



Full wwPDB EM Validation Report ⓘ

Nov 27, 2022 – 02:36 AM EST

PDB ID : 5V8F
EMDB ID : EMD-8540
Title : Structural basis of MCM2-7 replicative helicase loading by ORC-Cdc6 and Cdt1
Authors : Yuan, Z.; Riera, A.; Bai, L.; Sun, J.; Spanos, C.; Chen, Z.A.; Barbon, M.; Rappsilber, J.; Stillman, B.; Speck, C.; Li, H.
Deposited on : 2017-03-21
Resolution : 3.90 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev43
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

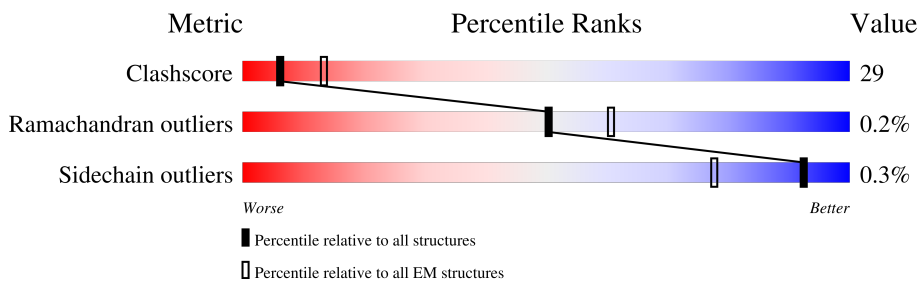
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.90 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.





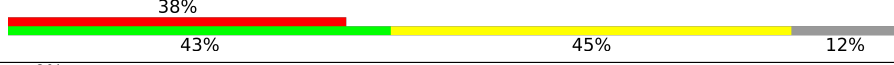
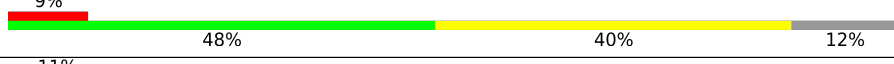




Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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	2	868	21% (Upper red bar) 38% (Green), 31% (Yellow), 31% (Grey)
2	3	971	60% (Upper red bar) 34% (Green), 33% (Yellow), 33% (Grey)
3	4	933	17% (Upper red bar) 39% (Green), 39% (Yellow), 21% (Grey)
4	5	775	75% (Upper red bar) 37% (Green), 37% (Yellow), 25% (Grey)
5	6	1017	11% (Upper red bar) 33% (Green), 35% (Yellow), 32% (Grey)
6	7	800	52% (Upper red bar) 47% (Green), 43% (Yellow), 9% (Grey)
7	8	604	56% (Upper red bar) 36% (Green), 49% (Yellow), 14% (Grey)
8	9	513	54% (Upper red bar) 34% (Green), 39% (Yellow), 27% (Grey)

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
9	A	913	
10	B	620	
11	C	616	
12	E	479	
13	D	529	
14	F	435	
15	M	39	
16	N	39	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
17	AGS	2	2001	-	-	X	-
17	AGS	6	1101	-	-	X	-
17	AGS	7	2001	-	-	X	-

2 Entry composition i

There are 17 unique types of molecules in this entry. The entry contains 59586 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 DNA replication licensing factor MCM2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	2	603	4735	2970	863	887	15	0	0

- Molecule 2 is a protein called DNA replication licensing factor MCM3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	3	654	5134	3241	905	972	16	0	0

- Molecule 3 is a protein called DNA replication licensing factor MCM4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	4	741	5891	3677	1030	1154	30	0	0

- Molecule 4 is a protein called Minichromosome maintenance protein 5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	5	580	4527	2852	781	873	21	0	0

- Molecule 5 is a protein called DNA replication licensing factor MCM6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	6	692	5512	3484	956	1048	24	0	0

- Molecule 6 is a protein called DNA replication licensing factor MCM7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	7	725	5726	3610	990	1094	32	0	0

- Molecule 7 is a protein called Cell division cycle protein CDT1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	8	519	4156	2644	715	778	19	0	0

- Molecule 8 is a protein called Cell division control protein 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	9	373	2982	1914	497	554	17	0	0

- Molecule 9 is a protein called Origin recognition complex subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	A	425	3399	2170	576	635	18	0	0

- Molecule 10 is a protein called Origin recognition complex subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	B	328	2698	1747	448	487	16	0	0

- Molecule 11 is a protein called Origin recognition complex subunit 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	C	544	4508	2911	743	838	16	0	0

- Molecule 12 is a protein called Origin recognition complex subunit 5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	E	422	3458	2253	549	643	13	0	0

- Molecule 13 is a protein called Origin recognition complex subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	D	456	3698	2366	626	693	13	0	0

- Molecule 14 is a protein called Origin recognition complex subunit 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	F	157	1315	846	222	235	12	0	0

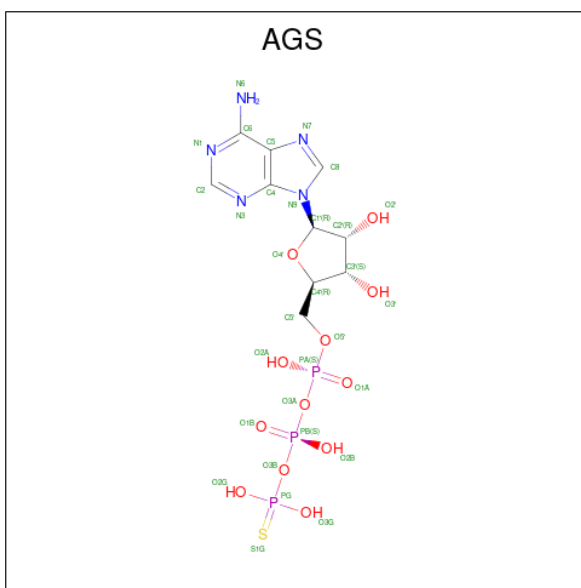
- Molecule 15 is a DNA chain called DNA (39-MER).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
15	M	39	795	383	127	246	39	0	0

- Molecule 16 is a DNA chain called DNA (39-MER).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
16	N	39	804	382	161	222	39	0	0

- Molecule 17 is PHOSPHOTHIOPHOSPHORIC ACID-ADENYLATE ESTER (three-letter code: AGS) (formula: C₁₀H₁₆N₅O₁₂P₃S).

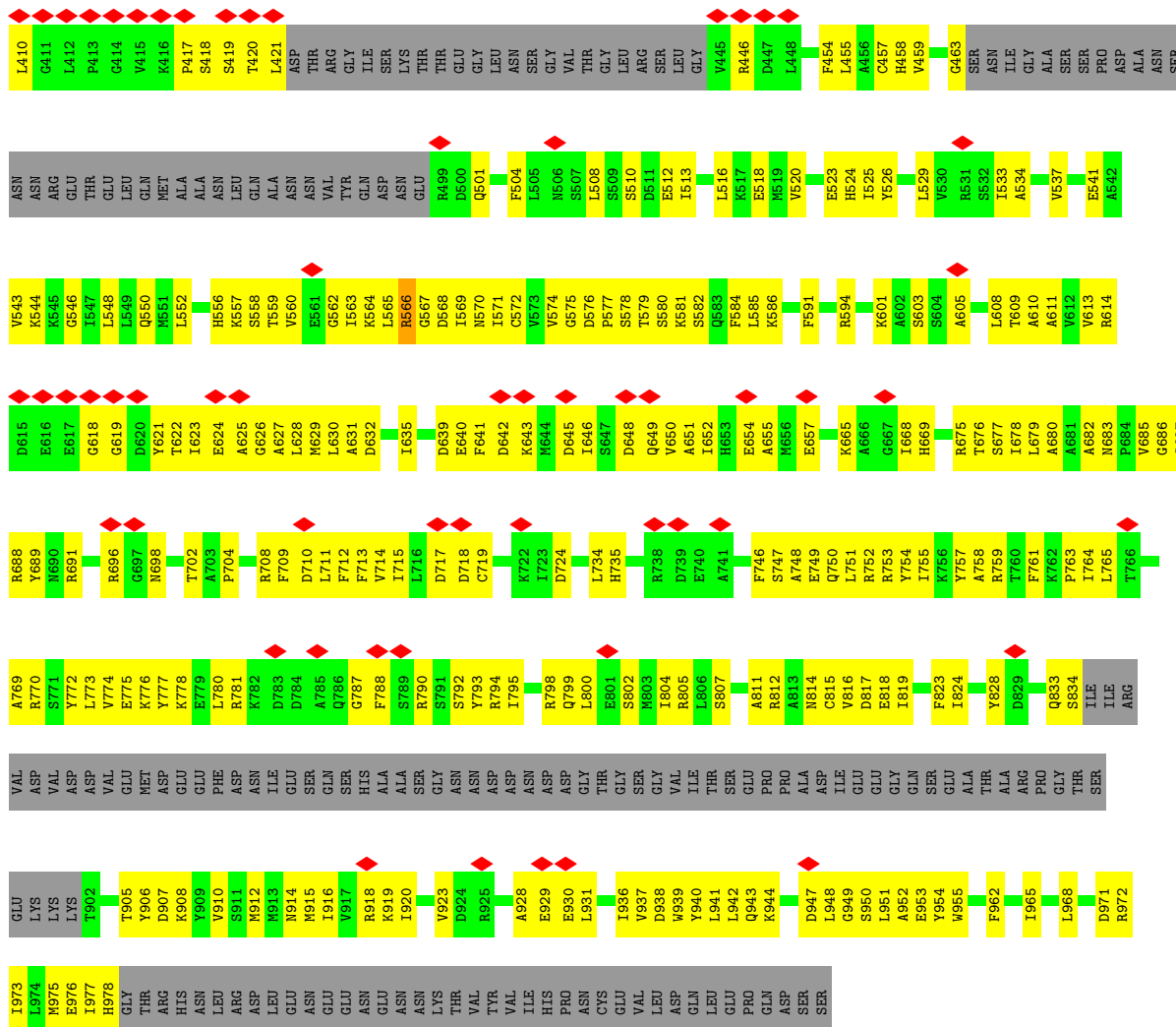


Mol	Chain	Residues	Atoms						AltConf
			Total	C	N	O	P	S	
17	2	1	31	10	5	12	3	1	0
17	4	1	31	10	5	12	3	1	0
17	6	1	31	10	5	12	3	1	0
17	7	1	31	10	5	12	3	1	0

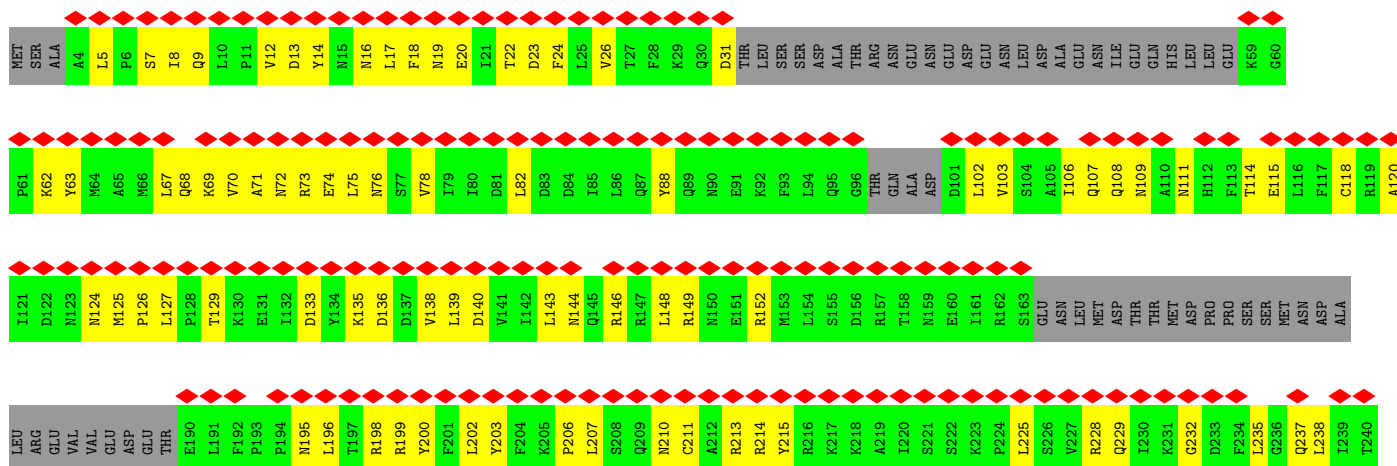
Continued on next page...

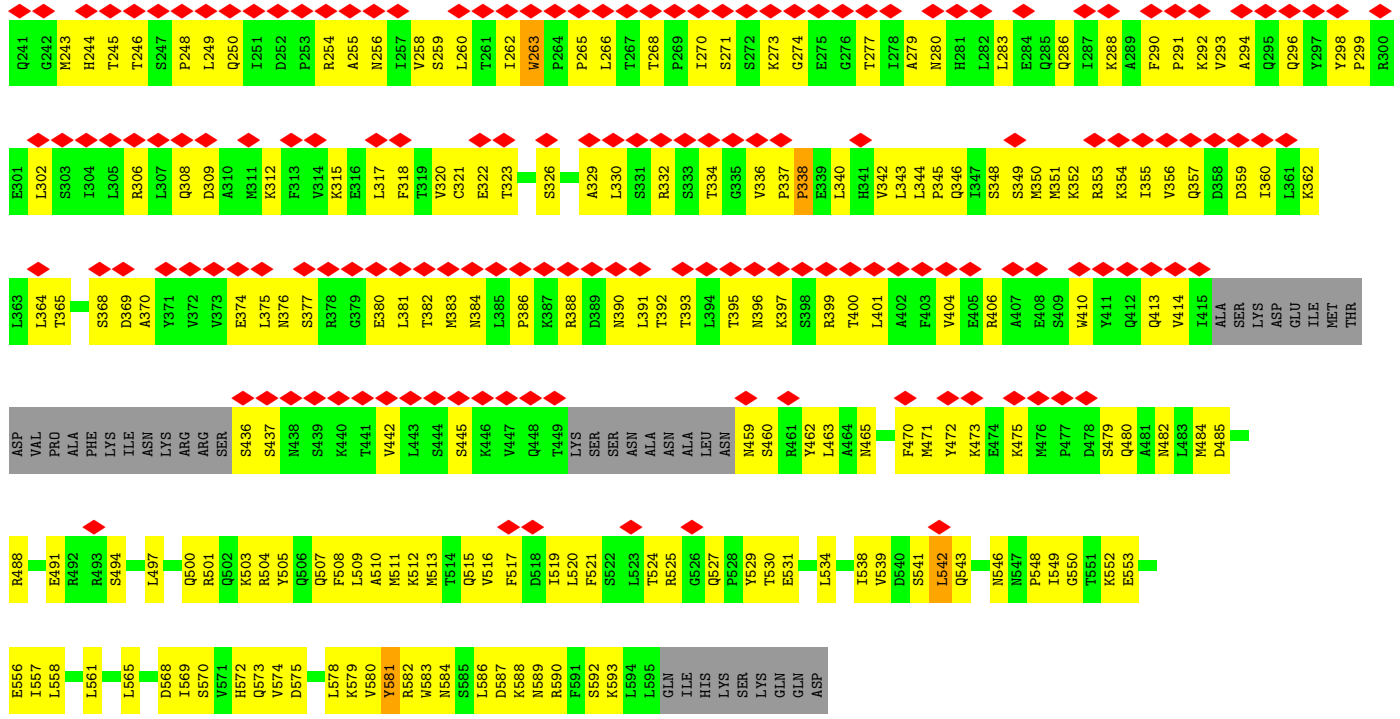
Continued from previous page...

Mol	Chain	Residues	Atoms						AltConf
			Total	C	N	O	P	S	
17	9	1	Total 31	10	5	12	3	1	0
17	A	1	Total 31	10	5	12	3	1	0
17	E	1	Total 31	10	5	12	3	1	0
17	D	1	Total 31	10	5	12	3	1	0

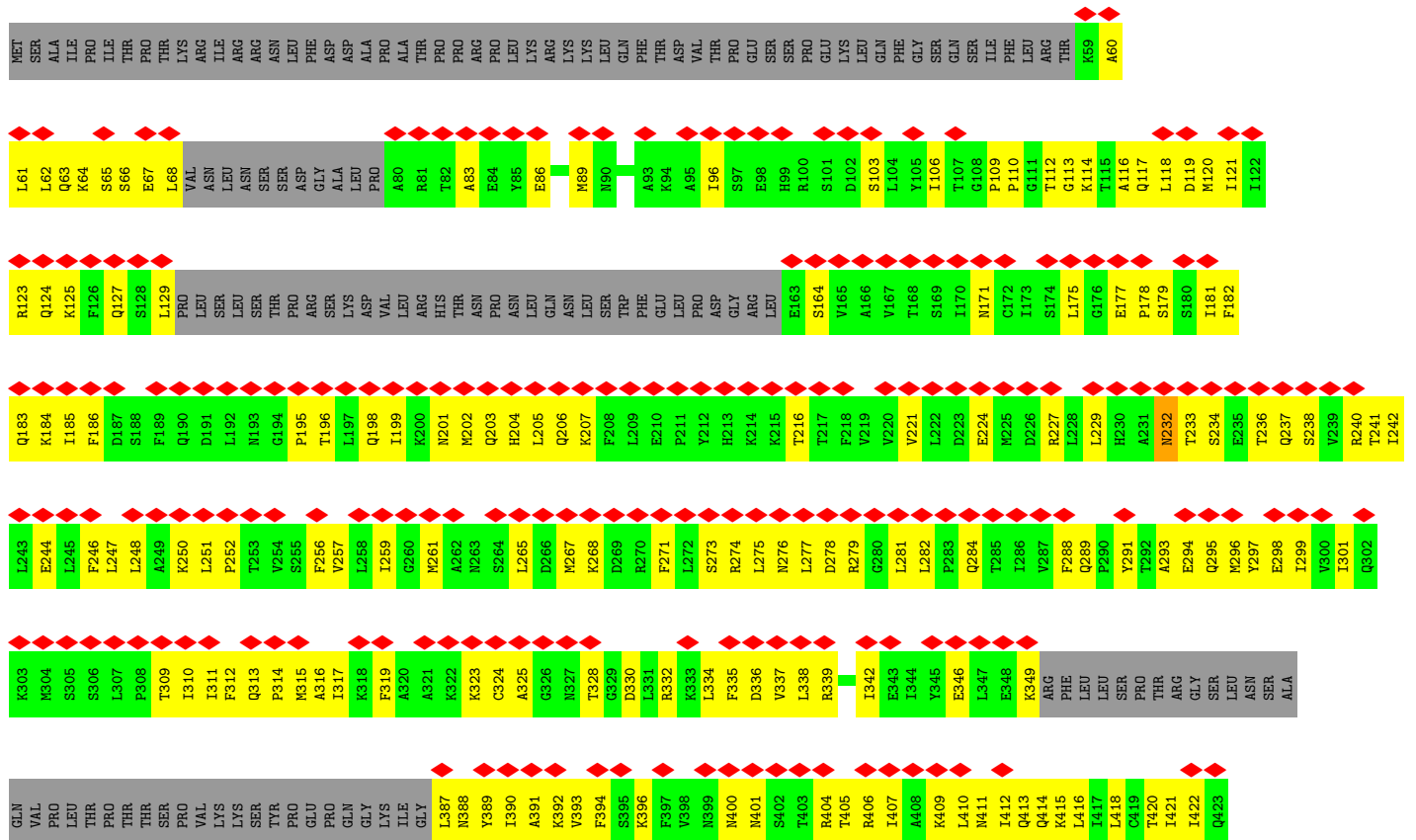


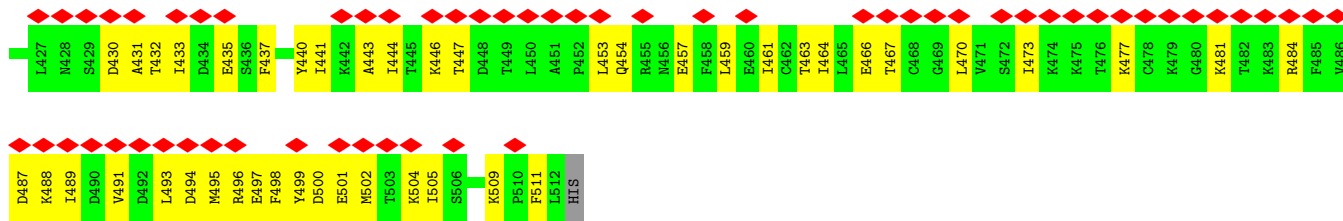
● Molecule 6: DNA replication licensing factor MCM7



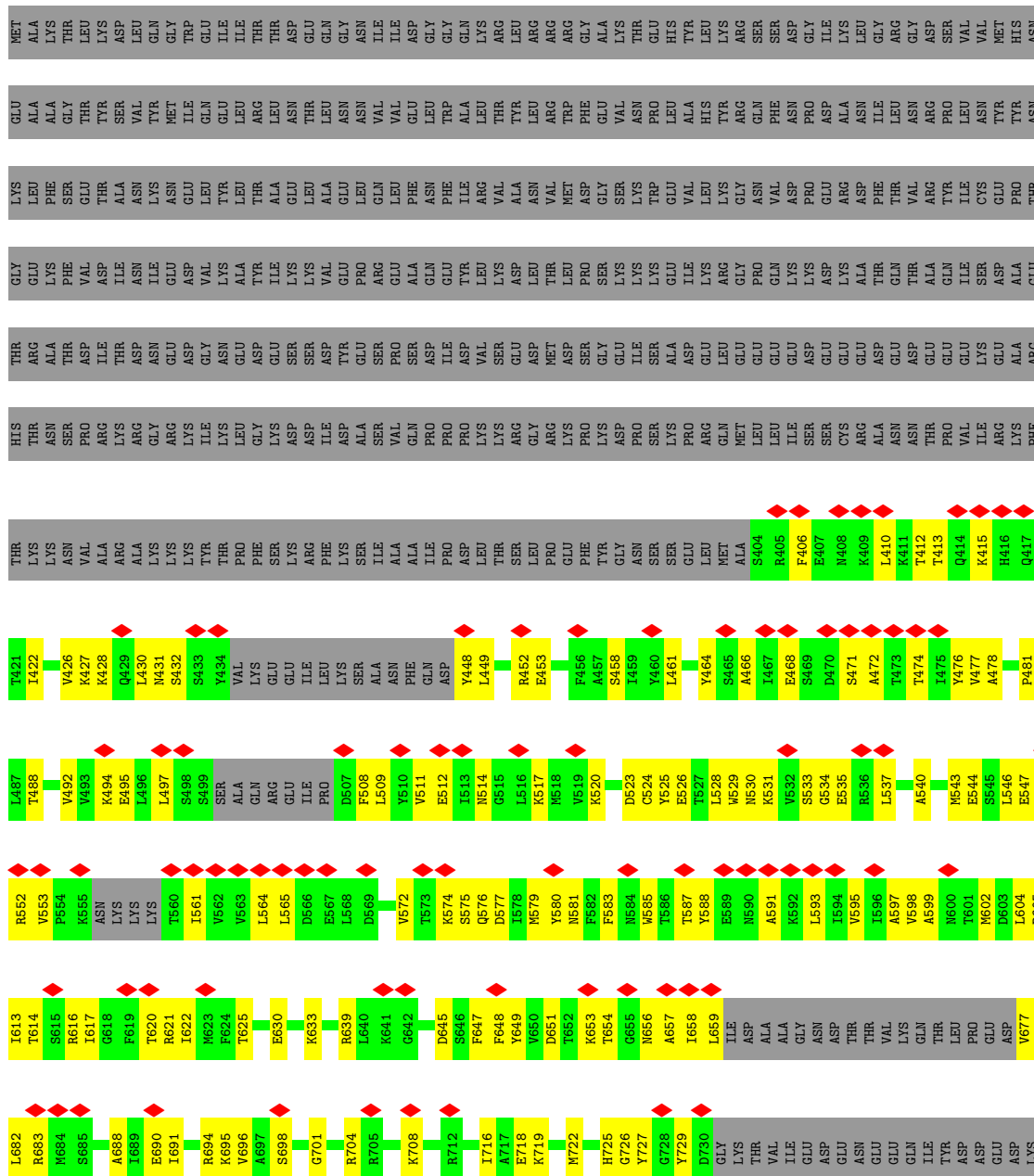


● Molecule 8: Cell division control protein 6





• Molecule 9: Origin recognition complex subunit 1



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	304288	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	10	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.108	Depositor
Minimum map value	-0.039	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.005	Depositor
Recommended contour level	0.021	Depositor
Map size (Å)	258.56, 258.56, 258.56	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.01, 1.01, 1.01	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: AGS

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	2	0.34	0/4809	0.49	0/6492
2	3	0.27	0/5218	0.48	0/7063
3	4	0.37	0/5968	0.54	0/8055
4	5	0.25	0/4587	0.51	0/6193
5	6	0.41	0/5601	0.52	0/7558
6	7	0.29	0/5811	0.49	0/7848
7	8	0.29	0/4232	0.51	0/5732
8	9	0.28	0/3025	0.49	0/4070
9	A	0.33	0/3448	0.47	0/4639
10	B	0.30	0/2756	0.45	0/3717
11	C	0.32	0/4605	0.47	0/6215
12	E	0.41	0/3540	0.49	0/4812
13	D	0.40	0/3764	0.47	0/5092
14	F	0.25	0/1336	0.45	0/1798
15	M	0.58	0/886	1.03	0/1366
16	N	0.63	0/906	0.84	0/1395
All	All	0.34	0/60492	0.51	0/82045

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

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	2	4735	0	4759	301	0
2	3	5134	0	5181	335	0
3	4	5891	0	5933	393	0
4	5	4527	0	4641	287	0
5	6	5512	0	5530	466	0
6	7	5726	0	5814	370	0
7	8	4156	0	4225	315	0
8	9	2982	0	3107	198	0
9	A	3399	0	3475	170	0
10	B	2698	0	2713	188	0
11	C	4508	0	4465	245	0
12	E	3458	0	3465	174	0
13	D	3698	0	3755	159	0
14	F	1315	0	1353	62	0
15	M	795	0	448	47	0
16	N	804	0	436	61	0
17	2	31	0	12	11	0
17	4	31	0	12	8	0
17	6	31	0	12	10	0
17	7	31	0	12	11	0
17	9	31	0	12	4	0
17	A	31	0	12	7	0
17	D	31	0	12	5	0
17	E	31	0	12	6	0
All	All	59586	0	59396	3439	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 29.

All (3439) 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)
6:7:541:MET:HG3	6:7:593:ARG:CD	1.45	1.46
6:7:541:MET:CG	6:7:593:ARG:HD3	1.50	1.39
4:5:470:VAL:HG22	4:5:513:LEU:CD2	1.52	1.39
5:6:977:ILE:HG22	5:6:978:HIS:CD2	1.57	1.38
5:6:394:ARG:HD3	5:6:594:ARG:CD	1.52	1.38
5:6:394:ARG:CD	5:6:594:ARG:HD3	1.51	1.38
6:7:541:MET:SD	6:7:593:ARG:HB3	1.68	1.33
4:5:470:VAL:CG2	4:5:513:LEU:HD21	1.59	1.31
10:B:396:TRP:CD1	16:N:76:DC:H5"	1.65	1.31
3:4:795:THR:CG2	5:6:578:SER:HB2	1.62	1.28

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:977:ILE:CG2	5:6:978:HIS:HD2	1.49	1.24
5:6:351:SER:HB3	5:6:353:PHE:CE1	1.74	1.23
4:5:498:GLU:CD	4:5:549:ARG:HD3	1.61	1.21
10:B:396:TRP:HD1	16:N:76:DC:C5'	1.53	1.20
8:9:233:THR:HG22	16:N:73:DA:OP1	1.37	1.19
1:2:534:ARG:HB3	1:2:627:GLN:OE1	1.41	1.18
3:4:795:THR:HG22	5:6:578:SER:CB	1.72	1.18
5:6:351:SER:CB	5:6:353:PHE:CE1	2.28	1.17
3:4:203:TYR:CD2	3:4:219:THR:HG21	1.79	1.17
7:8:329:ALA:HA	7:8:336:VAL:HG21	1.22	1.16
1:2:443:GLY:O	1:2:444:PHE:CD1	1.99	1.16
3:4:618:SER:OG	6:7:552:GLY:HA2	1.44	1.15
8:9:273:SER:HB2	10:B:271:ARG:NH1	1.59	1.15
5:6:977:ILE:CG2	5:6:978:HIS:CD2	2.26	1.15
5:6:351:SER:HB3	5:6:353:PHE:HE1	1.00	1.14
3:4:203:TYR:HD2	3:4:219:THR:HG21	1.00	1.14
4:5:179:LEU:HG	4:5:181:ILE:HD11	1.23	1.14
7:8:189:THR:HG22	7:8:206:ARG:NH2	1.62	1.13
5:6:534:ALA:CB	5:6:544:LYS:HE2	1.78	1.12
8:9:247:LEU:HD21	8:9:275:LEU:HD11	1.18	1.12
5:6:351:SER:HB2	5:6:353:PHE:CZ	1.82	1.11
5:6:948:LEU:HD12	5:6:949:GLY:N	1.63	1.11
5:6:534:ALA:HB3	5:6:544:LYS:CE	1.79	1.10
2:3:193:ARG:HB2	2:3:253:HIS:O	1.49	1.10
2:3:448:THR:HG22	2:3:455:ARG:HB3	1.16	1.10
5:6:520:VAL:HG12	5:6:754:TYR:HE1	1.05	1.10
5:6:605:ALA:HB2	5:6:648:ASP:HA	1.11	1.09
6:7:541:MET:CG	6:7:593:ARG:HB3	1.81	1.09
9:A:817:SER:O	9:A:818:GLN:HG3	1.53	1.09
3:4:718:ARG:HG3	6:7:661:VAL:HG11	1.29	1.08
5:6:579:THR:HG21	5:6:715:ILE:HG21	1.10	1.08
5:6:948:LEU:CD1	5:6:949:GLY:H	1.65	1.08
4:5:275:THR:HG22	4:5:276:MET:H	1.19	1.07
6:7:541:MET:SD	6:7:593:ARG:CB	2.42	1.07
7:8:338:PRO:HG3	7:8:383:MET:O	1.53	1.07
5:6:579:THR:HG21	5:6:715:ILE:CG2	1.84	1.07
5:6:394:ARG:HD2	5:6:594:ARG:HG2	1.32	1.07
5:6:394:ARG:CD	5:6:594:ARG:CD	2.21	1.06
5:6:558:SER:HB2	5:6:564:LYS:HG2	1.36	1.06
5:6:304:LEU:HD11	5:6:322:GLU:HG3	1.32	1.05
8:9:273:SER:CB	10:B:271:ARG:NH1	2.20	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:718:ARG:HG3	6:7:661:VAL:CG1	1.85	1.04
5:6:579:THR:CG2	5:6:715:ILE:HG21	1.87	1.04
8:9:273:SER:HB2	10:B:271:ARG:CZ	1.88	1.03
4:5:225:SER:N	4:5:298:TYR:HH	1.56	1.02
10:B:396:TRP:CD1	16:N:76:DC:C5'	2.35	1.02
4:5:447:ALA:HB1	4:5:452:SER:OG	1.57	1.02
6:7:596:ILE:HG21	6:7:598:PHE:CZ	1.95	1.02
15:M:29:DT:C4	16:N:61:DA:N6	2.27	1.02
6:7:422:ILE:HG22	17:7:2001:AGS:C2	1.89	1.01
4:5:498:GLU:OE1	4:5:549:ARG:HB3	1.59	1.01
5:6:394:ARG:HD2	5:6:594:ARG:CG	1.90	1.01
5:6:625:ALA:HA	5:6:629:MET:HE3	1.40	1.01
1:2:506:TYR:H	17:2:2001:AGS:HN62	1.01	1.01
3:4:795:THR:HG22	5:6:578:SER:HB2	1.01	1.00
4:5:498:GLU:OE1	4:5:549:ARG:HD3	1.61	1.00
7:8:92:TYR:HB2	7:8:152:LEU:HB2	1.40	1.00
5:6:520:VAL:HG12	5:6:754:TYR:CE1	1.96	0.99
1:2:444:PHE:CZ	5:6:326:LYS:C	2.36	0.98
7:8:189:THR:HG22	7:8:206:ARG:HH21	1.14	0.98
3:4:203:TYR:HD2	3:4:219:THR:CG2	1.76	0.97
5:6:605:ALA:HB2	5:6:648:ASP:CA	1.94	0.97
3:4:236:LEU:CD2	7:8:579:LYS:HD2	1.93	0.97
5:6:304:LEU:CD1	5:6:322:GLU:HG3	1.95	0.97
4:5:291:ARG:H	4:5:337:VAL:HG12	1.28	0.96
9:A:647:PHE:CD1	9:A:681:ARG:HB3	2.00	0.96
1:2:508:HIS:HB3	1:2:511:ILE:CG2	1.96	0.96
4:5:179:LEU:CG	4:5:181:ILE:HD11	1.95	0.96
1:2:444:PHE:CZ	5:6:326:LYS:CA	2.49	0.95
4:5:179:LEU:HG	4:5:181:ILE:CD1	1.96	0.95
5:6:351:SER:CB	5:6:353:PHE:HE1	1.72	0.95
5:6:351:SER:CB	5:6:353:PHE:CZ	2.46	0.95
10:B:326:LEU:HD23	10:B:425:HIS:ND1	1.81	0.94
1:2:508:HIS:HB3	1:2:511:ILE:HG22	1.50	0.94
5:6:558:SER:CB	5:6:564:LYS:HG2	1.96	0.94
6:7:422:ILE:C	6:7:625:GLN:HE22	1.72	0.93
3:4:236:LEU:HD21	7:8:579:LYS:HD2	1.50	0.93
4:5:469:MET:HG3	4:5:502:ILE:HD13	1.50	0.93
5:6:298:SER:O	5:6:357:GLN:HG3	1.68	0.93
5:6:565:LEU:CD1	5:6:805:ARG:NH2	2.31	0.93
4:5:497:MET:SD	4:5:519:VAL:HG11	2.08	0.93
4:5:469:MET:HG3	4:5:502:ILE:CD1	1.99	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:443:GLY:O	1:2:444:PHE:HD1	1.48	0.92
4:5:446:ALA:HB3	4:5:465:GLU:OE2	1.68	0.92
8:9:233:THR:HG23	8:9:236:THR:HB	1.49	0.92
5:6:354:LEU:HD21	5:6:383:GLY:N	1.86	0.91
7:8:209:PRO:HA	7:8:217:ASN:HB2	1.50	0.91
4:5:475:GLY:O	4:5:517:THR:HG21	1.71	0.91
4:5:275:THR:HG22	4:5:276:MET:N	1.86	0.91
6:7:541:MET:CB	6:7:593:ARG:HD3	1.99	0.91
1:2:428:GLY:HA3	1:2:452:GLU:O	1.71	0.91
5:6:533:ILE:CD1	5:6:548:LEU:HB2	2.01	0.90
6:7:541:MET:HG3	6:7:593:ARG:CB	2.01	0.90
7:8:123:LEU:HD12	7:8:124:PHE:N	1.86	0.90
5:6:144:LYS:HD2	5:6:193:ALA:HB1	1.52	0.90
3:4:599:VAL:HG13	3:4:604:TYR:HB3	1.50	0.90
5:6:625:ALA:O	5:6:629:MET:HE3	1.72	0.90
3:4:201:PHE:O	3:4:224:LEU:HD12	1.71	0.90
5:6:626:GLY:O	5:6:630:LEU:HG	1.70	0.90
3:4:600:GLY:HA3	6:7:549:SER:O	1.71	0.89
5:6:354:LEU:HD21	5:6:383:GLY:H	1.37	0.89
7:8:50:ASN:HB3	7:8:117:ARG:HE	1.37	0.89
6:7:541:MET:HG3	6:7:593:ARG:CG	2.03	0.89
1:2:534:ARG:CB	1:2:627:GLN:OE1	2.20	0.88
2:3:444:ALA:HA	2:3:458:GLU:O	1.73	0.88
2:3:278:LEU:HB3	2:3:282:LEU:HB2	1.55	0.88
1:2:502:ALA:HB3	1:2:512:LYS:HZ3	1.38	0.88
5:6:351:SER:HB2	5:6:353:PHE:HZ	1.34	0.88
4:5:450:THR:HG23	4:5:504:ILE:HG22	1.55	0.88
6:7:500:ASP:O	6:7:504:ASP:HA	1.74	0.88
6:7:596:ILE:CG2	6:7:598:PHE:CE2	2.57	0.88
8:9:247:LEU:CD2	8:9:275:LEU:HD11	2.02	0.88
1:2:444:PHE:CZ	5:6:326:LYS:N	2.41	0.87
5:6:611:ALA:HB3	5:6:624:GLU:HB3	1.56	0.87
3:4:618:SER:OG	6:7:552:GLY:CA	2.21	0.87
7:8:338:PRO:CG	7:8:383:MET:O	2.22	0.87
7:8:213:ALA:O	7:8:214:THR:HG22	1.73	0.87
9:A:476:TYR:HD2	9:A:621:ARG:HB2	1.40	0.87
7:8:338:PRO:HG2	7:8:383:MET:H	1.37	0.87
5:6:567:GLY:HA2	5:6:805:ARG:HE	1.38	0.86
1:2:503:PRO:O	1:2:755:ILE:HD13	1.74	0.86
5:6:625:ALA:O	5:6:629:MET:CE	2.23	0.86
16:N:61:DA:C8	16:N:62:DG:C8	2.64	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:423:TYR:HB2	6:7:625:GLN:HE21	1.39	0.86
4:5:178:TYR:CB	4:5:193:THR:HG22	2.06	0.86
4:5:447:ALA:CB	4:5:452:SER:OG	2.24	0.86
5:6:565:LEU:HD13	5:6:805:ARG:NH2	1.90	0.86
6:7:541:MET:CB	6:7:593:ARG:HH11	1.89	0.86
3:4:236:LEU:HD23	7:8:579:LYS:CD	2.06	0.86
9:A:415:LYS:HD2	13:D:208:THR:HB	1.58	0.86
5:6:605:ALA:CB	5:6:648:ASP:HA	2.02	0.85
1:2:502:ALA:HB3	1:2:512:LYS:NZ	1.90	0.85
5:6:150:THR:HG22	5:6:264:GLN:H	1.40	0.85
5:6:297:THR:HG22	5:6:359:VAL:HG12	1.58	0.85
6:7:421:GLU:OE1	6:7:421:GLU:N	2.09	0.85
3:4:372:GLU:OE2	3:4:382:MET:CE	2.24	0.84
3:4:602:THR:O	3:4:603:ALA:O	1.94	0.84
5:6:625:ALA:CA	5:6:629:MET:HE3	2.06	0.84
8:9:242:ILE:O	8:9:246:PHE:HB2	1.77	0.84
5:6:351:SER:O	5:6:353:PHE:CE1	2.31	0.84
1:2:506:TYR:N	17:2:2001:AGS:HN62	1.75	0.84
5:6:463:GLY:HA2	5:6:594:ARG:HH12	1.40	0.84
5:6:977:ILE:HG22	5:6:978:HIS:HD2	0.95	0.84
2:3:340:GLN:NE2	2:3:658:LYS:HG3	1.93	0.83
12:E:248:HIS:HE1	12:E:253:ASN:OD1	1.61	0.83
5:6:948:LEU:CD1	5:6:949:GLY:N	2.32	0.83
6:7:541:MET:HG3	6:7:593:ARG:HD3	0.85	0.83
7:8:120:LYS:O	7:8:123:LEU:HG	1.78	0.83
11:C:95:THR:HA	11:C:99:ARG:HH11	1.41	0.83
5:6:364:ASN:HD22	5:6:394:ARG:HH12	1.26	0.83
5:6:951:LEU:HD12	5:6:952:ALA:N	1.94	0.83
6:7:541:MET:CG	6:7:593:ARG:CB	2.55	0.83
10:B:277:VAL:HG11	11:C:582:ILE:HD13	1.58	0.83
1:2:429:ILE:HD11	1:2:431:LYS:HE2	1.58	0.83
4:5:275:THR:CG2	4:5:276:MET:H	1.90	0.83
8:9:233:THR:CG2	8:9:236:THR:HB	2.08	0.83
5:6:580:SER:HB3	17:6:1101:AGS:N7	1.93	0.82
7:8:338:PRO:O	7:8:382:THR:HG22	1.78	0.82
5:6:582:SER:CB	17:6:1101:AGS:O2B	2.28	0.82
2:3:375:ASP:HA	2:3:378:LYS:HD3	1.61	0.81
6:7:524:ASP:OD1	6:7:525:GLU:N	2.11	0.81
1:2:651:ASN:ND2	17:2:2001:AGS:S1G	2.53	0.81
4:5:663:LEU:HB3	4:5:676:HIS:HB3	1.62	0.81
6:7:596:ILE:HG21	6:7:598:PHE:CE2	2.16	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:213:ALA:O	7:8:214:THR:CG2	2.28	0.81
8:9:247:LEU:HD21	8:9:275:LEU:CD1	2.05	0.81
8:9:276:ASN:HB2	8:9:282:LEU:HD22	1.63	0.81
6:7:596:ILE:CG2	6:7:598:PHE:CZ	2.63	0.81
4:5:178:TYR:HD1	4:5:193:THR:CG2	1.93	0.81
1:2:586:THR:HG22	1:2:588:GLU:HG2	1.63	0.80
5:6:150:THR:CG2	5:6:264:GLN:HB2	2.12	0.80
5:6:501:GLN:NE2	7:8:462:TYR:HA	1.96	0.80
8:9:311:ILE:HG13	8:9:312:PHE:H	1.44	0.80
4:5:451:ALA:O	4:5:506:LYS:HE3	1.82	0.80
5:6:947:ASP:O	5:6:948:LEU:HG	1.82	0.80
6:7:541:MET:HB3	6:7:593:ARG:HH11	1.47	0.80
1:2:510:ASP:OD1	1:2:511:ILE:N	2.15	0.80
3:4:198:LEU:HD22	3:4:226:TYR:CE1	2.17	0.80
6:7:470:LEU:HD22	6:7:564:LEU:CD2	2.12	0.80
14:F:351:CYS:SG	14:F:356:THR:OG1	2.39	0.79
5:6:609:THR:HA	5:6:628:LEU:HD12	1.65	0.79
4:5:664:ALA:HA	4:5:673:GLN:HE22	1.47	0.79
9:A:476:TYR:CD2	9:A:621:ARG:HB2	2.18	0.79
10:B:361:LEU:HA	11:C:24:THR:HG23	1.65	0.79
3:4:280:MET:HB3	3:4:296:ILE:HD11	1.63	0.79
4:5:527:TYR:HB3	4:5:530:TYR:HB2	1.65	0.79
9:A:647:PHE:CE1	9:A:681:ARG:HB3	2.18	0.78
2:3:297:VAL:H	2:3:322:LEU:HB2	1.48	0.78
10:B:326:LEU:HB3	10:B:425:HIS:CE1	2.18	0.78
4:5:178:TYR:HA	4:5:193:THR:HG22	1.64	0.78
4:5:178:TYR:HB3	4:5:193:THR:HG22	1.66	0.78
10:B:459:ILE:HD11	11:C:484:LYS:HA	1.63	0.78
3:4:531:TYR:HB3	17:4:2001:AGS:HN62	1.46	0.78
6:7:508:LEU:HD11	6:7:557:LEU:HD22	1.64	0.78
3:4:784:SER:HB2	13:D:399:LEU:HD21	1.64	0.78
5:6:351:SER:C	5:6:353:PHE:CE1	2.57	0.78
1:2:314:LEU:HD22	1:2:432:ASN:HD21	1.49	0.77
1:2:444:PHE:CE2	5:6:326:LYS:N	2.52	0.77
5:6:161:ARG:NH1	5:6:161:ARG:O	2.17	0.77
7:8:76:ASN:O	7:8:89:LEU:HB3	1.83	0.77
1:2:386:GLN:HB3	1:2:410:LEU:HB2	1.67	0.77
3:4:718:ARG:HB2	6:7:665:ILE:HD11	1.65	0.77
6:7:262:CYS:HA	6:7:298:LEU:HA	1.67	0.77
7:8:61:LEU:H	7:8:107:ARG:HH11	1.28	0.77
5:6:657:GLU:HB3	5:6:708:ARG:HH12	1.50	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:46:LYS:HE2	7:8:227:CYS:SG	2.25	0.77
8:9:481:LYS:HE2	9:A:893:LYS:HB2	1.67	0.76
8:9:273:SER:CB	10:B:271:ARG:CZ	2.62	0.76
1:2:786:VAL:HG11	1:2:834:LEU:HD21	1.67	0.76
11:C:395:PHE:HB2	11:C:462:PHE:HD2	1.50	0.76
2:3:97:ILE:HG23	2:3:158:LYS:HB2	1.67	0.76
2:3:200:VAL:HG13	2:3:244:GLU:HB2	1.66	0.76
3:4:315:ARG:HH22	3:4:410:GLN:HG3	1.49	0.76
4:5:571:HIS:O	4:5:574:ASN:HB3	1.85	0.76
8:9:276:ASN:HB2	8:9:282:LEU:CD2	2.15	0.76
4:5:498:GLU:OE1	4:5:549:ARG:CB	2.34	0.76
2:3:507:ASN:HD21	6:7:324:VAL:CG2	1.99	0.76
2:3:169:ARG:HH22	4:5:509:ILE:CD1	1.99	0.76
5:6:300:VAL:CG1	5:6:355:ASP:HB2	2.16	0.76
10:B:396:TRP:CG	16:N:76:DC:H5''	2.21	0.76
4:5:500:GLN:CG	4:5:501:THR:H	1.99	0.76
7:8:329:ALA:HA	7:8:336:VAL:CG2	2.12	0.76
8:9:236:THR:HG22	8:9:237:GLN:HE21	1.49	0.76
4:5:498:GLU:OE1	4:5:549:ARG:CD	2.33	0.75
8:9:273:SER:HB2	10:B:271:ARG:HH11	1.48	0.75
1:2:502:ALA:HB1	1:2:505:ILE:HD12	1.68	0.75
7:8:196:LEU:HD11	7:8:236:LEU:HD22	1.68	0.75
7:8:59:ALA:O	7:8:107:ARG:NH1	2.20	0.75
8:9:233:THR:HB	16:N:72:DA:O3'	1.86	0.75
3:4:650:GLU:HB2	3:4:701:ARG:CZ	2.17	0.75
5:6:582:SER:HB2	17:6:1101:AGS:O2B	1.85	0.75
5:6:942:LEU:HD21	7:8:475:LYS:HA	1.67	0.75
8:9:336:ASP:HA	8:9:339:ARG:HD3	1.69	0.75
8:9:411:ASN:ND2	9:A:698:SER:O	2.20	0.75
10:B:326:LEU:HB3	10:B:425:HIS:HE1	1.50	0.75
13:D:278:ILE:HG21	13:D:284:MET:HG3	1.68	0.75
4:5:279:ASP:H	4:5:282:LEU:HD13	1.51	0.75
6:7:423:TYR:HB2	6:7:625:GLN:NE2	2.02	0.75
5:6:625:ALA:C	5:6:629:MET:HE3	2.08	0.74
11:C:296:ASP:OD1	11:C:432:LEU:HB3	1.87	0.74
10:B:473:TYR:O	10:B:474:ASN:CG	2.26	0.74
3:4:236:LEU:CD2	7:8:579:LYS:CD	2.65	0.74
5:6:679:LEU:HD23	5:6:680:ALA:H	1.51	0.74
6:7:453:ASP:CG	6:7:562:SER:HB3	2.08	0.74
8:9:232:ASN:HB2	16:N:73:DA:P	2.27	0.74
2:3:234:GLU:HG2	2:3:240:LYS:HA	1.67	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:679:LEU:HD23	5:6:680:ALA:N	2.03	0.74
15:M:18:DT:H2'	15:M:19:DG:C8	2.23	0.74
8:9:198:GLN:HA	8:9:204:HIS:HB3	1.70	0.74
11:C:558:ARG:HG2	11:C:570:ALA:HB1	1.68	0.74
3:4:207:LYS:NZ	3:4:219:THR:HG23	2.03	0.74
4:5:178:TYR:HD1	4:5:193:THR:HG21	1.49	0.74
5:6:508:LEU:HD21	5:6:512:GLU:HB3	1.70	0.74
6:7:508:LEU:HD11	6:7:557:LEU:CD2	2.18	0.74
6:7:538:HIS:CE1	6:7:589:ALA:O	2.41	0.74
6:7:570:LEU:HB3	6:7:585:ASN:HD21	1.52	0.74
2:3:469:VAL:HG22	2:3:511:SER:HB3	1.68	0.74
4:5:500:GLN:HG2	4:5:501:THR:H	1.51	0.73
3:4:370:ARG:HG3	3:4:378:GLU:HA	1.70	0.73
2:3:448:THR:CG2	2:3:455:ARG:HB3	2.09	0.73
2:3:913:SER:HB2	2:3:960:ARG:HD3	1.70	0.73
5:6:905:THR:HG23	5:6:908:LYS:HB3	1.70	0.73
3:4:221:ASP:O	3:4:222:GLU:HG2	1.88	0.73
7:8:138:GLU:O	7:8:141:ASP:HB3	1.88	0.73
7:8:482:ASN:O	7:8:485:ASP:HB2	1.88	0.73
9:A:850:PHE:HE1	9:A:863:ILE:HG22	1.52	0.73
14:F:333:ASN:ND2	14:F:389:PHE:O	2.22	0.73
2:3:340:GLN:NE2	2:3:658:LYS:CG	2.52	0.73
6:7:422:ILE:C	6:7:625:GLN:NE2	2.40	0.73
6:7:453:ASP:OD1	6:7:562:SER:HB3	1.89	0.73
2:3:100:LEU:HA	2:3:103:LEU:HD13	1.68	0.73
3:4:198:LEU:HB3	3:4:226:TYR:CE2	2.24	0.73
13:D:120:GLN:HE21	13:D:124:LYS:HD2	1.53	0.73
3:4:579:GLN:NE2	6:7:542:GLU:OE2	2.22	0.73
2:3:334:THR:HG22	2:3:335:GLY:H	1.54	0.73
7:8:20:LEU:HA	7:8:23:VAL:HG12	1.71	0.73
8:9:182:PHE:HA	8:9:185:ILE:HD12	1.71	0.73
8:9:337:VAL:HG12	9:A:620:THR:HG22	1.70	0.73
9:A:614:THR:HA	9:A:617:ILE:HD12	1.70	0.73
1:2:300:PHE:O	1:2:319:ARG:NH2	2.22	0.72
3:4:871:ASN:OD1	3:4:874:LYS:NZ	2.22	0.72
3:4:618:SER:HB3	6:7:552:GLY:O	1.88	0.72
5:6:790:ARG:HH12	12:E:476:ASP:H	1.38	0.72
7:8:524:THR:HB	7:8:529:TYR:HE2	1.54	0.72
8:9:273:SER:OG	10:B:271:ARG:NH1	2.21	0.72
10:B:580:ARG:HA	10:B:583:ILE:HB	1.72	0.72
4:5:500:GLN:CG	4:5:501:THR:N	2.52	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:23:DG:H2'	15:M:24:DT:C6	2.24	0.72
4:5:496:ALA:HB2	4:5:502:ILE:HG22	1.70	0.72
1:2:585:ILE:HG13	5:6:619:GLY:CA	2.20	0.72
2:3:195:LYS:HG3	6:7:370:LEU:HD12	1.70	0.72
10:B:322:LYS:O	10:B:326:LEU:N	2.20	0.72
1:2:327:ARG:NH1	1:2:418:SER:O	2.22	0.72
1:2:586:THR:HG22	1:2:586:THR:O	1.88	0.72
2:3:960:ARG:HH22	8:9:388:ASN:HA	1.54	0.72
5:6:297:THR:HG22	5:6:359:VAL:CG1	2.19	0.72
5:6:691:ARG:NH1	5:6:718:ASP:OD1	2.21	0.72
6:7:67:LEU:HD22	6:7:126:PRO:HD2	1.70	0.72
8:9:221:VAL:HG13	8:9:259:ILE:HB	1.72	0.72
8:9:293:ALA:O	8:9:297:TYR:HB3	1.90	0.72
10:B:269:VAL:HG11	11:C:582:ILE:HD11	1.71	0.72
11:C:357:CYS:HB2	11:C:360:PHE:HB2	1.72	0.72
7:8:94:PHE:O	7:8:149:ALA:HA	1.89	0.72
15:M:32:DC:O2	16:N:58:DG:N2	2.23	0.72
1:2:215:LEU:HG	1:2:216:LEU:HD12	1.70	0.71
5:6:297:THR:HB	5:6:357:GLN:HE21	1.55	0.71
4:5:178:TYR:CD1	4:5:193:THR:CG2	2.72	0.71
5:6:763:PRO:HB3	5:6:817:ASP:HA	1.72	0.71
7:8:332:ARG:HB2	7:8:336:VAL:HG22	1.70	0.71
11:C:378:LEU:O	11:C:383:ASN:ND2	2.23	0.71
11:C:531:ALA:HB1	11:C:535:ILE:HG21	1.72	0.71
5:6:144:LYS:HD2	5:6:193:ALA:CB	2.19	0.71
11:C:309:ASN:ND2	11:C:312:HIS:O	2.21	0.71
3:4:818:GLU:N	3:4:821:ASP:OD2	2.23	0.71
17:4:2001:AGS:O2B	17:4:2001:AGS:O1A	2.05	0.71
5:6:150:THR:HG21	5:6:264:GLN:HB2	1.70	0.71
6:7:596:ILE:HG22	6:7:598:PHE:CE2	2.23	0.71
7:8:120:LYS:HA	7:8:123:LEU:CD2	2.20	0.71
9:A:512:GLU:HG2	9:A:564:LEU:HD23	1.72	0.71
17:E:2001:AGS:S1G	17:E:2001:AGS:O2B	2.48	0.71
4:5:478:CYS:HA	4:5:520:LEU:HB3	1.70	0.71
6:7:423:TYR:CA	6:7:625:GLN:NE2	2.53	0.71
7:8:155:TYR:HB2	7:8:255:ALA:HB1	1.73	0.71
7:8:570:SER:H	7:8:581:TYR:HB3	1.55	0.71
2:3:27:ARG:NH2	2:3:106:PHE:O	2.23	0.71
2:3:416:SER:HB2	2:3:420:ARG:HH11	1.54	0.71
6:7:419:ALA:HB3	6:7:429:LYS:CE	2.20	0.71
3:4:261:LEU:HA	3:4:268:VAL:HG11	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:394:ARG:CD	5:6:594:ARG:CG	2.57	0.71
5:6:565:LEU:CD1	5:6:805:ARG:HH21	2.02	0.71
7:8:309:ASP:O	7:8:312:LYS:NZ	2.24	0.71
11:C:496:GLN:HB2	14:F:397:ILE:HG21	1.72	0.71
11:C:558:ARG:HH21	11:C:571:GLU:HA	1.55	0.71
11:C:369:LYS:HE3	11:C:370:GLN:HG2	1.73	0.71
5:6:719:CYS:H	13:D:528:GLN:HE22	1.36	0.70
6:7:497:VAL:HB	6:7:553:ILE:CD1	2.21	0.70
6:7:470:LEU:HD22	6:7:564:LEU:HD23	1.72	0.70
10:B:379:ILE:HA	10:B:382:LEU:HD12	1.72	0.70
12:E:192:TYR:HB3	12:E:196:GLU:HG3	1.71	0.70
2:3:443:THR:CG2	2:3:485:ALA:HB2	2.21	0.70
2:3:435:ARG:HB2	2:3:477:LYS:O	1.91	0.70
3:4:631:ILE:HD12	3:4:671:ILE:HD11	1.74	0.70
5:6:580:SER:HB3	17:6:1101:AGS:C5	2.20	0.70
8:9:175:LEU:HD22	8:9:181:ILE:HG12	1.72	0.70
4:5:622:LEU:HD13	4:5:681:ILE:HG12	1.72	0.70
1:2:215:LEU:HD21	1:2:278:ALA:HB2	1.74	0.70
5:6:104:ASP:HB3	5:6:176:ARG:HH22	1.55	0.70
5:6:303:GLU:OE1	5:6:303:GLU:HA	1.91	0.70
5:6:303:GLU:HG2	5:6:356:TRP:HE1	1.57	0.70
7:8:237:ALA:HB2	7:8:244:HIS:HB2	1.73	0.70
2:3:342:LEU:HD11	2:3:658:LYS:HB3	1.74	0.70
3:4:578:LEU:HD11	3:4:674:SER:HB3	1.74	0.70
7:8:515:GLN:HE22	7:8:542:LEU:HD11	1.56	0.70
10:B:483:PHE:HD1	11:C:521:LEU:HD13	1.56	0.70
3:4:236:LEU:HD23	7:8:579:LYS:HD2	1.68	0.70
4:5:178:TYR:CA	4:5:193:THR:HG22	2.21	0.70
1:2:576:LEU:O	1:2:595:ALA:N	2.25	0.69
2:3:507:ASN:HD21	6:7:324:VAL:HG21	1.55	0.69
4:5:485:MET:SD	4:5:490:ARG:NH1	2.65	0.69
8:9:113:GLY:O	8:9:117:GLN:N	2.23	0.69
13:D:149:GLN:HA	13:D:152:GLN:HE21	1.57	0.69
2:3:152:PRO:HB2	2:3:154:LYS:HG2	1.74	0.69
5:6:306:LYS:HG2	5:6:321:VAL:HG12	1.74	0.69
5:6:501:GLN:OE1	7:8:462:TYR:CE1	2.45	0.69
6:7:516:ALA:O	6:7:561:THR:HG22	1.92	0.69
12:E:222:GLU:HG3	12:E:223:GLN:O	1.90	0.69
17:E:2001:AGS:O2A	17:E:2001:AGS:O2G	2.10	0.69
5:6:790:ARG:NH2	12:E:476:ASP:OD1	2.25	0.69
7:8:293:VAL:HB	7:8:299:PRO:HB2	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:612:LYS:HE3	9:A:616:ARG:HH22	1.56	0.69
4:5:138:ILE:HG22	4:5:333:ILE:HG12	1.75	0.69
9:A:452:ARG:NH1	9:A:625:THR:O	2.25	0.69
3:4:201:PHE:O	3:4:224:LEU:CD1	2.40	0.69
4:5:53:ASN:HB3	4:5:58:ASN:HB3	1.73	0.69
4:5:155:HIS:HB3	4:5:297:ILE:HG21	1.74	0.69
4:5:178:TYR:CD1	4:5:193:THR:HG21	2.27	0.69
8:9:233:THR:HG22	16:N:73:DA:P	2.32	0.69
10:B:589:ASN:HB2	10:B:601:TRP:O	1.92	0.69
4:5:370:LEU:HA	4:5:373:SER:OG	1.91	0.69
13:D:347:THR:O	13:D:349:LYS:NZ	2.23	0.69
5:6:159:SER:HA	5:6:164:GLY:HA2	1.75	0.69
16:N:61:DA:H2''	16:N:62:DG:O5'	1.93	0.69
1:2:247:ARG:NH2	7:8:349:SER:O	2.26	0.69
3:4:494:GLU:HG2	3:4:757:HIS:HE2	1.57	0.69
3:4:824:GLU:OE1	3:4:824:GLU:N	2.25	0.69
3:4:916:VAL:HA	3:4:926:SER:HA	1.72	0.69
5:6:565:LEU:CD1	5:6:805:ARG:HH22	2.04	0.69
5:6:576:ASP:HB3	5:6:577:PRO:HD2	1.74	0.69
6:7:551:ALA:CA	16:N:50:DG:OP1	2.40	0.69
7:8:507:GLN:O	7:8:510:ALA:HB3	1.92	0.69
12:E:205:ARG:NH1	12:E:259:ASN:OD1	2.26	0.69
3:4:234:ARG:HG3	3:4:290:ASP:OD2	1.93	0.69
5:6:533:ILE:HD11	5:6:548:LEU:HB2	1.73	0.69
6:7:14:TYR:O	6:7:18:PHE:N	2.25	0.69
8:9:312:PHE:HD2	8:9:387:LEU:HD23	1.56	0.69
8:9:313:GLN:HE21	8:9:315:MET:HB2	1.58	0.69
14:F:351:CYS:HG	14:F:356:THR:HG1	1.38	0.69
2:3:443:THR:HG21	2:3:485:ALA:HB2	1.75	0.69
3:4:498:VAL:O	3:4:499:ARG:HG2	1.93	0.69
7:8:543:GLN:OE1	7:8:543:GLN:N	2.24	0.69
10:B:427:LEU:HB3	10:B:456:THR:HG22	1.73	0.69
1:2:622:GLU:O	1:2:625:GLU:HG2	1.93	0.68
2:3:530:HIS:ND1	2:3:530:HIS:O	2.27	0.68
4:5:298:TYR:HB3	4:5:328:ILE:HA	1.75	0.68
4:5:493:ILE:O	4:5:497:MET:HG2	1.94	0.68
5:6:777:TYR:OH	5:6:781:ARG:NH2	2.24	0.68
10:B:309:THR:HG22	10:B:310:GLN:OE1	1.93	0.68
1:2:444:PHE:CE2	5:6:326:LYS:CA	2.76	0.68
1:2:562:ARG:HB2	1:2:602:GLY:HA3	1.75	0.68
1:2:625:GLU:HB3	1:2:676:ARG:NE	2.09	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:601:LEU:O	3:4:621:LEU:HB2	1.92	0.68
4:5:470:VAL:CG2	4:5:513:LEU:CD2	2.41	0.68
10:B:282:ASN:HB3	10:B:485:PRO:HG3	1.74	0.68
10:B:532:GLN:HG2	10:B:553:GLY:HA2	1.75	0.68
8:9:240:ARG:NH2	8:9:241:THR:OG1	2.27	0.68
9:A:605:PRO:HB3	9:A:617:ILE:HD13	1.74	0.68
3:4:203:TYR:CD2	3:4:219:THR:CG2	2.62	0.68
5:6:657:GLU:CB	5:6:708:ARG:NH1	2.56	0.68
13:D:379:ARG:HH12	13:D:467:ASP:HB3	1.59	0.68
7:8:108:ASN:O	7:8:112:CYS:N	2.22	0.68
9:A:811:LEU:HD12	9:A:820:GLN:HE21	1.58	0.68
2:3:98:ILE:HD13	2:3:155:LEU:HD22	1.74	0.68
5:6:501:GLN:OE1	7:8:462:TYR:CD1	2.46	0.68
5:6:923:VAL:HG13	5:6:928:ALA:HB3	1.75	0.68
6:7:715:GLU:OE2	6:7:718:ARG:NE	2.22	0.68
3:4:467:LYS:NZ	3:4:470:SER:H	1.92	0.68
3:4:500:GLN:NE2	3:4:505:ASP:OD2	2.27	0.68
5:6:773:LEU:HD12	5:6:824:ILE:HD12	1.75	0.68
13:D:223:ALA:HA	13:D:228:GLN:HG2	1.73	0.68
2:3:158:LYS:HA	2:3:325:THR:CG2	2.24	0.68
8:9:324:CYS:SG	8:9:325:ALA:N	2.67	0.67
12:E:183:CYS:O	13:D:339:ASN:ND2	2.26	0.67
13:D:379:ARG:NH1	13:D:466:LEU:O	2.27	0.67
2:3:908:ILE:HG12	2:3:922:ARG:HH11	1.58	0.67
3:4:372:GLU:OE2	3:4:382:MET:HE3	1.92	0.67
8:9:388:ASN:O	8:9:392:LYS:NZ	2.26	0.67
17:A:2001:AGS:O2A	17:A:2001:AGS:O1B	2.11	0.67
10:B:535:ASN:HB2	10:B:552:THR:HA	1.75	0.67
13:D:82:ILE:HD11	13:D:100:LEU:HD21	1.76	0.67
7:8:77:PHE:HA	7:8:88:TRP:HB2	1.76	0.67
8:9:183:GLN:HE22	8:9:186:PHE:HD2	1.42	0.67
12:E:12:GLU:N	12:E:12:GLU:OE1	2.25	0.67
1:2:534:ARG:HD3	1:2:627:GLN:OE1	1.95	0.67
3:4:315:ARG:HH11	3:4:413:HIS:HB2	1.59	0.67
3:4:333:LEU:HD22	3:4:616:LEU:O	1.94	0.67
3:4:701:ARG:HH21	3:4:796:ARG:HH12	1.40	0.67
3:4:894:SER:HB3	9:A:840:LYS:HD3	1.74	0.67
4:5:179:LEU:CD2	4:5:181:ILE:HD11	2.24	0.67
5:6:463:GLY:HA2	5:6:594:ARG:NH1	2.09	0.67
5:6:775:GLU:O	5:6:778:LYS:HB3	1.93	0.67
5:6:948:LEU:HD13	5:6:949:GLY:H	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:140:ASP:O	6:7:144:ASN:ND2	2.28	0.67
2:3:110:PHE:HZ	2:3:125:ALA:HB2	1.59	0.67
5:6:575:GLY:O	5:6:581:LYS:NZ	2.24	0.67
5:6:712:PHE:O	5:6:713:PHE:CD1	2.48	0.67
9:A:817:SER:C	9:A:818:GLN:HG3	2.14	0.67
1:2:429:ILE:CD1	1:2:431:LYS:HE2	2.24	0.67
2:3:342:LEU:HD12	2:3:346:ASP:HB3	1.76	0.67
4:5:35:ILE:HD12	4:5:93:ALA:HB3	1.76	0.67
5:6:354:LEU:HD21	5:6:383:GLY:CA	2.23	0.67
7:8:191:LEU:HD11	7:8:286:GLN:HE22	1.60	0.67
10:B:371:ASN:HD21	10:B:373:ARG:HB2	1.60	0.67
2:3:542:ARG:NH2	17:7:2001:AGS:O2B	2.28	0.67
5:6:382:ARG:HH11	5:6:455:LEU:HD21	1.58	0.67
11:C:88:SER:O	11:C:119:LYS:NZ	2.27	0.67
11:C:185:LEU:HD21	11:C:222:LEU:HD21	1.76	0.67
1:2:578:ALA:HB2	1:2:597:VAL:HG21	1.77	0.67
1:2:790:TYR:OH	1:2:794:ARG:NH2	2.27	0.67
2:3:916:VAL:HB	2:3:959:TRP:HE1	1.59	0.67
3:4:911:GLN:HE22	3:4:918:VAL:H	1.43	0.67
4:5:286:VAL:HG23	4:5:292:VAL:HG11	1.76	0.67
5:6:941:LEU:HD12	5:6:954:TYR:OH	1.93	0.67
8:9:454:GLN:HB3	8:9:457:GLU:HG2	1.76	0.67
3:4:234:ARG:CG	3:4:290:ASP:OD2	2.43	0.66
4:5:498:GLU:CD	4:5:549:ARG:CD	2.53	0.66
6:7:449:LYS:HE3	6:7:544:GLN:HE21	1.61	0.66
9:A:494:LYS:HA	9:A:497:LEU:HD12	1.76	0.66
1:2:444:PHE:CE1	5:6:326:LYS:C	2.68	0.66
5:6:710:ASP:HB3	5:6:802:SER:HB2	1.78	0.66
5:6:712:PHE:HB2	5:6:794:ARG:HH11	1.60	0.66
6:7:664:TYR:HB2	6:7:689:LEU:HD13	1.77	0.66
7:8:330:LEU:HD21	7:8:390:ASN:HB2	1.77	0.66
10:B:555:GLU:HG3	10:B:558:LEU:H	1.61	0.66
11:C:359:THR:HG21	11:C:462:PHE:HA	1.78	0.66
3:4:193:ASN:ND2	3:4:253:GLN:O	2.26	0.66
3:4:503:ASP:O	3:4:507:ALA:HB2	1.94	0.66
5:6:368:ILE:HD12	5:6:369:PRO:HD2	1.78	0.66
6:7:31:ASP:HB3	6:7:62:LYS:H	1.60	0.66
8:9:123:ARG:HH21	8:9:124:GLN:HE21	1.44	0.66
8:9:477:LYS:HA	8:9:484:ARG:O	1.96	0.66
13:D:94:GLU:OE1	13:D:96:HIS:ND1	2.29	0.66
5:6:154:ASP:OD1	5:6:155:TYR:N	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:500:ASP:O	6:7:504:ASP:CA	2.43	0.66
10:B:396:TRP:CD1	16:N:76:DC:OP1	2.47	0.66
13:D:171:THR:O	13:D:183:LYS:NZ	2.26	0.66
1:2:508:HIS:HB3	1:2:511:ILE:HG21	1.77	0.66
1:2:746:GLN:HE22	1:2:750:LYS:HE3	1.60	0.66
2:3:542:ARG:NH1	17:7:2001:AGS:O1A	2.29	0.66
6:7:422:ILE:N	6:7:625:GLN:OE1	2.29	0.66
6:7:541:MET:HB2	6:7:593:ARG:NH1	2.11	0.66
14:F:285:ILE:HA	14:F:288:LEU:HD12	1.78	0.66
5:6:657:GLU:HB2	5:6:708:ARG:NH1	2.10	0.66
8:9:457:GLU:O	8:9:461:ILE:HG12	1.96	0.66
14:F:347:VAL:O	14:F:351:CYS:HB2	1.95	0.66
5:6:915:MET:SD	5:6:944:LYS:NZ	2.68	0.66
6:7:544:GLN:HA	6:7:559:ALA:H	1.60	0.66
8:9:313:GLN:HG2	8:9:316:ALA:H	1.59	0.66
12:E:328:SER:HB3	12:E:423:ASN:HD22	1.61	0.66
13:D:396:ARG:NH1	13:D:414:GLU:OE2	2.28	0.66
5:6:303:GLU:HG2	5:6:356:TRP:NE1	2.11	0.66
8:9:273:SER:HB2	10:B:271:ARG:HD3	1.77	0.66
3:4:713:ASP:OD2	3:4:716:ASN:N	2.30	0.66
2:3:391:LYS:NZ	6:7:623:ASN:OD1	2.29	0.65
4:5:183:CYS:HB3	4:5:188:HIS:H	1.61	0.65
6:7:476:ILE:HA	6:7:639:ARG:HH21	1.60	0.65
14:F:310:ALA:HA	14:F:313:LEU:HD23	1.76	0.65
3:4:260:GLN:O	3:4:264:TYR:N	2.27	0.65
4:5:523:ALA:HB3	4:5:539:ASN:HD21	1.61	0.65
11:C:64:LEU:HD11	11:C:291:LYS:HD3	1.78	0.65
12:E:231:GLN:HE21	12:E:278:ILE:HG22	1.61	0.65
2:3:411:PRO:HA	2:3:415:LYS:HD3	1.78	0.65
6:7:423:TYR:CA	6:7:625:GLN:HE22	2.09	0.65
8:9:232:ASN:HB2	16:N:73:DA:OP2	1.96	0.65
12:E:274:THR:OG1	12:E:277:ASN:ND2	2.29	0.65
1:2:435:ASP:HB2	1:2:446:VAL:HG23	1.78	0.65
1:2:782:ASP:OD2	1:2:834:LEU:HD23	1.96	0.65
3:4:365:ILE:HB	5:6:419:SER:HA	1.79	0.65
5:6:570:ASN:HD22	5:6:678:ILE:H	1.45	0.65
6:7:451:ARG:O	6:7:694:ARG:NH2	2.30	0.65
8:9:389:TYR:HA	8:9:392:LYS:HG2	1.77	0.65
2:3:49:ASN:HB3	2:3:91:ILE:HG13	1.78	0.65
3:4:418:CYS:HG	3:4:420:TYR:HE2	1.45	0.65
7:8:348:SER:O	7:8:352:LYS:N	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:791:ILE:HD11	9:A:900:GLU:HB2	1.77	0.65
1:2:774:ILE:HG22	1:2:776:PRO:HD3	1.77	0.65
9:A:882:GLN:NE2	9:A:891:CYS:SG	2.70	0.65
11:C:199:LEU:HD21	11:C:201:MET:HE3	1.77	0.65
13:D:344:LEU:HD12	13:D:363:PHE:HB3	1.78	0.65
1:2:656:ARG:NH1	5:6:792:SER:O	2.29	0.65
4:5:200:ILE:HG13	4:5:226:ASN:HD22	1.62	0.65
6:7:419:ALA:HB3	6:7:429:LYS:HE3	1.78	0.65
7:8:17:VAL:HG22	7:8:44:LEU:HB3	1.79	0.65
7:8:370:ALA:HB1	7:8:399:ARG:HH21	1.62	0.65
1:2:625:GLU:HB3	1:2:676:ARG:HE	1.61	0.65
2:3:488:GLU:OE2	6:7:482:TYR:HE2	1.79	0.65
4:5:55:LEU:HG	4:5:56:VAL:HG23	1.78	0.65
7:8:520:LEU:HD13	7:8:583:TRP:NE1	2.11	0.65
15:M:14:DG:C2'	15:M:15:DT:H71	2.27	0.65
1:2:503:PRO:HG3	5:6:562:GLY:HA3	1.78	0.65
2:3:432:THR:HB	2:3:472:ILE:HG12	1.78	0.65
5:6:567:GLY:HA2	5:6:805:ARG:NE	2.11	0.65
6:7:267:TYR:HB2	6:7:286:SER:HB3	1.79	0.65
7:8:120:LYS:HA	7:8:123:LEU:HD21	1.77	0.65
2:3:43:ARG:NH1	2:3:136:MET:O	2.30	0.64
9:A:427:LYS:HA	9:A:430:LEU:HB3	1.79	0.64
1:2:331:PHE:CZ	1:2:588:GLU:HG3	2.32	0.64
2:3:274:ILE:HD12	2:3:321:ILE:HG21	1.80	0.64
3:4:180:ILE:HG22	3:4:182:GLY:H	1.62	0.64
3:4:425:ASP:OD1	3:4:425:ASP:O	2.14	0.64
3:4:743:PRO:HB2	3:4:746:PHE:HB3	1.78	0.64
2:3:373:GLY:O	2:3:378:LYS:NZ	2.30	0.64
1:2:331:PHE:HE1	1:2:588:GLU:CD	2.00	0.64
1:2:490:ASP:OD2	1:2:491:ARG:N	2.29	0.64
2:3:310:ASN:OD1	2:3:314:LEU:N	2.30	0.64
2:3:527:ARG:HH11	2:3:532:ASN:HA	1.61	0.64
9:A:413:THR:HA	13:D:207:ILE:HA	1.79	0.64
1:2:311:GLU:HA	1:2:314:LEU:HD23	1.79	0.64
3:4:231:ASN:OD1	3:4:234:ARG:NH2	2.31	0.64
3:4:548:THR:HG21	3:4:760:PRO:HD2	1.78	0.64
3:4:553:THR:HG23	3:4:554:LYS:HG3	1.80	0.64
4:5:529:ARG:HH11	4:5:564:ARG:HG3	1.62	0.64
4:5:685:GLN:HA	4:5:688:THR:HG22	1.78	0.64
5:6:582:SER:HB3	17:6:1101:AGS:O2B	1.97	0.64
7:8:527:GLN:HB3	7:8:582:ARG:HG2	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:400:ASN:O	8:9:405:THR:N	2.30	0.64
9:A:551:LYS:HG3	9:A:552:ARG:HH11	1.63	0.64
1:2:226:VAL:HA	7:8:215:THR:HG21	1.80	0.64
3:4:479:SER:OG	3:4:480:THR:N	2.31	0.64
4:5:148:LEU:HB2	4:5:260:GLU:HB2	1.80	0.64
6:7:531:GLU:HA	6:7:534:ARG:HG3	1.79	0.64
8:9:250:LYS:HG2	8:9:252:PRO:HD2	1.79	0.64
1:2:500:SER:HB3	1:2:757:PRO:HB2	1.80	0.64
5:6:657:GLU:CB	5:6:708:ARG:HH12	2.11	0.64
5:6:787:GLY:HA3	5:6:790:ARG:HD3	1.80	0.64
13:D:324:ILE:HG12	13:D:337:LEU:HD11	1.79	0.64
3:4:703:ASP:OD2	3:4:803:ARG:NH1	2.31	0.64
3:4:859:ARG:NH2	9:A:905:MET:O	2.30	0.64
5:6:654:GLU:OE1	5:6:654:GLU:N	2.30	0.64
7:8:187:TYR:HE2	7:8:249:LEU:HB2	1.63	0.64
7:8:338:PRO:HD2	7:8:382:THR:HB	1.80	0.64
2:3:196:LEU:HD21	2:3:199:SER:HB3	1.78	0.64
3:4:238:THR:HG22	3:4:240:ASN:H	1.61	0.64
3:4:349:CYS:HB3	3:4:355:THR:HB	1.79	0.64
3:4:408:ASP:OD1	6:7:557:LEU:HA	1.98	0.64
4:5:494:HIS:HD2	4:5:549:ARG:HB2	1.63	0.64
4:5:500:GLN:NE2	4:5:516:ARG:HE	1.96	0.64
13:D:327:ASN:HD22	13:D:337:LEU:HD12	1.62	0.64
1:2:428:GLY:CA	1:2:452:GLU:O	2.46	0.63
9:A:695:LYS:HG2	9:A:782:LEU:HD21	1.79	0.63
10:B:428:ASP:OD2	10:B:458:HIS:N	2.26	0.63
12:E:255:ILE:O	12:E:259:ASN:ND2	2.31	0.63
1:2:549:LYS:NZ	17:2:2001:AGS:O1B	2.24	0.63
2:3:416:SER:OG	4:5:651:ARG:NH2	2.32	0.63
2:3:911:GLU:HB3	2:3:913:SER:H	1.63	0.63
5:6:817:ASP:HB3	5:6:818:GLU:HG2	1.80	0.63
6:7:20:GLU:O	6:7:24:PHE:HB2	1.97	0.63
14:F:413:VAL:HG13	14:F:418:TYR:HB2	1.80	0.63
2:3:169:ARG:NH2	4:5:509:ILE:CD1	2.61	0.63
5:6:566:ARG:NH1	5:6:570:ASN:OD1	2.29	0.63
2:3:24:ARG:NH1	2:3:120:TYR:O	2.31	0.63
3:4:372:GLU:OE2	3:4:382:MET:HE1	1.98	0.63
4:5:663:LEU:HD13	4:5:666:LEU:HD12	1.79	0.63
10:B:473:TYR:O	10:B:474:ASN:ND2	2.32	0.63
11:C:510:SER:HB2	11:C:556:PHE:HE1	1.61	0.63
12:E:346:ASP:OD2	12:E:385:ARG:NH2	2.30	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:205:ILE:HG23	7:8:221:SER:HA	1.80	0.63
7:8:574:VAL:HG23	7:8:575:ASP:H	1.64	0.63
7:8:582:ARG:O	7:8:584:ASN:ND2	2.32	0.63
8:9:406:ARG:H	8:9:406:ARG:HD2	1.64	0.63
11:C:296:ASP:OD1	11:C:432:LEU:CB	2.46	0.63
17:E:2001:AGS:O2B	17:E:2001:AGS:O1A	2.16	0.63
5:6:591:PHE:HZ	5:6:751:LEU:HD22	1.64	0.63
6:7:7:SER:O	6:7:9:GLN:NE2	2.31	0.63
6:7:423:TYR:N	6:7:625:GLN:HE22	1.95	0.63
11:C:447:LYS:O	11:C:450:LYS:NZ	2.29	0.63
12:E:12:GLU:HG2	12:E:13:TYR:H	1.62	0.63
1:2:443:GLY:C	1:2:444:PHE:CD1	2.72	0.63
4:5:660:THR:HB	4:5:677:VAL:HG13	1.80	0.63
5:6:408:THR:O	5:6:408:THR:HG22	1.98	0.63
6:7:440:VAL:HG11	6:7:697:GLN:HB3	1.80	0.63
6:7:470:LEU:CD2	6:7:564:LEU:HD21	2.28	0.63
8:9:289:GLN:NE2	10:B:515:GLN:O	2.32	0.63
14:F:329:PHE:O	14:F:336:ARG:NH2	2.32	0.63
5:6:632:ASP:HA	5:6:676:THR:HG22	1.79	0.63
5:6:761:PHE:O	5:6:812:ARG:NH1	2.31	0.63
6:7:497:VAL:CG1	6:7:553:ILE:HD13	2.29	0.63
6:7:573:ARG:NH2	6:7:602:ASP:O	2.29	0.63
11:C:360:PHE:HZ	11:C:388:LEU:HD11	1.62	0.63
11:C:426:GLU:HG3	11:C:439:TYR:HE1	1.63	0.63
1:2:585:ILE:CG1	5:6:619:GLY:CA	2.77	0.63
1:2:780:GLN:HE22	4:5:573:ILE:HD13	1.63	0.63
1:2:788:ARG:NH2	14:F:314:VAL:O	2.32	0.63
6:7:439:GLY:HA3	6:7:701:LYS:HZ1	1.63	0.63
6:7:541:MET:CB	6:7:593:ARG:NH1	2.61	0.63
9:A:431:ASN:O	9:A:639:ARG:NH1	2.31	0.63
12:E:225:THR:O	12:E:225:THR:HG22	1.97	0.63
2:3:259:GLN:HG2	2:3:260:GLU:H	1.63	0.62
3:4:452:VAL:HG12	6:7:279:THR:HB	1.81	0.62
7:8:17:VAL:HG11	7:8:46:LYS:HD2	1.80	0.62
12:E:40:GLY:N	17:E:2001:AGS:O1B	2.26	0.62
12:E:346:ASP:OD1	12:E:347:ALA:N	2.32	0.62
5:6:504:PHE:HE1	7:8:546:ASN:HB3	1.63	0.62
5:6:558:SER:HB2	5:6:564:LYS:CG	2.23	0.62
8:9:314:PRO:HA	8:9:317:ILE:HD12	1.81	0.62
15:M:29:DT:N3	16:N:61:DA:N6	2.47	0.62
17:2:2001:AGS:O2G	5:6:708:ARG:NH2	2.33	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:702:LEU:HA	2:3:705:LEU:HG	1.81	0.62
3:4:255:GLU:O	3:4:259:HIS:ND1	2.31	0.62
5:6:977:ILE:HG23	5:6:978:HIS:HD2	1.56	0.62
9:A:798:SER:HA	13:D:332:ARG:HE	1.64	0.62
10:B:364:ASN:ND2	11:C:18:ALA:O	2.32	0.62
11:C:518:ALA:HB3	11:C:523:GLN:HB3	1.81	0.62
12:E:212:ASP:OD2	12:E:266:TRP:NE1	2.32	0.62
3:4:256:ASP:HA	6:7:135:LYS:HE2	1.80	0.62
3:4:618:SER:CB	6:7:552:GLY:O	2.47	0.62
4:5:171:VAL:O	4:5:255:PHE:N	2.32	0.62
5:6:270:LEU:HD12	5:6:289:SER:HB3	1.82	0.62
5:6:625:ALA:O	5:6:629:MET:HE2	1.98	0.62
8:9:67:GLU:O	8:9:332:ARG:NH2	2.32	0.62
8:9:276:ASN:OD1	8:9:277:LEU:N	2.32	0.62
9:A:599:ALA:HB1	9:A:604:LEU:HD13	1.80	0.62
9:A:645:ASP:HA	9:A:682:LEU:O	1.98	0.62
1:2:569:GLN:N	1:2:569:GLN:OE1	2.33	0.62
1:2:621:HIS:HB2	1:2:673:ILE:HG22	1.81	0.62
6:7:660:VAL:HG22	6:7:713:VAL:HG21	1.81	0.62
11:C:61:TYR:HD1	11:C:329:PHE:HD2	1.47	0.62
12:E:218:ARG:HA	12:E:221:GLU:HB2	1.82	0.62
1:2:795:ARG:NH1	14:F:313:LEU:O	2.27	0.62
2:3:206:THR:O	2:3:208:ARG:NH2	2.33	0.62
2:3:896:ILE:HA	2:3:899:ILE:HD12	1.81	0.62
6:7:401:VAL:HA	6:7:404:LEU:HD12	1.79	0.62
1:2:444:PHE:HZ	5:6:326:LYS:N	1.97	0.62
5:6:186:ARG:HA	5:6:189:VAL:HG12	1.82	0.62
5:6:297:THR:HB	5:6:357:GLN:NE2	2.15	0.62
8:9:233:THR:HG23	8:9:236:THR:CB	2.29	0.62
10:B:301:PHE:HA	10:B:304:TYR:HD2	1.63	0.62
1:2:689:GLU:O	5:6:778:LYS:NZ	2.32	0.62
2:3:158:LYS:NZ	2:3:324:ASN:O	2.33	0.62
3:4:602:THR:O	3:4:603:ALA:C	2.38	0.62
4:5:179:LEU:HB3	4:5:192:ILE:O	1.98	0.62
5:6:313:MET:CG	5:6:313:MET:CE	2.77	0.62
5:6:975:MET:HG3	12:E:245:GLN:HE22	1.65	0.62
1:2:478:GLU:H	7:8:354:LYS:HD3	1.65	0.62
2:3:200:VAL:HG11	2:3:247:TYR:HB2	1.82	0.62
17:4:2001:AGS:O3A	6:7:687:ARG:NH2	2.33	0.62
6:7:551:ALA:N	16:N:50:DG:OP1	2.32	0.62
7:8:520:LEU:HD13	7:8:583:TRP:HE1	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:489:ASP:OD2	11:C:614:ARG:NH1	2.33	0.62
11:C:550:LYS:O	11:C:553:ILE:HG22	2.00	0.62
1:2:444:PHE:CE2	5:6:326:LYS:HA	2.35	0.62
2:3:198:ARG:NE	2:3:211:TYR:OH	2.33	0.62
2:3:350:ILE:HG23	2:3:659:TYR:HD1	1.63	0.62
8:9:411:ASN:HD21	8:9:413:GLN:HB2	1.64	0.62
10:B:326:LEU:HD23	10:B:425:HIS:CE1	2.34	0.62
11:C:328:TYR:HB2	11:C:468:LEU:HD21	1.81	0.62
13:D:79:GLN:O	13:D:83:ASP:N	2.28	0.62
1:2:362:SER:CB	5:6:343:PHE:CE2	2.83	0.61
1:2:447:PHE:O	5:6:302:PRO:HD2	1.99	0.61
3:4:233:MET:O	3:4:237:GLY:N	2.32	0.61
4:5:450:THR:HG23	4:5:504:ILE:CG2	2.26	0.61
7:8:351:MET:HB3	7:8:353:ARG:HG3	1.82	0.61
7:8:406:ARG:NH1	7:8:406:ARG:O	2.33	0.61
7:8:460:SER:O	7:8:462:TYR:N	2.28	0.61
7:8:580:VAL:HG12	7:8:581:TYR:H	1.65	0.61
17:9:2001:AGS:S1G	17:9:2001:AGS:O2B	2.58	0.61
12:E:12:GLU:HG2	12:E:13:TYR:N	2.15	0.61
15:M:13:DA:H2 ^{''}	15:M:14:DG:H5 [']	1.82	0.61
1:2:362:SER:CB	5:6:343:PHE:CZ	2.82	0.61
3:4:370:ARG:NH2	3:4:372:GLU:O	2.26	0.61
3:4:724:LEU:O	3:4:727:LEU:HG	1.99	0.61
3:4:790:ARG:HH22	3:4:837:ALA:N	1.97	0.61
4:5:437:VAL:HB	4:5:477:VAL:HA	1.82	0.61
6:7:423:TYR:N	6:7:625:GLN:NE2	2.49	0.61
6:7:505:GLU:HG3	6:7:506:MET:H	1.65	0.61
10:B:396:TRP:CD1	16:N:76:DC:P	2.93	0.61
2:3:409:GLY:O	2:3:415:LYS:NZ	2.33	0.61
5:6:579:THR:O	5:6:579:THR:HG22	2.00	0.61
7:8:312:LYS:HA	7:8:315:LYS:HG2	1.81	0.61
4:5:178:TYR:CD1	4:5:193:THR:HG22	2.35	0.61
7:8:515:GLN:HE21	7:8:519:ILE:HD11	1.65	0.61
9:A:587:THR:HG21	9:A:616:ARG:HD3	1.82	0.61
3:4:907:LEU:O	3:4:911:GLN:HG2	2.00	0.61
4:5:295:VAL:HB	4:5:330:ILE:HA	1.81	0.61
7:8:92:TYR:HB2	7:8:152:LEU:CB	2.26	0.61
8:9:66:SER:OG	8:9:67:GLU:OE2	2.18	0.61
9:A:789:HIS:ND1	9:A:789:HIS:O	2.32	0.61
12:E:330:TYR:HA	12:E:333:ILE:HG22	1.82	0.61
6:7:467:SER:N	17:7:2001:AGS:O1B	2.24	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:508:LEU:CD1	6:7:557:LEU:HD22	2.31	0.61
6:7:512:ALA:HA	6:7:515:LEU:HD12	1.81	0.61
7:8:206:ARG:NH1	7:8:250:GLN:HB3	2.15	0.61
8:9:470:LEU:HD12	8:9:493:LEU:HD21	1.82	0.61
10:B:370:CYS:SG	11:C:21:SER:OG	2.56	0.61
10:B:475:PHE:O	11:C:319:LYS:NZ	2.26	0.61
11:C:108:LEU:HD13	11:C:240:ILE:HD11	1.81	0.61
12:E:6:PRO:HG3	12:E:50:TYR:HA	1.82	0.61
1:2:247:ARG:NH1	7:8:350:MET:SD	2.73	0.61
2:3:28:PHE:HZ	2:3:129:LEU:HD12	1.66	0.61
3:4:266:GLN:OE1	3:4:440:ARG:NH2	2.33	0.61
5:6:601:LYS:HG3	5:6:643:LYS:HB3	1.83	0.61
9:A:792:THR:O	9:A:796:ARG:NH1	2.33	0.61
12:E:447:LYS:O	12:E:448:VAL:HG23	1.99	0.61
16:N:57:DG:H2'	16:N:58:DG:O4'	2.01	0.61
17:2:2001:AGS:N3	17:2:2001:AGS:H2'	2.15	0.61
4:5:164:GLY:HA2	4:5:261:ILE:HG12	1.82	0.61
6:7:419:ALA:CB	6:7:429:LYS:HE3	2.31	0.61
7:8:480:GLN:OE1	7:8:482:ASN:ND2	2.33	0.61
9:A:857:ILE:HB	13:D:369:LYS:HD2	1.81	0.61
12:E:218:ARG:NH1	12:E:270:VAL:O	2.33	0.61
15:M:24:DT:H2''	15:M:25:DG:N7	2.16	0.61
1:2:658:ASN:OD1	1:2:659:SER:N	2.30	0.61
2:3:295:VAL:HB	2:3:325:THR:OG1	1.99	0.61
2:3:340:GLN:HB3	2:3:658:LYS:HG2	1.81	0.61
3:4:482:GLU:HA	3:4:485:LEU:HD13	1.82	0.61
3:4:629:CYS:SG	3:4:630:CYS:N	2.74	0.61
3:4:657:ALA:O	5:6:603:SER:HB2	2.01	0.61
4:5:319:SER:OG	4:5:320:GLY:N	2.33	0.61
3:4:568:GLY:O	3:4:574:LYS:NZ	2.33	0.61
3:4:659:ALA:HB2	16:N:47:DA:O3'	2.01	0.61
5:6:533:ILE:HD13	5:6:548:LEU:HB2	1.80	0.61
7:8:213:ALA:C	7:8:214:THR:HG22	2.20	0.61
8:9:430:ASP:HA	8:9:488:LYS:HD3	1.81	0.61
9:A:851:GLN:O	9:A:853:GLY:N	2.34	0.61
12:E:380:LEU:HB3	12:E:449:ARG:HB3	1.81	0.61
12:E:457:GLU:OE1	12:E:457:GLU:N	2.34	0.61
2:3:158:LYS:HG2	2:3:325:THR:HG22	1.83	0.60
2:3:493:GLN:O	2:3:494:THR:HG23	2.01	0.60
5:6:158:LEU:HB3	5:6:167:ALA:HB2	1.83	0.60
13:D:308:THR:HA	13:D:311:LYS:HE2	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:527:ALA:HA	3:4:580:TYR:CE2	2.36	0.60
3:4:789:LYS:HD3	3:4:840:PRO:HD2	1.82	0.60
8:9:83:ALA:H	8:9:295:GLN:HE21	1.48	0.60
10:B:396:TRP:CD1	16:N:76:DC:H5'	2.35	0.60
11:C:334:PHE:HD2	11:C:465:LEU:HB3	1.64	0.60
3:4:371:CYS:SG	3:4:372:GLU:N	2.73	0.60
3:4:762:ILE:HG12	3:4:802:ILE:HD11	1.82	0.60
3:4:840:PRO:O	3:4:841:LYS:HG2	2.00	0.60
3:4:865:LEU:HD21	3:4:903:ILE:HG12	1.83	0.60
6:7:338:THR:O	6:7:338:THR:HG22	2.00	0.60
7:8:90:GLU:OE2	7:8:154:ARG:NH1	2.33	0.60
7:8:471:MET:HG3	7:8:472:TYR:H	1.66	0.60
8:9:181:ILE:O	8:9:184:LYS:HB2	2.01	0.60
2:3:130:THR:HG22	2:3:153:TRP:HB2	1.84	0.60
3:4:198:LEU:O	3:4:226:TYR:CD2	2.54	0.60
5:6:769:ALA:O	5:6:772:TYR:HB3	2.01	0.60
7:8:23:VAL:HG23	7:8:28:GLN:HB3	1.83	0.60
14:F:363:ILE:HA	14:F:366:VAL:HG22	1.81	0.60
15:M:24:DT:H2'	15:M:25:DG:C8	2.35	0.60
1:2:613:ASN:HD21	1:2:615:GLN:HB2	1.67	0.60
7:8:206:ARG:HG2	7:8:207:TYR:H	1.66	0.60
7:8:520:LEU:HD12	7:8:521:PHE:N	2.16	0.60
11:C:189:GLU:HA	11:C:231:HIS:CE1	2.37	0.60
13:D:301:TRP:O	13:D:305:TRP:N	2.24	0.60
1:2:242:LEU:O	1:2:296:ARG:N	2.33	0.60
1:2:543:GLY:HA3	1:2:549:LYS:HE2	1.83	0.60
5:6:304:LEU:HD11	5:6:322:GLU:CG	2.20	0.60
11:C:409:VAL:HG12	11:C:453:LEU:HD22	1.83	0.60
5:6:569:ILE:HD11	5:6:711:LEU:HD23	1.84	0.60
6:7:422:ILE:HG22	17:7:2001:AGS:H2	1.79	0.60
8:9:273:SER:HB2	10:B:271:ARG:NE	2.16	0.60
11:C:405:HIS:CE1	11:C:455:PHE:HB2	2.36	0.60
2:3:92:LEU:HD12	2:3:93:PRO:HD2	1.83	0.60
3:4:901:SER:HA	3:4:904:GLN:HG2	1.82	0.60
5:6:611:ALA:HB3	5:6:624:GLU:CB	2.30	0.60
6:7:422:ILE:HG22	17:7:2001:AGS:N1	2.16	0.60
8:9:273:SER:HB2	10:B:271:ARG:CD	2.32	0.60
13:D:76:GLN:O	13:D:79:GLN:HG3	2.01	0.60
2:3:212:ARG:HH12	2:3:232:PRO:HG3	1.67	0.60
2:3:215:THR:HB	2:3:224:ARG:HB3	1.82	0.60
2:3:683:TYR:CE2	2:3:687:ARG:HD2	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:639:ASP:HB3	5:6:640:GLU:OE1	2.02	0.60
12:E:472:ASP:OD1	12:E:473:TYR:N	2.34	0.60
13:D:389:ALA:HB2	13:D:523:TYR:CE2	2.37	0.60
1:2:314:LEU:CD2	1:2:432:ASN:HD21	2.15	0.60
2:3:369:PRO:HG3	4:5:403:GLY:HA3	1.84	0.60
4:5:175:ARG:HD3	4:5:200:ILE:HG12	1.83	0.60
6:7:541:MET:SD	6:7:593:ARG:HB2	2.38	0.60
12:E:29:THR:O	12:E:165:LYS:NZ	2.32	0.60
1:2:786:VAL:CG1	1:2:834:LEU:HD21	2.30	0.59
3:4:344:VAL:HA	3:4:359:GLU:HA	1.83	0.59
3:4:650:GLU:OE2	3:4:796:ARG:NE	2.34	0.59
6:7:536:ALA:O	6:7:539:GLU:HB3	2.00	0.59
7:8:344:LEU:HD21	7:8:356:VAL:HA	1.82	0.59
8:9:232:ASN:HB2	16:N:73:DA:OP1	2.02	0.59
10:B:270:THR:HG23	10:B:273:GLU:H	1.64	0.59
10:B:526:LYS:HD3	10:B:617:LEU:HB3	1.83	0.59
1:2:331:PHE:CE1	1:2:588:GLU:HG3	2.37	0.59
1:2:443:GLY:HA3	5:6:327:TYR:HB2	1.84	0.59
1:2:506:TYR:HD2	1:2:695:LEU:HD12	1.66	0.59
1:2:549:LYS:N	17:2:2001:AGS:O2A	2.35	0.59
3:4:548:THR:O	3:4:550:LYS:NZ	2.36	0.59
3:4:573:SER:N	17:4:2001:AGS:O1A	2.35	0.59
3:4:621:LEU:HD13	3:4:648:VAL:HG21	1.84	0.59
6:7:287:GLU:HA	6:7:290:SER:HB3	1.84	0.59
6:7:763:GLU:N	6:7:763:GLU:OE1	2.35	0.59
7:8:189:THR:CG2	7:8:206:ARG:HH21	2.03	0.59
10:B:495:VAL:HG22	10:B:496:MET:H	1.67	0.59
4:5:294:ILE:HD12	4:5:330:ILE:HD13	1.84	0.59
5:6:765:LEU:HG	5:6:819:ILE:HD11	1.84	0.59
7:8:581:TYR:CZ	7:8:583:TRP:HA	2.38	0.59
10:B:411:TYR:HA	10:B:414:GLN:HG2	1.84	0.59
12:E:275:LYS:HG3	12:E:276:GLU:HG3	1.83	0.59
13:D:361:CYS:HB3	13:D:364:LEU:HD12	1.83	0.59
4:5:328:ILE:HG22	4:5:329:LYS:H	1.66	0.59
6:7:658:ASP:OD1	6:7:659:TYR:N	2.29	0.59
9:A:605:PRO:HB3	9:A:617:ILE:CD1	2.32	0.59
9:A:609:LEU:HD12	9:A:613:ILE:HG21	1.84	0.59
11:C:424:LEU:HD23	11:C:427:LEU:HD23	1.83	0.59
3:4:311:CYS:SG	3:4:312:LYS:N	2.75	0.59
3:4:602:THR:O	3:4:602:THR:HG23	2.01	0.59
3:4:799:GLU:OE2	5:6:735:HIS:NE2	2.32	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:498:GLU:OE1	4:5:549:ARG:CG	2.49	0.59
6:7:422:ILE:O	6:7:625:GLN:NE2	2.31	0.59
10:B:317:TYR:HE1	10:B:477:PHE:HB3	1.65	0.59
11:C:141:MET:SD	11:C:144:ARG:NH1	2.76	0.59
11:C:472:SER:HB3	14:F:409:THR:HA	1.84	0.59
4:5:498:GLU:CG	4:5:549:ARG:HD3	2.31	0.59
7:8:271:SER:O	7:8:274:GLY:N	2.23	0.59
7:8:529:TYR:HB2	7:8:583:TRP:HH2	1.66	0.59
3:4:367:GLU:OE1	3:4:367:GLU:N	2.36	0.59
5:6:543:VAL:HG21	5:6:715:ILE:HD11	1.85	0.59
6:7:530:ASP:OD1	6:7:532:SER:OG	2.20	0.59
7:8:99:GLN:HB3	7:8:102:PHE:HB2	1.84	0.59
7:8:534:LEU:HD22	7:8:558:LEU:HD11	1.84	0.59
9:A:681:ARG:HG3	9:A:770:VAL:HG23	1.85	0.59
10:B:367:ASN:ND2	11:C:19:GLN:O	2.36	0.59
10:B:396:TRP:HD1	16:N:76:DC:P	2.26	0.59
11:C:99:ARG:O	11:C:100:ARG:NE	2.34	0.59
14:F:360:ASP:O	14:F:364:GLU:HG3	2.03	0.59
3:4:521:LEU:HA	3:4:524:ARG:HE	1.66	0.59
5:6:534:ALA:HB1	5:6:537:VAL:HB	1.84	0.59
6:7:423:TYR:CB	6:7:625:GLN:NE2	2.65	0.59
6:7:451:ARG:HD3	6:7:541:MET:O	2.02	0.59
7:8:524:THR:HB	7:8:529:TYR:CE2	2.37	0.59
7:8:525:ARG:NH2	7:8:583:TRP:O	2.36	0.59
12:E:25:ASP:OD2	12:E:28:ILE:N	2.32	0.59
1:2:255:ILE:HG23	7:8:393:THR:HB	1.84	0.59
2:3:501:GLY:HA2	6:7:510:GLY:N	2.18	0.59
2:3:535:LEU:HD22	2:3:539:LEU:HD22	1.85	0.59
3:4:242:ASN:HA	3:4:304:ARG:HB2	1.84	0.59
3:4:790:ARG:CZ	3:4:836:TYR:HD2	2.16	0.59
5:6:504:PHE:CE1	7:8:546:ASN:HB3	2.38	0.59
8:9:196:THR:HG21	15:M:12:DA:OP2	2.02	0.59
12:E:457:GLU:HA	12:E:460:LYS:HD3	1.83	0.59
2:3:492:GLN:HE22	6:7:471:LYS:HB2	1.67	0.59
3:4:221:ASP:C	3:4:222:GLU:HG2	2.23	0.59
3:4:284:ILE:HD12	3:4:293:LEU:HA	1.84	0.59
3:4:476:VAL:HG12	5:6:369:PRO:HB3	1.85	0.59
6:7:520:ILE:HG13	6:7:562:SER:OG	2.02	0.59
9:A:543:MET:HA	9:A:546:LEU:HD12	1.83	0.59
11:C:451:ASP:HA	11:C:454:HIS:HB2	1.85	0.59
13:D:375:ASN:OD1	13:D:376:LEU:N	2.34	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:795:THR:HG22	5:6:578:SER:OG	2.03	0.58
5:6:277:ARG:NH1	5:6:367:GLU:O	2.31	0.58
6:7:538:HIS:HE1	6:7:589:ALA:O	1.85	0.58
9:A:648:PHE:CD1	9:A:659:LEU:HA	2.38	0.58
14:F:304:ASP:O	14:F:308:ILE:HG12	2.03	0.58
15:M:18:DT:H2 ^γ	15:M:19:DG:H8	1.66	0.58
15:M:38:DG:N2	16:N:53:DT:O2	2.35	0.58
3:4:778:ARG:NH2	5:6:718:ASP:O	2.37	0.58
7:8:553:GLU:O	7:8:557:ILE:HG12	2.02	0.58
8:9:124:GLN:HA	8:9:127:GLN:HG2	1.85	0.58
10:B:261:HIS:HB3	11:C:538:TYR:HB3	1.85	0.58
12:E:134:GLY:H	12:E:169:THR:HB	1.66	0.58
12:E:218:ARG:NH2	12:E:273:ILE:O	2.36	0.58
1:2:327:ARG:NH1	1:2:416:ASP:OD1	2.36	0.58
1:2:443:GLY:HA3	5:6:327:TYR:CB	2.32	0.58
6:7:549:SER:HA	6:7:554:ASN:HA	1.85	0.58
11:C:545:ARG:HA	11:C:548:LEU:HD12	1.85	0.58
11:C:596:LEU:HB2	11:C:597:ILE:HD12	1.86	0.58
1:2:242:LEU:HB2	1:2:295:VAL:HG12	1.84	0.58
1:2:569:GLN:HG3	5:6:650:VAL:HG22	1.85	0.58
2:3:401:GLY:HA2	2:3:707:ARG:HG2	1.85	0.58
2:3:542:ARG:NH2	17:7:2001:AGS:O2G	2.36	0.58
3:4:334:ARG:HE	3:4:615:VAL:HG21	1.67	0.58
5:6:748:ALA:O	5:6:752:ARG:NH1	2.36	0.58
6:7:18:PHE:O	6:7:22:THR:HG23	2.03	0.58
6:7:228:ARG:HH22	6:7:326:HIS:HB2	1.67	0.58
6:7:470:LEU:HD22	6:7:564:LEU:HD21	1.83	0.58
7:8:340:LEU:HA	7:8:343:LEU:HG	1.85	0.58
7:8:406:ARG:HH22	7:8:410:TRP:HE3	1.50	0.58
11:C:350:TYR:HA	11:C:353:ILE:HG12	1.85	0.58
1:2:503:PRO:O	1:2:755:ILE:CD1	2.49	0.58
2:3:169:ARG:NH1	2:3:260:GLU:OE1	2.36	0.58
2:3:185:ILE:O	2:3:259:GLN:N	2.36	0.58
2:3:340:GLN:HE21	2:3:657:ARG:HG3	1.66	0.58
6:7:353:GLY:HA3	6:7:377:GLU:O	2.03	0.58
7:8:334:THR:HG23	7:8:337:PRO:HD2	1.86	0.58
8:9:233:THR:H	16:N:73:DA:P	2.26	0.58
8:9:297:TYR:O	8:9:301:ILE:HG12	2.04	0.58
8:9:418:LEU:HA	8:9:421:ILE:HD12	1.85	0.58
9:A:630:GLU:HA	9:A:633:LYS:HE2	1.85	0.58
1:2:444:PHE:CE1	5:6:327:TYR:N	2.71	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:168:PRO:HG2	2:3:260:GLU:HG2	1.86	0.58
3:4:887:ILE:HD13	3:4:897:ARG:HH11	1.69	0.58
4:5:444:SER:HB2	4:5:468:ALA:HB3	1.86	0.58
5:6:260:GLU:OE1	5:6:352:ARG:NH2	2.31	0.58
5:6:361:ILE:HD12	5:6:397:PHE:CE2	2.38	0.58
5:6:571:ILE:HA	5:6:711:LEU:HB2	1.85	0.58
6:7:118:CYS:SG	6:7:198:ARG:NH1	2.76	0.58
6:7:434:LEU:HD11	6:7:699:LEU:HG	1.85	0.58
4:5:654:GLU:HA	4:5:657:ILE:HD12	1.84	0.58
5:6:746:PHE:HA	5:6:750:GLN:HE21	1.67	0.58
6:7:195:ASN:HA	6:7:198:ARG:HG2	1.84	0.58
8:9:201:ASN:HB3	8:9:204:HIS:ND1	2.19	0.58
9:A:420:GLU:O	9:A:657:ALA:N	2.35	0.58
11:C:525:PHE:O	11:C:528:TYR:HB3	2.02	0.58
4:5:106:ARG:HH11	4:5:110:ALA:HB3	1.68	0.58
5:6:501:GLN:HE22	7:8:462:TYR:HA	1.66	0.58
6:7:494:THR:OG1	6:7:495:ALA:N	2.36	0.58
7:8:510:ALA:O	7:8:513:MET:HG2	2.04	0.58
9:A:653:LYS:HG3	9:A:654:THR:HG23	1.86	0.58
12:E:248:HIS:CE1	12:E:253:ASN:OD1	2.50	0.58
13:D:479:ASP:OD1	13:D:480:ASN:N	2.37	0.58
2:3:96:ILE:HD12	2:3:129:LEU:HD11	1.86	0.58
2:3:501:GLY:HA2	6:7:510:GLY:HA3	1.84	0.58
5:6:641:PHE:HB2	5:6:682:ALA:HB2	1.86	0.58
6:7:659:TYR:OH	6:7:714:GLU:OE1	2.21	0.58
10:B:614:LYS:HG3	10:B:615:THR:HG23	1.86	0.58
1:2:544:ASP:H	1:2:549:LYS:HE2	1.69	0.58
1:2:557:GLU:HG3	1:2:605:LEU:HD22	1.84	0.58
1:2:660:THR:O	1:2:850:LYS:HA	2.04	0.58
3:4:494:GLU:HG2	3:4:757:HIS:NE2	2.18	0.58
5:6:552:LEU:HD11	5:6:755:ILE:HG12	1.86	0.58
7:8:338:PRO:HD3	7:8:384:ASN:OD1	2.03	0.58
10:B:433:ARG:HD2	12:E:444:LEU:HB2	1.85	0.58
10:B:573:ILE:HG13	10:B:574:ALA:N	2.19	0.58
2:3:403:ILE:O	2:3:511:SER:OG	2.22	0.57
4:5:415:LEU:HA	4:5:522:ALA:HA	1.85	0.57
4:5:614:LEU:HA	4:5:672:ALA:HB2	1.85	0.57
6:7:456:VAL:HG13	6:7:564:LEU:CD1	2.35	0.57
7:8:115:TYR:HA	7:8:260:LEU:HD11	1.86	0.57
9:A:512:GLU:HA	9:A:564:LEU:HB3	1.86	0.57
9:A:580:TYR:HA	9:A:613:ILE:HD12	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:378:LYS:HA	2:3:381:ILE:HD12	1.85	0.57
2:3:661:GLN:HA	2:3:664:LYS:HE3	1.86	0.57
3:4:543:GLN:HA	3:4:562:ILE:HD11	1.85	0.57
5:6:534:ALA:HB3	5:6:544:LYS:HE2	0.83	0.57
6:7:616:VAL:HG12	6:7:620:HIS:HE1	1.68	0.57
7:8:565:LEU:HD21	7:8:586:LEU:HD12	1.87	0.57
10:B:462:PRO:HB2	12:E:421:PHE:HB2	1.85	0.57
12:E:299:LEU:HD23	12:E:299:LEU:H	1.70	0.57
15:M:10:DT:H2'	15:M:11:DT:H4'	1.86	0.57
15:M:42:DT:H1'	15:M:43:DT:H5'	1.86	0.57
1:2:821:ALA:O	1:2:825:LEU:N	2.38	0.57
5:6:773:LEU:HD21	5:6:800:LEU:HD11	1.86	0.57
6:7:449:LYS:CE	6:7:544:GLN:HE21	2.16	0.57
7:8:569:ILE:HA	7:8:581:TYR:CG	2.40	0.57
9:A:526:GLU:O	9:A:530:ASN:N	2.35	0.57
10:B:321:SER:H	10:B:484:GLU:HB2	1.67	0.57
11:C:199:LEU:HB3	11:C:232:VAL:HG12	1.85	0.57
1:2:586:THR:O	1:2:586:THR:CG2	2.52	0.57
3:4:520:SER:O	3:4:523:ALA:HB3	2.05	0.57
10:B:556:LEU:HD23	10:B:598:GLU:HG2	1.86	0.57
1:2:613:ASN:OD1	1:2:614:ASP:N	2.38	0.57
2:3:107:ASP:HB3	2:3:110:PHE:HB3	1.86	0.57
2:3:566:LEU:HD13	4:5:619:ALA:HB1	1.86	0.57
6:7:551:ALA:HB2	16:N:50:DG:OP1	2.05	0.57
6:7:616:VAL:O	6:7:620:HIS:ND1	2.37	0.57
6:7:670:ASP:OD1	6:7:671:SER:N	2.37	0.57
8:9:277:LEU:HD21	10:B:272:GLU:HA	1.87	0.57
12:E:325:SER:N	12:E:328:SER:OG	2.37	0.57
2:3:368:ALA:HB2	2:3:378:LYS:HE2	1.87	0.57
3:4:467:LYS:HD3	3:4:489:LYS:HE2	1.87	0.57
3:4:545:PHE:HE1	3:4:751:ILE:HG12	1.69	0.57
7:8:214:THR:HG23	7:8:214:THR:O	2.04	0.57
8:9:203:GLN:HE22	8:9:207:LYS:HD3	1.70	0.57
15:M:32:DC:N3	15:M:33:DC:N4	2.53	0.57
1:2:444:PHE:HE2	5:6:325:PHE:C	2.07	0.57
2:3:212:ARG:NH1	2:3:232:PRO:HG3	2.19	0.57
6:7:341:ARG:O	6:7:341:ARG:HG2	2.03	0.57
8:9:411:ASN:ND2	8:9:413:GLN:HB2	2.20	0.57
11:C:426:GLU:HG3	11:C:439:TYR:CE1	2.38	0.57
11:C:536:ASN:OD1	11:C:537:ILE:N	2.38	0.57
11:C:542:ILE:O	11:C:546:GLU:HG2	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:494:ILE:HG13	1:2:836:ARG:HH12	1.69	0.57
2:3:252:ASP:HB2	2:3:280:ASP:H	1.69	0.57
2:3:684:THR:HG21	6:7:610:GLU:HG3	1.85	0.57
3:4:323:ASP:HB2	6:7:303:ARG:HD3	1.87	0.57
5:6:550:GLN:HG2	5:6:635:ILE:CD1	2.35	0.57
7:8:504:ARG:O	7:8:508:PHE:N	2.28	0.57
9:A:704:ARG:NH2	17:A:2001:AGS:O3A	2.38	0.57
1:2:331:PHE:CE1	1:2:588:GLU:CD	2.79	0.57
1:2:795:ARG:HA	1:2:798:ILE:HG12	1.86	0.57
2:3:158:LYS:CA	2:3:325:THR:HG22	2.35	0.57
3:4:290:ASP:OD2	3:4:291:TYR:HD2	1.88	0.57
3:4:468:LYS:HD2	3:4:468:LYS:H	1.69	0.57
3:4:502:THR:O	3:4:506:LEU:N	2.27	0.57
2:3:935:ALA:HA	2:3:938:TYR:CE1	2.40	0.56
4:5:288:PRO:HB3	4:5:435:ILE:HD13	1.87	0.56
6:7:23:ASP:O	6:7:88:TYR:OH	2.20	0.56
6:7:459:MET:HB3	6:7:599:LEU:HA	1.86	0.56
6:7:615:HIS:CE1	6:7:625:GLN:HG3	2.39	0.56
7:8:236:LEU:HD12	7:8:239:TRP:HB3	1.87	0.56
13:D:471:GLU:OE1	13:D:473:SER:N	2.38	0.56
5:6:556:HIS:ND1	5:6:556:HIS:O	2.37	0.56
5:6:645:ASP:N	5:6:645:ASP:OD1	2.38	0.56
6:7:494:THR:HG22	6:7:536:ALA:HB1	1.86	0.56
6:7:741:THR:OG1	6:7:782:CYS:SG	2.63	0.56
8:9:473:ILE:HG22	8:9:489:ILE:HG22	1.87	0.56
13:D:286:ASP:OD1	13:D:289:ARG:NH1	2.38	0.56
17:D:2001:AGS:O5'	17:D:2001:AGS:O2B	2.23	0.56
1:2:518:SER:HA	1:2:537:ILE:HD13	1.88	0.56
3:4:201:PHE:HZ	3:4:247:ASN:HB3	1.70	0.56
3:4:273:ASP:HA	3:4:276:ILE:HD12	1.86	0.56
4:5:255:PHE:HB3	4:5:458:MET:CE	2.35	0.56
4:5:413:LEU:HD12	4:5:553:ILE:HG13	1.87	0.56
5:6:754:TYR:OH	5:6:815:CYS:SG	2.63	0.56
6:7:439:GLY:HA3	6:7:701:LYS:NZ	2.21	0.56
6:7:730:GLU:O	6:7:730:GLU:HG2	2.05	0.56
10:B:266:ALA:HB2	11:C:538:TYR:HE1	1.70	0.56
11:C:100:ARG:O	11:C:224:LYS:NZ	2.38	0.56
11:C:493:SER:OG	11:C:496:GLN:NE2	2.25	0.56
12:E:216:ARG:HA	12:E:219:ILE:HD12	1.87	0.56
15:M:21:DT:H2'	15:M:22:DT:C6	2.40	0.56
2:3:369:PRO:O	2:3:564:HIS:NE2	2.29	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:377:ILE:HG12	2:3:547:PHE:CD2	2.41	0.56
2:3:493:GLN:O	2:3:494:THR:CG2	2.54	0.56
2:3:892:ARG:HG3	2:3:893:LEU:H	1.71	0.56
4:5:369:ILE:HG13	4:5:370:LEU:HD12	1.85	0.56
4:5:456:ASP:O	4:5:460:ARG:N	2.37	0.56
5:6:749:GLU:OE2	7:8:550:GLY:N	2.38	0.56
5:6:754:TYR:HH	5:6:815:CYS:HG	1.50	0.56
6:7:284:CYS:SG	6:7:286:SER:OG	2.51	0.56
7:8:375:LEU:HA	7:8:381:LEU:HA	1.87	0.56
9:A:565:LEU:HB2	9:A:597:ALA:HA	1.88	0.56
17:A:2001:AGS:O2G	13:D:267:ARG:NH1	2.38	0.56
10:B:372:TYR:HB2	10:B:440:MET:SD	2.45	0.56
13:D:227:ARG:NH1	13:D:227:ARG:HA	2.21	0.56
1:2:246:TYR:N	1:2:298:SER:OG	2.31	0.56
3:4:561:ASP:OD1	3:4:562:ILE:N	2.37	0.56
3:4:701:ARG:NH2	17:6:1101:AGS:S1G	2.79	0.56
3:4:794:THR:HB	5:6:578:SER:OG	2.05	0.56
8:9:433:ILE:O	8:9:437:PHE:HB2	2.06	0.56
9:A:530:ASN:O	9:A:534:GLY:N	2.39	0.56
9:A:817:SER:HB3	9:A:819:GLU:HG2	1.87	0.56
1:2:319:ARG:NE	1:2:425:GLU:OE2	2.32	0.56
1:2:502:ALA:CB	1:2:512:LYS:HZ3	2.14	0.56
2:3:527:ARG:NH1	2:3:532:ASN:O	2.39	0.56
2:3:952:MET:HG3	8:9:319:PHE:HD1	1.69	0.56
4:5:83:PRO:HD2	4:5:157:SER:O	2.06	0.56
4:5:181:ILE:HG21	4:5:241:TYR:HB3	1.88	0.56
6:7:425:ASN:O	6:7:428:VAL:HG22	2.05	0.56
7:8:459:ASN:OD1	7:8:460:SER:N	2.38	0.56
9:A:826:VAL:HG21	9:A:862:ARG:HH12	1.71	0.56
10:B:301:PHE:HB3	10:B:333:TYR:CE2	2.41	0.56
10:B:399:HIS:O	10:B:403:GLN:HB2	2.05	0.56
10:B:409:ASP:HA	10:B:412:LYS:HD3	1.88	0.56
1:2:212:LYS:HD2	1:2:215:LEU:HB2	1.88	0.56
1:2:667:VAL:HG12	1:2:669:LEU:H	1.69	0.56
17:2:2001:AGS:O1A	17:2:2001:AGS:O2B	2.22	0.56
5:6:303:GLU:HG2	5:6:356:TRP:CD1	2.41	0.56
5:6:361:ILE:HD12	5:6:397:PHE:HE2	1.71	0.56
13:D:304:GLN:O	13:D:307:GLU:HG2	2.06	0.56
13:D:397:VAL:HG11	13:D:410:LEU:HB3	1.87	0.56
1:2:539:VAL:HG22	1:2:679:ILE:HB	1.87	0.56
2:3:674:GLU:OE1	2:3:723:LYS:HB3	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:733:PRO:HG2	6:7:444:VAL:HG23	1.88	0.56
3:4:859:ARG:HH22	9:A:907:GLU:N	2.04	0.56
4:5:673:GLN:HE21	4:5:676:HIS:HB2	1.70	0.56
5:6:558:SER:OG	5:6:564:LYS:HG2	2.05	0.56
7:8:46:LYS:O	7:8:47:ASN:OD1	2.23	0.56
7:8:552:LYS:O	7:8:556:GLU:HG2	2.06	0.56
9:A:412:THR:O	13:D:208:THR:N	2.35	0.56
10:B:359:PRO:HA	11:C:27:PRO:HD2	1.87	0.56
15:M:20:DT:H2 ⁷	15:M:21:DT:C7	2.36	0.56
2:3:340:GLN:HE21	2:3:658:LYS:HG3	1.68	0.56
3:4:503:ASP:O	3:4:507:ALA:CB	2.53	0.56
5:6:353:PHE:N	5:6:353:PHE:CD1	2.73	0.56
6:7:466:LYS:HA	6:7:469:LEU:HD13	1.86	0.56
6:7:571:TYR:HD1	6:7:575:ASN:HB3	1.70	0.56
6:7:574:TYR:CG	6:7:601:LEU:HD12	2.41	0.56
11:C:298:PHE:O	11:C:302:ILE:HG12	2.05	0.56
1:2:241:SER:O	1:2:296:ARG:NH2	2.39	0.56
1:2:585:ILE:CG1	5:6:619:GLY:HA3	2.35	0.56
2:3:443:THR:HG22	2:3:485:ALA:CB	2.36	0.56
2:3:566:LEU:HD22	4:5:619:ALA:HB1	1.88	0.56
3:4:733:PRO:HG3	6:7:442:LYS:HE3	1.87	0.56
7:8:391:LEU:HD21	7:8:396:ASN:HB2	1.88	0.56
12:E:14:GLN:HG2	12:E:189:PHE:CD1	2.41	0.56
1:2:783:MET:HA	1:2:786:VAL:HG22	1.86	0.55
3:4:519:TYR:OH	3:4:538:LYS:HB3	2.05	0.55
6:7:597:LEU:HD22	6:7:681:PHE:HZ	1.71	0.55
8:9:195:PRO:O	8:9:199:ILE:HG12	2.05	0.55
15:M:11:DT:H3	16:N:79:DA:H61	1.54	0.55
1:2:434:TYR:HB2	1:2:445:PRO:HB2	1.87	0.55
3:4:213:GLU:HG3	3:4:503:ASP:OD2	2.07	0.55
3:4:354:HIS:O	3:4:354:HIS:ND1	2.39	0.55
4:5:444:SER:HB2	4:5:468:ALA:CB	2.36	0.55
5:6:196:LEU:HD11	5:6:263:PHE:HE2	1.70	0.55
5:6:310:THR:O	5:6:345:THR:N	2.38	0.55
5:6:971:ASP:OD2	5:6:972:ARG:N	2.36	0.55
6:7:550:LYS:O	6:7:553:ILE:HG12	2.05	0.55
8:9:495:MET:HA	8:9:498:PHE:HB2	1.88	0.55
10:B:556:LEU:HD21	10:B:600:ILE:HG23	1.88	0.55
10:B:602:VAL:HG12	10:B:604:TYR:H	1.71	0.55
1:2:245:ASN:HD21	7:8:217:ASN:ND2	2.05	0.55
2:3:95:ARG:HA	2:3:154:LYS:O	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:618:SER:HG	6:7:552:GLY:HA2	1.64	0.55
3:4:657:ALA:HB3	5:6:603:SER:CB	2.36	0.55
5:6:296:ARG:HD2	5:6:360:ARG:HH22	1.71	0.55
7:8:538:ILE:O	7:8:541:SER:OG	2.24	0.55
9:A:708:LYS:NZ	13:D:267:ARG:O	2.39	0.55
13:D:416:GLU:HG3	13:D:450:LEU:HD11	1.87	0.55
2:3:198:ARG:HD2	2:3:249:THR:HG23	1.89	0.55
3:4:277:LYS:O	3:4:281:VAL:HG23	2.07	0.55
7:8:17:VAL:HG11	7:8:46:LYS:CD	2.36	0.55
11:C:602:THR:O	11:C:603:LYS:HG2	2.06	0.55
3:4:635:ASP:OD1	3:4:636:LYS:N	2.40	0.55
3:4:731:ASP:OD1	3:4:732:LYS:N	2.36	0.55
5:6:955:TRP:HA	5:6:955:TRP:CE3	2.40	0.55
11:C:111:ASP:OD1	11:C:113:THR:N	2.36	0.55
1:2:761:GLU:OE1	1:2:761:GLU:N	2.39	0.55
2:3:171:LEU:HD22	2:3:182:VAL:HG11	1.88	0.55
3:4:657:ALA:HB3	5:6:603:SER:HB3	1.89	0.55
5:6:356:TRP:HB3	5:6:382:ARG:HG2	1.88	0.55
8:9:114:LYS:HZ3	8:9:261:MET:HB2	1.72	0.55
8:9:178:PRO:HB3	8:9:241:THR:HG23	1.88	0.55
8:9:277:LEU:CD2	10:B:272:GLU:HA	2.36	0.55
9:A:476:TYR:CD2	9:A:621:ARG:CB	2.87	0.55
9:A:529:TRP:HE1	9:A:537:LEU:HB2	1.71	0.55
9:A:611:ASN:OD1	9:A:612:LYS:N	2.39	0.55
14:F:335:ARG:O	14:F:339:ASP:N	2.32	0.55
1:2:217:GLU:OE1	1:2:217:GLU:N	2.37	0.55
1:2:527:VAL:HG12	1:2:530:LYS:H	1.72	0.55
1:2:794:ARG:NH1	1:2:805:ILE:O	2.40	0.55
2:3:36:THR:HG23	2:3:39:ARG:HD2	1.89	0.55
3:4:467:LYS:HZ1	3:4:470:SER:H	1.54	0.55
3:4:891:ASN:HD21	3:4:898:VAL:H	1.55	0.55
5:6:351:SER:O	5:6:353:PHE:CD1	2.59	0.55
5:6:608:LEU:O	5:6:628:LEU:HG	2.07	0.55
5:6:719:CYS:N	13:D:528:GLN:HE22	2.04	0.55
5:6:804:ILE:O	5:6:807:SER:OG	2.24	0.55
8:9:420:THR:HG21	8:9:440:TYR:HB2	1.88	0.55
9:A:708:LYS:HD3	13:D:269:SER:HA	1.89	0.55
10:B:514:LEU:HD13	10:B:517:LEU:HD12	1.89	0.55
11:C:190:ASN:HD22	11:C:193:ARG:HH21	1.52	0.55
12:E:283:ALA:HA	12:E:286:LYS:HE2	1.89	0.55
13:D:350:ASN:OD1	13:D:353:SER:N	2.30	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:33:ASP:HA	2:3:39:ARG:HH11	1.72	0.55
2:3:687:ARG:HE	2:3:697:ILE:HD12	1.71	0.55
3:4:284:ILE:HD13	3:4:296:ILE:HD13	1.89	0.55
4:5:596:ILE:HG13	4:5:597:GLU:H	1.71	0.55
6:7:107:GLN:O	6:7:237:GLN:HG2	2.07	0.55
9:A:788:SER:OG	9:A:789:HIS:N	2.38	0.55
12:E:40:GLY:H	17:E:2001:AGS:PB	2.29	0.55
14:F:376:GLU:OE1	14:F:376:GLU:N	2.40	0.55
1:2:212:LYS:NZ	1:2:274:VAL:HB	2.21	0.55
1:2:548:ALA:HB2	17:2:2001:AGS:C8	2.36	0.55
2:3:940:ALA:O	2:3:944:ILE:HG13	2.06	0.55
3:4:198:LEU:HD22	3:4:226:TYR:CZ	2.41	0.55
3:4:619:GLY:O	3:4:623:LEU:HG	2.07	0.55
3:4:728:TYR:CD2	6:7:693:ILE:HG21	2.42	0.55
5:6:385:SER:OG	5:6:457:CYS:O	2.23	0.55
6:7:475:LYS:O	6:7:639:ARG:NH2	2.40	0.55
10:B:442:SER:HA	10:B:473:TYR:CE1	2.41	0.55
11:C:98:LYS:HZ3	11:C:261:ARG:HD2	1.70	0.55
13:D:228:GLN:NE2	13:D:259:TYR:O	2.31	0.55
4:5:570:ASN:O	4:5:574:ASN:N	2.37	0.55
6:7:72:ASN:O	6:7:73:ARG:HG2	2.07	0.55
7:8:123:LEU:HD12	7:8:123:LEU:C	2.27	0.55
7:8:517:PHE:CG	7:8:588:LYS:HG2	2.42	0.55
8:9:60:ALA:HA	8:9:63:GLN:HE21	1.72	0.55
9:A:651:ASP:OD1	9:A:651:ASP:N	2.40	0.55
11:C:100:ARG:NH2	11:C:230:ASP:OD1	2.40	0.55
11:C:278:ASN:CG	11:C:424:LEU:H	2.10	0.55
1:2:502:ALA:CB	1:2:505:ILE:HD12	2.37	0.54
1:2:508:HIS:O	1:2:511:ILE:HG22	2.06	0.54
1:2:760:GLN:O	1:2:763:LEU:N	2.40	0.54
2:3:496:THR:HB	2:3:505:THR:HG22	1.89	0.54
6:7:497:VAL:HB	6:7:553:ILE:HD11	1.89	0.54
6:7:523:ILE:HG21	6:7:526:PHE:HD1	1.72	0.54
9:A:476:TYR:HD2	9:A:621:ARG:CB	2.16	0.54
10:B:428:ASP:OD1	10:B:428:ASP:N	2.36	0.54
12:E:36:GLN:HA	12:E:170:MET:O	2.07	0.54
13:D:499:PHE:HA	13:D:502:ARG:NH1	2.22	0.54
1:2:782:ASP:OD1	1:2:785:LYS:HB3	2.07	0.54
2:3:169:ARG:NH2	4:5:509:ILE:HD11	2.21	0.54
5:6:303:GLU:HB2	5:6:356:TRP:CD1	2.41	0.54
6:7:78:VAL:O	6:7:202:LEU:HG	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:138:GLU:O	7:8:141:ASP:CB	2.55	0.54
10:B:310:GLN:O	10:B:448:ARG:NH1	2.39	0.54
12:E:438:ASN:OD1	12:E:439:LYS:NZ	2.31	0.54
3:4:201:PHE:CZ	3:4:247:ASN:HB3	2.43	0.54
3:4:235:GLU:OE1	7:8:572:HIS:NE2	2.33	0.54
3:4:476:VAL:HG22	3:4:477:ASP:H	1.71	0.54
3:4:484:GLU:HG3	7:8:579:LYS:HE2	1.89	0.54
4:5:54:ILE:HG23	4:5:135:PHE:HZ	1.72	0.54
4:5:541:ASP:HB3	4:5:543:GLN:HE22	1.72	0.54
5:6:712:PHE:HB2	5:6:794:ARG:NH1	2.21	0.54
10:B:430:PRO:HA	10:B:433:ARG:NH2	2.23	0.54
13:D:148:THR:O	13:D:151:GLU:HG2	2.08	0.54
15:M:29:DT:H3	16:N:62:DG:N2	2.06	0.54
1:2:240:GLU:HB3	1:2:290:HIS:CD2	2.42	0.54
2:3:402:ASP:OD1	2:3:402:ASP:N	2.40	0.54
4:5:297:ILE:HA	4:5:328:ILE:HD12	1.88	0.54
7:8:50:ASN:HB3	7:8:117:ARG:NE	2.16	0.54
11:C:282:GLN:NE2	11:C:286:ASP:OD1	2.41	0.54
14:F:364:GLU:O	14:F:368:LEU:HG	2.07	0.54
2:3:215:THR:HG22	2:3:224:ARG:HD3	1.90	0.54
2:3:255:ARG:HB3	2:3:277:ILE:HG13	1.90	0.54
3:4:451:ARG:NH2	6:7:279:THR:OG1	2.41	0.54
7:8:516:VAL:HA	7:8:519:ILE:HD12	1.90	0.54
8:9:494:ASP:OD1	8:9:497:GLU:N	2.27	0.54
11:C:274:PHE:HB3	11:C:278:ASN:H	1.71	0.54
1:2:444:PHE:CE2	5:6:325:PHE:C	2.81	0.54
2:3:400:ARG:O	2:3:707:ARG:NE	2.32	0.54
3:4:545:PHE:CE1	3:4:751:ILE:HG12	2.43	0.54
5:6:929:GLU:HG2	5:6:930:GLU:HG2	1.89	0.54
6:7:482:TYR:HA	6:7:522:CYS:HB2	1.90	0.54
7:8:151:LYS:HB2	7:8:259:SER:HB3	1.89	0.54
9:A:526:GLU:HA	9:A:529:TRP:HB3	1.89	0.54
11:C:412:PHE:CG	11:C:453:LEU:HD21	2.42	0.54
12:E:328:SER:HB3	12:E:423:ASN:ND2	2.23	0.54
13:D:333:SER:O	13:D:336:THR:OG1	2.24	0.54
1:2:694:ARG:O	1:2:697:THR:OG1	2.21	0.54
2:3:415:LYS:O	2:3:419:LEU:HB2	2.08	0.54
2:3:501:GLY:CA	6:7:510:GLY:HA3	2.38	0.54
6:7:258:ILE:HD12	6:7:271:GLN:HE21	1.73	0.54
6:7:361:THR:HG23	6:7:364:LYS:HD2	1.89	0.54
10:B:260:ARG:HH11	11:C:536:ASN:HB2	1.73	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:230:ASP:O	12:E:234:ASN:ND2	2.40	0.54
2:3:340:GLN:NE2	2:3:657:ARG:NE	2.56	0.54
2:3:340:GLN:NE2	2:3:657:ARG:HG3	2.22	0.54
3:4:255:GLU:HA	3:4:258:TYR:HB3	1.90	0.54
4:5:246:GLU:OE1	4:5:246:GLU:N	2.39	0.54
4:5:420:THR:HG23	4:5:556:VAL:HG11	1.89	0.54
4:5:596:ILE:HG13	4:5:597:GLU:N	2.23	0.54
5:6:111:VAL:HG12	5:6:181:LEU:HD21	1.90	0.54
7:8:472:TYR:O	7:8:475:LYS:NZ	2.23	0.54
8:9:202:MET:HB2	8:9:244:GLU:HG3	1.89	0.54
11:C:371:HIS:HB2	11:C:377:ILE:HD11	1.90	0.54
12:E:96:ASP:N	12:E:96:ASP:OD1	2.41	0.54
13:D:281:LEU:HD21	13:D:325:ARG:HH21	1.73	0.54
16:N:56:DA:H1'	16:N:57:DG:C8	2.43	0.54
1:2:374:ARG:NH2	2:3:309:SER:O	2.41	0.54
1:2:564:VAL:HG13	5:6:669:HIS:CE1	2.42	0.54
5:6:811:ALA:HB2	5:6:819:ILE:HG22	1.90	0.54
5:6:976:GLU:HG2	5:6:977:ILE:N	2.23	0.54
6:7:423:TYR:HA	6:7:625:GLN:HE22	1.72	0.54
8:9:123:ARG:HE	8:9:124:GLN:HG3	1.73	0.54
12:E:338:CYS:HB2	12:E:381:PHE:CE2	2.43	0.54
1:2:652:PRO:HG2	1:2:655:GLY:O	2.08	0.54
3:4:531:TYR:HB3	17:4:2001:AGS:N6	2.21	0.54
7:8:321:CYS:SG	7:8:322:GLU:N	2.81	0.54
7:8:392:THR:O	7:8:395:THR:N	2.40	0.54
9:A:580:TYR:HD1	9:A:613:ILE:HD11	1.73	0.54
10:B:433:ARG:CZ	12:E:444:LEU:HD13	2.37	0.54
11:C:375:ASP:N	11:C:375:ASP:OD1	2.39	0.54
1:2:546:GLY:O	17:2:2001:AGS:H8	2.09	0.53
2:3:360:PHE:CE2	2:3:379:LYS:HD2	2.43	0.53
3:4:393:ASP:HB2	3:4:424:VAL:HG21	1.90	0.53
4:5:386:LYS:HA	4:5:389:VAL:HG12	1.90	0.53
4:5:498:GLU:OE2	4:5:498:GLU:HA	2.08	0.53
6:7:138:VAL:HG12	6:7:139:LEU:HD13	1.89	0.53
8:9:265:LEU:O	8:9:268:LYS:HG2	2.07	0.53
8:9:336:ASP:O	8:9:339:ARG:HG2	2.09	0.53
13:D:105:GLN:HA	17:D:2001:AGS:H5'1	1.90	0.53
14:F:358:LYS:HE2	14:F:360:ASP:H	1.73	0.53
1:2:311:GLU:OE2	1:2:311:GLU:N	2.32	0.53
2:3:570:ARG:HB3	4:5:613:ARG:HD3	1.90	0.53
3:4:895:GLN:HG3	3:4:896:ASP:H	1.72	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:510:SER:HA	5:6:513:ILE:HD12	1.90	0.53
5:6:937:VAL:HG21	5:6:962:PHE:CE2	2.44	0.53
6:7:242:ARG:HB3	6:7:350:ASP:OD1	2.08	0.53
6:7:411:TYR:CE1	6:7:430:LYS:HD2	2.43	0.53
6:7:497:VAL:CB	6:7:553:ILE:CD1	2.86	0.53
7:8:139:LEU:HD12	7:8:195:VAL:HG21	1.89	0.53
8:9:265:LEU:HD21	10:B:513:VAL:HG22	1.90	0.53
9:A:696:VAL:O	9:A:701:GLY:N	2.35	0.53
10:B:263:MET:HA	11:C:538:TYR:HD1	1.72	0.53
10:B:399:HIS:O	10:B:403:GLN:CB	2.56	0.53
12:E:466:VAL:HG13	12:E:468:PHE:H	1.73	0.53
1:2:444:PHE:CZ	5:6:326:LYS:O	2.61	0.53
1:2:488:SER:HA	1:2:493:ILE:HG21	1.91	0.53
2:3:507:ASN:HD21	6:7:324:VAL:CB	2.21	0.53
4:5:40:LEU:HD23	4:5:342:ILE:HA	1.91	0.53
4:5:179:LEU:H	4:5:193:THR:HA	1.74	0.53
5:6:939:TRP:O	5:6:942:LEU:HB3	2.08	0.53
6:7:485:GLY:N	6:7:524:ASP:O	2.41	0.53
6:7:551:ALA:HA	16:N:50:DG:OP1	2.08	0.53
9:A:851:GLN:NE2	9:A:858:SER:HB3	2.23	0.53
14:F:417:GLN:HA	14:F:420:ILE:HD12	1.90	0.53
1:2:444:PHE:HZ	5:6:326:LYS:C	2.08	0.53
2:3:687:ARG:HG2	2:3:697:ILE:HB	1.89	0.53
3:4:533:LEU:H	3:4:533:LEU:HD23	1.74	0.53
5:6:300:VAL:HG12	5:6:355:ASP:HB2	1.91	0.53
5:6:710:ASP:O	5:6:711:LEU:HD22	2.09	0.53
5:6:764:ILE:HB	5:6:818:GLU:OE1	2.08	0.53
6:7:581:LEU:HA	6:7:584:ILE:HB	1.91	0.53
6:7:596:ILE:HD11	6:7:695:LEU:HD11	1.91	0.53
7:8:336:VAL:O	7:8:336:VAL:HG12	2.07	0.53
11:C:554:LEU:HA	11:C:557:ILE:HG22	1.90	0.53
12:E:141:LEU:HD21	12:E:175:PHE:HE1	1.74	0.53
1:2:508:HIS:CB	1:2:511:ILE:HG22	2.31	0.53
3:4:221:ASP:O	3:4:222:GLU:CG	2.55	0.53
3:4:618:SER:OG	6:7:552:GLY:C	2.46	0.53
4:5:367:TYR:HE1	4:5:666:LEU:HD22	1.73	0.53
5:6:950:SER:O	5:6:953:GLU:HB2	2.08	0.53
7:8:589:ASN:HA	7:8:592:SER:HB2	1.90	0.53
11:C:212:ASN:ND2	11:C:215:THR:OG1	2.41	0.53
13:D:128:ILE:HG12	13:D:212:VAL:HG12	1.89	0.53
1:2:783:MET:N	1:2:783:MET:SD	2.81	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:490:MET:HB3	2:3:491:GLU:OE1	2.08	0.53
2:3:507:ASN:OD1	6:7:324:VAL:HG23	2.08	0.53
2:3:527:ARG:O	2:3:532:ASN:ND2	2.42	0.53
3:4:401:GLU:OE1	3:4:401:GLU:N	2.41	0.53
3:4:481:ILE:O	3:4:484:GLU:N	2.37	0.53
5:6:330:PRO:HG2	5:6:344:TRP:CD2	2.44	0.53
6:7:497:VAL:CG1	6:7:553:ILE:CD1	2.87	0.53
7:8:360:ILE:H	7:8:360:ILE:HD12	1.72	0.53
10:B:463:LEU:HD11	12:E:450:TRP:HH2	1.73	0.53
10:B:602:VAL:HG11	10:B:609:LEU:HD21	1.91	0.53
11:C:446:CYS:O	11:C:450:LYS:N	2.42	0.53
2:3:25:VAL:HG13	2:3:128:ALA:HB2	1.90	0.53
2:3:197:ILE:HA	2:3:214:TYR:HB2	1.89	0.53
3:4:594:LYS:HG3	6:7:535:THR:HG21	1.90	0.53
3:4:790:ARG:NH1	3:4:837:ALA:O	2.41	0.53
5:6:159:SER:O	5:6:164:GLY:N	2.41	0.53
5:6:301:ARG:HH22	5:6:618:GLY:HA3	1.74	0.53
5:6:626:GLY:O	5:6:630:LEU:CG	2.52	0.53
10:B:317:TYR:CE1	10:B:477:PHE:HB3	2.44	0.53
10:B:526:LYS:HG3	10:B:530:GLU:OE2	2.09	0.53
11:C:520:VAL:HG11	11:C:583:LEU:HD11	1.90	0.53
14:F:294:LEU:HB3	14:F:298:VAL:HG13	1.91	0.53
3:4:242:ASN:HD21	3:4:488:ASN:HB3	1.74	0.53
3:4:307:ASN:H	3:4:436:THR:HG21	1.73	0.53
3:4:697:PRO:HD3	5:6:687:GLY:HA3	1.90	0.53
4:5:159:ILE:HG13	4:5:295:VAL:HG13	1.89	0.53
5:6:968:LEU:HD22	5:6:973:ILE:HD12	1.91	0.53
6:7:470:LEU:CD2	6:7:564:LEU:CD2	2.84	0.53
7:8:529:TYR:HB2	7:8:583:TRP:CH2	2.44	0.53
8:9:324:CYS:SG	8:9:334:LEU:HD22	2.48	0.53
9:A:819:GLU:O	9:A:820:GLN:OE1	2.27	0.53
10:B:364:ASN:HB2	11:C:22:HIS:H	1.73	0.53
12:E:329:LYS:HG2	12:E:462:ILE:HD11	1.90	0.53
1:2:506:TYR:CD2	1:2:695:LEU:HB2	2.43	0.53
2:3:202:TYR:HB2	2:3:244:GLU:OE2	2.09	0.53
3:4:736:ILE:H	3:4:736:ILE:HD12	1.74	0.53
4:5:87:ILE:HD11	4:5:329:LYS:HD2	1.90	0.53
4:5:383:ASP:CG	4:5:687:SER:OG	2.47	0.53
5:6:642:ASP:OD2	5:6:643:LYS:NZ	2.42	0.53
5:6:657:GLU:HB3	5:6:708:ARG:NH1	2.17	0.53
7:8:587:ASP:O	7:8:590:ARG:NE	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:400:ASN:HA	8:9:404:ARG:HB2	1.90	0.53
10:B:282:ASN:O	10:B:290:ARG:NH1	2.40	0.53
1:2:488:SER:HB2	1:2:825:LEU:HD13	1.91	0.53
3:4:397:ILE:O	3:4:417:LEU:HB2	2.09	0.53
3:4:503:ASP:HA	3:4:506:LEU:HB3	1.90	0.53
4:5:669:SER:OG	4:5:673:GLN:OE1	2.24	0.53
5:6:277:ARG:NH1	5:6:367:GLU:HG3	2.24	0.53
7:8:17:VAL:HG11	7:8:46:LYS:CE	2.39	0.53
7:8:89:LEU:HD11	7:8:91:GLN:HB2	1.90	0.53
8:9:117:GLN:NE2	8:9:121:ILE:HD11	2.24	0.53
9:A:525:TYR:CE2	9:A:543:MET:HB3	2.44	0.53
9:A:774:HIS:HB2	9:A:777:HIS:CE1	2.44	0.53
11:C:119:LYS:O	11:C:126:ASN:ND2	2.42	0.53
12:E:64:PRO:HD2	12:E:133:ASP:O	2.09	0.53
13:D:234:LEU:O	13:D:238:VAL:HG23	2.09	0.53
1:2:444:PHE:CZ	5:6:326:LYS:HA	2.42	0.52
1:2:534:ARG:CD	1:2:627:GLN:OE1	2.58	0.52
2:3:691:ASN:HD22	2:3:697:ILE:HG21	1.75	0.52
5:6:407:VAL:HG22	5:6:446:ARG:HH22	1.73	0.52
6:7:420:PRO:N	6:7:421:GLU:OE1	2.43	0.52
7:8:53:VAL:HG13	7:8:114:ILE:HD11	1.89	0.52
8:9:498:PHE:HA	8:9:501:GLU:HG2	1.92	0.52
11:C:460:THR:OG1	11:C:463:GLN:OE1	2.27	0.52
15:M:14:DG:H2 ⁺	15:M:15:DT:OP2	2.08	0.52
2:3:193:ARG:CB	2:3:253:HIS:O	2.39	0.52
3:4:475:ASP:OD1	3:4:475:ASP:N	2.42	0.52
5:6:109:GLU:O	5:6:113:GLU:HG2	2.09	0.52
5:6:463:GLY:CA	5:6:594:ARG:NH1	2.72	0.52
5:6:657:GLU:HB2	5:6:708:ARG:HH11	1.74	0.52
7:8:473:LYS:O	7:8:475:LYS:N	2.43	0.52
13:D:514:ARG:NH1	13:D:527:THR:OG1	2.36	0.52
1:2:314:LEU:HD22	1:2:432:ASN:ND2	2.21	0.52
2:3:713:ALA:HA	2:3:716:ARG:HB3	1.92	0.52
3:4:543:GLN:HE22	3:4:672:LEU:HB2	1.74	0.52
5:6:951:LEU:HD12	5:6:951:LEU:C	2.29	0.52
5:6:955:TRP:HA	5:6:955:TRP:HE3	1.74	0.52
6:7:318:LEU:HG	6:7:320:GLN:HG2	1.91	0.52
7:8:340:LEU:HG	7:8:343:LEU:HD11	1.90	0.52
8:9:422:ILE:HD11	8:9:491:VAL:HG21	1.91	0.52
11:C:140:ARG:HH12	11:C:144:ARG:NH2	2.07	0.52
13:D:519:LYS:HG2	13:D:524:TYR:CZ	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:432:THR:O	2:3:472:ILE:HA	2.10	0.52
2:3:722:ASN:OD1	2:3:723:LYS:N	2.42	0.52
4:5:382:GLU:HG3	4:5:683:LEU:HD22	1.92	0.52
5:6:364:ASN:ND2	5:6:394:ARG:HH12	2.01	0.52
5:6:702:THR:OG1	5:6:704:PRO:HD2	2.10	0.52
6:7:354:ILE:HG12	6:7:377:GLU:HB3	1.92	0.52
6:7:553:ILE:HG13	6:7:553:ILE:O	2.08	0.52
14:F:276:LYS:HA	14:F:317:TRP:CD1	2.44	0.52
2:3:230:ILE:HG13	2:3:231:TYR:N	2.25	0.52
5:6:747:SER:H	5:6:750:GLN:NE2	2.07	0.52
6:7:244:ILE:HG12	6:7:479:ARG:HH12	1.74	0.52
7:8:140:GLN:O	7:8:143:ILE:HG12	2.09	0.52
1:2:419:LYS:N	1:2:422:GLU:OE2	2.26	0.52
1:2:540:LEU:HB2	1:2:677:PHE:CD1	2.44	0.52
1:2:669:LEU:HB3	1:2:673:ILE:HD11	1.92	0.52
2:3:24:ARG:HD3	2:3:124:PRO:HG3	1.92	0.52
3:4:864:ASP:HA	3:4:867:ARG:HD2	1.90	0.52
5:6:298:SER:O	5:6:357:GLN:CG	2.50	0.52
5:6:560:VAL:O	5:6:562:GLY:N	2.43	0.52
7:8:207:TYR:HA	7:8:248:PRO:HD2	1.91	0.52
8:9:410:LEU:O	8:9:415:LYS:NZ	2.43	0.52
9:A:452:ARG:HH12	9:A:625:THR:N	2.07	0.52
10:B:555:GLU:HA	10:B:598:GLU:O	2.10	0.52
1:2:326:ARG:CB	1:2:592:GLU:HA	2.39	0.52
1:2:333:GLN:OE1	1:2:334:LEU:N	2.42	0.52
2:3:254:GLN:HG2	2:3:256:ILE:HG22	1.92	0.52
3:4:891:ASN:ND2	3:4:898:VAL:H	2.07	0.52
5:6:351:SER:CA	5:6:353:PHE:CE1	2.93	0.52
5:6:565:LEU:HD11	5:6:805:ARG:HH22	1.73	0.52
6:7:543:GLN:HE21	6:7:560:ARG:HA	1.75	0.52
8:9:392:LYS:O	8:9:396:LYS:HG3	2.08	0.52
9:A:867:ASP:N	9:A:867:ASP:OD1	2.42	0.52
10:B:518:THR:HG23	10:B:521:SER:H	1.74	0.52
11:C:585:MET:O	11:C:589:PHE:HB2	2.10	0.52
12:E:192:TYR:HB2	12:E:197:VAL:HG23	1.90	0.52
13:D:278:ILE:O	13:D:332:ARG:NH1	2.43	0.52
1:2:233:THR:O	1:2:237:MET:HB2	2.10	0.52
2:3:409:GLY:H	2:3:415:LYS:NZ	2.08	0.52
6:7:206:PRO:HD3	6:7:352:THR:HG21	1.92	0.52
6:7:497:VAL:HG11	6:7:553:ILE:CD1	2.40	0.52
7:8:224:GLU:HB2	7:8:227:CYS:HB2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:245:SER:HA	11:C:248:GLU:HG2	1.92	0.52
1:2:478:GLU:O	1:2:481:GLU:HG2	2.10	0.52
4:5:367:TYR:HA	4:5:370:LEU:HD13	1.92	0.52
5:6:280:ARG:HB3	5:6:282:GLU:OE1	2.09	0.52
5:6:948:LEU:HD12	5:6:949:GLY:CA	2.39	0.52
6:7:69:LYS:HD2	6:7:74:GLU:HB2	1.91	0.52
11:C:278:ASN:OD1	11:C:424:LEU:N	2.35	0.52
11:C:398:ARG:HD2	11:C:461:ILE:HG22	1.92	0.52
11:C:412:PHE:CD2	11:C:453:LEU:HD11	2.45	0.52
12:E:23:SER:OG	12:E:24:ALA:N	2.43	0.52
1:2:696:ALA:HB3	5:6:774:VAL:HG13	1.92	0.52
2:3:404:ASN:HA	2:3:512:VAL:O	2.10	0.52
3:4:865:LEU:HD13	9:A:841:PHE:CZ	2.45	0.52
4:5:275:THR:CG2	4:5:276:MET:N	2.55	0.52
6:7:71:ALA:HB3	6:7:129:THR:HG21	1.92	0.52
7:8:501:ARG:O	7:8:504:ARG:HB2	2.09	0.52
8:9:182:PHE:HB2	8:9:199:ILE:HB	1.92	0.52
11:C:390:GLU:HA	11:C:393:VAL:HG22	1.91	0.52
12:E:247:PHE:O	12:E:251:THR:HG22	2.10	0.52
13:D:105:GLN:HB3	13:D:335:PRO:HG2	1.91	0.52
1:2:326:ARG:HG2	1:2:389:THR:OG1	2.11	0.51
2:3:28:PHE:HD2	2:3:128:ALA:HB3	1.74	0.51
2:3:442:LEU:O	2:3:460:GLY:HA3	2.10	0.51
2:3:916:VAL:HG23	2:3:919:LEU:HD23	1.92	0.51
3:4:498:VAL:C	3:4:500:GLN:H	2.13	0.51
4:5:75:ILE:HA	4:5:78:LYS:HB2	1.91	0.51
5:6:556:HIS:H	5:6:567:GLY:HA3	1.75	0.51
5:6:585:LEU:HD11	5:6:679:LEU:HD21	1.91	0.51
6:7:143:LEU:HD12	6:7:196:LEU:HD21	1.93	0.51
6:7:214:ARG:HG3	6:7:215:TYR:CD2	2.45	0.51
8:9:501:GLU:HA	8:9:504:LYS:HE3	1.91	0.51
10:B:317:TYR:O	10:B:480:ILE:N	2.36	0.51
14:F:273:LEU:HD22	14:F:356:THR:HA	1.92	0.51
14:F:316:PRO:HG2	14:F:317:TRP:CD1	2.45	0.51
5:6:907:ASP:OD1	5:6:908:LYS:N	2.44	0.51
6:7:143:LEU:HD22	6:7:146:ARG:HH12	1.75	0.51
9:A:633:LYS:HD3	9:A:690:GLU:OE1	2.11	0.51
9:A:645:ASP:HA	9:A:683:ARG:HA	1.92	0.51
12:E:171:LEU:HD12	12:E:172:GLU:HB2	1.92	0.51
1:2:484:PHE:CZ	1:2:766:TYR:HA	2.45	0.51
4:5:500:GLN:HB2	4:5:515:SER:O	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:151:ILE:O	5:6:151:ILE:HG13	2.10	0.51
6:7:456:VAL:HG13	6:7:564:LEU:HD13	1.93	0.51
6:7:608:ASP:OD1	6:7:609:ASP:N	2.38	0.51
7:8:308:GLN:OE1	7:8:436:SER:N	2.43	0.51
11:C:423:ASN:O	11:C:439:TYR:OH	2.27	0.51
12:E:155:LEU:HG	13:D:136:ILE:HD11	1.92	0.51
13:D:142:ALA:O	13:D:146:ILE:HG13	2.11	0.51
1:2:856:GLN:HA	1:2:859:ARG:HB3	1.92	0.51
2:3:488:GLU:OE2	6:7:482:TYR:CE2	2.62	0.51
3:4:314:MET:HG2	3:4:413:HIS:HB3	1.92	0.51
3:4:786:SER:HA	3:4:790:ARG:HG3	1.92	0.51
4:5:500:GLN:HE21	4:5:516:ARG:HE	1.58	0.51
4:5:597:GLU:OE2	4:5:601:ARG:NH2	2.40	0.51
5:6:916:ILE:HD11	5:6:936:ILE:HD13	1.92	0.51
6:7:769:VAL:HG21	6:7:779:LEU:HD13	1.92	0.51
8:9:265:LEU:H	8:9:265:LEU:HD23	1.75	0.51
15:M:13:DA:H1'	15:M:14:DG:H5'	1.93	0.51
1:2:502:ALA:HB3	1:2:512:LYS:CE	2.40	0.51
3:4:650:GLU:HB2	3:4:701:ARG:NH1	2.25	0.51
4:5:232:THR:HG23	4:5:240:PRO:HD2	1.93	0.51
5:6:172:GLU:HG3	5:6:173:GLN:H	1.76	0.51
5:6:329:GLU:OE2	5:6:344:TRP:N	2.44	0.51
5:6:642:ASP:OD1	5:6:643:LYS:N	2.42	0.51
10:B:422:LEU:HD22	10:B:450:ILE:HD11	1.92	0.51
13:D:152:GLN:O	13:D:156:LYS:NZ	2.33	0.51
15:M:14:DG:N2	16:N:77:DT:C2	2.78	0.51
16:N:61:DA:C8	16:N:62:DG:N7	2.79	0.51
1:2:511:ILE:HD11	1:2:541:LEU:HD11	1.91	0.51
5:6:154:ASP:OD1	5:6:156:GLN:N	2.43	0.51
7:8:187:TYR:CE2	7:8:249:LEU:HB2	2.45	0.51
1:2:613:ASN:ND2	1:2:615:GLN:HB2	2.26	0.51
1:2:764:MET:HA	1:2:767:ILE:HG22	1.92	0.51
1:2:835:ASP:HA	1:2:838:ILE:HG22	1.93	0.51
2:3:366:SER:HA	2:3:653:ILE:HG13	1.93	0.51
2:3:443:THR:CG2	2:3:485:ALA:CB	2.89	0.51
3:4:259:HIS:HA	3:4:262:LEU:HD12	1.93	0.51
3:4:548:THR:N	3:4:806:GLU:OE2	2.44	0.51
3:4:718:ARG:CG	6:7:661:VAL:HG11	2.19	0.51
4:5:470:VAL:HG22	4:5:513:LEU:HD21	0.66	0.51
4:5:611:ALA:N	4:5:612:PRO:HD3	2.26	0.51
5:6:394:ARG:HD3	5:6:594:ARG:HD3	0.64	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:490:GLY:O	6:7:494:THR:HG23	2.11	0.51
6:7:654:GLU:O	6:7:657:ASN:ND2	2.43	0.51
6:7:728:TYR:O	6:7:729:GLN:HB2	2.11	0.51
6:7:738:GLU:HG2	6:7:740:PRO:HD3	1.93	0.51
7:8:30:LEU:HB3	7:8:31:PRO:HD3	1.92	0.51
7:8:73:PHE:HB3	7:8:92:TYR:CD1	2.46	0.51
8:9:459:LEU:O	8:9:463:THR:HG23	2.10	0.51
9:A:784:GLU:OE1	9:A:787:ASN:ND2	2.33	0.51
11:C:300:GLU:HB3	11:C:429:HIS:CE1	2.46	0.51
1:2:705:ARG:NH2	1:2:754:GLU:OE1	2.44	0.51
1:2:782:ASP:OD2	1:2:834:LEU:CD2	2.58	0.51
4:5:181:ILE:HG21	4:5:241:TYR:CD1	2.45	0.51
6:7:358:ALA:N	6:7:373:GLU:OE2	2.39	0.51
6:7:646:LYS:HA	6:7:701:LYS:NZ	2.24	0.51
12:E:63:GLU:HB2	12:E:66:GLU:HG2	1.93	0.51
2:3:193:ARG:HA	6:7:372:THR:OG1	2.10	0.51
2:3:520:PHE:HB3	2:3:527:ARG:HH22	1.76	0.51
3:4:319:PRO:HB3	6:7:253:PRO:HB3	1.92	0.51
3:4:350:ASN:HD22	3:4:371:CYS:HB2	1.75	0.51
3:4:498:VAL:HG21	3:4:501:ILE:HB	1.91	0.51
7:8:525:ARG:HE	7:8:527:GLN:HE22	1.59	0.51
8:9:496:ARG:HA	8:9:499:TYR:CD2	2.46	0.51
9:A:431:ASN:OD1	9:A:432:SER:N	2.44	0.51
9:A:776:THR:O	9:A:780:LYS:HG2	2.10	0.51
12:E:11:ARG:NH2	12:E:192:TYR:OH	2.43	0.51
13:D:77:ASP:O	13:D:81:GLU:N	2.27	0.51
2:3:501:GLY:HA2	6:7:510:GLY:CA	2.40	0.51
3:4:363:GLY:HA2	5:6:417:PRO:HB3	1.92	0.51
3:4:504:GLN:HG2	3:4:505:ASP:N	2.26	0.51
4:5:633:LEU:O	4:5:637:GLU:HG3	2.11	0.51
6:7:428:VAL:O	6:7:432:LEU:HG	2.11	0.51
7:8:138:GLU:OE2	7:8:268:THR:OG1	2.27	0.51
7:8:196:LEU:HB2	7:8:262:ILE:HD13	1.91	0.51
7:8:266:LEU:HG	7:8:280:ASN:HD22	1.75	0.51
8:9:411:ASN:OD1	8:9:412:ILE:N	2.43	0.51
9:A:576:GLN:HG2	9:A:609:LEU:HA	1.92	0.51
9:A:612:LYS:HE3	9:A:616:ARG:NH2	2.24	0.51
11:C:189:GLU:HB3	11:C:229:TYR:CD1	2.46	0.51
12:E:338:CYS:H	12:E:381:PHE:HZ	1.57	0.51
14:F:341:ARG:NH1	14:F:341:ARG:HA	2.26	0.51
1:2:737:GLN:NE2	7:8:377:SER:O	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:242:ASN:OD1	3:4:242:ASN:N	2.44	0.50
6:7:262:CYS:SG	6:7:265:CYS:N	2.82	0.50
6:7:451:ARG:NH2	6:7:453:ASP:O	2.44	0.50
7:8:197:THR:HG22	7:8:199:PHE:HD2	1.76	0.50
7:8:266:LEU:HA	7:8:280:ASN:HD22	1.76	0.50
8:9:248:LEU:HD11	8:9:257:VAL:HA	1.93	0.50
11:C:130:GLU:OE1	11:C:130:GLU:N	2.45	0.50
14:F:286:ILE:O	14:F:290:ASN:HB2	2.11	0.50
1:2:278:ALA:O	1:2:281:LEU:HG	2.11	0.50
2:3:103:LEU:O	2:3:107:ASP:N	2.44	0.50
2:3:169:ARG:HH22	4:5:509:ILE:HD11	1.75	0.50
3:4:662:ILE:HD11	5:6:630:LEU:HD11	1.92	0.50
3:4:701:ARG:HH21	3:4:796:ARG:NH1	2.06	0.50
4:5:621:LYS:O	4:5:625:ASN:ND2	2.43	0.50
5:6:795:ILE:HA	5:6:799:GLN:HG3	1.93	0.50
5:6:947:ASP:C	5:6:948:LEU:HG	2.31	0.50
6:7:423:TYR:HA	6:7:625:GLN:NE2	2.24	0.50
7:8:60:GLY:HA2	7:8:107:ARG:NE	2.26	0.50
7:8:104:ARG:HE	7:8:105:LYS:H	1.57	0.50
8:9:118:LEU:HA	8:9:121:ILE:HD12	1.92	0.50
8:9:405:THR:HG22	8:9:409:LYS:NZ	2.26	0.50
10:B:473:TYR:C	10:B:474:ASN:ND2	2.65	0.50
10:B:529:ILE:HD11	10:B:609:LEU:HD22	1.94	0.50
11:C:484:LYS:HG2	12:E:417:ASN:OD1	2.11	0.50
1:2:678:ASP:OD1	1:2:679:ILE:N	2.44	0.50
1:2:803:PHE:HD2	1:2:805:ILE:H	1.58	0.50
3:4:233:MET:HE2	3:4:241:LEU:HD21	1.93	0.50
4:5:196:ASN:ND2	4:5:199:SER:HB2	2.27	0.50
4:5:415:LEU:HD21	4:5:537:GLY:HA2	1.92	0.50
6:7:668:ARG:NH1	6:7:684:ALA:O	2.43	0.50
9:A:602:MET:O	9:A:621:ARG:NH1	2.45	0.50
10:B:589:ASN:HB2	10:B:603:PRO:HD3	1.92	0.50
2:3:202:TYR:CE1	2:3:207:GLY:HA2	2.46	0.50
5:6:354:LEU:HD21	5:6:383:GLY:HA2	1.92	0.50
6:7:470:LEU:HA	6:7:473:ILE:HG22	1.92	0.50
6:7:538:HIS:ND1	6:7:593:ARG:HD2	2.25	0.50
7:8:568:ASP:HB3	7:8:581:TYR:CE2	2.46	0.50
8:9:390:ILE:HA	8:9:393:VAL:HG12	1.92	0.50
9:A:529:TRP:NE1	9:A:537:LEU:HB2	2.26	0.50
10:B:304:TYR:CD1	10:B:314:LEU:HD21	2.46	0.50
11:C:147:MET:SD	11:C:150:LEU:HD21	2.52	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:444:LEU:HG	12:E:445:SER:N	2.26	0.50
13:D:494:GLY:HA2	13:D:497:ILE:HG12	1.92	0.50
1:2:520:PHE:HA	1:2:767:ILE:HD11	1.92	0.50
1:2:852:SER:O	1:2:856:GLN:N	2.34	0.50
3:4:366:GLN:HA	5:6:421:LEU:HG	1.93	0.50
3:4:794:THR:O	3:4:797:GLN:N	2.32	0.50
7:8:570:SER:H	7:8:581:TYR:CB	2.23	0.50
8:9:83:ALA:H	8:9:295:GLN:NE2	2.10	0.50
8:9:233:THR:CG2	8:9:236:THR:CB	2.85	0.50
1:2:700:VAL:HG11	5:6:770:ARG:HG3	1.93	0.50
2:3:158:LYS:N	2:3:325:THR:HG22	2.27	0.50
3:4:198:LEU:HB3	3:4:226:TYR:CD2	2.46	0.50
3:4:347:PHE:O	3:4:355:THR:OG1	2.24	0.50
3:4:602:THR:OG1	3:4:654:ILE:HG12	2.11	0.50
4:5:171:VAL:HG23	4:5:255:PHE:HB2	1.93	0.50
5:6:196:LEU:HD11	5:6:263:PHE:CE2	2.46	0.50
5:6:625:ALA:HA	5:6:629:MET:CE	2.29	0.50
5:6:938:ASP:O	5:6:941:LEU:HB3	2.12	0.50
6:7:703:ARG:NH2	6:7:709:ASP:OD2	2.45	0.50
9:A:415:LYS:HD2	13:D:208:THR:CB	2.37	0.50
9:A:526:GLU:O	9:A:530:ASN:ND2	2.45	0.50
11:C:260:LYS:HB3	12:E:264:PHE:CZ	2.46	0.50
11:C:439:TYR:HA	11:C:442:ARG:HH12	1.75	0.50
13:D:296:SER:OG	13:D:297:GLU:N	2.45	0.50
1:2:537:ILE:H	1:2:537:ILE:HD12	1.75	0.50
2:3:93:PRO:HG2	2:3:281:ASP:HB3	1.94	0.50
2:3:432:THR:HB	2:3:472:ILE:HA	1.92	0.50
3:4:187:ILE:HG23	3:4:271:ILE:HD12	1.94	0.50
3:4:836:TYR:HD1	3:4:842:THR:HG22	1.77	0.50
4:5:31:PHE:CZ	4:5:35:ILE:HD11	2.47	0.50
4:5:500:GLN:HG3	4:5:501:THR:N	2.26	0.50
5:6:150:THR:HG22	5:6:264:GLN:HB2	1.92	0.50
5:6:533:ILE:HD11	5:6:548:LEU:HD22	1.94	0.50
5:6:962:PHE:HA	5:6:965:ILE:HG22	1.94	0.50
6:7:541:MET:HB2	6:7:593:ARG:HD3	1.88	0.50
11:C:60:LEU:HA	11:C:63:GLN:HG2	1.92	0.50
12:E:62:LEU:HD21	12:E:80:THR:HG21	1.94	0.50
13:D:113:ASP:OD1	13:D:114:TYR:N	2.44	0.50
13:D:236:ASP:OD1	13:D:267:ARG:NE	2.39	0.50
13:D:319:ASN:OD1	13:D:322:ARG:NH2	2.35	0.50
16:N:65:DC:H2"	16:N:66:DA:N7	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:497:ILE:O	1:2:501:MET:N	2.45	0.50
4:5:46:TYR:HD1	4:5:61:LEU:HD23	1.77	0.50
5:6:178:LEU:HB3	5:6:179:PRO:HD3	1.94	0.50
6:7:453:ASP:OD2	6:7:562:SER:HB3	2.11	0.50
8:9:232:ASN:CB	16:N:73:DA:OP2	2.60	0.50
14:F:386:TYR:HB3	14:F:388:ASP:OD2	2.12	0.50
1:2:274:VAL:O	1:2:277:GLU:HG3	2.12	0.50
1:2:493:ILE:HD11	1:2:824:ARG:HA	1.94	0.50
2:3:558:ASP:OD2	4:5:627:VAL:HG22	2.12	0.50
2:3:656:LEU:O	2:3:659:TYR:HB3	2.12	0.50
4:5:568:ILE:O	4:5:571:HIS:HB3	2.11	0.50
5:6:266:SER:HB3	5:6:458:HIS:HB2	1.94	0.50
5:6:297:THR:HA	5:6:359:VAL:HG12	1.92	0.50
6:7:541:MET:CG	6:7:593:ARG:CD	2.34	0.50
11:C:281:PHE:CZ	11:C:425:ILE:HA	2.46	0.50
13:D:423:ASN:HA	13:D:426:ILE:HD12	1.93	0.50
1:2:585:ILE:HG13	5:6:619:GLY:HA2	1.93	0.49
1:2:658:ASN:ND2	1:2:661:LEU:HD12	2.27	0.49
2:3:183:GLU:OE1	2:3:183:GLU:N	2.45	0.49
2:3:421:PHE:CE2	2:3:426:ALA:HB2	2.47	0.49
4:5:494:HIS:NE2	4:5:550:PHE:CZ	2.80	0.49
4:5:652:GLN:O	4:5:656:ILE:HG13	2.12	0.49
5:6:195:GLU:O	5:6:199:THR:OG1	2.26	0.49
5:6:776:LYS:HD3	5:6:828:TYR:CG	2.47	0.49
6:7:361:THR:HG23	6:7:364:LYS:HA	1.94	0.49
7:8:106:CYS:SG	7:8:108:ASN:ND2	2.85	0.49
7:8:201:CYS:SG	7:8:229:LEU:HB2	2.52	0.49
7:8:270:ILE:HB	7:8:274:GLY:HA3	1.94	0.49
7:8:298:TYR:CD1	7:8:299:PRO:HD3	2.47	0.49
7:8:344:LEU:HB3	7:8:345:PRO:HD3	1.94	0.49
7:8:569:ILE:HG13	7:8:581:TYR:CZ	2.46	0.49
10:B:439:THR:HG22	10:B:469:LYS:HE2	1.94	0.49
10:B:441:LEU:HD13	10:B:444:LEU:HD23	1.94	0.49
15:M:13:DA:C2'	15:M:14:DG:H5'	2.41	0.49
15:M:29:DT:C5	16:N:61:DA:N6	2.71	0.49
2:3:438:SER:HA	2:3:442:LEU:HG	1.93	0.49
3:4:345:ALA:N	3:4:358:VAL:O	2.40	0.49
3:4:608:ASP:O	3:4:612:LYS:HA	2.12	0.49
4:5:148:LEU:HD11	4:5:258:LEU:HG	1.94	0.49
6:7:82:LEU:HB2	6:7:207:LEU:HB3	1.95	0.49
8:9:295:GLN:HE22	8:9:299:ILE:HD11	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:432:THR:HG1	8:9:435:GLU:H	1.57	0.49
8:9:491:VAL:HG22	8:9:493:LEU:H	1.75	0.49
9:A:464:TYR:CD1	9:A:468:GLU:HG3	2.46	0.49
10:B:611:LYS:HG2	10:B:614:LYS:NZ	2.27	0.49
12:E:148:LYS:HZ2	13:D:136:ILE:HA	1.78	0.49
2:3:204:ALA:HB2	2:3:240:LYS:HB3	1.92	0.49
3:4:492:HIS:CG	3:4:492:HIS:O	2.65	0.49
3:4:575:SER:O	3:4:579:GLN:HG2	2.12	0.49
4:5:165:ILE:HB	4:5:261:ILE:HD13	1.94	0.49
4:5:323:ILE:HG22	4:5:324:ARG:HG3	1.94	0.49
4:5:490:ARG:O	4:5:494:HIS:ND1	2.45	0.49
5:6:605:ALA:HB1	5:6:651:ALA:HB2	1.94	0.49
5:6:718:ASP:HB3	13:D:528:GLN:NE2	2.28	0.49
7:8:322:GLU:N	7:8:322:GLU:OE1	2.45	0.49
7:8:348:SER:HA	7:8:355:ILE:HG13	1.95	0.49
8:9:463:THR:HA	8:9:466:GLU:OE1	2.12	0.49
2:3:683:TYR:OH	2:3:698:THR:O	2.30	0.49
3:4:356:MET:HB2	3:4:372:GLU:OE1	2.12	0.49
3:4:366:GLN:N	3:4:366:GLN:OE1	2.45	0.49
3:4:419:VAL:HG22	3:4:463:VAL:HG21	1.94	0.49
3:4:506:LEU:HA	3:4:509:ILE:HD12	1.93	0.49
4:5:276:MET:HG3	4:5:330:ILE:HD12	1.94	0.49
5:6:275:ARG:HB3	5:6:367:GLU:HG2	1.94	0.49
11:C:328:TYR:HE2	11:C:335:SER:HB3	1.76	0.49
11:C:351:LEU:HD23	11:C:354:LEU:HD21	1.93	0.49
13:D:293:THR:HB	13:D:295:ARG:HH11	1.77	0.49
13:D:451:TRP:HB3	13:D:455:ASP:OD1	2.12	0.49
14:F:335:ARG:HA	14:F:338:LYS:HB2	1.93	0.49
1:2:301:PRO:O	7:8:346:GLN:HG2	2.13	0.49
2:3:340:GLN:NE2	2:3:657:ARG:CD	2.76	0.49
2:3:538:SER:O	2:3:542:ARG:N	2.31	0.49
3:4:501:ILE:HD11	3:4:506:LEU:HD12	1.95	0.49
6:7:120:ALA:O	6:7:124:ASN:N	2.43	0.49
8:9:240:ARG:NH2	8:9:241:THR:HG1	2.09	0.49
11:C:245:SER:H	12:E:320:GLN:NE2	2.11	0.49
11:C:353:ILE:HA	11:C:356:ARG:CZ	2.42	0.49
11:C:395:PHE:HB2	11:C:462:PHE:CD2	2.39	0.49
12:E:277:ASN:HB3	12:E:284:LEU:HB2	1.95	0.49
12:E:444:LEU:HG	12:E:445:SER:H	1.77	0.49
16:N:56:DA:H4'	16:N:57:DG:H5'	1.94	0.49
4:5:65:MET:HG3	4:5:140:ASN:N	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:160:VAL:HG22	4:5:296:GLY:HA3	1.94	0.49
6:7:16:ASN:OD1	6:7:17:LEU:N	2.45	0.49
11:C:208:VAL:O	11:C:211:ILE:HG22	2.12	0.49
3:4:435:VAL:HG23	3:4:466:VAL:HG22	1.95	0.49
3:4:743:PRO:CB	3:4:746:PHE:HB3	2.43	0.49
4:5:503:SER:HA	4:5:512:VAL:HA	1.94	0.49
4:5:656:ILE:O	4:5:660:THR:HG23	2.13	0.49
5:6:719:CYS:H	13:D:528:GLN:NE2	2.08	0.49
6:7:13:ASP:OD1	6:7:14:TYR:N	2.45	0.49
6:7:259:ALA:H	6:7:305:SER:HB3	1.78	0.49
6:7:454:ILE:O	6:7:562:SER:HB2	2.12	0.49
7:8:236:LEU:HG	7:8:244:HIS:HE1	1.77	0.49
8:9:177:GLU:OE1	8:9:179:SER:OG	2.20	0.49
9:A:886:ASN:HB2	13:D:470:THR:HG21	1.95	0.49
11:C:96:THR:HG21	11:C:262:ASN:HD22	1.78	0.49
11:C:403:ASN:O	11:C:407:LYS:NZ	2.39	0.49
13:D:105:GLN:N	17:D:2001:AGS:O1B	2.41	0.49
1:2:477:THR:O	1:2:480:GLU:HB2	2.13	0.49
1:2:585:ILE:CG1	5:6:619:GLY:HA2	2.42	0.49
5:6:678:ILE:HG12	5:6:679:LEU:H	1.78	0.49
7:8:108:ASN:HB2	7:8:111:LEU:HB2	1.94	0.49
7:8:376:ASN:N	7:8:380:GLU:O	2.26	0.49
8:9:387:LEU:HD22	8:9:390:ILE:HD13	1.93	0.49
8:9:416:LEU:HD11	8:9:444:ILE:HD11	1.93	0.49
8:9:500:ASP:N	8:9:500:ASP:OD1	2.46	0.49
10:B:270:THR:CG2	10:B:272:GLU:HG2	2.43	0.49
10:B:495:VAL:HG13	10:B:497:LYS:HG2	1.94	0.49
11:C:491:LEU:HD11	11:C:521:LEU:HB3	1.94	0.49
13:D:54:ARG:NH1	13:D:54:ARG:HB2	2.28	0.49
13:D:461:GLU:HA	13:D:464:VAL:HG12	1.95	0.49
2:3:669:PRO:HD2	2:3:714:LYS:HG2	1.95	0.49
3:4:388:ARG:HH22	5:6:176:ARG:NE	2.10	0.49
3:4:563:ASN:OD1	3:4:671:ILE:N	2.45	0.49
4:5:408:GLY:HA2	4:5:658:ARG:HH11	1.78	0.49
7:8:20:LEU:O	7:8:24:SER:N	2.45	0.49
10:B:444:LEU:HD12	10:B:447:ILE:HD12	1.94	0.49
10:B:483:PHE:CD1	11:C:521:LEU:HD13	2.42	0.49
10:B:521:SER:HA	10:B:524:MET:HG2	1.95	0.49
10:B:604:TYR:HB2	10:B:609:LEU:HD21	1.93	0.49
12:E:109:VAL:HG11	12:E:155:LEU:HB3	1.94	0.49
2:3:247:TYR:CE1	6:7:12:VAL:HG11	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:207:LYS:HZ1	3:4:219:THR:HG23	1.76	0.49
3:4:696:PRO:N	3:4:697:PRO:HD2	2.27	0.49
3:4:698:LEU:O	3:4:701:ARG:HB3	2.12	0.49
5:6:605:ALA:HB1	5:6:651:ALA:CB	2.42	0.49
6:7:580:PRO:HD2	6:7:678:LYS:O	2.12	0.49
7:8:90:GLU:HG3	7:8:154:ARG:HB2	1.95	0.49
7:8:508:PHE:O	7:8:511:MET:HG3	2.12	0.49
8:9:62:LEU:O	8:9:66:SER:N	2.46	0.49
9:A:482:GLY:HA2	17:A:2001:AGS:H5'2	1.93	0.49
12:E:195:ASP:OD1	12:E:195:ASP:N	2.45	0.49
16:N:81:DA:H2''	16:N:82:DT:C5	2.48	0.49
3:4:308:VAL:H	3:4:327:ASN:HD21	1.59	0.48
3:4:569:ASP:OD2	3:4:681:ARG:NH2	2.46	0.48
4:5:572:VAL:HG22	4:5:576:HIS:NE2	2.28	0.48
5:6:550:GLN:NE2	5:6:678:ILE:O	2.45	0.48
7:8:580:VAL:HG12	7:8:581:TYR:N	2.27	0.48
10:B:556:LEU:H	10:B:598:GLU:HB3	1.78	0.48
12:E:8:VAL:HB	12:E:11:ARG:HB2	1.94	0.48
12:E:108:LEU:O	12:E:112:LEU:HG	2.12	0.48
14:F:316:PRO:HG2	14:F:317:TRP:HD1	1.77	0.48
2:3:507:ASN:HD21	6:7:324:VAL:HB	1.79	0.48
3:4:409:GLY:O	6:7:506:MET:SD	2.71	0.48
6:7:534:ARG:O	6:7:538:HIS:HB2	2.13	0.48
6:7:626:PRO:HB3	6:7:630:PHE:HB3	1.94	0.48
6:7:626:PRO:HG2	6:7:632:PRO:HG3	1.95	0.48
7:8:541:SER:OG	7:8:543:GLN:OE1	2.27	0.48
8:9:96:ILE:HD12	8:9:129:LEU:HD11	1.94	0.48
8:9:229:LEU:HD22	8:9:267:MET:HB3	1.95	0.48
8:9:334:LEU:HA	8:9:337:VAL:HG22	1.94	0.48
8:9:334:LEU:O	8:9:338:LEU:HD23	2.13	0.48
8:9:391:ALA:HB3	8:9:392:LYS:HZ2	1.79	0.48
10:B:377:LYS:O	10:B:380:THR:OG1	2.31	0.48
12:E:324:LEU:HB2	12:E:328:SER:OG	2.12	0.48
2:3:211:TYR:HB2	6:7:8:ILE:H	1.78	0.48
2:3:557:ARG:NH1	2:3:560:SER:HB3	2.29	0.48
2:3:567:ARG:HA	2:3:570:ARG:HD3	1.94	0.48
3:4:233:MET:HG2	3:4:238:THR:HB	1.95	0.48
3:4:714:GLU:CD	6:7:669:GLN:HE21	2.17	0.48
4:5:278:CYS:HA	4:5:282:LEU:HB2	1.96	0.48
4:5:384:ILE:O	4:5:388:ILE:HG13	2.13	0.48
6:7:235:LEU:HG	6:7:355:PHE:CD2	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:611:LYS:HG2	10:B:614:LYS:HZ2	1.78	0.48
11:C:381:LEU:HD11	14:F:422:LYS:NZ	2.29	0.48
11:C:464:GLU:OE1	11:C:464:GLU:N	2.47	0.48
13:D:67:ASP:OD1	13:D:67:ASP:N	2.45	0.48
13:D:90:ILE:HA	13:D:211:THR:HG21	1.94	0.48
14:F:308:ILE:O	14:F:311:SER:OG	2.31	0.48
14:F:350:MET:HA	14:F:353:LEU:HB3	1.94	0.48
15:M:19:DG:H2'	15:M:20:DT:H72	1.95	0.48
1:2:572:SER:O	1:2:575:GLY:N	2.22	0.48
3:4:296:ILE:HA	3:4:299:LYS:HE3	1.95	0.48
3:4:468:LYS:HD2	3:4:468:LYS:N	2.28	0.48
4:5:391:LEU:HG	4:5:476:VAL:HG21	1.95	0.48
5:6:918:ARG:NH2	13:D:442:PHE:O	2.36	0.48
8:9:65:SER:HA	8:9:68:LEU:HD12	1.95	0.48
9:A:789:HIS:O	9:A:793:PHE:N	2.46	0.48
11:C:292:LEU:O	11:C:293:ASN:ND2	2.46	0.48
13:D:227:ARG:HA	13:D:227:ARG:HH11	1.77	0.48
14:F:370:LYS:HE2	14:F:370:LYS:HB3	1.64	0.48
15:M:27:DA:H2''	15:M:28:DC:C4	2.49	0.48
1:2:534:ARG:HD3	1:2:627:GLN:CB	2.43	0.48
2:3:39:ARG:HG3	2:3:136:MET:SD	2.54	0.48
3:4:370:ARG:HH21	3:4:375:ASP:HA	1.78	0.48
3:4:908:SER:O	3:4:912:GLN:HG3	2.14	0.48
4:5:450:THR:CG2	4:5:504:ILE:HG22	2.37	0.48
5:6:292:GLY:HA3	5:6:361:ILE:HD11	1.96	0.48
5:6:691:ARG:NH1	5:6:717:ASP:O	2.46	0.48
6:7:537:ILE:O	6:7:540:VAL:N	2.45	0.48
6:7:581:LEU:HD13	6:7:680:SER:O	2.13	0.48
8:9:464:ILE:O	8:9:467:THR:OG1	2.25	0.48
9:A:583:PHE:O	9:A:587:THR:HG23	2.13	0.48
9:A:588:TYR:HB2	9:A:591:ALA:HB2	1.94	0.48
10:B:326:LEU:CD2	10:B:425:HIS:ND1	2.65	0.48
11:C:188:VAL:HG13	11:C:232:VAL:HG11	1.95	0.48
11:C:512:ASP:OD1	11:C:513:LEU:N	2.44	0.48
11:C:592:GLU:HG3	11:C:599:PHE:CE2	2.49	0.48
12:E:265:LYS:NZ	12:E:295:THR:O	2.40	0.48
13:D:292:LEU:HB3	13:D:309:LEU:HD11	1.95	0.48
1:2:622:GLU:HA	1:2:625:GLU:OE2	2.12	0.48
2:3:350:ILE:HG23	2:3:659:TYR:CD1	2.47	0.48
2:3:941:GLY:HA2	2:3:944:ILE:HD12	1.95	0.48
3:4:207:LYS:HZ3	3:4:219:THR:HG23	1.73	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:543:GLN:OE1	3:4:564:ILE:HD13	2.14	0.48
3:4:731:ASP:O	6:7:442:LYS:NZ	2.39	0.48
4:5:663:LEU:HA	4:5:666:LEU:HD12	1.94	0.48
7:8:207:TYR:CE2	7:8:217:ASN:HA	2.49	0.48
9:A:477:VAL:O	9:A:598:VAL:HA	2.14	0.48
9:A:847:LYS:O	9:A:851:GLN:N	2.44	0.48
11:C:425:ILE:HG23	11:C:426:GLU:H	1.79	0.48
13:D:399:LEU:HD23	13:D:529:LEU:HD21	1.94	0.48
15:M:14:DG:H2''	15:M:15:DT:H71	1.96	0.48
2:3:39:ARG:HH12	2:3:132:LEU:HD11	1.79	0.48
3:4:249:LEU:HD12	3:4:255:GLU:HG2	1.96	0.48
3:4:322:ILE:O	3:4:439:PHE:HB3	2.13	0.48
3:4:354:HIS:O	3:4:372:GLU:OE1	2.31	0.48
3:4:531:TYR:CG	3:4:532:GLU:N	2.72	0.48
3:4:713:ASP:OD2	3:4:715:LYS:N	2.46	0.48
4:5:613:ARG:HG2	4:5:670:PRO:O	2.12	0.48
7:8:296:GLN:HG2	7:8:299:PRO:CD	2.43	0.48
8:9:234:SER:HA	8:9:238:SER:OG	2.13	0.48
10:B:301:PHE:HA	10:B:304:TYR:CD2	2.47	0.48
11:C:82:ASP:OD2	11:C:276:TYR:OH	2.32	0.48
13:D:127:PHE:HA	13:D:210:ILE:HG23	1.95	0.48
14:F:414:THR:HG23	14:F:417:GLN:H	1.79	0.48
1:2:300:PHE:H	1:2:319:ARG:HD3	1.79	0.48
1:2:362:SER:CA	5:6:343:PHE:CE2	2.97	0.48
1:2:444:PHE:HZ	5:6:326:LYS:O	1.96	0.48
2:3:419:LEU:O	2:3:423:LEU:HG	2.13	0.48
3:4:755:LYS:HA	3:4:810:LYS:HD3	1.96	0.48
3:4:836:TYR:CD1	3:4:842:THR:HG22	2.48	0.48
4:5:147:PRO:HA	4:5:162:LEU:HG	1.95	0.48
4:5:291:ARG:N	4:5:337:VAL:HG12	2.11	0.48
5:6:303:GLU:O	5:6:354:LEU:N	2.46	0.48
5:6:578:SER:HA	17:6:1101:AGS:O2A	2.14	0.48
7:8:200:PRO:HB2	7:8:254:ARG:NE	2.28	0.48
7:8:238:ARG:HB3	7:8:273:LYS:HE2	1.95	0.48
11:C:572:THR:OG1	11:C:575:ALA:HB2	2.14	0.48
13:D:331:PHE:HB3	13:D:333:SER:OG	2.13	0.48
14:F:421:TRP:HD1	14:F:424:ARG:HH21	1.59	0.48
15:M:38:DG:H2''	15:M:39:DG:H8	1.79	0.48
1:2:434:TYR:HA	1:2:447:PHE:HA	1.96	0.48
1:2:537:ILE:O	1:2:645:SER:HB2	2.13	0.48
2:3:354:SER:HB2	2:3:659:TYR:HE1	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:507:ASN:ND2	6:7:324:VAL:CG2	2.73	0.48
3:4:245:ALA:HB2	3:4:308:VAL:HG12	1.95	0.48
4:5:381:ASN:HD21	4:5:556:VAL:HA	1.79	0.48
5:6:196:LEU:HD12	5:6:261:ARG:HD2	1.96	0.48
5:6:356:TRP:CE3	5:6:356:TRP:C	2.87	0.48
5:6:525:ILE:HG13	5:6:526:TYR:N	2.29	0.48
5:6:623:ILE:HD11	5:6:668:ILE:HD13	1.96	0.48
5:6:919:LYS:HD3	5:6:939:TRP:CZ2	2.48	0.48
6:7:653:SER:OG	6:7:708:VAL:N	2.47	0.48
7:8:16:PRO:HB2	7:8:43:PHE:CE1	2.48	0.48
7:8:130:VAL:O	7:8:133:VAL:HG22	2.14	0.48
8:9:103:SER:HB3	8:9:281:LEU:HA	1.94	0.48
9:A:811:LEU:HD12	9:A:820:GLN:NE2	2.27	0.48
10:B:458:HIS:NE2	10:B:460:TYR:HB2	2.29	0.48
11:C:217:ASP:OD2	11:C:255:THR:HG21	2.12	0.48
11:C:537:ILE:HG23	11:C:584:PHE:HZ	1.79	0.48
12:E:387:LEU:HD11	12:E:421:PHE:CE1	2.49	0.48
13:D:135:PHE:CZ	13:D:218:GLU:HG2	2.48	0.48
2:3:537:ASP:OD1	2:3:538:SER:N	2.40	0.48
4:5:254:GLN:HB2	4:5:278:CYS:HB2	1.96	0.48
5:6:352:ARG:C	5:6:353:PHE:CD1	2.87	0.48
5:6:689:TYR:HB2	5:6:698:ASN:OD1	2.14	0.48
6:7:459:MET:HE3	6:7:584:ILE:HG12	1.96	0.48
6:7:551:ALA:CB	16:N:50:DG:OP1	2.62	0.48
6:7:583:ASN:OD1	6:7:584:ILE:N	2.47	0.48
7:8:93:ILE:HG13	7:8:93:ILE:O	2.14	0.48
10:B:423:VAL:HA	10:B:453:VAL:O	2.13	0.48
10:B:458:HIS:CE1	10:B:460:TYR:HB2	2.48	0.48
11:C:496:GLN:OE1	11:C:496:GLN:N	2.35	0.48
11:C:531:ALA:HB3	11:C:610:LYS:HD2	1.96	0.48
1:2:271:PHE:CE2	1:2:295:VAL:HG11	2.49	0.47
2:3:158:LYS:HG2	2:3:325:THR:HA	1.96	0.47
2:3:665:GLU:OE1	2:3:666:ARG:NE	2.47	0.47
3:4:238:THR:O	3:4:240:ASN:ND2	2.43	0.47
3:4:532:GLU:O	3:4:534:GLU:N	2.46	0.47
5:6:322:GLU:CD	5:6:328:THR:H	2.18	0.47
9:A:811:LEU:HD23	9:A:828:GLU:HG2	1.96	0.47
10:B:261:HIS:O	11:C:536:ASN:ND2	2.43	0.47
11:C:352:LYS:HE3	11:C:356:ARG:HH22	1.78	0.47
1:2:307:ARG:CZ	1:2:404:ARG:HG3	2.44	0.47
1:2:527:VAL:HB	1:2:531:HIS:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:780:GLN:NE2	4:5:573:ILE:HD13	2.29	0.47
2:3:304:GLY:O	2:3:310:ASN:ND2	2.48	0.47
2:3:433:THR:H	2:3:437:SER:HB2	1.78	0.47
2:3:469:VAL:HA	2:3:511:SER:O	2.13	0.47
2:3:491:GLU:OE1	2:3:491:GLU:N	2.48	0.47
4:5:141:SER:HB3	4:5:161:ARG:HG2	1.95	0.47
4:5:225:SER:N	4:5:298:TYR:OH	2.36	0.47
5:6:124:VAL:HG23	5:6:135:VAL:HG11	1.96	0.47
6:7:494:THR:HG22	6:7:536:ALA:CB	2.44	0.47
9:A:849:LEU:HD11	9:A:863:ILE:HD12	1.95	0.47
10:B:433:ARG:CD	12:E:444:LEU:HB2	2.43	0.47
10:B:459:ILE:HG23	10:B:460:TYR:CD1	2.48	0.47
10:B:464:LEU:HD22	12:E:443:TYR:HB3	1.96	0.47
13:D:499:PHE:HA	13:D:502:ARG:HH12	1.78	0.47
14:F:377:LYS:NZ	14:F:381:ASP:OD1	2.47	0.47
15:M:20:DT:H2 ⁺	15:M:21:DT:C5	2.49	0.47
1:2:861:PHE:CE2	1:2:864:TYR:HB3	2.49	0.47
2:3:921:GLU:O	2:3:925:GLU:HB2	2.14	0.47
3:4:619:GLY:HA3	3:4:622:VAL:HG23	1.96	0.47
4:5:103:ILE:HD11	4:5:132:LEU:HB2	1.95	0.47
4:5:181:ILE:HG21	4:5:241:TYR:HD1	1.78	0.47
5:6:119:LEU:HD11	5:6:188:VAL:HG21	1.95	0.47
6:7:697:GLN:O	6:7:701:LYS:HG3	2.14	0.47
7:8:118:LEU:HB2	7:8:260:LEU:HD12	1.96	0.47
10:B:286:GLN:HE22	11:C:519:PRO:HB3	1.79	0.47
10:B:315:LEU:HD12	10:B:316:PHE:H	1.79	0.47
10:B:574:ALA:O	10:B:578:MET:HG2	2.15	0.47
11:C:79:ILE:HG13	11:C:80:GLU:N	2.29	0.47
11:C:310:THR:HG21	12:E:324:LEU:HA	1.97	0.47
1:2:444:PHE:HZ	5:6:326:LYS:H	1.60	0.47
2:3:171:LEU:HD21	2:3:274:ILE:HG21	1.95	0.47
2:3:953:VAL:HA	2:3:959:TRP:HE3	1.80	0.47
3:4:687:PRO:HB3	3:4:840:PRO:HG2	1.96	0.47
4:5:659:ILE:HG21	4:5:684:PHE:CZ	2.49	0.47
5:6:614:ARG:CZ	5:6:621:TYR:HB3	2.44	0.47
6:7:436:LEU:HB3	6:7:473:ILE:HD11	1.95	0.47
6:7:605:SER:OG	6:7:606:ARG:N	2.47	0.47
7:8:391:LEU:HD11	7:8:396:ASN:HB2	1.96	0.47
7:8:504:ARG:O	7:8:507:GLN:HB2	2.15	0.47
7:8:512:LYS:O	7:8:515:GLN:HG2	2.15	0.47
8:9:312:PHE:CD2	8:9:387:LEU:HD23	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:533:SER:HB3	9:A:535:GLU:HG3	1.95	0.47
11:C:274:PHE:O	11:C:278:ASN:N	2.47	0.47
2:3:518:PRO:HB3	2:3:524:ASP:HB3	1.95	0.47
3:4:680:SER:HB3	6:7:588:ALA:HB3	1.97	0.47
3:4:880:SER:HB2	3:4:923:VAL:HB	1.95	0.47
4:5:178:TYR:HA	4:5:193:THR:HA	1.96	0.47
4:5:414:LEU:HD12	4:5:554:PHE:HB2	1.97	0.47
5:6:675:ARG:HB2	5:6:675:ARG:HH11	1.79	0.47
17:9:2001:AGS:O2A	17:9:2001:AGS:O3'	2.26	0.47
10:B:392:GLU:O	10:B:394:LYS:HG2	2.15	0.47
10:B:528:LEU:HD13	10:B:600:ILE:HD12	1.97	0.47
10:B:533:MET:HG2	10:B:606:TYR:CE1	2.50	0.47
11:C:314:LEU:O	11:C:318:THR:HG23	2.15	0.47
12:E:32:ASN:HB3	12:E:168:TYR:HE2	1.78	0.47
2:3:493:GLN:C	2:3:494:THR:HG23	2.34	0.47
3:4:236:LEU:HD23	7:8:579:LYS:CE	2.45	0.47
3:4:276:ILE:O	3:4:280:MET:HG2	2.14	0.47
3:4:498:VAL:HG23	3:4:500:GLN:H	1.80	0.47
4:5:298:TYR:HB2	4:5:329:LYS:HG2	1.96	0.47
5:6:914:ASN:ND2	13:D:429:VAL:HG22	2.28	0.47
6:7:68:GLN:O	6:7:72:ASN:N	2.35	0.47
7:8:369:ASP:OD1	7:8:369:ASP:N	2.47	0.47
8:9:406:ARG:HG3	8:9:409:LYS:HZ3	1.80	0.47
11:C:202:VAL:HG12	11:C:235:SER:HB3	1.97	0.47
11:C:536:ASN:ND2	11:C:539:ASP:H	2.12	0.47
12:E:29:THR:HG22	12:E:165:LYS:HD2	1.95	0.47
12:E:198:SER:O	12:E:202:VAL:HG12	2.15	0.47
1:2:758:ILE:HD12	1:2:758:ILE:H	1.79	0.47
2:3:158:LYS:HA	2:3:325:THR:HG21	1.94	0.47
2:3:158:LYS:HA	2:3:325:THR:HG22	1.90	0.47
2:3:394:GLU:O	2:3:395:ASN:ND2	2.48	0.47
2:3:478:MET:HB2	2:3:483:ARG:HE	1.79	0.47
2:3:527:ARG:HD2	2:3:532:ASN:HA	1.97	0.47
2:3:687:ARG:HD3	6:7:609:ASP:CG	2.35	0.47
3:4:265:PRO:HA	3:4:268:VAL:HG12	1.95	0.47
3:4:534:GLU:N	3:4:534:GLU:OE1	2.42	0.47
4:5:35:ILE:HG12	4:5:38:PHE:CE2	2.50	0.47
4:5:170:SER:HB3	4:5:256:LEU:HD13	1.97	0.47
4:5:411:ASN:OD1	4:5:412:VAL:N	2.47	0.47
4:5:413:LEU:N	4:5:552:MET:O	2.38	0.47
5:6:104:ASP:HB3	5:6:176:ARG:NH2	2.25	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:712:PHE:HB2	5:6:794:ARG:HE	1.80	0.47
5:6:833:GLN:O	5:6:834:SER:OG	2.32	0.47
5:6:915:MET:HB2	5:6:940:TYR:OH	2.14	0.47
6:7:203:TYR:HB3	6:7:379:GLN:O	2.15	0.47
6:7:249:SER:OG	6:7:250:ASP:N	2.46	0.47
6:7:555:THR:HG22	6:7:556:THR:H	1.80	0.47
6:7:616:VAL:HG12	6:7:620:HIS:CE1	2.48	0.47
6:7:668:ARG:O	6:7:671:SER:HB2	2.15	0.47
8:9:440:TYR:HE2	8:9:453:LEU:H	1.62	0.47
9:A:549:TYR:CD1	9:A:553:VAL:HG21	2.50	0.47
10:B:532:GLN:CD	10:B:602:VAL:H	2.18	0.47
12:E:442:ASP:OD1	12:E:448:VAL:HG11	2.15	0.47
13:D:455:ASP:OD1	13:D:456:VAL:N	2.48	0.47
2:3:492:GLN:NE2	6:7:467:SER:O	2.47	0.47
3:4:569:ASP:OD1	3:4:570:PRO:HD2	2.14	0.47
4:5:146:ILE:HB	4:5:160:VAL:HB	1.97	0.47
5:6:764:ILE:HG22	5:6:765:LEU:H	1.79	0.47
6:7:584:ILE:HD13	6:7:597:LEU:HD11	1.97	0.47
9:A:509:LEU:O	9:A:511:VAL:HG23	2.15	0.47
9:A:540:ALA:O	9:A:544:GLU:HG2	2.15	0.47
11:C:68:PHE:O	11:C:72:VAL:HG23	2.15	0.47
12:E:205:ARG:HH21	12:E:208:GLU:HG2	1.79	0.47
12:E:469:ASN:OD1	12:E:470:ILE:N	2.48	0.47
1:2:534:ARG:HD3	1:2:627:GLN:HB2	1.96	0.47
2:3:110:PHE:O	2:3:114:ILE:HG13	2.15	0.47
2:3:127:LYS:O	2:3:130:THR:OG1	2.27	0.47
3:4:729:LEU:HD21	6:7:657:ASN:HD21	1.80	0.47
3:4:790:ARG:HH21	3:4:839:ASP:C	2.18	0.47
4:5:181:ILE:CG2	4:5:241:TYR:CD1	2.98	0.47
4:5:300:ILE:HB	4:5:326:PRO:HB3	1.97	0.47
5:6:296:ARG:CD	5:6:360:ARG:HH22	2.28	0.47
5:6:364:ASN:HD22	5:6:394:ARG:NH1	2.04	0.47
5:6:550:GLN:NE2	5:6:677:SER:HB3	2.30	0.47
6:7:401:VAL:O	6:7:405:ILE:HG13	2.15	0.47
6:7:517:ASP:HA	6:7:561:THR:CG2	2.45	0.47
6:7:646:LYS:HA	6:7:701:LYS:HZ1	1.78	0.47
7:8:397:LYS:O	7:8:401:LEU:HG	2.15	0.47
7:8:515:GLN:HG3	7:8:519:ILE:HD11	1.96	0.47
9:A:415:LYS:HE2	9:A:418:ILE:HG12	1.97	0.47
14:F:322:GLY:HA3	14:F:369:VAL:HG21	1.95	0.47
14:F:368:LEU:O	14:F:372:LEU:HG	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:572:SER:OG	5:6:665:LYS:HG2	2.14	0.47
1:2:596:LEU:CD1	1:2:623:ALA:HB1	2.45	0.47
17:2:2001:AGS:O1B	17:2:2001:AGS:O3G	2.32	0.47
2:3:287:LYS:HA	6:7:326:HIS:NE2	2.29	0.47
2:3:422:VAL:HG21	2:3:513:ILE:HG21	1.96	0.47
2:3:459:ALA:HB1	2:3:463:VAL:HG23	1.97	0.47
2:3:677:ASN:O	2:3:681:LYS:HG2	2.14	0.47
3:4:542:LEU:HA	3:4:542:LEU:HD23	1.76	0.47
4:5:498:GLU:CG	4:5:549:ARG:CD	2.91	0.47
5:6:273:VAL:HA	5:6:289:SER:OG	2.15	0.47
6:7:260:TYR:HB3	6:7:298:LEU:HD13	1.95	0.47
7:8:501:ARG:HA	7:8:504:ARG:HD2	1.97	0.47
10:B:526:LYS:O	10:B:529:ILE:HG22	2.15	0.47
12:E:34:ILE:HG21	12:E:176:LEU:HD13	1.97	0.47
13:D:111:LEU:HD23	13:D:111:LEU:HA	1.74	0.47
14:F:286:ILE:HG12	14:F:290:ASN:ND2	2.30	0.47
14:F:358:LYS:HD3	14:F:360:ASP:HB2	1.97	0.47
2:3:404:ASN:OD1	2:3:512:VAL:N	2.47	0.46
4:5:97:VAL:HA	4:5:100:ARG:HD2	1.97	0.46
4:5:375:ALA:HB1	4:5:378:ILE:HB	1.97	0.46
4:5:390:CYS:HA	4:5:393:MET:HB2	1.96	0.46
5:6:112:ARG:NH2	5:6:183:LYS:HE3	2.30	0.46
5:6:788:PHE:CG	12:E:456:TRP:HH2	2.33	0.46
6:7:67:LEU:HA	6:7:70:VAL:HG22	1.96	0.46
6:7:148:LEU:O	6:7:152:ARG:HG3	2.15	0.46
6:7:497:VAL:HG11	6:7:553:ILE:HD13	1.97	0.46
6:7:612:LEU:O	6:7:616:VAL:HG23	2.15	0.46
7:8:212:MET:HB3	7:8:245:THR:OG1	2.15	0.46
7:8:317:LEU:HD13	7:8:359:ASP:HB3	1.97	0.46
7:8:338:PRO:O	7:8:382:THR:CG2	2.58	0.46
7:8:374:GLU:OE1	7:8:374:GLU:N	2.47	0.46
7:8:484:MET:O	7:8:488:ARG:N	2.46	0.46
9:A:422:ILE:HG12	9:A:648:PHE:HD2	1.80	0.46
10:B:557:LYS:NZ	10:B:598:GLU:HB2	2.29	0.46
11:C:278:ASN:HB3	11:C:424:LEU:HD12	1.97	0.46
11:C:426:GLU:O	11:C:430:ASN:ND2	2.38	0.46
1:2:520:PHE:CD1	1:2:767:ILE:HD13	2.50	0.46
1:2:740:ALA:O	1:2:744:ARG:HG2	2.15	0.46
2:3:28:PHE:CE1	2:3:155:LEU:HD11	2.50	0.46
2:3:542:ARG:CZ	6:7:462:PRO:HB3	2.44	0.46
2:3:672:THR:HG21	2:3:720:THR:HB	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:138:ILE:HG13	4:5:281:TYR:OH	2.15	0.46
4:5:255:PHE:HB3	4:5:458:MET:HE3	1.97	0.46
4:5:660:THR:HG22	4:5:680:ALA:HB3	1.96	0.46
5:6:274:HIS:CD2	5:6:288:LEU:HD11	2.50	0.46
5:6:541:GLU:OE2	5:6:541:GLU:N	2.44	0.46
6:7:618:TYR:HA	6:7:621:MET:HE2	1.96	0.46
8:9:121:ILE:O	8:9:125:LYS:HG2	2.16	0.46
8:9:422:ILE:HG13	8:9:498:PHE:CE2	2.50	0.46
9:A:525:TYR:O	9:A:529:TRP:N	2.25	0.46
10:B:396:TRP:CB	16:N:76:DC:H5"	2.44	0.46
11:C:83:LEU:O	11:C:86:GLU:HG2	2.15	0.46
12:E:325:SER:OG	12:E:326:ILE:N	2.48	0.46
12:E:332:LEU:HD12	12:E:427:LEU:HD11	1.97	0.46
2:3:432:THR:HA	2:3:437:SER:HB2	1.97	0.46
2:3:662:TYR:CZ	2:3:666:ARG:HG3	2.49	0.46
3:4:480:THR:OG1	3:4:481:ILE:N	2.48	0.46
3:4:536:VAL:O	3:4:540:ILE:HG12	2.15	0.46
3:4:565:LEU:HD23	3:4:566:LEU:N	2.31	0.46
3:4:689:THR:HG21	3:4:791:ILE:N	2.29	0.46
3:4:701:ARG:HE	3:4:796:ARG:CZ	2.29	0.46
4:5:476:VAL:HG22	4:5:517:THR:OG1	2.16	0.46
6:7:125:MET:O	6:7:127:LEU:HD12	2.15	0.46
7:8:296:GLN:O	7:8:299:PRO:HD2	2.15	0.46
7:8:470:PHE:HE2	7:8:473:LYS:HE3	1.80	0.46
8:9:171:ASN:OD1	8:9:224:GLU:HB2	2.16	0.46
9:A:492:VAL:O	9:A:495:GLU:HG3	2.15	0.46
10:B:371:ASN:ND2	10:B:373:ARG:HB2	2.29	0.46
11:C:75:ILE:O	11:C:79:ILE:HG23	2.15	0.46
11:C:440:LEU:HD13	11:C:446:CYS:HB3	1.96	0.46
13:D:500:ASP:O	13:D:501:LEU:HD22	2.16	0.46
14:F:424:ARG:HE	14:F:425:ILE:HG12	1.80	0.46
1:2:839:LYS:HE2	1:2:864:TYR:CD1	2.50	0.46
2:3:492:GLN:NE2	6:7:471:LYS:HB2	2.30	0.46
2:3:923:ILE:O	2:3:932:LYS:NZ	2.44	0.46
3:4:181:TRP:CZ3	6:7:149:ARG:HD2	2.50	0.46
3:4:191:THR:HB	3:4:271:ILE:HD11	1.97	0.46
3:4:365:ILE:N	5:6:420:THR:O	2.47	0.46
3:4:370:ARG:HA	3:4:378:GLU:O	2.16	0.46
17:4:2001:AGS:O3B	6:7:593:ARG:NH2	2.48	0.46
4:5:196:ASN:OD1	4:5:197:PHE:N	2.48	0.46
6:7:31:ASP:OD2	6:7:63:TYR:N	2.41	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:225:LEU:HD12	6:7:229:GLN:HB2	1.97	0.46
7:8:205:ILE:HG21	7:8:222:ILE:HG12	1.96	0.46
7:8:302:LEU:HD22	7:8:306:ARG:NH1	2.30	0.46
7:8:365:THR:HG23	7:8:442:VAL:HB	1.97	0.46
8:9:405:THR:HG22	8:9:409:LYS:HZ2	1.80	0.46
10:B:314:LEU:HD12	10:B:476:VAL:HG13	1.97	0.46
11:C:114:THR:HG21	11:C:268:VAL:HG11	1.98	0.46
11:C:437:ASP:OD1	11:C:437:ASP:N	2.48	0.46
12:E:146:PHE:CE2	12:E:150:ILE:HD11	2.51	0.46
14:F:273:LEU:HB3	14:F:354:MET:HG2	1.97	0.46
1:2:421:GLY:HA3	1:2:597:VAL:HG12	1.95	0.46
2:3:478:MET:HE3	2:3:483:ARG:NE	2.30	0.46
3:4:340:PRO:HB2	3:4:391:PHE:CD1	2.50	0.46
4:5:427:LYS:O	4:5:431:LYS:HG2	2.16	0.46
5:6:409:GLN:O	5:6:410:LEU:HD23	2.15	0.46
5:6:565:LEU:HD11	5:6:805:ARG:NH2	2.25	0.46
5:6:906:TYR:O	5:6:910:VAL:HG23	2.15	0.46
5:6:939:TRP:O	5:6:943:GLN:HG2	2.16	0.46
6:7:619:VAL:HA	6:7:622:HIS:O	2.15	0.46
7:8:193:THR:OG1	7:8:283:LEU:HD12	2.16	0.46
7:8:400:THR:O	7:8:404:VAL:HG23	2.15	0.46
7:8:541:SER:O	7:8:543:GLN:N	2.49	0.46
8:9:405:THR:O	8:9:409:LYS:HG2	2.16	0.46
17:9:2001:AGS:O2A	17:9:2001:AGS:O1B	2.33	0.46
11:C:513:LEU:HA	11:C:516:ILE:HG12	1.97	0.46
1:2:240:GLU:HA	1:2:293:ILE:HG12	1.97	0.46
1:2:252:SER:C	1:2:253:LYS:HD3	2.36	0.46
1:2:527:VAL:H	1:2:532:SER:HA	1.80	0.46
1:2:816:ILE:O	1:2:819:SER:OG	2.25	0.46
2:3:95:ARG:NH1	2:3:155:LEU:O	2.49	0.46
2:3:340:GLN:NE2	2:3:658:LYS:HG2	2.27	0.46
2:3:507:ASN:ND2	2:3:509:ARG:HH22	2.14	0.46
3:4:386:HIS:CE1	5:6:325:PHE:HB3	2.50	0.46
3:4:467:LYS:HZ2	3:4:470:SER:H	1.62	0.46
4:5:541:ASP:HB3	4:5:543:GLN:NE2	2.31	0.46
5:6:501:GLN:HE22	7:8:463:LEU:H	1.64	0.46
5:6:646:ILE:HA	5:6:649:GLN:HB2	1.98	0.46
6:7:449:LYS:CE	6:7:544:GLN:NE2	2.78	0.46
6:7:525:GLU:HG2	6:7:528:LYS:HB2	1.97	0.46
10:B:358:ILE:HG23	10:B:420:LEU:HA	1.97	0.46
11:C:136:SER:OG	11:C:142:MET:SD	2.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:592:GLU:HG3	11:C:599:PHE:CD2	2.51	0.46
12:E:374:ARG:HH11	12:E:474:PHE:HB2	1.80	0.46
1:2:328:THR:HG21	1:2:331:PHE:HE2	1.79	0.46
3:4:872:VAL:O	3:4:876:GLN:N	2.42	0.46
4:5:176:ALA:O	4:5:194:ILE:HD12	2.15	0.46
5:6:679:LEU:CD2	5:6:680:ALA:H	2.25	0.46
5:6:978:HIS:NE2	12:E:282:LEU:CD2	2.79	0.46
6:7:423:TYR:CB	6:7:625:GLN:HE21	2.17	0.46
8:9:103:SER:O	8:9:284:GLN:HB2	2.16	0.46
8:9:251:LEU:HB2	8:9:252:PRO:HD3	1.97	0.46
11:C:101:CYS:SG	11:C:261:ARG:HG3	2.55	0.46
11:C:528:TYR:CZ	11:C:610:LYS:HB2	2.50	0.46
12:E:222:GLU:O	12:E:223:GLN:C	2.52	0.46
13:D:103:PRO:HA	13:D:252:THR:HG23	1.96	0.46
13:D:394:ALA:HB1	13:D:406:PHE:CE2	2.51	0.46
14:F:328:THR:HA	14:F:331:VAL:HG12	1.97	0.46
15:M:21:DT:H3	16:N:70:DA:H2	1.64	0.46
1:2:209:ARG:HB3	1:2:209:ARG:NH1	2.31	0.46
1:2:233:THR:HA	1:2:236:GLU:HG2	1.96	0.46
2:3:110:PHE:CE2	2:3:114:ILE:HD11	2.50	0.46
3:4:260:GLN:HG3	6:7:135:LYS:NZ	2.30	0.46
4:5:413:LEU:HD11	4:5:550:PHE:HB3	1.98	0.46
4:5:688:THR:HG23	4:5:689:MET:N	2.31	0.46
5:6:759:ARG:O	5:6:812:ARG:NH2	2.49	0.46
6:7:334:HIS:O	6:7:336:ASN:ND2	2.49	0.46
6:7:654:GLU:HA	6:7:657:ASN:HD21	1.81	0.46
9:A:524:CYS:O	9:A:528:LEU:HG	2.15	0.46
9:A:607:ARG:HG3	9:A:608:GLN:OE1	2.16	0.46
10:B:301:PHE:HB3	10:B:333:TYR:CZ	2.50	0.46
11:C:191:PHE:CE2	11:C:199:LEU:HB2	2.51	0.46
11:C:348:ASP:HA	11:C:351:LEU:HD12	1.98	0.46
15:M:12:DA:H61	16:N:78:DT:H3	1.63	0.46
1:2:697:THR:HG23	5:6:774:VAL:HG11	1.98	0.46
1:2:843:ASP:OD1	1:2:844:SER:N	2.49	0.46
2:3:126:GLU:O	2:3:130:THR:HG23	2.16	0.46
2:3:661:GLN:O	2:3:664:LYS:HG2	2.16	0.46
2:3:914:TYR:CE1	2:3:959:TRP:HB2	2.51	0.46
3:4:443:PRO:HD3	3:4:457:TYR:CE2	2.51	0.46
3:4:884:ASN:O	3:4:888:LYS:HG2	2.15	0.46
3:4:887:ILE:HG21	3:4:897:ARG:HE	1.81	0.46
4:5:367:TYR:CE1	4:5:666:LEU:HD22	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:605:ALA:HB2	5:6:648:ASP:CB	2.43	0.46
6:7:73:ARG:HB2	6:7:199:ARG:NH1	2.31	0.46
6:7:434:LEU:HD21	6:7:699:LEU:HD21	1.98	0.46
11:C:412:PHE:CD1	11:C:416:GLU:HG3	2.51	0.46
11:C:528:TYR:O	11:C:610:LYS:NZ	2.33	0.46
12:E:216:ARG:O	12:E:219:ILE:HB	2.16	0.46
13:D:143:ILE:HD12	13:D:181:PHE:CD1	2.51	0.46
13:D:514:ARG:NH1	13:D:527:THR:HG1	2.13	0.46
1:2:761:GLU:HG2	1:2:762:LEU:N	2.31	0.46
1:2:857:LEU:O	1:2:861:PHE:HB2	2.16	0.46
2:3:415:LYS:NZ	2:3:518:PRO:HD3	2.31	0.46
2:3:528:ASP:HB2	2:3:530:HIS:CD2	2.51	0.46
3:4:283:LEU:O	3:4:287:ASN:N	2.47	0.46
5:6:143:MET:SD	5:6:151:ILE:CG2	3.04	0.46
6:7:421:GLU:C	6:7:625:GLN:OE1	2.55	0.46
6:7:529:MET:SD	6:7:534:ARG:HG2	2.56	0.46
7:8:386:PRO:C	7:8:388:ARG:HH21	2.19	0.46
9:A:651:ASP:HA	9:A:677:VAL:HA	1.97	0.46
11:C:124:ARG:HD3	11:C:200:ALA:HB2	1.98	0.46
11:C:243:ASN:HA	12:E:320:GLN:OE1	2.16	0.46
11:C:555:ASN:O	11:C:559:LYS:HB2	2.14	0.46
13:D:64:LEU:HD23	13:D:64:LEU:HA	1.81	0.46
13:D:77:ASP:O	13:D:80:GLN:HB2	2.15	0.46
3:4:308:VAL:N	3:4:327:ASN:HD21	2.14	0.45
3:4:480:THR:O	3:4:482:GLU:N	2.49	0.45
4:5:31:PHE:HZ	4:5:90:PHE:CE1	2.34	0.45
5:6:310:THR:OG1	5:6:345:THR:O	2.32	0.45
5:6:379:VAL:HG23	5:6:454:PHE:HB3	1.98	0.45
5:6:750:GLN:HA	5:6:753:ARG:HG2	1.98	0.45
6:7:200:TYR:HE1	6:7:202:LEU:HB2	1.81	0.45
7:8:201:CYS:SG	7:8:224:GLU:HG3	2.56	0.45
11:C:92:TYR:HD2	11:C:119:LYS:HZ3	1.64	0.45
11:C:366:GLY:HA2	11:C:369:LYS:HE2	1.98	0.45
12:E:37:GLY:O	12:E:43:LYS:NZ	2.40	0.45
12:E:41:THR:HA	12:E:192:TYR:CE2	2.50	0.45
12:E:143:ALA:O	12:E:179:TYR:OH	2.30	0.45
12:E:395:PRO:O	12:E:413:LEU:HD22	2.17	0.45
12:E:426:GLU:O	12:E:429:THR:OG1	2.28	0.45
13:D:218:GLU:OE1	13:D:218:GLU:N	2.49	0.45
1:2:331:PHE:HB2	1:2:385:TYR:HB3	1.98	0.45
2:3:247:TYR:HE1	6:7:12:VAL:HG11	1.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:394:GLU:OE1	2:3:395:ASN:ND2	2.42	0.45
3:4:633:GLU:O	3:4:636:LYS:N	2.49	0.45
3:4:714:GLU:OE2	6:7:669:GLN:HB2	2.16	0.45
3:4:881:MET:HE2	3:4:885:GLU:HG3	1.99	0.45
4:5:87:ILE:O	4:5:91:GLU:HG2	2.15	0.45
4:5:168:SER:OG	4:5:169:THR:N	2.48	0.45
6:7:500:ASP:HB2	6:7:507:ILE:HD11	1.98	0.45
7:8:207:TYR:HE2	7:8:217:ASN:HA	1.81	0.45
8:9:67:GLU:HA	8:9:335:PHE:CE2	2.51	0.45
8:9:236:THR:HG21	16:N:73:DA:H5"	1.99	0.45
9:A:514:ASN:HB3	9:A:517:LYS:HB2	1.97	0.45
9:A:547:GLU:O	9:A:551:LYS:HG2	2.16	0.45
11:C:287:THR:C	11:C:291:LYS:HZ3	2.20	0.45
11:C:405:HIS:ND1	11:C:455:PHE:HB2	2.31	0.45
12:E:197:VAL:HG22	12:E:255:ILE:HD11	1.98	0.45
12:E:325:SER:O	12:E:329:LYS:HG3	2.16	0.45
13:D:180:VAL:O	13:D:184:ILE:HG23	2.16	0.45
14:F:301:LYS:HA	14:F:301:LYS:HD2	1.68	0.45
1:2:221:GLU:O	1:2:222:THR:OG1	2.30	0.45
2:3:46:GLN:HA	2:3:49:ASN:HD22	1.81	0.45
2:3:343:THR:H	2:3:346:ASP:HB2	1.80	0.45
2:3:426:ALA:O	2:3:427:SER:OG	2.24	0.45
5:6:176:ARG:HD3	5:6:177:PHE:CZ	2.51	0.45
5:6:344:TRP:H	5:6:344:TRP:HE3	1.64	0.45
5:6:529:LEU:HA	5:6:529:LEU:HD23	1.70	0.45
5:6:657:GLU:CD	5:6:798:ARG:HE	2.17	0.45
6:7:397:VAL:O	6:7:401:VAL:HG23	2.16	0.45
7:8:205:ILE:HG12	7:8:220:VAL:O	2.17	0.45
7:8:356:VAL:HG12	7:8:357:GLN:H	1.82	0.45
7:8:513:MET:HB2	7:8:561:LEU:HD21	1.98	0.45
8:9:407:ILE:O	8:9:410:LEU:HG	2.16	0.45
10:B:439:THR:O	10:B:442:SER:OG	2.23	0.45
10:B:608:GLU:O	10:B:612:LEU:HG	2.17	0.45
12:E:231:GLN:HA	12:E:234:ASN:HD22	1.81	0.45
12:E:338:CYS:SG	12:E:385:ARG:NH1	2.83	0.45
13:D:118:LEU:HD23	13:D:119:LEU:HD23	1.98	0.45
1:2:201:PRO:HD3	1:2:262:LYS:NZ	2.32	0.45
5:6:144:LYS:HE2	5:6:194:PRO:HD2	1.99	0.45
5:6:816:VAL:HG22	7:8:465:ASN:HB2	1.98	0.45
6:7:317:GLU:OE1	6:7:328:PRO:HB3	2.15	0.45
7:8:44:LEU:HD11	7:8:227:CYS:HB3	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:73:PHE:HB3	7:8:92:TYR:CE1	2.51	0.45
7:8:189:THR:HG22	7:8:206:ARG:HH22	1.68	0.45
7:8:364:LEU:HD12	7:8:368:SER:HA	1.97	0.45
7:8:516:VAL:HG22	7:8:519:ILE:HD12	1.98	0.45
7:8:539:VAL:HG12	7:8:549:ILE:HG23	1.99	0.45
9:A:472:ALA:HB1	9:A:593:LEU:O	2.16	0.45
10:B:487:THR:OG1	10:B:488:VAL:N	2.50	0.45
10:B:493:GLN:HB3	11:C:589:PHE:CE2	2.52	0.45
11:C:151:TYR:HB2	11:C:187:LEU:HD21	1.98	0.45
11:C:154:ALA:O	11:C:158:GLU:CB	2.65	0.45
12:E:44:THR:HG22	12:E:133:ASP:OD1	2.16	0.45
12:E:212:ASP:O	12:E:216:ARG:NH1	2.49	0.45
12:E:433:ILE:HG22	12:E:452:VAL:HG12	1.97	0.45
13:D:288:VAL:HG12	13:D:313:LEU:HD11	1.98	0.45
16:N:71:DC:H2'	16:N:72:DA:C8	2.51	0.45
1:2:306:LEU:HD12	1:2:306:LEU:HA	1.80	0.45
2:3:449:ASP:O	2:3:453:GLY:HA2	2.16	0.45
3:4:418:CYS:SG	3:4:462:ASP:HA	2.56	0.45
3:4:683:ASN:O	3:4:685:ASN:N	2.49	0.45
3:4:705:VAL:O	3:4:832:ALA:HB2	2.16	0.45
4:5:87:ILE:N	4:5:88:PRO:HD2	2.31	0.45
4:5:172:LEU:HA	4:5:254:GLN:HA	1.98	0.45
5:6:914:ASN:O	5:6:918:ARG:HG3	2.16	0.45
6:7:461:ASP:HB3	6:7:462:PRO:HD2	1.98	0.45
6:7:702:LEU:HD23	6:7:702:LEU:HA	1.82	0.45
9:A:484:GLY:O	9:A:488:THR:N	2.48	0.45
11:C:18:ALA:HA	11:C:23:TYR:CE1	2.52	0.45
12:E:110:LYS:HD2	13:D:148:THR:HG21	1.98	0.45
12:E:142:ASP:OD1	12:E:145:LEU:HB2	2.16	0.45
12:E:454:VAL:HB	12:E:458:ILE:HG21	1.97	0.45
1:2:245:ASN:HA	1:2:298:SER:HB3	1.97	0.45
1:2:581:ARG:NH1	5:6:614:ARG:HH22	2.15	0.45
2:3:564:HIS:HA	2:3:567:ARG:HG2	1.98	0.45
3:4:881:MET:O	3:4:924:ARG:N	2.50	0.45
4:5:50:LEU:O	4:5:54:ILE:HG13	2.17	0.45
4:5:202:GLY:O	4:5:328:ILE:N	2.43	0.45
4:5:614:LEU:HB2	4:5:661:GLU:HG2	1.99	0.45
5:6:191:LYS:HB3	5:6:191:LYS:HE2	1.81	0.45
5:6:325:PHE:CG	5:6:326:LYS:N	2.84	0.45
5:6:914:ASN:HD21	13:D:429:VAL:HG22	1.82	0.45
6:7:517:ASP:HA	6:7:561:THR:HG23	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:227:ARG:NH2	9:A:577:ASP:OD1	2.49	0.45
10:B:526:LYS:HZ3	10:B:613:LEU:HG	1.81	0.45
11:C:440:LEU:HA	11:C:443:TRP:HZ3	1.82	0.45
12:E:261:LEU:HD23	12:E:261:LEU:HA	1.79	0.45
13:D:389:ALA:HB2	13:D:523:TYR:HE2	1.80	0.45
1:2:326:ARG:HB3	1:2:592:GLU:HA	1.99	0.45
1:2:592:GLU:OE1	1:2:592:GLU:N	2.50	0.45
1:2:606:ILE:O	1:2:648:ALA:HA	2.17	0.45
1:2:778:LEU:HB2	1:2:783:MET:HE2	1.98	0.45
2:3:197:ILE:HD13	2:3:251:ILE:HD12	1.99	0.45
2:3:495:VAL:HG23	2:3:506:LEU:HB2	1.98	0.45
2:3:900:ILE:HG22	10:B:567:PHE:HZ	1.82	0.45
3:4:434:GLU:HB3	3:4:467:LYS:HB3	1.99	0.45
3:4:900:SER:HA	3:4:903:ILE:HD12	1.99	0.45
4:5:321:VAL:O	4:5:325:THR:OG1	2.30	0.45
5:6:919:LYS:HE3	5:6:939:TRP:CE3	2.52	0.45
7:8:147:HIS:CG	7:8:265:PRO:HA	2.52	0.45
7:8:352:LYS:HD2	7:8:352:LYS:HA	1.75	0.45
10:B:373:ARG:HH22	10:B:398:ASN:HA	1.81	0.45
11:C:369:LYS:HE2	11:C:369:LYS:HB3	1.75	0.45
11:C:480:PHE:HA	12:E:418:ILE:HG21	1.98	0.45
12:E:218:ARG:NH1	12:E:273:ILE:HG12	2.31	0.45
13:D:219:ILE:HG22	13:D:251:THR:HB	1.98	0.45
3:4:204:LYS:O	3:4:205:PHE:C	2.53	0.45
3:4:228:LYS:NZ	3:4:232:GLU:OE1	2.49	0.45
3:4:653:THR:HA	3:4:666:ASN:HA	1.98	0.45
4:5:487:ASP:HA	4:5:490:ARG:HG2	1.99	0.45
5:6:356:TRP:CE3	5:6:356:TRP:O	2.70	0.45
5:6:790:ARG:NH1	12:E:475:SER:HA	2.31	0.45
6:7:211:CYS:SG	6:7:214:ARG:NH1	2.89	0.45
7:8:568:ASP:HB3	7:8:581:TYR:HE2	1.82	0.45
8:9:278:ASP:O	8:9:279:ARG:HD3	2.16	0.45
9:A:854:SER:O	9:A:854:SER:OG	2.33	0.45
9:A:897:SER:HB3	9:A:900:GLU:HG2	1.98	0.45
10:B:319:VAL:O	10:B:481:SER:HA	2.17	0.45
10:B:435:ASN:HB3	12:E:440:ASN:OD1	2.17	0.45
11:C:334:PHE:CD2	11:C:465:LEU:HB3	2.50	0.45
13:D:189:ASP:HA	13:D:241:SER:HB2	1.99	0.45
13:D:327:ASN:OD1	13:D:331:PHE:HB2	2.17	0.45
1:2:208:ALA:HA	1:2:211:LEU:HG	1.98	0.45
1:2:362:SER:N	5:6:343:PHE:CE2	2.85	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:792:ASP:O	1:2:796:GLU:HG2	2.17	0.45
3:4:249:LEU:HB2	3:4:258:TYR:CD1	2.52	0.45
4:5:467:GLY:H	4:5:470:VAL:HG23	1.80	0.45
9:A:583:PHE:CE2	9:A:617:ILE:HG12	2.51	0.45
12:E:193:ASN:N	12:E:196:GLU:OE2	2.32	0.45
12:E:298:ASN:ND2	13:D:454:LYS:HD2	2.32	0.45
13:D:226:VAL:HG22	13:D:227:ARG:HG2	1.97	0.45
1:2:285:ASP:O	1:2:289:ILE:HG12	2.17	0.45
1:2:553:LEU:HB2	1:2:605:LEU:HD23	1.99	0.45
2:3:225:ILE:O	2:3:227:THR:N	2.50	0.45
2:3:247:TYR:CE2	6:7:109:ASN:HB2	2.52	0.45
2:3:557:ARG:NH1	2:3:561:ILE:HG12	2.32	0.45
3:4:709:LEU:HD23	3:4:709:LEU:HA	1.85	0.45
9:A:432:SER:O	9:A:432:SER:OG	2.35	0.45
11:C:286:ASP:OD1	11:C:407:LYS:HD3	2.17	0.45
11:C:490:ASN:OD1	14:F:401:LYS:NZ	2.48	0.45
11:C:550:LYS:HG3	11:C:576:PHE:HB2	1.99	0.45
12:E:229:ASP:OD1	12:E:229:ASP:N	2.50	0.45
13:D:390:ILE:HD13	13:D:390:ILE:HA	1.87	0.45
1:2:477:THR:HA	7:8:354:LYS:HB3	1.99	0.44
2:3:294:VAL:HA	2:3:325:THR:O	2.17	0.44
2:3:403:ILE:HD11	2:3:707:ARG:HB3	1.98	0.44
2:3:474:GLU:OE2	2:3:517:ASN:ND2	2.51	0.44
3:4:222:GLU:HG3	3:4:222:GLU:O	2.17	0.44
3:4:879:ASP:O	3:4:925:ARG:HA	2.17	0.44
4:5:395:GLY:HA2	4:5:662:SER:HB2	1.99	0.44
5:6:764:ILE:HG22	5:6:765:LEU:N	2.32	0.44
5:6:908:LYS:O	5:6:912:MET:HG2	2.18	0.44
6:7:341:ARG:O	6:7:341:ARG:CG	2.65	0.44
6:7:476:ILE:O	6:7:639:ARG:NE	2.50	0.44
6:7:727:LEU:HD23	6:7:727:LEU:H	1.82	0.44
7:8:62:THR:HG23	7:8:64:LYS:HE2	1.99	0.44
7:8:530:THR:OG1	7:8:531:GLU:N	2.50	0.44
9:A:613:ILE:HD13	9:A:616:ARG:NH2	2.33	0.44
9:A:819:GLU:O	9:A:819:GLU:HG3	2.17	0.44
11:C:557:ILE:HG13	11:C:570:ALA:HB2	1.99	0.44
12:E:231:GLN:NE2	12:E:278:ILE:O	2.51	0.44
13:D:62:GLY:O	13:D:69:LYS:HE2	2.17	0.44
13:D:77:ASP:OD1	13:D:78:CYS:N	2.47	0.44
16:N:70:DA:H2"	16:N:71:DC:C6	2.52	0.44
1:2:493:ILE:HG13	1:2:494:ILE:N	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:659:SER:OG	1:2:661:LEU:HG	2.17	0.44
1:2:842:VAL:O	1:2:846:VAL:HG23	2.17	0.44
5:6:150:THR:HG22	5:6:264:GLN:N	2.19	0.44
5:6:685:VAL:HG13	5:6:686:GLY:N	2.32	0.44
6:7:103:VAL:O	6:7:107:GLN:HG2	2.17	0.44
6:7:597:LEU:HD22	6:7:681:PHE:CZ	2.50	0.44
7:8:254:ARG:NH2	7:8:258:VAL:H	2.16	0.44
7:8:296:GLN:HG2	7:8:299:PRO:HD3	1.98	0.44
7:8:318:PHE:HA	7:8:321:CYS:SG	2.58	0.44
7:8:543:GLN:O	7:8:548:PRO:HA	2.18	0.44
11:C:188:VAL:O	11:C:191:PHE:HB3	2.17	0.44
12:E:247:PHE:HE1	12:E:295:THR:HG22	1.80	0.44
12:E:447:LYS:O	12:E:448:VAL:CG2	2.66	0.44
1:2:429:ILE:HG12	1:2:452:GLU:HB3	1.98	0.44
1:2:535:GLY:HA2	1:2:815:ARG:HD2	1.99	0.44
3:4:814:LYS:NZ	3:4:818:GLU:OE2	2.42	0.44
4:5:304:LYS:HD3	4:5:304:LYS:HA	1.62	0.44
6:7:527:ASP:OD1	6:7:528:LYS:HD2	2.18	0.44
8:9:61:LEU:O	8:9:65:SER:OG	2.24	0.44
8:9:311:ILE:HG13	8:9:312:PHE:N	2.22	0.44
10:B:270:THR:HG23	10:B:272:GLU:HG2	2.00	0.44
10:B:433:ARG:HH21	12:E:441:ILE:HD11	1.82	0.44
11:C:351:LEU:O	11:C:354:LEU:HG	2.17	0.44
12:E:240:ILE:O	12:E:244:VAL:HG12	2.17	0.44
13:D:60:LEU:O	13:D:338:LYS:HD3	2.17	0.44
14:F:302:ILE:HA	14:F:305:GLU:OE2	2.17	0.44
1:2:217:GLU:H	1:2:217:GLU:CD	2.19	0.44
1:2:520:PHE:HA	1:2:767:ILE:CD1	2.47	0.44
1:2:788:ARG:HH12	14:F:316:PRO:HD3	1.81	0.44
2:3:400:ARG:HB3	2:3:707:ARG:HH21	1.82	0.44
3:4:333:LEU:HD23	3:4:333:LEU:HA	1.81	0.44
3:4:795:THR:HG21	17:6:1101:AGS:C8	2.48	0.44
3:4:864:ASP:OD2	3:4:865:LEU:N	2.50	0.44
4:5:174:SER:HB2	4:5:250:PHE:HD1	1.81	0.44
5:6:912:MET:HA	5:6:940:TYR:OH	2.17	0.44
6:7:354:ILE:O	6:7:376:LEU:HD12	2.18	0.44
7:8:573:GLN:HB2	7:8:578:LEU:HG	1.98	0.44
8:9:103:SER:HA	8:9:281:LEU:HD12	1.99	0.44
12:E:33:LEU:HA	12:E:33:LEU:HD12	1.78	0.44
13:D:79:GLN:HA	13:D:82:ILE:HB	1.99	0.44
13:D:463:LEU:HD23	13:D:463:LEU:HA	1.66	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:D:527:THR:OG1	13:D:528:GLN:N	2.50	0.44
14:F:320:VAL:O	14:F:324:VAL:HG22	2.17	0.44
1:2:484:PHE:CE1	1:2:766:TYR:HA	2.52	0.44
1:2:579:SER:OG	1:2:592:GLU:OE2	2.35	0.44
1:2:625:GLU:HB3	1:2:676:ARG:CZ	2.47	0.44
1:2:707:HIS:CE1	5:6:557:LYS:HZ1	2.35	0.44
1:2:819:SER:O	1:2:823:MET:HG2	2.18	0.44
2:3:198:ARG:HB3	2:3:249:THR:OG1	2.17	0.44
2:3:708:LEU:HD21	2:3:732:LEU:HD12	1.99	0.44
3:4:651:GLN:HG3	5:6:586:LYS:NZ	2.32	0.44
3:4:911:GLN:NE2	3:4:918:VAL:H	2.11	0.44
4:5:469:MET:HG3	4:5:502:ILE:CG1	2.47	0.44
4:5:572:VAL:HG22	4:5:576:HIS:CE1	2.51	0.44
5:6:568:ASP:OD1	5:6:569:ILE:N	2.46	0.44
5:6:712:PHE:O	5:6:713:PHE:HD1	1.98	0.44
6:7:593:ARG:HG2	6:7:687:ARG:NH1	2.33	0.44
7:8:37:LEU:HA	7:8:41:ASP:H	1.81	0.44
7:8:112:CYS:HA	7:8:115:TYR:HB3	1.99	0.44
8:9:284:GLN:N	8:9:284:GLN:OE1	2.51	0.44
9:A:836:ASN:HB2	9:A:842:VAL:HG21	1.99	0.44
10:B:286:GLN:C	10:B:290:ARG:HE	2.21	0.44
11:C:188:VAL:O	11:C:191:PHE:CB	2.65	0.44
11:C:283:SER:O	11:C:287:THR:HG23	2.18	0.44
13:D:154:LEU:O	13:D:157:ILE:HG22	2.18	0.44
1:2:437:ASN:HB3	1:2:439:ASN:HD21	1.82	0.44
2:3:351:ASN:O	2:3:355:LYS:HG3	2.18	0.44
2:3:507:ASN:ND2	6:7:324:VAL:HB	2.33	0.44
4:5:59:TYR:HB3	4:5:135:PHE:CD1	2.52	0.44
5:6:537:VAL:HG11	5:6:584:PHE:CZ	2.53	0.44
5:6:787:GLY:C	12:E:374:ARG:HH22	2.21	0.44
6:7:747:ILE:HA	6:7:750:LYS:HE2	1.98	0.44
7:8:89:LEU:HD13	7:8:155:TYR:CE1	2.53	0.44
7:8:123:LEU:HA	7:8:140:GLN:HE22	1.83	0.44
8:9:406:ARG:HG2	8:9:504:LYS:HE2	2.00	0.44
9:A:797:LEU:HB3	9:A:801:ALA:HB3	2.00	0.44
9:A:873:LEU:HA	9:A:873:LEU:HD23	1.80	0.44
10:B:573:ILE:HG13	10:B:574:ALA:H	1.81	0.44
12:E:190:PRO:HB3	13:D:373:SER:OG	2.16	0.44
1:2:242:LEU:C	1:2:296:ARG:HH21	2.21	0.44
1:2:437:ASN:HB3	1:2:439:ASN:ND2	2.32	0.44
1:2:540:LEU:HB2	1:2:677:PHE:CG	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:662:PRO:HG2	1:2:665:GLN:HB3	1.99	0.44
2:3:375:ASP:O	2:3:379:LYS:HG2	2.17	0.44
2:3:415:LYS:HZ3	2:3:518:PRO:HD3	1.83	0.44
2:3:478:MET:HE3	2:3:483:ARG:HE	1.83	0.44
3:4:400:GLN:HE21	3:4:412:PRO:HG2	1.83	0.44
3:4:521:LEU:HA	3:4:524:ARG:NE	2.31	0.44
3:4:581:VAL:O	3:4:584:ILE:N	2.50	0.44
3:4:682:TYR:HA	3:4:691:ASN:HD21	1.83	0.44
4:5:178:TYR:CG	4:5:193:THR:HG22	2.52	0.44
4:5:612:PRO:HG2	4:5:665:LYS:HD3	1.99	0.44
5:6:570:ASN:ND2	5:6:678:ILE:H	2.11	0.44
6:7:338:THR:O	6:7:338:THR:CG2	2.64	0.44
8:9:116:ALA:O	8:9:120:MET:HG2	2.18	0.44
8:9:346:GLU:O	8:9:349:LYS:HD3	2.17	0.44
9:A:508:PHE:HA	9:A:561:ILE:HG22	1.99	0.44
9:A:716:ILE:O	9:A:719:LYS:HG2	2.17	0.44
9:A:725:HIS:HB2	9:A:727:TYR:CE2	2.53	0.44
10:B:285:PHE:CD2	10:B:286:GLN:HG3	2.53	0.44
10:B:401:ILE:O	10:B:404:ILE:HG22	2.18	0.44
11:C:130:GLU:H	11:C:149:LYS:NZ	2.16	0.44
13:D:157:ILE:HG23	13:D:158:HIS:CD2	2.52	0.44
16:N:55:DC:C2	16:N:56:DA:C8	3.06	0.44
1:2:247:ARG:NH1	1:2:299:ASP:OD2	2.42	0.44
1:2:443:GLY:CA	5:6:327:TYR:HB2	2.47	0.44
2:3:562:SER:HA	2:3:565:VAL:HG12	2.00	0.44
3:4:198:LEU:O	3:4:226:TYR:HD2	1.95	0.44
3:4:365:ILE:HG13	5:6:418:SER:O	2.18	0.44
4:5:196:ASN:HD22	4:5:199:SER:HB2	1.82	0.44
4:5:457:PRO:HA	4:5:460:ARG:HA	2.00	0.44
4:5:626:PHE:CE1	4:5:649:THR:HB	2.52	0.44
5:6:918:ARG:HH21	13:D:441:THR:HA	1.83	0.44
7:8:96:THR:HG21	7:8:147:HIS:CD2	2.52	0.44
9:A:464:TYR:CE1	9:A:468:GLU:HG3	2.52	0.44
10:B:312:PHE:HA	10:B:474:ASN:OD1	2.18	0.44
10:B:486:SER:HB3	10:B:489:GLU:HB2	2.00	0.44
11:C:90:LEU:HD21	11:C:264:HIS:CG	2.53	0.44
12:E:146:PHE:CE1	12:E:170:MET:HE1	2.52	0.44
13:D:387:GLU:HG2	13:D:459:VAL:HG13	1.99	0.44
14:F:341:ARG:HH12	14:F:424:ARG:HG2	1.82	0.44
1:2:244:VAL:N	1:2:296:ARG:O	2.51	0.44
1:2:331:PHE:CE1	1:2:588:GLU:CG	3.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:477:THR:N	1:2:480:GLU:OE1	2.42	0.44
1:2:596:LEU:CD1	1:2:623:ALA:CB	2.96	0.44
2:3:419:LEU:HD21	2:3:473:ASP:HB3	1.99	0.44
3:4:427:CYS:SG	3:4:433:ILE:HG21	2.58	0.44
3:4:650:GLU:HB2	3:4:701:ARG:NE	2.32	0.44
6:7:330:SER:OG	6:7:331:LEU:N	2.51	0.44
7:8:150:THR:O	7:8:151:LYS:HE2	2.18	0.44
7:8:254:ARG:HH22	7:8:258:VAL:H	1.66	0.44
8:9:116:ALA:HA	8:9:119:ASP:HB2	1.99	0.44
8:9:233:THR:CG2	16:N:73:DA:OP1	2.33	0.44
8:9:431:ALA:HB3	8:9:489:ILE:HG12	2.00	0.44
9:A:406:PHE:HB2	13:D:187:LEU:HG	1.98	0.44
9:A:478:ALA:HB3	9:A:602:MET:SD	2.57	0.44
9:A:574:LYS:HG3	9:A:575:SER:H	1.82	0.44
9:A:607:ARG:HG3	9:A:608:GLN:CD	2.38	0.44
10:B:304:TYR:HD1	10:B:314:LEU:HD21	1.82	0.44
10:B:314:LEU:HG	10:B:316:PHE:CE1	2.53	0.44
10:B:547:ARG:CA	10:B:606:TYR:H	2.31	0.44
11:C:248:GLU:HA	11:C:256:ILE:HD11	2.00	0.44
11:C:454:HIS:NE2	11:C:456:GLU:HG2	2.33	0.44
13:D:388:LEU:HD12	13:D:388:LEU:HA	1.75	0.44
15:M:31:DG:H2'	15:M:32:DC:O4'	2.18	0.44
1:2:224:ARG:NH1	7:8:243:MET:O	2.48	0.43
1:2:657:TYR:HD2	1:2:684:ARG:HD3	1.83	0.43
2:3:250:PHE:HB2	6:7:232:GLY:O	2.18	0.43
2:3:416:SER:HB2	2:3:420:ARG:NH1	2.30	0.43
2:3:433:THR:H	2:3:437:SER:CB	2.30	0.43
3:4:473:ARG:HG2	3:4:668:ARG:HH22	1.83	0.43
3:4:575:SER:OG	17:4:2001:AGS:O2A	2.24	0.43
3:4:798:LEU:O	3:4:802:ILE:HG22	2.18	0.43
4:5:181:ILE:CG2	4:5:241:TYR:HB3	2.48	0.43
4:5:298:TYR:CG	4:5:299:SER:N	2.86	0.43
4:5:446:ALA:CB	4:5:465:GLU:OE2	2.55	0.43
5:6:149:ASN:O	5:6:150:THR:HG23	2.18	0.43
5:6:302:PRO:HA	5:6:355:ASP:HA	2.00	0.43
5:6:322:GLU:CD	5:6:328:THR:HG22	2.39	0.43
5:6:501:GLN:CD	7:8:462:TYR:CD1	2.91	0.43
5:6:978:HIS:CD2	5:6:978:HIS:N	2.86	0.43
7:8:482:ASN:O	7:8:485:ASP:CB	2.62	0.43
7:8:568:ASP:OD2	7:8:584:ASN:HB2	2.18	0.43
8:9:106:ILE:HG23	8:9:288:PHE:HE2	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:291:TYR:HD2	8:9:296:MET:HE2	1.83	0.43
8:9:505:ILE:HG13	8:9:505:ILE:O	2.18	0.43
9:A:427:LYS:NZ	9:A:718:GLU:OE1	2.50	0.43
9:A:484:GLY:N	17:A:2001:AGS:O2A	2.48	0.43
11:C:99:ARG:HD3	11:C:99:ARG:HA	1.57	0.43
11:C:209:ASP:OD1	11:C:209:ASP:N	2.51	0.43
12:E:51:PHE:CD1	12:E:57:LEU:HD11	2.53	0.43
13:D:304:GLN:HA	13:D:307:GLU:CD	2.39	0.43
13:D:519:LYS:HE2	13:D:519:LYS:HB2	1.89	0.43
16:N:74:DT:H73	16:N:74:DT:OP2	2.18	0.43
2:3:185:ILE:HG12	2:3:291:ARG:HG2	1.99	0.43
2:3:389:VAL:HG11	2:3:710:THR:HB	1.99	0.43
2:3:529:PRO:HA	2:3:532:ASN:HB2	2.00	0.43
2:3:672:THR:HG23	2:3:721:VAL:H	1.83	0.43
2:3:920:PHE:HA	2:3:923:ILE:HG12	1.99	0.43
3:4:225:TYR:O	3:4:228:LYS:HB3	2.18	0.43
3:4:383:SER:OG	3:4:384:LEU:N	2.52	0.43
3:4:388:ARG:HH12	5:6:176:ARG:HD2	1.84	0.43
3:4:561:ASP:O	3:4:803:ARG:NH2	2.51	0.43
3:4:758:ILE:O	3:4:810:LYS:NZ	2.51	0.43
3:4:878:SER:O	3:4:880:SER:N	2.51	0.43
4:5:35:ILE:HA	4:5:38:PHE:CD2	2.53	0.43
4:5:265:VAL:HB	4:5:266:PRO:HD3	2.00	0.43
4:5:655:ALA:O	4:5:659:ILE:HG12	2.17	0.43
7:8:235:LEU:HD13	7:8:279:ALA:HB2	2.00	0.43
9:A:497:LEU:HA	9:A:508:PHE:CZ	2.53	0.43
13:D:138:SER:N	13:D:141:THR:OG1	2.51	0.43
1:2:574:VAL:HG13	1:2:579:SER:CB	2.47	0.43
2:3:244:GLU:HA	6:7:109:ASN:HD21	1.82	0.43
3:4:282:SER:HA	3:4:285:VAL:HG22	2.01	0.43
3:4:562:ILE:HG22	3:4:803:ARG:NH2	2.32	0.43
3:4:665:LEU:HD13	5:6:373:MET:HE3	2.00	0.43
3:4:760:PRO:HA	3:4:815:ASN:O	2.19	0.43
4:5:96:GLN:HA	4:5:99:LYS:HD2	2.00	0.43
4:5:181:ILE:HG12	4:5:230:GLU:OE2	2.18	0.43
4:5:615:SER:HB2	4:5:617:GLN:OE1	2.19	0.43
5:6:327:TYR:OH	5:6:329:GLU:OE1	2.21	0.43
5:6:408:THR:O	5:6:408:THR:CG2	2.65	0.43
7:8:98:PRO:HG2	7:8:145:THR:O	2.17	0.43
7:8:292:LYS:NZ	7:8:294:ALA:HB2	2.34	0.43
7:8:365:THR:OG1	7:8:442:VAL:N	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:474:THR:HA	9:A:595:VAL:HG23	2.00	0.43
10:B:324:ASN:OD1	10:B:325:PHE:N	2.49	0.43
11:C:447:LYS:HA	11:C:450:LYS:HD3	1.99	0.43
12:E:224:ILE:O	12:E:225:THR:C	2.56	0.43
12:E:325:SER:O	12:E:328:SER:OG	2.21	0.43
15:M:16:DA:C2	15:M:17:DT:C2	3.06	0.43
1:2:695:LEU:O	1:2:699:VAL:HG23	2.18	0.43
1:2:762:LEU:HD23	1:2:762:LEU:HA	1.87	0.43
2:3:247:TYR:N	6:7:108:GLN:HB3	2.33	0.43
2:3:493:GLN:OE1	6:7:471:LYS:NZ	2.48	0.43
2:3:556:ILE:HG13	2:3:557:ARG:N	2.34	0.43
2:3:682:ASN:O	2:3:686:LEU:HG	2.19	0.43
3:4:235:GLU:CD	7:8:572:HIS:HE2	2.16	0.43
3:4:699:LEU:HD22	3:4:791:ILE:HD13	1.99	0.43
3:4:746:PHE:O	3:4:749:MET:HG2	2.18	0.43
5:6:145:ILE:O	7:8:334:THR:OG1	2.36	0.43
5:6:543:VAL:O	5:6:546:GLY:N	2.51	0.43
5:6:556:HIS:N	5:6:567:GLY:HA3	2.33	0.43
5:6:591:PHE:CE1	5:6:752:ARG:HG3	2.54	0.43
5:6:685:VAL:HG13	5:6:686:GLY:H	1.84	0.43
5:6:920:ILE:HG12	5:6:931:LEU:HD23	2.01	0.43
6:7:486:LYS:HD2	6:7:486:LYS:HA	1.70	0.43
6:7:615:HIS:HA	6:7:618:TYR:HB3	2.00	0.43
7:8:590:ARG:HA	7:8:593:LYS:NZ	2.34	0.43
8:9:268:LYS:HA	8:9:271:PHE:CD2	2.53	0.43
17:9:2001:AGS:S1G	9:A:616:ARG:NH1	2.91	0.43
9:A:422:ILE:O	9:A:426:VAL:HG23	2.18	0.43
9:A:517:LYS:HA	13:D:233:ASN:HD21	1.82	0.43
10:B:462:PRO:HA	10:B:465:TRP:CZ3	2.53	0.43
11:C:339:ASP:OD1	11:C:339:ASP:N	2.50	0.43
12:E:195:ASP:O	12:E:198:SER:OG	2.28	0.43
12:E:330:TYR:CZ	12:E:395:PRO:HD3	2.54	0.43
12:E:330:TYR:CE1	12:E:395:PRO:HD3	2.53	0.43
15:M:14:DG:C4	15:M:15:DT:C5	3.05	0.43
1:2:806:THR:OG1	1:2:807:VAL:N	2.51	0.43
3:4:259:HIS:HB2	6:7:135:LYS:NZ	2.34	0.43
3:4:618:SER:CB	6:7:552:GLY:C	2.87	0.43
4:5:450:THR:HG23	4:5:504:ILE:CB	2.47	0.43
4:5:490:ARG:O	4:5:493:ILE:HG22	2.19	0.43
5:6:580:SER:HA	17:6:1101:AGS:O1A	2.19	0.43
5:6:719:CYS:SG	13:D:528:GLN:NE2	2.92	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:26:VAL:HG23	6:7:63:TYR:HB2	1.99	0.43
6:7:615:HIS:HE1	6:7:625:GLN:HG3	1.84	0.43
7:8:245:THR:OG1	7:8:246:THR:N	2.52	0.43
7:8:581:TYR:CE2	7:8:583:TRP:HA	2.53	0.43
8:9:233:THR:CB	16:N:72:DA:O3'	2.61	0.43
11:C:297:ARG:HE	11:C:297:ARG:HB3	1.57	0.43
12:E:147:ASN:OD1	12:E:147:ASN:N	2.51	0.43
13:D:357:ALA:O	13:D:361:CYS:N	2.24	0.43
1:2:212:LYS:HD2	1:2:215:LEU:HD13	2.01	0.43
1:2:335:LYS:HD3	1:2:383:ARG:NH2	2.34	0.43
1:2:603:VAL:HG12	1:2:645:SER:OG	2.18	0.43
2:3:139:VAL:HB	2:3:140:PRO:HD3	1.99	0.43
2:3:432:THR:O	2:3:473:ASP:N	2.52	0.43
3:4:268:VAL:HA	3:4:271:ILE:HG22	1.99	0.43
3:4:290:ASP:OD2	3:4:291:TYR:CD2	2.69	0.43
3:4:469:VAL:O	3:4:470:SER:OG	2.35	0.43
3:4:747:LEU:O	3:4:751:ILE:HG13	2.18	0.43
4:5:230:GLU:OE2	4:5:243:ILE:HG12	2.19	0.43
6:7:16:ASN:HA	6:7:19:ASN:HD22	1.83	0.43
7:8:41:ASP:HB3	7:8:245:THR:HG22	2.00	0.43
7:8:203:LYS:HZ1	7:8:222:ILE:N	2.16	0.43
7:8:298:TYR:O	7:8:302:LEU:HG	2.19	0.43
7:8:561:LEU:HD23	7:8:561:LEU:HA	1.79	0.43
8:9:484:ARG:HD3	8:9:484:ARG:HA	1.65	0.43
10:B:286:GLN:HA	11:C:514:ASP:OD2	2.19	0.43
10:B:300:MET:O	10:B:303:GLN:HB3	2.18	0.43
10:B:529:ILE:O	10:B:533:MET:HB2	2.18	0.43
11:C:92:TYR:CE2	11:C:119:LYS:HD3	2.54	0.43
13:D:379:ARG:NH1	13:D:467:ASP:HB3	2.30	0.43
14:F:281:THR:N	14:F:284:GLU:HB3	2.34	0.43
1:2:214:PHE:HB2	1:2:253:LYS:NZ	2.33	0.43
1:2:301:PRO:O	1:2:303:ILE:HG12	2.19	0.43
1:2:598:LEU:HD12	1:2:598:LEU:HA	1.84	0.43
1:2:838:ILE:O	1:2:842:VAL:HG12	2.18	0.43
2:3:165:ALA:HB3	2:3:181:SER:O	2.18	0.43
2:3:169:ARG:HG2	2:3:260:GLU:OE2	2.18	0.43
3:4:898:VAL:HG12	3:4:899:GLU:N	2.33	0.43
4:5:42:SER:OG	4:5:43:GLN:N	2.52	0.43
4:5:136:GLN:HE21	4:5:197:PHE:HD1	1.67	0.43
5:6:276:ILE:HG12	5:6:363:GLU:OE1	2.19	0.43
5:6:977:ILE:HG22	5:6:978:HIS:N	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:615:HIS:O	6:7:619:VAL:HG23	2.19	0.43
7:8:570:SER:N	7:8:581:TYR:HB3	2.28	0.43
8:9:328:THR:HG23	8:9:330:ASP:OD1	2.19	0.43
9:A:497:LEU:HA	9:A:508:PHE:HZ	1.84	0.43
9:A:593:LEU:HD12	9:A:593:LEU:HA	1.92	0.43
9:A:879:LEU:HD12	9:A:879:LEU:HA	1.66	0.43
11:C:103:ASN:HA	11:C:262:ASN:OD1	2.18	0.43
11:C:412:PHE:O	11:C:416:GLU:N	2.50	0.43
11:C:584:PHE:O	11:C:588:ILE:HG22	2.18	0.43
12:E:231:GLN:NE2	12:E:278:ILE:HG22	2.31	0.43
12:E:232:PHE:HA	12:E:235:VAL:HG12	2.01	0.43
12:E:342:GLU:H	12:E:342:GLU:CD	2.21	0.43
13:D:338:LYS:HE3	13:D:338:LYS:HB2	1.83	0.43
15:M:42:DT:H6	15:M:42:DT:H2'	1.71	0.43
2:3:235:ASP:OD2	2:3:236:THR:OG1	2.37	0.43
3:4:473:ARG:HG2	3:4:668:ARG:NH2	2.32	0.43
3:4:529:SER:HB3	3:4:736:ILE:HD13	2.00	0.43
3:4:783:ASP:OD1	3:4:784:SER:N	2.52	0.43
4:5:87:ILE:HA	4:5:90:PHE:CD1	2.54	0.43
4:5:91:GLU:CD	4:5:137:LEU:H	2.17	0.43
5:6:518:GLU:CD	7:8:501:ARG:HH11	2.22	0.43
6:7:404:LEU:HD13	6:7:641:TYR:HB2	2.01	0.43
6:7:513:LEU:O	6:7:516:ALA:HB3	2.18	0.43
7:8:145:THR:HG23	7:8:147:HIS:HB2	2.00	0.43
8:9:237:GLN:OE1	8:9:240:ARG:NE	2.50	0.43
8:9:294:GLU:O	8:9:298:GLU:HG2	2.19	0.43
8:9:410:LEU:HD23	8:9:410:LEU:HA	1.82	0.43
10:B:326:LEU:HD12	10:B:326:LEU:HA	1.90	0.43
12:E:148:LYS:HE2	12:E:148:LYS:HB2	1.90	0.43
12:E:217:LYS:HB3	12:E:221:GLU:OE2	2.18	0.43
16:N:52:DC:H2''	16:N:53:DT:C5	2.54	0.43
1:2:260:LEU:C	1:2:264:PRO:HB3	2.39	0.43
1:2:324:VAL:HG13	1:2:388:VAL:HG13	2.01	0.43
2:3:21:PHE:O	2:3:25:VAL:HG23	2.19	0.43
2:3:122:ILE:HD13	2:3:157:PHE:CZ	2.54	0.43
2:3:683:TYR:HD1	2:3:686:LEU:HD12	1.83	0.43
3:4:236:LEU:HD23	7:8:579:LYS:HD3	1.98	0.43
4:5:169:THR:O	4:5:256:LEU:HA	2.19	0.43
4:5:335:SER:HB2	4:5:339:THR:O	2.19	0.43
5:6:571:ILE:HG22	5:6:711:LEU:HG	2.01	0.43
5:6:585:LEU:HD11	5:6:679:LEU:CD2	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:780:LEU:HD12	5:6:828:TYR:CD1	2.54	0.43
6:7:111:ASN:OD1	6:7:354:ILE:HD13	2.18	0.43
6:7:419:ALA:HB3	6:7:429:LYS:HE2	2.00	0.43
6:7:527:ASP:OD1	6:7:527:ASP:N	2.51	0.43
7:8:479:SER:OG	7:8:482:ASN:HB2	2.19	0.43
7:8:531:GLU:HB2	7:8:578:LEU:O	2.19	0.43
9:A:572:VAL:HG12	9:A:579:MET:HB2	2.00	0.43
9:A:886:ASN:ND2	9:A:889:ILE:HG12	2.33	0.43
11:C:189:GLU:OE1	11:C:189:GLU:N	2.50	0.43
12:E:336:TYR:HH	12:E:456:TRP:HD1	1.61	0.43
13:D:105:GLN:HE22	17:D:2001:AGS:H3'	1.83	0.43
14:F:294:LEU:HD11	14:F:328:THR:HG22	1.99	0.43
1:2:750:LYS:O	1:2:754:GLU:HG3	2.19	0.43
2:3:425:THR:OG1	2:3:426:ALA:N	2.52	0.43
3:4:568:GLY:HA3	3:4:708:VAL:O	2.19	0.43
3:4:685:ASN:HA	3:4:841:LYS:HD2	2.01	0.43
4:5:31:PHE:CD1	4:5:75:ILE:HD13	2.54	0.43
4:5:87:ILE:HD11	4:5:199:SER:OG	2.19	0.43
4:5:91:GLU:O	4:5:95:THR:HG22	2.19	0.43
5:6:122:PHE:HB2	5:6:133:GLU:O	2.19	0.43
5:6:134:LYS:HB3	5:6:137:ARG:HD3	2.01	0.43
5:6:354:LEU:CD2	5:6:383:GLY:HA2	2.49	0.43
5:6:627:ALA:O	5:6:631:ALA:HB2	2.19	0.43
5:6:652:ILE:O	5:6:655:ALA:N	2.46	0.43
6:7:76:ASN:HB3	6:7:200:TYR:HA	2.01	0.43
6:7:356:LEU:HB2	6:7:375:TYR:CE1	2.54	0.43
6:7:537:ILE:O	6:7:540:VAL:HB	2.19	0.43
7:8:274:GLY:HA2	7:8:277:THR:OG1	2.19	0.43
7:8:312:LYS:HE2	7:8:312:LYS:HB2	1.86	0.43
7:8:381:LEU:HD23	7:8:381:LEU:H	1.84	0.43
7:8:497:LEU:O	7:8:500:GLN:HB3	2.19	0.43
8:9:334:LEU:HD11	8:9:394:PHE:CZ	2.54	0.43
8:9:433:ILE:O	8:9:437:PHE:CB	2.67	0.43
8:9:446:LYS:HE3	8:9:447:THR:HG23	2.00	0.43
10:B:266:ALA:HB1	11:C:581:LEU:HD22	2.01	0.43
10:B:364:ASN:HD22	10:B:366:TYR:HE2	1.66	0.43
12:E:22:ILE:HG12	12:E:129:PHE:HE1	1.83	0.43
12:E:36:GLN:HB3	12:E:188:MET:SD	2.59	0.43
12:E:69:SER:OG	12:E:70:TRP:N	2.52	0.43
12:E:127:CYS:SG	12:E:129:PHE:HE2	2.42	0.43
13:D:181:PHE:O	13:D:184:ILE:HG12	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:D:297:GLU:OE2	13:D:300:PRO:HA	2.19	0.43
15:M:30:DT:H6	15:M:30:DT:H2'	1.71	0.43
1:2:362:SER:N	5:6:343:PHE:HE2	2.17	0.42
1:2:426:VAL:HG12	1:2:428:GLY:H	1.83	0.42
1:2:476:TRP:HB2	1:2:480:GLU:OE1	2.19	0.42
1:2:778:LEU:HD21	4:5:576:HIS:CE1	2.53	0.42
2:3:263:GLU:OE1	2:3:291:ARG:NH2	2.52	0.42
2:3:557:ARG:HD2	2:3:557:ARG:HA	1.75	0.42
3:4:347:PHE:CE1	3:4:384:LEU:HD12	2.54	0.42
3:4:427:CYS:SG	3:4:466:VAL:HG11	2.59	0.42
3:4:649:MET:HE1	3:4:702:PHE:CE1	2.54	0.42
3:4:854:LYS:HE2	3:4:859:ARG:HE	1.84	0.42
4:5:324:ARG:O	4:5:326:PRO:HD3	2.19	0.42
5:6:625:ALA:O	5:6:629:MET:HB2	2.19	0.42
5:6:788:PHE:O	5:6:790:ARG:HG3	2.19	0.42
6:7:317:GLU:OE1	6:7:317:GLU:N	2.52	0.42
6:7:615:HIS:HE1	6:7:625:GLN:HA	1.84	0.42
6:7:739:SER:HB3	6:7:743:LYS:HB2	2.00	0.42
7:8:154:ARG:HA	7:8:256:ASN:HD22	1.83	0.42
7:8:308:GLN:HE22	7:8:436:SER:C	2.20	0.42
7:8:569:ILE:HD12	7:8:569:ILE:H	1.83	0.42
8:9:278:ASP:O	8:9:279:ARG:HG2	2.18	0.42
9:A:811:LEU:HB3	9:A:820:GLN:HG3	2.00	0.42
11:C:198:ASP:N	11:C:198:ASP:OD1	2.52	0.42
11:C:300:GLU:HB3	11:C:429:HIS:NE2	2.34	0.42
11:C:340:PRO:O	11:C:343:VAL:HG13	2.19	0.42
14:F:381:ASP:O	14:F:385:ARG:HD3	2.19	0.42
14:F:421:TRP:HA	14:F:424:ARG:NH2	2.34	0.42
2:3:196:LEU:HB2	2:3:250:PHE:CE1	2.53	0.42
2:3:204:ALA:N	2:3:240:LYS:O	2.35	0.42
2:3:896:ILE:HD13	2:3:928:PRO:HG2	1.99	0.42
3:4:334:ARG:HB3	3:4:615:VAL:HG13	2.01	0.42
4:5:381:ASN:HD21	4:5:384:ILE:HD12	1.83	0.42
4:5:569:ALA:O	4:5:572:VAL:HG12	2.19	0.42
4:5:608:LEU:HG	4:5:609:LYS:HG2	2.01	0.42
6:7:521:CYS:HB3	6:7:563:ILE:CD1	2.48	0.42
7:8:17:VAL:HG11	7:8:46:LYS:HE3	2.00	0.42
7:8:196:LEU:CB	7:8:262:ILE:HD13	2.49	0.42
7:8:203:LYS:HB3	7:8:203:LYS:HE3	1.66	0.42
7:8:283:LEU:HA	7:8:283:LEU:HD13	1.77	0.42
8:9:109:PRO:HG2	8:9:112:THR:HG21	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:110:PRO:HB3	9:A:612:LYS:HB3	2.02	0.42
8:9:242:ILE:HD13	8:9:242:ILE:HA	1.86	0.42
9:A:520:LYS:N	9:A:523:ASP:OD2	2.39	0.42
9:A:722:MET:O	9:A:726:GLY:N	2.41	0.42
9:A:881:LYS:HG2	9:A:882:GLN:O	2.18	0.42
11:C:56:LYS:HA	11:C:59:GLU:HG2	2.01	0.42
11:C:295:SER:HB3	11:C:469:ASP:CG	2.39	0.42
12:E:441:ILE:HD11	12:E:444:LEU:HD22	2.00	0.42
17:D:2001:AGS:O2G	17:D:2001:AGS:O3A	2.37	0.42
14:F:361:ASP:OD1	14:F:362:VAL:N	2.52	0.42
2:3:253:HIS:HE1	2:3:255:ARG:HD2	1.82	0.42
2:3:678:VAL:HA	2:3:681:LYS:HE3	2.01	0.42
2:3:910:GLU:O	2:3:911:GLU:HG3	2.19	0.42
3:4:828:LEU:HD23	3:4:828:LEU:HA	1.84	0.42
4:5:148:LEU:HD23	4:5:162:LEU:HD11	2.01	0.42
4:5:298:TYR:CD1	4:5:329:LYS:HD3	2.54	0.42
4:5:391:LEU:HD11	4:5:476:VAL:HG11	2.01	0.42
4:5:476:VAL:HA	4:5:517:THR:OG1	2.19	0.42
5:6:322:GLU:OE2	5:6:328:THR:N	2.41	0.42
5:6:765:LEU:HD21	5:6:804:ILE:HD12	2.01	0.42
5:6:936:ILE:O	5:6:939:TRP:HB3	2.19	0.42
6:7:380:PHE:HE2	6:7:382:ARG:HH11	1.66	0.42
6:7:570:LEU:HG	6:7:571:TYR:CD2	2.53	0.42
7:8:322:GLU:O	7:8:326:SER:N	2.28	0.42
7:8:480:GLN:OE1	7:8:480:GLN:N	2.45	0.42
7:8:525:ARG:HD2	7:8:525:ARG:HA	1.68	0.42
7:8:580:VAL:CG1	7:8:581:TYR:H	2.30	0.42
8:9:106:ILE:HG23	8:9:288:PHE:CE2	2.54	0.42
9:A:649:TYR:N	9:A:658:ILE:O	2.48	0.42
10:B:318:GLY:O	10:B:322:LYS:NZ	2.33	0.42
11:C:61:TYR:O	11:C:65:HIS:HB3	2.19	0.42
11:C:65:HIS:CE1	11:C:69:HIS:CE1	3.07	0.42
11:C:254:SER:HA	11:C:257:ARG:CZ	2.49	0.42
13:D:425:ARG:H	13:D:425:ARG:HG2	1.68	0.42
13:D:529:LEU:H	13:D:529:LEU:HD12	1.84	0.42
1:2:319:ARG:HE	1:2:425:GLU:CD	2.19	0.42
2:3:157:PHE:O	2:3:325:THR:HG21	2.20	0.42
2:3:330:HIS:HB3	2:3:334:THR:O	2.19	0.42
2:3:419:LEU:HB3	2:3:423:LEU:HD11	2.00	0.42
2:3:448:THR:HA	2:3:455:ARG:HA	2.02	0.42
3:4:204:LYS:HE2	3:4:208:ILE:HD11	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:657:ALA:HB3	5:6:603:SER:HB2	2.00	0.42
3:4:723:HIS:ND1	3:4:723:HIS:O	2.52	0.42
3:4:726:ASN:OD1	3:4:727:LEU:N	2.50	0.42
3:4:778:ARG:HD3	5:6:724:ASP:OD2	2.19	0.42
4:5:431:LYS:HB3	4:5:596:ILE:HD13	2.01	0.42
4:5:484:LYS:HE2	4:5:484:LYS:HB3	1.87	0.42
4:5:501:THR:HB	4:5:514:ASN:HA	2.01	0.42
5:6:297:THR:CG2	5:6:359:VAL:HG12	2.40	0.42
5:6:397:PHE:CD1	5:6:459:VAL:HG22	2.54	0.42
5:6:572:CYS:SG	5:6:709:PHE:CG	3.11	0.42
5:6:976:GLU:CG	5:6:977:ILE:N	2.82	0.42
6:7:210:ASN:O	6:7:213:ARG:HB3	2.19	0.42
8:9:337:VAL:HG12	9:A:620:THR:CG2	2.45	0.42
9:A:688:ALA:HB1	9:A:778:VAL:HG21	2.02	0.42
11:C:402:ILE:HG13	11:C:403:ASN:N	2.34	0.42
12:E:348:SER:OG	12:E:349:ILE:N	2.53	0.42
12:E:424:LEU:HA	12:E:424:LEU:HD23	1.76	0.42
13:D:78:CYS:O	13:D:82:ILE:N	2.45	0.42
1:2:443:GLY:O	5:6:327:TYR:HB2	2.19	0.42
2:3:348:ARG:HA	2:3:348:ARG:HD3	1.68	0.42
2:3:366:SER:HB2	2:3:653:ILE:HA	2.01	0.42
2:3:713:ALA:O	2:3:717:LEU:N	2.53	0.42
3:4:565:LEU:HD22	3:4:705:VAL:HG13	2.02	0.42
3:4:625:ASP:OD1	3:4:668:ARG:N	2.53	0.42
4:5:65:MET:SD	4:5:139:LEU:HB3	2.60	0.42
5:6:755:ILE:O	5:6:758:ALA:N	2.52	0.42
6:7:73:ARG:HB2	6:7:199:ARG:CZ	2.50	0.42
6:7:570:LEU:HB3	6:7:585:ASN:ND2	2.27	0.42
6:7:748:ILE:O	6:7:752:LEU:HG	2.20	0.42
6:7:751:MET:SD	6:7:765:ILE:HG12	2.60	0.42
7:8:480:GLN:C	7:8:482:ASN:H	2.23	0.42
7:8:569:ILE:HG13	7:8:581:TYR:CE1	2.54	0.42
8:9:103:SER:HA	8:9:281:LEU:CD1	2.50	0.42
10:B:272:GLU:HG3	10:B:273:GLU:N	2.34	0.42
10:B:526:LYS:HD2	10:B:617:LEU:HD13	2.01	0.42
11:C:121:GLU:OE1	11:C:124:ARG:HB3	2.20	0.42
11:C:297:ARG:NH2	11:C:471:ARG:HA	2.35	0.42
11:C:430:ASN:O	11:C:434:GLY:N	2.32	0.42
12:E:293:LEU:HD23	12:E:293:LEU:H	1.84	0.42
12:E:336:TYR:CZ	12:E:456:TRP:HD1	2.38	0.42
13:D:79:GLN:HB3	13:D:111:LEU:HD13	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:288:ARG:HD2	1:2:288:ARG:HA	1.71	0.42
1:2:503:PRO:HD3	1:2:555:TYR:CE1	2.55	0.42
2:3:560:SER:HA	2:3:563:GLU:OE1	2.20	0.42
3:4:194:PHE:CE2	3:4:198:LEU:HD11	2.55	0.42
3:4:388:ARG:HH12	5:6:176:ARG:NE	2.16	0.42
3:4:645:LEU:HA	3:4:648:VAL:HG12	2.01	0.42
4:5:617:GLN:HG2	4:5:618:ALA:H	1.84	0.42
5:6:122:PHE:H	5:6:134:LYS:NZ	2.18	0.42
5:6:300:VAL:HG22	5:6:357:GLN:HB2	2.00	0.42
6:7:111:ASN:O	6:7:115:GLU:HG3	2.19	0.42
6:7:719:LEU:O	6:7:722:VAL:HG12	2.19	0.42
7:8:198:ILE:HD13	7:8:230:PHE:HB2	2.01	0.42
8:9:195:PRO:HB2	8:9:199:ILE:HD13	2.02	0.42
8:9:481:LYS:NZ	9:A:893:LYS:HD3	2.34	0.42
9:A:729:TYR:CD2	13:D:87:LYS:HD2	2.54	0.42
11:C:353:ILE:HA	11:C:356:ARG:NE	2.34	0.42
12:E:34:ILE:HD13	12:E:168:TYR:HB2	2.00	0.42
12:E:385:ARG:NH1	12:E:385:ARG:HB3	2.34	0.42
14:F:331:VAL:HG23	14:F:386:TYR:HE2	1.84	0.42
14:F:336:ARG:HH12	14:F:420:ILE:HD13	1.85	0.42
15:M:27:DA:H2 ^o	15:M:28:DC:C5	2.55	0.42
1:2:202:ASN:C	1:2:204:SER:H	2.23	0.42
1:2:306:LEU:O	1:2:404:ARG:NH1	2.52	0.42
2:3:95:ARG:HG3	2:3:156:SER:HB3	2.00	0.42
2:3:443:THR:OG1	2:3:444:ALA:N	2.52	0.42
3:4:362:ARG:HB3	3:4:364:VAL:HG22	2.01	0.42
3:4:574:LYS:HD2	17:4:2001:AGS:O2G	2.20	0.42
3:4:579:GLN:HG2	3:4:579:GLN:H	1.73	0.42
3:4:585:THR:HG23	3:4:588:GLY:H	1.85	0.42
3:4:728:TYR:O	6:7:652:MET:HB3	2.20	0.42
4:5:45:ILE:O	4:5:49:GLN:HB3	2.20	0.42
5:6:550:GLN:HA	5:6:569:ILE:CG2	2.50	0.42
5:6:579:THR:CG2	5:6:715:ILE:CG2	2.68	0.42
5:6:613:VAL:HG22	5:6:614:ARG:N	2.34	0.42
5:6:807:SER:HB3	5:6:824:ILE:HD13	2.01	0.42
6:7:103:VAL:O	6:7:106:ILE:HG12	2.19	0.42
6:7:195:ASN:O	6:7:306:LYS:HE2	2.20	0.42
6:7:332:ASN:O	6:7:375:TYR:HA	2.19	0.42
7:8:574:VAL:HG23	7:8:575:ASP:N	2.33	0.42
8:9:406:ARG:NH2	8:9:501:GLU:HB3	2.35	0.42
9:A:481:PRO:HA	9:A:485:LYS:NZ	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:296:ILE:O	10:B:299:LYS:HE3	2.20	0.42
10:B:298:LYS:HE3	10:B:298:LYS:HB2	1.91	0.42
10:B:458:HIS:CD2	10:B:460:TYR:H	2.37	0.42
11:C:513:LEU:O	11:C:517:MET:N	2.52	0.42
12:E:211:GLU:O	12:E:216:ARG:NH2	2.50	0.42
13:D:291:LEU:HD23	13:D:291:LEU:HA	1.79	0.42
15:M:10:DT:N3	16:N:80:DA:H2	2.17	0.42
15:M:28:DC:H2 ⁷	15:M:29:DT:O5 ⁷	2.19	0.42
15:M:45:DT:H6	15:M:45:DT:H2 ⁷	1.64	0.42
16:N:61:DA:H2 ⁷	16:N:62:DG:C5 ⁷	2.50	0.42
1:2:792:ASP:O	1:2:795:ARG:HG2	2.19	0.42
2:3:277:ILE:CD1	2:3:320:LEU:HD21	2.49	0.42
2:3:334:THR:HG21	2:3:428:LEU:HG	2.02	0.42
2:3:435:ARG:CB	2:3:477:LYS:O	2.65	0.42
2:3:671:LEU:HD12	2:3:671:LEU:HA	1.95	0.42
3:4:245:ALA:HB3	3:4:308:VAL:HA	2.00	0.42
3:4:314:MET:HG2	3:4:413:HIS:CB	2.50	0.42
3:4:454:LYS:HG2	3:4:455:SER:O	2.19	0.42
3:4:603:ALA:HB2	3:4:619:GLY:HA3	2.02	0.42
4:5:633:LEU:HD11	4:5:643:ARG:NH1	2.34	0.42
5:6:149:ASN:O	5:6:150:THR:CG2	2.68	0.42
5:6:951:LEU:CD1	5:6:952:ALA:N	2.75	0.42
6:7:238:LEU:HA	6:7:353:GLY:O	2.20	0.42
6:7:538:HIS:CE1	6:7:593:ARG:HE	2.37	0.42
6:7:580:PRO:C	6:7:582:ASP:H	2.23	0.42
7:8:509:LEU:H	7:8:509:LEU:HG	1.63	0.42
8:9:179:SER:HA	8:9:199:ILE:O	2.20	0.42
8:9:206:GLN:HE22	8:9:256:PHE:HE1	1.68	0.42
8:9:502:MET:C	8:9:509:LYS:HD3	2.39	0.42
9:A:822:LEU:HD21	9:A:870:LEU:HD11	2.02	0.42
10:B:277:VAL:HG13	11:C:582:ILE:HG21	2.01	0.42
11:C:324:SER:O	11:C:327:SER:OG	2.33	0.42
11:C:491:LEU:HD23	11:C:525:PHE:CD2	2.55	0.42
13:D:85:ILE:HG23	13:D:96:HIS:NE2	2.35	0.42
13:D:216:PHE:HD2	13:D:219:ILE:HG13	1.84	0.42
1:2:252:SER:OG	1:2:253:LYS:N	2.52	0.42
1:2:671:GLU:N	1:2:672:PRO:HD2	2.35	0.42
1:2:850:LYS:HG2	1:2:851:VAL:H	1.84	0.42
2:3:230:ILE:HG13	2:3:231:TYR:H	1.85	0.42
3:4:329:LYS:HE2	3:4:329:LYS:HB3	1.89	0.42
3:4:728:TYR:HD2	6:7:693:ILE:HG21	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:417:ASP:OD2	4:5:418:PRO:HD2	2.20	0.42
4:5:437:VAL:CG1	4:5:468:ALA:HB1	2.49	0.42
6:7:737:ASP:OD1	6:7:738:GLU:N	2.53	0.42
7:8:94:PHE:O	7:8:149:ALA:CA	2.65	0.42
7:8:111:LEU:HD23	7:8:152:LEU:HD23	2.02	0.42
8:9:233:THR:N	16:N:73:DA:OP1	2.52	0.42
9:A:415:LYS:HE3	9:A:418:ILE:HD13	2.02	0.42
17:A:2001:AGS:PG	13:D:267:ARG:HH12	2.42	0.42
10:B:286:GLN:C	10:B:289:PRO:HD2	2.40	0.42
11:C:357:CYS:SG	11:C:465:LEU:HD21	2.59	0.42
15:M:21:DT:H2 ^{''}	15:M:22:DT:O4 [']	2.20	0.42
16:N:63:DT:H6	16:N:63:DT:H2 [']	1.57	0.42
1:2:596:LEU:HD23	1:2:596:LEU:HA	1.90	0.42
1:2:745:LEU:HA	1:2:748:GLN:OE1	2.20	0.42
1:2:778:LEU:HD13	1:2:783:MET:HG3	2.01	0.42
2:3:203:ALA:HB1	2:3:239:ASN:OD1	2.19	0.42
2:3:520:PHE:HB3	2:3:527:ARG:NH2	2.35	0.42
2:3:561:ILE:HG21	4:5:650:ILE:HD11	2.02	0.42
3:4:189:GLU:H	3:4:189:GLU:CD	2.21	0.42
3:4:408:ASP:OD1	3:4:409:GLY:N	2.53	0.42
3:4:688:VAL:HG12	3:4:840:PRO:HB3	2.02	0.42
4:5:501:THR:OG1	4:5:513:LEU:O	2.25	0.42
5:6:516:LEU:HD23	5:6:516:LEU:HA	1.85	0.42
6:7:422:ILE:CG2	17:7:2001:AGS:C2	2.80	0.42
6:7:440:VAL:O	6:7:452:GLY:HA3	2.20	0.42
6:7:511:GLY:O	6:7:514:VAL:HG12	2.20	0.42
7:8:185:ARG:HG3	7:8:186:ASP:N	2.35	0.42
7:8:364:LEU:O	7:8:368:SER:OG	2.21	0.42
8:9:443:ALA:HB1	8:9:511:PHE:CE1	2.54	0.42
9:A:525:TYR:O	9:A:528:LEU:HB2	2.20	0.42
10:B:274:PHE:CD1	11:C:582:ILE:HG23	2.54	0.42
10:B:435:ASN:O	10:B:439:THR:HG23	2.19	0.42
11:C:138:ASN:OD1	11:C:141:MET:HB2	2.20	0.42
11:C:154:ALA:O	11:C:158:GLU:HB2	2.20	0.42
12:E:387:LEU:HD11	12:E:421:PHE:CZ	2.55	0.42
1:2:317:LEU:HD13	1:2:317:LEU:HA	1.89	0.41
1:2:331:PHE:HZ	1:2:588:GLU:HG3	1.84	0.41
1:2:408:VAL:HG21	1:2:426:VAL:HG11	2.02	0.41
1:2:500:SER:HB3	1:2:757:PRO:CB	2.49	0.41
2:3:506:LEU:H	2:3:506:LEU:HD12	1.85	0.41
2:3:535:LEU:HB3	2:3:539:LEU:HB2	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:916:VAL:O	2:3:919:LEU:HB3	2.20	0.41
4:5:148:LEU:HB3	4:5:272:ARG:HB2	2.01	0.41
4:5:477:VAL:HG13	4:5:519:VAL:HA	2.02	0.41
4:5:630:ARG:HA	4:5:630:ARG:HD3	1.70	0.41
7:8:320:VAL:O	7:8:323:THR:HB	2.20	0.41
10:B:292:LYS:NZ	10:B:296:ILE:HD11	2.35	0.41
10:B:591:THR:HG23	10:B:601:TRP:HE1	1.85	0.41
11:C:306:MET:HG2	11:C:313:ASN:OD1	2.20	0.41
12:E:438:ASN:CG	12:E:439:LYS:H	2.23	0.41
13:D:410:LEU:HA	13:D:410:LEU:HD23	1.75	0.41
15:M:40:DC:C2	15:M:41:DC:C5	3.08	0.41
1:2:226:VAL:O	1:2:230:ARG:HG2	2.20	0.41
2:3:408:VAL:O	2:3:548:VAL:HA	2.21	0.41
2:3:695:SER:N	2:3:696:PRO:HD3	2.36	0.41
3:4:602:THR:OG1	3:4:654:ILE:HG21	2.20	0.41
4:5:185:ASN:OD1	4:5:240:PRO:HG3	2.21	0.41
4:5:529:ARG:NH1	4:5:564:ARG:HG3	2.32	0.41
4:5:673:GLN:NE2	4:5:676:HIS:HB2	2.35	0.41
5:6:112:ARG:HG3	5:6:180:PHE:HD2	1.86	0.41
5:6:143:MET:SD	5:6:151:ILE:HG23	2.59	0.41
5:6:168:MET:O	5:6:172:GLU:HG2	2.19	0.41
5:6:308:SER:HA	5:6:318:VAL:O	2.20	0.41
5:6:575:GLY:C	5:6:581:LYS:HZ1	2.16	0.41
6:7:611:LYS:HA	6:7:611:LYS:HD3	1.81	0.41
7:8:357:GLN:HA	7:8:360:ILE:HD13	2.02	0.41
7:8:501:ARG:HA	7:8:504:ARG:HH11	1.84	0.41
8:9:401:ASN:HA	8:9:405:THR:OG1	2.20	0.41
9:A:612:LYS:HB2	9:A:616:ARG:HH12	1.85	0.41
11:C:61:TYR:CD1	11:C:329:PHE:HD2	2.34	0.41
12:E:242:LEU:HA	12:E:242:LEU:HD12	1.70	0.41
13:D:123:TYR:HB3	13:D:126:GLN:CG	2.50	0.41
14:F:347:VAL:O	14:F:351:CYS:CB	2.67	0.41
1:2:262:LYS:HG2	1:2:263:CYS:SG	2.60	0.41
2:3:234:GLU:H	2:3:241:LEU:CB	2.33	0.41
3:4:633:GLU:OE1	3:4:636:LYS:HD2	2.20	0.41
3:4:836:TYR:HB2	3:4:839:ASP:O	2.20	0.41
4:5:79:LEU:HD12	4:5:83:PRO:HA	2.01	0.41
4:5:623:SER:O	4:5:627:VAL:HG23	2.20	0.41
5:6:103:VAL:O	5:6:107:THR:N	2.53	0.41
5:6:575:GLY:H	5:6:581:LYS:HZ3	1.68	0.41
6:7:543:GLN:C	6:7:544:GLN:HG2	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:43:PHE:O	7:8:229:LEU:HD12	2.19	0.41
7:8:515:GLN:O	7:8:519:ILE:HG13	2.20	0.41
8:9:309:THR:OG1	8:9:310:ILE:N	2.54	0.41
10:B:611:LYS:HA	10:B:614:LYS:HE3	2.02	0.41
11:C:214:ASN:OD1	11:C:214:ASN:N	2.54	0.41
11:C:272:LYS:NZ	11:C:275:LYS:HD3	2.35	0.41
11:C:352:LYS:HG2	11:C:356:ARG:HH21	1.86	0.41
11:C:372:ALA:N	11:C:373:PRO:HD2	2.35	0.41
11:C:549:PRO:HB2	11:C:552:GLU:OE1	2.20	0.41
11:C:598:LYS:NZ	11:C:600:GLN:HA	2.34	0.41
1:2:505:ILE:HB	1:2:512:LYS:NZ	2.35	0.41
2:3:407:MET:HE2	2:3:549:VAL:HG13	2.02	0.41
2:3:657:ARG:HG3	2:3:658:LYS:N	2.36	0.41
3:4:450:GLN:HB2	3:4:452:VAL:HG22	2.01	0.41
3:4:513:ALA:HA	3:4:518:LEU:CD1	2.50	0.41
3:4:683:ASN:HB3	3:4:685:ASN:OD1	2.20	0.41
4:5:411:ASN:HA	4:5:519:VAL:HG22	2.02	0.41
4:5:617:GLN:HG2	4:5:618:ALA:N	2.34	0.41
7:8:16:PRO:HD3	7:8:40:HIS:CD2	2.55	0.41
7:8:546:ASN:O	7:8:548:PRO:HD3	2.21	0.41
8:9:274:ARG:NH2	10:B:491:THR:OG1	2.53	0.41
10:B:473:TYR:C	10:B:474:ASN:CG	2.78	0.41
10:B:490:SER:HA	11:C:589:PHE:HE2	1.85	0.41
10:B:526:LYS:HD2	10:B:526:LYS:HA	1.92	0.41
11:C:94:GLU:O	11:C:99:ARG:NH1	2.53	0.41
11:C:203:PHE:HB2	11:C:236:LEU:HD22	2.02	0.41
11:C:538:TYR:HA	11:C:541:TYR:HB3	2.03	0.41
12:E:83:TYR:CZ	12:E:87:THR:HG21	2.55	0.41
13:D:400:ARG:NH1	13:D:414:GLU:OE2	2.52	0.41
15:M:14:DG:C8	15:M:15:DT:C7	3.04	0.41
2:3:915:PRO:HB2	2:3:918:SER:H	1.85	0.41
4:5:384:ILE:HD13	4:5:414:LEU:HD11	2.02	0.41
5:6:347:ASN:OD1	5:6:348:VAL:N	2.53	0.41
5:6:609:THR:HG23	5:6:610:ALA:N	2.35	0.41
5:6:724:ASP:N	5:6:724:ASP:OD1	2.54	0.41
5:6:734:LEU:HD23	5:6:734:LEU:HA	1.71	0.41
5:6:772:TYR:OH	13:D:430:ALA:HB3	2.20	0.41
6:7:656:VAL:O	6:7:660:VAL:HG23	2.20	0.41
6:7:717:LEU:O	6:7:721:ARG:HG2	2.20	0.41
7:8:123:LEU:CD1	7:8:124:PHE:N	2.71	0.41
7:8:318:PHE:HE2	7:8:400:THR:HA	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:410:TRP:HA	7:8:413:GLN:HE21	1.85	0.41
8:9:205:LEU:HA	8:9:205:LEU:HD13	1.90	0.41
9:A:458:SER:O	9:A:461:LEU:HG	2.20	0.41
9:A:477:VAL:HG12	9:A:622:ILE:HB	2.03	0.41
10:B:277:VAL:CG1	11:C:582:ILE:HG21	2.50	0.41
10:B:379:ILE:HG23	10:B:383:LEU:HD23	2.03	0.41
10:B:462:PRO:HB3	12:E:418:ILE:HD12	2.02	0.41
10:B:495:VAL:CG1	10:B:497:LYS:HG2	2.49	0.41
11:C:130:GLU:H	11:C:149:LYS:HZ3	1.68	0.41
11:C:131:LEU:HA	11:C:135:GLU:OE1	2.21	0.41
11:C:139:VAL:HG21	11:C:218:ASN:HD22	1.85	0.41
11:C:271:ASN:ND2	11:C:313:ASN:ND2	2.68	0.41
11:C:395:PHE:O	11:C:398:ARG:HG3	2.21	0.41
12:E:172:GLU:O	12:E:175:PHE:N	2.36	0.41
12:E:188:MET:HB2	13:D:370:ASN:OD1	2.21	0.41
13:D:296:SER:O	13:D:302:VAL:HG11	2.20	0.41
13:D:366:ILE:H	13:D:366:ILE:HG13	1.66	0.41
15:M:23:DG:C6	16:N:68:DA:C6	3.09	0.41
15:M:29:DT:H73	15:M:30:DT:O4	2.20	0.41
1:2:778:LEU:HA	1:2:829:VAL:HG22	2.02	0.41
2:3:370:SER:O	2:3:564:HIS:HD2	2.04	0.41
2:3:555:GLU:HG2	4:5:627:VAL:CG1	2.50	0.41
3:4:310:SER:HA	3:4:327:ASN:HB2	2.03	0.41
3:4:467:LYS:NZ	3:4:469:VAL:H	2.18	0.41
4:5:384:ILE:HG23	4:5:414:LEU:HD11	2.02	0.41
4:5:465:GLU:O	4:5:466:GLY:C	2.57	0.41
4:5:467:GLY:H	4:5:470:VAL:CG2	2.34	0.41
5:6:132:VAL:HG13	5:6:134:LYS:O	2.21	0.41
5:6:550:GLN:HG2	5:6:635:ILE:HD11	2.03	0.41
5:6:627:ALA:O	5:6:631:ALA:CB	2.69	0.41
5:6:696:ARG:HB2	5:6:793:TYR:HE2	1.86	0.41
5:6:770:ARG:O	5:6:774:VAL:HG23	2.20	0.41
5:6:814:ASN:HD22	5:6:823:PHE:HE1	1.68	0.41
6:7:102:LEU:O	6:7:106:ILE:HG23	2.21	0.41
6:7:133:ASP:HB2	6:7:136:ASP:HB3	2.03	0.41
6:7:701:LYS:HE2	6:7:701:LYS:HB3	1.68	0.41
7:8:288:LYS:HA	7:8:288:LYS:HD2	1.89	0.41
7:8:338:PRO:HB2	7:8:343:LEU:CD2	2.50	0.41
7:8:485:ASP:HA	7:8:488:ARG:HD2	2.03	0.41
8:9:60:ALA:C	8:9:64:LYS:HD3	2.41	0.41
8:9:319:PHE:CE1	8:9:323:LYS:HG3	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:411:ASN:N	8:9:414:GLN:OE1	2.53	0.41
8:9:418:LEU:HG	8:9:498:PHE:HZ	1.85	0.41
9:A:581:ASN:HB3	9:A:585:TRP:CZ2	2.56	0.41
10:B:404:ILE:HD11	10:B:444:LEU:HA	2.02	0.41
11:C:520:VAL:HG12	11:C:583:LEU:HD21	2.01	0.41
12:E:51:PHE:HD1	12:E:57:LEU:HD11	1.85	0.41
1:2:407:GLU:OE1	1:2:407:GLU:HA	2.21	0.41
1:2:777:LYS:O	1:2:829:VAL:HG13	2.21	0.41
1:2:800:THR:HG21	1:2:849:GLN:HE21	1.85	0.41
2:3:176:LEU:HD23	2:3:298:PHE:HE2	1.86	0.41
2:3:193:ARG:O	2:3:195:LYS:N	2.54	0.41
2:3:539:LEU:HD12	2:3:539:LEU:H	1.86	0.41
2:3:899:ILE:HA	2:3:902:ARG:HG2	2.03	0.41
4:5:409:ASP:H	4:5:658:ARG:HH12	1.68	0.41
4:5:494:HIS:NE2	4:5:546:ILE:O	2.49	0.41
5:6:580:SER:HB3	17:6:1101:AGS:C8	2.48	0.41
5:6:581:LYS:NZ	5:6:683:ASN:OD1	2.42	0.41
6:7:111:ASN:O	6:7:114:THR:OG1	2.31	0.41
7:8:34:ARG:HG3	7:8:132:SER:OG	2.19	0.41
8:9:433:ILE:HG23	8:9:487:ASP:OD2	2.20	0.41
9:A:449:LEU:HD11	9:A:452:ARG:HB2	2.03	0.41
9:A:604:LEU:HB3	9:A:605:PRO:HD3	2.03	0.41
10:B:462:PRO:HB2	12:E:421:PHE:HD2	1.86	0.41
11:C:233:LYS:HE3	11:C:233:LYS:HB2	1.93	0.41
13:D:53:GLN:O	13:D:57:LEU:HD23	2.21	0.41
13:D:514:ARG:NE	13:D:528:GLN:HB2	2.35	0.41
14:F:281:THR:O	14:F:285:ILE:HG22	2.20	0.41
1:2:406:ARG:HD3	1:2:406:ARG:HA	1.76	0.41
1:2:438:LEU:C	1:2:440:ALA:H	2.24	0.41
2:3:359:ILE:O	2:3:362:ILE:HG12	2.21	0.41
2:3:531:GLN:H	2:3:536:PRO:HG3	1.86	0.41
2:3:893:LEU:HA	2:3:896:ILE:HG22	2.03	0.41
4:5:171:VAL:HG21	4:5:458:MET:HG3	2.02	0.41
4:5:451:ALA:O	4:5:506:LYS:CE	2.60	0.41
5:6:320:ASN:HD22	5:6:330:PRO:HD3	1.84	0.41
5:6:816:VAL:HG12	5:6:817:ASP:O	2.21	0.41
6:7:351:VAL:HG13	6:7:376:LEU:HD23	2.03	0.41
6:7:672:LYS:HA	6:7:675:MET:HG3	2.01	0.41
6:7:791:VAL:O	9:A:694:ARG:NH2	2.53	0.41
7:8:125:PHE:HA	7:8:128:LEU:HG	2.03	0.41
7:8:505:TYR:HD1	7:8:505:TYR:HA	1.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:586:LEU:HB3	7:8:590:ARG:HH21	1.86	0.41
11:C:280:ILE:HA	11:C:283:SER:OG	2.21	0.41
11:C:401:PRO:O	11:C:405:HIS:N	2.42	0.41
15:M:32:DC:C2	16:N:58:DG:N2	2.88	0.41
1:2:310:ARG:HA	1:2:310:ARG:HD3	1.81	0.41
2:3:35:PHE:CZ	2:3:102:ASP:HB3	2.56	0.41
2:3:235:ASP:OD2	6:7:5:LEU:HD11	2.20	0.41
2:3:340:GLN:HE21	2:3:658:LYS:CG	2.28	0.41
2:3:497:ILE:O	2:3:503:HIS:HA	2.20	0.41
2:3:656:LEU:O	2:3:660:VAL:HG23	2.21	0.41
3:4:303:VAL:HG13	3:4:305:PRO:HD3	2.02	0.41
3:4:330:GLY:HA3	3:4:401:GLU:HA	2.02	0.41
3:4:334:ARG:HB3	3:4:615:VAL:HG22	2.03	0.41
3:4:418:CYS:SG	3:4:420:TYR:HE2	2.44	0.41
3:4:531:TYR:O	3:4:537:LYS:NZ	2.54	0.41
3:4:544:LEU:HD23	3:4:544:LEU:HA	1.68	0.41
3:4:683:ASN:C	3:4:685:ASN:H	2.25	0.41
3:4:865:LEU:HD13	9:A:841:PHE:HZ	1.86	0.41
3:4:898:VAL:HG12	3:4:899:GLU:H	1.85	0.41
4:5:147:PRO:C	4:5:149:ARG:H	2.23	0.41
4:5:149:ARG:HG3	4:5:268:GLY:HA3	2.03	0.41
4:5:504:ILE:O	4:5:504:ILE:HG13	2.20	0.41
6:7:249:SER:O	6:7:311:GLN:NE2	2.47	0.41
6:7:255:VAL:O	6:7:273:VAL:HG21	2.20	0.41
6:7:422:ILE:CG2	17:7:2001:AGS:N1	2.84	0.41
6:7:775:THR:HG23	6:7:778:GLN:H	1.86	0.41
7:8:96:THR:O	7:8:102:PHE:HB3	2.21	0.41
7:8:414:VAL:HG13	7:8:437:SER:HB3	2.03	0.41
7:8:503:LYS:O	7:8:507:GLN:N	2.49	0.41
8:9:164:SER:O	8:9:216:THR:HG21	2.20	0.41
8:9:313:GLN:NE2	8:9:315:MET:HB2	2.32	0.41
9:A:410:LEU:HD13	13:D:243:VAL:HG21	2.03	0.41
9:A:645:ASP:CA	9:A:682:LEU:O	2.66	0.41
9:A:656:ASN:OD1	9:A:657:ALA:N	2.53	0.41
10:B:395:TYR:HB3	11:C:145:ARG:HH12	1.85	0.41
10:B:424:VAL:HG11	10:B:432:ILE:HD13	2.02	0.41
10:B:610:GLU:HA	10:B:613:LEU:HD13	2.03	0.41
11:C:20:ARG:HH21	11:C:23:TYR:HB2	1.85	0.41
11:C:56:LYS:HE3	11:C:342:ASN:OD1	2.21	0.41
11:C:187:LEU:O	11:C:191:PHE:HB2	2.21	0.41
11:C:304:SER:OG	11:C:305:LYS:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:381:LEU:HD12	11:C:381:LEU:HA	1.88	0.41
11:C:537:ILE:HG23	11:C:584:PHE:CZ	2.55	0.41
12:E:352:ARG:O	12:E:352:ARG:HG2	2.21	0.41
13:D:95:SER:HA	13:D:245:VAL:O	2.21	0.41
13:D:463:LEU:O	13:D:466:LEU:N	2.53	0.41
16:N:61:DA:N9	16:N:62:DG:C8	2.89	0.41
1:2:317:LEU:HD22	1:2:429:ILE:HG22	2.02	0.41
1:2:362:SER:HA	5:6:343:PHE:CZ	2.56	0.41
2:3:408:VAL:HG13	2:3:548:VAL:HG22	2.02	0.41
3:4:266:GLN:HB3	3:4:267:GLU:OE2	2.20	0.41
3:4:328:LEU:O	3:4:434:GLU:HG2	2.21	0.41
3:4:347:PHE:HA	3:4:384:LEU:HA	2.03	0.41
3:4:686:LEU:HD12	3:4:687:PRO:HD2	2.02	0.41
3:4:792:THR:HG21	5:6:688:ARG:NH1	2.35	0.41
4:5:425:LEU:HD21	4:5:520:LEU:HD11	2.03	0.41
5:6:504:PHE:CE2	5:6:757:TYR:HD1	2.39	0.41
6:7:466:LYS:N	17:7:2001:AGS:O1B	2.54	0.41
7:8:342:VAL:C	7:8:345:PRO:HD2	2.41	0.41
9:A:448:TYR:HE1	9:A:453:GLU:HG2	1.85	0.41
9:A:577:ASP:O	9:A:581:ASN:ND2	2.54	0.41
10:B:398:ASN:HD21	10:B:400:VAL:HB	1.86	0.41
10:B:527:LEU:O	10:B:531:THR:HG22	2.21	0.41
11:C:57:ARG:NH1	11:C:332:ASN:O	2.44	0.41
11:C:492:LEU:HA	11:C:492:LEU:HD23	1.78	0.41
12:E:337:ILE:O	12:E:341:LEU:HB2	2.21	0.41
13:D:87:LYS:HG3	13:D:88:GLN:N	2.35	0.41
13:D:354:LEU:O	13:D:358:ILE:HG23	2.21	0.41
16:N:61:DA:H2'	16:N:62:DG:H8	1.85	0.41
1:2:212:LYS:NZ	1:2:271:PHE:O	2.51	0.40
1:2:438:LEU:O	1:2:440:ALA:N	2.53	0.40
2:3:98:ILE:HG13	2:3:157:PHE:HA	2.03	0.40
2:3:169:ARG:HH22	4:5:509:ILE:HD12	1.82	0.40
2:3:379:LYS:O	2:3:382:LEU:HG	2.21	0.40
2:3:443:THR:HG22	2:3:485:ALA:HB1	2.02	0.40
2:3:471:CYS:HA	2:3:513:ILE:HG23	2.02	0.40
2:3:480:ASP:HA	2:3:483:ARG:HD3	2.03	0.40
2:3:949:ASN:HA	2:3:952:MET:CE	2.51	0.40
3:4:686:LEU:HD12	3:4:686:LEU:HA	1.94	0.40
3:4:728:TYR:HD1	3:4:728:TYR:HA	1.72	0.40
4:5:83:PRO:HG3	4:5:159:ILE:N	2.37	0.40
4:5:183:CYS:HB2	4:5:241:TYR:CE2	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:599:MET:O	4:5:603:ILE:HG12	2.20	0.40
5:6:559:THR:OG1	5:6:563:ILE:O	2.28	0.40
5:6:570:ASN:ND2	5:6:678:ILE:HG22	2.36	0.40
6:7:465:ALA:HA	17:7:2001:AGS:O3A	2.21	0.40
6:7:757:LYS:HA	6:7:757:LYS:HD3	1.87	0.40
7:8:22:ARG:HD2	7:8:22:ARG:HA	1.84	0.40
7:8:190:PHE:H	7:8:249:LEU:H	1.69	0.40
7:8:222:ILE:HG13	7:8:224:GLU:OE1	2.20	0.40
8:9:114:LYS:HA	8:9:117:GLN:HB3	2.02	0.40
8:9:339:ARG:O	8:9:342:ILE:HG22	2.21	0.40
8:9:437:PHE:O	8:9:441:ILE:HG12	2.21	0.40
11:C:191:PHE:O	11:C:195:PHE:N	2.53	0.40
11:C:520:VAL:HA	11:C:523:GLN:HE21	1.86	0.40
11:C:579:VAL:HA	11:C:582:ILE:HD12	2.03	0.40
12:E:201:LEU:HD21	12:E:262:ILE:HD11	2.03	0.40
13:D:235:PHE:HB3	13:D:267:ARG:HB3	2.02	0.40
14:F:271:SER:HA	14:F:355:LEU:O	2.21	0.40
15:M:29:DT:H6	15:M:29:DT:H2'	1.71	0.40
16:N:69:DA:H2''	16:N:70:DA:C8	2.57	0.40
1:2:481:GLU:O	1:2:484:PHE:HB3	2.21	0.40
2:3:670:GLN:HE22	2:3:719:LYS:NZ	2.19	0.40
3:4:602:THR:C	3:4:603:ALA:O	2.58	0.40
4:5:627:VAL:O	4:5:631:LYS:HG2	2.21	0.40
5:6:275:ARG:HH11	5:6:277:ARG:HH11	1.69	0.40
5:6:329:GLU:OE2	5:6:344:TRP:HE3	2.04	0.40
5:6:574:VAL:O	5:6:714:VAL:HA	2.21	0.40
6:7:143:LEU:HD22	6:7:146:ARG:NH1	2.36	0.40
6:7:313:CYS:SG	6:7:333:ILE:HB	2.61	0.40
6:7:717:LEU:O	6:7:720:VAL:HG12	2.21	0.40
7:8:491:GLU:O	7:8:494:SER:HB3	2.21	0.40
8:9:278:ASP:C	8:9:279:ARG:HG2	2.42	0.40
9:A:428:LYS:HB3	9:A:428:LYS:HE3	1.77	0.40
10:B:418:ILE:HA	10:B:449:GLN:O	2.21	0.40
11:C:79:ILE:HG22	11:C:276:TYR:CE1	2.56	0.40
11:C:491:LEU:HD12	11:C:491:LEU:HA	1.90	0.40
11:C:537:ILE:HD11	11:C:608:VAL:HG13	2.03	0.40
12:E:200:ILE:HD13	17:E:2001:AGS:C5	2.52	0.40
12:E:340:TYR:HD1	12:E:373:PRO:HB2	1.86	0.40
12:E:381:PHE:HB2	12:E:450:TRP:O	2.21	0.40
1:2:220:ASP:O	7:8:211:THR:HB	2.21	0.40
2:3:158:LYS:NZ	2:3:325:THR:HA	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:564:HIS:HA	2:3:567:ARG:NE	2.36	0.40
3:4:468:LYS:HE3	3:4:482:GLU:OE2	2.21	0.40
3:4:731:ASP:O	3:4:733:PRO:HD3	2.21	0.40
3:4:790:ARG:NH2	3:4:836:TYR:HD2	2.19	0.40
3:4:811:MET:HG2	3:4:812:LYS:N	2.37	0.40
5:6:622:THR:OG1	5:6:623:ILE:N	2.53	0.40
5:6:780:LEU:HD21	5:6:795:ILE:HG12	2.03	0.40
7:8:73:PHE:HA	7:8:92:TYR:HA	2.03	0.40
7:8:147:HIS:CE1	7:8:263:TRP:HZ3	2.39	0.40
7:8:359:ASP:HA	7:8:362:LYS:HE2	2.03	0.40
7:8:445:SER:O	7:8:445:SER:OG	2.34	0.40
8:9:86:GLU:O	8:9:89:MET:HB3	2.21	0.40
8:9:325:ALA:HA	8:9:328:THR:HB	2.02	0.40
8:9:495:MET:HG3	8:9:499:TYR:CE1	2.56	0.40
9:A:466:ALA:HA	9:A:471:SER:OG	2.21	0.40
9:A:691:ILE:HG21	9:A:775:ILE:HD11	2.03	0.40
10:B:358:ILE:HD13	10:B:358:ILE:HA	1.87	0.40
10:B:398:ASN:OD1	10:B:400:VAL:HB	2.22	0.40
11:C:60:LEU:HG	11:C:63:GLN:HE21	1.86	0.40
12:E:12:GLU:O	12:E:16:ASN:ND2	2.54	0.40
12:E:100:LEU:HA	12:E:100:LEU:HD12	1.81	0.40
12:E:423:ASN:O	12:E:427:LEU:HD23	2.22	0.40
12:E:433:ILE:O	12:E:433:ILE:HG13	2.22	0.40
13:D:56:LEU:HD12	13:D:56:LEU:HA	1.87	0.40
13:D:528:GLN:HG2	13:D:529:LEU:O	2.21	0.40
14:F:281:THR:HG23	14:F:284:GLU:H	1.87	0.40
14:F:323:LEU:N	14:F:369:VAL:HG11	2.37	0.40
16:N:61:DA:H1'	16:N:62:DG:H5'	2.04	0.40
1:2:739:ASN:O	1:2:743:ARG:HG2	2.21	0.40
2:3:384:MET:HE1	2:3:513:ILE:HB	2.04	0.40
2:3:404:ASN:HB3	2:3:512:VAL:HB	2.03	0.40
2:3:686:LEU:HD21	2:3:734:ARG:HH22	1.87	0.40
3:4:197:PHE:CD1	3:4:254:THR:HG21	2.56	0.40
3:4:296:ILE:O	3:4:299:LYS:HG2	2.21	0.40
3:4:519:TYR:CE2	3:4:538:LYS:HD3	2.56	0.40
5:6:356:TRP:CZ3	5:6:358:LYS:HB2	2.57	0.40
5:6:605:ALA:H	5:6:648:ASP:CG	2.23	0.40
5:6:793:TYR:HD1	5:6:793:TYR:HA	1.78	0.40
6:7:570:LEU:CB	6:7:585:ASN:HD21	2.29	0.40
7:8:290:PHE:CD2	7:8:291:PRO:HD3	2.57	0.40
7:8:472:TYR:O	7:8:475:LYS:HG3	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:117:GLN:O	8:9:121:ILE:HG13	2.22	0.40
9:A:531:LYS:HA	9:A:531:LYS:HD3	1.88	0.40
10:B:373:ARG:NE	16:N:76:DC:OP1	2.54	0.40
10:B:517:LEU:O	10:B:522:LYS:NZ	2.54	0.40
12:E:347:ALA:O	12:E:351:SER:HB3	2.20	0.40
13:D:305:TRP:HZ3	13:D:354:LEU:HD21	1.87	0.40
13:D:430:ALA:N	13:D:431:PRO:HD3	2.36	0.40
1:2:265:GLU:HG2	1:2:266:GLU:N	2.37	0.40
2:3:24:ARG:NH2	2:3:120:TYR:HB3	2.36	0.40
2:3:122:ILE:O	2:3:126:GLU:HG3	2.21	0.40
4:5:648:ILE:O	4:5:648:ILE:HG13	2.21	0.40
5:6:196:LEU:HD13	5:6:196:LEU:HA	1.96	0.40
5:6:303:GLU:CB	5:6:356:TRP:CD1	3.04	0.40
5:6:463:GLY:C	5:6:594:ARG:NH1	2.75	0.40
5:6:523:GLU:HB3	5:6:524:HIS:CD2	2.56	0.40
6:7:70:VAL:HG12	6:7:75:LEU:HB3	2.03	0.40
7:8:48:TYR:CG	7:8:49:ALA:N	2.90	0.40
7:8:99:GLN:HG2	7:8:147:HIS:NE2	2.37	0.40
7:8:364:LEU:HG	7:8:442:VAL:HG11	2.04	0.40
9:A:547:GLU:HA	9:A:550:PHE:CD2	2.56	0.40
17:A:2001:AGS:O2B	17:A:2001:AGS:S1G	2.80	0.40
11:C:198:ASP:HB2	11:C:231:HIS:O	2.21	0.40
11:C:358:PRO:HG2	11:C:464:GLU:HG2	2.03	0.40
13:D:493:GLN:O	13:D:496:MET:N	2.54	0.40
14:F:394:TYR:O	14:F:398:ILE:HG12	2.22	0.40
16:N:53:DT:H2''	16:N:54:DG:N7	2.36	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	2	595/868 (68%)	526 (88%)	68 (11%)	1 (0%)	47	79
2	3	640/971 (66%)	562 (88%)	78 (12%)	0	100	100
3	4	735/933 (79%)	629 (86%)	102 (14%)	4 (0%)	29	67
4	5	568/775 (73%)	500 (88%)	64 (11%)	4 (1%)	22	60
5	6	682/1017 (67%)	606 (89%)	76 (11%)	0	100	100
6	7	715/800 (89%)	631 (88%)	83 (12%)	1 (0%)	51	84
7	8	509/604 (84%)	417 (82%)	89 (18%)	3 (1%)	25	63
8	9	365/513 (71%)	324 (89%)	40 (11%)	1 (0%)	41	75
9	A	413/913 (45%)	371 (90%)	42 (10%)	0	100	100
10	B	318/620 (51%)	293 (92%)	25 (8%)	0	100	100
11	C	536/616 (87%)	495 (92%)	41 (8%)	0	100	100
12	E	414/479 (86%)	384 (93%)	30 (7%)	0	100	100
13	D	450/529 (85%)	408 (91%)	42 (9%)	0	100	100
14	F	153/435 (35%)	146 (95%)	7 (5%)	0	100	100
All	All	7093/10073 (70%)	6292 (89%)	787 (11%)	14 (0%)	50	79

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	4	603	ALA
4	5	500	GLN
8	9	232	ASN
3	4	481	ILE
7	8	142	CYS
7	8	338	PRO
1	2	627	GLN
4	5	195	ASN
7	8	542	LEU
3	4	482	GLU
3	4	840	PRO
4	5	148	LEU
6	7	531	GLU
4	5	147	PRO

5.3.2 Protein sidechains [i](#)

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	2	510/770 (66%)	508 (100%)	2 (0%)	91	94
2	3	564/835 (68%)	563 (100%)	1 (0%)	93	96
3	4	668/848 (79%)	665 (100%)	3 (0%)	91	94
4	5	516/688 (75%)	514 (100%)	2 (0%)	91	94
5	6	603/886 (68%)	598 (99%)	5 (1%)	81	89
6	7	644/714 (90%)	640 (99%)	4 (1%)	86	91
7	8	473/545 (87%)	471 (100%)	2 (0%)	91	94
8	9	341/470 (73%)	341 (100%)	0	100	100
9	A	376/812 (46%)	375 (100%)	1 (0%)	92	95
10	B	302/573 (53%)	301 (100%)	1 (0%)	92	95
11	C	506/576 (88%)	506 (100%)	0	100	100
12	E	394/440 (90%)	394 (100%)	0	100	100
13	D	420/488 (86%)	419 (100%)	1 (0%)	93	96
14	F	151/406 (37%)	151 (100%)	0	100	100
All	All	6468/9051 (72%)	6446 (100%)	22 (0%)	92	95

All (22) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	2	609	PHE
1	2	657	TYR
2	3	543	PHE
3	4	203	TYR
3	4	580	TYR
3	4	757	HIS
4	5	272	ARG
4	5	498	GLU
5	6	180	PHE
5	6	303	GLU
5	6	304	LEU
5	6	353	PHE
5	6	566	ARG
6	7	486	LYS
6	7	517	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	7	538	HIS
6	7	618	TYR
7	8	263	TRP
7	8	581	TYR
9	A	486	THR
10	B	366	TYR
13	D	231	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (124) such sidechains are listed below:

Mol	Chain	Res	Type
1	2	245	ASN
1	2	248	HIS
1	2	432	ASN
1	2	439	ASN
1	2	561	HIS
1	2	666	ASN
1	2	746	GLN
1	2	780	GLN
1	2	849	GLN
2	3	46	GLN
2	3	49	ASN
2	3	94	HIS
2	3	151	HIS
2	3	253	HIS
2	3	310	ASN
2	3	340	GLN
2	3	424	ASN
2	3	487	HIS
2	3	507	ASN
2	3	661	GLN
2	3	691	ASN
2	3	950	ASN
3	4	184	ASN
3	4	350	ASN
3	4	413	HIS
3	4	483	GLN
3	4	487	GLN
3	4	492	HIS
3	4	646	HIS
3	4	911	GLN
4	5	49	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	5	67	HIS
4	5	381	ASN
4	5	500	GLN
4	5	539	ASN
5	6	198	ASN
5	6	357	GLN
5	6	364	ASN
5	6	366	ASN
5	6	501	GLN
5	6	524	HIS
5	6	653	HIS
5	6	750	GLN
5	6	914	ASN
5	6	978	HIS
6	7	19	ASN
6	7	76	ASN
6	7	109	ASN
6	7	124	ASN
6	7	144	ASN
6	7	229	GLN
6	7	271	GLN
6	7	336	ASN
6	7	538	HIS
6	7	543	GLN
6	7	544	GLN
6	7	575	ASN
6	7	615	HIS
6	7	657	ASN
6	7	669	GLN
6	7	683	GLN
7	8	28	GLN
7	8	39	GLN
7	8	99	GLN
7	8	108	ASN
7	8	140	GLN
7	8	244	HIS
7	8	256	ASN
7	8	280	ASN
7	8	286	GLN
7	8	413	GLN
7	8	469	ASN
7	8	482	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	8	515	GLN
7	8	547	ASN
7	8	573	GLN
7	8	584	ASN
8	9	63	GLN
8	9	124	GLN
8	9	183	GLN
8	9	206	GLN
8	9	295	GLN
8	9	313	GLN
8	9	399	ASN
8	9	428	ASN
9	A	725	HIS
9	A	882	GLN
9	A	886	ASN
10	B	286	GLN
10	B	297	GLN
10	B	458	HIS
10	B	550	GLN
11	C	19	GLN
11	C	63	GLN
11	C	190	ASN
11	C	218	ASN
11	C	239	ASN
11	C	271	ASN
11	C	371	HIS
11	C	477	GLN
11	C	486	ASN
12	E	14	GLN
12	E	16	ASN
12	E	32	ASN
12	E	54	ASN
12	E	114	ASN
12	E	123	GLN
12	E	231	GLN
12	E	234	ASN
12	E	248	HIS
12	E	277	ASN
12	E	298	ASN
12	E	422	GLN
12	E	423	ASN
13	D	105	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	D	120	GLN
13	D	126	GLN
13	D	152	GLN
13	D	158	HIS
13	D	233	ASN
13	D	327	ASN
13	D	528	GLN
14	F	318	GLN
14	F	383	GLN

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 monosaccharides in this entry.

5.6 Ligand geometry [i](#)

8 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
17	AGS	9	2001	-	26,33,33	0.73	1 (3%)	26,52,52	1.22	2 (7%)
17	AGS	7	2001	-	26,33,33	0.70	0	26,52,52	1.19	3 (11%)
17	AGS	6	1101	-	26,33,33	1.89	3 (11%)	26,52,52	1.58	4 (15%)
17	AGS	4	2001	-	26,33,33	0.74	0	26,52,52	1.24	2 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
17	AGS	E	2001	-	26,33,33	0.73	0	26,52,52	1.35	2 (7%)
17	AGS	2	2001	-	26,33,33	0.78	0	26,52,52	1.40	2 (7%)
17	AGS	A	2001	-	26,33,33	0.71	0	26,52,52	1.14	2 (7%)
17	AGS	D	2001	-	26,33,33	0.73	0	26,52,52	1.34	2 (7%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	AGS	9	2001	-	-	4/17/38/38	0/3/3/3
17	AGS	7	2001	-	-	2/17/38/38	0/3/3/3
17	AGS	6	1101	-	-	1/17/38/38	0/3/3/3
17	AGS	4	2001	-	-	5/17/38/38	0/3/3/3
17	AGS	E	2001	-	-	9/17/38/38	0/3/3/3
17	AGS	2	2001	-	-	6/17/38/38	0/3/3/3
17	AGS	A	2001	-	-	8/17/38/38	0/3/3/3
17	AGS	D	2001	-	-	2/17/38/38	0/3/3/3

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	6	1101	AGS	PG-S1G	7.96	2.08	1.90
17	6	1101	AGS	C5-C4	2.51	1.47	1.40
17	9	2001	AGS	PG-S1G	2.05	1.95	1.90
17	6	1101	AGS	PG-O3G	-2.02	1.48	1.54

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	2	2001	AGS	PA-O3A-PB	-5.71	113.25	132.83
17	E	2001	AGS	PA-O3A-PB	-5.65	113.44	132.83
17	D	2001	AGS	PA-O3A-PB	-5.62	113.53	132.83
17	4	2001	AGS	PA-O3A-PB	-5.11	115.30	132.83
17	9	2001	AGS	PA-O3A-PB	-4.89	116.06	132.83
17	A	2001	AGS	PA-O3A-PB	-4.50	117.39	132.83
17	7	2001	AGS	PA-O3A-PB	-4.25	118.23	132.83
17	6	1101	AGS	PA-O3A-PB	-3.59	120.51	132.83

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	6	1101	AGS	C3'-C2'-C1'	3.45	106.17	100.98
17	6	1101	AGS	N3-C2-N1	-3.15	123.75	128.68
17	6	1101	AGS	C4-C5-N7	-2.69	106.59	109.40
17	2	2001	AGS	C5-C6-N6	2.42	124.03	120.35
17	7	2001	AGS	C5-C6-N6	2.34	123.90	120.35
17	D	2001	AGS	C5-C6-N6	2.25	123.77	120.35
17	7	2001	AGS	C3'-C2'-C1'	2.25	104.36	100.98
17	9	2001	AGS	C5-C6-N6	2.25	123.77	120.35
17	A	2001	AGS	C5-C6-N6	2.25	123.76	120.35
17	E	2001	AGS	C5-C6-N6	2.21	123.72	120.35
17	4	2001	AGS	C5-C6-N6	2.10	123.54	120.35

There are no chirality outliers.

All (37) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
17	2	2001	AGS	PB-O3B-PG-O2G
17	2	2001	AGS	PB-O3B-PG-O3G
17	2	2001	AGS	C5'-O5'-PA-O2A
17	2	2001	AGS	C5'-O5'-PA-O3A
17	4	2001	AGS	C5'-O5'-PA-O1A
17	9	2001	AGS	O4'-C4'-C5'-O5'
17	A	2001	AGS	C5'-O5'-PA-O2A
17	E	2001	AGS	C5'-O5'-PA-O3A
17	4	2001	AGS	O4'-C4'-C5'-O5'
17	E	2001	AGS	O4'-C4'-C5'-O5'
17	E	2001	AGS	C3'-C4'-C5'-O5'
17	2	2001	AGS	C3'-C4'-C5'-O5'
17	7	2001	AGS	O4'-C4'-C5'-O5'
17	7	2001	AGS	C3'-C4'-C5'-O5'
17	9	2001	AGS	C3'-C4'-C5'-O5'
17	E	2001	AGS	PG-O3B-PB-O1B
17	2	2001	AGS	O4'-C4'-C5'-O5'
17	A	2001	AGS	O4'-C4'-C5'-O5'
17	4	2001	AGS	C5'-O5'-PA-O3A
17	A	2001	AGS	PA-O3A-PB-O1B
17	9	2001	AGS	C4'-C5'-O5'-PA
17	D	2001	AGS	C4'-C5'-O5'-PA
17	4	2001	AGS	C5'-O5'-PA-O2A
17	A	2001	AGS	C5'-O5'-PA-O1A
17	E	2001	AGS	C5'-O5'-PA-O1A
17	E	2001	AGS	C5'-O5'-PA-O2A

Continued on next page...

Continued from previous page...

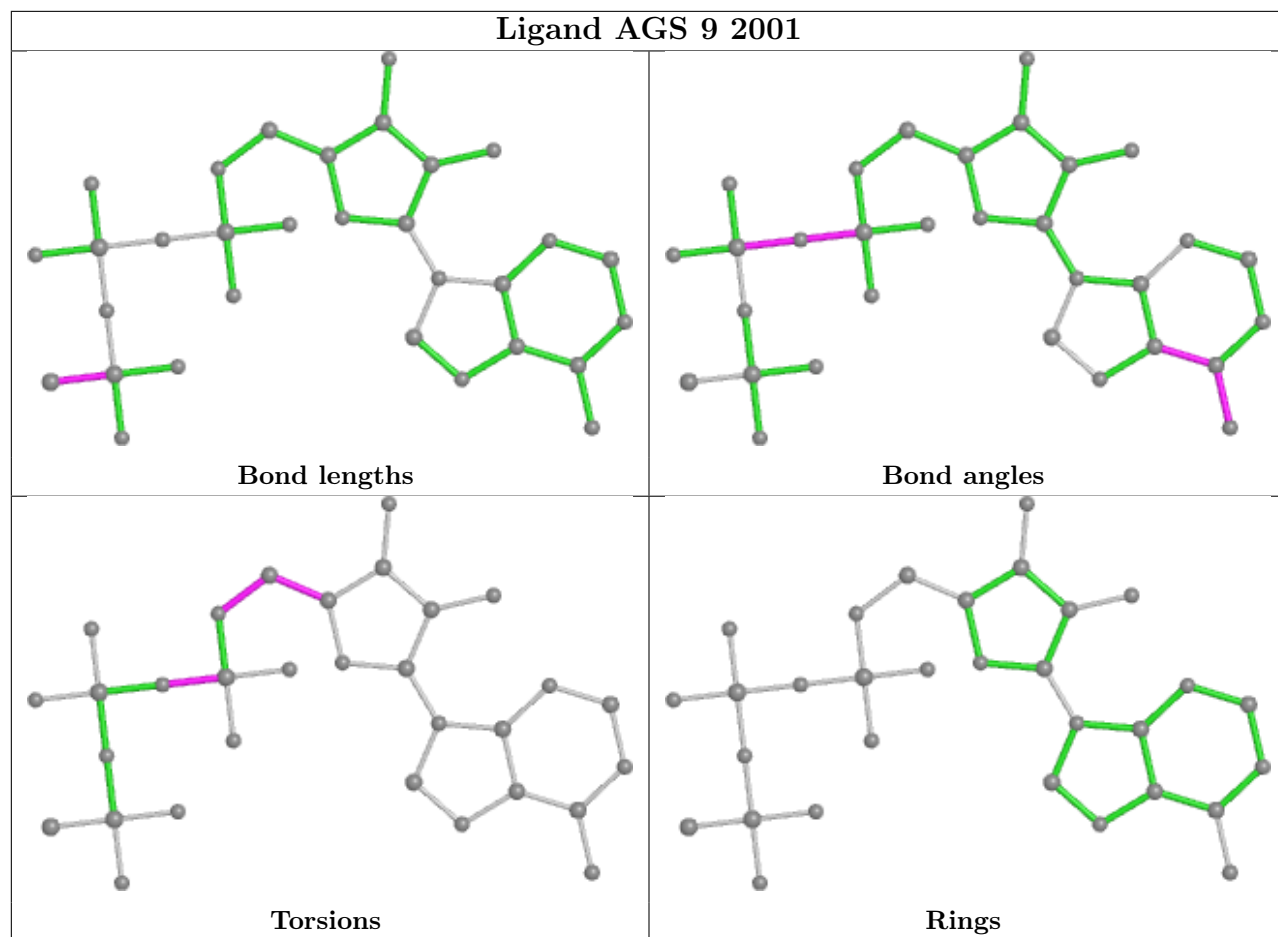
Mol	Chain	Res	Type	Atoms
17	4	2001	AGS	C3'-C4'-C5'-O5'
17	A	2001	AGS	PG-O3B-PB-O2B
17	9	2001	AGS	PB-O3A-PA-O2A
17	E	2001	AGS	PA-O3A-PB-O2B
17	E	2001	AGS	PA-O3A-PB-O1B
17	D	2001	AGS	PB-O3A-PA-O5'
17	6	1101	AGS	O4'-C4'-C5'-O5'
17	E	2001	AGS	PG-O3B-PB-O2B
17	A	2001	AGS	C5'-O5'-PA-O3A
17	A	2001	AGS	PB-O3A-PA-O1A
17	A	2001	AGS	PB-O3A-PA-O2A

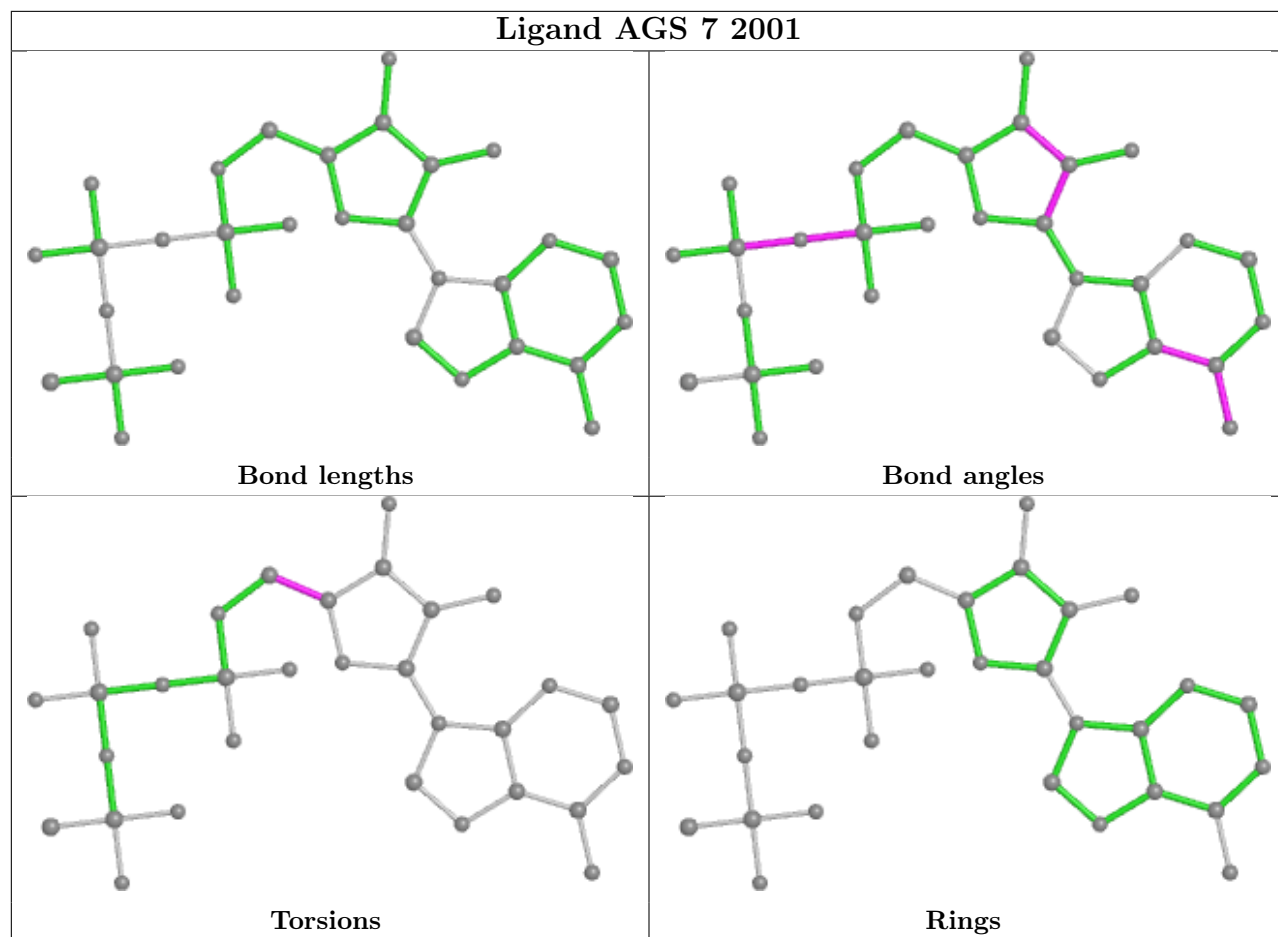
There are no ring outliers.

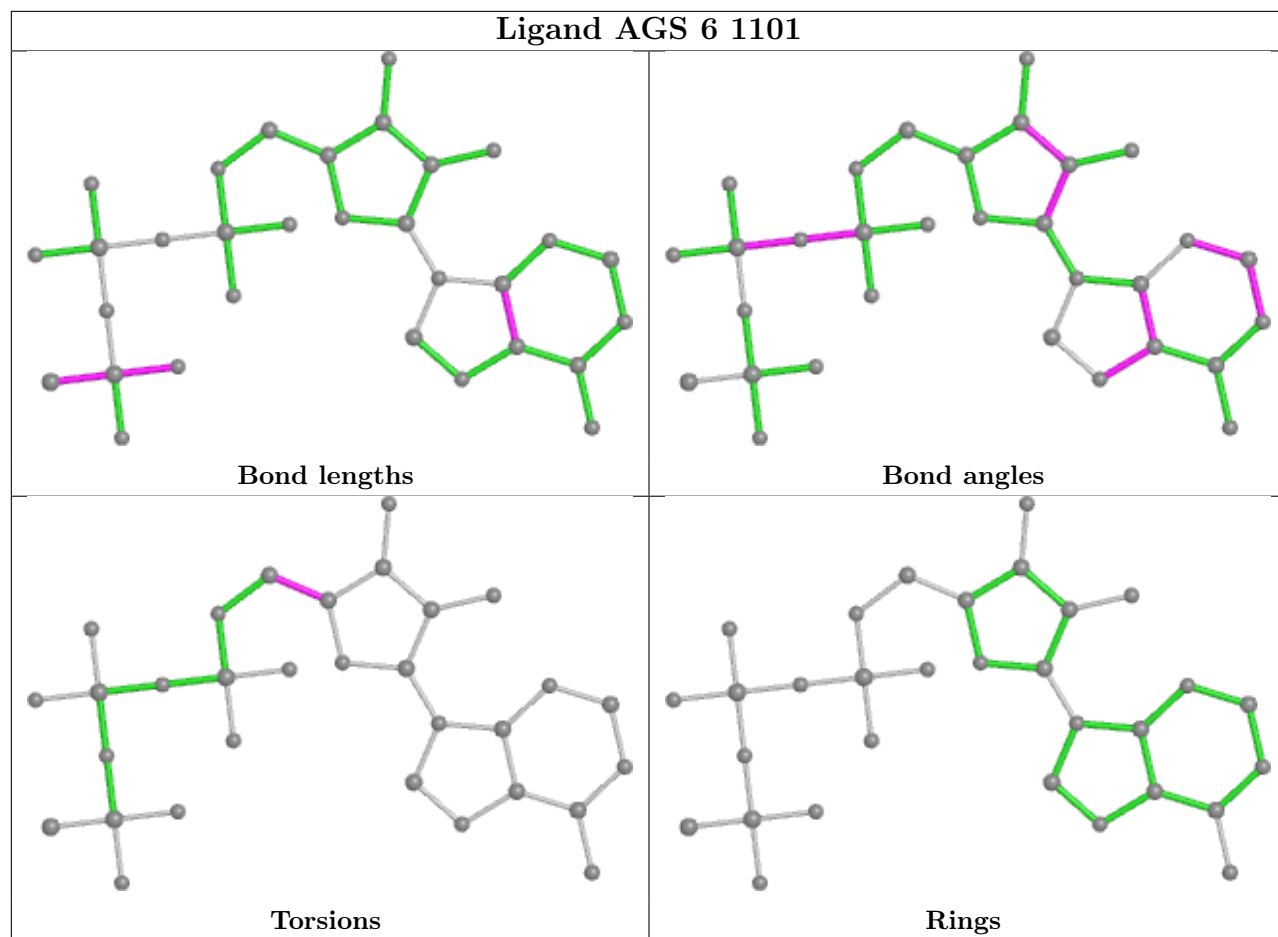
8 monomers are involved in 62 short contacts:

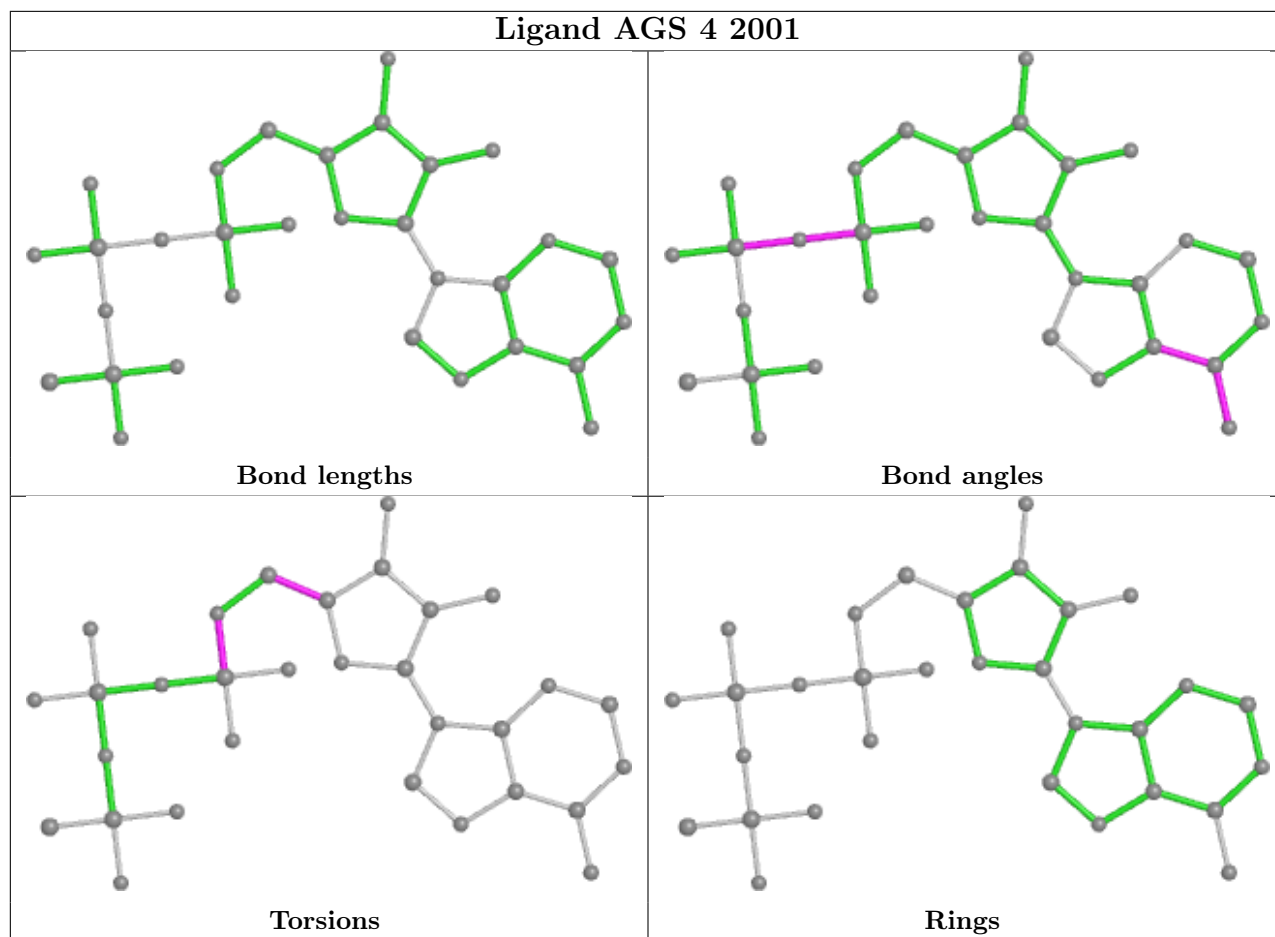
Mol	Chain	Res	Type	Clashes	Symm-Clashes
17	9	2001	AGS	4	0
17	7	2001	AGS	11	0
17	6	1101	AGS	10	0
17	4	2001	AGS	8	0
17	E	2001	AGS	6	0
17	2	2001	AGS	11	0
17	A	2001	AGS	7	0
17	D	2001	AGS	5	0

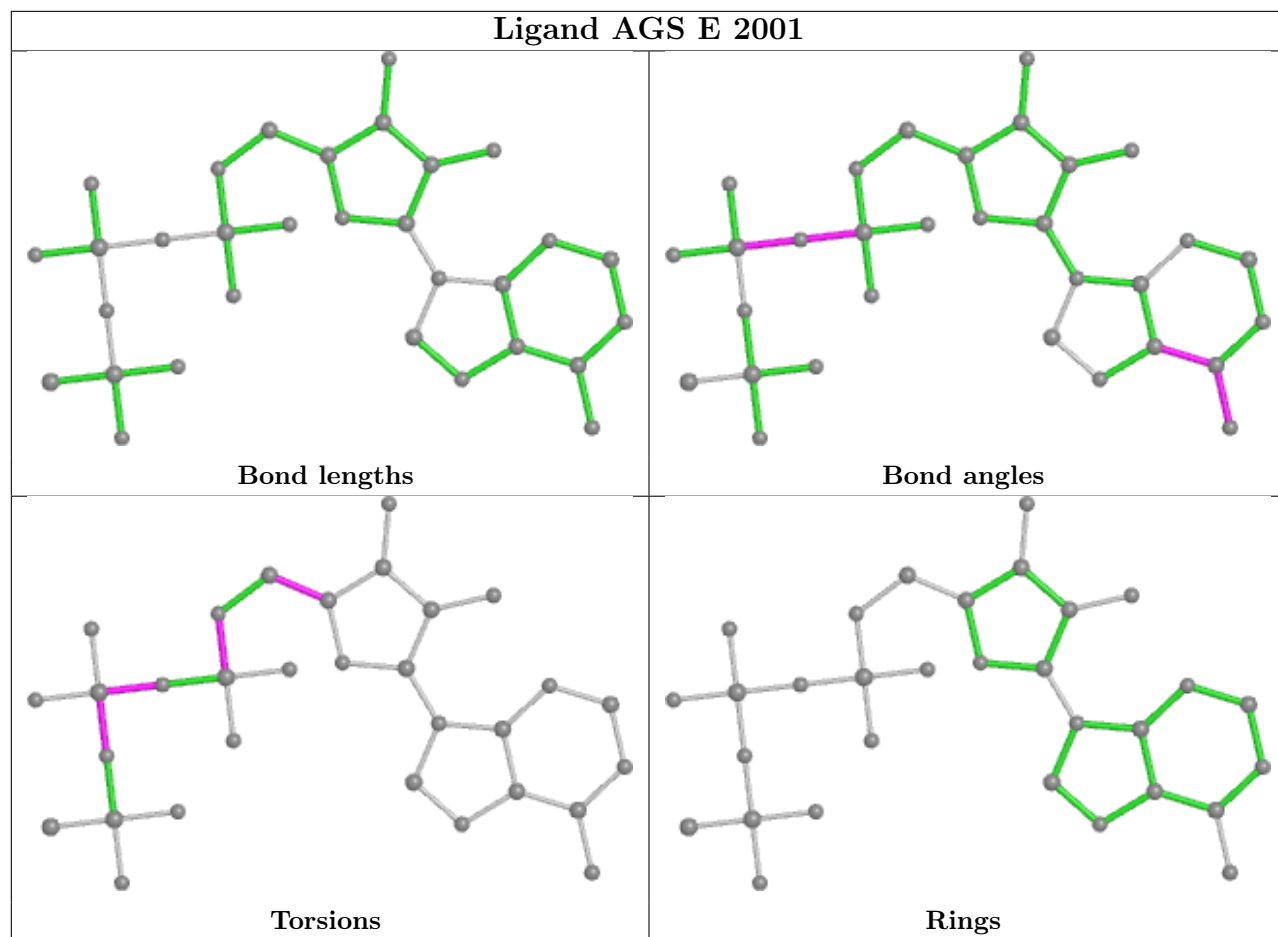
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

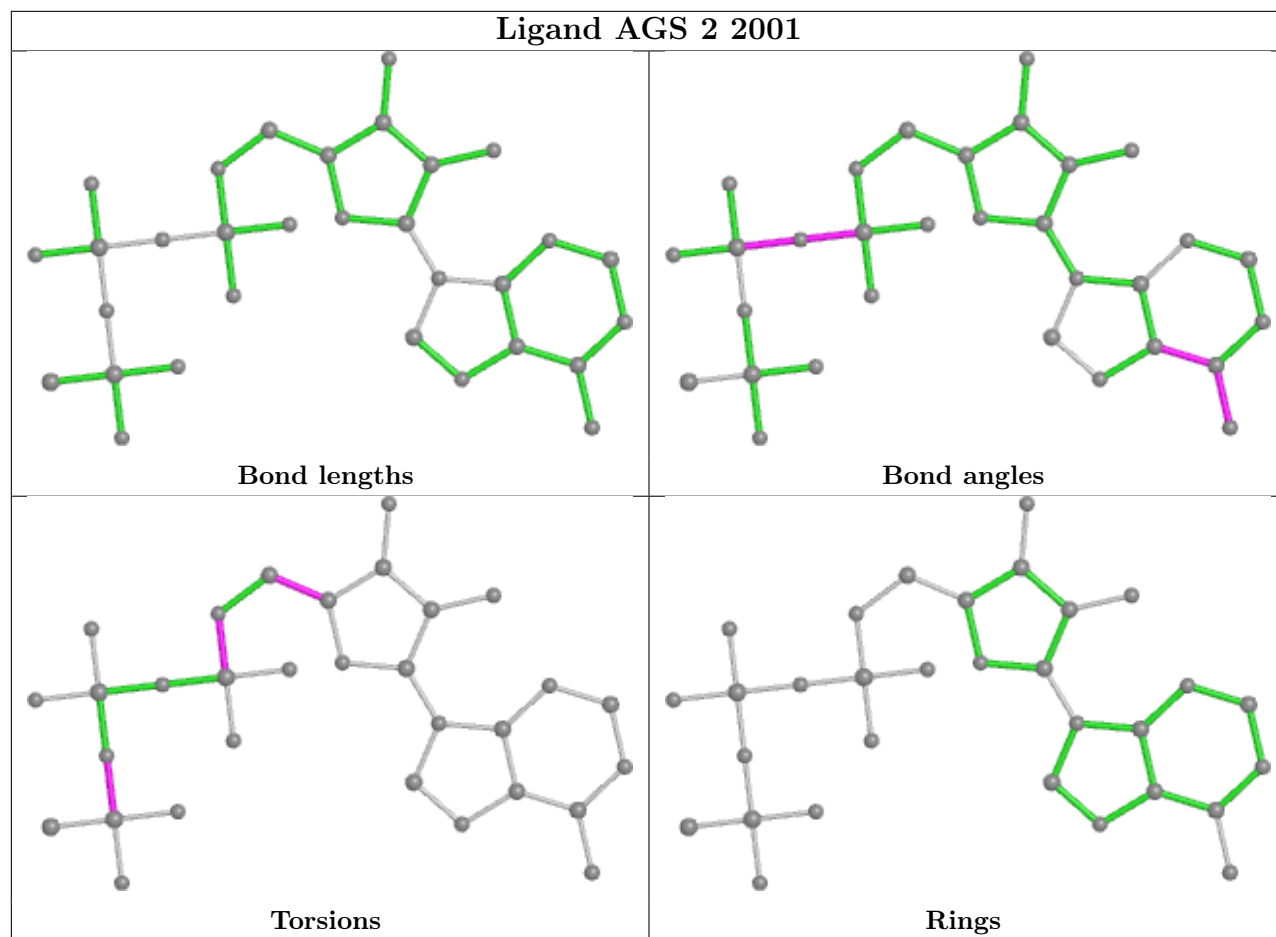


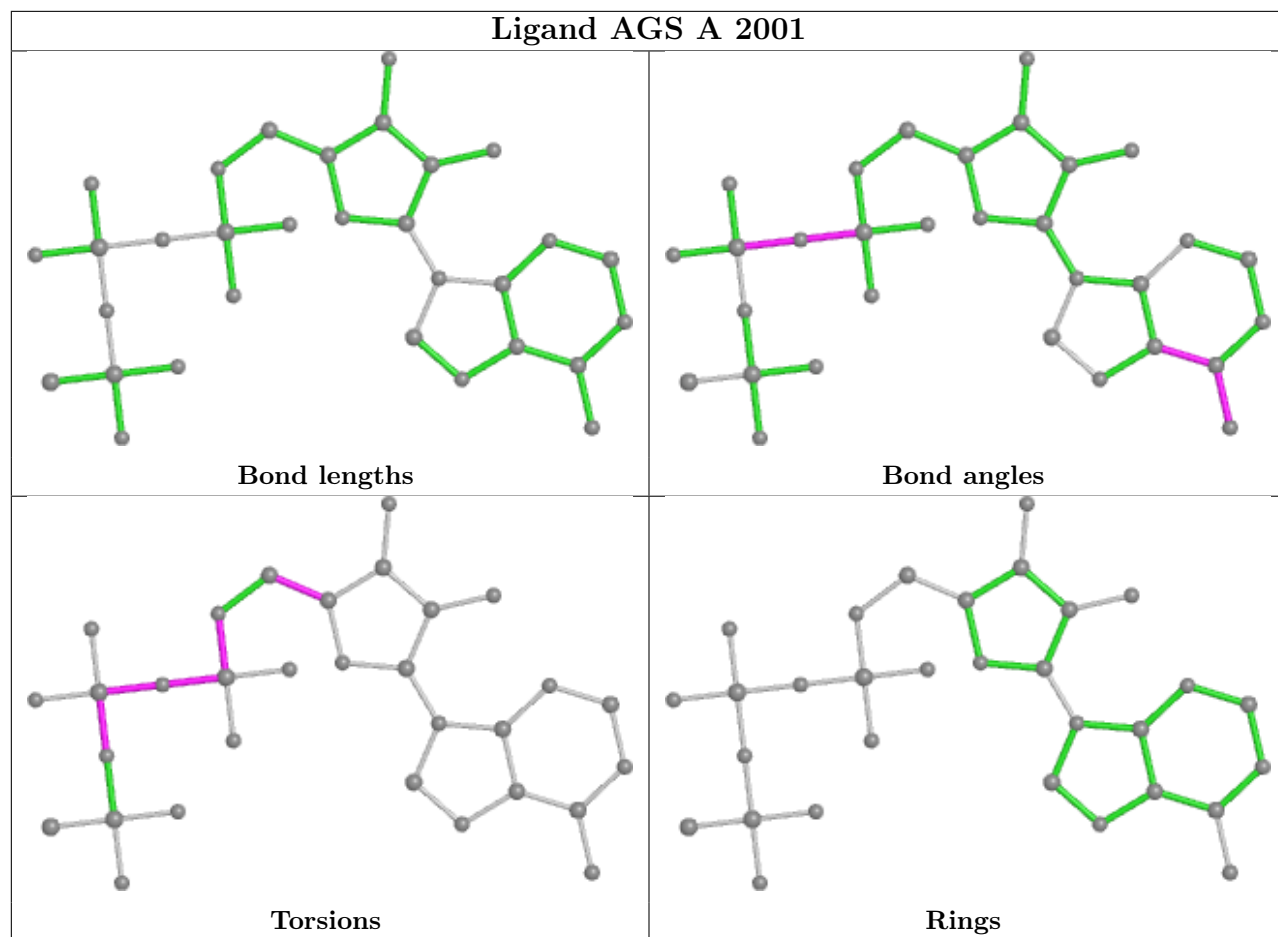


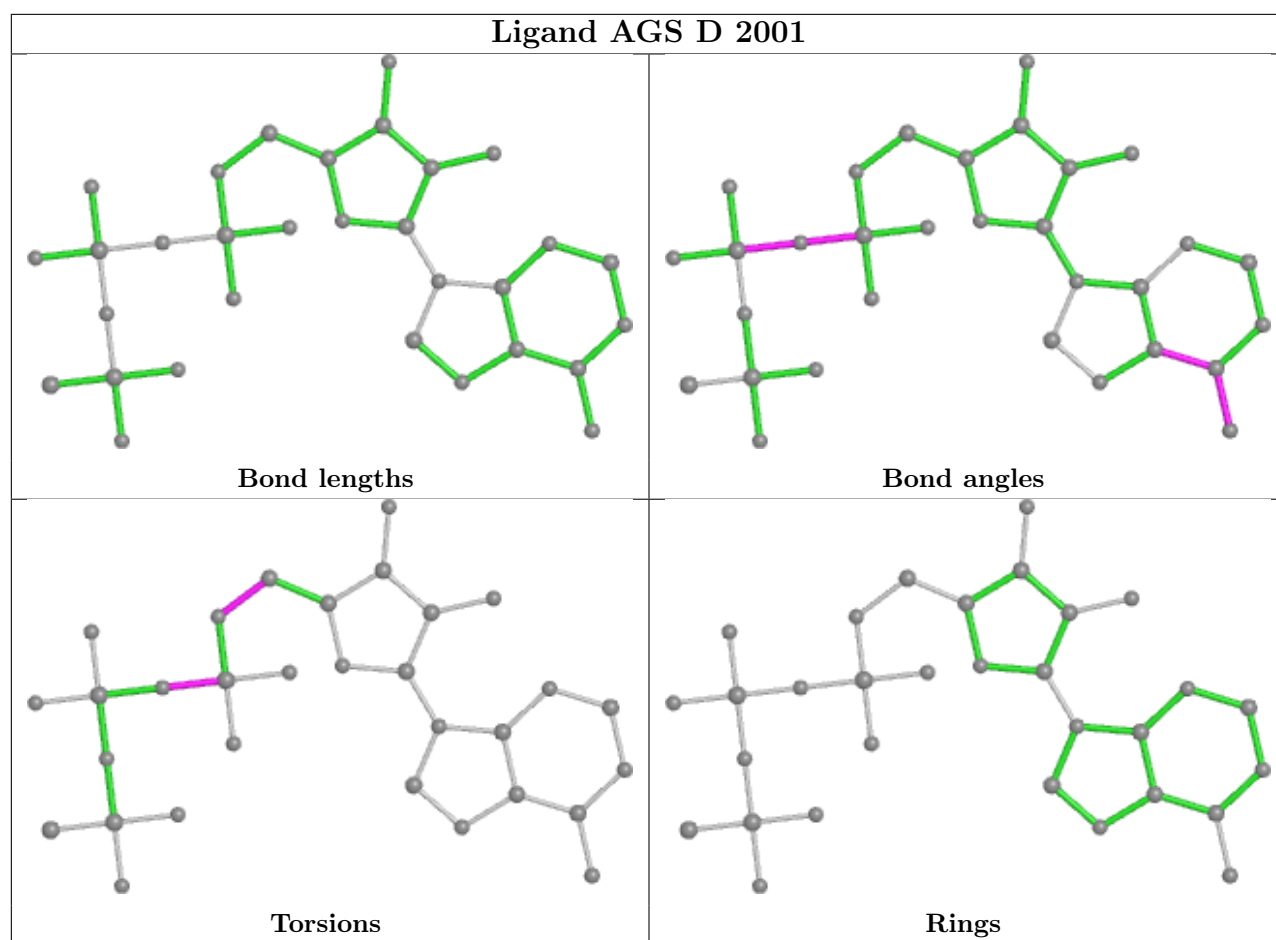












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

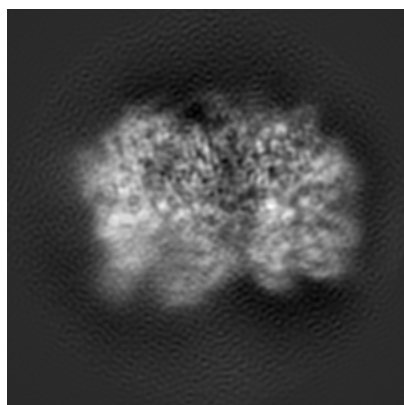
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-8540. These allow visual inspection of the internal detail of the map and identification of artifacts.

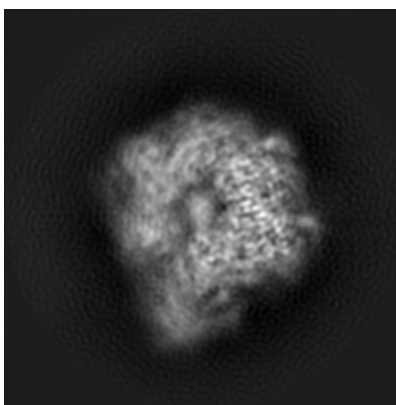
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

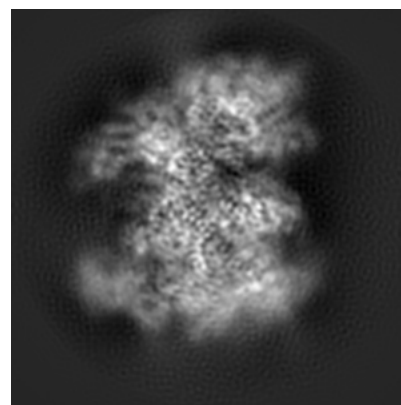
6.1.1 Primary map



X



Y

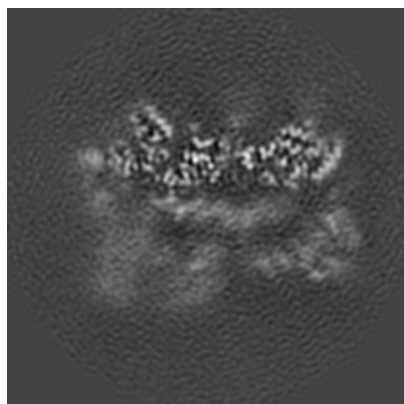


Z

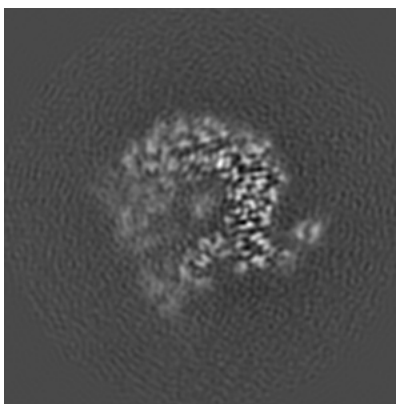
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

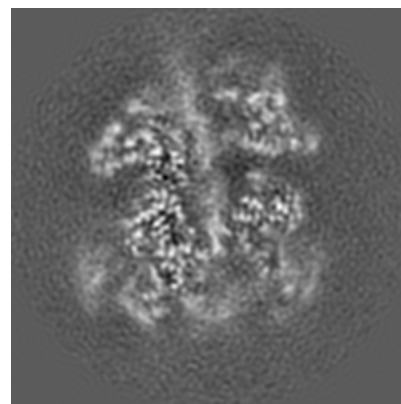
6.2.1 Primary map



X Index: 128



Y Index: 128

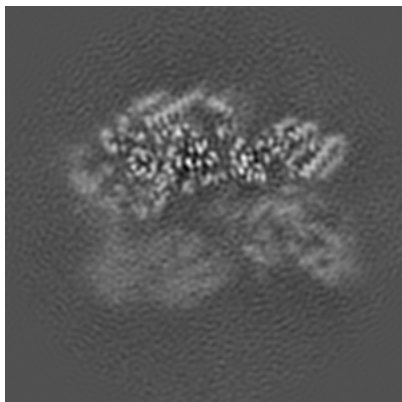


Z Index: 128

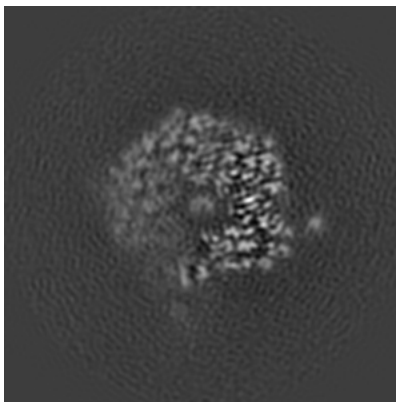
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

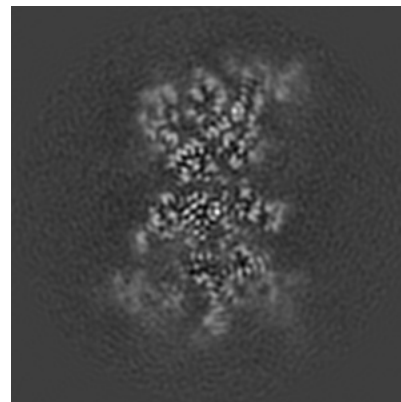
6.3.1 Primary map



X Index: 119



Y Index: 123



Z Index: 157

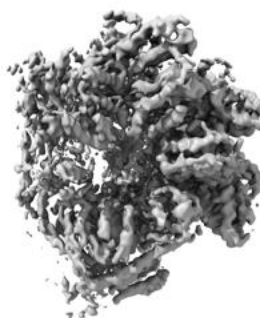
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

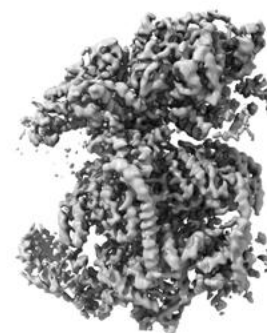
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.021. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

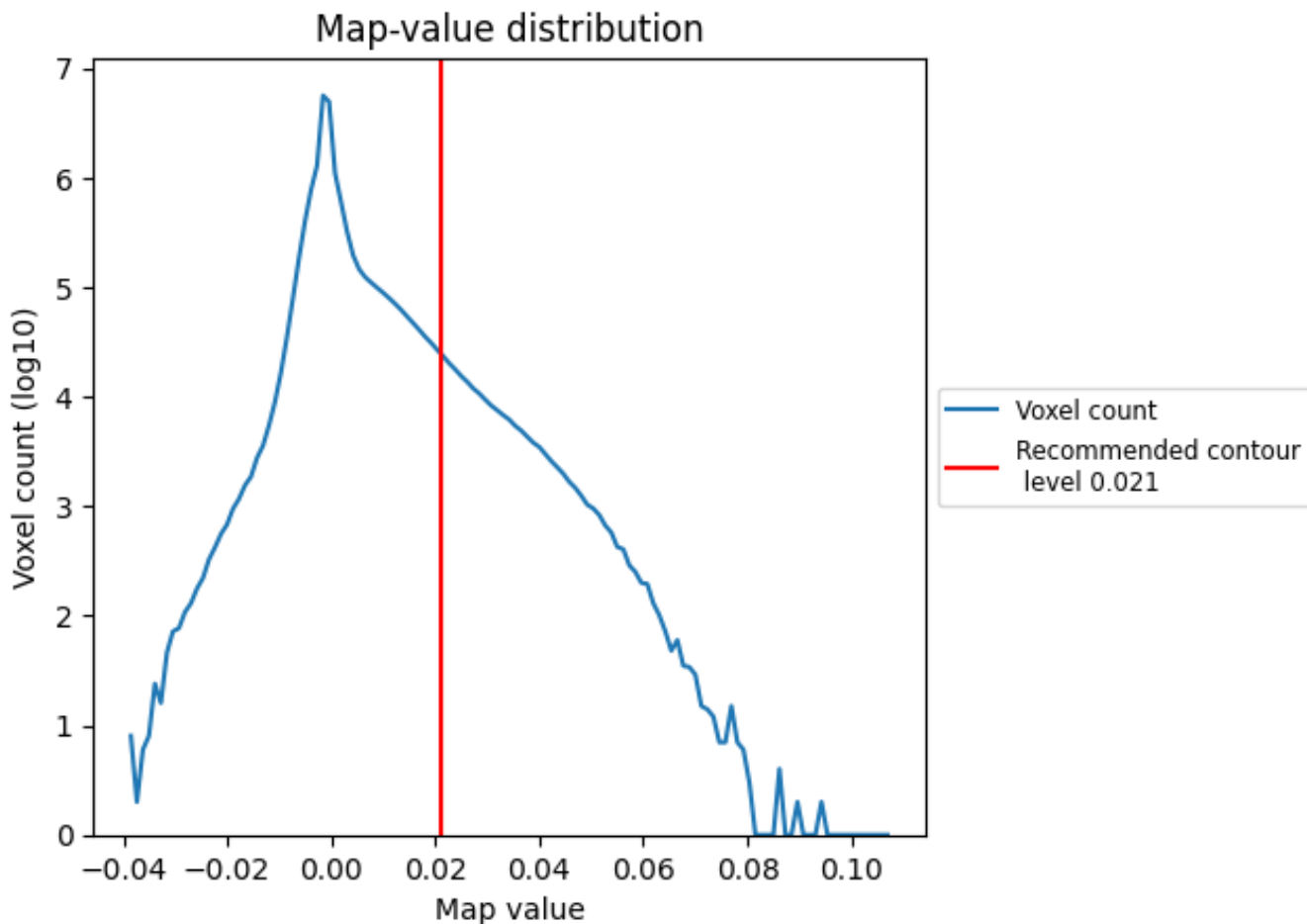
6.5 Mask visualisation

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

7 Map analysis [i](#)

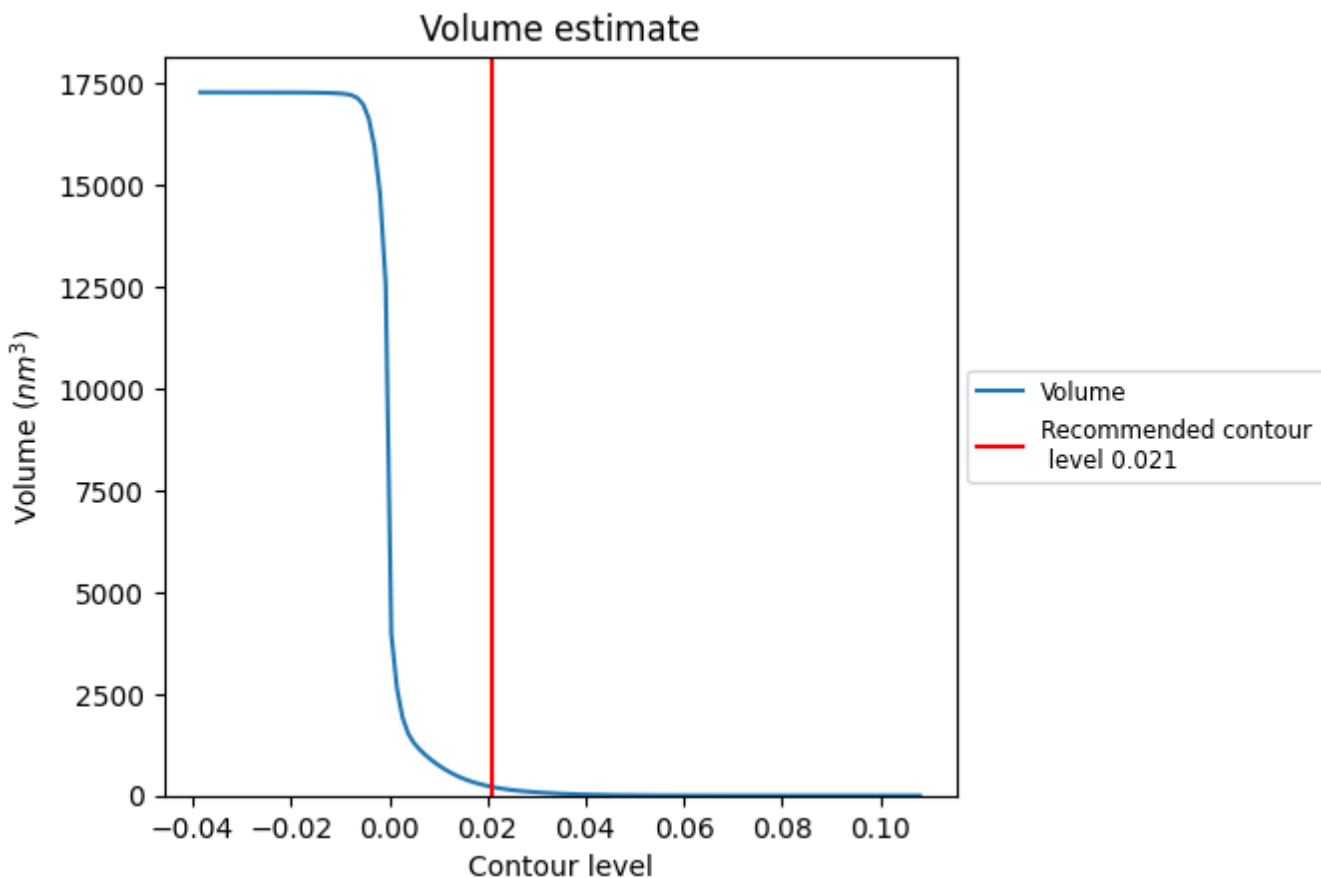
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

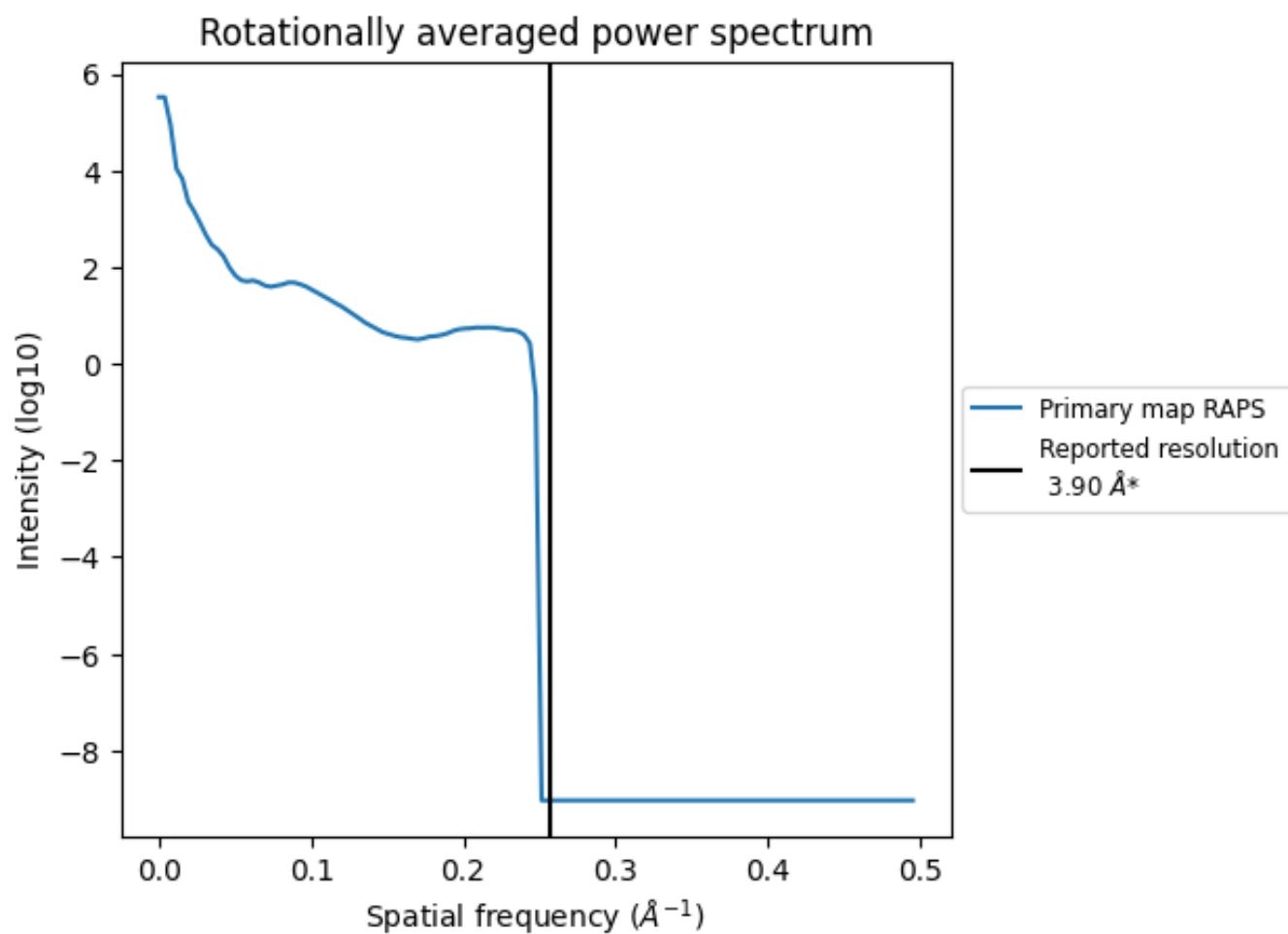
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 212 nm³; this corresponds to an approximate mass of 192 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)



*Reported resolution corresponds to spatial frequency of 0.256 Å⁻¹

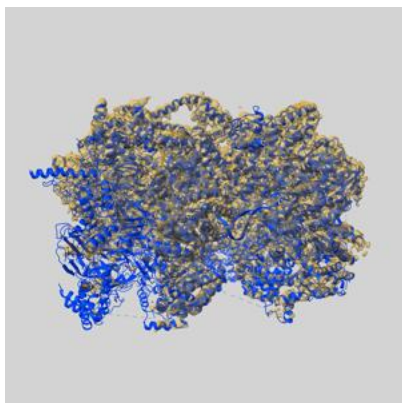
8 Fourier-Shell correlation

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

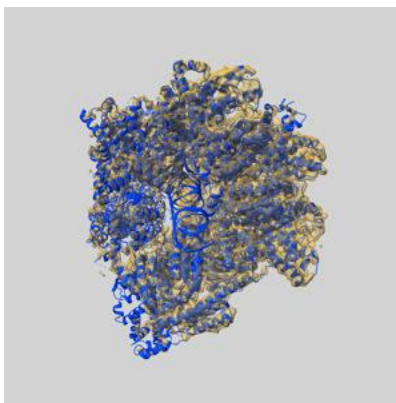
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-8540 and PDB model 5V8F. Per-residue inclusion information can be found in section 3 on page 8.

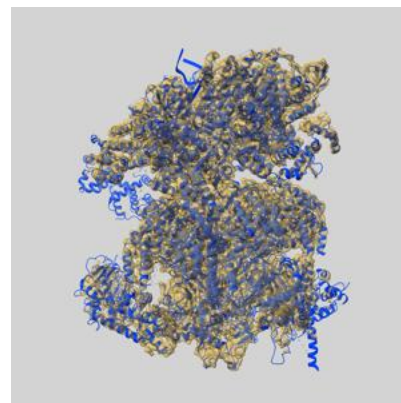
9.1 Map-model overlay [i](#)



X



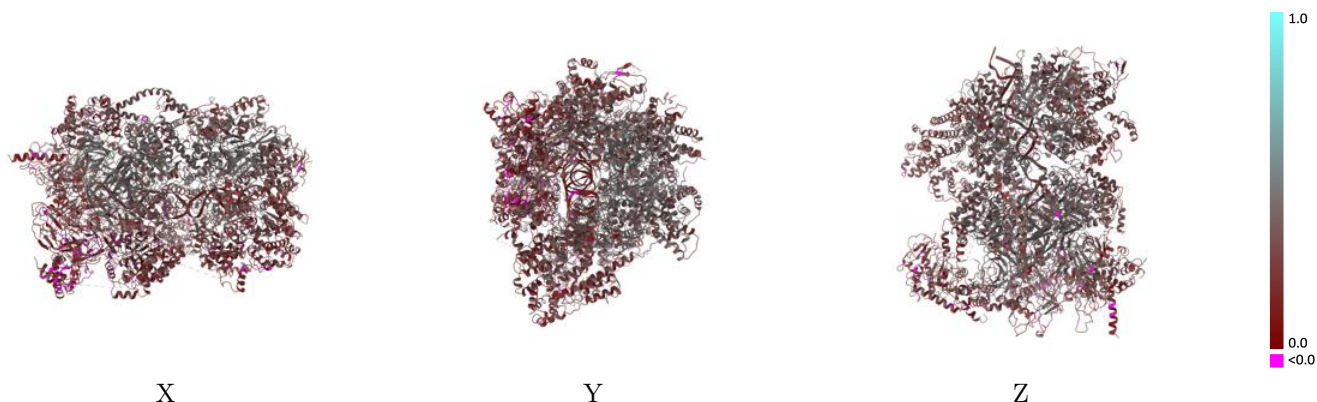
Y



Z

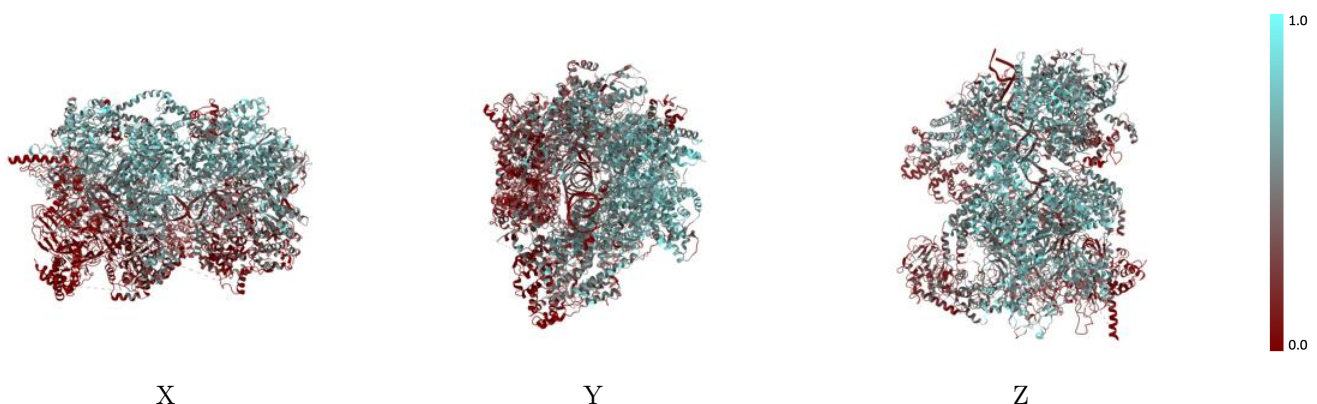
The images above show the 3D surface view of the map at the recommended contour level 0.021 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



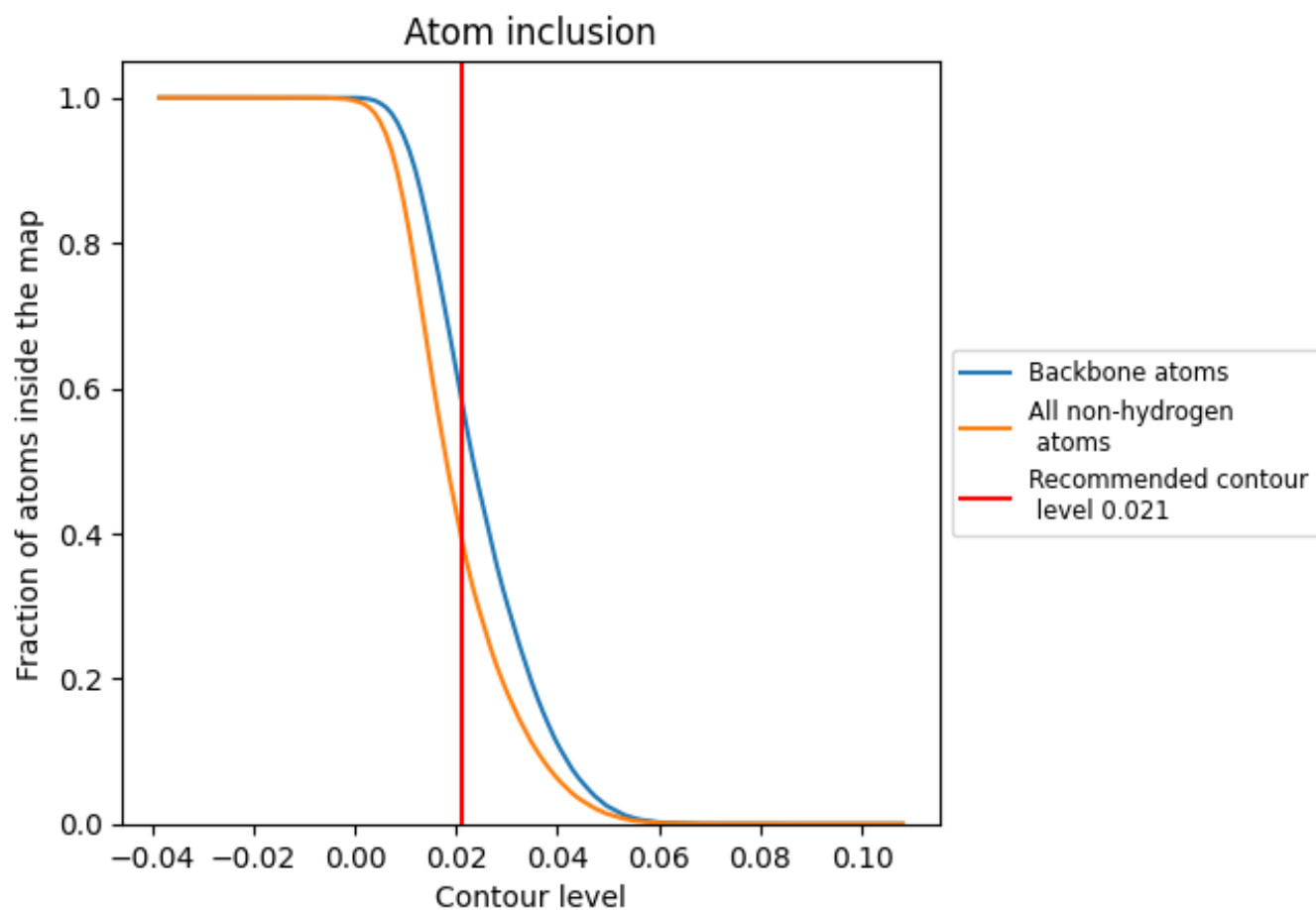
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.021).



































9.4 Atom inclusion [i](#)



At the recommended contour level, 59% of all backbone atoms, 40% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.021) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.3955	 0.3200
2	 0.4984	 0.3530
3	 0.1360	 0.2420
4	 0.5636	 0.3790
5	 0.0099	 0.1920
6	 0.6203	 0.3940
7	 0.3221	 0.3170
8	 0.2967	 0.2730
9	 0.2609	 0.2640
A	 0.5306	 0.3470
B	 0.3448	 0.2920
C	 0.4190	 0.3230
D	 0.6335	 0.4030
E	 0.6468	 0.4050
F	 0.0390	 0.2620
M	 0.2629	 0.2070
N	 0.3545	 0.2480

