



Full wwPDB EM Validation Report ⓘ

Oct 6, 2024 – 04:47 pm BST

PDB ID : 4BOO
EMDB ID : EMD-2381
Title : The structure and super-organization of acetylcholine receptor-rapsyn complexes class C
Authors : Zuber, B.; Unwin, N.
Deposited on : 2013-05-21
Resolution : 42.00 Å(reported)
Based on initial model : 2BG9

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
MolProbity : 4.02b-467
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

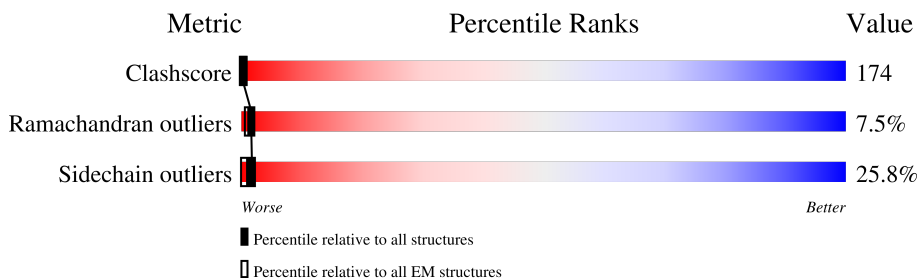
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 42.00 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	461	<div> <div>8%</div> <div>6%</div> <div>50%</div> <div>20%</div> <div>20%</div> </div>
1	D	461	<div> <div>9%</div> <div>7%</div> <div>51%</div> <div>21%</div> <div>20%</div> </div>
2	B	493	<div> <div>6%</div> <div>5%</div> <div>50%</div> <div>19%</div> <div>25%</div> </div>
3	C	522	<div> <div>5%</div> <div>7%</div> <div>44%</div> <div>19%</div> <div>29%</div> </div>
4	E	505	<div> <div>6%</div> <div>6%</div> <div>46%</div> <div>18%</div> <div>27%</div> </div>

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 14924 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called ACETYLCHOLINE RECEPTOR SUBUNIT ALPHA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	370	Total	C	N	O	S	0	0
			2991	1954	478	540	19		
1	D	370	Total	C	N	O	S	0	0
			2991	1954	478	540	19		

- Molecule 2 is a protein called ACETYLCHOLINE RECEPTOR BETA SUBUNIT.

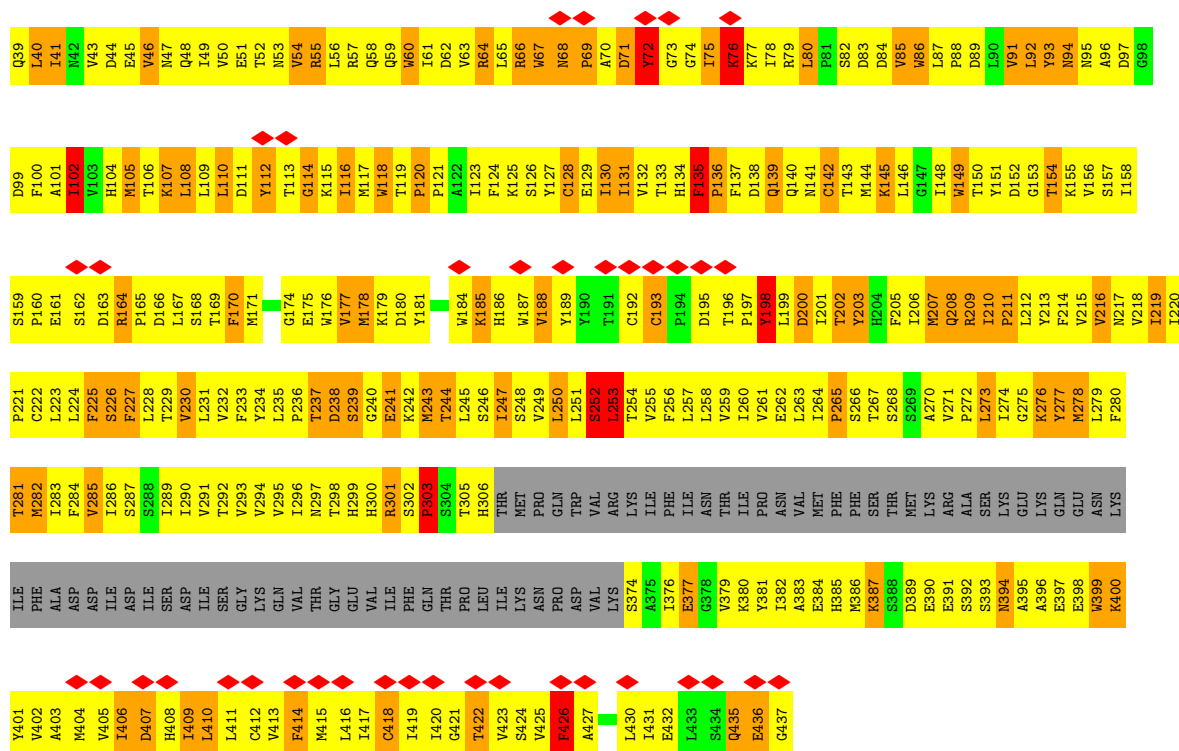
Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	370	Total	C	N	O	S	0	0
			2972	1938	465	554	15		

- Molecule 3 is a protein called ACETYLCHOLINE RECEPTOR DELTA SUBUNIT.

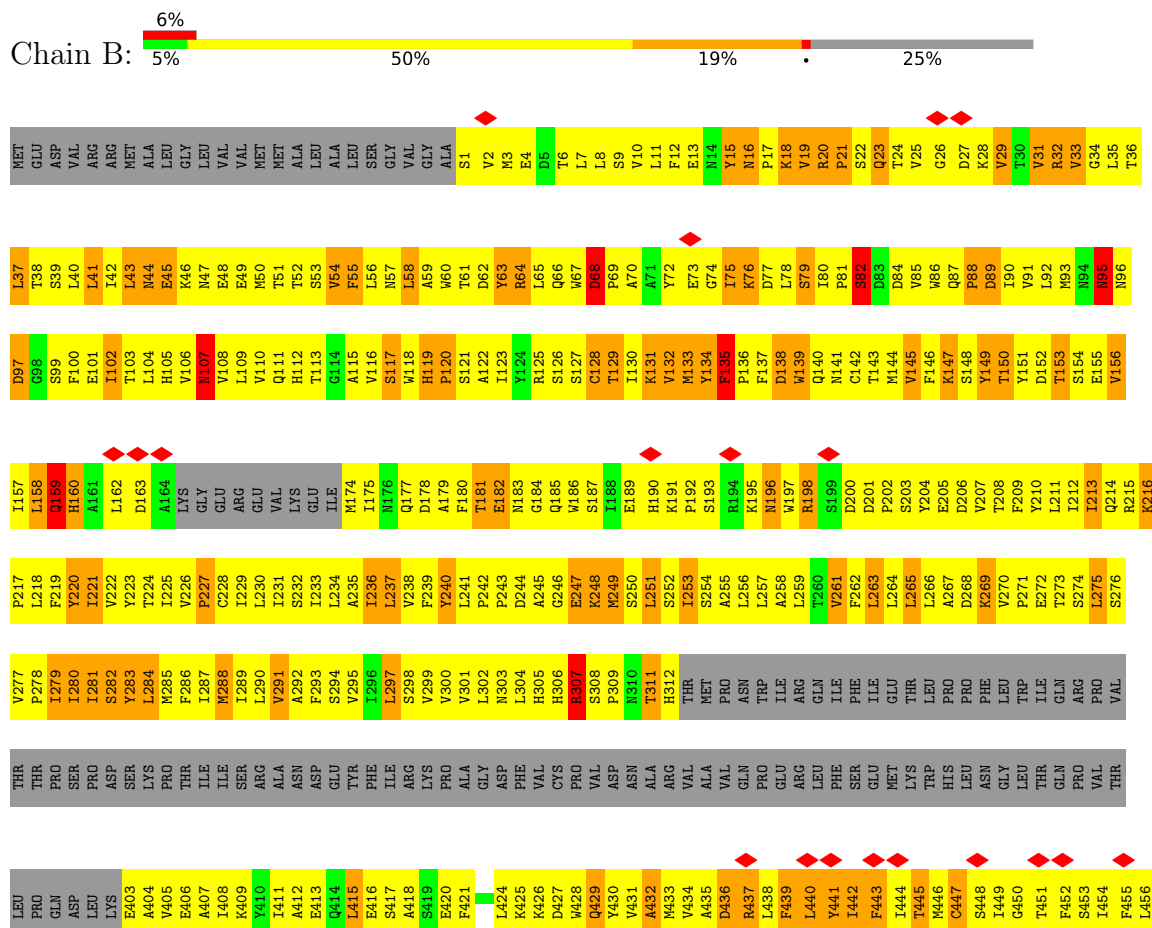
Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	370	Total	C	N	O	S	0	1
			2983	1944	489	536	14		

- Molecule 4 is a protein called ACETYLCHOLINE RECEPTOR GAMMA SUBUNIT.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	E	371	Total	C	N	O	S	0	1
			2987	1948	478	551	10		



• Molecule 2: ACETYLCHOLINE RECEPTOR BETA SUBUNIT





4 Experimental information

Property	Value	Source
EM reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of tilted images used	3564	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	3000	Depositor
Maximum defocus (nm)	6000	Depositor
Magnification	80213	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum voxel value	1.092	Depositor
Minimum voxel value	-0.624	Depositor
Average voxel value	0.000	Depositor
Voxel value standard deviation	0.066	Depositor
Recommended contour level	0.248	Depositor
Tomogram size (\AA)	448.8, 448.8, 448.8	wwPDB
Tomogram dimensions	60, 60, 60	wwPDB
Tomogram angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Grid spacing (\AA)	7.48, 7.48, 7.48	Depositor

5 Model quality

5.1 Standard geometry

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	0.72	3/3069 (0.1%)	1.03	10/4186 (0.2%)
1	D	0.74	2/3069 (0.1%)	1.01	6/4186 (0.1%)
2	B	0.76	2/3048 (0.1%)	0.99	4/4162 (0.1%)
3	C	0.74	2/3059 (0.1%)	1.03	9/4175 (0.2%)
4	E	0.74	6/3057 (0.2%)	1.01	9/4174 (0.2%)
All	All	0.74	15/15302 (0.1%)	1.01	38/20883 (0.2%)

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	D	0	2
3	C	0	2
All	All	0	4

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	129	THR	C-N	-8.38	1.14	1.34
1	A	118	TRP	CB-CG	7.89	1.64	1.50
1	D	208	GLN	C-N	7.59	1.51	1.34
4	E	8	GLU	CB-CG	6.55	1.64	1.52
3	C	265	LEU	C-N	6.17	1.48	1.34
3	C	130	CYS	C-N	6.06	1.45	1.34
1	A	222	CYS	CB-SG	-5.86	1.72	1.81
4	E	8	GLU	CG-CD	5.62	1.60	1.51
4	E	126	THR	C-N	-5.30	1.21	1.34
4	E	311	PRO	N-CD	5.29	1.55	1.47
4	E	306	VAL	C-N	-5.24	1.22	1.34
2	B	159	GLN	C-N	5.14	1.45	1.34
1	D	140	GLN	C-N	-5.08	1.22	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	134	PHE	C-N	5.07	1.43	1.34
1	A	122	ALA	C-N	-5.03	1.22	1.34

All (38) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	266	ALA	N-CA-CB	10.40	124.66	110.10
4	E	198	LEU	CA-CB-CG	7.18	131.82	115.30
3	C	315	ARG	NE-CZ-NH2	7.15	123.87	120.30
1	A	209	ARG	NE-CZ-NH2	7.02	123.81	120.30
4	E	263	ILE	CG1-CB-CG2	-6.65	96.77	111.40
3	C	92	ILE	O-C-N	6.45	133.02	122.70
1	D	209	ARG	NE-CZ-NH2	6.42	123.51	120.30
4	E	265	LEU	CA-CB-CG	6.33	129.86	115.30
3	C	190	TRP	O-C-N	6.25	132.70	122.70
1	A	253	LEU	CA-CB-CG	6.05	129.22	115.30
1	D	253	LEU	CA-CB-CG	6.05	129.21	115.30
1	A	149	TRP	CA-CB-CG	5.99	125.09	113.70
2	B	159	GLN	O-C-N	5.88	132.10	122.70
4	E	203	ILE	N-CA-C	-5.82	95.28	111.00
4	E	443	GLY	N-CA-C	5.79	127.59	113.10
2	B	44	ASN	N-CA-C	-5.73	95.53	111.00
3	C	67	LEU	CA-CB-CG	5.71	128.43	115.30
1	D	178	MET	CG-SD-CE	5.65	109.25	100.20
3	C	281	THR	O-C-N	5.63	131.71	122.70
4	E	238	LEU	N-CA-C	-5.53	96.08	111.00
1	D	410	LEU	CA-CB-CG	5.47	127.89	115.30
1	D	128	CYS	CA-CB-SG	5.44	123.80	114.00
2	B	297	LEU	CA-CB-CG	-5.44	102.79	115.30
1	A	301	ARG	N-CA-C	5.43	125.68	111.00
1	A	257	LEU	CB-CG-CD1	-5.42	101.79	111.00
4	E	141	CYS	CA-CB-SG	5.34	123.62	114.00
3	C	151	LEU	CA-CB-CG	5.29	127.46	115.30
1	D	102	ILE	CG1-CB-CG2	-5.28	99.80	111.40
1	A	92	LEU	CA-CB-CG	5.23	127.33	115.30
2	B	441	TYR	N-CA-C	-5.16	97.06	111.00
1	A	108	LEU	CA-CB-CG	5.13	127.10	115.30
4	E	308	LEU	CA-CB-CG	5.12	127.08	115.30
1	A	228	LEU	CA-CB-CG	5.10	127.04	115.30
3	C	190	TRP	CA-C-N	-5.10	105.97	117.20
3	C	222	ARG	NE-CZ-NH1	5.10	122.85	120.30
1	A	411	LEU	CA-CB-CG	5.08	126.99	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	130	ILE	N-CA-C	-5.02	97.44	111.00
4	E	134	PHE	C-N-CD	5.02	138.94	128.40

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	C	63	TYR	Sidechain
3	C	74	TYR	Sidechain
1	D	277	TYR	Sidechain
1	D	72	TYR	Sidechain

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	2991	0	3005	1078	0
1	D	2991	0	3006	1061	0
2	B	2972	0	2953	1087	0
3	C	2983	0	2987	1149	0
4	E	2987	0	2994	1084	0
All	All	14924	0	14945	5193	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 174.

All (5193) 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)
4:E:183:TRP:CB	4:E:216:ARG:HG2	1.33	1.50
1:A:167:LEU:HD12	1:A:178:MET:CB	1.43	1.48
2:B:134:TYR:CE1	2:B:213:ILE:HG13	1.44	1.47
1:A:167:LEU:CD1	1:A:178:MET:HB2	1.46	1.45
3:C:316:THR:CG2	3:C:317:PRO:HD2	1.53	1.39
3:C:316:THR:CG2	3:C:447:ASN:HB3	1.53	1.37

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:148:PHE:HB2	3:C:215:VAL:CG2	1.56	1.35
1:D:261:VAL:O	1:D:265:PRO:HD2	1.22	1.35
4:E:284:LYS:N	4:E:284:LYS:HE3	1.47	1.29
3:C:162:LEU:HD11	3:C:217:PHE:CE1	1.68	1.29
4:E:135:PRO:HG2	4:E:137:ASP:O	1.32	1.26
4:E:183:TRP:HB3	4:E:216:ARG:CG	1.64	1.26
2:B:141:ASN:ND2	2:B:212:ILE:HG12	1.48	1.26
1:D:45:GLU:HG2	1:D:272:PRO:CG	1.63	1.25
4:E:44:GLU:HG3	4:E:129:ILE:CG1	1.68	1.24
1:A:251:LEU:HD22	4:E:260:ALA:CB	1.70	1.22
2:B:47:ASN:O	2:B:48:GLU:HG2	1.36	1.22
4:E:182:GLU:HB2	4:E:216:ARG:NH2	1.55	1.22
1:D:35:LEU:CD1	1:D:54:VAL:HG11	1.70	1.21
3:C:447:ASN:O	3:C:449:VAL:HG23	1.38	1.21
1:D:64:ARG:HA	1:D:66:ARG:NH1	1.55	1.20
2:B:425:LYS:HA	2:B:428:TRP:CD1	1.78	1.19
3:C:189:GLU:O	3:C:223:ARG:HG3	1.40	1.19
2:B:258:ALA:CB	3:C:265:LEU:HD22	1.72	1.18
3:C:93:VAL:HG11	3:C:151:LEU:HD13	1.25	1.18
3:C:97:ASN:ND2	3:C:146:LEU:HG	1.59	1.17
4:E:132:THR:O	4:E:135:PRO:HD3	1.43	1.17
1:A:187:TRP:CZ2	1:A:196:THR:HG23	1.80	1.17
4:E:195:ASN:H	4:E:204:ASP:HB3	1.06	1.17
4:E:241:PHE:HA	4:E:450:CYS:SG	1.84	1.17
1:D:135:PHE:HB2	1:D:209:ARG:HB3	1.24	1.17
1:D:102:ILE:HG13	4:E:98:GLN:NE2	1.59	1.17
3:C:311:ASN:O	3:C:315:ARG:HB3	1.45	1.16
1:D:255:VAL:O	1:D:259:VAL:HG23	1.41	1.16
4:E:249:GLN:NE2	4:E:250:LYS:HE3	1.61	1.16
1:A:134:HIS:C	1:A:136:PRO:HD2	1.64	1.16
4:E:311:PRO:HD2	4:E:440:VAL:HG13	1.24	1.16
1:A:57:ARG:HA	1:A:119:THR:HG22	1.20	1.16
1:A:137:PHE:O	1:A:435:GLN:HG3	1.44	1.15
4:E:59:TRP:C	4:E:60:ASN:HD22	1.49	1.15
1:D:92:LEU:HB3	1:D:95:ASN:HB2	1.22	1.15
1:A:130:ILE:HD13	1:A:131:ILE:N	1.60	1.15
4:E:44:GLU:CG	4:E:129:ILE:HB	1.74	1.15
4:E:47:GLU:HA	4:E:129:ILE:HD11	1.24	1.14
1:A:41:ILE:HD11	1:A:51:GLU:OE1	1.43	1.14
4:E:236:VAL:HA	4:E:239:VAL:CG2	1.77	1.14
3:C:445:ASN:HA	3:C:448:LEU:HG	1.22	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:43:VAL:HG13	1:D:49:ILE:O	1.48	1.14
3:C:316:THR:HG21	3:C:447:ASN:HB3	1.16	1.13
1:A:107:LYS:CE	2:B:150:THR:HG22	1.77	1.13
2:B:216:LYS:HE3	2:B:216:LYS:H	1.06	1.13
4:E:262:THR:OG1	4:E:265:LEU:HD12	1.49	1.13
2:B:279:ILE:HG22	2:B:280:ILE:H	0.97	1.12
4:E:172:ILE:HG13	4:E:174:PRO:HD2	1.30	1.12
2:B:230:LEU:HA	2:B:233:ILE:HG13	1.19	1.12
4:E:44:GLU:HG3	4:E:129:ILE:CB	1.78	1.12
2:B:95:ASN:HB3	2:B:126:SER:HB2	1.27	1.12
2:B:134:TYR:CE1	2:B:213:ILE:CG1	2.33	1.12
4:E:107:VAL:HG13	4:E:117:TRP:HB2	1.25	1.12
1:D:250:LEU:HD13	1:D:296:ILE:HD13	1.31	1.12
4:E:249:GLN:HE22	4:E:250:LYS:HE3	1.01	1.12
1:A:38:ILE:O	1:A:39:GLN:HG3	1.50	1.11
2:B:189:GLU:HG3	2:B:468:PHE:HB3	1.28	1.11
4:E:265:LEU:HD21	4:E:296:ILE:HD11	1.18	1.11
3:C:230:ILE:HG13	3:C:231:ASN:HD22	1.15	1.11
2:B:406:GLU:HA	2:B:409:LYS:HD2	1.30	1.11
1:D:145:LYS:CG	1:D:202:THR:HG23	1.78	1.11
4:E:135:PRO:HB2	4:E:137:ASP:OD1	1.49	1.11
4:E:183:TRP:CB	4:E:216:ARG:CG	2.21	1.11
1:A:251:LEU:HD13	4:E:260:ALA:HB2	1.30	1.11
2:B:258:ALA:HB2	3:C:265:LEU:HD13	1.31	1.11
2:B:306:HIS:HA	2:B:312:HIS:O	1.50	1.11
3:C:142:GLN:HG3	3:C:143:ASN:H	0.95	1.10
2:B:160:HIS:NE2	2:B:207:VAL:HG11	1.66	1.10
3:C:309:VAL:O	3:C:313:HIS:HB3	1.48	1.10
1:D:35:LEU:HD23	1:D:164:ARG:HH12	1.09	1.10
1:D:296:ILE:HA	1:D:299:HIS:HB2	1.32	1.10
1:A:107:LYS:HE3	2:B:150:THR:O	1.52	1.10
1:A:118:TRP:CD1	1:A:120:PRO:HD3	1.85	1.10
2:B:46:LYS:CB	2:B:278:PRO:HD2	1.81	1.10
1:A:130:ILE:HD13	1:A:131:ILE:H	0.97	1.10
1:A:145:LYS:HG3	1:A:202:THR:HG22	1.27	1.10
1:A:148:ILE:HD11	1:A:156:VAL:HG13	1.31	1.10
2:B:248:LYS:HD3	2:B:252:SER:HB3	1.11	1.10
1:A:296:ILE:HA	1:A:299:HIS:HB2	1.28	1.09
1:D:17:LYS:HG2	1:D:84:ASP:HA	1.26	1.09
4:E:44:GLU:HA	4:E:129:ILE:CD1	1.82	1.09
2:B:153:THR:HB	2:B:204:TYR:HB2	1.18	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:167:LEU:HD11	1:D:178:MET:HB3	1.21	1.09
1:A:235:LEU:HD11	1:A:242:LYS:HE3	1.23	1.09
3:C:77:ILE:CD1	3:C:80:LEU:HD13	1.82	1.09
3:C:273:LEU:HA	3:C:276:GLN:HG2	1.17	1.09
4:E:91:LEU:HD13	4:E:145:PHE:HB3	1.20	1.09
4:E:183:TRP:HB2	4:E:216:ARG:HG2	1.28	1.09
1:D:45:GLU:HG2	1:D:272:PRO:HG2	1.25	1.09
1:A:20:ARG:HH11	1:A:20:ARG:CG	1.65	1.09
2:B:46:LYS:HB2	2:B:278:PRO:HD2	1.16	1.09
3:C:316:THR:HG22	3:C:317:PRO:HD2	1.10	1.08
1:D:20:ARG:HH11	1:D:20:ARG:CG	1.66	1.08
4:E:236:VAL:CA	4:E:239:VAL:HG23	1.82	1.08
1:A:87:LEU:HD22	1:A:87:LEU:H	1.13	1.08
2:B:223:TYR:O	2:B:227:PRO:HD3	1.50	1.08
2:B:409:LYS:HB3	3:C:426:THR:HG21	1.35	1.08
3:C:162:LEU:HD11	3:C:217:PHE:HE1	1.02	1.08
1:D:89:ASP:OD2	1:D:150:THR:HG22	1.53	1.08
4:E:20:PRO:HG2	4:E:28:ILE:HD12	1.35	1.08
1:A:165:PRO:HG2	1:A:168:SER:HB3	1.28	1.08
3:C:190:TRP:CD1	3:C:221:ILE:HD12	1.88	1.08
4:E:242:LEU:HD11	4:E:253:LEU:HD21	1.35	1.08
1:A:137:PHE:CE1	1:A:210:ILE:HD12	1.88	1.08
1:D:35:LEU:CG	1:D:54:VAL:HG11	1.84	1.08
1:D:167:LEU:HD11	1:D:178:MET:CB	1.83	1.08
1:D:253:LEU:HD23	1:D:254:THR:N	1.68	1.08
2:B:37:LEU:HD23	2:B:179:ALA:HB3	1.26	1.08
3:C:434:LYS:HD3	3:C:435:GLU:HG3	1.10	1.08
3:C:190:TRP:CB	3:C:223:ARG:HB2	1.84	1.07
1:A:38:ILE:CD1	1:A:55:ARG:HG3	1.84	1.07
3:C:154:ASN:HB3	3:C:211:ASN:HB3	1.36	1.07
3:C:159:SER:HA	3:C:213:GLN:HG3	1.34	1.07
3:C:227:PHE:O	3:C:230:ILE:HG12	1.54	1.07
2:B:92:LEU:H	2:B:96:ASN:HB2	1.19	1.07
2:B:134:TYR:HE1	2:B:213:ILE:CG1	1.67	1.07
2:B:134:TYR:H	2:B:279:ILE:HG12	1.17	1.07
3:C:246:ALA:O	3:C:250:PRO:HD3	1.55	1.07
1:D:145:LYS:C	1:D:146:LEU:HD12	1.74	1.07
2:B:272:GLU:HA	2:B:275:LEU:HG	1.34	1.07
3:C:251:ALA:CB	3:C:453:ILE:HD11	1.85	1.07
4:E:94:ASN:HD22	4:E:125:SER:HB2	1.17	1.07
3:C:60:HIS:CD2	3:C:92:ILE:HD13	1.89	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:271:LYS:HZ3	4:E:271:LYS:HB2	1.18	1.06
3:C:69:TRP:HB3	3:C:73:GLU:HB2	1.38	1.06
1:D:145:LYS:HG3	1:D:202:THR:CG2	1.84	1.06
2:B:9:SER:HA	2:B:12:PHE:CE1	1.90	1.06
4:E:236:VAL:HA	4:E:239:VAL:HG23	1.11	1.06
4:E:233:SER:O	4:E:237:VAL:HG23	1.54	1.06
2:B:269:LYS:HE3	2:B:270:VAL:CG2	1.86	1.05
1:D:65:LEU:HD23	1:D:110:LEU:HD22	1.35	1.05
4:E:75:ASP:HB3	4:E:110:TYR:CE1	1.92	1.05
4:E:189:PRO:HD2	4:E:211:PHE:HB2	1.08	1.05
2:B:37:LEU:HB3	2:B:179:ALA:HB3	1.37	1.05
4:E:183:TRP:HB3	4:E:216:ARG:HG2	1.05	1.05
1:A:38:ILE:HD11	1:A:55:ARG:CG	1.87	1.05
3:C:69:TRP:HZ2	3:C:112:VAL:HG11	1.12	1.05
3:C:130:CYS:SG	3:C:146:LEU:HD11	1.97	1.05
4:E:27:VAL:HG12	4:E:153:HIS:C	1.77	1.05
3:C:12:LEU:HD12	3:C:16:LYS:HG2	1.39	1.05
1:A:235:LEU:HA	2:B:306:HIS:CD2	1.91	1.04
1:D:137:PHE:HB3	1:D:435:GLN:CB	1.87	1.04
3:C:45:LEU:HD12	3:C:190:TRP:CE3	1.91	1.04
3:C:271:LEU:HD11	3:C:303:VAL:CG2	1.87	1.04
1:D:29:VAL:HG12	1:D:60:TRP:CD1	1.90	1.04
1:A:20:ARG:HH11	1:A:20:ARG:HG2	0.88	1.04
1:A:63:VAL:O	1:A:66:ARG:HD2	1.56	1.03
1:A:89:ASP:OD2	1:A:150:THR:HG22	1.58	1.03
1:A:277:TYR:HA	1:A:280:PHE:CZ	1.92	1.03
1:D:137:PHE:HB3	1:D:435:GLN:CG	1.87	1.03
1:D:235:LEU:HD13	1:D:242:LYS:HE3	1.37	1.03
1:D:261:VAL:HA	1:D:264:ILE:HD12	1.08	1.03
1:D:379:VAL:HA	1:D:382:ILE:HG13	1.37	1.03
1:A:79:ARG:CD	1:A:107:LYS:HD2	1.88	1.03
2:B:443:PHE:O	2:B:447:CYS:SG	2.17	1.03
3:C:318:SER:HB2	3:C:447:ASN:HD22	1.18	1.03
1:D:95:ASN:HD21	1:D:128:CYS:HB3	1.23	1.03
1:D:104:HIS:O	1:D:105:MET:SD	2.16	1.03
4:E:246:ALA:HB1	4:E:250:LYS:HG3	1.39	1.03
1:A:121:PRO:HB2	2:B:149:TYR:CZ	1.93	1.03
3:C:316:THR:HG23	3:C:317:PRO:HD2	1.40	1.03
2:B:20:ARG:HD3	2:B:20:ARG:H	1.21	1.03
3:C:316:THR:CG2	3:C:317:PRO:CD	2.37	1.03
1:D:216:VAL:O	1:D:220:ILE:HG13	1.57	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:19:LYS:HZ2	4:E:154:GLU:HB3	1.22	1.03
2:B:438:LEU:HA	2:B:441:TYR:HB3	1.41	1.03
1:D:131:ILE:HG13	1:D:133:THR:H	1.17	1.03
4:E:56:GLU:HA	4:E:118:LEU:HG	1.41	1.03
3:C:241:PHE:O	3:C:245:LEU:HG	1.59	1.02
1:D:43:VAL:HG22	1:D:50:VAL:HA	1.37	1.02
1:D:412:CYS:O	1:D:416:LEU:HD23	1.60	1.02
4:E:183:TRP:HB3	4:E:216:ARG:CD	1.87	1.02
2:B:37:LEU:HA	2:B:54:VAL:HG12	1.06	1.02
2:B:56:LEU:CD2	2:B:103:THR:HG23	1.89	1.02
3:C:13:ILE:HD13	3:C:82:LEU:HD11	1.40	1.02
1:D:187:TRP:CZ2	1:D:189:TYR:HB3	1.94	1.02
1:D:292:THR:HA	1:D:295:VAL:HG22	1.40	1.02
1:A:244:THR:O	1:A:247:ILE:HG22	1.59	1.02
1:A:252:SER:O	1:A:256:PHE:CD1	2.12	1.02
4:E:67:ASN:HD22	4:E:67:ASN:N	1.53	1.02
2:B:23:GLN:HE21	2:B:23:GLN:N	1.56	1.02
2:B:68:ASP:HB3	2:B:69:PRO:CD	1.90	1.02
3:C:18:ASN:CB	3:C:21:VAL:HB	1.89	1.02
1:D:104:HIS:C	1:D:105:MET:SD	2.38	1.02
4:E:470:HIS:NE2	4:E:474:VAL:HG23	1.74	1.02
2:B:238:VAL:HG13	2:B:248:LYS:NZ	1.75	1.02
3:C:87:ILE:HD12	3:C:110:VAL:HB	1.07	1.02
4:E:224:ASN:O	4:E:228:PRO:HG3	1.60	1.02
1:A:41:ILE:HD11	1:A:51:GLU:CD	1.81	1.01
3:C:307:GLY:HA2	3:C:310:LEU:HD23	1.38	1.01
1:D:20:ARG:HH11	1:D:20:ARG:HG2	0.87	1.01
1:D:38:ILE:HA	1:D:169:THR:HG21	1.36	1.01
3:C:37:LEU:HB2	3:C:217:PHE:CE2	1.94	1.01
4:E:149:THR:HG23	4:E:150:TYR:H	1.26	1.01
2:B:37:LEU:HD23	2:B:179:ALA:CB	1.89	1.01
3:C:159:SER:HA	3:C:213:GLN:CG	1.89	1.01
2:B:37:LEU:CD2	2:B:179:ALA:HB3	1.91	1.01
3:C:102:TYR:HD1	3:C:102:TYR:O	1.42	1.01
3:C:271:LEU:HD11	3:C:303:VAL:HG22	1.04	1.01
4:E:27:VAL:HG12	4:E:154:GLU:CA	1.91	1.01
4:E:470:HIS:NE2	4:E:474:VAL:CG2	2.24	1.01
2:B:24:THR:HG22	2:B:25:VAL:H	1.27	1.00
2:B:224:THR:C	2:B:227:PRO:HD2	1.81	1.00
3:C:266:ALA:O	3:C:270:PHE:CD1	2.14	1.00
1:D:263:LEU:O	1:D:267:THR:HG22	1.59	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:182:GLU:CB	4:E:216:ARG:HH21	1.73	1.00
2:B:248:LYS:CD	2:B:252:SER:HB3	1.90	1.00
4:E:28:ILE:HD11	4:E:60:ASN:O	1.61	1.00
4:E:152:ALA:HB3	4:E:204:ASP:O	1.61	1.00
1:A:64:ARG:HA	1:A:66:ARG:HH11	1.22	1.00
3:C:312:PHE:CE1	3:C:456:LEU:HD13	1.96	1.00
4:E:44:GLU:HA	4:E:129:ILE:HD12	1.41	1.00
1:A:274:ILE:HG12	1:A:277:TYR:CE1	1.96	1.00
2:B:131:LYS:HD3	2:B:132:VAL:H	1.27	1.00
2:B:92:LEU:H	2:B:96:ASN:CB	1.72	1.00
3:C:472:ILE:HA	3:C:475:MET:HB3	1.44	1.00
4:E:129:ILE:HG22	4:E:133:TYR:CD2	1.96	1.00
1:D:432:GLU:HG2	1:D:435:GLN:NE2	1.74	1.00
4:E:27:VAL:HG12	4:E:154:GLU:N	1.77	1.00
2:B:405:VAL:O	2:B:408:ILE:HG22	1.60	0.99
1:D:35:LEU:HG	1:D:54:VAL:HG11	1.41	0.99
1:D:106:THR:HG22	1:D:107:LYS:H	1.27	0.99
1:D:170:PHE:HE2	1:D:176:TRP:NE1	1.59	0.99
4:E:211:PHE:C	4:E:212:LEU:HD12	1.83	0.99
1:A:303:PRO:HB2	1:A:400:LYS:HD3	1.44	0.99
2:B:279:ILE:HG22	2:B:280:ILE:HD13	1.41	0.99
3:C:30:VAL:HG22	3:C:158:ILE:N	1.76	0.99
1:A:304:SER:HB2	1:A:397:GLU:HG2	1.40	0.99
2:B:216:LYS:HD2	2:B:216:LYS:O	1.61	0.99
2:B:279:ILE:HG22	2:B:280:ILE:N	1.74	0.99
1:A:251:LEU:HD22	4:E:260:ALA:HB1	1.42	0.99
2:B:56:LEU:HD22	2:B:103:THR:HG23	1.44	0.99
3:C:273:LEU:HA	3:C:276:GLN:CG	1.91	0.99
4:E:59:TRP:HH2	4:E:107:VAL:HG11	1.25	0.99
1:D:35:LEU:HD23	1:D:164:ARG:NH1	1.77	0.99
4:E:250:LYS:HA	4:E:253:LEU:HB3	1.44	0.99
2:B:130:ILE:HB	2:B:134:TYR:CD2	1.97	0.99
1:D:64:ARG:HA	1:D:66:ARG:HH11	1.16	0.99
1:D:160:PRO:HD3	1:D:185:LYS:HB3	1.42	0.99
1:A:419:ILE:O	1:A:423:VAL:HG23	1.61	0.99
3:C:271:LEU:CD1	3:C:303:VAL:HG22	1.92	0.99
4:E:90:VAL:HG22	4:E:95:VAL:HG11	1.44	0.99
1:A:261:VAL:O	1:A:265:PRO:HD3	1.63	0.99
2:B:409:LYS:HD3	3:C:426:THR:OG1	1.63	0.99
4:E:44:GLU:OE2	4:E:133:TYR:CD2	2.16	0.98
4:E:47:GLU:HG2	4:E:129:ILE:HG12	1.43	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:32:THR:HB	1:D:59:GLN:HB3	1.43	0.98
2:B:160:HIS:H	2:B:195:LYS:HZ3	1.10	0.98
1:D:110:LEU:HD12	1:D:111:ASP:H	1.28	0.98
4:E:34:LEU:HD12	4:E:210:PHE:CE2	1.98	0.98
4:E:470:HIS:CE1	4:E:474:VAL:HG23	1.98	0.98
2:B:254:SER:O	3:C:265:LEU:HD11	1.62	0.98
3:C:66:ARG:HG2	3:C:66:ARG:HH11	1.28	0.98
3:C:65:HIS:CD2	3:C:65:HIS:H	1.72	0.98
3:C:97:ASN:HB3	3:C:128:SER:HB3	1.42	0.98
3:C:434:LYS:HD3	3:C:435:GLU:CG	1.92	0.98
1:A:64:ARG:HA	1:A:66:ARG:NH1	1.79	0.98
1:A:274:ILE:HG12	1:A:277:TYR:CD1	1.98	0.98
1:D:7:LEU:HD13	1:D:70:ALA:HB1	1.41	0.98
1:D:249:VAL:HG13	4:E:259:LEU:HD21	1.45	0.98
1:A:107:LYS:CE	2:B:150:THR:O	2.12	0.98
2:B:267:ALA:O	2:B:271:PRO:HD3	1.63	0.98
1:A:107:LYS:HE2	2:B:150:THR:HG22	1.01	0.98
3:C:74:TYR:CD1	3:C:114:PRO:HB2	1.98	0.98
2:B:37:LEU:CA	2:B:54:VAL:HG12	1.93	0.97
3:C:29:GLU:O	3:C:156:ASN:HA	1.64	0.97
3:C:312:PHE:CZ	3:C:456:LEU:HD22	1.98	0.97
4:E:36:LEU:CD1	4:E:173:ASP:OD1	2.12	0.97
1:A:41:ILE:CD1	1:A:51:GLU:OE1	2.11	0.97
2:B:230:LEU:CA	2:B:233:ILE:HG13	1.92	0.97
3:C:97:ASN:OD1	3:C:128:SER:HB2	1.63	0.97
1:D:48:GLN:HB3	1:D:130:ILE:HD12	0.98	0.97
4:E:189:PRO:HD2	4:E:211:PHE:CB	1.94	0.97
4:E:304:LEU:O	4:E:308:LEU:HB2	1.63	0.97
1:A:20:ARG:HG2	1:A:20:ARG:NH1	1.67	0.97
2:B:68:ASP:HB3	2:B:69:PRO:HD3	1.44	0.97
4:E:19:LYS:NZ	4:E:154:GLU:CB	2.27	0.97
3:C:102:TYR:CE1	3:C:106:TYR:HB3	1.98	0.97
3:C:316:THR:HG22	3:C:317:PRO:CD	1.93	0.97
2:B:212:ILE:HD13	2:B:469:ALA:HA	1.44	0.97
1:A:133:THR:HA	1:A:274:ILE:HG22	1.47	0.97
1:D:48:GLN:CB	1:D:130:ILE:HD12	1.94	0.97
4:E:19:LYS:NZ	4:E:154:GLU:HB3	1.80	0.97
2:B:308:SER:HB2	2:B:311:THR:HG22	1.47	0.97
3:C:48:THR:N	3:C:286:PRO:HD3	1.80	0.97
3:C:69:TRP:HZ2	3:C:112:VAL:CG1	1.78	0.97
2:B:141:ASN:ND2	2:B:212:ILE:CG1	2.28	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:245:LEU:O	3:C:249:LEU:HD13	1.64	0.96
2:B:133:MET:HA	2:B:279:ILE:HG23	1.45	0.96
2:B:281:ILE:HG22	2:B:285:MET:N	1.79	0.96
3:C:142:GLN:HG3	3:C:143:ASN:N	1.80	0.96
3:C:149:THR:HG21	3:C:214:ASP:HB3	1.46	0.96
3:C:122:PRO:HB2	3:C:123:PRO:HD2	1.43	0.96
1:D:229:THR:O	1:D:232:VAL:HB	1.64	0.96
3:C:148:PHE:HB2	3:C:215:VAL:HG21	1.47	0.96
4:E:44:GLU:HG3	4:E:129:ILE:HG13	1.46	0.96
1:A:89:ASP:O	1:A:149:TRP:HB3	1.65	0.96
2:B:141:ASN:HD21	2:B:212:ILE:HG12	1.16	0.96
3:C:69:TRP:CZ2	3:C:112:VAL:HG11	2.00	0.96
4:E:188:ARG:HD2	4:E:211:PHE:O	1.65	0.96
2:B:160:HIS:H	2:B:195:LYS:NZ	1.63	0.96
4:E:235:LEU:HA	4:E:238:LEU:HG	1.44	0.96
2:B:37:LEU:HA	2:B:54:VAL:CG1	1.95	0.96
2:B:220:TYR:CE2	3:C:279:PRO:HB2	2.00	0.96
3:C:60:HIS:HB3	3:C:62:TRP:HZ3	1.28	0.96
4:E:255:ILE:HD11	4:E:304:LEU:HD13	1.46	0.96
3:C:142:GLN:CG	3:C:143:ASN:H	1.77	0.96
1:A:189:TYR:HA	1:A:197:PRO:HD2	1.48	0.96
1:A:416:LEU:O	1:A:419:ILE:HG22	1.66	0.96
1:D:109:LEU:O	1:D:116:ILE:HG22	1.65	0.96
1:A:108:LEU:HD13	1:A:118:TRP:HB2	1.47	0.96
2:B:92:LEU:N	2:B:96:ASN:HB2	1.79	0.96
2:B:230:LEU:HA	2:B:233:ILE:CG1	1.95	0.96
1:D:203:TYR:N	1:D:203:TYR:HD1	1.64	0.96
4:E:47:GLU:HA	4:E:129:ILE:CD1	1.96	0.96
1:D:62:ASP:HB3	1:D:65:LEU:HD13	1.44	0.95
1:D:102:ILE:HG13	4:E:98:GLN:HE22	1.25	0.95
3:C:52:LEU:HD21	3:C:130:CYS:HB2	1.45	0.95
3:C:115:ASN:HD22	3:C:115:ASN:H	1.04	0.95
1:D:261:VAL:O	1:D:265:PRO:CD	2.14	0.95
1:A:38:ILE:HD11	1:A:55:ARG:HG3	0.96	0.95
1:A:43:VAL:HG22	1:A:50:VAL:HG22	1.47	0.95
1:A:187:TRP:CH2	1:A:189:TYR:HB3	2.02	0.95
1:D:421:GLY:O	1:D:425:VAL:HG23	1.66	0.95
2:B:56:LEU:O	2:B:120:PRO:HD2	1.64	0.95
1:D:187:TRP:HB2	1:D:199:LEU:HD23	1.45	0.95
1:A:101:ALA:HB3	1:A:123:ILE:O	1.66	0.95
3:C:149:THR:CG2	3:C:214:ASP:HB3	1.95	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:235:LEU:HD11	4:E:257:VAL:HG11	1.47	0.95
1:D:48:GLN:HB3	1:D:130:ILE:CD1	1.94	0.95
3:C:37:LEU:HB2	3:C:217:PHE:HE2	1.31	0.95
1:D:300:HIS:HA	1:D:306:HIS:O	1.65	0.95
4:E:182:GLU:HB2	4:E:216:ARG:HH21	0.78	0.95
2:B:269:LYS:HE3	2:B:270:VAL:HG22	1.47	0.95
3:C:316:THR:HG21	3:C:447:ASN:CB	1.97	0.95
1:D:49:ILE:HG21	1:D:125:LYS:NZ	1.82	0.95
1:D:282:MET:HG3	1:D:286:ILE:HD11	1.49	0.95
2:B:224:THR:O	2:B:227:PRO:HD2	1.66	0.95
1:A:131:ILE:HD11	1:A:140:GLN:HG2	1.49	0.94
2:B:160:HIS:HB2	2:B:195:LYS:CE	1.96	0.94
3:C:299:VAL:O	3:C:303:VAL:HG23	1.65	0.94
1:A:3:HIS:O	1:A:7:LEU:HG	1.65	0.94
1:D:47:ASN:O	1:D:48:GLN:HG2	1.66	0.94
1:A:227:PHE:HA	1:A:230:VAL:HB	1.49	0.94
1:A:303:PRO:HB2	1:A:400:LYS:CD	1.95	0.94
1:A:121:PRO:HB2	2:B:149:TYR:CE2	2.02	0.94
1:D:78:ILE:HD12	1:D:78:ILE:O	1.67	0.94
4:E:27:VAL:CG1	4:E:153:HIS:C	2.35	0.94
3:C:113:ARG:HD2	3:C:117:TYR:HB3	1.50	0.94
3:C:148:PHE:HB2	3:C:215:VAL:HG22	1.48	0.94
3:C:18:ASN:HB3	3:C:21:VAL:HB	1.49	0.94
3:C:74:TYR:HD1	3:C:114:PRO:HB2	1.29	0.94
3:C:93:VAL:CG1	3:C:151:LEU:HD13	1.98	0.94
4:E:91:LEU:CD1	4:E:145:PHE:HB3	1.98	0.94
1:A:38:ILE:O	1:A:39:GLN:CG	2.15	0.94
1:A:406:ILE:HA	1:A:409:ILE:HD11	1.49	0.94
4:E:44:GLU:HG3	4:E:129:ILE:HB	1.38	0.94
1:D:110:LEU:HD12	1:D:111:ASP:N	1.83	0.94
1:D:187:TRP:CZ3	1:D:189:TYR:CD2	2.56	0.94
1:D:296:ILE:HA	1:D:299:HIS:CB	1.96	0.94
3:C:9:ASN:O	3:C:12:LEU:HG	1.68	0.94
1:D:416:LEU:HA	1:D:419:ILE:CG1	1.98	0.94
4:E:250:LYS:HB3	4:E:253:LEU:HD23	1.50	0.94
1:A:107:LYS:HE2	2:B:150:THR:CG2	1.96	0.93
1:A:41:ILE:HD11	1:A:51:GLU:HB3	1.50	0.93
1:A:229:THR:HA	1:A:232:VAL:HB	1.51	0.93
1:A:242:LYS:HD3	2:B:312:HIS:ND1	1.82	0.93
3:C:312:PHE:HE1	3:C:456:LEU:HD13	1.28	0.93
2:B:279:ILE:CG2	2:B:280:ILE:H	1.81	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:39:LEU:HD23	4:E:183:TRP:HZ2	1.32	0.93
3:C:38:THR:CG2	3:C:57:TRP:CE3	2.51	0.93
1:D:118:TRP:HE1	1:D:120:PRO:HB3	1.33	0.93
1:D:134:HIS:CE1	1:D:209:ARG:HD3	2.03	0.93
4:E:36:LEU:CD2	4:E:51:THR:HG21	1.98	0.93
1:A:229:THR:O	1:A:233:PHE:CD1	2.21	0.93
1:A:238:ASP:HB3	2:B:306:HIS:CE1	2.03	0.93
1:D:167:LEU:CG	1:D:178:MET:HB2	1.98	0.93
4:E:35:THR:HG23	4:E:175:GLU:OE1	1.68	0.93
4:E:67:ASN:HD22	4:E:67:ASN:H	1.02	0.93
4:E:173:ASP:OD2	4:E:212:LEU:HD23	1.69	0.93
1:D:263:LEU:HD11	4:E:266:PHE:CZ	2.04	0.93
1:A:136:PRO:HA	1:A:277:TYR:OH	1.69	0.93
2:B:46:LYS:HB2	2:B:278:PRO:CD	1.99	0.93
1:D:20:ARG:HG2	1:D:20:ARG:NH1	1.65	0.93
4:E:226:ILE:O	4:E:230:VAL:HG23	1.66	0.93
1:A:79:ARG:HD2	1:A:107:LYS:HD2	1.48	0.93
1:A:217:ASN:O	1:A:221:PRO:HD3	1.69	0.93
3:C:83:ARG:HB3	3:C:84:PRO:HD2	1.51	0.93
1:D:45:GLU:CG	1:D:272:PRO:HG2	1.97	0.93
4:E:191:LYS:H	4:E:209:ILE:HG23	1.30	0.93
1:A:135:PHE:N	1:A:136:PRO:CD	2.31	0.93
3:C:94:LEU:HB2	3:C:98:ASN:HB2	1.51	0.92
1:A:41:ILE:CG1	1:A:51:GLU:HB3	1.99	0.92
1:A:292:THR:CA	1:A:296:ILE:HD11	1.99	0.92
1:A:136:PRO:HG3	1:A:274:ILE:CG2	1.99	0.92
3:C:87:ILE:HD12	3:C:110:VAL:CB	1.98	0.92
1:D:135:PHE:CB	1:D:209:ARG:HB3	2.00	0.92
1:D:261:VAL:CA	1:D:264:ILE:HD12	1.99	0.92
4:E:247:GLY:H	4:E:250:LYS:NZ	1.67	0.92
3:C:42:LEU:HD22	3:C:190:TRP:CH2	2.05	0.92
1:D:7:LEU:O	1:D:11:LEU:HG	1.67	0.92
1:D:40:LEU:HD13	1:D:52:THR:HB	1.52	0.92
1:D:131:ILE:HD11	1:D:133:THR:HB	1.52	0.92
3:C:97:ASN:HD21	3:C:146:LEU:HG	1.34	0.92
3:C:141:TRP:CZ3	3:C:223:ARG:HB3	2.04	0.92
1:D:187:TRP:CZ3	1:D:189:TYR:HD2	1.86	0.92
4:E:185:ILE:HG12	4:E:214:ILE:CG2	1.99	0.92
1:A:129:GLU:O	1:A:142:CYS:SG	2.27	0.92
3:C:463:PRO:HA	3:C:466:VAL:HG23	1.51	0.92
4:E:110:TYR:HD1	4:E:111:ASN:H	1.09	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:9:SER:HA	2:B:12:PHE:CD1	2.05	0.92
2:B:288:MET:O	2:B:291:VAL:HG12	1.69	0.92
3:C:278:LEU:C	3:C:278:LEU:HD12	1.90	0.92
2:B:45:GLU:CD	2:B:279:ILE:HD11	1.88	0.92
2:B:440:LEU:O	2:B:443:PHE:HB3	1.68	0.92
4:E:135:PRO:CG	4:E:137:ASP:O	2.18	0.92
4:E:195:ASN:HB3	4:E:205:PHE:H	1.32	0.92
3:C:249:LEU:N	3:C:250:PRO:HD2	1.81	0.91
4:E:91:LEU:HB2	4:E:95:VAL:HG23	1.49	0.91
4:E:414:SER:N	4:E:416:VAL:HG13	1.84	0.91
1:A:142:CYS:HB2	1:A:205:PHE:HB2	1.53	0.91
2:B:409:LYS:HB3	3:C:426:THR:CG2	2.00	0.91
3:C:145:SER:C	3:C:146:LEU:HD12	1.90	0.91
3:C:162:LEU:HB2	3:C:199:LYS:HB3	1.52	0.91
1:A:251:LEU:HD22	4:E:260:ALA:HB3	1.52	0.91
4:E:247:GLY:H	4:E:250:LYS:HZ1	1.11	0.91
3:C:131:PRO:HG2	3:C:144:CYS:HA	1.49	0.91
1:D:78:ILE:HD11	1:D:110:LEU:HG	1.51	0.91
3:C:132:ILE:O	3:C:136:TYR:HB2	1.70	0.91
3:C:192:ILE:HD12	3:C:219:LEU:HD11	1.53	0.91
4:E:436:ASN:HA	4:E:439:TRP:HE1	1.34	0.91
2:B:223:TYR:O	2:B:226:VAL:HG22	1.70	0.91
2:B:75:ILE:CD1	2:B:78:LEU:HD13	2.01	0.91
1:D:137:PHE:HB3	1:D:435:GLN:HB2	1.49	0.91
4:E:305:ASN:HA	4:E:308:LEU:HD12	1.52	0.91
1:A:149:TRP:CH2	4:E:120:PRO:HD3	2.05	0.91
1:A:187:TRP:CE2	1:A:196:THR:HG23	2.05	0.91
1:A:298:THR:HA	1:A:301:ARG:HB3	1.52	0.91
1:D:253:LEU:HD23	1:D:254:THR:H	1.29	0.91
1:D:391:GLU:HA	1:D:394:ASN:OD1	1.68	0.91
2:B:160:HIS:HB2	2:B:195:LYS:HE2	1.52	0.91
3:C:58:MET:SD	3:C:92:ILE:CD1	2.59	0.91
3:C:110:VAL:HG13	3:C:120:TRP:HB2	1.52	0.91
3:C:263:VAL:HG13	1:D:251:LEU:HD21	1.53	0.91
1:D:7:LEU:CD1	1:D:70:ALA:HB1	2.00	0.91
1:D:38:ILE:CA	1:D:169:THR:HG21	1.99	0.91
4:E:174:PRO:HA	4:E:177:PHE:HB3	1.53	0.91
4:E:472:ASN:O	4:E:476:GLU:HG3	1.70	0.91
1:D:94:ASN:C	1:D:94:ASN:HD22	1.72	0.91
1:A:265:PRO:HA	1:A:268:SER:HB3	1.53	0.90
1:D:187:TRP:CD1	1:D:197:PRO:O	2.24	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:140:ASN:C	4:E:140:ASN:HD22	1.72	0.90
1:A:59:GLN:HE22	1:A:117:MET:CG	1.83	0.90
2:B:131:LYS:HB3	2:B:133:MET:HG3	1.53	0.90
3:C:144:CYS:SG	3:C:146:LEU:HD11	2.11	0.90
1:D:245:LEU:HD21	4:E:255:ILE:HG13	1.51	0.90
3:C:162:LEU:CD1	3:C:217:PHE:HE1	1.83	0.90
3:C:195:LYS:HE3	3:C:217:PHE:HB3	1.53	0.90
1:D:28:PHE:HD2	1:D:157:SER:HB3	1.36	0.90
1:A:252:SER:HB3	2:B:257:LEU:HD13	1.52	0.90
3:C:38:THR:CG2	3:C:57:TRP:HE3	1.85	0.90
3:C:67:LEU:HD21	3:C:112:VAL:HG13	1.52	0.90
3:C:162:LEU:HD21	3:C:217:PHE:HZ	1.36	0.90
1:D:41:ILE:HD12	1:D:51:GLU:O	1.72	0.90
1:D:250:LEU:HA	1:D:253:LEU:HD22	1.54	0.90
4:E:59:TRP:CH2	4:E:107:VAL:HG11	2.07	0.90
4:E:189:PRO:CD	4:E:211:PHE:HB2	2.00	0.90
3:C:143:ASN:OD1	3:C:220:ILE:HB	1.70	0.90
3:C:148:PHE:CB	3:C:215:VAL:CG2	2.49	0.90
4:E:142:SER:OG	4:E:209:ILE:HD11	1.72	0.90
1:A:89:ASP:HB2	1:A:149:TRP:CD1	2.07	0.90
1:A:145:LYS:HG3	1:A:202:THR:CG2	2.00	0.90
2:B:144:MET:CE	2:B:191:LYS:HE3	2.02	0.90
3:C:42:LEU:HG	3:C:54:THR:HG23	1.51	0.90
4:E:31:THR:O	4:E:32:LEU:HD23	1.72	0.90
4:E:222:ILE:O	4:E:226:ILE:HG13	1.71	0.90
1:A:274:ILE:CG1	1:A:277:TYR:CD1	2.55	0.90
1:D:53:ASN:HB2	1:D:123:ILE:HG12	1.51	0.90
1:D:55:ARG:HA	1:D:120:PRO:O	1.71	0.90
4:E:235:LEU:HD11	4:E:257:VAL:CG1	2.01	0.90
2:B:152:ASP:HB3	2:B:203:SER:HB3	1.54	0.90
1:D:31:ILE:HG22	1:D:158:ILE:HG23	1.53	0.90
3:C:162:LEU:HD21	3:C:217:PHE:CZ	2.07	0.89
3:C:13:ILE:O	3:C:17:TYR:HB3	1.73	0.89
1:D:203:TYR:N	1:D:203:TYR:CD1	2.34	0.89
1:D:239:SER:O	1:D:242:LYS:HG2	1.72	0.89
4:E:129:ILE:HA	4:E:133:TYR:HB2	1.53	0.89
4:E:195:ASN:N	4:E:204:ASP:HB3	1.86	0.89
1:A:250:LEU:HD11	1:A:296:ILE:HG21	1.52	0.89
3:C:229:VAL:O	3:C:233:ILE:HG12	1.70	0.89
1:D:187:TRP:CH2	1:D:189:TYR:HB3	2.07	0.89
1:D:287:SER:HA	1:D:290:ILE:CD1	2.01	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:416:LEU:HA	1:D:419:ILE:HG13	1.53	0.89
4:E:242:LEU:CD1	4:E:253:LEU:HD21	2.02	0.89
1:A:292:THR:HA	1:A:296:ILE:HD11	1.52	0.89
3:C:67:LEU:HB3	3:C:116:GLY:HA2	1.53	0.89
1:D:238:ASP:HB3	4:E:308:LEU:CD2	2.03	0.89
4:E:132:THR:O	4:E:134:PHE:N	2.05	0.89
1:A:279:LEU:HA	1:A:282:MET:HB2	1.52	0.89
2:B:307:ARG:O	2:B:307:ARG:HG2	1.70	0.89
2:B:459:SER:O	2:B:463:PRO:HD2	1.73	0.89
3:C:316:THR:HG22	3:C:447:ASN:HB3	1.52	0.89
1:D:132:VAL:HB	1:D:274:ILE:HA	1.51	0.89
1:D:189:TYR:HA	1:D:197:PRO:HD2	1.54	0.89
1:D:283:ILE:HA	1:D:286:ILE:HD12	1.53	0.89
1:A:380:LYS:HB3	2:B:408:ILE:HD13	1.53	0.89
2:B:48:GLU:HB2	2:B:128:CYS:O	1.73	0.89
3:C:65:HIS:H	3:C:65:HIS:HD2	1.14	0.89
1:D:170:PHE:CE2	1:D:176:TRP:NE1	2.40	0.89
1:D:259:VAL:HG13	1:D:262:GLU:OE1	1.73	0.89
3:C:273:LEU:CA	3:C:276:GLN:HG2	2.03	0.89
3:C:434:LYS:CD	3:C:435:GLU:HG3	2.00	0.89
4:E:59:TRP:HH2	4:E:107:VAL:CG1	1.84	0.89
4:E:71:TYR:HD1	4:E:111:ASN:HB2	1.35	0.89
4:E:99:PHE:HB3	4:E:102:ALA:HB3	1.55	0.89
2:B:23:GLN:N	2:B:23:GLN:NE2	2.21	0.89
3:C:475:MET:O	3:C:478:PHE:CE1	2.26	0.89
1:D:92:LEU:HD13	1:D:146:LEU:HG	1.53	0.89
1:D:303:PRO:HD2	1:D:400:LYS:HD3	1.54	0.89
2:B:279:ILE:CG2	2:B:280:ILE:HD13	2.02	0.88
3:C:111:LEU:HB3	3:C:119:THR:OG1	1.74	0.88
1:A:33:VAL:CG2	1:A:158:ILE:HG12	2.03	0.88
1:A:224:LEU:HG	1:A:225:PHE:N	1.88	0.88
2:B:131:LYS:CD	2:B:132:VAL:H	1.85	0.88
2:B:421:PHE:HA	2:B:424:LEU:HB2	1.56	0.88
2:B:458:ALA:O	2:B:462:VAL:HG23	1.73	0.88
3:C:42:LEU:HG	3:C:54:THR:CG2	2.04	0.88
3:C:251:ALA:HB2	3:C:453:ILE:HD11	1.53	0.88
3:C:266:ALA:HB1	3:C:270:PHE:CZ	2.07	0.88
3:C:452:THR:O	3:C:455:ARG:HG2	1.74	0.88
4:E:44:GLU:CG	4:E:129:ILE:CB	2.46	0.88
4:E:91:LEU:HD13	4:E:145:PHE:CB	2.04	0.88
2:B:95:ASN:HA	2:B:127:SER:H	1.34	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:252:SER:OG	2:B:257:LEU:HD22	1.73	0.88
1:A:278:MET:O	1:A:281:THR:HG22	1.73	0.88
2:B:241:LEU:HG	2:B:248:LYS:HB2	1.52	0.88
3:C:7:LEU:HD23	3:C:10:ASP:HB2	1.54	0.88
4:E:36:LEU:HD23	4:E:51:THR:HG21	1.55	0.88
4:E:44:GLU:OE2	4:E:133:TYR:HD2	1.55	0.88
1:A:221:PRO:HA	1:A:224:LEU:HB3	1.53	0.88
1:A:256:PHE:CE1	2:B:261:VAL:HG23	2.07	0.88
3:C:312:PHE:HZ	3:C:456:LEU:HD22	1.34	0.88
3:C:439:TYR:O	3:C:443:VAL:HG23	1.73	0.88
1:D:137:PHE:CB	1:D:435:GLN:HB2	2.03	0.88
1:A:41:ILE:CD1	1:A:51:GLU:HB3	2.04	0.88
1:A:245:LEU:HD13	2:B:250:SER:HB2	1.55	0.88
1:D:17:LYS:HG2	1:D:84:ASP:CA	2.04	0.88
4:E:31:THR:HB	4:E:58:GLN:HB2	1.56	0.88
1:A:235:LEU:HA	2:B:306:HIS:NE2	1.89	0.88
1:A:274:ILE:CG1	1:A:277:TYR:HD1	1.86	0.88
2:B:131:LYS:HD3	2:B:132:VAL:N	1.88	0.88
2:B:436:ASP:O	2:B:440:LEU:HD12	1.73	0.88
3:C:38:THR:HG22	3:C:57:TRP:CE3	2.08	0.88
4:E:284:LYS:O	4:E:287:ILE:HG23	1.72	0.88
2:B:135:PHE:HB2	2:B:279:ILE:HD13	1.55	0.88
2:B:216:LYS:HE3	2:B:216:LYS:N	1.88	0.88
4:E:1:ASN:HD22	4:E:69:SER:N	1.72	0.88
1:A:87:LEU:HD22	1:A:87:LEU:N	1.88	0.88
1:A:131:ILE:HD11	1:A:140:GLN:CG	2.04	0.88
2:B:131:LYS:NZ	2:B:132:VAL:HB	1.88	0.88
2:B:142:CYS:O	2:B:210:TYR:HD1	1.57	0.88
3:C:180:ASP:N	3:C:195:LYS:HG2	1.89	0.88
3:C:453:ILE:HG23	3:C:454:ASP:N	1.87	0.87
3:C:475:MET:HG2	3:C:476:GLY:N	1.89	0.87
4:E:152:ALA:H	4:E:205:PHE:HD1	1.18	0.87
4:E:172:ILE:HG13	4:E:174:PRO:CD	2.03	0.87
1:D:17:LYS:CG	1:D:84:ASP:HA	2.04	0.87
2:B:407:ALA:O	2:B:411:ILE:HG13	1.74	0.87
3:C:302:VAL:O	3:C:306:CYS:SG	2.32	0.87
1:A:298:THR:HG23	1:A:301:ARG:HD3	1.55	0.87
4:E:195:ASN:HB3	4:E:205:PHE:N	1.87	0.87
4:E:283:GLY:O	4:E:287:ILE:HG22	1.75	0.87
2:B:256:LEU:CD2	2:B:298:SER:HB2	2.04	0.87
1:D:30:ASP:O	1:D:60:TRP:HB2	1.74	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:236:PRO:HB3	1:D:299:HIS:HE2	1.40	0.87
1:A:134:HIS:C	1:A:136:PRO:CD	2.42	0.87
2:B:141:ASN:HA	2:B:211:LEU:O	1.74	0.87
2:B:274:SER:O	2:B:278:PRO:HD3	1.74	0.87
3:C:93:VAL:HG11	3:C:151:LEU:CD1	2.04	0.87
4:E:94:ASN:HB3	4:E:125:SER:HB3	1.56	0.87
1:A:59:GLN:NE2	1:A:117:MET:SD	2.48	0.87
3:C:80:LEU:O	3:C:112:VAL:HB	1.75	0.87
1:D:245:LEU:CD2	4:E:255:ILE:HG21	2.04	0.87
4:E:141:CYS:HB3	4:E:212:LEU:HB2	1.54	0.87
4:E:149:THR:HG23	4:E:150:TYR:N	1.89	0.87
1:A:57:ARG:HD3	1:A:161:GLU:HG2	1.57	0.87
1:A:388:SER:O	1:A:391:GLU:HB3	1.75	0.87
3:C:69:TRP:CE3	3:C:73:GLU:HB3	2.09	0.87
3:C:230:ILE:CG1	3:C:231:ASN:HD22	1.88	0.87
1:D:227:PHE:O	1:D:230:VAL:HG12	1.74	0.87
1:D:45:GLU:O	1:D:130:ILE:HG13	1.75	0.86
1:D:187:TRP:HB2	1:D:199:LEU:CD2	2.05	0.86
4:E:44:GLU:O	4:E:129:ILE:HG13	1.75	0.86
4:E:107:VAL:HG13	4:E:117:TRP:CB	2.05	0.86
2:B:90:ILE:HG23	2:B:147:LYS:H	1.38	0.86
1:D:89:ASP:O	1:D:149:TRP:HB3	1.74	0.86
1:D:432:GLU:HG2	1:D:435:GLN:HE21	1.40	0.86
1:A:148:ILE:HD11	1:A:156:VAL:CG1	2.05	0.86
2:B:226:VAL:HG22	2:B:227:PRO:HD3	1.55	0.86
3:C:31:VAL:HG11	3:C:88:TRP:HH2	1.40	0.86
3:C:155:ALA:HB2	3:C:211:ASN:HA	1.56	0.86
1:D:166:ASP:HB2	1:D:181:TYR:CB	2.05	0.86
4:E:311:PRO:HG2	4:E:440:VAL:HG22	1.57	0.86
1:A:145:LYS:C	1:A:146:LEU:HD12	1.95	0.86
2:B:272:GLU:HA	2:B:275:LEU:CG	2.06	0.86
1:D:37:LEU:HD12	1:D:53:ASN:O	1.74	0.86
3:C:472:ILE:HB	3:C:475:MET:SD	2.15	0.86
4:E:271:LYS:HB2	4:E:271:LYS:NZ	1.90	0.86
1:A:41:ILE:HD11	1:A:51:GLU:CB	2.04	0.86
3:C:69:TRP:HB3	3:C:73:GLU:CB	2.05	0.86
1:D:259:VAL:HA	1:D:262:GLU:CD	1.96	0.86
1:D:379:VAL:HA	1:D:382:ILE:CG1	2.05	0.86
1:A:397:GLU:O	1:A:400:LYS:HB2	1.76	0.86
1:D:419:ILE:O	1:D:423:VAL:HG23	1.76	0.86
4:E:433:GLY:O	4:E:436:ASN:HB2	1.76	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:159:SER:CA	3:C:213:GLN:HG3	2.04	0.86
1:D:107:LYS:NZ	4:E:149:THR:HA	1.91	0.86
4:E:122:ILE:H	4:E:122:ILE:HD13	1.38	0.86
1:A:107:LYS:C	1:A:108:LEU:HD23	1.96	0.86
1:D:46:VAL:HG22	1:D:271:VAL:HA	1.55	0.86
1:D:160:PRO:HD3	1:D:185:LYS:CB	2.06	0.86
4:E:110:TYR:HD1	4:E:111:ASN:N	1.74	0.86
1:A:45:GLU:HB2	1:A:209:ARG:NH1	1.91	0.85
1:A:148:ILE:CG2	1:A:198:TYR:HB2	2.06	0.85
3:C:18:ASN:HB2	3:C:21:VAL:HB	1.57	0.85
3:C:102:TYR:O	3:C:102:TYR:CD1	2.28	0.85
4:E:262:THR:CB	4:E:265:LEU:HD12	2.06	0.85
1:A:230:VAL:HG13	1:A:414:PHE:HZ	1.40	0.85
1:A:251:LEU:CD2	4:E:260:ALA:CB	2.54	0.85
1:A:426:PHE:HD1	1:A:427:ALA:N	1.71	0.85
2:B:23:GLN:NE2	2:B:23:GLN:H	1.74	0.85
3:C:311:ASN:O	3:C:315:ARG:CB	2.24	0.85
1:D:419:ILE:HD12	1:D:420:ILE:N	1.91	0.85
4:E:240:TYR:CD2	4:E:453:ILE:HG12	2.11	0.85
1:A:15:TYR:OH	1:A:84:ASP:HB3	1.76	0.85
1:A:235:LEU:HD21	1:A:242:LYS:HG3	1.59	0.85
2:B:258:ALA:HB3	3:C:265:LEU:HD22	1.56	0.85
1:D:146:LEU:HD13	1:D:203:TYR:CE1	2.12	0.85
1:D:224:LEU:HD21	4:E:297:VAL:HG11	1.57	0.85
1:A:226:SER:O	1:A:230:VAL:HG23	1.77	0.85
2:B:442:ILE:O	2:B:446:MET:HG2	1.76	0.85
3:C:12:LEU:HD12	3:C:16:LYS:CG	2.06	0.85
3:C:33:ILE:O	3:C:160:MET:HA	1.77	0.85
1:D:78:ILE:HD12	1:D:110:LEU:HB3	1.56	0.85
1:D:148:ILE:HG12	1:D:151:TYR:HB2	1.58	0.85
1:D:167:LEU:CD1	1:D:178:MET:CB	2.54	0.85
2:B:201:ASP:OD1	2:B:202:PRO:HD2	1.75	0.85
3:C:12:LEU:HB2	3:C:16:LYS:HG2	1.57	0.85
1:D:68:ASN:HB2	1:D:69:PRO:CD	2.07	0.85
1:A:16:ASN:HB2	1:A:19:ILE:HD12	1.59	0.85
2:B:132:VAL:O	2:B:279:ILE:HG23	1.77	0.85
3:C:30:VAL:HG11	3:C:159:SER:CB	2.07	0.85
3:C:56:VAL:HG13	3:C:126:PHE:HE2	1.42	0.85
2:B:90:ILE:HG23	2:B:147:LYS:N	1.92	0.85
2:B:91:VAL:HA	2:B:96:ASN:ND2	1.91	0.85
2:B:152:ASP:HB3	2:B:203:SER:CB	2.06	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:261:VAL:HG12	2:B:262:PHE:HD1	1.41	0.85
2:B:409:LYS:CB	3:C:426:THR:HG21	2.05	0.85
1:D:245:LEU:HD21	4:E:255:ILE:HG21	1.57	0.85
4:E:216:ARG:O	4:E:217:LYS:CG	2.25	0.85
4:E:283:GLY:C	4:E:284:LYS:HE3	1.97	0.85
4:E:311:PRO:HD2	4:E:440:VAL:CG1	2.04	0.85
1:A:43:VAL:HG13	1:A:50:VAL:HG22	1.59	0.84
3:C:19:LYS:O	3:C:19:LYS:HD2	1.77	0.84
1:D:86:TRP:CD2	1:D:86:TRP:O	2.30	0.84
4:E:187:HIS:ND1	4:E:189:PRO:HG3	1.92	0.84
1:D:261:VAL:HA	1:D:264:ILE:CD1	2.02	0.84
2:B:92:LEU:HG	2:B:96:ASN:HB2	1.59	0.84
3:C:58:MET:SD	3:C:92:ILE:HD11	2.15	0.84
3:C:180:ASP:H	3:C:195:LYS:CB	1.90	0.84
3:C:251:ALA:HB1	3:C:453:ILE:HD11	1.56	0.84
4:E:178:THR:HG22	4:E:180:ASN:H	1.40	0.84
3:C:35:LEU:HD22	3:C:215:VAL:HG11	1.59	0.84
1:D:35:LEU:HD11	1:D:54:VAL:HG11	1.58	0.84
4:E:261:GLN:HE22	4:E:296:ILE:CD1	1.90	0.84
1:A:128:CYS:HB3	1:A:144:MET:CE	2.07	0.84
1:A:274:ILE:HG13	1:A:277:TYR:HD1	1.42	0.84
2:B:11:LEU:O	2:B:15:TYR:HB3	1.78	0.84
2:B:81:PRO:HA	2:B:107:ASN:HA	1.60	0.84
3:C:241:PHE:CZ	1:D:293:VAL:HG22	2.12	0.84
4:E:197:GLN:HG2	4:E:198:LEU:H	1.41	0.84
1:A:43:VAL:CG2	1:A:50:VAL:HG22	2.07	0.84
1:A:192:CYS:SG	1:A:193:CYS:N	2.47	0.84
3:C:38:THR:OG1	3:C:178:ILE:HD13	1.76	0.84
1:D:257:LEU:HD12	1:D:258:LEU:N	1.92	0.84
4:E:187:HIS:CE1	4:E:189:PRO:HG3	2.12	0.84
4:E:250:LYS:HD2	4:E:253:LEU:HD22	1.59	0.84
1:A:394:ASN:OD1	1:A:395:ALA:N	2.11	0.84
2:B:198:ARG:HH11	2:B:198:ARG:HG3	1.41	0.84
2:B:226:VAL:CG2	2:B:227:PRO:HD3	2.07	0.84
4:E:265:LEU:O	4:E:268:ILE:HG23	1.78	0.84
1:A:304:SER:H	1:A:400:LYS:HD3	1.42	0.84
2:B:134:TYR:HE1	2:B:213:ILE:HG13	1.02	0.84
1:D:37:LEU:H	1:D:164:ARG:NH2	1.76	0.84
4:E:183:TRP:CA	4:E:216:ARG:HG2	2.08	0.84
1:A:190:TYR:HB2	1:A:192:CYS:SG	2.17	0.84
3:C:65:HIS:CD2	3:C:65:HIS:N	2.45	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:134:HIS:HE1	1:D:209:ARG:CD	1.91	0.84
1:D:229:THR:HA	1:D:232:VAL:CG2	2.07	0.84
4:E:127:CYS:SG	4:E:143:LEU:HG	2.16	0.84
1:A:90:LEU:CD1	1:A:100:PHE:HE2	1.91	0.84
1:A:149:TRP:CZ2	4:E:120:PRO:HD3	2.12	0.84
2:B:238:VAL:HG13	2:B:248:LYS:HZ1	1.40	0.84
4:E:32:LEU:O	4:E:33:LYS:HG3	1.78	0.84
4:E:268:ILE:HG13	4:E:269:ALA:N	1.91	0.84
1:A:188:VAL:O	1:A:197:PRO:HB2	1.76	0.83
3:C:63:TYR:CE1	3:C:116:GLY:HA3	2.12	0.83
3:C:230:ILE:HG13	3:C:231:ASN:ND2	1.92	0.83
1:D:284:PHE:CE2	1:D:424:SER:HB3	2.13	0.83
1:D:377:GLU:HB2	4:E:415:CYS:HB2	1.59	0.83
4:E:20:PRO:HB3	4:E:61:ASP:CG	1.99	0.83
4:E:246:ALA:HB1	4:E:250:LYS:CG	2.07	0.83
2:B:189:GLU:O	2:B:190:HIS:CD2	2.31	0.83
3:C:312:PHE:HE1	3:C:456:LEU:CD1	1.91	0.83
3:C:67:LEU:HD12	3:C:116:GLY:CA	2.08	0.83
3:C:478:PHE:O	3:C:482:PRO:HD3	1.77	0.83
1:D:239:SER:HB3	4:E:314:HIS:HB2	1.60	0.83
1:D:252:SER:CB	4:E:259:LEU:HD22	2.07	0.83
1:A:133:THR:HA	1:A:274:ILE:CG2	2.08	0.83
2:B:218:LEU:O	2:B:219:PHE:CD1	2.31	0.83
3:C:305:ASN:HA	3:C:308:ILE:HB	1.59	0.83
1:D:214:PHE:O	1:D:218:VAL:HG23	1.78	0.83
1:A:56:LEU:O	1:A:119:THR:HA	1.78	0.83
2:B:425:LYS:HA	2:B:428:TRP:HD1	1.44	0.83
1:D:134:HIS:HE1	1:D:209:ARG:HD3	1.41	0.83
4:E:135:PRO:CB	4:E:137:ASP:OD1	2.25	0.83
4:E:292:VAL:O	4:E:296:ILE:HG23	1.78	0.83
3:C:83:ARG:O	3:C:87:ILE:HG13	1.78	0.83
3:C:115:ASN:HD22	3:C:115:ASN:N	1.75	0.83
1:D:102:ILE:CG1	4:E:98:GLN:NE2	2.41	0.83
4:E:107:VAL:CG1	4:E:117:TRP:HB2	2.08	0.83
1:A:281:THR:O	1:A:285:VAL:HG12	1.79	0.83
1:A:422:THR:O	1:A:425:VAL:HG12	1.78	0.83
3:C:87:ILE:CD1	3:C:110:VAL:HB	2.03	0.83
1:D:377:GLU:HA	1:D:380:LYS:HD2	1.60	0.83
4:E:6:LEU:HD12	4:E:69:SER:OG	1.78	0.83
4:E:148:GLN:HA	4:E:148:GLN:HE21	1.42	0.83
1:A:255:VAL:O	1:A:259:VAL:HG23	1.78	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:247:GLU:O	2:B:249:MET:SD	2.37	0.83
2:B:258:ALA:HB2	3:C:265:LEU:CD1	2.08	0.83
2:B:258:ALA:HB1	3:C:265:LEU:HD22	1.60	0.83
2:B:297:LEU:HD12	2:B:445:THR:HG21	1.61	0.83
4:E:45:LYS:HD3	4:E:277:LEU:O	1.79	0.83
3:C:47:GLU:O	3:C:132:ILE:HG21	1.79	0.83
3:C:56:VAL:HG13	3:C:126:PHE:CE2	2.14	0.83
1:D:418:CYS:O	1:D:422:THR:HB	1.77	0.83
4:E:261:GLN:HE22	4:E:296:ILE:HD11	1.43	0.83
1:A:35:LEU:HD21	1:A:37:LEU:HD23	1.58	0.82
1:A:67:TRP:CG	1:A:71:ASP:HB3	2.14	0.82
2:B:7:LEU:O	2:B:11:LEU:HD23	1.79	0.82
4:E:431:ASP:O	4:E:435:GLU:HG3	1.79	0.82
1:A:417:ILE:HA	1:A:420:ILE:HG12	1.60	0.82
1:D:92:LEU:HB2	1:D:96:ALA:N	1.94	0.82
1:D:292:THR:HA	1:D:295:VAL:CG2	2.09	0.82
1:D:376:ILE:O	1:D:380:LYS:HG3	1.79	0.82
1:A:245:LEU:CD2	2:B:250:SER:HA	2.09	0.82
1:A:300:HIS:HA	1:A:306:HIS:O	1.79	0.82
3:C:113:ARG:HD2	3:C:117:TYR:CB	2.09	0.82
1:D:30:ASP:OD1	1:D:30:ASP:N	2.12	0.82
4:E:238:LEU:C	4:E:242:LEU:HD23	1.97	0.82
2:B:31:VAL:HG12	2:B:158:LEU:HD21	1.60	0.82
3:C:476:GLY:HA2	3:C:479:ASN:HB3	1.60	0.82
1:D:78:ILE:CD1	1:D:110:LEU:HB3	2.09	0.82
4:E:20:PRO:HG2	4:E:28:ILE:CD1	2.09	0.82
1:A:108:LEU:CD1	1:A:118:TRP:HB2	2.09	0.82
1:A:245:LEU:HD22	2:B:250:SER:HA	1.62	0.82
2:B:269:LYS:HE3	2:B:270:VAL:HG23	1.62	0.82
3:C:427:ASN:HA	3:C:430:VAL:HG23	1.62	0.82
1:D:130:ILE:HD13	1:D:131:ILE:H	1.45	0.82
1:D:380:LYS:HE3	4:E:415:CYS:SG	2.19	0.82
2:B:254:SER:O	3:C:265:LEU:CD1	2.27	0.82
1:D:87:LEU:HD12	1:D:88:PRO:HD2	1.59	0.82
4:E:39:LEU:HD23	4:E:183:TRP:CZ2	2.13	0.82
1:A:137:PHE:CG	1:A:435:GLN:NE2	2.46	0.82
1:A:303:PRO:HB2	1:A:400:LYS:CE	2.10	0.82
3:C:273:LEU:HD23	3:C:276:GLN:CB	2.08	0.82
1:D:92:LEU:CB	1:D:95:ASN:HB2	2.08	0.82
4:E:432:SER:O	4:E:435:GLU:HB2	1.78	0.82
4:E:436:ASN:HA	4:E:439:TRP:NE1	1.95	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:235:LEU:N	1:A:236:PRO:HD2	1.95	0.82
2:B:9:SER:HA	2:B:12:PHE:HE1	1.41	0.82
3:C:42:LEU:HA	3:C:54:THR:HG22	1.60	0.82
3:C:47:GLU:HG2	3:C:286:PRO:CD	2.09	0.82
3:C:316:THR:CG2	3:C:447:ASN:CB	2.49	0.82
1:D:407:ASP:OD1	1:D:408:HIS:HD2	1.63	0.82
4:E:242:LEU:HD11	4:E:253:LEU:CD2	2.09	0.82
3:C:276:GLN:O	3:C:279:PRO:HD2	1.78	0.82
3:C:307:GLY:O	3:C:310:LEU:HB2	1.80	0.82
4:E:148:GLN:HA	4:E:148:GLN:NE2	1.92	0.82
1:A:79:ARG:HH11	1:A:107:LYS:NZ	1.78	0.82
2:B:405:VAL:HG12	2:B:409:LYS:HZ3	1.44	0.82
3:C:461:ILE:O	3:C:464:VAL:HG12	1.78	0.82
1:D:49:ILE:HG21	1:D:125:LYS:HZ1	1.43	0.82
4:E:67:ASN:N	4:E:67:ASN:ND2	2.25	0.82
4:E:444:LYS:O	4:E:448:LYS:HG2	1.79	0.82
1:A:135:PHE:HB3	1:A:273:LEU:HA	1.60	0.81
2:B:144:MET:HE3	2:B:191:LYS:HE3	1.59	0.81
2:B:160:HIS:CE1	2:B:207:VAL:HG11	2.15	0.81
2:B:261:VAL:HG12	2:B:262:PHE:CD1	2.15	0.81
3:C:130:CYS:SG	3:C:131:PRO:HD2	2.20	0.81
1:D:166:ASP:HB2	1:D:181:TYR:HB2	1.61	0.81
1:D:239:SER:HB2	1:D:242:LYS:HE2	1.60	0.81
4:E:6:LEU:HD13	4:E:67:ASN:ND2	1.95	0.81
4:E:19:LYS:HZ2	4:E:154:GLU:CB	1.90	0.81
4:E:184:THR:N	4:E:215:GLN:O	2.13	0.81
1:A:108:LEU:HB3	1:A:117:MET:O	1.79	0.81
1:A:250:LEU:CD1	1:A:296:ILE:HG21	2.10	0.81
1:A:257:LEU:CD1	1:A:285:VAL:HG23	2.10	0.81
2:B:258:ALA:CB	3:C:265:LEU:CD2	2.57	0.81
3:C:305:ASN:O	3:C:308:ILE:HG22	1.80	0.81
1:D:29:VAL:CG1	1:D:60:TRP:HE1	1.93	0.81
1:D:107:LYS:CE	4:E:149:THR:HA	2.10	0.81
1:D:240:GLY:O	1:D:243:MET:SD	2.38	0.81
4:E:19:LYS:NZ	4:E:154:GLU:HB2	1.94	0.81
4:E:191:LYS:H	4:E:209:ILE:CG2	1.93	0.81
4:E:216:ARG:O	4:E:217:LYS:HG3	1.81	0.81
1:A:291:VAL:HG12	1:A:295:VAL:HG21	1.62	0.81
1:A:378:GLY:O	1:A:382:ILE:HG12	1.79	0.81
2:B:35:LEU:HD22	2:B:55:PHE:O	1.80	0.81
3:C:110:VAL:CG1	3:C:120:TRP:HB2	2.10	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:235:LEU:HD12	4:E:235:LEU:O	1.80	0.81
1:A:167:LEU:HA	1:A:170:PHE:HB2	1.63	0.81
1:A:233:PHE:O	1:A:236:PRO:HG2	1.80	0.81
3:C:180:ASP:H	3:C:195:LYS:HB3	1.43	0.81
1:D:209:ARG:CG	1:D:210:ILE:H	1.93	0.81
3:C:278:LEU:C	3:C:278:LEU:CD1	2.47	0.81
1:D:264:ILE:HB	1:D:265:PRO:HD3	1.63	0.81
4:E:55:ILE:HG13	4:E:57:ILE:HG13	1.63	0.81
4:E:89:VAL:HG23	4:E:99:PHE:CZ	2.15	0.81
4:E:276:SER:HB3	4:E:281:LEU:HD13	1.63	0.81
1:A:276:LYS:HD2	1:A:276:LYS:H	1.46	0.81
3:C:438:ALA:HA	3:C:441:GLU:CD	2.01	0.81
1:D:35:LEU:CD1	1:D:54:VAL:CG1	2.57	0.81
1:D:201:ILE:O	1:D:203:TYR:HE1	1.62	0.81
1:D:298:THR:CG2	1:D:301:ARG:HD3	2.11	0.81
1:A:235:LEU:CD1	1:A:242:LYS:HE3	2.10	0.81
3:C:475:MET:O	3:C:478:PHE:CD1	2.33	0.81
1:D:242:LYS:HD2	1:D:245:LEU:HD13	1.60	0.81
1:D:255:VAL:O	1:D:259:VAL:CG2	2.26	0.81
4:E:249:GLN:HE22	4:E:250:LYS:CE	1.91	0.81
1:A:382:ILE:O	1:A:386:MET:HG2	1.80	0.81
2:B:33:VAL:HG21	2:B:158:LEU:HD13	1.61	0.81
2:B:223:TYR:O	2:B:227:PRO:CD	2.29	0.81
3:C:89:ILE:HB	3:C:120:TRP:CZ3	2.16	0.81
2:B:31:VAL:HG12	2:B:158:LEU:CD2	2.11	0.80
2:B:35:LEU:HD22	2:B:56:LEU:HA	1.61	0.80
3:C:31:VAL:HG11	3:C:88:TRP:CH2	2.15	0.80
4:E:2:GLU:HA	4:E:5:ARG:HG3	1.62	0.80
4:E:144:VAL:HA	4:E:208:ILE:O	1.80	0.80
1:A:130:ILE:CD1	1:A:131:ILE:N	2.42	0.80
1:A:254:THR:O	1:A:258:LEU:HG	1.81	0.80
2:B:75:ILE:O	2:B:75:ILE:HG13	1.79	0.80
2:B:119:HIS:N	2:B:119:HIS:CD2	2.48	0.80
1:D:236:PRO:HB2	1:D:406:ILE:HG12	1.63	0.80
1:A:286:ILE:O	1:A:289:ILE:HB	1.81	0.80
1:A:305:THR:HB	1:A:401:TYR:HB3	1.63	0.80
2:B:265:LEU:O	2:B:268:ASP:HB2	1.81	0.80
3:C:7:LEU:HA	3:C:10:ASP:OD2	1.81	0.80
3:C:160:MET:H	3:C:213:GLN:HB2	1.45	0.80
1:D:35:LEU:HG	1:D:54:VAL:CG1	2.10	0.80
1:D:107:LYS:HE3	4:E:149:THR:HA	1.64	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:35:THR:HB	4:E:54:TRP:HE3	1.45	0.80
4:E:44:GLU:CD	4:E:129:ILE:HB	2.01	0.80
4:E:138:TRP:CZ2	4:E:215:GLN:HB2	2.16	0.80
1:A:175:GLU:O	1:A:211:PRO:HD3	1.81	0.80
1:A:414:PHE:HA	1:A:417:ILE:HD12	1.61	0.80
1:D:245:LEU:HD11	4:E:255:ILE:HG13	1.62	0.80
4:E:1:ASN:ND2	4:E:69:SER:N	2.30	0.80
1:A:160:PRO:HG3	1:A:185:LYS:HB3	1.61	0.80
2:B:37:LEU:CB	2:B:179:ALA:HB3	2.11	0.80
2:B:131:LYS:HZ2	2:B:132:VAL:HB	1.44	0.80
1:D:405:VAL:O	1:D:409:ILE:HG23	1.80	0.80
1:A:41:ILE:HG13	1:A:42:ASN:N	1.97	0.80
3:C:154:ASN:HB3	3:C:211:ASN:CB	2.11	0.80
1:D:201:ILE:HG22	1:D:203:TYR:CE1	2.17	0.80
1:A:420:ILE:HG13	1:A:421:GLY:N	1.96	0.80
2:B:226:VAL:O	2:B:230:LEU:HG	1.82	0.80
3:C:2:ASN:ND2	3:C:71:ALA:HB3	1.97	0.80
3:C:279:PRO:HA	3:C:282:ALA:HB3	1.63	0.80
1:D:284:PHE:O	1:D:287:SER:HB3	1.82	0.80
4:E:267:LEU:HD12	4:E:270:GLN:OE1	1.82	0.80
1:A:148:ILE:CD1	1:A:156:VAL:HG13	2.12	0.80
1:A:305:THR:HG21	1:A:401:TYR:CD1	2.17	0.80
3:C:426:THR:O	3:C:429:ILE:HG13	1.81	0.80
1:D:145:LYS:HG3	1:D:202:THR:HG23	0.88	0.80
4:E:102:ALA:HB2	4:E:121:ALA:HB2	1.62	0.80
1:A:66:ARG:HD3	1:A:66:ARG:N	1.95	0.80
1:A:139:GLN:HB2	1:A:207:MET:O	1.82	0.80
1:A:179:LYS:HE2	1:A:208:GLN:CD	2.02	0.80
1:A:243:MET:HE3	1:A:244:THR:HG22	1.64	0.80
2:B:226:VAL:HB	2:B:230:LEU:HD11	1.64	0.80
2:B:435:ALA:O	2:B:439:PHE:HB3	1.82	0.80
4:E:241:PHE:CA	4:E:450:CYS:SG	2.70	0.80
1:A:238:ASP:HB3	2:B:306:HIS:HE1	1.45	0.79
2:B:89:ASP:OD1	2:B:151:TYR:HD1	1.65	0.79
3:C:97:ASN:HB3	3:C:128:SER:CB	2.11	0.79
3:C:106:TYR:O	3:C:106:TYR:HD1	1.65	0.79
1:A:135:PHE:CD1	1:A:273:LEU:HB2	2.16	0.79
1:A:419:ILE:HD13	1:A:423:VAL:CG2	2.13	0.79
2:B:107:ASN:HB2	3:C:152:ASN:ND2	1.97	0.79
2:B:109:LEU:HB3	2:B:117:SER:HB2	1.62	0.79
2:B:272:GLU:CA	2:B:275:LEU:HG	2.11	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:12:LEU:CD1	3:C:16:LYS:HG2	2.12	0.79
4:E:91:LEU:H	4:E:95:VAL:CG2	1.95	0.79
1:A:1:SER:N	1:A:4:GLU:HB2	1.96	0.79
3:C:77:ILE:O	3:C:77:ILE:HG13	1.82	0.79
1:D:256:PHE:HE2	4:E:262:THR:HG22	1.47	0.79
2:B:100:PHE:HB2	2:B:103:THR:CB	2.13	0.79
1:D:165:PRO:HG2	1:D:168:SER:HB3	1.63	0.79
1:D:231:LEU:O	1:D:235:LEU:HG	1.80	0.79
1:D:264:ILE:HB	1:D:265:PRO:CD	2.12	0.79
1:A:189:TYR:HA	1:A:197:PRO:CD	2.12	0.79
4:E:237:VAL:HG13	4:E:453:ILE:HD11	1.63	0.79
1:A:131:ILE:HD11	1:A:140:GLN:CD	2.02	0.79
1:D:167:LEU:HG	1:D:178:MET:HB2	1.63	0.79
1:D:252:SER:HB2	4:E:259:LEU:HD22	1.63	0.79
1:A:35:LEU:HD21	1:A:37:LEU:CD2	2.12	0.79
1:A:235:LEU:HD11	1:A:242:LYS:CE	2.10	0.79
2:B:28:LYS:HG2	2:B:154:SER:O	1.82	0.79
3:C:190:TRP:HB3	3:C:223:ARG:HB2	1.63	0.79
1:D:137:PHE:O	1:D:435:GLN:HG3	1.83	0.79
1:D:287:SER:HA	1:D:290:ILE:HG12	1.62	0.79
4:E:1:ASN:HD22	4:E:69:SER:HB3	1.47	0.79
2:B:88:PRO:HB2	2:B:90:ILE:HG13	1.64	0.79
3:C:244:ALA:O	3:C:248:TYR:CD2	2.35	0.79
1:D:250:LEU:O	1:D:254:THR:HG22	1.82	0.79
4:E:191:LYS:O	4:E:209:ILE:HG22	1.82	0.79
2:B:226:VAL:HB	2:B:230:LEU:CD1	2.12	0.79
3:C:155:ALA:CB	3:C:211:ASN:HA	2.12	0.79
3:C:179:ILE:HG22	3:C:182:GLU:HB2	1.65	0.79
1:D:56:LEU:N	1:D:120:PRO:HD2	1.98	0.79
1:D:222:CYS:O	1:D:225:PHE:CD1	2.36	0.79
1:A:79:ARG:HD3	1:A:107:LYS:HD2	1.62	0.79
1:A:291:VAL:O	1:A:295:VAL:HG23	1.82	0.79
2:B:160:HIS:HE2	2:B:207:VAL:HG11	1.45	0.79
3:C:78:SER:O	3:C:79:ILE:HD12	1.82	0.79
1:D:95:ASN:ND2	1:D:128:CYS:HB3	1.98	0.79
1:D:131:ILE:HG13	1:D:133:THR:N	1.97	0.79
1:A:52:THR:O	1:A:123:ILE:HG13	1.83	0.78
2:B:271:PRO:O	2:B:275:LEU:HG	1.83	0.78
2:B:405:VAL:HG12	2:B:409:LYS:NZ	1.98	0.78
1:D:189:TYR:HA	1:D:197:PRO:CD	2.13	0.78
4:E:60:ASN:HD22	4:E:60:ASN:N	1.81	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:6:ARG:NH1	1:A:6:ARG:HB2	1.97	0.78
1:A:118:TRP:CD1	1:A:120:PRO:CD	2.67	0.78
2:B:133:MET:CA	2:B:279:ILE:HG23	2.13	0.78
1:D:28:PHE:CD2	1:D:157:SER:HB3	2.17	0.78
1:D:135:PHE:CG	1:D:210:ILE:HG12	2.18	0.78
1:D:138:ASP:O	1:D:139:GLN:HG2	1.84	0.78
4:E:262:THR:HA	4:E:265:LEU:HB2	1.64	0.78
4:E:474:VAL:HB	4:E:475:PRO:HD3	1.64	0.78
1:A:3:HIS:C	1:A:7:LEU:HG	2.03	0.78
1:A:43:VAL:HG22	1:A:50:VAL:HG13	1.63	0.78
2:B:107:ASN:HB2	3:C:152:ASN:HD21	1.49	0.78
3:C:153:TYR:HB2	3:C:158:ILE:HB	1.65	0.78
4:E:34:LEU:HB2	4:E:210:PHE:HZ	1.48	0.78
4:E:39:LEU:HD12	4:E:49:LEU:HD13	1.65	0.78
4:E:141:CYS:SG	4:E:143:LEU:HD11	2.23	0.78
2:B:198:ARG:HH11	2:B:198:ARG:CG	1.95	0.78
2:B:241:LEU:HD21	2:B:251:LEU:HD21	1.63	0.78
2:B:445:THR:O	2:B:449:ILE:HG12	1.84	0.78
1:D:29:VAL:CG1	1:D:60:TRP:NE1	2.45	0.78
1:A:41:ILE:CD1	1:A:51:GLU:CD	2.50	0.78
3:C:471:PHE:CD1	3:C:471:PHE:C	2.56	0.78
4:E:27:VAL:HG12	4:E:153:HIS:O	1.84	0.78
1:A:257:LEU:HD13	1:A:285:VAL:HG23	1.65	0.78
2:B:197:TRP:CD1	2:B:204:TYR:HB3	2.17	0.78
2:B:306:HIS:ND1	2:B:306:HIS:O	2.17	0.78
3:C:77:ILE:HD11	3:C:80:LEU:HD13	1.63	0.78
3:C:469:THR:O	3:C:473:PHE:HB2	1.83	0.78
1:D:276:LYS:H	1:D:276:LYS:HD2	1.48	0.78
4:E:148:GLN:HE21	4:E:148:GLN:CA	1.95	0.78
2:B:21:PRO:HG2	2:B:60:TRP:HE1	1.48	0.78
3:C:453:ILE:HG23	3:C:454:ASP:H	1.46	0.78
1:D:29:VAL:HG12	1:D:60:TRP:HD1	1.44	0.78
4:E:91:LEU:HB2	4:E:95:VAL:H	1.48	0.78
1:A:89:ASP:HB2	1:A:149:TRP:HD1	1.48	0.78
2:B:291:VAL:HG12	2:B:292:ALA:H	1.47	0.78
3:C:279:PRO:O	3:C:282:ALA:HB3	1.82	0.78
3:C:289:GLY:O	3:C:293:MET:HE2	1.84	0.78
1:D:102:ILE:O	1:D:102:ILE:HG22	1.82	0.78
4:E:162:GLU:HG2	4:E:190:ALA:O	1.84	0.78
1:A:167:LEU:HD12	1:A:178:MET:CG	2.14	0.78
3:C:230:ILE:HG13	3:C:231:ASN:N	1.99	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:152:ALA:H	4:E:205:PHE:HA	1.47	0.78
4:E:271:LYS:C	4:E:273:PRO:HD2	2.03	0.78
1:A:1:SER:H3	1:A:4:GLU:HB2	1.49	0.78
1:A:129:GLU:OE2	1:A:140:GLN:CG	2.32	0.78
1:A:218:VAL:O	1:A:221:PRO:HD2	1.82	0.78
1:A:255:VAL:CG2	4:E:264:PHE:CE1	2.66	0.78
2:B:135:PHE:HB2	2:B:279:ILE:CD1	2.14	0.78
2:B:144:MET:HE1	2:B:211:LEU:HD21	1.66	0.78
4:E:227:ALA:N	4:E:228:PRO:HD2	1.99	0.78
4:E:293:SER:O	4:E:296:ILE:HG12	1.84	0.78
1:A:242:LYS:HD2	1:A:245:LEU:HD23	1.66	0.77
2:B:45:GLU:HA	2:B:130:ILE:HD12	1.66	0.77
2:B:68:ASP:O	2:B:72:TYR:HB3	1.84	0.77
2:B:134:TYR:N	2:B:279:ILE:HG12	1.98	0.77
1:D:132:VAL:O	1:D:274:ILE:N	2.16	0.77
1:D:228:LEU:HD21	4:E:258:LEU:HD21	1.66	0.77
1:D:250:LEU:HD13	1:D:296:ILE:CD1	2.10	0.77
1:A:54:VAL:CG2	1:A:122:ALA:HB3	2.14	0.77
2:B:55:PHE:N	2:B:55:PHE:CD1	2.51	0.77
2:B:67:TRP:HB2	2:B:72:TYR:HB2	1.64	0.77
1:D:135:PHE:HB2	1:D:209:ARG:CB	2.13	0.77
4:E:71:TYR:CD1	4:E:111:ASN:HB2	2.20	0.77
1:A:406:ILE:HA	1:A:409:ILE:CD1	2.14	0.77
3:C:13:ILE:HB	3:C:86:LEU:HD22	1.66	0.77
3:C:60:HIS:NE2	3:C:92:ILE:HG21	2.00	0.77
3:C:309:VAL:O	3:C:313:HIS:CB	2.31	0.77
1:D:49:ILE:HD12	1:D:125:LYS:HE3	1.66	0.77
1:A:136:PRO:HG3	1:A:274:ILE:HG23	1.64	0.77
1:A:413:VAL:O	1:A:417:ILE:HG13	1.83	0.77
1:A:423:VAL:O	1:A:426:PHE:HB3	1.85	0.77
1:A:432:GLU:HG3	1:A:436:GLU:OE2	1.84	0.77
2:B:232:SER:O	2:B:236:ILE:HG22	1.84	0.77
2:B:244:ASP:HB3	3:C:314:PHE:HE1	1.49	0.77
2:B:247:GLU:C	2:B:249:MET:HG3	2.05	0.77
3:C:453:ILE:CG2	3:C:454:ASP:H	1.98	0.77
1:D:376:ILE:C	1:D:380:LYS:HE2	2.05	0.77
4:E:94:ASN:CG	4:E:143:LEU:HD23	2.05	0.77
4:E:99:PHE:HB3	4:E:102:ALA:CB	2.14	0.77
4:E:133:TYR:CE1	4:E:139:GLN:O	2.38	0.77
1:A:251:LEU:CD1	4:E:260:ALA:HB2	2.13	0.77
1:D:68:ASN:HB2	1:D:69:PRO:HD3	1.66	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:170:PHE:HE2	1:D:176:TRP:CD1	2.02	0.77
1:D:178:MET:SD	1:D:207:MET:HB3	2.25	0.77
1:D:187:TRP:CH2	1:D:189:TYR:CD2	2.73	0.77
1:A:294:VAL:HG13	1:A:295:VAL:N	1.98	0.77
2:B:408:ILE:HG23	2:B:409:LYS:N	1.99	0.77
3:C:470:ILE:O	3:C:474:VAL:HG23	1.84	0.77
4:E:284:LYS:HE3	4:E:284:LYS:CA	2.14	0.77
1:A:273:LEU:O	1:A:273:LEU:HD23	1.84	0.77
2:B:266:LEU:O	2:B:270:VAL:HG23	1.84	0.77
4:E:26:HIS:CG	4:E:26:HIS:O	2.37	0.77
4:E:177:PHE:CZ	4:E:184:THR:HA	2.19	0.77
4:E:185:ILE:HG12	4:E:214:ILE:HG22	1.67	0.77
4:E:284:LYS:N	4:E:284:LYS:CE	2.40	0.77
3:C:13:ILE:HG21	3:C:86:LEU:HB3	1.66	0.77
3:C:43:ILE:H	3:C:43:ILE:HD12	1.46	0.77
3:C:103:ASN:ND2	3:C:106:TYR:CE2	2.53	0.77
3:C:204:ASP:OD1	3:C:205:LYS:NZ	2.18	0.77
1:D:1:SER:N	1:D:4:GLU:HB2	1.99	0.77
1:D:287:SER:HA	1:D:290:ILE:CG1	2.15	0.77
1:A:43:VAL:CG1	1:A:50:VAL:HG22	2.15	0.77
3:C:155:ALA:N	3:C:211:ASN:HA	2.00	0.77
3:C:190:TRP:HB2	3:C:223:ARG:HB2	1.67	0.77
3:C:248:TYR:C	3:C:250:PRO:HD2	2.05	0.77
4:E:163:GLU:CD	4:E:163:GLU:N	2.39	0.77
4:E:453:ILE:HD12	4:E:454:ALA:N	2.00	0.77
1:A:296:ILE:HA	1:A:299:HIS:CB	2.10	0.77
3:C:263:VAL:HA	1:D:251:LEU:HD11	1.66	0.77
1:D:141:ASN:HA	1:D:205:PHE:O	1.84	0.77
1:A:106:THR:HG22	1:A:107:LYS:H	1.48	0.76
1:A:145:LYS:HZ2	1:A:202:THR:HG23	1.47	0.76
2:B:134:TYR:CD1	2:B:213:ILE:HG13	2.20	0.76
2:B:256:LEU:HD21	2:B:298:SER:HB2	1.66	0.76
3:C:35:LEU:HD12	3:C:92:ILE:HG21	1.67	0.76
3:C:471:PHE:C	3:C:471:PHE:HD1	1.88	0.76
1:D:29:VAL:CG1	1:D:60:TRP:CD1	2.68	0.76
1:D:149:TRP:CE2	1:D:150:THR:HB	2.21	0.76
1:D:160:PRO:CD	1:D:185:LYS:HB3	2.15	0.76
1:D:169:THR:O	1:D:169:THR:HG22	1.83	0.76
1:D:303:PRO:HG2	1:D:400:LYS:HZ3	1.47	0.76
4:E:470:HIS:NE2	4:E:474:VAL:HG21	1.99	0.76
1:A:230:VAL:HG22	1:A:414:PHE:CE1	2.20	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4:GLU:HB3	3:C:72:SER:HB2	1.65	0.76
3:C:47:GLU:HG2	3:C:286:PRO:CG	2.16	0.76
3:C:113:ARG:HB3	3:C:114:PRO:HD2	1.67	0.76
3:C:120:TRP:CD1	3:C:122:PRO:HD3	2.21	0.76
3:C:279:PRO:HA	3:C:282:ALA:CB	2.14	0.76
1:A:426:PHE:CD1	1:A:427:ALA:N	2.53	0.76
2:B:232:SER:HA	2:B:235:ALA:HB3	1.67	0.76
2:B:235:ALA:HB1	2:B:239:PHE:CE2	2.21	0.76
2:B:236:ILE:O	2:B:240:TYR:HB2	1.85	0.76
2:B:291:VAL:CG1	2:B:292:ALA:N	2.48	0.76
1:D:62:ASP:HB3	1:D:65:LEU:CD1	2.15	0.76
1:D:203:TYR:HD1	1:D:203:TYR:H	1.29	0.76
2:B:92:LEU:HA	2:B:145:VAL:O	1.84	0.76
3:C:78:SER:C	3:C:79:ILE:HD12	2.06	0.76
3:C:316:THR:HG23	3:C:317:PRO:CD	2.06	0.76
1:D:61:ILE:HA	1:D:116:ILE:HD11	1.66	0.76
1:D:295:VAL:O	1:D:299:HIS:N	2.19	0.76
1:D:376:ILE:HG22	1:D:380:LYS:NZ	2.00	0.76
4:E:71:TYR:HD1	4:E:111:ASN:CB	1.97	0.76
1:A:262:GLU:O	1:A:265:PRO:HD2	1.85	0.76
3:C:58:MET:O	3:C:58:MET:HG2	1.85	0.76
3:C:449:VAL:HG12	3:C:452:THR:HG21	1.68	0.76
1:D:38:ILE:HA	1:D:169:THR:CG2	2.14	0.76
4:E:152:ALA:HA	4:E:155:VAL:O	1.85	0.76
1:A:212:LEU:HA	1:A:215:VAL:HG23	1.68	0.76
2:B:287:ILE:HA	2:B:290:LEU:HD12	1.66	0.76
3:C:306:CYS:O	3:C:309:VAL:HB	1.85	0.76
1:D:130:ILE:HB	1:D:134:HIS:CD2	2.20	0.76
1:D:243:MET:O	1:D:246:SER:HB3	1.86	0.76
1:D:419:ILE:HD12	1:D:420:ILE:HG23	1.67	0.76
4:E:45:LYS:HB3	4:E:280:PRO:HA	1.67	0.76
4:E:422:ILE:O	4:E:425:SER:HB3	1.86	0.76
1:A:209:ARG:CG	1:A:210:ILE:H	1.96	0.76
2:B:251:LEU:HD13	3:C:261:ILE:HG21	1.66	0.76
3:C:438:ALA:HA	3:C:441:GLU:OE1	1.86	0.76
1:A:230:VAL:HG13	1:A:414:PHE:CZ	2.21	0.76
2:B:450:GLY:O	2:B:454:ILE:HG13	1.85	0.76
3:C:42:LEU:HD22	3:C:190:TRP:HH2	1.49	0.76
3:C:190:TRP:HD1	3:C:221:ILE:HD12	1.49	0.76
4:E:117:TRP:NE1	4:E:119:PRO:HD3	2.01	0.76
1:A:240:GLY:O	1:A:306:HIS:HE1	1.67	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:37:LEU:HB3	2:B:179:ALA:CB	2.14	0.76
2:B:191:LYS:HE2	2:B:209:PHE:HB3	1.68	0.76
3:C:38:THR:HG21	3:C:57:TRP:CE3	2.19	0.76
3:C:216:THR:C	3:C:217:PHE:HD1	1.89	0.76
4:E:183:TRP:HA	4:E:216:ARG:HA	1.66	0.76
4:E:235:LEU:CA	4:E:238:LEU:HG	2.15	0.76
1:A:212:LEU:HA	1:A:215:VAL:CG2	2.16	0.76
3:C:48:THR:CA	3:C:286:PRO:HD3	2.16	0.76
3:C:263:VAL:O	3:C:267:GLN:HG2	1.85	0.76
3:C:431:LYS:O	3:C:434:LYS:HB3	1.86	0.76
4:E:267:LEU:O	4:E:270:GLN:HG3	1.85	0.76
1:A:41:ILE:O	1:A:42:ASN:CG	2.24	0.75
1:A:233:PHE:CZ	1:A:417:ILE:HD11	2.21	0.75
1:A:261:VAL:O	1:A:265:PRO:CD	2.34	0.75
1:D:92:LEU:CD2	1:D:92:LEU:H	1.99	0.75
1:D:135:PHE:CD2	1:D:210:ILE:HG12	2.21	0.75
2:B:244:ASP:HB3	3:C:314:PHE:CE1	2.21	0.75
3:C:3:GLU:HG2	3:C:3:GLU:O	1.86	0.75
1:D:65:LEU:HD23	1:D:110:LEU:CD2	2.14	0.75
4:E:250:LYS:CA	4:E:253:LEU:HB3	2.16	0.75
1:A:36:GLN:HA	1:A:164:ARG:NH2	2.01	0.75
1:D:303:PRO:HB2	1:D:400:LYS:HZ2	1.50	0.75
3:C:35:LEU:HD12	3:C:60:HIS:NE2	2.02	0.75
1:D:46:VAL:CA	1:D:272:PRO:HD3	2.16	0.75
2:B:132:VAL:HG12	2:B:279:ILE:HA	1.67	0.75
3:C:60:HIS:CD2	3:C:92:ILE:CD1	2.70	0.75
3:C:318:SER:HB2	3:C:447:ASN:ND2	1.97	0.75
1:D:137:PHE:HB3	1:D:435:GLN:CD	2.07	0.75
1:D:416:LEU:CA	1:D:419:ILE:HG13	2.16	0.75
4:E:44:GLU:HB3	4:E:280:PRO:HB3	1.69	0.75
4:E:76:LEU:HD21	4:E:108:LEU:HD11	1.66	0.75
4:E:144:VAL:HG12	4:E:209:ILE:HA	1.67	0.75
2:B:40:LEU:HD23	2:B:52:THR:OG1	1.85	0.75
3:C:1:VAL:O	3:C:3:GLU:N	2.20	0.75
3:C:17:TYR:CZ	3:C:19:LYS:HA	2.21	0.75
3:C:81:ARG:CZ	3:C:111:LEU:HD13	2.17	0.75
3:C:141:TRP:CB	3:C:222:ARG:HA	2.16	0.75
1:D:92:LEU:HD22	1:D:92:LEU:N	2.00	0.75
1:A:229:THR:CA	1:A:232:VAL:HB	2.17	0.75
2:B:80:ILE:HA	3:C:20:HIS:HE1	1.51	0.75
3:C:50:GLU:HB3	3:C:132:ILE:HB	1.67	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:90:PRO:HD2	3:C:120:TRP:CZ3	2.22	0.75
3:C:148:PHE:HB2	3:C:215:VAL:HG23	1.67	0.75
3:C:180:ASP:HB2	3:C:195:LYS:HB2	1.68	0.75
1:D:188:VAL:O	1:D:197:PRO:HB2	1.86	0.75
4:E:59:TRP:HE1	4:E:84:LEU:HD23	1.51	0.75
1:A:90:LEU:HD13	1:A:100:PHE:HE2	1.51	0.75
1:D:92:LEU:HD13	1:D:146:LEU:CG	2.16	0.75
4:E:36:LEU:HD12	4:E:173:ASP:OD1	1.86	0.75
4:E:86:LEU:HD13	4:E:103:TYR:CE1	2.22	0.75
4:E:90:VAL:HA	4:E:99:PHE:HE1	1.51	0.75
4:E:128:PRO:O	4:E:129:ILE:HG12	1.87	0.75
4:E:449:ALA:HA	4:E:452:TRP:CD1	2.21	0.75
3:C:216:THR:O	3:C:217:PHE:HD1	1.70	0.75
3:C:280:GLU:HG3	3:C:281:THR:N	2.00	0.75
3:C:449:VAL:HG12	3:C:452:THR:CG2	2.17	0.75
1:D:56:LEU:N	1:D:56:LEU:HD23	2.02	0.75
4:E:38:ASN:O	4:E:51:THR:HA	1.87	0.75
4:E:52:ASN:HD21	4:E:120:PRO:HB2	1.52	0.75
4:E:291:PHE:O	4:E:295:VAL:HG23	1.87	0.75
2:B:153:THR:CB	2:B:204:TYR:HB2	2.10	0.74
2:B:240:TYR:O	2:B:244:ASP:HB2	1.87	0.74
3:C:311:ASN:O	3:C:315:ARG:N	2.20	0.74
1:D:290:ILE:O	1:D:293:VAL:HB	1.87	0.74
4:E:183:TRP:HB2	4:E:216:ARG:CG	2.06	0.74
1:A:66:ARG:HD3	1:A:66:ARG:H	1.51	0.74
1:A:279:LEU:HD13	1:A:282:MET:CB	2.17	0.74
1:A:380:LYS:CB	2:B:408:ILE:HD13	2.15	0.74
2:B:92:LEU:HD22	2:B:146:PHE:CD1	2.23	0.74
3:C:266:ALA:O	3:C:270:PHE:CE1	2.40	0.74
1:A:62:ASP:OD1	1:A:64:ARG:HB2	1.87	0.74
1:A:133:THR:O	1:A:133:THR:HG22	1.86	0.74
2:B:147:LYS:HG3	2:B:148:SER:N	2.00	0.74
3:C:60:HIS:NE2	3:C:92:ILE:HD13	2.01	0.74
3:C:249:LEU:N	3:C:250:PRO:CD	2.49	0.74
1:D:10:ASN:OD1	1:D:11:LEU:HD23	1.86	0.74
1:D:377:GLU:HB2	4:E:415:CYS:CB	2.17	0.74
4:E:44:GLU:HA	4:E:129:ILE:HD11	1.68	0.74
1:A:160:PRO:HG2	1:A:185:LYS:NZ	2.01	0.74
2:B:192:PRO:HD2	2:B:210:TYR:CB	2.15	0.74
2:B:284:LEU:HD23	2:B:287:ILE:HD11	1.69	0.74
3:C:131:PRO:HG3	3:C:145:SER:H	1.51	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:223:ARG:HG2	3:C:224:LYS:N	2.03	0.74
3:C:278:LEU:HD12	3:C:278:LEU:O	1.86	0.74
1:D:32:THR:CB	1:D:59:GLN:HB3	2.18	0.74
1:D:166:ASP:OD1	1:D:205:PHE:CE2	2.40	0.74
1:D:298:THR:HG22	1:D:301:ARG:HD3	1.70	0.74
4:E:163:GLU:CD	4:E:163:GLU:H	1.91	0.74
4:E:305:ASN:HA	4:E:308:LEU:CD1	2.17	0.74
2:B:233:ILE:O	2:B:237:LEU:HB2	1.87	0.74
3:C:47:GLU:HG2	3:C:286:PRO:HD2	1.68	0.74
4:E:275:THR:O	4:E:279:VAL:HG23	1.87	0.74
1:A:244:THR:O	1:A:247:ILE:CG2	2.36	0.74
1:A:380:LYS:O	1:A:384:GLU:HB2	1.86	0.74
2:B:45:GLU:OE1	2:B:279:ILE:HD11	1.86	0.74
2:B:55:PHE:N	2:B:55:PHE:HD1	1.82	0.74
4:E:159:LEU:HD11	4:E:208:ILE:HG23	1.68	0.74
1:A:249:VAL:HG13	1:A:253:LEU:HD23	1.70	0.74
1:A:379:VAL:HA	1:A:382:ILE:HD11	1.70	0.74
2:B:108:VAL:HG13	2:B:118:TRP:HB2	1.70	0.74
2:B:459:SER:O	2:B:463:PRO:CD	2.36	0.74
4:E:100:GLU:HB2	4:E:122:ILE:CD1	2.17	0.74
4:E:107:VAL:HG12	4:E:108:LEU:H	1.51	0.74
4:E:132:THR:C	4:E:135:PRO:HD3	2.08	0.74
2:B:142:CYS:SG	2:B:143:THR:N	2.61	0.74
3:C:42:LEU:HD22	3:C:190:TRP:CZ2	2.23	0.74
1:D:46:VAL:HG21	1:D:270:ALA:O	1.87	0.74
4:E:36:LEU:HD13	4:E:173:ASP:OD1	1.87	0.74
4:E:240:TYR:CD2	4:E:453:ILE:CG1	2.71	0.74
1:A:39:GLN:O	1:A:53:ASN:HB2	1.88	0.74
2:B:133:MET:HA	2:B:279:ILE:CG2	2.18	0.74
3:C:475:MET:HA	3:C:478:PHE:CZ	2.23	0.74
3:C:478:PHE:C	3:C:478:PHE:HD1	1.91	0.74
1:D:170:PHE:CZ	1:D:171:MET:O	2.40	0.74
4:E:194:TYR:HA	4:E:206:GLN:HG2	1.70	0.74
4:E:197:GLN:HG2	4:E:198:LEU:N	2.03	0.74
4:E:266:PHE:HD1	4:E:269:ALA:HB3	1.49	0.74
2:B:92:LEU:HD12	2:B:95:ASN:HB2	1.69	0.74
2:B:136:PRO:HB3	2:B:280:ILE:HD11	1.68	0.74
1:D:142:CYS:SG	1:D:144:MET:HG3	2.28	0.74
4:E:27:VAL:HG12	4:E:154:GLU:HA	1.67	0.74
1:A:37:LEU:CD2	1:A:54:VAL:HG12	2.18	0.73
1:A:107:LYS:O	1:A:108:LEU:HD23	1.87	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:186:HIS:CE1	1:A:187:TRP:O	2.40	0.73
2:B:47:ASN:O	2:B:48:GLU:CG	2.27	0.73
2:B:160:HIS:HE2	2:B:209:PHE:HE1	1.36	0.73
3:C:97:ASN:ND2	3:C:146:LEU:CG	2.48	0.73
1:D:187:TRP:HZ2	1:D:196:THR:HA	1.53	0.73
1:A:43:VAL:HG22	1:A:50:VAL:CG2	2.18	0.73
1:A:432:GLU:O	1:A:436:GLU:HG3	1.88	0.73
2:B:10:VAL:HG13	2:B:11:LEU:HD22	1.69	0.73
2:B:100:PHE:CD2	2:B:103:THR:HB	2.24	0.73
3:C:59:ASP:OD1	3:C:121:LEU:HD13	1.88	0.73
3:C:463:PRO:HA	3:C:466:VAL:CG2	2.17	0.73
1:D:35:LEU:HD11	1:D:54:VAL:HG21	1.71	0.73
1:D:238:ASP:HB3	4:E:308:LEU:HD23	1.69	0.73
2:B:256:LEU:HD22	2:B:298:SER:HB2	1.70	0.73
1:D:106:THR:HG22	1:D:107:LYS:N	2.02	0.73
1:D:228:LEU:O	1:D:232:VAL:HG23	1.88	0.73
1:D:413:VAL:HG12	1:D:417:ILE:HG13	1.69	0.73
1:A:93:TYR:OH	1:A:200:ASP:HB3	1.89	0.73
3:C:141:TRP:CH2	3:C:223:ARG:HB3	2.23	0.73
3:C:253:SER:CB	1:D:306:HIS:HB3	2.19	0.73
3:C:300:THR:HA	3:C:303:VAL:CG2	2.17	0.73
1:D:63:VAL:O	1:D:66:ARG:HD3	1.89	0.73
1:D:291:VAL:HG11	1:D:413:VAL:HG11	1.70	0.73
1:D:419:ILE:CD1	1:D:420:ILE:HG23	2.18	0.73
2:B:253:ILE:HG12	2:B:302:LEU:HD11	1.71	0.73
3:C:35:LEU:HD22	3:C:215:VAL:HG21	1.70	0.73
3:C:463:PRO:CA	3:C:466:VAL:HG23	2.19	0.73
1:D:95:ASN:HD21	1:D:128:CYS:CB	1.99	0.73
1:D:252:SER:O	1:D:255:VAL:HG12	1.88	0.73
4:E:59:TRP:CZ2	4:E:115:MET:HB3	2.23	0.73
4:E:282:ILE:O	4:E:286:LEU:HD12	1.88	0.73
2:B:33:VAL:HG22	2:B:158:LEU:HD22	1.70	0.73
2:B:283:TYR:O	2:B:287:ILE:HG23	1.89	0.73
3:C:122:PRO:CB	3:C:123:PRO:HD2	2.09	0.73
1:D:411:LEU:O	1:D:415:MET:HG3	1.89	0.73
4:E:59:TRP:C	4:E:60:ASN:ND2	2.35	0.73
1:A:292:THR:O	1:A:296:ILE:HG12	1.88	0.73
2:B:89:ASP:OD1	2:B:151:TYR:CD1	2.42	0.73
2:B:136:PRO:HD3	2:B:280:ILE:HD11	1.70	0.73
2:B:144:MET:CE	2:B:211:LEU:HD21	2.19	0.73
2:B:227:PRO:O	2:B:231:ILE:HG12	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:103:ASN:ND2	3:C:106:TYR:HE2	1.86	0.73
1:A:148:ILE:HG22	1:A:198:TYR:HB2	1.71	0.73
1:A:240:GLY:O	1:A:306:HIS:CE1	2.42	0.73
1:A:293:VAL:O	1:A:297:ASN:HB3	1.87	0.73
3:C:37:LEU:HD12	3:C:217:PHE:CD2	2.22	0.73
3:C:94:LEU:CB	3:C:98:ASN:HB2	2.19	0.73
3:C:300:THR:HA	3:C:303:VAL:HG23	1.70	0.73
1:D:3:HIS:O	1:D:7:LEU:HG	1.89	0.73
1:D:249:VAL:HA	1:D:252:SER:HB3	1.68	0.73
1:D:292:THR:CA	1:D:295:VAL:HG22	2.15	0.73
4:E:152:ALA:N	4:E:205:PHE:HD1	1.85	0.73
4:E:265:LEU:CD2	4:E:296:ILE:HD11	2.11	0.73
1:A:52:THR:O	1:A:123:ILE:HA	1.89	0.73
1:A:229:THR:O	1:A:233:PHE:HD1	1.70	0.73
3:C:102:TYR:HE1	3:C:106:TYR:HB3	1.54	0.73
3:C:104:VAL:HA	3:C:106:TYR:CE1	2.22	0.73
3:C:269:VAL:HA	3:C:272:LEU:HD11	1.69	0.73
3:C:474:VAL:HA	3:C:477:ASN:OD1	1.88	0.73
1:D:40:LEU:CD1	1:D:52:THR:HB	2.19	0.73
4:E:262:THR:OG1	4:E:265:LEU:CD1	2.33	0.73
2:B:416:GLU:CD	3:C:433:ILE:HD13	2.08	0.73
3:C:266:ALA:HB3	1:D:251:LEU:HD22	1.69	0.73
3:C:269:VAL:HG13	3:C:270:PHE:CD1	2.24	0.73
1:D:56:LEU:HB2	1:D:120:PRO:CG	2.19	0.73
1:A:249:VAL:HG23	2:B:257:LEU:HD21	1.70	0.72
3:C:90:PRO:HD2	3:C:120:TRP:CE3	2.24	0.72
3:C:453:ILE:CG2	3:C:454:ASP:N	2.51	0.72
1:D:228:LEU:HD23	1:D:249:VAL:HG11	1.71	0.72
1:A:201:ILE:HG21	1:A:203:TYR:HE1	1.54	0.72
2:B:297:LEU:CD1	2:B:445:THR:HG21	2.19	0.72
3:C:244:ALA:O	3:C:248:TYR:HD2	1.69	0.72
1:D:78:ILE:HD11	1:D:110:LEU:CG	2.19	0.72
4:E:32:LEU:HD12	4:E:157:LEU:HD13	1.71	0.72
4:E:261:GLN:HE21	4:E:265:LEU:HG	1.54	0.72
3:C:275:SER:O	3:C:279:PRO:HD3	1.88	0.72
3:C:296:MET:HA	3:C:296:MET:CE	2.19	0.72
1:D:131:ILE:HD11	1:D:133:THR:CB	2.20	0.72
4:E:75:ASP:HB3	4:E:110:TYR:HE1	1.52	0.72
2:B:416:GLU:OE2	3:C:433:ILE:HD13	1.88	0.72
3:C:69:TRP:CB	3:C:73:GLU:HB2	2.18	0.72
3:C:77:ILE:HD12	3:C:80:LEU:HD13	1.71	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:56:LEU:HD22	1:A:58:GLN:HG3	1.70	0.72
1:A:56:LEU:HD23	1:A:57:ARG:N	2.04	0.72
1:A:132:VAL:O	1:A:274:ILE:HG22	1.88	0.72
1:A:401:TYR:CD1	1:A:401:TYR:O	2.42	0.72
2:B:135:PHE:CB	2:B:279:ILE:HD13	2.18	0.72
3:C:243:ALA:O	3:C:246:ALA:HB3	1.90	0.72
1:D:286:ILE:O	1:D:290:ILE:HG23	1.89	0.72
4:E:416:VAL:HG22	4:E:417:GLU:N	2.04	0.72
2:B:129:THR:HG23	2:B:129:THR:O	1.88	0.72
3:C:19:LYS:NZ	3:C:88:TRP:HD1	1.88	0.72
3:C:463:PRO:O	3:C:467:LEU:HD23	1.90	0.72
1:D:20:ARG:HG3	1:D:22:VAL:HG23	1.70	0.72
1:D:415:MET:O	1:D:419:ILE:HG23	1.90	0.72
4:E:184:THR:O	4:E:215:GLN:N	2.22	0.72
4:E:209:ILE:HG12	4:E:211:PHE:HE1	1.55	0.72
2:B:60:TRP:CH2	2:B:85:VAL:HG21	2.25	0.72
2:B:95:ASN:CB	2:B:126:SER:HB2	2.15	0.72
3:C:42:LEU:HD13	3:C:190:TRP:HZ2	1.54	0.72
1:D:170:PHE:CE1	1:D:171:MET:O	2.42	0.72
4:E:140:ASN:HD21	4:E:211:PHE:HA	1.53	0.72
1:A:136:PRO:HA	1:A:277:TYR:CZ	2.24	0.72
2:B:75:ILE:HD13	2:B:78:LEU:HD13	1.70	0.72
3:C:201:ILE:O	3:C:202:TYR:CG	2.42	0.72
1:D:40:LEU:HD22	1:D:52:THR:OG1	1.90	0.72
4:E:152:ALA:HB2	4:E:206:GLN:H	1.55	0.72
4:E:217:LYS:O	4:E:217:LYS:HE3	1.88	0.72
4:E:222:ILE:HG23	4:E:223:ILE:H	1.55	0.72
1:A:380:LYS:HD3	2:B:408:ILE:HB	1.72	0.72
2:B:421:PHE:CA	2:B:424:LEU:HB2	2.19	0.72
3:C:67:LEU:HD12	3:C:116:GLY:HA2	1.70	0.72
1:D:192:CYS:SG	1:D:193:CYS:N	2.62	0.72
4:E:238:LEU:O	4:E:242:LEU:HB3	1.90	0.72
1:A:376:ILE:HG23	1:A:380:LYS:NZ	2.04	0.72
2:B:7:LEU:HD13	2:B:68:ASP:HB2	1.71	0.72
1:D:45:GLU:O	1:D:272:PRO:HG3	1.90	0.72
1:D:245:LEU:HD21	4:E:255:ILE:CG2	2.20	0.72
4:E:309:ARG:NH2	4:E:446:ILE:HG13	2.05	0.72
1:A:37:LEU:HA	1:A:53:ASN:O	1.89	0.71
2:B:48:GLU:HA	2:B:130:ILE:HG12	1.72	0.71
4:E:289:VAL:O	4:E:293:SER:HB3	1.90	0.71
4:E:311:PRO:CG	4:E:440:VAL:HG22	2.20	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:60:TRP:HH2	2:B:85:VAL:HG21	1.55	0.71
2:B:95:ASN:HA	2:B:127:SER:N	2.03	0.71
2:B:145:VAL:HG12	2:B:206:ASP:HB2	1.71	0.71
3:C:200:ASN:ND2	3:C:201:ILE:H	1.88	0.71
3:C:445:ASN:HA	3:C:448:LEU:CG	2.12	0.71
1:D:45:GLU:HG2	1:D:272:PRO:HG3	1.67	0.71
1:D:92:LEU:CD2	1:D:92:LEU:N	2.53	0.71
1:D:257:LEU:HD12	1:D:257:LEU:C	2.10	0.71
1:A:31:ILE:CG1	1:A:60:TRP:HB3	2.21	0.71
3:C:115:ASN:H	3:C:115:ASN:ND2	1.85	0.71
4:E:28:ILE:HG21	4:E:85:TRP:CZ3	2.24	0.71
4:E:454:ALA:O	4:E:457:LEU:HB3	1.90	0.71
1:A:141:ASN:HA	1:A:205:PHE:O	1.90	0.71
2:B:131:LYS:HB3	2:B:133:MET:CG	2.20	0.71
3:C:50:GLU:O	3:C:129:SER:HA	1.90	0.71
3:C:282:ALA:O	3:C:285:VAL:O	2.08	0.71
4:E:236:VAL:C	4:E:239:VAL:HG23	2.10	0.71
4:E:241:PHE:CE1	4:E:450:CYS:HB3	2.26	0.71
4:E:416:VAL:CG2	4:E:417:GLU:N	2.53	0.71
1:A:175:GLU:OE1	1:A:175:GLU:HA	1.90	0.71
1:A:245:LEU:HG	2:B:253:ILE:HG21	1.71	0.71
3:C:70:ASN:O	3:C:74:TYR:HB3	1.91	0.71
4:E:55:ILE:CG2	4:E:119:PRO:HG2	2.21	0.71
4:E:103:TYR:C	4:E:104:TYR:CD1	2.64	0.71
1:A:131:ILE:CD1	1:A:140:GLN:HG2	2.21	0.71
2:B:20:ARG:HD3	2:B:20:ARG:N	2.02	0.71
2:B:95:ASN:CA	2:B:127:SER:H	2.03	0.71
1:D:15:TYR:C	1:D:16:ASN:ND2	2.44	0.71
1:D:287:SER:O	1:D:291:VAL:HG23	1.90	0.71
4:E:94:ASN:ND2	4:E:143:LEU:HD23	2.06	0.71
4:E:140:ASN:HD22	4:E:141:CYS:N	1.89	0.71
1:A:145:LYS:HZ2	1:A:202:THR:CG2	2.04	0.71
2:B:278:PRO:O	2:B:279:ILE:HG13	1.91	0.71
1:D:195:ASP:OD1	1:D:196:THR:N	2.24	0.71
1:D:396:ALA:O	1:D:399:TRP:HB2	1.90	0.71
4:E:122:ILE:HG12	4:E:122:ILE:O	1.90	0.71
3:C:278:LEU:CD1	3:C:278:LEU:O	2.37	0.71
1:D:107:LYS:N	1:D:107:LYS:HD3	2.05	0.71
4:E:42:LEU:HD22	4:E:183:TRP:CZ2	2.26	0.71
4:E:183:TRP:HB3	4:E:216:ARG:NE	2.04	0.71
1:A:17:LYS:NZ	1:A:83:ASP:HB3	2.05	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:43:VAL:HG13	1:A:50:VAL:CG2	2.21	0.71
1:A:64:ARG:CA	1:A:66:ARG:HH11	2.02	0.71
1:A:410:LEU:HD13	1:A:414:PHE:HD2	1.56	0.71
2:B:195:LYS:HA	2:B:207:VAL:HG13	1.73	0.71
2:B:218:LEU:HD13	2:B:221:ILE:HD11	1.71	0.71
3:C:7:LEU:HD13	3:C:73:GLU:OE1	1.89	0.71
3:C:180:ASP:N	3:C:181:PRO:HD2	2.05	0.71
3:C:478:PHE:CD1	3:C:478:PHE:C	2.64	0.71
1:D:249:VAL:O	1:D:253:LEU:HB3	1.90	0.71
1:A:247:ILE:CG2	1:A:248:SER:N	2.53	0.71
2:B:56:LEU:HD21	2:B:103:THR:HG23	1.72	0.71
2:B:132:VAL:CG1	2:B:279:ILE:HA	2.21	0.71
3:C:426:THR:O	3:C:429:ILE:CG1	2.38	0.71
1:D:236:PRO:HB3	1:D:299:HIS:NE2	2.05	0.71
1:D:377:GLU:HA	1:D:380:LYS:CD	2.20	0.71
4:E:10:LEU:HD13	4:E:64:LEU:CD2	2.21	0.71
4:E:34:LEU:HB2	4:E:210:PHE:CZ	2.25	0.71
1:A:95:ASN:HA	1:A:127:TYR:HB3	1.73	0.70
1:A:145:LYS:NZ	1:A:202:THR:CG2	2.54	0.70
2:B:290:LEU:HD11	2:B:453:SER:CB	2.21	0.70
3:C:30:VAL:HG11	3:C:159:SER:N	2.05	0.70
3:C:305:ASN:O	3:C:309:VAL:HG23	1.90	0.70
1:D:146:LEU:HD22	1:D:203:TYR:CZ	2.26	0.70
4:E:59:TRP:CD2	4:E:115:MET:HB2	2.26	0.70
4:E:251:CYS:SG	4:E:252:THR:N	2.64	0.70
1:A:221:PRO:CA	1:A:224:LEU:HB3	2.21	0.70
2:B:291:VAL:HG12	2:B:292:ALA:N	2.06	0.70
3:C:241:PHE:HA	3:C:244:ALA:HB3	1.72	0.70
1:D:43:VAL:HG22	1:D:50:VAL:CA	2.19	0.70
1:A:413:VAL:HG13	1:A:416:LEU:HD23	1.72	0.70
2:B:269:LYS:HD2	2:B:270:VAL:N	2.06	0.70
3:C:199:LYS:HZ3	3:C:200:ASN:HA	1.55	0.70
3:C:299:VAL:O	3:C:302:VAL:HG23	1.91	0.70
3:C:434:LYS:CE	3:C:435:GLU:HG2	2.20	0.70
1:D:35:LEU:CD2	1:D:164:ARG:HH12	1.98	0.70
1:D:46:VAL:HA	1:D:272:PRO:HD3	1.73	0.70
1:D:63:VAL:O	1:D:66:ARG:CD	2.39	0.70
1:D:157:SER:HA	1:D:199:LEU:HD12	1.72	0.70
4:E:173:ASP:N	4:E:174:PRO:HD2	2.06	0.70
1:A:121:PRO:CB	2:B:149:TYR:CZ	2.74	0.70
3:C:462:THR:O	3:C:466:VAL:HG23	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:201:ILE:O	1:D:203:TYR:CE1	2.44	0.70
1:D:239:SER:CB	4:E:314:HIS:HB2	2.21	0.70
4:E:27:VAL:CG1	4:E:153:HIS:O	2.40	0.70
4:E:32:LEU:HD12	4:E:208:ILE:HD11	1.72	0.70
4:E:42:LEU:HD22	4:E:183:TRP:CE2	2.26	0.70
4:E:44:GLU:CA	4:E:129:ILE:HD12	2.20	0.70
1:A:4:GLU:HA	1:A:7:LEU:HD12	1.73	0.70
1:A:80:LEU:O	1:A:80:LEU:HD12	1.92	0.70
1:A:93:TYR:CD2	1:A:145:LYS:HB3	2.27	0.70
1:A:166:ASP:OD2	1:A:178:MET:HE1	1.91	0.70
3:C:62:TRP:CZ2	3:C:88:TRP:O	2.44	0.70
3:C:201:ILE:O	3:C:202:TYR:CD1	2.45	0.70
1:D:102:ILE:HG13	4:E:98:GLN:HE21	1.53	0.70
4:E:147:SER:O	4:E:205:PHE:HE2	1.74	0.70
4:E:149:THR:CG2	4:E:150:TYR:H	2.03	0.70
1:A:41:ILE:HD11	1:A:51:GLU:CG	2.20	0.70
1:A:294:VAL:CG1	1:A:295:VAL:N	2.55	0.70
1:A:299:HIS:O	1:A:306:HIS:O	2.09	0.70
2:B:118:TRP:CD1	2:B:120:PRO:HD3	2.26	0.70
2:B:281:ILE:HD12	2:B:281:ILE:N	2.07	0.70
3:C:93:VAL:HG21	3:C:151:LEU:HD13	1.73	0.70
3:C:180:ASP:OD2	3:C:219:LEU:HD22	1.92	0.70
1:D:1:SER:H3	1:D:4:GLU:HB2	1.56	0.70
1:D:43:VAL:CG1	1:D:49:ILE:O	2.35	0.70
1:D:253:LEU:CD2	1:D:254:THR:N	2.52	0.70
4:E:94:ASN:ND2	4:E:125:SER:HB2	2.01	0.70
1:A:35:LEU:HD23	1:A:35:LEU:C	2.11	0.70
1:A:207:MET:H	1:A:207:MET:HE2	1.55	0.70
3:C:190:TRP:CA	3:C:223:ARG:HB2	2.21	0.70
3:C:204:ASP:OD1	3:C:205:LYS:HD3	1.92	0.70
1:D:92:LEU:HD21	1:D:124:PHE:CZ	2.26	0.70
1:D:235:LEU:CD2	4:E:308:LEU:HG	2.21	0.70
4:E:47:GLU:O	4:E:126:THR:HG23	1.92	0.70
1:A:243:MET:HG2	1:A:244:THR:H	1.56	0.70
3:C:69:TRP:HE3	3:C:73:GLU:HB3	1.55	0.70
1:D:252:SER:HB2	4:E:259:LEU:HD13	1.73	0.70
1:D:287:SER:O	1:D:290:ILE:HG12	1.91	0.70
4:E:27:VAL:CG1	4:E:154:GLU:N	2.52	0.70
4:E:62:TYR:HD1	4:E:62:TYR:C	1.94	0.70
1:A:4:GLU:HA	1:A:7:LEU:CD1	2.22	0.70
1:A:209:ARG:C	1:A:210:ILE:HG13	2.12	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:284:LEU:HA	2:B:287:ILE:HG13	1.72	0.70
3:C:160:MET:H	3:C:213:GLN:CB	2.04	0.70
3:C:181:PRO:HD3	3:C:192:ILE:HG21	1.74	0.70
1:D:250:LEU:CA	1:D:253:LEU:HD22	2.22	0.70
4:E:103:TYR:CG	4:E:104:TYR:N	2.58	0.70
4:E:151:ASN:O	4:E:153:HIS:N	2.25	0.70
1:A:233:PHE:O	1:A:236:PRO:CG	2.40	0.70
2:B:40:LEU:HD13	2:B:41:LEU:N	2.07	0.70
2:B:72:TYR:HD1	2:B:112:HIS:HB2	1.57	0.70
2:B:185:GLN:HB3	2:B:217:PRO:HB3	1.74	0.70
2:B:264:LEU:O	2:B:267:ALA:HB3	1.92	0.70
2:B:416:GLU:OE1	3:C:433:ILE:HD13	1.92	0.70
3:C:58:MET:SD	3:C:92:ILE:HD12	2.30	0.70
3:C:457:SER:O	3:C:461:ILE:HG13	1.92	0.70
1:D:214:PHE:CE1	1:D:267:THR:HG21	2.27	0.70
1:A:136:PRO:HG3	1:A:274:ILE:HG21	1.74	0.69
1:A:149:TRP:HH2	4:E:119:PRO:HA	1.54	0.69
1:A:166:ASP:OD2	1:A:178:MET:CE	2.40	0.69
1:D:46:VAL:HG22	1:D:272:PRO:HD3	1.74	0.69
1:D:244:THR:HG23	1:D:245:LEU:N	2.06	0.69
1:D:292:THR:O	1:D:296:ILE:HG12	1.91	0.69
1:A:60:TRP:HE1	1:A:116:ILE:HD12	1.57	0.69
1:A:136:PRO:HB2	1:A:138:ASP:OD1	1.92	0.69
1:A:137:PHE:CD1	1:A:210:ILE:HD12	2.26	0.69
1:A:251:LEU:HD13	4:E:260:ALA:CB	2.15	0.69
2:B:75:ILE:HD11	2:B:78:LEU:HD13	1.74	0.69
2:B:132:VAL:HG12	2:B:279:ILE:CA	2.21	0.69
2:B:251:LEU:HD12	2:B:251:LEU:O	1.91	0.69
1:D:80:LEU:HD22	1:D:110:LEU:HD23	1.74	0.69
1:D:303:PRO:HD2	1:D:400:LYS:CD	2.22	0.69
4:E:30:VAL:O	4:E:158:GLN:HG3	1.91	0.69
4:E:63:ARG:HB2	4:E:63:ARG:HH11	1.56	0.69
2:B:281:ILE:HG22	2:B:285:MET:CA	2.22	0.69
2:B:460:HIS:O	2:B:464:PRO:HG2	1.92	0.69
3:C:455:ARG:O	3:C:459:PHE:HD1	1.73	0.69
1:D:48:GLN:HB2	1:D:128:CYS:O	1.93	0.69
1:D:130:ILE:HB	1:D:134:HIS:HB2	1.73	0.69
1:D:419:ILE:O	1:D:422:THR:HG22	1.91	0.69
4:E:136:PHE:CE1	4:E:285:TYR:OH	2.42	0.69
1:A:79:ARG:HH11	1:A:107:LYS:HZ2	1.39	0.69
1:A:187:TRP:CH2	1:A:189:TYR:CB	2.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:135:PHE:N	2:B:279:ILE:HD13	2.07	0.69
2:B:145:VAL:HA	2:B:207:VAL:O	1.93	0.69
3:C:230:ILE:CG1	3:C:231:ASN:H	2.05	0.69
1:D:178:MET:HA	1:D:207:MET:CB	2.23	0.69
1:A:87:LEU:H	1:A:87:LEU:CD2	1.89	0.69
1:A:187:TRP:HZ2	1:A:196:THR:HG23	1.51	0.69
2:B:20:ARG:H	2:B:20:ARG:CD	2.03	0.69
3:C:33:ILE:HG12	3:C:62:TRP:HB3	1.73	0.69
1:D:236:PRO:HA	1:D:240:GLY:HA2	1.74	0.69
4:E:44:GLU:CD	4:E:133:TYR:HD2	1.96	0.69
4:E:195:ASN:CB	4:E:205:PHE:H	2.02	0.69
4:E:262:THR:HG1	4:E:265:LEU:HD12	1.54	0.69
1:A:384:GLU:OE2	1:A:387:LYS:HE2	1.93	0.69
2:B:241:LEU:N	2:B:242:PRO:HD2	2.06	0.69
2:B:254:SER:C	3:C:265:LEU:HD11	2.12	0.69
3:C:33:ILE:HG22	3:C:160:MET:SD	2.31	0.69
1:D:253:LEU:CD2	1:D:254:THR:H	2.05	0.69
1:A:35:LEU:HD13	1:A:203:TYR:OH	1.92	0.69
2:B:75:ILE:HD11	2:B:78:LEU:HB2	1.73	0.69
2:B:152:ASP:CB	2:B:203:SER:HB3	2.23	0.69
2:B:160:HIS:NE2	2:B:209:PHE:HE1	1.90	0.69
2:B:449:ILE:HA	2:B:452:PHE:CD2	2.27	0.69
3:C:60:HIS:HB3	3:C:62:TRP:CZ3	2.20	0.69
3:C:91:ASP:OD1	3:C:153:TYR:HE1	1.75	0.69
3:C:481:PRO:O	3:C:484:LYS:HB3	1.92	0.69
1:D:137:PHE:CA	1:D:435:GLN:HG3	2.22	0.69
4:E:10:LEU:HD11	4:E:63:ARG:O	1.93	0.69
4:E:70:GLU:OE1	4:E:70:GLU:HA	1.92	0.69
2:B:111:GLN:HB2	2:B:115:ALA:HB3	1.74	0.69
2:B:175:ILE:HG12	2:B:177:GLN:H	1.56	0.69
3:C:77:ILE:HD11	3:C:80:LEU:HB2	1.74	0.69
1:D:95:ASN:OD1	1:D:144:MET:HG2	1.93	0.69
1:D:111:ASP:OD2	1:D:115:LYS:HD3	1.92	0.69
1:D:245:LEU:CD2	4:E:255:ILE:HG13	2.23	0.69
1:D:293:VAL:O	1:D:297:ASN:HB2	1.93	0.69
4:E:140:ASN:C	4:E:140:ASN:ND2	2.45	0.69
4:E:231:LEU:HG	4:E:232:ILE:N	2.03	0.69
4:E:297:VAL:O	4:E:301:VAL:HG22	1.92	0.69
1:A:54:VAL:HG23	1:A:122:ALA:HB3	1.75	0.69
1:A:107:LYS:NZ	2:B:151:TYR:HA	2.08	0.69
1:A:230:VAL:HG22	1:A:414:PHE:CZ	2.28	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:245:LEU:HD21	2:B:253:ILE:HB	1.74	0.69
2:B:58:LEU:HD11	2:B:118:TRP:HE3	1.58	0.69
3:C:130:CYS:SG	3:C:146:LEU:CD1	2.78	0.69
3:C:162:LEU:H	3:C:199:LYS:HG2	1.56	0.69
3:C:266:ALA:CB	1:D:251:LEU:HD13	2.23	0.69
1:D:149:TRP:CG	1:D:150:THR:N	2.59	0.69
4:E:134:PHE:N	4:E:135:PRO:CD	2.55	0.69
1:A:76:LYS:HG3	1:A:112:TYR:CE2	2.27	0.69
1:A:227:PHE:CA	1:A:230:VAL:HB	2.22	0.69
1:A:265:PRO:CA	1:A:268:SER:HB3	2.23	0.69
1:A:410:LEU:O	1:A:414:PHE:HB2	1.93	0.69
2:B:4:GLU:OE1	2:B:8:LEU:HG	1.92	0.69
2:B:160:HIS:CB	2:B:195:LYS:HE2	2.22	0.69
3:C:113:ARG:CD	3:C:117:TYR:HB3	2.22	0.69
1:D:37:LEU:H	1:D:164:ARG:HH22	1.40	0.69
1:D:60:TRP:CZ3	1:D:116:ILE:HG13	2.27	0.69
1:D:253:LEU:HD23	1:D:254:THR:CA	2.22	0.69
4:E:10:LEU:O	4:E:14:TYR:N	2.23	0.69
1:A:243:MET:HG2	1:A:244:THR:N	2.08	0.68
3:C:30:VAL:HG11	3:C:159:SER:HB2	1.75	0.68
1:D:66:ARG:O	1:D:67:TRP:CE3	2.46	0.68
1:D:94:ASN:C	1:D:94:ASN:ND2	2.46	0.68
1:A:118:TRP:HD1	1:A:120:PRO:HD3	1.56	0.68
2:B:444:ILE:HG23	2:B:445:THR:N	2.08	0.68
3:C:136:TYR:HD1	3:C:142:GLN:HB3	1.58	0.68
1:D:37:LEU:HD11	1:D:52:THR:OG1	1.93	0.68
1:D:38:ILE:HD11	4:E:199:THR:HG21	1.74	0.68
4:E:239:VAL:HG12	4:E:254:SER:OG	1.92	0.68
2:B:7:LEU:O	2:B:10:VAL:HG12	1.94	0.68
2:B:28:LYS:HB3	2:B:156:VAL:N	2.07	0.68
2:B:136:PRO:HD3	2:B:279:ILE:HG21	1.75	0.68
2:B:444:ILE:HG23	2:B:445:THR:H	1.57	0.68
3:C:225:PRO:HG2	3:C:228:TYR:CD1	2.29	0.68
3:C:443:VAL:HA	3:C:446:TRP:CD1	2.29	0.68
3:C:42:LEU:CD2	3:C:190:TRP:CH2	2.76	0.68
3:C:160:MET:H	3:C:213:GLN:CG	2.05	0.68
3:C:263:VAL:O	3:C:267:GLN:CG	2.41	0.68
1:D:56:LEU:CA	1:D:120:PRO:HD2	2.24	0.68
1:D:280:PHE:HB3	1:D:284:PHE:CZ	2.29	0.68
1:D:408:HIS:O	1:D:412:CYS:SG	2.50	0.68
4:E:44:GLU:HG3	4:E:129:ILE:CD1	2.24	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:173:ASP:OD2	4:E:212:LEU:CD2	2.41	0.68
4:E:261:GLN:HE21	4:E:265:LEU:CG	2.07	0.68
1:A:57:ARG:HA	1:A:119:THR:CG2	2.12	0.68
2:B:281:ILE:HD12	2:B:281:ILE:H	1.59	0.68
3:C:143:ASN:OD1	3:C:220:ILE:CB	2.41	0.68
3:C:199:LYS:NZ	3:C:199:LYS:O	2.26	0.68
3:C:230:ILE:CG1	3:C:231:ASN:N	2.57	0.68
1:D:60:TRP:CH2	1:D:86:TRP:CZ3	2.81	0.68
1:D:68:ASN:CB	1:D:69:PRO:CD	2.71	0.68
4:E:273:PRO:HG2	4:E:274:GLU:H	1.59	0.68
1:A:141:ASN:HB3	1:A:206:ILE:HG13	1.75	0.68
1:A:242:LYS:HB2	1:A:245:LEU:CB	2.23	0.68
3:C:273:LEU:HD23	3:C:276:GLN:HB2	1.73	0.68
1:D:72:TYR:CD1	1:D:72:TYR:C	2.66	0.68
1:D:229:THR:HA	1:D:232:VAL:HG23	1.73	0.68
4:E:239:VAL:N	4:E:242:LEU:HD23	2.07	0.68
2:B:75:ILE:CD1	2:B:78:LEU:HB2	2.24	0.68
2:B:100:PHE:HB2	2:B:103:THR:HB	1.74	0.68
2:B:216:LYS:H	2:B:216:LYS:CE	1.96	0.68
3:C:263:VAL:CA	1:D:251:LEU:HD11	2.24	0.68
1:D:177:VAL:O	1:D:207:MET:HB2	1.94	0.68
1:D:236:PRO:HA	1:D:240:GLY:CA	2.24	0.68
4:E:313:THR:O	4:E:314:HIS:ND1	2.26	0.68
1:A:265:PRO:CD	1:A:266:SER:H	2.07	0.68
2:B:128:CYS:SG	2:B:144:MET:HG2	2.33	0.68
2:B:136:PRO:HG2	2:B:139:TRP:HA	1.75	0.68
1:A:20:ARG:HG3	1:A:22:VAL:CG2	2.24	0.68
1:A:260:ILE:O	1:A:264:ILE:HG23	1.93	0.68
2:B:52:THR:HG22	2:B:53:SER:H	1.59	0.68
2:B:104:LEU:HA	2:B:118:TRP:HH2	1.58	0.68
2:B:160:HIS:NE2	2:B:209:PHE:CE1	2.61	0.68
3:C:8:ILE:HD11	3:C:69:TRP:HZ3	1.59	0.68
3:C:141:TRP:HB2	3:C:222:ARG:HA	1.76	0.68
3:C:253:SER:OG	1:D:306:HIS:HB3	1.94	0.68
1:D:40:LEU:HD22	1:D:52:THR:HG1	1.59	0.68
1:D:236:PRO:HB2	1:D:406:ILE:CG1	2.23	0.68
4:E:44:GLU:OE1	4:E:129:ILE:HG21	1.94	0.68
4:E:100:GLU:HB2	4:E:122:ILE:HD11	1.76	0.68
4:E:185:ILE:HG12	4:E:214:ILE:HG21	1.75	0.68
4:E:211:PHE:O	4:E:212:LEU:HD12	1.93	0.68
4:E:306:VAL:O	4:E:309:ARG:HG3	1.93	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:67:TRP:CD1	1:A:71:ASP:CG	2.68	0.68
1:A:135:PHE:CD1	1:A:273:LEU:CB	2.77	0.68
2:B:48:GLU:HA	2:B:130:ILE:CG1	2.24	0.68
4:E:302:ILE:O	4:E:306:VAL:HG23	1.93	0.68
4:E:453:ILE:O	4:E:457:LEU:N	2.27	0.68
1:A:277:TYR:HA	1:A:280:PHE:CE1	2.28	0.67
2:B:280:ILE:H	2:B:280:ILE:HD13	1.59	0.67
3:C:66:ARG:HH11	3:C:66:ARG:CG	2.05	0.67
3:C:204:ASP:H	3:C:207:PRO:HG2	1.59	0.67
1:D:45:GLU:HG2	1:D:272:PRO:CD	2.24	0.67
4:E:265:LEU:HD21	4:E:296:ILE:CD1	2.11	0.67
1:A:6:ARG:HB2	1:A:6:ARG:HH11	1.57	0.67
1:A:135:PHE:N	1:A:136:PRO:HD3	2.09	0.67
1:A:155:LYS:HG3	4:E:78:ARG:HE	1.59	0.67
1:A:217:ASN:O	1:A:221:PRO:CD	2.42	0.67
1:A:252:SER:CB	2:B:257:LEU:HD13	2.25	0.67
3:C:63:TYR:HE1	3:C:116:GLY:HA3	1.56	0.67
3:C:220:ILE:HG13	3:C:220:ILE:O	1.94	0.67
3:C:289:GLY:O	3:C:293:MET:CE	2.43	0.67
4:E:47:GLU:CA	4:E:129:ILE:HD11	2.15	0.67
2:B:15:TYR:O	2:B:15:TYR:CD1	2.47	0.67
2:B:26:GLY:O	2:B:28:LYS:HE3	1.93	0.67
3:C:80:LEU:O	3:C:112:VAL:CB	2.42	0.67
1:D:107:LYS:HZ1	4:E:149:THR:HA	1.59	0.67
1:D:167:LEU:CD1	1:D:178:MET:HB3	2.11	0.67
4:E:92:GLU:HB3	4:E:144:VAL:HG23	1.77	0.67
4:E:132:THR:O	4:E:135:PRO:CD	2.31	0.67
2:B:47:ASN:HB2	2:B:49:GLU:CD	2.13	0.67
2:B:460:HIS:O	2:B:464:PRO:CG	2.43	0.67
3:C:201:ILE:HD12	3:C:213:GLN:OE1	1.93	0.67
1:D:7:LEU:HA	1:D:10:ASN:ND2	2.08	0.67
1:A:305:THR:HG1	1:A:400:LYS:HB2	1.59	0.67
1:D:15:TYR:C	1:D:16:ASN:HD22	1.97	0.67
4:E:39:LEU:CD1	4:E:49:LEU:HD13	2.24	0.67
1:A:17:LYS:HE3	1:A:84:ASP:HA	1.77	0.67
1:A:235:LEU:HD21	1:A:242:LYS:CG	2.24	0.67
1:A:391:GLU:O	1:A:394:ASN:CG	2.33	0.67
2:B:21:PRO:HG2	2:B:60:TRP:NE1	2.09	0.67
2:B:29:VAL:O	2:B:156:VAL:HG23	1.95	0.67
2:B:308:SER:CB	2:B:311:THR:HG22	2.23	0.67
4:E:173:ASP:HB2	4:E:188:ARG:HH11	1.59	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:134:HIS:CA	1:A:136:PRO:HD2	2.25	0.67
3:C:259:THR:O	3:C:262:CYS:SG	2.43	0.67
1:D:130:ILE:HB	1:D:134:HIS:CG	2.30	0.67
4:E:294:LEU:HA	4:E:297:VAL:HG23	1.76	0.67
1:A:128:CYS:HB3	1:A:144:MET:HE1	1.75	0.67
1:A:302:SER:O	4:E:245:GLN:O	2.12	0.67
2:B:104:LEU:HD12	2:B:118:TRP:HH2	1.57	0.67
3:C:30:VAL:CG2	3:C:158:ILE:N	2.55	0.67
3:C:36:SER:HB3	3:C:59:ASP:CB	2.24	0.67
3:C:293:MET:O	3:C:297:SER:HB3	1.93	0.67
1:D:41:ILE:HG12	4:E:96:ASP:OD2	1.94	0.67
1:D:305:THR:HG1	1:D:401:TYR:HD2	1.43	0.67
1:D:427:ALA:O	1:D:431:ILE:HG13	1.94	0.67
4:E:59:TRP:HZ2	4:E:84:LEU:HD22	1.58	0.67
4:E:214:ILE:C	4:E:214:ILE:HD12	2.14	0.67
4:E:242:LEU:N	4:E:243:PRO:HD2	2.10	0.67
1:A:45:GLU:O	1:A:130:ILE:HG13	1.95	0.67
1:A:108:LEU:HD13	1:A:118:TRP:CB	2.24	0.67
1:A:229:THR:HA	1:A:232:VAL:CB	2.24	0.67
1:A:291:VAL:HG12	1:A:295:VAL:CG2	2.24	0.67
2:B:306:HIS:ND1	2:B:306:HIS:C	2.48	0.67
3:C:69:TRP:HB2	3:C:74:TYR:N	2.09	0.67
3:C:162:LEU:CD1	3:C:217:PHE:CE1	2.61	0.67
1:D:145:LYS:O	1:D:146:LEU:HD12	1.95	0.67
1:D:212:LEU:O	1:D:216:VAL:HG23	1.94	0.67
1:D:241:GLU:C	1:D:243:MET:HE2	2.15	0.67
4:E:32:LEU:CD1	4:E:157:LEU:HD13	2.24	0.67
1:A:46:VAL:HG21	1:A:269:SER:O	1.95	0.67
1:A:118:TRP:NE1	1:A:120:PRO:HG3	2.10	0.67
2:B:58:LEU:CD1	2:B:118:TRP:HB3	2.25	0.67
2:B:311:THR:O	2:B:312:HIS:HB3	1.95	0.67
2:B:439:PHE:HA	2:B:442:ILE:HB	1.76	0.67
3:C:132:ILE:HG13	3:C:136:TYR:CD2	2.30	0.67
3:C:452:THR:O	3:C:456:LEU:HG	1.95	0.67
3:C:478:PHE:HD1	3:C:479:ASN:N	1.92	0.67
1:D:38:ILE:C	1:D:169:THR:HG21	2.14	0.67
1:D:144:MET:O	1:D:203:TYR:CD1	2.48	0.67
4:E:1:ASN:O	4:E:69:SER:HB3	1.94	0.67
4:E:240:TYR:CD1	4:E:303:VAL:HG21	2.30	0.67
1:A:108:LEU:HD22	1:A:118:TRP:HA	1.77	0.66
1:A:243:MET:HB3	1:A:306:HIS:CE1	2.30	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:110:VAL:HG13	3:C:120:TRP:CB	2.25	0.66
3:C:259:THR:O	3:C:263:VAL:HG23	1.94	0.66
1:D:21:PRO:HG3	1:D:60:TRP:CZ2	2.30	0.66
4:E:59:TRP:CE2	4:E:115:MET:HB2	2.30	0.66
4:E:62:TYR:C	4:E:62:TYR:CD1	2.67	0.66
1:A:16:ASN:HB2	1:A:19:ILE:CD1	2.23	0.66
2:B:37:LEU:HD23	2:B:179:ALA:C	2.14	0.66
2:B:130:ILE:HD12	2:B:134:TYR:CE2	2.30	0.66
3:C:31:VAL:HG21	3:C:88:TRP:HZ3	1.61	0.66
1:D:100:PHE:HA	1:D:124:PHE:HB3	1.78	0.66
1:D:212:LEU:O	1:D:216:VAL:CG2	2.42	0.66
4:E:29:ASP:N	4:E:29:ASP:OD1	2.28	0.66
4:E:34:LEU:HD12	4:E:210:PHE:HE2	1.58	0.66
4:E:266:PHE:CD1	4:E:269:ALA:HB3	2.30	0.66
1:A:290:ILE:O	1:A:293:VAL:HG12	1.95	0.66
1:D:303:PRO:CD	1:D:400:LYS:HD3	2.25	0.66
4:E:89:VAL:O	4:E:90:VAL:HG23	1.95	0.66
4:E:174:PRO:HA	4:E:177:PHE:CB	2.24	0.66
2:B:43:LEU:HB3	2:B:215:ARG:HH12	1.58	0.66
2:B:406:GLU:HA	2:B:409:LYS:CD	2.18	0.66
3:C:7:LEU:HD11	3:C:70:ASN:HD22	1.61	0.66
3:C:263:VAL:HA	1:D:251:LEU:CD1	2.26	0.66
3:C:273:LEU:HD23	3:C:276:GLN:CG	2.25	0.66
1:D:137:PHE:CB	1:D:435:GLN:CG	2.71	0.66
4:E:416:VAL:HG22	4:E:417:GLU:H	1.59	0.66
1:A:72:TYR:HB2	1:A:112:TYR:HA	1.78	0.66
1:A:90:LEU:HD12	1:A:100:PHE:HE2	1.61	0.66
1:A:255:VAL:HG23	1:A:258:LEU:HD12	1.76	0.66
1:A:419:ILE:CG2	1:A:420:ILE:H	2.08	0.66
2:B:45:GLU:HA	2:B:130:ILE:CD1	2.25	0.66
2:B:92:LEU:HG	2:B:96:ASN:CB	2.24	0.66
2:B:244:ASP:CB	3:C:314:PHE:HE1	2.07	0.66
2:B:251:LEU:HD13	3:C:261:ILE:CG2	2.25	0.66
2:B:416:GLU:OE2	3:C:433:ILE:HG21	1.95	0.66
3:C:12:LEU:HB3	3:C:15:ASN:HB3	1.78	0.66
1:D:242:LYS:O	1:D:245:LEU:HB3	1.96	0.66
4:E:36:LEU:CD1	4:E:173:ASP:CG	2.64	0.66
4:E:240:TYR:O	4:E:450:CYS:SG	2.53	0.66
2:B:92:LEU:CG	2:B:96:ASN:HB2	2.25	0.66
3:C:8:ILE:HD12	3:C:11:LEU:HD12	1.78	0.66
1:D:298:THR:HA	1:D:301:ARG:HB3	1.76	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:224:ASN:O	4:E:228:PRO:CG	2.40	0.66
2:B:438:LEU:O	2:B:442:ILE:N	2.28	0.66
3:C:39:LEU:O	3:C:183:ALA:HB3	1.96	0.66
3:C:266:ALA:HB3	1:D:251:LEU:HD13	1.78	0.66
4:E:184:THR:O	4:E:214:ILE:HB	1.94	0.66
4:E:235:LEU:HD12	4:E:235:LEU:C	2.16	0.66
4:E:253:LEU:HG	4:E:254:SER:N	2.11	0.66
2:B:33:VAL:HG11	2:B:158:LEU:HD11	1.76	0.66
2:B:220:TYR:CE2	3:C:279:PRO:CB	2.77	0.66
2:B:220:TYR:HB3	2:B:223:TYR:CE2	2.31	0.66
2:B:306:HIS:C	2:B:306:HIS:HD1	1.98	0.66
3:C:58:MET:HE1	3:C:105:ALA:O	1.95	0.66
3:C:93:VAL:CB	3:C:151:LEU:HD13	2.24	0.66
3:C:179:ILE:HG13	3:C:181:PRO:HD2	1.76	0.66
3:C:223:ARG:O	3:C:224:LYS:HG3	1.95	0.66
1:D:111:ASP:OD2	1:D:115:LYS:HB3	1.95	0.66
1:D:250:LEU:CD1	1:D:296:ILE:HD13	2.17	0.66
4:E:45:LYS:CD	4:E:277:LEU:O	2.43	0.66
4:E:146:ARG:NH1	4:E:205:PHE:HB3	2.11	0.66
2:B:135:PHE:HB2	2:B:279:ILE:HB	1.77	0.66
3:C:42:LEU:O	3:C:185:THR:OG1	2.14	0.66
3:C:206:PHE:N	3:C:207:PRO:HD2	2.11	0.66
1:D:45:GLU:C	1:D:272:PRO:HG3	2.16	0.66
1:D:56:LEU:O	1:D:120:PRO:CD	2.44	0.66
1:D:97:ASP:OD1	1:D:97:ASP:O	2.13	0.66
1:A:52:THR:C	1:A:123:ILE:HG13	2.16	0.66
1:A:128:CYS:HB3	1:A:144:MET:SD	2.35	0.66
1:A:238:ASP:O	2:B:309:PRO:HA	1.96	0.66
2:B:415:LEU:HD13	2:B:415:LEU:C	2.16	0.66
3:C:233:ILE:HD13	3:C:233:ILE:N	2.08	0.66
1:D:29:VAL:HG23	1:D:155:LYS:O	1.95	0.66
4:E:35:THR:HB	4:E:54:TRP:CE3	2.29	0.66
4:E:52:ASN:HA	4:E:121:ALA:O	1.96	0.66
4:E:67:ASN:H	4:E:67:ASN:ND2	1.84	0.66
1:A:15:TYR:OH	1:A:84:ASP:O	2.14	0.65
1:A:129:GLU:OE2	1:A:140:GLN:HG3	1.95	0.65
2:B:136:PRO:CD	2:B:280:ILE:HD11	2.25	0.65
3:C:51:THR:HA	3:C:128:SER:O	1.94	0.65
4:E:151:ASN:HA	4:E:205:PHE:HB2	1.77	0.65
1:A:72:TYR:CD1	1:A:72:TYR:C	2.67	0.65
2:B:145:VAL:CG1	2:B:206:ASP:HB2	2.26	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:272:GLU:HA	2:B:275:LEU:CD1	2.26	0.65
3:C:445:ASN:OD1	3:C:448:LEU:HD11	1.95	0.65
3:C:474:VAL:HA	3:C:477:ASN:CG	2.16	0.65
1:D:17:LYS:HE3	1:D:83:ASP:O	1.96	0.65
1:D:26:THR:HG22	1:D:27:HIS:H	1.61	0.65
1:D:57:ARG:HA	1:D:119:THR:HG22	1.78	0.65
1:D:235:LEU:HD22	4:E:308:LEU:HG	1.77	0.65
4:E:188:ARG:NH2	4:E:210:PHE:CD2	2.62	0.65
4:E:276:SER:O	4:E:279:VAL:O	2.14	0.65
2:B:143:THR:HG23	2:B:208:THR:HG23	1.77	0.65
2:B:233:ILE:O	2:B:237:LEU:HD22	1.97	0.65
2:B:247:GLU:HA	2:B:249:MET:HG3	1.76	0.65
3:C:19:LYS:O	3:C:19:LYS:CD	2.43	0.65
3:C:92:ILE:HA	3:C:149:THR:O	1.95	0.65
3:C:305:ASN:OD1	3:C:308:ILE:HG21	1.96	0.65
2:B:90:ILE:HA	2:B:148:SER:HA	1.77	0.65
2:B:132:VAL:C	2:B:279:ILE:HG23	2.16	0.65
3:C:33:ILE:HD11	3:C:88:TRP:CH2	2.31	0.65
3:C:199:LYS:HD2	3:C:200:ASN:N	2.11	0.65
3:C:253:SER:HB2	1:D:306:HIS:HB3	1.78	0.65
1:D:167:LEU:CD1	1:D:178:MET:HB2	2.22	0.65
1:A:35:LEU:HD23	1:A:36:GLN:N	2.09	0.65
2:B:108:VAL:HG22	2:B:118:TRP:CG	2.31	0.65
2:B:245:ALA:O	2:B:248:LYS:N	2.29	0.65
3:C:180:ASP:N	3:C:195:LYS:CG	2.59	0.65
4:E:89:VAL:HG23	4:E:99:PHE:CE1	2.32	0.65
1:A:32:THR:HG23	1:A:159:SER:O	1.97	0.65
1:A:282:MET:O	1:A:286:ILE:HG13	1.95	0.65
2:B:241:LEU:HG	2:B:248:LYS:CB	2.23	0.65
4:E:136:PHE:CD1	4:E:285:TYR:OH	2.48	0.65
4:E:240:TYR:HD2	4:E:453:ILE:HD13	1.62	0.65
4:E:242:LEU:HD12	4:E:246:ALA:HB2	1.77	0.65
1:A:187:TRP:CZ2	1:A:189:TYR:HB3	2.31	0.65
1:A:377:GLU:HA	1:A:380:LYS:HE2	1.78	0.65
2:B:81:PRO:HD2	3:C:20:HIS:CE1	2.32	0.65
2:B:91:VAL:HG11	2:B:149:TYR:CD1	2.30	0.65
2:B:409:LYS:HE2	3:C:423:ILE:HA	1.79	0.65
2:B:438:LEU:HD23	2:B:441:TYR:CB	2.27	0.65
1:D:130:ILE:O	1:D:134:HIS:HB2	1.96	0.65
1:D:181:TYR:HE1	1:D:203:TYR:HB3	1.62	0.65
1:D:287:SER:CA	1:D:290:ILE:HG12	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:293:SER:O	4:E:297:VAL:HG23	1.97	0.65
1:A:149:TRP:CH2	4:E:119:PRO:HA	2.31	0.65
2:B:24:THR:HG22	2:B:25:VAL:HG23	1.78	0.65
2:B:70:ALA:O	2:B:74:GLY:HA3	1.97	0.65
2:B:142:CYS:O	2:B:210:TYR:HA	1.96	0.65
3:C:269:VAL:HG13	3:C:270:PHE:HD1	1.60	0.65
1:D:15:TYR:CE2	1:D:84:ASP:HB3	2.32	0.65
1:D:79:ARG:HH12	4:E:154:GLU:CD	2.00	0.65
1:D:242:LYS:HD2	1:D:245:LEU:CD1	2.27	0.65
1:D:412:CYS:O	1:D:415:MET:HE2	1.95	0.65
4:E:172:ILE:HD12	4:E:188:ARG:HB3	1.79	0.65
3:C:58:MET:HE3	3:C:122:PRO:HD2	1.79	0.65
1:D:16:ASN:HD22	1:D:16:ASN:N	1.95	0.65
4:E:83:LEU:HD22	4:E:83:LEU:N	2.12	0.65
4:E:110:TYR:HE1	4:E:111:ASN:ND2	1.94	0.65
4:E:138:TRP:CE2	4:E:215:GLN:HB2	2.32	0.65
4:E:435:GLU:O	4:E:438:ASN:HB3	1.97	0.65
1:A:58:GLN:HB3	1:A:60:TRP:CZ3	2.31	0.65
1:A:195:ASP:O	1:A:197:PRO:HD3	1.97	0.65
1:A:259:VAL:O	1:A:263:LEU:HG	1.97	0.65
1:A:303:PRO:HB2	1:A:400:LYS:HE2	1.79	0.65
2:B:58:LEU:HD11	2:B:118:TRP:CE3	2.31	0.65
2:B:212:ILE:HD13	2:B:469:ALA:CA	2.25	0.65
2:B:441:TYR:HA	2:B:444:ILE:HG22	1.79	0.65
3:C:302:VAL:C	3:C:306:CYS:HG	1.97	0.65
1:D:215:VAL:O	1:D:219:ILE:HG23	1.97	0.65
4:E:78:ARG:HD3	4:E:108:LEU:HD12	1.78	0.65
4:E:173:ASP:CG	4:E:185:ILE:HD13	2.18	0.65
3:C:131:PRO:CG	3:C:144:CYS:HA	2.25	0.64
3:C:191:GLU:CG	3:C:222:ARG:HB3	2.27	0.64
1:D:32:THR:HB	1:D:59:GLN:CB	2.24	0.64
1:D:76:LYS:HE3	1:D:112:TYR:CE2	2.32	0.64
2:B:138:ASP:OD1	2:B:464:PRO:HB2	1.97	0.64
2:B:156:VAL:HG22	2:B:157:ILE:N	2.13	0.64
3:C:29:GLU:O	3:C:30:VAL:HG23	1.97	0.64
3:C:33:ILE:CG2	3:C:160:MET:SD	2.85	0.64
3:C:69:TRP:CZ2	3:C:112:VAL:CG1	2.69	0.64
3:C:455:ARG:H	3:C:455:ARG:HD2	1.61	0.64
1:D:166:ASP:HB2	1:D:181:TYR:CG	2.31	0.64
1:D:171:MET:SD	1:D:174:GLY:HA2	2.36	0.64
1:D:395:ALA:O	1:D:398:GLU:HG2	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:1:ASN:ND2	4:E:69:SER:HB3	2.11	0.64
4:E:23:THR:CG2	4:E:24:LEU:H	2.10	0.64
4:E:236:VAL:O	4:E:239:VAL:HG23	1.98	0.64
1:A:34:GLY:CA	1:A:57:ARG:HG2	2.28	0.64
1:A:228:LEU:O	1:A:232:VAL:N	2.30	0.64
2:B:38:THR:HG22	2:B:55:PHE:HE1	1.62	0.64
2:B:45:GLU:HG3	2:B:134:TYR:HB3	1.79	0.64
2:B:181:THR:CG2	2:B:184:GLY:N	2.60	0.64
2:B:181:THR:HG23	2:B:184:GLY:N	2.13	0.64
2:B:241:LEU:HD21	2:B:251:LEU:HD11	1.78	0.64
2:B:408:ILE:CG2	2:B:409:LYS:N	2.59	0.64
1:D:195:ASP:O	1:D:197:PRO:HD3	1.97	0.64
1:A:43:VAL:HG22	1:A:50:VAL:CG1	2.28	0.64
2:B:45:GLU:CD	2:B:279:ILE:CD1	2.63	0.64
2:B:95:ASN:HB3	2:B:126:SER:CB	2.18	0.64
2:B:107:ASN:HD22	3:C:152:ASN:ND2	1.96	0.64
2:B:147:LYS:NZ	2:B:205:GLU:OE2	2.29	0.64
2:B:256:LEU:HD12	2:B:302:LEU:HD22	1.80	0.64
2:B:406:GLU:O	2:B:409:LYS:HB2	1.96	0.64
3:C:51:THR:C	3:C:52:LEU:HD13	2.18	0.64
3:C:102:TYR:HD1	3:C:102:TYR:C	2.01	0.64
1:D:167:LEU:CD2	1:D:178:MET:HB2	2.26	0.64
4:E:178:THR:HG22	4:E:180:ASN:N	2.12	0.64
4:E:474:VAL:CB	4:E:475:PRO:HD3	2.28	0.64
1:A:228:LEU:HD13	1:A:249:VAL:HG21	1.78	0.64
1:A:292:THR:CB	1:A:296:ILE:HD11	2.27	0.64
1:A:383:ALA:O	1:A:387:LYS:HG2	1.97	0.64
1:A:409:ILE:HA	1:A:412:CYS:HB2	1.80	0.64
2:B:153:THR:HG23	2:B:156:VAL:O	1.98	0.64
3:C:123:PRO:HD3	1:D:149:TRP:CH2	2.33	0.64
1:D:97:ASP:HB2	1:D:127:TYR:HB2	1.78	0.64
1:D:171:MET:HG2	1:D:174:GLY:N	2.12	0.64
1:D:291:VAL:O	1:D:295:VAL:HG13	1.98	0.64
1:D:379:VAL:HG22	1:D:382:ILE:CD1	2.27	0.64
4:E:191:LYS:HB2	4:E:209:ILE:HG21	1.79	0.64
4:E:235:LEU:CD1	4:E:257:VAL:HG11	2.24	0.64
4:E:446:ILE:HG22	4:E:447:ASP:N	2.11	0.64
1:A:31:ILE:HG13	1:A:60:TRP:HB3	1.80	0.64
1:A:250:LEU:HD21	1:A:296:ILE:HD12	1.79	0.64
1:A:380:LYS:HB3	2:B:408:ILE:CD1	2.27	0.64
1:A:408:HIS:O	1:A:412:CYS:SG	2.55	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:245:ALA:O	2:B:248:LYS:HB3	1.97	0.64
3:C:12:LEU:CB	3:C:16:LYS:HG2	2.27	0.64
1:D:130:ILE:HD13	1:D:131:ILE:N	2.13	0.64
1:D:141:ASN:HB3	1:D:206:ILE:CD1	2.27	0.64
1:D:382:ILE:O	1:D:385:HIS:HB3	1.96	0.64
4:E:113:GLY:O	4:E:115:MET:SD	2.55	0.64
4:E:136:PHE:CZ	4:E:217:LYS:HD2	2.33	0.64
4:E:270:GLN:C	4:E:273:PRO:HD2	2.18	0.64
1:A:158:ILE:O	1:A:199:LEU:HB2	1.97	0.64
2:B:258:ALA:CB	3:C:265:LEU:HD13	2.21	0.64
2:B:285:MET:O	2:B:288:MET:HB3	1.97	0.64
2:B:297:LEU:O	2:B:301:VAL:HG22	1.97	0.64
3:C:67:LEU:HD21	3:C:112:VAL:CG1	2.25	0.64
1:D:56:LEU:C	1:D:120:PRO:HD2	2.18	0.64
1:D:298:THR:HG23	1:D:301:ARG:HD3	1.80	0.64
4:E:237:VAL:HG13	4:E:453:ILE:CD1	2.28	0.64
4:E:272:VAL:HA	4:E:275:THR:OG1	1.96	0.64
1:A:151:TYR:HB2	1:A:156:VAL:CG1	2.27	0.64
2:B:119:HIS:N	2:B:119:HIS:HD2	1.95	0.64
3:C:106:TYR:C	3:C:107:PHE:HD1	2.01	0.64
1:D:17:LYS:HE3	1:D:83:ASP:C	2.18	0.64
4:E:23:THR:CG2	4:E:24:LEU:N	2.60	0.64
1:A:54:VAL:HG22	1:A:122:ALA:HB3	1.79	0.64
2:B:32:ARG:HE	2:B:59:ALA:C	2.00	0.64
2:B:92:LEU:HD13	2:B:146:PHE:CE1	2.33	0.64
3:C:7:LEU:HD22	3:C:73:GLU:OE1	1.98	0.64
3:C:144:CYS:N	3:C:219:LEU:O	2.30	0.64
3:C:434:LYS:CD	3:C:435:GLU:CG	2.70	0.64
4:E:110:TYR:CD1	4:E:111:ASN:N	2.55	0.64
4:E:188:ARG:CD	4:E:211:PHE:O	2.43	0.64
4:E:292:VAL:O	4:E:296:ILE:CG2	2.45	0.64
4:E:299:ASN:HA	4:E:302:ILE:HB	1.79	0.64
1:A:147:GLY:HA2	1:A:158:ILE:HG21	1.78	0.64
1:A:155:LYS:HE3	4:E:76:LEU:HB3	1.80	0.64
2:B:24:THR:HG22	2:B:25:VAL:N	2.07	0.64
2:B:246:GLY:C	2:B:248:LYS:H	2.02	0.64
2:B:447:CYS:O	2:B:451:THR:HG22	1.98	0.64
3:C:429:ILE:HG13	3:C:430:VAL:N	2.12	0.64
1:D:303:PRO:CB	1:D:400:LYS:HZ2	2.11	0.64
4:E:444:LYS:HA	4:E:444:LYS:HE3	1.80	0.64
1:A:419:ILE:CG2	1:A:420:ILE:N	2.61	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:191:LYS:CE	2:B:209:PHE:HB3	2.28	0.63
3:C:155:ALA:HB2	3:C:211:ASN:CA	2.28	0.63
3:C:228:TYR:CD1	3:C:229:VAL:N	2.65	0.63
1:D:137:PHE:C	1:D:435:GLN:HG3	2.18	0.63
1:D:303:PRO:HB2	1:D:400:LYS:NZ	2.12	0.63
1:D:412:CYS:HA	1:D:415:MET:HE1	1.79	0.63
1:D:426:PHE:CG	1:D:427:ALA:N	2.65	0.63
4:E:1:ASN:ND2	4:E:68:THR:HB	2.12	0.63
4:E:82:GLU:C	4:E:83:LEU:HD22	2.17	0.63
4:E:246:ALA:CB	4:E:250:LYS:HG3	2.24	0.63
4:E:260:ALA:O	4:E:264:PHE:CD1	2.51	0.63
4:E:453:ILE:O	4:E:457:LEU:HB2	1.97	0.63
4:E:463:LEU:HD12	4:E:463:LEU:O	1.98	0.63
1:A:107:LYS:HZ1	2:B:151:TYR:HA	1.63	0.63
1:A:129:GLU:OE2	1:A:140:GLN:HG2	1.98	0.63
1:A:170:PHE:HE1	1:A:176:TRP:NE1	1.95	0.63
1:A:274:ILE:HG13	1:A:274:ILE:O	1.97	0.63
2:B:229:ILE:O	2:B:232:SER:HB2	1.98	0.63
3:C:42:LEU:CD1	3:C:190:TRP:HZ2	2.12	0.63
3:C:81:ARG:NH1	3:C:111:LEU:HB2	2.13	0.63
1:D:263:LEU:HD11	4:E:266:PHE:CE2	2.33	0.63
4:E:178:THR:CG2	4:E:180:ASN:H	2.10	0.63
1:A:251:LEU:CD2	4:E:260:ALA:HB3	2.24	0.63
1:A:282:MET:O	1:A:285:VAL:HG12	1.99	0.63
1:A:287:SER:HA	1:A:290:ILE:HG13	1.79	0.63
2:B:192:PRO:HD2	2:B:210:TYR:O	1.98	0.63
3:C:30:VAL:HG13	3:C:31:VAL:N	2.13	0.63
3:C:312:PHE:HZ	3:C:456:LEU:CD2	2.08	0.63
1:D:167:LEU:HA	1:D:170:PHE:HB3	1.80	0.63
4:E:435:GLU:HB3	4:E:439:TRP:CZ2	2.33	0.63
1:A:34:GLY:HA3	1:A:57:ARG:CD	2.28	0.63
1:A:135:PHE:CD1	1:A:135:PHE:O	2.52	0.63
1:A:208:GLN:OE1	1:A:435:GLN:HG2	1.98	0.63
1:A:296:ILE:CA	1:A:299:HIS:HB2	2.17	0.63
1:A:377:GLU:HG2	2:B:404:ALA:HB1	1.81	0.63
2:B:281:ILE:HG22	2:B:285:MET:H	1.58	0.63
2:B:287:ILE:HA	2:B:290:LEU:HB2	1.81	0.63
2:B:439:PHE:CA	2:B:442:ILE:HB	2.29	0.63
3:C:19:LYS:HZ2	3:C:88:TRP:HD1	1.45	0.63
1:A:389:ASP:O	1:A:392:SER:HB3	1.99	0.63
1:A:413:VAL:O	1:A:416:LEU:HB3	1.97	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:93:MET:HB2	2:B:145:VAL:CG2	2.28	0.63
2:B:297:LEU:O	2:B:297:LEU:HD23	1.99	0.63
1:D:1:SER:O	1:D:3:HIS:N	2.32	0.63
1:D:226:SER:O	1:D:230:VAL:HB	1.99	0.63
1:A:38:ILE:C	1:A:39:GLN:HG3	2.18	0.63
2:B:220:TYR:CZ	3:C:279:PRO:HB2	2.32	0.63
2:B:247:GLU:CA	2:B:249:MET:HG3	2.28	0.63
4:E:103:TYR:C	4:E:104:TYR:HD1	2.02	0.63
4:E:279:VAL:HG12	4:E:280:PRO:HD2	1.80	0.63
1:A:249:VAL:CG2	2:B:257:LEU:HD21	2.28	0.63
2:B:212:ILE:HG22	2:B:212:ILE:O	1.98	0.63
3:C:77:ILE:CD1	3:C:80:LEU:HB2	2.29	0.63
1:D:282:MET:O	1:D:286:ILE:HG13	1.98	0.63
1:D:379:VAL:HG22	1:D:382:ILE:HD12	1.80	0.63
4:E:2:GLU:CA	4:E:5:ARG:HG3	2.28	0.63
4:E:44:GLU:CD	4:E:129:ILE:CB	2.66	0.63
4:E:133:TYR:OH	4:E:214:ILE:HG13	1.99	0.63
1:A:2:GLU:HG3	1:A:2:GLU:O	1.99	0.63
2:B:230:LEU:HA	2:B:233:ILE:CD1	2.29	0.63
1:D:37:LEU:CD1	1:D:54:VAL:HG13	2.28	0.63
1:D:38:ILE:HG22	1:D:38:ILE:O	1.97	0.63
1:A:201:ILE:CG2	1:A:203:TYR:HE1	2.12	0.63
1:A:255:VAL:HG21	4:E:264:PHE:CE1	2.33	0.63
1:A:419:ILE:C	1:A:423:VAL:HG23	2.18	0.63
2:B:85:VAL:O	2:B:87:GLN:HG3	1.97	0.63
2:B:132:VAL:O	2:B:279:ILE:HA	1.99	0.63
3:C:247:PHE:O	3:C:250:PRO:CG	2.47	0.63
3:C:257:MET:O	3:C:261:ILE:HG12	1.98	0.63
3:C:260:ALA:CB	3:C:313:HIS:CE1	2.82	0.63
3:C:282:ALA:O	3:C:285:VAL:N	2.28	0.63
3:C:478:PHE:CD1	3:C:479:ASN:N	2.66	0.63
1:D:178:MET:SD	1:D:207:MET:CB	2.87	0.63
1:D:240:GLY:C	1:D:242:LYS:H	2.02	0.63
4:E:240:TYR:HD2	4:E:453:ILE:CD1	2.11	0.63
4:E:240:TYR:HD2	4:E:453:ILE:CG1	2.12	0.63
1:A:20:ARG:O	1:A:22:VAL:HG23	1.97	0.62
1:A:133:THR:O	1:A:136:PRO:HG2	1.99	0.62
1:A:186:HIS:ND1	1:A:187:TRP:N	2.47	0.62
2:B:218:LEU:CD1	2:B:221:ILE:HD11	2.28	0.62
2:B:434:VAL:CG1	2:B:438:LEU:HD12	2.29	0.62
4:E:94:ASN:O	4:E:125:SER:HA	1.98	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:273:PRO:HG2	4:E:274:GLU:N	2.14	0.62
1:A:176:TRP:HB3	1:A:209:ARG:HD2	1.81	0.62
2:B:443:PHE:C	2:B:447:CYS:HG	1.98	0.62
3:C:33:ILE:HD11	3:C:88:TRP:CZ3	2.34	0.62
3:C:95:GLN:OE1	3:C:147:LYS:HB3	1.98	0.62
3:C:154:ASN:CB	3:C:211:ASN:HB3	2.23	0.62
3:C:269:VAL:HA	3:C:272:LEU:CD1	2.29	0.62
1:D:27:HIS:O	1:D:28:PHE:HB2	1.99	0.62
1:D:233:PHE:HD1	1:D:409:ILE:HD12	1.64	0.62
1:D:245:LEU:HD11	4:E:255:ILE:CG1	2.29	0.62
1:D:379:VAL:HG13	1:D:382:ILE:HD12	1.81	0.62
4:E:94:ASN:HB3	4:E:125:SER:CB	2.27	0.62
4:E:108:LEU:O	4:E:115:MET:HA	1.98	0.62
4:E:172:ILE:HA	4:E:188:ARG:HB3	1.80	0.62
4:E:247:GLY:N	4:E:250:LYS:NZ	2.45	0.62
4:E:298:THR:O	4:E:302:ILE:HG13	1.99	0.62
1:A:279:LEU:HD13	1:A:282:MET:HB3	1.79	0.62
2:B:89:ASP:OD1	2:B:148:SER:HB2	1.98	0.62
2:B:238:VAL:CG1	2:B:248:LYS:HZ1	2.11	0.62
2:B:253:ILE:HD13	2:B:302:LEU:HD21	1.81	0.62
3:C:45:LEU:CD1	3:C:190:TRP:CE3	2.77	0.62
1:D:379:VAL:HA	1:D:382:ILE:CD1	2.28	0.62
1:D:416:LEU:HA	1:D:419:ILE:HG12	1.80	0.62
2:B:135:PHE:H	2:B:279:ILE:HG21	1.64	0.62
3:C:12:LEU:HB2	3:C:16:LYS:CG	2.29	0.62
3:C:223:ARG:CG	3:C:224:LYS:N	2.62	0.62
1:D:135:PHE:CE1	1:D:273:LEU:HB2	2.35	0.62
1:D:408:HIS:HB3	1:D:412:CYS:SG	2.38	0.62
4:E:86:LEU:HD13	4:E:103:TYR:HE1	1.63	0.62
4:E:129:ILE:CG2	4:E:133:TYR:CD2	2.78	0.62
4:E:147:SER:O	4:E:205:PHE:CE2	2.52	0.62
1:A:146:LEU:HD12	1:A:146:LEU:N	2.14	0.62
1:A:229:THR:O	1:A:232:VAL:HB	1.99	0.62
1:A:292:THR:HA	1:A:296:ILE:CD1	2.24	0.62
1:A:413:VAL:O	1:A:417:ILE:N	2.31	0.62
2:B:420:GLU:O	2:B:424:LEU:N	2.32	0.62
3:C:266:ALA:O	3:C:270:PHE:CG	2.53	0.62
1:D:294:VAL:O	1:D:298:THR:N	2.26	0.62
4:E:138:TRP:CH2	4:E:215:GLN:HG3	2.35	0.62
4:E:144:VAL:HG12	4:E:209:ILE:CA	2.29	0.62
4:E:456:LEU:O	4:E:456:LEU:HD22	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:171:MET:SD	1:A:173:SER:HB3	2.39	0.62
1:A:216:VAL:HG13	1:A:220:ILE:HD11	1.82	0.62
2:B:287:ILE:HA	2:B:290:LEU:CD1	2.29	0.62
3:C:7:LEU:O	3:C:10:ASP:HB2	1.99	0.62
3:C:58:MET:HG3	3:C:92:ILE:HD12	1.82	0.62
3:C:102:TYR:CD1	3:C:102:TYR:C	2.73	0.62
1:D:186:HIS:CE1	1:D:187:TRP:O	2.53	0.62
1:D:264:ILE:CB	1:D:265:PRO:HD3	2.29	0.62
4:E:1:ASN:HD22	4:E:69:SER:CB	2.11	0.62
4:E:310:THR:OG1	4:E:313:THR:CG2	2.48	0.62
1:A:34:GLY:HA3	1:A:57:ARG:HG2	1.80	0.62
1:A:57:ARG:HD3	1:A:161:GLU:CG	2.29	0.62
1:A:100:PHE:HB3	1:A:103:VAL:CG2	2.30	0.62
1:A:431:ILE:HG22	1:A:431:ILE:O	1.98	0.62
2:B:198:ARG:CG	2:B:198:ARG:NH1	2.59	0.62
2:B:237:LEU:O	2:B:241:LEU:N	2.29	0.62
3:C:49:ASP:C	3:C:50:GLU:HG3	2.20	0.62
3:C:108:CYS:HB3	3:C:122:PRO:HG3	1.81	0.62
1:D:135:PHE:C	1:D:135:PHE:CD1	2.72	0.62
1:D:230:VAL:HG22	1:D:234:TYR:CE1	2.34	0.62
1:D:264:ILE:CB	1:D:265:PRO:CD	2.78	0.62
1:D:410:LEU:O	1:D:414:PHE:N	2.31	0.62
4:E:143:LEU:H	4:E:143:LEU:HD12	1.63	0.62
4:E:182:GLU:O	4:E:218:PRO:HD2	1.99	0.62
1:A:432:GLU:OE1	1:A:435:GLN:NE2	2.33	0.62
2:B:40:LEU:HB2	2:B:52:THR:HG23	1.82	0.62
2:B:104:LEU:HD12	2:B:118:TRP:CH2	2.34	0.62
2:B:130:ILE:HD12	2:B:134:TYR:CD2	2.35	0.62
2:B:439:PHE:O	2:B:439:PHE:CD1	2.52	0.62
3:C:35:LEU:HD21	3:C:37:LEU:CD2	2.30	0.62
1:D:238:ASP:HB3	4:E:308:LEU:HD22	1.81	0.62
1:D:410:LEU:O	1:D:414:PHE:CB	2.47	0.62
4:E:1:ASN:ND2	4:E:69:SER:H	1.96	0.62
4:E:23:THR:HG22	4:E:24:LEU:N	2.15	0.62
4:E:140:ASN:OD1	4:E:211:PHE:HB3	1.99	0.62
4:E:414:SER:N	4:E:416:VAL:CG1	2.60	0.62
1:A:145:LYS:NZ	1:A:202:THR:HG23	2.13	0.62
1:A:262:GLU:HG2	4:E:271:LYS:HZ1	1.65	0.62
2:B:28:LYS:HE2	2:B:154:SER:O	2.00	0.62
2:B:192:PRO:HD2	2:B:210:TYR:HB2	1.80	0.62
3:C:160:MET:N	3:C:213:GLN:HB2	2.15	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:CYS:CB	1:A:205:PHE:HB2	2.28	0.62
2:B:409:LYS:CG	3:C:426:THR:HG21	2.30	0.62
1:D:80:LEU:O	1:D:108:LEU:HB3	2.00	0.62
1:D:135:PHE:CZ	1:D:273:LEU:HB3	2.35	0.62
4:E:41:SER:O	4:E:49:LEU:HA	2.00	0.62
4:E:162:GLU:CG	4:E:190:ALA:O	2.48	0.62
1:A:157:SER:HB2	1:A:199:LEU:CD1	2.30	0.61
2:B:136:PRO:CB	2:B:280:ILE:HD11	2.30	0.61
2:B:233:ILE:C	2:B:237:LEU:HD22	2.19	0.61
3:C:43:ILE:HD12	3:C:43:ILE:N	2.15	0.61
3:C:472:ILE:CA	3:C:475:MET:HB3	2.26	0.61
1:D:419:ILE:HD12	1:D:420:ILE:CG2	2.29	0.61
4:E:14:TYR:CD2	4:E:16:LYS:NZ	2.66	0.61
4:E:149:THR:CG2	4:E:150:TYR:N	2.61	0.61
4:E:172:ILE:CG2	4:E:174:PRO:HG2	2.30	0.61
4:E:235:LEU:O	4:E:238:LEU:HB2	1.99	0.61
1:A:242:LYS:CD	2:B:312:HIS:ND1	2.62	0.61
1:A:382:ILE:O	1:A:386:MET:CE	2.47	0.61
2:B:283:TYR:HA	2:B:286:PHE:CZ	2.34	0.61
1:D:102:ILE:CD1	4:E:98:GLN:HE21	2.12	0.61
1:D:130:ILE:HB	1:D:134:HIS:CB	2.30	0.61
1:D:167:LEU:HD21	1:D:178:MET:HB2	1.82	0.61
1:D:199:LEU:C	1:D:200:ASP:OD1	2.38	0.61
1:A:89:ASP:O	1:A:89:ASP:OD1	2.18	0.61
2:B:37:LEU:HD23	2:B:179:ALA:O	2.00	0.61
2:B:97:ASP:OD2	2:B:127:SER:HB2	2.00	0.61
2:B:463:PRO:HB2	2:B:464:PRO:HD3	1.81	0.61
3:C:141:TRP:CG	3:C:222:ARG:HA	2.34	0.61
3:C:206:PHE:C	3:C:206:PHE:CD1	2.74	0.61
3:C:295:ILE:O	3:C:299:VAL:HG23	2.00	0.61
3:C:425:SER:O	3:C:429:ILE:HG23	2.00	0.61
3:C:480:ARG:N	3:C:481:PRO:HD2	2.15	0.61
1:D:242:LYS:N	1:D:243:MET:HE2	2.14	0.61
1:D:407:ASP:OD1	1:D:408:HIS:CD2	2.51	0.61
1:D:408:HIS:O	1:D:412:CYS:N	2.24	0.61
4:E:32:LEU:HA	4:E:56:GLU:O	2.01	0.61
4:E:62:TYR:HD1	4:E:62:TYR:O	1.82	0.61
4:E:117:TRP:CD1	4:E:119:PRO:HD3	2.34	0.61
4:E:309:ARG:HD2	4:E:310:THR:N	2.16	0.61
1:A:35:LEU:O	1:A:164:ARG:CZ	2.49	0.61
1:A:95:ASN:O	1:A:96:ALA:HB3	1.99	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:227:PHE:O	1:A:231:LEU:HG	2.00	0.61
1:A:234:TYR:CG	1:A:410:LEU:HD21	2.35	0.61
1:A:280:PHE:O	1:A:284:PHE:CG	2.53	0.61
2:B:1:SER:O	2:B:3:MET:N	2.33	0.61
2:B:235:ALA:C	2:B:239:PHE:CE2	2.74	0.61
1:D:135:PHE:O	1:D:210:ILE:HG13	2.00	0.61
1:D:249:VAL:HG13	4:E:259:LEU:CD2	2.25	0.61
1:D:382:ILE:O	1:D:386:MET:HG2	2.01	0.61
4:E:138:TRP:HH2	4:E:215:GLN:HE21	1.48	0.61
3:C:38:THR:CG2	3:C:57:TRP:CZ3	2.84	0.61
3:C:141:TRP:CH2	3:C:223:ARG:HD3	2.35	0.61
3:C:288:ILE:HD11	3:C:290:LYS:HE3	1.83	0.61
1:D:89:ASP:OD2	1:D:149:TRP:CD1	2.54	0.61
1:A:67:TRP:CD1	1:A:71:ASP:HB3	2.34	0.61
1:A:106:THR:HG22	1:A:107:LYS:N	2.16	0.61
1:A:130:ILE:O	1:A:131:ILE:O	2.19	0.61
1:A:189:TYR:CA	1:A:197:PRO:HD2	2.29	0.61
1:A:430:LEU:O	1:A:433:LEU:HB3	2.01	0.61
2:B:189:GLU:O	2:B:190:HIS:CG	2.52	0.61
2:B:301:VAL:O	2:B:304:LEU:HB3	2.01	0.61
2:B:462:VAL:HB	2:B:463:PRO:HD3	1.81	0.61
3:C:63:TYR:HA	3:C:117:TYR:HA	1.83	0.61
1:D:112:TYR:HD1	1:D:113:THR:H	1.47	0.61
1:D:432:GLU:O	1:D:436:GLU:CG	2.47	0.61
2:B:163:ASP:HB3	2:B:193:SER:OG	2.00	0.61
3:C:17:TYR:CE1	3:C:18:ASN:O	2.54	0.61
3:C:52:LEU:HD23	3:C:128:SER:OG	1.99	0.61
3:C:181:PRO:HD3	3:C:192:ILE:CG2	2.30	0.61
1:D:37:LEU:HD13	1:D:54:VAL:HG13	1.82	0.61
1:D:118:TRP:NE1	1:D:120:PRO:HB3	2.09	0.61
1:D:242:LYS:HB2	1:D:245:LEU:CD1	2.31	0.61
2:B:34:GLY:C	2:B:35:LEU:HD23	2.20	0.61
3:C:36:SER:HB3	3:C:59:ASP:HB3	1.82	0.61
1:D:283:ILE:CA	1:D:286:ILE:HD12	2.26	0.61
1:D:416:LEU:C	1:D:419:ILE:HG13	2.20	0.61
4:E:223:ILE:HA	4:E:226:ILE:HB	1.82	0.61
1:A:227:PHE:HA	1:A:230:VAL:CB	2.28	0.61
2:B:46:LYS:HG3	2:B:278:PRO:CG	2.31	0.61
2:B:242:PRO:HD3	2:B:248:LYS:HE3	1.81	0.61
2:B:462:VAL:O	2:B:465:ASP:OD1	2.18	0.61
3:C:161:ASP:OD1	3:C:199:LYS:HD3	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:162:LEU:HD12	3:C:199:LYS:N	2.16	0.61
3:C:266:ALA:HB2	1:D:251:LEU:HB3	1.81	0.61
1:D:45:GLU:OE2	1:D:135:PHE:HB3	2.00	0.61
4:E:31:THR:CB	4:E:58:GLN:HB2	2.30	0.61
1:A:48:GLN:OE1	1:A:130:ILE:HD12	2.00	0.61
2:B:104:LEU:HA	2:B:118:TRP:CH2	2.35	0.61
2:B:162:LEU:HB2	2:B:174:MET:N	2.15	0.61
2:B:290:LEU:HD11	2:B:453:SER:OG	2.01	0.61
3:C:58:MET:CG	3:C:92:ILE:HD12	2.31	0.61
4:E:418:ALA:HA	4:E:421:PHE:CD2	2.36	0.61
4:E:437:GLU:O	4:E:441:LEU:HG	2.01	0.61
1:A:1:SER:O	1:A:3:HIS:N	2.34	0.60
1:A:76:LYS:HG3	1:A:112:TYR:CD2	2.35	0.60
2:B:88:PRO:HB2	2:B:90:ILE:CG1	2.30	0.60
3:C:2:ASN:HB3	3:C:72:SER:HB3	1.81	0.60
3:C:33:ILE:HG12	3:C:62:TRP:CB	2.30	0.60
3:C:55:ASN:HA	3:C:124:ALA:O	2.01	0.60
3:C:91:ASP:OD1	3:C:153:TYR:CE1	2.54	0.60
1:D:38:ILE:CD1	4:E:199:THR:HG21	2.30	0.60
4:E:162:GLU:N	4:E:163:GLU:OE2	2.29	0.60
4:E:247:GLY:N	4:E:250:LYS:HG3	2.16	0.60
4:E:279:VAL:HB	4:E:280:PRO:HD2	1.83	0.60
1:A:36:GLN:OE1	1:A:37:LEU:C	2.40	0.60
1:A:110:LEU:HD11	1:A:114:GLY:HA2	1.82	0.60
1:A:376:ILE:HG23	1:A:380:LYS:CE	2.30	0.60
2:B:238:VAL:HG13	2:B:248:LYS:HZ2	1.61	0.60
2:B:249:MET:CE	2:B:250:SER:HB3	2.31	0.60
2:B:289:ILE:HG22	2:B:293:PHE:CZ	2.35	0.60
3:C:232:PHE:C	3:C:235:PRO:HD2	2.21	0.60
3:C:234:THR:N	3:C:235:PRO:HD2	2.15	0.60
3:C:276:GLN:C	3:C:279:PRO:HD2	2.20	0.60
3:C:451:GLN:O	3:C:455:ARG:NH1	2.34	0.60
4:E:213:ILE:HG23	4:E:213:ILE:O	2.01	0.60
4:E:262:THR:CA	4:E:265:LEU:HB2	2.30	0.60
1:A:20:ARG:O	1:A:22:VAL:N	2.31	0.60
3:C:38:THR:HG21	3:C:57:TRP:CZ3	2.36	0.60
3:C:278:LEU:HD11	3:C:292:LEU:HD21	1.84	0.60
3:C:318:SER:CB	3:C:447:ASN:HD22	2.04	0.60
1:D:36:GLN:HE21	1:D:38:ILE:HG13	1.65	0.60
1:D:225:PHE:O	1:D:229:THR:HG23	2.01	0.60
1:D:247:ILE:HG22	1:D:248:SER:N	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:59:TRP:CZ2	4:E:115:MET:CB	2.84	0.60
4:E:146:ARG:HB3	4:E:207:GLU:HA	1.83	0.60
1:A:28:PHE:CD1	1:A:153:GLY:O	2.55	0.60
1:A:136:PRO:HA	1:A:277:TYR:CE1	2.37	0.60
1:A:255:VAL:HG23	4:E:264:PHE:CE1	2.34	0.60
2:B:39:SER:HA	2:B:179:ALA:O	2.01	0.60
2:B:43:LEU:HB3	2:B:215:ARG:NH1	2.16	0.60
2:B:141:ASN:HD21	2:B:212:ILE:CG1	2.01	0.60
2:B:147:LYS:HG3	2:B:148:SER:H	1.65	0.60
2:B:242:PRO:HG2	2:B:243:PRO:HD2	1.82	0.60
2:B:307:ARG:NH1	2:B:434:VAL:HG21	2.16	0.60
3:C:305:ASN:O	3:C:309:VAL:N	2.32	0.60
1:D:67:TRP:CD1	1:D:71:ASP:CG	2.75	0.60
1:D:184:TRP:HE3	1:D:185:LYS:O	1.84	0.60
1:D:243:MET:HE2	1:D:243:MET:H	1.66	0.60
1:D:298:THR:O	1:D:301:ARG:HB3	2.02	0.60
1:A:117:MET:CE	1:A:119:THR:HG21	2.32	0.60
1:A:257:LEU:O	1:A:260:ILE:HG22	2.01	0.60
1:A:419:ILE:HG23	1:A:420:ILE:N	2.15	0.60
2:B:409:LYS:O	2:B:412:ALA:HB3	2.01	0.60
3:C:147:LYS:HE2	3:C:216:THR:HG23	1.83	0.60
1:D:291:VAL:HG12	1:D:295:VAL:HG11	1.83	0.60
4:E:66:TRP:N	4:E:66:TRP:CD1	2.70	0.60
4:E:68:THR:HG23	4:E:72:GLU:OE1	2.00	0.60
4:E:100:GLU:OE2	4:E:122:ILE:O	2.19	0.60
4:E:462:THR:O	4:E:466:PHE:HB3	2.00	0.60
1:A:31:ILE:HG12	1:A:60:TRP:HB3	1.84	0.60
1:A:61:ILE:HG22	1:A:115:LYS:HA	1.84	0.60
1:A:284:PHE:CZ	1:A:424:SER:HB3	2.37	0.60
3:C:50:GLU:HA	3:C:132:ILE:HD13	1.82	0.60
3:C:52:LEU:CD2	3:C:130:CYS:HB2	2.25	0.60
3:C:190:TRP:HA	3:C:223:ARG:HB2	1.82	0.60
4:E:66:TRP:CE3	4:E:70:GLU:HG2	2.37	0.60
1:A:252:SER:O	1:A:256:PHE:CE1	2.55	0.60
1:A:258:LEU:O	1:A:261:VAL:HB	2.01	0.60
2:B:95:ASN:O	2:B:96:ASN:C	2.40	0.60
2:B:431:VAL:O	2:B:432:ALA:HB3	2.01	0.60
1:D:56:LEU:O	1:D:120:PRO:HD2	2.02	0.60
1:D:260:ILE:HG22	1:D:264:ILE:HD11	1.84	0.60
4:E:49:LEU:O	4:E:124:ARG:HD2	2.01	0.60
4:E:50:THR:HA	4:E:123:TYR:O	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:12:LEU:HG	1:A:13:GLU:N	2.16	0.60
1:A:34:GLY:HA3	1:A:57:ARG:CG	2.32	0.60
3:C:247:PHE:C	3:C:250:PRO:CD	2.70	0.60
3:C:312:PHE:O	3:C:315:ARG:HD2	2.02	0.60
1:D:245:LEU:CD1	4:E:255:ILE:HG13	2.31	0.60
1:D:387:LYS:O	1:D:391:GLU:HG3	2.02	0.60
4:E:138:TRP:CH2	4:E:215:GLN:CG	2.84	0.60
1:A:124:PHE:CD1	1:A:124:PHE:C	2.73	0.60
1:A:284:PHE:CE2	1:A:424:SER:HB3	2.37	0.60
1:A:380:LYS:HE3	2:B:405:VAL:HA	1.84	0.60
2:B:241:LEU:HD13	3:C:314:PHE:CE2	2.37	0.60
1:D:432:GLU:O	1:D:436:GLU:HG3	2.02	0.60
4:E:279:VAL:CG1	4:E:280:PRO:HD2	2.32	0.60
1:A:226:SER:O	1:A:230:VAL:N	2.34	0.60
1:A:300:HIS:CA	1:A:306:HIS:O	2.47	0.60
2:B:68:ASP:CB	2:B:69:PRO:CD	2.74	0.60
2:B:101:GLU:HB2	2:B:123:ILE:HG22	1.84	0.60
2:B:258:ALA:O	2:B:262:PHE:CD1	2.54	0.60
2:B:297:LEU:HD23	2:B:301:VAL:HG13	1.83	0.60
3:C:270:PHE:CD1	3:C:270:PHE:N	2.66	0.60
3:C:291:TYR:N	3:C:291:TYR:HD1	2.00	0.60
3:C:319:THR:OG1	3:C:448:LEU:HD23	2.02	0.60
4:E:159:LEU:CD1	4:E:208:ILE:HG23	2.32	0.60
4:E:262:THR:HA	4:E:265:LEU:CB	2.31	0.60
1:A:306:HIS:HB2	4:E:250:LYS:HZ3	1.67	0.59
2:B:279:ILE:HG22	2:B:280:ILE:CD1	2.25	0.59
3:C:11:LEU:O	3:C:16:LYS:HB2	2.01	0.59
3:C:148:PHE:CB	3:C:215:VAL:HG22	2.26	0.59
3:C:180:ASP:CB	3:C:219:LEU:HD13	2.31	0.59
3:C:222:ARG:HH21	3:C:223:ARG:C	2.06	0.59
1:D:109:LEU:O	1:D:116:ILE:CG2	2.48	0.59
1:D:237:THR:OG1	1:D:406:ILE:CG2	2.49	0.59
1:D:432:GLU:CG	1:D:435:GLN:NE2	2.59	0.59
4:E:266:PHE:CD1	4:E:266:PHE:O	2.55	0.59
1:A:56:LEU:HD12	1:A:90:LEU:HD13	1.83	0.59
1:A:131:ILE:CD1	1:A:133:THR:HB	2.32	0.59
2:B:46:LYS:CG	2:B:278:PRO:HD2	2.31	0.59
3:C:215:VAL:HG23	3:C:215:VAL:O	2.02	0.59
3:C:242:LEU:HD21	3:C:263:VAL:HG11	1.84	0.59
3:C:263:VAL:N	1:D:251:LEU:HD11	2.17	0.59
1:D:220:ILE:N	1:D:221:PRO:HD2	2.17	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:250:LEU:HD22	1:D:292:THR:OG1	2.02	0.59
1:D:384:GLU:HG2	4:E:422:ILE:HD12	1.84	0.59
4:E:222:ILE:HG23	4:E:223:ILE:N	2.16	0.59
1:A:223:LEU:O	1:A:226:SER:HB2	2.02	0.59
2:B:87:GLN:CB	2:B:104:LEU:HD11	2.31	0.59
2:B:92:LEU:HD22	2:B:146:PHE:CG	2.37	0.59
2:B:249:MET:O	2:B:252:SER:OG	2.21	0.59
3:C:3:GLU:OE1	3:C:7:LEU:HD12	2.01	0.59
3:C:7:LEU:HD11	3:C:70:ASN:ND2	2.18	0.59
1:D:26:THR:HG22	1:D:27:HIS:N	2.17	0.59
1:D:43:VAL:CG1	1:D:50:VAL:HG22	2.33	0.59
4:E:37:THR:OG1	4:E:54:TRP:CZ3	2.55	0.59
4:E:78:ARG:HD3	4:E:108:LEU:CD1	2.32	0.59
4:E:152:ALA:N	4:E:205:PHE:HA	2.15	0.59
4:E:261:GLN:NE2	4:E:296:ILE:HD11	2.13	0.59
1:A:224:LEU:CG	1:A:225:PHE:N	2.58	0.59
1:A:419:ILE:HD13	1:A:423:VAL:HG21	1.84	0.59
2:B:9:SER:O	2:B:12:PHE:CD1	2.56	0.59
2:B:67:TRP:CB	2:B:72:TYR:HB2	2.31	0.59
2:B:69:PRO:O	2:B:74:GLY:N	2.35	0.59
2:B:87:GLN:HB3	2:B:104:LEU:HD11	1.84	0.59
2:B:200:ASP:O	2:B:200:ASP:OD1	2.19	0.59
3:C:84:PRO:HG2	3:C:85:GLU:OE1	2.01	0.59
3:C:464:VAL:CG1	3:C:465:MET:N	2.66	0.59
1:D:189:TYR:CA	1:D:197:PRO:HD2	2.31	0.59
1:D:293:VAL:O	1:D:297:ASN:ND2	2.36	0.59
1:D:410:LEU:O	1:D:414:PHE:HB2	2.02	0.59
4:E:212:LEU:HD12	4:E:212:LEU:N	2.18	0.59
1:A:93:TYR:CG	1:A:145:LYS:HB3	2.38	0.59
2:B:36:THR:O	2:B:55:PHE:CD1	2.56	0.59
2:B:65:LEU:HD23	2:B:110:VAL:HG11	1.84	0.59
2:B:181:THR:HG23	2:B:183:ASN:N	2.17	0.59
1:D:27:HIS:O	1:D:28:PHE:CB	2.50	0.59
1:A:187:TRP:HE1	1:A:196:THR:HG22	1.67	0.59
1:A:306:HIS:HB2	4:E:250:LYS:NZ	2.18	0.59
2:B:38:THR:OG1	2:B:39:SER:N	2.35	0.59
2:B:54:VAL:O	2:B:121:SER:HA	2.02	0.59
2:B:91:VAL:HA	2:B:96:ASN:CG	2.23	0.59
2:B:253:ILE:CD1	2:B:302:LEU:HD21	2.33	0.59
2:B:439:PHE:O	2:B:442:ILE:HG22	2.03	0.59
3:C:260:ALA:HB3	3:C:313:HIS:CE1	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:426:THR:CA	3:C:429:ILE:HG23	2.33	0.59
1:D:74:GLY:O	1:D:75:ILE:HG23	2.03	0.59
1:D:187:TRP:NE1	1:D:197:PRO:O	2.35	0.59
1:D:223:LEU:HD23	1:D:223:LEU:C	2.22	0.59
1:D:235:LEU:O	1:D:239:SER:N	2.31	0.59
1:D:245:LEU:HD23	4:E:255:ILE:HG21	1.84	0.59
4:E:162:GLU:H	4:E:163:GLU:CD	2.06	0.59
1:A:247:ILE:HG23	1:A:248:SER:N	2.16	0.59
1:A:416:LEU:C	1:A:419:ILE:HG22	2.23	0.59
2:B:9:SER:O	2:B:13:GLU:HG3	2.02	0.59
2:B:88:PRO:O	2:B:90:ILE:N	2.34	0.59
2:B:132:VAL:O	2:B:279:ILE:CG2	2.49	0.59
2:B:247:GLU:OE1	3:C:320:HIS:NE2	2.36	0.59
2:B:251:LEU:HD12	2:B:251:LEU:C	2.23	0.59
2:B:285:MET:O	2:B:289:ILE:HG12	2.03	0.59
2:B:290:LEU:HD21	2:B:453:SER:OG	2.03	0.59
3:C:42:LEU:O	3:C:185:THR:CB	2.50	0.59
3:C:105:ALA:HA	3:C:122:PRO:HG2	1.84	0.59
3:C:206:PHE:CD1	3:C:206:PHE:O	2.55	0.59
3:C:426:THR:HA	3:C:429:ILE:CG2	2.32	0.59
3:C:435:GLU:O	3:C:438:ALA:HB3	2.03	0.59
1:D:15:TYR:HE2	1:D:84:ASP:HB3	1.66	0.59
1:D:60:TRP:CZ2	1:D:86:TRP:CZ3	2.91	0.59
4:E:78:ARG:CD	4:E:108:LEU:CD1	2.81	0.59
4:E:255:ILE:HD11	4:E:304:LEU:CD1	2.28	0.59
4:E:296:ILE:HG13	4:E:297:VAL:N	2.17	0.59
4:E:441:LEU:C	4:E:441:LEU:HD12	2.22	0.59
1:A:390:GLU:O	1:A:393:SER:OG	2.21	0.59
2:B:109:LEU:HB3	2:B:117:SER:CB	2.30	0.59
2:B:247:GLU:OE1	3:C:320:HIS:CD2	2.56	0.59
3:C:230:ILE:HG13	3:C:231:ASN:H	1.62	0.59
3:C:241:PHE:C	3:C:241:PHE:CD1	2.76	0.59
1:D:110:LEU:HA	1:D:116:ILE:HG22	1.84	0.59
4:E:235:LEU:HD11	4:E:257:VAL:HG13	1.85	0.59
1:A:136:PRO:CB	1:A:138:ASP:OD1	2.50	0.59
1:A:292:THR:HG22	1:A:296:ILE:HD11	1.85	0.59
2:B:92:LEU:HB2	2:B:96:ASN:N	2.18	0.59
1:D:178:MET:HA	1:D:207:MET:HB2	1.84	0.59
1:D:250:LEU:CD2	1:D:292:THR:OG1	2.51	0.59
4:E:34:LEU:CD2	4:E:55:ILE:HA	2.33	0.59
4:E:279:VAL:CB	4:E:280:PRO:HD2	2.33	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:41:ILE:HG12	1:A:51:GLU:HB3	1.81	0.59
1:A:94:ASN:C	1:A:94:ASN:HD22	2.05	0.59
1:A:274:ILE:CG1	1:A:277:TYR:CE1	2.80	0.59
2:B:406:GLU:HG2	2:B:409:LYS:HD2	1.85	0.59
2:B:426:LYS:HB3	2:B:430:TYR:CE2	2.37	0.59
3:C:42:LEU:CD2	3:C:190:TRP:HH2	2.13	0.59
3:C:162:LEU:N	3:C:199:LYS:HG2	2.18	0.59
3:C:190:TRP:CD1	3:C:221:ILE:CD1	2.75	0.59
1:D:56:LEU:O	1:D:120:PRO:HD3	2.03	0.59
1:D:109:LEU:HD12	1:D:117:MET:HB3	1.85	0.59
1:D:170:PHE:CE2	1:D:176:TRP:CD1	2.86	0.59
1:D:228:LEU:HD23	1:D:249:VAL:CG1	2.32	0.59
4:E:59:TRP:CZ2	4:E:84:LEU:HD22	2.38	0.59
1:A:137:PHE:CE1	1:A:210:ILE:CD1	2.77	0.58
1:A:245:LEU:HG	2:B:253:ILE:CG2	2.33	0.58
2:B:160:HIS:HE2	2:B:207:VAL:CG1	2.13	0.58
3:C:93:VAL:CG2	3:C:151:LEU:HD13	2.32	0.58
3:C:253:SER:O	3:C:256:LYS:HG3	2.02	0.58
3:C:263:VAL:HG13	1:D:251:LEU:CD2	2.32	0.58
4:E:78:ARG:CD	4:E:108:LEU:HD12	2.33	0.58
4:E:145:PHE:O	4:E:208:ILE:HD12	2.02	0.58
1:A:93:TYR:CZ	1:A:198:TYR:CE2	2.91	0.58
1:A:156:VAL:CG2	1:A:157:SER:N	2.66	0.58
1:A:265:PRO:O	1:A:269:SER:N	2.34	0.58
2:B:37:LEU:HD23	2:B:179:ALA:CA	2.32	0.58
3:C:291:TYR:N	3:C:291:TYR:CD1	2.71	0.58
4:E:75:ASP:CB	4:E:110:TYR:CE1	2.78	0.58
4:E:227:ALA:H	4:E:228:PRO:HD2	1.66	0.58
1:A:29:VAL:HB	1:A:31:ILE:CD1	2.33	0.58
1:A:29:VAL:HB	1:A:31:ILE:HD12	1.85	0.58
1:A:156:VAL:HG22	1:A:157:SER:N	2.18	0.58
1:A:249:VAL:HG12	1:A:250:LEU:N	2.18	0.58
1:A:417:ILE:HA	1:A:420:ILE:CG1	2.32	0.58
2:B:85:VAL:HG12	2:B:86:TRP:N	2.18	0.58
3:C:2:ASN:HD22	3:C:71:ALA:HB3	1.67	0.58
1:D:280:PHE:O	1:D:284:PHE:CD1	2.56	0.58
1:D:412:CYS:HA	1:D:415:MET:CE	2.33	0.58
4:E:55:ILE:HG22	4:E:119:PRO:O	2.03	0.58
4:E:227:ALA:N	4:E:228:PRO:CD	2.66	0.58
1:A:37:LEU:HD23	1:A:54:VAL:HG12	1.85	0.58
1:A:133:THR:O	1:A:140:GLN:HB2	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:187:TRP:CZ2	1:A:196:THR:CG2	2.73	0.58
1:A:380:LYS:CA	2:B:408:ILE:HD13	2.34	0.58
2:B:59:ALA:HA	2:B:116:VAL:O	2.03	0.58
2:B:62:ASP:C	2:B:64:ARG:H	2.05	0.58
2:B:304:LEU:HD23	2:B:304:LEU:O	2.02	0.58
3:C:77:ILE:CD1	3:C:80:LEU:CD1	2.72	0.58
3:C:97:ASN:CG	3:C:128:SER:HB2	2.24	0.58
3:C:242:LEU:O	3:C:246:ALA:N	2.34	0.58
1:D:114:GLY:O	1:D:116:ILE:HG23	2.03	0.58
4:E:34:LEU:HD12	4:E:210:PHE:CZ	2.38	0.58
4:E:47:GLU:HG2	4:E:128:PRO:O	2.03	0.58
4:E:239:VAL:CG1	4:E:254:SER:OG	2.51	0.58
4:E:472:ASN:O	4:E:476:GLU:CG	2.46	0.58
1:A:171:MET:CG	1:A:173:SER:H	2.15	0.58
1:A:255:VAL:HB	4:E:264:PHE:CZ	2.37	0.58
1:A:408:HIS:O	1:A:412:CYS:N	2.33	0.58
2:B:100:PHE:HB2	2:B:103:THR:OG1	2.02	0.58
2:B:258:ALA:HB3	3:C:265:LEU:CD2	2.28	0.58
3:C:35:LEU:HD22	3:C:215:VAL:CG1	2.32	0.58
3:C:42:LEU:CD2	3:C:190:TRP:CZ2	2.86	0.58
3:C:93:VAL:HB	3:C:151:LEU:HB2	1.85	0.58
1:D:21:PRO:HB3	1:D:62:ASP:OD2	2.03	0.58
1:D:65:LEU:CD2	1:D:110:LEU:HD22	2.23	0.58
4:E:122:ILE:HD13	4:E:122:ILE:N	2.16	0.58
4:E:470:HIS:CE1	4:E:474:VAL:CG2	2.75	0.58
1:A:6:ARG:HH11	1:A:6:ARG:CB	2.16	0.58
1:A:218:VAL:HG13	1:A:219:ILE:N	2.18	0.58
1:A:234:TYR:CD2	1:A:410:LEU:HD21	2.39	0.58
2:B:102:ILE:HB	2:B:121:SER:O	2.03	0.58
3:C:139:PHE:CE2	3:C:291:TYR:OH	2.56	0.58
3:C:247:PHE:C	3:C:250:PRO:HD2	2.23	0.58
3:C:296:MET:HA	3:C:296:MET:HE2	1.84	0.58
1:D:35:LEU:HD12	1:D:54:VAL:HG11	1.74	0.58
4:E:31:THR:HA	4:E:158:GLN:HG3	1.85	0.58
4:E:59:TRP:CE2	4:E:115:MET:CB	2.87	0.58
1:A:50:VAL:HG12	1:A:52:THR:HG23	1.85	0.58
1:A:54:VAL:N	1:A:122:ALA:O	2.32	0.58
1:A:391:GLU:O	1:A:394:ASN:ND2	2.36	0.58
2:B:9:SER:CA	2:B:12:PHE:CE1	2.78	0.58
2:B:134:TYR:HB3	2:B:279:ILE:HD11	1.86	0.58
2:B:175:ILE:HG23	2:B:178:ASP:N	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:49:ASP:O	3:C:50:GLU:HG3	2.03	0.58
3:C:93:VAL:HB	3:C:151:LEU:HD22	1.85	0.58
3:C:180:ASP:HB2	3:C:195:LYS:CB	2.33	0.58
3:C:312:PHE:CE1	3:C:456:LEU:CD1	2.74	0.58
1:D:36:GLN:C	1:D:54:VAL:HG12	2.24	0.58
1:D:89:ASP:CB	1:D:149:TRP:HD1	2.16	0.58
4:E:6:LEU:HD13	4:E:67:ASN:CG	2.23	0.58
4:E:102:ALA:HB2	4:E:121:ALA:CB	2.33	0.58
4:E:228:PRO:HA	4:E:231:LEU:HD23	1.85	0.58
4:E:246:ALA:CA	4:E:250:LYS:HZ2	2.16	0.58
1:A:15:TYR:HE2	1:A:84:ASP:OD2	1.86	0.58
1:A:244:THR:O	1:A:247:ILE:N	2.37	0.58
1:A:245:LEU:HD21	2:B:250:SER:HA	1.86	0.58
2:B:91:VAL:C	2:B:92:LEU:HD23	2.24	0.58
2:B:101:GLU:C	2:B:102:ILE:HG13	2.24	0.58
3:C:74:TYR:CE1	3:C:114:PRO:HB2	2.39	0.58
3:C:154:ASN:CB	3:C:211:ASN:CB	2.81	0.58
3:C:451:GLN:O	3:C:455:ARG:HD3	2.04	0.58
4:E:80:PRO:HB2	4:E:83:LEU:HD23	1.86	0.58
4:E:133:TYR:CZ	4:E:214:ILE:HG13	2.39	0.58
4:E:272:VAL:N	4:E:273:PRO:HD2	2.18	0.58
4:E:449:ALA:O	4:E:452:TRP:HB2	2.04	0.58
1:A:416:LEU:O	1:A:420:ILE:HG23	2.04	0.58
2:B:66:GLN:HG3	2:B:113:THR:HA	1.85	0.58
3:C:7:LEU:CD1	3:C:70:ASN:HB2	2.34	0.58
3:C:30:VAL:CG1	3:C:31:VAL:N	2.67	0.58
3:C:131:PRO:CG	3:C:145:SER:H	2.17	0.58
1:D:157:SER:HB2	1:D:199:LEU:CD1	2.34	0.58
4:E:80:PRO:O	4:E:83:LEU:HB2	2.03	0.58
4:E:91:LEU:CB	4:E:95:VAL:H	2.16	0.58
1:A:45:GLU:HG2	1:A:272:PRO:CG	2.33	0.58
1:A:227:PHE:O	1:A:231:LEU:N	2.34	0.58
1:A:415:MET:O	1:A:419:ILE:HB	2.03	0.58
2:B:92:LEU:CB	2:B:96:ASN:HB2	2.33	0.58
2:B:241:LEU:HD13	3:C:314:PHE:CZ	2.39	0.58
2:B:287:ILE:CA	2:B:290:LEU:HD12	2.34	0.58
2:B:431:VAL:O	2:B:432:ALA:CB	2.52	0.58
3:C:220:ILE:O	3:C:220:ILE:CG1	2.51	0.58
3:C:270:PHE:HD1	3:C:270:PHE:N	2.00	0.58
1:D:130:ILE:CB	1:D:134:HIS:HB2	2.33	0.58
1:D:246:SER:O	1:D:250:LEU:HD12	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:257:LEU:HA	1:D:260:ILE:CG1	2.34	0.58
4:E:177:PHE:CE2	4:E:184:THR:HA	2.38	0.58
4:E:417:GLU:HA	4:E:420:ASN:HB2	1.86	0.58
1:A:26:THR:O	1:A:28:PHE:N	2.37	0.57
1:A:57:ARG:NH1	1:A:161:GLU:OE2	2.37	0.57
1:A:237:THR:OG1	1:A:407:ASP:OD1	2.20	0.57
1:A:261:VAL:O	1:A:265:PRO:CG	2.51	0.57
1:A:380:LYS:HA	2:B:408:ILE:HD13	1.86	0.57
2:B:189:GLU:CG	2:B:468:PHE:HB3	2.18	0.57
2:B:409:LYS:HD3	3:C:426:THR:HG1	1.69	0.57
3:C:115:ASN:N	3:C:115:ASN:ND2	2.48	0.57
3:C:180:ASP:N	3:C:195:LYS:CB	2.66	0.57
3:C:426:THR:C	3:C:429:ILE:HG23	2.25	0.57
3:C:464:VAL:HG13	3:C:465:MET:N	2.19	0.57
1:D:29:VAL:HG11	1:D:60:TRP:HE1	1.67	0.57
1:D:303:PRO:CD	1:D:400:LYS:CD	2.82	0.57
1:D:377:GLU:N	1:D:380:LYS:HE2	2.19	0.57
4:E:34:LEU:HD23	4:E:55:ILE:HA	1.85	0.57
4:E:59:TRP:N	4:E:59:TRP:CE3	2.71	0.57
4:E:86:LEU:CD1	4:E:103:TYR:OH	2.52	0.57
4:E:241:PHE:CD1	4:E:450:CYS:HB3	2.39	0.57
4:E:296:ILE:CG1	4:E:297:VAL:N	2.66	0.57
1:A:106:THR:HG23	2:B:150:THR:HG23	1.86	0.57
1:A:401:TYR:O	1:A:401:TYR:CG	2.57	0.57
2:B:3:MET:O	2:B:6:THR:HB	2.04	0.57
3:C:192:ILE:HD13	3:C:221:ILE:CG2	2.34	0.57
3:C:228:TYR:HD1	3:C:229:VAL:H	1.47	0.57
3:C:427:ASN:HA	3:C:430:VAL:CG2	2.34	0.57
1:D:7:LEU:HA	1:D:10:ASN:HD21	1.67	0.57
1:D:86:TRP:O	1:D:86:TRP:CG	2.57	0.57
4:E:10:LEU:HD13	4:E:64:LEU:HD23	1.86	0.57
4:E:246:ALA:CB	4:E:250:LYS:HZ2	2.18	0.57
1:A:58:GLN:NE2	1:A:90:LEU:HD11	2.19	0.57
1:A:280:PHE:HB3	1:A:284:PHE:CE2	2.39	0.57
1:A:305:THR:OG1	1:A:400:LYS:HB2	2.04	0.57
2:B:40:LEU:HD13	2:B:40:LEU:C	2.24	0.57
2:B:251:LEU:HD22	3:C:261:ILE:HG13	1.86	0.57
2:B:284:LEU:HA	2:B:287:ILE:CG1	2.34	0.57
3:C:56:VAL:CG2	3:C:124:ALA:HB3	2.34	0.57
3:C:194:HIS:ND1	3:C:195:LYS:N	2.51	0.57
3:C:296:MET:CE	3:C:299:VAL:HG21	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:66:ARG:HD3	1:D:66:ARG:H	1.68	0.57
1:D:131:ILE:CG1	1:D:133:THR:H	2.06	0.57
4:E:162:GLU:CB	4:E:190:ALA:O	2.52	0.57
4:E:456:LEU:HD22	4:E:460:LEU:HG	1.84	0.57
2:B:16:ASN:OD1	2:B:18:LYS:NZ	2.23	0.57
2:B:129:THR:C	2:B:131:LYS:N	2.57	0.57
2:B:241:LEU:CD2	2:B:251:LEU:HD11	2.33	0.57
2:B:452:PHE:O	2:B:456:LEU:HD23	2.04	0.57
3:C:58:MET:HE1	3:C:120:TRP:CZ2	2.39	0.57
3:C:180:ASP:CG	3:C:219:LEU:HD22	2.24	0.57
3:C:279:PRO:CA	3:C:282:ALA:HB3	2.33	0.57
4:E:261:GLN:HE22	4:E:296:ILE:HD12	1.69	0.57
4:E:269:ALA:O	4:E:273:PRO:HG3	2.04	0.57
2:B:182:GLU:CD	2:B:182:GLU:H	2.06	0.57
2:B:187:SER:OG	2:B:216:LYS:HE2	2.05	0.57
2:B:267:ALA:O	2:B:271:PRO:CD	2.46	0.57
3:C:62:TRP:HH2	3:C:120:TRP:HB3	1.70	0.57
3:C:162:LEU:HB2	3:C:199:LYS:CB	2.31	0.57
3:C:228:TYR:O	3:C:232:PHE:HB2	2.04	0.57
1:D:95:ASN:HA	1:D:127:TYR:O	2.05	0.57
1:D:383:ALA:HA	1:D:386:MET:HG2	1.86	0.57
4:E:127:CYS:O	4:E:128:PRO:O	2.22	0.57
4:E:129:ILE:HG22	4:E:133:TYR:HD2	1.66	0.57
4:E:135:PRO:C	4:E:136:PHE:HD1	2.08	0.57
1:A:17:LYS:HZ1	1:A:83:ASP:HB3	1.69	0.57
1:A:37:LEU:O	1:A:169:THR:HG21	2.04	0.57
1:A:93:TYR:CZ	1:A:200:ASP:HB3	2.40	0.57
2:B:45:GLU:HG3	2:B:134:TYR:CB	2.35	0.57
2:B:131:LYS:HB3	2:B:133:MET:SD	2.44	0.57
2:B:259:LEU:HD23	2:B:263:LEU:HD12	1.86	0.57
3:C:11:LEU:O	3:C:13:ILE:N	2.38	0.57
3:C:199:LYS:NZ	3:C:199:LYS:C	2.58	0.57
3:C:235:PRO:O	3:C:239:ILE:HB	2.05	0.57
3:C:298:LEU:CD2	3:C:467:LEU:HD12	2.34	0.57
1:D:134:HIS:HE1	1:D:209:ARG:HD2	1.69	0.57
1:D:225:PHE:HD1	1:D:226:SER:N	2.03	0.57
4:E:232:ILE:HG22	4:E:233:SER:N	2.18	0.57
1:A:34:GLY:HA3	1:A:57:ARG:HD3	1.85	0.57
1:A:90:LEU:HD12	1:A:100:PHE:CE2	2.39	0.57
1:A:379:VAL:O	1:A:382:ILE:HG13	2.04	0.57
2:B:75:ILE:O	2:B:75:ILE:CG1	2.49	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:187:SER:N	2:B:214:GLN:O	2.37	0.57
2:B:438:LEU:O	2:B:442:ILE:CD1	2.53	0.57
3:C:12:LEU:HD12	3:C:16:LYS:HE3	1.86	0.57
3:C:25:LYS:HG3	3:C:25:LYS:O	2.04	0.57
3:C:50:GLU:CB	3:C:132:ILE:HB	2.35	0.57
3:C:138:PRO:O	3:C:141:TRP:CD1	2.58	0.57
3:C:222:ARG:NH2	3:C:223:ARG:C	2.57	0.57
3:C:423:ILE:HD12	1:D:376:ILE:HG13	1.85	0.57
1:D:135:PHE:CA	1:D:209:ARG:HB3	2.35	0.57
1:D:157:SER:CA	1:D:199:LEU:HD12	2.35	0.57
1:D:187:TRP:CB	1:D:199:LEU:HD23	2.26	0.57
4:E:138:TRP:CH2	4:E:215:GLN:NE2	2.72	0.57
4:E:138:TRP:CE3	4:E:215:GLN:HA	2.40	0.57
4:E:273:PRO:O	4:E:277:LEU:HG	2.04	0.57
1:A:35:LEU:CD1	1:A:203:TYR:OH	2.52	0.57
1:A:242:LYS:HB2	1:A:245:LEU:HB2	1.86	0.57
1:A:274:ILE:HG12	1:A:277:TYR:HE1	1.61	0.57
1:A:384:GLU:HA	1:A:387:LYS:HG3	1.86	0.57
2:B:409:LYS:HE2	3:C:423:ILE:HG22	1.86	0.57
2:B:458:ALA:O	2:B:462:VAL:CG2	2.51	0.57
3:C:146:LEU:HD12	3:C:146:LEU:N	2.19	0.57
1:D:35:LEU:HB3	1:D:164:ARG:NH1	2.20	0.57
4:E:62:TYR:CD1	4:E:62:TYR:O	2.57	0.57
4:E:453:ILE:HD12	4:E:453:ILE:C	2.24	0.57
1:A:137:PHE:C	1:A:435:GLN:HG3	2.21	0.57
1:A:225:PHE:CD1	1:A:225:PHE:C	2.78	0.57
1:A:252:SER:OG	2:B:257:LEU:CD2	2.48	0.57
1:A:304:SER:N	1:A:400:LYS:HD3	2.18	0.57
2:B:35:LEU:CD2	2:B:56:LEU:HA	2.31	0.57
2:B:245:ALA:HB1	3:C:320:HIS:HD2	1.70	0.57
2:B:404:ALA:O	2:B:407:ALA:HB3	2.05	0.57
2:B:430:TYR:O	2:B:430:TYR:HD1	1.87	0.57
3:C:37:LEU:O	3:C:178:ILE:HD12	2.05	0.57
1:D:176:TRP:HB3	1:D:209:ARG:HD2	1.84	0.57
1:D:179:LYS:HB2	1:D:206:ILE:HG22	1.85	0.57
1:D:242:LYS:CD	1:D:245:LEU:HD13	2.35	0.57
4:E:27:VAL:HG11	4:E:152:ALA:O	2.04	0.57
4:E:49:LEU:HD12	4:E:50:THR:N	2.20	0.57
4:E:101:VAL:O	4:E:101:VAL:HG12	2.04	0.57
4:E:250:LYS:HB3	4:E:253:LEU:CD2	2.30	0.57
4:E:417:GLU:O	4:E:421:PHE:CG	2.58	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:234:TYR:CZ	1:A:410:LEU:HD11	2.40	0.57
2:B:92:LEU:HD12	2:B:96:ASN:H	1.70	0.57
2:B:177:GLN:HA	2:B:180:PHE:HB2	1.86	0.57
3:C:31:VAL:HG13	3:C:33:ILE:HG13	1.87	0.57
3:C:159:SER:HA	3:C:213:GLN:HG2	1.80	0.57
3:C:243:ALA:HA	3:C:246:ALA:HB2	1.86	0.57
1:D:91:VAL:HG22	1:D:96:ALA:HB2	1.87	0.57
1:D:94:ASN:HD22	1:D:95:ASN:N	2.02	0.57
1:A:243:MET:CE	1:A:244:THR:HG22	2.34	0.56
1:A:376:ILE:O	1:A:380:LYS:HG3	2.04	0.56
3:C:35:LEU:CD2	3:C:215:VAL:HG11	2.31	0.56
3:C:266:ALA:CB	1:D:251:LEU:HB3	2.35	0.56
1:D:32:THR:HG21	1:D:59:GLN:HE21	1.70	0.56
1:D:198:TYR:N	1:D:198:TYR:CD1	2.73	0.56
4:E:233:SER:HB2	4:E:457:LEU:HD11	1.87	0.56
4:E:444:LYS:HA	4:E:444:LYS:CE	2.35	0.56
1:A:2:GLU:O	1:A:7:LEU:HD21	2.05	0.56
1:A:36:GLN:OE1	1:A:36:GLN:C	2.43	0.56
1:A:87:LEU:N	1:A:87:LEU:CD2	2.59	0.56
1:A:137:PHE:N	1:A:277:TYR:OH	2.38	0.56
1:A:276:LYS:HD2	1:A:276:LYS:N	2.19	0.56
2:B:186:TRP:HA	2:B:215:ARG:HA	1.87	0.56
3:C:476:GLY:O	3:C:480:ARG:HG3	2.04	0.56
1:D:102:ILE:CD1	4:E:98:GLN:NE2	2.67	0.56
4:E:284:LYS:CA	4:E:284:LYS:CE	2.82	0.56
4:E:438:ASN:O	4:E:442:ILE:HG12	2.05	0.56
4:E:450:CYS:O	4:E:453:ILE:HG13	2.05	0.56
1:A:36:GLN:HA	1:A:164:ARG:HH21	1.70	0.56
1:A:107:LYS:O	1:A:108:LEU:CD2	2.54	0.56
1:A:175:GLU:OE1	1:A:211:PRO:HG3	2.06	0.56
1:A:218:VAL:C	1:A:221:PRO:HD2	2.24	0.56
1:A:235:LEU:N	1:A:236:PRO:CD	2.67	0.56
1:A:266:SER:O	1:A:270:ALA:N	2.38	0.56
1:A:301:ARG:HH11	1:A:301:ARG:HG2	1.69	0.56
1:A:425:VAL:O	1:A:429:ARG:HG2	2.05	0.56
2:B:32:ARG:HG3	2:B:59:ALA:O	2.06	0.56
2:B:46:LYS:NZ	2:B:275:LEU:O	2.24	0.56
2:B:101:GLU:OE1	2:B:123:ILE:HG21	2.04	0.56
2:B:156:VAL:CG2	2:B:157:ILE:N	2.69	0.56
2:B:163:ASP:HB3	2:B:193:SER:HG	1.68	0.56
2:B:192:PRO:HB2	2:B:210:TYR:HB2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:217:PRO:HB2	2:B:219:PHE:CE2	2.39	0.56
2:B:241:LEU:HD23	2:B:248:LYS:HE2	1.87	0.56
2:B:418:ALA:HA	2:B:421:PHE:CE2	2.40	0.56
2:B:455:PHE:O	2:B:458:ALA:HB3	2.05	0.56
3:C:52:LEU:HD22	3:C:52:LEU:N	2.20	0.56
3:C:141:TRP:CZ2	3:C:223:ARG:O	2.58	0.56
3:C:206:PHE:N	3:C:207:PRO:CD	2.68	0.56
3:C:241:PHE:O	3:C:245:LEU:CG	2.44	0.56
3:C:272:LEU:O	3:C:275:SER:OG	2.23	0.56
3:C:308:ILE:HG22	3:C:309:VAL:N	2.19	0.56
3:C:312:PHE:CZ	3:C:456:LEU:CD2	2.81	0.56
3:C:426:THR:HA	3:C:429:ILE:HG23	1.87	0.56
1:D:61:ILE:HA	1:D:116:ILE:CD1	2.35	0.56
1:D:105:MET:HG2	1:D:105:MET:O	2.05	0.56
1:D:280:PHE:N	1:D:280:PHE:CD1	2.67	0.56
4:E:44:GLU:CA	4:E:129:ILE:CD1	2.72	0.56
4:E:74:ILE:O	4:E:74:ILE:HG12	2.04	0.56
4:E:84:LEU:O	4:E:86:LEU:HG	2.05	0.56
4:E:173:ASP:N	4:E:174:PRO:CD	2.68	0.56
4:E:234:SER:O	4:E:238:LEU:N	2.38	0.56
4:E:303:VAL:HA	4:E:306:VAL:HB	1.87	0.56
1:A:295:VAL:O	1:A:299:HIS:N	2.37	0.56
1:D:31:ILE:HB	1:D:157:SER:O	2.05	0.56
1:D:101:ALA:O	1:D:102:ILE:HB	2.06	0.56
4:E:136:PHE:HA	4:E:138:TRP:CZ3	2.41	0.56
4:E:238:LEU:O	4:E:242:LEU:CB	2.54	0.56
4:E:452:TRP:HA	4:E:452:TRP:HE3	1.70	0.56
2:B:108:VAL:HG13	2:B:117:SER:O	2.05	0.56
3:C:71:ALA:O	3:C:76:ASP:N	2.38	0.56
3:C:288:ILE:HD13	3:C:290:LYS:HD2	1.87	0.56
4:E:177:PHE:HB2	4:E:185:ILE:HD12	1.86	0.56
4:E:438:ASN:OD1	4:E:442:ILE:HD11	2.06	0.56
4:E:441:LEU:CD1	4:E:441:LEU:O	2.54	0.56
1:A:79:ARG:NH1	1:A:107:LYS:NZ	2.50	0.56
1:A:132:VAL:O	1:A:274:ILE:HA	2.06	0.56
1:A:187:TRP:NE1	1:A:196:THR:CG2	2.69	0.56
1:A:416:LEU:O	1:A:420:ILE:N	2.36	0.56
2:B:40:LEU:HA	2:B:52:THR:HG23	1.87	0.56
2:B:232:SER:O	2:B:236:ILE:N	2.38	0.56
3:C:162:LEU:HD12	3:C:198:LYS:C	2.26	0.56
3:C:475:MET:HA	3:C:478:PHE:CE2	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:171:MET:SD	1:D:174:GLY:CA	2.94	0.56
1:D:426:PHE:HE1	1:D:430:LEU:HD12	1.70	0.56
4:E:99:PHE:CZ	4:E:123:TYR:CE2	2.93	0.56
4:E:235:LEU:HA	4:E:238:LEU:CG	2.30	0.56
4:E:246:ALA:HB1	4:E:250:LYS:HZ2	1.69	0.56
4:E:313:THR:O	4:E:314:HIS:CG	2.58	0.56
1:A:136:PRO:CA	1:A:277:TYR:OH	2.48	0.56
1:A:200:ASP:OD1	1:A:200:ASP:N	2.39	0.56
1:A:261:VAL:O	1:A:265:PRO:HG3	2.06	0.56
1:A:306:HIS:CB	4:E:250:LYS:NZ	2.69	0.56
1:A:419:ILE:O	1:A:423:VAL:N	2.38	0.56
2:B:130:ILE:HB	2:B:134:TYR:CE2	2.39	0.56
3:C:33:ILE:HD12	3:C:158:ILE:HD11	1.88	0.56
3:C:245:LEU:HB3	3:C:249:LEU:HD11	1.88	0.56
1:D:38:ILE:O	1:D:39:GLN:HG3	2.06	0.56
1:D:68:ASN:HB2	1:D:69:PRO:HD2	1.86	0.56
1:D:107:LYS:H	1:D:107:LYS:HD3	1.71	0.56
1:D:186:HIS:CG	1:D:187:TRP:N	2.74	0.56
1:D:305:THR:CG2	1:D:400:LYS:HB3	2.35	0.56
4:E:303:VAL:O	4:E:306:VAL:HB	2.06	0.56
1:A:28:PHE:CG	1:A:153:GLY:O	2.58	0.56
1:A:97:ASP:HB2	1:A:127:TYR:HB2	1.88	0.56
1:A:399:TRP:HA	1:A:399:TRP:CE3	2.39	0.56
1:A:413:VAL:HA	1:A:416:LEU:CB	2.35	0.56
1:A:420:ILE:CG1	1:A:421:GLY:N	2.68	0.56
2:B:136:PRO:HG2	2:B:139:TRP:CA	2.35	0.56
3:C:62:TRP:HZ2	3:C:88:TRP:O	1.85	0.56
3:C:63:TYR:CE1	3:C:115:ASN:O	2.58	0.56
3:C:67:LEU:HD11	3:C:113:ARG:O	2.05	0.56
3:C:109:ASN:C	3:C:109:ASN:OD1	2.44	0.56
3:C:231:ASN:O	3:C:235:PRO:HD3	2.06	0.56
3:C:429:ILE:CG1	3:C:430:VAL:N	2.69	0.56
1:D:16:ASN:ND2	1:D:16:ASN:N	2.52	0.56
1:D:52:THR:OG1	1:D:53:ASN:N	2.39	0.56
1:D:102:ILE:CG1	4:E:98:GLN:HE21	2.12	0.56
1:D:284:PHE:CE2	1:D:424:SER:CB	2.86	0.56
4:E:310:THR:HB	4:E:313:THR:HG22	1.88	0.56
1:A:64:ARG:CA	1:A:66:ARG:NH1	2.63	0.56
1:A:175:GLU:N	1:A:176:TRP:CE3	2.74	0.56
2:B:269:LYS:HD2	2:B:269:LYS:C	2.26	0.56
3:C:31:VAL:HG13	3:C:31:VAL:O	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:81:ARG:NH1	3:C:111:LEU:HD13	2.19	0.56
1:D:177:VAL:HG12	1:D:208:GLN:HG2	1.88	0.56
1:D:198:TYR:N	1:D:198:TYR:HD1	2.03	0.56
1:D:209:ARG:HG2	1:D:210:ILE:H	1.71	0.56
1:D:250:LEU:O	1:D:253:LEU:HD22	2.06	0.56
1:A:303:PRO:CB	1:A:400:LYS:HE2	2.36	0.56
2:B:46:LYS:CG	2:B:278:PRO:CD	2.84	0.56
2:B:241:LEU:CD1	3:C:314:PHE:CD1	2.90	0.56
3:C:107:PHE:CG	3:C:107:PHE:O	2.58	0.56
3:C:449:VAL:O	3:C:452:THR:HG22	2.06	0.56
1:D:287:SER:HA	1:D:290:ILE:HD13	1.86	0.56
1:D:305:THR:CB	1:D:401:TYR:HD2	2.19	0.56
4:E:22:LYS:HG3	4:E:23:THR:N	2.21	0.56
4:E:27:VAL:HB	4:E:154:GLU:O	2.05	0.56
4:E:47:GLU:OE2	4:E:130:ALA:HB2	2.06	0.56
4:E:151:ASN:HA	4:E:205:PHE:CG	2.40	0.56
4:E:241:PHE:C	4:E:243:PRO:HD2	2.27	0.56
4:E:262:THR:HA	4:E:265:LEU:CG	2.35	0.56
1:A:130:ILE:HD13	1:A:130:ILE:H	1.71	0.55
2:B:132:VAL:HG12	2:B:279:ILE:C	2.26	0.55
2:B:284:LEU:O	2:B:288:MET:CB	2.54	0.55
2:B:409:LYS:CE	3:C:423:ILE:HG22	2.37	0.55
3:C:20:HIS:O	3:C:20:HIS:CG	2.58	0.55
3:C:42:LEU:HA	3:C:54:THR:CG2	2.33	0.55
3:C:77:ILE:HD11	3:C:80:LEU:CD1	2.35	0.55
3:C:114:PRO:HG2	3:C:115:ASN:N	2.22	0.55
2:B:65:LEU:HD23	2:B:110:VAL:CG1	2.36	0.55
2:B:218:LEU:C	2:B:219:PHE:CD1	2.80	0.55
3:C:56:VAL:HG22	3:C:124:ALA:HB3	1.87	0.55
3:C:185:THR:CG2	3:C:187:ASN:H	2.18	0.55
3:C:216:THR:C	3:C:217:PHE:CD1	2.77	0.55
3:C:310:LEU:O	3:C:314:PHE:CD2	2.59	0.55
3:C:454:ASP:O	3:C:458:MET:N	2.39	0.55
1:D:56:LEU:HD11	1:D:100:PHE:CE2	2.41	0.55
4:E:103:TYR:CD2	4:E:104:TYR:CD1	2.95	0.55
4:E:161:ALA:HA	4:E:163:GLU:OE2	2.07	0.55
4:E:189:PRO:HB2	4:E:211:PHE:CD2	2.42	0.55
1:A:59:GLN:NE2	1:A:117:MET:CG	2.62	0.55
1:A:243:MET:CG	1:A:306:HIS:ND1	2.69	0.55
1:A:298:THR:O	1:A:301:ARG:HG2	2.06	0.55
2:B:304:LEU:HD23	2:B:304:LEU:C	2.26	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:480:ARG:C	3:C:482:PRO:HD2	2.26	0.55
1:D:21:PRO:HB3	1:D:62:ASP:CG	2.26	0.55
1:D:67:TRP:CD1	1:D:71:ASP:HB3	2.42	0.55
1:D:209:ARG:CG	1:D:210:ILE:N	2.67	0.55
1:D:305:THR:HG22	1:D:400:LYS:HB3	1.88	0.55
4:E:62:TYR:C	4:E:64:LEU:H	2.07	0.55
4:E:74:ILE:C	4:E:76:LEU:H	2.10	0.55
4:E:99:PHE:CB	4:E:102:ALA:HB3	2.33	0.55
4:E:136:PHE:CD2	4:E:472:ASN:HA	2.41	0.55
1:A:37:LEU:H	1:A:164:ARG:HH22	1.55	0.55
1:A:45:GLU:CD	1:A:134:HIS:HD1	2.09	0.55
1:A:50:VAL:HG12	1:A:52:THR:CG2	2.36	0.55
1:A:265:PRO:HD2	1:A:266:SER:H	1.70	0.55
1:A:285:VAL:HG13	1:A:286:ILE:N	2.21	0.55
1:A:295:VAL:O	1:A:299:HIS:HB2	2.06	0.55
2:B:300:VAL:O	2:B:304:LEU:N	2.39	0.55
2:B:438:LEU:HD22	2:B:441:TYR:CD2	2.41	0.55
2:B:440:LEU:C	2:B:443:PHE:HB3	2.26	0.55
3:C:36:SER:HB3	3:C:59:ASP:HB2	1.88	0.55
3:C:147:LYS:HE2	3:C:216:THR:CG2	2.37	0.55
3:C:274:THR:HG22	3:C:275:SER:N	2.21	0.55
1:D:37:LEU:CB	1:D:54:VAL:HG13	2.36	0.55
4:E:172:ILE:HG21	4:E:174:PRO:HG2	1.88	0.55
1:A:144:MET:HB2	1:A:203:TYR:HB2	1.87	0.55
1:A:163:ASP:C	1:A:164:ARG:HG3	2.25	0.55
1:A:294:VAL:CG1	1:A:295:VAL:H	2.19	0.55
2:B:28:LYS:CG	2:B:154:SER:O	2.54	0.55
2:B:249:MET:SD	2:B:250:SER:N	2.69	0.55
2:B:441:TYR:CA	2:B:444:ILE:HG22	2.36	0.55
3:C:80:LEU:O	3:C:112:VAL:CG2	2.54	0.55
3:C:110:VAL:HG22	3:C:120:TRP:CG	2.42	0.55
3:C:180:ASP:N	3:C:181:PRO:CD	2.69	0.55
3:C:311:ASN:O	3:C:315:ARG:CA	2.54	0.55
3:C:434:LYS:CG	3:C:435:GLU:N	2.67	0.55
1:D:43:VAL:CG2	1:D:50:VAL:HG13	2.37	0.55
4:E:13:ASP:C	4:E:13:ASP:OD1	2.43	0.55
4:E:27:VAL:HB	4:E:154:GLU:C	2.27	0.55
4:E:55:ILE:HG21	4:E:119:PRO:HG2	1.88	0.55
1:A:54:VAL:O	1:A:122:ALA:N	2.40	0.55
1:A:265:PRO:O	1:A:268:SER:HB3	2.06	0.55
2:B:10:VAL:O	2:B:13:GLU:HB2	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:262:PHE:HD1	2:B:262:PHE:N	2.04	0.55
2:B:272:GLU:HG3	2:B:275:LEU:HD12	1.87	0.55
3:C:95:GLN:HB2	3:C:147:LYS:O	2.06	0.55
3:C:161:ASP:HA	3:C:199:LYS:HG2	1.89	0.55
3:C:195:LYS:CE	3:C:217:PHE:HB3	2.32	0.55
3:C:429:ILE:C	3:C:429:ILE:HD12	2.27	0.55
1:D:167:LEU:HD11	1:D:178:MET:HB2	1.76	0.55
4:E:81:SER:C	4:E:83:LEU:H	2.09	0.55
4:E:270:GLN:O	4:E:273:PRO:CG	2.54	0.55
4:E:452:TRP:HA	4:E:452:TRP:CE3	2.41	0.55
1:A:132:VAL:O	1:A:274:ILE:CG2	2.55	0.55
1:A:167:LEU:HD23	1:A:167:LEU:O	2.06	0.55
1:A:201:ILE:CG2	1:A:203:TYR:CE1	2.90	0.55
1:A:242:LYS:HB2	1:A:245:LEU:HB3	1.88	0.55
1:A:248:SER:C	2:B:257:LEU:HD11	2.26	0.55
1:A:262:GLU:C	1:A:265:PRO:HD2	2.26	0.55
2:B:50:MET:HB3	2:B:126:SER:OG	2.06	0.55
2:B:283:TYR:HD1	2:B:283:TYR:H	1.54	0.55
3:C:67:LEU:CB	3:C:116:GLY:HA2	2.33	0.55
3:C:204:ASP:O	3:C:207:PRO:HG2	2.05	0.55
1:D:66:ARG:HD3	1:D:66:ARG:N	2.22	0.55
1:D:167:LEU:CG	1:D:178:MET:CB	2.77	0.55
1:D:289:ILE:O	1:D:293:VAL:HG23	2.06	0.55
4:E:19:LYS:HG3	4:E:20:PRO:HD2	1.89	0.55
4:E:26:HIS:O	4:E:27:VAL:O	2.25	0.55
4:E:469:GLY:O	4:E:473:GLN:HB2	2.06	0.55
1:A:35:LEU:C	1:A:35:LEU:CD2	2.75	0.55
1:A:61:ILE:CG2	1:A:115:LYS:HA	2.36	0.55
1:A:218:VAL:CG1	1:A:219:ILE:N	2.69	0.55
1:A:235:LEU:HA	2:B:306:HIS:HD2	1.67	0.55
1:A:262:GLU:HG2	4:E:271:LYS:NZ	2.22	0.55
1:A:418:CYS:O	1:A:422:THR:HB	2.06	0.55
2:B:31:VAL:HG21	2:B:86:TRP:HZ3	1.72	0.55
2:B:226:VAL:O	2:B:230:LEU:CG	2.53	0.55
2:B:262:PHE:CD1	2:B:262:PHE:N	2.72	0.55
3:C:41:ASN:ND2	3:C:185:THR:OG1	2.39	0.55
3:C:240:SER:O	3:C:244:ALA:N	2.37	0.55
4:E:184:THR:CG2	4:E:215:GLN:HG2	2.37	0.55
1:A:76:LYS:HE3	1:A:112:TYR:CE2	2.42	0.55
1:A:93:TYR:N	1:A:93:TYR:CD1	2.75	0.55
1:A:279:LEU:CD1	1:A:282:MET:HB3	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:40:LEU:HD22	2:B:51:THR:O	2.06	0.55
2:B:108:VAL:HG12	2:B:109:LEU:N	2.22	0.55
2:B:132:VAL:C	2:B:279:ILE:HA	2.28	0.55
2:B:247:GLU:CD	3:C:320:HIS:NE2	2.59	0.55
3:C:13:ILE:CG2	3:C:82:LEU:HD21	2.37	0.55
3:C:13:ILE:HG23	3:C:82:LEU:HD21	1.89	0.55
3:C:37:LEU:HD12	3:C:217:PHE:CE2	2.42	0.55
3:C:221:ILE:HG13	3:C:222:ARG:N	2.20	0.55
3:C:241:PHE:O	3:C:245:LEU:N	2.27	0.55
3:C:247:PHE:O	3:C:250:PRO:HG3	2.07	0.55
3:C:426:THR:O	3:C:429:ILE:HG23	2.07	0.55
1:D:17:LYS:CD	1:D:84:ASP:HA	2.37	0.55
1:D:46:VAL:CG2	1:D:272:PRO:HD3	2.37	0.55
1:D:187:TRP:CH2	1:D:189:TYR:CB	2.86	0.55
1:D:254:THR:HG23	1:D:255:VAL:N	2.22	0.55
4:E:33:LYS:NZ	4:E:160:SER:OG	2.38	0.55
1:A:89:ASP:OD2	1:A:151:TYR:CE2	2.60	0.55
1:A:117:MET:CG	1:A:119:THR:HG23	2.37	0.55
1:A:230:VAL:CG1	1:A:414:PHE:HZ	2.15	0.55
2:B:53:SER:HB3	3:C:99:ASP:OD1	2.05	0.55
2:B:440:LEU:HA	2:B:443:PHE:CB	2.36	0.55
3:C:58:MET:CE	3:C:122:PRO:HD2	2.36	0.55
3:C:67:LEU:HD12	3:C:116:GLY:N	2.22	0.55
3:C:188:GLY:HA3	3:C:190:TRP:CZ3	2.42	0.55
3:C:260:ALA:HB3	3:C:313:HIS:NE2	2.22	0.55
3:C:300:THR:CA	3:C:303:VAL:HG23	2.37	0.55
1:D:46:VAL:CB	1:D:272:PRO:HD3	2.37	0.55
1:D:187:TRP:HD1	1:D:197:PRO:O	1.85	0.55
1:D:395:ALA:O	1:D:399:TRP:CD2	2.60	0.55
1:D:409:ILE:HG13	1:D:410:LEU:N	2.22	0.55
4:E:100:GLU:HB2	4:E:122:ILE:HG12	1.89	0.55
4:E:113:GLY:C	4:E:115:MET:SD	2.85	0.55
4:E:151:ASN:HA	4:E:205:PHE:CB	2.36	0.55
4:E:238:LEU:O	4:E:242:LEU:N	2.38	0.55
1:A:67:TRP:CB	1:A:71:ASP:HB3	2.37	0.54
1:A:105:MET:O	1:A:105:MET:HG2	2.06	0.54
2:B:298:SER:HA	2:B:301:VAL:CG2	2.38	0.54
3:C:30:VAL:HG22	3:C:158:ILE:H	1.66	0.54
3:C:53:THR:HA	3:C:126:PHE:O	2.07	0.54
3:C:258:SER:O	3:C:261:ILE:HB	2.07	0.54
3:C:272:LEU:O	3:C:276:GLN:HG2	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:460:ILE:O	3:C:463:PRO:HG2	2.06	0.54
1:D:49:ILE:CD1	1:D:125:LYS:HE3	2.36	0.54
4:E:172:ILE:HG23	4:E:175:GLU:N	2.21	0.54
1:A:89:ASP:OD2	1:A:150:THR:CG2	2.45	0.54
1:A:160:PRO:HG2	1:A:185:LYS:HZ1	1.71	0.54
1:A:163:ASP:OD1	1:A:164:ARG:N	2.39	0.54
1:A:171:MET:HG2	1:A:174:GLY:N	2.23	0.54
1:A:292:THR:CA	1:A:296:ILE:CD1	2.81	0.54
1:A:420:ILE:HG13	1:A:421:GLY:H	1.72	0.54
2:B:75:ILE:HG22	3:C:27:ASN:HB3	1.90	0.54
2:B:227:PRO:C	2:B:231:ILE:HG12	2.27	0.54
3:C:8:ILE:CD1	3:C:69:TRP:HZ3	2.19	0.54
3:C:94:LEU:HB2	3:C:98:ASN:CB	2.33	0.54
3:C:219:LEU:HD11	3:C:221:ILE:HG22	1.87	0.54
1:D:47:ASN:O	1:D:48:GLN:CG	2.47	0.54
1:D:146:LEU:HD12	1:D:146:LEU:N	2.19	0.54
4:E:37:THR:OG1	4:E:54:TRP:CE3	2.60	0.54
4:E:101:VAL:O	4:E:119:PRO:HB2	2.07	0.54
4:E:425:SER:O	4:E:429:GLN:N	2.25	0.54
1:A:41:ILE:HG12	1:A:51:GLU:O	2.07	0.54
1:A:160:PRO:HG3	1:A:185:LYS:HE2	1.89	0.54
1:A:291:VAL:O	1:A:294:VAL:HG12	2.06	0.54
1:A:305:THR:CB	1:A:401:TYR:HB3	2.37	0.54
2:B:281:ILE:H	2:B:281:ILE:CD1	2.18	0.54
2:B:432:ALA:O	2:B:436:ASP:CG	2.46	0.54
3:C:30:VAL:HG23	3:C:156:ASN:CA	2.38	0.54
3:C:192:ILE:CD1	3:C:221:ILE:CG2	2.86	0.54
3:C:201:ILE:HB	3:C:213:GLN:OE1	2.06	0.54
3:C:228:TYR:CD1	3:C:229:VAL:HG22	2.43	0.54
1:A:408:HIS:C	1:A:412:CYS:SG	2.86	0.54
2:B:56:LEU:HB2	2:B:120:PRO:HG2	1.89	0.54
2:B:93:MET:HG3	2:B:206:ASP:OD2	2.06	0.54
2:B:101:GLU:OE1	2:B:123:ILE:CG2	2.55	0.54
2:B:256:LEU:HD12	2:B:302:LEU:HD13	1.89	0.54
3:C:17:TYR:CE2	3:C:19:LYS:HA	2.41	0.54
3:C:65:HIS:HD2	3:C:65:HIS:N	1.90	0.54
3:C:83:ARG:HB3	3:C:84:PRO:CD	2.31	0.54
3:C:481:PRO:N	3:C:482:PRO:HD2	2.22	0.54
1:D:101:ALA:O	1:D:102:ILE:HD13	2.07	0.54
1:D:184:TRP:CE3	1:D:185:LYS:O	2.60	0.54
1:D:245:LEU:HD21	4:E:255:ILE:CG1	2.30	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:295:VAL:O	1:D:299:HIS:HB2	2.07	0.54
4:E:47:GLU:O	4:E:126:THR:HA	2.07	0.54
1:A:36:GLN:O	1:A:38:ILE:HD12	2.07	0.54
1:A:225:PHE:HD1	1:A:229:THR:HG1	1.54	0.54
1:A:297:ASN:O	1:A:301:ARG:N	2.40	0.54
1:A:301:ARG:HH12	1:A:406:ILE:HD11	1.73	0.54
2:B:45:GLU:CG	2:B:279:ILE:HD11	2.37	0.54
2:B:242:PRO:HG2	2:B:243:PRO:CD	2.38	0.54
3:C:12:LEU:HD12	3:C:16:LYS:CD	2.37	0.54
3:C:191:GLU:N	3:C:222:ARG:O	2.24	0.54
1:D:38:ILE:O	1:D:169:THR:HG21	2.08	0.54
1:D:230:VAL:HG22	1:D:234:TYR:HE1	1.72	0.54
1:D:233:PHE:HB3	1:D:410:LEU:HB3	1.90	0.54
4:E:419:CYS:HA	4:E:422:ILE:HG12	1.90	0.54
1:A:7:LEU:O	1:A:11:LEU:HG	2.08	0.54
1:A:74:GLY:O	1:A:75:ILE:HG23	2.07	0.54
1:A:148:ILE:HG21	1:A:198:TYR:HB2	1.86	0.54
1:A:151:TYR:HB2	1:A:156:VAL:HG13	1.88	0.54
2:B:255:ALA:O	2:B:259:LEU:N	2.34	0.54
3:C:155:ALA:H	3:C:211:ASN:HA	1.71	0.54
3:C:180:ASP:HB2	3:C:195:LYS:CG	2.38	0.54
3:C:434:LYS:NZ	3:C:435:GLU:HG2	2.22	0.54
3:C:452:THR:HA	3:C:455:ARG:HD3	1.89	0.54
1:D:53:ASN:HD21	1:D:121:PRO:C	2.11	0.54
1:D:132:VAL:C	1:D:274:ILE:HG23	2.28	0.54
1:D:141:ASN:HB3	1:D:206:ILE:HD11	1.89	0.54
1:D:141:ASN:HB3	1:D:206:ILE:HG12	1.89	0.54
4:E:284:LYS:HA	4:E:287:ILE:CG2	2.37	0.54
2:B:95:ASN:CB	2:B:127:SER:H	2.21	0.54
2:B:135:PHE:H	2:B:136:PRO:CD	2.21	0.54
2:B:249:MET:HE2	2:B:250:SER:HB3	1.89	0.54
2:B:269:LYS:O	2:B:273:THR:HG23	2.08	0.54
2:B:281:ILE:O	2:B:284:LEU:N	2.41	0.54
3:C:160:MET:N	3:C:213:GLN:HG3	2.23	0.54
3:C:305:ASN:HA	3:C:308:ILE:CB	2.35	0.54
1:D:222:CYS:SG	1:D:225:PHE:CZ	2.93	0.54
1:D:226:SER:HA	1:D:229:THR:OG1	2.07	0.54
1:D:233:PHE:O	1:D:236:PRO:HG2	2.08	0.54
1:D:377:GLU:HA	1:D:380:LYS:CE	2.37	0.54
4:E:44:GLU:CG	4:E:129:ILE:HD12	2.38	0.54
4:E:136:PHE:HD2	4:E:472:ASN:HA	1.73	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:143:LEU:HD12	4:E:210:PHE:O	2.06	0.54
4:E:250:LYS:O	4:E:253:LEU:HB3	2.08	0.54
1:A:48:GLN:HB2	1:A:130:ILE:HG23	1.89	0.54
1:A:62:ASP:C	1:A:64:ARG:H	2.11	0.54
1:A:286:ILE:HA	1:A:289:ILE:HB	1.90	0.54
1:A:399:TRP:HA	1:A:399:TRP:HE3	1.72	0.54
2:B:68:ASP:N	2:B:72:TYR:HB3	2.22	0.54
2:B:136:PRO:HD3	2:B:280:ILE:CD1	2.36	0.54
3:C:7:LEU:HD13	3:C:73:GLU:CD	2.27	0.54
3:C:39:LEU:O	3:C:183:ALA:CB	2.55	0.54
1:D:45:GLU:OE2	1:D:272:PRO:O	2.26	0.54
1:D:250:LEU:O	1:D:253:LEU:CD2	2.56	0.54
1:D:291:VAL:HG12	1:D:295:VAL:CG1	2.37	0.54
4:E:183:TRP:HB2	4:E:214:ILE:HD13	1.90	0.54
1:A:67:TRP:CG	1:A:71:ASP:CB	2.90	0.54
1:A:134:HIS:HE1	1:A:209:ARG:HD2	1.72	0.54
2:B:32:ARG:HH21	2:B:60:TRP:C	2.10	0.54
3:C:308:ILE:CG2	3:C:309:VAL:N	2.71	0.54
3:C:466:VAL:O	3:C:470:ILE:HG12	2.08	0.54
1:D:95:ASN:ND2	1:D:127:TYR:C	2.61	0.54
1:D:163:ASP:OD1	1:D:164:ARG:N	2.41	0.54
1:D:276:LYS:O	1:D:280:PHE:CE1	2.61	0.54
1:D:390:GLU:O	1:D:393:SER:HB2	2.07	0.54
4:E:90:VAL:HA	4:E:99:PHE:CE1	2.39	0.54
4:E:95:VAL:HG22	4:E:123:TYR:CE2	2.42	0.54
4:E:110:TYR:CE1	4:E:111:ASN:ND2	2.76	0.54
4:E:128:PRO:C	4:E:129:ILE:HG23	2.27	0.54
4:E:135:PRO:CG	4:E:137:ASP:OD1	2.56	0.54
4:E:248:GLY:C	4:E:250:LYS:H	2.11	0.54
4:E:441:LEU:HD12	4:E:441:LEU:O	2.08	0.54
1:A:17:LYS:HZ2	1:A:83:ASP:HB3	1.71	0.54
2:B:11:LEU:HD22	2:B:11:LEU:N	2.21	0.54
2:B:135:PHE:N	2:B:136:PRO:CD	2.71	0.54
2:B:226:VAL:CG2	2:B:227:PRO:CD	2.84	0.54
2:B:235:ALA:O	2:B:239:PHE:CD2	2.61	0.54
2:B:246:GLY:C	2:B:248:LYS:N	2.60	0.54
2:B:271:PRO:O	2:B:275:LEU:CG	2.55	0.54
3:C:42:LEU:CG	3:C:54:THR:CG2	2.84	0.54
3:C:139:PHE:O	3:C:222:ARG:CG	2.56	0.54
3:C:474:VAL:HA	3:C:477:ASN:ND2	2.23	0.54
1:D:31:ILE:O	1:D:158:ILE:HA	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:135:PHE:CZ	1:D:273:LEU:CB	2.90	0.54
1:D:393:SER:O	1:D:396:ALA:HB3	2.07	0.54
1:D:399:TRP:HA	1:D:399:TRP:CE3	2.43	0.54
4:E:48:ALA:HA	4:E:125:SER:O	2.08	0.54
4:E:71:TYR:CG	4:E:72:GLU:N	2.76	0.54
4:E:127:CYS:SG	4:E:143:LEU:CG	2.94	0.54
4:E:262:THR:CG2	4:E:265:LEU:HD12	2.37	0.54
1:A:100:PHE:CD2	1:A:103:VAL:HG21	2.43	0.53
1:A:433:LEU:O	1:A:433:LEU:HD12	2.08	0.53
3:C:79:ILE:HG23	3:C:111:LEU:HD11	1.90	0.53
3:C:93:VAL:HG21	3:C:151:LEU:CD1	2.37	0.53
3:C:431:LYS:HE2	1:D:382:ILE:CD1	2.38	0.53
1:D:401:TYR:O	1:D:401:TYR:CD1	2.61	0.53
4:E:100:GLU:OE2	4:E:122:ILE:HG12	2.08	0.53
4:E:156:ASN:ND2	4:E:206:GLN:OE1	2.41	0.53
1:A:171:MET:HG3	1:A:173:SER:H	1.73	0.53
1:A:177:VAL:O	1:A:207:MET:HB2	2.08	0.53
1:A:419:ILE:HG22	1:A:420:ILE:H	1.74	0.53
2:B:37:LEU:HD12	2:B:54:VAL:HG11	1.90	0.53
2:B:451:THR:HA	2:B:454:ILE:HD12	1.90	0.53
3:C:256:LYS:HB3	3:C:259:THR:CG2	2.37	0.53
3:C:257:MET:HE1	3:C:320:HIS:O	2.08	0.53
1:D:257:LEU:HA	1:D:260:ILE:HG13	1.90	0.53
1:D:406:ILE:O	1:D:410:LEU:HD23	2.07	0.53
1:A:167:LEU:HA	1:A:170:PHE:CB	2.36	0.53
1:A:250:LEU:CD2	1:A:292:THR:HG22	2.39	0.53
2:B:241:LEU:HD13	3:C:314:PHE:CD2	2.43	0.53
2:B:255:ALA:HA	3:C:265:LEU:HD21	1.90	0.53
3:C:59:ASP:OD1	3:C:121:LEU:CD1	2.55	0.53
3:C:64:ASP:O	3:C:67:LEU:HB3	2.08	0.53
3:C:120:TRP:NE1	3:C:122:PRO:HD3	2.23	0.53
1:D:8:VAL:O	1:D:12:LEU:HD13	2.08	0.53
1:D:420:ILE:HA	1:D:423:VAL:CG2	2.39	0.53
4:E:162:GLU:HA	4:E:190:ALA:H	1.74	0.53
4:E:267:LEU:HA	4:E:270:GLN:CG	2.38	0.53
4:E:281:LEU:HD11	4:E:286:LEU:HD11	1.91	0.53
1:A:287:SER:O	1:A:291:VAL:HG23	2.09	0.53
2:B:196:ASN:OD1	2:B:197:TRP:N	2.41	0.53
2:B:426:LYS:HB3	2:B:430:TYR:CZ	2.42	0.53
3:C:60:HIS:HE1	3:C:160:MET:CE	2.21	0.53
3:C:314:PHE:HA	3:C:320:HIS:O	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:451:GLN:O	3:C:455:ARG:CZ	2.56	0.53
3:C:452:THR:CA	3:C:455:ARG:HD3	2.38	0.53
1:D:3:HIS:HB3	1:D:7:LEU:HG	1.88	0.53
1:D:106:THR:HG23	1:D:107:LYS:HE2	1.90	0.53
1:D:135:PHE:C	1:D:135:PHE:HD1	2.12	0.53
1:D:137:PHE:HB3	1:D:435:GLN:NE2	2.24	0.53
1:D:241:GLU:C	1:D:243:MET:CE	2.77	0.53
1:D:276:LYS:HA	1:D:279:LEU:HD12	1.90	0.53
4:E:23:THR:HG23	4:E:24:LEU:H	1.74	0.53
4:E:228:PRO:O	4:E:232:ILE:N	2.38	0.53
4:E:473:GLN:OE1	4:E:473:GLN:O	2.26	0.53
1:A:187:TRP:HD1	1:A:199:LEU:HD23	1.73	0.53
2:B:38:THR:HG1	2:B:39:SER:H	1.56	0.53
2:B:40:LEU:CB	2:B:52:THR:HG23	2.37	0.53
2:B:88:PRO:HB2	2:B:90:ILE:CD1	2.38	0.53
2:B:137:PHE:CZ	2:B:461:ASN:OD1	2.62	0.53
2:B:160:HIS:CG	2:B:195:LYS:HE2	2.43	0.53
2:B:224:THR:O	2:B:227:PRO:CD	2.49	0.53
2:B:241:LEU:CG	2:B:248:LYS:HE2	2.38	0.53
2:B:248:LYS:HD3	2:B:252:SER:CB	2.07	0.53
2:B:295:VAL:O	2:B:299:VAL:HG23	2.09	0.53
3:C:77:ILE:O	3:C:77:ILE:CG1	2.54	0.53
1:D:63:VAL:HG22	1:D:66:ARG:HD2	1.91	0.53
1:D:92:LEU:H	1:D:92:LEU:HD23	1.73	0.53
1:D:161:GLU:HG3	1:D:162:SER:N	2.24	0.53
1:D:223:LEU:HD23	1:D:223:LEU:O	2.08	0.53
1:D:245:LEU:CG	4:E:255:ILE:HG13	2.38	0.53
1:D:302:SER:HB3	1:D:400:LYS:HG2	1.91	0.53
4:E:258:LEU:HD12	4:E:300:CYS:SG	2.48	0.53
1:A:101:ALA:C	1:A:102:ILE:HG13	2.29	0.53
2:B:15:TYR:O	2:B:15:TYR:HD1	1.92	0.53
2:B:142:CYS:O	2:B:210:TYR:CD1	2.49	0.53
2:B:226:VAL:HG23	2:B:227:PRO:HD3	1.88	0.53
2:B:230:LEU:C	2:B:233:ILE:HG13	2.29	0.53
2:B:261:VAL:O	2:B:265:LEU:HG	2.09	0.53
2:B:467:PRO:O	2:B:469:ALA:N	2.41	0.53
3:C:90:PRO:HD2	3:C:120:TRP:HZ3	1.73	0.53
1:D:115:LYS:HG2	1:D:116:ILE:N	2.23	0.53
1:D:209:ARG:HG3	1:D:210:ILE:H	1.72	0.53
4:E:60:ASN:N	4:E:60:ASN:ND2	2.49	0.53
4:E:127:CYS:SG	4:E:128:PRO:HD2	2.49	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:285:VAL:HG13	1:A:286:ILE:HG13	1.91	0.53
2:B:196:ASN:O	2:B:197:TRP:CD1	2.61	0.53
2:B:287:ILE:C	2:B:287:ILE:HD12	2.29	0.53
3:C:106:TYR:CD1	3:C:107:PHE:CE1	2.96	0.53
3:C:110:VAL:CG2	3:C:120:TRP:HB2	2.39	0.53
3:C:434:LYS:CE	3:C:435:GLU:CG	2.86	0.53
1:D:245:LEU:O	1:D:249:VAL:HG23	2.08	0.53
4:E:1:ASN:HD22	4:E:69:SER:CA	2.22	0.53
4:E:138:TRP:HB2	4:E:213:ILE:HG12	1.91	0.53
4:E:143:LEU:HD12	4:E:143:LEU:N	2.23	0.53
4:E:191:LYS:HB2	4:E:209:ILE:CG2	2.38	0.53
1:A:41:ILE:HG13	1:A:42:ASN:H	1.69	0.53
1:A:95:ASN:OD1	1:A:144:MET:SD	2.66	0.53
1:A:221:PRO:C	1:A:224:LEU:HB3	2.29	0.53
2:B:9:SER:HA	2:B:12:PHE:HD1	1.71	0.53
3:C:204:ASP:C	3:C:207:PRO:HD2	2.29	0.53
3:C:443:VAL:HA	3:C:446:TRP:HD1	1.73	0.53
1:D:64:ARG:CA	1:D:66:ARG:HH11	2.06	0.53
1:D:82:SER:HB3	1:D:118:TRP:CZ3	2.44	0.53
1:D:242:LYS:NZ	4:E:304:LEU:HD11	2.23	0.53
1:D:244:THR:CG2	1:D:245:LEU:N	2.72	0.53
4:E:34:LEU:HA	4:E:54:TRP:O	2.09	0.53
1:A:25:HIS:O	1:A:25:HIS:CG	2.61	0.53
1:A:43:VAL:CB	1:A:50:VAL:HG22	2.38	0.53
1:A:209:ARG:CG	1:A:210:ILE:N	2.69	0.53
2:B:69:PRO:HG2	2:B:70:ALA:H	1.73	0.53
2:B:132:VAL:O	2:B:279:ILE:CA	2.57	0.53
2:B:183:ASN:HB2	3:C:50:GLU:OE2	2.09	0.53
2:B:459:SER:C	2:B:463:PRO:HD2	2.29	0.53
3:C:70:ASN:O	3:C:74:TYR:N	2.42	0.53
3:C:262:CYS:SG	3:C:263:VAL:N	2.82	0.53
1:D:227:PHE:CD1	1:D:231:LEU:HG	2.44	0.53
1:D:301:ARG:NH2	1:D:405:VAL:HB	2.24	0.53
4:E:74:ILE:HD13	4:E:74:ILE:N	2.24	0.53
4:E:271:LYS:NZ	4:E:271:LYS:CB	2.61	0.53
1:A:384:GLU:HA	1:A:387:LYS:CG	2.39	0.53
1:A:416:LEU:HA	1:A:419:ILE:HG22	1.91	0.53
2:B:105:HIS:CG	2:B:105:HIS:O	2.61	0.53
2:B:281:ILE:O	2:B:282:SER:C	2.47	0.53
3:C:110:VAL:HG22	3:C:120:TRP:HB2	1.91	0.53
1:D:104:HIS:HB2	1:D:105:MET:SD	2.49	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:253:LEU:HD23	1:D:254:THR:HB	1.91	0.53
1:D:267:THR:O	1:D:271:VAL:N	2.42	0.53
1:D:432:GLU:O	1:D:436:GLU:OE2	2.27	0.53
4:E:38:ASN:O	4:E:51:THR:CA	2.56	0.53
4:E:71:TYR:HD1	4:E:111:ASN:CG	2.11	0.53
1:A:426:PHE:CD1	1:A:426:PHE:C	2.82	0.52
2:B:147:LYS:CG	2:B:148:SER:N	2.71	0.52
3:C:180:ASP:H	3:C:181:PRO:HD2	1.71	0.52
3:C:274:THR:HA	3:C:277:ARG:HH11	1.74	0.52
1:D:144:MET:CE	1:D:205:PHE:CE1	2.92	0.52
1:D:426:PHE:CE1	1:D:430:LEU:HD12	2.45	0.52
4:E:62:TYR:C	4:E:64:LEU:N	2.62	0.52
4:E:157:LEU:CD1	4:E:208:ILE:HD11	2.38	0.52
4:E:239:VAL:HA	4:E:242:LEU:HD23	1.90	0.52
1:A:24:HIS:CD2	1:A:24:HIS:N	2.76	0.52
1:A:304:SER:CB	1:A:400:LYS:HZ2	2.21	0.52
2:B:95:ASN:HB3	2:B:127:SER:H	1.73	0.52
2:B:106:VAL:HG13	2:B:107:ASN:N	2.24	0.52
2:B:152:ASP:CB	2:B:203:SER:CB	2.82	0.52
2:B:298:SER:O	2:B:301:VAL:CG2	2.58	0.52
2:B:439:PHE:C	2:B:442:ILE:HB	2.29	0.52
2:B:444:ILE:CG2	2:B:445:THR:H	2.22	0.52
3:C:96:ASN:OD1	3:C:97:ASN:ND2	2.42	0.52
3:C:110:VAL:HG12	3:C:111:LEU:N	2.23	0.52
3:C:181:PRO:HA	3:C:184:PHE:HB2	1.90	0.52
3:C:199:LYS:C	3:C:199:LYS:HZ2	2.12	0.52
4:E:35:THR:CB	4:E:54:TRP:HE3	2.18	0.52
4:E:61:ASP:OD1	4:E:63:ARG:CB	2.57	0.52
4:E:128:PRO:HD2	4:E:141:CYS:HA	1.91	0.52
4:E:183:TRP:HB2	4:E:215:GLN:O	2.08	0.52
4:E:303:VAL:O	4:E:307:SER:N	2.30	0.52
4:E:444:LYS:N	4:E:444:LYS:HD2	2.22	0.52
1:A:90:LEU:O	1:A:91:VAL:HG23	2.09	0.52
1:A:160:PRO:HG2	1:A:185:LYS:HZ3	1.72	0.52
2:B:252:SER:O	2:B:255:ALA:HB3	2.09	0.52
3:C:60:HIS:ND1	3:C:90:PRO:HG2	2.24	0.52
3:C:478:PHE:O	3:C:482:PRO:CD	2.54	0.52
4:E:174:PRO:HD3	4:E:185:ILE:HG21	1.91	0.52
4:E:272:VAL:N	4:E:273:PRO:CD	2.72	0.52
1:A:7:LEU:HD22	1:A:70:ALA:HB1	1.90	0.52
2:B:11:LEU:N	2:B:11:LEU:CD2	2.72	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:21:PRO:HA	2:B:64:ARG:HD2	1.92	0.52
2:B:181:THR:HG23	2:B:183:ASN:H	1.74	0.52
3:C:29:GLU:O	3:C:155:ALA:O	2.26	0.52
3:C:180:ASP:CB	3:C:195:LYS:HB2	2.37	0.52
1:D:46:VAL:HG22	1:D:272:PRO:CD	2.39	0.52
1:D:252:SER:OG	4:E:259:LEU:HD22	2.10	0.52
4:E:184:THR:HG23	4:E:215:GLN:HG2	1.90	0.52
4:E:228:PRO:O	4:E:232:ILE:HB	2.10	0.52
1:A:37:LEU:HD22	1:A:54:VAL:HG12	1.90	0.52
1:A:187:TRP:CE2	1:A:196:THR:CG2	2.88	0.52
1:A:405:VAL:HA	1:A:408:HIS:ND1	2.24	0.52
2:B:22:SER:HB3	2:B:29:VAL:HG22	1.91	0.52
2:B:45:GLU:OE1	2:B:279:ILE:CD1	2.54	0.52
2:B:234:LEU:HA	2:B:237:LEU:HD23	1.92	0.52
2:B:242:PRO:HA	2:B:248:LYS:HG2	1.90	0.52
2:B:272:GLU:O	2:B:275:LEU:HB2	2.09	0.52
3:C:279:PRO:C	3:C:282:ALA:HB3	2.30	0.52
1:D:27:HIS:N	1:D:27:HIS:ND1	2.57	0.52
1:D:390:GLU:O	1:D:394:ASN:ND2	2.43	0.52
4:E:104:TYR:CD1	4:E:104:TYR:N	2.76	0.52
4:E:136:PHE:CZ	4:E:217:LYS:CD	2.92	0.52
4:E:140:ASN:ND2	4:E:212:LEU:H	2.08	0.52
4:E:173:ASP:CB	4:E:188:ARG:HH11	2.22	0.52
1:A:67:TRP:CD1	1:A:71:ASP:OD1	2.62	0.52
1:A:213:TYR:CG	1:A:214:PHE:N	2.76	0.52
3:C:248:TYR:OH	3:C:461:ILE:HG12	2.09	0.52
1:D:28:PHE:N	1:D:28:PHE:CD1	2.76	0.52
1:D:37:LEU:CA	1:D:54:VAL:HG13	2.39	0.52
1:D:43:VAL:HG11	1:D:50:VAL:HG22	1.90	0.52
1:D:387:LYS:HD2	1:D:390:GLU:OE2	2.10	0.52
4:E:2:GLU:HA	4:E:5:ARG:CG	2.38	0.52
4:E:19:LYS:HZ1	4:E:154:GLU:CB	2.20	0.52
4:E:143:LEU:O	4:E:210:PHE:HB2	2.10	0.52
1:A:20:ARG:HG3	1:A:22:VAL:HG22	1.90	0.52
1:A:33:VAL:HG22	1:A:158:ILE:HG12	1.86	0.52
1:A:135:PHE:HB3	1:A:272:PRO:O	2.09	0.52
1:A:195:ASP:C	1:A:195:ASP:OD1	2.48	0.52
2:B:67:TRP:HB2	2:B:72:TYR:CB	2.36	0.52
2:B:81:PRO:HD2	3:C:20:HIS:ND1	2.25	0.52
2:B:86:TRP:CH2	2:B:156:VAL:HG21	2.45	0.52
2:B:297:LEU:O	2:B:301:VAL:HG13	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:451:THR:O	2:B:455:PHE:HB2	2.10	0.52
3:C:256:LYS:CB	3:C:259:THR:HG22	2.40	0.52
1:D:46:VAL:HA	1:D:272:PRO:CD	2.39	0.52
1:D:89:ASP:HB2	1:D:149:TRP:HD1	1.75	0.52
1:D:252:SER:HB2	4:E:259:LEU:CD2	2.36	0.52
1:D:302:SER:HB2	1:D:305:THR:HG23	1.92	0.52
4:E:59:TRP:CH2	4:E:107:VAL:CG1	2.76	0.52
4:E:75:ASP:HB3	4:E:111:ASN:ND2	2.24	0.52
4:E:104:TYR:N	4:E:104:TYR:HD1	2.07	0.52
4:E:436:ASN:CA	4:E:439:TRP:NE1	2.72	0.52
1:A:46:VAL:HG23	1:A:271:VAL:CA	2.39	0.52
1:A:56:LEU:CD2	1:A:57:ARG:N	2.73	0.52
1:A:100:PHE:HB3	1:A:103:VAL:HG21	1.92	0.52
1:A:262:GLU:O	1:A:265:PRO:CD	2.58	0.52
1:A:379:VAL:HA	1:A:382:ILE:CD1	2.38	0.52
1:A:397:GLU:HA	1:A:400:LYS:HD2	1.91	0.52
1:A:431:ILE:HD12	1:A:431:ILE:N	2.25	0.52
2:B:287:ILE:O	2:B:291:VAL:N	2.43	0.52
2:B:312:HIS:O	2:B:312:HIS:CG	2.62	0.52
2:B:440:LEU:HA	2:B:443:PHE:HB3	1.92	0.52
3:C:12:LEU:O	3:C:14:VAL:N	2.43	0.52
3:C:16:LYS:HE2	3:C:16:LYS:HA	1.91	0.52
3:C:45:LEU:HB2	3:C:190:TRP:CZ3	2.45	0.52
3:C:264:LEU:HD11	3:C:306:CYS:O	2.09	0.52
3:C:296:MET:HA	3:C:296:MET:HE3	1.90	0.52
1:D:33:VAL:HG13	1:D:201:ILE:CD1	2.40	0.52
1:D:67:TRP:CD1	1:D:71:ASP:CB	2.93	0.52
4:E:103:TYR:HB3	4:E:104:TYR:CD1	2.44	0.52
4:E:184:THR:HG23	4:E:215:GLN:C	2.30	0.52
1:A:102:ILE:HG21	2:B:149:TYR:HD2	1.75	0.52
1:A:209:ARG:HG3	1:A:210:ILE:H	1.72	0.52
1:A:258:LEU:HD11	4:E:264:PHE:CD2	2.44	0.52
2:B:130:ILE:HG21	2:B:134:TYR:CE2	2.44	0.52
3:C:18:ASN:O	3:C:21:VAL:O	2.28	0.52
3:C:155:ALA:CA	3:C:211:ASN:HA	2.40	0.52
3:C:429:ILE:HG13	3:C:430:VAL:H	1.74	0.52
1:D:37:LEU:HD13	1:D:54:VAL:HG22	1.91	0.52
1:D:56:LEU:HB2	1:D:120:PRO:CD	2.39	0.52
4:E:36:LEU:HD12	4:E:173:ASP:CG	2.29	0.52
4:E:172:ILE:HG13	4:E:174:PRO:CG	2.39	0.52
4:E:240:TYR:CE2	4:E:453:ILE:HG21	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:240:TYR:CE1	4:E:303:VAL:HG21	2.45	0.52
4:E:436:ASN:CA	4:E:439:TRP:HE1	2.15	0.52
4:E:447:ASP:O	4:E:450:CYS:HB2	2.10	0.52
1:A:135:PHE:CZ	1:A:210:ILE:HG12	2.45	0.52
3:C:2:ASN:ND2	3:C:71:ALA:CB	2.72	0.52
3:C:12:LEU:CG	3:C:16:LYS:HG2	2.40	0.52
3:C:63:TYR:O	3:C:65:HIS:CD2	2.63	0.52
3:C:87:ILE:HG21	3:C:110:VAL:HG11	1.91	0.52
3:C:149:THR:HG22	3:C:214:ASP:HB3	1.87	0.52
1:D:263:LEU:HD21	4:E:266:PHE:HZ	1.75	0.52
1:D:287:SER:C	1:D:290:ILE:HG12	2.31	0.52
4:E:31:THR:N	4:E:58:GLN:O	2.38	0.52
4:E:138:TRP:HB3	4:E:214:ILE:O	2.09	0.52
4:E:173:ASP:H	4:E:188:ARG:HB2	1.75	0.52
1:A:48:GLN:HB2	1:A:128:CYS:O	2.09	0.51
1:A:265:PRO:CD	1:A:266:SER:N	2.71	0.51
2:B:235:ALA:HB1	2:B:239:PHE:HE2	1.73	0.51
2:B:282:SER:O	2:B:286:PHE:CD2	2.62	0.51
3:C:67:LEU:CD1	3:C:116:GLY:HA2	2.37	0.51
3:C:422:GLY:O	3:C:425:SER:HB2	2.11	0.51
1:D:86:TRP:O	1:D:86:TRP:CE3	2.63	0.51
1:D:118:TRP:CD1	1:D:118:TRP:C	2.83	0.51
1:D:303:PRO:CB	1:D:400:LYS:NZ	2.71	0.51
4:E:239:VAL:CA	4:E:242:LEU:HD23	2.39	0.51
1:A:67:TRP:CD1	1:A:71:ASP:CB	2.93	0.51
1:A:265:PRO:HG2	1:A:266:SER:N	2.25	0.51
2:B:32:ARG:HH21	2:B:60:TRP:CA	2.24	0.51
2:B:45:GLU:OE2	2:B:277:VAL:HB	2.10	0.51
2:B:451:THR:HA	2:B:454:ILE:HB	1.91	0.51
3:C:136:TYR:CD1	3:C:142:GLN:HB3	2.43	0.51
3:C:434:LYS:HE2	3:C:435:GLU:HG2	1.92	0.51
3:C:481:PRO:HG2	3:C:482:PRO:HD3	1.92	0.51
1:D:230:VAL:O	1:D:234:TYR:HD1	1.93	0.51
1:D:305:THR:HB	1:D:401:TYR:HD2	1.76	0.51
1:D:411:LEU:O	1:D:415:MET:CG	2.56	0.51
1:A:67:TRP:NE1	1:A:71:ASP:CG	2.63	0.51
1:A:174:GLY:HA2	1:A:176:TRP:CZ3	2.45	0.51
1:A:239:SER:OG	2:B:312:HIS:HA	2.10	0.51
1:A:285:VAL:CG1	1:A:286:ILE:N	2.74	0.51
2:B:54:VAL:C	2:B:55:PHE:HD1	2.12	0.51
2:B:80:ILE:HG23	3:C:20:HIS:CE1	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:459:SER:O	2:B:463:PRO:HB2	2.11	0.51
3:C:30:VAL:CG2	3:C:158:ILE:H	2.21	0.51
3:C:317:PRO:HD2	3:C:447:ASN:HB3	1.92	0.51
3:C:447:ASN:O	3:C:449:VAL:CG2	2.33	0.51
3:C:462:THR:O	3:C:465:MET:HB3	2.10	0.51
1:D:53:ASN:HD22	1:D:123:ILE:HG13	1.75	0.51
1:D:85:VAL:HG23	1:D:108:LEU:CD1	2.40	0.51
1:D:145:LYS:NZ	1:D:200:ASP:OD2	2.43	0.51
1:D:233:PHE:HD1	1:D:409:ILE:CD1	2.24	0.51
4:E:100:GLU:HB2	4:E:122:ILE:CG1	2.39	0.51
4:E:267:LEU:HD12	4:E:270:GLN:CD	2.30	0.51
1:A:156:VAL:CG2	1:A:157:SER:H	2.23	0.51
1:A:285:VAL:O	1:A:288:SER:HB3	2.11	0.51
1:A:385:HIS:HD1	1:A:385:HIS:C	2.14	0.51
2:B:27:ASP:C	2:B:28:LYS:HD2	2.31	0.51
2:B:239:PHE:N	2:B:239:PHE:CD1	2.76	0.51
3:C:54:THR:O	3:C:126:PHE:CD2	2.63	0.51
3:C:113:ARG:HD2	3:C:117:TYR:HB2	1.92	0.51
3:C:467:LEU:HA	3:C:470:ILE:HB	1.92	0.51
1:D:91:VAL:HG22	1:D:96:ALA:CB	2.39	0.51
1:D:112:TYR:HD1	1:D:113:THR:N	2.08	0.51
1:D:135:PHE:CD1	1:D:210:ILE:HD11	2.45	0.51
1:D:227:PHE:CD1	1:D:227:PHE:C	2.84	0.51
1:D:229:THR:HA	1:D:232:VAL:HG21	1.92	0.51
4:E:39:LEU:CD2	4:E:183:TRP:HZ2	2.16	0.51
4:E:91:LEU:H	4:E:95:VAL:HG21	1.74	0.51
4:E:195:ASN:HB3	4:E:204:ASP:HA	1.92	0.51
4:E:418:ALA:HA	4:E:421:PHE:HD2	1.73	0.51
1:A:87:LEU:HB3	1:A:118:TRP:CZ3	2.45	0.51
1:A:166:ASP:HB2	1:A:181:TYR:CG	2.46	0.51
1:A:187:TRP:HZ2	1:A:196:THR:HA	1.75	0.51
1:A:305:THR:HG21	1:A:401:TYR:CG	2.45	0.51
1:A:417:ILE:CA	1:A:420:ILE:HG12	2.37	0.51
2:B:26:GLY:O	2:B:28:LYS:CE	2.59	0.51
2:B:32:ARG:NE	2:B:59:ALA:O	2.44	0.51
2:B:33:VAL:HG13	2:B:158:LEU:HD21	1.92	0.51
2:B:38:THR:HG22	2:B:55:PHE:CE1	2.45	0.51
2:B:72:TYR:O	2:B:76:LYS:HG2	2.11	0.51
2:B:129:THR:C	2:B:131:LYS:H	2.13	0.51
3:C:278:LEU:O	3:C:278:LEU:HD13	2.10	0.51
1:D:260:ILE:HA	1:D:263:LEU:HD12	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:20:ARG:CG	1:A:20:ARG:NH1	2.37	0.51
1:A:48:GLN:HB3	1:A:130:ILE:HD12	1.93	0.51
1:A:54:VAL:HG22	1:A:122:ALA:CB	2.41	0.51
1:A:280:PHE:O	1:A:284:PHE:CD1	2.64	0.51
2:B:58:LEU:HD11	2:B:118:TRP:HB3	1.91	0.51
2:B:129:THR:HG22	2:B:142:CYS:SG	2.51	0.51
3:C:149:THR:OG1	3:C:150:ALA:N	2.43	0.51
3:C:241:PHE:HZ	1:D:293:VAL:HG22	1.72	0.51
1:D:65:LEU:CD2	1:D:110:LEU:HD13	2.41	0.51
1:D:101:ALA:C	1:D:102:ILE:CD1	2.78	0.51
1:D:130:ILE:C	1:D:134:HIS:HB2	2.31	0.51
1:D:137:PHE:HB2	1:D:435:GLN:HB2	1.87	0.51
1:D:144:MET:HE3	1:D:205:PHE:CE1	2.46	0.51
1:D:240:GLY:C	1:D:242:LYS:N	2.64	0.51
1:D:295:VAL:HG23	1:D:296:ILE:N	2.26	0.51
1:D:298:THR:O	1:D:301:ARG:CB	2.58	0.51
4:E:453:ILE:CD1	4:E:454:ALA:N	2.72	0.51
1:A:256:PHE:HE1	2:B:261:VAL:HG23	1.72	0.51
1:A:264:ILE:N	1:A:265:PRO:CD	2.73	0.51
2:B:93:MET:HG3	2:B:206:ASP:CG	2.30	0.51
2:B:108:VAL:CG1	2:B:117:SER:O	2.58	0.51
2:B:130:ILE:CB	2:B:134:TYR:CD2	2.84	0.51
2:B:262:PHE:HA	2:B:265:LEU:HD12	1.92	0.51
3:C:37:LEU:HD21	3:C:148:PHE:CD2	2.45	0.51
3:C:449:VAL:HG12	3:C:452:THR:CB	2.41	0.51
1:D:20:ARG:CG	1:D:20:ARG:NH1	2.38	0.51
1:D:101:ALA:C	1:D:102:ILE:HD12	2.30	0.51
1:D:243:MET:H	1:D:243:MET:CE	2.22	0.51
1:D:298:THR:CA	1:D:301:ARG:HB3	2.40	0.51
1:D:422:THR:HA	1:D:425:VAL:HB	1.93	0.51
4:E:35:THR:HG23	4:E:175:GLU:CD	2.31	0.51
4:E:56:GLU:CA	4:E:118:LEU:HG	2.28	0.51
4:E:159:LEU:HD21	4:E:208:ILE:HG23	1.93	0.51
4:E:453:ILE:HA	4:E:456:LEU:HD12	1.91	0.51
1:A:184:TRP:CE3	1:A:185:LYS:O	2.63	0.51
2:B:9:SER:CA	2:B:12:PHE:HE1	2.18	0.51
2:B:160:HIS:N	2:B:195:LYS:HZ3	1.94	0.51
2:B:408:ILE:CG2	2:B:409:LYS:H	2.24	0.51
3:C:35:LEU:HD21	3:C:37:LEU:HD21	1.93	0.51
3:C:42:LEU:CA	3:C:54:THR:HG22	2.35	0.51
3:C:72:SER:HA	3:C:76:ASP:HB2	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:35:LEU:HD12	1:D:54:VAL:CG1	2.36	0.51
1:D:227:PHE:O	1:D:227:PHE:HD1	1.94	0.51
1:D:257:LEU:HA	1:D:260:ILE:HB	1.93	0.51
1:D:303:PRO:HG2	1:D:400:LYS:NZ	2.20	0.51
4:E:182:GLU:N	4:E:183:TRP:CE3	2.79	0.51
4:E:306:VAL:O	4:E:309:ARG:NH1	2.43	0.51
1:A:56:LEU:HD23	1:A:57:ARG:H	1.76	0.51
2:B:147:LYS:HZ2	2:B:205:GLU:HA	1.76	0.51
2:B:162:LEU:C	2:B:174:MET:N	2.64	0.51
2:B:234:LEU:HA	2:B:237:LEU:CD2	2.41	0.51
3:C:4:GLU:HA	3:C:72:SER:OG	2.11	0.51
3:C:7:LEU:HD11	3:C:70:ASN:HB2	1.93	0.51
3:C:134:VAL:HG12	3:C:134:VAL:O	2.11	0.51
3:C:141:TRP:HB2	3:C:221:ILE:O	2.11	0.51
3:C:141:TRP:HH2	3:C:223:ARG:HD3	1.74	0.51
3:C:296:MET:CE	3:C:296:MET:CA	2.88	0.51
3:C:469:THR:O	3:C:473:PHE:N	2.43	0.51
4:E:81:SER:O	4:E:83:LEU:N	2.44	0.51
4:E:138:TRP:HB2	4:E:213:ILE:CG1	2.41	0.51
4:E:217:LYS:O	4:E:219:LEU:N	2.44	0.51
4:E:449:ALA:HA	4:E:452:TRP:CG	2.46	0.51
1:A:45:GLU:OE2	1:A:135:PHE:HB2	2.11	0.51
1:A:63:VAL:O	1:A:66:ARG:CD	2.46	0.51
1:A:79:ARG:NH1	1:A:107:LYS:HZ2	2.07	0.51
1:A:257:LEU:CD1	1:A:285:VAL:CG2	2.86	0.51
1:A:292:THR:C	1:A:296:ILE:HG12	2.31	0.51
1:A:413:VAL:HG12	1:A:417:ILE:HG13	1.92	0.51
2:B:40:LEU:CA	2:B:52:THR:HG23	2.41	0.51
2:B:53:SER:C	2:B:54:VAL:HG13	2.32	0.51
2:B:108:VAL:CG1	2:B:118:TRP:HB2	2.40	0.51
2:B:287:ILE:O	2:B:291:VAL:HB	2.10	0.51
2:B:298:SER:O	2:B:301:VAL:HG23	2.11	0.51
3:C:137:PHE:CE1	3:C:288:ILE:HG22	2.46	0.51
3:C:289:GLY:CA	3:C:293:MET:HE1	2.41	0.51
1:D:63:VAL:O	1:D:66:ARG:HD2	2.10	0.51
1:D:296:ILE:HA	1:D:299:HIS:HB3	1.88	0.51
4:E:266:PHE:HA	4:E:269:ALA:HB3	1.92	0.51
1:A:265:PRO:CG	1:A:266:SER:N	2.73	0.50
1:A:381:TYR:CD1	1:A:381:TYR:N	2.78	0.50
2:B:135:PHE:N	2:B:136:PRO:HD2	2.27	0.50
2:B:306:HIS:O	2:B:308:SER:N	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:106:TYR:CD1	3:C:107:PHE:HE1	2.29	0.50
1:D:36:GLN:HG3	1:D:55:ARG:HG3	1.93	0.50
1:D:201:ILE:CG2	1:D:203:TYR:CE1	2.93	0.50
1:D:379:VAL:O	1:D:379:VAL:HG12	2.10	0.50
1:D:432:GLU:HG2	1:D:435:GLN:HE22	1.70	0.50
4:E:173:ASP:H	4:E:174:PRO:HD2	1.77	0.50
4:E:255:ILE:CD1	4:E:304:LEU:HD22	2.41	0.50
1:A:94:ASN:C	1:A:94:ASN:ND2	2.65	0.50
1:A:160:PRO:CG	1:A:185:LYS:NZ	2.74	0.50
2:B:251:LEU:CD1	3:C:261:ILE:HG21	2.40	0.50
3:C:83:ARG:HB3	3:C:85:GLU:OE1	2.11	0.50
3:C:256:LYS:HB3	3:C:259:THR:HG22	1.92	0.50
3:C:303:VAL:HA	3:C:306:CYS:SG	2.51	0.50
1:D:167:LEU:HG	1:D:178:MET:CB	2.38	0.50
1:D:252:SER:CB	4:E:259:LEU:CD2	2.85	0.50
1:A:381:TYR:N	1:A:381:TYR:HD1	2.09	0.50
1:A:397:GLU:HA	1:A:400:LYS:CD	2.42	0.50
2:B:46:LYS:HD2	2:B:278:PRO:HD3	1.93	0.50
2:B:48:GLU:HG3	2:B:48:GLU:O	2.12	0.50
2:B:256:LEU:HD11	2:B:298:SER:O	2.11	0.50
2:B:306:HIS:CA	2:B:312:HIS:O	2.41	0.50
2:B:438:LEU:O	2:B:442:ILE:HB	2.11	0.50
3:C:48:THR:HA	3:C:286:PRO:HB3	1.91	0.50
3:C:78:SER:O	3:C:79:ILE:CD1	2.55	0.50
3:C:160:MET:N	3:C:213:GLN:CG	2.72	0.50
3:C:245:LEU:HD13	1:D:297:ASN:OD1	2.12	0.50
3:C:306:CYS:HA	3:C:309:VAL:HB	1.92	0.50
3:C:319:THR:OG1	3:C:448:LEU:HA	2.10	0.50
1:D:17:LYS:CE	1:D:84:ASP:HA	2.41	0.50
1:D:389:ASP:O	1:D:393:SER:OG	2.22	0.50
4:E:55:ILE:HG13	4:E:55:ILE:O	2.11	0.50
4:E:134:PHE:CD2	4:E:280:PRO:HG2	2.46	0.50
4:E:217:LYS:N	4:E:218:PRO:CD	2.74	0.50
4:E:293:SER:O	4:E:297:VAL:CG2	2.59	0.50
1:A:52:THR:O	1:A:123:ILE:CG1	2.58	0.50
1:A:137:PHE:CD1	1:A:435:GLN:NE2	2.79	0.50
1:A:199:LEU:C	1:A:200:ASP:OD1	2.49	0.50
1:A:227:PHE:O	1:A:230:VAL:HB	2.11	0.50
2:B:45:GLU:OE2	2:B:277:VAL:O	2.29	0.50
2:B:68:ASP:HA	2:B:72:TYR:CD2	2.46	0.50
2:B:421:PHE:O	2:B:425:LYS:N	2.42	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:455:ARG:H	3:C:455:ARG:CD	2.23	0.50
3:C:471:PHE:O	3:C:475:MET:N	2.34	0.50
1:D:33:VAL:HG12	1:D:158:ILE:HG22	1.93	0.50
4:E:145:PHE:CZ	4:E:208:ILE:HD13	2.46	0.50
4:E:152:ALA:N	4:E:205:PHE:CD1	2.70	0.50
4:E:311:PRO:CD	4:E:440:VAL:HG13	2.16	0.50
1:A:35:LEU:HD13	1:A:203:TYR:CE2	2.46	0.50
1:A:382:ILE:O	1:A:386:MET:HE3	2.09	0.50
1:A:413:VAL:HA	1:A:416:LEU:HB2	1.93	0.50
2:B:37:LEU:CG	2:B:179:ALA:HB3	2.38	0.50
2:B:68:ASP:O	2:B:72:TYR:CD2	2.64	0.50
3:C:33:ILE:O	3:C:159:SER:O	2.29	0.50
3:C:317:PRO:HG2	3:C:447:ASN:CG	2.32	0.50
3:C:481:PRO:N	3:C:482:PRO:CD	2.75	0.50
1:D:178:MET:HA	1:D:207:MET:HB3	1.94	0.50
1:D:242:LYS:HB2	1:D:245:LEU:CB	2.42	0.50
1:D:414:PHE:O	1:D:418:CYS:HB2	2.12	0.50
4:E:36:LEU:N	4:E:175:GLU:OE2	2.42	0.50
4:E:79:ILE:CG1	4:E:80:PRO:HD2	2.41	0.50
4:E:264:PHE:N	4:E:264:PHE:HD1	2.09	0.50
4:E:304:LEU:HD12	4:E:307:SER:OG	2.12	0.50
1:A:56:LEU:CD1	1:A:90:LEU:HD13	2.42	0.50
1:A:226:SER:O	1:A:230:VAL:CG2	2.56	0.50
1:A:394:ASN:O	1:A:398:GLU:HG3	2.11	0.50
2:B:438:LEU:O	2:B:442:ILE:HD12	2.11	0.50
3:C:13:ILE:CD1	3:C:82:LEU:HD11	2.26	0.50
3:C:39:LEU:HD12	3:C:39:LEU:N	2.25	0.50
3:C:212:TYR:CD1	3:C:212:TYR:O	2.64	0.50
3:C:276:GLN:OE1	3:C:276:GLN:N	2.45	0.50
1:D:47:ASN:C	1:D:48:GLN:HG2	2.32	0.50
1:D:56:LEU:H	1:D:120:PRO:HD2	1.73	0.50
1:D:75:ILE:HG13	1:D:78:ILE:CG2	2.42	0.50
1:D:133:THR:HA	1:D:274:ILE:HG23	1.92	0.50
1:D:144:MET:O	1:D:203:TYR:HD1	1.93	0.50
1:D:376:ILE:O	1:D:380:LYS:HE2	2.11	0.50
4:E:131:VAL:HG12	4:E:131:VAL:O	2.12	0.50
4:E:272:VAL:O	4:E:272:VAL:HG22	2.12	0.50
1:A:26:THR:O	1:A:28:PHE:CD1	2.64	0.50
1:A:124:PHE:C	1:A:124:PHE:HD1	2.13	0.50
2:B:17:PRO:HG2	2:B:18:LYS:H	1.77	0.50
2:B:147:LYS:HB2	2:B:206:ASP:HA	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:444:ILE:CG2	2:B:445:THR:N	2.75	0.50
3:C:2:ASN:O	3:C:72:SER:HB3	2.11	0.50
3:C:11:LEU:C	3:C:13:ILE:N	2.65	0.50
3:C:37:LEU:O	3:C:178:ILE:HG21	2.12	0.50
3:C:104:VAL:O	3:C:123:PRO:HG2	2.11	0.50
3:C:289:GLY:O	3:C:293:MET:SD	2.70	0.50
1:D:78:ILE:CD1	1:D:110:LEU:CB	2.86	0.50
4:E:103:TYR:CB	4:E:104:TYR:HD1	2.25	0.50
4:E:172:ILE:HG23	4:E:175:GLU:H	1.77	0.50
4:E:229:CYS:O	4:E:233:SER:N	2.30	0.50
4:E:242:LEU:N	4:E:243:PRO:CD	2.73	0.50
4:E:294:LEU:HA	4:E:297:VAL:CG2	2.40	0.50
1:A:46:VAL:HG23	1:A:271:VAL:HA	1.94	0.50
1:A:130:ILE:C	1:A:131:ILE:O	2.49	0.50
1:A:239:SER:CB	2:B:312:HIS:HA	2.42	0.50
2:B:227:PRO:O	2:B:231:ILE:CG1	2.59	0.50
2:B:235:ALA:HB1	2:B:239:PHE:CZ	2.47	0.50
2:B:286:PHE:HA	2:B:289:ILE:HG12	1.93	0.50
2:B:308:SER:HB2	2:B:312:HIS:H	1.77	0.50
3:C:35:LEU:HD22	3:C:215:VAL:CG2	2.40	0.50
3:C:77:ILE:C	3:C:79:ILE:H	2.13	0.50
1:D:51:GLU:HA	1:D:124:PHE:O	2.12	0.50
1:D:144:MET:HE1	1:D:205:PHE:CZ	2.47	0.50
1:D:242:LYS:HB2	1:D:245:LEU:HD12	1.94	0.50
1:D:275:GLY:O	1:D:277:TYR:N	2.44	0.50
4:E:6:LEU:CD2	4:E:67:ASN:OD1	2.60	0.50
4:E:38:ASN:O	4:E:51:THR:HG23	2.12	0.50
4:E:59:TRP:NE1	4:E:84:LEU:HD23	2.23	0.50
4:E:250:LYS:C	4:E:253:LEU:HB3	2.32	0.50
1:A:291:VAL:CG1	1:A:295:VAL:HG21	2.40	0.50
2:B:92:LEU:HD22	2:B:146:PHE:HA	1.94	0.50
3:C:39:LEU:HD21	3:C:180:ASP:OD1	2.12	0.50
3:C:47:GLU:CG	3:C:286:PRO:HD2	2.38	0.50
3:C:227:PHE:HA	3:C:230:ILE:HG23	1.94	0.50
1:D:7:LEU:HD11	1:D:70:ALA:HB1	1.90	0.50
1:D:53:ASN:HD22	1:D:123:ILE:CG1	2.25	0.50
1:D:280:PHE:HB3	1:D:284:PHE:CE2	2.46	0.50
4:E:11:LEU:HA	4:E:14:TYR:HB2	1.94	0.50
4:E:91:LEU:H	4:E:95:VAL:CB	2.25	0.50
1:A:67:TRP:HB3	1:A:71:ASP:HB3	1.94	0.49
1:A:221:PRO:CB	1:A:224:LEU:HD23	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:228:LEU:HD13	1:A:249:VAL:CG2	2.42	0.49
1:A:264:ILE:O	1:A:267:THR:HB	2.12	0.49
1:A:296:ILE:HD13	1:A:296:ILE:N	2.27	0.49
1:A:410:LEU:CD1	1:A:414:PHE:HD2	2.25	0.49
2:B:10:VAL:CG1	2:B:11:LEU:HD22	2.40	0.49
2:B:431:VAL:HG23	2:B:433:MET:H	1.77	0.49
2:B:459:SER:HA	2:B:463:PRO:HG2	1.94	0.49
3:C:9:ASN:C	3:C:12:LEU:HG	2.32	0.49
3:C:234:THR:N	3:C:235:PRO:CD	2.75	0.49
1:D:75:ILE:O	1:D:76:LYS:C	2.50	0.49
1:D:186:HIS:CG	1:D:187:TRP:H	2.30	0.49
1:D:296:ILE:HG22	1:D:299:HIS:ND1	2.27	0.49
1:D:396:ALA:HA	1:D:399:TRP:CD1	2.46	0.49
4:E:27:VAL:CG1	4:E:154:GLU:CA	2.80	0.49
4:E:191:LYS:HB3	4:E:193:ASN:HD21	1.76	0.49
1:A:38:ILE:HD12	1:A:38:ILE:N	2.27	0.49
1:A:79:ARG:HH11	1:A:107:LYS:HZ1	1.54	0.49
1:A:135:PHE:CZ	1:A:210:ILE:HG23	2.47	0.49
1:A:242:LYS:HZ3	2:B:312:HIS:CE1	2.30	0.49
2:B:60:TRP:CH2	2:B:85:VAL:HG11	2.46	0.49
2:B:241:LEU:HD13	3:C:314:PHE:CE1	2.47	0.49
3:C:63:TYR:HD1	3:C:64:ASP:N	2.10	0.49
3:C:113:ARG:HB2	3:C:117:TYR:O	2.13	0.49
3:C:317:PRO:HG2	3:C:447:ASN:ND2	2.26	0.49
1:D:51:GLU:HG3	1:D:125:LYS:HG3	1.93	0.49
1:D:229:THR:O	1:D:233:PHE:CD2	2.65	0.49
1:D:392:SER:O	1:D:395:ALA:HB3	2.11	0.49
1:D:405:VAL:O	1:D:405:VAL:HG12	2.12	0.49
4:E:195:ASN:HB3	4:E:204:ASP:CA	2.42	0.49
4:E:273:PRO:CG	4:E:274:GLU:H	2.24	0.49
1:A:35:LEU:HD13	1:A:203:TYR:CZ	2.47	0.49
1:A:91:VAL:HB	1:A:149:TRP:HB2	1.94	0.49
1:A:136:PRO:CG	1:A:274:ILE:HG23	2.39	0.49
1:A:190:TYR:HH	1:A:198:TYR:HE1	1.61	0.49
1:A:285:VAL:CG1	1:A:286:ILE:HG13	2.42	0.49
1:A:416:LEU:O	1:A:420:ILE:HG12	2.11	0.49
2:B:7:LEU:CD1	2:B:68:ASP:HB2	2.40	0.49
2:B:192:PRO:CD	2:B:210:TYR:HB2	2.42	0.49
2:B:416:GLU:OE2	3:C:433:ILE:CG2	2.60	0.49
3:C:226:LEU:H	3:C:227:PHE:HD1	1.59	0.49
1:D:220:ILE:HG21	4:E:294:LEU:HD11	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:266:SER:O	1:D:270:ALA:HB2	2.12	0.49
1:D:376:ILE:HG22	1:D:380:LYS:HZ3	1.73	0.49
4:E:6:LEU:HD12	4:E:69:SER:HG	1.76	0.49
4:E:44:GLU:CD	4:E:129:ILE:CG2	2.80	0.49
4:E:188:ARG:NH2	4:E:210:PHE:CE2	2.80	0.49
4:E:207:GLU:C	4:E:208:ILE:HG13	2.32	0.49
4:E:264:PHE:CD1	4:E:264:PHE:N	2.79	0.49
4:E:294:LEU:CA	4:E:297:VAL:HG23	2.41	0.49
4:E:302:ILE:O	4:E:306:VAL:N	2.44	0.49
1:A:38:ILE:HD12	1:A:38:ILE:H	1.77	0.49
1:A:179:LYS:CE	1:A:208:GLN:CD	2.76	0.49
1:A:305:THR:O	1:A:306:HIS:CB	2.61	0.49
2:B:238:VAL:O	2:B:242:PRO:HD3	2.11	0.49
2:B:261:VAL:CG1	2:B:262:PHE:N	2.76	0.49
2:B:286:PHE:HD1	2:B:290:LEU:HD12	1.78	0.49
2:B:311:THR:O	2:B:312:HIS:CB	2.60	0.49
2:B:425:LYS:CA	2:B:428:TRP:CD1	2.71	0.49
3:C:67:LEU:O	3:C:67:LEU:HD13	2.13	0.49
1:D:92:LEU:CD2	1:D:124:PHE:CZ	2.95	0.49
1:D:298:THR:O	1:D:301:ARG:CG	2.60	0.49
1:D:408:HIS:HB3	1:D:412:CYS:HG	1.77	0.49
4:E:85:TRP:CZ2	4:E:155:VAL:HG22	2.48	0.49
4:E:90:VAL:HG13	4:E:95:VAL:HB	1.94	0.49
1:A:155:LYS:CE	4:E:76:LEU:HD13	2.42	0.49
1:A:276:LYS:H	1:A:276:LYS:CD	2.22	0.49
1:A:286:ILE:O	1:A:289:ILE:CB	2.57	0.49
1:A:301:ARG:O	1:A:301:ARG:HG3	2.11	0.49
1:A:376:ILE:HG23	1:A:380:LYS:HE2	1.94	0.49
1:A:396:ALA:O	1:A:399:TRP:HB2	2.13	0.49
2:B:31:VAL:HG12	2:B:158:LEU:HD23	1.92	0.49
2:B:97:ASP:N	2:B:125:ARG:O	2.45	0.49
2:B:241:LEU:N	2:B:242:PRO:CD	2.74	0.49
2:B:306:HIS:O	2:B:312:HIS:C	2.50	0.49
2:B:438:LEU:HD23	2:B:441:TYR:HB3	1.94	0.49
3:C:110:VAL:HG13	3:C:120:TRP:CA	2.42	0.49
3:C:268:ALA:O	3:C:272:LEU:HG	2.13	0.49
3:C:299:VAL:C	3:C:303:VAL:HG23	2.31	0.49
1:D:38:ILE:O	1:D:38:ILE:CG2	2.59	0.49
1:D:101:ALA:O	1:D:102:ILE:CD1	2.60	0.49
1:D:133:THR:CA	1:D:274:ILE:HG23	2.42	0.49
1:D:214:PHE:HA	1:D:217:ASN:OD1	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:1:ASN:C	4:E:3:GLU:H	2.14	0.49
4:E:83:LEU:N	4:E:83:LEU:CD2	2.76	0.49
4:E:103:TYR:CD2	4:E:104:TYR:HD1	2.30	0.49
4:E:261:GLN:NE2	4:E:265:LEU:HG	2.23	0.49
4:E:436:ASN:HA	4:E:439:TRP:CD1	2.46	0.49
1:A:62:ASP:HB3	1:A:65:LEU:CD1	2.42	0.49
1:A:133:THR:O	1:A:133:THR:CG2	2.57	0.49
2:B:31:VAL:CG1	2:B:158:LEU:HD21	2.39	0.49
2:B:130:ILE:CD1	2:B:134:TYR:CE2	2.95	0.49
2:B:131:LYS:CG	2:B:132:VAL:H	2.25	0.49
2:B:286:PHE:HD1	2:B:290:LEU:CD1	2.26	0.49
3:C:149:THR:HB	3:C:214:ASP:HA	1.94	0.49
1:D:89:ASP:CG	1:D:149:TRP:HB3	2.33	0.49
1:D:227:PHE:C	1:D:227:PHE:HD1	2.15	0.49
1:D:253:LEU:HD23	1:D:254:THR:CB	2.42	0.49
4:E:146:ARG:HD2	4:E:205:PHE:CD2	2.47	0.49
4:E:172:ILE:CG2	4:E:175:GLU:N	2.75	0.49
4:E:239:VAL:O	4:E:243:PRO:HD3	2.12	0.49
1:A:150:THR:HG23	1:A:151:TYR:CE1	2.47	0.49
1:A:187:TRP:NE1	1:A:196:THR:HG23	2.27	0.49
1:A:212:LEU:C	1:A:215:VAL:HG23	2.33	0.49
1:A:243:MET:HB3	1:A:306:HIS:ND1	2.27	0.49
1:A:292:THR:CG2	1:A:296:ILE:HD11	2.41	0.49
1:A:305:THR:O	1:A:306:HIS:CG	2.66	0.49
2:B:60:TRP:CZ2	2:B:85:VAL:HG11	2.46	0.49
3:C:106:TYR:C	3:C:107:PHE:CD1	2.85	0.49
3:C:143:ASN:OD1	3:C:220:ILE:CG2	2.61	0.49
3:C:180:ASP:HB2	3:C:195:LYS:HD3	1.95	0.49
3:C:188:GLY:CA	3:C:190:TRP:CZ3	2.96	0.49
3:C:480:ARG:H	3:C:481:PRO:HD2	1.78	0.49
1:D:38:ILE:O	1:D:169:THR:CG2	2.61	0.49
1:D:244:THR:HG23	1:D:245:LEU:H	1.76	0.49
4:E:471:LEU:O	4:E:471:LEU:HD12	2.13	0.49
1:A:33:VAL:HG23	1:A:158:ILE:HG12	1.89	0.49
1:A:58:GLN:HE21	1:A:90:LEU:HD21	1.78	0.49
1:A:76:LYS:HE3	1:A:112:TYR:CZ	2.48	0.49
1:A:166:ASP:N	1:A:181:TYR:CD1	2.81	0.49
1:A:262:GLU:C	1:A:265:PRO:CD	2.81	0.49
2:B:51:THR:OG1	2:B:125:ARG:NH1	2.45	0.49
2:B:274:SER:O	2:B:276:SER:N	2.46	0.49
3:C:275:SER:O	3:C:278:LEU:HB3	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:106:THR:CG2	1:D:107:LYS:HE2	2.43	0.49
1:D:130:ILE:CA	1:D:134:HIS:HB2	2.43	0.49
1:D:291:VAL:O	1:D:295:VAL:HG22	2.13	0.49
1:D:385:HIS:O	1:D:389:ASP:OD1	2.31	0.49
4:E:10:LEU:HD13	4:E:64:LEU:HD21	1.95	0.49
4:E:44:GLU:OE2	4:E:133:TYR:HB3	2.13	0.49
4:E:75:ASP:O	4:E:110:TYR:CD1	2.65	0.49
4:E:116:TYR:HD1	4:E:117:TRP:N	2.10	0.49
4:E:123:TYR:N	4:E:123:TYR:CD1	2.81	0.49
4:E:200:LYS:O	4:E:200:LYS:HG3	2.12	0.49
1:A:31:ILE:HA	1:A:59:GLN:O	2.12	0.49
1:A:177:VAL:HG12	1:A:208:GLN:O	2.13	0.49
2:B:118:TRP:C	2:B:119:HIS:CD2	2.86	0.49
2:B:129:THR:O	2:B:129:THR:CG2	2.57	0.49
2:B:440:LEU:CA	2:B:443:PHE:HB3	2.43	0.49
3:C:296:MET:HE3	3:C:296:MET:CA	2.43	0.49
1:D:49:ILE:HG21	1:D:125:LYS:HZ2	1.74	0.49
1:D:278:MET:SD	1:D:281:THR:OG1	2.57	0.49
4:E:94:ASN:HA	4:E:126:THR:H	1.78	0.49
4:E:228:PRO:O	4:E:231:LEU:HD23	2.13	0.49
4:E:287:ILE:O	4:E:291:PHE:CD2	2.66	0.49
1:A:82:SER:O	1:A:84:ASP:N	2.46	0.49
1:A:146:LEU:HD22	1:A:203:TYR:CZ	2.47	0.49
1:A:376:ILE:O	1:A:379:VAL:HB	2.13	0.49
2:B:256:LEU:HD22	2:B:298:SER:CB	2.43	0.49
2:B:261:VAL:CG1	2:B:262:PHE:HD1	2.19	0.49
3:C:66:ARG:HG2	3:C:66:ARG:NH1	2.08	0.49
3:C:279:PRO:HA	3:C:282:ALA:HB2	1.94	0.49
3:C:425:SER:O	3:C:429:ILE:CG2	2.60	0.49
1:D:65:LEU:HB3	1:D:110:LEU:CD1	2.43	0.49
4:E:79:ILE:HG12	4:E:80:PRO:HD2	1.95	0.49
4:E:138:TRP:CZ2	4:E:215:GLN:CB	2.93	0.49
4:E:140:ASN:HD21	4:E:211:PHE:CA	2.21	0.49
1:A:75:ILE:O	1:A:76:LYS:C	2.51	0.48
1:A:166:ASP:HB3	1:A:178:MET:CE	2.43	0.48
1:A:187:TRP:NE1	1:A:196:THR:HG22	2.28	0.48
1:A:187:TRP:CZ3	1:A:189:TYR:HB3	2.45	0.48
1:A:291:VAL:CG1	1:A:295:VAL:CG2	2.91	0.48
1:A:304:SER:OG	1:A:400:LYS:NZ	2.44	0.48
2:B:45:GLU:HB2	2:B:134:TYR:CD2	2.48	0.48
2:B:67:TRP:C	2:B:72:TYR:HB2	2.32	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:220:TYR:HE2	3:C:279:PRO:HB2	1.65	0.48
2:B:253:ILE:CG1	2:B:302:LEU:HD11	2.41	0.48
2:B:258:ALA:HB2	3:C:265:LEU:HD22	1.84	0.48
3:C:58:MET:CG	3:C:92:ILE:CD1	2.90	0.48
3:C:97:ASN:CB	3:C:128:SER:CB	2.86	0.48
3:C:106:TYR:O	3:C:106:TYR:CD1	2.56	0.48
3:C:141:TRP:CE2	3:C:223:ARG:O	2.66	0.48
3:C:274:THR:HA	3:C:277:ARG:HD2	1.94	0.48
1:D:283:ILE:N	1:D:286:ILE:HD12	2.27	0.48
4:E:58:GLN:C	4:E:59:TRP:HE3	2.17	0.48
4:E:76:LEU:HD23	4:E:77:VAL:N	2.28	0.48
1:A:223:LEU:HA	1:A:226:SER:OG	2.13	0.48
1:A:398:GLU:C	1:A:400:LYS:H	2.16	0.48
1:A:422:THR:C	1:A:425:VAL:HG12	2.33	0.48
2:B:10:VAL:CG1	2:B:11:LEU:CD2	2.91	0.48
2:B:133:MET:HB2	2:B:140:GLN:HG3	1.93	0.48
3:C:113:ARG:HB3	3:C:114:PRO:CD	2.40	0.48
3:C:162:LEU:CB	3:C:199:LYS:HB3	2.36	0.48
3:C:180:ASP:HB3	3:C:219:LEU:HD13	1.95	0.48
1:D:65:LEU:HD23	1:D:110:LEU:HD13	1.95	0.48
1:D:239:SER:HB2	1:D:242:LYS:CE	2.37	0.48
4:E:20:PRO:CB	4:E:61:ASP:CG	2.78	0.48
4:E:40:ILE:HB	4:E:50:THR:HB	1.95	0.48
4:E:303:VAL:HG12	4:E:304:LEU:N	2.26	0.48
1:A:50:VAL:HG12	1:A:51:GLU:N	2.29	0.48
1:A:230:VAL:HA	1:A:233:PHE:CD1	2.49	0.48
1:A:243:MET:HG3	1:A:306:HIS:ND1	2.28	0.48
1:A:245:LEU:CD2	2:B:253:ILE:HB	2.41	0.48
2:B:216:LYS:O	2:B:216:LYS:CD	2.50	0.48
2:B:241:LEU:HD12	3:C:314:PHE:CD1	2.49	0.48
3:C:33:ILE:HD12	3:C:158:ILE:CD1	2.42	0.48
1:D:65:LEU:HB3	1:D:110:LEU:HD11	1.94	0.48
1:D:89:ASP:CG	1:D:149:TRP:CD1	2.87	0.48
4:E:59:TRP:CH2	4:E:115:MET:HB3	2.48	0.48
4:E:59:TRP:N	4:E:59:TRP:HE3	2.12	0.48
1:A:20:ARG:HG3	1:A:22:VAL:HG23	1.94	0.48
1:A:134:HIS:O	1:A:136:PRO:HD2	2.09	0.48
1:A:137:PHE:CD1	1:A:435:GLN:CD	2.86	0.48
1:A:151:TYR:CB	1:A:156:VAL:CG1	2.91	0.48
2:B:28:LYS:CE	2:B:154:SER:O	2.60	0.48
2:B:181:THR:HG23	2:B:184:GLY:H	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:453:SER:O	2:B:457:ASP:OD1	2.31	0.48
3:C:83:ARG:CB	3:C:84:PRO:HD2	2.33	0.48
3:C:274:THR:CG2	3:C:275:SER:N	2.76	0.48
3:C:431:LYS:C	3:C:434:LYS:HB3	2.33	0.48
3:C:452:THR:CG2	3:C:453:ILE:N	2.76	0.48
1:D:33:VAL:HG13	1:D:201:ILE:HD12	1.94	0.48
1:D:187:TRP:CZ2	1:D:196:THR:HG23	2.48	0.48
1:D:407:ASP:OD1	1:D:408:HIS:N	2.47	0.48
4:E:30:VAL:O	4:E:157:LEU:HA	2.13	0.48
4:E:55:ILE:HG13	4:E:57:ILE:CG1	2.41	0.48
4:E:91:LEU:CB	4:E:95:VAL:HG23	2.32	0.48
4:E:100:GLU:CD	4:E:122:ILE:HG12	2.34	0.48
4:E:151:ASN:HA	4:E:205:PHE:CD1	2.48	0.48
4:E:270:GLN:C	4:E:273:PRO:CD	2.81	0.48
4:E:273:PRO:CG	4:E:274:GLU:N	2.76	0.48
1:A:249:VAL:HG13	1:A:253:LEU:CD2	2.42	0.48
1:A:413:VAL:HA	1:A:416:LEU:HB3	1.95	0.48
1:A:432:GLU:HG3	1:A:436:GLU:CD	2.34	0.48
2:B:68:ASP:HA	2:B:72:TYR:HD2	1.78	0.48
2:B:406:GLU:CA	2:B:409:LYS:HD2	2.22	0.48
3:C:64:ASP:HB3	3:C:67:LEU:CB	2.42	0.48
3:C:132:ILE:HG22	3:C:133:ASN:N	2.28	0.48
3:C:180:ASP:OD2	3:C:219:LEU:CD2	2.61	0.48
3:C:245:LEU:C	3:C:249:LEU:HD13	2.30	0.48
3:C:302:VAL:O	3:C:306:CYS:N	2.46	0.48
3:C:479:ASN:ND2	3:C:479:ASN:C	2.67	0.48
1:D:167:LEU:N	1:D:167:LEU:HD12	2.28	0.48
1:D:252:SER:HB2	4:E:259:LEU:CD1	2.42	0.48
1:D:259:VAL:CG1	1:D:262:GLU:OE1	2.55	0.48
4:E:6:LEU:CD1	4:E:67:ASN:CG	2.82	0.48
4:E:145:PHE:CD1	4:E:208:ILE:HB	2.48	0.48
4:E:191:LYS:N	4:E:209:ILE:CG2	2.70	0.48
4:E:219:LEU:HB3	4:E:222:ILE:HB	1.95	0.48
1:A:50:VAL:CG1	1:A:52:THR:CG2	2.91	0.48
1:A:128:CYS:CB	1:A:144:MET:CE	2.87	0.48
1:A:155:LYS:HE2	4:E:76:LEU:HD13	1.95	0.48
1:A:167:LEU:HD12	1:A:178:MET:HB2	0.59	0.48
1:A:186:HIS:ND1	1:A:187:TRP:O	2.46	0.48
1:A:207:MET:O	1:A:207:MET:HE3	2.13	0.48
2:B:10:VAL:HG13	2:B:11:LEU:N	2.29	0.48
2:B:129:THR:N	2:B:142:CYS:SG	2.84	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:261:VAL:HG12	2:B:262:PHE:N	2.29	0.48
2:B:415:LEU:C	2:B:415:LEU:CD1	2.82	0.48
3:C:184:PHE:HE1	3:C:190:TRP:CE2	2.30	0.48
3:C:191:GLU:HG2	3:C:222:ARG:O	2.14	0.48
3:C:204:ASP:OD1	3:C:205:LYS:CE	2.62	0.48
3:C:459:PHE:O	3:C:463:PRO:HG3	2.13	0.48
1:D:60:TRP:HZ3	1:D:116:ILE:HG13	1.71	0.48
4:E:78:ARG:NH1	4:E:108:LEU:HD13	2.29	0.48
4:E:172:ILE:HG23	4:E:174:PRO:CD	2.43	0.48
1:A:2:GLU:O	1:A:2:GLU:CG	2.61	0.48
1:A:47:ASN:O	1:A:48:GLN:HG2	2.14	0.48
1:A:48:GLN:CB	1:A:130:ILE:HG23	2.43	0.48
1:A:94:ASN:O	1:A:127:TYR:HD2	1.96	0.48
1:A:229:THR:HA	1:A:232:VAL:CG2	2.44	0.48
2:B:93:MET:HB2	2:B:145:VAL:HG23	1.96	0.48
2:B:186:TRP:HB3	2:B:215:ARG:CB	2.43	0.48
2:B:435:ALA:O	2:B:439:PHE:CB	2.59	0.48
3:C:39:LEU:CD2	3:C:180:ASP:OD1	2.62	0.48
3:C:49:ASP:C	3:C:50:GLU:CG	2.81	0.48
3:C:110:VAL:HG22	3:C:120:TRP:CD1	2.49	0.48
3:C:190:TRP:HA	3:C:223:ARG:CB	2.43	0.48
3:C:465:MET:O	3:C:469:THR:HB	2.14	0.48
1:D:32:THR:O	1:D:58:GLN:HA	2.13	0.48
1:D:37:LEU:CD1	1:D:54:VAL:HG22	2.43	0.48
4:E:17:ARG:H	4:E:17:ARG:CD	2.27	0.48
1:A:31:ILE:HG23	1:A:60:TRP:HE3	1.78	0.48
1:A:130:ILE:O	1:A:134:HIS:HB2	2.13	0.48
2:B:10:VAL:CG1	2:B:11:LEU:N	2.76	0.48
2:B:101:GLU:CD	2:B:123:ILE:CG2	2.82	0.48
2:B:227:PRO:O	2:B:228:CYS:C	2.51	0.48
3:C:12:LEU:CD1	3:C:16:LYS:HE3	2.43	0.48
3:C:242:LEU:HD21	3:C:263:VAL:CG1	2.43	0.48
3:C:471:PHE:O	3:C:474:VAL:N	2.47	0.48
1:D:49:ILE:HG21	1:D:125:LYS:CE	2.43	0.48
1:D:154:THR:O	1:D:155:LYS:HD3	2.14	0.48
1:D:305:THR:OG1	1:D:401:TYR:HD2	1.96	0.48
4:E:133:TYR:C	4:E:135:PRO:HD2	2.34	0.48
1:A:43:VAL:HG12	1:A:44:ASP:N	2.29	0.48
1:A:229:THR:C	1:A:232:VAL:HB	2.34	0.48
1:A:242:LYS:HA	1:A:243:MET:HE2	1.96	0.48
1:A:252:SER:O	1:A:256:PHE:CG	2.63	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:89:ASP:OD2	2:B:150:THR:N	2.47	0.48
2:B:211:LEU:HB3	2:B:213:ILE:CG2	2.43	0.48
3:C:30:VAL:HG22	3:C:157:GLU:C	2.30	0.48
3:C:241:PHE:CZ	1:D:293:VAL:CG2	2.92	0.48
3:C:259:THR:OG1	1:D:244:THR:OG1	2.16	0.48
1:D:36:GLN:N	1:D:54:VAL:HG12	2.29	0.48
1:D:40:LEU:HD22	1:D:52:THR:CB	2.44	0.48
1:D:41:ILE:HG21	4:E:96:ASP:OD2	2.14	0.48
1:D:135:PHE:CG	1:D:210:ILE:CG1	2.95	0.48
1:D:187:TRP:HB2	1:D:199:LEU:HD21	1.93	0.48
4:E:434:SER:HA	4:E:437:GLU:HG2	1.96	0.48
1:A:233:PHE:HE2	1:A:413:VAL:HB	1.78	0.48
1:A:267:THR:O	1:A:271:VAL:HG22	2.14	0.48
2:B:35:LEU:HD23	2:B:35:LEU:N	2.27	0.48
2:B:92:LEU:CD1	2:B:95:ASN:HB2	2.40	0.48
2:B:184:GLY:C	2:B:186:TRP:H	2.17	0.48
2:B:465:ASP:C	2:B:467:PRO:HD2	2.33	0.48
3:C:132:ILE:HA	3:C:136:TYR:CG	2.48	0.48
3:C:204:ASP:OD1	3:C:205:LYS:CD	2.61	0.48
3:C:241:PHE:CD1	3:C:242:LEU:N	2.82	0.48
1:D:230:VAL:HA	1:D:233:PHE:HD2	1.78	0.48
1:D:236:PRO:HD3	1:D:299:HIS:CE1	2.49	0.48
4:E:142:SER:HG	4:E:209:ILE:HD11	1.74	0.48
4:E:246:ALA:HA	4:E:250:LYS:NZ	2.29	0.48
4:E:304:LEU:HA	4:E:307:SER:OG	2.14	0.48
1:A:27:HIS:C	1:A:28:PHE:CG	2.87	0.47
1:A:60:TRP:HH2	1:A:118:TRP:HE3	1.61	0.47
1:A:85:VAL:O	1:A:87:LEU:HD13	2.14	0.47
1:A:146:LEU:O	1:A:201:ILE:N	2.38	0.47
1:A:247:ILE:CG1	4:E:253:LEU:HD12	2.44	0.47
2:B:112:HIS:CD2	2:B:113:THR:HG23	2.49	0.47
2:B:130:ILE:O	2:B:131:LYS:O	2.32	0.47
2:B:192:PRO:HD2	2:B:210:TYR:HB3	1.94	0.47
2:B:448:SER:HB3	2:B:452:PHE:CZ	2.49	0.47
3:C:7:LEU:CD1	3:C:70:ASN:HD22	2.26	0.47
3:C:50:GLU:HA	3:C:132:ILE:CD1	2.43	0.47
3:C:135:LEU:HD22	3:C:135:LEU:N	2.29	0.47
3:C:273:LEU:HD23	3:C:276:GLN:HG3	1.96	0.47
3:C:429:ILE:HG13	3:C:430:VAL:HG22	1.96	0.47
1:D:19:ILE:HG22	1:D:20:ARG:N	2.29	0.47
1:D:130:ILE:HD13	1:D:130:ILE:H	1.77	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:376:ILE:HG22	1:D:380:LYS:HZ1	1.78	0.47
4:E:174:PRO:HD3	4:E:185:ILE:CG2	2.44	0.47
4:E:216:ARG:O	4:E:217:LYS:HG2	2.12	0.47
4:E:240:TYR:O	4:E:243:PRO:CG	2.62	0.47
1:A:82:SER:O	1:A:85:VAL:N	2.43	0.47
1:A:93:TYR:N	1:A:93:TYR:HD1	2.11	0.47
1:A:175:GLU:O	1:A:209:ARG:HG3	2.14	0.47
1:A:207:MET:H	1:A:207:MET:CE	2.25	0.47
1:A:227:PHE:HZ	2:B:303:ASN:HD22	1.62	0.47
1:A:244:THR:HG23	1:A:245:LEU:N	2.29	0.47
1:A:252:SER:CB	2:B:257:LEU:HD22	2.43	0.47
1:A:255:VAL:HA	1:A:258:LEU:HD12	1.96	0.47
2:B:234:LEU:HA	2:B:237:LEU:HB2	1.96	0.47
2:B:421:PHE:HA	2:B:424:LEU:HD12	1.96	0.47
3:C:35:LEU:CD2	3:C:37:LEU:HG	2.44	0.47
3:C:48:THR:OG1	3:C:285:VAL:CA	2.62	0.47
3:C:195:LYS:HG3	3:C:195:LYS:O	2.13	0.47
3:C:307:GLY:HA2	3:C:310:LEU:CD2	2.26	0.47
4:E:269:ALA:O	4:E:273:PRO:CG	2.62	0.47
1:A:27:HIS:O	1:A:28:PHE:CB	2.61	0.47
1:A:44:ASP:O	1:A:48:GLN:N	2.47	0.47
1:A:90:LEU:HD13	1:A:100:PHE:CE2	2.41	0.47
1:A:108:LEU:HD21	1:A:118:TRP:CD1	2.49	0.47
1:A:129:GLU:HG2	1:A:130:ILE:N	2.29	0.47
1:A:171:MET:HG2	1:A:173:SER:H	1.79	0.47
1:A:212:LEU:HA	1:A:215:VAL:HG21	1.94	0.47
1:A:300:HIS:O	1:A:302:SER:N	2.46	0.47
2:B:11:LEU:CD2	2:B:11:LEU:H	2.27	0.47
2:B:53:SER:HA	2:B:122:ALA:O	2.13	0.47
2:B:438:LEU:CA	2:B:441:TYR:HB3	2.29	0.47
3:C:59:ASP:HA	3:C:121:LEU:CB	2.44	0.47
3:C:205:LYS:HD3	3:C:205:LYS:H	1.79	0.47
3:C:264:LEU:HA	3:C:267:GLN:HG3	1.96	0.47
1:D:159:SER:HB3	1:D:160:PRO:HD2	1.96	0.47
1:D:219:ILE:C	1:D:219:ILE:HD12	2.35	0.47
1:D:233:PHE:CD1	1:D:409:ILE:HD12	2.45	0.47
1:D:257:LEU:C	1:D:257:LEU:CD1	2.82	0.47
1:D:419:ILE:HD11	1:D:420:ILE:HG23	1.94	0.47
4:E:88:ASP:O	4:E:88:ASP:CG	2.52	0.47
4:E:129:ILE:CG2	4:E:133:TYR:HD2	2.22	0.47
4:E:232:ILE:O	4:E:236:VAL:HG22	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:238:LEU:C	4:E:242:LEU:HB3	2.34	0.47
1:A:108:LEU:CD2	1:A:118:TRP:CD1	2.98	0.47
1:A:131:ILE:C	1:A:133:THR:H	2.18	0.47
1:A:212:LEU:O	1:A:215:VAL:HG23	2.15	0.47
2:B:55:PHE:HA	2:B:121:SER:HA	1.96	0.47
2:B:144:MET:O	2:B:209:PHE:CD2	2.68	0.47
2:B:197:TRP:CB	2:B:204:TYR:HD1	2.27	0.47
2:B:235:ALA:O	2:B:239:PHE:CG	2.67	0.47
2:B:258:ALA:HB2	3:C:265:LEU:CG	2.43	0.47
3:C:52:LEU:HD21	3:C:130:CYS:CB	2.29	0.47
3:C:56:VAL:CG1	3:C:126:PHE:HE2	2.21	0.47
3:C:148:PHE:O	3:C:215:VAL:HG22	2.13	0.47
3:C:181:PRO:HA	3:C:184:PHE:CB	2.43	0.47
3:C:469:THR:O	3:C:473:PHE:CB	2.58	0.47
1:D:44:ASP:OD1	1:D:46:VAL:HG23	2.15	0.47
1:D:303:PRO:N	1:D:400:LYS:HD2	2.29	0.47
1:D:305:THR:OG1	1:D:401:TYR:CD2	2.66	0.47
4:E:55:ILE:HG23	4:E:119:PRO:HD2	1.96	0.47
4:E:162:GLU:HB3	4:E:191:LYS:HD3	1.96	0.47
4:E:251:CYS:HG	4:E:314:HIS:HE2	1.63	0.47
4:E:276:SER:CB	4:E:281:LEU:HD13	2.41	0.47
1:A:46:VAL:CA	1:A:272:PRO:HD3	2.45	0.47
1:A:46:VAL:N	1:A:272:PRO:HD3	2.29	0.47
1:A:148:ILE:CD1	1:A:156:VAL:HG22	2.44	0.47
1:A:227:PHE:HZ	2:B:303:ASN:ND2	2.12	0.47
1:A:391:GLU:O	1:A:394:ASN:OD1	2.33	0.47
2:B:21:PRO:HB2	2:B:29:VAL:HG11	1.96	0.47
2:B:28:LYS:CB	2:B:156:VAL:N	2.76	0.47
2:B:82:SER:OG	2:B:108:VAL:HG21	2.15	0.47
2:B:92:LEU:CA	2:B:96:ASN:HB2	2.43	0.47
2:B:247:GLU:O	2:B:249:MET:HG3	2.15	0.47
2:B:438:LEU:HA	2:B:441:TYR:CB	2.29	0.47
3:C:106:TYR:CE1	3:C:107:PHE:HE1	2.32	0.47
1:D:299:HIS:O	1:D:306:HIS:O	2.33	0.47
1:D:416:LEU:O	1:D:420:ILE:HG23	2.14	0.47
4:E:103:TYR:HD2	4:E:104:TYR:CD1	2.32	0.47
4:E:240:TYR:C	4:E:450:CYS:SG	2.93	0.47
1:A:2:GLU:O	1:A:7:LEU:HD11	2.14	0.47
1:A:431:ILE:O	1:A:431:ILE:CG2	2.63	0.47
2:B:9:SER:C	2:B:13:GLU:HG3	2.35	0.47
2:B:136:PRO:HG2	2:B:139:TRP:N	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:220:TYR:CB	2:B:223:TYR:CE2	2.97	0.47
2:B:241:LEU:CD1	3:C:314:PHE:CE1	2.98	0.47
2:B:271:PRO:O	2:B:275:LEU:CD2	2.63	0.47
2:B:409:LYS:HD3	3:C:426:THR:CB	2.44	0.47
3:C:69:TRP:HD1	3:C:114:PRO:O	1.97	0.47
3:C:148:PHE:CD1	3:C:148:PHE:N	2.83	0.47
3:C:192:ILE:CD1	3:C:221:ILE:HG21	2.44	0.47
3:C:275:SER:O	3:C:279:PRO:CD	2.59	0.47
1:D:3:HIS:HB3	1:D:7:LEU:CD2	2.45	0.47
1:D:26:THR:CG2	1:D:27:HIS:H	2.19	0.47
1:D:92:LEU:HG	1:D:124:PHE:CE1	2.50	0.47
1:D:135:PHE:O	1:D:210:ILE:CD1	2.62	0.47
1:D:256:PHE:O	1:D:260:ILE:HG13	2.14	0.47
4:E:59:TRP:CE3	4:E:115:MET:HB2	2.48	0.47
1:A:133:THR:C	1:A:136:PRO:CD	2.82	0.47
1:A:134:HIS:CD2	1:A:207:MET:HE3	2.49	0.47
1:A:137:PHE:CD2	1:A:435:GLN:NE2	2.82	0.47
2:B:6:THR:O	2:B:9:SER:OG	2.27	0.47
2:B:112:HIS:CG	2:B:113:THR:N	2.83	0.47
2:B:241:LEU:HG	2:B:248:LYS:HE2	1.96	0.47
2:B:284:LEU:O	2:B:288:MET:HB2	2.15	0.47
2:B:299:VAL:O	2:B:302:LEU:HB3	2.14	0.47
3:C:7:LEU:O	3:C:10:ASP:N	2.48	0.47
3:C:12:LEU:O	3:C:13:ILE:C	2.51	0.47
3:C:58:MET:O	3:C:58:MET:CG	2.57	0.47
3:C:429:ILE:O	3:C:433:ILE:HG13	2.15	0.47
3:C:449:VAL:HG12	3:C:452:THR:HB	1.97	0.47
3:C:476:GLY:O	3:C:480:ARG:CG	2.62	0.47
1:D:1:SER:H2	1:D:4:GLU:HB2	1.76	0.47
1:D:17:LYS:HG2	1:D:84:ASP:C	2.34	0.47
1:D:37:LEU:O	1:D:169:THR:HB	2.14	0.47
1:D:135:PHE:CE1	1:D:273:LEU:CB	2.97	0.47
1:D:141:ASN:HB3	1:D:206:ILE:CG1	2.44	0.47
1:D:187:TRP:CH2	1:D:189:TYR:CG	3.02	0.47
1:D:268:SER:OG	1:D:273:LEU:HD21	2.15	0.47
1:D:293:VAL:O	1:D:297:ASN:CB	2.61	0.47
1:D:420:ILE:HA	1:D:423:VAL:HB	1.96	0.47
4:E:58:GLN:CA	4:E:59:TRP:HE3	2.27	0.47
4:E:86:LEU:HD13	4:E:103:TYR:CZ	2.49	0.47
4:E:200:LYS:O	4:E:200:LYS:CG	2.63	0.47
1:A:207:MET:O	1:A:207:MET:CE	2.63	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:245:LEU:HD11	2:B:250:SER:O	2.15	0.47
2:B:4:GLU:OE2	2:B:70:ALA:HB3	2.14	0.47
2:B:82:SER:C	2:B:84:ASP:H	2.17	0.47
2:B:135:PHE:CA	2:B:279:ILE:HD13	2.44	0.47
2:B:226:VAL:HB	2:B:230:LEU:CG	2.45	0.47
3:C:153:TYR:CB	3:C:158:ILE:HB	2.39	0.47
3:C:185:THR:HG22	3:C:187:ASN:H	1.78	0.47
1:D:37:LEU:N	1:D:164:ARG:HH22	2.11	0.47
1:D:101:ALA:O	1:D:102:ILE:CB	2.62	0.47
1:D:137:PHE:CB	1:D:435:GLN:HG3	2.41	0.47
1:D:189:TYR:HA	1:D:197:PRO:CG	2.44	0.47
1:D:231:LEU:HD22	1:D:235:LEU:HD21	1.97	0.47
1:D:285:VAL:C	1:D:287:SER:N	2.65	0.47
1:D:302:SER:HB3	1:D:400:LYS:CG	2.45	0.47
4:E:163:GLU:O	4:E:164:GLY:C	2.53	0.47
4:E:284:LYS:HE3	4:E:284:LYS:H	1.64	0.47
4:E:309:ARG:CD	4:E:310:THR:HG23	2.45	0.47
1:A:62:ASP:HB3	1:A:65:LEU:HD12	1.97	0.47
1:A:208:GLN:OE1	1:A:435:GLN:CG	2.63	0.47
1:A:420:ILE:O	1:A:424:SER:N	2.41	0.47
2:B:72:TYR:CD1	2:B:112:HIS:HB2	2.45	0.47
2:B:86:TRP:HD1	2:B:151:TYR:CZ	2.33	0.47
2:B:88:PRO:C	2:B:90:ILE:N	2.68	0.47
2:B:136:PRO:HB3	2:B:280:ILE:CD1	2.42	0.47
2:B:180:PHE:CE1	2:B:181:THR:O	2.68	0.47
2:B:233:ILE:O	2:B:237:LEU:CB	2.60	0.47
3:C:63:TYR:CZ	3:C:115:ASN:O	2.68	0.47
3:C:434:LYS:HG2	3:C:435:GLU:N	2.29	0.47
1:D:36:GLN:O	1:D:54:VAL:HA	2.14	0.47
1:D:238:ASP:CB	4:E:308:LEU:HD22	2.44	0.47
1:D:280:PHE:O	1:D:284:PHE:CG	2.68	0.47
4:E:22:LYS:HE2	4:E:26:HIS:HB3	1.97	0.47
4:E:136:PHE:O	4:E:138:TRP:CZ2	2.68	0.47
4:E:209:ILE:HG12	4:E:211:PHE:CE1	2.43	0.47
1:A:304:SER:H	1:A:400:LYS:CD	2.20	0.47
2:B:196:ASN:OD1	2:B:196:ASN:C	2.52	0.47
2:B:298:SER:C	2:B:301:VAL:HG22	2.35	0.47
3:C:30:VAL:HG11	3:C:159:SER:HB3	1.93	0.47
3:C:114:PRO:HG2	3:C:115:ASN:H	1.80	0.47
3:C:144:CYS:SG	3:C:146:LEU:CD1	2.94	0.47
1:D:45:GLU:OE2	1:D:135:PHE:CD2	2.68	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:221:PRO:O	1:D:225:PHE:HB3	2.15	0.47
4:E:10:LEU:HD22	4:E:64:LEU:HD21	1.97	0.47
4:E:219:LEU:CB	4:E:222:ILE:HB	2.45	0.47
4:E:270:GLN:O	4:E:273:PRO:HD2	2.15	0.47
1:A:46:VAL:HA	1:A:272:PRO:HD3	1.97	0.46
1:A:247:ILE:HG13	4:E:253:LEU:HD12	1.96	0.46
1:A:301:ARG:HH22	1:A:406:ILE:HD11	1.80	0.46
1:A:397:GLU:HA	1:A:400:LYS:HG3	1.96	0.46
2:B:38:THR:O	2:B:179:ALA:HB1	2.15	0.46
2:B:131:LYS:HZ3	2:B:132:VAL:HB	1.74	0.46
2:B:146:PHE:O	2:B:147:LYS:HB2	2.15	0.46
3:C:17:TYR:CD1	3:C:18:ASN:N	2.83	0.46
3:C:54:THR:O	3:C:126:PHE:CE2	2.68	0.46
3:C:139:PHE:O	3:C:222:ARG:HG2	2.14	0.46
3:C:241:PHE:C	3:C:241:PHE:HD1	2.17	0.46
3:C:262:CYS:SG	1:D:251:LEU:HD11	2.56	0.46
3:C:279:PRO:HG2	3:C:280:GLU:N	2.30	0.46
1:D:146:LEU:O	1:D:201:ILE:N	2.39	0.46
1:D:217:ASN:O	1:D:221:PRO:CD	2.63	0.46
1:D:395:ALA:O	1:D:399:TRP:CG	2.67	0.46
4:E:1:ASN:C	4:E:3:GLU:N	2.68	0.46
4:E:310:THR:CB	4:E:313:THR:HG22	2.45	0.46
1:A:130:ILE:HD13	1:A:130:ILE:N	2.29	0.46
1:A:130:ILE:O	1:A:134:HIS:CB	2.63	0.46
1:A:255:VAL:HG23	4:E:264:PHE:CD1	2.51	0.46
1:A:303:PRO:CB	1:A:400:LYS:CE	2.86	0.46
2:B:130:ILE:HD12	2:B:134:TYR:HE2	1.78	0.46
2:B:187:SER:O	2:B:214:GLN:O	2.33	0.46
2:B:253:ILE:CD1	2:B:302:LEU:HD11	2.45	0.46
2:B:256:LEU:CD1	2:B:302:LEU:HD22	2.43	0.46
2:B:430:TYR:O	2:B:430:TYR:CD1	2.66	0.46
1:D:254:THR:OG1	1:D:258:LEU:CD1	2.63	0.46
1:D:276:LYS:HA	1:D:279:LEU:CD1	2.45	0.46
1:D:417:ILE:HA	1:D:420:ILE:HG12	1.96	0.46
1:D:419:ILE:HA	1:D:422:THR:HG22	1.96	0.46
4:E:162:GLU:OE1	4:E:191:LYS:HG3	2.15	0.46
4:E:265:LEU:C	4:E:268:ILE:HG23	2.34	0.46
4:E:270:GLN:HA	4:E:273:PRO:HG3	1.97	0.46
1:A:28:PHE:CD1	1:A:154:THR:HA	2.50	0.46
1:A:41:ILE:CG2	1:A:123:ILE:HD11	2.45	0.46
1:A:45:GLU:OE1	1:A:209:ARG:HD3	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:66:ARG:O	1:A:67:TRP:CE3	2.68	0.46
1:A:186:HIS:HE1	1:A:187:TRP:O	1.96	0.46
1:A:244:THR:O	1:A:247:ILE:CB	2.63	0.46
1:A:281:THR:HG23	1:A:282:MET:N	2.30	0.46
1:A:304:SER:CB	1:A:397:GLU:HG2	2.29	0.46
2:B:147:LYS:CG	2:B:148:SER:H	2.26	0.46
2:B:441:TYR:O	2:B:444:ILE:HG22	2.16	0.46
2:B:463:PRO:HB2	2:B:464:PRO:CD	2.45	0.46
3:C:30:VAL:CG1	3:C:159:SER:CB	2.88	0.46
3:C:63:TYR:CD1	3:C:116:GLY:HA3	2.50	0.46
3:C:141:TRP:CH2	3:C:223:ARG:CB	2.98	0.46
1:D:146:LEU:HD22	1:D:203:TYR:OH	2.16	0.46
1:D:170:PHE:CD1	1:D:170:PHE:C	2.89	0.46
1:D:235:LEU:CD2	4:E:308:LEU:CG	2.93	0.46
1:D:404:MET:O	1:D:407:ASP:OD1	2.33	0.46
1:A:80:LEU:HD12	1:A:80:LEU:C	2.35	0.46
1:A:131:ILE:HG13	1:A:133:THR:HB	1.97	0.46
2:B:118:TRP:C	2:B:119:HIS:HD2	2.18	0.46
2:B:136:PRO:CG	2:B:280:ILE:HD11	2.46	0.46
2:B:196:ASN:C	2:B:197:TRP:CG	2.89	0.46
2:B:247:GLU:C	2:B:249:MET:N	2.65	0.46
2:B:279:ILE:CG2	2:B:280:ILE:N	2.48	0.46
2:B:429:GLN:HA	2:B:429:GLN:HE21	1.81	0.46
2:B:450:GLY:O	2:B:454:ILE:CG1	2.59	0.46
2:B:466:ASN:C	2:B:468:PHE:H	2.18	0.46
3:C:4:GLU:HG3	3:C:5:GLU:N	2.30	0.46
3:C:111:LEU:CB	3:C:119:THR:OG1	2.55	0.46
1:D:92:LEU:HB2	1:D:96:ALA:CA	2.46	0.46
1:D:94:ASN:O	1:D:127:TYR:O	2.34	0.46
1:D:135:PHE:O	1:D:210:ILE:CG1	2.63	0.46
4:E:56:GLU:HB2	4:E:118:LEU:HD11	1.97	0.46
4:E:103:TYR:CD2	4:E:104:TYR:N	2.83	0.46
4:E:195:ASN:O	4:E:204:ASP:OD1	2.34	0.46
4:E:219:LEU:HD23	4:E:221:TYR:CE2	2.51	0.46
1:A:265:PRO:C	1:A:268:SER:HB3	2.36	0.46
2:B:46:LYS:CD	2:B:275:LEU:O	2.64	0.46
3:C:37:LEU:HD11	3:C:148:PHE:CG	2.50	0.46
3:C:58:MET:CE	3:C:105:ALA:O	2.64	0.46
3:C:122:PRO:CB	3:C:123:PRO:CD	2.87	0.46
3:C:299:VAL:O	3:C:303:VAL:CG2	2.52	0.46
1:D:45:GLU:CG	1:D:272:PRO:CG	2.57	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:14:TYR:HD2	4:E:16:LYS:NZ	2.09	0.46
4:E:307:SER:O	4:E:314:HIS:O	2.32	0.46
1:A:51:GLU:HA	1:A:124:PHE:O	2.15	0.46
1:A:129:GLU:CD	1:A:140:GLN:HG2	2.36	0.46
1:A:132:VAL:O	1:A:274:ILE:CA	2.63	0.46
1:A:212:LEU:CA	1:A:215:VAL:HG23	2.40	0.46
1:A:221:PRO:HA	1:A:224:LEU:CB	2.36	0.46
2:B:9:SER:CA	2:B:12:PHE:CD1	2.89	0.46
2:B:62:ASP:C	2:B:64:ARG:N	2.67	0.46
2:B:75:ILE:HD12	2:B:78:LEU:HB2	1.98	0.46
3:C:181:PRO:CD	3:C:192:ILE:HG21	2.45	0.46
3:C:249:LEU:N	3:C:249:LEU:CD1	2.79	0.46
3:C:481:PRO:HA	3:C:484:LYS:NZ	2.31	0.46
1:D:166:ASP:OD2	1:D:205:PHE:CD2	2.69	0.46
1:D:374:SER:O	1:D:377:GLU:HB3	2.16	0.46
1:D:399:TRP:HA	1:D:399:TRP:HE3	1.79	0.46
4:E:19:LYS:CG	4:E:20:PRO:HD2	2.45	0.46
4:E:183:TRP:HA	4:E:216:ARG:HG2	1.95	0.46
4:E:261:GLN:HG3	4:E:262:THR:N	2.29	0.46
4:E:272:VAL:O	4:E:275:THR:HB	2.15	0.46
4:E:313:THR:C	4:E:314:HIS:ND1	2.69	0.46
4:E:472:ASN:ND2	4:E:476:GLU:HG3	2.31	0.46
1:A:171:MET:HG2	1:A:173:SER:N	2.31	0.46
1:A:407:ASP:O	1:A:410:LEU:HB3	2.16	0.46
2:B:16:ASN:OD1	2:B:18:LYS:CD	2.63	0.46
2:B:60:TRP:CG	2:B:61:THR:N	2.83	0.46
2:B:234:LEU:O	2:B:238:VAL:N	2.49	0.46
2:B:235:ALA:C	2:B:239:PHE:CD2	2.89	0.46
3:C:66:ARG:CG	3:C:66:ARG:NH1	2.69	0.46
3:C:427:ASN:O	3:C:431:LYS:HG3	2.15	0.46
1:D:43:VAL:HG21	1:D:50:VAL:HG13	1.96	0.46
1:D:106:THR:CG2	1:D:107:LYS:H	2.09	0.46
4:E:20:PRO:HB3	4:E:61:ASP:OD2	2.15	0.46
4:E:61:ASP:OD1	4:E:63:ARG:HB3	2.15	0.46
4:E:155:VAL:CG1	4:E:205:PHE:HE1	2.28	0.46
4:E:262:THR:HG23	4:E:265:LEU:HD12	1.96	0.46
4:E:451:PHE:HA	4:E:454:ALA:HB3	1.98	0.46
1:A:104:HIS:HB2	1:A:105:MET:SD	2.56	0.46
1:A:284:PHE:CD1	1:A:284:PHE:N	2.82	0.46
2:B:68:ASP:O	2:B:72:TYR:HD2	1.98	0.46
2:B:90:ILE:HA	2:B:147:LYS:C	2.35	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:133:MET:N	2:B:279:ILE:HG23	2.30	0.46
2:B:153:THR:HB	2:B:204:TYR:CB	2.13	0.46
2:B:226:VAL:O	2:B:230:LEU:N	2.30	0.46
3:C:3:GLU:O	3:C:3:GLU:CG	2.59	0.46
3:C:98:ASN:C	3:C:100:GLY:H	2.17	0.46
3:C:137:PHE:CE1	3:C:288:ILE:CG2	2.99	0.46
3:C:238:LEU:HA	3:C:241:PHE:CD2	2.50	0.46
3:C:245:LEU:HB3	3:C:249:LEU:CD1	2.46	0.46
3:C:471:PHE:CD1	3:C:472:ILE:N	2.84	0.46
1:D:89:ASP:HB2	1:D:149:TRP:CD1	2.51	0.46
1:D:287:SER:HA	1:D:290:ILE:HD11	1.93	0.46
4:E:44:GLU:HB3	4:E:280:PRO:CB	2.44	0.46
4:E:54:TRP:C	4:E:118:LEU:HD21	2.36	0.46
4:E:99:PHE:CZ	4:E:123:TYR:HE2	2.34	0.46
4:E:100:GLU:HG3	4:E:122:ILE:O	2.16	0.46
1:A:221:PRO:CA	1:A:224:LEU:HD23	2.45	0.46
1:A:227:PHE:CZ	2:B:303:ASN:ND2	2.84	0.46
1:A:277:TYR:O	1:A:280:PHE:CG	2.69	0.46
2:B:203:SER:O	2:B:205:GLU:HG2	2.16	0.46
2:B:220:TYR:N	2:B:220:TYR:CD1	2.84	0.46
2:B:406:GLU:HG2	2:B:409:LYS:CD	2.46	0.46
3:C:22:ARG:NE	3:C:153:TYR:CE2	2.84	0.46
3:C:42:LEU:O	3:C:185:THR:HB	2.16	0.46
3:C:59:ASP:OD1	3:C:121:LEU:HB2	2.16	0.46
3:C:82:LEU:O	3:C:87:ILE:HG13	2.16	0.46
3:C:82:LEU:O	3:C:87:ILE:HD11	2.16	0.46
3:C:125:ILE:O	3:C:125:ILE:HG22	2.16	0.46
3:C:271:LEU:HD23	3:C:271:LEU:C	2.36	0.46
1:D:227:PHE:HE1	1:D:231:LEU:HD21	1.80	0.46
1:D:305:THR:OG1	1:D:401:TYR:HB3	2.15	0.46
4:E:74:ILE:HD13	4:E:74:ILE:H	1.81	0.46
4:E:151:ASN:CA	4:E:205:PHE:HB2	2.46	0.46
1:A:92:LEU:CD2	1:A:92:LEU:N	2.79	0.46
1:A:263:LEU:N	1:A:263:LEU:HD23	2.31	0.46
1:A:292:THR:O	1:A:293:VAL:C	2.55	0.46
2:B:409:LYS:NZ	3:C:423:ILE:HG22	2.31	0.46
2:B:439:PHE:O	2:B:442:ILE:CG2	2.63	0.46
3:C:37:LEU:O	3:C:178:ILE:CD1	2.63	0.46
3:C:111:LEU:O	3:C:118:VAL:HG13	2.15	0.46
3:C:318:SER:CB	3:C:447:ASN:ND2	2.72	0.46
3:C:436:LYS:O	3:C:439:TYR:HB2	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:149:TRP:CD2	1:D:150:THR:N	2.84	0.46
1:D:263:LEU:CD1	4:E:266:PHE:CZ	2.90	0.46
4:E:172:ILE:CG1	4:E:174:PRO:HD2	2.21	0.46
4:E:453:ILE:HD12	4:E:454:ALA:CA	2.46	0.46
1:A:3:HIS:O	1:A:7:LEU:N	2.38	0.45
1:A:46:VAL:HG12	1:A:47:ASN:N	2.31	0.45
1:A:102:ILE:O	1:A:102:ILE:HG22	2.16	0.45
1:A:130:ILE:CG1	1:A:131:ILE:N	2.79	0.45
1:A:136:PRO:C	1:A:277:TYR:OH	2.55	0.45
1:A:147:GLY:HA2	1:A:158:ILE:HD13	1.98	0.45
2:B:134:TYR:CD1	2:B:213:ILE:CG1	2.89	0.45
2:B:258:ALA:HB2	3:C:265:LEU:CD2	2.44	0.45
2:B:311:THR:HG22	2:B:312:HIS:N	2.30	0.45
1:D:89:ASP:O	1:D:149:TRP:CB	2.55	0.45
1:D:225:PHE:CD1	1:D:225:PHE:C	2.90	0.45
1:D:257:LEU:C	1:D:260:ILE:H	2.19	0.45
1:D:413:VAL:HA	1:D:416:LEU:HB2	1.98	0.45
4:E:240:TYR:C	4:E:243:PRO:HD2	2.36	0.45
1:A:133:THR:O	1:A:136:PRO:CG	2.64	0.45
1:A:155:LYS:HD3	1:A:155:LYS:HA	1.66	0.45
1:A:416:LEU:CA	1:A:419:ILE:HG22	2.46	0.45
2:B:31:VAL:HG21	2:B:86:TRP:CZ3	2.50	0.45
2:B:47:ASN:HB2	2:B:49:GLU:OE1	2.16	0.45
2:B:62:ASP:OD1	2:B:65:LEU:N	2.49	0.45
2:B:101:GLU:CD	2:B:123:ILE:HG22	2.37	0.45
2:B:143:THR:CG2	2:B:145:VAL:HG22	2.45	0.45
2:B:241:LEU:CD2	2:B:248:LYS:HE2	2.44	0.45
2:B:268:ASP:O	2:B:271:PRO:HD2	2.17	0.45
2:B:456:LEU:HA	2:B:459:SER:OG	2.17	0.45
3:C:7:LEU:HD12	3:C:70:ASN:HB2	1.98	0.45
3:C:94:LEU:N	3:C:94:LEU:HD23	2.31	0.45
3:C:273:LEU:O	3:C:277:ARG:HD2	2.17	0.45
3:C:290:LYS:O	3:C:294:PHE:CE2	2.69	0.45
3:C:437:ASN:O	3:C:441:GLU:HG3	2.16	0.45
1:D:21:PRO:HG3	1:D:60:TRP:HZ2	1.78	0.45
1:D:213:TYR:O	1:D:216:VAL:HG23	2.15	0.45
1:D:291:VAL:O	1:D:295:VAL:N	2.40	0.45
4:E:172:ILE:HG22	4:E:175:GLU:HB3	1.98	0.45
4:E:241:PHE:CG	4:E:450:CYS:SG	3.09	0.45
4:E:279:VAL:HB	4:E:280:PRO:CD	2.43	0.45
4:E:472:ASN:O	4:E:472:ASN:ND2	2.48	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:89:ASP:CG	1:A:150:THR:H	2.19	0.45
1:A:413:VAL:HG12	1:A:417:ILE:CG1	2.47	0.45
2:B:7:LEU:CD1	2:B:69:PRO:HD2	2.45	0.45
2:B:177:GLN:HA	2:B:180:PHE:CB	2.46	0.45
2:B:226:VAL:O	2:B:230:LEU:CB	2.64	0.45
3:C:14:VAL:HB	3:C:86:LEU:HD21	1.99	0.45
3:C:106:TYR:O	3:C:107:PHE:CD1	2.70	0.45
3:C:123:PRO:HD3	1:D:149:TRP:CZ2	2.52	0.45
3:C:137:PHE:CD1	3:C:137:PHE:C	2.89	0.45
3:C:204:ASP:H	3:C:207:PRO:CG	2.27	0.45
3:C:481:PRO:HA	3:C:484:LYS:HZ3	1.81	0.45
1:D:107:LYS:N	1:D:107:LYS:CD	2.72	0.45
1:D:238:ASP:CB	4:E:308:LEU:CD2	2.84	0.45
4:E:22:LYS:CG	4:E:23:THR:N	2.78	0.45
4:E:95:VAL:HG22	4:E:123:TYR:CD2	2.52	0.45
1:A:104:HIS:C	1:A:105:MET:SD	2.95	0.45
1:A:289:ILE:O	1:A:292:THR:OG1	2.34	0.45
1:A:385:HIS:C	1:A:385:HIS:ND1	2.70	0.45
1:A:387:LYS:O	1:A:390:GLU:HG3	2.16	0.45
2:B:46:LYS:HG3	2:B:278:PRO:CD	2.47	0.45
2:B:137:PHE:HB2	2:B:464:PRO:HG2	1.97	0.45
2:B:185:GLN:C	2:B:216:LYS:HZ2	2.20	0.45
2:B:234:LEU:CA	2:B:237:LEU:HB2	2.46	0.45
3:C:84:PRO:HG2	3:C:85:GLU:CD	2.37	0.45
3:C:233:ILE:C	3:C:235:PRO:HD2	2.36	0.45
1:D:26:THR:CG2	1:D:27:HIS:N	2.79	0.45
1:D:35:LEU:CD2	1:D:164:ARG:NH1	2.64	0.45
1:D:257:LEU:HA	1:D:260:ILE:CB	2.46	0.45
1:D:408:HIS:O	1:D:412:CYS:CB	2.63	0.45
1:A:219:ILE:CG2	1:A:219:ILE:O	2.64	0.45
2:B:211:LEU:HB3	2:B:213:ILE:HG22	1.98	0.45
2:B:238:VAL:CA	2:B:248:LYS:HZ1	2.30	0.45
3:C:108:CYS:SG	3:C:109:ASN:N	2.89	0.45
3:C:143:ASN:HA	3:C:220:ILE:HA	1.98	0.45
3:C:204:ASP:CG	3:C:205:LYS:H	2.20	0.45
3:C:224:LYS:HZ3	3:C:291:TYR:HE2	1.65	0.45
3:C:257:MET:CE	3:C:320:HIS:O	2.64	0.45
3:C:427:ASN:CA	3:C:430:VAL:HG23	2.38	0.45
1:D:48:GLN:HB2	1:D:130:ILE:HG23	1.98	0.45
1:D:242:LYS:HB2	1:D:245:LEU:HB2	1.99	0.45
4:E:19:LYS:HZ3	4:E:154:GLU:HB2	1.74	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:89:VAL:CG2	4:E:99:PHE:CZ	2.95	0.45
4:E:237:VAL:HA	4:E:240:TYR:HB2	1.98	0.45
2:B:132:VAL:CG1	2:B:279:ILE:CA	2.87	0.45
2:B:226:VAL:HG23	2:B:227:PRO:CD	2.46	0.45
2:B:265:LEU:HA	2:B:268:ASP:OD2	2.17	0.45
3:C:33:ILE:HD12	3:C:158:ILE:HG12	1.99	0.45
3:C:37:LEU:HD11	3:C:148:PHE:CD1	2.52	0.45
3:C:216:THR:O	3:C:217:PHE:CD1	2.59	0.45
3:C:263:VAL:O	3:C:267:GLN:HG3	2.17	0.45
1:D:53:ASN:CB	1:D:123:ILE:HG12	2.35	0.45
1:D:57:ARG:HG3	1:D:117:MET:SD	2.56	0.45
1:D:415:MET:O	1:D:419:ILE:N	2.49	0.45
1:D:426:PHE:CE1	1:D:430:LEU:CD1	2.99	0.45
4:E:30:VAL:O	4:E:158:GLN:CG	2.60	0.45
4:E:239:VAL:HA	4:E:242:LEU:CD2	2.45	0.45
1:A:146:LEU:N	1:A:146:LEU:CD1	2.80	0.45
1:A:146:LEU:HD22	1:A:203:TYR:OH	2.17	0.45
1:A:382:ILE:HD12	4:E:424:LYS:NZ	2.31	0.45
2:B:236:ILE:HA	2:B:239:PHE:CD2	2.52	0.45
3:C:306:CYS:C	3:C:309:VAL:HB	2.37	0.45
1:D:37:LEU:HD13	1:D:54:VAL:CG1	2.47	0.45
4:E:74:ILE:HG12	4:E:76:LEU:O	2.17	0.45
4:E:86:LEU:HD13	4:E:103:TYR:OH	2.16	0.45
4:E:293:SER:HA	4:E:296:ILE:HG23	1.99	0.45
1:A:138:ASP:O	1:A:139:GLN:CD	2.55	0.45
1:A:262:GLU:CG	4:E:271:LYS:HZ1	2.28	0.45
1:A:286:ILE:C	1:A:289:ILE:HB	2.37	0.45
2:B:7:LEU:O	2:B:8:LEU:C	2.55	0.45
2:B:45:GLU:OE1	2:B:134:TYR:HB3	2.17	0.45
2:B:90:ILE:HA	2:B:147:LYS:O	2.17	0.45
2:B:130:ILE:CB	2:B:134:TYR:CE2	2.99	0.45
2:B:131:LYS:C	2:B:133:MET:H	2.20	0.45
2:B:456:LEU:O	2:B:460:HIS:N	2.38	0.45
3:C:12:LEU:HD12	3:C:16:LYS:CE	2.47	0.45
3:C:205:LYS:HD3	3:C:205:LYS:N	2.31	0.45
1:D:53:ASN:ND2	1:D:121:PRO:O	2.50	0.45
1:D:227:PHE:CE1	1:D:231:LEU:HG	2.52	0.45
1:D:401:TYR:O	1:D:401:TYR:HD1	2.00	0.45
4:E:5:ARG:H	4:E:5:ARG:HG2	1.33	0.45
4:E:91:LEU:HD13	4:E:145:PHE:CA	2.47	0.45
4:E:91:LEU:H	4:E:95:VAL:HB	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:236:VAL:O	4:E:240:TYR:N	2.50	0.45
1:A:170:PHE:HE1	1:A:176:TRP:CD1	2.34	0.45
1:A:227:PHE:C	1:A:230:VAL:HB	2.36	0.45
1:A:236:PRO:HB3	1:A:299:HIS:CE1	2.52	0.45
1:A:415:MET:O	1:A:419:ILE:N	2.50	0.45
2:B:134:TYR:C	2:B:279:ILE:HD13	2.36	0.45
2:B:138:ASP:HA	2:B:467:PRO:HG2	1.99	0.45
3:C:30:VAL:HG11	3:C:159:SER:CA	2.47	0.45
3:C:132:ILE:HG22	3:C:133:ASN:O	2.17	0.45
3:C:219:LEU:HG	3:C:221:ILE:HG23	1.98	0.45
3:C:292:LEU:HD23	3:C:295:ILE:HD12	1.98	0.45
3:C:306:CYS:CA	3:C:309:VAL:HB	2.47	0.45
3:C:447:ASN:O	3:C:448:LEU:C	2.54	0.45
1:D:3:HIS:O	1:D:7:LEU:N	2.45	0.45
1:D:29:VAL:HG11	1:D:60:TRP:NE1	2.27	0.45
1:D:35:LEU:HD11	1:D:54:VAL:CG2	2.43	0.45
1:D:36:GLN:NE2	1:D:38:ILE:CG1	2.80	0.45
4:E:66:TRP:CB	4:E:70:GLU:HB3	2.47	0.45
1:A:137:PHE:CD1	1:A:435:GLN:OE1	2.70	0.45
2:B:221:ILE:HA	2:B:224:THR:HB	1.99	0.45
2:B:232:SER:HA	2:B:235:ALA:CB	2.42	0.45
3:C:80:LEU:O	3:C:112:VAL:HG23	2.16	0.45
1:D:17:LYS:HE3	1:D:84:ASP:HA	1.99	0.45
1:D:32:THR:HB	1:D:59:GLN:O	2.17	0.45
1:D:60:TRP:CE2	1:D:86:TRP:CH2	3.05	0.45
1:D:273:LEU:O	1:D:273:LEU:HD23	2.17	0.45
4:E:28:ILE:HG12	4:E:29:ASP:N	2.32	0.45
4:E:173:ASP:H	4:E:188:ARG:CB	2.29	0.45
1:A:201:ILE:HG22	1:A:203:TYR:CE1	2.52	0.44
2:B:117:SER:CB	2:B:119:HIS:NE2	2.80	0.44
2:B:145:VAL:HG13	2:B:208:THR:HA	1.99	0.44
3:C:253:SER:OG	1:D:306:HIS:CB	2.64	0.44
3:C:462:THR:O	3:C:466:VAL:CG2	2.61	0.44
4:E:81:SER:OG	4:E:82:GLU:N	2.39	0.44
4:E:105:ALA:HB3	4:E:117:TRP:HE1	1.83	0.44
4:E:312:ASN:H	4:E:440:VAL:HG11	1.82	0.44
1:A:92:LEU:HB2	1:A:95:ASN:HB2	1.98	0.44
1:A:179:LYS:HB2	1:A:206:ILE:HG22	1.99	0.44
1:A:187:TRP:HE1	1:A:196:THR:CG2	2.28	0.44
1:A:250:LEU:HD13	1:A:296:ILE:HG21	1.95	0.44
1:A:259:VAL:HG13	1:A:262:GLU:OE1	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:241:LEU:HD13	3:C:314:PHE:CG	2.52	0.44
3:C:132:ILE:C	3:C:136:TYR:HB2	2.34	0.44
1:D:219:ILE:HD12	1:D:219:ILE:O	2.17	0.44
1:D:236:PRO:CB	1:D:299:HIS:HE2	2.21	0.44
4:E:109:VAL:HG22	4:E:115:MET:HE3	1.99	0.44
4:E:271:LYS:N	4:E:273:PRO:HD2	2.31	0.44
4:E:311:PRO:CD	4:E:440:VAL:HG22	2.47	0.44
1:A:139:GLN:HB2	1:A:207:MET:C	2.36	0.44
1:A:256:PHE:CD1	1:A:256:PHE:N	2.85	0.44
2:B:16:ASN:HA	2:B:17:PRO:HD2	1.72	0.44
2:B:68:ASP:O	2:B:72:TYR:CB	2.62	0.44
2:B:85:VAL:CG1	2:B:86:TRP:N	2.80	0.44
2:B:144:MET:HB2	2:B:209:PHE:HB2	1.98	0.44
2:B:181:THR:CG2	2:B:181:THR:O	2.63	0.44
2:B:241:LEU:HD13	3:C:314:PHE:CD1	2.53	0.44
2:B:289:ILE:HG22	2:B:293:PHE:CE2	2.53	0.44
3:C:141:TRP:CB	3:C:221:ILE:O	2.66	0.44
3:C:273:LEU:CD2	3:C:276:GLN:HB2	2.44	0.44
1:D:107:LYS:H	1:D:107:LYS:CD	2.24	0.44
1:D:131:ILE:CD1	1:D:133:THR:CB	2.95	0.44
1:D:146:LEU:N	1:D:146:LEU:CD1	2.80	0.44
1:D:252:SER:OG	1:D:253:LEU:N	2.48	0.44
1:D:413:VAL:O	1:D:417:ILE:N	2.45	0.44
1:D:419:ILE:CD1	1:D:420:ILE:CG2	2.92	0.44
4:E:214:ILE:C	4:E:214:ILE:CD1	2.82	0.44
4:E:225:ILE:O	4:E:228:PRO:HG2	2.17	0.44
1:A:9:ALA:O	1:A:13:GLU:HG3	2.16	0.44
1:A:37:LEU:H	1:A:164:ARG:NH2	2.14	0.44
1:A:72:TYR:C	1:A:72:TYR:HD1	2.18	0.44
1:A:89:ASP:OD1	1:A:149:TRP:N	2.46	0.44
1:A:145:LYS:HZ3	1:A:202:THR:HG21	1.82	0.44
1:A:176:TRP:HD1	1:A:207:MET:HG3	1.82	0.44
1:A:223:LEU:HA	1:A:226:SER:CB	2.48	0.44
1:A:234:TYR:CE2	1:A:410:LEU:HD11	2.51	0.44
1:A:247:ILE:HG22	1:A:248:SER:H	1.82	0.44
1:A:249:VAL:CG1	1:A:253:LEU:HD23	2.44	0.44
1:A:279:LEU:HD13	1:A:282:MET:HG2	2.00	0.44
1:A:285:VAL:HG13	1:A:286:ILE:CG1	2.47	0.44
2:B:60:TRP:CD1	2:B:61:THR:N	2.85	0.44
2:B:107:ASN:HB2	3:C:152:ASN:CG	2.38	0.44
2:B:136:PRO:O	2:B:139:TRP:N	2.43	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:432:ALA:O	2:B:436:ASP:OD2	2.36	0.44
3:C:137:PHE:H	3:C:138:PRO:CD	2.29	0.44
3:C:180:ASP:CG	3:C:219:LEU:HD13	2.37	0.44
3:C:271:LEU:HD23	3:C:271:LEU:O	2.16	0.44
3:C:449:VAL:CG1	3:C:452:THR:HG21	2.42	0.44
1:D:37:LEU:HB2	1:D:54:VAL:HG13	1.99	0.44
1:D:38:ILE:O	1:D:39:GLN:CG	2.66	0.44
1:D:46:VAL:HA	1:D:272:PRO:CG	2.47	0.44
4:E:279:VAL:CB	4:E:280:PRO:CD	2.96	0.44
4:E:444:LYS:O	4:E:448:LYS:CG	2.60	0.44
1:A:45:GLU:CD	1:A:134:HIS:ND1	2.71	0.44
1:A:62:ASP:O	1:A:64:ARG:N	2.49	0.44
1:A:68:ASN:CG	1:A:69:PRO:HD2	2.38	0.44
1:A:135:PHE:O	1:A:135:PHE:CG	2.70	0.44
1:A:160:PRO:HG3	1:A:185:LYS:CE	2.47	0.44
1:A:209:ARG:HG2	1:A:210:ILE:H	1.80	0.44
1:A:247:ILE:HG12	4:E:253:LEU:CD1	2.47	0.44
1:A:398:GLU:C	1:A:400:LYS:N	2.70	0.44
1:A:422:THR:HA	1:A:425:VAL:CG1	2.48	0.44
2:B:37:LEU:CD2	2:B:179:ALA:C	2.84	0.44
2:B:144:MET:CE	2:B:191:LYS:CE	2.85	0.44
2:B:220:TYR:HD2	2:B:223:TYR:HH	1.64	0.44
2:B:248:LYS:HB2	2:B:248:LYS:HE2	1.79	0.44
2:B:298:SER:CA	2:B:301:VAL:HG22	2.48	0.44
3:C:142:GLN:CG	3:C:143:ASN:N	2.53	0.44
1:D:33:VAL:HB	1:D:158:ILE:HG21	1.99	0.44
1:D:67:TRP:CG	1:D:71:ASP:HB3	2.53	0.44
1:D:134:HIS:CE1	1:D:209:ARG:CD	2.75	0.44
1:D:266:SER:O	1:D:270:ALA:CB	2.65	0.44
1:D:290:ILE:HG13	1:D:291:VAL:N	2.33	0.44
1:D:298:THR:O	1:D:301:ARG:HG2	2.17	0.44
4:E:58:GLN:HA	4:E:59:TRP:HE3	1.82	0.44
1:A:66:ARG:HA	1:A:113:THR:O	2.18	0.44
1:A:261:VAL:C	1:A:265:PRO:HD3	2.36	0.44
3:C:22:ARG:HG2	3:C:153:TYR:CE2	2.52	0.44
1:D:35:LEU:HD11	1:D:54:VAL:CG1	2.36	0.44
1:D:209:ARG:C	1:D:210:ILE:HG13	2.38	0.44
1:D:229:THR:C	1:D:232:VAL:HB	2.34	0.44
1:D:397:GLU:HG3	1:D:401:TYR:HE2	1.83	0.44
4:E:21:ALA:O	4:E:22:LYS:C	2.56	0.44
4:E:100:GLU:CG	4:E:122:ILE:O	2.66	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:251:LEU:CD1	4:E:260:ALA:CB	2.86	0.44
2:B:281:ILE:N	2:B:281:ILE:CD1	2.75	0.44
2:B:434:VAL:HG12	2:B:438:LEU:HD12	1.99	0.44
3:C:51:THR:O	3:C:52:LEU:HD13	2.18	0.44
1:D:99:ASP:O	1:D:124:PHE:HB2	2.18	0.44
1:D:250:LEU:HD23	1:D:253:LEU:CD1	2.47	0.44
1:D:254:THR:OG1	1:D:258:LEU:HD13	2.18	0.44
1:D:277:TYR:HD1	1:D:280:PHE:CE2	2.35	0.44
1:D:302:SER:CB	1:D:400:LYS:HG2	2.48	0.44
4:E:182:GLU:OE1	4:E:182:GLU:HA	2.18	0.44
4:E:269:ALA:O	4:E:273:PRO:HD3	2.17	0.44
4:E:472:ASN:OD1	4:E:476:GLU:OE2	2.36	0.44
1:A:229:THR:O	1:A:233:PHE:CE1	2.67	0.44
2:B:87:GLN:CD	2:B:104:LEU:HD11	2.38	0.44
2:B:197:TRP:HB3	2:B:204:TYR:HD1	1.82	0.44
2:B:227:PRO:O	2:B:231:ILE:N	2.37	0.44
3:C:74:TYR:O	3:C:78:SER:HA	2.18	0.44
3:C:77:ILE:HD11	3:C:80:LEU:HD22	2.00	0.44
3:C:154:ASN:HA	3:C:211:ASN:HB2	1.99	0.44
3:C:259:THR:CB	1:D:244:THR:OG1	2.66	0.44
3:C:289:GLY:HA3	3:C:293:MET:HE1	2.00	0.44
1:D:35:LEU:CD1	1:D:54:VAL:HG21	2.46	0.44
1:D:132:VAL:O	1:D:274:ILE:HG23	2.18	0.44
1:D:178:MET:SD	1:D:207:MET:CG	3.06	0.44
1:D:274:ILE:HG13	1:D:277:TYR:CD2	2.52	0.44
1:D:283:ILE:O	1:D:287:SER:N	2.51	0.44
1:D:419:ILE:O	1:D:423:VAL:N	2.51	0.44
4:E:209:ILE:CG1	4:E:211:PHE:HE1	2.28	0.44
4:E:453:ILE:O	4:E:457:LEU:CB	2.64	0.44
1:A:62:ASP:C	1:A:64:ARG:N	2.71	0.44
2:B:38:THR:O	2:B:39:SER:OG	2.36	0.44
2:B:79:SER:O	2:B:80:ILE:HG13	2.18	0.44
2:B:437:ARG:HA	2:B:437:ARG:HD2	1.67	0.44
3:C:77:ILE:HD11	3:C:80:LEU:CG	2.47	0.44
3:C:278:LEU:N	3:C:279:PRO:HD2	2.31	0.44
3:C:455:ARG:O	3:C:459:PHE:CD1	2.62	0.44
1:D:33:VAL:HG22	1:D:34:GLY:N	2.32	0.44
1:D:221:PRO:O	1:D:225:PHE:CB	2.66	0.44
1:D:379:VAL:HG22	1:D:382:ILE:HD11	1.98	0.44
1:D:413:VAL:HG12	1:D:417:ILE:CG1	2.44	0.44
4:E:6:LEU:HD21	4:E:67:ASN:OD1	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:38:ASN:ND2	4:E:40:ILE:HG12	2.33	0.44
4:E:48:ALA:HA	4:E:126:THR:HA	2.00	0.44
4:E:59:TRP:CZ2	4:E:84:LEU:CD2	3.01	0.44
1:A:92:LEU:HD23	1:A:92:LEU:H	1.83	0.43
1:A:158:ILE:O	1:A:158:ILE:CG2	2.65	0.43
1:A:426:PHE:HD1	1:A:427:ALA:CA	2.28	0.43
2:B:20:ARG:O	2:B:22:SER:N	2.46	0.43
2:B:160:HIS:NE2	2:B:207:VAL:CG1	2.56	0.43
2:B:192:PRO:CB	2:B:210:TYR:HB2	2.48	0.43
3:C:230:ILE:HG12	3:C:231:ASN:H	1.81	0.43
3:C:241:PHE:C	3:C:245:LEU:HG	2.34	0.43
1:D:32:THR:CB	1:D:59:GLN:O	2.66	0.43
4:E:58:GLN:HA	4:E:59:TRP:CE3	2.53	0.43
4:E:109:VAL:O	4:E:110:TYR:O	2.35	0.43
4:E:255:ILE:HD12	4:E:304:LEU:HD22	2.00	0.43
4:E:307:SER:C	4:E:314:HIS:O	2.56	0.43
4:E:475:PRO:C	4:E:477:PHE:N	2.68	0.43
1:A:79:ARG:NH1	1:A:107:LYS:HZ1	2.16	0.43
1:A:405:VAL:O	1:A:409:ILE:HG13	2.18	0.43
1:A:432:GLU:HG3	1:A:436:GLU:HG3	2.00	0.43
2:B:53:SER:CB	3:C:99:ASP:OD1	2.65	0.43
2:B:137:PHE:C	2:B:464:PRO:O	2.57	0.43
2:B:145:VAL:HG11	2:B:206:ASP:OD2	2.19	0.43
2:B:227:PRO:CA	2:B:231:ILE:HG12	2.48	0.43
2:B:236:ILE:O	2:B:240:TYR:CB	2.62	0.43
3:C:82:LEU:O	3:C:87:ILE:CD1	2.66	0.43
3:C:130:CYS:O	3:C:132:ILE:HD13	2.18	0.43
3:C:252:GLU:O	3:C:253:SER:HB2	2.19	0.43
3:C:289:GLY:C	3:C:293:MET:HE2	2.36	0.43
1:D:60:TRP:O	1:D:116:ILE:CD1	2.66	0.43
1:D:264:ILE:HA	1:D:267:THR:CG2	2.48	0.43
1:D:381:TYR:O	1:D:385:HIS:HB2	2.18	0.43
4:E:71:TYR:CD1	4:E:111:ASN:CG	2.91	0.43
4:E:144:VAL:HG23	4:E:144:VAL:O	2.18	0.43
4:E:173:ASP:CG	4:E:185:ILE:CD1	2.86	0.43
4:E:305:ASN:HA	4:E:308:LEU:CB	2.48	0.43
4:E:452:TRP:O	4:E:456:LEU:HB3	2.18	0.43
1:A:82:SER:O	1:A:83:ASP:C	2.56	0.43
1:A:141:ASN:OD1	1:A:141:ASN:N	2.48	0.43
1:A:190:TYR:C	1:A:192:CYS:N	2.71	0.43
2:B:21:PRO:CG	2:B:60:TRP:HE1	2.22	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:86:TRP:HD1	2:B:151:TYR:CE2	2.37	0.43
2:B:91:VAL:HG22	2:B:92:LEU:N	2.33	0.43
2:B:100:PHE:CB	2:B:103:THR:HB	2.47	0.43
2:B:236:ILE:O	2:B:240:TYR:N	2.51	0.43
2:B:409:LYS:O	2:B:413:GLU:N	2.40	0.43
2:B:424:LEU:O	2:B:427:ASP:HB3	2.18	0.43
3:C:50:GLU:HA	3:C:132:ILE:CG1	2.48	0.43
3:C:95:GLN:CD	3:C:147:LYS:HB3	2.38	0.43
3:C:104:VAL:HA	3:C:106:TYR:CD1	2.53	0.43
3:C:279:PRO:O	3:C:283:LEU:N	2.42	0.43
1:D:67:TRP:CE3	1:D:67:TRP:HA	2.52	0.43
1:D:92:LEU:HD13	1:D:146:LEU:CD2	2.47	0.43
1:D:93:TYR:N	1:D:93:TYR:CD1	2.86	0.43
1:D:130:ILE:O	1:D:131:ILE:CG1	2.66	0.43
1:D:277:TYR:HA	1:D:280:PHE:CZ	2.52	0.43
1:D:432:GLU:C	1:D:436:GLU:OE2	2.56	0.43
1:A:34:GLY:O	1:A:57:ARG:HG2	2.18	0.43
1:A:46:VAL:CG2	1:A:270:ALA:C	2.87	0.43
1:A:56:LEU:CD1	1:A:90:LEU:CD1	2.96	0.43
1:A:134:HIS:CD2	1:A:207:MET:CE	3.01	0.43
2:B:38:THR:HG23	2:B:54:VAL:HA	1.99	0.43
2:B:92:LEU:H	2:B:96:ASN:HB3	1.73	0.43
2:B:163:ASP:CB	2:B:193:SER:OG	2.66	0.43
2:B:269:LYS:CE	2:B:270:VAL:HG23	2.42	0.43
2:B:462:VAL:CB	2:B:463:PRO:HD3	2.46	0.43
1:D:56:LEU:HB2	1:D:120:PRO:HG3	1.94	0.43
1:D:214:PHE:HE1	1:D:267:THR:HG21	1.81	0.43
1:D:220:ILE:N	1:D:221:PRO:CD	2.81	0.43
1:D:225:PHE:HD1	1:D:225:PHE:C	2.21	0.43
1:D:432:GLU:HA	1:D:435:GLN:HB3	1.99	0.43
4:E:59:TRP:HE1	4:E:84:LEU:CD2	2.25	0.43
4:E:136:PHE:HA	4:E:138:TRP:CH2	2.53	0.43
4:E:199:THR:O	4:E:200:LYS:HB3	2.18	0.43
4:E:436:ASN:O	4:E:437:GLU:C	2.57	0.43
1:A:60:TRP:NE1	1:A:116:ILE:HD12	2.28	0.43
1:A:221:PRO:HB2	1:A:224:LEU:HD23	1.99	0.43
1:A:255:VAL:CG2	1:A:258:LEU:HD12	2.45	0.43
2:B:24:THR:CG2	2:B:25:VAL:N	2.76	0.43
2:B:81:PRO:O	2:B:82:SER:O	2.37	0.43
2:B:197:TRP:HD1	2:B:205:GLU:N	2.16	0.43
2:B:217:PRO:CB	2:B:219:PHE:CE2	3.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:434:VAL:HG13	2:B:438:LEU:HD12	2.01	0.43
3:C:180:ASP:CA	3:C:195:LYS:HG2	2.49	0.43
3:C:219:LEU:CD1	3:C:221:ILE:HG22	2.48	0.43
3:C:230:ILE:CG1	3:C:231:ASN:ND2	2.67	0.43
3:C:245:LEU:O	3:C:249:LEU:N	2.39	0.43
3:C:470:ILE:HD13	3:C:470:ILE:HA	1.89	0.43
1:D:76:LYS:HB3	1:D:77:LYS:H	1.54	0.43
1:D:80:LEU:HD22	1:D:110:LEU:CD2	2.44	0.43
1:D:130:ILE:O	1:D:131:ILE:HG12	2.19	0.43
1:D:135:PHE:O	1:D:210:ILE:HD11	2.18	0.43
4:E:49:LEU:HD12	4:E:49:LEU:C	2.39	0.43
4:E:90:VAL:CG1	4:E:91:LEU:N	2.81	0.43
4:E:123:TYR:N	4:E:123:TYR:HD1	2.15	0.43
4:E:288:PHE:O	4:E:292:VAL:HG23	2.19	0.43
1:A:57:ARG:CZ	1:A:161:GLU:CD	2.87	0.43
1:A:137:PHE:CD1	1:A:210:ILE:CD1	3.01	0.43
1:A:137:PHE:HE1	1:A:210:ILE:HD12	1.69	0.43
1:A:145:LYS:NZ	1:A:202:THR:HG21	2.31	0.43
1:A:397:GLU:HA	1:A:400:LYS:CG	2.49	0.43
3:C:8:ILE:HD11	3:C:69:TRP:CZ3	2.46	0.43
3:C:60:HIS:CE1	3:C:160:MET:CE	3.01	0.43
3:C:148:PHE:N	3:C:148:PHE:HD1	2.16	0.43
3:C:211:ASN:O	3:C:212:TYR:C	2.56	0.43
1:D:85:VAL:CG2	1:D:108:LEU:CD1	2.96	0.43
1:D:384:GLU:OE1	1:D:384:GLU:HA	2.19	0.43
4:E:193:ASN:O	4:E:206:GLN:HG2	2.19	0.43
1:A:76:LYS:HE3	1:A:112:TYR:OH	2.19	0.43
1:A:107:LYS:HZ3	2:B:151:TYR:HA	1.84	0.43
1:A:110:LEU:HD12	1:A:111:ASP:N	2.34	0.43
1:A:137:PHE:CG	1:A:435:GLN:CD	2.91	0.43
1:A:234:TYR:CD1	1:A:410:LEU:HD21	2.54	0.43
2:B:108:VAL:HG13	2:B:118:TRP:CB	2.45	0.43
2:B:130:ILE:CG2	2:B:134:TYR:CE2	3.01	0.43
2:B:160:HIS:CD2	2:B:209:PHE:HE1	2.37	0.43
3:C:21:VAL:O	3:C:23:PRO:HD3	2.19	0.43
3:C:35:LEU:CD2	3:C:215:VAL:HG21	2.44	0.43
3:C:191:GLU:HG3	3:C:222:ARG:HB3	2.00	0.43
3:C:271:LEU:C	3:C:271:LEU:CD2	2.87	0.43
1:D:187:TRP:CZ2	1:D:196:THR:HA	2.42	0.43
1:D:435:GLN:C	1:D:437:GLY:N	2.71	0.43
4:E:116:TYR:CD1	4:E:116:TYR:C	2.92	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:132:THR:C	4:E:134:PHE:H	2.10	0.43
4:E:214:ILE:HD12	4:E:215:GLN:N	2.34	0.43
4:E:242:LEU:HG	4:E:243:PRO:HD3	2.01	0.43
4:E:416:VAL:O	4:E:420:ASN:N	2.51	0.43
4:E:423:ALA:C	4:E:425:SER:N	2.72	0.43
1:A:69:PRO:HA	1:A:73:GLY:HA3	2.00	0.43
1:A:133:THR:HG21	1:A:140:GLN:OE1	2.19	0.43
1:A:135:PHE:CB	1:A:272:PRO:O	2.67	0.43
1:A:146:LEU:N	1:A:201:ILE:O	2.48	0.43
1:A:276:LYS:O	1:A:280:PHE:CE1	2.72	0.43
1:A:418:CYS:O	1:A:422:THR:CB	2.66	0.43
2:B:192:PRO:CG	2:B:210:TYR:HB2	2.49	0.43
2:B:286:PHE:CE1	2:B:287:ILE:HG23	2.54	0.43
2:B:311:THR:CG2	2:B:312:HIS:N	2.81	0.43
3:C:4:GLU:CG	3:C:5:GLU:N	2.82	0.43
3:C:64:ASP:HB3	3:C:67:LEU:HB3	2.01	0.43
3:C:262:CYS:C	1:D:251:LEU:HD11	2.39	0.43
3:C:426:THR:HA	3:C:429:ILE:HG21	2.01	0.43
3:C:465:MET:O	3:C:469:THR:CB	2.67	0.43
1:D:28:PHE:N	1:D:28:PHE:HD1	2.17	0.43
1:D:43:VAL:HG12	1:D:44:ASP:N	2.33	0.43
1:D:57:ARG:CD	1:D:161:GLU:OE1	2.66	0.43
1:D:95:ASN:HD22	1:D:127:TYR:C	2.21	0.43
1:D:102:ILE:O	1:D:102:ILE:CG2	2.56	0.43
1:D:130:ILE:CD1	1:D:131:ILE:N	2.80	0.43
1:D:233:PHE:CB	1:D:410:LEU:HB3	2.49	0.43
1:D:244:THR:O	1:D:247:ILE:HB	2.19	0.43
1:D:250:LEU:HD21	1:D:292:THR:OG1	2.19	0.43
1:D:260:ILE:O	1:D:264:ILE:HG13	2.18	0.43
4:E:91:LEU:HD13	4:E:145:PHE:N	2.34	0.43
4:E:128:PRO:O	4:E:129:ILE:CG1	2.60	0.43
4:E:290:MET:O	4:E:294:LEU:N	2.49	0.43
1:A:65:LEU:HB3	1:A:110:LEU:CD2	2.49	0.43
2:B:106:VAL:HG12	2:B:118:TRP:NE1	2.34	0.43
2:B:152:ASP:CG	2:B:203:SER:HB3	2.39	0.43
2:B:187:SER:HB2	2:B:214:GLN:HG3	2.00	0.43
3:C:7:LEU:HD23	3:C:10:ASP:CB	2.37	0.43
3:C:48:THR:HA	3:C:286:PRO:HD3	2.00	0.43
3:C:90:PRO:HD2	3:C:120:TRP:HE3	1.78	0.43
3:C:91:ASP:OD2	3:C:152:ASN:CB	2.67	0.43
1:D:69:PRO:HA	1:D:73:GLY:HA3	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:305:THR:HG21	1:D:401:TYR:N	2.33	0.43
1:D:416:LEU:O	1:D:419:ILE:HG13	2.19	0.43
4:E:74:ILE:O	4:E:74:ILE:CG1	2.65	0.43
4:E:138:TRP:CZ2	4:E:215:GLN:CD	2.92	0.43
4:E:202:ASP:O	4:E:203:ILE:O	2.36	0.43
4:E:240:TYR:CG	4:E:453:ILE:HG12	2.53	0.43
4:E:277:LEU:HG	4:E:277:LEU:H	1.61	0.43
4:E:449:ALA:HA	4:E:452:TRP:HB2	2.00	0.43
1:A:28:PHE:CE1	1:A:154:THR:HA	2.54	0.43
1:A:94:ASN:O	1:A:127:TYR:CD2	2.72	0.43
1:A:178:MET:HA	1:A:207:MET:CB	2.49	0.43
1:A:243:MET:CB	1:A:306:HIS:ND1	2.82	0.43
1:A:278:MET:CE	1:A:282:MET:CE	2.96	0.43
1:A:374:SER:N	1:A:377:GLU:CD	2.72	0.43
2:B:23:GLN:HG2	2:B:23:GLN:O	2.19	0.43
2:B:33:VAL:HG11	2:B:158:LEU:CD1	2.46	0.43
2:B:247:GLU:O	2:B:249:MET:CG	2.66	0.43
3:C:185:THR:HG23	3:C:187:ASN:H	1.83	0.43
1:D:49:ILE:CG2	1:D:125:LYS:HE3	2.48	0.43
1:D:55:ARG:C	1:D:56:LEU:HD23	2.39	0.43
1:D:72:TYR:CD1	1:D:72:TYR:O	2.71	0.43
1:D:222:CYS:HA	1:D:225:PHE:CE1	2.53	0.43
1:D:264:ILE:O	1:D:267:THR:HG23	2.19	0.43
1:D:303:PRO:CG	1:D:400:LYS:NZ	2.81	0.43
4:E:30:VAL:HG22	4:E:59:TRP:HB3	2.01	0.43
4:E:61:ASP:OD1	4:E:63:ARG:HB2	2.19	0.43
4:E:108:LEU:CB	4:E:116:TYR:O	2.67	0.43
4:E:116:TYR:HD1	4:E:116:TYR:C	2.22	0.43
1:A:90:LEU:CD1	1:A:100:PHE:CE2	2.82	0.42
1:A:287:SER:C	1:A:289:ILE:N	2.71	0.42
1:A:379:VAL:HA	1:A:382:ILE:CG1	2.49	0.42
2:B:44:ASN:O	2:B:130:ILE:HD11	2.19	0.42
3:C:2:ASN:O	3:C:72:SER:CB	2.67	0.42
3:C:62:TRP:CH2	3:C:120:TRP:HB3	2.52	0.42
3:C:211:ASN:ND2	3:C:212:TYR:CE2	2.87	0.42
1:D:67:TRP:HA	1:D:67:TRP:HE3	1.84	0.42
1:D:136:PRO:HG3	1:D:274:ILE:HG12	2.00	0.42
1:D:400:LYS:O	1:D:402:VAL:HG23	2.19	0.42
4:E:261:GLN:NE2	4:E:265:LEU:HD21	2.34	0.42
4:E:287:ILE:O	4:E:291:PHE:HD2	2.02	0.42
1:A:1:SER:H2	1:A:4:GLU:HB2	1.78	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:85:VAL:HG12	1:A:86:TRP:N	2.34	0.42
1:A:93:TYR:HD2	1:A:145:LYS:HD3	1.83	0.42
1:A:100:PHE:CB	1:A:103:VAL:HG21	2.49	0.42
2:B:117:SER:HB2	2:B:119:HIS:NE2	2.34	0.42
2:B:466:ASN:N	2:B:467:PRO:HD2	2.34	0.42
3:C:30:VAL:HG23	3:C:156:ASN:HA	2.02	0.42
3:C:430:VAL:O	3:C:434:LYS:N	2.41	0.42
3:C:479:ASN:C	3:C:482:PRO:HD2	2.39	0.42
1:D:7:LEU:O	1:D:10:ASN:ND2	2.52	0.42
1:D:130:ILE:O	1:D:134:HIS:CB	2.66	0.42
4:E:162:GLU:HB3	4:E:190:ALA:O	2.18	0.42
4:E:247:GLY:N	4:E:250:LYS:HZ1	1.95	0.42
2:B:19:VAL:HG13	2:B:20:ARG:N	2.34	0.42
2:B:32:ARG:CG	2:B:59:ALA:O	2.66	0.42
2:B:138:ASP:O	2:B:139:TRP:O	2.38	0.42
2:B:159:GLN:O	2:B:159:GLN:HG3	2.19	0.42
2:B:220:TYR:C	2:B:222:VAL:N	2.72	0.42
3:C:29:GLU:O	3:C:30:VAL:CB	2.68	0.42
3:C:105:ALA:HB2	3:C:123:PRO:O	2.19	0.42
3:C:462:THR:N	3:C:463:PRO:HD2	2.34	0.42
1:D:31:ILE:HG21	1:D:158:ILE:HG12	2.01	0.42
1:D:33:VAL:CG1	1:D:158:ILE:HG21	2.50	0.42
1:D:212:LEU:O	1:D:216:VAL:HG22	2.17	0.42
1:D:227:PHE:O	1:D:227:PHE:CD1	2.73	0.42
4:E:1:ASN:CG	4:E:68:THR:HB	2.39	0.42
4:E:26:HIS:O	4:E:27:VAL:HG22	2.18	0.42
4:E:55:ILE:HG23	4:E:119:PRO:CD	2.49	0.42
4:E:453:ILE:CG1	4:E:454:ALA:N	2.83	0.42
1:A:59:GLN:HE22	1:A:117:MET:CB	2.31	0.42
1:A:133:THR:C	1:A:136:PRO:CG	2.88	0.42
1:A:293:VAL:O	1:A:297:ASN:CB	2.64	0.42
2:B:220:TYR:N	2:B:220:TYR:HD1	2.17	0.42
2:B:226:VAL:C	2:B:230:LEU:HG	2.37	0.42
3:C:19:LYS:NZ	3:C:88:TRP:HA	2.34	0.42
3:C:482:PRO:HG2	3:C:483:ALA:N	2.34	0.42
1:D:130:ILE:CG1	1:D:131:ILE:N	2.82	0.42
1:D:222:CYS:SG	1:D:225:PHE:CE1	3.05	0.42
4:E:215:GLN:CG	4:E:216:ARG:N	2.81	0.42
1:A:8:VAL:HG23	1:A:9:ALA:N	2.34	0.42
1:A:35:LEU:HD21	1:A:37:LEU:CG	2.49	0.42
1:A:39:GLN:C	1:A:40:LEU:HD23	2.39	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:148:ILE:CG2	1:A:198:TYR:CB	2.88	0.42
1:A:298:THR:CA	1:A:301:ARG:HB3	2.36	0.42
2:B:61:THR:CG2	2:B:63:TYR:HD1	2.32	0.42
2:B:218:LEU:HD13	2:B:221:ILE:CD1	2.44	0.42
3:C:194:HIS:CG	3:C:195:LYS:N	2.87	0.42
3:C:204:ASP:N	3:C:207:PRO:HG2	2.32	0.42
4:E:159:LEU:HD12	4:E:192:LYS:CA	2.48	0.42
4:E:270:GLN:O	4:E:273:PRO:HG2	2.18	0.42
1:A:41:ILE:HG13	1:A:51:GLU:HB3	1.95	0.42
1:A:47:ASN:O	1:A:49:ILE:HG13	2.19	0.42
1:A:170:PHE:CE1	1:A:176:TRP:CD1	3.08	0.42
1:A:243:MET:HE3	1:A:244:THR:H	1.83	0.42
1:A:297:ASN:O	1:A:300:HIS:HB2	2.19	0.42
1:A:302:SER:OG	1:A:400:LYS:O	2.34	0.42
2:B:47:ASN:C	2:B:48:GLU:HG2	2.25	0.42
2:B:89:ASP:OD2	2:B:149:TYR:N	2.50	0.42
2:B:91:VAL:N	2:B:147:LYS:O	2.29	0.42
3:C:83:ARG:NH1	3:C:109:ASN:HB2	2.35	0.42
3:C:224:LYS:NZ	3:C:291:TYR:HE2	2.17	0.42
4:E:91:LEU:HA	4:E:145:PHE:CB	2.50	0.42
4:E:158:GLN:O	4:E:159:LEU:HD23	2.19	0.42
1:A:170:PHE:CE1	1:A:176:TRP:NE1	2.82	0.42
1:A:405:VAL:O	1:A:405:VAL:HG23	2.18	0.42
1:A:406:ILE:HG23	1:A:409:ILE:CD1	2.49	0.42
2:B:16:ASN:HB3	2:B:19:VAL:HB	2.02	0.42
2:B:53:SER:O	2:B:54:VAL:HG13	2.19	0.42
2:B:438:LEU:CD2	2:B:441:TYR:CD2	3.02	0.42
2:B:460:HIS:O	2:B:464:PRO:HD2	2.20	0.42
3:C:8:ILE:N	3:C:73:GLU:OE2	2.52	0.42
3:C:17:TYR:OH	3:C:19:LYS:HA	2.19	0.42
3:C:43:ILE:H	3:C:43:ILE:CD1	2.25	0.42
3:C:77:ILE:HD11	3:C:80:LEU:CB	2.44	0.42
3:C:98:ASN:C	3:C:100:GLY:N	2.73	0.42
3:C:249:LEU:HB3	3:C:256:LYS:NZ	2.35	0.42
1:D:36:GLN:H	1:D:54:VAL:HG12	1.84	0.42
1:D:38:ILE:C	1:D:169:THR:CG2	2.84	0.42
1:D:175:GLU:O	1:D:209:ARG:HG3	2.19	0.42
1:D:228:LEU:O	1:D:232:VAL:N	2.47	0.42
1:D:229:THR:O	1:D:232:VAL:CB	2.51	0.42
1:D:240:GLY:O	1:D:242:LYS:N	2.52	0.42
4:E:74:ILE:C	4:E:76:LEU:N	2.71	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:123:TYR:HD1	4:E:123:TYR:H	1.68	0.42
4:E:173:ASP:OD1	4:E:173:ASP:O	2.37	0.42
4:E:215:GLN:HG3	4:E:216:ARG:N	2.34	0.42
4:E:436:ASN:O	4:E:439:TRP:CD1	2.73	0.42
1:A:152:ASP:H	4:E:78:ARG:NH2	2.17	0.42
1:A:179:LYS:CE	1:A:208:GLN:OE1	2.67	0.42
1:A:251:LEU:CD1	4:E:256:SER:O	2.67	0.42
2:B:28:LYS:HG2	2:B:155:GLU:HA	2.01	0.42
2:B:46:LYS:CA	2:B:278:PRO:HD2	2.46	0.42
2:B:241:LEU:HD21	2:B:251:LEU:CD2	2.43	0.42
2:B:409:LYS:HE2	3:C:423:ILE:CG2	2.50	0.42
2:B:440:LEU:C	2:B:443:PHE:H	2.22	0.42
3:C:3:GLU:CD	3:C:7:LEU:HB2	2.40	0.42
3:C:8:ILE:CD1	3:C:69:TRP:CZ3	3.02	0.42
3:C:29:GLU:O	3:C:30:VAL:CG2	2.66	0.42
1:D:92:LEU:CD1	1:D:146:LEU:HD21	2.50	0.42
1:D:242:LYS:CA	1:D:243:MET:HE2	2.50	0.42
1:D:264:ILE:CG2	1:D:265:PRO:HD3	2.50	0.42
1:D:303:PRO:CD	1:D:400:LYS:HD2	2.50	0.42
4:E:9:LYS:HG3	4:E:10:LEU:N	2.34	0.42
4:E:33:LYS:HZ1	4:E:160:SER:CB	2.32	0.42
4:E:240:TYR:CD2	4:E:453:ILE:HG21	2.54	0.42
1:A:67:TRP:CE3	1:A:67:TRP:HA	2.54	0.42
1:A:107:LYS:CE	2:B:150:THR:C	2.86	0.42
1:A:110:LEU:CD1	1:A:114:GLY:HA2	2.46	0.42
1:A:243:MET:CG	1:A:244:THR:N	2.82	0.42
1:A:306:HIS:C	1:A:306:HIS:CD2	2.93	0.42
1:A:415:MET:HA	1:A:415:MET:CE	2.49	0.42
1:A:422:THR:HA	1:A:425:VAL:HG12	2.02	0.42
2:B:10:VAL:HA	2:B:13:GLU:HB2	2.01	0.42
2:B:15:TYR:CD1	2:B:15:TYR:C	2.93	0.42
2:B:81:PRO:CD	3:C:20:HIS:CE1	3.00	0.42
2:B:107:ASN:HD22	3:C:152:ASN:CG	2.22	0.42
2:B:130:ILE:CD1	2:B:134:TYR:HE2	2.33	0.42
2:B:135:PHE:HB2	2:B:279:ILE:CB	2.47	0.42
2:B:137:PHE:CZ	2:B:283:TYR:OH	2.71	0.42
2:B:439:PHE:CD1	2:B:439:PHE:C	2.93	0.42
2:B:459:SER:O	2:B:463:PRO:CG	2.68	0.42
3:C:4:GLU:CB	3:C:72:SER:HB2	2.43	0.42
3:C:30:VAL:HG21	3:C:158:ILE:O	2.20	0.42
3:C:296:MET:HE2	3:C:299:VAL:HG21	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:35:LEU:HD12	1:D:54:VAL:CB	2.50	0.42
1:D:40:LEU:HD11	1:D:50:VAL:CG1	2.50	0.42
1:D:436:GLU:O	1:D:437:GLY:OXT	2.38	0.42
4:E:51:THR:O	4:E:121:ALA:O	2.38	0.42
4:E:441:LEU:C	4:E:441:LEU:CD1	2.88	0.42
1:A:38:ILE:O	1:A:39:GLN:HG2	2.11	0.42
1:A:120:PRO:HA	1:A:121:PRO:HD3	1.67	0.42
1:A:223:LEU:HA	1:A:226:SER:HB2	2.00	0.42
1:A:382:ILE:O	1:A:386:MET:HE2	2.18	0.42
2:B:88:PRO:CB	2:B:90:ILE:HG13	2.43	0.42
2:B:100:PHE:CG	2:B:103:THR:HB	2.55	0.42
2:B:152:ASP:O	2:B:154:SER:N	2.53	0.42
2:B:227:PRO:HA	2:B:231:ILE:HG12	2.01	0.42
2:B:301:VAL:O	2:B:305:HIS:N	2.49	0.42
3:C:69:TRP:HB2	3:C:74:TYR:CA	2.50	0.42
3:C:87:ILE:HG23	3:C:118:VAL:HG11	2.02	0.42
3:C:154:ASN:HA	3:C:212:TYR:H	1.85	0.42
1:D:48:GLN:HG3	1:D:48:GLN:O	2.20	0.42
1:D:181:TYR:CE1	1:D:203:TYR:HB3	2.49	0.42
1:D:254:THR:O	1:D:258:LEU:CD1	2.68	0.42
4:E:42:LEU:HA	4:E:42:LEU:HD12	1.80	0.42
4:E:202:ASP:C	4:E:203:ILE:HG13	2.40	0.42
4:E:212:LEU:O	4:E:214:ILE:HG23	2.19	0.42
4:E:456:LEU:C	4:E:456:LEU:HD13	2.40	0.42
1:A:33:VAL:O	1:A:161:GLU:HB3	2.20	0.41
1:A:36:GLN:OE1	1:A:36:GLN:O	2.38	0.41
1:A:45:GLU:OE2	1:A:135:PHE:N	2.53	0.41
1:A:279:LEU:HD13	1:A:282:MET:CG	2.49	0.41
2:B:75:ILE:CD1	2:B:78:LEU:CD1	2.87	0.41
2:B:118:TRP:CA	2:B:119:HIS:HD2	2.33	0.41
2:B:301:VAL:HG23	2:B:302:LEU:N	2.35	0.41
2:B:466:ASN:N	2:B:467:PRO:CD	2.83	0.41
3:C:1:VAL:HA	3:C:4:GLU:HG2	2.02	0.41
3:C:30:VAL:CG2	3:C:157:GLU:N	2.83	0.41
3:C:148:PHE:C	3:C:149:THR:HG22	2.40	0.41
1:D:37:LEU:HA	1:D:54:VAL:HG13	2.02	0.41
1:D:129:GLU:OE1	1:D:129:GLU:HA	2.20	0.41
4:E:107:VAL:HG12	4:E:108:LEU:N	2.27	0.41
4:E:209:ILE:CG1	4:E:211:PHE:CE1	3.03	0.41
4:E:210:PHE:O	4:E:212:LEU:CD1	2.68	0.41
4:E:238:LEU:O	4:E:242:LEU:HD23	2.17	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:417:GLU:O	4:E:421:PHE:CD2	2.73	0.41
4:E:435:GLU:OE1	4:E:439:TRP:CH2	2.73	0.41
1:A:20:ARG:HA	1:A:21:PRO:HD2	1.84	0.41
1:A:41:ILE:HG21	1:A:123:ILE:HD11	2.00	0.41
1:A:242:LYS:NZ	2:B:312:HIS:ND1	2.68	0.41
1:A:301:ARG:HG2	1:A:301:ARG:NH1	2.32	0.41
1:A:303:PRO:CB	1:A:400:LYS:HD3	2.31	0.41
2:B:92:LEU:HG	2:B:96:ASN:HD22	1.85	0.41
2:B:284:LEU:CA	2:B:287:ILE:HG13	2.47	0.41
2:B:298:SER:HA	2:B:301:VAL:HG21	2.01	0.41
2:B:431:VAL:HG21	2:B:433:MET:HG2	2.02	0.41
3:C:7:LEU:HD13	3:C:73:GLU:CG	2.50	0.41
3:C:24:VAL:HG13	3:C:31:VAL:N	2.36	0.41
3:C:91:ASP:OD2	3:C:153:TYR:CD1	2.73	0.41
3:C:266:ALA:HB2	1:D:251:LEU:HD13	1.99	0.41
3:C:295:ILE:O	3:C:299:VAL:CG2	2.68	0.41
1:D:114:GLY:O	1:D:115:LYS:C	2.56	0.41
1:D:296:ILE:CA	1:D:299:HIS:CB	2.85	0.41
1:D:402:VAL:C	1:D:404:MET:H	2.24	0.41
4:E:30:VAL:CG2	4:E:85:TRP:CZ3	3.03	0.41
4:E:109:VAL:HG13	4:E:115:MET:HE1	2.01	0.41
4:E:240:TYR:HD1	4:E:303:VAL:HG21	1.82	0.41
1:A:51:GLU:HG3	1:A:125:LYS:HD2	2.02	0.41
1:A:76:LYS:CG	1:A:112:TYR:CE2	3.01	0.41
1:A:108:LEU:HD11	1:A:118:TRP:HB2	1.98	0.41
1:A:148:ILE:HD11	1:A:156:VAL:HG22	2.02	0.41
1:A:408:HIS:C	1:A:412:CYS:HG	2.23	0.41
1:A:432:GLU:HG3	1:A:436:GLU:CG	2.50	0.41
2:B:58:LEU:HD21	2:B:118:TRP:CE3	2.55	0.41
2:B:90:ILE:HG23	2:B:147:LYS:CA	2.50	0.41
2:B:132:VAL:CA	2:B:279:ILE:HA	2.50	0.41
2:B:245:ALA:HB1	3:C:320:HIS:CD2	2.52	0.41
2:B:246:GLY:O	2:B:248:LYS:N	2.53	0.41
3:C:15:ASN:C	3:C:15:ASN:HD22	2.22	0.41
3:C:30:VAL:CG1	3:C:159:SER:HB3	2.50	0.41
1:D:75:ILE:HG13	1:D:78:ILE:HG23	2.02	0.41
1:D:78:ILE:CD1	1:D:110:LEU:CG	2.94	0.41
1:D:89:ASP:CB	1:D:149:TRP:CD1	3.00	0.41
1:D:167:LEU:HA	1:D:170:PHE:CB	2.49	0.41
1:D:210:ILE:C	1:D:211:PRO:O	2.58	0.41
1:D:275:GLY:C	1:D:277:TYR:N	2.73	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:301:ARG:HH21	1:D:405:VAL:HB	1.84	0.41
4:E:142:SER:OG	4:E:209:ILE:CD1	2.57	0.41
4:E:212:LEU:N	4:E:212:LEU:CD1	2.83	0.41
4:E:463:LEU:HD12	4:E:463:LEU:C	2.38	0.41
1:A:2:GLU:C	1:A:4:GLU:N	2.73	0.41
1:A:93:TYR:CD2	1:A:145:LYS:HD3	2.55	0.41
1:A:164:ARG:NH1	1:A:181:TYR:OH	2.54	0.41
1:A:185:LYS:HB3	1:A:185:LYS:HE2	1.75	0.41
1:A:278:MET:HE1	1:A:282:MET:CE	2.50	0.41
1:A:410:LEU:HD13	1:A:414:PHE:CD2	2.46	0.41
2:B:138:ASP:CA	2:B:464:PRO:O	2.69	0.41
2:B:152:ASP:HA	2:B:203:SER:HB2	2.01	0.41
3:C:11:LEU:O	3:C:12:LEU:C	2.59	0.41
3:C:84:PRO:HG2	3:C:85:GLU:N	2.36	0.41
1:D:20:ARG:O	1:D:22:VAL:N	2.49	0.41
1:D:40:LEU:CD1	1:D:50:VAL:HG13	2.50	0.41
1:D:134:HIS:ND1	1:D:134:HIS:C	2.73	0.41
4:E:313:THR:HB	4:E:441:LEU:HB3	2.02	0.41
1:A:201:ILE:HG21	1:A:203:TYR:CE1	2.43	0.41
3:C:48:THR:OG1	3:C:286:PRO:N	2.53	0.41
3:C:106:TYR:O	3:C:107:PHE:C	2.59	0.41
3:C:316:THR:HG21	3:C:447:ASN:CA	2.48	0.41
3:C:446:TRP:HA	3:C:446:TRP:CE3	2.56	0.41
1:D:3:HIS:HB3	1:D:7:LEU:CG	2.50	0.41
1:D:109:LEU:HB2	1:D:117:MET:H	1.85	0.41
1:D:174:GLY:C	1:D:176:TRP:H	2.23	0.41
1:D:254:THR:CG2	1:D:255:VAL:N	2.84	0.41
1:D:290:ILE:CG1	1:D:291:VAL:N	2.83	0.41
4:E:72:GLU:O	4:E:73:GLY:C	2.57	0.41
4:E:129:ILE:N	4:E:139:GLN:OE1	2.50	0.41
1:A:46:VAL:HG21	1:A:270:ALA:C	2.41	0.41
1:A:56:LEU:CD2	1:A:56:LEU:C	2.88	0.41
1:A:102:ILE:HB	1:A:121:PRO:O	2.20	0.41
1:A:106:THR:CG2	2:B:150:THR:HG23	2.49	0.41
1:A:117:MET:SD	1:A:119:THR:HG21	2.61	0.41
1:A:233:PHE:CB	1:A:410:LEU:HD22	2.50	0.41
1:A:250:LEU:HD11	1:A:296:ILE:CG2	2.37	0.41
1:A:406:ILE:HA	1:A:409:ILE:CG1	2.50	0.41
2:B:92:LEU:N	2:B:96:ASN:CB	2.51	0.41
2:B:277:VAL:N	2:B:278:PRO:CD	2.83	0.41
3:C:39:LEU:N	3:C:39:LEU:CD1	2.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:191:GLU:HG2	3:C:222:ARG:C	2.40	0.41
3:C:214:ASP:OD1	3:C:214:ASP:N	2.54	0.41
3:C:256:LYS:O	3:C:260:ALA:HB2	2.21	0.41
3:C:264:LEU:HD11	3:C:306:CYS:C	2.41	0.41
1:D:214:PHE:CZ	1:D:267:THR:HG21	2.56	0.41
1:D:274:ILE:HB	1:D:276:LYS:HD3	2.01	0.41
1:D:292:THR:OG1	1:D:296:ILE:CD1	2.68	0.41
4:E:91:LEU:HA	4:E:145:PHE:HA	2.03	0.41
4:E:117:TRP:CE2	4:E:119:PRO:HD3	2.55	0.41
4:E:265:LEU:CA	4:E:268:ILE:HG23	2.50	0.41
1:A:105:MET:SD	1:A:105:MET:N	2.93	0.41
2:B:186:TRP:C	2:B:216:LYS:HZ1	2.24	0.41
2:B:241:LEU:HB3	2:B:248:LYS:CE	2.51	0.41
2:B:459:SER:O	2:B:463:PRO:CB	2.68	0.41
3:C:223:ARG:O	3:C:224:LYS:CB	2.68	0.41
3:C:235:PRO:O	3:C:239:ILE:N	2.35	0.41
1:D:36:GLN:NE2	1:D:38:ILE:HG13	2.33	0.41
1:D:106:THR:HG23	1:D:107:LYS:CE	2.50	0.41
1:D:138:ASP:C	1:D:139:GLN:HG2	2.41	0.41
1:D:411:LEU:HD23	1:D:411:LEU:HA	1.69	0.41
4:E:94:ASN:CA	4:E:126:THR:H	2.34	0.41
4:E:175:GLU:CG	4:E:176:ASP:N	2.84	0.41
4:E:289:VAL:O	4:E:293:SER:N	2.49	0.41
4:E:435:GLU:O	4:E:436:ASN:C	2.59	0.41
1:A:36:GLN:OE1	1:A:37:LEU:O	2.39	0.41
1:A:68:ASN:ND2	1:A:69:PRO:HD2	2.35	0.41
1:A:416:LEU:HA	1:A:419:ILE:CG2	2.51	0.41
1:A:420:ILE:CG1	1:A:421:GLY:H	2.31	0.41
2:B:251:LEU:C	2:B:251:LEU:CD1	2.87	0.41
2:B:270:VAL:N	2:B:271:PRO:HD2	2.36	0.41
2:B:286:PHE:CE1	2:B:457:ASP:OD1	2.74	0.41
2:B:297:LEU:HD23	2:B:297:LEU:C	2.41	0.41
2:B:409:LYS:HB3	3:C:426:THR:HG23	1.95	0.41
3:C:54:THR:OG1	3:C:126:PHE:CE1	2.65	0.41
3:C:84:PRO:CG	3:C:85:GLU:OE1	2.68	0.41
3:C:137:PHE:C	3:C:138:PRO:O	2.59	0.41
3:C:223:ARG:O	3:C:224:LYS:CG	2.66	0.41
1:D:102:ILE:HD12	4:E:98:GLN:HE21	1.86	0.41
4:E:129:ILE:CG1	4:E:129:ILE:O	2.69	0.41
4:E:145:PHE:O	4:E:208:ILE:CG1	2.69	0.41
4:E:240:TYR:CD2	4:E:453:ILE:CB	3.04	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:131:ILE:HG13	1:A:133:THR:H	1.85	0.41
1:A:187:TRP:HD1	1:A:199:LEU:CD2	2.33	0.41
1:A:237:THR:HB	1:A:406:ILE:HG22	2.03	0.41
1:A:419:ILE:HG23	1:A:420:ILE:H	1.80	0.41
2:B:100:PHE:HD2	2:B:103:THR:HB	1.78	0.41
2:B:186:TRP:HB3	2:B:215:ARG:HB2	2.03	0.41
2:B:231:ILE:CG2	2:B:259:LEU:HD21	2.51	0.41
2:B:241:LEU:HD12	2:B:245:ALA:HB3	2.03	0.41
2:B:256:LEU:O	2:B:257:LEU:C	2.56	0.41
2:B:298:SER:HA	2:B:301:VAL:HG22	2.02	0.41
2:B:438:LEU:HD23	2:B:441:TYR:CG	2.56	0.41
3:C:33:ILE:HG21	3:C:160:MET:SD	2.60	0.41
3:C:80:LEU:HG	3:C:81:ARG:N	2.36	0.41
3:C:84:PRO:CD	3:C:85:GLU:OE1	2.69	0.41
3:C:85:GLU:OE1	3:C:85:GLU:N	2.30	0.41
3:C:149:THR:HA	3:C:160:MET:HE2	2.03	0.41
3:C:192:ILE:CD1	3:C:221:ILE:HG22	2.51	0.41
3:C:245:LEU:HD13	1:D:297:ASN:HD21	1.86	0.41
3:C:289:GLY:CA	3:C:293:MET:CE	2.99	0.41
1:D:15:TYR:OH	1:D:84:ASP:HB3	2.20	0.41
1:D:146:LEU:HD13	1:D:203:TYR:CD1	2.53	0.41
1:D:166:ASP:CG	1:D:205:PHE:CD2	2.94	0.41
1:D:189:TYR:HA	1:D:197:PRO:HG2	2.01	0.41
1:D:303:PRO:HB2	1:D:400:LYS:CE	2.50	0.41
1:D:395:ALA:HB1	1:D:399:TRP:CZ2	2.56	0.41
1:D:398:GLU:HA	1:D:401:TYR:CE2	2.56	0.41
4:E:24:LEU:HA	4:E:24:LEU:HD23	1.87	0.41
4:E:78:ARG:HH11	4:E:108:LEU:HD13	1.85	0.41
4:E:159:LEU:CD2	4:E:208:ILE:HG23	2.50	0.41
4:E:246:ALA:HA	4:E:250:LYS:HZ2	1.83	0.41
4:E:262:THR:HG22	4:E:262:THR:O	2.20	0.41
1:A:85:VAL:CG1	1:A:86:TRP:N	2.84	0.41
1:A:93:TYR:CZ	1:A:198:TYR:HE2	2.38	0.41
1:A:129:GLU:CD	1:A:140:GLN:CG	2.88	0.41
1:A:157:SER:HB2	1:A:199:LEU:HD11	2.02	0.41
1:A:398:GLU:HA	1:A:401:TYR:CE1	2.56	0.41
2:B:57:ASN:HA	2:B:118:TRP:O	2.21	0.41
2:B:75:ILE:HG22	3:C:27:ASN:CB	2.50	0.41
2:B:138:ASP:N	2:B:464:PRO:O	2.54	0.41
2:B:186:TRP:CB	2:B:215:ARG:HA	2.51	0.41
2:B:197:TRP:HB3	2:B:204:TYR:CD1	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:276:SER:C	2:B:277:VAL:HG13	2.41	0.41
3:C:35:LEU:HD12	3:C:92:ILE:CG2	2.42	0.41
1:D:78:ILE:HD12	1:D:78:ILE:C	2.35	0.41
1:D:86:TRP:H	1:D:86:TRP:HE3	1.69	0.41
1:D:107:LYS:NZ	4:E:149:THR:CA	2.74	0.41
1:D:234:TYR:CE1	1:D:410:LEU:HD12	2.56	0.41
1:D:296:ILE:O	1:D:300:HIS:N	2.44	0.41
1:D:402:VAL:HB	1:D:404:MET:HG2	2.03	0.41
4:E:157:LEU:HD13	4:E:208:ILE:HD11	2.01	0.41
4:E:266:PHE:HA	4:E:269:ALA:CB	2.51	0.41
4:E:287:ILE:HG13	4:E:291:PHE:CD2	2.56	0.41
1:A:18:VAL:O	1:A:18:VAL:HG12	2.21	0.40
1:A:114:GLY:O	1:A:115:LYS:C	2.60	0.40
1:A:128:CYS:SG	1:A:144:MET:HE2	2.61	0.40
1:A:134:HIS:N	1:A:136:PRO:CD	2.84	0.40
1:A:155:LYS:CE	4:E:76:LEU:HB3	2.49	0.40
1:A:380:LYS:CD	2:B:408:ILE:HB	2.48	0.40
2:B:38:THR:CG2	2:B:55:PHE:HE1	2.32	0.40
2:B:86:TRP:CD1	2:B:151:TYR:CE2	3.09	0.40
2:B:128:CYS:O	2:B:130:ILE:N	2.55	0.40
2:B:237:LEU:CD2	3:C:310:LEU:HG	2.51	0.40
2:B:417:SER:HB2	2:B:421:PHE:CZ	2.55	0.40
3:C:48:THR:HA	3:C:286:PRO:CD	2.51	0.40
3:C:147:LYS:HG2	3:C:214:ASP:OD2	2.21	0.40
3:C:245:LEU:CD1	1:D:297:ASN:HD21	2.34	0.40
1:D:28:PHE:CD2	1:D:153:GLY:O	2.74	0.40
1:D:85:VAL:HG13	1:D:86:TRP:N	2.36	0.40
1:D:145:LYS:C	1:D:146:LEU:CD1	2.66	0.40
1:D:248:SER:O	4:E:259:LEU:HD11	2.21	0.40
4:E:1:ASN:O	4:E:1:ASN:CG	2.58	0.40
4:E:44:GLU:CD	4:E:129:ILE:HG21	2.41	0.40
4:E:138:TRP:CZ2	4:E:215:GLN:NE2	2.88	0.40
4:E:462:THR:O	4:E:463:LEU:C	2.60	0.40
1:A:92:LEU:HD21	1:A:124:PHE:HE2	1.86	0.40
1:A:146:LEU:HD13	1:A:203:TYR:CE1	2.56	0.40
1:A:148:ILE:O	1:A:148:ILE:HG23	2.21	0.40
1:A:187:TRP:CD1	1:A:199:LEU:HD23	2.56	0.40
2:B:218:LEU:C	2:B:219:PHE:CG	2.94	0.40
2:B:247:GLU:CD	3:C:320:HIS:CE1	2.95	0.40
3:C:17:TYR:CE2	3:C:19:LYS:HB2	2.57	0.40
3:C:33:ILE:HD12	3:C:158:ILE:CG1	2.52	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:48:THR:HA	3:C:286:PRO:CG	2.51	0.40
3:C:199:LYS:HZ3	3:C:200:ASN:CA	2.27	0.40
3:C:219:LEU:HG	3:C:221:ILE:CG2	2.52	0.40
3:C:262:CYS:SG	1:D:247:ILE:CG2	3.10	0.40
3:C:277:ARG:NH2	1:D:262:GLU:OE2	2.53	0.40
3:C:465:MET:O	3:C:465:MET:HG2	2.18	0.40
3:C:474:VAL:CA	3:C:477:ASN:OD1	2.65	0.40
1:D:35:LEU:CD1	1:D:54:VAL:CB	3.00	0.40
1:D:138:ASP:C	1:D:139:GLN:CG	2.90	0.40
1:D:139:GLN:NE2	1:D:179:LYS:HG3	2.36	0.40
1:D:399:TRP:CE3	1:D:399:TRP:CA	3.05	0.40
1:D:407:ASP:HA	1:D:410:LEU:CD2	2.51	0.40
4:E:32:LEU:HD12	4:E:208:ILE:CD1	2.44	0.40
4:E:261:GLN:NE2	4:E:296:ILE:CD1	2.71	0.40
1:A:235:LEU:O	1:A:239:SER:O	2.39	0.40
1:A:251:LEU:HD11	4:E:256:SER:O	2.22	0.40
2:B:75:ILE:O	2:B:77:ASP:N	2.54	0.40
2:B:106:VAL:HG12	2:B:107:ASN:O	2.21	0.40
2:B:131:LYS:HE2	2:B:132:VAL:HG23	2.02	0.40
2:B:138:ASP:OD1	2:B:138:ASP:N	2.53	0.40
3:C:161:ASP:CA	3:C:199:LYS:HG2	2.51	0.40
1:D:49:ILE:CD1	1:D:97:ASP:OD2	2.70	0.40
1:D:271:VAL:O	1:D:271:VAL:CG1	2.70	0.40
4:E:47:GLU:HB3	4:E:127:CYS:O	2.21	0.40
4:E:262:THR:CA	4:E:265:LEU:HD12	2.50	0.40
4:E:266:PHE:CZ	4:E:270:GLN:HB3	2.56	0.40
4:E:299:ASN:CA	4:E:302:ILE:HB	2.47	0.40
4:E:474:VAL:CB	4:E:475:PRO:CD	2.99	0.40
1:A:45:GLU:HB2	1:A:209:ARG:HH12	1.78	0.40
1:A:284:PHE:CZ	1:A:424:SER:CB	3.05	0.40
2:B:9:SER:O	2:B:10:VAL:C	2.60	0.40
2:B:108:VAL:CG1	2:B:109:LEU:N	2.84	0.40
2:B:139:TRP:CD2	2:B:214:GLN:HA	2.56	0.40
3:C:40:SER:O	3:C:41:ASN:HB2	2.22	0.40
3:C:52:LEU:HD21	3:C:130:CYS:H	1.86	0.40
3:C:106:TYR:C	3:C:106:TYR:CD1	2.94	0.40
3:C:132:ILE:HG13	3:C:136:TYR:CE2	2.56	0.40
3:C:193:ILE:HD11	3:C:222:ARG:HB2	2.03	0.40
3:C:279:PRO:HG2	3:C:280:GLU:H	1.85	0.40
1:D:40:LEU:O	1:D:171:MET:HE2	2.22	0.40
1:D:250:LEU:HD23	1:D:253:LEU:HD11	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:398:GLU:HA	1:D:401:TYR:CZ	2.57	0.40
4:E:50:THR:HG23	4:E:123:TYR:O	2.22	0.40
4:E:59:TRP:CH2	4:E:115:MET:CB	3.04	0.40
4:E:215:GLN:HG3	4:E:216:ARG:H	1.86	0.40
1:A:34:GLY:HA3	1:A:161:GLU:HG2	2.03	0.40
1:A:80:LEU:CD2	1:A:110:LEU:HB2	2.52	0.40
1:A:251:LEU:CG	4:E:260:ALA:CB	3.00	0.40
2:B:111:GLN:CD	2:B:115:ALA:HB3	2.42	0.40
2:B:460:HIS:O	2:B:464:PRO:CD	2.69	0.40
3:C:69:TRP:HB3	3:C:73:GLU:HB3	1.98	0.40
3:C:69:TRP:HB2	3:C:74:TYR:HB2	2.03	0.40
3:C:113:ARG:HE	3:C:119:THR:HG23	1.87	0.40
1:D:32:THR:N	1:D:59:GLN:O	2.53	0.40
1:D:40:LEU:HD11	1:D:50:VAL:HG13	2.03	0.40
1:D:48:GLN:NE2	1:D:127:TYR:CZ	2.89	0.40
1:D:402:VAL:O	1:D:404:MET:N	2.54	0.40
4:E:44:GLU:OE1	4:E:129:ILE:HD12	2.22	0.40
4:E:94:ASN:O	4:E:95:VAL:C	2.60	0.40
4:E:197:GLN:HE21	4:E:197:GLN:HB3	1.61	0.40
4:E:242:LEU:HG	4:E:243:PRO:CD	2.51	0.40
4:E:285:TYR:OH	4:E:471:LEU:HG	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	366/461 (79%)	289 (79%)	48 (13%)	29 (8%)	1	10
1	D	366/461 (79%)	294 (80%)	41 (11%)	31 (8%)	0	9
2	B	364/493 (74%)	273 (75%)	59 (16%)	32 (9%)	0	9
3	C	364/522 (70%)	288 (79%)	58 (16%)	18 (5%)	2	16

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	E	365/505 (72%)	281 (77%)	58 (16%)	26 (7%)	1	11
All	All	1825/2442 (75%)	1425 (78%)	264 (14%)	136 (8%)	1	10

All (136) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	2	GLU
1	A	27	HIS
1	A	76	LYS
1	A	83	ASP
1	A	102	ILE
1	A	131	ILE
1	A	139	GLN
1	A	198	TYR
1	A	282	MET
1	A	301	ARG
2	B	2	VAL
2	B	68	ASP
2	B	82	SER
2	B	95	ASN
2	B	131	LYS
2	B	139	TRP
2	B	156	VAL
2	B	282	SER
2	B	307	ARG
2	B	432	ALA
3	C	2	ASN
3	C	13	ILE
3	C	131	PRO
3	C	212	TYR
3	C	224	LYS
3	C	253	SER
3	C	310	LEU
1	D	2	GLU
1	D	27	HIS
1	D	30	ASP
1	D	76	LYS
1	D	102	ILE
1	D	131	ILE
1	D	136	PRO
1	D	198	TYR
1	D	282	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	301	ARG
4	E	27	VAL
4	E	82	GLU
4	E	110	TYR
4	E	128	PRO
4	E	133	TYR
4	E	152	ALA
4	E	217	LYS
1	A	4	GLU
1	A	63	VAL
1	A	75	ILE
1	A	93	TYR
1	A	426	PHE
2	B	76	LYS
2	B	99	SER
2	B	249	MET
2	B	275	LEU
2	B	279	ILE
3	C	12	LEU
3	C	30	VAL
3	C	78	SER
3	C	434	LYS
1	D	75	ILE
1	D	139	GLN
1	D	241	GLU
1	D	276	LYS
1	D	426	PHE
4	E	81	SER
4	E	95	VAL
4	E	438	ASN
4	E	443	GLY
1	A	13	GLU
1	A	21	PRO
1	A	26	THR
1	A	82	SER
1	A	97	ASP
1	A	105	MET
1	A	292	THR
2	B	107	ASN
3	C	107	PHE
3	C	142	GLN
3	C	257	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	93	TYR
1	D	403	ALA
4	E	16	LYS
4	E	75	ASP
4	E	129	ILE
4	E	280	PRO
2	B	89	ASP
2	B	102	ILE
2	B	147	LYS
2	B	153	THR
2	B	247	GLU
1	D	4	GLU
1	D	24	HIS
1	D	64	ARG
1	D	436	GLU
4	E	2	GLU
4	E	101	VAL
4	E	135	PRO
4	E	249	GLN
4	E	265	LEU
4	E	454	ALA
1	A	210	ILE
1	A	303	PRO
2	B	21	PRO
2	B	150	THR
2	B	415	LEU
3	C	137	PHE
1	D	68	ASN
1	D	71	ASP
1	D	210	ILE
1	D	252	SER
4	E	132	THR
4	E	203	ILE
4	E	271	LYS
1	A	71	ASP
2	B	88	PRO
2	B	135	PHE
2	B	227	PRO
2	B	445	THR
1	D	239	SER
1	D	303	PRO
2	B	120	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	135	PHE
1	A	130	ILE
1	A	135	PHE
1	A	293	VAL
3	C	453	ILE
1	D	114	GLY
2	B	75	ILE
3	C	83	ARG
3	C	449	VAL
1	D	211	PRO
4	E	134	PHE
1	A	69	PRO
2	B	132	VAL
1	D	69	PRO
4	E	80	PRO
2	B	54	VAL

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	343/427 (80%)	248 (72%)	95 (28%)	0	2
1	D	343/427 (80%)	258 (75%)	85 (25%)	0	3
2	B	340/449 (76%)	262 (77%)	78 (23%)	0	4
3	C	335/475 (70%)	243 (72%)	92 (28%)	0	2
4	E	337/463 (73%)	249 (74%)	88 (26%)	0	3
All	All	1698/2241 (76%)	1260 (74%)	438 (26%)	2	3

All (438) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	6	ARG
1	A	12	LEU
1	A	20	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	24	HIS
1	A	25	HIS
1	A	29	VAL
1	A	30	ASP
1	A	36	GLN
1	A	46	VAL
1	A	56	LEU
1	A	61	ILE
1	A	63	VAL
1	A	66	ARG
1	A	68	ASN
1	A	72	TYR
1	A	75	ILE
1	A	79	ARG
1	A	87	LEU
1	A	92	LEU
1	A	94	ASN
1	A	95	ASN
1	A	100	PHE
1	A	103	VAL
1	A	105	MET
1	A	107	LYS
1	A	108	LEU
1	A	111	ASP
1	A	112	TYR
1	A	116	ILE
1	A	124	PHE
1	A	125	LYS
1	A	126	SER
1	A	129	GLU
1	A	130	ILE
1	A	132	VAL
1	A	137	PHE
1	A	139	GLN
1	A	142	CYS
1	A	144	MET
1	A	145	LYS
1	A	149	TRP
1	A	161	GLU
1	A	164	ARG
1	A	180	ASP
1	A	181	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	185	LYS
1	A	193	CYS
1	A	195	ASP
1	A	198	TYR
1	A	200	ASP
1	A	207	MET
1	A	210	ILE
1	A	218	VAL
1	A	224	LEU
1	A	225	PHE
1	A	238	ASP
1	A	243	MET
1	A	246	SER
1	A	247	ILE
1	A	254	THR
1	A	255	VAL
1	A	257	LEU
1	A	265	PRO
1	A	266	SER
1	A	268	SER
1	A	273	LEU
1	A	278	MET
1	A	279	LEU
1	A	282	MET
1	A	289	ILE
1	A	290	ILE
1	A	292	THR
1	A	293	VAL
1	A	296	ILE
1	A	297	ASN
1	A	298	THR
1	A	303	PRO
1	A	305	THR
1	A	306	HIS
1	A	376	ILE
1	A	382	ILE
1	A	387	LYS
1	A	389	ASP
1	A	399	TRP
1	A	401	TYR
1	A	402	VAL
1	A	409	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	410	LEU
1	A	414	PHE
1	A	415	MET
1	A	419	ILE
1	A	425	VAL
1	A	426	PHE
1	A	430	LEU
1	A	434	SER
2	B	15	TYR
2	B	16	ASN
2	B	18	LYS
2	B	19	VAL
2	B	20	ARG
2	B	23	GLN
2	B	29	VAL
2	B	31	VAL
2	B	32	ARG
2	B	33	VAL
2	B	37	LEU
2	B	41	LEU
2	B	42	ILE
2	B	43	LEU
2	B	45	GLU
2	B	55	PHE
2	B	58	LEU
2	B	63	TYR
2	B	64	ARG
2	B	68	ASP
2	B	73	GLU
2	B	79	SER
2	B	82	SER
2	B	95	ASN
2	B	97	ASP
2	B	107	ASN
2	B	117	SER
2	B	119	HIS
2	B	128	CYS
2	B	133	MET
2	B	134	TYR
2	B	135	PHE
2	B	138	ASP
2	B	145	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	149	TYR
2	B	158	LEU
2	B	159	GLN
2	B	160	HIS
2	B	181	THR
2	B	182	GLU
2	B	196	ASN
2	B	198	ARG
2	B	213	ILE
2	B	216	LYS
2	B	220	TYR
2	B	221	ILE
2	B	225	ILE
2	B	236	ILE
2	B	237	LEU
2	B	240	TYR
2	B	248	LYS
2	B	251	LEU
2	B	253	ILE
2	B	261	VAL
2	B	263	LEU
2	B	265	LEU
2	B	269	LYS
2	B	280	ILE
2	B	281	ILE
2	B	283	TYR
2	B	284	LEU
2	B	288	MET
2	B	291	VAL
2	B	294	SER
2	B	307	ARG
2	B	311	THR
2	B	403	GLU
2	B	429	GLN
2	B	436	ASP
2	B	437	ARG
2	B	439	PHE
2	B	440	LEU
2	B	442	ILE
2	B	443	PHE
2	B	447	CYS
2	B	461	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	462	VAL
2	B	463	PRO
3	C	3	GLU
3	C	7	LEU
3	C	13	ILE
3	C	15	ASN
3	C	22	ARG
3	C	25	LYS
3	C	28	ASN
3	C	30	VAL
3	C	41	ASN
3	C	43	ILE
3	C	45	LEU
3	C	50	GLU
3	C	52	LEU
3	C	54	THR
3	C	55	ASN
3	C	60	HIS
3	C	63	TYR
3	C	65	HIS
3	C	66	ARG
3	C	69	TRP
3	C	91	ASP
3	C	92	ILE
3	C	96	ASN
3	C	102	TYR
3	C	104	VAL
3	C	106	TYR
3	C	107	PHE
3	C	114	PRO
3	C	115	ASN
3	C	121	LEU
3	C	130	CYS
3	C	140	ASP
3	C	144	CYS
3	C	147	LYS
3	C	148	PHE
3	C	149	THR
3	C	158	ILE
3	C	160	MET
3	C	162	LEU
3	C	199	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	200	ASN
3	C	202	TYR
3	C	206	PHE
3	C	211	ASN
3	C	214	ASP
3	C	222	ARG
3	C	228	TYR
3	C	229	VAL
3	C	233	ILE
3	C	241	PHE
3	C	242	LEU
3	C	249	LEU
3	C	259	THR
3	C	264	LEU
3	C	267	GLN
3	C	270	PHE
3	C	271	LEU
3	C	272	LEU
3	C	274	THR
3	C	276	GLN
3	C	278	LEU
3	C	279	PRO
3	C	280	GLU
3	C	291	TYR
3	C	293	MET
3	C	296	MET
3	C	297	SER
3	C	299	VAL
3	C	302	VAL
3	C	310	LEU
3	C	311	ASN
3	C	312	PHE
3	C	315	ARG
3	C	319	THR
3	C	423	ILE
3	C	428	TYR
3	C	429	ILE
3	C	430	VAL
3	C	432	GLN
3	C	442	GLU
3	C	446	TRP
3	C	451	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	455	ARG
3	C	458	MET
3	C	460	ILE
3	C	465	MET
3	C	467	LEU
3	C	471	PHE
3	C	475	MET
3	C	478	PHE
3	C	479	ASN
3	C	480	ARG
1	D	3	HIS
1	D	16	ASN
1	D	20	ARG
1	D	23	GLU
1	D	25	HIS
1	D	30	ASP
1	D	40	LEU
1	D	41	ILE
1	D	46	VAL
1	D	54	VAL
1	D	55	ARG
1	D	60	TRP
1	D	66	ARG
1	D	67	TRP
1	D	72	TYR
1	D	76	LYS
1	D	80	LEU
1	D	85	VAL
1	D	86	TRP
1	D	91	VAL
1	D	92	LEU
1	D	94	ASN
1	D	105	MET
1	D	107	LYS
1	D	108	LEU
1	D	110	LEU
1	D	112	TYR
1	D	116	ILE
1	D	118	TRP
1	D	120	PRO
1	D	126	SER
1	D	130	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	135	PHE
1	D	142	CYS
1	D	143	THR
1	D	145	LYS
1	D	149	TRP
1	D	152	ASP
1	D	154	THR
1	D	156	VAL
1	D	164	ARG
1	D	170	PHE
1	D	177	VAL
1	D	180	ASP
1	D	185	LYS
1	D	188	VAL
1	D	193	CYS
1	D	198	TYR
1	D	200	ASP
1	D	202	THR
1	D	203	TYR
1	D	207	MET
1	D	216	VAL
1	D	219	ILE
1	D	225	PHE
1	D	226	SER
1	D	227	PHE
1	D	230	VAL
1	D	237	THR
1	D	238	ASP
1	D	243	MET
1	D	244	THR
1	D	247	ILE
1	D	250	LEU
1	D	252	SER
1	D	253	LEU
1	D	265	PRO
1	D	273	LEU
1	D	278	MET
1	D	281	THR
1	D	285	VAL
1	D	303	PRO
1	D	377	GLU
1	D	387	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	394	ASN
1	D	399	TRP
1	D	400	LYS
1	D	406	ILE
1	D	407	ASP
1	D	409	ILE
1	D	414	PHE
1	D	418	CYS
1	D	422	THR
1	D	426	PHE
1	D	435	GLN
4	E	5	ARG
4	E	13	ASP
4	E	15	ASP
4	E	17	ARG
4	E	18	ILE
4	E	23	THR
4	E	29	ASP
4	E	31	THR
4	E	44	GLU
4	E	49	LEU
4	E	52	ASN
4	E	55	ILE
4	E	60	ASN
4	E	62	TYR
4	E	63	ARG
4	E	66	TRP
4	E	67	ASN
4	E	70	GLU
4	E	71	TYR
4	E	74	ILE
4	E	75	ASP
4	E	80	PRO
4	E	82	GLU
4	E	84	LEU
4	E	89	VAL
4	E	104	TYR
4	E	106	ASN
4	E	116	TYR
4	E	118	LEU
4	E	122	ILE
4	E	123	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	E	124	ARG
4	E	125	SER
4	E	127	CYS
4	E	128	PRO
4	E	129	ILE
4	E	133	TYR
4	E	138	TRP
4	E	140	ASN
4	E	143	LEU
4	E	147	SER
4	E	148	GLN
4	E	151	ASN
4	E	156	ASN
4	E	158	GLN
4	E	162	GLU
4	E	163	GLU
4	E	177	PHE
4	E	179	GLU
4	E	184	THR
4	E	195	ASN
4	E	198	LEU
4	E	204	ASP
4	E	214	ILE
4	E	217	LYS
4	E	221	TYR
4	E	225	ILE
4	E	231	LEU
4	E	232	ILE
4	E	235	LEU
4	E	239	VAL
4	E	242	LEU
4	E	252	THR
4	E	253	LEU
4	E	263	ILE
4	E	268	ILE
4	E	270	GLN
4	E	271	LYS
4	E	279	VAL
4	E	284	LYS
4	E	286	LEU
4	E	287	ILE
4	E	291	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	E	294	LEU
4	E	296	ILE
4	E	297	VAL
4	E	301	VAL
4	E	303	VAL
4	E	308	LEU
4	E	309	ARG
4	E	310	THR
4	E	439	TRP
4	E	444	LYS
4	E	452	TRP
4	E	456	LEU
4	E	465	ILE
4	E	472	ASN
4	E	473	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (62) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	24	HIS
1	A	27	HIS
1	A	58	GLN
1	A	59	GLN
1	A	94	ASN
1	A	299	HIS
1	A	435	GLN
2	B	23	GLN
2	B	96	ASN
2	B	107	ASN
2	B	111	GLN
2	B	140	GLN
2	B	190	HIS
2	B	305	HIS
2	B	429	GLN
2	B	460	HIS
2	B	461	ASN
3	C	2	ASN
3	C	15	ASN
3	C	20	HIS
3	C	41	ASN
3	C	55	ASN
3	C	65	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	70	ASN
3	C	97	ASN
3	C	103	ASN
3	C	115	ASN
3	C	152	ASN
3	C	200	ASN
3	C	231	ASN
3	C	267	GLN
3	C	447	ASN
3	C	479	ASN
1	D	16	ASN
1	D	36	GLN
1	D	42	ASN
1	D	53	ASN
1	D	59	GLN
1	D	94	ASN
1	D	95	ASN
1	D	134	HIS
1	D	300	HIS
1	D	408	HIS
1	D	435	GLN
4	E	1	ASN
4	E	26	HIS
4	E	52	ASN
4	E	60	ASN
4	E	67	ASN
4	E	93	ASN
4	E	94	ASN
4	E	98	GLN
4	E	140	ASN
4	E	148	GLN
4	E	153	HIS
4	E	156	ASN
4	E	193	ASN
4	E	197	GLN
4	E	206	GLN
4	E	215	GLN
4	E	261	GLN
4	E	472	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](#)

There are no ligands in this entry.

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
2	B	1

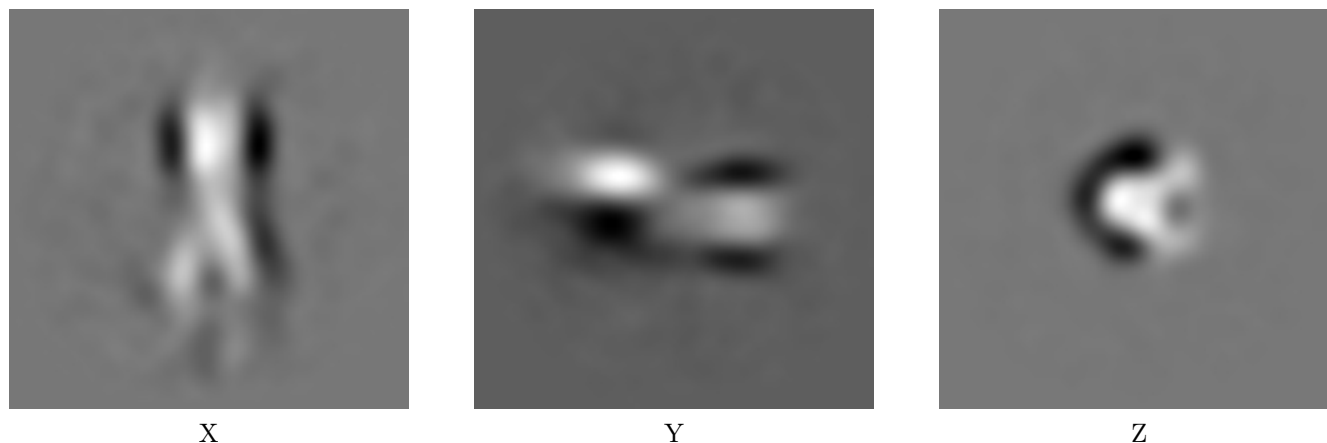
All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B	129:THR	C	130:ILE	N	1.14

6 Tomogram visualisation [i](#)

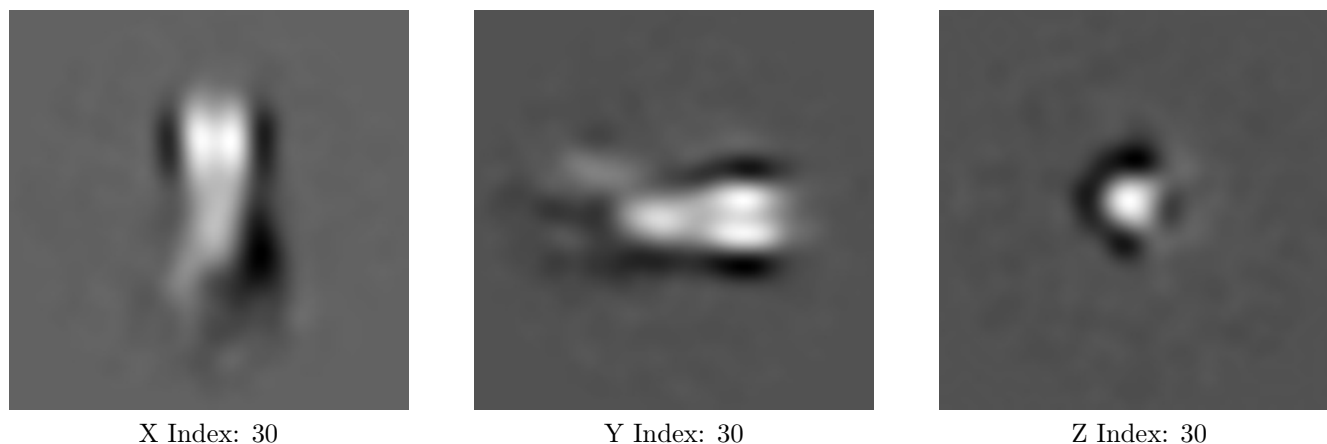
This section contains visualisations of the EMDB entry EMD-2381. These allow visual inspection of the internal detail of the tomogram and identification of artifacts.

6.1 Orthogonal projections [i](#)



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

6.2 Central slices [i](#)

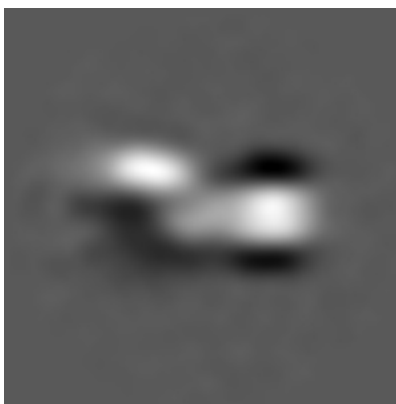


The images above show central slices of the tomogram in three orthogonal directions.

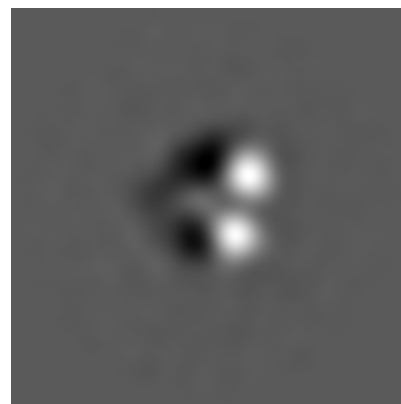
6.3 Largest variance slices [i](#)



X Index: 28



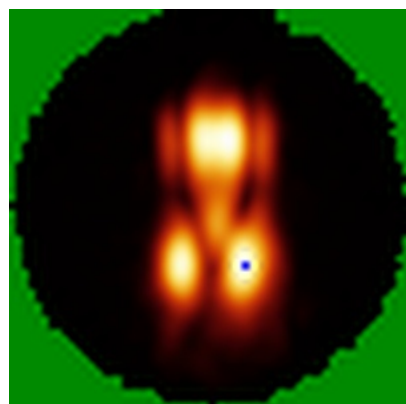
Y Index: 33



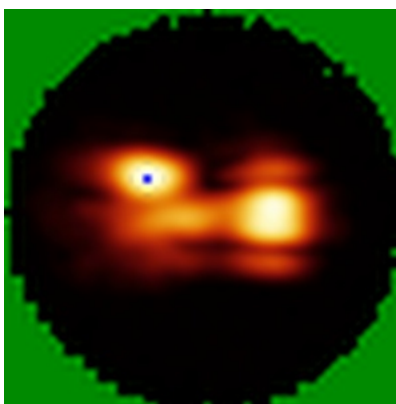
Z Index: 21

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

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



X



Y



Z

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

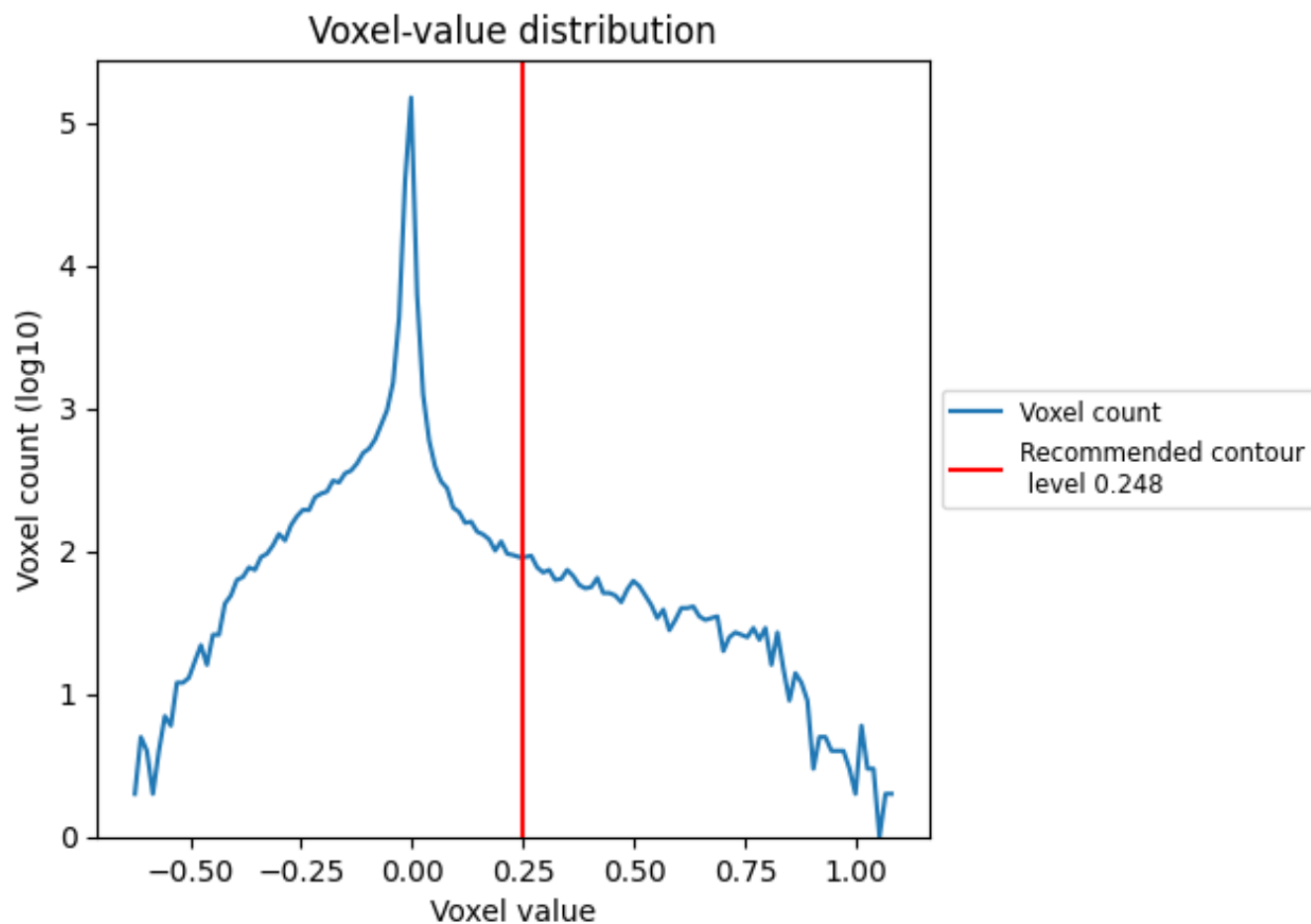
6.5 Mask visualisation [i](#)

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

7 Tomogram analysis [i](#)

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

7.1 Voxel-value distribution [i](#)



The voxel-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic.

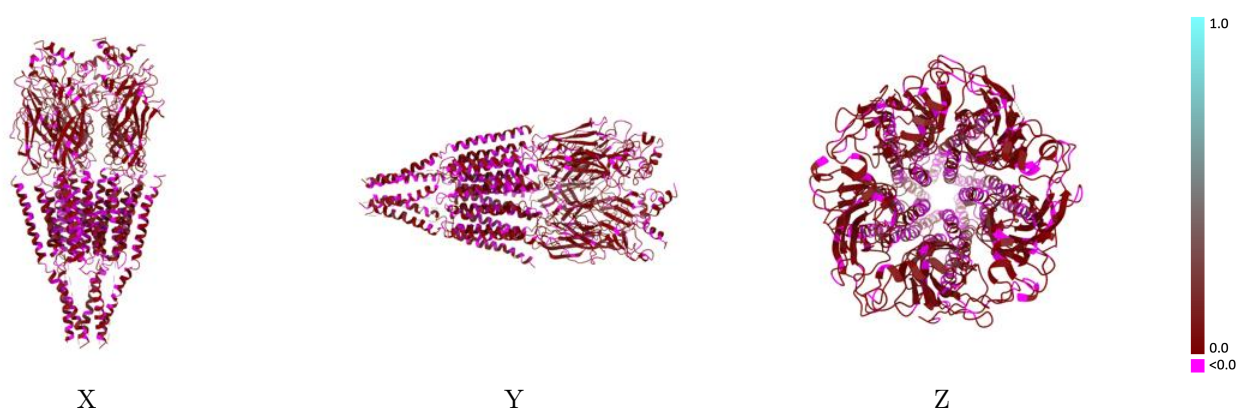
8 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-2381 and PDB model 4BOO. Per-residue inclusion information can be found in section 3 on page 4.

8.1 Map-model overlay [i](#)

This section was not generated.

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

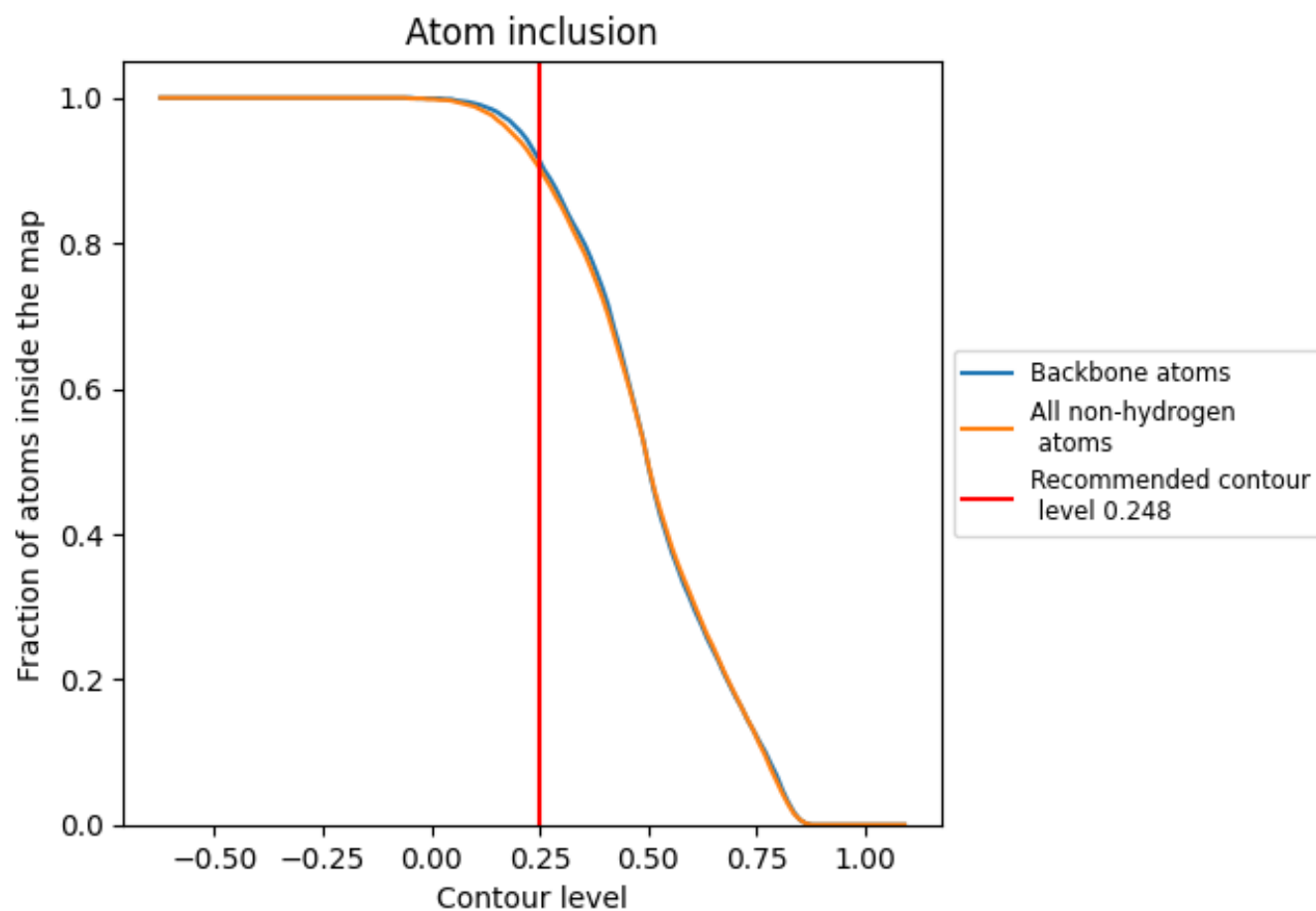


The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

8.3 Atom inclusion mapped to coordinate model [i](#)

This section was not generated.

8.4 Atom inclusion [i](#)



At the recommended contour level, 92% of all backbone atoms, 90% of all non-hydrogen atoms, are inside the map.

8.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.248) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.9050	<div></div> 0.0420
A	<div></div> 0.8890	<div></div> 0.0470
B	<div></div> 0.9090	<div></div> 0.0470
C	<div></div> 0.9140	<div></div> 0.0410
D	<div></div> 0.8770	<div></div> 0.0310
E	<div></div> 0.9330	<div></div> 0.0470

