2	1:A:3485:THR:CA	2.16	0.75
3:C:39:LEU:H	3:C:53:PRO:HA	1.51	0.75
4:D:360:ALA:CB	5:E:133:PHE:CZ	2.57	0.75
4:D:543:MET:SD	4:D:563:MET:CG	2.74	0.75
5:E:259:ASN:ND2	5:E:299:GLY:N	2.34	0.75
1:A:872:ASP:OD1	1:A:873:PRO:CD	2.33	0.75
1:A:971:ASN:HB3	1:A:983:ALA:CA	2.14	0.75
1:A:3251:ILE:N	17:Q:60:ASN:N	2.26	0.75
2:B:531:LEU:HD22	2:B:540:LEU:CD1	2.14	0.75
4:D:92:TYR:CD2	13:M:29:LYS:HB2	2.21	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:57:TYR:HA	1:A:103:ASP:HA	1.68	0.75
1:A:119:ILE:O	2:B:107:ASP:O	2.03	0.75
1:A:1026:LEU:HD23	1:A:1026:LEU:O	1.86	0.75
1:A:3237:MET:SD	1:A:3332:ILE:HD13	2.26	0.75
2:B:544:HIS:CE1	2:B:609:LEU:CD1	2.19	0.75
2:B:963:PHE:CE2	3:C:103:THR:C	2.59	0.75
2:B:1237:ARG:NH2	2:B:1262:ASP:CB	2.49	0.75
4:D:75:LEU:H	4:D:75:LEU:CD2	1.99	0.75
4:D:105:MET:CE	14:N:51:ILE:HD12	2.16	0.75
8:H:46:LYS:CE	9:I:86:ASP:HB2	2.03	0.75
12:L:21:ILE:HG21	12:L:24:ASN:HB2	1.68	0.75
2:B:603:ILE:CD1	2:B:626:TYR:CZ	2.70	0.75
2:B:1474:MET:HE2	2:B:1515:VAL:HG12	1.67	0.75
2:B:3164:VAL:HG12	2:B:3409:ALA:HB2	1.67	0.75
4:D:175:THR:OG1	13:M:60:ASN:CA	2.34	0.75
5:E:129:LEU:HD11	6:F:80:ARG:CD	2.16	0.75
6:F:84:SER:CB	6:F:106:ALA:CB	2.65	0.75
14:N:116:ALA:C	15:O:131:PHE:CE1	2.59	0.75
2:B:956:LEU:HD12	2:B:959:ILE:CD1	2.09	0.75
2:B:1329:PRO:CB	2:B:1412:PHE:CB	2.64	0.75
2:B:3264:ASN:HB2	2:B:3306:ILE:HD13	1.67	0.75
3:C:180:LEU:HD23	3:C:187:TRP:CZ2	2.21	0.75
4:D:163:ARG:HD3	12:L:73:GLU:OE2	1.86	0.75
4:D:367:LEU:HG	4:D:371:THR:OG1	1.60	0.75
5:E:384:LEU:CG	5:E:417:TRP:NE1	2.49	0.75
7:G:111:ARG:O	7:G:114:VAL:CG1	2.34	0.75
1:A:1598:LYS:CD	1:A:1681:GLU:OE2	2.35	0.75
1:A:3350:LYS:CB	1:A:3351:PRO:HD3	2.15	0.75
2:B:422:ARG:NH1	2:B:422:ARG:HB2	2.02	0.75
2:B:1160:ILE:HG21	2:B:1180:GLU:OE2	1.85	0.75
2:B:1374:THR:O	2:B:1420:LEU:CB	2.35	0.75
2:B:3301:ASN:HB3	2:B:3351:LYS:NZ	2.01	0.75
3:C:289:ASP:OD2	3:C:317:LYS:HE3	1.86	0.75
1:A:397:ILE:CB	1:A:489:LYS:O	2.33	0.75
1:A:1429:ILE:HG21	1:A:1490:PHE:HZ	1.51	0.75
14:N:73:LEU:O	15:O:95:LEU:HB2	1.86	0.75
1:A:5:LYS:CB	1:A:48:GLU:HA	2.17	0.75
1:A:763:LEU:HD22	1:A:780:TYR:OH	1.86	0.75
1:A:1013:VAL:O	1:A:1016:PHE:CD1	2.40	0.75
1:A:1511:TRP:CA	1:A:1574:LEU:HD13	2.17	0.75
1:A:3236:ILE:CA	1:A:3333:LEU:HD21	2.03	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:731:PRO:O	2:B:735:PRO:CD	2.34	0.75
2:B:1610:TYR:CD2	2:B:1942:GLY:CA	2.70	0.75
2:B:3238:HIS:CE1	2:B:3335:LYS:CG	2.63	0.75
3:C:10:LEU:HD23	3:C:65:ASN:C	2.06	0.75
3:C:176:ASP:CG	3:C:189:ARG:HH11	1.90	0.75
4:D:80:PRO:HG2	15:O:103:TRP:HZ2	1.52	0.75
4:D:517:ILE:CD1	4:D:527:ILE:HG12	2.14	0.75
7:G:114:VAL:HG11	7:G:123:LEU:HG	1.68	0.75
8:H:60:ILE:HG12	9:I:85:TYR:CG	2.21	0.75
9:I:81:GLU:OE1	9:I:102:ASN:HB2	1.86	0.75
10:J:32:CYS:SG	10:J:96:ILE:CG1	2.75	0.75
16:P:16:GLU:CA	16:P:74:LEU:CB	2.64	0.75
1:A:889:TYR:OH	7:G:16:ILE:CB	2.34	0.75
1:A:1458:MET:CE	1:A:1518:TRP:CZ2	2.70	0.75
2:B:881:HIS:NE2	2:B:885:GLN:NE2	2.35	0.75
3:C:261:ILE:CG1	3:C:360:PRO:CB	2.54	0.75
3:C:2800:PRO:CG	3:C:2818:VAL:HG21	2.17	0.75
4:D:91:TYR:HB2	13:M:28:VAL:CG1	2.17	0.75
14:N:72:ILE:CA	15:O:97:ILE:HG12	2.17	0.75
1:A:15:THR:CB	2:B:19:SER:HA	2.16	0.74
1:A:939:GLY:O	1:A:940:ASP:HB2	1.87	0.74
2:B:501:ARG:NH1	4:D:491:GLN:CG	2.45	0.74
3:C:2711:SER:HB3	3:C:2751:TRP:CE2	2.16	0.74
6:F:19:GLY:O	6:F:101:GLN:CA	2.35	0.74
6:F:19:GLY:O	6:F:101:GLN:HA	1.86	0.74
1:A:1458:MET:CE	1:A:1548:TRP:CD1	2.70	0.74
1:A:3298:ILE:CA	1:A:3343:HIS:CE1	2.67	0.74
2:B:545:ILE:HD11	2:B:616:ARG:NH1	2.01	0.74
2:B:1559:MET:HG2	2:B:1577:ARG:HH22	1.51	0.74
4:D:94:ARG:NH2	13:M:78:ASN:ND2	2.35	0.74
5:E:517:LYS:HB3	5:E:517:LYS:HZ2	1.51	0.74
2:B:762:ILE:HG23	2:B:766:ILE:HG13	1.69	0.74
3:C:163:GLY:HA2	3:C:174:PHE:HD2	1.52	0.74
5:E:61:VAL:HG21	10:J:106:LEU:CD2	2.13	0.74
8:H:16:MET:SD	8:H:77:ILE:HB	2.27	0.74
1:A:1020:PHE:CE1	1:A:1069:TYR:CZ	2.75	0.74
2:B:797:PHE:CE1	2:B:871:ILE:HD13	2.22	0.74
2:B:966:LYS:HE2	3:C:84:TYR:OH	1.87	0.74
4:D:174:GLN:HE22	12:L:50:GLU:N	1.86	0.74
1:A:935:VAL:HG12	1:A:1081:ILE:HD12	1.69	0.74
1:A:1560:LYS:HB2	1:A:1563:PRO:HG2	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3229:PRO:CB	1:A:3233:ILE:HG21	2.17	0.74
2:B:938:PHE:CD2	2:B:956:LEU:HD11	2.22	0.74
2:B:1447:ILE:HD11	2:B:1484:LEU:CB	2.18	0.74
2:B:1511:VAL:CG2	2:B:1570:VAL:HG11	2.17	0.74
4:D:66:LEU:HD22	4:D:66:LEU:N	2.03	0.74
4:D:115:TYR:HH	14:N:78:HIS:CD2	1.93	0.74
4:D:567:GLN:CD	4:D:578:LYS:CD	2.55	0.74
1:A:246:TRP:CB	1:A:317:LEU:CB	2.65	0.74
1:A:1637:VAL:CG1	1:A:1653:ILE:HG23	2.18	0.74
1:A:3212:VAL:HG23	1:A:3338:ALA:HB3	1.69	0.74
1:A:3298:ILE:HA	1:A:3343:HIS:CE1	2.23	0.74
2:B:679:ARG:CA	5:E:186:PHE:HZ	2.01	0.74
2:B:871:ILE:CG1	2:B:944:ILE:CD1	2.47	0.74
3:C:2746:PRO:HD2	3:C:2747:LYS:N	1.95	0.74
4:D:294:GLN:NE2	4:D:294:GLN:HA	2.02	0.74
7:G:137:VAL:HG22	7:G:146:ILE:HG12	1.70	0.74
9:I:27:SER:HB2	9:I:96:PHE:HB3	1.69	0.74
2:B:410:ASN:O	2:B:414:VAL:CG2	2.35	0.74
3:C:214:LEU:HD12	3:C:232:TYR:O	1.86	0.74
3:C:2730:LEU:HD23	3:C:2738:ILE:CD1	2.17	0.74
4:D:106:ILE:CG1	15:O:99:SER:O	2.36	0.74
4:D:351:MET:HA	4:D:351:MET:CE	2.17	0.74
5:E:334:LEU:HD22	5:E:375:ARG:HH21	1.52	0.74
10:J:77:HIS:CE1	11:K:70:VAL:HG22	2.23	0.74
1:A:704:ARG:HD2	4:D:478:GLU:HG2	1.70	0.74
1:A:1133:GLY:N	1:A:1272:LEU:HD11	2.01	0.74
3:C:29:VAL:HG11	3:C:95:MET:SD	2.27	0.74
3:C:180:LEU:CD2	3:C:187:TRP:CH2	2.71	0.74
3:C:180:LEU:CD2	3:C:187:TRP:CZ3	2.70	0.74
5:E:110:LYS:HA	6:F:10:GLN:HG2	1.69	0.74
14:N:115:MET:CE	15:O:129:CYS:SG	2.76	0.74
1:A:852:ASN:ND2	1:A:969:LEU:HA	2.03	0.74
1:A:1066:VAL:CG1	1:A:1068:THR:O	2.36	0.74
2:B:660:LEU:CB	2:B:755:ILE:HD12	2.14	0.74
2:B:667:ASP:H	2:B:726:LYS:HE3	1.50	0.74
2:B:957:GLN:OE1	3:C:164:HIS:CE1	2.40	0.74
3:C:2708:GLN:CD	3:C:2813:ILE:CD1	2.57	0.74
3:C:2711:SER:O	3:C:2751:TRP:CZ2	2.37	0.74
4:D:89:TYR:CE2	11:K:56:PRO:HD3	2.23	0.74
10:J:74:PRO:HD3	12:L:102:ARG:CZ	2.18	0.74
2:B:410:ASN:O	2:B:414:VAL:HG23	1.86	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:583:PRO:CB	2:B:683:GLU:HG2	2.17	0.74
2:B:794:LEU:C	2:B:797:PHE:CD2	2.61	0.74
2:B:957:GLN:CD	3:C:164:HIS:NE2	2.40	0.74
2:B:1080:LEU:HD12	2:B:1080:LEU:N	2.03	0.74
4:D:243:ARG:HG3	5:E:131:GLU:OE2	1.88	0.74
1:A:751:LEU:O	1:A:751:LEU:HD23	1.88	0.73
2:B:425:ASP:O	2:B:489:PHE:CZ	2.41	0.73
2:B:660:LEU:CG	2:B:755:ILE:CD1	2.66	0.73
2:B:1488:LYS:CB	2:B:1501:VAL:CB	2.65	0.73
3:C:96:LEU:HD12	3:C:96:LEU:O	1.88	0.73
3:C:2927:ASP:HB3	3:C:2974:ILE:HG21	1.70	0.73
4:D:241:PHE:CZ	7:G:78:ILE:HD12	2.19	0.73
4:D:297:LYS:CE	4:D:316:LEU:HD23	2.02	0.73
5:E:99:ILE:HD12	6:F:31:ILE:CD1	2.17	0.73
5:E:100:GLU:OE1	6:F:34:LYS:NZ	2.15	0.73
5:E:282:THR:HG22	5:E:288:VAL:HG22	1.68	0.73
1:A:3141:GLU:O	1:A:3145:LEU:HG	1.87	0.73
2:B:589:LEU:CD1	2:B:687:PHE:CZ	2.71	0.73
2:B:1002:GLN:HA	2:B:1094:TRP:CE2	2.23	0.73
3:C:220:TRP:HB2	3:C:251:TRP:HB2	1.69	0.73
6:F:19:GLY:O	6:F:101:GLN:CB	2.37	0.73
12:L:16:LEU:HD12	12:L:17:PRO:HD2	0.87	0.73
1:A:1066:VAL:HB	1:A:1069:TYR:CZ	2.23	0.73
2:B:1116:PHE:CA	2:B:1119:LYS:NZ	2.52	0.73
2:B:3067:ILE:HD11	2:B:3119:LYS:HD2	1.68	0.73
2:B:3342:ASN:O	2:B:3346:PHE:HB2	1.88	0.73
3:C:2740:ILE:CD1	3:C:2744:LYS:HD3	2.17	0.73
5:E:45:PRO:HA	12:L:89:ASP:HA	1.68	0.73
5:E:59:HIS:HD2	10:J:90:HIS:NE2	1.85	0.73
5:E:355:ILE:HD12	5:E:355:ILE:H	1.53	0.73
5:E:394:TRP:NE1	5:E:401:PRO:CA	2.51	0.73
1:A:997:LYS:HD3	18:R:149:LEU:HA	0.74	0.73
1:A:1416:ILE:O	1:A:1420:THR:HG23	1.88	0.73
1:A:1433:LEU:HD21	1:A:1481:PHE:HD2	1.54	0.73
2:B:356:GLN:CB	2:B:419:PHE:CZ	2.71	0.73
2:B:1511:VAL:HA	2:B:1570:VAL:HG13	1.70	0.73
2:B:1511:VAL:HG23	2:B:1570:VAL:HG11	1.70	0.73
3:C:159:TYR:CD1	3:C:179:VAL:HG21	2.23	0.73
3:C:2581:LEU:HD12	3:C:2936:SER:HB2	1.69	0.73
5:E:42:GLN:NE2	12:L:91:ASN:HD21	1.86	0.73
5:E:55:GLU:OE1	10:J:92:LYS:HD3	1.88	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1031:ILE:HG22	1:A:1031:ILE:O	1.88	0.73
2:B:1566:ASN:HB3	3:C:2275:LYS:HE3	1.68	0.73
2:B:3301:ASN:CG	2:B:3351:LYS:NZ	2.32	0.73
2:B:3301:ASN:HD21	2:B:3351:LYS:HG2	1.54	0.73
5:E:72:GLY:HA3	8:H:68:PHE:CD2	2.23	0.73
1:A:1450:TRP:CD1	1:A:1518:TRP:CZ3	2.77	0.73
1:A:1632:ASP:CB	1:A:1892:PHE:CE1	2.63	0.73
2:B:409:SER:C	2:B:413:PHE:HB2	2.09	0.73
2:B:2188:SER:O	20:B:5601:ATP:O3A	2.06	0.73
1:A:8:LYS:CB	1:A:109:SER:CB	2.66	0.73
1:A:594:PRO:HB3	1:A:609:TRP:CZ3	2.24	0.73
1:A:598:ARG:HB2	4:D:504:TYR:HE1	1.52	0.73
1:A:3257:VAL:CB	1:A:3266:VAL:CG1	2.35	0.73
2:B:3143:LEU:CD2	2:B:3698:LEU:CD1	2.67	0.73
3:C:159:TYR:HD1	3:C:179:VAL:HG22	1.36	0.73
3:C:265:LYS:CE	3:C:356:THR:CG2	2.42	0.73
4:D:175:THR:OG1	13:M:60:ASN:C	2.27	0.73
4:D:501:LEU:HB2	4:D:522:ASP:HB2	1.69	0.73
1:A:1007:GLN:HA	1:A:1010:LYS:HE2	1.70	0.73
1:A:3042:PHE:CE2	1:A:3100:LYS:HE2	2.22	0.73
5:E:110:LYS:O	5:E:114:GLU:HG3	1.88	0.73
8:H:66:GLY:HA2	9:I:56:ILE:CG2	2.13	0.73
10:J:48:LEU:HD12	10:J:100:ILE:CD1	2.18	0.73
1:A:1638:THR:HG21	1:A:1655:GLN:HE21	0.61	0.73
1:A:3046:PHE:HE2	1:A:3104:ILE:HD11	1.52	0.73
2:B:59:THR:O	2:B:81:ILE:CA	2.36	0.73
2:B:532:THR:CG2	2:B:536:ILE:HG13	2.13	0.73
2:B:3125:LYS:HE2	2:B:3447:MET:HB3	1.71	0.73
4:D:526:ARG:HB2	4:D:528:TRP:CZ2	2.24	0.73
6:F:19:GLY:HA2	6:F:107:ILE:HD11	1.71	0.73
2:B:603:ILE:HD12	2:B:626:TYR:CZ	2.24	0.73
2:B:715:LEU:O	2:B:719:VAL:HG23	1.89	0.73
2:B:963:PHE:CE2	3:C:103:THR:CA	2.72	0.73
2:B:1444:LEU:HD21	2:B:1501:VAL:HG22	1.69	0.73
2:B:1467:PHE:CD2	2:B:1560:MET:SD	2.82	0.73
3:C:2726:THR:HA	3:C:2729:LEU:HD12	0.73	0.73
4:D:75:LEU:HD12	15:O:102:LEU:CD1	2.18	0.73
15:O:90:ILE:HD12	15:O:90:ILE:O	1.89	0.73
1:A:635:ARG:HA	1:A:638:TYR:CD2	2.24	0.72
1:A:899:LEU:CD1	1:A:992:ASP:OD2	2.35	0.72
1:A:935:VAL:CG2	1:A:944:LEU:HD21	2.01	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:521:PHE:CE2	2:B:605:LYS:HB3	2.24	0.72
2:B:725:ILE:HG23	2:B:780:VAL:HG21	1.69	0.72
2:B:1567:PRO:HD3	3:C:2275:LYS:HE3	1.71	0.72
3:C:2726:THR:CA	3:C:2729:LEU:HD11	2.14	0.72
4:D:367:LEU:CD1	4:D:368:TYR:O	2.36	0.72
12:L:21:ILE:HD13	12:L:96:PHE:HB3	1.68	0.72
14:N:115:MET:HE2	15:O:129:CYS:CB	2.19	0.72
1:A:1596:ARG:HG2	1:A:1603:TYR:CE2	2.23	0.72
2:B:603:ILE:CD1	2:B:626:TYR:CE1	2.72	0.72
2:B:861:ASP:HB3	3:C:170:GLN:CA	2.19	0.72
2:B:1119:LYS:CB	2:B:1138:LYS:NZ	2.50	0.72
2:B:1456:PHE:CD1	2:B:1456:PHE:O	2.42	0.72
3:C:214:LEU:H	3:C:214:LEU:HD13	1.54	0.72
3:C:2794:ASN:N	3:C:2796:PRO:HD3	2.05	0.72
4:D:216:HIS:HA	4:D:217:GLN:N	2.04	0.72
4:D:294:GLN:CD	4:D:297:LYS:HE2	2.04	0.72
6:F:26:PHE:CE1	6:F:49:ALA:HB2	2.24	0.72
8:H:62:GLY:HA3	9:I:82:GLY:O	1.89	0.72
14:N:116:ALA:O	15:O:131:PHE:CE1	2.41	0.72
1:A:853:VAL:HB	5:E:206:ASN:HD21	0.79	0.72
1:A:854:GLU:CG	5:E:205:PRO:HG2	2.19	0.72
1:A:1130:ASP:HB3	1:A:1265:ILE:CB	2.19	0.72
2:B:583:PRO:HB2	2:B:586:ALA:HB3	1.72	0.72
2:B:871:ILE:HD11	2:B:944:ILE:HD11	1.71	0.72
3:C:360:PRO:HG2	3:C:361:PRO:CD	2.18	0.72
3:C:2606:GLY:HA3	3:C:2910:TRP:CZ3	2.25	0.72
5:E:50:LEU:HD13	12:L:95:PHE:HB2	1.69	0.72
1:A:63:ALA:O	1:A:95:PHE:CB	2.37	0.72
1:A:597:VAL:HB	1:A:600:MET:CG	2.17	0.72
1:A:730:LEU:HD21	1:A:781:LEU:CD2	2.17	0.72
1:A:737:TYR:CD1	1:A:759:LEU:CD2	2.72	0.72
1:A:936:GLN:CA	1:A:1081:ILE:HG13	2.11	0.72
1:A:1126:VAL:CG1	1:A:1201:TYR:OH	2.37	0.72
1:A:1427:LEU:O	1:A:1431:THR:HG23	1.88	0.72
1:A:1487:VAL:HG23	1:A:1490:PHE:HE1	1.51	0.72
1:A:1634:ILE:HD13	1:A:1656:ILE:HG23	1.71	0.72
2:B:575:ASN:HB2	5:E:481:GLN:NE2	2.04	0.72
2:B:1116:PHE:HA	2:B:1119:LYS:HZ2	1.51	0.72
2:B:1567:PRO:HD2	3:C:2275:LYS:CE	2.20	0.72
2:B:3454:ALA:HB2	2:B:3497:ILE:HG21	1.71	0.72
3:C:143:PRO:HG3	3:C:187:TRP:CZ2	2.24	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:90:ASP:OD1	13:M:32:LYS:CB	2.38	0.72
4:D:109:PHE:CE2	15:O:121:TYR:CE2	2.76	0.72
9:I:90:GLN:HB2	9:I:93:THR:HG21	1.71	0.72
1:A:97:ARG:O	1:A:121:GLY:HA2	1.90	0.72
2:B:433:ILE:CB	2:B:463:PHE:HZ	2.01	0.72
2:B:3300:GLU:CD	2:B:3354:LYS:NZ	2.42	0.72
3:C:2711:SER:CB	3:C:2751:TRP:CH2	2.68	0.72
7:G:58:SER:O	7:G:62:ASP:HB3	1.87	0.72
8:H:13:ASN:O	8:H:78:TYR:HB3	1.89	0.72
12:L:93:LEU:HD13	12:L:108:PHE:HB3	1.71	0.72
13:M:14:GLU:OE1	13:M:14:GLU:N	2.20	0.72
1:A:1066:VAL:HG12	1:A:1068:THR:O	1.89	0.72
1:A:1111:LEU:O	1:A:1115:THR:HG23	1.89	0.72
2:B:886:ILE:HD13	2:B:972:ILE:HG23	1.72	0.72
3:C:200:ARG:HB2	3:C:219:GLY:HA3	1.71	0.72
3:C:2366:LYS:HE2	19:C:4703:ADP:O3B	1.88	0.72
4:D:473:LEU:HD23	4:D:483:LYS:HA	1.71	0.72
6:F:28:GLU:N	6:F:28:GLU:OE1	2.18	0.72
1:A:1482:ASN:HA	1:A:1487:VAL:HG11	1.70	0.72
1:A:3222:GLU:HB3	1:A:3328:ALA:CB	2.17	0.72
3:C:53:PRO:CG	3:C:81:PRO:HB3	2.20	0.72
3:C:293:VAL:HG21	3:C:304:ILE:HD12	1.70	0.72
3:C:2581:LEU:CD1	3:C:2937:TYR:CE2	2.73	0.72
4:D:386:TYR:CE1	5:E:142:VAL:CG1	2.72	0.72
4:D:514:ARG:HB2	4:D:530:SER:HB2	1.71	0.72
6:F:81:THR:HB	7:G:121:ASN:OD1	1.89	0.72
10:J:61:ALA:CA	10:J:80:PHE:CE2	2.69	0.72
13:M:2:ASN:HD21	13:M:77:ILE:HD11	1.53	0.72
1:A:1263:TYR:CD2	1:A:1283:LEU:CB	2.73	0.72
1:A:1433:LEU:CD1	1:A:1490:PHE:CE1	2.72	0.72
2:B:726:LYS:O	2:B:726:LYS:HD3	1.90	0.72
2:B:1129:ALA:HA	2:B:1132:GLU:CD	2.09	0.72
2:B:1208:LYS:HA	2:B:1208:LYS:CE	2.20	0.72
3:C:5:LEU:HD12	3:C:355:SER:H	1.54	0.72
5:E:26:ARG:O	14:N:85:ILE:HG22	1.90	0.72
1:A:3306:LEU:HD13	1:A:3310:LEU:HG	1.71	0.72
2:B:81:ILE:C	2:B:110:VAL:HA	2.09	0.72
2:B:501:ARG:NH2	4:D:491:GLN:CD	2.43	0.72
5:E:15:ASN:C	15:O:132:GLU:HG2	2.10	0.72
5:E:117:GLU:HG3	6:F:17:LEU:HD11	0.72	0.72
9:I:35:LEU:HD22	9:I:95:LEU:HD13	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:89:LEU:HD12	11:K:89:LEU:O	1.90	0.72
1:A:818:LEU:HA	1:A:844:LYS:HE3	1.71	0.72
1:A:3257:VAL:HG13	1:A:3266:VAL:HA	1.72	0.72
2:B:682:LYS:HZ2	5:E:186:PHE:HE1	1.27	0.72
2:B:3231:VAL:O	2:B:3339:TRP:HD1	1.73	0.72
3:C:111:THR:HG21	3:C:187:TRP:HZ3	1.54	0.72
3:C:217:PHE:CZ	3:C:246:HIS:HB2	2.25	0.72
3:C:2721:GLU:CA	3:C:2798:PHE:CZ	2.73	0.72
4:D:110:SER:CB	15:O:96:ARG:HG3	2.20	0.72
4:D:254:GLN:OE1	5:E:126:ILE:HD11	1.90	0.72
5:E:100:GLU:CA	5:E:105:PHE:HD2	2.03	0.72
5:E:446:ILE:HD12	5:E:446:ILE:N	2.01	0.72
8:H:79:LEU:HD12	8:H:79:LEU:O	1.89	0.72
9:I:24:ILE:HD13	9:I:98:PHE:HE1	1.53	0.72
1:A:761:LEU:HD13	1:A:761:LEU:O	1.90	0.71
2:B:3257:ARG:NH2	2:B:3273:ASP:OD1	2.23	0.71
6:F:21:ASN:ND2	6:F:102:LEU:HD11	2.05	0.71
14:N:86:THR:OG1	15:O:83:VAL:CG1	2.37	0.71
15:O:22:LEU:HD11	15:O:23:ASN:CG	2.10	0.71
1:A:601:PRO:CB	1:A:698:GLU:CD	2.53	0.71
1:A:1511:TRP:HA	1:A:1574:LEU:CD1	2.19	0.71
2:B:446:GLY:HA2	5:E:512:GLU:OE2	1.89	0.71
2:B:501:ARG:CZ	4:D:491:GLN:CD	2.53	0.71
2:B:679:ARG:CA	5:E:186:PHE:CZ	2.73	0.71
2:B:713:VAL:HG11	5:E:258:GLU:CB	2.18	0.71
2:B:963:PHE:CD2	3:C:104:SER:N	2.58	0.71
2:B:3301:ASN:ND2	2:B:3351:LYS:HG2	2.05	0.71
3:C:106:LEU:N	3:C:106:LEU:HD12	2.04	0.71
3:C:2673:VAL:HA	3:C:2841:THR:HG22	1.70	0.71
4:D:66:LEU:HD11	4:D:73:LYS:HE2	1.71	0.71
4:D:70:MET:CE	5:E:13:GLU:CB	2.68	0.71
4:D:260:LYS:HB3	4:D:287:TRP:CZ2	2.25	0.71
4:D:269:SER:HB2	4:D:618:PRO:HD3	1.71	0.71
8:H:58:HIS:HD2	9:I:87:VAL:CG1	2.00	0.71
15:O:45:ARG:HG3	15:O:63:LEU:CD1	2.20	0.71
1:A:1609:THR:HG21	1:A:1629:LYS:HE3	1.72	0.71
2:B:789:LYS:HE3	2:B:839:LEU:HD21	1.71	0.71
2:B:799:VAL:CG1	2:B:800:LYS:N	2.52	0.71
2:B:1511:VAL:CA	2:B:1570:VAL:HG22	1.95	0.71
2:B:3301:ASN:CB	2:B:3351:LYS:NZ	2.53	0.71
5:E:75:HIS:CE1	8:H:85:ALA:HB2	2.26	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:394:TRP:NE1	5:E:401:PRO:CB	2.54	0.71
5:E:446:ILE:H	5:E:446:ILE:CD1	1.99	0.71
9:I:78:ILE:HD12	9:I:78:ILE:O	1.91	0.71
16:P:10:THR:CB	16:P:66:ILE:O	2.39	0.71
1:A:804:ASN:HD22	5:E:148:LYS:CB	2.01	0.71
1:A:944:LEU:HD11	1:A:1013:VAL:HG11	1.69	0.71
1:A:1012:LYS:NZ	1:A:1071:ILE:HB	2.05	0.71
1:A:3215:ILE:HG23	1:A:3219:ASP:CG	2.11	0.71
1:A:3583:ILE:HG22	1:A:3627:CYS:HA	1.71	0.71
2:B:718:ILE:HD12	2:B:773:VAL:HG11	1.71	0.71
2:B:861:ASP:HB3	3:C:170:GLN:N	2.04	0.71
2:B:969:LEU:HD13	3:C:341:TRP:HZ2	1.56	0.71
3:C:2365:GLY:HA2	19:C:4703:ADP:C3'	2.21	0.71
3:C:2676:GLN:CB	3:C:2837:LEU:O	2.37	0.71
3:C:2698:LEU:CD2	3:C:2768:LEU:HB3	2.19	0.71
4:D:198:ASN:HB3	8:H:39:LYS:HE3	1.72	0.71
5:E:20:PHE:HZ	15:O:80:LYS:HG3	0.90	0.71
12:L:59:LYS:HB2	12:L:59:LYS:NZ	2.06	0.71
1:A:891:PHE:CZ	1:A:985:PHE:CZ	2.78	0.71
1:A:1504:VAL:CG1	1:A:1565:CYS:SG	2.78	0.71
3:C:256:ILE:HB	3:C:326:ILE:HG23	1.72	0.71
10:J:61:ALA:CB	10:J:80:PHE:CZ	2.56	0.71
1:A:841:ILE:O	1:A:845:THR:HG23	1.89	0.71
2:B:409:SER:CA	2:B:413:PHE:CD1	2.48	0.71
2:B:984:ASN:HA	2:B:987:ARG:HG2	1.71	0.71
2:B:1607:PRO:HB2	2:B:1946:SER:CB	2.19	0.71
2:B:3252:VAL:HG22	2:B:3333:ALA:HB2	1.72	0.71
3:C:346:LEU:O	3:C:346:LEU:HD22	1.88	0.71
4:D:170:THR:HG21	13:M:66:ILE:HG12	0.71	0.71
4:D:429:MET:HB2	4:D:432:LYS:O	1.90	0.71
4:D:535:GLN:N	4:D:535:GLN:OE1	2.24	0.71
8:H:28:ALA:HB1	8:H:86:ILE:CD1	2.20	0.71
14:N:85:ILE:HG21	14:N:98:ILE:HD12	1.54	0.71
1:A:1623:ILE:HD11	1:A:1680:ILE:CD1	2.17	0.71
1:A:3110:LEU:CD1	1:A:3443:LEU:HD22	2.14	0.71
2:B:575:ASN:CA	5:E:481:GLN:NE2	2.52	0.71
2:B:744:MET:SD	2:B:772:ILE:HG12	2.28	0.71
2:B:797:PHE:CZ	2:B:871:ILE:HD13	2.26	0.71
2:B:3118:TYR:CE2	2:B:3452:LEU:CB	2.74	0.71
2:B:3248:PRO:HB2	2:B:3253:ILE:HD11	1.73	0.71
5:E:19:ASN:O	14:N:90:ASP:OD2	2.09	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:366:HIS:CE1	5:E:394:TRP:HH2	2.09	0.71
5:E:394:TRP:CD1	5:E:401:PRO:N	2.59	0.71
10:J:48:LEU:HD23	10:J:60:ILE:CD1	2.20	0.71
13:M:57:VAL:HG22	13:M:82:LEU:HG	1.72	0.71
1:A:1143:ARG:CD	4:D:169:ASN:ND2	2.47	0.71
2:B:444:LEU:C	5:E:515:LYS:CG	2.46	0.71
2:B:575:ASN:H	5:E:481:GLN:NE2	1.82	0.71
2:B:729:LEU:HD13	2:B:780:VAL:HG22	1.73	0.71
2:B:1378:LEU:HA	2:B:1424:GLU:HG2	1.72	0.71
2:B:3150:VAL:CG1	2:B:3423:VAL:HG22	2.14	0.71
2:B:3303:GLU:OE1	2:B:3306:ILE:CD1	2.39	0.71
3:C:233:ASP:OD1	3:C:235:GLU:O	2.09	0.71
3:C:2581:LEU:CD1	3:C:2936:SER:CB	2.68	0.71
4:D:424:MET:SD	4:D:437:GLU:HG2	2.31	0.71
10:J:48:LEU:HD22	10:J:53:ILE:HG13	1.72	0.71
10:J:87:GLN:OE1	11:K:44:SER:HB3	1.89	0.71
11:K:30:LYS:C	11:K:30:LYS:HD3	2.11	0.71
12:L:77:ILE:HG23	13:M:63:SER:CB	2.20	0.71
1:A:888:ARG:HH22	7:G:5:THR:CB	2.04	0.71
1:A:1444:GLN:HA	1:A:1561:VAL:N	2.06	0.71
2:B:467:VAL:C	2:B:471:THR:HG1	1.83	0.71
3:C:2606:GLY:CA	3:C:2910:TRP:HZ3	2.04	0.71
4:D:91:TYR:CE1	13:M:80:LEU:HD12	2.25	0.71
6:F:84:SER:HB3	6:F:106:ALA:CB	2.17	0.71
1:A:906:LEU:CD1	1:A:998:VAL:HG21	2.21	0.71
1:A:942:VAL:HG21	1:A:1021:THR:CG2	2.21	0.71
1:A:1126:VAL:HA	1:A:1131:SER:HG	1.50	0.71
2:B:1467:PHE:HB2	2:B:1470:LEU:HD11	1.69	0.71
2:B:3342:ASN:O	2:B:3346:PHE:N	2.22	0.71
3:C:53:PRO:CG	3:C:81:PRO:HB2	2.21	0.71
3:C:244:ILE:HG12	3:C:299:LEU:O	1.90	0.71
5:E:259:ASN:ND2	5:E:298:ALA:C	2.44	0.71
5:E:384:LEU:HD23	5:E:417:TRP:CZ2	2.26	0.71
1:A:806:ILE:CD1	1:A:890:TYR:CD2	2.75	0.70
2:B:477:ILE:O	2:B:477:ILE:HG22	1.91	0.70
2:B:888:PRO:C	2:B:891:ILE:HG22	2.11	0.70
2:B:957:GLN:CG	3:C:164:HIS:NE2	2.53	0.70
2:B:963:PHE:HE2	3:C:103:THR:C	1.90	0.70
5:E:50:LEU:CD1	12:L:95:PHE:CB	2.64	0.70
5:E:58:GLU:HB3	10:J:89:VAL:HA	1.71	0.70
5:E:272:MET:SD	5:E:326:VAL:HG22	2.30	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:10:SER:HB2	14:N:97:LEU:HD11	1.73	0.70
14:N:72:ILE:HG12	15:O:97:ILE:CG1	2.20	0.70
1:A:852:ASN:HD22	1:A:969:LEU:HA	1.55	0.70
1:A:3251:ILE:HG13	17:Q:82:ASN:HA	0.82	0.70
1:A:3306:LEU:HD22	1:A:3309:TYR:HB2	1.73	0.70
2:B:655:LYS:HA	2:B:677:LEU:HD11	1.71	0.70
2:B:904:LEU:HD11	2:B:911:ILE:HG22	1.71	0.70
2:B:3238:HIS:ND1	2:B:3335:LYS:CG	2.51	0.70
3:C:360:PRO:CD	3:C:361:PRO:HD2	2.22	0.70
4:D:180:ILE:O	4:D:180:ILE:HD12	1.91	0.70
4:D:201:GLN:OE1	9:I:102:ASN:HB3	1.89	0.70
4:D:201:GLN:HE22	9:I:102:ASN:CB	2.03	0.70
5:E:82:GLY:CA	8:H:12:LYS:NZ	2.51	0.70
1:A:700:LYS:CE	1:A:720:GLU:OE1	2.30	0.70
1:A:2418:ILE:HG22	1:A:2419:PRO:HD2	1.72	0.70
1:A:3293:PHE:HE1	1:A:3335:TRP:CH2	2.04	0.70
2:B:673:PHE:CZ	2:B:677:LEU:CB	2.74	0.70
2:B:864:ASN:HB3	2:B:947:LEU:HG	1.21	0.70
2:B:883:ASN:HA	2:B:886:ILE:HG22	1.73	0.70
2:B:1058:LYS:HB2	2:B:1166:GLU:HB3	1.68	0.70
2:B:2192:CYS:SG	20:B:5601:ATP:H8	2.12	0.70
3:C:2701:ILE:HD12	3:C:2704:LYS:HE3	1.72	0.70
4:D:201:GLN:HE22	9:I:102:ASN:CA	2.03	0.70
5:E:20:PHE:HA	14:N:90:ASP:CG	2.10	0.70
5:E:20:PHE:CA	14:N:90:ASP:OD1	2.35	0.70
5:E:363:GLN:HG2	5:E:363:GLN:O	1.91	0.70
14:N:85:ILE:HB	14:N:98:ILE:CD1	2.14	0.70
1:A:1443:MET:HG3	1:A:1561:VAL:HG21	1.73	0.70
1:A:1521:LEU:O	1:A:1541:PHE:CE2	2.45	0.70
1:A:3223:LEU:CD1	1:A:3332:ILE:CG1	2.47	0.70
2:B:882:LEU:C	2:B:886:ILE:HG22	2.11	0.70
2:B:899:LEU:CD1	2:B:900:PHE:N	2.52	0.70
2:B:1439:LYS:O	2:B:1443:LYS:HG3	1.91	0.70
3:C:2589:LEU:CB	3:C:2928:VAL:HG11	2.22	0.70
8:H:11:ILE:HA	8:H:79:LEU:HA	1.73	0.70
12:L:77:ILE:HA	13:M:63:SER:HB2	1.72	0.70
1:A:3212:VAL:HG21	1:A:3339:ILE:HG13	1.73	0.70
3:C:2701:ILE:HG13	3:C:2704:LYS:HB2	1.73	0.70
4:D:172:GLU:HB3	13:M:64:HIS:CG	2.25	0.70
4:D:367:LEU:CD1	4:D:371:THR:HG1	1.95	0.70
5:E:100:GLU:HA	5:E:105:PHE:CB	2.22	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:261:HIS:HB3	5:E:289:MET:SD	2.31	0.70
1:A:730:LEU:CD2	1:A:781:LEU:CD2	2.70	0.70
1:A:1450:TRP:CZ2	1:A:1519:THR:HG23	2.27	0.70
1:A:3230:LEU:N	1:A:3233:ILE:CG2	2.54	0.70
1:A:3251:ILE:HG12	17:Q:62:ILE:N	2.07	0.70
2:B:57:ASN:CA	2:B:71:CYS:CB	2.69	0.70
2:B:1566:ASN:OD1	3:C:2275:LYS:HD3	1.92	0.70
3:C:195:ASN:C	3:C:239:TRP:CZ2	2.65	0.70
3:C:221:SER:O	3:C:282:ARG:NH2	2.24	0.70
3:C:2014:CYS:SG	3:C:2015:GLY:N	2.64	0.70
3:C:2708:GLN:HE21	3:C:2809:ALA:C	1.95	0.70
3:C:2800:PRO:CD	3:C:2801:GLU:H	1.98	0.70
1:A:801:ILE:HG21	1:A:862:LEU:HG	1.73	0.70
1:A:1449:ILE:CA	1:A:1459:LEU:CD2	2.62	0.70
1:A:1511:TRP:CG	1:A:1574:LEU:HD11	2.27	0.70
1:A:2839:LEU:CD1	19:A:4901:ADP:C5	2.74	0.70
1:A:2872:GLY:CA	19:A:4901:ADP:O2A	2.40	0.70
1:A:3587:VAL:HG11	1:A:3638:LEU:HD13	1.74	0.70
2:B:489:PHE:O	2:B:493:ARG:HG2	1.92	0.70
2:B:1456:PHE:CG	2:B:1467:PHE:HE1	2.08	0.70
3:C:136:ALA:HB2	3:C:168:ASN:HA	1.74	0.70
3:C:2607:LEU:N	3:C:2910:TRP:CZ3	2.58	0.70
4:D:590:LEU:HD23	4:D:604:VAL:HG13	1.71	0.70
5:E:23:THR:HG22	14:N:88:TYR:CD1	2.23	0.70
1:A:3273:TYR:CD1	1:A:3276:SER:N	2.60	0.70
2:B:520:ARG:HH11	2:B:550:MET:HG3	1.55	0.70
4:D:61:LEU:N	14:N:59:ASN:ND2	2.40	0.70
5:E:162:ARG:HD3	5:E:194:PRO:HG2	1.72	0.70
6:F:81:THR:C	7:G:124:VAL:HG23	2.11	0.70
1:A:3702:SER:CB	1:A:3712:LEU:HD11	2.22	0.70
2:B:726:LYS:HD3	2:B:726:LYS:C	2.11	0.70
2:B:3446:SER:HA	2:B:3488:ILE:HA	1.72	0.70
6:F:48:ILE:HD11	6:F:98:LEU:HD21	1.58	0.70
7:G:79:VAL:CG2	7:G:146:ILE:HD12	2.22	0.70
15:O:71:ILE:HG21	15:O:81:ILE:HG21	1.72	0.70
1:A:40:LEU:H	1:A:41:LEU:N	1.90	0.70
1:A:1274:GLY:O	4:D:164:ASN:OD1	2.10	0.70
1:A:1926:PHE:HB3	1:A:1974:ILE:HG23	1.74	0.70
2:B:545:ILE:CD1	2:B:616:ARG:HH11	1.99	0.70
2:B:690:LEU:C	2:B:690:LEU:HD12	2.12	0.70
2:B:957:GLN:OE1	3:C:164:HIS:NE2	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1566:ASN:ND2	3:C:2275:LYS:HD3	2.06	0.70
3:C:196:PRO:CA	3:C:239:TRP:CH2	2.72	0.70
3:C:2365:GLY:O	19:C:4703:ADP:H5'2	1.92	0.70
4:D:80:PRO:HG2	15:O:103:TRP:CZ2	2.24	0.70
4:D:92:TYR:CD2	13:M:29:LYS:CB	2.74	0.70
4:D:109:PHE:CD2	15:O:121:TYR:CD2	2.80	0.70
4:D:517:ILE:CD1	4:D:550:TRP:CZ2	2.73	0.70
5:E:272:MET:SD	5:E:326:VAL:CG2	2.80	0.70
11:K:39:GLU:N	11:K:39:GLU:OE1	2.24	0.70
1:A:817:VAL:C	1:A:818:LEU:HD12	2.11	0.69
1:A:819:VAL:HG21	1:A:905:SER:HB2	1.74	0.69
1:A:1100:LEU:HD22	1:A:1163:LEU:HB2	1.74	0.69
1:A:1597:LYS:CE	1:A:1962:ILE:HD11	2.22	0.69
2:B:500:GLU:HG2	2:B:532:THR:HG21	1.73	0.69
2:B:935:ASN:CB	3:C:283:THR:CG2	2.70	0.69
2:B:1471:ASP:OD1	2:B:1472:ASN:N	2.24	0.69
2:B:3143:LEU:HD23	2:B:3698:LEU:HD13	1.73	0.69
3:C:2669:ILE:HD12	3:C:2847:ALA:HB2	1.25	0.69
3:C:2792:TYR:O	3:C:2796:PRO:HD3	1.91	0.69
4:D:569:TYR:CZ	4:D:578:LYS:CD	2.74	0.69
7:G:119:PRO:CG	9:I:12:ILE:CD1	2.69	0.69
10:J:79:PHE:CG	11:K:68:ALA:CB	2.74	0.69
14:N:116:ALA:O	15:O:131:PHE:HD1	1.75	0.69
1:A:1142:ILE:HD13	1:A:1190:LEU:HD21	1.74	0.69
1:A:3230:LEU:C	1:A:3233:ILE:HG22	2.12	0.69
1:A:3317:PHE:HA	1:A:3333:LEU:HD13	1.74	0.69
2:B:741:ILE:HD13	2:B:776:LEU:CD1	2.20	0.69
2:B:789:LYS:CB	2:B:839:LEU:HD13	2.21	0.69
2:B:3297:PHE:CE2	2:B:3302:ILE:HD13	2.27	0.69
3:C:2365:GLY:HA2	19:C:4703:ADP:H5'2	1.74	0.69
3:C:2784:ASN:O	3:C:2787:ILE:CG2	2.33	0.69
5:E:251:PRO:HG2	5:E:254:ILE:HD11	1.73	0.69
5:E:531:ARG:O	5:E:535:LYS:HG3	1.91	0.69
6:F:91:GLN:HE21	6:F:96:THR:HG21	1.55	0.69
10:J:19:LYS:HB2	10:J:28:TRP:CB	2.20	0.69
10:J:62:GLU:HG3	11:K:69:TYR:CE2	2.26	0.69
16:P:10:THR:CB	16:P:66:ILE:H	2.05	0.69
1:A:53:ILE:C	1:A:54:PHE:N	2.45	0.69
1:A:398:TRP:CB	1:A:490:LYS:CA	2.69	0.69
1:A:580:LEU:HD22	1:A:640:SER:CB	1.99	0.69
1:A:943:THR:C	1:A:944:LEU:CA	2.60	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:960:THR:CG2	18:R:117:VAL:CB	2.70	0.69
1:A:1452:LYS:CA	1:A:1458:MET:N	2.52	0.69
1:A:3194:ALA:HB1	1:A:3356:VAL:HG22	1.69	0.69
2:B:528:GLU:CD	5:E:526:GLN:NE2	2.42	0.69
2:B:1051:ASP:OD2	2:B:1162:THR:HG21	1.90	0.69
2:B:1447:ILE:HG21	2:B:1504:TRP:HE1	0.53	0.69
2:B:3234:LEU:CD1	2:B:3336:LEU:CD2	2.69	0.69
3:C:2690:LEU:CB	3:C:2826:VAL:CG1	2.70	0.69
3:C:2850:LYS:O	3:C:2854:VAL:HG23	1.93	0.69
4:D:61:LEU:N	14:N:59:ASN:HD21	1.89	0.69
5:E:378:GLN:HB2	5:E:422:SER:HB3	1.72	0.69
1:A:819:VAL:CA	1:A:840:TYR:HE2	2.05	0.69
1:A:3709:ASP:HB3	1:A:3712:LEU:HD12	1.74	0.69
2:B:58:SER:N	2:B:71:CYS:CB	2.56	0.69
2:B:582:MET:O	5:E:186:PHE:HB3	1.93	0.69
2:B:674:ASP:OD1	2:B:675:PRO:HD2	1.91	0.69
2:B:721:ASN:OD1	2:B:777:PHE:HB2	1.92	0.69
2:B:1477:LEU:HD13	2:B:1511:VAL:HG11	1.73	0.69
4:D:90:ASP:OD1	13:M:32:LYS:CG	2.40	0.69
4:D:441:LEU:CD1	4:D:457:ALA:O	2.40	0.69
4:D:529:ASP:OD2	4:D:532:TYR:CE2	2.45	0.69
4:D:553:TYR:HE1	4:D:595:PHE:HZ	1.40	0.69
5:E:361:LEU:O	5:E:361:LEU:HD13	1.90	0.69
6:F:51:LEU:HB3	7:G:113:VAL:HG13	1.74	0.69
6:F:56:TRP:CZ3	6:F:74:ILE:CG1	2.74	0.69
1:A:970:TYR:CA	1:A:983:ALA:O	2.40	0.69
1:A:1544:ILE:HG12	1:A:1580:LYS:HG2	1.75	0.69
1:A:1637:VAL:CG1	1:A:1653:ILE:CG2	2.70	0.69
2:B:429:LEU:HD13	2:B:492:PHE:HD2	1.56	0.69
2:B:844:LEU:O	2:B:844:LEU:HD23	1.92	0.69
2:B:3271:ASP:CG	2:B:3272:PRO:HD2	2.11	0.69
3:C:114:LEU:HD13	3:C:114:LEU:C	2.13	0.69
5:E:46:ASN:HB3	12:L:88:PHE:CD1	2.28	0.69
5:E:116:VAL:HG11	6:F:99:ALA:HB2	1.74	0.69
1:A:3236:ILE:CG2	1:A:3333:LEU:N	2.56	0.69
2:B:433:ILE:CA	2:B:463:PHE:CZ	2.74	0.69
2:B:699:LYS:O	2:B:703:THR:HG23	1.92	0.69
3:C:12:GLN:NE2	3:C:349:LEU:HB2	2.00	0.69
3:C:2673:VAL:HA	3:C:2841:THR:CG2	2.23	0.69
3:C:2726:THR:O	3:C:2729:LEU:HB2	1.93	0.69
5:E:145:LEU:HD13	5:E:494:LEU:HD11	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:72:ILE:HG12	15:O:97:ILE:CD1	2.18	0.69
1:A:670:LEU:HD21	1:A:772:TRP:HD1	1.55	0.69
1:A:726:TYR:CE1	1:A:777:ILE:CG2	2.74	0.69
1:A:1536:LEU:H	1:A:1536:LEU:CD1	2.02	0.69
1:A:1623:ILE:CD1	1:A:1680:ILE:HD13	2.19	0.69
1:A:3121:LEU:HD21	1:A:3429:TRP:C	2.12	0.69
1:A:3293:PHE:CE1	1:A:3335:TRP:HH2	2.11	0.69
2:B:1058:LYS:NZ	2:B:1167:MET:SD	2.60	0.69
2:B:2540:ALA:O	19:B:5501:ADP:O3B	2.10	0.69
2:B:3433:TRP:CH2	2:B:3695:LEU:HD21	2.27	0.69
3:C:222:PHE:C	3:C:282:ARG:HH12	1.95	0.69
3:C:2708:GLN:OE1	3:C:2813:ILE:CG1	2.41	0.69
4:D:329:ILE:HD11	4:D:350:VAL:HG21	1.73	0.69
6:F:48:ILE:HD13	6:F:98:LEU:HD23	1.63	0.69
1:A:398:TRP:HA	1:A:486:ASN:O	1.92	0.69
1:A:596:LEU:HD21	1:A:602:PRO:HA	1.72	0.69
1:A:761:LEU:CD1	1:A:872:ASP:OD2	2.41	0.69
1:A:1088:TRP:O	1:A:1092:TRP:CD1	2.46	0.69
1:A:1101:HIS:CA	1:A:1163:LEU:CD1	2.62	0.69
1:A:1596:ARG:HD3	1:A:1603:TYR:CD1	2.28	0.69
1:A:1601:ARG:HE	1:A:1688:GLU:CD	1.92	0.69
1:A:2839:LEU:CD1	19:A:4901:ADP:N3	2.55	0.69
1:A:3290:LEU:HD23	1:A:3335:TRP:CZ2	2.17	0.69
1:A:3322:ALA:HB2	1:A:3333:LEU:HD12	1.74	0.69
1:A:4056:ILE:HD11	1:A:4072:LEU:HD21	1.72	0.69
2:B:436:PHE:HD2	2:B:463:PHE:CZ	2.11	0.69
2:B:669:ILE:HD13	2:B:752:ILE:HD11	1.74	0.69
2:B:871:ILE:HG13	2:B:944:ILE:HD12	1.69	0.69
2:B:1467:PHE:CG	2:B:1470:LEU:HD11	2.28	0.69
2:B:3264:ASN:CA	2:B:3306:ILE:HD11	2.23	0.69
3:C:294:LEU:HD23	3:C:294:LEU:C	2.13	0.69
4:D:90:ASP:OD2	13:M:32:LYS:HE3	1.93	0.69
4:D:110:SER:HA	15:O:96:ARG:HG3	1.74	0.69
4:D:174:GLN:HA	13:M:62:GLY:HA2	0.75	0.69
4:D:297:LYS:HZ3	4:D:328:LEU:CD1	2.05	0.69
4:D:353:LEU:HD23	4:D:353:LEU:C	2.13	0.69
5:E:100:GLU:HA	5:E:105:PHE:HB3	1.75	0.69
5:E:225:GLN:H	5:E:225:GLN:CD	1.96	0.69
10:J:79:PHE:HA	11:K:68:ALA:CB	2.23	0.69
1:A:598:ARG:NH2	4:D:546:VAL:HG11	2.02	0.69
2:B:794:LEU:C	2:B:797:PHE:CE2	2.66	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:957:GLN:HG2	3:C:164:HIS:HE1	0.75	0.69
3:C:352:LEU:O	3:C:352:LEU:HD22	1.93	0.69
5:E:24:GLU:OE2	14:N:91:THR:CG2	2.41	0.69
6:F:73:ASP:OD1	6:F:73:ASP:O	2.11	0.69
10:J:19:LYS:CE	15:O:19:LEU:CD1	2.66	0.69
14:N:8:TYR:CZ	14:N:13:VAL:HG21	2.27	0.69
1:A:766:GLY:HA3	1:A:780:TYR:HE1	1.55	0.69
1:A:944:LEU:HD21	1:A:1017:LEU:CD2	2.23	0.69
1:A:1487:VAL:HA	1:A:1490:PHE:CZ	2.27	0.69
1:A:3222:GLU:CB	1:A:3328:ALA:CB	2.70	0.69
1:A:3249:ILE:HG12	1:A:3273:TYR:CA	2.05	0.69
1:A:3273:TYR:CG	1:A:3276:SER:HB3	2.28	0.69
1:A:3293:PHE:CE1	1:A:3335:TRP:CZ2	2.76	0.69
2:B:520:ARG:HH12	2:B:550:MET:HG3	1.44	0.69
2:B:783:MET:CE	2:B:847:VAL:CG2	2.71	0.69
3:C:60:LEU:HD23	3:C:69:TRP:CZ3	2.23	0.69
4:D:517:ILE:HD11	4:D:550:TRP:CZ2	2.28	0.69
4:D:593:LEU:C	4:D:593:LEU:HD12	2.12	0.69
7:G:61:GLU:OE1	7:G:61:GLU:N	2.26	0.69
8:H:60:ILE:CG1	9:I:85:TYR:HB3	2.19	0.69
15:O:72:LYS:C	15:O:72:LYS:HD3	2.12	0.69
1:A:155:GLY:HA3	2:B:167:GLN:O	1.70	0.68
1:A:933:VAL:CG2	1:A:951:ILE:HD11	2.24	0.68
2:B:309:ASP:O	2:B:313:LEU:N	2.22	0.68
2:B:582:MET:CE	2:B:587:GLY:N	2.56	0.68
3:C:192:PRO:HG2	3:C:232:TYR:HE2	1.57	0.68
4:D:174:GLN:HB3	12:L:51:LYS:CB	2.22	0.68
4:D:590:LEU:CD2	4:D:604:VAL:CG1	2.68	0.68
6:F:62:VAL:HG21	7:G:106:LEU:CD1	2.13	0.68
8:H:46:LYS:HZ1	9:I:86:ASP:C	1.92	0.68
1:A:1126:VAL:CG2	1:A:1131:SER:OG	2.42	0.68
1:A:1433:LEU:HD21	1:A:1481:PHE:CD2	2.28	0.68
1:A:2042:ARG:HG3	1:A:2278:ASN:HA	1.76	0.68
1:A:3702:SER:HB3	1:A:3712:LEU:HD11	1.73	0.68
2:B:408:THR:O	2:B:412:LEU:HB3	1.94	0.68
2:B:501:ARG:HH12	4:D:491:GLN:NE2	1.90	0.68
2:B:669:ILE:O	2:B:719:VAL:HG13	1.93	0.68
2:B:681:LEU:HD11	2:B:705:ALA:HB2	1.73	0.68
2:B:963:PHE:HE1	3:C:83:CYS:SG	2.16	0.68
2:B:1458:PHE:CE1	2:B:1560:MET:O	2.46	0.68
2:B:2333:PRO:CA	20:B:5601:ATP:N1	2.55	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:113:ILE:CD1	3:C:185:PHE:CZ	2.75	0.68
3:C:352:LEU:O	3:C:352:LEU:HD13	1.93	0.68
5:E:20:PHE:CG	15:O:80:LYS:CE	2.61	0.68
5:E:113:LYS:HE2	6:F:10:GLN:HA	1.74	0.68
15:O:19:LEU:HD23	15:O:19:LEU:O	1.94	0.68
1:A:1458:MET:HE3	1:A:1518:TRP:CH2	2.27	0.68
1:A:3257:VAL:HG11	1:A:3266:VAL:HG22	1.75	0.68
2:B:3:ASP:CB	2:B:7:LYS:N	2.57	0.68
2:B:783:MET:HE2	2:B:847:VAL:CG2	2.23	0.68
2:B:872:SER:HB2	2:B:965:ILE:HD11	1.75	0.68
3:C:2013:GLY:CA	19:C:4702:ADP:O2A	2.41	0.68
4:D:89:TYR:CD2	11:K:56:PRO:CG	2.75	0.68
4:D:570:ASP:H	4:D:579:LEU:HD13	1.58	0.68
6:F:54:ASP:OD2	7:G:109:LYS:NZ	2.24	0.68
6:F:56:TRP:CH2	6:F:74:ILE:CG1	2.75	0.68
7:G:77:LEU:HD23	7:G:77:LEU:C	2.14	0.68
10:J:21:PHE:CZ	10:J:37:LEU:HD21	2.29	0.68
1:A:670:LEU:HD23	1:A:670:LEU:O	1.94	0.68
1:A:1551:ILE:HA	1:A:1554:LYS:HE2	1.75	0.68
2:B:10:PRO:CA	2:B:25:GLN:C	2.41	0.68
2:B:927:ARG:NH1	2:B:976:LEU:HB3	2.07	0.68
3:C:2721:GLU:CG	3:C:2803:MET:HE2	2.23	0.68
3:C:2726:THR:CA	3:C:2729:LEU:HG	2.23	0.68
4:D:180:ILE:HD12	4:D:180:ILE:C	2.14	0.68
11:K:36:TYR:HD2	11:K:41:LYS:HB3	1.58	0.68
13:M:84:LEU:C	13:M:84:LEU:HD12	2.12	0.68
1:A:1101:HIS:HA	1:A:1163:LEU:HD12	1.75	0.68
1:A:1163:LEU:C	1:A:1163:LEU:HD23	2.13	0.68
1:A:1458:MET:SD	1:A:1548:TRP:HD1	2.16	0.68
1:A:1517:LEU:HD11	1:A:1582:GLU:HG2	1.74	0.68
1:A:1639:PHE:CE1	1:A:1653:ILE:HG12	2.27	0.68
1:A:3230:LEU:N	1:A:3233:ILE:HG21	2.07	0.68
1:A:3285:ASN:O	1:A:3289:LYS:HG3	1.93	0.68
1:A:3421:SER:HB2	1:A:3716:LEU:HD21	1.76	0.68
2:B:3269:LEU:C	2:B:3269:LEU:HD22	2.13	0.68
3:C:354:VAL:HG21	3:C:357:ILE:CG1	2.21	0.68
3:C:834:VAL:HG22	3:C:881:ILE:HD11	1.75	0.68
4:D:174:GLN:HE21	12:L:51:LYS:N	1.86	0.68
5:E:61:VAL:HG11	10:J:95:PHE:CZ	2.27	0.68
9:I:26:ASN:CB	9:I:98:PHE:HE2	2.04	0.68
1:A:670:LEU:HA	1:A:692:ILE:CD1	2.23	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:821:LEU:O	1:A:912:ARG:HD3	1.94	0.68
1:A:1020:PHE:CE2	1:A:1069:TYR:CE1	2.78	0.68
1:A:3442:LYS:HD2	1:A:3485:THR:N	2.08	0.68
2:B:555:LEU:HD23	2:B:625:LEU:HD22	0.68	0.68
2:B:1467:PHE:CB	2:B:1470:LEU:CD1	2.40	0.68
2:B:2192:CYS:SG	20:B:5601:ATP:C8	2.87	0.68
3:C:24:HIS:CD2	3:C:325:SER:OG	2.45	0.68
3:C:250:LYS:HG3	3:C:273:VAL:HG12	1.75	0.68
3:C:336:ILE:HD12	3:C:336:ILE:N	2.08	0.68
1:A:695:LEU:C	1:A:695:LEU:HD23	2.14	0.68
1:A:791:LEU:O	1:A:795:ILE:HG13	1.94	0.68
1:A:818:LEU:HB2	1:A:844:LYS:HG3	1.76	0.68
1:A:871:LEU:HD23	1:A:875:VAL:HG11	1.72	0.68
1:A:1045:LEU:HD13	1:A:1045:LEU:C	2.14	0.68
1:A:3191:LYS:HE2	1:A:3360:GLU:HG2	1.76	0.68
2:B:899:LEU:HD12	2:B:900:PHE:H	1.57	0.68
3:C:113:ILE:HD11	3:C:185:PHE:CE1	2.29	0.68
3:C:2796:PRO:HD2	3:C:2796:PRO:O	1.93	0.68
4:D:162:LEU:C	4:D:162:LEU:HD23	2.14	0.68
4:D:499:HIS:CD2	4:D:528:TRP:HH2	2.11	0.68
5:E:456:PRO:HD2	5:E:481:GLN:HB3	1.74	0.68
6:F:81:THR:HG22	7:G:123:LEU:HD23	1.76	0.68
8:H:11:ILE:HG22	8:H:79:LEU:HB3	1.74	0.68
10:J:37:LEU:C	10:J:37:LEU:HD23	2.14	0.68
12:L:28:GLN:HA	12:L:28:GLN:NE2	2.07	0.68
1:A:722:LYS:O	1:A:726:TYR:CD2	2.43	0.68
1:A:755:HIS:CE1	1:A:869:TYR:CG	2.81	0.68
1:A:805:ARG:HH12	5:E:152:LEU:HD11	1.59	0.68
1:A:1458:MET:HE1	1:A:1548:TRP:CD1	2.29	0.68
2:B:551:TYR:HD2	2:B:622:VAL:CG1	2.06	0.68
2:B:883:ASN:CA	2:B:886:ILE:HG22	2.24	0.68
2:B:963:PHE:CD2	3:C:103:THR:HA	2.29	0.68
2:B:1109:THR:C	2:B:1113:LEU:HG	2.08	0.68
2:B:1529:TYR:HB2	2:B:1549:PHE:HZ	1.58	0.68
4:D:401:GLN:HB3	4:D:417:ILE:CG2	2.23	0.68
4:D:517:ILE:CD1	4:D:527:ILE:CG1	2.71	0.68
5:E:423:GLY:HA2	5:E:505:ILE:HD12	1.74	0.68
9:I:81:GLU:OE1	9:I:102:ASN:CG	2.30	0.68
1:A:837:GLN:NE2	1:A:958:ALA:HB1	2.01	0.68
1:A:1100:LEU:HD22	1:A:1163:LEU:HD12	1.76	0.68
1:A:1596:ARG:HH21	1:A:1610:LEU:HD23	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3317:PHE:HD1	1:A:3333:LEU:CD2	2.06	0.68
2:B:746:GLU:O	2:B:750:PRO:HD3	1.93	0.68
2:B:1531:ILE:HD13	2:B:1618:LEU:CD2	2.24	0.68
2:B:3067:ILE:HD11	2:B:3119:LYS:CD	2.22	0.68
4:D:567:GLN:CD	4:D:578:LYS:CE	2.62	0.68
5:E:30:ILE:HD12	5:E:30:ILE:O	1.94	0.68
8:H:79:LEU:HD12	8:H:79:LEU:C	2.13	0.68
1:A:1597:LYS:HZ2	1:A:1962:ILE:CD1	2.05	0.68
1:A:1632:ASP:OD1	1:A:1842:LYS:NZ	2.27	0.68
2:B:1447:ILE:HG12	2:B:1480:HIS:ND1	2.09	0.68
3:C:2018:GLN:HG3	19:C:4702:ADP:C2'	2.24	0.68
4:D:77:PRO:HA	15:O:102:LEU:HD23	1.76	0.68
4:D:170:THR:CG2	13:M:66:ILE:CB	2.53	0.68
5:E:50:LEU:CD2	12:L:23:PHE:HB2	2.24	0.68
5:E:259:ASN:HD22	5:E:298:ALA:C	1.97	0.68
6:F:19:GLY:CA	6:F:107:ILE:HD11	2.23	0.68
7:G:125:PHE:CZ	7:G:136:MET:HE3	2.29	0.68
15:O:31:PRO:HB3	15:O:109:ASN:HD21	1.59	0.68
1:A:607:ILE:HD13	1:A:655:PHE:HD2	1.59	0.67
1:A:3124:ILE:HD13	1:A:3425:GLU:CG	2.24	0.67
2:B:888:PRO:CA	2:B:891:ILE:HG22	2.24	0.67
2:B:969:LEU:O	2:B:969:LEU:HD23	1.93	0.67
2:B:1058:LYS:HB2	2:B:1166:GLU:CG	2.24	0.67
2:B:1238:LYS:NZ	2:B:1308:LEU:CA	2.57	0.67
2:B:3178:VAL:HG12	2:B:3395:LEU:HD11	1.75	0.67
4:D:251:MET:CG	7:G:136:MET:HE1	2.18	0.67
5:E:48:ILE:CG1	12:L:88:PHE:CZ	2.77	0.67
12:L:59:LYS:HB2	12:L:59:LYS:HZ2	1.59	0.67
14:N:70:THR:OG1	14:N:111:SER:OG	2.12	0.67
1:A:794:LEU:HD13	1:A:794:LEU:O	1.95	0.67
1:A:1504:VAL:CG2	1:A:1565:CYS:HB3	2.16	0.67
1:A:1642:ALA:HB3	1:A:1652:GLN:HB2	1.76	0.67
1:A:3124:ILE:CD1	1:A:3425:GLU:HG3	2.24	0.67
1:A:3273:TYR:HD1	1:A:3276:SER:N	1.90	0.67
2:B:658:GLN:NE2	2:B:672:ASN:OD1	2.24	0.67
2:B:899:LEU:CD1	2:B:900:PHE:CD1	2.77	0.67
2:B:1374:THR:C	2:B:1420:LEU:CB	2.62	0.67
3:C:359:GLY:CA	3:C:440:TYR:CB	2.72	0.67
10:J:38:GLU:OE2	15:O:29:PHE:HE2	1.71	0.67
10:J:82:LYS:HG3	11:K:65:HIS:HE2	1.59	0.67
1:A:307:LEU:O	1:A:311:LYS:CB	2.42	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1212:LEU:HD23	1:A:1212:LEU:C	2.14	0.67
2:B:4314:ILE:HD12	2:B:4391:ILE:HG23	1.76	0.67
3:C:2899:LEU:HD23	3:C:2899:LEU:C	2.15	0.67
6:F:37:GLU:OE1	6:F:37:GLU:HA	1.94	0.67
9:I:24:ILE:HG23	9:I:98:PHE:CD1	2.29	0.67
10:J:52:GLU:OE1	10:J:52:GLU:N	2.18	0.67
12:L:77:ILE:HA	13:M:63:SER:OG	1.95	0.67
12:L:77:ILE:HG13	13:M:65:ILE:HD11	1.73	0.67
13:M:71:LYS:HG3	13:M:86:LYS:HD3	1.74	0.67
1:A:1515:GLN:O	1:A:1519:THR:OG1	2.10	0.67
2:B:409:SER:O	2:B:413:PHE:CA	2.43	0.67
2:B:412:LEU:HD13	2:B:412:LEU:C	2.15	0.67
2:B:783:MET:CE	2:B:847:VAL:HG21	2.25	0.67
2:B:1458:PHE:CE1	2:B:1560:MET:HE1	2.29	0.67
3:C:10:LEU:HD21	3:C:66:ASN:N	2.08	0.67
3:C:52:ALA:HB1	3:C:53:PRO:HD3	1.75	0.67
3:C:346:LEU:H	3:C:346:LEU:HD13	1.60	0.67
3:C:2902:ALA:HB1	3:C:3193:LEU:HB3	1.76	0.67
4:D:97:LYS:HE3	13:M:32:LYS:HE2	1.75	0.67
10:J:61:ALA:HA	10:J:80:PHE:HE2	1.57	0.67
1:A:596:LEU:HD23	1:A:602:PRO:HA	1.74	0.67
1:A:841:ILE:HD13	1:A:961:ALA:CB	2.23	0.67
1:A:943:THR:CA	1:A:944:LEU:N	2.57	0.67
1:A:1511:TRP:CA	1:A:1574:LEU:CD1	2.73	0.67
2:B:555:LEU:HG	2:B:625:LEU:CD2	2.24	0.67
2:B:736:LEU:HD12	2:B:859:TYR:CG	2.29	0.67
2:B:1566:ASN:CG	3:C:2275:LYS:CD	2.61	0.67
4:D:109:PHE:CE2	15:O:121:TYR:HD2	2.12	0.67
6:F:28:GLU:CD	6:F:28:GLU:H	1.97	0.67
10:J:48:LEU:HD12	10:J:100:ILE:HD12	1.74	0.67
12:L:75:GLN:HB2	13:M:65:ILE:HG23	1.76	0.67
1:A:1448:GLY:N	1:A:1460:ASN:O	2.27	0.67
1:A:3236:ILE:CG2	1:A:3333:LEU:CA	2.72	0.67
2:B:3289:ALA:O	2:B:3293:LYS:HG3	1.95	0.67
2:B:3764:LEU:HD11	2:B:3816:LEU:HD21	1.77	0.67
3:C:163:GLY:HA2	3:C:174:PHE:CD2	2.30	0.67
3:C:2708:GLN:NE2	3:C:2813:ILE:HG13	2.09	0.67
4:D:531:LYS:NZ	4:D:532:TYR:CZ	2.63	0.67
5:E:46:ASN:OD1	12:L:88:PHE:CZ	2.47	0.67
6:F:54:ASP:CG	7:G:109:LYS:HE2	2.15	0.67
6:F:81:THR:OG1	7:G:121:ASN:ND2	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:36:ALA:H	2:B:39:ASP:CB	2.06	0.67
2:B:524:LEU:HD23	2:B:524:LEU:C	2.14	0.67
2:B:3267:ILE:CG2	2:B:3271:ASP:HB2	2.24	0.67
3:C:29:VAL:CG2	3:C:92:ALA:O	2.42	0.67
3:C:85:HIS:HA	3:C:99:GLY:O	1.95	0.67
3:C:2581:LEU:HD23	3:C:2581:LEU:C	2.14	0.67
3:C:2804:ALA:HA	3:C:2811:LYS:HB2	1.75	0.67
4:D:201:GLN:OE1	9:I:102:ASN:HA	1.93	0.67
5:E:21:GLN:HG2	5:E:21:GLN:O	1.95	0.67
5:E:23:THR:HG23	14:N:88:TYR:CD1	2.29	0.67
15:O:34:ILE:HG23	15:O:71:ILE:HD12	1.76	0.67
1:A:604:ALA:HB3	1:A:698:GLU:CG	2.24	0.67
2:B:669:ILE:CD1	2:B:752:ILE:HD11	2.25	0.67
4:D:395:HIS:CG	4:D:418:SER:HB3	2.30	0.67
16:P:39:TRP:C	16:P:40:SER:CA	2.62	0.67
1:A:670:LEU:CD2	1:A:772:TRP:HD1	2.01	0.67
1:A:871:LEU:CD2	1:A:875:VAL:HG13	2.19	0.67
1:A:1445:PHE:HE2	1:A:1564:CYS:CB	1.68	0.67
2:B:429:LEU:HD11	2:B:489:PHE:CD1	2.30	0.67
2:B:804:ARG:NH1	2:B:898:PRO:O	2.28	0.67
2:B:957:GLN:HB2	3:C:220:TRP:CZ3	2.26	0.67
2:B:1119:LYS:HB3	2:B:1138:LYS:HZ3	1.59	0.67
3:C:258:ALA:HB1	3:C:357:ILE:HD13	1.77	0.67
3:C:2708:GLN:OE1	3:C:2813:ILE:CD1	2.42	0.67
4:D:111:MET:CE	15:O:90:ILE:HG22	2.22	0.67
4:D:288:ARG:NH1	4:D:585:VAL:HG11	2.10	0.67
8:H:60:ILE:HA	9:I:85:TYR:HB3	1.75	0.67
10:J:32:CYS:SG	10:J:96:ILE:HG12	2.33	0.67
13:M:84:LEU:HD12	13:M:84:LEU:O	1.95	0.67
14:N:72:ILE:CB	15:O:97:ILE:CD1	2.73	0.67
1:A:2037:GLN:HE22	1:A:4479:GLN:HE22	1.42	0.67
1:A:3255:GLU:OE1	1:A:3269:LEU:C	2.34	0.67
2:B:531:LEU:HD21	2:B:540:LEU:HD11	1.71	0.67
2:B:789:LYS:CG	2:B:839:LEU:CD1	2.66	0.67
2:B:1531:ILE:HD12	2:B:1595:LEU:HD13	1.75	0.67
2:B:2189:GLY:HA2	20:B:5601:ATP:C5'	2.25	0.67
2:B:3302:ILE:CG2	2:B:3303:GLU:N	2.53	0.67
2:B:3829:VAL:HG11	2:B:3946:ILE:CD1	2.25	0.67
5:E:46:ASN:CG	12:L:88:PHE:CZ	2.68	0.67
6:F:11:LEU:CB	6:F:23:TYR:OH	2.34	0.67
1:A:57:TYR:CA	1:A:103:ASP:HA	2.24	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:659:TRP:CE2	1:A:702:LEU:HD11	2.29	0.66
1:A:818:LEU:O	1:A:818:LEU:HD22	1.95	0.66
1:A:935:VAL:HG11	1:A:1017:LEU:CD2	2.25	0.66
1:A:1100:LEU:CD2	1:A:1163:LEU:HD12	2.25	0.66
1:A:3117:PHE:CE2	1:A:3429:TRP:CZ3	2.83	0.66
1:A:3335:TRP:CZ2	1:A:3339:ILE:HD11	2.29	0.66
2:B:583:PRO:HB3	2:B:683:GLU:CG	2.23	0.66
2:B:1458:PHE:CD1	2:B:1560:MET:CE	2.78	0.66
2:B:3173:ILE:HG22	2:B:3177:LYS:HE3	1.76	0.66
4:D:285:PRO:CB	4:D:584:ILE:HG22	2.25	0.66
5:E:48:ILE:CG1	12:L:88:PHE:HZ	2.04	0.66
7:G:111:ARG:HH21	7:G:139:PRO:HB2	1.60	0.66
8:H:70:THR:O	9:I:76:GLN:NE2	2.27	0.66
9:I:19:MET:HB2	9:I:22:LYS:CG	2.25	0.66
1:A:806:ILE:CD1	1:A:890:TYR:CE2	2.78	0.66
1:A:886:ILE:O	1:A:890:TYR:HD1	1.78	0.66
1:A:944:LEU:HD21	1:A:1017:LEU:HD21	1.76	0.66
1:A:1570:LEU:H	1:A:1570:LEU:HD12	1.60	0.66
2:B:673:PHE:CE1	2:B:677:LEU:CD1	2.76	0.66
2:B:792:LYS:HE3	2:B:796:ASN:ND2	2.10	0.66
2:B:1127:ASN:HB2	2:B:1128:PRO:HD2	1.77	0.66
2:B:1139:LEU:HD13	2:B:1139:LEU:C	2.15	0.66
2:B:1238:LYS:HE2	2:B:1308:LEU:CA	2.06	0.66
3:C:36:PHE:CE2	3:C:97:VAL:HG11	2.30	0.66
3:C:2740:ILE:CG1	3:C:2744:LYS:CB	2.58	0.66
5:E:68:THR:HB	8:H:70:THR:HG22	1.77	0.66
15:O:52:ASP:N	15:O:53:PRO:CD	2.58	0.66
1:A:3220:ILE:HG22	1:A:3224:LYS:HE3	1.75	0.66
2:B:794:LEU:HB3	2:B:797:PHE:HE2	1.59	0.66
2:B:837:GLN:OE1	2:B:837:GLN:HA	1.95	0.66
2:B:1429:GLU:O	2:B:1433:VAL:HG23	1.95	0.66
2:B:2863:VAL:HG21	2:B:3059:VAL:HG22	1.77	0.66
3:C:2581:LEU:CD1	3:C:2937:TYR:CZ	2.79	0.66
4:D:248:MET:HE2	7:G:147:VAL:CG2	2.26	0.66
5:E:112:LEU:HD23	6:F:97:MET:HE2	1.77	0.66
7:G:119:PRO:HG3	9:I:16:ARG:NH2	2.10	0.66
1:A:634:ILE:HG23	1:A:638:TYR:CZ	2.25	0.66
1:A:1134:TYR:HD2	1:A:1268:ARG:NE	1.93	0.66
1:A:1143:ARG:HD3	4:D:171:ARG:HE	1.61	0.66
1:A:1500:THR:HG23	1:A:1566:GLN:NE2	2.07	0.66
3:C:143:PRO:HG3	3:C:187:TRP:NE1	2.10	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2726:THR:HA	3:C:2729:LEU:HG	1.74	0.66
4:D:175:THR:CB	13:M:61:PHE:H	2.08	0.66
9:I:51:ALA:HB1	9:I:52:PRO:HD2	1.78	0.66
10:J:43:GLU:OE2	10:J:43:GLU:HA	1.96	0.66
1:A:669:ALA:HB1	1:A:689:ASP:OD2	1.95	0.66
1:A:1126:VAL:O	1:A:1126:VAL:HG12	1.95	0.66
1:A:1450:TRP:CD1	1:A:1518:TRP:HZ3	2.14	0.66
1:A:3099:TYR:CE1	1:A:3447:VAL:HG12	2.31	0.66
1:A:3290:LEU:HD21	1:A:3335:TRP:CH2	2.29	0.66
2:B:700:ASP:O	2:B:703:THR:OG1	2.14	0.66
2:B:762:ILE:O	2:B:766:ILE:HG13	1.95	0.66
3:C:39:LEU:O	3:C:39:LEU:HD13	1.95	0.66
3:C:165:GLY:C	3:C:174:PHE:HZ	1.87	0.66
5:E:16:ASN:CB	15:O:132:GLU:CB	2.52	0.66
5:E:80:TRP:O	8:H:80:TYR:CZ	2.48	0.66
5:E:112:LEU:CD2	6:F:97:MET:CE	2.74	0.66
14:N:89:GLN:HG2	14:N:94:ASP:CB	2.20	0.66
15:O:30:TYR:H	15:O:31:PRO:HD2	1.53	0.66
1:A:617:ILE:CD1	1:A:647:GLN:HE22	2.02	0.66
1:A:739:ARG:HH11	1:A:743:LYS:NZ	1.92	0.66
1:A:761:LEU:HD21	1:A:874:HIS:NE2	2.11	0.66
1:A:913:VAL:C	1:A:1073:ALA:HB1	2.15	0.66
1:A:1143:ARG:CZ	4:D:169:ASN:HD22	2.03	0.66
1:A:1418:ASP:CG	1:A:3604:LYS:HZ1	1.95	0.66
2:B:682:LYS:HZ3	5:E:186:PHE:HD1	1.21	0.66
2:B:1119:LYS:HB3	2:B:1138:LYS:HD3	1.77	0.66
2:B:1507:LYS:CD	2:B:1571:GLU:OE1	2.41	0.66
2:B:3453:LEU:HD22	2:B:3492:ILE:HD12	1.76	0.66
4:D:398:PRO:HD2	4:D:398:PRO:O	1.93	0.66
5:E:66:VAL:HG11	8:H:72:GLU:CD	2.16	0.66
5:E:112:LEU:HD23	5:E:112:LEU:C	2.16	0.66
6:F:45:ALA:HA	6:F:48:ILE:HG22	1.77	0.66
9:I:77:CYS:CB	9:I:107:ILE:HG22	2.24	0.66
1:A:2298:LEU:HD11	20:A:4801:ATP:C6	2.30	0.66
2:B:501:ARG:NH1	4:D:491:GLN:OE1	2.19	0.66
2:B:713:VAL:HG11	5:E:258:GLU:CA	2.26	0.66
2:B:718:ILE:CD1	2:B:773:VAL:CB	2.72	0.66
2:B:1069:THR:HB	2:B:1070:PRO:CD	2.25	0.66
2:B:1608:ARG:HG3	2:B:1638:PHE:HE1	1.58	0.66
2:B:3140:LEU:HD23	2:B:3140:LEU:C	2.16	0.66
3:C:2746:PRO:CD	3:C:2747:LYS:H	2.03	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:170:THR:HG21	13:M:66:ILE:CD1	2.23	0.66
6:F:91:GLN:CG	6:F:96:THR:HG21	2.17	0.66
1:A:613:LEU:HD21	4:D:523:TRP:CZ2	2.31	0.66
1:A:755:HIS:ND1	1:A:869:TYR:CE2	2.44	0.66
1:A:1100:LEU:HD23	1:A:1100:LEU:C	2.16	0.66
2:B:938:PHE:HD2	2:B:956:LEU:HD11	1.59	0.66
2:B:1595:LEU:HD23	2:B:1595:LEU:O	1.96	0.66
2:B:3234:LEU:HD11	2:B:3336:LEU:CD2	2.26	0.66
4:D:109:PHE:CD2	15:O:121:TYR:HE2	2.13	0.66
4:D:177:ASN:CG	13:M:60:ASN:CB	2.58	0.66
4:D:571:LEU:HD13	4:D:647:TYR:CD2	2.31	0.66
5:E:492:ASP:HA	5:E:495:TYR:CD2	2.28	0.66
1:A:1029:GLU:HA	1:A:1088:TRP:HZ2	1.60	0.66
2:B:1116:PHE:N	2:B:1119:LYS:NZ	2.44	0.66
3:C:192:PRO:CG	3:C:232:TYR:HE2	2.09	0.66
3:C:2793:LEU:C	3:C:2796:PRO:CG	2.64	0.66
5:E:435:ASP:HB2	5:E:446:ILE:HG21	1.75	0.66
6:F:50:ALA:HB2	8:H:83:GLN:CG	2.26	0.66
10:J:101:GLU:OE1	10:J:101:GLU:HA	1.95	0.66
1:A:791:LEU:HD11	1:A:795:ILE:HD11	1.77	0.66
1:A:2298:LEU:HD21	20:A:4801:ATP:C8	2.31	0.66
1:A:3307:GLU:N	1:A:3308:PRO:HD2	2.11	0.66
1:A:3345:LYS:HE3	1:A:3345:LYS:HA	1.77	0.66
2:B:492:PHE:HA	2:B:495:LYS:HD2	1.77	0.66
3:C:34:ILE:HG23	3:C:57:VAL:CG1	2.26	0.66
4:D:397:ASP:HB3	4:D:419:SER:HB3	1.78	0.66
5:E:58:GLU:HB3	10:J:89:VAL:HG22	1.78	0.66
5:E:82:GLY:CA	8:H:12:LYS:HZ3	1.98	0.66
5:E:420:THR:CG2	5:E:472:SER:O	2.42	0.66
1:A:1088:TRP:CE2	1:A:1092:TRP:NE1	2.59	0.65
1:A:1596:ARG:NH1	1:A:1909:LYS:HE3	2.11	0.65
1:A:1634:ILE:C	1:A:1634:ILE:HD12	2.14	0.65
1:A:3267:LEU:N	1:A:3267:LEU:HD12	2.12	0.65
2:B:411:ALA:HA	2:B:414:VAL:HG23	1.78	0.65
2:B:429:LEU:HD11	2:B:489:PHE:CE1	2.31	0.65
2:B:523:LEU:HD23	2:B:523:LEU:C	2.16	0.65
2:B:794:LEU:CA	2:B:797:PHE:HD2	2.02	0.65
2:B:799:VAL:HB	2:B:800:LYS:N	2.09	0.65
2:B:1115:ASP:C	2:B:1119:LYS:NZ	2.49	0.65
2:B:1423:TYR:O	2:B:1427:VAL:HG23	1.96	0.65
3:C:360:PRO:N	3:C:361:PRO:HD2	2.10	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2670:LYS:HD2	3:C:2670:LYS:C	2.17	0.65
3:C:2774:VAL:HG12	3:C:2780:VAL:HG22	1.78	0.65
4:D:106:ILE:CD1	15:O:99:SER:OG	2.39	0.65
4:D:417:ILE:CD1	4:D:474:VAL:HG23	2.26	0.65
5:E:47:PHE:C	12:L:88:PHE:CE2	2.70	0.65
8:H:12:LYS:HE2	8:H:80:TYR:CZ	2.30	0.65
9:I:81:GLU:OE1	9:I:102:ASN:CB	2.44	0.65
10:J:77:HIS:ND1	11:K:70:VAL:HG23	2.05	0.65
1:A:121:GLY:N	2:B:106:LYS:HA	2.06	0.65
1:A:332:PRO:N	1:A:380:ARG:CB	2.59	0.65
1:A:3651:GLN:HE22	1:A:3837:THR:HG22	1.60	0.65
2:B:655:LYS:CE	2:B:708:TYR:OH	2.38	0.65
2:B:732:VAL:O	2:B:735:PRO:HG2	1.95	0.65
2:B:783:MET:HE1	2:B:847:VAL:HG21	1.79	0.65
2:B:1377:PRO:CB	2:B:1424:GLU:OE2	2.44	0.65
5:E:99:ILE:HD11	6:F:31:ILE:CD1	2.19	0.65
5:E:117:GLU:HG3	6:F:17:LEU:CG	2.21	0.65
15:O:45:ARG:CG	15:O:63:LEU:CD1	2.74	0.65
1:A:1183:LEU:HD23	1:A:1183:LEU:C	2.17	0.65
2:B:731:PRO:O	2:B:735:PRO:HD3	1.96	0.65
2:B:910:GLY:HA2	2:B:995:TYR:HD1	1.59	0.65
2:B:1119:LYS:HB3	2:B:1138:LYS:CD	2.25	0.65
2:B:1242:GLN:O	2:B:1251:SER:CA	2.44	0.65
2:B:1705:LYS:HG2	2:B:1825:TRP:CD1	2.32	0.65
2:B:3119:LYS:HB3	2:B:3119:LYS:HZ3	1.58	0.65
3:C:287:PHE:HB3	3:C:320:PRO:HB2	1.78	0.65
4:D:134:LYS:HB2	4:D:134:LYS:NZ	2.11	0.65
4:D:170:THR:CG2	13:M:66:ILE:HA	2.21	0.65
4:D:421:GLY:HA3	4:D:441:LEU:CD1	2.22	0.65
1:A:614:PHE:CE1	1:A:648:LEU:HG	2.31	0.65
1:A:728:ASN:ND2	4:D:396:THR:CG2	2.45	0.65
1:A:1190:LEU:HD23	1:A:1190:LEU:C	2.17	0.65
2:B:883:ASN:HA	2:B:886:ILE:HG23	1.76	0.65
2:B:1116:PHE:CA	2:B:1119:LYS:HZ2	2.07	0.65
2:B:1329:PRO:C	2:B:1412:PHE:CB	2.65	0.65
2:B:3121:LEU:HD13	2:B:3121:LEU:C	2.16	0.65
4:D:576:LEU:HD13	4:D:576:LEU:C	2.16	0.65
4:D:590:LEU:N	4:D:590:LEU:HD12	2.11	0.65
5:E:48:ILE:CA	12:L:88:PHE:HE2	2.08	0.65
6:F:56:TRP:HZ2	6:F:91:GLN:OE1	1.65	0.65
12:L:77:ILE:N	12:L:77:ILE:HD12	2.11	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:906:LEU:CD1	1:A:998:VAL:CG1	1.85	0.65
1:A:3442:LYS:HD2	1:A:3485:THR:HA	1.77	0.65
2:B:1242:GLN:C	2:B:1251:SER:N	2.50	0.65
2:B:3826:THR:HG22	2:B:3942:LEU:HD21	1.77	0.65
4:D:572:ASN:HD21	4:D:643:LYS:HD2	1.61	0.65
5:E:258:GLU:OE1	5:E:258:GLU:N	2.19	0.65
8:H:52:ARG:HA	18:R:63:ASN:CA	2.26	0.65
15:O:22:LEU:HD12	15:O:23:ASN:OD1	1.93	0.65
1:A:580:LEU:HD21	1:A:640:SER:N	2.12	0.65
1:A:666:SER:CB	1:A:695:LEU:HD13	2.27	0.65
1:A:906:LEU:HB3	1:A:998:VAL:CG1	2.26	0.65
1:A:1026:LEU:HD23	1:A:1026:LEU:C	2.17	0.65
1:A:3212:VAL:HG23	1:A:3338:ALA:HB1	1.79	0.65
1:A:3236:ILE:CA	1:A:3333:LEU:CD2	2.59	0.65
1:A:3446:ASN:OD1	1:A:3488:LEU:CD2	2.40	0.65
2:B:736:LEU:CD1	2:B:859:TYR:CB	2.72	0.65
2:B:1116:PHE:HA	2:B:1119:LYS:HZ3	1.62	0.65
2:B:1329:PRO:CB	2:B:1413:GLU:N	2.59	0.65
2:B:3235:LYS:HB3	2:B:3237:PRO:HD2	1.77	0.65
2:B:3445:LYS:CG	2:B:3487:PRO:HB3	2.27	0.65
3:C:972:LEU:HD21	3:C:1017:MET:CE	2.27	0.65
3:C:2720:PRO:HB3	3:C:2798:PHE:CE2	2.04	0.65
3:C:2772:LYS:HD3	3:C:2772:LYS:C	2.16	0.65
4:D:331:LEU:HD12	4:D:331:LEU:N	2.11	0.65
5:E:203:LEU:HD23	5:E:203:LEU:C	2.16	0.65
5:E:394:TRP:HE1	5:E:401:PRO:CD	2.10	0.65
12:L:75:GLN:CB	13:M:65:ILE:HG23	2.19	0.65
1:A:50:LEU:O	1:A:102:ALA:CB	2.40	0.65
1:A:598:ARG:CZ	4:D:546:VAL:CG1	2.74	0.65
1:A:1013:VAL:CA	1:A:1016:PHE:HE1	2.09	0.65
1:A:1205:GLN:HE21	1:A:1272:LEU:HB3	1.61	0.65
3:C:2698:LEU:HD11	3:C:2768:LEU:O	1.97	0.65
4:D:148:GLU:CG	4:D:149:PRO:CD	2.68	0.65
4:D:170:THR:CG2	13:M:66:ILE:HG13	2.16	0.65
1:A:870:PRO:C	1:A:871:LEU:CD1	2.64	0.65
1:A:1642:ALA:HB2	1:A:1652:GLN:CB	2.26	0.65
2:B:441:LYS:O	5:E:518:ASN:ND2	2.30	0.65
2:B:927:ARG:HH12	2:B:976:LEU:CB	2.10	0.65
2:B:1058:LYS:HD3	2:B:1167:MET:SD	2.37	0.65
2:B:1115:ASP:C	2:B:1119:LYS:HZ2	1.99	0.65
2:B:1559:MET:HG2	2:B:1577:ARG:NH2	2.07	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3300:GLU:OE2	2:B:3354:LYS:HE3	1.91	0.65
2:B:3402:LYS:C	2:B:3402:LYS:HD3	2.16	0.65
3:C:268:ILE:HD13	3:C:301:TRP:CH2	2.32	0.65
3:C:3732:HIS:CG	3:C:3757:LEU:HD12	2.32	0.65
5:E:377:ASN:HD22	5:E:377:ASN:N	1.94	0.65
15:O:95:LEU:O	15:O:95:LEU:HD12	1.96	0.65
1:A:596:LEU:HD12	1:A:596:LEU:N	2.12	0.65
1:A:948:LEU:CG	1:A:1010:LYS:HG2	2.26	0.65
1:A:1596:ARG:HG2	1:A:1603:TYR:CZ	2.32	0.65
2:B:724:HIS:CE1	2:B:728:CYS:SG	2.90	0.65
3:C:114:LEU:HD13	3:C:114:LEU:O	1.97	0.65
4:D:177:ASN:ND2	13:M:60:ASN:CG	2.51	0.65
4:D:297:LYS:HB3	4:D:316:LEU:HB3	1.77	0.65
6:F:91:GLN:CD	6:F:96:THR:HG21	2.17	0.65
11:K:84:GLN:OE1	11:K:84:GLN:N	2.27	0.65
1:A:604:ALA:H	1:A:698:GLU:CD	1.98	0.65
1:A:952:GLN:HG2	1:A:1006:ILE:HG21	1.79	0.65
1:A:1136:MET:HA	1:A:1136:MET:CE	2.26	0.65
2:B:973:THR:CB	3:C:344:ASN:HB2	2.27	0.65
2:B:3118:TYR:CB	2:B:3455:SER:CB	2.70	0.65
3:C:2730:LEU:HD12	3:C:2730:LEU:N	2.12	0.65
4:D:93:THR:HG22	4:D:95:LYS:HG2	1.78	0.65
4:D:105:MET:HE3	14:N:47:THR:O	1.96	0.65
4:D:265:ARG:HB2	5:E:125:GLN:CG	2.27	0.65
4:D:569:TYR:HH	4:D:578:LYS:CD	1.99	0.65
6:F:74:ILE:HA	7:G:130:THR:HA	1.79	0.65
10:J:29:PRO:HB3	15:O:106:GLN:HE22	1.62	0.65
10:J:48:LEU:HD23	10:J:60:ILE:HD13	1.77	0.65
10:J:97:TYR:HB2	10:J:106:LEU:HD13	1.79	0.65
1:A:95:PHE:CA	1:A:124:THR:CB	2.75	0.64
1:A:690:LEU:N	1:A:690:LEU:HD12	2.12	0.64
1:A:1162:LEU:O	1:A:1162:LEU:HD23	1.97	0.64
2:B:433:ILE:CG2	2:B:463:PHE:CZ	2.45	0.64
2:B:954:ASP:OD2	3:C:282:ARG:HD3	1.97	0.64
2:B:1237:ARG:HH21	2:B:1262:ASP:CB	2.10	0.64
2:B:1612:LEU:HD21	2:B:1637:CYS:SG	2.36	0.64
2:B:3453:LEU:HD22	2:B:3492:ILE:CD1	2.27	0.64
3:C:180:LEU:HD23	3:C:187:TRP:CE2	2.32	0.64
3:C:2771:PHE:O	3:C:2775:VAL:HG23	1.97	0.64
3:C:4049:ILE:HD11	3:C:4110:ALA:HB1	1.80	0.64
5:E:72:GLY:HA2	8:H:68:PHE:HA	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:35:CYS:HB3	8:H:40:GLU:HB3	1.79	0.64
10:J:77:HIS:CG	11:K:70:VAL:HG23	2.32	0.64
10:J:79:PHE:CG	11:K:68:ALA:HB1	2.32	0.64
1:A:576:TYR:CE1	1:A:620:PRO:C	2.66	0.64
1:A:1069:TYR:CD1	1:A:1078:THR:CG2	2.80	0.64
1:A:3312:GLN:HG2	1:A:3312:GLN:O	1.97	0.64
2:B:3231:VAL:O	2:B:3339:TRP:CD1	2.50	0.64
3:C:269:PHE:HB2	3:C:291:SER:HB3	1.77	0.64
3:C:272:SER:OG	3:C:322:GLU:HG3	1.96	0.64
4:D:248:MET:CE	7:G:147:VAL:CB	2.69	0.64
5:E:395:VAL:HG22	5:E:402:ILE:HD12	1.75	0.64
9:I:67:LEU:HD12	9:I:75:TRP:CE2	2.32	0.64
10:J:79:PHE:CE2	11:K:88:LEU:HD23	2.32	0.64
17:Q:175:ASN:HA	17:Q:179:MET:O	1.98	0.64
1:A:992:ASP:OD2	1:A:995:ILE:HG12	1.97	0.64
1:A:1201:TYR:HA	1:A:1204:LYS:HB2	1.79	0.64
1:A:3121:LEU:HD23	1:A:3429:TRP:HB2	1.64	0.64
2:B:595:LEU:HD23	5:E:389:TRP:CH2	2.33	0.64
2:B:963:PHE:CE2	3:C:103:THR:N	2.66	0.64
2:B:970:ALA:HB3	3:C:345:TRP:CZ3	1.86	0.64
3:C:2606:GLY:CA	3:C:2910:TRP:CZ3	2.80	0.64
3:C:2903:LEU:HD23	3:C:2903:LEU:C	2.17	0.64
4:D:543:MET:SD	4:D:563:MET:HB3	2.36	0.64
7:G:79:VAL:HG23	7:G:146:ILE:HD12	1.79	0.64
1:A:14:LYS:CA	2:B:19:SER:O	2.45	0.64
1:A:598:ARG:HD3	4:D:319:TYR:HE1	1.60	0.64
1:A:694:GLN:HA	4:D:321:PHE:CZ	2.33	0.64
1:A:791:LEU:CD1	1:A:795:ILE:HD11	2.28	0.64
1:A:906:LEU:CD1	1:A:998:VAL:CG2	2.75	0.64
1:A:948:LEU:HD22	1:A:948:LEU:N	2.13	0.64
2:B:446:GLY:CA	5:E:512:GLU:OE2	2.43	0.64
2:B:581:ASN:HD21	5:E:184:MET:HE1	1.58	0.64
2:B:3231:VAL:HG13	2:B:3339:TRP:CD1	2.32	0.64
3:C:159:TYR:HD1	3:C:179:VAL:HG21	1.60	0.64
4:D:105:MET:CE	14:N:47:THR:O	2.45	0.64
4:D:510:ASN:HD22	4:D:552:PRO:HA	1.61	0.64
5:E:271:LEU:N	5:E:271:LEU:HD12	2.13	0.64
10:J:19:LYS:HG2	10:J:28:TRP:CD2	2.33	0.64
14:N:81:ILE:HA	15:O:87:PHE:O	1.98	0.64
1:A:576:TYR:CE1	1:A:624:PHE:N	2.65	0.64
1:A:597:VAL:O	1:A:600:MET:HB2	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1066:VAL:HG12	1:A:1068:THR:H	1.61	0.64
1:A:1487:VAL:HA	1:A:1490:PHE:CE2	2.32	0.64
2:B:582:MET:HE2	2:B:587:GLY:N	2.12	0.64
2:B:1212:ILE:HG22	2:B:1213:PRO:HD2	1.78	0.64
4:D:91:TYR:HE2	13:M:80:LEU:CB	1.94	0.64
5:E:252:ILE:HG13	5:E:253:MET:HG2	1.79	0.64
5:E:384:LEU:CD2	5:E:417:TRP:NE1	2.61	0.64
8:H:62:GLY:HA2	9:I:83:TYR:HA	1.79	0.64
9:I:5:LYS:HA	9:I:9:ASP:HB2	1.78	0.64
1:A:644:LEU:HA	1:A:647:GLN:HG3	1.79	0.64
1:A:1118:LEU:HD22	1:A:1118:LEU:H	1.61	0.64
1:A:3249:ILE:HD11	1:A:3273:TYR:CA	2.27	0.64
2:B:730:LEU:HD12	2:B:787:LEU:HD12	1.80	0.64
2:B:969:LEU:HD22	3:C:343:ASN:HA	1.80	0.64
3:C:2669:ILE:CD1	3:C:2847:ALA:HB3	2.09	0.64
4:D:172:GLU:HB2	12:L:51:LYS:HG2	1.80	0.64
4:D:348:ALA:HB1	4:D:368:TYR:HB2	1.80	0.64
5:E:22:ASP:HB2	14:N:91:THR:N	2.12	0.64
8:H:70:THR:H	9:I:76:GLN:HG2	1.62	0.64
2:B:58:SER:H	2:B:71:CYS:CB	2.05	0.64
2:B:552:LYS:HG3	2:B:622:VAL:HG22	1.79	0.64
2:B:3133:ILE:HG12	2:B:3440:LEU:HD13	1.80	0.64
3:C:29:VAL:HG23	3:C:92:ALA:HA	1.80	0.64
3:C:268:ILE:CD1	3:C:301:TRP:CZ2	2.80	0.64
3:C:2730:LEU:CD1	3:C:2730:LEU:H	2.11	0.64
8:H:84:LEU:HD12	8:H:84:LEU:N	2.12	0.64
14:N:24:VAL:HG13	14:N:25:PHE:CD2	2.31	0.64
15:O:31:PRO:HD3	15:O:109:ASN:HD22	1.62	0.64
1:A:1140:GLU:OE2	4:D:165:LYS:CG	2.46	0.64
2:B:958:GLU:OE1	2:B:958:GLU:N	2.31	0.64
3:C:98:PHE:CD1	3:C:111:THR:HG22	2.32	0.64
3:C:195:ASN:O	3:C:239:TRP:CZ2	2.50	0.64
4:D:114:ASP:OD2	5:E:43:ARG:N	2.30	0.64
12:L:55:LEU:C	12:L:55:LEU:HD23	2.18	0.64
1:A:95:PHE:O	1:A:124:THR:CA	2.45	0.64
1:A:3128:THR:CG2	1:A:3422:LEU:HB3	2.28	0.64
1:A:3449:LEU:CD2	1:A:3488:LEU:HD23	2.24	0.64
2:B:224:ASP:HA	2:B:347:ILE:CB	2.28	0.64
2:B:521:PHE:CZ	2:B:605:LYS:HB3	2.32	0.64
2:B:578:LEU:HD23	2:B:587:GLY:HA3	1.78	0.64
2:B:595:LEU:HD21	5:E:389:TRP:HZ2	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:734:GLU:N	2:B:735:PRO:HD2	2.12	0.64
2:B:935:ASN:HB3	3:C:283:THR:HG22	1.79	0.64
2:B:1145:LYS:O	2:B:1149:ASP:CB	2.46	0.64
2:B:1455:VAL:CG1	2:B:1456:PHE:N	2.61	0.64
2:B:3155:GLU:HA	2:B:3155:GLU:OE2	1.98	0.64
2:B:3257:ARG:HG2	2:B:3276:VAL:HG11	1.79	0.64
3:C:208:MET:HG3	3:C:208:MET:O	1.97	0.64
4:D:75:LEU:CG	15:O:102:LEU:HD11	2.25	0.64
5:E:126:ILE:HG13	5:E:128:LEU:HG	1.78	0.64
8:H:62:GLY:HA3	9:I:83:TYR:CA	2.28	0.64
14:N:8:TYR:CE1	14:N:13:VAL:CG2	2.80	0.64
16:P:24:ASN:HA	16:P:96:GLY:CA	2.28	0.64
16:P:53:LEU:O	16:P:57:ILE:N	2.25	0.64
1:A:753:LEU:O	1:A:753:LEU:HD23	1.97	0.64
1:A:1067:PRO:C	1:A:1078:THR:OG1	2.36	0.64
1:A:3124:ILE:HD12	1:A:3429:TRP:HD1	1.61	0.64
2:B:1129:ALA:HA	2:B:1132:GLU:OE2	1.98	0.64
2:B:1566:ASN:CB	3:C:2275:LYS:CE	2.76	0.64
3:C:214:LEU:HD13	3:C:232:TYR:O	1.97	0.64
3:C:217:PHE:HB2	3:C:229:ILE:HG12	1.80	0.64
4:D:106:ILE:HD12	4:D:106:ILE:O	1.97	0.64
4:D:208:TYR:CZ	9:I:100:ASN:CB	2.76	0.64
4:D:414:PHE:CD2	4:D:426:TRP:HD1	2.03	0.64
10:J:26:VAL:HA	10:J:98:PHE:HA	1.80	0.64
1:A:841:ILE:CD1	1:A:961:ALA:CB	2.76	0.63
1:A:3191:LYS:HG2	1:A:3360:GLU:HG3	1.79	0.63
1:A:3212:VAL:CG2	1:A:3338:ALA:CB	2.69	0.63
1:A:3421:SER:HB2	1:A:3716:LEU:CD2	2.28	0.63
2:B:1132:GLU:O	2:B:1136:ASP:CG	2.36	0.63
2:B:2190:LYS:HE3	20:B:5601:ATP:O1B	1.98	0.63
3:C:2606:GLY:HA3	3:C:2910:TRP:CH2	2.32	0.63
3:C:2613:THR:HG21	3:C:3176:LEU:CD2	2.23	0.63
3:C:2698:LEU:HD23	3:C:2698:LEU:C	2.18	0.63
3:C:2745:LYS:CE	3:C:2749:VAL:CB	2.76	0.63
4:D:252:VAL:CA	7:G:149:GLN:HE22	2.10	0.63
5:E:267:HIS:CD2	5:E:322:LEU:HB3	2.33	0.63
5:E:366:HIS:HE1	5:E:394:TRP:CH2	2.16	0.63
6:F:74:ILE:HD12	6:F:77:ILE:CD1	2.23	0.63
10:J:32:CYS:HG	10:J:96:ILE:HD11	1.61	0.63
11:K:42:ILE:HG22	11:K:62:VAL:HG21	1.79	0.63
1:A:837:GLN:NE2	1:A:958:ALA:CB	2.59	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1031:ILE:CG2	1:A:1034:SER:HG	2.11	0.63
1:A:1126:VAL:HG12	1:A:1132:LEU:HD12	1.79	0.63
2:B:89:ILE:N	2:B:100:THR:CB	2.60	0.63
2:B:1230:MET:HE2	2:B:1267:TYR:CA	2.28	0.63
2:B:2758:GLN:HE22	2:B:2834:TYR:H	1.47	0.63
2:B:2904:THR:HG21	2:B:2911:ILE:HB	1.80	0.63
2:B:3085:VAL:HG23	2:B:3477:TRP:CE2	2.33	0.63
3:C:354:VAL:HG13	3:C:357:ILE:HB	1.78	0.63
3:C:2720:PRO:O	3:C:2798:PHE:HZ	1.79	0.63
3:C:2730:LEU:HD12	3:C:2730:LEU:H	1.63	0.63
10:J:26:VAL:HG23	10:J:98:PHE:HA	1.79	0.63
10:J:86:CYS:CB	11:K:61:VAL:HG22	2.26	0.63
1:A:7:SER:C	1:A:9:ARG:H	2.02	0.63
1:A:3306:LEU:CD1	1:A:3310:LEU:CG	2.72	0.63
2:B:744:MET:HE1	2:B:772:ILE:HG23	1.81	0.63
2:B:902:ILE:HG21	2:B:1076:LEU:HD11	1.79	0.63
2:B:3164:VAL:HG11	2:B:3409:ALA:CB	2.23	0.63
2:B:3239:VAL:CG1	2:B:3291:ILE:HD11	2.28	0.63
2:B:3422:LEU:HD21	2:B:3706:ILE:HG22	1.80	0.63
5:E:166:GLU:HA	5:E:166:GLU:OE2	1.98	0.63
1:A:326:PRO:CB	1:A:372:GLN:O	2.47	0.63
1:A:598:ARG:CD	4:D:319:TYR:CE1	2.80	0.63
1:A:614:PHE:CE1	1:A:644:LEU:CB	2.81	0.63
1:A:1029:GLU:HA	1:A:1088:TRP:CH2	2.34	0.63
2:B:444:LEU:HD21	2:B:526:ASN:HB2	1.80	0.63
2:B:555:LEU:HD23	2:B:625:LEU:CD1	2.29	0.63
2:B:787:LEU:O	2:B:791:HIS:HD2	1.81	0.63
2:B:900:PHE:HZ	2:B:933:TRP:CH2	2.16	0.63
3:C:12:GLN:CG	3:C:69:TRP:HE1	2.12	0.63
4:D:172:GLU:CB	13:M:64:HIS:HB2	2.21	0.63
7:G:58:SER:C	7:G:59:GLU:HA	2.18	0.63
8:H:60:ILE:HA	9:I:85:TYR:CB	2.28	0.63
9:I:20:ILE:C	9:I:100:ASN:HD21	2.02	0.63
1:A:669:ALA:CB	1:A:689:ASP:OD2	2.47	0.63
1:A:804:ASN:HD22	5:E:148:LYS:HB3	1.56	0.63
1:A:1619:GLU:HA	1:A:1619:GLU:OE1	1.99	0.63
2:B:718:ILE:HD11	2:B:773:VAL:CG2	2.28	0.63
2:B:798:ASN:CB	2:B:874:ALA:CA	2.76	0.63
2:B:1375:VAL:N	2:B:1420:LEU:CB	2.61	0.63
2:B:1458:PHE:HD1	2:B:1560:MET:HE3	1.64	0.63
3:C:2726:THR:CA	3:C:2729:LEU:CG	2.57	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:564:ASP:HA	4:D:590:LEU:HD13	1.80	0.63
5:E:60:SER:HB3	10:J:87:GLN:CG	2.27	0.63
6:F:26:PHE:CE2	6:F:52:VAL:HG11	2.34	0.63
8:H:66:GLY:CA	9:I:56:ILE:HG22	1.99	0.63
1:A:1634:ILE:CD1	1:A:1656:ILE:HG23	2.28	0.63
2:B:58:SER:N	2:B:70:LYS:C	2.51	0.63
2:B:467:VAL:HG13	2:B:471:THR:OG1	1.91	0.63
2:B:1058:LYS:HB2	2:B:1166:GLU:CB	2.28	0.63
2:B:1330:TRP:HA	2:B:1410:PHE:HA	1.79	0.63
4:D:205:PHE:CZ	9:I:12:ILE:HG22	2.33	0.63
5:E:198:TYR:HB3	5:E:208:PRO:HB3	1.80	0.63
6:F:52:VAL:HG23	6:F:89:ILE:HD13	1.79	0.63
7:G:119:PRO:CG	9:I:12:ILE:CG2	2.63	0.63
10:J:87:GLN:OE1	11:K:44:SER:CB	2.45	0.63
1:A:1522:GLU:HA	1:A:1541:PHE:HZ	1.64	0.63
2:B:724:HIS:NE2	2:B:728:CYS:SG	2.71	0.63
2:B:2237:VAL:HG22	2:B:2639:LEU:HD22	1.80	0.63
2:B:3162:VAL:HG12	2:B:3166:LYS:HE3	1.81	0.63
3:C:1207:LEU:HD13	3:C:1214:TYR:CE1	2.34	0.63
4:D:177:ASN:OD1	13:M:60:ASN:CG	2.36	0.63
4:D:395:HIS:NE2	4:D:399:VAL:HG13	2.00	0.63
5:E:266:THR:HG21	5:E:320:THR:CA	2.11	0.63
1:A:326:PRO:O	1:A:376:ASN:CB	2.46	0.63
1:A:608:ILE:HD11	1:A:701:CYS:HB3	1.79	0.63
1:A:2496:GLY:HA2	19:A:4701:ADP:PB	2.38	0.63
2:B:1107:ARG:HH21	2:B:1172:LYS:CE	2.12	0.63
2:B:1464:THR:O	2:B:1466:THR:HG23	1.98	0.63
2:B:3139:GLY:HA2	2:B:3695:LEU:CD2	2.29	0.63
3:C:2745:LYS:CE	3:C:2749:VAL:CG2	2.66	0.63
4:D:392:ASN:O	4:D:435:PRO:HG3	1.98	0.63
4:D:499:HIS:NE2	4:D:528:TRP:HH2	1.97	0.63
4:D:503:VAL:HA	4:D:520:SER:HA	1.81	0.63
4:D:528:TRP:CE2	4:D:535:GLN:CB	2.80	0.63
5:E:48:ILE:CB	12:L:88:PHE:CE2	2.81	0.63
5:E:343:LEU:CD2	5:E:358:ARG:HG2	2.28	0.63
5:E:394:TRP:NE1	5:E:401:PRO:N	2.47	0.63
6:F:35:ARG:HG3	6:F:41:SER:HA	1.80	0.63
8:H:52:ARG:N	18:R:63:ASN:HA	2.13	0.63
12:L:80:LYS:HG2	12:L:103:LYS:HG2	1.81	0.63
17:Q:7:CYS:O	17:Q:11:ILE:N	2.27	0.63
1:A:53:ILE:CA	1:A:54:PHE:N	2.62	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:670:LEU:HD23	1:A:670:LEU:C	2.19	0.63
1:A:819:VAL:CA	1:A:840:TYR:CE2	2.82	0.63
2:B:658:GLN:CD	2:B:672:ASN:O	2.37	0.63
2:B:660:LEU:HG	2:B:755:ILE:CD1	2.14	0.63
2:B:721:ASN:OD1	2:B:777:PHE:CD2	2.52	0.63
2:B:973:THR:HG21	3:C:343:ASN:C	2.19	0.63
2:B:1447:ILE:HD13	2:B:1484:LEU:CB	2.29	0.63
2:B:2188:SER:O	20:B:5601:ATP:H5'2	1.99	0.63
2:B:3121:LEU:HD12	2:B:3451:SER:OG	1.99	0.63
2:B:3445:LYS:CB	2:B:3487:PRO:CB	2.76	0.63
3:C:1983:THR:HG22	19:C:4702:ADP:C6	2.34	0.63
3:C:2780:VAL:HG12	3:C:2786:ASN:ND2	2.13	0.63
3:C:3227:ALA:HA	3:C:3393:ILE:HG22	1.81	0.63
4:D:174:GLN:NE2	12:L:50:GLU:N	2.46	0.63
4:D:242:LYS:HG2	7:G:60:VAL:HG23	1.79	0.63
4:D:564:ASP:HA	4:D:590:LEU:CD1	2.28	0.63
5:E:110:LYS:CG	6:F:10:GLN:CD	2.67	0.63
1:A:155:GLY:HA2	2:B:167:GLN:O	1.96	0.62
1:A:971:ASN:CA	1:A:985:PHE:CE2	2.61	0.62
2:B:99:LEU:O	2:B:100:THR:C	2.35	0.62
2:B:861:ASP:OD2	3:C:170:GLN:CD	2.36	0.62
3:C:1983:THR:CG2	19:C:4702:ADP:N1	2.61	0.62
3:C:2721:GLU:OE1	3:C:2814:CYS:CA	2.42	0.62
4:D:242:LYS:HG2	7:G:60:VAL:HG22	1.81	0.62
5:E:156:GLU:OE1	5:E:156:GLU:HA	1.98	0.62
5:E:310:LEU:CD1	5:E:358:ARG:HH12	2.03	0.62
10:J:79:PHE:HA	11:K:68:ALA:HB2	1.81	0.62
1:A:1052:LEU:HD13	1:A:1166:TYR:CG	2.33	0.62
1:A:1100:LEU:HD23	1:A:1100:LEU:O	1.99	0.62
1:A:1638:THR:CB	1:A:1655:GLN:HG2	2.23	0.62
1:A:3212:VAL:HG13	1:A:3335:TRP:CD1	2.33	0.62
2:B:1458:PHE:HZ	2:B:1563:VAL:HG12	1.64	0.62
2:B:2192:CYS:SG	20:B:5601:ATP:H2'	2.39	0.62
3:C:898:TRP:O	3:C:902:LEU:HD13	1.99	0.62
3:C:2799:THR:HB	3:C:2800:PRO:HD3	1.80	0.62
4:D:77:PRO:CA	15:O:102:LEU:HD23	2.27	0.62
4:D:170:THR:HG21	13:M:66:ILE:HG13	1.68	0.62
4:D:180:ILE:CB	10:J:75:TYR:HE1	2.12	0.62
4:D:567:GLN:NE2	4:D:578:LYS:HE3	2.13	0.62
5:E:58:GLU:CA	10:J:89:VAL:HA	2.29	0.62
1:A:3099:TYR:HA	1:A:3451:THR:CG2	2.25	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3255:GLU:OE1	1:A:3270:LYS:HA	1.99	0.62
1:A:3322:ALA:HB1	1:A:3330:ALA:HA	1.82	0.62
2:B:60:ASN:HA	2:B:81:ILE:HA	0.80	0.62
2:B:1438:ALA:O	2:B:1442:LYS:HG3	1.98	0.62
2:B:3114:LEU:HD22	2:B:3460:TYR:CE2	2.34	0.62
2:B:3822:LEU:HD12	2:B:4282:LEU:HD13	1.81	0.62
4:D:66:LEU:HB2	4:D:70:MET:HB2	1.80	0.62
4:D:96:PHE:CD2	11:K:47:LYS:NZ	2.68	0.62
5:E:20:PHE:CE2	15:O:80:LYS:HD2	2.25	0.62
5:E:52:ASN:OD1	12:L:22:ARG:NH2	2.33	0.62
6:F:26:PHE:CE1	6:F:49:ALA:CB	2.82	0.62
8:H:29:LYS:HB2	8:H:29:LYS:NZ	2.14	0.62
8:H:60:ILE:CB	9:I:85:TYR:HB3	2.28	0.62
1:A:830:LEU:HD12	1:A:830:LEU:N	2.14	0.62
1:A:906:LEU:CB	1:A:998:VAL:CG1	2.77	0.62
1:A:3273:TYR:HD1	1:A:3276:SER:H	1.47	0.62
2:B:53:ILE:O	2:B:87:LYS:HA	1.98	0.62
2:B:945:GLN:O	2:B:945:GLN:HG2	2.00	0.62
2:B:1487:MET:HA	2:B:3612:ASP:OD2	1.99	0.62
2:B:2666:ARG:HD2	20:B:5601:ATP:PG	2.35	0.62
2:B:3252:VAL:CG2	2:B:3330:SER:OG	2.47	0.62
3:C:136:ALA:HB2	3:C:168:ASN:OD1	1.98	0.62
3:C:2795:MET:N	3:C:2796:PRO:CD	2.61	0.62
4:D:89:TYR:CE2	11:K:56:PRO:HG3	2.33	0.62
16:P:24:ASN:N	16:P:96:GLY:HA2	2.14	0.62
16:P:57:ILE:O	16:P:62:LYS:HA	1.99	0.62
1:A:617:ILE:HG21	1:A:644:LEU:HG	1.82	0.62
1:A:3194:ALA:HB3	1:A:3356:VAL:HG22	1.77	0.62
2:B:532:THR:HG22	2:B:536:ILE:CD1	2.28	0.62
2:B:789:LYS:CB	2:B:839:LEU:CD1	2.76	0.62
2:B:3261:ILE:O	2:B:3306:ILE:HD13	1.99	0.62
3:C:13:THR:O	3:C:68:GLU:HA	2.00	0.62
3:C:24:HIS:CE1	3:C:325:SER:HG	2.00	0.62
3:C:190:LEU:HD23	3:C:232:TYR:OH	1.99	0.62
3:C:278:GLU:HA	3:C:278:GLU:OE1	1.98	0.62
11:K:77:PHE:CZ	11:K:88:LEU:CD1	2.73	0.62
1:A:847:PHE:HZ	1:A:851:LYS:HZ2	1.48	0.62
1:A:861:ASP:OD2	5:E:152:LEU:HD12	2.00	0.62
1:A:935:VAL:HG21	1:A:1017:LEU:CD2	2.26	0.62
2:B:429:LEU:HD22	2:B:492:PHE:CD2	2.35	0.62
2:B:714:ALA:HA	2:B:717:MET:HE2	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1054:ILE:HG12	2:B:1098:TYR:HB3	1.82	0.62
2:B:1458:PHE:CZ	2:B:1563:VAL:HG12	2.34	0.62
2:B:2264:ASP:O	2:B:2625:ARG:NH2	2.32	0.62
3:C:2584:LEU:HD21	3:C:2935:VAL:HG11	1.80	0.62
4:D:327:GLY:HA3	4:D:349:GLY:HA2	1.81	0.62
5:E:50:LEU:CD2	12:L:23:PHE:CB	2.78	0.62
5:E:91:GLU:N	5:E:91:GLU:OE1	2.33	0.62
14:N:115:MET:HE1	15:O:129:CYS:SG	2.38	0.62
1:A:728:ASN:HD21	4:D:396:THR:CG2	2.03	0.62
1:A:3191:LYS:HB2	1:A:3191:LYS:HZ2	1.65	0.62
2:B:583:PRO:HA	5:E:186:PHE:CD2	2.34	0.62
2:B:2544:LYS:H	19:B:5501:ADP:PA	2.18	0.62
3:C:2581:LEU:HD11	3:C:2936:SER:OG	1.99	0.62
3:C:2694:ALA:HA	3:C:2819:ASN:HB3	1.81	0.62
5:E:304:LEU:HD13	5:E:353:VAL:HG11	1.80	0.62
7:G:99:ILE:HG23	7:G:103:ILE:HD12	1.81	0.62
1:A:603:GLU:HA	1:A:603:GLU:OE2	1.99	0.62
1:A:892:TRP:CH2	7:G:14:GLN:N	2.68	0.62
1:A:3251:ILE:CD1	17:Q:61:SER:CA	2.42	0.62
2:B:10:PRO:C	2:B:25:GLN:CA	2.60	0.62
2:B:501:ARG:CZ	4:D:491:GLN:CB	2.78	0.62
2:B:532:THR:H	2:B:536:ILE:CD1	2.06	0.62
3:C:2800:PRO:HB3	3:C:2818:VAL:HG21	1.81	0.62
4:D:80:PRO:CD	15:O:103:TRP:CE2	2.83	0.62
5:E:20:PHE:CZ	15:O:80:LYS:CE	2.73	0.62
16:P:34:ASP:O	16:P:69:LEU:N	2.32	0.62
1:A:635:ARG:HA	1:A:638:TYR:HD2	1.62	0.62
1:A:1567:ASN:HB3	1:A:1570:LEU:HD13	1.82	0.62
2:B:598:ARG:NH1	5:E:389:TRP:CD1	2.68	0.62
2:B:3269:LEU:H	2:B:3269:LEU:HD13	1.63	0.62
3:C:540:LYS:CB	3:C:705:LYS:H	2.12	0.62
4:D:292:GLU:OE1	4:D:292:GLU:N	2.19	0.62
8:H:11:ILE:HG22	8:H:79:LEU:CB	2.30	0.62
11:K:89:LEU:HD12	11:K:89:LEU:C	2.21	0.62
1:A:906:LEU:HD12	1:A:998:VAL:HG21	1.82	0.62
1:A:967:LYS:O	1:A:967:LYS:HG2	1.99	0.62
1:A:2839:LEU:HD11	19:A:4901:ADP:C5	2.28	0.62
1:A:3306:LEU:HD11	1:A:3310:LEU:HG	1.81	0.62
2:B:17:ARG:CB	2:B:21:ALA:HB3	2.30	0.62
2:B:518:TYR:CD1	5:E:404:ARG:NH1	2.55	0.62
2:B:730:LEU:CD1	2:B:787:LEU:CD1	2.78	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:962:PHE:HA	3:C:104:SER:HB2	1.81	0.62
2:B:1792:THR:HG22	2:B:2038:ASN:ND2	2.15	0.62
2:B:3118:TYR:HD2	2:B:3455:SER:CB	2.13	0.62
3:C:783:SER:CB	3:C:838:TRP:CZ2	2.83	0.62
3:C:2018:GLN:CD	19:C:4702:ADP:H2'	2.19	0.62
4:D:111:MET:HE1	15:O:90:ILE:CG2	2.23	0.62
5:E:395:VAL:HG23	5:E:402:ILE:HG13	1.80	0.62
1:A:600:MET:HE2	1:A:697:ARG:NH1	2.15	0.61
1:A:655:PHE:CZ	1:A:659:TRP:NE1	2.67	0.61
1:A:868:LEU:N	1:A:868:LEU:HD12	2.14	0.61
1:A:1436:ILE:HG23	1:A:1474:ASP:OD2	1.99	0.61
1:A:1597:LYS:HE3	1:A:1962:ILE:HD11	1.82	0.61
2:B:409:SER:HB2	2:B:413:PHE:CB	2.29	0.61
2:B:913:PHE:CE2	2:B:1078:ILE:CD1	2.79	0.61
4:D:361:ALA:N	5:E:133:PHE:CZ	2.68	0.61
8:H:8:GLN:HA	8:H:8:GLN:OE1	2.00	0.61
1:A:52:LYS:O	1:A:105:LYS:HA	2.00	0.61
1:A:1126:VAL:CG1	1:A:1131:SER:O	2.47	0.61
2:B:429:LEU:HB3	2:B:492:PHE:HE2	1.65	0.61
2:B:721:ASN:OD1	2:B:777:PHE:HD2	1.83	0.61
2:B:790:ILE:HG12	2:B:836:ILE:HG23	1.81	0.61
2:B:1458:PHE:CD1	2:B:1560:MET:HE3	2.35	0.61
2:B:1611:PHE:CE1	2:B:1923:MET:HG3	2.35	0.61
3:C:12:GLN:OE1	3:C:12:GLN:N	2.33	0.61
3:C:24:HIS:NE2	3:C:325:SER:HB3	2.14	0.61
4:D:75:LEU:CB	15:O:102:LEU:CD1	2.45	0.61
4:D:80:PRO:CG	15:O:103:TRP:HZ2	2.05	0.61
4:D:184:GLY:HA2	11:K:69:TYR:CD1	2.28	0.61
4:D:541:LEU:HD12	4:D:545:VAL:HG22	1.82	0.61
5:E:16:ASN:N	15:O:132:GLU:HG3	2.14	0.61
5:E:20:PHE:HZ	15:O:80:LYS:CG	1.64	0.61
5:E:112:LEU:CD2	6:F:97:MET:HE2	2.30	0.61
5:E:112:LEU:O	5:E:112:LEU:HD23	2.00	0.61
14:N:25:PHE:CZ	14:N:103:ILE:CG2	2.47	0.61
1:A:1143:ARG:HD2	4:D:169:ASN:HD21	1.65	0.61
1:A:3306:LEU:HA	1:A:3309:TYR:HD2	1.65	0.61
2:B:2512:VAL:HG11	2:B:2687:ILE:HA	1.83	0.61
2:B:3109:LYS:HE2	2:B:3113:GLU:OE2	1.99	0.61
3:C:2585:PHE:HB2	3:C:2932:SER:OG	2.00	0.61
5:E:188:GLN:OE1	5:E:188:GLN:HA	1.99	0.61
6:F:35:ARG:HE	6:F:41:SER:HB2	1.62	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:84:GLN:HG3	15:O:61:GLU:CA	2.23	0.61
1:A:888:ARG:NH2	7:G:5:THR:CB	2.63	0.61
1:A:948:LEU:CB	1:A:1010:LYS:CD	2.79	0.61
1:A:3386:ASN:O	1:A:3390:VAL:CG2	2.40	0.61
2:B:690:LEU:HD12	2:B:690:LEU:O	2.00	0.61
2:B:3236:LYS:N	2:B:3237:PRO:HD2	2.14	0.61
3:C:2745:LYS:CE	3:C:2749:VAL:CG1	2.51	0.61
3:C:2800:PRO:HB3	3:C:2818:VAL:CG2	2.29	0.61
4:D:91:TYR:HB2	13:M:28:VAL:HG11	1.82	0.61
4:D:648:GLU:HA	4:D:651:LYS:HE2	1.81	0.61
14:N:72:ILE:CB	15:O:97:ILE:CG1	2.73	0.61
14:N:84:GLN:CB	15:O:64:VAL:HG21	2.24	0.61
15:O:95:LEU:HD12	15:O:95:LEU:C	2.20	0.61
18:R:98:MET:C	18:R:100:GLY:H	2.03	0.61
1:A:552:PHE:CA	1:A:568:ARG:HH12	2.13	0.61
1:A:590:GLN:OE1	1:A:590:GLN:HA	2.00	0.61
1:A:677:ARG:HH21	1:A:684:LEU:HD21	1.65	0.61
1:A:753:LEU:HD23	1:A:753:LEU:C	2.20	0.61
1:A:753:LEU:N	1:A:754:PRO:HD2	2.16	0.61
1:A:1458:MET:SD	1:A:1552:MET:HG3	2.40	0.61
1:A:1636:LYS:O	1:A:1657:GLN:HB2	2.01	0.61
2:B:551:TYR:CD2	2:B:622:VAL:CG1	2.83	0.61
2:B:681:LEU:HD13	2:B:701:ILE:HG22	1.82	0.61
2:B:792:LYS:HE3	2:B:796:ASN:HD21	1.65	0.61
2:B:914:ASP:N	2:B:915:PRO:HD2	2.14	0.61
3:C:142:ALA:N	3:C:143:PRO:HD2	2.16	0.61
4:D:106:ILE:O	15:O:99:SER:N	2.33	0.61
4:D:186:SER:HB3	10:J:58:GLN:HB2	1.83	0.61
4:D:212:ILE:CG1	9:I:19:MET:HE3	2.29	0.61
4:D:386:TYR:HE1	5:E:142:VAL:CG1	2.13	0.61
4:D:395:HIS:CE1	4:D:399:VAL:CG1	2.71	0.61
4:D:517:ILE:HG13	4:D:550:TRP:CZ2	2.29	0.61
5:E:120:ILE:HA	6:F:101:GLN:OE1	2.01	0.61
5:E:343:LEU:HD22	5:E:358:ARG:HG2	1.82	0.61
1:A:819:VAL:N	1:A:840:TYR:HE2	1.99	0.61
1:A:906:LEU:CG	1:A:998:VAL:CG1	2.56	0.61
1:A:1616:GLN:OE1	1:A:1616:GLN:HA	1.99	0.61
1:A:3260:LYS:HZ1	1:A:3267:LEU:HD21	1.65	0.61
2:B:638:ASP:HA	2:B:641:ILE:CG2	2.31	0.61
2:B:984:ASN:HA	2:B:987:ARG:CG	2.30	0.61
3:C:29:VAL:HG12	3:C:95:MET:SD	2.40	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:213:GLN:HG2	3:C:233:ASP:HB3	1.82	0.61
4:D:70:MET:HE2	5:E:13:GLU:CB	2.29	0.61
12:L:28:GLN:HA	12:L:28:GLN:HE21	1.65	0.61
1:A:604:ALA:CB	1:A:698:GLU:CG	2.78	0.61
1:A:763:LEU:C	1:A:763:LEU:CD1	2.67	0.61
1:A:2676:TRP:CE2	1:A:2699:LEU:HD21	2.36	0.61
1:A:3042:PHE:CZ	1:A:3100:LYS:CE	2.80	0.61
1:A:3121:LEU:HD23	1:A:3429:TRP:CG	2.32	0.61
2:B:578:LEU:HD12	2:B:578:LEU:N	2.15	0.61
2:B:876:GLN:O	2:B:880:LEU:HG	2.00	0.61
2:B:1106:PHE:CZ	2:B:1160:ILE:CD1	2.76	0.61
2:B:1172:LYS:HB2	2:B:1176:VAL:HG23	1.83	0.61
2:B:1641:LEU:HD13	2:B:1662:MET:HB2	1.82	0.61
3:C:143:PRO:CG	3:C:187:TRP:NE1	2.63	0.61
3:C:213:GLN:NE2	3:C:231:ILE:HD12	2.16	0.61
4:D:248:MET:HE1	7:G:147:VAL:CG2	2.29	0.61
5:E:37:ILE:HG23	5:E:37:ILE:O	2.01	0.61
1:A:576:TYR:CE1	1:A:620:PRO:HA	2.36	0.61
1:A:1524:VAL:CG2	1:A:1611:LEU:HD22	2.30	0.61
2:B:408:THR:O	2:B:412:LEU:CB	2.49	0.61
2:B:658:GLN:OE1	2:B:674:ASP:HB2	2.01	0.61
2:B:886:ILE:CD1	2:B:972:ILE:HG23	2.29	0.61
2:B:954:ASP:H	3:C:222:PHE:HB2	1.66	0.61
2:B:1470:LEU:C	2:B:1474:MET:HG2	2.21	0.61
2:B:2070:LYS:HD2	2:B:2309:ARG:HA	1.83	0.61
2:B:3694:LEU:HD21	2:B:3715:ASN:HB3	1.81	0.61
3:C:268:ILE:CD1	3:C:301:TRP:CH2	2.84	0.61
3:C:2617:VAL:HG23	3:C:3183:ILE:HD13	1.83	0.61
4:D:90:ASP:OD2	13:M:32:LYS:CD	2.49	0.61
4:D:399:VAL:HG23	4:D:399:VAL:O	2.00	0.61
4:D:517:ILE:HD13	4:D:527:ILE:CG2	2.17	0.61
1:A:770:LEU:HD22	1:A:774:SER:CB	2.30	0.61
1:A:1142:ILE:CD1	1:A:1190:LEU:HD21	2.30	0.61
1:A:1600:PRO:HB2	1:A:1917:SER:HB3	1.81	0.61
1:A:1603:TYR:O	1:A:1909:LYS:HE2	2.01	0.61
1:A:3442:LYS:HG3	1:A:3485:THR:HG22	1.81	0.61
2:B:467:VAL:CA	2:B:471:THR:OG1	2.49	0.61
2:B:584:PRO:HD3	5:E:186:PHE:HD2	1.66	0.61
2:B:1055:THR:HG22	2:B:1166:GLU:OE1	2.01	0.61
3:C:2581:LEU:HG	3:C:2936:SER:HB3	1.83	0.61
3:C:2614:ALA:HB2	3:C:2903:LEU:HD11	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2790:ASN:HA	3:C:2793:LEU:HD12	1.81	0.61
4:D:184:GLY:N	11:K:69:TYR:CE1	2.68	0.61
4:D:201:GLN:OE1	9:I:102:ASN:CA	2.48	0.61
4:D:252:VAL:HA	7:G:149:GLN:HE22	1.66	0.61
4:D:499:HIS:CD2	4:D:528:TRP:CH2	2.88	0.61
5:E:395:VAL:HG21	5:E:402:ILE:CD1	1.88	0.61
12:L:92:VAL:HG11	12:L:109:LYS:HD3	1.83	0.61
15:O:81:ILE:HD12	15:O:81:ILE:N	2.16	0.61
15:O:91:LYS:HB2	15:O:91:LYS:NZ	2.15	0.61
1:A:970:TYR:C	1:A:983:ALA:O	2.39	0.61
1:A:3211:ALA:O	1:A:3215:ILE:HG13	2.01	0.61
1:A:3232:ILE:HD13	1:A:3316:TRP:CZ3	2.25	0.61
2:B:453:THR:HG21	5:E:511:ARG:HD2	1.83	0.61
2:B:648:VAL:HG22	2:B:680:LEU:HD11	1.82	0.61
2:B:791:HIS:NE2	2:B:866:ILE:HD13	2.15	0.61
2:B:956:LEU:HD11	2:B:960:ARG:HE	1.66	0.61
2:B:2191:THR:OG1	20:B:5601:ATP:O2A	2.18	0.61
2:B:3129:ILE:HD11	2:B:3447:MET:HG3	1.83	0.61
3:C:205:ALA:HB1	3:C:216:ILE:HG22	1.80	0.61
4:D:174:GLN:HB3	13:M:62:GLY:HA3	1.79	0.61
4:D:552:PRO:CG	4:D:595:PHE:HD2	2.13	0.61
16:P:82:PHE:O	16:P:84:ALA:N	2.28	0.61
1:A:948:LEU:HB2	1:A:1010:LYS:HD2	1.83	0.60
1:A:3384:ILE:O	1:A:3388:LYS:HG3	2.01	0.60
2:B:1230:MET:CE	2:B:1267:TYR:N	2.64	0.60
2:B:3314:ILE:HD12	2:B:3344:VAL:HG11	1.83	0.60
3:C:53:PRO:HD2	3:C:53:PRO:O	2.01	0.60
3:C:1983:THR:CB	19:C:4702:ADP:N6	2.59	0.60
3:C:2621:GLU:OE2	3:C:2900:VAL:CG2	2.49	0.60
4:D:208:TYR:HE1	9:I:22:LYS:HB2	1.65	0.60
4:D:405:ASN:HD22	4:D:406:PRO:CD	2.00	0.60
4:D:585:VAL:CG1	4:D:588:PRO:CG	2.79	0.60
5:E:258:GLU:H	5:E:258:GLU:CD	2.03	0.60
5:E:418:SER:HB2	5:E:426:PHE:HE1	1.66	0.60
9:I:87:VAL:HG12	9:I:89:VAL:HG13	1.82	0.60
14:N:116:ALA:HB3	15:O:131:PHE:CZ	2.35	0.60
15:O:16:GLU:HA	15:O:16:GLU:OE2	2.01	0.60
1:A:590:GLN:O	1:A:609:TRP:CH2	2.54	0.60
1:A:747:ILE:CD1	1:A:889:TYR:CZ	2.66	0.60
1:A:1013:VAL:HG13	1:A:1016:PHE:CE1	2.35	0.60
1:A:1134:TYR:CD2	1:A:1268:ARG:NE	2.51	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1449:ILE:CA	1:A:1459:LEU:HD23	2.12	0.60
1:A:4287:THR:HG22	1:A:4549:ILE:HD12	1.84	0.60
2:B:1485:MET:CB	2:B:1505:ARG:HE	2.05	0.60
2:B:2663:VAL:HG23	2:B:2668:GLN:HG3	1.83	0.60
2:B:3269:LEU:HD22	2:B:3269:LEU:O	2.01	0.60
5:E:24:GLU:CD	14:N:91:THR:HG22	2.21	0.60
6:F:11:LEU:CD2	6:F:23:TYR:CZ	2.50	0.60
7:G:120:THR:HG23	9:I:12:ILE:HG21	1.80	0.60
10:J:27:LEU:HG	10:J:29:PRO:HD2	1.82	0.60
14:N:75:GLN:HA	14:N:75:GLN:OE1	2.00	0.60
16:P:27:ASN:CB	16:P:95:GLU:HA	2.32	0.60
1:A:696:ILE:HD13	1:A:720:GLU:HG3	1.83	0.60
1:A:899:LEU:HD22	1:A:995:ILE:HD11	1.83	0.60
1:A:3215:ILE:HG21	1:A:3219:ASP:CG	2.19	0.60
1:A:3250:PRO:O	1:A:3250:PRO:HD2	2.01	0.60
2:B:957:GLN:CA	3:C:220:TRP:CZ3	2.78	0.60
3:C:163:GLY:HA2	3:C:174:PHE:HB2	1.84	0.60
3:C:2581:LEU:HD13	3:C:2937:TYR:CZ	2.36	0.60
4:D:405:ASN:HB3	4:D:413:ASN:HB2	1.83	0.60
5:E:57:SER:O	10:J:90:HIS:O	2.18	0.60
5:E:60:SER:CB	10:J:87:GLN:HA	2.32	0.60
5:E:394:TRP:HE1	5:E:401:PRO:HD3	1.66	0.60
8:H:11:ILE:O	8:H:11:ILE:HG13	2.01	0.60
9:I:89:VAL:HG11	9:I:108:PHE:HB2	1.83	0.60
14:N:8:TYR:OH	14:N:13:VAL:HG21	2.01	0.60
1:A:1013:VAL:O	1:A:1016:PHE:CE1	2.54	0.60
2:B:1458:PHE:CD1	2:B:1560:MET:HE1	2.35	0.60
3:C:2703:LYS:HD2	3:C:2703:LYS:N	2.16	0.60
3:C:3938:LEU:HD12	3:C:3982:LYS:HD3	1.81	0.60
4:D:242:LYS:CG	7:G:60:VAL:CG2	2.75	0.60
4:D:528:TRP:CD1	4:D:535:GLN:CB	2.85	0.60
4:D:556:THR:HG22	4:D:644:ILE:HD12	1.84	0.60
6:F:56:TRP:CD2	6:F:91:GLN:CD	2.72	0.60
1:A:651:TYR:HA	1:A:654:TRP:HB3	1.83	0.60
1:A:3249:ILE:HD11	1:A:3273:TYR:HA	1.78	0.60
2:B:473:VAL:HG22	2:B:476:ASP:HB2	1.83	0.60
2:B:805:LYS:HG3	2:B:805:LYS:O	2.01	0.60
2:B:953:GLY:HA2	3:C:222:PHE:HD1	1.65	0.60
2:B:1142:SER:O	2:B:1146:VAL:CG2	2.39	0.60
2:B:1467:PHE:CE1	2:B:1569:VAL:HG11	2.36	0.60
2:B:1531:ILE:CD1	2:B:1595:LEU:HD13	2.30	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1612:LEU:CG	2:B:1637:CYS:SG	2.89	0.60
2:B:3231:VAL:CG2	2:B:3342:ASN:CB	2.78	0.60
3:C:504:ALA:HB3	3:C:525:LYS:CB	2.31	0.60
3:C:2734:PHE:CZ	3:C:2767:LYS:CG	2.83	0.60
4:D:66:LEU:H	4:D:66:LEU:CD2	2.13	0.60
4:D:92:TYR:HB3	13:M:29:LYS:HA	1.83	0.60
6:F:11:LEU:HB3	6:F:23:TYR:CZ	2.35	0.60
7:G:58:SER:O	7:G:62:ASP:CA	2.50	0.60
11:K:62:VAL:HG22	11:K:87:ILE:HG23	1.84	0.60
13:M:79:GLU:OE1	13:M:79:GLU:HA	2.01	0.60
18:R:42:ASN:O	18:R:43:ILE:CB	2.49	0.60
1:A:1048:TYR:HE1	1:A:1100:LEU:CA	2.15	0.60
2:B:473:VAL:HG13	2:B:473:VAL:O	2.02	0.60
2:B:794:LEU:CD1	2:B:867:VAL:HA	2.31	0.60
2:B:1456:PHE:CD1	2:B:1467:PHE:CD1	2.86	0.60
3:C:258:ALA:HB1	3:C:357:ILE:CD1	2.31	0.60
3:C:2018:GLN:OE1	19:C:4702:ADP:C2	2.53	0.60
3:C:2177:ILE:HG22	3:C:2233:PRO:HA	1.84	0.60
3:C:2725:ALA:O	3:C:2728:TYR:CD2	2.54	0.60
4:D:292:GLU:H	4:D:292:GLU:CD	2.04	0.60
5:E:57:SER:O	10:J:90:HIS:ND1	2.35	0.60
12:L:99:LEU:O	12:L:102:ARG:HG3	2.02	0.60
16:P:10:THR:CA	16:P:65:ASP:CB	2.74	0.60
1:A:801:ILE:CD1	1:A:862:LEU:CD2	2.78	0.60
2:B:567:GLN:HA	2:B:567:GLN:OE1	2.01	0.60
2:B:642:LEU:C	2:B:642:LEU:HD13	2.21	0.60
2:B:902:ILE:HG12	2:B:915:PRO:HG3	1.82	0.60
3:C:2721:GLU:OE2	3:C:2721:GLU:HA	2.01	0.60
4:D:297:LYS:CE	4:D:316:LEU:CD2	2.71	0.60
4:D:364:ALA:HB1	4:D:414:PHE:CE1	2.34	0.60
6:F:56:TRP:CZ2	6:F:91:GLN:CD	2.51	0.60
6:F:76:VAL:HG22	6:F:90:THR:HG22	1.84	0.60
1:A:1162:LEU:HD23	1:A:1162:LEU:C	2.22	0.60
1:A:3442:LYS:CB	1:A:3485:THR:CG2	2.74	0.60
2:B:425:ASP:O	2:B:489:PHE:HZ	1.83	0.60
2:B:2333:PRO:O	20:B:5601:ATP:C2	2.55	0.60
2:B:3125:LYS:HE2	2:B:3447:MET:CB	2.31	0.60
3:C:2800:PRO:CD	3:C:2801:GLU:N	2.60	0.60
4:D:128:GLU:OE1	4:D:128:GLU:HA	2.01	0.60
4:D:261:TYR:CE1	5:E:126:ILE:HD11	2.37	0.60
4:D:269:SER:CB	4:D:618:PRO:HD3	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:48:ILE:CG1	12:L:23:PHE:CE2	2.84	0.60
6:F:11:LEU:CD2	6:F:23:TYR:HE1	1.85	0.60
12:L:77:ILE:CG1	13:M:65:ILE:CD1	2.70	0.60
15:O:76:VAL:O	15:O:76:VAL:HG12	2.01	0.60
16:P:39:TRP:CA	16:P:40:SER:N	2.64	0.60
1:A:95:PHE:C	1:A:124:THR:CB	2.70	0.60
1:A:761:LEU:HD11	1:A:872:ASP:OD2	2.00	0.60
1:A:847:PHE:CZ	1:A:851:LYS:NZ	2.66	0.60
1:A:1012:LYS:HB2	1:A:1071:ILE:HD12	1.79	0.60
1:A:1445:PHE:CD2	1:A:1564:CYS:HB2	2.30	0.60
2:B:177:PRO:CB	2:B:200:ILE:CB	2.79	0.60
2:B:558:VAL:HG11	2:B:599:ILE:HD11	1.84	0.60
2:B:910:GLY:HA2	2:B:995:TYR:CE1	2.36	0.60
2:B:1458:PHE:CE1	2:B:1560:MET:CE	2.84	0.60
2:B:1467:PHE:CE2	2:B:1560:MET:CE	2.85	0.60
2:B:3143:LEU:CD2	2:B:3698:LEU:HD11	2.32	0.60
2:B:3433:TRP:HH2	2:B:3695:LEU:HD21	1.66	0.60
3:C:128:ILE:HG22	3:C:128:ILE:O	2.01	0.60
7:G:64:LEU:HB3	7:G:76:TYR:CZ	2.36	0.60
16:P:27:ASN:HA	16:P:95:GLU:HA	1.83	0.60
1:A:607:ILE:HD13	1:A:655:PHE:CD2	2.36	0.60
1:A:1146:GLN:HA	1:A:1187:TRP:HZ2	1.67	0.60
1:A:1634:ILE:HG23	1:A:1634:ILE:O	2.02	0.60
1:A:2839:LEU:HD13	19:A:4901:ADP:C2	2.26	0.60
2:B:902:ILE:HG23	2:B:915:PRO:CG	2.32	0.60
2:B:1471:ASP:HA	2:B:1474:MET:HB2	1.83	0.60
3:C:346:LEU:H	3:C:346:LEU:CD1	2.15	0.60
3:C:540:LYS:CB	3:C:701:ASN:O	2.50	0.60
3:C:2673:VAL:HA	3:C:2841:THR:CA	2.29	0.60
4:D:107:VAL:HG11	15:O:96:ARG:HH21	1.67	0.60
4:D:107:VAL:HG22	15:O:97:ILE:O	1.99	0.60
5:E:323:GLU:OE1	5:E:323:GLU:HA	2.02	0.60
15:O:45:ARG:HB2	15:O:63:LEU:CD1	2.32	0.60
1:A:694:GLN:HA	4:D:321:PHE:CE2	2.36	0.59
1:A:763:LEU:CD2	1:A:780:TYR:OH	2.49	0.59
2:B:512:ASP:O	2:B:515:ASP:OD1	2.18	0.59
2:B:844:LEU:HD23	2:B:844:LEU:C	2.22	0.59
2:B:1110:GLN:O	2:B:1114:LEU:CD2	2.49	0.59
2:B:2237:VAL:CG2	2:B:2639:LEU:HD22	2.32	0.59
2:B:3153:LEU:HD12	2:B:3707:LEU:CD1	1.94	0.59
3:C:2708:GLN:CG	3:C:2809:ALA:HB1	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:111:MET:HE3	15:O:90:ILE:CB	2.29	0.59
8:H:77:ILE:HG22	8:H:88:LEU:HD11	1.84	0.59
1:A:2839:LEU:HA	19:A:4901:ADP:C2	2.37	0.59
2:B:59:THR:H	2:B:82:ASP:C	2.06	0.59
2:B:737:VAL:O	2:B:737:VAL:HG13	2.01	0.59
2:B:913:PHE:HE2	2:B:1078:ILE:HD11	1.66	0.59
2:B:1492:LYS:HZ1	2:B:3606:GLN:HB2	1.67	0.59
2:B:1531:ILE:CD1	2:B:1618:LEU:CD2	2.79	0.59
2:B:2462:ASN:ND2	2:B:2479:CYS:SG	2.75	0.59
3:C:2698:LEU:HD23	3:C:2698:LEU:O	2.02	0.59
3:C:3412:HIS:HA	3:C:3415:ILE:HD12	1.84	0.59
5:E:71:ARG:NH1	8:H:71:PHE:CE2	2.67	0.59
5:E:119:CYS:CB	6:F:88:ILE:CD1	2.74	0.59
6:F:56:TRP:CE3	6:F:74:ILE:CD1	2.80	0.59
1:A:935:VAL:CB	1:A:944:LEU:CD2	2.79	0.59
1:A:1012:LYS:HE2	1:A:1071:ILE:HB	0.67	0.59
1:A:1613:ILE:HD11	1:A:1626:ASP:CB	2.31	0.59
1:A:2697:ARG:HH11	19:A:4701:ADP:PB	2.22	0.59
2:B:532:THR:HG23	2:B:532:THR:O	2.02	0.59
2:B:572:MET:O	2:B:572:MET:HG2	2.00	0.59
2:B:657:LYS:O	2:B:657:LYS:HG3	2.02	0.59
5:E:61:VAL:HG21	10:J:106:LEU:CG	2.32	0.59
8:H:76:TYR:HD1	8:H:89:PHE:HB3	1.67	0.59
1:A:1644:ASP:N	1:A:1644:ASP:OD1	2.33	0.59
1:A:3271:GLU:OE1	1:A:3272:SER:O	2.19	0.59
2:B:467:VAL:O	2:B:471:THR:HB	1.99	0.59
2:B:3210:SER:HB3	2:B:3363:ALA:HB1	1.85	0.59
4:D:75:LEU:CD1	15:O:102:LEU:HD12	2.29	0.59
4:D:174:GLN:NE2	12:L:49:LEU:HB3	2.16	0.59
4:D:584:ILE:HG23	4:D:614:VAL:HG21	1.84	0.59
5:E:123:ASN:HB2	6:F:101:GLN:HE22	1.67	0.59
17:Q:68:LEU:CB	17:Q:92:ASP:CB	2.79	0.59
1:A:761:LEU:C	1:A:761:LEU:CD1	2.70	0.59
1:A:1048:TYR:HE1	1:A:1100:LEU:HA	1.67	0.59
1:A:1270:GLU:CB	1:A:1277:ASN:OD1	2.50	0.59
1:A:1422:SER:HB2	1:A:1486:HIS:HE1	1.49	0.59
3:C:265:LYS:HE2	3:C:356:THR:HG22	0.68	0.59
3:C:3528:LEU:HB3	3:C:3868:CYS:SG	2.42	0.59
4:D:212:ILE:CD1	9:I:19:MET:HE1	2.06	0.59
5:E:58:GLU:HB2	10:J:88:ALA:O	2.03	0.59
5:E:143:GLU:OE2	5:E:491:CYS:SG	2.61	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:600:MET:SD	1:A:701:CYS:SG	3.00	0.59
1:A:794:LEU:C	1:A:794:LEU:CD1	2.71	0.59
1:A:1134:TYR:HB2	1:A:1268:ARG:NE	2.15	0.59
1:A:3124:ILE:CD1	1:A:3429:TRP:HD1	2.11	0.59
1:A:3210:GLU:O	1:A:3214:SER:HB3	2.02	0.59
2:B:585:ILE:CD1	2:B:647:GLU:OE1	2.50	0.59
2:B:736:LEU:O	2:B:736:LEU:HD23	2.02	0.59
2:B:962:PHE:HB3	2:B:965:ILE:HD13	1.85	0.59
2:B:3125:LYS:HE2	2:B:3447:MET:CG	2.32	0.59
2:B:3231:VAL:HG13	2:B:3343:ILE:HG13	1.84	0.59
3:C:160:ILE:O	3:C:160:ILE:HG13	2.02	0.59
3:C:357:ILE:O	3:C:357:ILE:HG22	2.02	0.59
3:C:2698:LEU:CD1	3:C:2772:LYS:HB2	2.32	0.59
3:C:4077:LEU:HD13	3:C:4105:MET:HG2	1.82	0.59
4:D:199:ILE:HG12	9:I:104:ALA:HB2	1.84	0.59
10:J:61:ALA:HA	10:J:80:PHE:CE2	2.34	0.59
14:N:72:ILE:CG1	15:O:97:ILE:CG1	2.81	0.59
1:A:1013:VAL:CG2	1:A:1076:LEU:HD21	2.32	0.59
1:A:3046:PHE:HE2	1:A:3104:ILE:CD1	2.16	0.59
2:B:909:SER:O	2:B:995:TYR:HE1	1.86	0.59
3:C:2706:PHE:CD1	3:C:2761:PRO:HG3	2.37	0.59
3:C:2754:SER:HA	3:C:2757:LEU:HD12	1.85	0.59
4:D:61:LEU:O	4:D:61:LEU:HD13	2.03	0.59
5:E:20:PHE:CD2	15:O:80:LYS:NZ	2.69	0.59
5:E:403:ILE:HD11	5:E:512:GLU:HG3	1.85	0.59
6:F:74:ILE:CD1	6:F:77:ILE:HD11	2.28	0.59
14:N:115:MET:HE2	15:O:129:CYS:SG	2.42	0.59
1:A:596:LEU:N	1:A:596:LEU:CD1	2.66	0.59
1:A:760:ASP:O	1:A:764:ARG:CG	2.47	0.59
1:A:1013:VAL:HG22	1:A:1076:LEU:HD11	1.83	0.59
1:A:1121:LYS:CB	1:A:1138:THR:CG2	2.66	0.59
1:A:3194:ALA:CB	1:A:3356:VAL:HG21	2.30	0.59
1:A:4599:CYS:O	1:A:4599:CYS:SG	2.60	0.59
2:B:954:ASP:OD1	3:C:222:PHE:O	2.19	0.59
2:B:1079:ASN:HD21	2:B:1081:GLN:HB2	1.68	0.59
2:B:1119:LYS:CB	2:B:1138:LYS:HD3	2.33	0.59
2:B:1205:PHE:HA	2:B:1208:LYS:HB2	1.84	0.59
2:B:2609:MET:N	2:B:2610:PRO:HD2	2.18	0.59
4:D:194:THR:HB	9:I:88:THR:HG22	1.85	0.59
4:D:194:THR:HA	9:I:88:THR:HA	1.85	0.59
6:F:24:VAL:O	6:F:97:MET:HB2	2.01	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:85:TYR:CE2	9:I:106:LEU:HD22	2.37	0.59
10:J:35:ASP:CB	15:O:32:SER:HB3	2.33	0.59
10:J:77:HIS:HA	11:K:70:VAL:HG23	1.84	0.59
14:N:115:MET:CE	15:O:129:CYS:HB2	2.30	0.59
1:A:598:ARG:HB2	4:D:504:TYR:CE1	2.36	0.59
1:A:1133:GLY:HA2	1:A:1272:LEU:HG	1.84	0.59
1:A:1154:ASN:HB3	1:A:1155:PRO:HD3	1.83	0.59
1:A:2162:GLY:HA2	20:A:4801:ATP:O1A	2.03	0.59
1:A:3043:ILE:HD12	1:A:3060:MET:HG3	1.85	0.59
1:A:3110:LEU:HD12	1:A:3443:LEU:CD2	2.22	0.59
2:B:429:LEU:HD13	2:B:492:PHE:CD2	2.38	0.59
2:B:725:ILE:HG21	2:B:776:LEU:CD2	2.33	0.59
2:B:1387:MET:HA	2:B:1434:ALA:HB1	1.85	0.59
2:B:3150:VAL:HG22	2:B:3707:LEU:CD2	2.33	0.59
4:D:330:CYS:HB3	4:D:340:PRO:HB3	1.85	0.59
4:D:518:SER:OG	4:D:528:TRP:CH2	2.53	0.59
1:A:1012:LYS:HE2	1:A:1071:ILE:CG2	2.30	0.59
1:A:1069:TYR:HD1	1:A:1078:THR:CG2	2.15	0.59
2:B:448:LYS:HE3	2:B:452:LEU:HD21	1.84	0.59
2:B:642:LEU:HD11	2:B:646:LYS:HE3	1.85	0.59
2:B:1242:GLN:CB	2:B:1252:MET:O	2.51	0.59
2:B:1511:VAL:O	2:B:1570:VAL:HG22	2.03	0.59
2:B:3264:ASN:CA	2:B:3306:ILE:CD1	2.80	0.59
3:C:96:LEU:HD12	3:C:96:LEU:C	2.22	0.59
3:C:1541:LEU:HD13	3:C:1584:LEU:HD22	1.84	0.59
3:C:2585:PHE:CB	3:C:2932:SER:CB	2.74	0.59
3:C:2746:PRO:CD	3:C:2747:LYS:N	2.64	0.59
5:E:58:GLU:O	5:E:58:GLU:HG3	2.02	0.59
5:E:119:CYS:SG	6:F:88:ILE:HG21	2.42	0.59
12:L:28:GLN:HE21	12:L:28:GLN:CA	2.16	0.59
15:O:25:ILE:HG22	15:O:27:ASN:HB2	1.85	0.59
1:A:594:PRO:CG	1:A:606:LYS:HG2	2.32	0.58
2:B:450:LYS:HD3	5:E:507:GLU:OE2	2.03	0.58
2:B:3178:VAL:HG12	2:B:3395:LEU:HD21	1.69	0.58
3:C:1081:ILE:HD11	3:C:1117:GLN:HB3	1.85	0.58
3:C:2798:PHE:CG	3:C:2803:MET:SD	2.96	0.58
4:D:601:ILE:HD11	4:D:613:LEU:HD13	1.84	0.58
5:E:452:VAL:HG21	5:E:478:ILE:HD12	1.84	0.58
6:F:81:THR:CB	7:G:121:ASN:OD1	2.50	0.58
12:L:49:LEU:HD22	12:L:49:LEU:N	2.18	0.58
1:A:203:SER:O	1:A:207:GLN:CB	2.51	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:473:LEU:O	1:A:478:LEU:CB	2.51	0.58
1:A:761:LEU:CD2	1:A:874:HIS:CE1	2.76	0.58
1:A:1525:PHE:CG	1:A:1541:PHE:CD2	2.80	0.58
1:A:3210:GLU:O	1:A:3214:SER:CB	2.52	0.58
1:A:3268:PHE:HE1	17:Q:35:ILE:CB	2.02	0.58
2:B:984:ASN:CA	2:B:987:ARG:HG2	2.33	0.58
2:B:1140:LEU:HD13	2:B:1285:GLU:CB	2.33	0.58
3:C:2721:GLU:HG2	3:C:2803:MET:HE2	1.85	0.58
3:C:2745:LYS:CD	3:C:2749:VAL:HG11	2.31	0.58
4:D:89:TYR:CE2	11:K:56:PRO:CG	2.86	0.58
4:D:531:LYS:NZ	4:D:532:TYR:CE2	2.71	0.58
11:K:77:PHE:HZ	11:K:88:LEU:HD11	1.63	0.58
1:A:397:ILE:C	1:A:489:LYS:CB	2.71	0.58
1:A:613:LEU:CD2	4:D:523:TRP:CZ2	2.86	0.58
1:A:1013:VAL:CG1	1:A:1017:LEU:HD11	2.30	0.58
1:A:3117:PHE:CG	1:A:3429:TRP:HZ3	2.21	0.58
1:A:3421:SER:HB3	1:A:3716:LEU:CG	2.30	0.58
2:B:439:LEU:CD1	2:B:503:LEU:HD21	2.33	0.58
2:B:439:LEU:HD23	2:B:439:LEU:C	2.23	0.58
3:C:2708:GLN:HE22	3:C:2813:ILE:HG13	1.68	0.58
4:D:164:ASN:H	4:D:167:ASN:HB3	1.69	0.58
4:D:175:THR:HG23	13:M:61:PHE:O	2.03	0.58
4:D:412:TYR:HB2	4:D:428:LEU:HD22	1.84	0.58
13:M:44:GLU:OE1	13:M:44:GLU:HA	2.03	0.58
14:N:116:ALA:CB	15:O:131:PHE:CZ	2.86	0.58
1:A:615:GLN:OE1	4:D:500:LEU:HD21	2.03	0.58
1:A:1013:VAL:HA	1:A:1076:LEU:HD11	1.84	0.58
2:B:721:ASN:CG	2:B:773:VAL:HG12	2.23	0.58
2:B:1329:PRO:O	2:B:1412:PHE:CB	2.51	0.58
2:B:1604:LYS:HA	2:B:1945:GLN:HE22	1.68	0.58
3:C:2578:PHE:O	3:C:2582:ILE:HG13	2.02	0.58
3:C:2742:LYS:HE3	3:C:2785:VAL:CG2	2.29	0.58
4:D:265:ARG:HB2	5:E:125:GLN:CD	2.23	0.58
4:D:404:TRP:HZ3	4:D:412:TYR:HB3	1.68	0.58
5:E:104:SER:HB3	5:E:106:PRO:HD2	1.86	0.58
8:H:10:VAL:HB	8:H:80:TYR:CZ	2.38	0.58
11:K:18:MET:CE	11:K:18:MET:HA	2.33	0.58
1:A:690:LEU:N	1:A:690:LEU:CD1	2.67	0.58
1:A:944:LEU:HD11	1:A:1013:VAL:HG12	1.85	0.58
2:B:516:THR:HG21	5:E:406:LYS:HA	1.83	0.58
2:B:578:LEU:H	2:B:578:LEU:CD1	2.16	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:927:ARG:HH12	2:B:976:LEU:HB3	1.67	0.58
2:B:1584:TRP:HA	2:B:1584:TRP:CE3	2.39	0.58
3:C:1559:LEU:HD23	3:C:1607:LEU:HD21	1.84	0.58
3:C:2119:ILE:HG21	3:C:2122:THR:HG23	1.86	0.58
3:C:2726:THR:N	3:C:2729:LEU:HD11	2.18	0.58
3:C:2793:LEU:O	3:C:2796:PRO:CG	2.48	0.58
5:E:70:ASP:HA	8:H:69:VAL:O	2.04	0.58
9:I:23:ALA:HB1	9:I:97:MET:HE1	1.85	0.58
1:A:670:LEU:HA	1:A:692:ILE:HD12	1.86	0.58
2:B:582:MET:O	5:E:186:PHE:CB	2.50	0.58
2:B:867:VAL:HG12	2:B:944:ILE:HD13	1.85	0.58
2:B:1002:GLN:HG2	2:B:1094:TRP:NE1	2.19	0.58
2:B:3231:VAL:HG22	2:B:3343:ILE:N	2.18	0.58
3:C:288:VAL:O	3:C:320:PRO:HB3	2.03	0.58
4:D:313:ALA:HB2	4:D:331:LEU:HG	1.84	0.58
5:E:46:ASN:C	12:L:88:PHE:CD1	2.72	0.58
5:E:145:LEU:CD2	5:E:494:LEU:HG	2.33	0.58
12:L:55:LEU:HD23	12:L:55:LEU:O	2.04	0.58
15:O:52:ASP:H	15:O:53:PRO:HD3	1.69	0.58
1:A:755:HIS:HE1	1:A:869:TYR:HB3	1.69	0.58
1:A:807:GLU:O	1:A:811:LYS:HG3	2.04	0.58
1:A:906:LEU:HB3	1:A:998:VAL:HG13	1.85	0.58
1:A:1429:ILE:HG22	1:A:1490:PHE:CE1	2.37	0.58
2:B:59:THR:CA	2:B:82:ASP:O	2.51	0.58
2:B:3109:LYS:HG2	2:B:3113:GLU:OE2	2.03	0.58
2:B:3210:SER:HB3	2:B:3363:ALA:CB	2.33	0.58
2:B:3253:ILE:HG21	2:B:3273:ASP:HB3	1.84	0.58
4:D:556:THR:HB	4:D:571:LEU:HG	1.84	0.58
5:E:253:MET:HB2	5:E:296:PHE:HE2	1.67	0.58
8:H:65:PHE:HB3	9:I:80:GLY:HA3	1.83	0.58
10:J:38:GLU:OE1	15:O:29:PHE:CZ	2.49	0.58
13:M:77:ILE:HG22	13:M:80:LEU:HB3	1.86	0.58
14:N:25:PHE:CZ	14:N:103:ILE:CD1	2.70	0.58
1:A:1459:LEU:O	1:A:1552:MET:CE	2.52	0.58
2:B:500:GLU:CD	2:B:532:THR:CG2	2.72	0.58
2:B:544:HIS:HE1	2:B:609:LEU:HD12	0.51	0.58
2:B:762:ILE:O	2:B:766:ILE:CB	2.52	0.58
2:B:1464:THR:HG22	2:B:1557:LYS:HB2	1.86	0.58
2:B:3239:VAL:HG11	2:B:3291:ILE:HD11	1.86	0.58
3:C:217:PHE:CE2	3:C:268:ILE:HD12	2.39	0.58
4:D:177:ASN:CG	13:M:60:ASN:CG	2.62	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:265:ARG:HB2	5:E:125:GLN:HG2	1.84	0.58
4:D:288:ARG:HE	4:D:610:GLY:HA3	1.69	0.58
1:A:97:ARG:O	1:A:121:GLY:CA	2.51	0.58
1:A:473:LEU:CB	1:A:481:MET:CB	2.82	0.58
1:A:611:ARG:HH22	1:A:705:GLN:HB2	1.69	0.58
1:A:1118:LEU:HD22	1:A:1118:LEU:N	2.17	0.58
1:A:1121:LYS:CD	1:A:1138:THR:CG2	2.76	0.58
2:B:625:LEU:HD23	2:B:625:LEU:C	2.23	0.58
2:B:1772:ILE:HG23	2:B:2044:GLY:HA2	1.85	0.58
2:B:2545:THR:N	19:B:5501:ADP:O1A	2.36	0.58
2:B:3267:ILE:HG23	2:B:3271:ASP:HB2	1.84	0.58
3:C:9:GLN:HB2	3:C:350:TRP:CE2	2.38	0.58
3:C:533:GLU:CB	3:C:545:GLU:CB	2.82	0.58
3:C:2213:ARG:HH21	19:C:4702:ADP:PB	2.26	0.58
12:L:70:GLY:O	12:L:109:LYS:HE2	2.03	0.58
1:A:867:MET:SD	1:A:878:VAL:CG1	2.86	0.58
1:A:1418:ASP:CG	1:A:3604:LYS:HZ2	1.98	0.58
1:A:1505:ASN:C	1:A:1509:ASP:OD2	2.42	0.58
1:A:3446:ASN:CG	1:A:3488:LEU:HD22	2.24	0.58
2:B:736:LEU:HD12	2:B:859:TYR:HB3	1.80	0.58
2:B:1474:MET:HE2	2:B:1515:VAL:HG11	1.52	0.58
2:B:2569:SER:HA	2:B:2610:PRO:HA	1.85	0.58
2:B:2800:ILE:HD12	2:B:2814:ILE:HD11	1.85	0.58
2:B:3268:THR:HG22	2:B:3269:LEU:N	2.15	0.58
2:B:3422:LEU:HD23	2:B:3707:LEU:HD23	1.84	0.58
3:C:540:LYS:CB	3:C:705:LYS:N	2.67	0.58
3:C:2745:LYS:CD	3:C:2749:VAL:CG1	2.81	0.58
5:E:375:ARG:HA	5:E:383:PHE:HA	1.85	0.58
1:A:588:GLN:OE1	1:A:588:GLN:HA	2.04	0.57
1:A:678:HIS:HB2	1:A:681:ASN:HB2	1.85	0.57
1:A:1429:ILE:HG21	1:A:1490:PHE:CZ	2.31	0.57
1:A:3251:ILE:CD1	17:Q:62:ILE:N	2.66	0.57
2:B:575:ASN:CB	5:E:481:GLN:NE2	2.67	0.57
2:B:1447:ILE:CG1	2:B:1480:HIS:ND1	2.67	0.57
2:B:1608:ARG:HB3	2:B:1637:CYS:HB3	1.85	0.57
3:C:60:LEU:HD22	3:C:69:TRP:CH2	2.33	0.57
3:C:1296:ILE:HD11	3:C:1542:MET:SD	2.44	0.57
3:C:2593:ARG:CD	3:C:2921:LEU:HD11	2.34	0.57
4:D:208:TYR:O	4:D:212:ILE:HG13	2.04	0.57
4:D:297:LYS:HZ3	4:D:328:LEU:HD13	1.68	0.57
5:E:14:PHE:CE2	15:O:22:LEU:O	2.56	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:66:ASP:HB3	7:G:102:SER:CB	2.34	0.57
8:H:69:VAL:HG11	8:H:89:PHE:CZ	2.39	0.57
1:A:801:ILE:HD13	1:A:862:LEU:HD23	1.84	0.57
1:A:1422:SER:CA	1:A:1486:HIS:NE2	2.66	0.57
2:B:2512:VAL:H	19:B:5501:ADP:HN62	1.52	0.57
3:C:53:PRO:HD2	3:C:81:PRO:CB	2.34	0.57
4:D:517:ILE:CD1	4:D:550:TRP:HZ2	2.17	0.57
4:D:529:ASP:HB2	4:D:536:ILE:HD11	1.86	0.57
5:E:30:ILE:HD12	5:E:30:ILE:C	2.24	0.57
5:E:141:VAL:HG13	5:E:141:VAL:O	2.05	0.57
6:F:50:ALA:CB	8:H:83:GLN:CB	2.82	0.57
8:H:35:CYS:HB2	8:H:41:ILE:HG12	1.86	0.57
1:A:594:PRO:CB	1:A:609:TRP:CE3	2.86	0.57
1:A:1013:VAL:CG1	1:A:1076:LEU:HD11	2.33	0.57
1:A:1433:LEU:CD1	1:A:1490:PHE:HD1	2.10	0.57
1:A:3126:GLU:HA	1:A:3126:GLU:OE1	2.03	0.57
1:A:3241:LEU:HD11	1:A:3273:TYR:CD2	2.39	0.57
1:A:3273:TYR:CD1	1:A:3273:TYR:O	2.56	0.57
1:A:3317:PHE:CD1	1:A:3333:LEU:HD22	2.25	0.57
2:B:349:ASN:CB	2:B:416:LEU:HG	2.34	0.57
2:B:500:GLU:CD	2:B:532:THR:HG21	2.24	0.57
2:B:718:ILE:CD1	2:B:773:VAL:HG11	2.33	0.57
2:B:954:ASP:OD2	3:C:222:PHE:O	2.22	0.57
2:B:1003:ILE:HG22	2:B:1003:ILE:O	2.03	0.57
2:B:1051:ASP:CG	2:B:1162:THR:CG2	2.62	0.57
3:C:248:ILE:HG22	3:C:273:VAL:HB	1.86	0.57
3:C:261:ILE:N	3:C:262:PRO:HD2	2.20	0.57
3:C:2794:ASN:C	3:C:2796:PRO:CD	2.72	0.57
4:D:110:SER:CA	15:O:96:ARG:HG3	2.35	0.57
4:D:171:ARG:C	13:M:64:HIS:HB2	2.24	0.57
4:D:254:GLN:OE1	5:E:128:LEU:HD11	2.04	0.57
4:D:294:GLN:HG3	4:D:297:LYS:HZ1	1.68	0.57
5:E:408:HIS:HD2	5:E:412:LEU:HD11	1.67	0.57
16:P:55:ILE:O	16:P:60:PHE:N	2.37	0.57
1:A:669:ALA:HB1	1:A:689:ASP:CB	2.35	0.57
2:B:1956:ASN:HD21	2:B:2011:ARG:HG3	1.70	0.57
2:B:3241:GLU:O	2:B:3245:LEU:HG	2.05	0.57
2:B:3453:LEU:CD2	2:B:3492:ILE:HD12	2.35	0.57
3:C:10:LEU:HD13	3:C:10:LEU:C	2.24	0.57
3:C:1864:ILE:HD11	3:C:1910:ILE:HG23	1.85	0.57
3:C:2082:LEU:HG	3:C:2137:VAL:HG21	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:265:ARG:CB	5:E:125:GLN:CG	2.82	0.57
4:D:401:GLN:HB3	4:D:417:ILE:HG22	1.85	0.57
1:A:594:PRO:HG2	1:A:606:LYS:HG2	1.85	0.57
1:A:1100:LEU:CD2	1:A:1163:LEU:HB2	2.33	0.57
1:A:1163:LEU:HD21	1:A:1167:LEU:HD12	1.85	0.57
1:A:3241:LEU:HD11	1:A:3273:TYR:CE2	2.40	0.57
1:A:3313:SER:HA	1:A:3317:PHE:CD2	2.34	0.57
2:B:439:LEU:HD11	2:B:503:LEU:HD21	1.87	0.57
2:B:448:LYS:HE3	2:B:452:LEU:HD11	1.86	0.57
2:B:1143:VAL:O	2:B:1147:ILE:HG13	2.04	0.57
2:B:1538:ILE:HD11	2:B:1621:LEU:HB3	1.86	0.57
2:B:3300:GLU:CD	2:B:3354:LYS:HZ2	2.01	0.57
3:C:192:PRO:HG2	3:C:232:TYR:CE2	2.39	0.57
3:C:2556:VAL:HG21	3:C:2937:TYR:CD2	2.39	0.57
3:C:2676:GLN:CB	3:C:2837:LEU:HA	2.35	0.57
4:D:79:ASN:H	4:D:104:GLN:HG2	1.69	0.57
4:D:111:MET:SD	15:O:90:ILE:HG22	2.44	0.57
5:E:19:ASN:O	5:E:19:ASN:OD1	2.22	0.57
7:G:118:ASP:OD1	9:I:12:ILE:HD11	2.03	0.57
12:L:99:LEU:N	12:L:100:PRO:HD2	2.19	0.57
1:A:1031:ILE:CG2	1:A:1031:ILE:O	2.52	0.57
1:A:3212:VAL:HG21	1:A:3339:ILE:CG1	2.33	0.57
2:B:3147:GLN:HA	2:B:3426:LEU:CD1	2.34	0.57
3:C:2726:THR:N	3:C:2729:LEU:CD1	2.66	0.57
3:C:3072:ILE:HD12	3:C:3102:LEU:HD11	1.86	0.57
4:D:80:PRO:CD	15:O:103:TRP:HZ2	2.16	0.57
5:E:20:PHE:HE2	15:O:80:LYS:CG	2.07	0.57
14:N:72:ILE:CG1	15:O:97:ILE:HG23	2.29	0.57
17:Q:68:LEU:CA	17:Q:92:ASP:CB	2.79	0.57
18:R:27:GLY:O	18:R:28:LEU:CB	2.52	0.57
1:A:3222:GLU:HB2	1:A:3328:ALA:CB	2.35	0.57
2:B:433:ILE:CA	2:B:463:PHE:HZ	2.15	0.57
2:B:1455:VAL:CG1	2:B:1456:PHE:H	2.18	0.57
2:B:1458:PHE:CB	2:B:1465:LYS:HB3	2.30	0.57
3:C:2365:GLY:CA	19:C:4703:ADP:H5'2	2.35	0.57
3:C:2585:PHE:HE1	3:C:2929:LEU:CB	2.17	0.57
4:D:75:LEU:HD23	4:D:75:LEU:N	2.05	0.57
4:D:90:ASP:OD2	13:M:32:LYS:CE	2.52	0.57
6:F:14:LEU:HD22	6:F:23:TYR:CB	2.30	0.57
7:G:119:PRO:CG	9:I:12:ILE:HD12	2.33	0.57
1:A:690:LEU:CD1	1:A:690:LEU:H	2.18	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:651:SER:OG	2:B:680:LEU:CD2	2.52	0.57
2:B:883:ASN:CA	2:B:886:ILE:CG2	2.71	0.57
2:B:1002:GLN:CA	2:B:1094:TRP:CZ2	2.81	0.57
2:B:1466:THR:HA	2:B:1560:MET:HE2	1.86	0.57
2:B:2560:VAL:HG13	2:B:2601:ILE:HD13	1.85	0.57
2:B:3297:PHE:CZ	2:B:3302:ILE:HD13	2.40	0.57
3:C:85:HIS:CD2	3:C:85:HIS:N	2.73	0.57
3:C:2721:GLU:CA	3:C:2798:PHE:CE1	2.87	0.57
3:C:2792:TYR:C	3:C:2796:PRO:CG	2.53	0.57
4:D:285:PRO:HB3	4:D:584:ILE:HG22	1.85	0.57
8:H:50:ARG:NH2	9:I:88:THR:HG21	2.19	0.57
9:I:55:ASN:HB2	9:I:58:ALA:HB3	1.86	0.57
10:J:77:HIS:CB	11:K:70:VAL:HG23	2.35	0.57
15:O:103:TRP:HB2	15:O:108:ASP:OD1	2.04	0.57
1:A:739:ARG:HH11	1:A:743:LYS:HZ1	1.53	0.57
1:A:755:HIS:HE1	1:A:869:TYR:CG	2.20	0.57
1:A:933:VAL:CG1	1:A:944:LEU:HB3	2.35	0.57
1:A:1534:MET:HB3	1:A:1537:GLN:HG3	1.87	0.57
1:A:1806:PHE:CD1	1:A:4194:VAL:HG22	2.40	0.57
1:A:3106:LYS:HG2	1:A:3443:LEU:HD21	1.56	0.57
1:A:3215:ILE:HD13	1:A:3219:ASP:OD2	2.04	0.57
1:A:3691:LEU:HB3	1:A:3719:THR:HG22	1.86	0.57
1:A:4126:TRP:CZ2	1:A:4130:ILE:HD11	2.39	0.57
1:A:4240:VAL:HG11	1:A:4270:PRO:HG2	1.86	0.57
2:B:523:LEU:HD23	2:B:523:LEU:O	2.05	0.57
2:B:913:PHE:CE2	2:B:1078:ILE:HD11	2.39	0.57
2:B:1468:ALA:C	2:B:1469:SER:HG	1.97	0.57
2:B:1528:LEU:HD21	2:B:1591:CYS:HB3	1.81	0.57
2:B:1610:TYR:CD2	2:B:1942:GLY:HA3	2.39	0.57
2:B:2189:GLY:HA2	20:B:5601:ATP:H5'1	1.86	0.57
2:B:3063:PHE:CZ	2:B:3112:LEU:HD11	2.40	0.57
3:C:163:GLY:CA	3:C:174:PHE:HD2	2.18	0.57
3:C:760:THR:HA	3:C:827:ILE:HD11	1.87	0.57
3:C:2720:PRO:C	3:C:2798:PHE:CE2	2.78	0.57
3:C:2794:ASN:C	3:C:2796:PRO:HD3	2.25	0.57
4:D:88:VAL:HG21	13:M:33:GLN:NE2	2.20	0.57
4:D:588:PRO:HG2	4:D:606:ASP:CG	2.25	0.57
5:E:16:ASN:CA	15:O:132:GLU:CG	2.74	0.57
5:E:24:GLU:OE2	14:N:91:THR:CB	2.53	0.57
1:A:402:PRO:O	1:A:468:GLN:HA	2.04	0.57
1:A:600:MET:HE1	1:A:697:ARG:NH1	1.97	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1013:VAL:O	1:A:1017:LEU:HG	2.04	0.57
1:A:2697:ARG:HG2	19:A:4701:ADP:H4'	1.86	0.57
1:A:3442:LYS:CG	1:A:3485:THR:HG22	2.35	0.57
2:B:713:VAL:HG11	5:E:258:GLU:HA	1.86	0.57
2:B:814:TYR:O	2:B:818:LEU:HB2	2.05	0.57
2:B:1454:GLN:OE1	2:B:1477:LEU:HD21	2.05	0.57
2:B:3082:MET:SD	2:B:3115:ILE:CD1	2.93	0.57
2:B:3257:ARG:CZ	2:B:3273:ASP:OD1	2.53	0.57
2:B:3268:THR:CG2	2:B:3269:LEU:HD12	2.33	0.57
3:C:360:PRO:CG	3:C:361:PRO:CD	2.83	0.57
4:D:189:PRO:HD3	11:K:65:HIS:HB2	1.87	0.57
4:D:212:ILE:CD1	9:I:15:LEU:HD22	2.33	0.57
4:D:528:TRP:NE1	4:D:535:GLN:CA	2.68	0.57
4:D:573:VAL:HG21	4:D:579:LEU:HD21	1.86	0.57
4:D:585:VAL:HG11	4:D:588:PRO:HG3	1.85	0.57
4:D:640:LYS:HA	4:D:640:LYS:CE	2.34	0.57
5:E:16:ASN:CB	15:O:132:GLU:C	2.62	0.57
8:H:66:GLY:O	9:I:79:ILE:N	2.35	0.57
12:L:41:LEU:HD21	12:L:56:ASN:HB2	1.87	0.57
1:A:3222:GLU:OE1	1:A:3328:ALA:HB2	2.04	0.56
2:B:433:ILE:HA	2:B:463:PHE:CE1	2.40	0.56
2:B:747:GLU:O	2:B:750:PRO:HD2	2.05	0.56
2:B:997:TRP:CE3	2:B:997:TRP:HA	2.40	0.56
3:C:1142:VAL:HG21	3:C:1167:ILE:HD13	1.87	0.56
3:C:1907:ILE:HD11	3:C:1930:TRP:CZ2	2.39	0.56
3:C:2365:GLY:O	19:C:4703:ADP:C5'	2.52	0.56
3:C:2722:VAL:HG12	3:C:2813:ILE:HD13	1.88	0.56
3:C:2739:GLU:H	3:C:2746:PRO:CB	2.13	0.56
5:E:61:VAL:HG11	10:J:95:PHE:HZ	1.63	0.56
6:F:84:SER:HB2	6:F:102:LEU:HB3	1.87	0.56
10:J:43:GLU:HG2	10:J:67:TYR:CD2	2.40	0.56
12:L:84:CYS:CB	13:M:56:ILE:HA	2.34	0.56
15:O:25:ILE:CG2	15:O:27:ASN:HB2	2.34	0.56
1:A:617:ILE:HB	1:A:644:LEU:HD21	1.87	0.56
1:A:847:PHE:CZ	1:A:851:LYS:CE	2.88	0.56
1:A:1028:LYS:C	1:A:1088:TRP:CH2	2.72	0.56
1:A:2839:LEU:HA	19:A:4901:ADP:H2	1.68	0.56
1:A:3255:GLU:OE1	1:A:3270:LYS:CA	2.53	0.56
1:A:3421:SER:CB	1:A:3716:LEU:CD2	2.83	0.56
2:B:1100:ASP:HA	2:B:1103:VAL:CG2	2.35	0.56
2:B:1456:PHE:CE2	2:B:1569:VAL:HG12	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3109:LYS:O	2:B:3113:GLU:HG3	2.05	0.56
3:C:146:ARG:HA	3:C:165:GLY:HA3	1.87	0.56
3:C:2361:VAL:HG11	3:C:3113:PRO:HG2	1.87	0.56
4:D:181:ARG:O	11:K:71:SER:HA	2.06	0.56
4:D:247:ILE:HD13	5:E:129:LEU:CD2	2.35	0.56
5:E:286:GLY:HA2	5:E:318:GLY:HA2	1.86	0.56
1:A:604:ALA:CB	1:A:698:GLU:HG2	2.32	0.56
1:A:744:ILE:CD1	1:A:752:LEU:HD23	2.32	0.56
1:A:801:ILE:CG2	1:A:862:LEU:CG	2.75	0.56
1:A:853:VAL:HB	5:E:206:ASN:OD1	2.05	0.56
1:A:948:LEU:HG	1:A:1010:LYS:CG	2.31	0.56
1:A:997:LYS:CE	18:R:149:LEU:CA	2.27	0.56
1:A:1088:TRP:CZ2	1:A:1092:TRP:CZ2	2.92	0.56
1:A:1601:ARG:HD2	1:A:1630:LEU:O	2.05	0.56
1:A:2143:LEU:HD13	1:A:2155:LEU:HD13	1.88	0.56
1:A:3271:GLU:CD	1:A:3272:SER:N	2.59	0.56
2:B:422:ARG:HB2	2:B:422:ARG:CZ	2.35	0.56
2:B:969:LEU:HD23	2:B:969:LEU:C	2.25	0.56
2:B:1606:PHE:HE1	2:B:1687:LEU:HA	1.69	0.56
2:B:3269:LEU:H	2:B:3269:LEU:CD1	2.18	0.56
2:B:3446:SER:CB	2:B:3489:THR:HG22	2.30	0.56
3:C:113:ILE:HD13	3:C:185:PHE:HZ	1.69	0.56
3:C:196:PRO:HA	3:C:239:TRP:CH2	2.17	0.56
3:C:214:LEU:O	3:C:231:ILE:HA	2.05	0.56
3:C:2673:VAL:CB	3:C:2841:THR:CA	2.75	0.56
3:C:2734:PHE:HE2	3:C:2767:LYS:HE3	1.62	0.56
3:C:2737:ALA:O	3:C:2746:PRO:HG2	2.05	0.56
3:C:2807:SER:HG	3:C:2810:ALA:HB2	1.69	0.56
4:D:288:ARG:HH12	4:D:585:VAL:HG11	1.69	0.56
4:D:294:GLN:HB3	4:D:297:LYS:HE3	1.86	0.56
4:D:517:ILE:CD1	4:D:527:ILE:CB	2.83	0.56
4:D:576:LEU:HD13	4:D:576:LEU:O	2.05	0.56
4:D:603:LEU:HD22	4:D:611:VAL:HG12	1.87	0.56
5:E:70:ASP:OD1	8:H:70:THR:CB	2.52	0.56
5:E:174:PRO:HB3	5:E:463:ASN:HD22	1.70	0.56
5:E:361:LEU:HD13	5:E:361:LEU:C	2.25	0.56
13:M:82:LEU:C	13:M:82:LEU:HD23	2.26	0.56
17:Q:69:ASN:O	17:Q:70:MET:CB	2.53	0.56
1:A:607:ILE:HG12	1:A:654:TRP:CD1	2.41	0.56
2:B:721:ASN:CG	2:B:773:VAL:CG1	2.74	0.56
2:B:1467:PHE:CD2	2:B:1560:MET:CE	2.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1595:LEU:HD23	2:B:1595:LEU:C	2.26	0.56
2:B:3131:ARG:HD2	2:B:3131:ARG:C	2.25	0.56
3:C:214:LEU:O	3:C:214:LEU:HD22	2.05	0.56
3:C:2804:ALA:HB2	3:C:2811:LYS:HG3	1.86	0.56
4:D:532:TYR:CE1	4:D:652:MET:CE	2.88	0.56
5:E:80:TRP:HE3	5:E:81:PRO:CD	2.11	0.56
7:G:125:PHE:HZ	7:G:136:MET:HE3	1.67	0.56
10:J:89:VAL:HG23	11:K:47:LYS:HE3	1.87	0.56
14:N:89:GLN:HG3	14:N:94:ASP:HB2	1.83	0.56
16:P:57:ILE:O	16:P:62:LYS:CA	2.54	0.56
1:A:1274:GLY:N	4:D:166:PHE:HE1	1.92	0.56
1:A:1444:GLN:CB	1:A:1559:LYS:O	2.45	0.56
1:A:3229:PRO:HB3	1:A:3233:ILE:HD13	1.88	0.56
2:B:444:LEU:O	5:E:515:LYS:CG	2.53	0.56
2:B:585:ILE:HD11	2:B:647:GLU:OE1	2.05	0.56
2:B:1511:VAL:HG23	2:B:1570:VAL:CG1	2.33	0.56
2:B:2544:LYS:N	19:B:5501:ADP:PA	2.78	0.56
2:B:3242:MET:HG3	2:B:3336:LEU:HD11	1.88	0.56
2:B:3251:GLY:HA3	2:B:3329:GLN:CD	2.26	0.56
3:C:60:LEU:CD2	3:C:69:TRP:CE3	2.86	0.56
4:D:116:ILE:HD11	5:E:43:ARG:HH11	1.71	0.56
4:D:401:GLN:HG3	4:D:462:PHE:CE1	2.41	0.56
5:E:42:GLN:NE2	12:L:91:ASN:ND2	2.50	0.56
5:E:43:ARG:HB3	5:E:45:PRO:HD2	1.88	0.56
5:E:225:GLN:OE1	5:E:225:GLN:N	2.38	0.56
5:E:238:GLY:O	5:E:260:SER:OG	2.23	0.56
11:K:55:GLY:CA	13:M:79:GLU:HG3	2.33	0.56
14:N:75:GLN:CB	15:O:93:GLN:CG	2.53	0.56
1:A:614:PHE:HE1	1:A:644:LEU:HB3	1.62	0.56
1:A:1443:MET:CG	1:A:1561:VAL:HG21	2.21	0.56
1:A:3241:LEU:CD1	1:A:3273:TYR:CD2	2.88	0.56
1:A:3269:LEU:CD2	1:A:3312:GLN:OE1	2.50	0.56
1:A:4422:ASP:HB2	1:A:4423:PRO:HD2	1.87	0.56
2:B:606:LEU:HA	2:B:609:LEU:HD23	1.86	0.56
2:B:725:ILE:HD11	2:B:777:PHE:CA	2.07	0.56
2:B:1076:LEU:O	2:B:1076:LEU:HD23	2.05	0.56
2:B:2267:ILE:HG22	2:B:2271:TRP:HZ3	1.68	0.56
2:B:2409:LEU:HD21	2:B:2436:PHE:HA	1.88	0.56
2:B:3600:LYS:HD2	2:B:3605:LEU:HD22	1.88	0.56
3:C:52:ALA:HB1	3:C:53:PRO:CD	2.35	0.56
3:C:359:GLY:N	3:C:440:TYR:CB	2.68	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2597:GLU:OE1	3:C:2597:GLU:HA	2.06	0.56
8:H:60:ILE:HG23	9:I:85:TYR:HB3	1.87	0.56
1:A:686:VAL:HG23	1:A:734:LEU:HD12	1.88	0.56
1:A:3046:PHE:CG	1:A:3100:LYS:NZ	2.74	0.56
1:A:3306:LEU:CD1	1:A:3306:LEU:C	2.69	0.56
2:B:444:LEU:HA	5:E:515:LYS:CE	2.35	0.56
2:B:1474:MET:HE1	2:B:1515:VAL:HB	1.88	0.56
4:D:372:VAL:HG13	4:D:414:PHE:CZ	2.41	0.56
5:E:116:VAL:CG1	6:F:99:ALA:CB	2.84	0.56
8:H:10:VAL:HG11	8:H:80:TYR:OH	2.05	0.56
10:J:26:VAL:HG23	10:J:98:PHE:N	2.20	0.56
13:M:80:LEU:C	13:M:80:LEU:HD23	2.26	0.56
1:A:878:VAL:HG22	1:A:879:LEU:N	2.20	0.56
1:A:1126:VAL:CG1	1:A:1131:SER:C	2.62	0.56
1:A:1430:ARG:HG2	1:A:1490:PHE:CG	2.41	0.56
1:A:1446:GLN:O	1:A:1461:GLY:HA2	2.06	0.56
1:A:3140:GLU:O	1:A:3144:GLN:HG3	2.06	0.56
2:B:4:HIS:O	2:B:7:LYS:N	2.39	0.56
2:B:810:SER:HB2	2:B:813:ASP:CG	2.26	0.56
2:B:1458:PHE:CZ	2:B:1560:MET:O	2.59	0.56
2:B:2334:TYR:HA	20:B:5601:ATP:C2	2.38	0.56
2:B:3164:VAL:CG1	2:B:3409:ALA:CB	2.75	0.56
2:B:3243:LYS:HD2	2:B:3285:ASN:O	2.05	0.56
4:D:199:ILE:HG12	9:I:104:ALA:CB	2.36	0.56
5:E:48:ILE:CB	12:L:88:PHE:HE2	2.17	0.56
5:E:112:LEU:HD23	5:E:116:VAL:HG23	1.87	0.56
5:E:214:SER:HB3	5:E:243:TRP:HZ2	1.71	0.56
5:E:515:LYS:O	5:E:515:LYS:HD3	2.05	0.56
12:L:84:CYS:SG	13:M:56:ILE:HG12	2.46	0.56
1:A:3046:PHE:CE2	1:A:3104:ILE:CD1	2.89	0.56
1:A:3223:LEU:CD1	1:A:3332:ILE:HG12	2.19	0.56
1:A:3236:ILE:CA	1:A:3333:LEU:HD23	2.35	0.56
1:A:3257:VAL:HG13	1:A:3267:LEU:H	1.70	0.56
2:B:655:LYS:HB2	2:B:677:LEU:CD2	2.34	0.56
2:B:3118:TYR:CD2	2:B:3455:SER:CB	2.87	0.56
3:C:60:LEU:HD23	3:C:69:TRP:CE3	2.41	0.56
3:C:2673:VAL:CA	3:C:2841:THR:CG2	2.78	0.56
4:D:386:TYR:HB3	4:D:433:LEU:HD11	1.88	0.56
9:I:30:MET:HB3	9:I:35:LEU:HD21	1.88	0.56
1:A:3128:THR:HG22	1:A:3422:LEU:HD13	1.88	0.56
1:A:3251:ILE:CG1	17:Q:82:ASN:CA	2.56	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:514:TYR:HE2	2:B:523:LEU:HD12	1.71	0.56
2:B:555:LEU:HG	2:B:629:ILE:HD12	1.88	0.56
2:B:1176:VAL:O	2:B:1179:THR:OG1	2.17	0.56
2:B:1437:GLU:CG	2:B:1493:TYR:CB	2.77	0.56
2:B:3114:LEU:CD2	2:B:3460:TYR:CE2	2.89	0.56
3:C:227:SER:HB3	3:C:250:LYS:H	1.71	0.56
3:C:2184:ILE:HD11	3:C:2237:ILE:HD13	1.88	0.56
4:D:174:GLN:HE22	12:L:49:LEU:C	2.09	0.56
4:D:248:MET:HE2	7:G:147:VAL:HG21	1.88	0.56
4:D:543:MET:HE2	4:D:563:MET:CE	2.35	0.56
4:D:564:ASP:OD2	4:D:583:LYS:HE2	2.05	0.56
9:I:19:MET:HB3	9:I:22:LYS:HE3	1.88	0.56
1:A:683:LYS:HE2	1:A:738:GLU:HG2	1.87	0.55
1:A:937:LEU:CD1	1:A:1081:ILE:CD1	2.84	0.55
1:A:2330:TYR:O	1:A:2336:PHE:HB2	2.06	0.55
2:B:428:HIS:O	2:B:432:THR:HG23	2.05	0.55
2:B:585:ILE:HG21	2:B:644:TRP:HB2	1.87	0.55
2:B:736:LEU:CD1	2:B:859:TYR:HB3	2.35	0.55
2:B:1243:LYS:CB	2:B:1251:SER:N	2.69	0.55
4:D:283:LEU:HB3	4:D:614:VAL:HG11	1.88	0.55
4:D:529:ASP:CG	4:D:532:TYR:HD2	2.09	0.55
10:J:86:CYS:SG	11:K:61:VAL:HA	2.46	0.55
14:N:75:GLN:HG2	15:O:94:GLY:H	1.70	0.55
1:A:717:LEU:O	1:A:717:LEU:HD23	2.07	0.55
1:A:871:LEU:HD22	1:A:872:ASP:O	2.07	0.55
1:A:1135:VAL:HG12	1:A:1136:MET:HE3	1.87	0.55
1:A:3121:LEU:HD21	1:A:3429:TRP:HB3	0.57	0.55
1:A:3273:TYR:CD1	1:A:3276:SER:HB3	2.41	0.55
2:B:489:PHE:HE1	2:B:493:ARG:HD3	1.69	0.55
2:B:1107:ARG:HE	2:B:1172:LYS:NZ	2.04	0.55
2:B:1172:LYS:HD2	2:B:1176:VAL:HG23	1.87	0.55
2:B:2971:ILE:HG23	2:B:2974:LEU:HB2	1.89	0.55
2:B:3147:GLN:HA	2:B:3426:LEU:HD13	1.87	0.55
2:B:4243:ASN:HB2	2:B:4244:PRO:HD2	1.88	0.55
3:C:25:THR:OG1	3:C:87:SER:HB3	2.05	0.55
3:C:113:ILE:CD1	3:C:185:PHE:CE1	2.89	0.55
3:C:230:MET:SD	3:C:241:ASP:CG	2.84	0.55
3:C:2848:THR:O	3:C:2852:ASN:CG	2.45	0.55
5:E:26:ARG:O	14:N:85:ILE:CG2	2.53	0.55
5:E:59:HIS:HB2	10:J:90:HIS:NE2	2.22	0.55
5:E:143:GLU:OE1	5:E:493:SER:HB3	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:471:ASN:H	5:E:474:LYS:HE2	1.71	0.55
7:G:71:LYS:HG3	7:G:72:THR:HG23	1.87	0.55
16:P:16:GLU:CB	16:P:74:LEU:CA	2.82	0.55
1:A:3131:ILE:HG12	1:A:3422:LEU:HD12	1.88	0.55
1:A:3237:MET:SD	1:A:3332:ILE:HG21	2.46	0.55
2:B:904:LEU:HB2	2:B:1078:ILE:HG23	1.89	0.55
2:B:1139:LEU:HD23	2:B:1198:ILE:CG1	2.36	0.55
2:B:3122:LEU:HD11	2:B:3448:ILE:HG12	1.88	0.55
2:B:3139:GLY:CA	2:B:3695:LEU:CD2	2.84	0.55
3:C:2581:LEU:HD13	3:C:2937:TYR:OH	2.07	0.55
4:D:195:ILE:CD1	9:I:94:LEU:HD23	2.35	0.55
4:D:417:ILE:CD1	4:D:474:VAL:CG2	2.83	0.55
5:E:384:LEU:HD12	5:E:384:LEU:C	2.27	0.55
10:J:26:VAL:CG2	10:J:98:PHE:CB	2.72	0.55
10:J:79:PHE:CD2	11:K:68:ALA:HB2	2.41	0.55
14:N:23:GLN:OE1	14:N:23:GLN:HA	2.05	0.55
1:A:666:SER:CB	1:A:695:LEU:CD1	2.84	0.55
1:A:1637:VAL:HG11	1:A:1653:ILE:HG21	1.88	0.55
1:A:3298:ILE:HG22	1:A:3300:GLU:HG3	1.88	0.55
2:B:801:ILE:HG12	2:B:937:PHE:CD1	2.34	0.55
2:B:1474:MET:CE	2:B:1515:VAL:CB	2.83	0.55
3:C:2007:LEU:HD11	3:C:2128:MET:HE3	1.89	0.55
3:C:2738:ILE:HG22	3:C:2746:PRO:CG	2.34	0.55
3:C:2760:SER:HB2	3:C:2763:GLU:HG2	1.89	0.55
4:D:171:ARG:O	13:M:64:HIS:HA	2.05	0.55
4:D:240:SER:CB	7:G:140:ASP:OD2	2.55	0.55
1:A:594:PRO:O	1:A:596:LEU:CD1	2.54	0.55
1:A:1634:ILE:HD13	1:A:1656:ILE:HG22	1.87	0.55
2:B:87:LYS:N	2:B:104:VAL:O	2.39	0.55
2:B:411:ALA:HA	2:B:414:VAL:CG2	2.36	0.55
2:B:718:ILE:CD1	2:B:770:LYS:HA	2.35	0.55
2:B:1119:LYS:HA	2:B:1122:ASP:OD2	2.07	0.55
2:B:2411:ALA:HB3	2:B:2526:ILE:HG23	1.89	0.55
2:B:2531:ARG:HA	2:B:2649:LEU:HD21	1.88	0.55
2:B:2543:GLY:CA	19:B:5501:ADP:PA	2.92	0.55
2:B:3321:PHE:CD2	2:B:3321:PHE:O	2.60	0.55
3:C:217:PHE:HE2	3:C:268:ILE:HD12	1.71	0.55
3:C:1728:LEU:HD12	3:C:1728:LEU:O	2.06	0.55
3:C:2814:CYS:O	3:C:2818:VAL:HG23	2.07	0.55
4:D:111:MET:HB3	15:O:95:LEU:N	2.05	0.55
4:D:401:GLN:O	4:D:417:ILE:HG22	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:56:LEU:HD23	10:J:91:ASN:CA	2.35	0.55
9:I:24:ILE:CG2	9:I:98:PHE:O	2.55	0.55
10:J:79:PHE:CD2	11:K:68:ALA:HB3	2.40	0.55
18:R:82:ALA:C	18:R:83:ASN:CB	2.73	0.55
1:A:403:ALA:HA	1:A:468:GLN:HA	1.88	0.55
1:A:802:ILE:HA	1:A:806:ILE:CG2	2.37	0.55
1:A:818:LEU:C	1:A:840:TYR:HE2	2.10	0.55
1:A:1051:GLN:NE2	1:A:1096:TYR:CE2	2.74	0.55
1:A:1133:GLY:HA3	1:A:1268:ARG:CA	2.36	0.55
1:A:1263:TYR:HD2	1:A:1283:LEU:CB	2.18	0.55
1:A:2220:ASN:HD22	1:A:2220:ASN:N	2.04	0.55
1:A:3236:ILE:HA	1:A:3333:LEU:HD23	1.87	0.55
2:B:433:ILE:CB	2:B:463:PHE:CZ	2.88	0.55
2:B:436:PHE:HB2	2:B:463:PHE:CE2	2.41	0.55
2:B:658:GLN:HG2	2:B:672:ASN:O	2.04	0.55
2:B:946:ARG:NH2	2:B:958:GLU:OE2	2.40	0.55
2:B:984:ASN:O	2:B:987:ARG:HG2	2.07	0.55
2:B:1458:PHE:HD1	2:B:1560:MET:CE	2.19	0.55
3:C:2670:LYS:HB3	3:C:2848:THR:HG21	1.87	0.55
5:E:81:PRO:C	8:H:12:LYS:HZ1	2.10	0.55
5:E:180:SER:HB3	5:E:221:ILE:HG12	1.88	0.55
10:J:61:ALA:HB1	10:J:80:PHE:CE2	2.34	0.55
13:M:17:ILE:HG13	13:M:73:ILE:HD11	1.89	0.55
15:O:76:VAL:HG12	15:O:81:ILE:HD11	1.88	0.55
1:A:1100:LEU:CD2	1:A:1159:MET:HE3	2.28	0.55
1:A:1126:VAL:HG11	1:A:1201:TYR:CE1	2.42	0.55
1:A:2839:LEU:CD1	19:A:4901:ADP:C4	2.90	0.55
1:A:3231:ASP:OD2	1:A:3258:PHE:CG	2.52	0.55
1:A:3442:LYS:CG	1:A:3485:THR:CG2	2.84	0.55
2:B:718:ILE:CD1	2:B:773:VAL:CG1	2.84	0.55
2:B:798:ASN:HB2	2:B:874:ALA:HB1	1.78	0.55
2:B:1456:PHE:CG	2:B:1467:PHE:CE1	2.87	0.55
2:B:3242:MET:HA	2:B:3245:LEU:CD1	2.36	0.55
3:C:2585:PHE:HA	3:C:2932:SER:HB3	1.88	0.55
4:D:91:TYR:HB2	13:M:28:VAL:HG13	1.88	0.55
4:D:172:GLU:CA	13:M:64:HIS:HA	2.22	0.55
4:D:417:ILE:HG23	4:D:417:ILE:O	2.07	0.55
5:E:384:LEU:HD23	5:E:417:TRP:CD2	2.40	0.55
5:E:492:ASP:CA	5:E:495:TYR:CZ	2.80	0.55
7:G:119:PRO:HG2	9:I:12:ILE:CD1	2.37	0.55
8:H:45:ILE:HD13	8:H:86:ILE:HG23	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:59:CYS:O	9:I:85:TYR:HA	2.06	0.55
10:J:29:PRO:HB3	15:O:106:GLN:NE2	2.22	0.55
11:K:5:ALA:HB2	11:K:81:TYR:HB2	1.89	0.55
1:A:909:MET:CE	1:A:955:ILE:CD1	2.70	0.55
1:A:1450:TRP:CH2	1:A:1519:THR:HG23	2.41	0.55
2:B:409:SER:C	2:B:413:PHE:H	2.09	0.55
2:B:641:ILE:HG12	2:B:645:GLU:OE2	2.06	0.55
2:B:963:PHE:CD2	3:C:103:THR:CA	2.89	0.55
2:B:3132:GLN:HA	2:B:3132:GLN:OE1	2.05	0.55
3:C:2723:PHE:HZ	3:C:2745:LYS:HE3	1.72	0.55
4:D:174:GLN:NE2	12:L:51:LYS:N	2.43	0.55
4:D:248:MET:HG3	7:G:145:LEU:HD22	1.88	0.55
4:D:617:SER:OG	4:D:618:PRO:CD	2.52	0.55
5:E:58:GLU:HA	10:J:89:VAL:HA	1.88	0.55
15:O:31:PRO:CB	15:O:109:ASN:HD21	2.20	0.55
1:A:15:THR:N	2:B:19:SER:O	2.40	0.55
1:A:1190:LEU:HD23	1:A:1190:LEU:O	2.07	0.55
2:B:2066:LEU:HD22	2:B:2118:ASP:HB3	1.88	0.55
3:C:127:GLN:OE1	3:C:127:GLN:HA	2.07	0.55
3:C:164:HIS:HD2	3:C:201:GLY:HA3	1.71	0.55
3:C:2698:LEU:HD21	3:C:2768:LEU:CB	2.35	0.55
4:D:79:ASN:HD22	4:D:80:PRO:HD2	1.70	0.55
10:J:52:GLU:H	10:J:52:GLU:CD	2.06	0.55
12:L:58:VAL:HB	13:M:64:HIS:HE1	1.71	0.55
2:B:260:LEU:HA	2:B:264:LYS:N	2.22	0.55
2:B:532:THR:HG23	2:B:535:ILE:HB	1.88	0.55
2:B:1474:MET:HE1	2:B:1515:VAL:CB	2.37	0.55
2:B:3268:THR:HG22	2:B:3269:LEU:HD13	1.87	0.55
3:C:24:HIS:HE1	3:C:339:GLY:O	1.90	0.55
3:C:25:THR:HG22	3:C:85:HIS:CE1	2.42	0.55
4:D:207:ALA:CA	9:I:24:ILE:CD1	2.75	0.55
5:E:116:VAL:CG1	6:F:99:ALA:HB2	2.37	0.55
8:H:65:PHE:CA	9:I:80:GLY:HA2	2.13	0.55
12:L:70:GLY:O	12:L:109:LYS:NZ	2.40	0.55
12:L:72:GLY:O	12:L:109:LYS:HE3	2.07	0.55
1:A:948:LEU:HB3	1:A:1010:LYS:HD3	1.88	0.54
1:A:1597:LYS:NZ	1:A:1962:ILE:HD12	2.21	0.54
1:A:3251:ILE:HG13	17:Q:82:ASN:CB	2.35	0.54
2:B:997:TRP:HA	2:B:997:TRP:HE3	1.71	0.54
2:B:3203:ALA:CB	2:B:3370:LYS:CB	2.84	0.54
3:C:10:LEU:HD21	3:C:66:ASN:CA	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:143:PRO:CG	3:C:187:TRP:CE2	2.85	0.54
3:C:2585:PHE:CE1	3:C:2929:LEU:CB	2.90	0.54
4:D:180:ILE:CG2	10:J:75:TYR:CE1	2.88	0.54
10:J:48:LEU:HD13	10:J:100:ILE:HD12	1.85	0.54
1:A:97:ARG:O	1:A:122:GLU:N	2.40	0.54
1:A:1048:TYR:CE1	1:A:1100:LEU:HB2	2.41	0.54
1:A:1525:PHE:CD1	1:A:1541:PHE:CD2	2.96	0.54
1:A:3251:ILE:HD12	17:Q:83:VAL:N	2.19	0.54
2:B:228:LEU:CB	2:B:291:TYR:O	2.55	0.54
2:B:530:LEU:HD12	2:B:530:LEU:O	2.07	0.54
2:B:583:PRO:HG2	2:B:683:GLU:HA	1.88	0.54
2:B:3239:VAL:HB	2:B:3284:MET:CE	2.37	0.54
2:B:3399:GLU:O	2:B:3403:MET:HG2	2.07	0.54
3:C:2701:ILE:HD12	3:C:2704:LYS:HG3	1.89	0.54
4:D:208:TYR:N	9:I:24:ILE:CD1	2.66	0.54
5:E:310:LEU:HD12	5:E:358:ARG:NH1	2.21	0.54
5:E:392:LYS:HD2	5:E:394:TRP:CZ2	2.42	0.54
5:E:425:PHE:HE2	5:E:427:LEU:HD11	1.72	0.54
9:I:85:TYR:CZ	9:I:106:LEU:HD22	2.41	0.54
12:L:69:ILE:HG22	12:L:69:ILE:O	2.07	0.54
15:O:52:ASP:N	15:O:53:PRO:HD3	2.22	0.54
15:O:105:VAL:HG12	15:O:106:GLN:HG3	1.87	0.54
1:A:714:ARG:O	1:A:718:LEU:HG	2.07	0.54
1:A:853:VAL:HG21	5:E:206:ASN:ND2	2.23	0.54
1:A:909:MET:HE1	1:A:955:ILE:CD1	2.29	0.54
2:B:3445:LYS:HG3	2:B:3487:PRO:CB	2.37	0.54
3:C:24:HIS:CD2	3:C:325:SER:CB	2.89	0.54
3:C:972:LEU:HD11	3:C:1017:MET:HE3	1.90	0.54
3:C:2723:PHE:HZ	3:C:2749:VAL:HG11	1.64	0.54
3:C:2743:ASN:CG	3:C:2789:LYS:HG3	2.28	0.54
9:I:96:PHE:HE1	9:I:98:PHE:CD2	2.26	0.54
11:K:46:ILE:HD11	11:K:87:ILE:HD13	1.87	0.54
15:O:24:TYR:HD1	15:O:26:LYS:HE2	1.73	0.54
1:A:847:PHE:CZ	1:A:851:LYS:HE3	2.42	0.54
1:A:1016:PHE:CE2	1:A:1076:LEU:CB	2.89	0.54
1:A:1136:MET:CE	1:A:1136:MET:CA	2.85	0.54
1:A:1511:TRP:CB	1:A:1574:LEU:HD11	2.38	0.54
2:B:609:LEU:N	2:B:609:LEU:HD22	2.22	0.54
3:C:2581:LEU:CG	3:C:2936:SER:CB	2.86	0.54
3:C:2669:ILE:HG21	3:C:2843:GLN:O	2.07	0.54
3:C:2711:SER:CA	3:C:2751:TRP:CZ2	2.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2743:ASN:HD21	3:C:2786:ASN:N	2.04	0.54
5:E:59:HIS:CE1	10:J:31:GLU:OE1	2.60	0.54
5:E:117:GLU:CB	6:F:17:LEU:CD1	2.80	0.54
6:F:26:PHE:CD1	6:F:49:ALA:HA	2.42	0.54
1:A:616:LYS:O	1:A:620:PRO:HD3	2.05	0.54
1:A:675:ILE:HA	1:A:687:ASN:HB2	1.89	0.54
1:A:869:TYR:O	1:A:871:LEU:HD12	2.08	0.54
1:A:1016:PHE:CE2	1:A:1069:TYR:HB2	2.42	0.54
1:A:1027:CYS:O	1:A:1088:TRP:HZ3	1.89	0.54
1:A:1263:TYR:HE2	1:A:1280:TYR:CA	2.21	0.54
1:A:3260:LYS:HZ2	1:A:3315:ASP:HB3	1.70	0.54
1:A:3317:PHE:CD1	1:A:3333:LEU:CD2	2.88	0.54
2:B:459:ILE:HD11	2:B:502:ARG:HB3	1.90	0.54
2:B:467:VAL:CA	2:B:471:THR:HG1	2.21	0.54
2:B:674:ASP:OD1	2:B:675:PRO:CD	2.55	0.54
2:B:984:ASN:HA	2:B:987:ARG:CD	2.37	0.54
2:B:1455:VAL:HG12	2:B:1456:PHE:H	1.72	0.54
2:B:2544:LYS:CA	19:B:5501:ADP:O1A	2.53	0.54
4:D:509:ASN:HD22	4:D:644:ILE:HD13	1.73	0.54
4:D:536:ILE:HG22	4:D:537:ILE:HG13	1.88	0.54
10:J:82:LYS:HG3	11:K:65:HIS:NE2	2.23	0.54
1:A:818:LEU:CD1	1:A:818:LEU:N	2.67	0.54
1:A:1088:TRP:CZ2	1:A:1092:TRP:HZ2	2.25	0.54
1:A:2498:ALA:HA	19:A:4701:ADP:O2A	2.07	0.54
1:A:3220:ILE:HG23	1:A:3286:PHE:CE2	2.43	0.54
2:B:900:PHE:HZ	2:B:933:TRP:CZ2	2.26	0.54
2:B:1058:LYS:HB2	2:B:1166:GLU:HG2	1.89	0.54
2:B:1511:VAL:C	2:B:1570:VAL:HG22	2.27	0.54
2:B:1539:ARG:HA	2:B:1546:THR:HG21	1.90	0.54
2:B:3220:ALA:HB3	2:B:3353:VAL:HG23	1.89	0.54
3:C:352:LEU:HD22	3:C:352:LEU:C	2.28	0.54
3:C:2711:SER:C	3:C:2751:TRP:HZ2	2.11	0.54
5:E:110:LYS:HG2	6:F:10:GLN:CG	2.38	0.54
6:F:55:LEU:HB2	7:G:113:VAL:HG21	1.89	0.54
6:F:73:ASP:OD1	7:G:131:LYS:HB2	2.08	0.54
8:H:29:LYS:HB2	8:H:29:LYS:HZ2	1.73	0.54
8:H:67:SER:HB3	9:I:78:ILE:HG22	1.84	0.54
2:B:17:ARG:N	2:B:17:ARG:CB	2.61	0.54
2:B:904:LEU:HD23	2:B:1080:LEU:HG	1.89	0.54
3:C:229:ILE:HD11	3:C:301:TRP:HE1	1.72	0.54
3:C:2706:PHE:HD1	3:C:2761:PRO:HG3	1.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2800:PRO:HG3	3:C:2818:VAL:CG2	2.37	0.54
4:D:265:ARG:HD3	5:E:125:GLN:HA	1.88	0.54
4:D:517:ILE:CG1	4:D:550:TRP:HZ2	2.14	0.54
16:P:15:SER:C	16:P:16:GLU:C	2.66	0.54
1:A:801:ILE:HD12	1:A:862:LEU:CD2	2.34	0.54
1:A:868:LEU:N	1:A:868:LEU:CD1	2.70	0.54
1:A:989:ILE:HG23	1:A:995:ILE:HG21	1.90	0.54
1:A:1396:PRO:HA	1:A:1400:TYR:CA	2.37	0.54
2:B:886:ILE:HD11	2:B:976:LEU:CD2	2.37	0.54
2:B:1467:PHE:CE1	2:B:1569:VAL:CG1	2.90	0.54
2:B:3243:LYS:CE	2:B:3285:ASN:O	2.56	0.54
3:C:95:MET:HE2	3:C:116:THR:HG22	1.90	0.54
4:D:174:GLN:HE22	12:L:49:LEU:HB3	1.72	0.54
4:D:260:LYS:CB	4:D:287:TRP:CZ2	2.91	0.54
4:D:351:MET:CE	4:D:351:MET:CA	2.85	0.54
5:E:50:LEU:HD21	12:L:23:PHE:HB3	1.87	0.54
5:E:50:LEU:HD22	12:L:23:PHE:HB2	1.90	0.54
5:E:77:GLU:OE1	5:E:86:PRO:HB2	2.08	0.54
5:E:80:TRP:CE3	5:E:81:PRO:CD	2.89	0.54
1:A:937:LEU:CD1	1:A:1081:ILE:CG1	2.84	0.54
1:A:997:LYS:NZ	18:R:149:LEU:C	2.53	0.54
1:A:1048:TYR:HE1	1:A:1100:LEU:CB	2.20	0.54
1:A:1440:TRP:HH2	1:A:1471:LEU:HG	1.73	0.54
2:B:436:PHE:CD2	2:B:463:PHE:CG	2.96	0.54
2:B:969:LEU:CD2	3:C:343:ASN:HA	2.38	0.54
2:B:1521:VAL:HG22	2:B:1585:SER:HB3	1.90	0.54
2:B:1531:ILE:HD11	2:B:1618:LEU:HD22	1.89	0.54
2:B:3085:VAL:HG21	2:B:3456:ALA:HB1	1.89	0.54
2:B:3499:THR:HG21	2:B:3507:TRP:CH2	2.42	0.54
3:C:110:ASP:HB2	3:C:128:ILE:HG12	1.89	0.54
3:C:261:ILE:HG13	3:C:360:PRO:HB2	1.87	0.54
3:C:2701:ILE:HG13	3:C:2704:LYS:CB	2.37	0.54
4:D:89:TYR:CE2	11:K:56:PRO:CD	2.89	0.54
4:D:252:VAL:HA	7:G:149:GLN:NE2	2.23	0.54
5:E:26:ARG:NH2	5:E:26:ARG:HB2	2.23	0.54
5:E:153:PHE:HB3	5:E:200:TRP:CE2	2.43	0.54
5:E:203:LEU:HD23	5:E:203:LEU:O	2.08	0.54
5:E:308:GLU:OE2	5:E:361:LEU:CD2	2.56	0.54
7:G:119:PRO:CG	9:I:12:ILE:HD13	2.35	0.54
8:H:52:ARG:CA	18:R:63:ASN:CB	2.61	0.54
1:A:3121:LEU:CD2	1:A:3429:TRP:CG	2.81	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3230:LEU:N	1:A:3233:ILE:HG22	2.23	0.54
2:B:14:ILE:HA	2:B:23:GLY:N	2.22	0.54
2:B:412:LEU:HD13	2:B:412:LEU:O	2.08	0.54
2:B:1474:MET:SD	2:B:1515:VAL:HG21	2.48	0.54
3:C:34:ILE:CG2	3:C:57:VAL:CG1	2.86	0.54
3:C:972:LEU:HD13	3:C:1029:GLU:HG2	1.90	0.54
3:C:2739:GLU:N	3:C:2746:PRO:HB3	2.13	0.54
3:C:2780:VAL:HG12	3:C:2786:ASN:HD21	1.72	0.54
3:C:2927:ASP:OD2	3:C:2974:ILE:HD13	2.06	0.54
4:D:105:MET:HE3	14:N:48:GLN:CA	2.27	0.54
4:D:174:GLN:OE1	12:L:49:LEU:HB3	2.08	0.54
4:D:180:ILE:HG21	10:J:75:TYR:CZ	2.43	0.54
4:D:255:ASN:ND2	7:G:134:GLU:CD	2.57	0.54
12:L:17:PRO:HG2	12:L:35:ILE:HG22	1.90	0.54
12:L:98:LEU:HB2	12:L:101:SER:HB2	1.90	0.54
1:A:889:TYR:CE2	7:G:12:SER:CB	2.91	0.53
1:A:1048:TYR:CE1	1:A:1100:LEU:CB	2.92	0.53
1:A:2935:LEU:HD12	1:A:2938:ILE:HD11	1.89	0.53
1:A:3232:ILE:CD1	1:A:3316:TRP:CE3	2.76	0.53
2:B:508:THR:HG22	2:B:539:GLU:CD	2.28	0.53
2:B:956:LEU:HA	2:B:959:ILE:CG1	2.38	0.53
2:B:2846:LEU:HD11	2:B:2872:VAL:HG11	1.91	0.53
2:B:3878:ILE:HG12	2:B:3887:ALA:HB2	1.90	0.53
3:C:9:GLN:OE1	3:C:350:TRP:CZ2	2.61	0.53
3:C:53:PRO:CD	3:C:81:PRO:CB	2.85	0.53
3:C:1081:ILE:HD11	3:C:1117:GLN:CB	2.38	0.53
3:C:2217:ASN:HD22	3:C:2247:THR:HG23	1.72	0.53
3:C:2614:ALA:CB	3:C:2903:LEU:HD11	2.38	0.53
3:C:2708:GLN:CD	3:C:2813:ILE:HG13	2.28	0.53
3:C:3927:VAL:HG21	3:C:4031:ALA:HB2	1.90	0.53
4:D:92:TYR:CB	13:M:29:LYS:HB3	2.37	0.53
9:I:11:ASP:H	9:I:14:GLU:HB2	1.73	0.53
10:J:43:GLU:HG2	10:J:67:TYR:CE2	2.43	0.53
12:L:92:VAL:O	12:L:92:VAL:HG12	2.07	0.53
1:A:53:ILE:C	1:A:54:PHE:CA	2.77	0.53
1:A:306:LYS:O	1:A:310:ALA:CB	2.55	0.53
1:A:747:ILE:HD13	1:A:889:TYR:CD1	2.43	0.53
1:A:789:LYS:O	1:A:793:GLN:HG3	2.09	0.53
1:A:1060:GLU:O	1:A:1063:GLU:HB3	2.08	0.53
1:A:1130:ASP:HA	1:A:1265:ILE:O	2.08	0.53
2:B:725:ILE:HD12	2:B:780:VAL:CG2	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:762:ILE:O	2:B:766:ILE:HB	2.07	0.53
2:B:790:ILE:HD13	2:B:863:VAL:HG13	1.90	0.53
2:B:3239:VAL:HG11	2:B:3291:ILE:CD1	2.38	0.53
2:B:3454:ALA:CB	2:B:3497:ILE:HG21	2.37	0.53
2:B:4311:SER:HA	2:B:4391:ILE:HG21	1.90	0.53
3:C:2013:GLY:C	19:C:4702:ADP:O2A	2.46	0.53
3:C:2709:ALA:CB	3:C:2758:MET:SD	2.96	0.53
3:C:3064:ILE:HG13	3:C:3115:ILE:HD12	1.90	0.53
4:D:91:TYR:CE2	13:M:80:LEU:CD1	2.90	0.53
4:D:536:ILE:HD13	4:D:648:GLU:HG3	1.89	0.53
8:H:28:ALA:CB	8:H:86:ILE:HD12	2.33	0.53
10:J:44:THR:HG22	10:J:64:LEU:HD22	1.89	0.53
10:J:97:TYR:HB2	10:J:106:LEU:CD1	2.38	0.53
15:O:22:LEU:HD11	15:O:23:ASN:ND2	2.23	0.53
1:A:861:ASP:OD2	5:E:152:LEU:CD1	2.55	0.53
1:A:906:LEU:CD1	1:A:998:VAL:CB	2.59	0.53
1:A:935:VAL:CG1	1:A:1017:LEU:HD22	2.38	0.53
1:A:1597:LYS:HZ1	1:A:1962:ILE:CD1	2.19	0.53
1:A:3251:ILE:CD1	17:Q:82:ASN:C	2.77	0.53
1:A:3345:LYS:CA	1:A:3345:LYS:CE	2.85	0.53
2:B:467:VAL:CG1	2:B:471:THR:HG1	2.16	0.53
2:B:721:ASN:ND2	2:B:773:VAL:HG12	2.24	0.53
2:B:2190:LYS:HE2	20:B:5601:ATP:PB	2.49	0.53
2:B:2863:VAL:HG23	19:B:5602:ADP:N1	2.23	0.53
3:C:106:LEU:HD23	3:C:133:PRO:HB2	1.90	0.53
3:C:1559:LEU:CD2	3:C:1607:LEU:HD21	2.38	0.53
3:C:2804:ALA:HB1	3:C:2811:LYS:HD2	1.90	0.53
4:D:537:ILE:HD11	4:D:647:TYR:CE2	2.42	0.53
5:E:59:HIS:CD2	10:J:31:GLU:OE1	2.61	0.53
5:E:162:ARG:HA	5:E:183:ILE:HD11	1.90	0.53
10:J:19:LYS:CE	15:O:19:LEU:HD11	2.38	0.53
12:L:58:VAL:HG21	13:M:64:HIS:CE1	2.44	0.53
14:N:68:CYS:HA	15:O:101:CYS:HA	1.90	0.53
1:A:752:LEU:HD21	1:A:795:ILE:HG12	1.90	0.53
1:A:1624:GLN:HA	1:A:1627:PHE:CD2	2.44	0.53
1:A:3533:PRO:HD3	1:A:3648:THR:HG22	1.89	0.53
1:A:3914:ASN:O	1:A:3950:ARG:NH1	2.41	0.53
2:B:225:PRO:CA	2:B:298:LEU:CB	2.86	0.53
3:C:881:ILE:O	3:C:881:ILE:HG22	2.09	0.53
3:C:2719:VAL:HG12	3:C:2720:PRO:HD3	1.85	0.53
3:C:4082:TRP:CZ2	3:C:4091:GLY:HA3	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:537:ILE:CD1	4:D:647:TYR:OH	2.56	0.53
5:E:146:SER:H	5:E:491:CYS:HB2	1.73	0.53
5:E:286:GLY:HA3	5:E:316:ILE:HG22	1.91	0.53
14:N:103:ILE:O	14:N:103:ILE:HG22	2.08	0.53
15:O:45:ARG:HB2	15:O:63:LEU:HD11	1.90	0.53
1:A:1031:ILE:HG22	1:A:1034:SER:HG	1.73	0.53
1:A:1513:LYS:CE	1:A:1578:ASN:OD1	2.42	0.53
1:A:3117:PHE:CD2	1:A:3429:TRP:HE3	2.27	0.53
1:A:3293:PHE:HE1	1:A:3335:TRP:HZ2	1.47	0.53
2:B:911:ILE:HD12	2:B:991:ASP:OD2	2.08	0.53
2:B:1099:THR:O	2:B:1163:ARG:NH1	2.42	0.53
2:B:1237:ARG:HD3	2:B:1260:ALA:N	2.22	0.53
3:C:2055:ILE:HG22	3:C:2059:LEU:CD1	2.39	0.53
4:D:199:ILE:HG21	9:I:104:ALA:HB3	1.82	0.53
8:H:69:VAL:HG23	8:H:71:PHE:HD2	1.73	0.53
11:K:25:ALA:HB1	11:K:80:PHE:HE2	1.74	0.53
13:M:21:LYS:HB3	13:M:21:LYS:NZ	2.23	0.53
14:N:82:SER:OG	15:O:57:ASN:OD1	2.26	0.53
14:N:85:ILE:HG21	14:N:98:ILE:HD11	1.50	0.53
1:A:1013:VAL:HG13	1:A:1016:PHE:HE1	1.73	0.53
1:A:1100:LEU:HD21	1:A:1159:MET:CE	2.32	0.53
1:A:2061:THR:HG22	1:A:2073:LEU:HD22	1.90	0.53
2:B:984:ASN:HA	2:B:987:ARG:HD3	1.90	0.53
2:B:1125:LYS:HG3	2:B:1200:ILE:CG2	2.38	0.53
2:B:1432:ASP:O	2:B:1436:LYS:HG3	2.09	0.53
2:B:3314:ILE:CG1	2:B:3321:PHE:CE2	2.68	0.53
3:C:10:LEU:HD23	3:C:65:ASN:CA	2.39	0.53
3:C:180:LEU:HD12	3:C:180:LEU:C	2.28	0.53
3:C:359:GLY:C	3:C:440:TYR:CB	2.77	0.53
3:C:2726:THR:CG2	3:C:2729:LEU:HD12	2.38	0.53
4:D:288:ARG:HB2	4:D:612:THR:HG22	1.91	0.53
4:D:573:VAL:O	4:D:574:ASP:OD1	2.27	0.53
5:E:113:LYS:HE2	6:F:13:GLN:HB2	1.91	0.53
5:E:342:ILE:HB	5:E:359:TYR:HB2	1.89	0.53
8:H:62:GLY:CA	9:I:82:GLY:O	2.56	0.53
8:H:76:TYR:CE1	8:H:87:LEU:HD13	2.42	0.53
15:O:64:VAL:HG22	15:O:85:VAL:HB	1.90	0.53
1:A:155:GLY:CA	2:B:168:ILE:N	2.54	0.53
1:A:892:TRP:CZ3	7:G:14:GLN:N	2.77	0.53
1:A:1034:SER:HB3	1:A:1092:TRP:HZ3	1.74	0.53
1:A:1176:GLU:OE1	1:A:1176:GLU:HA	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1205:GLN:HA	1:A:1208:TYR:HB2	1.90	0.53
2:B:736:LEU:CA	2:B:855:SER:HB2	2.30	0.53
3:C:53:PRO:HD2	3:C:81:PRO:HB3	1.89	0.53
3:C:702:PHE:O	3:C:706:LYS:CB	2.56	0.53
3:C:1060:LEU:HD21	3:C:1148:LEU:HD13	1.90	0.53
3:C:1880:VAL:HA	3:C:1883:ILE:HD12	1.90	0.53
4:D:172:GLU:HB3	13:M:64:HIS:HB3	0.55	0.53
5:E:57:SER:OG	10:J:90:HIS:CE1	2.62	0.53
6:F:50:ALA:HB1	8:H:83:GLN:CB	2.39	0.53
6:F:81:THR:C	7:G:124:VAL:CG2	2.77	0.53
8:H:68:PHE:CE2	9:I:61:LYS:HA	2.43	0.53
10:J:31:GLU:HB2	10:J:95:PHE:O	2.09	0.53
10:J:36:ILE:HG23	10:J:72:PHE:CE1	2.44	0.53
14:N:83:VAL:HG22	15:O:86:VAL:HG23	1.90	0.53
14:N:117:VAL:O	14:N:117:VAL:HG12	2.08	0.53
1:A:607:ILE:HG13	1:A:654:TRP:HE1	1.73	0.53
1:A:791:LEU:HG	1:A:795:ILE:CD1	2.38	0.53
1:A:1114:GLN:C	1:A:1118:LEU:HD23	2.29	0.53
1:A:3446:ASN:CG	1:A:3488:LEU:CD2	2.77	0.53
2:B:638:ASP:O	2:B:642:LEU:HB2	2.08	0.53
2:B:899:LEU:HD12	2:B:900:PHE:CA	2.38	0.53
2:B:1057:LEU:HD11	2:B:1098:TYR:CE2	2.43	0.53
2:B:4545:CYS:SG	2:B:4579:ILE:HD13	2.49	0.53
3:C:2725:ALA:CA	3:C:2728:TYR:CE2	2.85	0.53
4:D:201:GLN:NE2	9:I:102:ASN:CA	2.70	0.53
4:D:564:ASP:CB	4:D:583:LYS:HE2	2.39	0.53
5:E:50:LEU:HD21	12:L:23:PHE:HB2	1.86	0.53
5:E:259:ASN:ND2	5:E:298:ALA:O	2.41	0.53
5:E:378:GLN:OE1	5:E:378:GLN:HA	2.08	0.53
10:J:28:TRP:N	10:J:29:PRO:HD2	2.23	0.53
10:J:78:VAL:HG22	10:J:107:MET:HB3	1.89	0.53
1:A:745:LYS:HB3	1:A:746:PRO:HD2	1.90	0.53
1:A:2500:THR:OG1	21:A:5002:MG:MG	1.37	0.53
1:A:2877:THR:HG21	1:A:2923:LEU:HD13	1.91	0.53
2:B:559:GLN:HB2	2:B:629:ILE:HD11	1.91	0.53
2:B:1001:GLU:O	2:B:1094:TRP:CZ2	2.62	0.53
2:B:1069:THR:CB	2:B:1070:PRO:HD2	2.33	0.53
2:B:1559:MET:HE2	2:B:1577:ARG:HH21	1.65	0.53
3:C:289:ASP:OD2	3:C:317:LYS:HB2	2.09	0.53
3:C:2772:LYS:HD3	3:C:2772:LYS:O	2.08	0.53
4:D:180:ILE:HG21	10:J:75:TYR:HE1	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:569:TYR:CE1	4:D:578:LYS:HG2	2.28	0.53
5:E:273:SER:O	5:E:273:SER:OG	2.23	0.53
5:E:440:TYR:CD1	5:E:501:GLU:HG2	2.44	0.53
12:L:92:VAL:HG11	12:L:109:LYS:HB2	1.91	0.53
1:A:948:LEU:HB2	1:A:1010:LYS:CD	2.39	0.53
1:A:1013:VAL:HG13	1:A:1076:LEU:CD2	2.38	0.53
1:A:1273:PHE:HA	4:D:166:PHE:HZ	0.71	0.53
2:B:58:SER:O	2:B:68:SER:O	0.58	0.53
2:B:3810:GLN:O	2:B:3814:ARG:HD3	2.09	0.53
3:C:2903:LEU:HD23	3:C:2903:LEU:O	2.08	0.53
5:E:470:HIS:CE1	5:E:475:LEU:HD11	2.44	0.53
6:F:14:LEU:CD2	6:F:23:TYR:HD2	2.05	0.53
6:F:62:VAL:HG11	7:G:106:LEU:CD2	2.39	0.53
10:J:77:HIS:NE2	11:K:92:LYS:HG2	2.16	0.53
15:O:45:ARG:HG3	15:O:63:LEU:HD12	1.88	0.53
1:A:3257:VAL:HG13	1:A:3267:LEU:N	2.25	0.52
1:A:3318:ASN:HB3	1:A:3321:PHE:HD2	1.74	0.52
2:B:3243:LYS:HE3	2:B:3285:ASN:O	2.09	0.52
4:D:196:CYS:HA	9:I:85:TYR:O	2.09	0.52
4:D:459:GLY:HA2	4:D:476:THR:HA	1.91	0.52
5:E:35:VAL:O	14:N:78:HIS:CE1	2.60	0.52
5:E:48:ILE:HB	12:L:93:LEU:HD23	1.90	0.52
8:H:60:ILE:CA	9:I:85:TYR:HB3	2.38	0.52
13:M:53:TRP:HZ3	13:M:86:LYS:HD2	1.73	0.52
1:A:1012:LYS:NZ	1:A:1072:GLY:HA3	2.24	0.52
1:A:1016:PHE:CD2	1:A:1020:PHE:CE2	2.97	0.52
1:A:1041:ASN:HD21	1:A:1096:TYR:HE1	1.57	0.52
1:A:1428:LYS:O	1:A:1431:THR:OG1	2.24	0.52
1:A:3306:LEU:HD11	1:A:3310:LEU:CD2	2.39	0.52
1:A:3442:LYS:HD2	1:A:3485:THR:CG2	2.39	0.52
2:B:682:LYS:NZ	5:E:186:PHE:HE1	1.88	0.52
2:B:1117:ILE:HD13	2:B:1186:PRO:HB3	1.91	0.52
4:D:94:ARG:CZ	13:M:78:ASN:HD22	2.16	0.52
4:D:584:ILE:CG2	4:D:614:VAL:HG22	2.37	0.52
4:D:588:PRO:HB2	4:D:606:ASP:HB3	1.92	0.52
6:F:11:LEU:CB	6:F:23:TYR:CZ	2.93	0.52
1:A:1012:LYS:CE	1:A:1072:GLY:H	2.06	0.52
1:A:3212:VAL:HG13	1:A:3335:TRP:NE1	2.25	0.52
1:A:4505:THR:HG22	1:A:4558:VAL:HG12	1.91	0.52
2:B:518:TYR:CB	5:E:404:ARG:NH1	2.69	0.52
2:B:644:TRP:CZ3	2:B:695:PRO:HB3	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:791:HIS:NE2	2:B:866:ILE:CD1	2.71	0.52
2:B:2742:ARG:HG3	19:B:5501:ADP:O3'	2.08	0.52
2:B:3139:GLY:CA	2:B:3695:LEU:HD21	2.38	0.52
3:C:1556:PHE:CE1	3:C:1580:ILE:HG23	2.45	0.52
3:C:2902:ALA:CB	3:C:3193:LEU:HB3	2.39	0.52
4:D:240:SER:HB2	7:G:140:ASP:OD2	2.09	0.52
5:E:41:VAL:HG22	5:E:42:GLN:HG3	1.91	0.52
12:L:77:ILE:CD1	13:M:65:ILE:HD11	2.39	0.52
1:A:18:CYS:CB	2:B:17:ARG:CB	2.87	0.52
1:A:552:PHE:CB	1:A:568:ARG:HH12	2.22	0.52
1:A:614:PHE:CE1	1:A:644:LEU:CD2	2.83	0.52
1:A:1048:TYR:CE1	1:A:1100:LEU:HA	2.43	0.52
1:A:1620:PRO:HB2	1:A:1639:PHE:CZ	2.44	0.52
1:A:1868:GLY:O	1:A:1973:PHE:HA	2.10	0.52
1:A:3550:ILE:HG12	1:A:3554:CYS:HB2	1.90	0.52
2:B:500:GLU:HB3	2:B:535:ILE:HG21	1.90	0.52
2:B:508:THR:HG22	2:B:539:GLU:OE2	2.10	0.52
2:B:582:MET:SD	2:B:587:GLY:CA	2.94	0.52
2:B:642:LEU:CD1	2:B:646:LYS:HE3	2.40	0.52
2:B:887:ASN:HB3	2:B:975:ASN:ND2	2.25	0.52
2:B:2966:LEU:C	2:B:2966:LEU:HD12	2.30	0.52
2:B:3850:LEU:O	2:B:3931:ARG:NH2	2.42	0.52
2:B:4152:ASN:HD21	2:B:4553:ARG:CZ	2.22	0.52
3:C:215:MET:HB3	3:C:231:ILE:HG22	1.91	0.52
3:C:346:LEU:CD1	3:C:346:LEU:N	2.73	0.52
3:C:2725:ALA:C	3:C:2729:LEU:HG	2.29	0.52
3:C:2793:LEU:O	3:C:2796:PRO:O	2.27	0.52
3:C:2943:LYS:HB3	3:C:2994:VAL:HG11	1.92	0.52
4:D:207:ALA:C	9:I:24:ILE:HD11	2.22	0.52
4:D:291:ASN:HB3	4:D:294:GLN:HB2	1.92	0.52
4:D:379:ASN:HB3	4:D:381:HIS:CD2	2.44	0.52
4:D:405:ASN:ND2	4:D:406:PRO:CD	2.57	0.52
14:N:85:ILE:HG21	14:N:98:ILE:CG1	2.38	0.52
1:A:751:LEU:HD21	1:A:866:ILE:HD13	1.90	0.52
1:A:2143:LEU:HD23	1:A:2170:LEU:HD12	1.91	0.52
2:B:425:ASP:O	2:B:489:PHE:CE2	2.62	0.52
2:B:718:ILE:HD12	2:B:773:VAL:CG1	2.40	0.52
2:B:1087:LEU:O	2:B:1091:VAL:HG23	2.10	0.52
2:B:2960:ILE:HB	2:B:2961:PRO:HD3	1.90	0.52
3:C:10:LEU:HD11	3:C:67:CYS:CB	2.39	0.52
3:C:463:PRO:C	3:C:465:LEU:H	2.13	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1726:TYR:CE2	3:C:1728:LEU:HD21	2.44	0.52
3:C:2357:LEU:HB3	3:C:2512:ILE:HG22	1.92	0.52
3:C:2743:ASN:HB3	3:C:2789:LYS:HE3	1.91	0.52
3:C:2807:SER:OG	3:C:2810:ALA:HB3	2.09	0.52
4:D:70:MET:CE	5:E:13:GLU:CG	2.85	0.52
4:D:404:TRP:CZ3	4:D:412:TYR:HB3	2.44	0.52
6:F:26:PHE:HD1	6:F:49:ALA:HB2	1.67	0.52
8:H:66:GLY:CA	9:I:79:ILE:O	2.55	0.52
10:J:36:ILE:HG23	10:J:72:PHE:CE2	2.44	0.52
10:J:99:TYR:CE1	10:J:104:ALA:HB2	2.43	0.52
1:A:15:THR:HA	2:B:19:SER:CA	2.29	0.52
1:A:573:LEU:HD22	1:A:633:GLU:HG2	1.90	0.52
1:A:751:LEU:HD23	1:A:751:LEU:C	2.30	0.52
1:A:891:PHE:HD1	1:A:972:TRP:CD2	2.25	0.52
1:A:1069:TYR:HE1	1:A:1078:THR:HG21	1.65	0.52
2:B:725:ILE:HD12	2:B:780:VAL:HB	1.92	0.52
2:B:815:ASP:O	2:B:819:LYS:CG	2.53	0.52
2:B:902:ILE:HG23	2:B:915:PRO:HG3	1.90	0.52
2:B:1378:LEU:CB	2:B:1424:GLU:CG	2.85	0.52
2:B:1784:ARG:HG2	2:B:1788:ILE:HD12	1.92	0.52
3:C:25:THR:CG2	3:C:87:SER:HB2	2.36	0.52
3:C:2721:GLU:HG2	3:C:2814:CYS:SG	2.49	0.52
3:C:2726:THR:OG1	3:C:2729:LEU:HD12	2.10	0.52
3:C:2738:ILE:CG2	3:C:2746:PRO:CD	2.49	0.52
4:D:285:PRO:HA	4:D:614:VAL:HG22	1.92	0.52
4:D:331:LEU:N	4:D:331:LEU:CD1	2.73	0.52
4:D:528:TRP:NE1	4:D:535:GLN:N	2.56	0.52
4:D:585:VAL:HG11	4:D:588:PRO:CG	2.40	0.52
6:F:91:GLN:HG2	6:F:96:THR:HB	1.90	0.52
9:I:24:ILE:CD1	9:I:98:PHE:HE1	2.22	0.52
9:I:26:ASN:ND2	9:I:98:PHE:HE2	2.08	0.52
10:J:100:ILE:O	10:J:100:ILE:HG13	2.09	0.52
11:K:73:ASP:HB2	11:K:76:ASN:HD22	1.73	0.52
12:L:59:LYS:NZ	12:L:59:LYS:CB	2.73	0.52
12:L:76:CYS:HB2	12:L:107:LEU:CD1	2.34	0.52
12:L:77:ILE:HD11	13:M:65:ILE:CD1	2.39	0.52
1:A:737:TYR:CD1	1:A:759:LEU:HD21	2.43	0.52
1:A:746:PRO:HA	1:A:749:LYS:HG3	1.91	0.52
1:A:830:LEU:N	1:A:830:LEU:CD1	2.73	0.52
1:A:1100:LEU:HG	1:A:1159:MET:HE1	1.91	0.52
2:B:53:ILE:HA	2:B:88:GLY:O	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:879:LEU:HB3	2:B:968:CYS:SG	2.50	0.52
2:B:888:PRO:HA	2:B:891:ILE:HG21	1.90	0.52
2:B:1458:PHE:HZ	2:B:1563:VAL:C	2.07	0.52
3:C:132:GLU:OE2	3:C:133:PRO:CD	2.53	0.52
3:C:252:ASN:O	3:C:271:GLY:HA2	2.10	0.52
3:C:2012:SER:O	3:C:2014:CYS:N	2.43	0.52
3:C:2585:PHE:CE1	3:C:2929:LEU:HB2	2.45	0.52
3:C:2703:LYS:HD2	3:C:2703:LYS:H	1.75	0.52
3:C:2725:ALA:O	3:C:2729:LEU:CD2	2.57	0.52
3:C:3012:ILE:CD1	3:C:3121:LEU:HD11	2.40	0.52
4:D:109:PHE:HD1	15:O:114:THR:HG1	1.55	0.52
4:D:261:TYR:O	5:E:125:GLN:OE1	2.26	0.52
5:E:24:GLU:CG	14:N:91:THR:HG22	2.40	0.52
9:I:96:PHE:HE1	9:I:98:PHE:HD2	1.58	0.52
12:L:23:PHE:CE2	12:L:25:ASP:HB2	2.45	0.52
15:O:65:LEU:HD12	15:O:65:LEU:O	2.09	0.52
1:A:326:PRO:CA	1:A:376:ASN:CB	2.88	0.52
1:A:599:ASN:HB2	4:D:400:TRP:CZ2	2.45	0.52
1:A:604:ALA:CB	1:A:698:GLU:CD	2.79	0.52
1:A:1062:ILE:HG23	1:A:1082:CYS:SG	2.49	0.52
1:A:1126:VAL:CG1	1:A:1132:LEU:HA	2.39	0.52
1:A:1407:ALA:O	1:A:1416:ILE:HD13	2.10	0.52
1:A:3117:PHE:CE2	1:A:3429:TRP:HZ3	2.25	0.52
2:B:801:ILE:HD12	2:B:879:LEU:N	2.23	0.52
2:B:913:PHE:CE2	2:B:1078:ILE:HD13	2.34	0.52
3:C:43:LYS:HG2	3:C:51:ILE:HD12	1.91	0.52
4:D:294:GLN:HB3	4:D:297:LYS:CE	2.40	0.52
4:D:401:GLN:HB3	4:D:417:ILE:HG21	1.90	0.52
5:E:49:ASP:OD1	12:L:85:SER:HB2	2.09	0.52
5:E:121:TYR:OH	6:F:17:LEU:CD2	2.58	0.52
6:F:27:ASN:HB2	6:F:33:LEU:HD21	1.92	0.52
8:H:32:ILE:CD1	8:H:81:VAL:HG11	2.36	0.52
1:A:770:LEU:HD22	1:A:774:SER:OG	2.10	0.52
1:A:773:THR:HG22	1:A:773:THR:O	2.10	0.52
1:A:1126:VAL:HG13	1:A:1131:SER:OG	2.10	0.52
1:A:1443:MET:HG3	1:A:1561:VAL:CG2	2.40	0.52
1:A:2746:VAL:HG12	1:A:3026:TRP:CD2	2.44	0.52
1:A:3232:ILE:CB	1:A:3316:TRP:CE3	2.92	0.52
1:A:3251:ILE:CD1	17:Q:82:ASN:CA	2.87	0.52
1:A:3255:GLU:CD	1:A:3269:LEU:O	2.43	0.52
1:A:3345:LYS:HA	1:A:3345:LYS:CE	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3421:SER:CB	1:A:3716:LEU:HD21	2.40	0.52
2:B:57:ASN:O	2:B:84:PHE:N	2.41	0.52
2:B:902:ILE:O	2:B:1077:ARG:O	2.28	0.52
2:B:1102:LEU:HB3	2:B:1106:PHE:CD2	2.45	0.52
2:B:1511:VAL:CB	2:B:1570:VAL:HG11	2.40	0.52
2:B:1529:TYR:HA	2:B:1549:PHE:CE2	2.45	0.52
2:B:3231:VAL:CG1	2:B:3339:TRP:CD1	2.92	0.52
4:D:184:GLY:CA	11:K:69:TYR:CE1	2.93	0.52
4:D:297:LYS:NZ	4:D:328:LEU:HD13	2.25	0.52
4:D:593:LEU:HD12	4:D:593:LEU:O	2.10	0.52
5:E:46:ASN:C	12:L:88:PHE:CZ	2.84	0.52
6:F:35:ARG:NH2	6:F:41:SER:CB	2.71	0.52
9:I:11:ASP:HB2	9:I:14:GLU:HG2	1.91	0.52
1:A:804:ASN:HD22	5:E:148:LYS:CA	2.22	0.52
1:A:1631:PHE:HZ	1:A:1684:LEU:HD22	1.74	0.52
1:A:1789:VAL:HG21	1:A:2010:VAL:HG22	1.92	0.52
2:B:411:ALA:CA	2:B:414:VAL:HG23	2.39	0.52
2:B:1081:GLN:HA	2:B:1081:GLN:NE2	2.24	0.52
2:B:1106:PHE:CE1	2:B:1160:ILE:HD11	2.40	0.52
2:B:1139:LEU:HD23	2:B:1198:ILE:HG13	1.92	0.52
2:B:3242:MET:HA	2:B:3245:LEU:HG	1.92	0.52
3:C:113:ILE:HD11	3:C:124:PRO:HB3	1.91	0.52
3:C:336:ILE:HG22	3:C:349:LEU:HD11	1.92	0.52
3:C:2701:ILE:CG1	3:C:2704:LYS:CG	2.87	0.52
10:J:26:VAL:CG2	10:J:97:TYR:C	2.68	0.52
16:P:24:ASN:HA	16:P:96:GLY:HA3	1.91	0.52
16:P:82:PHE:C	16:P:84:ALA:H	2.10	0.52
1:A:37:ASN:O	1:A:41:LEU:N	2.43	0.51
1:A:688:PHE:CD2	1:A:772:TRP:CH2	2.99	0.51
1:A:768:VAL:O	1:A:768:VAL:HG12	2.09	0.51
2:B:580:LEU:HD22	2:B:580:LEU:N	2.24	0.51
2:B:1080:LEU:N	2:B:1080:LEU:CD1	2.73	0.51
2:B:1230:MET:CE	2:B:1267:TYR:CA	2.87	0.51
2:B:1498:TYR:O	2:B:1502:GLU:HG2	2.10	0.51
2:B:2023:ARG:NH2	2:B:4194:MET:SD	2.82	0.51
2:B:3118:TYR:CZ	2:B:3452:LEU:HD13	2.45	0.51
2:B:3288:GLN:NE2	2:B:3288:GLN:HA	2.24	0.51
3:C:2701:ILE:CG1	3:C:2704:LYS:CD	2.73	0.51
3:C:2701:ILE:HG12	3:C:2704:LYS:HD2	1.90	0.51
4:D:636:MET:HA	4:D:636:MET:CE	2.40	0.51
6:F:66:ASP:HB3	7:G:102:SER:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:37:LYS:HG2	11:K:37:LYS:O	2.10	0.51
16:P:57:ILE:O	16:P:62:LYS:N	2.43	0.51
1:A:669:ALA:HB1	1:A:689:ASP:CG	2.30	0.51
1:A:1013:VAL:CB	1:A:1076:LEU:HD11	2.40	0.51
1:A:1514:VAL:HG12	1:A:1548:TRP:CZ3	2.45	0.51
2:B:426:ILE:HG12	2:B:485:PHE:CZ	2.44	0.51
2:B:468:GLN:HA	2:B:471:THR:HB	1.91	0.51
2:B:3178:VAL:CB	2:B:3395:LEU:HD21	2.33	0.51
2:B:4370:ILE:HD13	2:B:4384:MET:HB3	1.91	0.51
3:C:106:LEU:HD12	3:C:106:LEU:H	1.75	0.51
4:D:180:ILE:CG2	10:J:75:TYR:HE1	2.23	0.51
4:D:537:ILE:HD11	4:D:651:LYS:HD2	1.92	0.51
5:E:394:TRP:CD1	5:E:400:THR:C	2.83	0.51
7:G:119:PRO:CG	9:I:12:ILE:CB	2.85	0.51
14:N:86:THR:HG1	15:O:83:VAL:HG13	1.71	0.51
1:A:730:LEU:HD23	1:A:781:LEU:CD2	2.40	0.51
1:A:804:ASN:HD22	5:E:148:LYS:HA	1.75	0.51
1:A:913:VAL:C	1:A:1073:ALA:HB2	2.30	0.51
1:A:3191:LYS:NZ	1:A:3191:LYS:CB	2.73	0.51
2:B:58:SER:CB	2:B:70:LYS:CB	2.88	0.51
2:B:798:ASN:CB	2:B:874:ALA:HA	2.39	0.51
2:B:1329:PRO:CB	2:B:1412:PHE:C	2.79	0.51
2:B:3078:ILE:CD1	2:B:3452:LEU:CD2	2.84	0.51
2:B:3303:GLU:OE1	2:B:3306:ILE:HD11	2.10	0.51
2:B:4103:LEU:HD12	2:B:4256:LEU:HD22	1.92	0.51
2:B:4440:MET:HB2	2:B:4443:ARG:HG2	1.92	0.51
3:C:180:LEU:O	3:C:180:LEU:CD1	2.49	0.51
4:D:97:LYS:CE	13:M:32:LYS:HE2	2.40	0.51
4:D:306:PRO:HG3	4:D:357:PRO:HA	1.91	0.51
4:D:397:ASP:CB	4:D:398:PRO:CD	2.85	0.51
5:E:80:TRP:O	8:H:80:TYR:OH	2.25	0.51
8:H:29:LYS:NZ	8:H:29:LYS:CB	2.73	0.51
9:I:75:TRP:CZ3	9:I:109:LYS:HB2	2.45	0.51
9:I:100:ASN:O	9:I:100:ASN:OD1	2.27	0.51
1:A:805:ARG:HD2	1:A:858:ALA:HB2	1.92	0.51
1:A:805:ARG:HH22	5:E:152:LEU:CD1	2.23	0.51
1:A:1274:GLY:H	4:D:166:PHE:HE1	1.53	0.51
1:A:1643:LYS:HE3	1:A:1675:LYS:NZ	2.25	0.51
2:B:744:MET:HE1	2:B:773:VAL:N	2.25	0.51
2:B:861:ASP:O	2:B:864:ASN:CG	2.48	0.51
2:B:3327:ALA:HA	2:B:3334:SER:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:58:PHE:CD2	3:C:71:GLN:HB3	2.45	0.51
3:C:190:LEU:CD2	3:C:232:TYR:OH	2.58	0.51
4:D:269:SER:HB2	4:D:618:PRO:CD	2.39	0.51
4:D:290:SER:HB3	4:D:610:GLY:HA2	1.92	0.51
4:D:421:GLY:CA	4:D:441:LEU:HD12	2.31	0.51
4:D:551:ALA:HB3	4:D:557:VAL:HB	1.93	0.51
5:E:56:LEU:HD23	10:J:91:ASN:HA	1.91	0.51
5:E:391:CYS:SG	5:E:427:LEU:HD13	2.49	0.51
5:E:433:TRP:CE2	5:E:451:LYS:HB2	2.45	0.51
9:I:24:ILE:HG23	9:I:98:PHE:O	2.10	0.51
10:J:79:PHE:HE2	11:K:88:LEU:HD23	1.72	0.51
1:A:326:PRO:HA	1:A:376:ASN:CB	2.40	0.51
1:A:1511:TRP:CB	1:A:1574:LEU:CD1	2.88	0.51
1:A:4046:CYS:SG	1:A:4074:ILE:HG23	2.49	0.51
2:B:10:PRO:C	2:B:25:GLN:N	2.63	0.51
2:B:524:LEU:HD23	2:B:524:LEU:O	2.10	0.51
3:C:2725:ALA:CA	3:C:2728:TYR:HE2	2.10	0.51
3:C:2743:ASN:HD21	3:C:2785:VAL:C	2.13	0.51
6:F:26:PHE:HD1	6:F:49:ALA:CB	2.20	0.51
13:M:21:LYS:NZ	13:M:21:LYS:CB	2.73	0.51
16:P:24:ASN:CA	16:P:96:GLY:CA	2.89	0.51
1:A:599:ASN:CB	4:D:400:TRP:CZ2	2.92	0.51
1:A:1041:ASN:HA	1:A:1047:ASN:ND2	2.22	0.51
1:A:1522:GLU:HA	1:A:1541:PHE:CZ	2.44	0.51
1:A:1524:VAL:HG22	1:A:1611:LEU:HD22	1.92	0.51
1:A:1637:VAL:CG1	1:A:1653:ILE:HG21	2.41	0.51
2:B:625:LEU:HD23	2:B:625:LEU:O	2.10	0.51
2:B:1205:PHE:CZ	2:B:1284:LEU:O	2.64	0.51
2:B:1492:LYS:NZ	2:B:3606:GLN:HB2	2.25	0.51
2:B:2240:VAL:HG21	2:B:2640:GLU:HG3	1.92	0.51
2:B:3303:GLU:OE1	2:B:3306:ILE:HD12	2.08	0.51
2:B:3422:LEU:HD12	2:B:3716:LEU:HD11	1.91	0.51
3:C:2581:LEU:HG	3:C:2936:SER:CB	2.41	0.51
3:C:2727:ILE:HD12	3:C:2745:LYS:CB	2.13	0.51
4:D:410:LYS:HE3	4:D:413:ASN:ND2	2.25	0.51
4:D:421:GLY:CA	4:D:441:LEU:CD1	2.89	0.51
6:F:48:ILE:CG1	6:F:98:LEU:CD2	2.85	0.51
12:L:69:ILE:HG21	12:L:92:VAL:HG22	1.92	0.51
15:O:91:LYS:HB2	15:O:91:LYS:HZ3	1.76	0.51
16:P:82:PHE:C	16:P:84:ALA:N	2.64	0.51
1:A:384:LYS:CB	1:A:408:VAL:CB	2.89	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:853:VAL:CB	5:E:206:ASN:OD1	2.56	0.51
1:A:2960:LEU:HA	1:A:2963:ILE:HD12	1.92	0.51
1:A:2963:ILE:HD13	1:A:2987:PHE:HB2	1.93	0.51
1:A:3212:VAL:HG13	1:A:3335:TRP:CE2	2.45	0.51
2:B:671:VAL:HG12	2:B:673:PHE:H	1.75	0.51
2:B:801:ILE:CG1	2:B:937:PHE:CD1	2.71	0.51
2:B:1456:PHE:CZ	2:B:1563:VAL:HG11	2.28	0.51
2:B:1562:GLU:O	2:B:1565:ALA:HB3	2.11	0.51
2:B:3082:MET:SD	2:B:3115:ILE:HD12	2.51	0.51
2:B:3133:ILE:O	2:B:3133:ILE:HD13	2.11	0.51
2:B:3457:PHE:O	2:B:3461:ILE:HB	2.11	0.51
3:C:10:LEU:HD11	3:C:67:CYS:N	2.25	0.51
3:C:34:ILE:HD12	3:C:95:MET:HE1	1.93	0.51
3:C:2723:PHE:CZ	3:C:2745:LYS:HE3	2.45	0.51
3:C:4017:LEU:HD21	3:C:4022:LEU:HD11	1.93	0.51
5:E:46:ASN:O	12:L:88:PHE:CZ	2.63	0.51
5:E:384:LEU:H	5:E:417:TRP:HE1	1.59	0.51
2:B:1117:ILE:HG12	2:B:1190:ILE:HD11	0.74	0.51
2:B:1584:TRP:HA	2:B:1584:TRP:HE3	1.74	0.51
2:B:3183:ALA:O	2:B:3187:GLU:HG3	2.11	0.51
3:C:180:LEU:HD23	3:C:187:TRP:CH2	2.41	0.51
3:C:499:THR:CB	3:C:698:GLU:CB	2.89	0.51
3:C:2592:LYS:HD3	3:C:2924:MET:HG3	1.93	0.51
3:C:2800:PRO:CB	3:C:2818:VAL:CG2	2.85	0.51
5:E:119:CYS:HB2	6:F:88:ILE:HD13	1.89	0.51
12:L:32:LYS:HE2	12:L:36:ARG:HH22	1.76	0.51
1:A:590:GLN:CB	1:A:609:TRP:HZ2	2.03	0.51
1:A:1263:TYR:HE2	1:A:1280:TYR:C	2.12	0.51
1:A:3446:ASN:HA	1:A:3488:LEU:HD22	1.92	0.51
2:B:648:VAL:HG22	2:B:680:LEU:CD1	2.40	0.51
2:B:1116:PHE:N	2:B:1119:LYS:HZ2	2.09	0.51
2:B:1125:LYS:HG3	2:B:1200:ILE:HG21	1.93	0.51
2:B:3272:PRO:HG2	2:B:3275:LYS:HG3	1.92	0.51
2:B:4148:PRO:HB3	2:B:4551:GLU:O	2.11	0.51
3:C:379:LYS:HA	3:C:418:CYS:O	2.11	0.51
4:D:588:PRO:HG2	4:D:606:ASP:OD2	2.11	0.51
7:G:125:PHE:CZ	7:G:136:MET:CE	2.94	0.51
10:J:86:CYS:SG	11:K:61:VAL:CB	2.98	0.51
15:O:102:LEU:C	15:O:102:LEU:HD13	2.31	0.51
1:A:1048:TYR:CD1	1:A:1100:LEU:HD12	2.39	0.51
1:A:1274:GLY:CA	4:D:164:ASN:OD1	2.58	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1430:ARG:HG3	1:A:1490:PHE:CD2	2.44	0.51
1:A:2746:VAL:HG12	1:A:3026:TRP:CE2	2.46	0.51
2:B:736:LEU:HD23	2:B:855:SER:OG	2.11	0.51
2:B:766:ILE:HG23	2:B:770:LYS:HE2	1.91	0.51
2:B:935:ASN:CB	3:C:283:THR:HG22	2.40	0.51
2:B:3147:GLN:CA	2:B:3426:LEU:HD13	2.40	0.51
2:B:3237:PRO:HG2	2:B:3238:HIS:HD2	1.76	0.51
3:C:53:PRO:CD	3:C:81:PRO:HB3	2.40	0.51
4:D:399:VAL:HA	4:D:418:SER:HA	1.93	0.51
4:D:410:LYS:HG3	4:D:413:ASN:HD21	1.76	0.51
4:D:569:TYR:CE2	4:D:578:LYS:HG3	2.40	0.51
5:E:282:THR:HG23	5:E:322:LEU:CD1	2.25	0.51
5:E:302:GLU:OE1	5:E:302:GLU:HA	2.11	0.51
10:J:28:TRP:CE3	10:J:28:TRP:HA	2.46	0.51
10:J:110:THR:HG22	10:J:110:THR:O	2.10	0.51
11:K:70:VAL:HG11	11:K:90:TYR:CZ	2.46	0.51
16:P:15:SER:CB	16:P:18:HIS:H	2.23	0.51
1:A:935:VAL:CG1	1:A:1017:LEU:CD2	2.89	0.50
1:A:935:VAL:HG13	1:A:944:LEU:CD2	2.41	0.50
1:A:1016:PHE:CD2	1:A:1069:TYR:HB2	2.46	0.50
1:A:1152:LYS:C	1:A:1155:PRO:HD2	2.31	0.50
1:A:1596:ARG:HH21	1:A:1610:LEU:CD2	2.23	0.50
1:A:1597:LYS:HZ2	1:A:1962:ILE:HD12	1.74	0.50
1:A:1638:THR:CG2	1:A:1655:GLN:HG2	2.42	0.50
1:A:2101:ILE:HG22	1:A:4498:LEU:HB2	1.92	0.50
1:A:2430:ASP:O	1:A:2443:CYS:SG	2.52	0.50
1:A:2490:LEU:HD11	1:A:2611:MET:HG2	1.91	0.50
1:A:3257:VAL:HG13	1:A:3266:VAL:CA	2.35	0.50
2:B:410:ASN:O	2:B:414:VAL:HG22	2.10	0.50
2:B:1566:ASN:OD1	3:C:2275:LYS:CD	2.59	0.50
2:B:1604:LYS:HA	2:B:1945:GLN:NE2	2.26	0.50
3:C:2663:ALA:HB2	3:C:2855:GLU:OE2	2.11	0.50
3:C:2726:THR:OG1	3:C:2729:LEU:CD1	2.59	0.50
3:C:2774:VAL:CG1	3:C:2780:VAL:HG22	2.40	0.50
4:D:107:VAL:HG11	15:O:96:ARG:NH2	2.26	0.50
4:D:281:GLY:HA3	4:D:580:ALA:HB2	1.92	0.50
4:D:292:GLU:HA	4:D:295:ARG:HG3	1.92	0.50
4:D:553:TYR:HE1	4:D:595:PHE:CE2	2.29	0.50
10:J:74:PRO:CD	12:L:102:ARG:CZ	2.77	0.50
1:A:801:ILE:HG22	1:A:862:LEU:HD21	1.78	0.50
1:A:935:VAL:HG11	1:A:1017:LEU:HD22	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2564:MET:N	1:A:2565:PRO:HD2	2.26	0.50
2:B:409:SER:HB2	2:B:413:PHE:HB2	1.93	0.50
2:B:440:GLU:HB2	2:B:460:PHE:CG	2.46	0.50
2:B:1514:VAL:HG12	2:B:1570:VAL:HG22	1.92	0.50
2:B:3139:GLY:HA3	2:B:3695:LEU:HD21	1.93	0.50
2:B:3446:SER:HB3	2:B:3489:THR:CG2	2.30	0.50
3:C:76:GLY:O	3:C:77:ASP:OD1	2.30	0.50
3:C:2800:PRO:HG3	3:C:2818:VAL:HG21	1.92	0.50
4:D:111:MET:SD	15:O:90:ILE:CG2	3.00	0.50
4:D:242:LYS:HG2	7:G:60:VAL:HG21	1.89	0.50
4:D:590:LEU:N	4:D:590:LEU:CD1	2.73	0.50
10:J:44:THR:HG22	10:J:64:LEU:CD2	2.41	0.50
11:K:77:PHE:CE1	11:K:88:LEU:CD1	2.82	0.50
1:A:573:LEU:CD2	1:A:633:GLU:HG2	2.42	0.50
1:A:607:ILE:CD1	1:A:655:PHE:HA	2.38	0.50
1:A:845:THR:O	1:A:849:THR:HG23	2.10	0.50
1:A:1517:LEU:HD13	1:A:1581:LEU:HB3	1.92	0.50
1:A:1631:PHE:CZ	1:A:1687:LEU:HD22	2.45	0.50
1:A:1787:ILE:HD13	1:A:1847:ILE:HD11	1.93	0.50
1:A:2840:VAL:CG1	1:A:3041:THR:HG21	2.42	0.50
2:B:762:ILE:O	2:B:766:ILE:CG1	2.60	0.50
2:B:1071:GLU:HG2	2:B:1079:ASN:HD22	1.75	0.50
2:B:3429:GLU:OE1	2:B:3429:GLU:HA	2.12	0.50
3:C:36:PHE:CZ	3:C:97:VAL:HG11	2.47	0.50
3:C:214:LEU:CD1	3:C:214:LEU:N	2.74	0.50
3:C:253:LEU:HD12	3:C:253:LEU:C	2.32	0.50
3:C:2584:LEU:HD21	3:C:2935:VAL:CG1	2.41	0.50
4:D:68:GLU:CD	5:E:12:LYS:HA	2.29	0.50
4:D:180:ILE:HB	10:J:75:TYR:HE1	1.75	0.50
4:D:294:GLN:HB3	4:D:316:LEU:HD23	1.94	0.50
4:D:299:VAL:HG11	4:D:302:ILE:HD11	1.94	0.50
4:D:518:SER:HG	4:D:528:TRP:HZ3	0.66	0.50
5:E:261:HIS:HB3	5:E:289:MET:CE	2.41	0.50
7:G:125:PHE:HZ	7:G:136:MET:CE	2.24	0.50
8:H:67:SER:HB2	9:I:78:ILE:HG21	1.89	0.50
12:L:73:GLU:HB3	13:M:66:ILE:CD1	2.23	0.50
12:L:84:CYS:HB3	13:M:56:ILE:HG12	1.87	0.50
15:O:31:PRO:CD	15:O:109:ASN:HD22	2.25	0.50
1:A:1433:LEU:CD2	1:A:1478:LEU:CD2	2.89	0.50
1:A:1513:LYS:CE	1:A:1578:ASN:CG	2.53	0.50
2:B:651:SER:CB	2:B:680:LEU:HD22	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1242:GLN:O	2:B:1251:SER:C	2.48	0.50
2:B:1458:PHE:HZ	2:B:1563:VAL:CG1	2.25	0.50
2:B:1468:ALA:O	2:B:1469:SER:CB	2.57	0.50
2:B:2189:GLY:HA2	20:B:5601:ATP:H5'2	1.93	0.50
2:B:3118:TYR:CZ	2:B:3452:LEU:HB2	2.46	0.50
2:B:3262:LEU:C	2:B:3297:PHE:CZ	2.81	0.50
3:C:2740:ILE:HG21	3:C:2744:LYS:HB2	0.54	0.50
4:D:367:LEU:HD12	4:D:367:LEU:C	2.32	0.50
4:D:386:TYR:CB	4:D:433:LEU:HD11	2.42	0.50
4:D:584:ILE:HD11	4:D:604:VAL:HG11	1.94	0.50
5:E:253:MET:CB	5:E:296:PHE:HE2	2.24	0.50
1:A:24:LYS:HA	1:A:96:LEU:O	2.12	0.50
1:A:819:VAL:HA	1:A:840:TYR:HE2	1.73	0.50
1:A:906:LEU:CB	1:A:998:VAL:HG11	2.37	0.50
1:A:1059:GLU:OE2	1:A:1093:LYS:HD3	2.12	0.50
1:A:1157:GLN:CB	1:A:1180:ARG:HH21	2.17	0.50
1:A:1522:GLU:N	1:A:1523:PRO:CD	2.74	0.50
1:A:3290:LEU:CD2	1:A:3335:TRP:CE2	2.59	0.50
2:B:444:LEU:HD21	2:B:526:ASN:CB	2.41	0.50
2:B:579:PHE:CZ	5:E:369:PRO:CG	2.85	0.50
2:B:658:GLN:NE2	2:B:672:ASN:CG	2.59	0.50
2:B:2267:ILE:HD11	2:B:2308:LEU:HG	1.94	0.50
2:B:2621:ILE:HG22	2:B:2667:LEU:HD13	1.93	0.50
2:B:3150:VAL:HG22	2:B:3707:LEU:HD23	1.93	0.50
3:C:7:TRP:CH2	3:C:352:LEU:HD12	2.46	0.50
3:C:1270:PHE:CG	3:C:1336:ALA:HB2	2.46	0.50
3:C:2708:GLN:OE1	3:C:2813:ILE:HG13	2.09	0.50
3:C:2708:GLN:HG3	3:C:2809:ALA:HB1	1.93	0.50
3:C:2800:PRO:CG	3:C:2818:VAL:CG2	2.89	0.50
4:D:91:TYR:CE2	13:M:80:LEU:HB3	2.42	0.50
4:D:526:ARG:HB3	4:D:535:GLN:HG3	1.93	0.50
5:E:20:PHE:CE1	14:N:89:GLN:CA	2.80	0.50
10:J:38:GLU:HB2	15:O:29:PHE:CZ	2.47	0.50
12:L:51:LYS:C	12:L:51:LYS:HD3	2.32	0.50
13:M:20:VAL:HG22	13:M:45:PHE:HZ	1.76	0.50
1:A:601:PRO:CB	1:A:698:GLU:OE1	2.40	0.50
1:A:902:THR:HG21	1:A:989:ILE:CD1	2.42	0.50
1:A:1118:LEU:CD2	1:A:1118:LEU:H	2.25	0.50
1:A:1680:ILE:HA	1:A:1683:TRP:CD1	2.47	0.50
1:A:3232:ILE:HG23	1:A:3316:TRP:CE3	2.31	0.50
2:B:436:PHE:HB2	2:B:463:PHE:CD2	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:915:PRO:O	2:B:925:THR:HG22	2.11	0.50
2:B:951:MET:HB2	2:B:952:PRO:HD3	1.92	0.50
2:B:1102:LEU:H	2:B:1163:ARG:NH2	1.96	0.50
2:B:1456:PHE:CE1	2:B:1563:VAL:HG11	2.34	0.50
2:B:1602:LYS:HD2	2:B:1683:GLU:OE1	1.98	0.50
2:B:3118:TYR:CE2	2:B:3452:LEU:N	2.60	0.50
3:C:289:ASP:CG	3:C:317:LYS:HE3	2.32	0.50
3:C:1174:LEU:HD12	3:C:1191:ILE:HG22	1.92	0.50
3:C:2715:PRO:HG2	3:C:2719:VAL:HB	1.92	0.50
3:C:2727:ILE:HD11	3:C:2745:LYS:CD	2.14	0.50
9:I:81:GLU:OE2	9:I:102:ASN:CB	2.51	0.50
1:A:505:THR:O	1:A:509:LYS:CA	2.59	0.50
1:A:933:VAL:HG12	1:A:944:LEU:HB3	1.94	0.50
1:A:1016:PHE:CE2	1:A:1076:LEU:HB2	2.45	0.50
1:A:2298:LEU:HD21	20:A:4801:ATP:N7	2.26	0.50
1:A:2418:ILE:HG23	1:A:2428:VAL:HG22	1.93	0.50
1:A:3293:PHE:CZ	1:A:3335:TRP:CH2	2.87	0.50
2:B:658:GLN:HG3	2:B:672:ASN:O	2.07	0.50
2:B:864:ASN:HA	2:B:947:LEU:HD11	1.93	0.50
2:B:1461:TYR:HD2	2:B:1464:THR:O	1.95	0.50
2:B:1511:VAL:C	2:B:1570:VAL:CG2	2.74	0.50
2:B:1728:GLN:HE21	2:B:1868:ILE:HD12	1.75	0.50
3:C:164:HIS:CD2	3:C:201:GLY:HA3	2.47	0.50
3:C:2738:ILE:HG22	3:C:2746:PRO:HD3	0.70	0.50
4:D:75:LEU:CD1	15:O:102:LEU:CD1	2.88	0.50
4:D:512:HIS:HD2	4:D:513:PRO:CD	2.19	0.50
4:D:517:ILE:HG12	4:D:550:TRP:HZ2	1.64	0.50
6:F:26:PHE:CZ	6:F:48:ILE:HG23	2.47	0.50
10:J:98:PHE:HE1	10:J:107:MET:HE2	1.77	0.50
14:N:89:GLN:NE2	14:N:116:ALA:N	2.51	0.50
1:A:326:PRO:CB	1:A:373:MET:HA	2.42	0.50
1:A:607:ILE:CD1	1:A:655:PHE:HD2	2.25	0.50
1:A:3306:LEU:HA	1:A:3309:TYR:CD2	2.46	0.50
1:A:3347:LYS:O	1:A:3351:PRO:CG	2.56	0.50
2:B:422:ARG:NH1	2:B:422:ARG:CB	2.73	0.50
2:B:722:TYR:CE2	2:B:748:VAL:HG11	2.47	0.50
2:B:888:PRO:HG2	2:B:978:TRP:CE3	2.47	0.50
3:C:276:PHE:CE2	3:C:282:ARG:HA	2.47	0.50
3:C:276:PHE:CZ	3:C:282:ARG:HA	2.47	0.50
3:C:2585:PHE:HD1	3:C:2929:LEU:HA	1.70	0.50
3:C:2709:ALA:N	3:C:2758:MET:SD	2.83	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2730:LEU:CD1	3:C:2730:LEU:N	2.73	0.50
4:D:528:TRP:HD1	4:D:534:SER:C	2.15	0.50
4:D:532:TYR:CZ	4:D:652:MET:CE	2.95	0.50
5:E:46:ASN:ND2	12:L:88:PHE:HE1	2.09	0.50
5:E:164:VAL:HG23	5:E:181:TYR:HE1	1.66	0.50
5:E:394:TRP:HE1	5:E:401:PRO:N	2.10	0.50
5:E:420:THR:CG2	5:E:472:SER:CB	2.85	0.50
8:H:43:THR:OG1	9:I:86:ASP:OD2	2.29	0.50
1:A:948:LEU:N	1:A:948:LEU:CD2	2.73	0.50
1:A:1066:VAL:HB	1:A:1069:TYR:OH	2.11	0.50
1:A:3255:GLU:HA	1:A:3271:GLU:CB	2.42	0.50
2:B:666:ASN:HA	2:B:726:LYS:HZ1	1.77	0.50
2:B:1201:TYR:C	2:B:1201:TYR:CD2	2.85	0.50
2:B:3234:LEU:HD11	2:B:3336:LEU:HD21	1.94	0.50
3:C:1993:THR:HG22	3:C:2023:ILE:HD11	1.94	0.50
3:C:2796:PRO:CD	3:C:2796:PRO:O	2.59	0.50
4:D:114:ASP:OD1	5:E:43:ARG:HG3	2.12	0.50
4:D:215:ASP:O	4:D:216:HIS:CG	2.65	0.50
4:D:386:TYR:CD1	4:D:433:LEU:CD1	2.92	0.50
4:D:461:CYS:SG	4:D:462:PHE:N	2.84	0.50
5:E:64:GLU:OE2	10:J:18:TYR:OH	2.30	0.50
5:E:190:PRO:HD2	5:E:193:MET:HE2	1.94	0.50
5:E:207:SER:HB2	5:E:208:PRO:HD2	1.93	0.50
5:E:280:VAL:HG11	5:E:333:PHE:HE2	1.77	0.50
7:G:119:PRO:CG	9:I:12:ILE:HB	2.41	0.50
14:N:75:GLN:HB2	15:O:94:GLY:O	2.12	0.50
1:A:688:PHE:CB	1:A:727:TYR:CE2	2.95	0.49
1:A:735:LYS:NZ	4:D:347:GLU:OE1	2.31	0.49
1:A:902:THR:HG21	1:A:989:ILE:HD11	1.94	0.49
1:A:1631:PHE:CD1	1:A:1631:PHE:N	2.80	0.49
1:A:3303:ILE:CD1	1:A:3340:TYR:CD2	2.95	0.49
2:B:17:ARG:CA	2:B:21:ALA:HB3	2.42	0.49
2:B:793:SER:OG	2:B:832:ASN:HB3	2.12	0.49
2:B:1111:LYS:HA	2:B:1114:LEU:HD12	1.94	0.49
2:B:3140:LEU:HD23	2:B:3140:LEU:O	2.12	0.49
3:C:3010:LEU:HA	3:C:3102:LEU:HB2	1.94	0.49
4:D:403:LYS:HB2	4:D:462:PHE:CZ	2.47	0.49
4:D:528:TRP:CG	4:D:535:GLN:HA	2.44	0.49
5:E:57:SER:O	10:J:90:HIS:CE1	2.65	0.49
5:E:59:HIS:HD2	10:J:90:HIS:HE1	1.50	0.49
5:E:66:VAL:HG11	8:H:72:GLU:CG	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:513:TYR:CZ	5:E:517:LYS:HD2	2.47	0.49
6:F:54:ASP:OD2	7:G:109:LYS:CE	2.60	0.49
7:G:103:ILE:N	7:G:104:PRO:HD2	2.27	0.49
1:A:805:ARG:HH22	5:E:152:LEU:HD12	1.76	0.49
1:A:868:LEU:CD1	1:A:868:LEU:H	2.25	0.49
1:A:1450:TRP:CH2	1:A:1519:THR:CG2	2.95	0.49
1:A:3230:LEU:H	1:A:3233:ILE:HG21	1.75	0.49
1:A:3261:LYS:CG	1:A:3262:GLU:N	2.69	0.49
2:B:436:PHE:CE2	2:B:463:PHE:CD1	2.97	0.49
2:B:467:VAL:HG12	2:B:471:THR:CB	2.35	0.49
2:B:793:SER:HB3	2:B:836:ILE:HD11	1.94	0.49
2:B:920:SER:HB3	2:B:925:THR:HG21	1.94	0.49
2:B:3157:LEU:HA	2:B:3160:LYS:HE2	1.94	0.49
2:B:3582:ILE:HG23	2:B:3582:ILE:O	2.11	0.49
2:B:3827:LEU:HD11	2:B:4289:LEU:HD13	1.94	0.49
3:C:834:VAL:CG2	3:C:881:ILE:HD11	2.41	0.49
3:C:2708:GLN:CD	3:C:2813:ILE:CG1	2.81	0.49
3:C:3266:ILE:HD13	3:C:3388:ARG:NH1	2.27	0.49
4:D:372:VAL:HG11	4:D:414:PHE:CE2	2.47	0.49
4:D:417:ILE:HD12	4:D:474:VAL:CG2	2.35	0.49
5:E:35:VAL:C	14:N:78:HIS:HD1	2.15	0.49
5:E:44:ASN:HB3	5:E:45:PRO:HD3	1.93	0.49
5:E:64:GLU:OE2	10:J:18:TYR:CZ	2.65	0.49
7:G:79:VAL:HG21	7:G:146:ILE:CD1	2.42	0.49
7:G:79:VAL:HG21	7:G:146:ILE:HD12	1.92	0.49
10:J:62:GLU:HG3	11:K:69:TYR:CZ	2.47	0.49
12:L:16:LEU:HD11	12:L:35:ILE:CG2	2.42	0.49
13:M:10:THR:CG2	13:M:73:ILE:HG13	2.42	0.49
13:M:73:ILE:HG22	13:M:84:LEU:HD11	1.93	0.49
14:N:72:ILE:HG12	15:O:97:ILE:CB	2.38	0.49
15:O:41:LEU:HD23	15:O:67:LEU:HD12	1.94	0.49
15:O:45:ARG:CB	15:O:63:LEU:HD11	2.39	0.49
1:A:576:TYR:HE1	1:A:620:PRO:C	2.06	0.49
1:A:747:ILE:CD1	1:A:889:TYR:CD1	2.93	0.49
1:A:1051:GLN:CD	1:A:1096:TYR:CE2	2.82	0.49
1:A:2697:ARG:CG	19:A:4701:ADP:H4'	2.41	0.49
2:B:633:ILE:O	2:B:637:GLU:HG3	2.11	0.49
2:B:744:MET:SD	2:B:772:ILE:CD1	2.99	0.49
2:B:883:ASN:ND2	2:B:971:MET:SD	2.85	0.49
2:B:1488:LYS:CB	2:B:1501:VAL:HB	2.42	0.49
3:C:214:LEU:CD1	3:C:214:LEU:H	2.22	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:525:VAL:HG23	4:D:545:VAL:HG21	1.95	0.49
5:E:459:CYS:SG	5:E:460:ILE:N	2.86	0.49
10:J:21:PHE:CD1	10:J:21:PHE:C	2.83	0.49
10:J:68:MET:HB3	10:J:76:TRP:CD1	2.47	0.49
12:L:74:TRP:CE2	12:L:109:LYS:CD	2.81	0.49
12:L:84:CYS:HB3	13:M:56:ILE:CA	2.40	0.49
1:A:121:GLY:C	2:B:105:ALA:O	2.51	0.49
1:A:157:ALA:O	1:A:160:GLU:N	2.45	0.49
1:A:1012:LYS:CG	1:A:1071:ILE:HD12	2.41	0.49
1:A:1126:VAL:HG13	1:A:1132:LEU:N	2.23	0.49
1:A:1562:ILE:N	1:A:1563:PRO:CD	2.75	0.49
2:B:349:ASN:CB	2:B:416:LEU:HD11	2.41	0.49
2:B:439:LEU:HD12	2:B:503:LEU:HD11	1.93	0.49
2:B:658:GLN:HG2	2:B:673:PHE:HA	1.93	0.49
2:B:762:ILE:HG23	2:B:766:ILE:CG1	2.38	0.49
2:B:864:ASN:CA	2:B:947:LEU:CD2	2.78	0.49
2:B:963:PHE:CD2	3:C:103:THR:C	2.86	0.49
2:B:1243:LYS:CA	2:B:1251:SER:N	2.76	0.49
2:B:3265:GLN:HG3	2:B:3283:PHE:HE2	1.78	0.49
3:C:2055:ILE:HG22	3:C:2059:LEU:HD11	1.94	0.49
3:C:2592:LYS:HD2	3:C:2928:VAL:HG23	1.91	0.49
3:C:2687:ALA:HB2	3:C:2830:VAL:HG21	1.95	0.49
3:C:2727:ILE:O	3:C:2730:LEU:HD12	2.02	0.49
3:C:4081:ALA:N	3:C:4094:ILE:O	2.44	0.49
3:C:4084:ILE:HD11	3:C:4106:PRO:HG3	1.94	0.49
4:D:199:ILE:HG21	9:I:104:ALA:HB1	1.86	0.49
4:D:205:PHE:CE1	9:I:12:ILE:HG22	2.47	0.49
4:D:286:ILE:HG22	4:D:287:TRP:CE3	2.46	0.49
4:D:312:PHE:C	4:D:312:PHE:CD1	2.85	0.49
4:D:503:VAL:HG11	4:D:506:VAL:HG23	1.93	0.49
5:E:113:LYS:CD	6:F:10:GLN:O	2.60	0.49
5:E:116:VAL:HG11	6:F:99:ALA:CB	2.41	0.49
5:E:237:ASN:HD22	5:E:237:ASN:N	2.10	0.49
10:J:28:TRP:HA	10:J:28:TRP:HE3	1.77	0.49
13:M:72:TYR:CD1	13:M:72:TYR:C	2.85	0.49
16:P:10:THR:CB	16:P:66:ILE:N	2.73	0.49
1:A:666:SER:HB2	1:A:695:LEU:HD13	1.94	0.49
1:A:755:HIS:CE1	1:A:869:TYR:HB3	2.47	0.49
1:A:819:VAL:N	1:A:840:TYR:CE2	2.80	0.49
1:A:1132:LEU:CA	1:A:1272:LEU:CD1	2.78	0.49
2:B:598:ARG:CA	5:E:367:LEU:HD13	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1458:PHE:HZ	2:B:1563:VAL:CB	2.25	0.49
2:B:1731:LEU:HD11	2:B:1793:ILE:HG13	1.93	0.49
2:B:3231:VAL:HG22	2:B:3342:ASN:CB	2.41	0.49
19:B:5501:ADP:O2A	19:B:5501:ADP:H4'	2.13	0.49
3:C:232:TYR:CD1	3:C:232:TYR:C	2.86	0.49
4:D:68:GLU:HG2	5:E:12:LYS:CA	2.34	0.49
4:D:301:SER:HB3	4:D:352:CYS:HA	1.94	0.49
5:E:160:CYS:SG	5:E:161:LYS:N	2.85	0.49
8:H:50:ARG:HH22	9:I:88:THR:CG2	2.25	0.49
9:I:62:TYR:CD1	9:I:62:TYR:C	2.85	0.49
15:O:22:LEU:HD12	15:O:23:ASN:CB	2.41	0.49
1:A:121:GLY:N	2:B:105:ALA:O	2.46	0.49
1:A:3255:GLU:HA	1:A:3271:GLU:HB2	1.93	0.49
2:B:361:LYS:HA	2:B:477:ILE:CG2	2.42	0.49
2:B:729:LEU:CD1	2:B:780:VAL:HG22	2.40	0.49
2:B:965:ILE:N	2:B:965:ILE:HD12	2.26	0.49
2:B:2839:ILE:N	2:B:2840:PRO:HD2	2.28	0.49
3:C:3161:PHE:HB3	3:C:3203:ILE:HD11	1.94	0.49
4:D:96:PHE:CZ	10:J:89:VAL:HG21	2.48	0.49
4:D:517:ILE:HG13	4:D:550:TRP:CE2	2.41	0.49
8:H:83:GLN:HA	8:H:83:GLN:OE1	2.12	0.49
11:K:21:MET:HG2	11:K:54:TYR:CE2	2.47	0.49
1:A:695:LEU:HD23	1:A:695:LEU:O	2.13	0.49
1:A:859:VAL:HG11	1:A:887:LYS:HG2	1.95	0.49
1:A:899:LEU:CD2	1:A:989:ILE:HG12	2.42	0.49
1:A:1623:ILE:HG22	1:A:1623:ILE:O	2.11	0.49
1:A:3120:GLY:HA2	1:A:3696:LEU:CD1	2.41	0.49
2:B:500:GLU:CB	2:B:532:THR:HG21	2.42	0.49
2:B:801:ILE:HG13	2:B:878:ALA:CA	2.42	0.49
2:B:1521:VAL:HG22	2:B:1585:SER:CB	2.43	0.49
2:B:1599:LEU:HD22	2:B:1617:LEU:HD21	1.94	0.49
2:B:4216:MET:HA	2:B:4220:LEU:HD12	1.94	0.49
5:E:46:ASN:O	12:L:88:PHE:CE2	2.63	0.49
5:E:119:CYS:HB3	6:F:88:ILE:CD1	2.15	0.49
6:F:32:PRO:CB	6:F:45:ALA:HB1	2.42	0.49
10:J:110:THR:HG21	11:K:92:LYS:HG3	1.93	0.49
12:L:49:LEU:HD22	12:L:49:LEU:H	1.77	0.49
12:L:49:LEU:CD2	12:L:49:LEU:H	2.24	0.49
1:A:818:LEU:CB	1:A:844:LYS:HG3	2.41	0.49
1:A:1028:LYS:HG2	1:A:1029:GLU:N	2.28	0.49
1:A:1140:GLU:CD	4:D:165:LYS:CE	2.80	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1610:LEU:HD12	1:A:1610:LEU:O	2.13	0.49
1:A:1926:PHE:CB	1:A:1974:ILE:HG23	2.41	0.49
1:A:3018:LEU:O	1:A:3022:CYS:SG	2.71	0.49
2:B:511:PHE:CE2	2:B:547:LEU:HD23	2.47	0.49
2:B:956:LEU:O	2:B:959:ILE:HG13	2.13	0.49
2:B:1185:ASP:HB2	2:B:1186:PRO:HD2	1.94	0.49
2:B:2862:LEU:HD13	2:B:2864:LEU:HG	1.94	0.49
2:B:3077:SER:OG	2:B:3486:ILE:HD11	2.12	0.49
2:B:3272:PRO:HG2	2:B:3275:LYS:CG	2.43	0.49
3:C:29:VAL:CG2	3:C:92:ALA:HA	2.43	0.49
3:C:1864:ILE:HD11	3:C:1910:ILE:CG2	2.43	0.49
3:C:2096:ILE:HD11	3:C:2141:TYR:CD2	2.48	0.49
4:D:414:PHE:HD2	4:D:426:TRP:CG	2.21	0.49
5:E:20:PHE:HE2	15:O:80:LYS:HD2	1.68	0.49
5:E:394:TRP:HD1	5:E:400:THR:C	2.16	0.49
5:E:402:ILE:HD11	5:E:513:TYR:HB2	1.95	0.49
1:A:666:SER:HB3	1:A:695:LEU:HD12	1.95	0.49
2:B:521:PHE:HE2	2:B:609:LEU:HD21	1.78	0.49
2:B:669:ILE:O	2:B:719:VAL:CG1	2.59	0.49
2:B:862:TYR:CD1	2:B:862:TYR:C	2.86	0.49
2:B:2085:GLN:CG	2:B:2176:VAL:HG21	2.43	0.49
3:C:250:LYS:HG3	3:C:273:VAL:HG13	1.94	0.49
3:C:2676:GLN:O	3:C:2837:LEU:CB	2.61	0.49
3:C:2711:SER:HB2	3:C:2755:LEU:CD2	2.40	0.49
3:C:4138:PHE:CE1	3:C:4141:THR:HA	2.47	0.49
4:D:196:CYS:SG	9:I:86:ASP:HA	2.52	0.49
4:D:298:ASN:HB3	4:D:591:THR:HG21	1.94	0.49
4:D:553:TYR:CE1	4:D:595:PHE:CE2	3.00	0.49
5:E:100:GLU:HA	5:E:105:PHE:CD2	2.47	0.49
5:E:112:LEU:HD23	5:E:116:VAL:CG2	2.42	0.49
5:E:325:ASN:HB2	5:E:375:ARG:HD2	1.95	0.49
6:F:80:ARG:N	7:G:125:PHE:O	2.42	0.49
7:G:30:ILE:O	7:G:31:TYR:C	2.51	0.49
8:H:67:SER:HB3	9:I:78:ILE:CG2	2.40	0.49
12:L:70:GLY:O	12:L:109:LYS:CE	2.60	0.49
13:M:32:LYS:HD2	13:M:32:LYS:N	2.28	0.49
1:A:683:LYS:NZ	1:A:741:ASN:HD22	2.11	0.49
1:A:937:LEU:HD12	1:A:1081:ILE:HD11	1.93	0.49
1:A:1171:ILE:HG13	1:A:1171:ILE:O	2.12	0.49
1:A:3251:ILE:CG1	17:Q:62:ILE:N	2.74	0.49
2:B:429:LEU:HD21	2:B:493:ARG:HD2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:658:GLN:NE2	2:B:672:ASN:O	2.45	0.49
2:B:1330:TRP:O	2:B:1409:SER:C	2.49	0.49
2:B:1492:LYS:NZ	2:B:3606:GLN:CG	2.76	0.49
2:B:3311:ASN:O	2:B:3315:GLN:HG3	2.13	0.49
3:C:114:LEU:HB2	3:C:121:TRP:CD2	2.48	0.49
3:C:341:TRP:HB2	3:C:345:TRP:CD1	2.48	0.49
3:C:2743:ASN:OD1	3:C:2786:ASN:OD1	2.30	0.49
3:C:2751:TRP:O	3:C:2754:SER:HB3	2.12	0.49
4:D:100:GLU:OE2	4:D:100:GLU:HA	2.13	0.49
4:D:172:GLU:CD	12:L:51:LYS:HE2	2.33	0.49
4:D:174:GLN:CD	12:L:49:LEU:HB3	2.33	0.49
9:I:85:TYR:OH	9:I:106:LEU:HD13	2.12	0.49
10:J:38:GLU:HG3	15:O:29:PHE:CZ	2.45	0.49
11:K:53:LYS:HG2	11:K:54:TYR:CE1	2.47	0.49
14:N:75:GLN:CG	15:O:93:GLN:HG3	2.39	0.49
1:A:674:LEU:HD23	1:A:770:LEU:CB	2.43	0.48
1:A:1009:THR:OG1	1:A:1074:MET:SD	2.69	0.48
1:A:1534:MET:HB3	1:A:1537:GLN:CG	2.43	0.48
1:A:1613:ILE:HD11	1:A:1626:ASP:HB3	1.93	0.48
1:A:1790:HIS:NE2	1:A:1794:ILE:HD11	2.28	0.48
1:A:2117:GLU:HG2	1:A:2141:ILE:HD11	1.95	0.48
1:A:3251:ILE:HD11	17:Q:62:ILE:O	2.13	0.48
2:B:744:MET:CE	2:B:772:ILE:HG23	2.42	0.48
2:B:1051:ASP:OD2	2:B:1162:THR:CG2	2.60	0.48
2:B:1606:PHE:CE1	2:B:1687:LEU:HA	2.47	0.48
2:B:1627:ALA:HB3	2:B:1628:PRO:HD3	1.94	0.48
3:C:180:LEU:CD2	3:C:187:TRP:CE3	2.93	0.48
3:C:334:ARG:HG3	3:C:336:ILE:HD11	1.95	0.48
3:C:884:ARG:HA	3:C:889:ILE:HD11	1.95	0.48
3:C:2531:LEU:HB3	3:C:2536:LEU:HD11	1.95	0.48
4:D:201:GLN:CD	9:I:102:ASN:CB	2.56	0.48
4:D:508:TRP:HZ3	4:D:514:ARG:HA	1.78	0.48
5:E:76:LYS:O	8:H:64:ASN:OD1	2.30	0.48
5:E:271:LEU:N	5:E:271:LEU:CD1	2.76	0.48
7:G:37:ARG:O	7:G:38:LYS:C	2.51	0.48
9:I:19:MET:CB	9:I:22:LYS:HE3	2.43	0.48
9:I:74:THR:HG23	9:I:74:THR:O	2.11	0.48
12:L:55:LEU:HA	13:M:64:HIS:CE1	2.48	0.48
14:N:22:LYS:HE2	14:N:28:LYS:CB	2.43	0.48
16:P:15:SER:CA	16:P:16:GLU:N	2.71	0.48
1:A:801:ILE:HG21	1:A:862:LEU:HD23	1.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:891:PHE:CZ	1:A:971:ASN:OD1	2.66	0.48
1:A:1504:VAL:CG2	1:A:1565:CYS:CB	2.72	0.48
1:A:3187:ILE:HG22	1:A:3191:LYS:HD3	1.93	0.48
1:A:3500:ILE:HD12	1:A:3515:ILE:HG23	1.95	0.48
2:B:86:LYS:HA	2:B:104:VAL:O	2.13	0.48
2:B:798:ASN:HB2	2:B:874:ALA:CA	2.43	0.48
2:B:909:SER:C	2:B:995:TYR:HE1	2.16	0.48
2:B:3770:MET:HA	2:B:4089:LEU:HD13	1.95	0.48
2:B:3984:PHE:CE2	2:B:4076:LEU:HD11	2.49	0.48
3:C:124:PRO:HB3	3:C:185:PHE:CD1	2.48	0.48
3:C:1503:ILE:HD12	3:C:1523:PHE:CZ	2.48	0.48
3:C:2899:LEU:HD23	3:C:2899:LEU:O	2.13	0.48
4:D:241:PHE:HZ	7:G:78:ILE:CD1	2.16	0.48
5:E:308:GLU:OE1	5:E:343:LEU:HD11	2.13	0.48
7:G:32:GLN:O	7:G:33:LYS:C	2.52	0.48
1:A:1126:VAL:CG1	1:A:1131:SER:OG	2.61	0.48
1:A:2697:ARG:HG2	19:A:4701:ADP:O3'	2.13	0.48
1:A:3249:ILE:HG13	1:A:3273:TYR:N	2.29	0.48
2:B:467:VAL:CB	2:B:471:THR:OG1	2.59	0.48
2:B:835:GLN:O	2:B:839:LEU:HG	2.13	0.48
2:B:917:ILE:HG22	2:B:917:ILE:O	2.13	0.48
2:B:1529:TYR:CZ	2:B:1533:LEU:HD12	2.48	0.48
3:C:231:ILE:HG12	3:C:240:VAL:O	2.13	0.48
3:C:1567:LEU:HD22	3:C:1619:ASP:HB3	1.94	0.48
4:D:91:TYR:CE1	13:M:80:LEU:CD1	2.94	0.48
7:G:33:LYS:O	7:G:34:SER:C	2.51	0.48
7:G:35:LEU:O	7:G:36:LYS:C	2.51	0.48
7:G:77:LEU:HB2	7:G:90:PHE:CE2	2.48	0.48
10:J:75:TYR:CB	11:K:92:LYS:HE2	2.36	0.48
11:K:34:GLU:OE2	11:K:34:GLU:HA	2.12	0.48
1:A:879:LEU:HD12	1:A:882:GLU:CD	2.34	0.48
1:A:909:MET:O	1:A:913:VAL:HG23	2.13	0.48
1:A:936:GLN:C	1:A:937:LEU:HD12	2.33	0.48
1:A:1638:THR:OG1	1:A:1655:GLN:HG3	2.11	0.48
1:A:3269:LEU:HD21	1:A:3312:GLN:CD	2.33	0.48
1:A:3425:GLU:OE2	1:A:3425:GLU:HA	2.14	0.48
2:B:429:LEU:HD22	2:B:492:PHE:CE2	2.48	0.48
2:B:552:LYS:CG	2:B:622:VAL:HG22	2.43	0.48
2:B:575:ASN:HB2	5:E:481:GLN:CD	2.34	0.48
2:B:1490:GLN:HB3	2:B:3612:ASP:HB3	1.95	0.48
2:B:2333:PRO:HB3	20:B:5601:ATP:HN62	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:113:ILE:HD11	3:C:185:PHE:CZ	2.47	0.48
3:C:2365:GLY:O	3:C:2367:GLN:N	2.46	0.48
3:C:2730:LEU:HD22	3:C:2743:ASN:H	1.77	0.48
3:C:2984:TRP:HB3	3:C:2989:LEU:HD23	1.95	0.48
4:D:66:LEU:HD21	4:D:73:LYS:HG2	1.96	0.48
4:D:195:ILE:HD12	9:I:94:LEU:HD23	1.95	0.48
5:E:46:ASN:CA	12:L:88:PHE:CE1	2.96	0.48
5:E:60:SER:HB3	10:J:87:GLN:CB	2.43	0.48
5:E:306:ILE:CG2	5:E:343:LEU:HD12	2.43	0.48
5:E:398:LEU:HD21	5:E:516:GLU:HB3	1.95	0.48
8:H:12:LYS:HE2	8:H:80:TYR:OH	2.13	0.48
12:L:74:TRP:HA	12:L:109:LYS:HG2	1.96	0.48
15:O:31:PRO:HD3	15:O:109:ASN:ND2	2.26	0.48
15:O:46:LEU:HD23	15:O:115:TYR:CE2	2.48	0.48
1:A:666:SER:HB3	1:A:695:LEU:CD1	2.43	0.48
1:A:688:PHE:CG	1:A:727:TYR:CD2	3.01	0.48
1:A:889:TYR:HE2	7:G:12:SER:CB	2.27	0.48
1:A:948:LEU:CB	1:A:1010:LYS:HD3	2.43	0.48
1:A:1062:ILE:HG21	1:A:1086:SER:OG	2.13	0.48
1:A:1617:GLY:HA2	1:A:1623:ILE:HD11	1.84	0.48
2:B:1532:PHE:CE1	2:B:1539:ARG:HB2	2.49	0.48
3:C:109:ASN:HB3	3:C:145:PRO:HG3	1.95	0.48
3:C:2701:ILE:HG13	3:C:2704:LYS:CG	2.43	0.48
4:D:543:MET:SD	4:D:563:MET:HB2	2.51	0.48
5:E:100:GLU:CA	5:E:105:PHE:CD2	2.86	0.48
5:E:334:LEU:HD12	5:E:344:THR:HG22	1.94	0.48
5:E:355:ILE:N	5:E:355:ILE:CD1	2.73	0.48
7:G:18:GLN:O	7:G:19:GLN:C	2.52	0.48
7:G:31:TYR:O	7:G:32:GLN:C	2.52	0.48
7:G:111:ARG:NH2	7:G:139:PRO:HB2	2.29	0.48
8:H:60:ILE:CG2	9:I:85:TYR:HB3	2.44	0.48
9:I:20:ILE:O	9:I:99:TYR:CZ	2.67	0.48
9:I:24:ILE:HG23	9:I:98:PHE:HD1	1.77	0.48
12:L:69:ILE:HD12	12:L:92:VAL:HG13	1.95	0.48
14:N:17:ILE:HG23	14:N:110:VAL:HG11	1.96	0.48
1:A:576:TYR:CE1	1:A:620:PRO:CA	2.96	0.48
1:A:939:GLY:O	1:A:940:ASP:CB	2.59	0.48
1:A:2298:LEU:CD2	20:A:4801:ATP:N7	2.77	0.48
1:A:3249:ILE:HG12	1:A:3273:TYR:CB	2.43	0.48
2:B:927:ARG:HH12	2:B:976:LEU:HB2	1.77	0.48
2:B:1612:LEU:HD11	2:B:1637:CYS:HG	1.73	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3125:LYS:NZ	2:B:3447:MET:SD	2.83	0.48
2:B:3445:LYS:O	2:B:3487:PRO:O	2.32	0.48
2:B:4353:ILE:HG22	2:B:4425:LEU:HD13	1.96	0.48
3:C:352:LEU:H	3:C:352:LEU:CD1	2.27	0.48
3:C:2589:LEU:CA	3:C:2928:VAL:HG11	2.44	0.48
3:C:2787:ILE:HD13	3:C:2824:TYR:CB	2.44	0.48
4:D:92:TYR:CB	13:M:29:LYS:HA	2.42	0.48
5:E:221:ILE:HG13	5:E:221:ILE:O	2.12	0.48
7:G:34:SER:O	7:G:35:LEU:C	2.51	0.48
10:J:79:PHE:CZ	11:K:88:LEU:HD23	2.48	0.48
1:A:573:LEU:CG	1:A:633:GLU:HG2	2.29	0.48
1:A:992:ASP:CG	1:A:995:ILE:HG12	2.34	0.48
1:A:1031:ILE:CA	1:A:1092:TRP:CH2	2.95	0.48
1:A:1449:ILE:HG13	1:A:1452:LYS:NZ	2.28	0.48
1:A:1585:GLN:HE21	1:A:1585:GLN:C	2.17	0.48
1:A:1825:ILE:HD12	1:A:1889:LEU:HA	1.95	0.48
1:A:2696:MET:CE	19:A:4701:ADP:C8	2.97	0.48
2:B:508:THR:CG2	2:B:539:GLU:CD	2.82	0.48
2:B:675:PRO:O	5:E:187:GLN:NE2	2.47	0.48
2:B:714:ALA:HA	2:B:717:MET:CE	2.43	0.48
2:B:714:ALA:HB1	2:B:766:ILE:CD1	2.44	0.48
2:B:861:ASP:CB	3:C:170:GLN:CB	2.83	0.48
2:B:902:ILE:CG2	2:B:1076:LEU:CD1	2.90	0.48
2:B:2128:ASP:HB3	2:B:4466:LEU:HB2	1.96	0.48
2:B:3342:ASN:O	2:B:3346:PHE:CA	2.62	0.48
2:B:3445:LYS:CG	2:B:3487:PRO:CB	2.91	0.48
3:C:2927:ASP:CG	3:C:2974:ILE:CD1	2.74	0.48
4:D:134:LYS:HB2	4:D:134:LYS:HZ3	1.78	0.48
4:D:386:TYR:CE1	5:E:142:VAL:HG11	2.47	0.48
4:D:563:MET:O	4:D:563:MET:HE3	2.14	0.48
5:E:386:VAL:HG21	5:E:415:GLY:HA3	1.95	0.48
7:G:36:LYS:O	7:G:37:ARG:C	2.52	0.48
9:I:49:ASN:ND2	9:I:59:ALA:HA	2.28	0.48
1:A:2120:ILE:HB	1:A:2121:PRO:HD3	1.95	0.48
1:A:3191:LYS:HZ2	1:A:3191:LYS:CB	2.26	0.48
1:A:3255:GLU:CB	1:A:3271:GLU:HB2	2.44	0.48
2:B:527:PHE:CD2	2:B:530:LEU:HD23	2.48	0.48
2:B:599:ILE:HG22	2:B:626:TYR:CE1	2.49	0.48
2:B:638:ASP:O	2:B:642:LEU:CB	2.62	0.48
2:B:1057:LEU:CD1	2:B:1098:TYR:CD2	2.97	0.48
2:B:3089:ILE:HG22	2:B:3106:THR:HG21	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3012:ILE:HD12	3:C:3121:LEU:HD11	1.96	0.48
4:D:195:ILE:N	9:I:87:VAL:O	2.31	0.48
5:E:61:VAL:CG2	10:J:106:LEU:CD1	2.86	0.48
5:E:279:CYS:SG	5:E:291:TRP:HB2	2.53	0.48
7:G:17:ILE:O	7:G:18:GLN:C	2.51	0.48
8:H:36:ASN:N	8:H:36:ASN:HD22	2.10	0.48
15:O:46:LEU:HD23	15:O:115:TYR:CD2	2.48	0.48
1:A:5:LYS:C	1:A:6:TYR:N	2.67	0.48
1:A:800:ASP:O	1:A:804:ASN:HB2	2.14	0.48
1:A:891:PHE:CD1	1:A:972:TRP:CD2	2.90	0.48
1:A:971:ASN:HB3	1:A:983:ALA:CB	2.43	0.48
1:A:1016:PHE:HD2	1:A:1069:TYR:CD1	2.30	0.48
1:A:1091:GLU:OE1	1:A:1091:GLU:HA	2.14	0.48
1:A:1273:PHE:HB3	1:A:1275:LEU:HG	1.95	0.48
1:A:1441:ASN:HA	1:A:1562:ILE:CD1	2.44	0.48
1:A:1458:MET:SD	1:A:1549:MET:HA	2.54	0.48
1:A:1606:SER:HB2	1:A:1608:PRO:HD2	1.96	0.48
1:A:2515:MET:HA	1:A:2553:LYS:O	2.13	0.48
1:A:3251:ILE:CD1	17:Q:82:ASN:HA	2.40	0.48
1:A:3260:LYS:NZ	1:A:3267:LEU:CD2	2.77	0.48
1:A:3709:ASP:CB	1:A:3712:LEU:HD12	2.43	0.48
2:B:581:ASN:HD22	5:E:184:MET:CE	2.22	0.48
2:B:696:THR:HG22	2:B:697:THR:HG23	1.96	0.48
2:B:729:LEU:HD13	2:B:780:VAL:CG2	2.43	0.48
2:B:1139:LEU:CD2	2:B:1198:ILE:HD11	2.40	0.48
2:B:1566:ASN:CB	3:C:2275:LYS:HE3	2.39	0.48
2:B:2267:ILE:CD1	2:B:2311:ALA:HB2	2.44	0.48
2:B:3147:GLN:NE2	2:B:3427:ALA:HB2	2.29	0.48
3:C:354:VAL:HG22	3:C:357:ILE:HG13	1.94	0.48
3:C:2726:THR:HG21	3:C:2757:LEU:HD13	1.96	0.48
3:C:2799:THR:HB	3:C:2800:PRO:CD	2.44	0.48
4:D:92:TYR:CE1	13:M:29:LYS:HD3	2.49	0.48
4:D:117:TRP:CE3	4:D:118:LYS:O	2.67	0.48
4:D:175:THR:H	13:M:61:PHE:C	2.12	0.48
4:D:294:GLN:NE2	4:D:328:LEU:HD13	2.29	0.48
4:D:410:LYS:HE3	4:D:413:ASN:HD21	1.79	0.48
5:E:289:MET:SD	5:E:300:PRO:HG3	2.53	0.48
8:H:46:LYS:NZ	9:I:86:ASP:C	2.61	0.48
10:J:65:LYS:C	10:J:65:LYS:HD3	2.34	0.48
11:K:80:PHE:CD1	11:K:80:PHE:C	2.88	0.48
12:L:74:TRP:CD1	12:L:109:LYS:CD	2.93	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:819:VAL:HA	1:A:840:TYR:CE2	2.49	0.48
1:A:952:GLN:NE2	1:A:1010:LYS:NZ	2.62	0.48
1:A:1048:TYR:HE1	1:A:1100:LEU:HB2	1.79	0.48
1:A:1445:PHE:HE2	1:A:1564:CYS:HB3	0.72	0.48
1:A:3220:ILE:HG21	1:A:3286:PHE:CD2	2.49	0.48
2:B:17:ARG:HA	2:B:21:ALA:HB3	1.96	0.48
2:B:225:PRO:HA	2:B:298:LEU:CB	2.44	0.48
2:B:459:ILE:HG23	2:B:499:LEU:HD12	1.96	0.48
2:B:775:GLN:O	2:B:779:THR:HG23	2.13	0.48
2:B:899:LEU:HD11	2:B:900:PHE:CD1	2.39	0.48
2:B:1456:PHE:CE1	2:B:1467:PHE:CZ	3.02	0.48
2:B:4104:LYS:HA	2:B:4256:LEU:HD13	1.95	0.48
3:C:147:TYR:C	3:C:147:TYR:CD2	2.87	0.48
3:C:2093:GLN:HB2	3:C:2096:ILE:HG22	1.95	0.48
4:D:466:LYS:HZ1	4:D:511:PHE:H	1.62	0.48
6:F:47:HIS:O	6:F:51:LEU:HD13	2.13	0.48
13:M:21:LYS:HB3	13:M:21:LYS:HZ3	1.79	0.48
1:A:1012:LYS:CE	1:A:1071:ILE:CB	2.42	0.47
1:A:1935:SER:HB2	1:A:4048:LEU:HD13	1.96	0.47
1:A:3043:ILE:HD11	1:A:3059:LEU:HD23	1.95	0.47
2:B:14:ILE:O	2:B:22:LEU:HA	2.13	0.47
2:B:902:ILE:HG13	2:B:1076:LEU:HB2	1.48	0.47
2:B:2586:LYS:HA	2:B:2592:TYR:HD2	1.79	0.47
2:B:3453:LEU:CD2	2:B:3492:ILE:CD1	2.91	0.47
3:C:106:LEU:N	3:C:106:LEU:CD1	2.73	0.47
3:C:2670:LYS:HB3	3:C:2848:THR:CG2	2.44	0.47
4:D:106:ILE:HD12	4:D:106:ILE:C	2.34	0.47
4:D:204:ILE:HG21	9:I:101:GLY:O	2.14	0.47
4:D:355:PHE:HE1	4:D:377:ILE:HD11	1.79	0.47
4:D:372:VAL:CG1	4:D:414:PHE:CE2	2.97	0.47
4:D:483:LYS:NZ	4:D:530:SER:HB3	2.28	0.47
4:D:528:TRP:HD1	4:D:535:GLN:N	2.05	0.47
4:D:620:LEU:O	4:D:620:LEU:CD1	2.48	0.47
5:E:44:ASN:N	5:E:45:PRO:CD	2.77	0.47
5:E:131:GLU:HB2	5:E:134:GLU:HB2	1.95	0.47
8:H:39:LYS:HA	9:I:84:ALA:HB1	1.96	0.47
12:L:50:GLU:OE2	13:M:61:PHE:HA	2.14	0.47
16:P:24:ASN:HA	16:P:96:GLY:N	2.29	0.47
16:P:27:ASN:CA	16:P:95:GLU:HA	2.44	0.47
1:A:686:VAL:CG2	1:A:731:LEU:HD21	2.37	0.47
1:A:736:GLU:O	1:A:740:ILE:HG13	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:755:HIS:HE1	1:A:869:TYR:CB	2.27	0.47
1:A:1274:GLY:HA3	4:D:164:ASN:HA	1.94	0.47
1:A:1599:PHE:HE2	1:A:1630:LEU:HD22	1.80	0.47
1:A:1830:TRP:CZ2	1:A:1832:SER:HB2	2.49	0.47
1:A:3220:ILE:CG2	1:A:3286:PHE:CD2	2.97	0.47
2:B:10:PRO:C	2:B:25:GLN:H	2.13	0.47
2:B:613:ILE:O	2:B:616:ARG:HG3	2.14	0.47
2:B:3173:ILE:CG2	2:B:3177:LYS:HE3	2.44	0.47
3:C:10:LEU:HD11	3:C:67:CYS:HB3	1.95	0.47
3:C:146:ARG:HG3	3:C:149:HIS:ND1	2.29	0.47
3:C:149:HIS:HA	3:C:162:GLY:HA3	1.95	0.47
3:C:261:ILE:CB	3:C:360:PRO:HB3	2.40	0.47
3:C:352:LEU:HD13	3:C:352:LEU:H	1.79	0.47
3:C:2701:ILE:HD13	3:C:2704:LYS:CE	2.35	0.47
4:D:240:SER:OG	7:G:140:ASP:OD2	2.29	0.47
4:D:386:TYR:HE1	5:E:142:VAL:HG12	1.79	0.47
4:D:517:ILE:HD13	4:D:527:ILE:HA	1.95	0.47
7:G:16:ILE:O	7:G:17:ILE:C	2.52	0.47
9:I:26:ASN:HD22	9:I:98:PHE:HE2	1.63	0.47
11:K:46:ILE:CD1	11:K:87:ILE:HD13	2.45	0.47
17:Q:108:GLU:HA	17:Q:129:ILE:H	1.78	0.47
1:A:598:ARG:NE	4:D:319:TYR:CZ	2.82	0.47
1:A:888:ARG:CZ	7:G:5:THR:CB	2.92	0.47
1:A:1052:LEU:HD12	1:A:1162:LEU:HD21	1.96	0.47
1:A:1088:TRP:CD2	1:A:1092:TRP:NE1	2.77	0.47
1:A:1183:LEU:HD23	1:A:1183:LEU:O	2.14	0.47
1:A:1393:TYR:O	1:A:1397:ASP:N	2.46	0.47
1:A:1914:LEU:HD21	1:A:1921:GLY:HA3	1.97	0.47
1:A:1915:VAL:HA	1:A:1970:VAL:HG21	1.96	0.47
1:A:2498:ALA:HB2	19:A:4701:ADP:H8	1.79	0.47
1:A:3257:VAL:CG1	1:A:3266:VAL:HG22	2.43	0.47
2:B:555:LEU:HD23	2:B:625:LEU:HD13	1.97	0.47
2:B:1611:PHE:CE1	2:B:1925:PHE:HZ	2.32	0.47
2:B:2619:SER:N	2:B:2620:PRO:HD2	2.29	0.47
2:B:4447:PRO:HB2	2:B:4558:VAL:HG11	1.96	0.47
3:C:997:LEU:HB2	3:C:1051:GLN:HE22	1.79	0.47
3:C:2745:LYS:HD2	3:C:2749:VAL:CG1	2.43	0.47
3:C:2770:ASN:O	3:C:2774:VAL:HG23	2.13	0.47
3:C:2798:PHE:HD1	3:C:2803:MET:SD	2.31	0.47
4:D:374:VAL:HB	4:D:386:TYR:HB2	1.96	0.47
6:F:61:LYS:CD	8:H:33:ASP:O	2.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:75:TRP:CE3	9:I:109:LYS:HB2	2.49	0.47
1:A:603:GLU:HG3	1:A:662:LYS:HE3	1.97	0.47
1:A:879:LEU:HB2	1:A:882:GLU:CD	2.35	0.47
1:A:1012:LYS:HZ1	1:A:1072:GLY:H	0.47	0.47
1:A:1433:LEU:HD11	1:A:1490:PHE:HE1	1.68	0.47
1:A:3290:LEU:CD2	1:A:3335:TRP:HZ2	1.96	0.47
2:B:533:ARG:O	2:B:537:ALA:HB2	2.13	0.47
2:B:1058:LYS:HD3	2:B:1166:GLU:O	2.05	0.47
2:B:1480:HIS:O	2:B:1484:LEU:CB	2.63	0.47
3:C:89:ALA:CB	3:C:95:MET:HG2	2.44	0.47
3:C:196:PRO:CB	3:C:239:TRP:CH2	2.96	0.47
3:C:246:HIS:HE1	3:C:292:PHE:CD2	2.32	0.47
3:C:700:LEU:CB	3:C:717:CYS:CB	2.92	0.47
3:C:2820:ILE:HG23	3:C:2824:TYR:HD2	1.80	0.47
3:C:3966:LEU:HD23	3:C:3976:PRO:HB3	1.97	0.47
4:D:172:GLU:OE2	12:L:55:LEU:HB2	2.14	0.47
4:D:261:TYR:HE1	5:E:126:ILE:CD1	1.94	0.47
4:D:395:HIS:CD2	4:D:399:VAL:HG13	2.45	0.47
4:D:398:PRO:CD	4:D:398:PRO:O	2.59	0.47
4:D:556:THR:HB	4:D:571:LEU:CG	2.44	0.47
5:E:198:TYR:HB3	5:E:208:PRO:CB	2.43	0.47
5:E:276:GLY:HA3	5:E:294:ARG:HH11	1.79	0.47
15:O:103:TRP:C	15:O:103:TRP:CD1	2.88	0.47
1:A:577:ALA:CB	1:A:636:ARG:CD	2.60	0.47
1:A:607:ILE:HD13	1:A:655:PHE:HB2	1.95	0.47
1:A:617:ILE:HG22	1:A:644:LEU:HD11	1.96	0.47
1:A:1277:ASN:HB3	1:A:1280:TYR:CB	2.44	0.47
1:A:2033:LEU:CD2	1:A:4498:LEU:HD23	2.44	0.47
1:A:2489:ALA:O	1:A:2608:ILE:HA	2.13	0.47
2:B:544:HIS:CE1	2:B:609:LEU:CG	2.95	0.47
2:B:724:HIS:ND1	2:B:728:CYS:SG	2.87	0.47
2:B:899:LEU:HD12	2:B:899:LEU:C	2.33	0.47
2:B:1427:VAL:O	2:B:1431:VAL:HG23	2.14	0.47
2:B:2395:PRO:HG2	2:B:2665:LEU:HD21	1.97	0.47
2:B:3164:VAL:HG12	2:B:3409:ALA:CB	2.42	0.47
2:B:3230:ALA:HB3	2:B:3342:ASN:OD1	2.07	0.47
3:C:172:LEU:C	3:C:172:LEU:HD12	2.34	0.47
3:C:2617:VAL:CG2	3:C:3183:ILE:CD1	2.87	0.47
3:C:2779:GLN:O	3:C:2780:VAL:HG23	2.13	0.47
3:C:3622:ILE:HD11	3:C:3624:LEU:HD21	1.96	0.47
3:C:4129:TYR:O	3:C:4164:LEU:HA	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:294:GLN:NE2	4:D:294:GLN:CA	2.73	0.47
4:D:361:ALA:HB2	5:E:133:PHE:CE2	2.49	0.47
4:D:553:TYR:OH	4:D:620:LEU:CD1	2.62	0.47
4:D:564:ASP:CG	4:D:583:LYS:CE	2.76	0.47
5:E:198:TYR:HB2	5:E:200:TRP:CZ3	2.49	0.47
5:E:376:SER:HB3	5:E:417:TRP:CE3	2.49	0.47
8:H:52:ARG:CA	18:R:63:ASN:HA	2.45	0.47
12:L:16:LEU:HD21	12:L:19:HIS:CE1	2.50	0.47
1:A:770:LEU:HD11	1:A:780:TYR:CG	2.50	0.47
1:A:1016:PHE:HD2	1:A:1020:PHE:CE2	2.33	0.47
1:A:1121:LYS:HD2	1:A:1138:THR:HG22	1.96	0.47
1:A:2298:LEU:HD11	20:A:4801:ATP:C5	2.50	0.47
1:A:3249:ILE:CD1	1:A:3273:TYR:CA	2.71	0.47
1:A:3249:ILE:HD11	1:A:3273:TYR:C	2.34	0.47
1:A:3280:THR:HG22	1:A:3286:PHE:HD1	1.79	0.47
1:A:3568:LEU:HD23	1:A:3568:LEU:C	2.35	0.47
2:B:53:ILE:CB	2:B:90:ALA:CB	2.89	0.47
2:B:492:PHE:CE2	2:B:496:ILE:HD11	2.50	0.47
2:B:601:GLU:N	2:B:602:PRO:CD	2.77	0.47
2:B:899:LEU:CD1	2:B:900:PHE:H	2.21	0.47
2:B:947:LEU:HD22	2:B:947:LEU:N	2.29	0.47
2:B:1708:ALA:HA	2:B:1711:TRP:CD1	2.49	0.47
2:B:3257:ARG:CG	2:B:3276:VAL:HG11	2.45	0.47
2:B:3402:LYS:HD3	2:B:3402:LYS:O	2.15	0.47
3:C:2690:LEU:CB	3:C:2826:VAL:CB	2.92	0.47
3:C:2784:ASN:C	3:C:2787:ILE:HG22	2.30	0.47
4:D:109:PHE:CD1	15:O:114:THR:OG1	2.67	0.47
4:D:162:LEU:HD23	4:D:162:LEU:O	2.14	0.47
4:D:509:ASN:HD21	4:D:512:HIS:HB3	1.80	0.47
4:D:517:ILE:HD11	4:D:550:TRP:HZ2	1.74	0.47
4:D:584:ILE:HG21	4:D:614:VAL:HG23	1.86	0.47
5:E:84:VAL:CG1	5:E:91:GLU:HB3	2.44	0.47
5:E:129:LEU:CD1	6:F:80:ARG:NE	2.77	0.47
7:G:86:VAL:HG21	7:G:143:PHE:CE1	2.49	0.47
8:H:24:VAL:HG22	8:H:49:PHE:HZ	1.79	0.47
10:J:37:LEU:HA	10:J:96:ILE:HD13	1.97	0.47
1:A:598:ARG:HH22	4:D:546:VAL:HG12	1.70	0.47
1:A:686:VAL:HG23	1:A:731:LEU:CD2	2.27	0.47
1:A:894:PHE:CD1	1:A:972:TRP:HH2	2.33	0.47
1:A:1041:ASN:CA	1:A:1047:ASN:HD21	2.25	0.47
1:A:1139:LEU:HB3	1:A:1143:ARG:HH22	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1140:GLU:OE2	4:D:165:LYS:HG2	2.13	0.47
1:A:1140:GLU:CD	4:D:165:LYS:HE3	2.35	0.47
1:A:3446:ASN:CA	1:A:3488:LEU:HD21	2.39	0.47
1:A:3896:LEU:N	1:A:3897:PRO:HD2	2.29	0.47
2:B:619:TYR:CD1	2:B:619:TYR:C	2.88	0.47
2:B:709:ARG:CZ	5:E:262:TYR:CD2	2.81	0.47
2:B:749:LYS:HB2	2:B:750:PRO:HD3	1.95	0.47
2:B:979:ILE:C	2:B:983:CYS:SG	2.87	0.47
2:B:1123:GLY:CA	2:B:1197:PHE:CE1	2.83	0.47
2:B:1205:PHE:HZ	2:B:1284:LEU:O	1.96	0.47
2:B:1316:ALA:HB1	16:P:62:LYS:CB	2.45	0.47
2:B:2516:HIS:HE2	2:B:2676:MET:HA	1.80	0.47
2:B:3150:VAL:HG22	2:B:3707:LEU:HD21	1.96	0.47
2:B:3150:VAL:HG11	2:B:3423:VAL:HG23	1.84	0.47
2:B:3242:MET:HA	2:B:3245:LEU:HD12	1.96	0.47
2:B:3264:ASN:ND2	2:B:3303:GLU:CD	2.64	0.47
3:C:35:MET:HE1	3:C:325:SER:OG	2.15	0.47
3:C:1864:ILE:HA	3:C:1868:CYS:HB3	1.97	0.47
3:C:1983:THR:HA	19:C:4702:ADP:N6	2.30	0.47
3:C:2666:CYS:SG	3:C:2667:GLY:N	2.87	0.47
3:C:2676:GLN:CB	3:C:2837:LEU:CA	2.93	0.47
3:C:2720:PRO:CB	3:C:2798:PHE:CD2	2.83	0.47
3:C:2730:LEU:HD22	3:C:2743:ASN:N	2.29	0.47
4:D:101:LEU:HD23	4:D:101:LEU:C	2.35	0.47
4:D:116:ILE:HG13	5:E:43:ARG:HD3	1.96	0.47
4:D:199:ILE:HD11	9:I:98:PHE:CD2	2.49	0.47
4:D:245:CYS:SG	7:G:145:LEU:HD12	2.55	0.47
4:D:248:MET:CE	7:G:147:VAL:HG23	2.44	0.47
4:D:367:LEU:HD11	4:D:371:THR:HG23	1.95	0.47
4:D:512:HIS:CD2	4:D:513:PRO:HD3	2.48	0.47
5:E:24:GLU:OE2	14:N:91:THR:HB	2.14	0.47
5:E:82:GLY:CA	8:H:12:LYS:HZ1	2.28	0.47
5:E:95:PHE:HE1	6:F:31:ILE:HD13	1.79	0.47
5:E:385:SER:HG	5:E:394:TRP:HZ3	0.72	0.47
10:J:48:LEU:HD13	10:J:100:ILE:CD1	2.33	0.47
11:K:18:MET:HA	11:K:18:MET:HE3	1.95	0.47
1:A:1013:VAL:HG22	1:A:1076:LEU:HD21	1.96	0.47
1:A:2336:PHE:HZ	1:A:2411:LEU:CD2	2.27	0.47
1:A:2363:LEU:HD23	1:A:2390:SER:HA	1.97	0.47
1:A:3508:LEU:HB2	1:A:3540:TRP:CD1	2.50	0.47
2:B:426:ILE:HG21	2:B:478:MET:SD	2.54	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:605:LYS:O	2:B:608:GLN:HB2	2.15	0.47
2:B:1316:ALA:O	16:P:60:PHE:O	2.29	0.47
2:B:1566:ASN:CG	3:C:2275:LYS:CE	2.83	0.47
2:B:3977:ALA:HB2	2:B:4093:ILE:HD12	1.97	0.47
3:C:24:HIS:CD2	3:C:325:SER:HB3	2.49	0.47
3:C:912:SER:HA	3:C:966:LEU:HD22	1.97	0.47
3:C:1890:LEU:HB3	3:C:1901:LEU:HD21	1.96	0.47
3:C:2800:PRO:CA	3:C:2814:CYS:HB3	2.38	0.47
4:D:529:ASP:HB3	4:D:532:TYR:HD2	1.79	0.47
5:E:74:SER:CB	9:I:56:ILE:HB	2.44	0.47
10:J:74:PRO:CG	12:L:102:ARG:CD	2.60	0.47
1:A:603:GLU:CG	1:A:662:LYS:HE3	2.44	0.47
1:A:1599:PHE:CE2	1:A:1601:ARG:HB2	2.50	0.47
1:A:2840:VAL:HG11	1:A:3041:THR:HG21	1.97	0.47
1:A:3297:SER:HB3	1:A:3299:ASN:OD1	2.14	0.47
2:B:443:GLU:CD	5:E:514:ARG:HH11	2.11	0.47
2:B:713:VAL:CG1	5:E:258:GLU:CD	2.80	0.47
2:B:729:LEU:HD23	2:B:734:GLU:CG	2.33	0.47
2:B:2333:PRO:HB3	20:B:5601:ATP:C6	2.43	0.47
2:B:2685:LYS:HA	2:B:2711:VAL:HG11	1.96	0.47
2:B:4440:MET:HB2	2:B:4443:ARG:CG	2.45	0.47
3:C:165:GLY:HA3	3:C:174:PHE:HE2	1.72	0.47
3:C:2703:LYS:H	3:C:2703:LYS:CD	2.27	0.47
5:E:20:PHE:HE1	14:N:89:GLN:HA	1.68	0.47
5:E:291:TRP:CE2	5:E:300:PRO:HB3	2.50	0.47
6:F:66:ASP:O	7:G:98:ASN:HB3	2.15	0.47
10:J:42:ARG:HA	10:J:42:ARG:HD2	1.71	0.47
13:M:3:HIS:CE1	13:M:78:ASN:HB3	2.50	0.47
15:O:41:LEU:HD23	15:O:67:LEU:CD1	2.45	0.47
1:A:306:LYS:O	1:A:310:ALA:HB3	2.15	0.47
1:A:871:LEU:CD2	1:A:872:ASP:O	2.63	0.47
1:A:1458:MET:SD	1:A:1552:MET:CG	3.03	0.47
1:A:3233:ILE:HD12	1:A:3329:ALA:HB2	1.95	0.47
2:B:436:PHE:CB	2:B:463:PHE:CD2	2.97	0.47
2:B:725:ILE:HD12	2:B:780:VAL:HG21	1.97	0.47
2:B:902:ILE:HB	2:B:1076:LEU:HG	1.76	0.47
2:B:938:PHE:HB3	2:B:956:LEU:HD13	1.97	0.47
2:B:951:MET:N	2:B:952:PRO:CD	2.78	0.47
2:B:1454:GLN:HB3	2:B:1473:MET:CE	2.45	0.47
2:B:1456:PHE:CZ	2:B:1569:VAL:HG12	2.50	0.47
2:B:3316:ASP:OD1	2:B:3317:PRO:HD2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3321:PHE:O	2:B:3321:PHE:CG	2.68	0.47
2:B:4315:LYS:HA	2:B:4367:LEU:HD11	1.96	0.47
2:B:4435:ILE:HD12	2:B:4436:PRO:HD2	1.97	0.47
3:C:2589:LEU:HB2	3:C:2928:VAL:CG1	2.34	0.47
3:C:2820:ILE:HG23	3:C:2824:TYR:CD2	2.50	0.47
4:D:422:ARG:NH2	4:D:424:MET:SD	2.86	0.47
4:D:584:ILE:HD12	4:D:585:VAL:H	1.80	0.47
5:E:383:PHE:CD1	5:E:383:PHE:C	2.87	0.47
5:E:395:VAL:HG12	5:E:396:GLU:N	2.30	0.47
5:E:491:CYS:O	5:E:495:TYR:CD2	2.68	0.47
6:F:54:ASP:OD2	7:G:109:LYS:HE2	2.15	0.47
6:F:82:LYS:N	7:G:124:VAL:HG23	2.30	0.47
16:P:24:ASN:CA	16:P:96:GLY:HA3	2.45	0.47
1:A:761:LEU:CD2	1:A:874:HIS:HE1	2.22	0.46
1:A:1127:LYS:O	1:A:1208:TYR:CE1	2.67	0.46
1:A:2567:VAL:HG22	1:A:2573:GLN:HG3	1.97	0.46
1:A:3226:ASN:ND2	1:A:3233:ILE:HD13	2.30	0.46
1:A:4477:MET:HG3	1:A:4524:VAL:HG23	1.96	0.46
2:B:736:LEU:HD23	2:B:736:LEU:C	2.35	0.46
2:B:1061:GLN:HG2	2:B:1091:VAL:CG1	2.45	0.46
2:B:1395:LEU:CB	2:B:1430:ILE:HG21	2.46	0.46
2:B:2333:PRO:CA	20:B:5601:ATP:C2	2.91	0.46
3:C:1221:THR:O	3:C:1225:THR:HG23	2.14	0.46
3:C:2403:TYR:CE1	3:C:2480:VAL:HG11	2.50	0.46
3:C:3381:SER:N	3:C:3382:PRO:HD2	2.29	0.46
4:D:313:ALA:CB	4:D:331:LEU:HG	2.45	0.46
4:D:567:GLN:CG	4:D:578:LYS:CD	2.87	0.46
5:E:64:GLU:CD	10:J:18:TYR:CE2	2.88	0.46
5:E:377:ASN:N	5:E:377:ASN:ND2	2.60	0.46
5:E:492:ASP:HB3	5:E:495:TYR:OH	2.15	0.46
6:F:19:GLY:O	6:F:102:LEU:N	2.48	0.46
6:F:26:PHE:CD1	6:F:49:ALA:CA	2.97	0.46
6:F:62:VAL:HG11	7:G:106:LEU:HD21	1.95	0.46
8:H:10:VAL:CG1	8:H:80:TYR:OH	2.63	0.46
13:M:23:ILE:HG22	13:M:41:ILE:HD13	1.96	0.46
15:O:64:VAL:HG13	15:O:85:VAL:HG23	1.98	0.46
1:A:655:PHE:CE2	1:A:659:TRP:CD1	3.01	0.46
1:A:935:VAL:HA	1:A:944:LEU:HD23	1.97	0.46
1:A:1009:THR:HB	1:A:1074:MET:CG	2.42	0.46
1:A:1637:VAL:HG11	1:A:1653:ILE:HD13	1.96	0.46
1:A:3106:LYS:CD	1:A:3443:LEU:CD1	2.93	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3538:GLN:O	1:A:3541:ILE:HG22	2.16	0.46
1:A:3748:ARG:HB3	1:A:3749:PRO:HD3	1.97	0.46
2:B:60:ASN:CA	2:B:81:ILE:CA	2.58	0.46
2:B:902:ILE:HG21	2:B:1076:LEU:CD1	2.42	0.46
2:B:946:ARG:HG3	2:B:953:GLY:HA3	1.96	0.46
2:B:1522:GLN:O	2:B:1526:LYS:N	2.42	0.46
2:B:3239:VAL:HG13	2:B:3291:ILE:HD11	1.96	0.46
2:B:3264:ASN:HA	2:B:3306:ILE:HD11	1.98	0.46
3:C:113:ILE:HD11	3:C:124:PRO:HG3	1.96	0.46
3:C:2738:ILE:CB	3:C:2746:PRO:CG	2.85	0.46
3:C:2740:ILE:HD12	3:C:2744:LYS:CD	2.33	0.46
3:C:2775:VAL:HG21	3:C:2824:TYR:CE2	2.50	0.46
4:D:265:ARG:CG	5:E:125:GLN:CG	2.71	0.46
5:E:170:HIS:CD2	5:E:172:GLU:HB3	2.51	0.46
6:F:54:ASP:CG	7:G:109:LYS:CE	2.82	0.46
10:J:19:LYS:HB3	10:J:28:TRP:HA	1.96	0.46
13:M:7:VAL:HG23	13:M:7:VAL:O	2.15	0.46
14:N:72:ILE:CG1	15:O:97:ILE:CG2	2.71	0.46
1:A:759:LEU:HD21	1:A:788:LEU:HD21	1.97	0.46
1:A:805:ARG:NH1	5:E:152:LEU:HD11	2.27	0.46
1:A:1140:GLU:CD	4:D:165:LYS:HE2	2.36	0.46
1:A:2298:LEU:CD2	20:A:4801:ATP:C8	2.98	0.46
1:A:2463:THR:HG23	19:A:4701:ADP:N6	2.30	0.46
1:A:3260:LYS:HZ3	1:A:3315:ASP:HB3	1.79	0.46
2:B:1230:MET:HE1	2:B:1266:VAL:C	2.34	0.46
2:B:3092:ALA:HB1	2:B:3472:LEU:HD11	1.96	0.46
3:C:217:PHE:HE1	3:C:246:HIS:HB2	1.78	0.46
3:C:1382:THR:HA	3:C:1385:ILE:HG22	1.97	0.46
3:C:3497:GLU:HG3	3:C:3861:ILE:HD11	1.97	0.46
4:D:75:LEU:CD2	4:D:75:LEU:N	2.73	0.46
4:D:426:TRP:CE3	4:D:435:PRO:HB3	2.48	0.46
4:D:529:ASP:CB	4:D:532:TYR:HD2	2.28	0.46
5:E:117:GLU:CD	6:F:17:LEU:HD21	2.30	0.46
10:J:32:CYS:N	10:J:95:PHE:O	2.49	0.46
12:L:82:PHE:HA	13:M:58:GLY:HA2	1.97	0.46
15:O:64:VAL:HG13	15:O:85:VAL:CG2	2.46	0.46
18:R:120:GLU:O	18:R:124:THR:CB	2.63	0.46
1:A:1143:ARG:CD	4:D:171:ARG:HE	2.27	0.46
1:A:1274:GLY:HA2	4:D:165:LYS:H	1.81	0.46
1:A:1620:PRO:HB2	1:A:1639:PHE:CE1	2.50	0.46
1:A:2871:SER:N	19:A:4901:ADP:O2B	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3715:VAL:HA	1:A:3718:ASN:HB3	1.97	0.46
1:A:4461:LEU:HD21	1:A:4516:ILE:HG21	1.97	0.46
2:B:59:THR:O	2:B:81:ILE:C	2.51	0.46
2:B:422:ARG:CB	2:B:422:ARG:HH11	2.28	0.46
2:B:436:PHE:CD1	2:B:499:LEU:CD2	2.51	0.46
2:B:551:TYR:CD2	2:B:622:VAL:HG11	2.34	0.46
2:B:599:ILE:HG22	2:B:626:TYR:CD1	2.51	0.46
2:B:642:LEU:HD13	2:B:642:LEU:O	2.16	0.46
2:B:811:PRO:HA	2:B:900:PHE:HE2	1.80	0.46
2:B:814:TYR:O	2:B:818:LEU:CB	2.63	0.46
2:B:919:GLU:N	2:B:927:ARG:HD2	2.30	0.46
2:B:1532:PHE:CE1	2:B:1546:THR:HB	2.51	0.46
2:B:1819:SER:HA	2:B:1857:VAL:HG13	1.98	0.46
2:B:3457:PHE:CE1	2:B:3498:LEU:HD11	2.49	0.46
3:C:172:LEU:HD12	3:C:173:ALA:O	2.14	0.46
3:C:192:PRO:HB3	3:C:237:ASP:C	2.36	0.46
3:C:346:LEU:O	3:C:346:LEU:HD13	2.15	0.46
3:C:972:LEU:HD21	3:C:1017:MET:HE1	1.96	0.46
3:C:2079:ILE:HD12	3:C:2124:VAL:CG1	2.45	0.46
3:C:2621:GLU:OE2	3:C:2900:VAL:HG23	2.14	0.46
3:C:2740:ILE:HG21	3:C:2744:LYS:CD	2.45	0.46
4:D:183:ARG:HD2	11:K:72:TYR:OH	2.16	0.46
4:D:514:ARG:O	4:D:514:ARG:HG3	2.15	0.46
4:D:567:GLN:CD	4:D:578:LYS:HD2	2.28	0.46
5:E:75:HIS:N	8:H:65:PHE:O	2.33	0.46
7:G:120:THR:H	9:I:12:ILE:HG21	1.81	0.46
8:H:24:VAL:HG22	8:H:49:PHE:CZ	2.51	0.46
12:L:72:GLY:O	12:L:109:LYS:CE	2.63	0.46
1:A:617:ILE:CD1	1:A:647:GLN:NE2	2.63	0.46
1:A:634:ILE:HG23	1:A:638:TYR:CE1	2.50	0.46
1:A:688:PHE:HD2	1:A:772:TRP:CH2	2.33	0.46
1:A:814:SER:HB3	1:A:900:ASN:HD22	1.80	0.46
1:A:909:MET:HE3	1:A:955:ILE:HD11	1.87	0.46
2:B:984:ASN:O	2:B:987:ARG:CG	2.63	0.46
2:B:1235:SER:O	2:B:1239:GLU:HG3	2.15	0.46
2:B:2781:ASP:HB3	2:B:3046:ASP:HA	1.98	0.46
2:B:3074:ILE:HG23	2:B:3486:ILE:HD12	1.97	0.46
2:B:3136:TYR:HE1	2:B:3436:ASN:ND2	2.05	0.46
2:B:3525:ILE:HD11	2:B:3544:TRP:HH2	1.80	0.46
2:B:3863:LEU:HD22	2:B:3863:LEU:N	2.31	0.46
2:B:4220:LEU:O	2:B:4220:LEU:HD23	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2617:VAL:HG22	3:C:3183:ILE:CD1	2.37	0.46
4:D:141:MET:CB	4:D:158:ILE:HD13	2.45	0.46
4:D:163:ARG:NH1	12:L:73:GLU:HG2	2.30	0.46
4:D:201:GLN:OE1	9:I:81:GLU:OE2	2.34	0.46
4:D:537:ILE:HD13	4:D:647:TYR:OH	2.14	0.46
4:D:543:MET:CE	4:D:563:MET:HE3	2.38	0.46
5:E:164:VAL:HG21	5:E:485:VAL:HG23	1.97	0.46
6:F:84:SER:OG	6:F:106:ALA:CB	2.63	0.46
8:H:60:ILE:HD13	9:I:78:ILE:CD1	2.45	0.46
13:M:20:VAL:HG22	13:M:45:PHE:CZ	2.49	0.46
13:M:77:ILE:CG2	13:M:80:LEU:HB3	2.46	0.46
1:A:737:TYR:HD1	1:A:759:LEU:HD21	1.81	0.46
1:A:791:LEU:HG	1:A:795:ILE:HD12	1.97	0.46
1:A:808:ASN:O	1:A:812:THR:HG23	2.16	0.46
1:A:837:GLN:NE2	1:A:958:ALA:HA	2.30	0.46
1:A:2727:LEU:HD22	1:A:2772:GLU:HG2	1.97	0.46
1:A:3124:ILE:CD1	1:A:3425:GLU:CG	2.92	0.46
1:A:3257:VAL:HG22	1:A:3266:VAL:HG12	1.90	0.46
2:B:729:LEU:HB3	2:B:734:GLU:OE2	2.16	0.46
2:B:886:ILE:HD11	2:B:976:LEU:HD21	1.96	0.46
2:B:1507:LYS:CG	2:B:1571:GLU:OE1	2.64	0.46
2:B:1521:VAL:CG2	2:B:1585:SER:HB3	2.45	0.46
2:B:1566:ASN:CB	3:C:2275:LYS:HE2	2.40	0.46
3:C:90:ILE:HD11	3:C:96:LEU:CD2	2.46	0.46
3:C:1188:LEU:HD21	3:C:1218:VAL:HG22	1.97	0.46
4:D:301:SER:CB	4:D:352:CYS:HA	2.46	0.46
5:E:16:ASN:N	5:E:17:PRO:HD3	2.31	0.46
6:F:54:ASP:OD1	7:G:109:LYS:HE2	2.15	0.46
15:O:19:LEU:HD23	15:O:19:LEU:C	2.35	0.46
1:A:841:ILE:HD12	1:A:961:ALA:HB1	1.93	0.46
1:A:2870:GLY:H	19:A:4901:ADP:PB	2.39	0.46
1:A:3232:ILE:CG2	1:A:3316:TRP:CE3	2.87	0.46
2:B:559:GLN:HB2	2:B:629:ILE:CD1	2.45	0.46
2:B:584:PRO:CD	5:E:186:PHE:HD2	2.27	0.46
2:B:733:GLU:CG	2:B:783:MET:HG2	2.45	0.46
2:B:1083:MET:SD	2:B:1083:MET:C	2.94	0.46
2:B:2885:ASN:HB2	2:B:3043:THR:HG22	1.98	0.46
3:C:1658:ASP:O	20:C:4201:ATP:N6	2.49	0.46
3:C:2721:GLU:HG3	3:C:2813:ILE:HG22	1.98	0.46
3:C:2931:ALA:HB1	3:C:2975:LEU:HD21	1.97	0.46
4:D:379:ASN:OD1	5:E:138:SER:OG	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:465:ASN:HB2	4:D:508:TRP:CE2	2.51	0.46
4:D:477:GLU:HA	4:D:502:ALA:CB	2.45	0.46
5:E:150:LEU:CD1	5:E:475:LEU:HD22	2.46	0.46
10:J:76:TRP:CE2	10:J:109:GLN:HB2	2.51	0.46
14:N:89:GLN:HE22	14:N:116:ALA:N	2.03	0.46
1:A:61:GLU:CB	1:A:98:ILE:O	2.64	0.46
1:A:598:ARG:CZ	4:D:546:VAL:HG12	2.44	0.46
1:A:3237:MET:O	1:A:3241:LEU:HG	2.16	0.46
2:B:804:ARG:CZ	2:B:896:ILE:CG2	2.93	0.46
2:B:888:PRO:O	2:B:891:ILE:HG23	2.15	0.46
2:B:1002:GLN:C	2:B:1004:SER:H	2.18	0.46
2:B:2577:GLN:OE1	2:B:2636:ARG:NH1	2.49	0.46
2:B:2893:GLY:HA3	2:B:3109:LYS:HB2	1.97	0.46
2:B:4451:LEU:HD11	2:B:4559:PHE:CD1	2.51	0.46
3:C:267:PHE:CD1	3:C:293:VAL:HG22	2.50	0.46
3:C:2119:ILE:HG21	3:C:2122:THR:CG2	2.46	0.46
3:C:3151:LYS:CE	3:C:3217:ILE:HD11	2.46	0.46
3:C:3806:LYS:O	3:C:3810:ARG:HG3	2.15	0.46
4:D:239:THR:HA	4:D:242:LYS:HD3	1.96	0.46
4:D:573:VAL:CG2	4:D:579:LEU:HD21	2.46	0.46
5:E:27:TYR:H	5:E:27:TYR:HD1	1.61	0.46
5:E:110:LYS:HG3	6:F:10:GLN:OE1	2.15	0.46
5:E:120:ILE:HG23	6:F:101:GLN:OE1	2.15	0.46
5:E:437:TRP:CZ2	5:E:446:ILE:HG13	2.51	0.46
7:G:77:LEU:HB2	7:G:90:PHE:HE2	1.80	0.46
12:L:49:LEU:N	12:L:49:LEU:CD2	2.79	0.46
1:A:935:VAL:HA	1:A:944:LEU:CD2	2.46	0.46
1:A:3230:LEU:CA	1:A:3233:ILE:HG22	2.46	0.46
2:B:511:PHE:CE2	2:B:543:LYS:HG3	2.50	0.46
2:B:533:ARG:NE	2:B:534:PRO:HD3	2.31	0.46
2:B:799:VAL:C	2:B:800:LYS:HA	2.33	0.46
2:B:804:ARG:CZ	2:B:896:ILE:HG22	2.45	0.46
2:B:954:ASP:OD2	3:C:282:ARG:CD	2.62	0.46
2:B:1603:LYS:HB3	2:B:1610:TYR:CZ	2.50	0.46
2:B:3121:LEU:HD13	2:B:3121:LEU:O	2.14	0.46
2:B:3231:VAL:HG22	2:B:3342:ASN:C	2.36	0.46
2:B:3243:LYS:HD2	2:B:3284:MET:O	2.15	0.46
2:B:3267:ILE:O	2:B:3267:ILE:HG22	2.16	0.46
2:B:4152:ASN:HD21	2:B:4553:ARG:NH2	2.13	0.46
3:C:216:ILE:O	3:C:216:ILE:HG13	2.16	0.46
3:C:1612:ILE:N	3:C:1613:PRO:HD2	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:68:GLU:HG2	5:E:12:LYS:C	2.36	0.46
4:D:145:GLU:HA	4:D:151:ALA:HB3	1.97	0.46
4:D:183:ARG:HB3	11:K:72:TYR:HE2	1.79	0.46
4:D:635:ALA:HB1	4:D:639:PHE:HB3	1.98	0.46
5:E:74:SER:OG	9:I:56:ILE:HB	2.16	0.46
15:O:34:ILE:HD11	15:O:76:VAL:HG21	1.98	0.46
15:O:91:LYS:NZ	15:O:91:LYS:CB	2.76	0.46
1:A:751:LEU:CD2	1:A:866:ILE:CD1	2.92	0.46
1:A:878:VAL:CG2	1:A:879:LEU:N	2.79	0.46
1:A:1458:MET:CE	1:A:1548:TRP:NE1	2.79	0.46
1:A:1613:ILE:HD11	1:A:1626:ASP:HB2	1.96	0.46
2:B:865:VAL:CG2	3:C:169:TYR:HB3	2.46	0.46
2:B:1076:LEU:HD23	2:B:1076:LEU:H	1.79	0.46
2:B:1511:VAL:CA	2:B:1570:VAL:HG13	2.34	0.46
2:B:2333:PRO:HB3	20:B:5601:ATP:N6	2.30	0.46
2:B:3320:LYS:HB3	2:B:3325:ASP:HB2	1.98	0.46
2:B:3388:VAL:CG1	2:B:3392:LYS:HE3	2.46	0.46
2:B:3446:SER:HB2	2:B:3489:THR:HG23	0.54	0.46
2:B:3791:VAL:O	2:B:3796:ARG:NH1	2.49	0.46
2:B:4041:LEU:CB	2:B:4044:ILE:HD11	2.46	0.46
2:B:4228:PRO:HB2	2:B:4229:TYR:CD2	2.51	0.46
2:B:4548:TYR:CD2	2:B:4553:ARG:HD2	2.52	0.46
3:C:1383:ASP:O	3:C:1387:VAL:HG23	2.16	0.46
3:C:1887:LEU:HD21	3:C:1902:PHE:HD1	1.81	0.46
3:C:2585:PHE:HE1	3:C:2929:LEU:N	2.11	0.46
4:D:636:MET:HA	4:D:636:MET:HE3	1.98	0.46
5:E:285:ASP:CG	5:E:285:ASP:O	2.53	0.46
5:E:430:ARG:O	5:E:430:ARG:HG2	2.16	0.46
6:F:85:TYR:HB3	6:F:87:TYR:CE1	2.51	0.46
7:G:137:VAL:HG22	7:G:146:ILE:HG23	1.98	0.46
11:K:33:VAL:HG22	11:K:42:ILE:HG13	1.97	0.46
12:L:73:GLU:HG3	13:M:66:ILE:HG21	1.98	0.46
14:N:8:TYR:HE1	14:N:13:VAL:HG21	1.77	0.46
15:O:72:LYS:HD3	15:O:72:LYS:O	2.16	0.46
1:A:614:PHE:CD1	1:A:644:LEU:HD23	2.46	0.45
1:A:801:ILE:CG2	1:A:862:LEU:HG	2.44	0.45
1:A:819:VAL:C	1:A:840:TYR:CE2	2.89	0.45
1:A:1449:ILE:HG13	1:A:1452:LYS:HZ1	1.81	0.45
1:A:1637:VAL:HG11	1:A:1653:ILE:CG2	2.44	0.45
1:A:2866:VAL:HG11	1:A:3026:TRP:CZ3	2.50	0.45
1:A:3855:ALA:HB2	1:A:4413:ALA:HB2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:477:ILE:O	2:B:477:ILE:CG2	2.62	0.45
2:B:887:ASN:HA	2:B:888:PRO:HD3	1.87	0.45
2:B:962:PHE:CB	2:B:965:ILE:HD13	2.45	0.45
2:B:2494:TRP:CD1	2:B:2519:ARG:HB3	2.51	0.45
2:B:3103:TYR:CD2	2:B:3632:HIS:CD2	3.05	0.45
2:B:3514:ALA:HB3	2:B:3659:ALA:CB	2.46	0.45
3:C:1718:VAL:HG21	3:C:1737:LEU:HD21	1.97	0.45
3:C:2204:ILE:HB	3:C:3956:ALA:HB1	1.97	0.45
3:C:2726:THR:O	3:C:2729:LEU:CB	2.63	0.45
3:C:2742:LYS:CE	3:C:2785:VAL:CG2	2.79	0.45
4:D:584:ILE:HD11	4:D:590:LEU:HD21	1.98	0.45
5:E:394:TRP:HD1	5:E:400:THR:O	1.98	0.45
6:F:62:VAL:CG1	7:G:106:LEU:HD21	2.46	0.45
6:F:91:GLN:CD	6:F:96:THR:CG2	2.74	0.45
8:H:50:ARG:HH22	9:I:88:THR:HG21	1.80	0.45
8:H:80:TYR:CD1	8:H:80:TYR:O	2.69	0.45
12:L:74:TRP:CD2	12:L:109:LYS:HD2	2.48	0.45
1:A:688:PHE:HB3	1:A:727:TYR:HE2	1.81	0.45
1:A:899:LEU:HD22	1:A:995:ILE:CD1	2.46	0.45
1:A:1052:LEU:HD13	1:A:1166:TYR:CD2	2.51	0.45
1:A:1458:MET:CE	1:A:1548:TRP:HD1	2.22	0.45
1:A:1613:ILE:O	1:A:1680:ILE:HD12	2.16	0.45
1:A:2511:ASP:HB2	1:A:2514:LYS:HB2	1.98	0.45
1:A:3306:LEU:HD22	1:A:3309:TYR:CB	2.43	0.45
2:B:433:ILE:HG12	2:B:463:PHE:CE1	2.51	0.45
2:B:714:ALA:HB1	2:B:766:ILE:HD13	1.97	0.45
2:B:1119:LYS:CB	2:B:1138:LYS:HZ3	2.22	0.45
2:B:1490:GLN:HB3	2:B:3612:ASP:CB	2.47	0.45
2:B:3875:GLN:HA	2:B:3878:ILE:HD12	1.98	0.45
2:B:4287:LEU:C	2:B:4287:LEU:HD13	2.37	0.45
3:C:231:ILE:HG13	3:C:231:ILE:O	2.15	0.45
3:C:269:PHE:HB2	3:C:291:SER:CB	2.43	0.45
3:C:2719:VAL:HG23	3:C:2751:TRP:HB2	1.97	0.45
3:C:2763:GLU:HA	3:C:2763:GLU:OE2	2.16	0.45
3:C:2923:LEU:HB3	3:C:2966:SER:OG	2.17	0.45
4:D:251:MET:HG3	7:G:125:PHE:CZ	2.52	0.45
5:E:64:GLU:OE1	5:E:64:GLU:N	2.48	0.45
8:H:77:ILE:HG22	8:H:88:LEU:CD1	2.47	0.45
15:O:34:ILE:HD12	15:O:71:ILE:HG23	1.99	0.45
1:A:331:THR:C	1:A:380:ARG:CB	2.84	0.45
1:A:655:PHE:O	1:A:659:TRP:HD1	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1126:VAL:HG11	1:A:1201:TYR:HE1	1.81	0.45
1:A:1127:LYS:C	1:A:1208:TYR:OH	2.55	0.45
1:A:1647:ASN:N	1:A:1648:PRO:CD	2.80	0.45
1:A:2027:PHE:CE2	1:A:2051:ILE:HG23	2.50	0.45
1:A:2164:SER:HB2	20:A:4801:ATP:O2A	2.16	0.45
1:A:3067:HIS:CD2	1:A:3092:PHE:HB2	2.52	0.45
1:A:3290:LEU:HD23	1:A:3335:TRP:CH2	2.37	0.45
1:A:4445:ARG:HG2	1:A:4466:GLY:HA2	1.97	0.45
2:B:88:GLY:HA2	2:B:100:THR:CB	2.47	0.45
2:B:349:ASN:CB	2:B:416:LEU:CD1	2.94	0.45
2:B:413:PHE:CD2	2:B:416:LEU:HD12	2.51	0.45
2:B:439:LEU:HD21	2:B:456:ILE:HG23	1.99	0.45
2:B:822:PHE:O	2:B:826:LEU:HG	2.16	0.45
2:B:861:ASP:HB3	3:C:170:GLN:CB	2.46	0.45
2:B:935:ASN:CB	3:C:283:THR:HG21	2.35	0.45
2:B:2820:PHE:CZ	2:B:2836:GLN:HB3	2.52	0.45
2:B:3241:GLU:O	2:B:3245:LEU:N	2.50	0.45
3:C:161:PHE:HD2	3:C:177:LEU:HB2	1.81	0.45
3:C:195:ASN:C	3:C:239:TRP:HZ2	2.09	0.45
3:C:2669:ILE:HD13	3:C:2847:ALA:CB	2.17	0.45
3:C:2711:SER:CA	3:C:2751:TRP:HZ2	2.25	0.45
4:D:297:LYS:HZ3	4:D:328:LEU:CG	2.26	0.45
5:E:291:TRP:CH2	5:E:300:PRO:HD3	2.52	0.45
7:G:111:ARG:HA	7:G:123:LEU:HG	1.98	0.45
8:H:79:LEU:HD11	8:H:86:ILE:HB	1.98	0.45
1:A:590:GLN:CB	1:A:609:TRP:CH2	2.98	0.45
1:A:614:PHE:CZ	1:A:648:LEU:CD1	2.99	0.45
1:A:759:LEU:HD21	1:A:788:LEU:CD2	2.46	0.45
1:A:1727:LEU:HD11	1:A:1788:GLN:HE21	1.82	0.45
1:A:2907:LYS:HB2	1:A:2950:LEU:HD11	1.98	0.45
1:A:3049:LEU:HD12	1:A:3103:TYR:OH	2.16	0.45
1:A:3280:THR:HG22	1:A:3286:PHE:CD1	2.52	0.45
1:A:3453:PHE:HA	1:A:3457:CYS:SG	2.56	0.45
1:A:4082:PHE:CG	1:A:4083:PRO:HD2	2.52	0.45
2:B:523:LEU:C	2:B:523:LEU:CD2	2.85	0.45
2:B:1115:ASP:O	2:B:1119:LYS:HG3	2.16	0.45
2:B:1444:LEU:O	2:B:1448:GLU:CG	2.60	0.45
2:B:1447:ILE:HG12	2:B:1480:HIS:HB3	1.99	0.45
2:B:1490:GLN:OE1	2:B:3612:ASP:HB2	2.16	0.45
2:B:3140:LEU:CB	2:B:3433:TRP:CE3	2.52	0.45
2:B:3228:GLU:HG2	2:B:3346:PHE:CZ	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3231:VAL:HA	2:B:3339:TRP:HA	1.99	0.45
2:B:3267:ILE:CG2	2:B:3271:ASP:CB	2.93	0.45
3:C:102:TYR:CD1	3:C:103:THR:HG23	2.50	0.45
3:C:2585:PHE:HE1	3:C:2929:LEU:HB2	1.78	0.45
4:D:89:TYR:CG	11:K:56:PRO:HB3	2.51	0.45
4:D:174:GLN:HA	13:M:61:PHE:O	2.15	0.45
4:D:431:ASN:HA	5:E:142:VAL:HB	1.98	0.45
4:D:543:MET:CG	4:D:563:MET:HB3	2.46	0.45
4:D:553:TYR:OH	4:D:620:LEU:HD11	2.16	0.45
4:D:595:PHE:CE1	4:D:602:LEU:HD21	2.43	0.45
5:E:168:SER:CB	5:E:222:SER:HA	2.47	0.45
5:E:428:VAL:HG11	5:E:460:ILE:HB	1.97	0.45
7:G:58:SER:O	7:G:62:ASP:HB2	2.10	0.45
8:H:28:ALA:CB	8:H:86:ILE:CD1	2.91	0.45
14:N:116:ALA:HB1	15:O:131:PHE:CZ	2.51	0.45
1:A:1007:GLN:HA	1:A:1010:LYS:CE	2.44	0.45
1:A:1135:VAL:HG12	1:A:1136:MET:CE	2.46	0.45
1:A:2418:ILE:CG2	1:A:2428:VAL:HG22	2.47	0.45
1:A:3592:ASP:N	1:A:3593:PRO:HD2	2.32	0.45
2:B:277:GLU:O	2:B:281:ALA:HB2	2.17	0.45
2:B:467:VAL:C	2:B:471:THR:CB	2.70	0.45
2:B:533:ARG:NE	2:B:534:PRO:CD	2.79	0.45
2:B:725:ILE:CG2	2:B:776:LEU:HG	2.31	0.45
2:B:811:PRO:HA	2:B:900:PHE:CE2	2.51	0.45
2:B:3252:VAL:HG22	2:B:3330:SER:OG	2.15	0.45
2:B:4040:MET:HG2	2:B:4075:PHE:HB2	1.97	0.45
3:C:10:LEU:CD1	3:C:67:CYS:HB3	2.47	0.45
3:C:360:PRO:CG	3:C:361:PRO:HD2	2.46	0.45
3:C:463:PRO:O	3:C:465:LEU:N	2.43	0.45
4:D:538:CYS:O	4:D:538:CYS:SG	2.73	0.45
4:D:624:GLY:N	4:D:625:PRO:CD	2.79	0.45
5:E:99:ILE:HD13	6:F:31:ILE:HD11	1.85	0.45
5:E:343:LEU:HD13	5:E:355:ILE:HG21	1.97	0.45
6:F:80:ARG:NH2	6:F:103:CYS:SG	2.85	0.45
7:G:74:LEU:HD22	7:G:148:ILE:CG2	2.47	0.45
10:J:77:HIS:CA	11:K:70:VAL:HG23	2.46	0.45
12:L:70:GLY:N	12:L:109:LYS:NZ	2.65	0.45
13:M:53:TRP:CZ3	13:M:86:LYS:HB2	2.50	0.45
1:A:624:PHE:O	1:A:637:TYR:OH	2.19	0.45
1:A:886:ILE:O	1:A:890:TYR:CD1	2.66	0.45
1:A:894:PHE:CG	1:A:972:TRP:HH2	2.34	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1041:ASN:CA	1:A:1047:ASN:ND2	2.79	0.45
1:A:1134:TYR:CB	1:A:1268:ARG:HE	2.30	0.45
1:A:3248:LEU:HD12	17:Q:104:TYR:CZ	2.51	0.45
1:A:3999:THR:HG21	1:A:4044:GLN:NE2	2.31	0.45
2:B:682:LYS:HE2	5:E:186:PHE:CZ	2.48	0.45
2:B:814:TYR:O	2:B:818:LEU:HG	2.17	0.45
2:B:903:ARG:CG	2:B:914:ASP:OD2	2.56	0.45
2:B:1107:ARG:HE	2:B:1172:LYS:HZ1	1.63	0.45
2:B:1116:PHE:CA	2:B:1119:LYS:HZ3	2.19	0.45
2:B:1806:ILE:HD12	2:B:4535:GLU:HB2	1.98	0.45
2:B:2267:ILE:HD12	2:B:2311:ALA:HB2	1.99	0.45
2:B:2731:SER:OG	2:B:2732:ALA:N	2.50	0.45
2:B:3236:LYS:HA	2:B:3291:ILE:HG13	1.97	0.45
3:C:2357:LEU:HD23	3:C:2488:ILE:HD12	1.99	0.45
3:C:2720:PRO:CA	3:C:2798:PHE:CE2	2.95	0.45
4:D:177:ASN:HD21	13:M:60:ASN:HB2	0.29	0.45
4:D:248:MET:CE	7:G:147:VAL:HG21	2.42	0.45
4:D:531:LYS:NZ	4:D:532:TYR:CE1	2.84	0.45
5:E:289:MET:HB3	5:E:300:PRO:CB	2.47	0.45
5:E:433:TRP:NE1	5:E:451:LYS:HD3	2.32	0.45
7:G:119:PRO:HG2	9:I:12:ILE:HD13	1.97	0.45
8:H:43:THR:CB	9:I:86:ASP:OD2	2.65	0.45
11:K:29:ALA:HB1	11:K:87:ILE:HD12	1.98	0.45
11:K:36:TYR:CD2	11:K:41:LYS:HB3	2.45	0.45
14:N:75:GLN:N	15:O:93:GLN:HE21	2.03	0.45
15:O:24:TYR:CD1	15:O:26:LYS:HE2	2.51	0.45
1:A:1133:GLY:HA2	1:A:1272:LEU:CG	2.45	0.45
1:A:1639:PHE:CE1	1:A:1653:ILE:CG1	2.98	0.45
1:A:2030:LEU:HB2	1:A:2101:ILE:HD13	1.98	0.45
1:A:2786:CYS:HB3	1:A:2850:LEU:HD22	1.98	0.45
1:A:3260:LYS:NZ	1:A:3267:LEU:HD21	2.32	0.45
1:A:3560:HIS:CG	1:A:3561:PRO:HD2	2.51	0.45
2:B:718:ILE:HB	2:B:770:LYS:NZ	2.32	0.45
2:B:1119:LYS:CB	2:B:1138:LYS:HZ2	2.19	0.45
2:B:1492:LYS:HZ1	2:B:3606:GLN:CD	2.04	0.45
2:B:1792:THR:HG22	2:B:2038:ASN:HD21	1.80	0.45
2:B:3077:SER:HG	2:B:3486:ILE:HD11	1.82	0.45
2:B:3157:LEU:HA	2:B:3160:LYS:CE	2.47	0.45
2:B:3690:LEU:O	2:B:3694:LEU:HD23	2.16	0.45
3:C:111:THR:HG21	3:C:187:TRP:CH2	2.52	0.45
3:C:261:ILE:HG23	3:C:385:ASP:CB	2.43	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:338:PHE:CD2	3:C:338:PHE:O	2.70	0.45
3:C:341:TRP:HB2	3:C:345:TRP:NE1	2.32	0.45
5:E:121:TYR:CZ	6:F:17:LEU:HD22	2.52	0.45
5:E:355:ILE:H	5:E:355:ILE:CD1	2.24	0.45
6:F:61:LYS:NZ	8:H:33:ASP:O	2.49	0.45
9:I:79:ILE:HG22	9:I:105:VAL:HG13	1.98	0.45
12:L:37:GLN:HG2	12:L:60:PHE:CD1	2.51	0.45
1:A:805:ARG:HH11	5:E:149:THR:HG21	1.82	0.45
1:A:899:LEU:HD21	1:A:989:ILE:HG12	1.98	0.45
1:A:1274:GLY:CA	4:D:164:ASN:CG	2.81	0.45
1:A:1550:LYS:HB3	1:A:1554:LYS:NZ	2.32	0.45
1:A:3095:TYR:CE1	1:A:3452:ALA:HA	2.51	0.45
1:A:3350:LYS:CB	1:A:3351:PRO:CD	2.92	0.45
1:A:3638:LEU:HA	1:A:3641:LYS:HE3	1.98	0.45
1:A:4583:TYR:HB3	1:A:4584:PRO:HD2	1.98	0.45
2:B:867:VAL:CG1	2:B:944:ILE:HD13	2.46	0.45
2:B:1212:ILE:HG22	2:B:1213:PRO:HD3	1.97	0.45
2:B:1230:MET:SD	2:B:1266:VAL:CB	3.04	0.45
2:B:2543:GLY:N	19:B:5501:ADP:O2A	2.49	0.45
2:B:3140:LEU:HD12	2:B:3433:TRP:HB3	1.99	0.45
2:B:3528:CYS:SG	2:B:3642:THR:HG21	2.57	0.45
3:C:98:PHE:CE2	3:C:160:ILE:HD13	2.52	0.45
3:C:211:LYS:HB3	3:C:212:PRO:HD2	1.97	0.45
3:C:227:SER:HB3	3:C:249:PRO:HA	1.97	0.45
3:C:3244:VAL:HB	3:C:3878:VAL:HG22	1.98	0.45
4:D:209:TYR:HE1	4:D:213:MET:SD	2.40	0.45
4:D:329:ILE:CD1	4:D:350:VAL:HG21	2.44	0.45
4:D:620:LEU:HD12	4:D:620:LEU:C	2.31	0.45
5:E:435:ASP:N	5:E:435:ASP:OD1	2.49	0.45
5:E:492:ASP:N	5:E:495:TYR:CE2	2.84	0.45
5:E:497:MET:CE	5:E:501:GLU:HB2	2.47	0.45
6:F:23:TYR:CD1	6:F:23:TYR:O	2.70	0.45
8:H:46:LYS:CE	9:I:86:ASP:O	2.61	0.45
8:H:84:LEU:N	8:H:84:LEU:CD1	2.79	0.45
9:I:85:TYR:O	9:I:85:TYR:CD1	2.70	0.45
12:L:16:LEU:HD11	12:L:35:ILE:HG21	1.98	0.45
12:L:73:GLU:CB	13:M:66:ILE:CD1	2.78	0.45
14:N:74:GLN:NE2	14:N:77:ASN:HA	2.31	0.45
15:O:30:TYR:CE1	15:O:34:ILE:HG13	2.51	0.45
1:A:21:LEU:O	1:A:25:ASP:C	2.55	0.45
1:A:753:LEU:C	1:A:753:LEU:CD2	2.85	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1013:VAL:CG2	1:A:1076:LEU:HD11	2.46	0.45
1:A:1100:LEU:CD2	1:A:1100:LEU:C	2.85	0.45
1:A:1126:VAL:CG2	1:A:1201:TYR:OH	2.63	0.45
1:A:1143:ARG:HE	4:D:171:ARG:HH21	1.65	0.45
1:A:1778:ARG:HA	1:A:1778:ARG:NE	2.31	0.45
1:A:3229:PRO:CB	1:A:3233:ILE:HD13	2.46	0.45
1:A:3306:LEU:HD11	1:A:3310:LEU:CG	2.44	0.45
2:B:744:MET:HE1	2:B:772:ILE:HG13	1.95	0.45
2:B:804:ARG:CZ	2:B:899:LEU:HB3	2.47	0.45
2:B:956:LEU:HA	2:B:959:ILE:HG13	1.99	0.45
2:B:1498:TYR:C	2:B:1500:ARG:N	2.70	0.45
2:B:1604:LYS:HA	2:B:1945:GLN:OE1	2.17	0.45
2:B:3131:ARG:C	2:B:3131:ARG:CD	2.85	0.45
4:D:94:ARG:NE	11:K:52:GLU:O	2.47	0.45
5:E:256:PRO:HG2	5:E:259:ASN:HB3	1.98	0.45
13:M:64:HIS:CG	13:M:64:HIS:O	2.70	0.45
15:O:31:PRO:CD	15:O:109:ASN:ND2	2.80	0.45
1:A:670:LEU:CD2	1:A:670:LEU:C	2.86	0.45
1:A:805:ARG:NH2	5:E:152:LEU:CD1	2.80	0.45
1:A:1013:VAL:CG1	1:A:1076:LEU:HD21	2.46	0.45
1:A:3271:GLU:CD	1:A:3272:SER:H	2.20	0.45
2:B:514:TYR:CE2	2:B:523:LEU:HB2	2.51	0.45
2:B:642:LEU:C	2:B:642:LEU:CD1	2.86	0.45
2:B:1237:ARG:CD	2:B:1260:ALA:CA	2.84	0.45
2:B:2546:ALA:HB2	19:B:5501:ADP:H5'2	1.98	0.45
2:B:3261:ILE:C	2:B:3306:ILE:CG2	2.83	0.45
2:B:3265:GLN:HG3	2:B:3283:PHE:CE2	2.52	0.45
2:B:3947:ARG:NH1	2:B:3957:VAL:HG11	2.32	0.45
3:C:53:PRO:CD	3:C:81:PRO:HB2	2.47	0.45
3:C:1174:LEU:CD1	3:C:1191:ILE:HG22	2.47	0.45
4:D:68:GLU:HG3	5:E:12:LYS:CB	2.47	0.45
4:D:526:ARG:CB	4:D:528:TRP:CZ2	2.97	0.45
5:E:58:GLU:CB	10:J:89:VAL:HG22	2.45	0.45
5:E:334:LEU:CD1	5:E:344:THR:HG22	2.47	0.45
9:I:32:GLY:HA2	9:I:35:LEU:HD12	1.98	0.45
10:J:28:TRP:CE3	10:J:28:TRP:O	2.70	0.45
12:L:55:LEU:C	12:L:55:LEU:CD2	2.86	0.45
12:L:76:CYS:SG	12:L:106:LEU:O	2.70	0.45
15:O:33:LYS:NZ	15:O:75:LYS:HD2	2.32	0.45
1:A:7:SER:C	1:A:9:ARG:N	2.70	0.44
1:A:758:ASP:HA	1:A:761:LEU:HB3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:935:VAL:HG12	1:A:1081:ILE:CD1	2.44	0.44
1:A:1127:LYS:O	1:A:1208:TYR:OH	2.34	0.44
1:A:1134:TYR:HB2	1:A:1268:ARG:HE	1.82	0.44
1:A:1390:LYS:C	1:A:1392:ASN:H	2.21	0.44
1:A:1458:MET:SD	1:A:1552:MET:HB2	2.57	0.44
1:A:3293:PHE:HZ	1:A:3335:TRP:HH2	1.61	0.44
2:B:649:GLU:O	2:B:652:SER:OG	2.29	0.44
2:B:658:GLN:HG2	2:B:673:PHE:CA	2.47	0.44
2:B:859:TYR:C	2:B:859:TYR:CD1	2.90	0.44
2:B:1237:ARG:HH22	2:B:1262:ASP:CB	2.30	0.44
2:B:3297:PHE:CE2	2:B:3302:ILE:CD1	2.96	0.44
2:B:3770:MET:HE1	2:B:4080:PRO:CB	2.46	0.44
2:B:3901:TRP:CZ2	2:B:3907:PRO:HB2	2.52	0.44
3:C:294:LEU:HB2	3:C:301:TRP:CE3	2.52	0.44
3:C:346:LEU:HD22	3:C:346:LEU:C	2.37	0.44
3:C:1690:LYS:N	20:C:4201:ATP:O2B	2.47	0.44
3:C:2593:ARG:CZ	3:C:2921:LEU:HD21	2.47	0.44
3:C:2787:ILE:HD13	3:C:2824:TYR:HB3	1.99	0.44
3:C:3054:SER:OG	3:C:3055:ALA:N	2.48	0.44
4:D:66:LEU:CB	4:D:70:MET:HB2	2.46	0.44
4:D:172:GLU:H	4:D:172:GLU:HG2	1.60	0.44
4:D:329:ILE:HB	4:D:344:PHE:HB2	1.98	0.44
4:D:501:LEU:HD12	4:D:522:ASP:CA	2.47	0.44
5:E:14:PHE:CD1	5:E:14:PHE:O	2.70	0.44
5:E:46:ASN:HB2	12:L:90:ALA:HA	1.98	0.44
5:E:57:SER:O	10:J:90:HIS:CD2	2.69	0.44
5:E:67:LYS:O	8:H:72:GLU:HA	2.17	0.44
5:E:453:SER:HB3	5:E:480:ASP:OD2	2.16	0.44
7:G:76:TYR:CG	7:G:76:TYR:O	2.70	0.44
1:A:751:LEU:CD2	1:A:751:LEU:C	2.86	0.44
1:A:1889:LEU:HD12	1:A:1920:TRP:CZ2	2.52	0.44
1:A:3546:SER:HA	1:A:3549:ILE:HG22	2.00	0.44
2:B:515:ASP:HA	2:B:520:ARG:NH2	2.32	0.44
2:B:746:GLU:O	2:B:750:PRO:CD	2.64	0.44
2:B:1447:ILE:CG2	2:B:1504:TRP:CZ2	2.84	0.44
2:B:1612:LEU:CD2	2:B:1637:CYS:SG	3.03	0.44
2:B:2417:LEU:N	2:B:2418:PRO:HD2	2.31	0.44
2:B:3261:ILE:O	2:B:3306:ILE:HG23	2.08	0.44
2:B:3606:GLN:HE21	2:B:3613:PRO:HB2	1.82	0.44
3:C:336:ILE:N	3:C:336:ILE:CD1	2.79	0.44
3:C:379:LYS:CA	3:C:418:CYS:O	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2018:GLN:NE2	19:C:4702:ADP:C2'	2.54	0.44
3:C:2213:ARG:NH2	19:C:4702:ADP:PB	2.89	0.44
3:C:2745:LYS:CG	3:C:2749:VAL:CG2	2.71	0.44
4:D:246:LYS:HE2	4:D:250:ARG:HH21	1.82	0.44
4:D:360:ALA:C	5:E:133:PHE:HZ	2.21	0.44
5:E:80:TRP:CZ3	5:E:84:VAL:HG11	2.52	0.44
5:E:129:LEU:HD12	6:F:80:ARG:NE	2.32	0.44
5:E:325:ASN:CB	5:E:375:ARG:HD2	2.48	0.44
5:E:386:VAL:HG21	5:E:415:GLY:CA	2.48	0.44
5:E:394:TRP:CG	5:E:401:PRO:HA	2.44	0.44
5:E:498:GLN:HB3	5:E:499:PRO:HD2	1.99	0.44
15:O:30:TYR:CD2	15:O:30:TYR:O	2.70	0.44
1:A:686:VAL:HG21	1:A:731:LEU:HD21	1.83	0.44
1:A:801:ILE:HG22	1:A:862:LEU:HD11	1.98	0.44
1:A:821:LEU:O	1:A:912:ARG:CZ	2.66	0.44
1:A:1013:VAL:CG1	1:A:1076:LEU:CD2	2.95	0.44
1:A:1066:VAL:HG11	1:A:1068:THR:O	2.14	0.44
1:A:1132:LEU:O	1:A:1272:LEU:HD21	2.17	0.44
1:A:1143:ARG:NE	4:D:171:ARG:HH21	2.14	0.44
1:A:1162:LEU:C	1:A:1162:LEU:CD2	2.86	0.44
1:A:1417:GLU:O	1:A:1420:THR:OG1	2.29	0.44
1:A:1436:ILE:HG22	1:A:1440:TRP:HD1	1.82	0.44
1:A:1478:LEU:HB3	1:A:1494:VAL:HG13	1.99	0.44
1:A:1540:GLN:O	1:A:1544:ILE:CB	2.64	0.44
1:A:3235:TYR:CE2	1:A:3269:LEU:HD11	2.06	0.44
2:B:177:PRO:O	2:B:197:GLU:CB	2.65	0.44
2:B:591:TRP:NE1	5:E:411:TYR:OH	2.51	0.44
2:B:660:LEU:HG	2:B:755:ILE:HG21	1.98	0.44
2:B:844:LEU:C	2:B:844:LEU:CD2	2.85	0.44
2:B:993:TYR:CZ	2:B:1067:ILE:HG21	2.52	0.44
2:B:1529:TYR:HA	2:B:1549:PHE:CZ	2.52	0.44
2:B:1606:PHE:HB3	2:B:1609:PHE:CD2	2.53	0.44
2:B:2961:PRO:HA	2:B:2971:ILE:HD12	1.99	0.44
2:B:3147:GLN:HB2	2:B:3426:LEU:HB3	1.98	0.44
2:B:3238:HIS:HE1	2:B:3335:LYS:HE3	1.83	0.44
3:C:227:SER:CB	3:C:249:PRO:HA	2.47	0.44
3:C:287:PHE:CE1	3:C:322:GLU:HB2	2.52	0.44
3:C:380:VAL:N	3:C:418:CYS:O	2.51	0.44
3:C:2207:HIS:CE1	3:C:2514:TRP:CZ3	3.06	0.44
3:C:2760:SER:HB2	3:C:2763:GLU:CG	2.48	0.44
3:C:2903:LEU:C	3:C:2903:LEU:CD2	2.86	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2934:PHE:CE2	3:C:3001:ILE:CG1	3.00	0.44
4:D:79:ASN:ND2	15:O:103:TRP:CH2	2.85	0.44
4:D:294:GLN:CG	4:D:297:LYS:HZ1	2.28	0.44
4:D:312:PHE:CD1	4:D:312:PHE:O	2.70	0.44
4:D:576:LEU:C	4:D:576:LEU:CD1	2.85	0.44
5:E:26:ARG:HB2	5:E:26:ARG:CZ	2.48	0.44
5:E:61:VAL:HG11	10:J:95:PHE:CE1	2.52	0.44
9:I:35:LEU:HB3	9:I:39:GLN:HE21	1.82	0.44
9:I:85:TYR:CD1	9:I:85:TYR:C	2.90	0.44
12:L:27:ALA:HB3	12:L:30:LEU:HG	1.98	0.44
14:N:78:HIS:O	14:N:78:HIS:CG	2.70	0.44
1:A:933:VAL:CG2	1:A:951:ILE:CD1	2.93	0.44
1:A:948:LEU:HB3	1:A:1010:LYS:CD	2.45	0.44
1:A:971:ASN:CB	1:A:983:ALA:CA	2.86	0.44
1:A:1027:CYS:O	1:A:1088:TRP:CZ3	2.70	0.44
1:A:1070:LYS:HG2	1:A:1075:GLU:HG2	2.00	0.44
1:A:2367:CYS:HB3	1:A:2386:PHE:CD1	2.53	0.44
2:B:225:PRO:CB	2:B:298:LEU:CB	2.96	0.44
2:B:440:GLU:HB2	2:B:460:PHE:CD1	2.52	0.44
2:B:969:LEU:C	2:B:969:LEU:CD2	2.86	0.44
2:B:1533:LEU:HD23	2:B:1534:LEU:HG	1.99	0.44
2:B:2413:LEU:O	2:B:2417:LEU:N	2.51	0.44
2:B:3140:LEU:C	2:B:3140:LEU:CD2	2.86	0.44
2:B:3353:VAL:HA	2:B:3356:LEU:HD12	2.00	0.44
3:C:29:VAL:CG2	3:C:92:ALA:C	2.85	0.44
3:C:161:PHE:CG	3:C:161:PHE:O	2.70	0.44
3:C:2733:TYR:O	3:C:2733:TYR:CD1	2.70	0.44
4:D:303:CYS:HB2	4:D:353:LEU:CD2	2.48	0.44
4:D:428:LEU:HD12	4:D:428:LEU:N	2.32	0.44
4:D:441:LEU:HB3	4:D:457:ALA:HB3	1.98	0.44
4:D:621:CYS:SG	4:D:622:LYS:N	2.90	0.44
5:E:150:LEU:HD11	5:E:475:LEU:HD22	1.99	0.44
8:H:79:LEU:C	8:H:79:LEU:CD1	2.85	0.44
9:I:24:ILE:CG2	9:I:98:PHE:CD1	2.97	0.44
12:L:70:GLY:N	12:L:109:LYS:HZ1	2.15	0.44
1:A:730:LEU:HD23	1:A:781:LEU:HD22	2.00	0.44
1:A:764:ARG:N	1:A:765:PRO:HD2	2.32	0.44
1:A:821:LEU:O	1:A:912:ARG:CD	2.64	0.44
1:A:869:TYR:CD2	1:A:871:LEU:HB3	2.53	0.44
1:A:1020:PHE:HA	1:A:1023:PHE:CZ	2.40	0.44
1:A:1390:LYS:C	1:A:1392:ASN:N	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1441:ASN:CA	1:A:1562:ILE:HD11	2.48	0.44
1:A:2839:LEU:HD11	19:A:4901:ADP:N6	2.14	0.44
1:A:3124:ILE:HD11	1:A:3429:TRP:NE1	2.32	0.44
1:A:3131:ILE:HG12	1:A:3422:LEU:CD1	2.48	0.44
2:B:946:ARG:CG	2:B:953:GLY:HA3	2.47	0.44
2:B:967:GLN:OE1	3:C:43:LYS:HD3	2.16	0.44
2:B:1447:ILE:HG12	2:B:1480:HIS:CG	2.52	0.44
2:B:1603:LYS:HD3	2:B:1610:TYR:CD1	2.52	0.44
2:B:2176:VAL:HG13	2:B:2177:ARG:HG2	1.99	0.44
2:B:2742:ARG:NH2	19:B:5501:ADP:O2B	2.47	0.44
3:C:12:GLN:HE22	3:C:349:LEU:HB3	1.79	0.44
3:C:1466:SER:HB3	3:C:3629:LEU:HD13	2.00	0.44
5:E:20:PHE:CG	5:E:20:PHE:O	2.70	0.44
5:E:457:LEU:N	5:E:457:LEU:CD1	2.80	0.44
11:K:42:ILE:CG2	11:K:62:VAL:HG21	2.46	0.44
14:N:84:GLN:OE1	14:N:84:GLN:HA	2.18	0.44
1:A:98:ILE:HA	1:A:121:GLY:HA2	1.99	0.44
1:A:761:LEU:HD12	1:A:872:ASP:OD2	2.17	0.44
1:A:1016:PHE:O	1:A:1020:PHE:CG	2.70	0.44
1:A:1592:LEU:HA	1:A:1592:LEU:HD12	1.82	0.44
1:A:2745:LEU:HD11	1:A:2754:VAL:HG21	1.99	0.44
1:A:2938:ILE:HD12	1:A:2999:LEU:HD21	1.99	0.44
1:A:3684:ASN:HB3	1:A:3726:VAL:HG22	1.98	0.44
2:B:598:ARG:NH1	5:E:389:TRP:NE1	2.66	0.44
2:B:865:VAL:HG11	3:C:169:TYR:HD1	1.83	0.44
2:B:1528:LEU:HD22	2:B:1591:CYS:HB2	1.97	0.44
2:B:1599:LEU:HD22	2:B:1617:LEU:CD2	2.48	0.44
2:B:3119:LYS:NZ	2:B:3119:LYS:CB	2.73	0.44
2:B:3144:ALA:HA	2:B:3430:ASN:HD21	1.83	0.44
2:B:3765:SER:HB2	2:B:3772:GLN:HA	2.00	0.44
2:B:4187:ILE:HD12	2:B:4213:PHE:CE1	2.53	0.44
3:C:24:HIS:CE1	3:C:339:GLY:O	2.70	0.44
3:C:99:GLY:HA3	3:C:149:HIS:HE2	1.80	0.44
3:C:318:PRO:HB3	3:C:350:TRP:CD2	2.51	0.44
3:C:1188:LEU:HD11	3:C:1207:LEU:HD11	1.98	0.44
3:C:2177:ILE:CG2	3:C:2233:PRO:HA	2.47	0.44
3:C:2556:VAL:HG11	3:C:2937:TYR:CD1	2.53	0.44
3:C:2899:LEU:C	3:C:2899:LEU:CD2	2.86	0.44
3:C:2927:ASP:OD2	3:C:2974:ILE:CD1	2.65	0.44
3:C:2989:LEU:HD12	3:C:2990:PRO:HD2	2.00	0.44
4:D:107:VAL:O	4:D:107:VAL:HG13	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:242:LYS:CG	7:G:60:VAL:HG21	2.45	0.44
4:D:246:LYS:HE2	4:D:250:ARG:NH2	2.32	0.44
4:D:298:ASN:N	4:D:298:ASN:HD22	2.14	0.44
4:D:573:VAL:HB	4:D:579:LEU:HD11	1.99	0.44
5:E:394:TRP:CZ2	5:E:401:PRO:HB3	2.51	0.44
6:F:35:ARG:CZ	6:F:41:SER:CB	2.80	0.44
10:J:38:GLU:OE1	15:O:29:PHE:CD1	2.67	0.44
10:J:99:TYR:CZ	10:J:104:ALA:HB2	2.52	0.44
12:L:67:PHE:CD2	12:L:67:PHE:O	2.70	0.44
13:M:44:GLU:HA	13:M:47:LYS:NZ	2.33	0.44
15:O:76:VAL:N	15:O:77:PRO:CD	2.80	0.44
15:O:113:TYR:CE2	15:O:115:TYR:HB2	2.52	0.44
1:A:818:LEU:O	1:A:818:LEU:CD2	2.64	0.44
1:A:1100:LEU:CD2	1:A:1159:MET:CE	2.94	0.44
1:A:1600:PRO:HB2	1:A:1917:SER:CB	2.45	0.44
1:A:3240:VAL:CG1	1:A:3244:PHE:CE1	2.92	0.44
1:A:3322:ALA:CB	1:A:3333:LEU:HD12	2.44	0.44
1:A:4056:ILE:CD1	1:A:4072:LEU:HD21	2.45	0.44
2:B:725:ILE:CD1	2:B:780:VAL:HB	2.47	0.44
2:B:736:LEU:HG	2:B:856:TRP:HA	1.98	0.44
2:B:798:ASN:OD1	2:B:799:VAL:N	2.51	0.44
2:B:986:PHE:HA	2:B:989:ARG:NE	2.32	0.44
2:B:1456:PHE:CG	2:B:1569:VAL:CG1	2.98	0.44
2:B:1783:GLU:HA	2:B:1786:LYS:HE2	2.00	0.44
2:B:3067:ILE:HD13	2:B:3119:LYS:HG3	1.99	0.44
3:C:244:ILE:N	3:C:244:ILE:HD12	2.32	0.44
3:C:2663:ALA:CB	3:C:2855:GLU:OE2	2.66	0.44
3:C:3014:PRO:CD	3:C:3125:THR:HG22	2.47	0.44
4:D:89:TYR:CD2	11:K:56:PRO:HB3	2.53	0.44
4:D:584:ILE:H	4:D:584:ILE:HG13	1.49	0.44
4:D:640:LYS:HZ1	4:D:643:LYS:HD3	1.83	0.44
5:E:57:SER:O	10:J:90:HIS:N	2.49	0.44
5:E:64:GLU:OE1	10:J:18:TYR:OH	2.32	0.44
5:E:129:LEU:CD1	6:F:80:ARG:CD	2.93	0.44
6:F:26:PHE:CE1	6:F:48:ILE:HG23	2.53	0.44
8:H:65:PHE:CZ	8:H:85:ALA:HB3	2.52	0.44
8:H:81:VAL:HG13	8:H:81:VAL:O	2.18	0.44
11:K:76:ASN:HB3	11:K:91:ARG:HB3	2.00	0.44
12:L:77:ILE:HG13	13:M:63:SER:OG	2.17	0.44
1:A:683:LYS:HZ1	1:A:741:ASN:HD22	1.65	0.44
1:A:818:LEU:C	1:A:840:TYR:CE2	2.89	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:894:PHE:CG	1:A:972:TRP:CH2	3.06	0.44
1:A:1016:PHE:CD2	1:A:1069:TYR:CD1	3.06	0.44
1:A:1045:LEU:C	1:A:1045:LEU:CD1	2.86	0.44
1:A:1422:SER:O	1:A:1486:HIS:CD2	2.70	0.44
1:A:1511:TRP:N	1:A:1574:LEU:HD13	2.33	0.44
1:A:3102:LEU:HD23	1:A:3451:THR:HG23	2.00	0.44
1:A:3114:GLU:HB2	1:A:3436:ILE:HG21	2.00	0.44
1:A:3284:MET:N	1:A:3284:MET:SD	2.90	0.44
1:A:3307:GLU:N	1:A:3308:PRO:CD	2.80	0.44
2:B:659:THR:HA	2:B:755:ILE:HG22	2.00	0.44
2:B:1467:PHE:HD1	2:B:1470:LEU:HD21	1.83	0.44
2:B:2150:THR:HG22	2:B:2203:ASN:HD22	1.82	0.44
2:B:2260:TRP:HB3	2:B:2300:ARG:HB2	2.00	0.44
2:B:3327:ALA:CA	2:B:3334:SER:HB2	2.48	0.44
3:C:442:ILE:O	3:C:443:THR:C	2.49	0.44
3:C:2532:GLU:N	3:C:2533:PRO:HD2	2.32	0.44
5:E:74:SER:HB2	9:I:56:ILE:HB	2.00	0.44
6:F:62:VAL:HG11	7:G:106:LEU:CD1	2.48	0.44
7:G:99:ILE:HG23	7:G:103:ILE:CD1	2.47	0.44
10:J:61:ALA:HB2	10:J:80:PHE:HZ	1.57	0.44
10:J:86:CYS:HB2	11:K:61:VAL:CG1	2.28	0.44
1:A:655:PHE:CZ	1:A:659:TRP:CD1	3.05	0.44
1:A:695:LEU:C	1:A:695:LEU:CD2	2.85	0.44
1:A:769:THR:O	1:A:769:THR:HG22	2.18	0.44
1:A:801:ILE:O	1:A:806:ILE:HG22	2.18	0.44
1:A:802:ILE:HA	1:A:806:ILE:HG22	1.98	0.44
1:A:1548:TRP:CD1	1:A:1548:TRP:O	2.70	0.44
1:A:1639:PHE:CD1	1:A:1653:ILE:HG12	2.53	0.44
1:A:2663:LYS:HB3	1:A:2768:GLN:HE22	1.82	0.44
1:A:3216:GLU:HB3	1:A:3217:SER:H	1.56	0.44
1:A:3249:ILE:CD1	1:A:3274:ASP:N	2.63	0.44
1:A:3991:LEU:HB2	1:A:4094:THR:HG22	2.00	0.44
2:B:349:ASN:HA	2:B:416:LEU:HD22	1.88	0.44
2:B:2188:SER:O	20:B:5601:ATP:PB	2.76	0.44
2:B:2441:LEU:O	2:B:2445:GLY:N	2.50	0.44
2:B:2591:ASN:HD22	2:B:2644:PHE:HB2	1.83	0.44
2:B:3243:LYS:CD	2:B:3285:ASN:O	2.66	0.44
3:C:90:ILE:CD1	3:C:96:LEU:HD23	2.48	0.44
3:C:161:PHE:O	3:C:161:PHE:CD1	2.70	0.44
3:C:259:PRO:HB3	3:C:264:TRP:CH2	2.53	0.44
3:C:341:TRP:CE3	3:C:341:TRP:O	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3034:LEU:HB3	3:C:3041:ILE:HG22	2.00	0.44
3:C:3600:MET:HB3	3:C:3630:MET:CE	2.48	0.44
4:D:294:GLN:NE2	4:D:297:LYS:NZ	2.60	0.44
5:E:185:ARG:HB2	5:E:188:GLN:HB2	1.98	0.44
10:J:38:GLU:CD	15:O:29:PHE:CD2	2.49	0.44
12:L:9:GLY:O	12:L:13:GLU:CD	2.56	0.44
12:L:14:GLU:HA	12:L:15:PRO:HD3	1.79	0.44
1:A:729:GLU:OE1	1:A:781:LEU:HD13	2.17	0.43
1:A:945:ASN:HB3	1:A:950:GLU:OE2	2.18	0.43
1:A:1163:LEU:C	1:A:1163:LEU:CD2	2.85	0.43
1:A:1273:PHE:C	1:A:1275:LEU:H	2.20	0.43
1:A:2357:VAL:HA	1:A:2360:ILE:HD12	2.00	0.43
1:A:2839:LEU:HD13	19:A:4901:ADP:C4	2.52	0.43
2:B:1230:MET:CE	2:B:1266:VAL:C	2.86	0.43
2:B:1681:ALA:HB3	2:B:1684:HIS:HB3	1.99	0.43
2:B:3267:ILE:CG2	2:B:3267:ILE:O	2.66	0.43
3:C:7:TRP:CE3	3:C:352:LEU:HB3	2.53	0.43
3:C:12:GLN:HG3	3:C:69:TRP:HE1	1.83	0.43
3:C:90:ILE:HD11	3:C:96:LEU:HD21	2.00	0.43
3:C:229:ILE:HD11	3:C:301:TRP:NE1	2.31	0.43
3:C:327:PHE:CE2	3:C:336:ILE:HB	2.52	0.43
3:C:2416:LEU:HD23	3:C:2417:PHE:N	2.32	0.43
3:C:2726:THR:C	3:C:2729:LEU:HG	2.37	0.43
3:C:2927:ASP:CB	3:C:2974:ILE:HD13	2.45	0.43
4:D:216:HIS:CA	4:D:217:GLN:N	2.78	0.43
4:D:334:LEU:HD23	4:D:334:LEU:HA	1.86	0.43
4:D:394:LYS:HG3	4:D:394:LYS:O	2.18	0.43
5:E:112:LEU:HD21	6:F:97:MET:CE	2.43	0.43
5:E:156:GLU:HG3	5:E:157:LYS:HG2	2.00	0.43
5:E:237:ASN:N	5:E:237:ASN:ND2	2.66	0.43
11:K:44:SER:HB2	11:K:48:LYS:NZ	2.32	0.43
14:N:116:ALA:HB1	15:O:131:PHE:CE1	2.48	0.43
1:A:402:PRO:CA	1:A:467:ILE:O	2.62	0.43
1:A:1013:VAL:CA	1:A:1016:PHE:CE1	2.91	0.43
1:A:1100:LEU:HD22	1:A:1163:LEU:CB	2.46	0.43
1:A:1271:ASN:O	4:D:165:LYS:HB3	2.18	0.43
1:A:1274:GLY:HA3	4:D:164:ASN:OD1	2.15	0.43
1:A:2866:VAL:HG11	1:A:3026:TRP:CH2	2.53	0.43
1:A:2925:THR:HG22	1:A:3000:CYS:HB2	2.00	0.43
1:A:3544:LYS:HE3	1:A:3545:LEU:HD13	1.99	0.43
1:A:4042:ILE:HD12	1:A:4042:ILE:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4046:CYS:HB2	1:A:4076:CYS:HB3	1.99	0.43
2:B:500:GLU:OE1	2:B:535:ILE:CG1	2.60	0.43
2:B:516:THR:CG2	5:E:406:LYS:HA	2.46	0.43
2:B:694:VAL:HB	2:B:695:PRO:HD2	2.00	0.43
2:B:965:ILE:N	2:B:965:ILE:CD1	2.81	0.43
2:B:1441:GLU:O	2:B:1445:LYS:HG3	2.19	0.43
2:B:2190:LYS:CE	20:B:5601:ATP:PB	3.05	0.43
2:B:4206:ARG:CZ	2:B:4573:ILE:HG22	2.49	0.43
2:B:4546:PRO:HB2	2:B:4548:TYR:CE2	2.53	0.43
3:C:22:SER:HB3	3:C:341:TRP:HB3	2.01	0.43
3:C:53:PRO:O	3:C:53:PRO:CD	2.67	0.43
3:C:264:TRP:HB2	3:C:296:ILE:HD12	1.99	0.43
3:C:1047:LEU:HG	3:C:1111:LEU:HD11	2.00	0.43
3:C:2357:LEU:C	3:C:2357:LEU:HD13	2.38	0.43
3:C:2743:ASN:HD21	3:C:2786:ASN:HA	1.83	0.43
3:C:3792:ILE:HD12	3:C:3801:ASN:HD22	1.83	0.43
4:D:68:GLU:CG	5:E:12:LYS:C	2.87	0.43
4:D:286:ILE:CG2	4:D:287:TRP:CZ3	3.01	0.43
4:D:564:ASP:OD2	4:D:583:LYS:CE	2.67	0.43
5:E:63:THR:HB	10:J:99:TYR:OH	2.17	0.43
5:E:71:ARG:O	8:H:68:PHE:HA	2.18	0.43
6:F:65:ARG:HH11	6:F:65:ARG:HG3	1.82	0.43
8:H:12:LYS:HE2	8:H:80:TYR:CE2	2.53	0.43
8:H:60:ILE:CD1	9:I:78:ILE:CG1	2.91	0.43
11:K:28:GLN:HG3	11:K:49:PHE:CD1	2.53	0.43
14:N:68:CYS:HB2	14:N:113:PHE:HB2	2.00	0.43
15:O:72:LYS:C	15:O:72:LYS:CD	2.85	0.43
15:O:121:TYR:O	15:O:121:TYR:CG	2.70	0.43
16:P:14:THR:H	16:P:18:HIS:CB	2.31	0.43
1:A:598:ARG:NH2	4:D:546:VAL:HG12	2.26	0.43
1:A:1033:GLU:HB3	1:A:1037:LYS:HE3	2.00	0.43
1:A:1190:LEU:C	1:A:1190:LEU:CD2	2.85	0.43
1:A:1440:TRP:NE1	1:A:1474:ASP:OD2	2.48	0.43
1:A:1637:VAL:HG13	1:A:1653:ILE:CG2	2.46	0.43
1:A:3250:PRO:O	1:A:3250:PRO:CD	2.65	0.43
1:A:4109:PHE:HA	1:A:4113:ILE:HB	1.99	0.43
2:B:973:THR:HG21	3:C:343:ASN:CA	2.48	0.43
2:B:1046:ASN:N	2:B:1049:LEU:HD12	2.32	0.43
2:B:1492:LYS:HE3	2:B:3606:GLN:OE1	1.70	0.43
2:B:1571:GLU:HA	2:B:1571:GLU:OE2	2.17	0.43
2:B:2214:ASN:HD21	2:B:2622:GLN:HB3	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3499:THR:HG21	2:B:3507:TRP:HH2	1.82	0.43
3:C:142:ALA:N	3:C:143:PRO:CD	2.81	0.43
3:C:319:ARG:HB2	3:C:321:ARG:HE	1.83	0.43
4:D:172:GLU:OE2	12:L:55:LEU:CG	2.66	0.43
5:E:12:LYS:HB3	5:E:13:GLU:H	1.47	0.43
5:E:26:ARG:HD2	14:N:97:LEU:HD23	2.00	0.43
5:E:418:SER:HB2	5:E:426:PHE:CE1	2.51	0.43
5:E:428:VAL:O	5:E:428:VAL:HG23	2.18	0.43
6:F:102:LEU:HB3	6:F:106:ALA:HB3	2.00	0.43
8:H:11:ILE:HD12	8:H:14:SER:HB3	2.00	0.43
10:J:90:HIS:HB3	10:J:108:TYR:HB2	2.00	0.43
13:M:6:GLU:HG3	13:M:6:GLU:O	2.18	0.43
14:N:99:GLN:HA	14:N:99:GLN:OE1	2.19	0.43
15:O:121:TYR:O	15:O:121:TYR:CD1	2.70	0.43
16:P:23:TYR:C	16:P:96:GLY:HA2	2.38	0.43
16:P:39:TRP:C	16:P:40:SER:CB	2.86	0.43
1:A:670:LEU:N	1:A:692:ILE:HD11	2.33	0.43
1:A:845:THR:HG22	1:A:965:CYS:HA	2.01	0.43
1:A:1013:VAL:CA	1:A:1076:LEU:HD11	2.49	0.43
1:A:1452:LYS:HG3	1:A:1458:MET:O	2.18	0.43
1:A:1540:GLN:O	1:A:1544:ILE:N	2.43	0.43
1:A:1634:ILE:HD11	1:A:1637:VAL:HG22	2.00	0.43
1:A:1828:THR:HG21	1:A:1860:GLN:HE21	1.83	0.43
1:A:3212:VAL:CG1	1:A:3335:TRP:CE2	3.01	0.43
1:A:3999:THR:HG21	1:A:4044:GLN:HE21	1.83	0.43
2:B:555:LEU:CD2	2:B:625:LEU:HB3	2.49	0.43
2:B:902:ILE:HG23	2:B:915:PRO:CD	2.48	0.43
2:B:903:ARG:HB3	2:B:914:ASP:OD1	2.11	0.43
2:B:938:PHE:CD2	2:B:956:LEU:CD1	2.96	0.43
2:B:939:ASN:ND2	2:B:939:ASN:O	2.51	0.43
2:B:3774:SER:HB3	2:B:4090:ASP:HB3	1.99	0.43
2:B:4041:LEU:HB3	2:B:4044:ILE:HD11	2.00	0.43
2:B:4044:ILE:HG13	2:B:4076:LEU:HB2	2.00	0.43
3:C:114:LEU:C	3:C:114:LEU:CD1	2.85	0.43
3:C:146:ARG:CB	3:C:165:GLY:HA3	2.48	0.43
3:C:2708:GLN:HG2	3:C:2809:ALA:HB1	2.00	0.43
3:C:2743:ASN:HD21	3:C:2786:ASN:CA	2.31	0.43
4:D:265:ARG:HD3	5:E:125:GLN:CA	2.48	0.43
10:J:28:TRP:N	10:J:29:PRO:CD	2.81	0.43
10:J:84:PHE:HB2	11:K:63:GLY:HA3	2.01	0.43
14:N:70:THR:HA	15:O:99:SER:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:15:SER:H	16:P:18:HIS:CB	2.31	0.43
1:A:739:ARG:HE	1:A:743:LYS:HE3	1.82	0.43
1:A:1149:ILE:HG21	1:A:1187:TRP:CE2	2.54	0.43
1:A:3533:PRO:CD	1:A:3648:THR:HG22	2.49	0.43
1:A:3975:ILE:HA	1:A:3978:ILE:HD12	2.00	0.43
2:B:447:THR:HA	5:E:443:GLN:HB3	2.00	0.43
2:B:500:GLU:HB3	2:B:532:THR:HG21	2.00	0.43
2:B:1101:PHE:CD1	2:B:1102:LEU:HG	2.54	0.43
2:B:3785:ALA:HB2	2:B:3807:THR:HG21	1.99	0.43
3:C:968:MET:HB2	3:C:1026:PHE:CZ	2.53	0.43
3:C:2581:LEU:HD12	3:C:2937:TYR:CZ	2.51	0.43
3:C:2703:LYS:N	3:C:2703:LYS:CD	2.81	0.43
4:D:105:MET:HE3	14:N:51:ILE:HD12	1.97	0.43
4:D:332:TYR:CZ	4:D:340:PRO:HG3	2.53	0.43
5:E:99:ILE:CG2	6:F:33:LEU:CD1	2.85	0.43
6:F:61:LYS:HD2	8:H:33:ASP:O	2.17	0.43
9:I:70:LYS:HB3	9:I:71:PHE:CD1	2.54	0.43
14:N:66:LYS:HG3	14:N:117:VAL:HG23	1.99	0.43
18:R:105:THR:C	18:R:107:SER:N	2.70	0.43
1:A:57:TYR:CB	1:A:103:ASP:HA	2.48	0.43
1:A:604:ALA:HB2	1:A:698:GLU:CG	2.49	0.43
1:A:805:ARG:NH2	5:E:152:LEU:HD12	2.33	0.43
1:A:879:LEU:HB2	1:A:882:GLU:CG	2.47	0.43
1:A:1458:MET:HE3	1:A:1548:TRP:HE1	1.84	0.43
1:A:2171:THR:HG21	1:A:2183:ILE:CG2	2.48	0.43
1:A:3273:TYR:CD1	1:A:3276:SER:CA	3.01	0.43
1:A:3824:ILE:HD13	1:A:3952:LEU:HG	2.00	0.43
2:B:412:LEU:CD1	2:B:412:LEU:C	2.86	0.43
2:B:913:PHE:HE1	2:B:987:ARG:CZ	2.31	0.43
2:B:946:ARG:HA	2:B:955:PHE:HZ	1.70	0.43
2:B:1100:ASP:HA	2:B:1103:VAL:HB	2.00	0.43
2:B:1140:LEU:HD21	2:B:1201:TYR:OH	2.18	0.43
2:B:1521:VAL:O	2:B:1525:TRP:N	2.31	0.43
2:B:2269:PRO:HD2	2:B:2615:TYR:CE1	2.54	0.43
3:C:1541:LEU:CD1	3:C:1584:LEU:HD22	2.49	0.43
3:C:1605:ARG:HB2	3:C:1636:ILE:HG21	2.01	0.43
3:C:2743:ASN:ND2	3:C:2785:VAL:C	2.72	0.43
4:D:61:LEU:HD22	4:D:74:MET:HE1	2.01	0.43
4:D:173:CYS:O	13:M:62:GLY:HA2	2.19	0.43
4:D:184:GLY:N	11:K:69:TYR:CD1	2.86	0.43
6:F:81:THR:HA	7:G:124:VAL:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:120:THR:N	9:I:12:ILE:HG21	2.33	0.43
18:R:98:MET:C	18:R:100:GLY:N	2.70	0.43
1:A:330:GLY:O	1:A:380:ARG:HA	2.18	0.43
1:A:871:LEU:CD2	1:A:875:VAL:HG12	2.45	0.43
1:A:1273:PHE:C	1:A:1275:LEU:N	2.72	0.43
1:A:1444:GLN:C	1:A:1561:VAL:HG22	2.09	0.43
1:A:1452:LYS:HZ1	1:A:1459:LEU:HD21	1.84	0.43
1:A:3083:ARG:NH2	1:A:3630:ALA:O	2.51	0.43
1:A:3538:GLN:HA	1:A:3541:ILE:HG22	2.00	0.43
1:A:3853:GLY:HA3	1:A:3879:ALA:HB2	2.00	0.43
1:A:3897:PRO:HA	1:A:3900:ILE:HG22	2.01	0.43
1:A:4534:CYS:SG	1:A:4535:LYS:N	2.92	0.43
2:B:601:GLU:HB2	2:B:602:PRO:HD3	2.00	0.43
2:B:749:LYS:N	2:B:750:PRO:CD	2.82	0.43
2:B:3258:VAL:HG12	2:B:3313:ILE:HD12	2.01	0.43
3:C:159:TYR:N	3:C:159:TYR:CD2	2.86	0.43
3:C:872:ARG:NH2	3:C:896:LYS:HA	2.32	0.43
3:C:2402:LEU:O	3:C:2406:CYS:SG	2.74	0.43
3:C:2593:ARG:HD2	3:C:2921:LEU:HD11	2.01	0.43
3:C:2923:LEU:HG	3:C:2966:SER:N	2.34	0.43
3:C:3499:ALA:HB1	3:C:3502:ALA:HB3	1.99	0.43
4:D:162:LEU:C	4:D:162:LEU:CD2	2.85	0.43
4:D:201:GLN:OE1	9:I:102:ASN:HB2	2.13	0.43
5:E:47:PHE:CA	12:L:88:PHE:CE2	3.02	0.43
5:E:70:ASP:HB3	8:H:68:PHE:HE1	1.83	0.43
5:E:119:CYS:HB2	6:F:88:ILE:CD1	2.47	0.43
5:E:152:LEU:HD22	5:E:486:THR:HG22	2.01	0.43
5:E:361:LEU:C	5:E:361:LEU:CD1	2.85	0.43
6:F:65:ARG:HG3	6:F:65:ARG:NH1	2.34	0.43
8:H:59:CYS:O	9:I:85:TYR:CA	2.66	0.43
12:L:77:ILE:N	12:L:77:ILE:CD1	2.81	0.43
1:A:642:ASN:O	1:A:646:LYS:HG3	2.19	0.43
1:A:3335:TRP:CZ3	1:A:3339:ILE:HD11	2.31	0.43
2:B:520:ARG:HD3	2:B:547:LEU:CD2	2.49	0.43
2:B:555:LEU:HG	2:B:625:LEU:HD21	2.00	0.43
2:B:673:PHE:CD1	2:B:677:LEU:HD13	2.45	0.43
2:B:801:ILE:HG22	2:B:802:ILE:HG13	2.00	0.43
2:B:865:VAL:HG21	3:C:169:TYR:HB3	2.00	0.43
2:B:1058:LYS:CB	2:B:1166:GLU:CG	2.94	0.43
2:B:1129:ALA:O	2:B:1132:GLU:HG3	2.18	0.43
2:B:1611:PHE:HE1	2:B:1925:PHE:HZ	1.65	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3150:VAL:HA	2:B:3707:LEU:HD21	2.01	0.43
2:B:3236:LYS:N	2:B:3237:PRO:CD	2.82	0.43
3:C:124:PRO:HB3	3:C:185:PHE:CE1	2.53	0.43
3:C:294:LEU:C	3:C:294:LEU:CD2	2.86	0.43
3:C:859:ILE:CB	3:C:864:MET:SD	3.07	0.43
4:D:303:CYS:HB2	4:D:353:LEU:HD22	2.00	0.43
4:D:439:ILE:HG12	4:D:472:PHE:HZ	1.83	0.43
5:E:26:ARG:O	14:N:98:ILE:HD12	2.18	0.43
10:J:26:VAL:HG21	10:J:98:PHE:HB3	1.96	0.43
10:J:48:LEU:HD22	10:J:53:ILE:CG1	2.44	0.43
11:K:38:PHE:HB3	11:K:41:LYS:HB2	2.01	0.43
14:N:61:LEU:HD12	14:N:61:LEU:O	2.19	0.43
1:A:853:VAL:HG11	5:E:206:ASN:CB	2.48	0.43
1:A:1041:ASN:HB3	1:A:1047:ASN:ND2	2.34	0.43
1:A:1430:ARG:HG3	1:A:1490:PHE:CE2	2.53	0.43
1:A:1537:GLN:NE2	1:A:1587:MET:HB3	2.34	0.43
1:A:1634:ILE:HD11	1:A:1637:VAL:CG2	2.48	0.43
1:A:2162:GLY:HA2	20:A:4801:ATP:PA	2.58	0.43
1:A:2311:ARG:NH1	1:A:2319:GLU:OE1	2.51	0.43
1:A:3124:ILE:CD1	1:A:3429:TRP:NE1	2.80	0.43
1:A:3294:GLU:HA	1:A:3294:GLU:OE2	2.19	0.43
1:A:3317:PHE:HA	1:A:3333:LEU:CD1	2.48	0.43
2:B:444:LEU:HD13	2:B:523:LEU:HG	2.00	0.43
2:B:804:ARG:NH2	2:B:899:LEU:HB3	2.34	0.43
2:B:1002:GLN:HG2	2:B:1094:TRP:HE1	1.84	0.43
2:B:1936:MET:HG2	2:B:1966:VAL:HG22	2.00	0.43
2:B:3121:LEU:C	2:B:3121:LEU:CD1	2.85	0.43
3:C:2079:ILE:HD12	3:C:2124:VAL:HG11	2.01	0.43
3:C:2726:THR:CG2	3:C:2757:LEU:HD13	2.49	0.43
3:C:2740:ILE:CG2	3:C:2744:LYS:CD	2.96	0.43
4:D:94:ARG:HG3	4:D:94:ARG:O	2.18	0.43
4:D:163:ARG:HH11	12:L:73:GLU:CD	2.23	0.43
4:D:208:TYR:CZ	9:I:22:LYS:HB2	2.52	0.43
4:D:257:GLN:OE1	4:D:257:GLN:HA	2.18	0.43
4:D:552:PRO:CG	4:D:597:TYR:HA	2.49	0.43
4:D:564:ASP:HB2	4:D:583:LYS:HE2	2.01	0.43
5:E:112:LEU:CD2	5:E:112:LEU:C	2.85	0.43
5:E:320:THR:HG22	5:E:320:THR:O	2.19	0.43
5:E:378:GLN:CB	5:E:422:SER:HB3	2.43	0.43
6:F:48:ILE:HD11	6:F:98:LEU:HD23	0.44	0.43
7:G:112:SER:HA	7:G:115:ARG:HB2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:688:PHE:HB3	1:A:727:TYR:CE2	2.54	0.43
1:A:1212:LEU:C	1:A:1212:LEU:CD2	2.86	0.43
1:A:1548:TRP:CD1	1:A:1548:TRP:C	2.92	0.43
1:A:3106:LYS:CD	1:A:3443:LEU:HD11	2.48	0.43
1:A:3921:ILE:HG23	1:A:3922:PRO:HD2	1.99	0.43
1:A:4053:MET:HA	1:A:4056:ILE:HG22	2.01	0.43
2:B:425:ASP:HB3	2:B:489:PHE:CZ	2.54	0.43
2:B:555:LEU:HD21	2:B:626:TYR:N	2.33	0.43
2:B:695:PRO:HG2	2:B:698:ALA:HB3	2.01	0.43
2:B:1498:TYR:C	2:B:1500:ARG:H	2.21	0.43
2:B:2185:PRO:HG3	2:B:2326:GLU:HB3	1.99	0.43
2:B:3080:LEU:HD12	2:B:3484:LYS:HE2	2.01	0.43
2:B:3422:LEU:HD12	2:B:3716:LEU:CD1	2.48	0.43
2:B:4458:ILE:HD12	2:B:4489:GLU:HA	2.01	0.43
3:C:50:LYS:HG2	3:C:103:THR:HB	2.01	0.43
3:C:143:PRO:HB3	3:C:160:ILE:HD11	2.00	0.43
3:C:2849:VAL:O	3:C:2853:GLU:HG3	2.19	0.43
4:D:183:ARG:CB	11:K:72:TYR:HE2	2.32	0.43
5:E:53:ILE:HG21	12:L:81:ASN:HD21	1.83	0.43
5:E:116:VAL:HG11	6:F:97:MET:HE1	1.78	0.43
5:E:439:TYR:CD1	5:E:443:GLN:HA	2.54	0.43
12:L:73:GLU:HB2	13:M:66:ILE:HD12	1.89	0.43
1:A:669:ALA:HB2	1:A:689:ASP:OD2	2.18	0.42
1:A:770:LEU:HD22	1:A:774:SER:HB3	2.00	0.42
1:A:1514:VAL:HG13	1:A:1581:LEU:CD1	2.49	0.42
1:A:1638:THR:CG2	1:A:1655:GLN:NE2	2.30	0.42
1:A:1896:THR:HG21	1:A:1910:ILE:HD13	1.99	0.42
1:A:2723:ILE:HG21	1:A:2776:LYS:HE2	2.00	0.42
1:A:2855:ILE:HG21	1:A:2863:GLY:CA	2.49	0.42
1:A:3110:LEU:HD13	1:A:3440:LYS:HA	2.00	0.42
1:A:4321:GLN:HB2	1:A:4393:ILE:HD12	2.00	0.42
2:B:725:ILE:HG21	2:B:776:LEU:HD21	2.01	0.42
2:B:726:LYS:C	2:B:726:LYS:CD	2.85	0.42
2:B:956:LEU:O	2:B:960:ARG:HG3	2.19	0.42
2:B:1603:LYS:HB3	2:B:1610:TYR:CE1	2.54	0.42
2:B:2058:LEU:HB2	2:B:2129:LEU:HD11	2.01	0.42
2:B:3210:SER:CB	2:B:3364:ASN:OD1	2.51	0.42
2:B:3288:GLN:NE2	2:B:3288:GLN:CA	2.80	0.42
3:C:172:LEU:CD1	3:C:173:ALA:O	2.66	0.42
3:C:972:LEU:HD21	3:C:1017:MET:SD	2.59	0.42
3:C:973:LYS:HA	3:C:976:ILE:HD12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2246:ARG:CD	3:C:2344:ARG:HG2	2.49	0.42
3:C:3588:VAL:O	3:C:3588:VAL:HG12	2.18	0.42
3:C:3588:VAL:HG11	3:C:3621:TRP:CD2	2.55	0.42
4:D:164:ASN:N	4:D:167:ASN:HB3	2.33	0.42
4:D:599:ASP:HB3	4:D:600:PRO:HD2	2.01	0.42
5:E:117:GLU:HG2	5:E:121:TYR:CE2	2.53	0.42
5:E:203:LEU:C	5:E:203:LEU:CD2	2.85	0.42
5:E:448:PHE:HE1	5:E:450:HIS:HB2	1.83	0.42
9:I:78:ILE:HD11	9:I:106:LEU:HB3	1.97	0.42
10:J:40:ALA:HB1	10:J:68:MET:HE3	2.01	0.42
11:K:5:ALA:CB	11:K:81:TYR:HB2	2.49	0.42
14:N:115:MET:HE3	15:O:80:LYS:HB3	2.01	0.42
15:O:22:LEU:HD12	15:O:22:LEU:C	2.39	0.42
1:A:889:TYR:CD2	7:G:12:SER:CB	3.02	0.42
1:A:952:GLN:NE2	1:A:1010:LYS:HZ2	2.17	0.42
1:A:1013:VAL:CG1	1:A:1016:PHE:HE1	2.32	0.42
1:A:3125:GLN:NE2	1:A:3125:GLN:C	2.73	0.42
1:A:3285:ASN:OD1	1:A:3288:LYS:HD2	2.18	0.42
1:A:4121:VAL:HB	1:A:4126:TRP:CG	2.54	0.42
2:B:444:LEU:C	5:E:515:LYS:CB	2.87	0.42
2:B:544:HIS:O	2:B:548:LEU:HG	2.19	0.42
2:B:579:PHE:HA	5:E:430:ARG:HH12	1.83	0.42
2:B:582:MET:SD	2:B:587:GLY:HA3	2.58	0.42
2:B:815:ASP:HB3	2:B:819:LYS:HE3	2.01	0.42
2:B:830:LYS:HA	2:B:943:THR:HB	2.00	0.42
2:B:864:ASN:CB	2:B:947:LEU:HB2	2.33	0.42
2:B:2815:ALA:HB1	2:B:2817:PRO:HD2	2.01	0.42
3:C:90:ILE:HA	3:C:153:PHE:CZ	2.54	0.42
3:C:94:LYS:HG2	3:C:115:LYS:HE2	2.01	0.42
3:C:207:MET:HE3	3:C:214:LEU:HB3	2.00	0.42
3:C:232:TYR:HB2	3:C:239:TRP:HB3	2.01	0.42
3:C:268:ILE:HG12	3:C:301:TRP:CH2	2.54	0.42
3:C:2589:LEU:HD11	3:C:2925:VAL:HG22	2.00	0.42
3:C:2697:ALA:HB1	3:C:2815:SER:O	2.19	0.42
3:C:4000:ARG:HG3	3:C:4021:TYR:HB3	2.00	0.42
4:D:541:LEU:HD12	4:D:545:VAL:CG2	2.47	0.42
5:E:59:HIS:H	10:J:90:HIS:CD2	2.38	0.42
5:E:105:PHE:O	5:E:105:PHE:CD1	2.72	0.42
5:E:162:ARG:HH12	5:E:196:GLN:H	1.66	0.42
5:E:266:THR:HG1	5:E:283:SER:HA	1.80	0.42
5:E:367:LEU:N	5:E:367:LEU:HD23	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:384:LEU:HG	5:E:417:TRP:CD1	2.53	0.42
5:E:439:TYR:HD1	5:E:443:GLN:HA	1.85	0.42
11:K:81:TYR:CE2	11:K:86:ALA:HB2	2.55	0.42
12:L:93:LEU:CD1	12:L:108:PHE:HB3	2.45	0.42
13:M:5:PRO:HG3	13:M:77:ILE:HG13	2.00	0.42
13:M:20:VAL:HG21	13:M:73:ILE:HD13	2.01	0.42
13:M:53:TRP:CZ3	13:M:86:LYS:HD2	2.51	0.42
1:A:604:ALA:HB2	1:A:698:GLU:HB3	2.01	0.42
1:A:907:ASN:C	1:A:911:TYR:HD2	2.23	0.42
1:A:1142:ILE:HD13	1:A:1190:LEU:CD2	2.47	0.42
1:A:3895:GLU:O	1:A:3899:LEU:HD13	2.19	0.42
2:B:730:LEU:HB2	2:B:733:GLU:HG3	2.01	0.42
2:B:2885:ASN:HD22	2:B:3018:VAL:HB	1.84	0.42
2:B:3133:ILE:CG1	2:B:3440:LEU:HD13	2.48	0.42
2:B:3658:ILE:HD11	2:B:3748:ARG:HD2	2.00	0.42
2:B:4187:ILE:O	2:B:4212:LEU:HD21	2.19	0.42
2:B:4230:ILE:HG23	2:B:4233:LYS:HB2	2.01	0.42
3:C:1552:LEU:HD21	3:C:1600:GLN:HG2	2.02	0.42
3:C:2152:PHE:CZ	3:C:2192:HIS:CE1	3.08	0.42
3:C:2578:PHE:CZ	3:C:2582:ILE:HD11	2.54	0.42
3:C:2740:ILE:CB	3:C:2744:LYS:O	2.54	0.42
3:C:3874:THR:O	3:C:3878:VAL:HG23	2.20	0.42
4:D:87:THR:HG22	4:D:98:THR:HA	2.00	0.42
4:D:509:ASN:ND2	4:D:512:HIS:HB3	2.34	0.42
5:E:58:GLU:OE2	10:J:89:VAL:HG22	2.19	0.42
5:E:334:LEU:HD12	5:E:334:LEU:HA	1.87	0.42
6:F:50:ALA:CB	8:H:83:GLN:HB3	2.49	0.42
10:J:86:CYS:CB	11:K:61:VAL:HG13	2.28	0.42
13:M:77:ILE:HG22	13:M:80:LEU:HD22	2.00	0.42
1:A:837:GLN:NE2	1:A:958:ALA:CA	2.83	0.42
1:A:1433:LEU:HD22	1:A:1478:LEU:CD2	2.50	0.42
1:A:1597:LYS:HG2	1:A:1916:GLN:HE22	1.83	0.42
1:A:2013:ALA:HB2	1:A:2020:ILE:HD13	2.00	0.42
1:A:3191:LYS:HD2	1:A:3360:GLU:HA	2.01	0.42
1:A:3222:GLU:HB2	1:A:3328:ALA:HB1	2.01	0.42
2:B:433:ILE:HG12	2:B:463:PHE:HE1	1.85	0.42
2:B:1102:LEU:HD23	2:B:1105:GLN:CB	2.50	0.42
2:B:1154:GLU:N	2:B:1155:PRO:HD2	2.33	0.42
2:B:2040:LEU:HD13	2:B:2083:LEU:HD22	2.00	0.42
2:B:2260:TRP:CD1	2:B:2302:ILE:HD12	2.54	0.42
2:B:2666:ARG:NH2	20:B:5601:ATP:O3G	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3902:TYR:O	2:B:3934:ARG:NH1	2.53	0.42
2:B:4017:LEU:HD12	2:B:4044:ILE:HA	2.01	0.42
3:C:7:TRP:CZ3	3:C:352:LEU:HD12	2.54	0.42
3:C:197:PRO:HB2	3:C:200:ARG:NH1	2.34	0.42
3:C:2772:LYS:C	3:C:2772:LYS:CD	2.86	0.42
3:C:2787:ILE:HG23	3:C:2788:VAL:N	2.35	0.42
3:C:2937:TYR:O	3:C:2941:PHE:CD1	2.73	0.42
3:C:4000:ARG:NH1	3:C:4001:ASN:OD1	2.52	0.42
3:C:4113:VAL:HG12	3:C:4114:PRO:HD2	2.01	0.42
4:D:109:PHE:CZ	15:O:121:TYR:CD2	3.03	0.42
4:D:199:ILE:CG2	9:I:104:ALA:CB	2.85	0.42
4:D:458:CYS:HB2	4:D:477:GLU:HB3	2.02	0.42
4:D:537:ILE:HD11	4:D:651:LYS:CD	2.48	0.42
5:E:46:ASN:CB	12:L:90:ALA:HA	2.49	0.42
5:E:55:GLU:HB2	10:J:92:LYS:HG3	2.01	0.42
5:E:121:TYR:CZ	6:F:17:LEU:CD2	3.03	0.42
5:E:286:GLY:CA	5:E:318:GLY:HA2	2.48	0.42
6:F:48:ILE:CD1	6:F:98:LEU:HD22	2.31	0.42
6:F:62:VAL:HG13	6:F:66:ASP:HB2	2.01	0.42
9:I:30:MET:HB3	9:I:35:LEU:CD2	2.50	0.42
9:I:50:SER:HA	9:I:54:LEU:HD12	2.00	0.42
12:L:86:LEU:HD21	13:M:56:ILE:HG12	2.01	0.42
15:O:35:GLN:HA	15:O:38:ILE:HG12	2.01	0.42
17:Q:5:THR:CB	17:Q:37:PRO:O	2.68	0.42
1:A:818:LEU:HB2	1:A:844:LYS:CG	2.45	0.42
1:A:1274:GLY:CA	4:D:164:ASN:HA	2.49	0.42
1:A:1599:PHE:HE2	1:A:1630:LEU:CD2	2.33	0.42
1:A:3117:PHE:HD2	1:A:3429:TRP:HE3	1.68	0.42
1:A:3208:ALA:HB1	1:A:3342:TYR:HB2	2.01	0.42
2:B:35:THR:HA	2:B:36:ALA:HA	1.69	0.42
2:B:224:ASP:CA	2:B:347:ILE:CB	2.96	0.42
2:B:693:GLU:N	2:B:693:GLU:OE2	2.52	0.42
2:B:725:ILE:HD12	2:B:780:VAL:CB	2.49	0.42
2:B:1075:TRP:CE3	2:B:1076:LEU:HB3	2.53	0.42
2:B:1454:GLN:C	2:B:1455:VAL:HG23	2.40	0.42
2:B:3827:LEU:HD21	2:B:4289:LEU:HB3	2.02	0.42
3:C:1281:MET:HE1	3:C:1328:LEU:HD23	2.02	0.42
3:C:2738:ILE:HD11	3:C:2740:ILE:O	2.05	0.42
4:D:288:ARG:HH21	4:D:610:GLY:HA3	1.85	0.42
4:D:297:LYS:HZ2	4:D:316:LEU:HD22	1.84	0.42
4:D:462:PHE:HA	4:D:474:VAL:HA	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:532:TYR:CZ	4:D:652:MET:HE1	2.50	0.42
4:D:553:TYR:CE1	4:D:595:PHE:CZ	2.93	0.42
4:D:561:ALA:HB2	4:D:566:VAL:HG22	2.01	0.42
5:E:81:PRO:HG2	5:E:95:PHE:CE2	2.55	0.42
5:E:272:MET:SD	5:E:326:VAL:HG23	2.58	0.42
5:E:308:GLU:OE2	5:E:361:LEU:HD23	2.19	0.42
12:L:66:GLU:HG3	12:L:66:GLU:O	2.20	0.42
1:A:590:GLN:C	1:A:609:TRP:CH2	2.92	0.42
1:A:604:ALA:HB2	1:A:698:GLU:CD	2.40	0.42
1:A:804:ASN:CG	5:E:148:LYS:HB3	2.33	0.42
1:A:1012:LYS:CB	1:A:1071:ILE:HD12	2.39	0.42
1:A:1020:PHE:CE2	1:A:1069:TYR:CD1	3.07	0.42
1:A:1263:TYR:HE2	1:A:1280:TYR:HA	1.84	0.42
1:A:1270:GLU:CB	1:A:1277:ASN:ND2	2.82	0.42
1:A:1521:LEU:O	1:A:1541:PHE:HE2	1.98	0.42
1:A:1570:LEU:HD12	1:A:1570:LEU:N	2.32	0.42
1:A:1597:LYS:HZ1	1:A:1962:ILE:HD11	1.76	0.42
2:B:802:ILE:HD11	2:B:882:LEU:HD11	1.67	0.42
2:B:947:LEU:HD22	2:B:955:PHE:HZ	1.85	0.42
2:B:1511:VAL:N	2:B:1570:VAL:HG13	2.31	0.42
2:B:2696:LEU:HD12	2:B:2707:ALA:HB2	2.01	0.42
3:C:106:LEU:CD2	3:C:133:PRO:HB2	2.49	0.42
3:C:162:GLY:HA2	3:C:203:HIS:CE1	2.54	0.42
3:C:2738:ILE:CB	3:C:2746:PRO:CD	2.96	0.42
4:D:141:MET:SD	4:D:155:GLU:HG2	2.60	0.42
4:D:248:MET:SD	7:G:125:PHE:HE2	2.42	0.42
4:D:350:VAL:CG1	4:D:365:VAL:HG13	2.49	0.42
5:E:60:SER:HB3	10:J:87:GLN:HA	2.01	0.42
5:E:120:ILE:HG12	6:F:101:GLN:OE1	2.20	0.42
6:F:107:ILE:CG2	6:F:111:LYS:HE3	2.49	0.42
7:G:64:LEU:HD22	7:G:76:TYR:CE2	2.55	0.42
7:G:125:PHE:HZ	7:G:136:MET:HB3	1.85	0.42
10:J:40:ALA:HB1	10:J:107:MET:CE	2.50	0.42
10:J:79:PHE:CE2	11:K:68:ALA:HB3	2.55	0.42
12:L:73:GLU:CG	13:M:66:ILE:HD12	2.48	0.42
13:M:75:PHE:CZ	13:M:82:LEU:HD13	2.55	0.42
1:A:937:LEU:HD12	1:A:1081:ILE:CD1	2.50	0.42
1:A:944:LEU:HD13	1:A:1013:VAL:HG11	1.97	0.42
1:A:1126:VAL:O	1:A:1126:VAL:CG1	2.65	0.42
1:A:1926:PHE:CE2	1:A:1934:LEU:HD22	2.54	0.42
2:B:277:GLU:O	2:B:281:ALA:CB	2.68	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:551:TYR:CE2	2:B:622:VAL:HG12	2.55	0.42
2:B:809:MET:HE3	2:B:813:ASP:HB3	2.02	0.42
2:B:917:ILE:HG22	2:B:980:GLU:HG3	2.02	0.42
2:B:3928:LEU:HD13	2:B:3928:LEU:C	2.40	0.42
3:C:218:GLY:HA3	3:C:253:LEU:CD2	2.45	0.42
3:C:1017:MET:HE2	3:C:1030:VAL:HB	2.01	0.42
3:C:2213:ARG:HB3	19:C:4702:ADP:H5'2	2.02	0.42
3:C:2775:VAL:CG2	3:C:2824:TYR:CE2	2.98	0.42
3:C:2824:TYR:HA	3:C:2827:ILE:HB	2.02	0.42
3:C:3724:CYS:HB3	3:C:3764:LEU:HD11	2.01	0.42
3:C:4051:THR:HB	3:C:4108:ILE:HG23	2.01	0.42
4:D:105:MET:HE1	14:N:47:THR:CB	2.49	0.42
4:D:312:PHE:O	4:D:312:PHE:CG	2.73	0.42
4:D:460:LEU:HD12	4:D:502:ALA:HB1	2.01	0.42
4:D:526:ARG:HB2	4:D:528:TRP:CZ3	2.47	0.42
5:E:110:LYS:CA	6:F:10:GLN:HG2	2.45	0.42
5:E:179:VAL:HG11	5:E:485:VAL:HG21	2.02	0.42
5:E:429:ARG:HH21	5:E:433:TRP:HB2	1.85	0.42
7:G:78:ILE:HD13	7:G:145:LEU:HG	2.01	0.42
9:I:79:ILE:O	9:I:79:ILE:HG13	2.20	0.42
10:J:19:LYS:CE	15:O:19:LEU:HD13	2.13	0.42
10:J:38:GLU:CB	15:O:29:PHE:CZ	3.03	0.42
10:J:43:GLU:HG2	10:J:67:TYR:CG	2.55	0.42
11:K:30:LYS:HD3	11:K:30:LYS:O	2.19	0.42
11:K:33:VAL:HA	11:K:42:ILE:HD11	2.01	0.42
11:K:80:PHE:CE1	11:K:87:ILE:HB	2.55	0.42
1:A:56:TYR:C	1:A:58:GLN:H	2.23	0.42
1:A:601:PRO:HB2	1:A:698:GLU:HG2	1.89	0.42
1:A:621:ILE:HD11	1:A:640:SER:HB2	2.01	0.42
1:A:709:ILE:CG2	1:A:710:PRO:CD	2.78	0.42
1:A:1517:LEU:HB3	1:A:1581:LEU:HD22	2.02	0.42
1:A:3236:ILE:HD11	1:A:3333:LEU:HD12	1.19	0.42
2:B:298:LEU:O	2:B:302:LEU:N	2.33	0.42
2:B:433:ILE:HG23	2:B:463:PHE:CE2	2.36	0.42
2:B:786:SER:CB	2:B:843:VAL:HG22	2.50	0.42
2:B:1234:GLU:CB	2:B:1308:LEU:CB	2.83	0.42
2:B:1771:LEU:HD11	2:B:1787:ILE:HG23	2.01	0.42
2:B:3894:ALA:N	2:B:3895:PRO:HD2	2.34	0.42
2:B:4466:LEU:HD13	2:B:4466:LEU:C	2.40	0.42
3:C:96:LEU:HB3	3:C:113:ILE:HG23	2.00	0.42
3:C:338:PHE:HA	3:C:349:LEU:HD12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1388:THR:HB	3:C:3786:ILE:HG23	2.02	0.42
3:C:2581:LEU:C	3:C:2581:LEU:CD2	2.85	0.42
3:C:2738:ILE:CG2	3:C:2746:PRO:CG	2.96	0.42
3:C:3057:ILE:HA	3:C:3101:PHE:O	2.19	0.42
3:C:3625:GLN:HA	3:C:3662:SER:OG	2.20	0.42
4:D:114:ASP:O	5:E:42:GLN:HA	2.19	0.42
4:D:360:ALA:CA	5:E:133:PHE:HZ	2.31	0.42
5:E:306:ILE:HG23	5:E:343:LEU:HD12	2.01	0.42
5:E:343:LEU:HD21	5:E:358:ARG:HG2	2.02	0.42
8:H:65:PHE:CE2	8:H:85:ALA:HB3	2.55	0.42
10:J:83:ASN:ND2	11:K:64:LYS:HD2	2.34	0.42
10:J:86:CYS:HG	11:K:61:VAL:HA	1.84	0.42
10:J:97:TYR:CD1	10:J:106:LEU:HB2	2.54	0.42
12:L:57:LEU:HD12	12:L:57:LEU:O	2.20	0.42
12:L:86:LEU:HD21	13:M:56:ILE:CG1	2.50	0.42
13:M:75:PHE:CZ	13:M:82:LEU:HD22	2.55	0.42
14:N:115:MET:HG3	15:O:129:CYS:SG	2.60	0.42
1:A:832:SER:O	1:A:836:LEU:HG	2.20	0.42
1:A:935:VAL:CG2	1:A:1017:LEU:CD2	2.89	0.42
1:A:1052:LEU:HB3	1:A:1166:TYR:CZ	2.46	0.42
1:A:1458:MET:HE2	1:A:1518:TRP:CH2	2.50	0.42
1:A:1638:THR:CG2	1:A:1655:GLN:CG	2.94	0.42
1:A:1764:LEU:HD12	1:A:1788:GLN:HG3	2.02	0.42
1:A:3192:GLU:N	1:A:3192:GLU:OE1	2.53	0.42
1:A:3273:TYR:CG	1:A:3273:TYR:O	2.73	0.42
1:A:3534:GLN:O	1:A:3536:GLN:N	2.53	0.42
1:A:4415:VAL:HG21	1:A:4438:TRP:CD1	2.55	0.42
2:B:60:ASN:CA	2:B:81:ILE:CB	2.97	0.42
2:B:609:LEU:HD22	2:B:609:LEU:H	1.85	0.42
2:B:736:LEU:HG	2:B:855:SER:O	2.20	0.42
2:B:969:LEU:HD13	3:C:341:TRP:CZ2	2.46	0.42
2:B:984:ASN:C	2:B:987:ARG:HG2	2.40	0.42
2:B:1057:LEU:HD11	2:B:1098:TYR:CD2	2.55	0.42
2:B:1122:ASP:HB2	2:B:1135:HIS:CE1	2.55	0.42
2:B:3147:GLN:HE21	2:B:3427:ALA:HB2	1.85	0.42
2:B:3269:LEU:HD13	2:B:3269:LEU:N	2.33	0.42
3:C:2669:ILE:CA	3:C:2844:LEU:CB	2.96	0.42
3:C:2688:GLN:N	3:C:2689:PRO:HD2	2.35	0.42
3:C:2723:PHE:CZ	3:C:2749:VAL:HG12	2.38	0.42
3:C:2727:ILE:HD12	3:C:2727:ILE:HA	1.94	0.42
3:C:2730:LEU:CD2	3:C:2738:ILE:HD13	2.37	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:94:ARG:CZ	13:M:78:ASN:HD21	2.27	0.42
4:D:622:LYS:CB	4:D:640:LYS:HD2	2.49	0.42
5:E:20:PHE:CD2	5:E:20:PHE:O	2.73	0.42
5:E:23:THR:CG2	14:N:88:TYR:CE1	2.99	0.42
5:E:216:SER:HB3	5:E:235:CYS:HB3	2.01	0.42
5:E:261:HIS:NE2	5:E:265:VAL:HG22	2.34	0.42
5:E:286:GLY:H	5:E:318:GLY:HA2	1.84	0.42
5:E:426:PHE:CD1	5:E:426:PHE:N	2.87	0.42
5:E:426:PHE:HD2	5:E:436:VAL:HG22	1.83	0.42
12:L:77:ILE:CD1	13:M:65:ILE:CD1	2.98	0.42
15:O:102:LEU:HD13	15:O:103:TRP:N	2.35	0.42
1:A:59:VAL:C	1:A:100:ASN:O	2.58	0.42
1:A:95:PHE:H	1:A:124:THR:CB	2.33	0.42
1:A:791:LEU:CG	1:A:795:ILE:HD11	2.50	0.42
1:A:935:VAL:CG1	1:A:944:LEU:CD2	2.98	0.42
1:A:1212:LEU:HD23	1:A:1212:LEU:O	2.19	0.42
1:A:1486:HIS:O	1:A:1489:PRO:HD2	2.20	0.42
1:A:1513:LYS:HD3	1:A:1578:ASN:HD22	1.76	0.42
1:A:3279:GLN:OE1	1:A:3279:GLN:HA	2.19	0.42
1:A:3953:ILE:N	1:A:3953:ILE:HD12	2.35	0.42
1:A:4336:ASN:HB2	1:A:4339:GLU:HB3	2.01	0.42
2:B:1511:VAL:O	2:B:1514:VAL:HG12	2.20	0.42
2:B:3139:GLY:N	2:B:3433:TRP:HZ3	2.07	0.42
4:D:184:GLY:HA3	11:K:69:TYR:CE1	2.53	0.42
4:D:518:SER:CB	4:D:528:TRP:HZ3	2.31	0.42
4:D:603:LEU:HD22	4:D:611:VAL:CG1	2.48	0.42
10:J:48:LEU:CD2	10:J:60:ILE:HD13	2.49	0.42
1:A:1396:PRO:O	1:A:1400:TYR:CA	2.68	0.41
1:A:1596:ARG:CZ	1:A:1909:LYS:HE3	2.50	0.41
1:A:3106:LYS:HB3	1:A:3443:LEU:HD21	1.97	0.41
2:B:655:LYS:CA	2:B:677:LEU:HD11	2.47	0.41
2:B:946:ARG:CA	2:B:955:PHE:CZ	2.81	0.41
2:B:3207:GLU:HG3	2:B:3367:LEU:CB	2.50	0.41
2:B:3654:GLU:OE1	2:B:3748:ARG:NH1	2.52	0.41
3:C:287:PHE:HE1	3:C:322:GLU:HB2	1.84	0.41
3:C:1171:ILE:HD11	3:C:1222:MET:SD	2.60	0.41
3:C:1397:MET:CE	3:C:3759:ILE:HD12	2.50	0.41
3:C:2666:CYS:HB2	3:C:2848:THR:N	2.34	0.41
3:C:2738:ILE:CA	3:C:2746:PRO:CG	2.28	0.41
3:C:2934:PHE:HE2	3:C:3001:ILE:HG13	1.85	0.41
3:C:3014:PRO:HD3	3:C:3125:THR:HG22	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3073:ALA:O	3:C:3074:ARG:HG2	2.20	0.41
5:E:110:LYS:HA	6:F:10:GLN:CG	2.46	0.41
5:E:117:GLU:HG3	6:F:17:LEU:CD2	2.49	0.41
5:E:253:MET:CB	5:E:296:PHE:CE2	3.03	0.41
5:E:423:GLY:CA	5:E:505:ILE:HD12	2.47	0.41
8:H:8:GLN:N	8:H:9:PRO:HD3	2.35	0.41
9:I:77:CYS:O	9:I:77:CYS:SG	2.78	0.41
12:L:16:LEU:HD21	12:L:19:HIS:HE1	1.85	0.41
12:L:86:LEU:CD1	13:M:54:ASN:HB3	2.36	0.41
13:M:45:PHE:HA	13:M:48:ILE:HG22	2.00	0.41
1:A:748:CYS:SG	1:A:802:ILE:CD1	3.08	0.41
1:A:755:HIS:CE1	1:A:869:TYR:CB	3.02	0.41
1:A:871:LEU:CD2	1:A:872:ASP:N	2.60	0.41
1:A:1031:ILE:HG23	1:A:1034:SER:CB	2.48	0.41
1:A:1111:LEU:HD11	1:A:1156:VAL:HG21	2.02	0.41
1:A:1163:LEU:CD2	1:A:1167:LEU:HD12	2.50	0.41
1:A:1183:LEU:C	1:A:1183:LEU:CD2	2.86	0.41
1:A:1504:VAL:HG21	1:A:1565:CYS:SG	2.56	0.41
1:A:2676:TRP:CD2	1:A:2699:LEU:HD21	2.54	0.41
1:A:3095:TYR:HD1	1:A:3455:SER:HG	1.67	0.41
1:A:4252:PRO:HG3	1:A:4265:TYR:CG	2.54	0.41
2:B:531:LEU:HD23	2:B:536:ILE:HG21	2.02	0.41
2:B:609:LEU:H	2:B:609:LEU:CD2	2.33	0.41
2:B:734:GLU:N	2:B:735:PRO:CD	2.80	0.41
2:B:803:GLU:HG3	2:B:803:GLU:O	2.20	0.41
2:B:1474:MET:SD	2:B:1515:VAL:CG2	3.09	0.41
2:B:1798:ARG:NH2	2:B:2049:ARG:HD2	2.35	0.41
2:B:1912:LYS:HA	2:B:1922:VAL:HG11	2.02	0.41
2:B:2893:GLY:HA2	19:B:5602:ADP:H5'2	2.02	0.41
2:B:3178:VAL:CG1	2:B:3395:LEU:HD11	2.47	0.41
2:B:3268:THR:CG2	2:B:3269:LEU:H	2.20	0.41
2:B:3269:LEU:CD1	2:B:3269:LEU:N	2.82	0.41
3:C:192:PRO:HG3	3:C:232:TYR:HE2	1.84	0.41
3:C:293:VAL:HG23	3:C:304:ILE:HB	2.01	0.41
3:C:2585:PHE:CD1	3:C:2932:SER:OG	2.73	0.41
3:C:2779:GLN:O	3:C:2780:VAL:CG2	2.68	0.41
3:C:3757:LEU:HD23	3:C:3757:LEU:C	2.41	0.41
4:D:288:ARG:NE	4:D:610:GLY:HA3	2.32	0.41
4:D:312:PHE:CZ	4:D:332:TYR:HB2	2.54	0.41
4:D:401:GLN:CG	4:D:462:PHE:CD1	3.03	0.41
5:E:66:VAL:CG1	8:H:72:GLU:HG2	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:80:TRP:CH2	5:E:92:THR:HA	2.55	0.41
5:E:110:LYS:HG2	6:F:10:GLN:NE2	2.33	0.41
5:E:327:GLU:HB3	5:E:380:PRO:HB3	2.02	0.41
6:F:63:ILE:HG13	6:F:74:ILE:HG22	2.03	0.41
10:J:81:GLY:HA3	11:K:66:PHE:HA	2.02	0.41
12:L:86:LEU:N	12:L:86:LEU:HD22	2.35	0.41
13:M:12:MET:SD	13:M:16:MET:HB3	2.60	0.41
1:A:674:LEU:HD13	1:A:674:LEU:C	2.41	0.41
1:A:677:ARG:HG3	1:A:677:ARG:O	2.19	0.41
1:A:907:ASN:HB3	1:A:911:TYR:HE2	1.85	0.41
1:A:952:GLN:HE21	1:A:1010:LYS:HZ2	1.67	0.41
1:A:1111:LEU:HB3	1:A:1183:LEU:HD11	2.03	0.41
1:A:1426:GLN:O	1:A:1430:ARG:HG3	2.19	0.41
1:A:1448:GLY:O	1:A:1459:LEU:HA	2.20	0.41
1:A:1534:MET:N	1:A:1535:PRO:CD	2.83	0.41
1:A:1924:ASP:HA	1:A:1975:THR:OG1	2.20	0.41
1:A:2227:THR:HG22	1:A:2267:ASN:HB2	2.02	0.41
1:A:2275:GLU:HB2	1:A:2624:ARG:HD3	2.02	0.41
1:A:3442:LYS:CG	1:A:3485:THR:HG23	2.49	0.41
2:B:533:ARG:NH1	2:B:534:PRO:HG3	2.36	0.41
2:B:736:LEU:CD1	2:B:859:TYR:CG	3.02	0.41
2:B:993:TYR:CE2	2:B:1067:ILE:HG21	2.55	0.41
2:B:3432:ARG:HH12	2:B:3687:LEU:HD11	1.85	0.41
2:B:3555:THR:HG22	2:B:3578:LEU:HD23	2.02	0.41
3:C:276:PHE:CE1	3:C:282:ARG:HG3	2.55	0.41
3:C:2564:LEU:HD13	3:C:2564:LEU:C	2.40	0.41
3:C:2698:LEU:CD2	3:C:2698:LEU:C	2.85	0.41
4:D:110:SER:HA	15:O:96:ARG:HA	2.02	0.41
4:D:379:ASN:ND2	5:E:138:SER:OG	2.53	0.41
4:D:470:HIS:HA	4:D:486:ARG:HD3	2.02	0.41
4:D:501:LEU:HD23	4:D:501:LEU:HA	1.91	0.41
5:E:22:ASP:CB	14:N:91:THR:H	2.25	0.41
5:E:94:ARG:HE	5:E:94:ARG:HB2	1.67	0.41
5:E:408:HIS:CB	5:E:412:LEU:HD21	2.51	0.41
6:F:51:LEU:HD21	7:G:116:ASP:OD2	2.20	0.41
8:H:91:THR:OG1	9:I:76:GLN:NE2	2.44	0.41
9:I:26:ASN:HB3	9:I:98:PHE:CE2	2.43	0.41
12:L:92:VAL:CG1	12:L:109:LYS:HD3	2.49	0.41
1:A:675:ILE:HA	1:A:687:ASN:CB	2.50	0.41
1:A:762:LYS:NZ	1:A:787:GLY:CA	2.83	0.41
1:A:847:PHE:HZ	1:A:851:LYS:CE	2.29	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1016:PHE:HD2	1:A:1020:PHE:CZ	2.38	0.41
1:A:1136:MET:HE3	1:A:1136:MET:N	2.36	0.41
1:A:3124:ILE:HD11	1:A:3429:TRP:HE1	1.86	0.41
1:A:3260:LYS:HZ1	1:A:3267:LEU:CD2	2.29	0.41
2:B:57:ASN:N	2:B:84:PHE:O	2.53	0.41
2:B:178:SER:HA	2:B:197:GLU:CB	2.50	0.41
2:B:673:PHE:HZ	2:B:677:LEU:HB3	1.74	0.41
2:B:954:ASP:HB2	3:C:222:PHE:HA	2.02	0.41
2:B:1603:LYS:HD3	2:B:1610:TYR:CE1	2.55	0.41
2:B:3085:VAL:HG23	2:B:3477:TRP:CZ2	2.56	0.41
2:B:3119:LYS:HB3	2:B:3119:LYS:HZ2	1.82	0.41
2:B:4076:LEU:C	2:B:4076:LEU:HD12	2.40	0.41
3:C:25:THR:OG1	3:C:87:SER:CB	2.67	0.41
3:C:90:ILE:HA	3:C:153:PHE:CE2	2.55	0.41
3:C:106:LEU:H	3:C:106:LEU:CD1	2.33	0.41
3:C:360:PRO:HD2	3:C:361:PRO:HD2	2.00	0.41
3:C:1201:PHE:HD1	3:C:1225:THR:HG21	1.85	0.41
3:C:1687:GLY:O	3:C:1688:ALA:HB3	2.20	0.41
3:C:2725:ALA:HA	3:C:2728:TYR:CD2	2.48	0.41
4:D:89:TYR:CD2	11:K:56:PRO:CB	3.04	0.41
4:D:199:ILE:HG21	9:I:104:ALA:HB2	1.94	0.41
4:D:212:ILE:CG1	9:I:19:MET:CE	2.90	0.41
4:D:252:VAL:CB	7:G:149:GLN:HE22	2.32	0.41
4:D:316:LEU:N	4:D:316:LEU:CD1	2.83	0.41
4:D:563:MET:O	4:D:563:MET:SD	2.79	0.41
5:E:113:LYS:HE2	6:F:10:GLN:CA	2.48	0.41
5:E:250:ASN:HB3	5:E:251:PRO:HD2	2.01	0.41
5:E:259:ASN:CG	5:E:299:GLY:HA3	2.28	0.41
5:E:280:VAL:HG22	5:E:322:LEU:HD11	2.02	0.41
5:E:394:TRP:NE1	5:E:401:PRO:CD	2.80	0.41
5:E:498:GLN:HB2	5:E:501:GLU:HG3	2.01	0.41
9:I:24:ILE:CG2	9:I:98:PHE:HD1	2.33	0.41
11:K:60:CYS:O	11:K:60:CYS:SG	2.77	0.41
15:O:30:TYR:H	15:O:31:PRO:HD3	1.81	0.41
1:A:1814:ILE:HD12	1:A:1814:ILE:N	2.35	0.41
2:B:58:SER:H	2:B:70:LYS:N	2.19	0.41
2:B:549:GLU:HA	2:B:549:GLU:OE2	2.19	0.41
2:B:886:ILE:HG21	2:B:972:ILE:HD12	2.01	0.41
2:B:1139:LEU:C	2:B:1139:LEU:CD1	2.86	0.41
2:B:1516:ASN:HB3	2:B:1520:LYS:HE3	2.02	0.41
2:B:3041:ASN:OD1	2:B:3042:ASN:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4498:LEU:HD21	2:B:4577:VAL:HG13	2.03	0.41
3:C:2005:PRO:HB2	3:C:2145:PHE:CD1	2.55	0.41
3:C:2719:VAL:CG1	3:C:2720:PRO:CD	2.77	0.41
3:C:2934:PHE:HE2	3:C:3001:ILE:CG1	2.33	0.41
3:C:3711:LEU:HD21	3:C:3725:LEU:HD23	2.02	0.41
4:D:174:GLN:C	13:M:61:PHE:O	2.56	0.41
4:D:331:LEU:HD13	4:D:342:TYR:HB2	2.03	0.41
4:D:550:TRP:HZ3	4:D:556:THR:HA	1.85	0.41
5:E:145:LEU:HD22	5:E:494:LEU:CG	2.43	0.41
5:E:214:SER:HB3	5:E:243:TRP:CZ2	2.53	0.41
5:E:385:SER:CB	5:E:394:TRP:HZ3	2.33	0.41
6:F:33:LEU:N	6:F:33:LEU:CD2	2.84	0.41
7:G:123:LEU:HD23	7:G:123:LEU:HA	1.74	0.41
14:N:84:GLN:NE2	15:O:61:GLU:CB	2.66	0.41
15:O:30:TYR:CZ	15:O:34:ILE:HG13	2.55	0.41
1:A:674:LEU:C	1:A:674:LEU:CD1	2.89	0.41
1:A:1143:ARG:HE	4:D:169:ASN:ND2	2.01	0.41
1:A:1448:GLY:C	1:A:1459:LEU:HD22	2.41	0.41
1:A:1449:ILE:N	1:A:1459:LEU:HD22	2.36	0.41
1:A:1550:LYS:HA	1:A:1550:LYS:HD2	1.75	0.41
2:B:911:ILE:CD1	2:B:991:ASP:OD2	2.68	0.41
2:B:1069:THR:CB	2:B:1070:PRO:CD	2.92	0.41
2:B:1083:MET:SD	2:B:1083:MET:O	2.79	0.41
2:B:1378:LEU:N	2:B:1424:GLU:OE2	2.54	0.41
2:B:3264:ASN:HA	2:B:3306:ILE:CD1	2.51	0.41
3:C:6:VAL:HG22	3:C:7:TRP:N	2.35	0.41
3:C:532:GLY:N	3:C:546:LYS:O	2.54	0.41
3:C:970:LYS:O	3:C:974:LYS:N	2.48	0.41
3:C:2159:SER:HA	3:C:2185:VAL:CG1	2.51	0.41
3:C:2798:PHE:HB2	3:C:2803:MET:SD	2.61	0.41
3:C:3245:HIS:HD2	3:C:3246:SER:O	2.03	0.41
5:E:243:TRP:NE1	5:E:251:PRO:HB3	2.35	0.41
10:J:86:CYS:SG	11:K:61:VAL:CA	3.09	0.41
1:A:1845:LEU:HD23	1:A:1845:LEU:HA	1.94	0.41
1:A:2945:GLY:HA3	1:A:2992:ARG:HD2	2.02	0.41
1:A:2951:LEU:HD11	1:A:2956:ARG:HG3	2.03	0.41
1:A:3577:THR:HG22	1:A:3622:LYS:HB2	2.03	0.41
1:A:3753:ARG:HG2	1:A:3803:ILE:HG23	2.02	0.41
2:B:409:SER:CA	2:B:413:PHE:HB2	2.51	0.41
2:B:439:LEU:HD12	2:B:503:LEU:HD21	2.02	0.41
2:B:599:ILE:CG2	2:B:626:TYR:CD1	3.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:603:ILE:HD12	2:B:626:TYR:CE1	2.49	0.41
2:B:2862:LEU:N	2:B:2862:LEU:HD12	2.35	0.41
3:C:71:GLN:HG3	3:C:71:GLN:O	2.21	0.41
3:C:194:GLY:H	3:C:238:GLU:CB	2.33	0.41
3:C:1191:ILE:HG23	3:C:1201:PHE:CE2	2.56	0.41
3:C:2740:ILE:HB	3:C:2744:LYS:CB	2.46	0.41
3:C:3644:LEU:HD11	3:C:3661:ILE:HD11	2.02	0.41
3:C:3871:VAL:O	3:C:3874:THR:OG1	2.37	0.41
4:D:431:ASN:H	5:E:142:VAL:HG12	1.85	0.41
4:D:474:VAL:HG13	4:D:474:VAL:O	2.19	0.41
4:D:561:ALA:CB	4:D:566:VAL:HG22	2.51	0.41
5:E:57:SER:HG	10:J:90:HIS:CE1	2.39	0.41
5:E:60:SER:HA	10:J:87:GLN:HA	2.01	0.41
5:E:75:HIS:CD2	5:E:75:HIS:O	2.74	0.41
5:E:198:TYR:CE1	5:E:211:LYS:HG3	2.55	0.41
5:E:317:ILE:HG22	5:E:338:GLU:HB2	2.02	0.41
6:F:87:TYR:CD2	6:F:100:ILE:HG12	2.56	0.41
10:J:102:LYS:HD2	10:J:102:LYS:O	2.21	0.41
11:K:79:PHE:HD1	11:K:88:LEU:HD13	1.85	0.41
12:L:99:LEU:N	12:L:100:PRO:CD	2.84	0.41
13:M:44:GLU:HA	13:M:47:LYS:HZ1	1.85	0.41
1:A:506:ALA:O	1:A:510:PHE:CB	2.68	0.41
1:A:1720:SER:HA	1:A:1780:LYS:HG3	2.03	0.41
1:A:1806:PHE:O	1:A:1809:GLN:N	2.54	0.41
1:A:2316:ARG:HH11	1:A:2372:VAL:HG22	1.85	0.41
1:A:2340:GLN:OE1	1:A:2341:SER:N	2.53	0.41
1:A:3128:THR:HG22	1:A:3422:LEU:CB	2.38	0.41
1:A:3194:ALA:HB3	1:A:3356:VAL:CG2	2.40	0.41
1:A:3532:ASP:HB3	1:A:3647:PHE:HB3	2.02	0.41
2:B:4:HIS:C	2:B:6:GLN:H	2.22	0.41
2:B:644:TRP:HZ3	2:B:695:PRO:HB3	1.84	0.41
2:B:744:MET:CG	2:B:776:LEU:HD22	2.32	0.41
2:B:805:LYS:HD3	2:B:809:MET:CE	2.50	0.41
2:B:1458:PHE:HE1	2:B:1560:MET:CE	2.34	0.41
2:B:2332:MET:N	2:B:2333:PRO:CD	2.83	0.41
2:B:2488:GLU:HG2	2:B:2492:ASN:HD21	1.86	0.41
2:B:2754:THR:HG21	2:B:2770:LEU:CD2	2.51	0.41
2:B:3143:LEU:HD21	2:B:3698:LEU:CD1	2.49	0.41
2:B:3446:SER:HA	2:B:3488:ILE:CA	2.46	0.41
2:B:3478:LEU:HB3	2:B:3479:PRO:HD3	2.02	0.41
3:C:10:LEU:HD23	3:C:65:ASN:O	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:354:VAL:CG1	3:C:357:ILE:HB	2.49	0.41
3:C:531:GLU:HA	3:C:546:LYS:O	2.21	0.41
3:C:1188:LEU:CD1	3:C:1207:LEU:HD11	2.50	0.41
3:C:4017:LEU:HD12	3:C:4018:CYS:N	2.36	0.41
4:D:199:ILE:HD12	4:D:199:ILE:HA	1.96	0.41
4:D:248:MET:HG2	7:G:138:ALA:HB2	2.03	0.41
5:E:63:THR:HA	10:J:99:TYR:OH	2.21	0.41
5:E:230:GLN:HE21	5:E:242:VAL:HG11	1.86	0.41
6:F:26:PHE:CE1	6:F:49:ALA:N	2.89	0.41
6:F:107:ILE:HG22	6:F:111:LYS:HE3	2.02	0.41
7:G:103:ILE:HD12	7:G:146:ILE:HG21	2.02	0.41
8:H:36:ASN:N	8:H:36:ASN:ND2	2.68	0.41
9:I:63:ILE:CG2	9:I:77:CYS:SG	3.09	0.41
16:P:61:GLU:C	16:P:63:ARG:N	2.73	0.41
1:A:402:PRO:C	1:A:467:ILE:O	2.59	0.41
1:A:852:ASN:OD1	1:A:894:PHE:CZ	2.74	0.41
1:A:909:MET:HE2	1:A:955:ILE:HD11	1.91	0.41
1:A:963:LEU:HD12	1:A:986:TYR:CE1	2.56	0.41
1:A:967:LYS:HB2	1:A:986:TYR:HB2	2.03	0.41
1:A:1143:ARG:NE	4:D:169:ASN:HD22	1.99	0.41
1:A:1270:GLU:CB	1:A:1277:ASN:CG	2.89	0.41
1:A:1436:ILE:CG2	1:A:1474:ASP:OD2	2.66	0.41
1:A:1562:ILE:N	1:A:1563:PRO:HD2	2.36	0.41
1:A:1631:PHE:HB2	1:A:1634:ILE:HG21	2.02	0.41
1:A:1637:VAL:HG12	1:A:1653:ILE:HG23	1.97	0.41
1:A:1918:GLY:HA3	1:A:1967:ILE:HG21	2.01	0.41
1:A:2171:THR:O	1:A:2175:THR:HG23	2.21	0.41
1:A:2367:CYS:HB3	1:A:2386:PHE:CE1	2.56	0.41
1:A:2448:TRP:CZ2	1:A:2450:PRO:HA	2.56	0.41
1:A:3238:ASN:O	1:A:3242:VAL:HG23	2.20	0.41
1:A:3251:ILE:CG1	17:Q:82:ASN:CB	2.98	0.41
2:B:861:ASP:CG	3:C:170:GLN:HB2	2.30	0.41
2:B:1102:LEU:HD23	2:B:1105:GLN:HB2	2.01	0.41
2:B:1139:LEU:HD13	2:B:1139:LEU:O	2.21	0.41
2:B:1317:LEU:HA	16:P:61:GLU:CA	2.20	0.41
2:B:1437:GLU:O	2:B:1441:GLU:HG3	2.21	0.41
2:B:1440:ILE:O	2:B:1443:LYS:HB2	2.20	0.41
2:B:2267:ILE:HG13	2:B:2311:ALA:HB2	2.03	0.41
2:B:2819:ILE:HD11	2:B:2870:GLU:HG2	2.03	0.41
2:B:3116:ASP:HA	2:B:3119:LYS:NZ	2.35	0.41
2:B:3446:SER:HB2	2:B:3489:THR:CB	2.38	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3458:VAL:CG2	2:B:3498:LEU:HD21	2.51	0.41
2:B:3762:ILE:O	2:B:3765:SER:OG	2.30	0.41
2:B:4130:LEU:C	2:B:4130:LEU:HD23	2.41	0.41
2:B:4139:THR:HG21	2:B:4211:TYR:CD1	2.56	0.41
2:B:4148:PRO:O	2:B:4152:ASN:ND2	2.53	0.41
3:C:195:ASN:O	3:C:239:TRP:CE2	2.73	0.41
3:C:215:MET:HA	3:C:230:MET:O	2.21	0.41
3:C:273:VAL:HG23	3:C:273:VAL:O	2.21	0.41
3:C:326:ILE:HG23	3:C:326:ILE:O	2.21	0.41
3:C:1299:VAL:O	3:C:1299:VAL:HG12	2.21	0.41
3:C:1694:TRP:CZ3	3:C:1710:LEU:HD13	2.56	0.41
3:C:1742:LEU:HD12	3:C:1780:LEU:HD22	2.03	0.41
3:C:3627:VAL:HG21	3:C:3661:ILE:HG23	2.03	0.41
3:C:4028:TYR:O	3:C:4031:ALA:HB3	2.21	0.41
4:D:286:ILE:HG21	4:D:287:TRP:CZ3	2.56	0.41
4:D:329:ILE:CG1	4:D:350:VAL:HG21	2.51	0.41
4:D:517:ILE:CG1	4:D:550:TRP:NE1	2.73	0.41
4:D:537:ILE:CD1	4:D:647:TYR:CE2	3.04	0.41
4:D:573:VAL:CB	4:D:579:LEU:HD21	2.51	0.41
5:E:166:GLU:CB	5:E:220:ASN:HA	2.51	0.41
5:E:324:TYR:CE2	5:E:330:PRO:HA	2.56	0.41
5:E:457:LEU:HD12	5:E:480:ASP:OD1	2.21	0.41
6:F:36:HIS:CD2	6:F:38:LYS:HB2	2.56	0.41
7:G:85:VAL:HG22	7:G:100:ALA:HB1	2.02	0.41
7:G:145:LEU:HD23	7:G:146:ILE:N	2.36	0.41
8:H:65:PHE:HB2	9:I:80:GLY:HA3	1.90	0.41
9:I:11:ASP:HB2	9:I:14:GLU:CG	2.50	0.41
9:I:24:ILE:HD13	9:I:98:PHE:CE1	2.43	0.41
10:J:37:LEU:CD2	10:J:37:LEU:C	2.85	0.41
10:J:40:ALA:HB1	10:J:107:MET:HE3	2.02	0.41
13:M:23:ILE:HG22	13:M:41:ILE:CD1	2.51	0.41
15:O:69:GLU:HA	15:O:69:GLU:OE1	2.21	0.41
1:A:95:PHE:N	1:A:124:THR:CB	2.84	0.41
1:A:739:ARG:HH11	1:A:743:LYS:HZ2	1.64	0.41
1:A:1126:VAL:CG1	1:A:1201:TYR:CE1	3.03	0.41
1:A:1441:ASN:N	1:A:1562:ILE:HD11	2.36	0.41
1:A:1684:LEU:HD23	1:A:1684:LEU:HA	1.93	0.41
1:A:2576:LEU:HD13	1:A:2621:ILE:HG13	2.03	0.41
1:A:2793:VAL:HG23	1:A:2804:ALA:HB2	2.02	0.41
1:A:2855:ILE:HG21	1:A:2863:GLY:HA3	2.03	0.41
1:A:3350:LYS:O	1:A:3354:ILE:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4415:VAL:HG22	1:A:4435:LEU:HA	2.01	0.41
1:A:4462:PHE:CD1	1:A:4524:VAL:HG13	2.56	0.41
2:B:453:THR:CG2	5:E:511:ARG:HD2	2.51	0.41
2:B:524:LEU:C	2:B:524:LEU:CD2	2.85	0.41
2:B:579:PHE:CE2	5:E:369:PRO:HG2	2.48	0.41
2:B:1107:ARG:NH2	2:B:1172:LYS:HE2	2.25	0.41
2:B:1123:GLY:HA2	2:B:1197:PHE:HE1	1.68	0.41
2:B:1492:LYS:HZ1	2:B:3606:GLN:CB	2.34	0.41
2:B:2366:ALA:HA	2:B:2432:LEU:HD13	2.02	0.41
3:C:2698:LEU:HD12	3:C:2820:ILE:HD11	2.02	0.41
3:C:2719:VAL:HA	3:C:2751:TRP:CE3	2.56	0.41
3:C:2726:THR:CB	3:C:2729:LEU:CD1	2.71	0.41
4:D:75:LEU:CG	15:O:102:LEU:CD1	2.93	0.41
4:D:107:VAL:CA	15:O:98:ALA:HA	2.33	0.41
4:D:252:VAL:HG21	7:G:147:VAL:HG11	2.03	0.41
4:D:294:GLN:CG	4:D:297:LYS:CE	2.99	0.41
4:D:412:TYR:CB	4:D:428:LEU:HD22	2.50	0.41
5:E:58:GLU:HB2	10:J:89:VAL:HA	1.92	0.41
5:E:119:CYS:CB	6:F:88:ILE:HG21	2.51	0.41
8:H:54:HIS:NE2	18:R:62:LYS:CA	2.57	0.41
8:H:61:VAL:N	9:I:84:ALA:O	2.28	0.41
9:I:19:MET:CB	9:I:22:LYS:CE	2.98	0.41
14:N:72:ILE:CG1	15:O:97:ILE:HG12	2.47	0.41
15:O:52:ASP:H	15:O:53:PRO:CD	2.27	0.41
17:Q:139:LYS:C	17:Q:141:LEU:H	2.25	0.41
1:A:1116:LYS:HD3	1:A:1116:LYS:O	2.21	0.40
1:A:1460:ASN:HA	1:A:1552:MET:HE1	2.03	0.40
1:A:1514:VAL:HG13	1:A:1581:LEU:HD13	2.03	0.40
1:A:2033:LEU:HD23	1:A:2097:LEU:HD22	2.03	0.40
1:A:2668:LEU:HD11	1:A:2729:LEU:CD2	2.51	0.40
2:B:511:PHE:CE2	2:B:520:ARG:HD3	2.56	0.40
2:B:511:PHE:CZ	2:B:546:VAL:HB	2.56	0.40
2:B:531:LEU:HD22	2:B:536:ILE:HG22	2.02	0.40
2:B:2879:LEU:O	2:B:3017:LYS:NZ	2.52	0.40
2:B:3239:VAL:HB	2:B:3284:MET:HE3	2.03	0.40
2:B:3242:MET:HA	2:B:3245:LEU:CG	2.50	0.40
3:C:209:ALA:HA	3:C:264:TRP:CG	2.56	0.40
3:C:1328:LEU:HG	3:C:1333:VAL:HG11	2.03	0.40
3:C:2850:LYS:O	3:C:2854:VAL:CG2	2.67	0.40
4:D:80:PRO:HD2	15:O:103:TRP:HZ2	1.66	0.40
4:D:134:LYS:HB2	4:D:134:LYS:HZ2	1.84	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:294:GLN:CG	4:D:297:LYS:HE2	2.51	0.40
4:D:422:ARG:HB3	4:D:422:ARG:HH21	1.85	0.40
4:D:543:MET:HG3	4:D:563:MET:HB3	2.03	0.40
4:D:553:TYR:CD1	4:D:595:PHE:HE2	2.39	0.40
6:F:35:ARG:HH21	6:F:41:SER:HB2	1.80	0.40
8:H:52:ARG:HA	18:R:63:ASN:HA	1.99	0.40
1:A:607:ILE:HD13	1:A:655:PHE:CB	2.52	0.40
1:A:614:PHE:CZ	1:A:648:LEU:HD11	2.56	0.40
1:A:889:TYR:HE2	7:G:12:SER:C	2.24	0.40
1:A:894:PHE:CD1	1:A:972:TRP:CH2	3.09	0.40
1:A:955:ILE:HD12	1:A:955:ILE:HA	1.93	0.40
1:A:1599:PHE:HB3	1:A:1602:PHE:CD2	2.56	0.40
1:A:3333:LEU:HD23	1:A:3333:LEU:HA	1.84	0.40
1:A:3654:LEU:HD23	1:A:3755:SER:HA	2.02	0.40
1:A:3749:PRO:HA	1:A:3752:ILE:HG22	2.03	0.40
1:A:4331:LEU:HD11	1:A:4382:VAL:HG12	2.03	0.40
2:B:426:ILE:HG12	2:B:485:PHE:HZ	1.84	0.40
2:B:500:GLU:CG	2:B:532:THR:CG2	2.90	0.40
2:B:736:LEU:CG	2:B:856:TRP:HA	2.52	0.40
2:B:787:LEU:O	2:B:791:HIS:CD2	2.69	0.40
2:B:1001:GLU:O	2:B:1094:TRP:HZ2	2.01	0.40
2:B:1208:LYS:HE3	2:B:1208:LYS:N	2.36	0.40
2:B:1456:PHE:CE2	2:B:1567:PRO:O	2.74	0.40
2:B:1488:LYS:HA	2:B:1494:VAL:CB	2.51	0.40
2:B:3160:LYS:HE3	2:B:3412:CYS:SG	2.61	0.40
3:C:9:GLN:HB2	3:C:350:TRP:CZ2	2.56	0.40
3:C:2242:HIS:HB2	3:C:2289:LEU:CD1	2.50	0.40
3:C:2581:LEU:HD11	3:C:2937:TYR:CE2	2.55	0.40
3:C:2743:ASN:ND2	3:C:2785:VAL:CG1	2.45	0.40
4:D:141:MET:HB2	4:D:158:ILE:HD13	2.01	0.40
4:D:199:ILE:CG1	9:I:104:ALA:HB2	2.51	0.40
5:E:84:VAL:HG13	5:E:91:GLU:HB3	2.03	0.40
5:E:121:TYR:OH	6:F:17:LEU:HD21	2.21	0.40
5:E:214:SER:HB2	5:E:215:PRO:HD2	2.02	0.40
5:E:405:THR:HG23	5:E:405:THR:O	2.20	0.40
9:I:49:ASN:HD21	9:I:59:ALA:HA	1.86	0.40
1:A:688:PHE:CB	1:A:727:TYR:CD2	3.05	0.40
1:A:854:GLU:CG	5:E:205:PRO:CG	2.86	0.40
1:A:889:TYR:HH	7:G:16:ILE:CB	2.32	0.40
1:A:935:VAL:HG13	1:A:944:LEU:HD23	2.03	0.40
1:A:1126:VAL:HG13	1:A:1131:SER:CB	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1468:LEU:HA	1:A:1471:LEU:HD12	2.03	0.40
1:A:1586:LYS:HB3	1:A:1586:LYS:HE2	1.65	0.40
1:A:3049:LEU:HD12	1:A:3103:TYR:CZ	2.57	0.40
1:A:3233:ILE:CD1	1:A:3329:ALA:HB2	2.51	0.40
1:A:3833:LYS:O	1:A:3837:THR:HG23	2.21	0.40
2:B:87:LYS:CB	2:B:103:ASN:HA	2.51	0.40
2:B:444:LEU:CD2	2:B:526:ASN:CB	2.99	0.40
2:B:599:ILE:CG2	2:B:626:TYR:HD1	2.33	0.40
2:B:3288:GLN:CA	2:B:3288:GLN:HE21	2.33	0.40
3:C:72:ILE:HG13	3:C:119:TYR:CE1	2.57	0.40
3:C:336:ILE:HG13	3:C:351:ALA:CB	2.51	0.40
3:C:1983:THR:CA	19:C:4702:ADP:N6	2.85	0.40
3:C:2189:LEU:HD13	3:C:2189:LEU:C	2.41	0.40
3:C:2414:LEU:HD13	3:C:2415:PHE:N	2.36	0.40
4:D:105:MET:HE3	14:N:47:THR:C	2.31	0.40
4:D:386:TYR:HB3	4:D:433:LEU:CD1	2.51	0.40
4:D:603:LEU:HD23	4:D:613:LEU:HB3	2.04	0.40
5:E:123:ASN:HB2	6:F:101:GLN:NE2	2.33	0.40
5:E:376:SER:HB3	5:E:417:TRP:CD2	2.56	0.40
5:E:556:GLU:N	5:E:556:GLU:OE1	2.55	0.40
7:G:74:LEU:HD22	7:G:148:ILE:HG22	2.03	0.40
9:I:89:VAL:HG21	9:I:94:LEU:HB2	2.03	0.40
1:A:777:ILE:O	1:A:780:TYR:HB3	2.21	0.40
1:A:944:LEU:HD21	1:A:1017:LEU:HD22	2.00	0.40
1:A:1514:VAL:HG12	1:A:1548:TRP:HZ3	1.86	0.40
1:A:2498:ALA:N	19:A:4701:ADP:O2B	2.52	0.40
2:B:360:ASP:CB	2:B:478:MET:HE3	2.51	0.40
2:B:603:ILE:CD1	2:B:626:TYR:CE2	3.05	0.40
2:B:1530:ASN:O	2:B:1530:ASN:OD1	2.38	0.40
2:B:2622:GLN:OE1	2:B:2625:ARG:NH1	2.54	0.40
2:B:3114:LEU:O	2:B:3114:LEU:HD12	2.22	0.40
2:B:3413:GLN:HA	2:B:3413:GLN:OE1	2.21	0.40
3:C:114:LEU:HD22	3:C:115:LYS:N	2.37	0.40
3:C:289:ASP:HB2	3:C:318:PRO:O	2.21	0.40
3:C:354:VAL:CG2	3:C:357:ILE:CG1	2.85	0.40
3:C:2059:LEU:HD13	3:C:2067:TYR:CG	2.56	0.40
3:C:3460:ASN:HB3	3:C:3466:ALA:HB1	2.03	0.40
4:D:289:PHE:HB3	4:D:332:TYR:CE1	2.56	0.40
5:E:59:HIS:CB	10:J:90:HIS:NE2	2.84	0.40
5:E:420:THR:CG2	5:E:472:SER:C	2.90	0.40
6:F:11:LEU:HD21	6:F:23:TYR:CE1	2.29	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:70:THR:H	9:I:76:GLN:CG	2.33	0.40
10:J:65:LYS:HD3	10:J:65:LYS:O	2.21	0.40
13:M:45:PHE:HA	13:M:48:ILE:CG2	2.51	0.40
15:O:41:LEU:HD22	15:O:70:LYS:HE2	2.02	0.40
1:A:674:LEU:HD23	1:A:770:LEU:HB2	2.03	0.40
1:A:1012:LYS:HB2	1:A:1071:ILE:HG21	1.95	0.40
1:A:1095:GLN:HA	1:A:1095:GLN:OE1	2.22	0.40
1:A:2196:MET:O	1:A:2211:VAL:N	2.55	0.40
1:A:2476:ILE:HG22	1:A:2477:LEU:HD23	2.03	0.40
1:A:2602:MET:N	1:A:2602:MET:SD	2.95	0.40
1:A:4347:LEU:HD11	1:A:4368:LEU:HD23	2.03	0.40
1:A:4501:VAL:HG12	1:A:4562:ASN:HA	2.03	0.40
2:B:1317:LEU:CA	16:P:61:GLU:CA	2.81	0.40
2:B:2151:THR:HA	2:B:2155:MET:HB2	2.02	0.40
3:C:79:PRO:HG3	3:C:121:TRP:CD2	2.56	0.40
3:C:2740:ILE:CG2	3:C:2744:LYS:HD2	2.51	0.40
3:C:2745:LYS:HG3	3:C:2749:VAL:HG21	1.90	0.40
3:C:3013:ASP:N	3:C:3013:ASP:OD1	2.54	0.40
3:C:3225:ARG:N	3:C:3226:PRO:CD	2.84	0.40
3:C:3457:SER:O	3:C:3462:ASN:N	2.55	0.40
5:E:274:LYS:HG3	5:E:278:GLU:CD	2.42	0.40
5:E:530:LYS:HD2	5:E:531:ARG:NH1	2.37	0.40
8:H:12:LYS:CG	8:H:80:TYR:HE2	2.15	0.40
8:H:58:HIS:HB3	9:I:87:VAL:HG22	2.03	0.40
8:H:62:GLY:HA3	9:I:83:TYR:HB3	2.04	0.40
9:I:15:LEU:HD22	9:I:19:MET:HE1	2.04	0.40
10:J:80:PHE:O	11:K:67:ASN:O	2.40	0.40
11:K:33:VAL:HA	11:K:42:ILE:CD1	2.52	0.40
11:K:78:ILE:HG22	11:K:89:LEU:HD11	2.03	0.40
14:N:82:SER:OG	15:O:57:ASN:CG	2.59	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	A	4391/4615 (95%)	4176 (95%)	190 (4%)	25 (1%)	22	60
2	B	4498/4588 (98%)	4258 (95%)	203 (4%)	37 (1%)	16	54
3	C	3923/3947 (99%)	3698 (94%)	202 (5%)	23 (1%)	22	60
4	D	569/595 (96%)	546 (96%)	16 (3%)	7 (1%)	11	44
5	E	551/557 (99%)	531 (96%)	18 (3%)	2 (0%)	30	68
6	F	126/128 (98%)	120 (95%)	6 (5%)	0	100	100
7	G	147/151 (97%)	134 (91%)	7 (5%)	6 (4%)	2	18
8	H	89/91 (98%)	88 (99%)	1 (1%)	0	100	100
9	I	104/106 (98%)	100 (96%)	3 (3%)	1 (1%)	13	49
10	J	93/95 (98%)	90 (97%)	3 (3%)	0	100	100
11	K	88/90 (98%)	85 (97%)	3 (3%)	0	100	100
12	L	109/111 (98%)	104 (95%)	4 (4%)	1 (1%)	14	51
13	M	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
14	N	112/114 (98%)	105 (94%)	7 (6%)	0	100	100
15	O	118/120 (98%)	112 (95%)	4 (3%)	2 (2%)	7	36
16	P	103/112 (92%)	90 (87%)	7 (7%)	6 (6%)	1	15
17	Q	190/192 (99%)	174 (92%)	13 (7%)	3 (2%)	8	37
18	R	148/150 (99%)	121 (82%)	19 (13%)	8 (5%)	1	16
All	All	15444/15849 (97%)	14615 (95%)	708 (5%)	121 (1%)	19	54

All (121) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	101	PRO
1	A	125	PRO
1	A	127	THR
1	A	151	ILE
1	A	1171	ILE
1	A	1172	THR
1	A	1348	GLN
2	B	6	GLN
2	B	17	ARG
2	B	100	THR
2	B	307	PRO

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Mol	Chain	Res	Type
2	B	533	ARG
2	B	897	SER
2	B	1127	ASN
2	B	1567	PRO
2	B	3267	ILE
2	B	4257	LYS
3	C	2013	GLY
3	C	3619	GLY
4	D	234	GLN
4	D	397	ASP
4	D	398	PRO
7	G	19	GLN
7	G	49	ASN
16	P	36	TYR
16	P	37	PRO
17	Q	19	PRO
18	R	43	ILE
18	R	59	VAL
18	R	106	GLY
1	A	8	LYS
1	A	27	ILE
1	A	28	VAL
1	A	3535	GLY
1	A	4430	TRP
1	A	4562	ASN
2	B	60	ASN
2	B	136	PRO
2	B	799	VAL
2	B	917	ILE
3	C	442	ILE
3	C	529	GLU
3	C	1549	ALA
3	C	2015	GLY
3	C	2247	THR
3	C	2796	PRO
3	C	3054	SER
3	C	3983	ALA
3	C	4090	ASP
3	C	4106	PRO
7	G	20	ARG
7	G	38	LYS
9	I	51	ALA

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Mol	Chain	Res	Type
16	P	62	LYS
18	R	66	LEU
1	A	197	ILE
1	A	1391	LEU
1	A	4563	LYS
2	B	103	ASN
2	B	1124	ILE
3	C	357	ILE
3	C	861	SER
3	C	1170	ALA
3	C	2366	LYS
12	L	15	PRO
17	Q	140	ASP
18	R	65	GLY
1	A	57	TYR
1	A	106	LYS
1	A	1745	ASN
1	A	4190	SER
1	A	4538	LYS
2	B	24	ILE
2	B	47	ASP
2	B	138	ASN
2	B	952	PRO
2	B	1856	ILE
2	B	3302	ILE
3	C	1277	ASP
3	C	4142	ALA
5	E	45	PRO
7	G	25	ILE
16	P	63	ARG
17	Q	129	ILE
18	R	121	PHE
1	A	3488	LEU
1	A	3585	ASN
2	B	5	SER
2	B	659	THR
2	B	1003	ILE
2	B	1333	ILE
2	B	1499	ASP
2	B	1863	TYR
2	B	4152	ASN
3	C	471	ILE

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Mol	Chain	Res	Type
3	C	2715	PRO
4	D	588	PRO
5	E	263	GLU
15	O	52	ASP
16	P	83	HIS
16	P	119	PRO
18	R	6	MET
18	R	104	THR
1	A	4618	SER
2	B	1069	THR
2	B	1680	GLY
2	B	1947	GLY
3	C	881	ILE
3	C	2795	MET
15	O	30	TYR
1	A	1856	ILE
3	C	1401	PRO
7	G	139	PRO
2	B	146	VAL
2	B	477	ILE
2	B	3248	PRO
4	D	435	PRO
4	D	513	PRO
2	B	4148	PRO
4	D	149	PRO
2	B	811	PRO

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	A	3430/4191 (82%)	3358 (98%)	72 (2%)	48	67
2	B	3525/4135 (85%)	3447 (98%)	78 (2%)	47	65
3	C	3139/3505 (90%)	3091 (98%)	48 (2%)	60	75
4	D	511/545 (94%)	507 (99%)	4 (1%)	79	84

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	E	488/496 (98%)	484 (99%)	4 (1%)	79	84
6	F	105/105 (100%)	104 (99%)	1 (1%)	73	81
7	G	86/141 (61%)	86 (100%)	0	100	100
8	H	82/82 (100%)	82 (100%)	0	100	100
9	I	91/91 (100%)	91 (100%)	0	100	100
10	J	82/82 (100%)	81 (99%)	1 (1%)	67	79
11	K	80/80 (100%)	80 (100%)	0	100	100
12	L	90/99 (91%)	90 (100%)	0	100	100
13	M	78/78 (100%)	78 (100%)	0	100	100
14	N	84/101 (83%)	84 (100%)	0	100	100
15	O	108/108 (100%)	106 (98%)	2 (2%)	52	69
17	Q	11/176 (6%)	11 (100%)	0	100	100
All	All	11990/14015 (86%)	11780 (98%)	210 (2%)	54	71

All (210) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	674	LEU
1	A	818	LEU
1	A	871	LEU
1	A	989	ILE
1	A	1153	PHE
1	A	1176	GLU
1	A	1519	THR
1	A	1522	GLU
1	A	1536	LEU
1	A	1540	GLN
1	A	1550	LYS
1	A	1559	LYS
1	A	1564	CYS
1	A	1567	ASN
1	A	1573	PHE
1	A	1581	LEU
1	A	1584	CYS
1	A	1585	GLN
1	A	1589	GLU
1	A	1609	THR
1	A	1618	SER

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Mol	Chain	Res	Type
1	A	1631	PHE
1	A	1634	ILE
1	A	1635	THR
1	A	1644	ASP
1	A	1681	GLU
1	A	1711	LEU
1	A	1846	CYS
1	A	1880	GLU
1	A	1922	CYS
1	A	2034	CYS
1	A	2084	SER
1	A	2089	ASP
1	A	2095	ASN
1	A	2098	LEU
1	A	2122	GLU
1	A	2220	ASN
1	A	2340	GLN
1	A	2418	ILE
1	A	2426	GLU
1	A	2430	ASP
1	A	2487	ASN
1	A	2729	LEU
1	A	2875	SER
1	A	2901	ASP
1	A	2905	ASP
1	A	2921	THR
1	A	3046	PHE
1	A	3095	TYR
1	A	3125	GLN
1	A	3149	THR
1	A	3185	GLU
1	A	3192	GLU
1	A	3203	PRO
1	A	3345	LYS
1	A	3354	ILE
1	A	3637	GLU
1	A	3647	PHE
1	A	3973	TYR
1	A	4130	ILE
1	A	4138	SER
1	A	4155	TYR
1	A	4209	ASP

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Mol	Chain	Res	Type
1	A	4287	THR
1	A	4317	GLU
1	A	4342	GLU
1	A	4396	GLN
1	A	4497	SER
1	A	4504	SER
1	A	4542	ASP
1	A	4562	ASN
1	A	4588	ASP
2	B	1183	THR
2	B	1186	PRO
2	B	1201	TYR
2	B	1208	LYS
2	B	1213	PRO
2	B	1623	ASN
2	B	1734	THR
2	B	1758	LYS
2	B	1770	ASN
2	B	1860	PHE
2	B	2116	THR
2	B	2117	ASP
2	B	2121	ILE
2	B	2128	ASP
2	B	2130	PHE
2	B	2219	THR
2	B	2252	TYR
2	B	2335	MET
2	B	2363	ASP
2	B	2383	ASP
2	B	2427	ASP
2	B	2462	ASN
2	B	2514	THR
2	B	2574	LEU
2	B	2617	THR
2	B	2655	ASN
2	B	2664	ASP
2	B	2667	LEU
2	B	2690	SER
2	B	2696	LEU
2	B	2741	PHE
2	B	2767	LEU
2	B	2776	LYS

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Mol	Chain	Res	Type
2	B	2862	LEU
2	B	2885	ASN
2	B	2944	ARG
2	B	2959	LEU
2	B	2963	ASN
2	B	2966	LEU
2	B	2975	PHE
2	B	3023	SER
2	B	3031	ILE
2	B	3032	ARG
2	B	3077	SER
2	B	3114	LEU
2	B	3133	ILE
2	B	3222	PRO
2	B	3269	LEU
2	B	3353	VAL
2	B	3355	PRO
2	B	3407	GLN
2	B	3447	MET
2	B	3540	GLN
2	B	3632	HIS
2	B	3644	ILE
2	B	3648	VAL
2	B	3756	MET
2	B	3793	ASP
2	B	3800	LEU
2	B	3814	ARG
2	B	3909	ASP
2	B	3952	GLN
2	B	4012	PHE
2	B	4076	LEU
2	B	4149	LYS
2	B	4304	LYS
2	B	4328	PHE
2	B	4329	ASN
2	B	4365	LYS
2	B	4405	TYR
2	B	4408	LYS
2	B	4464	TYR
2	B	4477	LYS
2	B	4482	GLU
2	B	4513	SER

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Mol	Chain	Res	Type
2	B	4563	LEU
2	B	4570	ARG
2	B	4588	ASP
3	C	39	LEU
3	C	98	PHE
3	C	114	LEU
3	C	187	TRP
3	C	214	LEU
3	C	232	TYR
3	C	346	LEU
3	C	352	LEU
3	C	1098	CYS
3	C	1113	ASN
3	C	1318	ASP
3	C	1321	SER
3	C	1453	CYS
3	C	1499	CYS
3	C	1660	ASP
3	C	1821	ASP
3	C	1884	CYS
3	C	1981	ASN
3	C	2014	CYS
3	C	2016	LYS
3	C	2043	ASN
3	C	2122	THR
3	C	2225	SER
3	C	2244	CYS
3	C	2295	ILE
3	C	2406	CYS
3	C	2432	ASN
3	C	2467	ASP
3	C	2488	ILE
3	C	2666	CYS
3	C	2670	LYS
3	C	3059	ASN
3	C	3405	ARG
3	C	3602	GLN
3	C	3621	TRP
3	C	3778	ASP
3	C	3787	MET
3	C	3793	THR
3	C	3804	TYR

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Mol	Chain	Res	Type
3	C	3819	ASN
3	C	3824	PHE
3	C	3863	TYR
3	C	3877	GLU
3	C	3883	SER
3	C	3918	VAL
3	C	3986	SER
3	C	4050	GLN
3	C	4167	ASP
4	D	115	TYR
4	D	174	GLN
4	D	584	ILE
4	D	639	PHE
5	E	27	TYR
5	E	377	ASN
5	E	556	GLU
5	E	560	HIS
6	F	35	ARG
10	J	21	PHE
15	O	46	LEU
15	O	121	TYR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (204) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	678	HIS
1	A	705	GLN
1	A	741	ASN
1	A	786	GLN
1	A	804	ASN
1	A	837	GLN
1	A	852	ASN
1	A	900	ASN
1	A	952	GLN
1	A	1041	ASN
1	A	1047	ASN
1	A	1051	GLN
1	A	1205	GLN
1	A	1276	GLN
1	A	1444	GLN
1	A	1460	ASN
1	A	1566	GLN

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Mol	Chain	Res	Type
1	A	1578	ASN
1	A	1585	GLN
1	A	1655	GLN
1	A	1666	ASN
1	A	1718	GLN
1	A	1788	GLN
1	A	1901	GLN
1	A	1916	GLN
1	A	1940	GLN
1	A	1950	GLN
1	A	2037	GLN
1	A	2095	ASN
1	A	2220	ASN
1	A	2267	ASN
1	A	2276	ASN
1	A	2279	ASN
1	A	2369	GLN
1	A	2458	GLN
1	A	2508	ASN
1	A	2768	GLN
1	A	2771	ASN
1	A	2889	GLN
1	A	3067	HIS
1	A	3112	GLN
1	A	3113	GLN
1	A	3122	ASN
1	A	3125	GLN
1	A	3226	ASN
1	A	3343	HIS
1	A	3344	GLN
1	A	3606	GLN
1	A	3651	GLN
1	A	3746	GLN
1	A	3772	ASN
1	A	3888	GLN
1	A	3918	ASN
1	A	4044	GLN
1	A	4088	GLN
1	A	4137	HIS
1	A	4574	ASN
2	B	544	HIS
2	B	581	ASN

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Mol	Chain	Res	Type
2	B	658	GLN
2	B	724	HIS
2	B	764	GLN
2	B	775	GLN
2	B	791	HIS
2	B	796	ASN
2	B	885	GLN
2	B	894	ASN
2	B	923	GLN
2	B	939	ASN
2	B	975	ASN
2	B	1079	ASN
2	B	1081	GLN
2	B	1131	HIS
2	B	1135	HIS
2	B	1566	ASN
2	B	1623	ASN
2	B	1770	ASN
2	B	1870	ASN
2	B	1956	ASN
2	B	1993	GLN
2	B	2005	ASN
2	B	2038	ASN
2	B	2148	GLN
2	B	2203	ASN
2	B	2462	ASN
2	B	2476	GLN
2	B	2489	ASN
2	B	2504	GLN
2	B	2591	ASN
2	B	2724	ASN
2	B	2758	GLN
2	B	2812	ASN
2	B	2963	ASN
2	B	3042	ASN
2	B	3081	ASN
2	B	3238	HIS
2	B	3288	GLN
2	B	3301	ASN
2	B	3407	GLN
2	B	3430	ASN
2	B	3475	ASN

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Mol	Chain	Res	Type
2	B	3521	ASN
2	B	3619	ASN
2	B	3640	GLN
2	B	3820	HIS
2	B	3873	GLN
2	B	3879	ASN
2	B	4106	ASN
2	B	4152	ASN
2	B	4170	ASN
2	B	4177	GLN
2	B	4420	GLN
3	C	9	GLN
3	C	17	GLN
3	C	85	HIS
3	C	105	ASN
3	C	126	ASN
3	C	164	HIS
3	C	203	HIS
3	C	213	GLN
3	C	246	HIS
3	C	281	ASN
3	C	1051	GLN
3	C	1113	ASN
3	C	1238	GLN
3	C	1279	ASN
3	C	1340	GLN
3	C	1428	ASN
3	C	1570	GLN
3	C	1863	HIS
3	C	1888	GLN
3	C	1981	ASN
3	C	2018	GLN
3	C	2198	ASN
3	C	2207	HIS
3	C	2217	ASN
3	C	2264	ASN
3	C	2432	ASN
3	C	2483	ASN
3	C	2516	GLN
3	C	2708	GLN
3	C	2743	ASN
3	C	2828	GLN

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Mol	Chain	Res	Type
3	C	2951	ASN
3	C	3004	ASN
3	C	3103	HIS
3	C	3654	HIS
3	C	3816	GLN
3	C	3819	ASN
3	C	3958	ASN
3	C	4034	GLN
3	C	4050	GLN
4	D	144	GLN
4	D	169	ASN
4	D	174	GLN
4	D	177	ASN
4	D	294	GLN
4	D	298	ASN
4	D	356	HIS
4	D	405	ASN
4	D	413	ASN
4	D	509	ASN
4	D	510	ASN
4	D	512	HIS
4	D	572	ASN
5	E	31	GLN
5	E	42	GLN
5	E	44	ASN
5	E	59	HIS
5	E	122	GLN
5	E	237	ASN
5	E	259	ASN
5	E	325	ASN
5	E	366	HIS
5	E	377	ASN
5	E	408	HIS
5	E	481	GLN
5	E	526	GLN
6	F	36	HIS
6	F	57	ASN
6	F	64	GLN
7	G	129	GLN
7	G	149	GLN
8	H	3	HIS
8	H	36	ASN

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Mol	Chain	Res	Type
8	H	54	HIS
9	I	39	GLN
9	I	66	ASN
9	I	76	GLN
9	I	100	ASN
10	J	45	GLN
10	J	63	HIS
11	K	76	ASN
12	L	19	HIS
12	L	28	GLN
12	L	64	GLN
13	M	2	ASN
13	M	64	HIS
13	M	78	ASN
14	N	89	GLN
15	O	84	GLN
15	O	93	GLN
15	O	106	GLN
15	O	109	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 18 ligands modelled in this entry, 9 are monoatomic - leaving 9 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	$\# Z > 2$
20	ATP	C	4201	21	28,33,33	0.69	0	34,52,52	0.90	2 (5%)
19	ADP	A	4701	21	24,29,29	0.85	0	29,45,45	1.35	4 (13%)
20	ATP	B	5601	21	28,33,33	0.75	0	34,52,52	0.78	1 (2%)
19	ADP	C	4702	21	24,29,29	0.75	1 (4%)	29,45,45	1.25	3 (10%)
19	ADP	A	4901	21	24,29,29	0.88	1 (4%)	29,45,45	1.23	3 (10%)
19	ADP	B	5602	21	24,29,29	0.73	0	29,45,45	0.74	1 (3%)
19	ADP	B	5501	21	24,29,29	0.74	0	29,45,45	0.83	1 (3%)
20	ATP	A	4801	21	28,33,33	0.87	0	34,52,52	1.12	2 (5%)
19	ADP	C	4703	21	24,29,29	0.72	0	29,45,45	1.04	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
20	ATP	C	4201	21	-	1/18/38/38	0/3/3/3
19	ADP	A	4701	21	-	8/12/32/32	0/3/3/3
20	ATP	B	5601	21	-	1/18/38/38	0/3/3/3
19	ADP	C	4702	21	-	5/12/32/32	0/3/3/3
19	ADP	A	4901	21	-	6/12/32/32	0/3/3/3
19	ADP	B	5602	21	-	1/12/32/32	0/3/3/3
19	ADP	B	5501	21	-	1/12/32/32	0/3/3/3
20	ATP	A	4801	21	-	3/18/38/38	0/3/3/3
19	ADP	C	4703	21	-	4/12/32/32	0/3/3/3

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	A	4901	ADP	O4'-C1'	2.03	1.43	1.40
19	C	4702	ADP	C8-N7	-2.02	1.31	1.34

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	C	4702	ADP	C4'-O4'-C1'	-4.32	105.97	109.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	A	4801	ATP	N3-C2-N1	-3.77	123.56	128.67
19	C	4703	ADP	C4'-O4'-C1'	-3.64	106.59	109.92
19	A	4901	ADP	N3-C2-N1	-3.49	123.94	128.67
19	A	4701	ADP	N3-C2-N1	-3.46	123.98	128.67
19	A	4701	ADP	C4'-O4'-C1'	3.34	112.99	109.92
19	A	4701	ADP	C4-C5-N7	-2.83	106.35	109.34
19	C	4702	ADP	C1'-N9-C4	2.72	131.41	126.64
20	A	4801	ATP	C4-C5-N7	-2.60	106.59	109.34
20	C	4201	ATP	C4'-O4'-C1'	-2.56	107.58	109.92
19	A	4901	ADP	C4-C5-N7	-2.40	106.80	109.34
19	B	5602	ADP	C5-C6-N6	2.34	123.87	120.31
20	B	5601	ATP	C5-C6-N6	2.32	123.85	120.31
19	B	5501	ADP	C5-C6-N6	2.29	123.80	120.31
20	C	4201	ATP	C5-C6-N6	2.27	123.78	120.31
19	C	4703	ADP	C5-C6-N6	2.22	123.69	120.31
19	A	4901	ADP	C4'-O4'-C1'	2.09	111.84	109.92
19	C	4702	ADP	C5-C6-N6	2.05	123.44	120.31
19	A	4701	ADP	C2'-C3'-C4'	2.02	106.51	102.61

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
19	A	4701	ADP	PB-O3A-PA-O5'
19	A	4701	ADP	C5'-O5'-PA-O1A
19	A	4701	ADP	C5'-O5'-PA-O2A
19	A	4701	ADP	C5'-O5'-PA-O3A
19	A	4901	ADP	PB-O3A-PA-O5'
19	A	4901	ADP	C5'-O5'-PA-O2A
19	A	4901	ADP	C5'-O5'-PA-O3A
19	B	5501	ADP	C4'-C5'-O5'-PA
19	C	4702	ADP	C5'-O5'-PA-O1A
19	C	4702	ADP	C5'-O5'-PA-O2A
19	C	4702	ADP	C5'-O5'-PA-O3A
19	C	4703	ADP	O4'-C4'-C5'-O5'
19	C	4702	ADP	C3'-C4'-C5'-O5'
19	A	4901	ADP	O4'-C4'-C5'-O5'
19	C	4702	ADP	O4'-C4'-C5'-O5'
20	A	4801	ATP	O4'-C4'-C5'-O5'
19	C	4703	ADP	C3'-C4'-C5'-O5'
19	A	4701	ADP	O4'-C4'-C5'-O5'
19	A	4901	ADP	C3'-C4'-C5'-O5'

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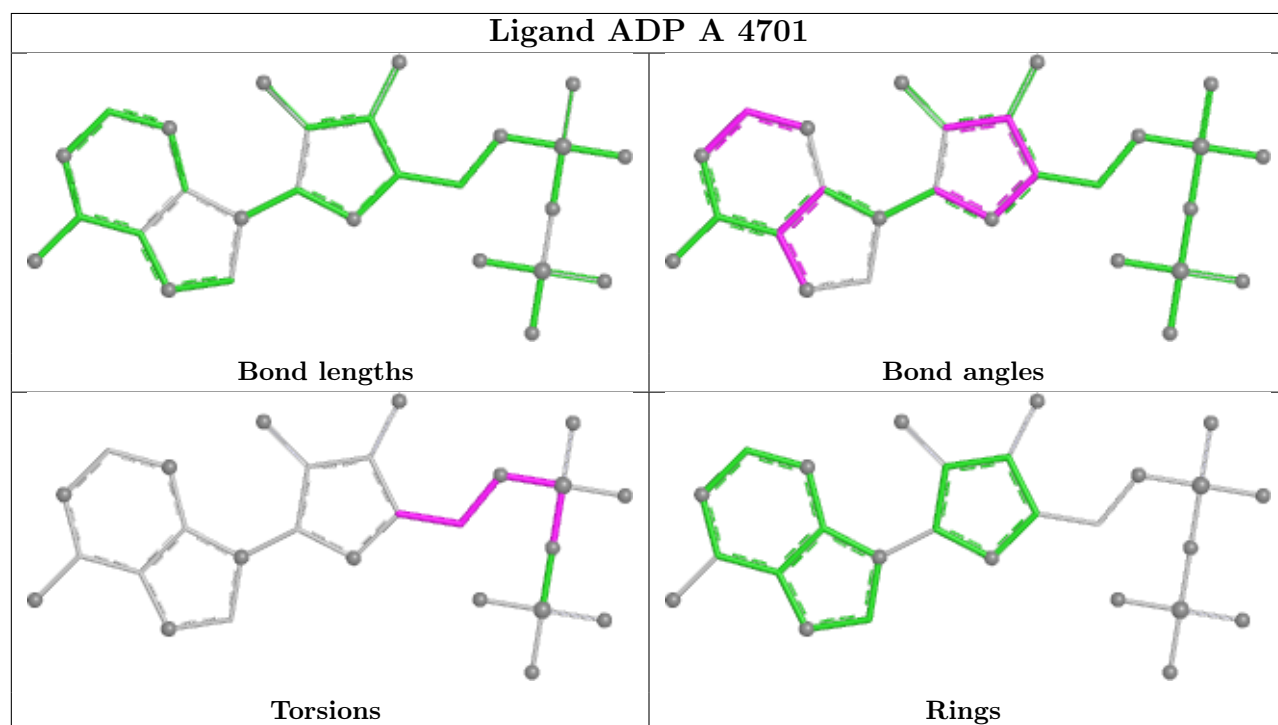
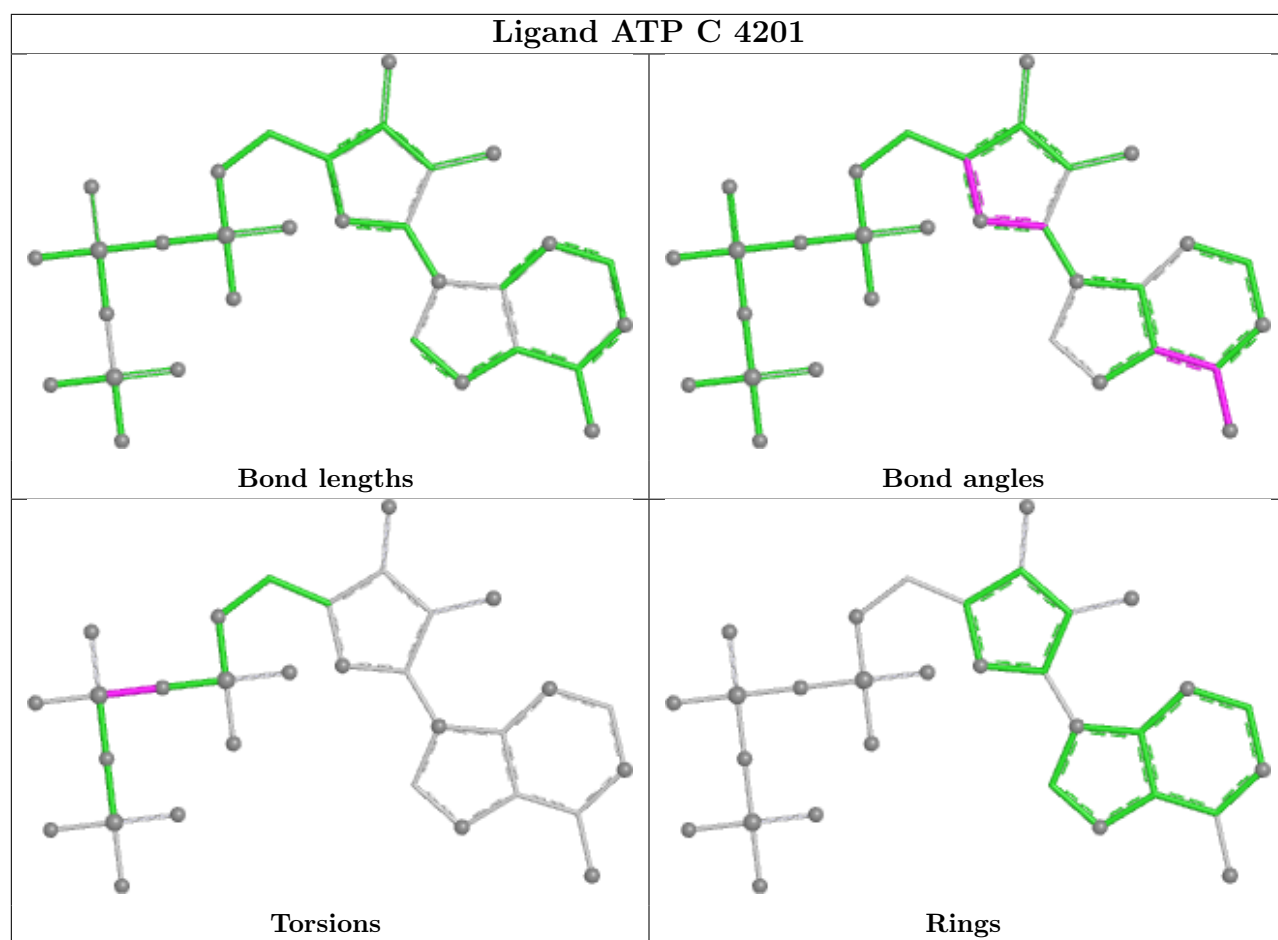
Mol	Chain	Res	Type	Atoms
20	A	4801	ATP	C3'-C4'-C5'-O5'
19	A	4901	ADP	C5'-O5'-PA-O1A
19	A	4701	ADP	C4'-C5'-O5'-PA
19	C	4703	ADP	PB-O3A-PA-O1A
19	A	4701	ADP	PB-O3A-PA-O1A
19	A	4701	ADP	PB-O3A-PA-O2A
20	A	4801	ATP	PB-O3A-PA-O2A
20	B	5601	ATP	O4'-C4'-C5'-O5'
19	B	5602	ADP	C4'-C5'-O5'-PA
19	C	4703	ADP	PB-O3A-PA-O2A
20	C	4201	ATP	PA-O3A-PB-O2B

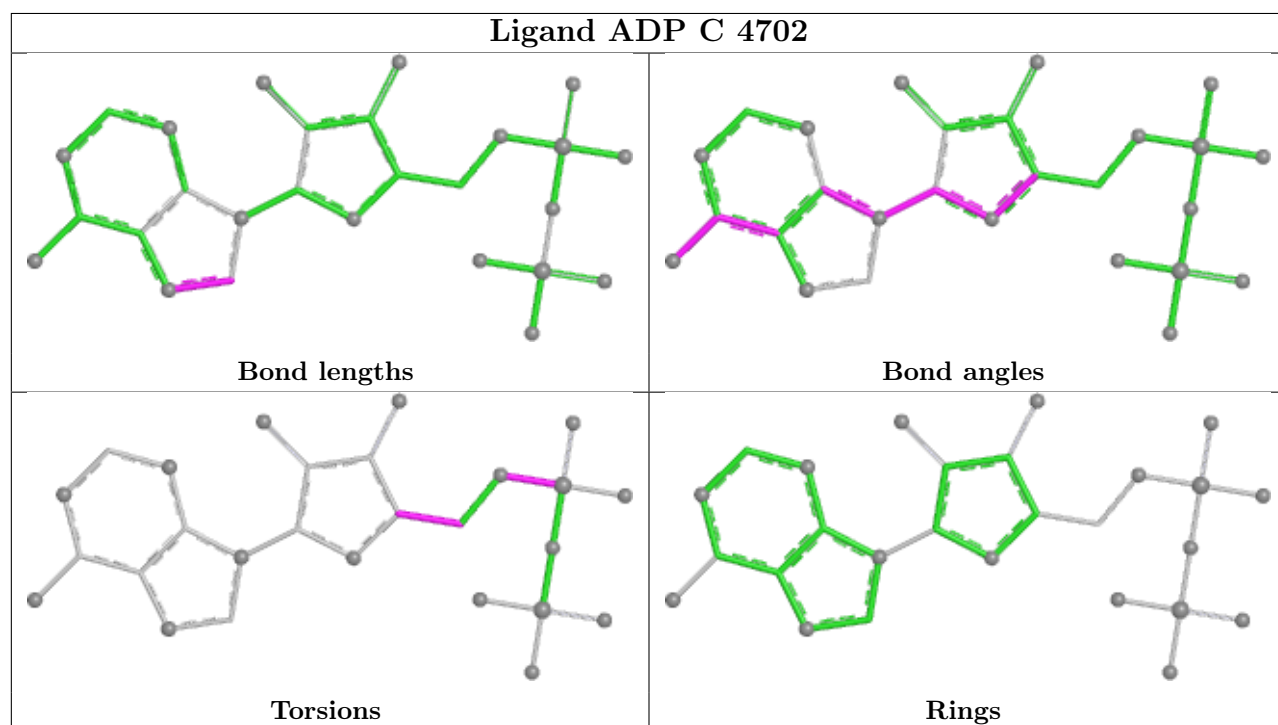
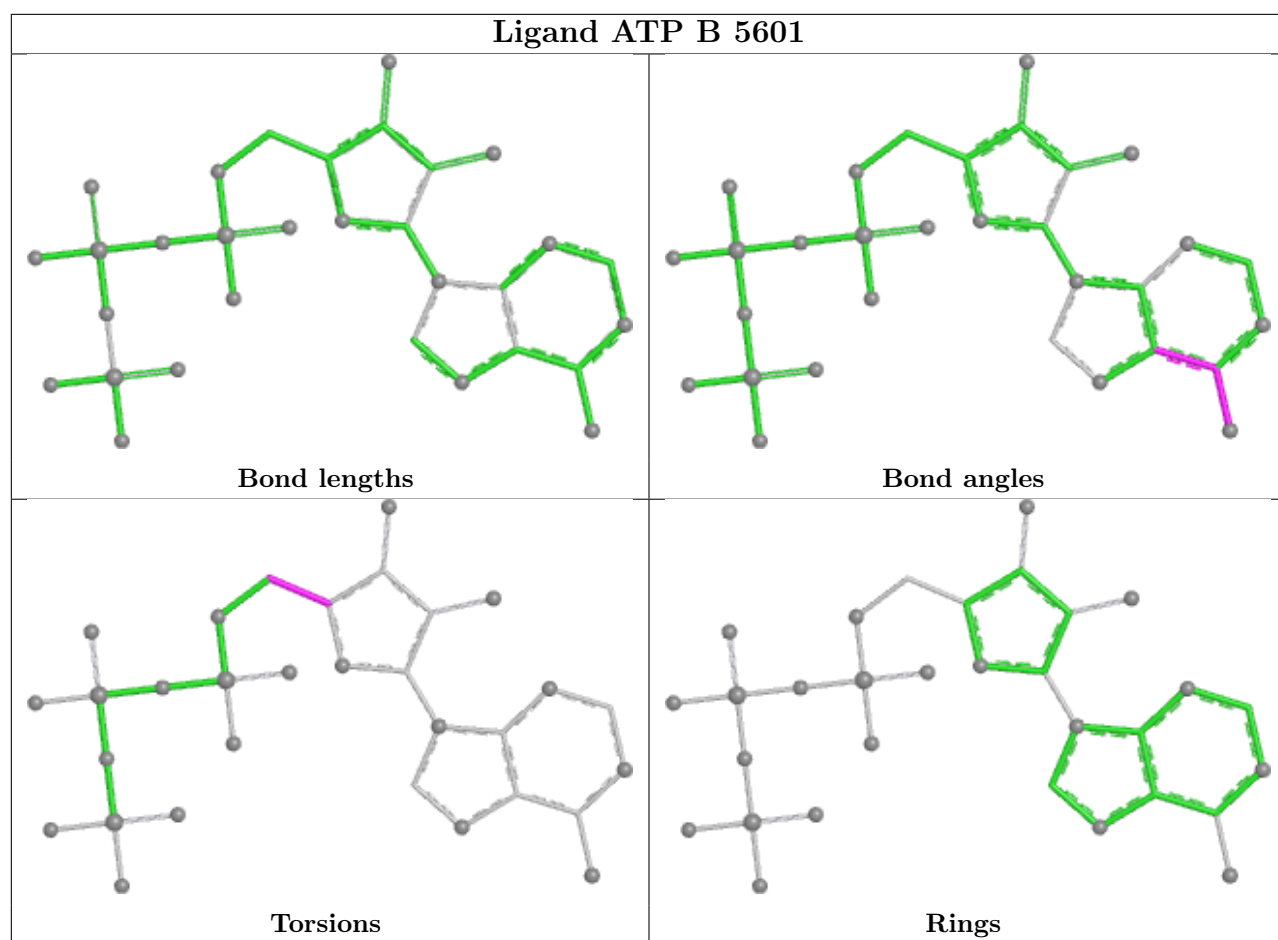
There are no ring outliers.

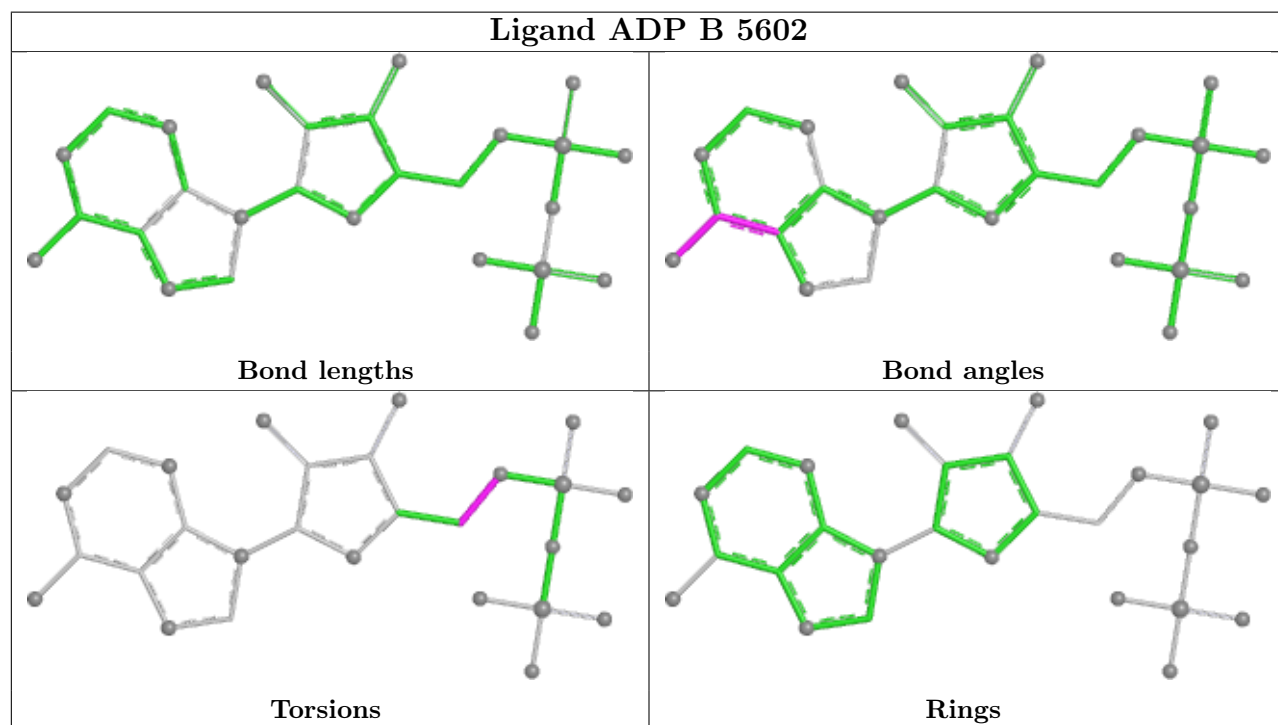
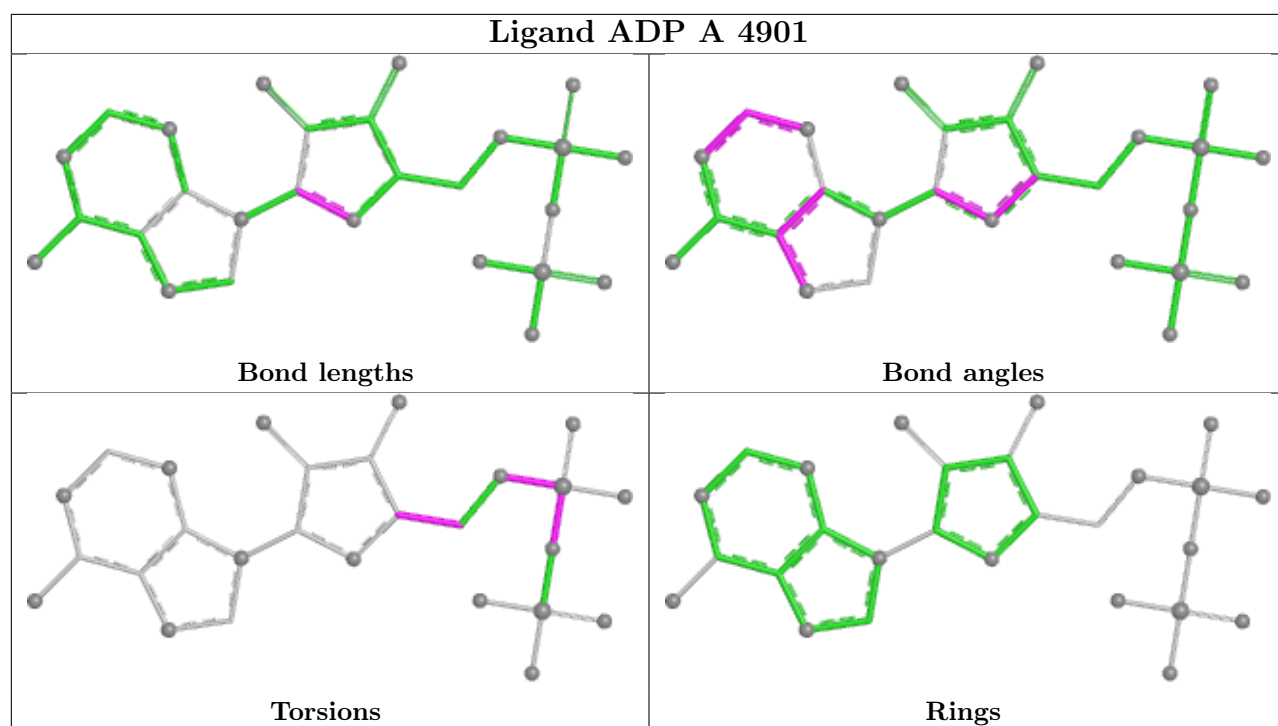
9 monomers are involved in 136 short contacts:

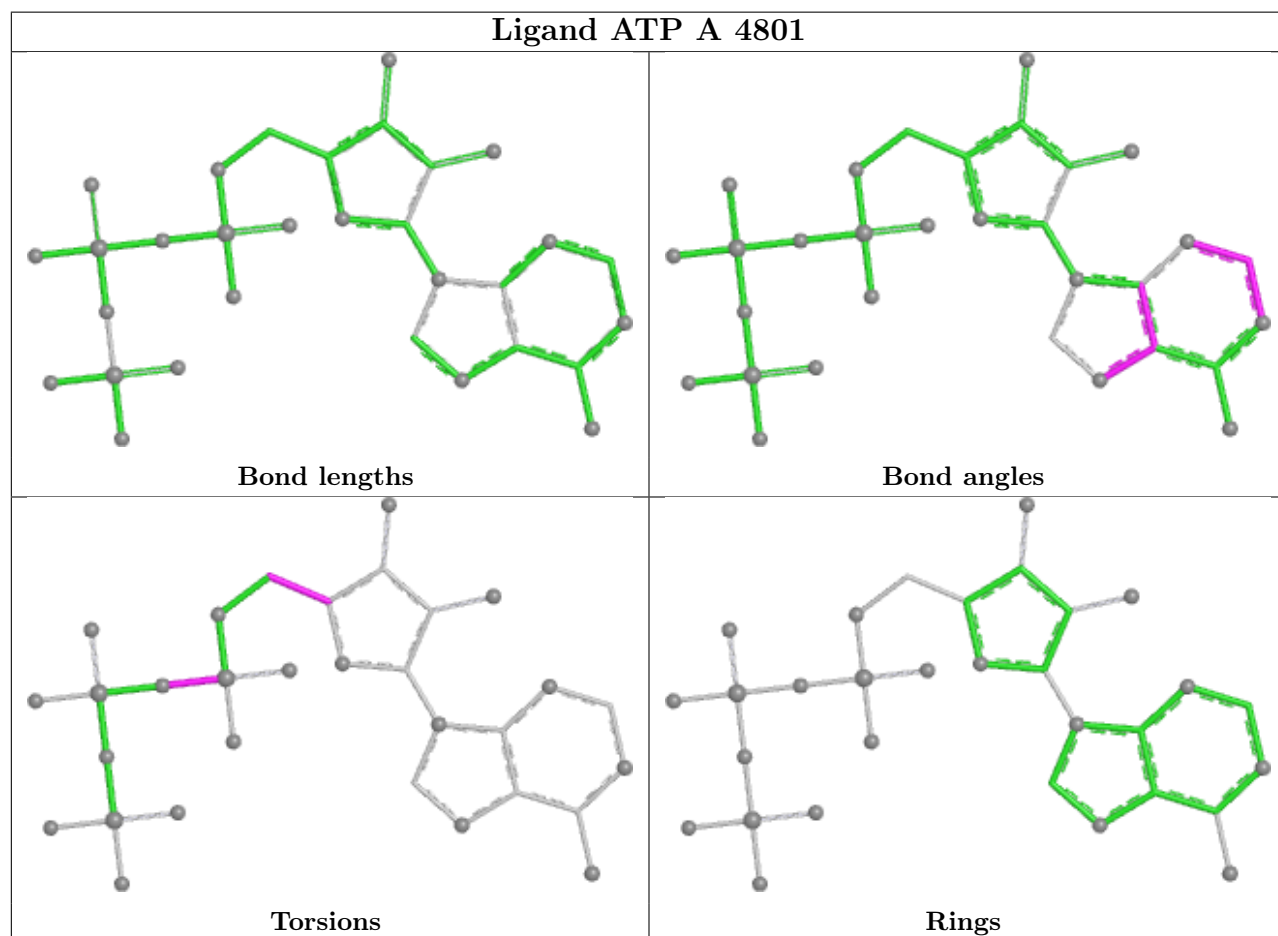
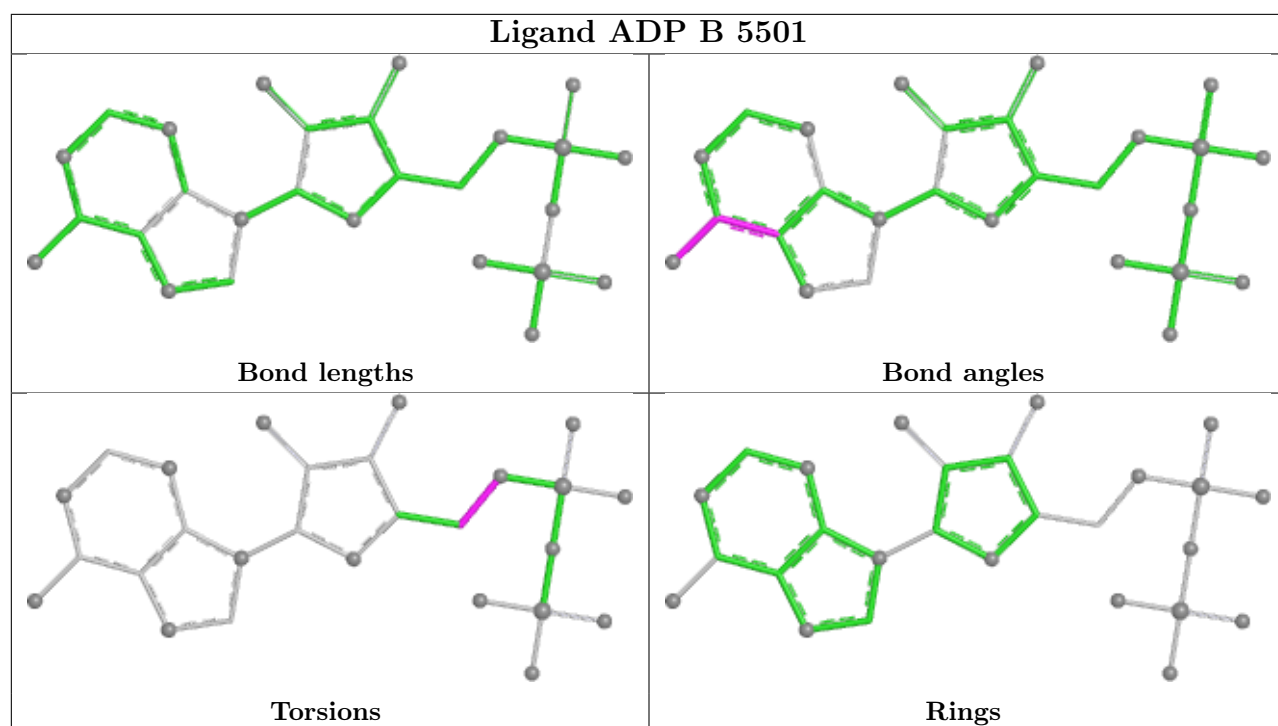
Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	C	4201	ATP	2	0
19	A	4701	ADP	12	0
20	B	5601	ATP	43	0
19	C	4702	ADP	25	0
19	A	4901	ADP	19	0
19	B	5602	ADP	2	0
19	B	5501	ADP	16	0
20	A	4801	ATP	10	0
19	C	4703	ADP	7	0

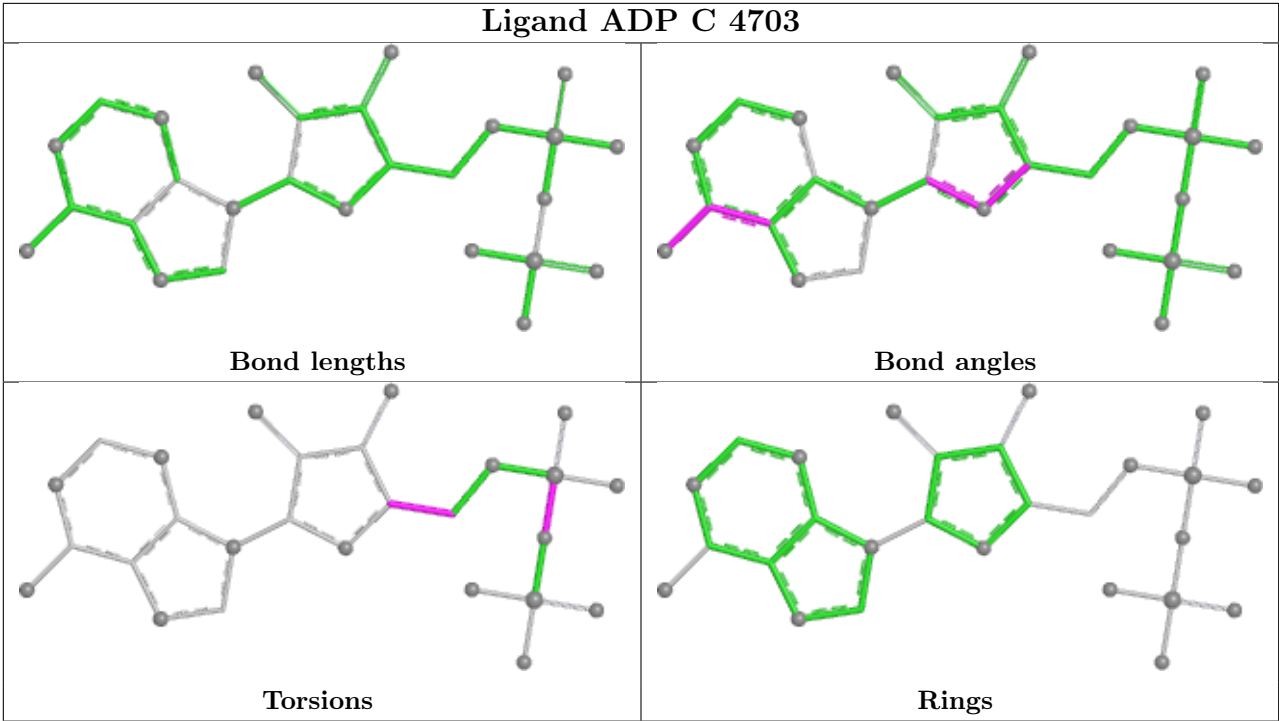
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.











5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	A	12
3	C	11
2	B	11
16	P	4
4	D	2
7	G	1
18	R	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	C	3277:MET	C	3380:MET	N	42.67
1	A	1235:PRO	C	1246:MET	N	14.08
1	C	809:ARG	C	818:ILE	N	13.93
1	C	449:TYR	C	452:ASN	N	13.33

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	C	665:ILE	C	670:SER	N	11.69
1	C	546:LYS	C	629:ASN	N	9.90
1	C	483:ASN	C	492:GLY	N	7.26
1	C	361:PRO	C	364:ILE	N	7.14
1	B	4297:ASP	C	4303:ILE	N	6.68
1	C	1061:PHE	C	1066:GLU	N	6.25
1	A	3250:PRO	C	3251:ILE	N	5.80
1	A	1408:LYS	C	1410:LEU	N	5.05
1	C	706:LYS	C	710:LYS	N	4.95
1	A	3251:ILE	C	3252:GLN	N	4.89
1	A	4489:GLY	C	4493:GLY	N	3.79
1	A	24:LYS	C	25:ASP	N	3.36
1	C	2780:VAL	C	2783:ALA	N	3.25
1	B	79:PRO	C	80:PRO	N	3.22
1	C	1186:THR	C	1188:LEU	N	3.05
1	D	216:HIS	C	217:GLN	N	2.93
1	A	115:ASP	C	116:ASN	N	2.81
1	A	40:LEU	C	41:LEU	N	2.75
1	A	5:LYS	C	6:TYR	N	2.67
1	A	53:ILE	C	54:PHE	N	2.45
1	G	58:SER	C	59:GLU	N	2.19
1	B	50:GLN	C	51:GLY	N	2.17
1	P	39:TRP	C	40:SER	N	2.17
1	B	52:PHE	C	53:ILE	N	2.15
1	B	70:LYS	C	71:CYS	N	2.10
1	D	238:SER	C	239:THR	N	2.02
1	P	15:SER	C	16:GLU	N	1.81
1	B	799:VAL	C	800:LYS	N	1.72
1	R	82:ALA	C	83:ASN	N	1.71
1	A	943:THR	C	944:LEU	N	1.69
1	B	55:GLN	C	56:ASP	N	1.60
1	P	61:GLU	C	62:LYS	N	1.60
1	B	99:LEU	C	100:THR	N	1.19
1	B	49:PHE	C	50:GLN	N	1.18
1	B	56:ASP	C	57:ASN	N	0.96
1	A	1649:ALA	C	1650:LEU	N	0.94
1	P	62:LYS	C	63:ARG	N	0.63
1	B	59:THR	C	60:ASN	N	0.44

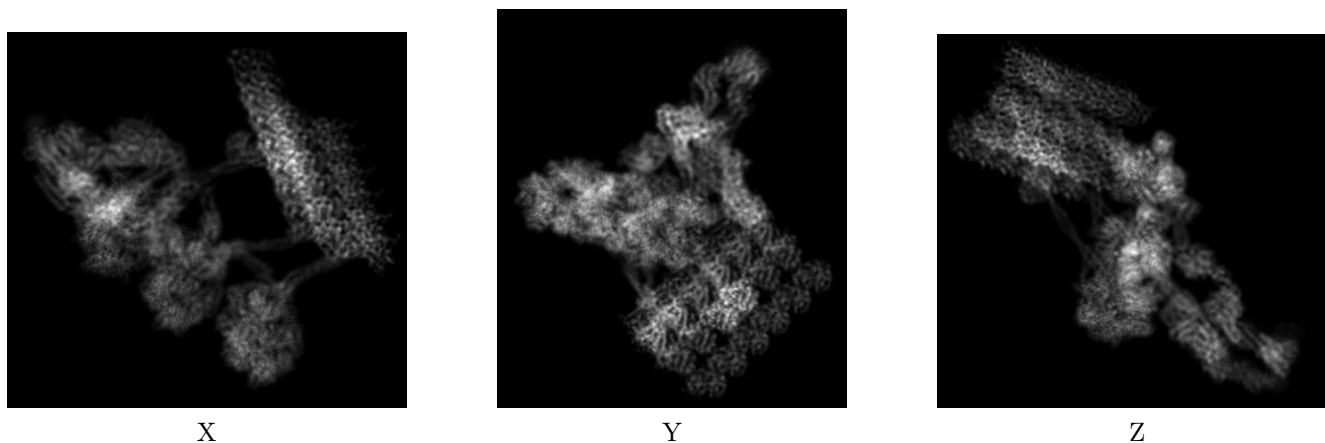
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-22679. These allow visual inspection of the internal detail of the map and identification of artifacts.

No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

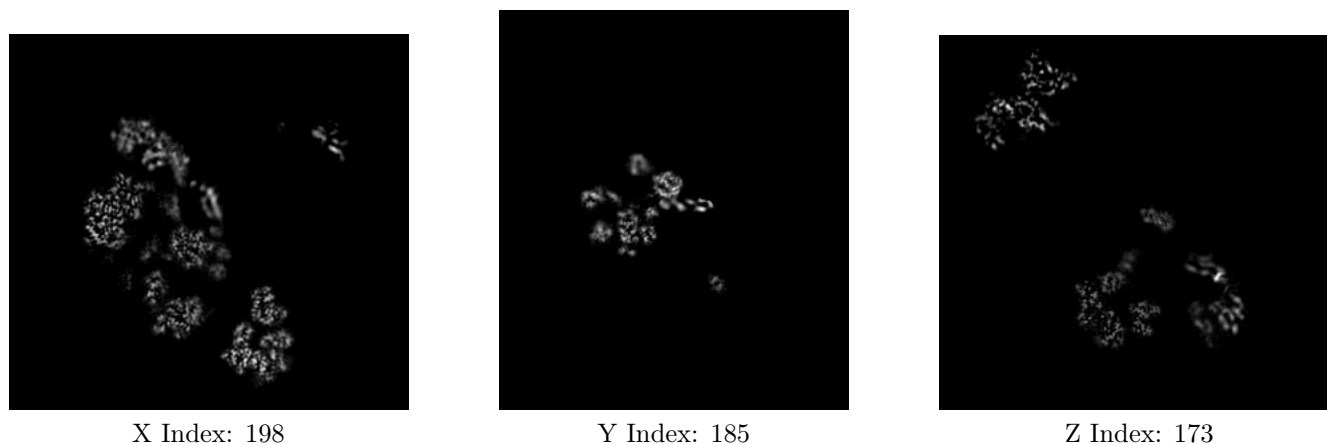
6.1.1 Primary map



The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

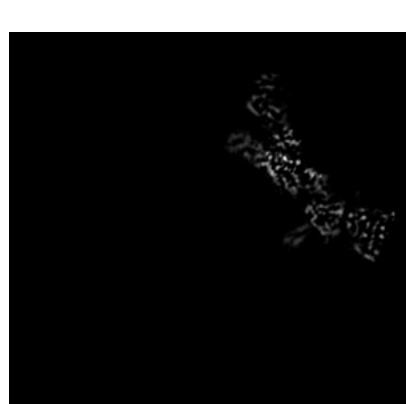
6.2.1 Primary map



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: 97



Y Index: 249

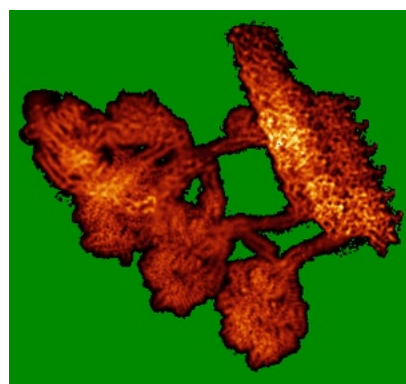


Z Index: 228

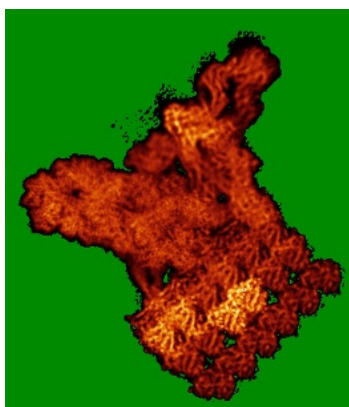
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

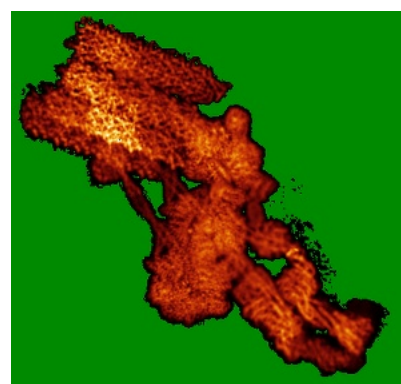
6.4.1 Primary map



X



Y

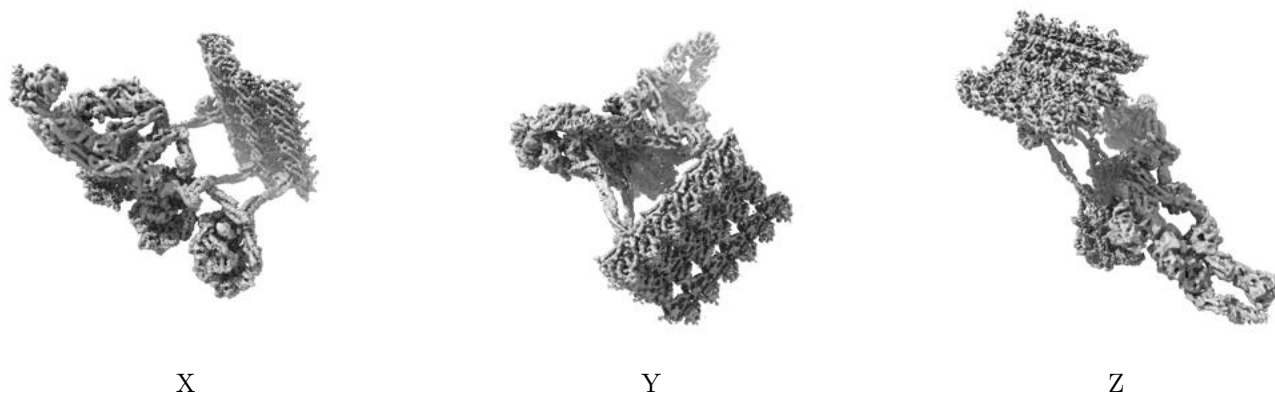


Z

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



The images above show the 3D surface view of the map at the recommended contour level 0.7. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

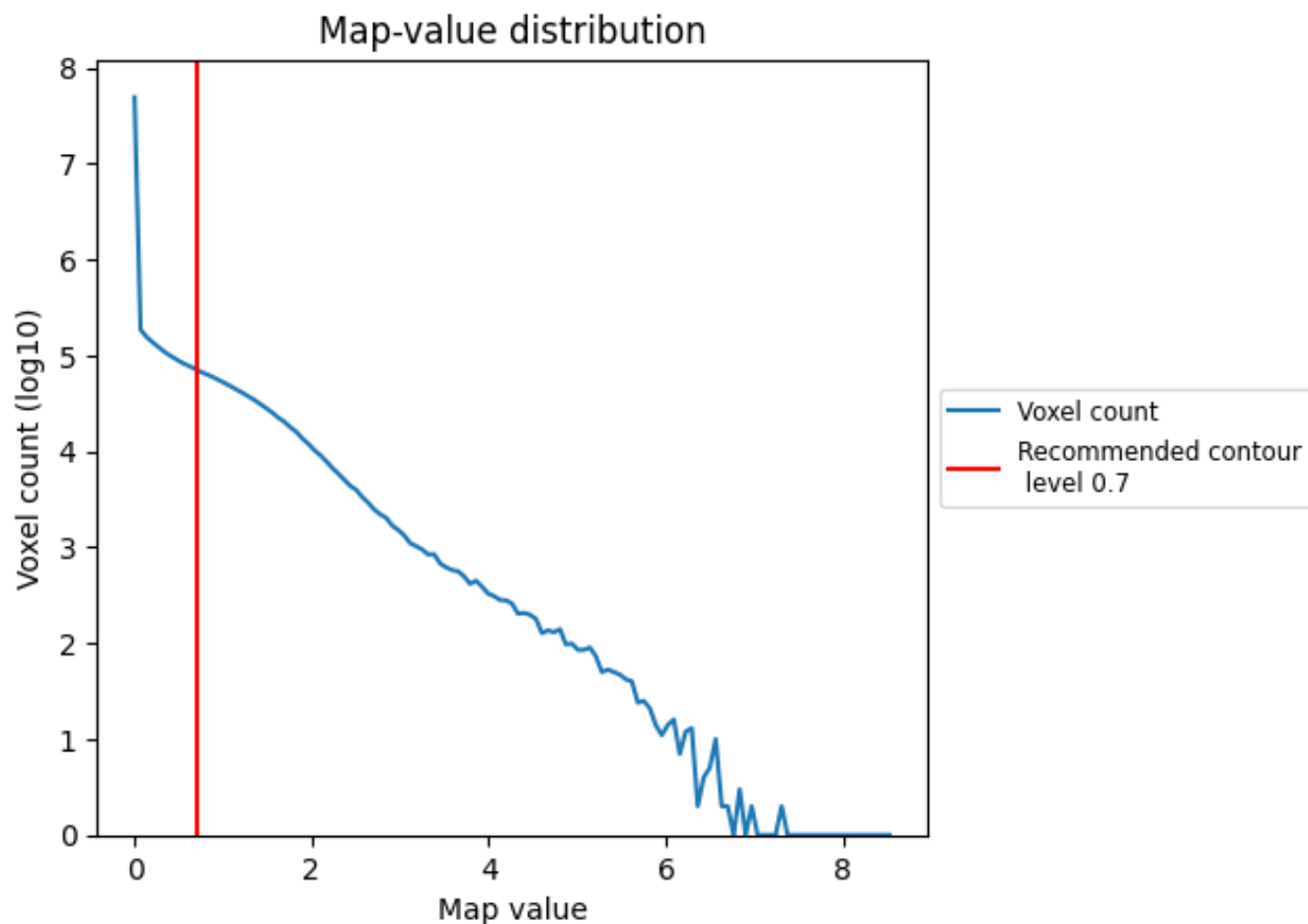
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

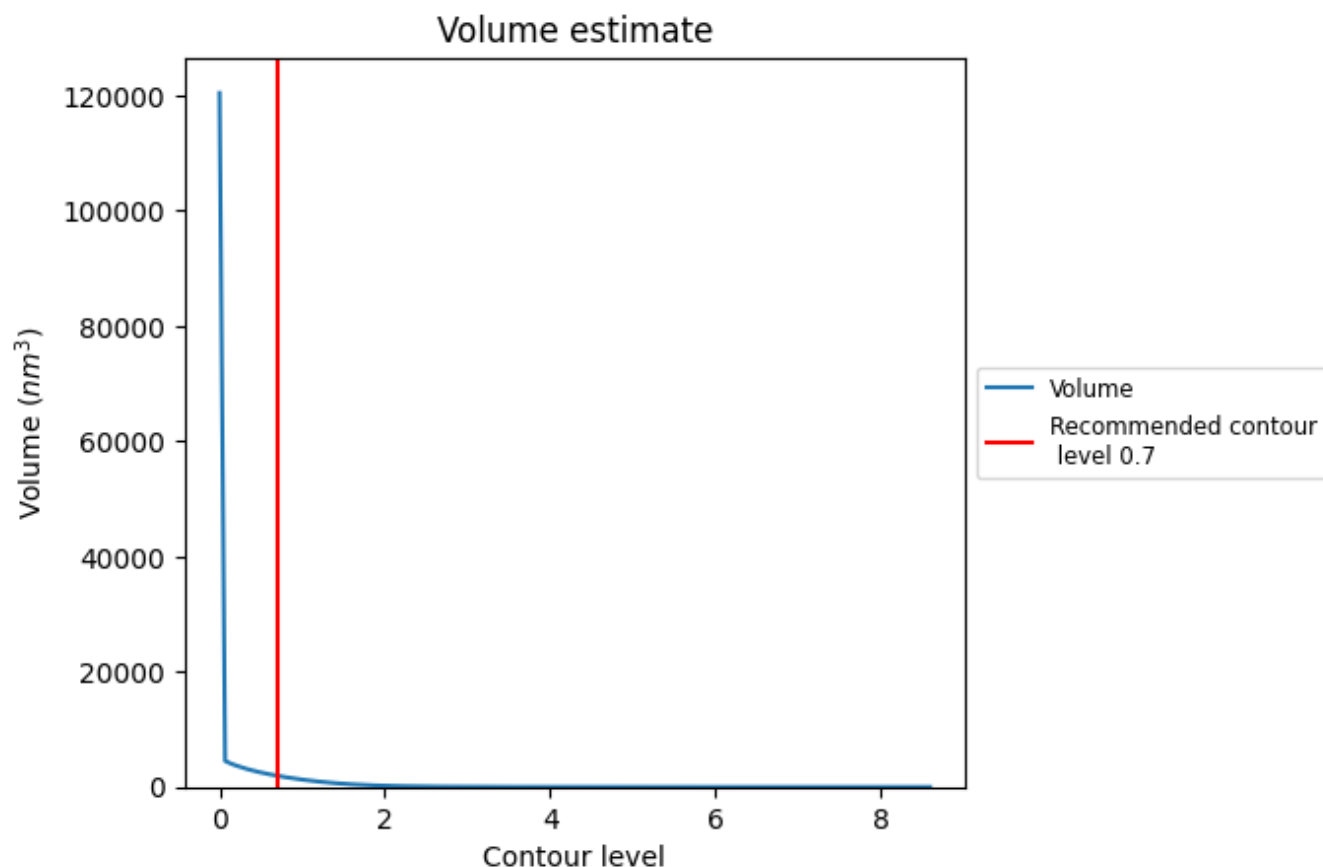
This section contains the results of statistical analysis of the map.

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 1940 nm³; this corresponds to an approximate mass of 1753 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 [i](#)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

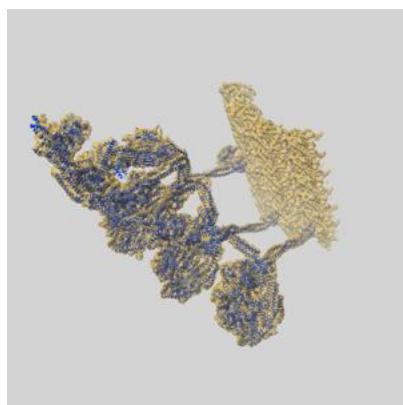
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

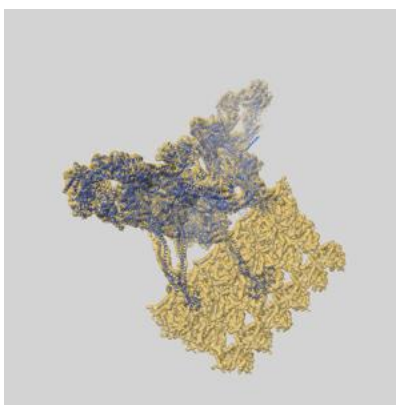
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-22679 and PDB model 7K5B. Per-residue inclusion information can be found in section [3](#) on page [9](#).

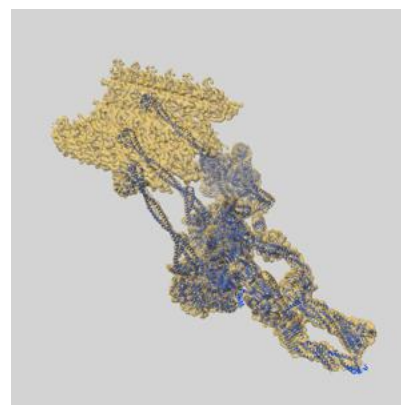
9.1 Map-model overlay [i](#)



X



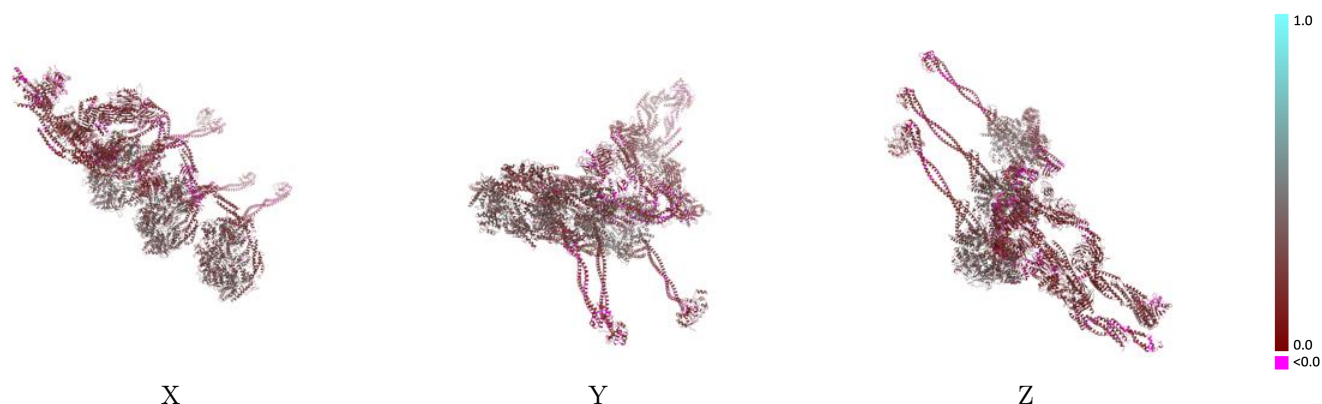
Y



Z

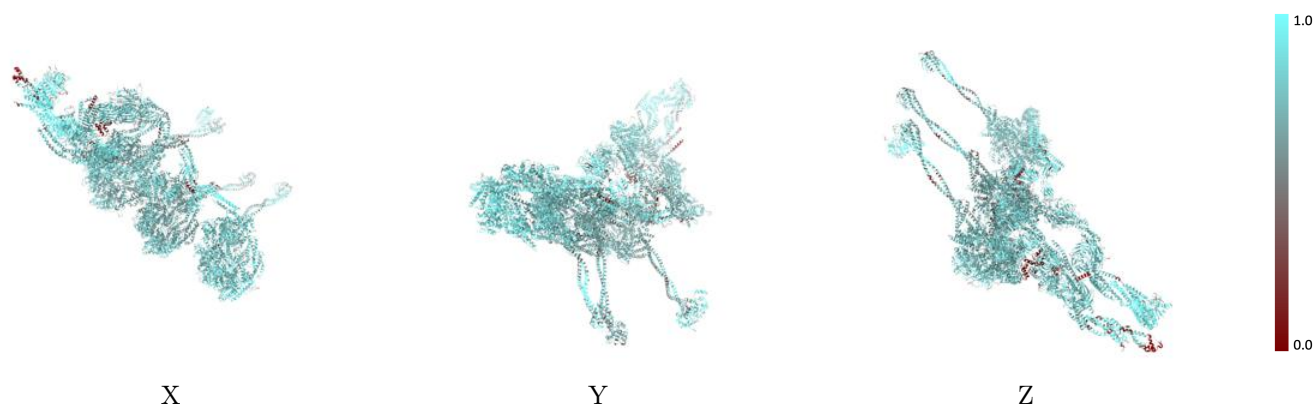
The images above show the 3D surface view of the map at the recommended contour level 0.7 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



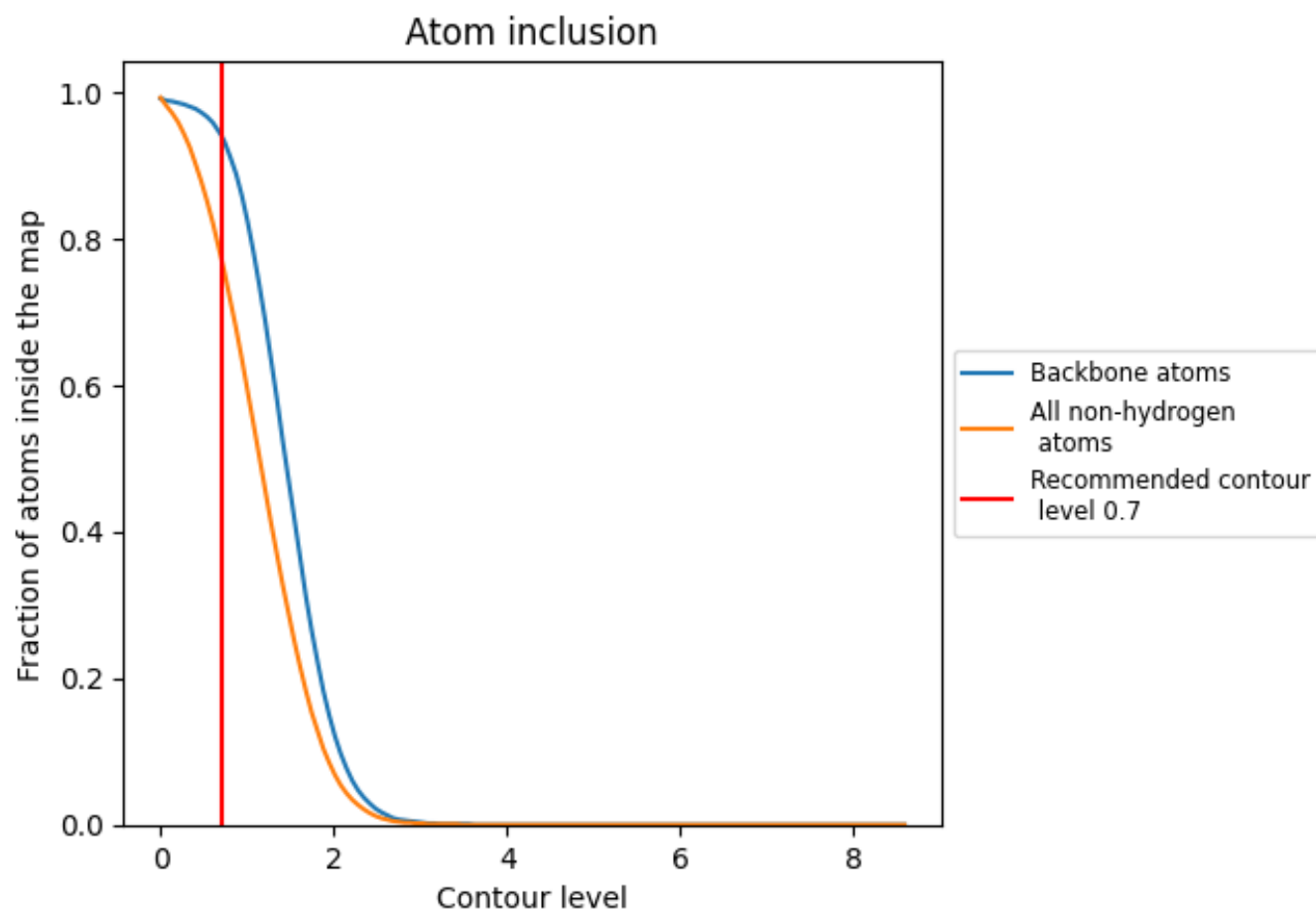
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.7).







































9.4 Atom inclusion [i](#)



At the recommended contour level, 94% of all backbone atoms, 77% 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 (0.7) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7740	 0.2640
A	 0.7590	 0.2830
B	 0.7570	 0.2730
C	 0.8180	 0.2860
D	 0.8030	 0.2060
E	 0.8280	 0.2060
F	 0.7010	 0.1850
G	 0.6180	 0.1440
H	 0.7740	 0.1860
I	 0.8050	 0.1730
J	 0.7950	 0.1850
K	 0.8070	 0.1780
L	 0.6570	 0.1780
M	 0.7680	 0.1590
N	 0.7670	 0.1640
O	 0.7500	 0.1440
P	 0.8910	 0.1510
Q	 0.8490	 0.2450
R	 0.0270	 -0.0320

