



Full wwPDB/EMDatabank EM Map/Model Validation Report ⓘ

Feb 15, 2017 – 01:52 PM EST

PDB ID : 5UDB
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 : 2016-12-25
Resolution : 3.90 Å(reported)

This is a Full wwPDB/EMDatabank EM Map/Model Validation Report
for a publicly released PDB/EMDB entry.

We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20028442

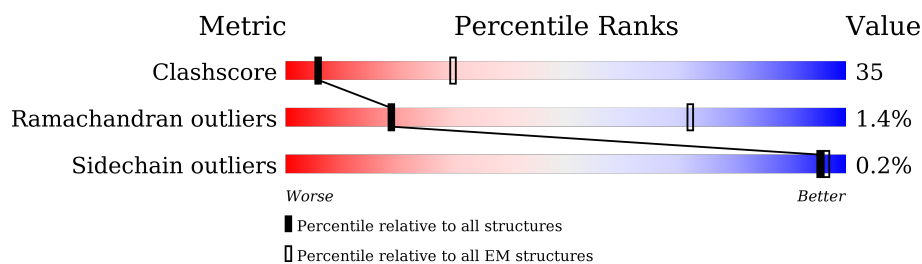
1 Overall quality at a glance

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.




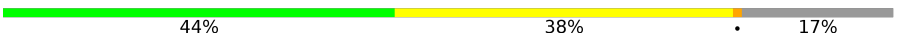



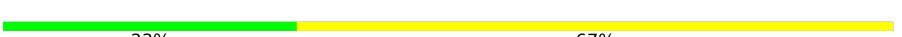
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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 $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	2	868	36% 33% 30%
2	3	971	35% 33% 32%
3	4	933	32% 47% 20%
4	5	775	51% 24% 25%
5	6	1017	31% 35% 32%
6	7	845	49% 36% 14%
7	8	604	45% 40% 14%
8	9	513	38% 34% 27%
9	A	914	20% 20% 59%

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Mol	Chain	Length	Quality of chain
10	B	620	
11	C	616	
12	D	529	
13	E	479	
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

There are 17 unique types of molecules in this entry. The entry contains 57577 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
1	2	605	Total	C	N	O	S	0	0
			4755	2984	865	891	15		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	3	659	Total	C	N	O	S	0	0
			5177	3243	938	982	14		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	4	751	Total	C	N	O	S	0	0
			5969	3727	1043	1168	31		

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

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

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	6	693	Total	C	N	O	S	0	0
			5394	3403	946	1021	24		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	7	726	Total	C	N	O	S	0	0
			5740	3619	993	1096	32		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
7	8	519	Total	C	N	O	S	0	0
			4163	2650	715	779	19		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
8	9	376	Total	C	N	O	S	0	0
			3005	1928	503	557	17		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	A	372	Total	C	N	O	S	0	0
			2963	1893	492	561	17		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	B	319	Total	C	N	O	S	0	0
			2636	1708	433	481	14		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
11	C	510	Total	C	N	O	S	0	0
			4234	2737	697	785	15		

- Molecule 12 is a protein called Origin recognition complex subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	D	447	Total	C	N	O	S	0	0
			3615	2311	611	680	13		

- Molecule 13 is a protein called Origin recognition complex subunit 5.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	E	417	Total	C	N	O	S	0	0
			3417	2229	542	633	13		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
14	F	15	Total	C	N	O	S	0	0
			135	86	23	25	1		

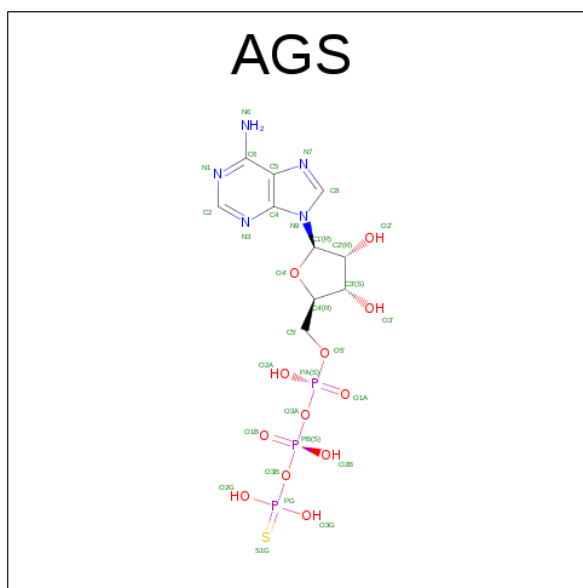
- Molecule 15 is a DNA chain called DNA (39-MER).

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

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

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

- Molecule 17 is PHOSPHOTHIOPHOSPHORIC ACID-ADENYLATE ESTER (three-letter code: AGS) (formula: $C_{10}H_{16}N_5O_{12}P_3S$).



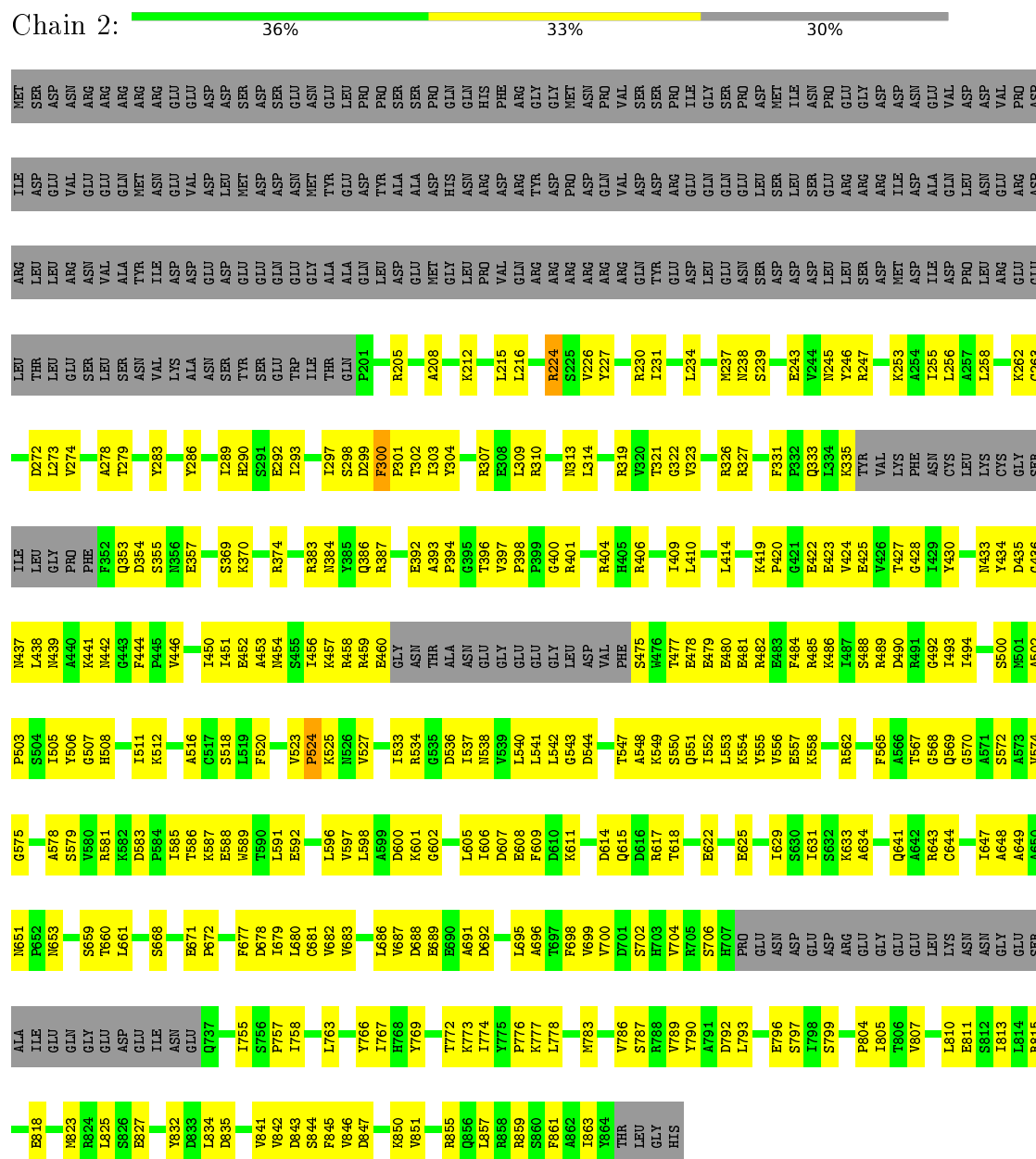
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Mol	Chain	Residues	Atoms						AltConf
17	9	1	Total	C	N	O	P	S	0
			31	10	5	12	3	1	
17	A	1	Total	C	N	O	P	S	0
			31	10	5	12	3	1	
17	D	1	Total	C	N	O	P	S	0
			31	10	5	12	3	1	
17	E	1	Total	C	N	O	P	S	0
			31	10	5	12	3	1	

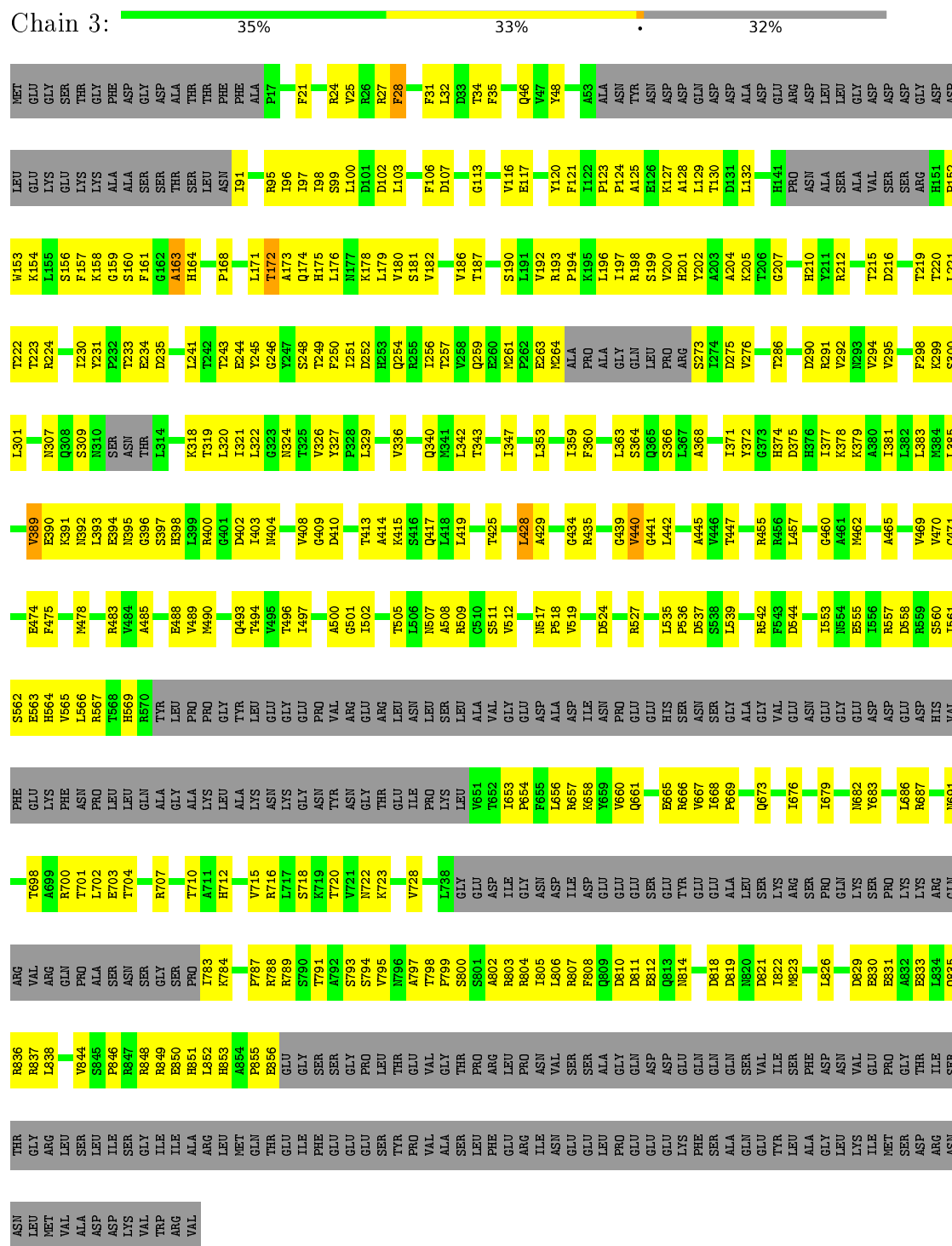
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: DNA replication licensing factor MCM2

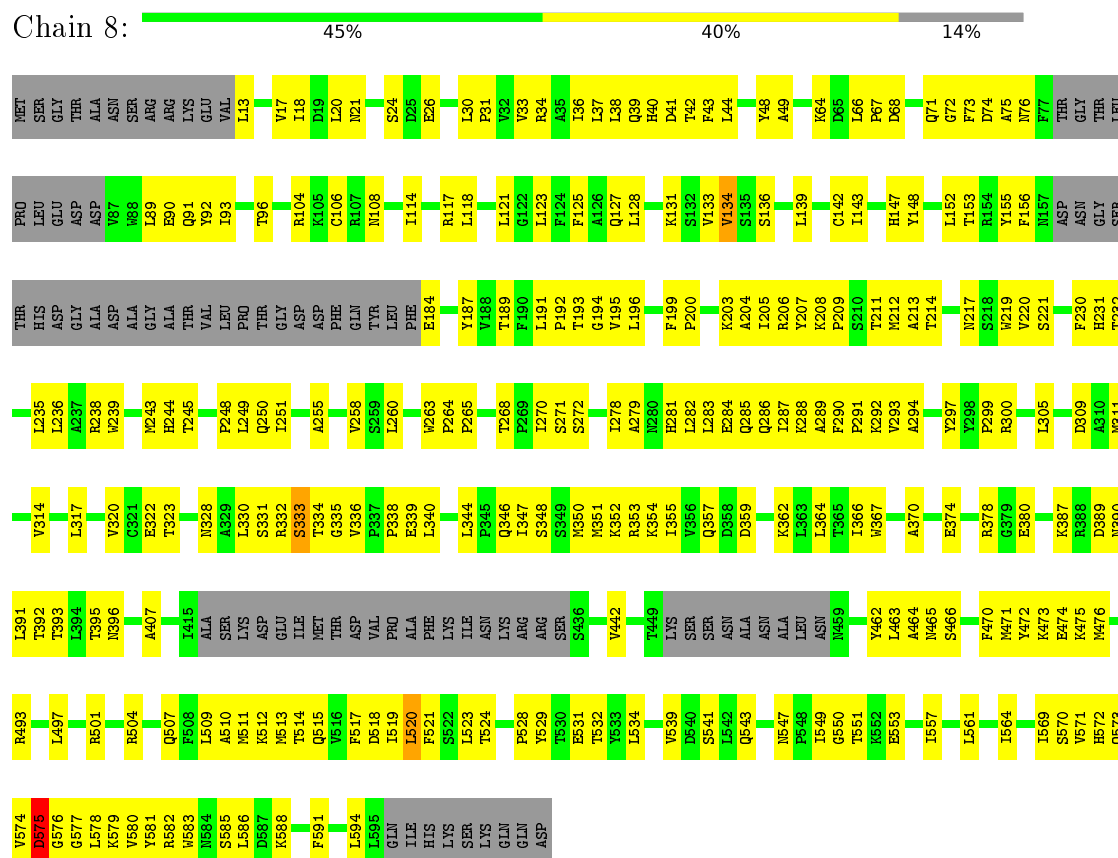


- Molecule 2: DNA replication licensing factor MCM3

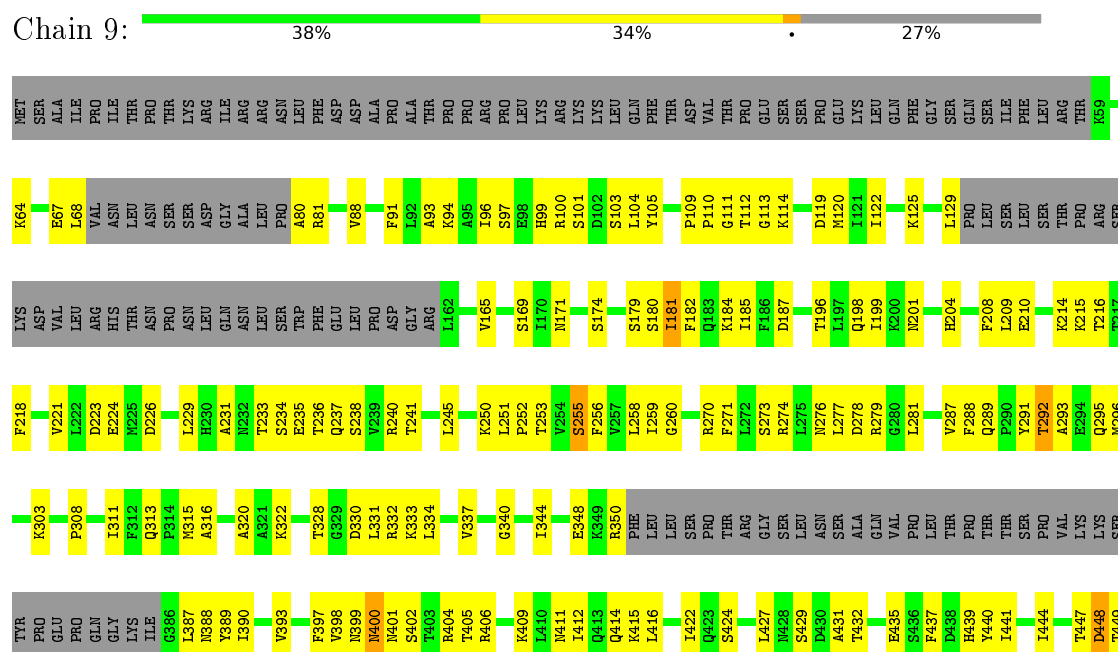


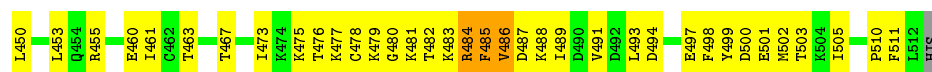
- Molecule 3: DNA replication licensing factor MCM4

• Molecule 7: Cell division cycle protein CDT1

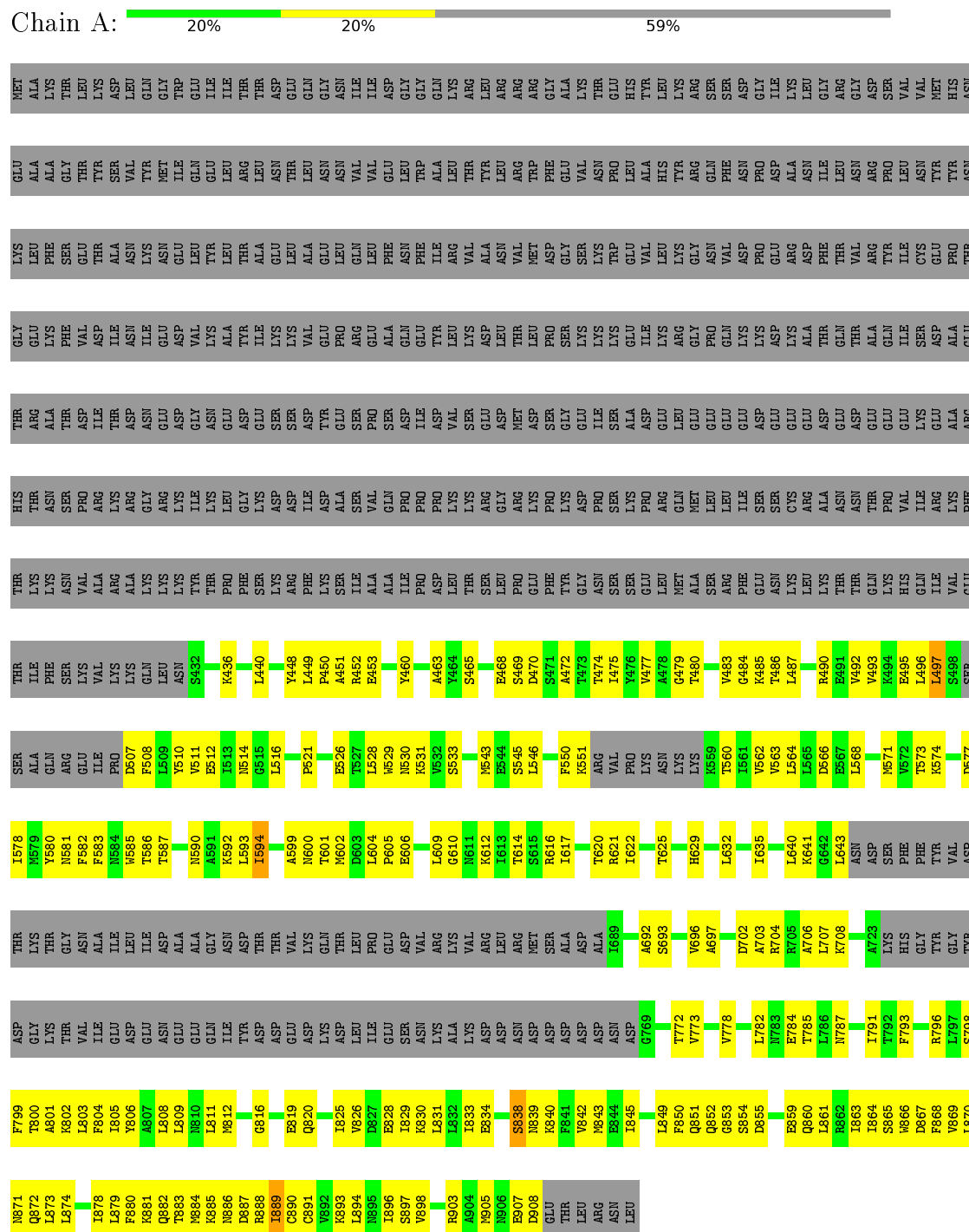


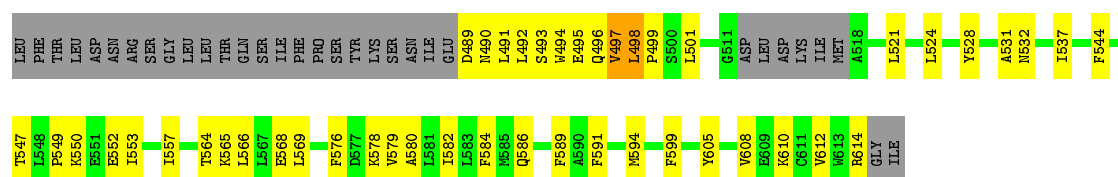
• Molecule 8: Cell division control protein 6





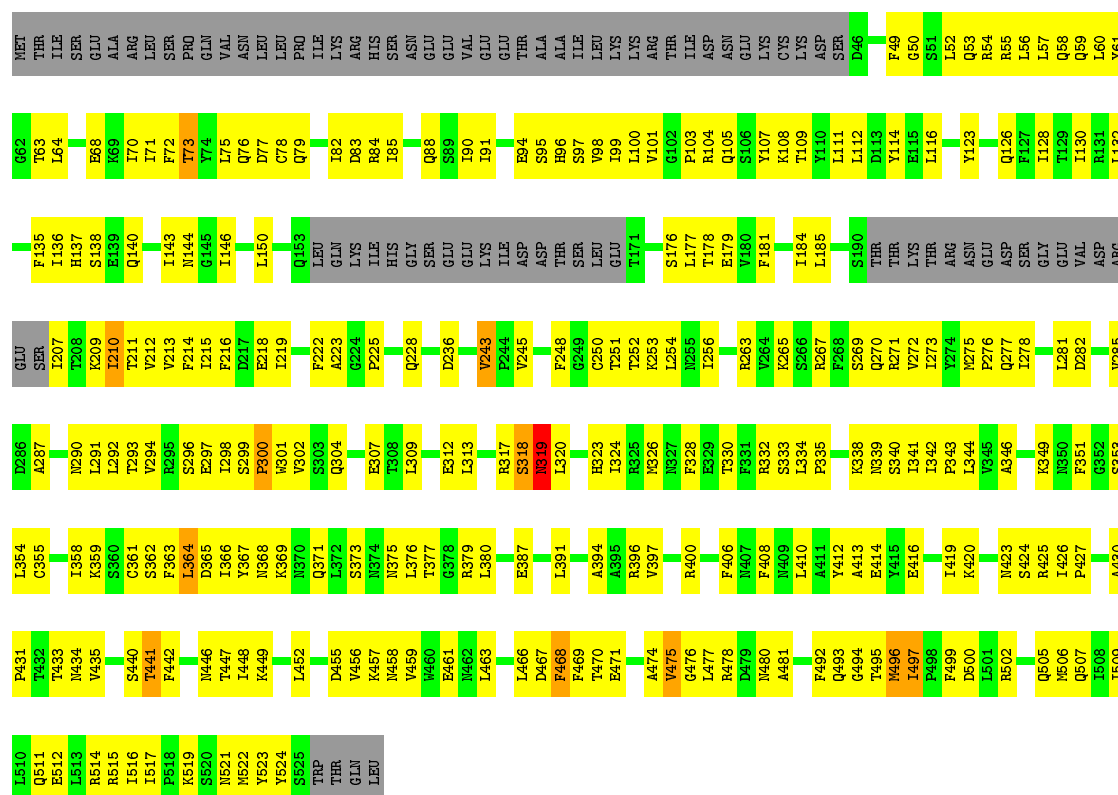
• Molecule 9: Origin recognition complex subunit 1





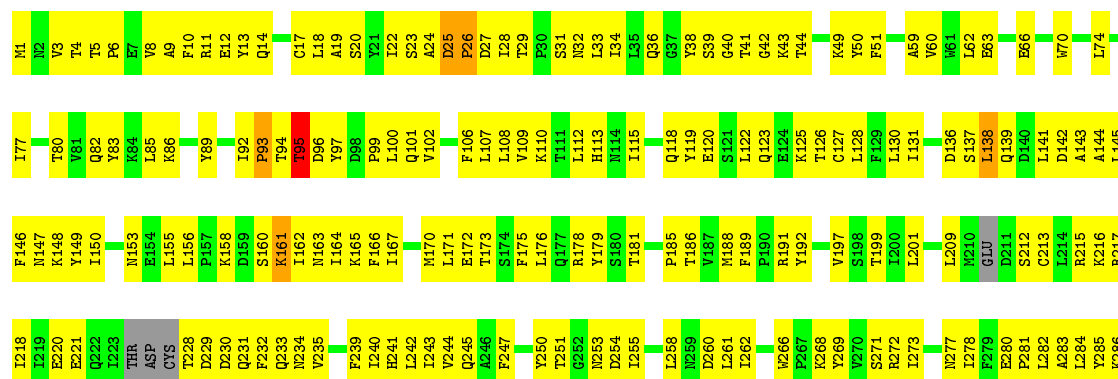
• Molecule 12: Origin recognition complex subunit 4

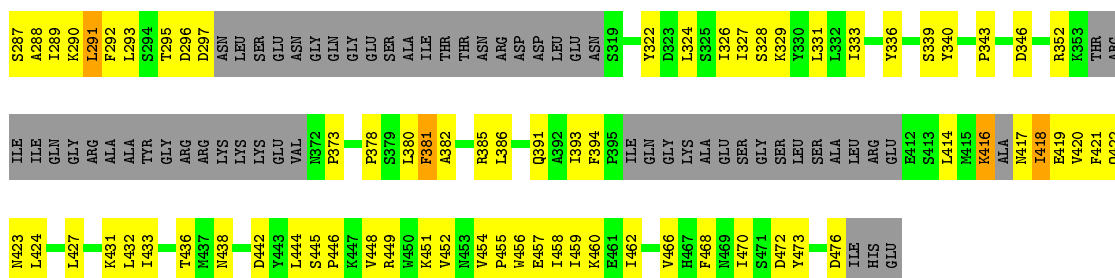
Chain D: 37% 45% 16%



• Molecule 13: Origin recognition complex subunit 5

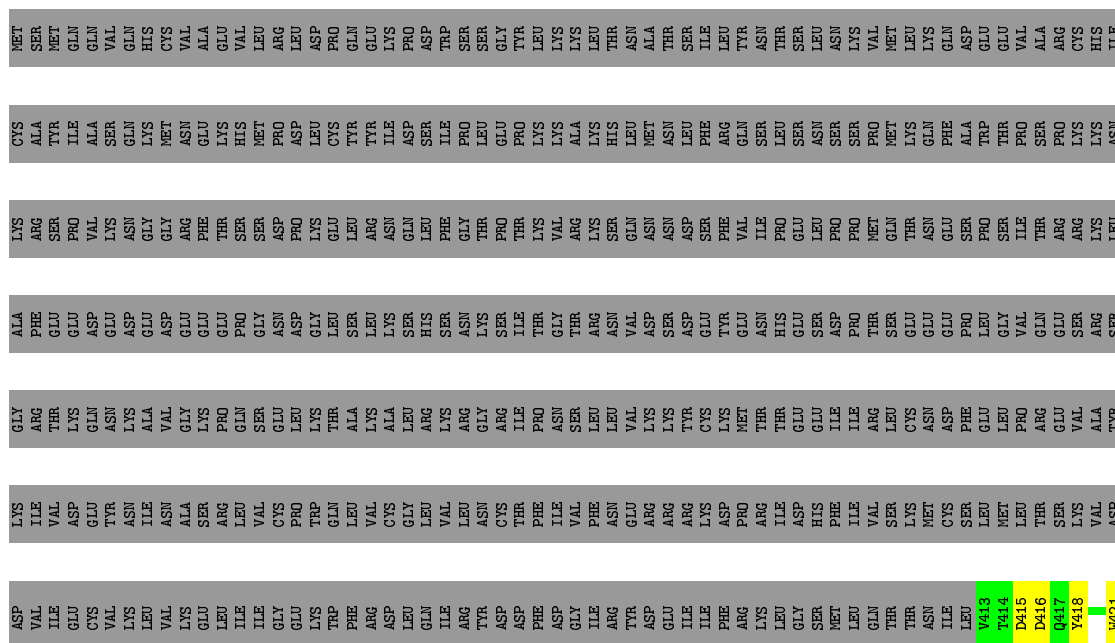
Chain E: 35% 49% 13%





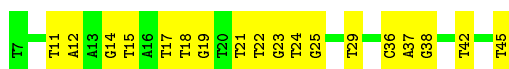
- Molecule 14: Origin recognition complex subunit 6

Chain F:  97%



- Molecule 15: DNA (39-MER)

Chain M:  54%  46%



- Molecule 16: DNA (39-MER)

Chain N:  33%  67%



4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	304288	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	Depositor
Minimum defocus (nm)	Not provided	Depositor
Maximum defocus (nm)	Not provided	Depositor
Magnification	Not provided	Depositor
Image detector	Not provided	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	$\# Z > 2$	RMSZ	$\# Z > 2$
1	2	0.33	0/4830	0.57	0/6520
10	B	0.29	0/2693	0.55	2/3635 (0.1%)
11	C	0.30	0/4324	0.54	1/5835 (0.0%)
12	D	0.47	0/3678	0.75	4/4976 (0.1%)
13	E	0.49	0/3498	0.75	3/4752 (0.1%)
14	F	0.23	0/137	0.45	0/183
15	M	0.52	0/886	0.98	0/1366
16	N	0.55	0/906	0.81	0/1395
2	3	0.26	0/5261	0.52	2/7124 (0.0%)
3	4	0.41	0/6049	0.73	6/8168 (0.1%)
4	5	0.24	0/4587	0.50	0/6193
5	6	0.50	0/5474	0.76	5/7389 (0.1%)
6	7	0.29	0/5825	0.57	1/7864 (0.0%)
7	8	0.34	0/4240	0.63	0/5743
8	9	0.27	0/3048	0.51	0/4100
9	A	0.35	0/3004	0.63	0/4046
All	All	0.37	0/58440	0.64	24/79289 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	2	0	2
13	E	0	3
2	3	0	1
3	4	0	2
4	5	0	1
5	6	0	5
6	7	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
7	8	0	3
8	9	0	3
All	All	0	21

There are no bond length outliers.

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	D	319	ASN	N-CA-C	-8.77	87.33	111.00
12	D	319	ASN	N-CA-CB	8.07	125.12	110.60
10	B	429	GLY	C-N-CD	-7.91	103.20	120.60
5	6	585	LEU	CA-CB-CG	-7.19	98.76	115.30
3	4	298	THR	N-CA-C	6.82	129.40	111.00
12	D	364	LEU	CA-CB-CG	6.67	130.65	115.30
5	6	377	LEU	CA-CB-CG	6.44	130.11	115.30
13	E	95	THR	N-CA-C	6.33	128.10	111.00
10	B	365	GLY	N-CA-C	6.14	128.44	113.10
3	4	298	THR	C-N-CA	6.13	137.03	121.70
5	6	549	LEU	CA-CB-CG	-6.02	101.45	115.30
3	4	602	THR	C-N-CA	5.82	136.26	121.70
12	D	318	SER	N-CA-C	5.71	126.43	111.00
2	3	389	VAL	N-CA-C	5.68	126.34	111.00
13	E	291	LEU	CA-CB-CG	5.62	128.23	115.30
2	3	428	LEU	CA-CB-CG	5.51	127.97	115.30
3	4	796	ARG	NE-CZ-NH2	5.49	123.05	120.30
5	6	572	CYS	CA-CB-SG	-5.35	104.37	114.00
6	7	366	LEU	CA-CB-CG	5.14	127.13	115.30
3	4	542	LEU	CA-CB-CG	-5.13	103.51	115.30
11	C	118	LEU	CA-CB-CG	5.11	127.06	115.30
3	4	714	GLU	C-N-CA	5.10	134.45	121.70
5	6	711	LEU	CA-CB-CG	5.07	126.95	115.30
13	E	138	LEU	CA-CB-CG	-5.04	103.71	115.30

There are no chirality outliers.

All (21) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	2	355	SER	Peptide
1	2	524	PRO	Peptide
2	3	163	ALA	Peptide
3	4	408	ASP	Peptide

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Mol	Chain	Res	Type	Group
3	4	628	VAL	Peptide
4	5	59	TYR	Peptide
5	6	133	GLU	Peptide
5	6	344	TRP	Peptide
5	6	370	THR	Peptide
5	6	558	SER	Peptide
5	6	560	VAL	Peptide
6	7	368	ALA	Peptide
7	8	333	SER	Peptide
7	8	575	ASP	Peptide
7	8	576	GLY	Peptide
8	9	255	SER	Peptide
8	9	328	THR	Peptide
8	9	400	ASN	Peptide
13	E	296	ASP	Peptide
13	E	381	PHE	Peptide
13	E	93	PRO	Mainchain

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	4755	0	4774	375	0
2	3	5177	0	5231	354	0
3	4	5969	0	6014	618	0
4	5	4527	0	4641	166	0
5	6	5394	0	5338	494	0
6	7	5740	0	5839	322	0
7	8	4163	0	4232	247	0
8	9	3005	0	3134	199	0
9	A	2963	0	3019	244	0
10	B	2636	0	2633	204	0
11	C	4234	0	4200	284	0
12	D	3615	0	3664	414	0
13	E	3417	0	3422	443	0
14	F	135	0	132	5	0
15	M	795	0	448	24	0
16	N	804	0	436	37	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
17	2	31	0	11	10	0
17	3	31	0	9	2	0
17	6	31	0	12	10	0
17	7	31	0	12	9	0
17	9	31	0	12	8	0
17	A	31	0	12	6	0
17	D	31	0	11	6	0
17	E	31	0	12	2	0
All	All	57577	0	57248	3976	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 35.

All (3976) 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)
12:D:300:PRO:HD2	12:D:301:TRP:CE3	1.29	1.60
2:3:31:PHE:CE1	2:3:35:PHE:CE2	1.80	1.60
10:B:321:SER:HB2	10:B:486:SER:CB	1.12	1.59
1:2:246:TYR:CZ	1:2:300:PHE:HE1	1.22	1.56
10:B:321:SER:CB	10:B:486:SER:HB2	1.31	1.55
11:C:498:LEU:HB3	11:C:499:PRO:CD	1.30	1.45
1:2:246:TYR:CZ	1:2:300:PHE:CE1	2.03	1.44
2:3:31:PHE:CZ	2:3:35:PHE:CE2	2.05	1.44
10:B:321:SER:CB	10:B:486:SER:CB	1.83	1.42
12:D:323:HIS:CD2	12:D:365:ASP:OD1	1.73	1.41
13:E:191:ARG:HB3	13:E:253:ASN:ND2	1.31	1.41
12:D:300:PRO:HD2	12:D:301:TRP:CZ3	1.56	1.41
2:3:31:PHE:CZ	2:3:35:PHE:HE2	1.36	1.40
13:E:146:PHE:CD2	13:E:179:TYR:CD2	2.11	1.37
2:3:28:PHE:CZ	2:3:129:LEU:HB2	1.59	1.37
12:D:298:ILE:CG2	12:D:302:VAL:HG12	1.56	1.33
1:2:682:VAL:HG21	1:2:847:ASP:OD2	1.25	1.33
11:C:495:GLU:CA	13:E:418:ILE:HD12	1.59	1.32
1:2:551:GLN:NE2	5:6:563:ILE:HG23	1.43	1.32
12:D:300:PRO:CD	12:D:301:TRP:CZ3	2.11	1.32
11:C:498:LEU:HD11	13:E:421:PHE:CZ	1.64	1.32
7:8:26:GLU:HG2	7:8:30:LEU:CD2	1.61	1.30
11:C:498:LEU:CB	11:C:499:PRO:HD3	1.60	1.30
12:D:375:ASN:HD21	13:E:173:THR:CG2	1.41	1.30
7:8:26:GLU:CG	7:8:30:LEU:HD21	1.63	1.29

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:687:VAL:HG13	5:6:781:ARG:NH2	1.45	1.29
13:E:115:ILE:O	13:E:118:GLN:HG2	1.24	1.26
12:D:298:ILE:CG2	12:D:302:VAL:CG1	2.13	1.25
12:D:298:ILE:HG21	12:D:302:VAL:CB	1.67	1.25
12:D:298:ILE:HG22	12:D:302:VAL:CG1	1.67	1.25
13:E:25:ASP:CB	13:E:26:PRO:HD3	1.64	1.24
3:4:418:CYS:O	3:4:463:VAL:CG2	1.85	1.24
3:4:240:ASN:ND2	3:4:481:ILE:HD13	1.50	1.22
2:3:31:PHE:HE1	2:3:35:PHE:CZ	1.59	1.20
1:2:688:ASP:CB	1:2:691:ALA:HB3	1.71	1.20
13:E:25:ASP:HB2	13:E:26:PRO:CD	1.72	1.19
11:C:456:GLU:HB3	11:C:457:PRO:CD	1.73	1.19
1:2:444:PHE:CZ	5:6:404:VAL:HG22	1.77	1.18
11:C:323:TYR:CB	11:C:490:ASN:HD21	1.54	1.18
5:6:566:ARG:NH1	5:6:656:MET:O	1.76	1.18
1:2:544:ASP:CB	1:2:683:VAL:HG22	1.73	1.18
12:D:375:ASN:HD21	13:E:173:THR:HG21	1.08	1.18
3:4:468:LYS:CD	3:4:486:MET:HG3	1.75	1.17
13:E:126:THR:O	13:E:162:ILE:HB	1.42	1.17
12:D:298:ILE:HG21	12:D:302:VAL:N	1.60	1.17
1:2:542:LEU:O	1:2:683:VAL:HB	1.41	1.17
12:D:300:PRO:CD	12:D:301:TRP:CE3	2.24	1.17
10:B:321:SER:N	10:B:486:SER:HB3	1.60	1.16
11:C:498:LEU:CB	11:C:499:PRO:CD	2.12	1.16
2:3:28:PHE:CE1	2:3:129:LEU:HB2	1.79	1.16
8:9:477:LYS:HB2	8:9:483:LYS:HE3	1.22	1.16
11:C:323:TYR:HB3	11:C:490:ASN:ND2	1.60	1.15
2:3:28:PHE:CD2	2:3:128:ALA:HB3	1.81	1.15
10:B:334:LEU:O	10:B:358:ILE:HD13	1.47	1.14
12:D:375:ASN:ND2	13:E:173:THR:HG21	1.60	1.14
2:3:28:PHE:CZ	2:3:129:LEU:CB	2.30	1.14
13:E:127:CYS:HA	13:E:162:ILE:HG13	1.15	1.14
1:2:543:GLY:HA3	1:2:549:LYS:HD3	1.30	1.14
3:4:591:THR:HG21	6:7:549:SER:OG	1.45	1.13
1:2:687:VAL:CG1	5:6:781:ARG:HH22	1.61	1.13
1:2:687:VAL:HG22	5:6:781:ARG:CZ	1.79	1.13
13:E:9:ALA:O	13:E:12:GLU:HG3	1.45	1.13
1:2:687:VAL:HG22	5:6:781:ARG:NH1	1.63	1.12
6:7:495:ALA:CB	6:7:548:ILE:HD11	1.79	1.12
2:3:703:GLU:HB3	2:3:707:ARG:HH12	1.14	1.12
3:4:487:GLN:O	3:4:490:VAL:HG12	1.47	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:314:MET:SD	3:4:415:ILE:HD11	1.89	1.11
2:3:389:VAL:HG12	2:3:389:VAL:O	1.45	1.11
12:D:298:ILE:CG2	12:D:302:VAL:CB	2.27	1.11
2:3:326:VAL:HG12	2:3:326:VAL:O	1.51	1.10
3:4:468:LYS:HD3	3:4:486:MET:HG3	1.19	1.10
7:8:26:GLU:O	7:8:30:LEU:HG	1.52	1.10
3:4:238:THR:HG23	3:4:481:ILE:HG12	1.24	1.10
11:C:495:GLU:HA	13:E:418:ILE:HD12	1.22	1.10
11:C:498:LEU:HD11	13:E:421:PHE:CE2	1.85	1.10
3:4:235:GLU:HA	3:4:291:TYR:OH	1.50	1.10
2:3:32:LEU:HD23	2:3:132:LEU:CD2	1.81	1.10
5:6:902:THR:HG22	5:6:903:THR:H	1.06	1.09
1:2:319:ARG:HE	1:2:427:THR:HG22	1.02	1.09
3:4:635:ASP:OD2	3:4:676:ASN:N	1.84	1.09
13:E:26:PRO:HB3	13:E:125:LYS:HB2	1.30	1.09
1:2:544:ASP:HB2	1:2:683:VAL:HG22	1.10	1.09
11:C:495:GLU:HA	13:E:418:ILE:CD1	1.82	1.09
1:2:614:ASP:OD1	1:2:617:ARG:NH1	1.84	1.08
12:D:313:LEU:HD23	12:D:320:LEU:HD21	1.28	1.08
6:7:129:THR:HG23	6:7:130:LYS:H	1.18	1.08
12:D:298:ILE:HD11	12:D:301:TRP:CE3	1.89	1.08
1:2:319:ARG:HG2	1:2:427:THR:HA	1.36	1.08
2:3:28:PHE:HZ	2:3:129:LEU:CA	1.66	1.07
7:8:518:ASP:OD1	7:8:588:LYS:HD2	1.55	1.07
3:4:284:ILE:HG22	3:4:296:ILE:HD13	1.29	1.07
2:3:35:PHE:CZ	2:3:102:ASP:C	2.20	1.07
12:D:298:ILE:HG21	12:D:302:VAL:H	1.07	1.07
13:E:417:ASN:O	13:E:420:VAL:N	1.85	1.06
11:C:456:GLU:HB3	11:C:457:PRO:HD2	1.33	1.06
2:3:535:LEU:HD12	2:3:535:LEU:O	1.53	1.06
10:B:321:SER:CB	10:B:486:SER:HB3	1.80	1.06
12:D:323:HIS:CE1	12:D:368:ASN:HB3	1.90	1.06
1:2:246:TYR:CE1	1:2:300:PHE:CE1	2.43	1.06
1:2:688:ASP:N	1:2:692:ASP:OD2	1.89	1.05
3:4:418:CYS:O	3:4:463:VAL:HG22	1.53	1.05
6:7:495:ALA:HB3	6:7:548:ILE:HD11	1.17	1.05
3:4:642:ARG:HH22	3:4:695:PRO:CD	1.69	1.05
4:5:49:GLN:C	4:5:61:LEU:HD21	1.75	1.05
5:6:575:GLY:O	5:6:581:LYS:NZ	1.87	1.05
13:E:136:ASP:OD2	13:E:171:LEU:O	1.74	1.05
3:4:642:ARG:NH2	3:4:695:PRO:CD	2.19	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:35:PHE:HZ	2:3:103:LEU:N	1.54	1.05
9:A:907:GLU:HG2	9:A:908:ASP:H	1.20	1.04
1:2:446:VAL:HG11	5:6:301:ARG:HH11	1.19	1.04
12:D:458:ASN:CB	13:E:250:TYR:HE1	1.69	1.04
13:E:136:ASP:HB2	13:E:171:LEU:H	1.17	1.04
3:4:562:ILE:CD1	3:4:564:ILE:HD11	1.86	1.04
1:2:523:VAL:CG1	1:2:525:LYS:HG3	1.88	1.04
5:6:518:GLU:OE1	7:8:501:ARG:NH1	1.90	1.04
1:2:548:ALA:HB2	17:2:2001:AGS:C8	1.88	1.04
3:4:642:ARG:HH22	3:4:695:PRO:HD3	1.13	1.04
4:5:50:LEU:HB2	4:5:61:LEU:HD11	1.40	1.04
1:2:300:PHE:CD1	1:2:301:PRO:HD3	1.92	1.03
2:3:28:PHE:CZ	2:3:129:LEU:CA	2.42	1.03
13:E:331:LEU:HD21	13:E:424:LEU:CD2	1.87	1.03
12:D:459:VAL:O	12:D:463:LEU:HD13	1.56	1.03
3:4:481:ILE:O	3:4:485:LEU:HD13	1.55	1.03
3:4:490:VAL:HG13	3:4:491:ASP:H	1.21	1.03
12:D:299:SER:HB2	12:D:300:PRO:HD3	1.41	1.03
2:3:25:VAL:HG13	2:3:128:ALA:CB	1.88	1.03
2:3:31:PHE:CE1	2:3:35:PHE:CZ	2.37	1.02
13:E:191:ARG:CB	13:E:253:ASN:ND2	2.20	1.02
2:3:25:VAL:HG13	2:3:128:ALA:HB2	1.07	1.02
2:3:35:PHE:HZ	2:3:102:ASP:C	1.50	1.02
1:2:581:ARG:NH1	1:2:592:GLU:OE1	1.92	1.02
13:E:24:ALA:O	13:E:25:ASP:OD1	1.76	1.02
2:3:24:ARG:HH12	2:3:120:TYR:HB3	1.22	1.02
8:9:481:LYS:HG2	9:A:882:GLN:NE2	1.75	1.02
1:2:688:ASP:HB3	1:2:691:ALA:HB3	1.41	1.01
3:4:774:TYR:HE2	5:6:724:ASP:OD1	1.43	1.01
6:7:127:LEU:N	6:7:128:PRO:HD2	1.69	1.01
10:B:321:SER:CA	10:B:486:SER:HB3	1.89	1.01
1:2:246:TYR:CE2	1:2:300:PHE:HE1	1.77	1.01
3:4:432:ARG:NH2	3:4:625:ASP:HB3	1.75	1.01
12:D:298:ILE:CG2	12:D:302:VAL:HB	1.87	1.01
6:7:495:ALA:HB3	6:7:548:ILE:CD1	1.90	1.01
7:8:26:GLU:O	7:8:30:LEU:CD1	2.08	1.01
12:D:298:ILE:CG2	12:D:302:VAL:H	1.73	1.01
5:6:296:ARG:NH1	5:6:360:ARG:HH12	1.58	1.00
5:6:382:ARG:HH11	5:6:455:LEU:HD21	1.25	1.00
1:2:687:VAL:CG1	5:6:781:ARG:NH2	2.19	1.00
12:D:375:ASN:ND2	13:E:173:THR:CG2	2.22	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:178:LEU:HD13	5:6:180:PHE:HB2	1.37	1.00
5:6:710:ASP:OD2	5:6:802:SER:OG	1.78	1.00
10:B:355:VAL:HG12	10:B:359:PRO:HA	1.43	1.00
12:D:64:LEU:HG	12:D:68:GLU:HG2	1.41	1.00
12:D:298:ILE:HG21	12:D:302:VAL:CA	1.90	1.00
2:3:28:PHE:HZ	2:3:129:LEU:CB	1.67	0.99
11:C:323:TYR:CB	11:C:490:ASN:ND2	2.20	0.99
13:E:251:THR:HB	13:E:258:LEU:CD1	1.91	0.99
1:2:554:LYS:CD	5:6:658:GLN:HE22	1.75	0.99
10:B:429:GLY:O	10:B:432:ILE:HG22	1.62	0.99
1:2:554:LYS:HD3	5:6:658:GLN:HE22	1.25	0.99
13:E:127:CYS:HA	13:E:162:ILE:CG1	1.91	0.99
1:2:289:ILE:HG22	1:2:290:HIS:ND1	1.78	0.99
3:4:240:ASN:HD22	3:4:481:ILE:HD13	1.07	0.98
1:2:687:VAL:HG22	5:6:781:ARG:NH2	1.78	0.98
7:8:26:GLU:O	7:8:30:LEU:CG	2.11	0.98
3:4:251:TYR:HD2	3:4:254:THR:CG2	1.75	0.98
3:4:417:LEU:HD23	3:4:463:VAL:CG1	1.92	0.98
3:4:417:LEU:HG	3:4:461:VAL:HB	1.45	0.98
3:4:238:THR:CG2	3:4:481:ILE:HG12	1.92	0.98
13:E:156:LEU:HD12	13:E:156:LEU:O	1.63	0.98
5:6:772:TYR:HE2	5:6:776:LYS:HZ2	1.03	0.98
11:C:275:LYS:HZ2	11:C:428:TYR:HE2	1.11	0.98
1:2:682:VAL:CG2	1:2:847:ASP:OD2	2.11	0.98
5:6:182:GLN:HB3	5:6:186:ARG:HH12	1.29	0.98
2:3:34:THR:OG1	2:3:106:PHE:CE1	2.16	0.97
6:7:440:VAL:O	6:7:441:ASP:OD1	1.83	0.97
12:D:313:LEU:HD23	12:D:320:LEU:CD2	1.95	0.97
5:6:400:VAL:HG11	5:6:455:LEU:HD23	1.45	0.97
12:D:75:LEU:HD12	12:D:77:ASP:OD1	1.62	0.97
13:E:146:PHE:CE2	13:E:179:TYR:CB	2.48	0.97
3:4:782:ASP:HB2	3:4:783:ASP:HB2	1.41	0.97
12:D:70:ILE:HG21	12:D:290:ASN:O	1.65	0.97
12:D:298:ILE:CD1	12:D:301:TRP:HE3	1.77	0.97
1:2:687:VAL:CB	5:6:781:ARG:HH22	1.77	0.97
13:E:127:CYS:CA	13:E:162:ILE:HG13	1.94	0.97
3:4:649:MET:HB2	3:4:701:ARG:HD3	1.47	0.96
12:D:64:LEU:CG	12:D:68:GLU:HG2	1.96	0.96
13:E:146:PHE:HE2	13:E:179:TYR:CB	1.77	0.96
5:6:127:THR:HA	5:6:132:VAL:HG23	1.47	0.96
5:6:902:THR:HG22	5:6:903:THR:N	1.79	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:427:LEU:HD12	10:B:432:ILE:HD11	1.45	0.96
3:4:234:ARG:CD	3:4:296:ILE:HD11	1.95	0.96
10:B:321:SER:CA	10:B:486:SER:CB	2.43	0.96
11:C:498:LEU:HG	13:E:417:ASN:CB	1.96	0.96
3:4:473:ARG:HG2	3:4:474:LEU:H	1.31	0.96
1:2:319:ARG:NH1	1:2:425:GLU:HG2	1.81	0.96
12:D:64:LEU:CB	12:D:68:GLU:HG2	1.96	0.95
3:4:289:LEU:HD12	3:4:289:LEU:O	1.64	0.95
5:6:683:ASN:ND2	17:6:1101:AGS:O2G	1.99	0.95
3:4:591:THR:CG2	6:7:549:SER:OG	2.14	0.95
11:C:253:GLN:N	12:D:461:GLU:OE2	1.99	0.95
3:4:427:CYS:SG	3:4:433:ILE:HD13	2.06	0.95
3:4:663:THR:HG21	5:6:373:MET:HE3	1.46	0.95
5:6:550:GLN:HG2	5:6:569:ILE:HG23	1.48	0.95
3:4:513:ALA:HA	3:4:518:LEU:HD13	1.48	0.95
13:E:96:ASP:CG	13:E:97:TYR:H	1.68	0.95
13:E:115:ILE:O	13:E:118:GLN:CG	2.13	0.95
13:E:343:PRO:HG3	13:E:385:ARG:HH12	1.30	0.95
1:2:544:ASP:CB	1:2:683:VAL:CG2	2.45	0.95
13:E:191:ARG:CB	13:E:253:ASN:HD21	1.76	0.95
1:2:300:PHE:CD1	1:2:301:PRO:CD	2.51	0.94
3:4:727:LEU:HD12	3:4:727:LEU:O	1.66	0.94
13:E:136:ASP:CB	13:E:171:LEU:H	1.79	0.94
1:2:406:ARG:NH1	1:2:430:TYR:HE1	1.65	0.94
13:E:146:PHE:CE2	13:E:179:TYR:HB2	2.02	0.94
13:E:191:ARG:HE	13:E:253:ASN:CB	1.81	0.94
13:E:454:VAL:HB	13:E:458:ILE:HD11	1.46	0.94
10:B:321:SER:H	10:B:486:SER:HB3	1.29	0.94
10:B:427:LEU:HD12	10:B:432:ILE:CD1	1.96	0.94
1:2:687:VAL:HG13	5:6:781:ARG:HH22	1.11	0.94
5:6:550:GLN:OE1	5:6:571:ILE:HG13	1.66	0.94
8:9:477:LYS:HB3	8:9:485:PHE:CE2	2.02	0.94
5:6:585:LEU:HD21	5:6:679:LEU:HD22	1.47	0.94
12:D:323:HIS:HD2	12:D:365:ASP:OD1	1.41	0.94
5:6:683:ASN:OD1	17:6:1101:AGS:O2G	1.86	0.93
10:B:428:ASP:OD2	10:B:458:HIS:HB2	1.66	0.93
12:D:70:ILE:CD1	12:D:72:PHE:HD2	1.79	0.93
13:E:331:LEU:HD21	13:E:424:LEU:HD23	1.49	0.93
1:2:246:TYR:CE2	1:2:300:PHE:CE1	2.54	0.93
1:2:542:LEU:HG	1:2:683:VAL:HG11	1.48	0.93
3:4:642:ARG:NH2	3:4:695:PRO:HD2	1.80	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:477:LYS:HB3	8:9:485:PHE:CZ	2.03	0.93
12:D:71:ILE:HG21	12:D:114:TYR:CE1	2.02	0.93
4:5:199:SER:O	4:5:329:LYS:NZ	2.01	0.93
5:6:754:TYR:OH	5:6:813:ALA:O	1.87	0.92
8:9:112:THR:HG1	17:9:2001:AGS:PG	1.91	0.92
10:B:321:SER:HB2	10:B:486:SER:CA	1.98	0.92
2:3:32:LEU:CD2	2:3:132:LEU:HD23	2.00	0.92
3:4:425:ASP:CG	3:4:478:THR:HG21	1.90	0.92
11:C:433:ILE:HD12	11:C:442:ARG:HH12	1.33	0.92
11:C:83:LEU:HD23	11:C:86:GLU:OE2	1.68	0.92
3:4:234:ARG:HD2	3:4:296:ILE:HD11	1.50	0.92
3:4:240:ASN:ND2	3:4:481:ILE:HG21	1.84	0.92
11:C:496:GLN:H	13:E:418:ILE:HD11	1.32	0.92
13:E:191:ARG:NH2	13:E:253:ASN:HB3	1.85	0.92
7:8:290:PHE:HB3	7:8:292:LYS:HB2	1.52	0.92
12:D:298:ILE:HG21	12:D:302:VAL:HB	1.47	0.92
13:E:146:PHE:HD2	13:E:179:TYR:CD2	1.77	0.92
11:C:144:ARG:HG3	11:C:182:SER:HB2	1.50	0.92
13:E:241:HIS:O	13:E:245:GLN:HG2	1.70	0.92
13:E:120:GLU:OE2	13:E:160:SER:OG	1.88	0.91
13:E:146:PHE:CD2	13:E:179:TYR:HD2	1.77	0.91
3:4:682:TYR:HA	3:4:691:ASN:HD21	1.35	0.91
3:4:234:ARG:HD2	3:4:296:ILE:CD1	2.01	0.91
1:2:544:ASP:HB2	1:2:683:VAL:CG2	1.98	0.91
3:4:795:THR:HG22	5:6:578:SER:HB3	1.50	0.91
3:4:235:GLU:CA	3:4:291:TYR:OH	2.19	0.91
2:3:28:PHE:CE2	2:3:129:LEU:N	2.39	0.90
9:A:799:PHE:HA	9:A:802:LYS:HG2	1.53	0.90
17:A:2001:AGS:S1G	12:D:267:ARG:NH2	2.44	0.90
12:D:72:PHE:CZ	12:D:287:ALA:HB1	2.07	0.90
1:2:319:ARG:NE	1:2:427:THR:HG22	1.87	0.90
12:D:375:ASN:CG	13:E:173:THR:HG21	1.92	0.90
2:3:31:PHE:HA	2:3:106:PHE:CE2	2.07	0.90
6:7:727:LEU:HD12	6:7:728:TYR:N	1.85	0.90
1:2:687:VAL:HG22	5:6:781:ARG:HH12	1.37	0.90
9:A:861:LEU:HD11	12:D:512:GLU:HB3	1.53	0.90
13:E:5:THR:O	13:E:12:GLU:HG2	1.70	0.90
9:A:887:ASP:OD2	9:A:888:ARG:N	2.04	0.90
2:3:28:PHE:CG	2:3:125:ALA:HA	2.07	0.90
6:7:687:ARG:HE	17:7:2001:AGS:H5'2	1.34	0.90
1:2:551:GLN:NE2	5:6:563:ILE:CG2	2.34	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:432:THR:OG1	8:9:486:VAL:HG21	1.72	0.89
2:3:28:PHE:CZ	2:3:129:LEU:N	2.40	0.89
6:7:486:LYS:HZ1	6:7:489:SER:HA	1.37	0.89
2:3:428:LEU:HB3	2:3:429:ALA:HA	1.53	0.89
3:4:774:TYR:CE2	5:6:724:ASP:OD1	2.26	0.89
13:E:36:GLN:O	13:E:43:LYS:NZ	2.06	0.89
2:3:389:VAL:O	2:3:389:VAL:CG1	2.18	0.89
1:2:298:SER:O	1:2:299:ASP:OD1	1.89	0.89
13:E:146:PHE:CD2	13:E:179:TYR:CG	2.61	0.89
12:D:458:ASN:HB2	13:E:250:TYR:HE1	1.36	0.89
12:D:300:PRO:HG2	12:D:301:TRP:CZ2	2.08	0.89
2:3:32:LEU:CD2	2:3:132:LEU:CD2	2.51	0.88
8:9:112:THR:OG1	17:9:2001:AGS:O2G	1.89	0.88
2:3:28:PHE:CE2	2:3:128:ALA:HB3	2.08	0.88
2:3:31:PHE:HZ	2:3:35:PHE:HE2	1.11	0.88
8:9:274:ARG:NH1	10:B:346:GLU:OE1	2.05	0.88
11:C:498:LEU:HD11	13:E:421:PHE:HZ	1.37	0.88
13:E:251:THR:HB	13:E:258:LEU:HD11	1.54	0.88
3:4:513:ALA:HA	3:4:518:LEU:CD1	2.03	0.88
12:D:105:GLN:HB3	12:D:335:PRO:HG2	1.54	0.88
12:D:300:PRO:HD3	12:D:301:TRP:CZ3	2.08	0.88
1:2:543:GLY:CA	1:2:549:LYS:HD3	2.03	0.88
9:A:850:PHE:O	9:A:851:GLN:NE2	2.06	0.88
1:2:659:SER:HB3	1:2:661:LEU:HG	1.54	0.88
13:E:191:ARG:HH21	13:E:253:ASN:HB3	1.34	0.88
3:4:717:ASP:OD2	6:7:668:ARG:HD3	1.74	0.88
11:C:610:LYS:NZ	11:C:612:VAL:O	2.07	0.88
13:E:96:ASP:HB2	13:E:118:GLN:HB2	1.53	0.88
11:C:491:LEU:HD12	11:C:492:LEU:N	1.89	0.88
11:C:495:GLU:C	13:E:418:ILE:HD12	1.93	0.88
2:3:24:ARG:NH1	2:3:120:TYR:HB3	1.88	0.87
3:4:281:VAL:O	3:4:284:ILE:HG12	1.74	0.87
3:4:796:ARG:HH21	3:4:796:ARG:HG2	1.38	0.87
1:2:502:ALA:HB1	1:2:505:ILE:HD12	1.57	0.87
8:9:481:LYS:HD3	9:A:891:CYS:HB3	1.53	0.87
8:9:482:THR:HG23	9:A:880:PHE:CD2	2.10	0.87
8:9:480:GLY:O	9:A:882:GLN:NE2	2.07	0.87
4:5:330:ILE:HG22	4:5:332:GLY:H	1.39	0.87
9:A:872:GLN:HE21	12:D:103:PRO:HB2	1.39	0.87
3:4:422:GLU:HG2	3:4:481:ILE:HD12	1.57	0.87
3:4:703:ASP:OD1	3:4:800:SER:HB3	1.74	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:683:ASN:CG	17:6:1101:AGS:O2G	2.13	0.87
1:2:446:VAL:HG11	5:6:301:ARG:NH1	1.89	0.87
13:E:93:PRO:O	13:E:95:THR:HG22	1.74	0.86
2:3:31:PHE:HA	2:3:106:PHE:CZ	2.11	0.86
3:4:235:GLU:HA	3:4:291:TYR:CZ	2.10	0.86
12:D:298:ILE:CD1	12:D:301:TRP:CE3	2.54	0.86
6:7:455:ASN:N	6:7:595:ASP:OD2	2.07	0.86
12:D:298:ILE:HG12	12:D:301:TRP:HB2	1.55	0.86
13:E:239:PHE:CZ	13:E:243:ILE:HG21	2.10	0.86
1:2:547:THR:O	17:2:2001:AGS:O2A	1.94	0.86
3:4:634:PHE:HE2	3:4:694:LEU:HD21	1.41	0.86
4:5:50:LEU:HB2	4:5:61:LEU:CD1	2.05	0.86
1:2:527:VAL:HG21	4:5:572:VAL:HG13	1.56	0.86
7:8:331:SER:O	7:8:332:ARG:NH1	2.07	0.86
5:6:571:ILE:HD11	5:6:679:LEU:HD11	1.56	0.86
10:B:468:MET:HE2	11:C:110:SER:HB2	1.57	0.86
1:2:541:LEU:CD2	1:2:549:LYS:HB2	2.06	0.85
10:B:321:SER:HB3	10:B:486:SER:CB	2.06	0.85
3:4:799:GLU:OE2	5:6:735:HIS:NE2	2.08	0.85
5:6:355:ASP:HB3	5:6:356:TRP:HA	1.58	0.85
5:6:575:GLY:H	5:6:581:LYS:HZ3	1.22	0.85
5:6:143:MET:CE	5:6:150:THR:O	2.24	0.85
13:E:26:PRO:HB3	13:E:125:LYS:CB	2.05	0.85
11:C:496:GLN:N	13:E:418:ILE:CD1	2.40	0.85
13:E:33:LEU:HD12	13:E:185:PRO:O	1.77	0.85
1:2:300:PHE:HD1	1:2:301:PRO:HD3	1.30	0.85
3:4:527:ALA:HB1	3:4:530:ILE:CD1	2.07	0.85
12:D:313:LEU:CD2	12:D:320:LEU:HD21	2.07	0.85
11:C:498:LEU:CD1	13:E:421:PHE:CE2	2.60	0.85
6:7:373:GLU:O	6:7:374:THR:HG22	1.77	0.84
10:B:366:TYR:C	10:B:430:PRO:HG2	1.96	0.84
1:2:523:VAL:HG12	1:2:525:LYS:HG3	1.58	0.84
3:4:284:ILE:CG2	3:4:296:ILE:HD13	2.06	0.84
8:9:482:THR:N	8:9:483:LYS:HA	1.92	0.84
10:B:321:SER:CB	10:B:486:SER:CA	2.53	0.84
13:E:70:TRP:HB3	13:E:145:LEU:HD21	1.59	0.84
8:9:481:LYS:HZ1	9:A:819:GLU:HB3	1.41	0.84
5:6:120:GLU:OE2	5:6:191:LYS:NZ	2.11	0.84
10:B:366:TYR:O	10:B:430:PRO:CG	2.26	0.84
13:E:146:PHE:HE2	13:E:179:TYR:HB2	1.36	0.84
3:4:251:TYR:HD2	3:4:254:THR:HG23	1.41	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:228:ARG:HH22	6:7:326:HIS:HB3	1.42	0.84
8:9:481:LYS:NZ	9:A:819:GLU:HB3	1.93	0.84
11:C:498:LEU:HD21	13:E:421:PHE:CE2	2.12	0.84
3:4:468:LYS:HD3	3:4:486:MET:CG	2.07	0.84
13:E:191:ARG:HE	13:E:253:ASN:HB3	1.43	0.84
6:7:157:ARG:NH2	6:7:287:GLU:OE2	2.10	0.84
3:4:427:CYS:SG	3:4:433:ILE:CD1	2.65	0.84
13:E:251:THR:HB	13:E:258:LEU:HD12	1.60	0.84
1:2:444:PHE:CZ	5:6:404:VAL:CG2	2.59	0.84
3:4:234:ARG:CG	3:4:296:ILE:HD11	2.06	0.84
13:E:239:PHE:O	13:E:243:ILE:HG23	1.78	0.84
2:3:703:GLU:HB3	2:3:707:ARG:NH1	1.92	0.83
12:D:136:ILE:HD11	13:E:155:LEU:HD22	1.59	0.83
1:2:542:LEU:HG	1:2:683:VAL:CG1	2.07	0.83
10:B:366:TYR:O	10:B:430:PRO:HG3	1.79	0.83
13:E:191:ARG:NE	13:E:253:ASN:HB3	1.93	0.83
2:3:326:VAL:CG1	2:3:326:VAL:O	2.26	0.83
12:D:271:ARG:HA	12:D:273:ILE:HG22	1.60	0.83
13:E:136:ASP:HB2	13:E:171:LEU:N	1.91	0.83
11:C:498:LEU:CD1	13:E:421:PHE:CZ	2.57	0.83
2:3:799:PRO:HB2	2:3:807:ARG:HB3	1.61	0.83
3:4:248:LEU:O	3:4:254:THR:OG1	1.96	0.83
3:4:471:ASP:CG	3:4:472:LYS:H	1.82	0.83
11:C:498:LEU:CB	11:C:499:PRO:HD2	2.09	0.83
2:3:25:VAL:CG1	2:3:128:ALA:HB2	2.01	0.83
6:7:662:GLN:HB3	6:7:666:ARG:HH12	1.43	0.83
3:4:242:ASN:HD21	3:4:488:ASN:CB	1.92	0.83
13:E:11:ARG:NH2	13:E:42:GLY:H	1.77	0.83
3:4:527:ALA:HB1	3:4:530:ILE:HD13	1.59	0.83
8:9:481:LYS:HG2	9:A:882:GLN:HE21	1.40	0.83
12:D:323:HIS:CE1	12:D:368:ASN:CB	2.61	0.83
13:E:247:PHE:O	13:E:251:THR:HG23	1.77	0.83
1:2:687:VAL:CG2	5:6:781:ARG:NH2	2.42	0.82
3:4:239:SER:OG	3:4:299:LYS:NZ	2.12	0.82
10:B:433:ARG:HD2	13:E:444:LEU:HB2	1.60	0.82
12:D:300:PRO:HG2	12:D:301:TRP:CE2	2.14	0.82
2:3:31:PHE:CZ	2:3:35:PHE:CD2	2.67	0.82
3:4:490:VAL:O	3:4:492:HIS:N	2.12	0.82
3:4:614:LEU:HB3	5:6:373:MET:HE2	1.60	0.82
3:4:206:ARG:HB3	3:4:212:ARG:H	1.44	0.82
3:4:394:LYS:HG3	3:4:420:TYR:CE1	2.15	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:878:ILE:HB	9:A:896:ILE:HD11	1.62	0.82
11:C:496:GLN:H	13:E:418:ILE:CD1	1.92	0.82
2:3:28:PHE:CD2	2:3:128:ALA:CB	2.63	0.82
3:4:774:TYR:HE2	5:6:724:ASP:CG	1.83	0.82
7:8:209:PRO:HA	7:8:217:ASN:HB2	1.61	0.82
1:2:554:LYS:HD3	5:6:658:GLN:NE2	1.95	0.82
1:2:301:PRO:O	7:8:346:GLN:HG2	1.78	0.82
12:D:458:ASN:CB	13:E:250:TYR:CE1	2.59	0.82
7:8:574:VAL:HB	7:8:575:ASP:HB2	1.59	0.82
12:D:298:ILE:HG23	12:D:302:VAL:HG12	1.59	0.82
5:6:178:LEU:HD13	5:6:180:PHE:CB	2.10	0.82
3:4:248:LEU:HD12	3:4:254:THR:HB	1.60	0.82
2:3:28:PHE:CE2	2:3:128:ALA:C	2.53	0.81
3:4:642:ARG:HH21	3:4:695:PRO:HD2	1.42	0.81
9:A:474:THR:HG1	9:A:586:THR:HG1	1.15	0.81
2:3:28:PHE:HE2	2:3:128:ALA:C	1.82	0.81
13:E:455:PRO:O	13:E:458:ILE:HG12	1.79	0.81
3:4:562:ILE:HD12	3:4:564:ILE:CD1	2.10	0.81
6:7:127:LEU:N	6:7:128:PRO:CD	2.43	0.81
2:3:31:PHE:CE1	2:3:35:PHE:CD2	2.67	0.81
3:4:562:ILE:HD12	3:4:564:ILE:HD11	1.62	0.81
6:7:244:ILE:HD11	6:7:479:ARG:HH12	1.43	0.81
6:7:680:SER:HB2	6:7:681:PHE:HA	1.61	0.81
9:A:852:GLN:NE2	9:A:855:ASP:O	2.13	0.81
7:8:531:GLU:OE2	7:8:580:VAL:HB	1.80	0.81
1:2:567:THR:OG1	1:2:568:GLY:O	1.99	0.81
3:4:473:ARG:HG2	3:4:474:LEU:N	1.96	0.81
3:4:591:THR:HG21	6:7:549:SER:HG	1.43	0.81
6:7:715:GLU:OE2	6:7:718:ARG:NH1	2.13	0.81
13:E:191:ARG:HE	13:E:253:ASN:CG	1.83	0.81
13:E:228:THR:O	13:E:231:GLN:HB2	1.79	0.81
12:D:380:LEU:HD21	12:D:517:ILE:CG2	2.11	0.81
11:C:495:GLU:CB	13:E:418:ILE:HD12	2.11	0.81
13:E:96:ASP:CG	13:E:97:TYR:N	2.34	0.81
9:A:791:ILE:HD13	9:A:903:ARG:HH12	1.45	0.81
9:A:708:LYS:NZ	12:D:270:GLN:O	2.13	0.81
5:6:566:ARG:NH1	5:6:657:GLU:HA	1.96	0.80
11:C:456:GLU:CB	11:C:457:PRO:CD	2.55	0.80
8:9:64:LYS:NZ	9:A:468:GLU:OE1	2.14	0.80
1:2:540:LEU:HB2	1:2:677:PHE:CD2	2.16	0.80
3:4:572:THR:HG22	3:4:572:THR:O	1.81	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:551:GLN:HE21	5:6:563:ILE:HG23	1.46	0.80
9:A:811:LEU:HD21	9:A:828:GLU:HG3	1.63	0.80
2:3:31:PHE:HB2	2:3:106:PHE:CE2	2.15	0.80
2:3:198:ARG:HB3	2:3:249:THR:H	1.45	0.80
3:4:481:ILE:O	3:4:485:LEU:CD1	2.29	0.80
3:4:490:VAL:HG13	3:4:491:ASP:N	1.96	0.80
4:5:50:LEU:N	4:5:61:LEU:HD21	1.95	0.80
1:2:687:VAL:CG2	5:6:781:ARG:HH22	1.93	0.80
11:C:458:ILE:HG23	11:C:459:ASP:H	1.46	0.80
3:4:418:CYS:O	3:4:463:VAL:HG21	1.79	0.80
7:8:531:GLU:N	7:8:531:GLU:OE1	2.14	0.80
11:C:495:GLU:HB3	13:E:418:ILE:HB	1.63	0.80
13:E:239:PHE:CE2	13:E:243:ILE:HG21	2.17	0.80
10:B:398:ASN:ND2	16:N:76:DC:OP1	2.11	0.80
3:4:712:VAL:HG12	3:4:712:VAL:O	1.79	0.80
12:D:70:ILE:HD11	12:D:72:PHE:HD2	1.47	0.80
1:2:596:LEU:HD22	1:2:644:CYS:SG	2.22	0.80
2:3:292:VAL:HG13	2:3:327:TYR:O	1.82	0.80
8:9:481:LYS:CG	9:A:882:GLN:HE21	1.94	0.80
3:4:647:GLU:OE2	3:4:654:ILE:HA	1.82	0.80
8:9:271:PHE:HB2	8:9:276:ASN:HB3	1.64	0.80
9:A:460:TYR:CZ	9:A:495:GLU:HG2	2.16	0.80
10:B:312:PHE:HA	10:B:474:ASN:HB2	1.64	0.80
3:4:678:ILE:HD11	3:4:693:ASP:HB2	1.62	0.79
2:3:490:MET:O	2:3:493:GLN:NE2	2.16	0.79
9:A:849:LEU:O	9:A:863:ILE:HD11	1.81	0.79
1:2:246:TYR:OH	1:2:300:PHE:HE1	1.65	0.79
1:2:327:ARG:NH1	1:2:419:LYS:HA	1.97	0.79
1:2:687:VAL:HG13	5:6:781:ARG:HH21	1.42	0.79
3:4:774:TYR:OH	3:4:778:ARG:NH2	2.15	0.79
5:6:189:VAL:HG11	5:6:196:LEU:HD12	1.64	0.79
6:7:129:THR:HG23	6:7:130:LYS:N	1.95	0.79
10:B:355:VAL:CG1	10:B:359:PRO:HA	2.12	0.79
12:D:144:ASN:HB3	13:E:110:LYS:HZ1	1.46	0.79
8:9:224:GLU:OE1	9:A:612:LYS:NZ	2.15	0.79
8:9:481:LYS:NZ	9:A:819:GLU:OE1	2.16	0.79
1:2:554:LYS:CD	5:6:658:GLN:NE2	2.44	0.79
2:3:811:ASP:OD2	2:3:848:ARG:NH2	2.15	0.79
9:A:568:LEU:HB3	9:A:600:ASN:HD21	1.48	0.79
9:A:871:ASN:ND2	13:E:178:ARG:O	2.15	0.79
2:3:99:SER:HA	2:3:158:LYS:HB3	1.65	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:419:LYS:HB3	1:2:422:GLU:OE2	1.83	0.79
13:E:191:ARG:CZ	13:E:253:ASN:HB3	2.12	0.79
1:2:542:LEU:HD23	1:2:683:VAL:HG12	1.65	0.79
5:6:296:ARG:NH1	5:6:360:ARG:NH1	2.30	0.79
5:6:638:ILE:HD12	5:6:678:ILE:HD11	1.63	0.79
8:9:481:LYS:NZ	9:A:819:GLU:CB	2.46	0.79
3:4:416:SER:O	3:4:417:LEU:HD12	1.83	0.78
4:5:49:GLN:CB	4:5:61:LEU:CD2	2.62	0.78
5:6:575:GLY:C	5:6:581:LYS:HZ1	1.86	0.78
13:E:331:LEU:HD21	13:E:424:LEU:HD21	1.65	0.78
2:3:435:ARG:O	2:3:439:GLY:HA2	1.84	0.78
6:7:443:ARG:NH1	6:7:449:LYS:NZ	2.31	0.78
10:B:468:MET:HB2	11:C:111:ASP:OD2	1.84	0.78
6:7:520:ILE:HA	6:7:562:SER:HB2	1.64	0.78
12:D:70:ILE:HD12	12:D:290:ASN:CB	2.13	0.78
1:2:811:GLU:OE1	1:2:815:ARG:NH1	2.17	0.78
8:9:255:SER:HB2	8:9:256:PHE:HA	1.66	0.78
3:4:634:PHE:CE2	3:4:694:LEU:HD21	2.17	0.78
5:6:902:THR:CG2	5:6:903:THR:H	1.90	0.78
9:A:479:GLY:O	9:A:485:LYS:NZ	2.16	0.78
10:B:432:ILE:HA	10:B:437:PHE:CD2	2.17	0.78
1:2:688:ASP:CG	1:2:691:ALA:HB3	2.03	0.78
3:4:251:TYR:CD2	3:4:254:THR:HG23	2.18	0.78
8:9:274:ARG:HH12	10:B:346:GLU:HB3	1.48	0.78
5:6:789:SER:HB2	5:6:791:SER:H	1.49	0.78
1:2:686:LEU:O	1:2:686:LEU:HD12	1.83	0.78
2:3:32:LEU:HD23	2:3:132:LEU:HD21	1.64	0.78
7:8:570:SER:OG	7:8:579:LYS:NZ	2.16	0.78
11:C:106:PHE:HE2	11:C:237:ILE:HG23	1.49	0.78
5:6:133:GLU:HB3	5:6:134:LYS:HA	1.65	0.78
2:3:257:THR:HA	2:3:275:ASP:HA	1.64	0.77
11:C:498:LEU:HB3	11:C:499:PRO:HD2	1.57	0.77
13:E:240:ILE:O	13:E:243:ILE:HG13	1.84	0.77
13:E:24:ALA:O	13:E:25:ASP:CG	2.22	0.77
5:6:550:GLN:HG2	5:6:569:ILE:CG2	2.15	0.77
10:B:405:GLN:NE2	11:C:117:GLU:OE2	2.15	0.77
11:C:461:ILE:HG22	11:C:462:PHE:N	1.98	0.77
13:E:25:ASP:HB2	13:E:26:PRO:HD3	0.82	0.77
1:2:686:LEU:CD1	1:2:688:ASP:OD1	2.33	0.77
2:3:28:PHE:HZ	2:3:129:LEU:HA	1.47	0.77
13:E:191:ARG:NH2	13:E:254:ASP:N	2.32	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:28:PHE:CE2	2:3:128:ALA:CB	2.67	0.77
3:4:234:ARG:NH1	3:4:290:ASP:HB3	1.98	0.77
13:E:191:ARG:HH21	13:E:253:ASN:CB	1.97	0.77
3:4:578:LEU:HD11	3:4:674:SER:HB3	1.67	0.77
3:4:891:ASN:HD21	3:4:898:VAL:H	1.31	0.77
3:4:209:LEU:HB2	3:4:212:ARG:HA	1.65	0.77
5:6:287:LEU:HG	5:6:399:GLY:HA2	1.65	0.77
6:7:400:ARG:HB3	6:7:637:LYS:NZ	1.99	0.77
12:D:265:LYS:O	12:D:270:GLN:NE2	2.18	0.77
12:D:323:HIS:NE2	12:D:365:ASP:OD1	2.18	0.77
3:4:207:LYS:HA	3:4:211:GLU:H	1.49	0.77
12:D:477:LEU:HD23	13:E:178:ARG:HH22	1.49	0.77
1:2:246:TYR:CE1	1:2:300:PHE:CZ	2.73	0.77
5:6:550:GLN:OE1	5:6:571:ILE:CG1	2.33	0.77
7:8:570:SER:H	7:8:581:TYR:HB3	1.48	0.77
8:9:481:LYS:CG	9:A:882:GLN:NE2	2.48	0.77
8:9:482:THR:HG23	9:A:880:PHE:CE2	2.19	0.77
3:4:473:ARG:NH1	3:4:666:ASN:ND2	2.33	0.77
1:2:572:SER:O	1:2:575:GLY:N	2.14	0.76
3:4:663:THR:HG21	5:6:373:MET:CE	2.15	0.76
11:C:456:GLU:HB3	11:C:457:PRO:HD3	1.65	0.76
5:6:178:LEU:HD12	5:6:178:LEU:O	1.85	0.76
1:2:585:ILE:HG13	1:2:586:THR:HG23	1.67	0.76
3:4:554:LYS:HZ1	5:6:587:TYR:HE1	1.31	0.76
9:A:849:LEU:O	9:A:863:ILE:CD1	2.33	0.76
13:E:218:ILE:HD11	13:E:232:PHE:CZ	2.21	0.76
13:E:346:ASP:OD2	13:E:385:ARG:HD2	1.85	0.76
2:3:173:ALA:HB3	4:5:280:ARG:HA	1.66	0.76
12:D:375:ASN:OD1	13:E:173:THR:HG21	1.85	0.76
1:2:548:ALA:HB2	17:2:2001:AGS:H8	1.66	0.76
6:7:670:ASP:OD1	6:7:671:SER:N	2.18	0.76
11:C:550:LYS:HE3	11:C:579:VAL:HB	1.67	0.76
12:D:70:ILE:HD12	12:D:72:PHE:HD2	1.49	0.76
1:2:534:ARG:NE	1:2:538:ASN:HD21	1.83	0.76
3:4:467:LYS:O	3:4:468:LYS:HG2	1.85	0.76
3:4:703:ASP:OD1	3:4:800:SER:CB	2.34	0.76
13:E:141:LEU:HD12	13:E:145:LEU:HD12	1.68	0.76
13:E:163:ASN:OD1	13:E:165:LYS:HE2	1.85	0.76
13:E:322:TYR:HB3	13:E:324:LEU:HD13	1.66	0.76
1:2:319:ARG:NH1	1:2:425:GLU:CG	2.48	0.76
12:D:82:ILE:HD11	12:D:111:LEU:CD2	2.16	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:178:THR:HA	12:D:181:PHE:HB3	1.66	0.76
2:3:410:ASP:O	2:3:413:THR:OG1	2.04	0.76
3:4:473:ARG:HH12	3:4:666:ASN:HD21	1.32	0.76
9:A:883:THR:HG23	9:A:884:MET:H	1.50	0.76
5:6:296:ARG:HH12	5:6:360:ARG:HH12	1.33	0.76
13:E:247:PHE:HB3	13:E:251:THR:HG23	1.68	0.76
1:2:212:LYS:HE3	1:2:274:VAL:HB	1.65	0.75
7:8:470:PHE:HE2	7:8:473:LYS:HD3	1.50	0.75
3:4:476:VAL:HG22	7:8:532:THR:CG2	2.15	0.75
9:A:609:LEU:HD13	9:A:614:THR:HA	1.68	0.75
9:A:479:GLY:N	9:A:485:LYS:HZ3	1.82	0.75
11:C:496:GLN:N	13:E:418:ILE:HD12	2.00	0.75
13:E:39:SER:OG	13:E:40:GLY:N	2.18	0.75
2:3:31:PHE:HE1	2:3:35:PHE:CE2	1.53	0.75
11:C:144:ARG:NH1	15:M:17:DT:OP1	2.19	0.75
2:3:28:PHE:HD2	2:3:128:ALA:HB3	1.51	0.75
4:5:49:GLN:HB3	4:5:61:LEU:CD2	2.16	0.75
6:7:459:MET:HB3	6:7:599:LEU:HA	1.68	0.75
5:6:120:GLU:O	5:6:134:LYS:NZ	2.18	0.75
6:7:543:GLN:NE2	6:7:559:ALA:O	2.20	0.75
7:8:155:TYR:HB2	7:8:255:ALA:HB1	1.68	0.75
9:A:907:GLU:HG2	9:A:908:ASP:N	2.00	0.75
1:2:523:VAL:HG13	1:2:525:LYS:HG3	1.69	0.75
2:3:24:ARG:HB3	2:3:124:PRO:HG3	1.68	0.75
8:9:481:LYS:HE3	9:A:819:GLU:CB	2.17	0.75
10:B:476:VAL:HG23	11:C:493:SER:OG	1.87	0.75
11:C:451:ASP:O	11:C:454:HIS:ND1	2.19	0.75
11:C:496:GLN:N	13:E:418:ILE:HD11	2.00	0.75
1:2:548:ALA:CB	17:2:2001:AGS:C8	2.65	0.75
2:3:409:GLY:O	2:3:415:LYS:NZ	2.19	0.75
11:C:435:LYS:NZ	11:C:453:LEU:HA	2.01	0.75
11:C:557:ILE:HG21	11:C:566:LEU:HD12	1.69	0.75
2:3:31:PHE:CA	2:3:106:PHE:CE2	2.70	0.75
3:4:281:VAL:O	3:4:284:ILE:CG1	2.34	0.75
13:E:141:LEU:CD1	13:E:145:LEU:HD12	2.17	0.75
3:4:240:ASN:ND2	3:4:481:ILE:CD1	2.43	0.75
12:D:380:LEU:HD21	12:D:517:ILE:HG23	1.66	0.75
9:A:511:VAL:HA	9:A:531:LYS:NZ	2.01	0.74
9:A:873:LEU:HG	9:A:878:ILE:HD11	1.69	0.74
1:2:406:ARG:NH1	1:2:430:TYR:CE1	2.52	0.74
3:4:792:THR:HG21	5:6:688:ARG:HH21	1.51	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:608:LEU:HA	5:6:627:ALA:HB3	1.69	0.74
12:D:319:ASN:HB3	12:D:361:CYS:SG	2.27	0.74
13:E:26:PRO:HG3	13:E:125:LYS:HD2	1.68	0.74
1:2:374:ARG:HH12	2:3:309:SER:HB3	1.53	0.74
3:4:239:SER:HG	3:4:299:LYS:NZ	1.84	0.74
13:E:34:ILE:HD11	13:E:176:LEU:HD11	1.69	0.74
1:2:238:ASN:HB3	1:2:290:HIS:CE1	2.22	0.74
6:7:495:ALA:CB	6:7:548:ILE:CD1	2.58	0.74
9:A:560:THR:HG22	9:A:592:LYS:HG2	1.69	0.74
9:A:573:THR:O	9:A:573:THR:HG23	1.87	0.74
12:D:72:PHE:CE1	12:D:287:ALA:CB	2.71	0.74
13:E:417:ASN:O	13:E:419:GLU:N	2.20	0.74
5:6:364:ASN:HB3	5:6:394:ARG:HH12	1.52	0.74
13:E:213:CYS:HA	13:E:216:LYS:HD2	1.67	0.74
13:E:217:ARG:HA	13:E:220:GLU:HB2	1.67	0.74
5:6:356:TRP:HZ3	5:6:358:LYS:HB2	1.53	0.74
10:B:459:ILE:HG12	11:C:501:LEU:HD23	1.69	0.74
10:B:321:SER:CA	10:B:486:SER:HB2	2.15	0.74
10:B:551:ARG:HG3	10:B:553:GLY:H	1.52	0.74
13:E:191:ARG:HB3	13:E:253:ASN:HD21	0.93	0.74
3:4:251:TYR:HD2	3:4:254:THR:HG21	1.52	0.74
3:4:858:GLN:HA	3:4:861:LEU:HB3	1.68	0.74
13:E:11:ARG:NH2	13:E:41:THR:OG1	2.16	0.74
2:3:35:PHE:CZ	2:3:103:LEU:N	2.47	0.74
11:C:305:LYS:HD3	11:C:494:TRP:NE1	2.03	0.74
12:D:299:SER:CB	12:D:300:PRO:HD3	2.18	0.74
3:4:468:LYS:CD	3:4:486:MET:CG	2.61	0.74
4:5:50:LEU:CB	4:5:61:LEU:HD11	2.18	0.74
5:6:264:GLN:HG3	5:6:383:GLY:HA2	1.69	0.74
12:D:70:ILE:HD12	12:D:290:ASN:HB3	1.70	0.74
2:3:668:ILE:HG23	2:3:669:PRO:HD2	1.70	0.73
6:7:443:ARG:HH12	6:7:449:LYS:HZ2	1.34	0.73
3:4:596:SER:HA	6:7:549:SER:HB2	1.70	0.73
5:6:594:ARG:NH1	5:6:632:ASP:O	2.20	0.73
7:8:534:LEU:O	7:8:534:LEU:HD13	1.88	0.73
9:A:479:GLY:H	9:A:485:LYS:HZ3	1.34	0.73
13:E:118:GLN:HE21	13:E:119:TYR:HE2	1.32	0.73
1:2:608:GLU:OE2	1:2:611:LYS:HG2	1.89	0.73
2:3:535:LEU:CD1	2:3:535:LEU:O	2.34	0.73
3:4:370:ARG:HB2	3:4:371:CYS:HB2	1.69	0.73
12:D:494:GLY:O	12:D:495:THR:HG22	1.87	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:144:ALA:O	13:E:148:LYS:HB2	1.87	0.73
13:E:93:PRO:HB2	13:E:95:THR:HB	1.70	0.73
3:4:487:GLN:O	3:4:490:VAL:CG1	2.34	0.73
6:7:443:ARG:NH1	6:7:449:LYS:HZ2	1.85	0.73
3:4:731:ASP:O	6:7:442:LYS:NZ	2.22	0.73
11:C:110:SER:O	11:C:241:ASN:ND2	2.21	0.73
13:E:146:PHE:CE2	13:E:179:TYR:CD2	2.76	0.73
13:E:146:PHE:HD2	13:E:179:TYR:CG	2.02	0.73
13:E:327:ILE:HD13	13:E:419:GLU:HG3	1.70	0.73
13:E:60:VAL:HG11	13:E:80:THR:HB	1.70	0.73
1:2:314:LEU:HA	1:2:430:TYR:HD2	1.53	0.73
3:4:468:LYS:HD2	3:4:486:MET:HG3	1.69	0.73
2:3:300:SER:O	4:5:245:HIS:HB3	1.88	0.73
1:2:550:SER:OG	17:2:2001:AGS:O1A	2.06	0.73
1:2:409:ILE:HG13	1:2:450:ILE:HG21	1.71	0.73
4:5:411:ASN:ND2	4:5:519:VAL:O	2.21	0.73
7:8:40:HIS:ND1	7:8:42:THR:O	2.20	0.73
7:8:521:PHE:CE1	7:8:585:SER:HA	2.23	0.73
3:4:370:ARG:HB3	3:4:379:PRO:HA	1.71	0.73
5:6:940:TYR:HA	5:6:943:GLN:HB2	1.71	0.73
7:8:573:GLN:HB2	7:8:578:LEU:HD23	1.71	0.73
11:C:411:ARG:HH21	11:C:452:ARG:HH12	1.36	0.73
13:E:23:SER:HB2	13:E:28:ILE:HG22	1.71	0.73
13:E:191:ARG:HE	13:E:253:ASN:ND2	1.86	0.73
4:5:46:TYR:O	4:5:61:LEU:CD1	2.37	0.72
10:B:316:PHE:HB3	10:B:322:LYS:HD2	1.71	0.72
11:C:305:LYS:NZ	11:C:494:TRP:CD1	2.51	0.72
12:D:326:MET:O	12:D:330:THR:N	2.21	0.72
17:D:2001:AGS:O3G	17:D:2001:AGS:O1A	2.06	0.72
1:2:215:LEU:HG	1:2:216:LEU:HG	1.71	0.72
5:6:569:ILE:HD11	5:6:806:LEU:HD21	1.71	0.72
8:9:473:ILE:HG22	8:9:489:ILE:HG22	1.70	0.72
11:C:435:LYS:HZ1	11:C:453:LEU:HA	1.51	0.72
13:E:122:LEU:HB3	13:E:123:GLN:HE21	1.54	0.72
1:2:319:ARG:HG2	1:2:427:THR:CA	2.16	0.72
1:2:477:THR:HG23	7:8:354:LYS:HB2	1.71	0.72
6:7:486:LYS:NZ	6:7:489:SER:HA	2.02	0.72
9:A:863:ILE:HG22	9:A:866:TRP:HE3	1.53	0.72
13:E:191:ARG:HH21	13:E:254:ASP:N	1.87	0.72
11:C:257:ARG:HD3	13:E:260:ASP:HB2	1.72	0.72
1:2:774:ILE:HG22	1:2:776:PRO:HD3	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:291:ARG:HB2	2:3:329:LEU:HD11	1.72	0.72
6:7:470:LEU:HD23	6:7:473:ILE:HD12	1.70	0.72
8:9:481:LYS:HD3	9:A:891:CYS:CB	2.20	0.72
11:C:141:MET:SD	11:C:144:ARG:NH1	2.59	0.72
3:4:242:ASN:ND2	3:4:488:ASN:CB	2.53	0.72
7:8:291:PRO:HB2	7:8:293:VAL:HA	1.70	0.72
12:D:71:ILE:HG21	12:D:114:TYR:CZ	2.25	0.72
1:2:423:GLU:OE2	1:2:562:ARG:NH1	2.22	0.72
5:6:788:PHE:CD2	5:6:790:ARG:NH2	2.57	0.72
5:6:802:SER:HA	5:6:805:ARG:HE	1.53	0.72
8:9:478:CYS:O	8:9:483:LYS:HD2	1.90	0.72
11:C:489:ASP:OD1	11:C:490:ASN:N	2.22	0.72
12:D:104:ARG:HB2	13:E:181:THR:HG22	1.70	0.72
2:3:475:PHE:CE2	2:3:535:LEU:HD21	2.24	0.72
4:5:43:GLN:NE2	4:5:48:ASP:OD2	2.21	0.72
5:6:591:PHE:HZ	5:6:751:LEU:HD22	1.53	0.72
5:6:749:GLU:OE2	7:8:550:GLY:N	2.21	0.72
7:8:235:LEU:HD12	7:8:282:LEU:HD23	1.71	0.72
11:C:405:HIS:HA	11:C:408:PHE:HD2	1.52	0.72
13:E:163:ASN:OD1	13:E:165:LYS:CE	2.38	0.72
2:3:27:ARG:HH21	2:3:107:ASP:HA	1.54	0.72
3:4:417:LEU:HD23	3:4:463:VAL:HG12	1.70	0.72
3:4:795:THR:HG21	17:6:1101:AGS:C8	2.20	0.72
3:4:860:LYS:NZ	9:A:845:ILE:HG12	2.05	0.72
13:E:161:LYS:HG3	13:E:162:ILE:HG22	1.71	0.72
1:2:303:ILE:O	1:2:303:ILE:HG22	1.89	0.72
3:4:476:VAL:HG12	3:4:476:VAL:O	1.90	0.72
3:4:727:LEU:HD13	6:7:442:LYS:HG2	1.72	0.72
12:D:72:PHE:O	12:D:73:THR:C	2.28	0.72
12:D:339:ASN:HD21	13:E:185:PRO:HA	1.54	0.72
3:4:234:ARG:HG3	3:4:296:ILE:HD11	1.72	0.71
3:4:774:TYR:CE2	5:6:724:ASP:OD2	2.43	0.71
5:6:611:ALA:HB1	16:N:47:DA:H5'	1.72	0.71
10:B:321:SER:CB	10:B:486:SER:HA	2.20	0.71
12:D:387:GLU:HG2	12:D:459:VAL:HG23	1.70	0.71
13:E:31:SER:O	13:E:153:ASN:ND2	2.23	0.71
5:6:143:MET:HE2	5:6:150:THR:O	1.90	0.71
12:D:251:THR:HG21	12:D:256:ILE:HG21	1.72	0.71
12:D:358:ILE:HG13	12:D:359:LYS:N	2.05	0.71
12:D:72:PHE:HB2	12:D:290:ASN:ND2	2.04	0.71
11:C:228:LYS:NZ	13:E:63:GLU:OE2	2.19	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:563:GLU:HA	2:3:566:LEU:HD12	1.72	0.71
3:4:642:ARG:NH2	3:4:695:PRO:HD3	1.89	0.71
3:4:650:GLU:OE2	3:4:701:ARG:HG3	1.90	0.71
3:4:575:SER:HB2	17:7:2001:AGS:O1B	1.91	0.71
12:D:300:PRO:CG	12:D:301:TRP:CH2	2.73	0.71
12:D:400:ARG:NH2	12:D:414:GLU:OE2	2.24	0.71
13:E:240:ILE:O	13:E:244:VAL:HG23	1.90	0.71
15:M:38:DG:N2	16:N:53:DT:O2	2.23	0.71
3:4:234:ARG:NH1	3:4:290:ASP:CB	2.53	0.71
6:7:461:ASP:H	6:7:573:ARG:HD3	1.56	0.71
4:5:49:GLN:CB	4:5:61:LEU:HD22	2.20	0.71
5:6:566:ARG:HD3	5:6:805:ARG:NH1	2.04	0.71
5:6:566:ARG:HH11	5:6:657:GLU:HA	1.55	0.71
8:9:476:THR:O	8:9:485:PHE:HA	1.91	0.71
1:2:246:TYR:OH	1:2:300:PHE:CE1	2.39	0.71
5:6:501:GLN:HE21	5:6:761:PHE:HA	1.54	0.71
3:4:550:LYS:HG2	5:6:737:LYS:HZ1	1.55	0.71
3:4:293:LEU:O	3:4:296:ILE:HG22	1.90	0.71
3:4:428:ARG:NH1	3:4:478:THR:CG2	2.53	0.71
13:E:126:THR:O	13:E:162:ILE:CB	2.31	0.71
6:7:446:ASP:N	6:7:447:GLY:HA2	2.05	0.71
12:D:298:ILE:CG1	12:D:301:TRP:HB2	2.20	0.71
12:D:459:VAL:O	12:D:463:LEU:CD1	2.37	0.71
13:E:156:LEU:HB2	13:E:158:LYS:HZ3	1.56	0.71
1:2:289:ILE:HG22	1:2:290:HIS:CE1	2.24	0.71
3:4:821:ASP:OD1	3:4:822:VAL:N	2.23	0.71
5:6:784:ASP:HB2	5:6:792:SER:HB2	1.71	0.71
9:A:886:ASN:ND2	9:A:889:ILE:HD11	2.06	0.71
11:C:537:ILE:HD12	11:C:605:TYR:HB3	1.72	0.71
3:4:476:VAL:HG22	7:8:532:THR:HG21	1.70	0.71
8:9:478:CYS:HB3	8:9:484:ARG:HB2	1.73	0.71
10:B:429:GLY:O	10:B:432:ILE:CG2	2.39	0.71
11:C:323:TYR:HB2	11:C:490:ASN:HD21	1.53	0.71
5:6:571:ILE:HD11	5:6:679:LEU:CD1	2.20	0.70
8:9:481:LYS:CD	9:A:891:CYS:HB3	2.20	0.70
12:D:298:ILE:HG21	12:D:302:VAL:CG1	2.00	0.70
12:D:99:ILE:CD1	12:D:256:ILE:HD12	2.21	0.70
5:6:543:VAL:HG22	5:6:713:PHE:HD2	1.55	0.70
6:7:129:THR:CG2	6:7:130:LYS:H	2.02	0.70
12:D:108:LYS:HD2	12:D:250:CYS:HB2	1.71	0.70
12:D:298:ILE:HG22	12:D:302:VAL:HG11	1.68	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:187:THR:O	2:3:257:THR:OG1	2.09	0.70
3:4:490:VAL:CG1	3:4:491:ASP:H	2.03	0.70
3:4:687:PRO:HA	3:4:840:PRO:HG3	1.73	0.70
5:6:178:LEU:CD1	5:6:181:LEU:H	2.05	0.70
9:A:449:LEU:HB3	9:A:453:GLU:HG2	1.73	0.70
3:4:242:ASN:ND2	3:4:488:ASN:HB2	2.06	0.70
2:3:31:PHE:HB2	2:3:106:PHE:HE2	1.57	0.70
3:4:273:ASP:HA	3:4:276:ILE:HD12	1.74	0.70
3:4:432:ARG:HH21	3:4:625:ASP:HB3	1.53	0.70
5:6:832:ARG:HD3	12:D:424:SER:HB2	1.73	0.70
10:B:353:LYS:HG2	10:B:355:VAL:HG13	1.73	0.70
2:3:787:PRO:HB3	2:3:826:LEU:HD13	1.73	0.70
6:7:581:LEU:HD13	6:7:681:PHE:H	1.56	0.70
7:8:470:PHE:CD2	7:8:473:LYS:HB2	2.26	0.70
4:5:134:THR:O	4:5:280:ARG:NH2	2.23	0.70
4:5:50:LEU:HD12	4:5:60:SER:HB2	1.74	0.70
12:D:471:GLU:OE1	12:D:471:GLU:N	2.25	0.70
13:E:96:ASP:CB	13:E:118:GLN:HB2	2.20	0.70
9:A:485:LYS:HD2	9:A:599:ALA:HB2	1.74	0.70
1:2:319:ARG:HH12	1:2:425:GLU:HG2	1.57	0.69
2:3:535:LEU:HD13	2:3:539:LEU:CD1	2.22	0.69
5:6:589:VAL:HA	5:6:595:SER:OG	1.92	0.69
10:B:427:LEU:CD1	10:B:432:ILE:HD11	2.20	0.69
1:2:425:GLU:HB3	1:2:457:LYS:HB2	1.74	0.69
1:2:518:SER:HA	1:2:537:ILE:HD13	1.74	0.69
2:3:221:LEU:HD11	2:3:299:LYS:HD3	1.72	0.69
3:4:418:CYS:SG	3:4:462:ASP:HA	2.32	0.69
7:8:123:LEU:HA	7:8:143:ILE:HD13	1.74	0.69
8:9:447:THR:HG21	8:9:511:PHE:HB2	1.75	0.69
10:B:283:GLU:OE2	10:B:485:PRO:HG3	1.92	0.69
1:2:534:ARG:NE	1:2:538:ASN:ND2	2.39	0.69
3:4:289:LEU:HB3	3:4:293:LEU:CD2	2.21	0.69
3:4:349:CYS:HB2	3:4:372:GLU:OE2	1.91	0.69
7:8:232:THR:HG23	7:8:236:LEU:HD23	1.73	0.69
8:9:350:ARG:NH1	8:9:388:ASN:OD1	2.26	0.69
1:2:755:ILE:HG22	1:2:757:PRO:HD2	1.74	0.69
3:4:290:ASP:O	3:4:296:ILE:HB	1.93	0.69
6:7:720:VAL:O	6:7:723:SER:OG	2.08	0.69
17:E:2001:AGS:O2B	17:E:2001:AGS:O3G	2.10	0.69
3:4:559:ARG:HH11	3:4:563:ASN:HD22	1.40	0.69
3:4:545:PHE:HE1	3:4:751:ILE:HG12	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:475:LYS:HA	8:9:487:ASP:HA	1.73	0.69
2:3:190:SER:O	2:3:254:GLN:NE2	2.24	0.69
2:3:419:LEU:HD13	2:3:471:CYS:HB3	1.72	0.69
3:4:289:LEU:CB	3:4:293:LEU:HG	2.22	0.69
3:4:452:VAL:HG12	6:7:279:THR:HB	1.75	0.69
7:8:195:VAL:HG22	7:8:264:PRO:HD3	1.74	0.69
4:5:269:GLU:OE2	4:5:324:ARG:NH1	2.25	0.69
11:C:388:LEU:HA	11:C:391:PHE:HD2	1.57	0.69
1:2:855:ARG:HH12	13:E:352:ARG:NH1	1.91	0.69
1:2:815:ARG:HA	1:2:818:GLU:OE2	1.92	0.69
10:B:432:ILE:HG13	10:B:437:PHE:CD2	2.27	0.69
3:4:419:VAL:HG13	3:4:423:LEU:HB2	1.73	0.69
3:4:657:ALA:HB3	5:6:603:SER:HA	1.75	0.69
7:8:133:VAL:HG12	7:8:134:VAL:HG23	1.75	0.69
1:2:557:GLU:HG2	1:2:565:PHE:HB2	1.74	0.69
2:3:152:PRO:HB2	2:3:154:LYS:HG2	1.72	0.69
6:7:357:PRO:HA	6:7:374:THR:HA	1.74	0.69
7:8:334:THR:HB	7:8:335:GLY:HA3	1.74	0.69
12:D:458:ASN:ND2	13:E:250:TYR:CE1	2.61	0.69
13:E:146:PHE:HE2	13:E:179:TYR:HB3	1.56	0.69
3:4:643:SER:OG	5:6:601:LYS:HD3	1.93	0.68
8:9:412:ILE:HD12	8:9:415:LYS:HD2	1.74	0.68
1:2:300:PHE:CD1	1:2:301:PRO:HD2	2.27	0.68
3:4:248:LEU:CD1	3:4:254:THR:HB	2.22	0.68
5:6:143:MET:HE1	5:6:150:THR:O	1.91	0.68
7:8:71:GLN:NE2	7:8:104:ARG:O	2.27	0.68
12:D:216:PHE:HB3	12:D:219:ILE:HG22	1.75	0.68
1:2:543:GLY:HA3	1:2:549:LYS:CD	2.15	0.68
1:2:687:VAL:CG2	5:6:781:ARG:HH12	2.06	0.68
2:3:566:LEU:HD21	4:5:622:LEU:HD22	1.75	0.68
12:D:475:VAL:HG13	12:D:476:GLY:H	1.58	0.68
12:D:458:ASN:HB3	13:E:250:TYR:HE1	1.58	0.68
2:3:199:SER:OG	2:3:201:HIS:NE2	2.26	0.68
3:4:240:ASN:HD21	3:4:481:ILE:HD13	1.54	0.68
3:4:473:ARG:HH12	3:4:666:ASN:ND2	1.89	0.68
4:5:175:ARG:HH21	4:5:200:ILE:HG23	1.58	0.68
1:2:581:ARG:HH11	1:2:592:GLU:CD	1.97	0.68
4:5:295:VAL:HB	4:5:330:ILE:HA	1.75	0.68
5:6:621:TYR:CD1	5:6:668:ILE:HG12	2.29	0.68
7:8:470:PHE:CE2	7:8:473:LYS:HB2	2.29	0.68
13:E:336:TYR:CZ	13:E:456:TRP:HD1	2.12	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:572:THR:HG21	3:4:708:VAL:HG12	1.75	0.68
4:5:506:LYS:HB2	4:5:509:ILE:HD12	1.75	0.68
10:B:366:TYR:HA	10:B:430:PRO:HG2	1.75	0.68
12:D:70:ILE:HD11	12:D:72:PHE:CD2	2.29	0.68
5:6:151:ILE:CD1	5:6:185:LEU:HD11	2.24	0.68
13:E:93:PRO:O	13:E:94:THR:C	2.30	0.68
5:6:558:SER:HB3	5:6:559:THR:HA	1.74	0.68
6:7:231:LYS:HG3	6:7:233:ASP:H	1.57	0.68
9:A:853:GLY:HA2	9:A:864:ILE:CD1	2.24	0.68
10:B:321:SER:HB3	10:B:486:SER:HA	1.74	0.68
1:2:542:LEU:C	1:2:683:VAL:HB	2.13	0.68
1:2:688:ASP:OD2	1:2:691:ALA:CB	2.42	0.68
3:4:407:PRO:HB2	3:4:410:GLN:HB3	1.75	0.68
4:5:560:HIS:ND1	4:5:563:GLU:OE1	2.26	0.68
12:D:467:ASP:HB2	13:E:172:GLU:OE2	1.94	0.68
13:E:288:ALA:HB1	13:E:292:PHE:CZ	2.29	0.68
13:E:70:TRP:HB3	13:E:145:LEU:CD2	2.24	0.68
1:2:541:LEU:HD22	1:2:549:LYS:HB2	1.75	0.68
2:3:24:ARG:HB3	2:3:124:PRO:CG	2.23	0.68
3:4:714:GLU:H	3:4:715:LYS:HB3	1.59	0.68
5:6:569:ILE:HD11	5:6:806:LEU:CD2	2.24	0.68
6:7:671:SER:O	6:7:675:MET:N	2.26	0.68
7:8:26:GLU:HG2	7:8:30:LEU:HD21	0.77	0.68
10:B:366:TYR:CA	10:B:430:PRO:HG2	2.24	0.68
3:4:782:ASP:CB	3:4:783:ASP:HB2	2.23	0.67
4:5:256:LEU:HB2	4:5:276:MET:HB2	1.75	0.67
4:5:276:MET:HA	4:5:330:ILE:HD12	1.76	0.67
9:A:894:LEU:HD23	9:A:896:ILE:H	1.58	0.67
13:E:32:ASN:HD21	13:E:150:ILE:HG23	1.58	0.67
5:6:789:SER:H	5:6:790:ARG:HA	1.59	0.67
1:2:542:LEU:CD2	1:2:683:VAL:HG12	2.24	0.67
1:2:688:ASP:HB3	1:2:691:ALA:CB	2.22	0.67
3:4:559:ARG:HH11	3:4:563:ASN:ND2	1.92	0.67
4:5:140:ASN:ND2	4:5:294:ILE:O	2.27	0.67
4:5:49:GLN:HB2	4:5:61:LEU:HD22	1.77	0.67
9:A:577:ASP:O	9:A:581:ASN:ND2	2.28	0.67
10:B:334:LEU:O	10:B:358:ILE:CD1	2.35	0.67
2:3:385:LEU:HB3	2:3:660:VAL:HG11	1.77	0.67
12:D:355:CYS:O	12:D:359:LYS:NZ	2.19	0.67
13:E:331:LEU:HD11	13:E:386:LEU:HD21	1.77	0.67
1:2:508:HIS:HB2	1:2:511:ILE:HG22	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:164:GLY:O	5:6:168:MET:N	2.28	0.67
5:6:575:GLY:N	5:6:581:LYS:HZ3	1.93	0.67
5:6:777:TYR:CZ	5:6:781:ARG:HD2	2.29	0.67
6:7:543:GLN:NE2	6:7:544:GLN:OE1	2.24	0.67
9:A:872:GLN:HE21	12:D:103:PRO:CB	2.08	0.67
13:E:251:THR:CB	13:E:258:LEU:HD11	2.24	0.67
1:2:805:ILE:HD12	1:2:805:ILE:H	1.58	0.67
5:6:355:ASP:OD2	5:6:383:GLY:N	2.26	0.67
5:6:929:GLU:HG2	5:6:930:GLU:HG2	1.76	0.67
8:9:477:LYS:CB	8:9:483:LYS:HE3	2.15	0.67
12:D:130:ILE:HG12	12:D:146:ILE:HG12	1.76	0.67
4:5:438:TYR:HA	4:5:478:CYS:HB2	1.75	0.67
13:E:4:THR:OG1	13:E:50:TYR:HA	1.95	0.67
3:4:468:LYS:HD2	3:4:486:MET:SD	2.34	0.67
3:4:682:TYR:CA	3:4:691:ASN:HD21	2.08	0.67
5:6:689:TYR:HD2	5:6:716:LEU:HD21	1.59	0.67
6:7:626:PRO:HB3	6:7:630:PHE:HB3	1.77	0.67
9:A:867:ASP:O	9:A:870:LEU:N	2.27	0.67
10:B:366:TYR:O	10:B:430:PRO:HG2	1.93	0.67
13:E:109:VAL:HG21	13:E:155:LEU:HD23	1.76	0.67
1:2:393:ALA:O	1:2:396:THR:OG1	2.13	0.67
2:3:494:THR:HA	2:3:508:ALA:H	1.57	0.67
3:4:240:ASN:OD1	3:4:304:ARG:CZ	2.43	0.67
4:5:529:ARG:HH11	4:5:564:ARG:NH2	1.93	0.67
5:6:942:LEU:HD21	7:8:476:MET:H	1.59	0.67
2:3:804:ARG:HB3	8:9:313:GLN:HB2	1.77	0.67
13:E:272:ARG:HG2	13:E:287:SER:CB	2.24	0.67
1:2:554:LYS:NZ	5:6:564:LYS:O	2.28	0.67
1:2:688:ASP:OD2	1:2:691:ALA:HB3	1.95	0.67
5:6:182:GLN:HB3	5:6:186:ARG:NH1	2.07	0.67
5:6:260:GLU:HA	5:6:352:ARG:HH12	1.58	0.67
8:9:477:LYS:HB2	8:9:483:LYS:CE	2.15	0.67
11:C:323:TYR:CG	11:C:490:ASN:ND2	2.58	0.67
1:2:659:SER:OG	1:2:660:THR:N	2.28	0.66
2:3:496:THR:HG21	6:7:482:TYR:HD2	1.58	0.66
3:4:467:LYS:O	3:4:468:LYS:CG	2.43	0.66
8:9:393:VAL:HG12	8:9:398:VAL:HG23	1.77	0.66
1:2:212:LYS:HD2	1:2:215:LEU:HD22	1.76	0.66
3:4:416:SER:C	3:4:417:LEU:HD12	2.16	0.66
5:6:556:HIS:HA	5:6:567:GLY:HA2	1.78	0.66
6:7:631:THR:HG23	6:7:631:THR:O	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:321:SER:HB3	10:B:486:SER:CA	2.23	0.66
11:C:423:ASN:HB2	11:C:426:GLU:HG3	1.76	0.66
2:3:301:LEU:HG	2:3:320:LEU:HD21	1.78	0.66
3:4:468:LYS:HG3	3:4:470:SER:H	1.59	0.66
10:B:349:LEU:HD21	10:B:367:ASN:H	1.61	0.66
10:B:427:LEU:HD12	10:B:432:ILE:HD13	1.78	0.66
1:2:386:GLN:HB3	1:2:410:LEU:HB2	1.77	0.66
3:4:284:ILE:O	3:4:288:ASN:O	2.13	0.66
3:4:641:THR:HG22	3:4:642:ARG:H	1.60	0.66
5:6:273:VAL:HG22	5:6:396:LYS:HZ2	1.61	0.66
7:8:364:LEU:HD22	7:8:442:VAL:HG11	1.77	0.66
8:9:103:SER:HB2	8:9:281:LEU:HD23	1.75	0.66
9:A:808:LEU:HD13	9:A:825:ILE:HD11	1.78	0.66
6:7:470:LEU:HD21	6:7:564:LEU:HD22	1.77	0.66
8:9:481:LYS:CE	9:A:819:GLU:CB	2.73	0.66
13:E:329:LYS:HE3	13:E:466:VAL:HB	1.78	0.66
1:2:807:VAL:HG11	4:5:564:ARG:HB2	1.76	0.66
3:4:862:GLN:NE2	3:4:913:GLU:OE1	2.29	0.66
5:6:369:PRO:O	5:6:372:SER:OG	2.10	0.66
5:6:530:VAL:HG21	5:6:545:LYS:HG3	1.77	0.66
7:8:288:LYS:HD2	7:8:299:PRO:HD2	1.76	0.66
8:9:393:VAL:HG13	8:9:397:PHE:HB2	1.77	0.66
11:C:498:LEU:HG	13:E:417:ASN:HB2	1.77	0.66
3:4:284:ILE:HG21	3:4:296:ILE:CG2	2.25	0.66
7:8:521:PHE:HE1	7:8:585:SER:HA	1.58	0.66
13:E:394:PHE:HB3	13:E:414:LEU:HD11	1.78	0.66
3:4:242:ASN:HD21	3:4:488:ASN:HB3	1.61	0.66
3:4:727:LEU:O	3:4:727:LEU:CD1	2.44	0.66
3:4:795:THR:HG21	17:6:1101:AGS:H8	1.78	0.66
5:6:303:GLU:HB2	5:6:356:TRP:CD1	2.31	0.66
5:6:616:GLU:H	5:6:617:GLU:HA	1.61	0.66
7:8:470:PHE:HE2	7:8:473:LYS:CD	2.09	0.66
2:3:402:ASP:HB2	2:3:511:SER:HB3	1.78	0.66
3:4:643:SER:OG	5:6:601:LYS:CD	2.44	0.66
9:A:610:GLY:O	9:A:614:THR:OG1	2.13	0.66
5:6:968:LEU:HD22	5:6:973:ILE:HD12	1.78	0.66
7:8:193:THR:HA	7:8:286:GLN:HE21	1.60	0.66
8:9:112:THR:OG1	17:9:2001:AGS:PG	2.52	0.66
12:D:70:ILE:O	12:D:71:ILE:HG13	1.96	0.66
13:E:25:ASP:N	13:E:26:PRO:HD2	2.09	0.66
13:E:97:TYR:O	13:E:99:PRO:HD2	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:473:ARG:NH1	3:4:666:ASN:HD21	1.94	0.65
3:4:712:VAL:HG11	6:7:672:LYS:HE2	1.78	0.65
5:6:543:VAL:HA	5:6:713:PHE:HE2	1.60	0.65
12:D:70:ILE:CD1	12:D:72:PHE:CD2	2.72	0.65
13:E:457:GLU:O	13:E:460:LYS:HB2	1.96	0.65
1:2:289:ILE:CG2	1:2:290:HIS:CE1	2.78	0.65
5:6:151:ILE:HD11	5:6:185:LEU:HD11	1.76	0.65
7:8:317:LEU:HG	7:8:347:ILE:HD11	1.77	0.65
9:A:852:GLN:C	9:A:854:SER:H	1.99	0.65
1:2:660:THR:OG1	13:E:472:ASP:OD1	2.13	0.65
5:6:769:ALA:HB1	5:6:821:PRO:HB3	1.77	0.65
12:D:300:PRO:CG	12:D:301:TRP:CZ3	2.78	0.65
3:4:824:GLU:HA	3:4:827:ARG:HB3	1.78	0.65
7:8:391:LEU:HD21	7:8:396:ASN:HB2	1.79	0.65
11:C:199:LEU:HB3	11:C:232:VAL:HG12	1.78	0.65
12:D:112:LEU:HD21	12:D:215:ILE:HD13	1.78	0.65
3:4:273:ASP:OD2	3:4:302:LYS:HA	1.97	0.65
3:4:317:LEU:O	6:7:341:ARG:NH2	2.29	0.65
1:2:554:LYS:HZ2	5:6:564:LYS:HB2	1.61	0.65
6:7:454:ILE:HD13	6:7:694:ARG:HE	1.61	0.65
1:2:544:ASP:HB3	1:2:683:VAL:HG22	1.76	0.65
5:6:305:TYR:HA	5:6:323:GLN:HA	1.79	0.65
5:6:690:ASN:HD21	5:6:693:LEU:HD12	1.61	0.65
9:A:493:VAL:HB	9:A:508:PHE:HZ	1.62	0.65
12:D:104:ARG:NH2	12:D:218:GLU:OE1	2.22	0.65
2:3:716:ARG:HH12	2:3:722:ASN:HD22	1.44	0.65
10:B:476:VAL:CG2	11:C:493:SER:OG	2.44	0.65
2:3:215:THR:HB	2:3:224:ARG:HB3	1.79	0.65
5:6:614:ARG:NH1	16:N:45:DA:O4'	2.30	0.65
5:6:776:LYS:HD3	5:6:828:TYR:CG	2.32	0.65
8:9:481:LYS:HG2	9:A:882:GLN:CD	2.18	0.65
10:B:386:ALA:O	10:B:387:GLU:HB3	1.97	0.65
11:C:496:GLN:HG2	11:C:497:VAL:H	1.61	0.65
12:D:300:PRO:HG2	12:D:301:TRP:CH2	2.30	0.65
13:E:14:GLN:OE1	13:E:14:GLN:N	2.28	0.65
1:2:683:VAL:HG13	1:2:683:VAL:O	1.95	0.65
5:6:923:VAL:HG13	5:6:928:ALA:HB3	1.77	0.65
6:7:466:LYS:HD3	6:7:566:ALA:HB1	1.78	0.65
10:B:466:ASP:O	10:B:470:ALA:N	2.26	0.65
10:B:467:ASN:HD21	13:E:422:GLN:HB3	1.61	0.65
10:B:532:GLN:HA	10:B:553:GLY:HA2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:70:ILE:HD12	12:D:72:PHE:CD2	2.32	0.65
1:2:255:ILE:HG23	7:8:393:THR:HB	1.79	0.65
1:2:502:ALA:HB3	1:2:512:LYS:HE2	1.79	0.65
3:4:649:MET:CB	3:4:701:ARG:HD3	2.26	0.65
6:7:118:CYS:SG	6:7:198:ARG:NH2	2.70	0.65
9:A:796:ARG:NH1	12:D:277:GLN:HG3	2.12	0.65
2:3:687:ARG:O	2:3:691:ASN:ND2	2.31	0.64
5:6:804:ILE:O	5:6:807:SER:OG	2.14	0.64
7:8:206:ARG:HG3	7:8:248:PRO:HG2	1.79	0.64
8:9:415:LYS:HD3	8:9:505:ILE:HD13	1.79	0.64
12:D:126:GLN:O	12:D:211:THR:HG22	1.96	0.64
12:D:75:LEU:CD1	12:D:77:ASP:OD1	2.44	0.64
1:2:327:ARG:HH12	1:2:419:LYS:HA	1.61	0.64
1:2:578:ALA:HB2	1:2:597:VAL:HG21	1.78	0.64
3:4:774:TYR:CE2	5:6:724:ASP:CG	2.69	0.64
5:6:575:GLY:H	5:6:581:LYS:NZ	1.94	0.64
17:A:2001:AGS:O2B	17:A:2001:AGS:S1G	2.55	0.64
11:C:199:LEU:HD13	11:C:231:HIS:HE1	1.62	0.64
3:4:284:ILE:HG21	3:4:296:ILE:HG21	1.78	0.64
3:4:235:GLU:CB	3:4:291:TYR:OH	2.44	0.64
3:4:554:LYS:NZ	5:6:587:TYR:HE1	1.96	0.64
3:4:841:LYS:HG2	3:4:842:THR:H	1.61	0.64
8:9:482:THR:OG1	9:A:893:LYS:NZ	2.29	0.64
11:C:498:LEU:CD2	13:E:421:PHE:CE2	2.80	0.64
13:E:156:LEU:HB2	13:E:158:LYS:NZ	2.12	0.64
3:4:425:ASP:OD2	3:4:478:THR:HG21	1.96	0.64
3:4:489:LYS:HE3	3:4:496:GLU:OE2	1.97	0.64
3:4:878:SER:HG	3:4:880:SER:HG	1.45	0.64
10:B:432:ILE:HG12	10:B:438:GLN:NE2	2.12	0.64
12:D:108:LYS:HG3	12:D:109:THR:H	1.62	0.64
2:3:31:PHE:CB	2:3:106:PHE:CE2	2.80	0.64
3:4:628:VAL:HA	3:4:670:SER:HB2	1.79	0.64
5:6:918:ARG:HH21	7:8:472:TYR:HE2	1.43	0.64
7:8:208:LYS:HB3	7:8:248:PRO:HG3	1.79	0.64
7:8:569:ILE:HA	7:8:581:TYR:CG	2.33	0.64
2:3:819:ASP:HA	2:3:823:MET:HB2	1.78	0.64
4:5:614:LEU:HD22	4:5:657:ILE:HG23	1.80	0.64
3:4:767:LYS:HG2	5:6:732:VAL:HG11	1.80	0.64
6:7:248:VAL:HA	6:7:313:CYS:HB3	1.79	0.64
7:8:332:ARG:HB3	7:8:334:THR:HG23	1.80	0.64
9:A:521:PRO:HG3	9:A:574:LYS:HE2	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:496:MET:O	12:D:497:ILE:HG12	1.98	0.64
6:7:400:ARG:HB3	6:7:637:LYS:HZ2	1.63	0.64
12:D:458:ASN:HB2	13:E:250:TYR:CE1	2.26	0.64
11:C:495:GLU:CB	13:E:418:ILE:HB	2.26	0.64
1:2:541:LEU:HA	1:2:681:CYS:HB2	1.80	0.64
1:2:601:LYS:NZ	1:2:643:ARG:NH1	2.46	0.64
2:3:429:ALA:H	2:3:469:VAL:H	1.46	0.64
2:3:445:ALA:HA	2:3:457:LEU:HA	1.80	0.64
3:4:428:ARG:NH1	3:4:478:THR:HG23	2.12	0.64
5:6:817:ASP:HB3	5:6:818:GLU:HG3	1.78	0.64
12:D:298:ILE:CG1	12:D:301:TRP:HE3	2.09	0.64
1:2:591:LEU:HD12	1:2:631:ILE:HD13	1.78	0.64
3:4:289:LEU:HB3	3:4:293:LEU:HG	1.80	0.64
7:8:320:VAL:O	7:8:323:THR:OG1	2.15	0.64
8:9:119:ASP:HA	8:9:122:ILE:HG22	1.80	0.64
8:9:481:LYS:CE	9:A:819:GLU:HB3	2.28	0.64
12:D:72:PHE:HB3	12:D:290:ASN:CB	2.28	0.64
12:D:298:ILE:HG12	12:D:301:TRP:CB	2.28	0.64
12:D:317:ARG:HG2	12:D:318:SER:N	2.13	0.64
13:E:164:ILE:HD13	13:E:166:PHE:HE1	1.61	0.64
3:4:714:GLU:N	3:4:715:LYS:HB3	2.12	0.64
5:6:902:THR:CG2	5:6:903:THR:N	2.55	0.64
10:B:477:PHE:HE2	13:E:418:ILE:HD13	1.63	0.64
11:C:495:GLU:HG2	13:E:418:ILE:CG2	2.28	0.64
3:4:495:VAL:O	3:4:500:GLN:HA	1.98	0.63
5:6:683:ASN:HD21	17:6:1101:AGS:PG	2.19	0.63
6:7:119:ARG:HA	6:7:198:ARG:HH12	1.64	0.63
8:9:292:THR:HB	8:9:295:GLN:HB3	1.80	0.63
9:A:799:PHE:CE1	9:A:849:LEU:HD11	2.33	0.63
12:D:478:ARG:O	13:E:142:ASP:HB3	1.98	0.63
12:D:497:ILE:HD11	12:D:502:ARG:HA	1.80	0.63
12:D:72:PHE:O	12:D:73:THR:O	2.16	0.63
13:E:229:ASP:HA	13:E:232:PHE:HD2	1.63	0.63
3:4:214:GLU:OE2	3:4:506:LEU:HD12	1.98	0.63
9:A:580:TYR:HE1	9:A:612:LYS:HD2	1.63	0.63
11:C:495:GLU:CG	13:E:418:ILE:HB	2.29	0.63
1:2:688:ASP:HB2	1:2:692:ASP:OD1	1.99	0.63
3:4:205:PHE:HZ	3:4:246:ARG:HH21	1.46	0.63
3:4:639:ASP:OD1	3:4:642:ARG:NH1	2.30	0.63
3:4:649:MET:SD	3:4:671:ILE:HG21	2.38	0.63
5:6:639:ASP:HA	5:6:681:ALA:HB3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:860:LYS:HZ1	9:A:845:ILE:HG12	1.62	0.63
10:B:355:VAL:HG12	10:B:359:PRO:CA	2.24	0.63
11:C:254:SER:HA	11:C:257:ARG:NH1	2.13	0.63
1:2:216:LEU:HD21	1:2:231:ILE:HD11	1.79	0.63
6:7:547:SER:HA	6:7:556:THR:HG22	1.80	0.63
12:D:358:ILE:O	12:D:362:SER:OG	2.16	0.63
1:2:702:SER:O	5:6:559:THR:HG21	1.98	0.63
2:3:28:PHE:CB	2:3:125:ALA:HA	2.28	0.63
6:7:208:SER:HB3	6:7:209:GLN:HA	1.81	0.63
10:B:313:SER:OG	10:B:452:ILE:O	2.13	0.63
11:C:496:GLN:HG2	11:C:497:VAL:N	2.14	0.63
12:D:447:THR:O	12:D:448:ILE:HD13	1.97	0.63
3:4:857:ILE:O	3:4:861:LEU:N	2.31	0.63
5:6:773:LEU:HD12	5:6:824:ILE:HD12	1.80	0.63
10:B:389:THR:OG1	10:B:403:GLN:HB2	1.99	0.63
11:C:456:GLU:CB	11:C:457:PRO:HD2	2.21	0.63
3:4:388:ARG:H	5:6:176:ARG:HH11	1.45	0.63
10:B:399:HIS:NE2	11:C:148:TYR:OH	2.27	0.63
10:B:322:LYS:HE2	10:B:455:SER:HB2	1.80	0.63
11:C:53:ASN:HB3	11:C:336:VAL:HG11	1.79	0.63
12:D:358:ILE:HG13	12:D:359:LYS:HG2	1.81	0.63
12:D:440:SER:O	12:D:441:THR:HB	1.99	0.63
1:2:313:ASN:HD22	7:8:332:ARG:HH21	1.44	0.63
2:3:475:PHE:HE2	2:3:535:LEU:HD21	1.63	0.63
5:6:572:CYS:HB3	5:6:680:ALA:HB3	1.81	0.63
12:D:380:LEU:HD23	12:D:516:ILE:CG2	2.29	0.63
1:2:335:LYS:HA	1:2:383:ARG:NH1	2.13	0.63
3:4:527:ALA:CB	3:4:530:ILE:HD13	2.29	0.63
3:4:779:LYS:HG3	3:4:780:MET:H	1.64	0.63
4:5:420:THR:HG23	4:5:556:VAL:HG11	1.81	0.63
5:6:264:GLN:NE2	5:6:354:LEU:HD21	2.14	0.63
1:2:446:VAL:HG21	5:6:301:ARG:HH12	1.62	0.63
3:4:576:GLN:NE2	6:7:448:MET:SD	2.71	0.63
9:A:692:ALA:HB1	9:A:778:VAL:HG11	1.79	0.63
9:A:885:LYS:C	9:A:887:ASP:H	2.00	0.63
11:C:498:LEU:HB3	11:C:499:PRO:HD3	0.63	0.63
15:M:19:DG:N1	16:N:71:DC:O2	2.26	0.63
2:3:28:PHE:CE1	2:3:125:ALA:O	2.52	0.62
2:3:555:GLU:HB3	4:5:631:LYS:HD2	1.80	0.62
3:4:506:LEU:HD23	3:4:509:ILE:HD12	1.81	0.62
3:4:785:ARG:C	3:4:787:ASP:H	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:178:LEU:C	5:6:178:LEU:HD12	2.19	0.62
5:6:347:ASN:O	5:6:351:SER:OG	2.17	0.62
5:6:574:VAL:O	5:6:715:ILE:N	2.24	0.62
10:B:428:ASP:OD2	10:B:458:HIS:CB	2.45	0.62
2:3:805:ILE:HG13	8:9:387:LEU:HB2	1.80	0.62
6:7:217:LYS:HB3	6:7:218:LYS:HD2	1.79	0.62
6:7:543:GLN:HG3	6:7:544:GLN:HG2	1.81	0.62
13:E:102:VAL:HG13	13:E:107:LEU:HB2	1.81	0.62
13:E:281:PRO:O	13:E:284:LEU:HB2	1.98	0.62
1:2:357:GLU:O	1:2:437:ASN:ND2	2.32	0.62
2:3:291:ARG:HD3	2:3:336:VAL:HG22	1.81	0.62
3:4:251:TYR:CD2	3:4:254:THR:CG2	2.67	0.62
4:5:49:GLN:CB	4:5:61:LEU:HD21	2.29	0.62
6:7:364:LYS:HG2	6:7:365:ALA:H	1.63	0.62
12:D:75:LEU:CD2	12:D:276:PRO:O	2.48	0.62
13:E:218:ILE:HD11	13:E:232:PHE:CE1	2.34	0.62
2:3:340:GLN:HB3	2:3:658:LYS:HG2	1.80	0.62
2:3:400:ARG:O	2:3:707:ARG:NE	2.32	0.62
5:6:612:VAL:HG23	5:6:623:ILE:HA	1.80	0.62
9:A:511:VAL:HA	9:A:531:LYS:HZ2	1.62	0.62
3:4:213:GLU:HB3	3:4:503:ASP:H	1.63	0.62
3:4:562:ILE:HD11	3:4:564:ILE:HD11	1.81	0.62
3:4:687:PRO:HA	3:4:840:PRO:CG	2.30	0.62
12:D:70:ILE:HD12	12:D:290:ASN:HB2	1.81	0.62
15:M:23:DG:N1	16:N:67:DC:O2	2.31	0.62
2:3:291:ARG:HH12	2:3:428:LEU:HD11	1.64	0.62
2:3:397:SER:HB2	6:7:471:LYS:HD2	1.80	0.62
4:5:136:GLN:HE22	4:5:280:ARG:HE	1.46	0.62
5:6:543:VAL:HA	5:6:713:PHE:CE2	2.35	0.62
5:6:787:GLY:O	5:6:788:PHE:O	2.18	0.62
8:9:482:THR:OG1	9:A:893:LYS:CE	2.47	0.62
9:A:845:ILE:HG23	9:A:849:LEU:HD12	1.81	0.62
12:D:292:LEU:HD13	12:D:309:LEU:HD11	1.81	0.62
2:3:360:PHE:HD1	2:3:715:VAL:HG11	1.65	0.62
7:8:235:LEU:HD21	7:8:270:ILE:HG13	1.80	0.62
7:8:359:ASP:HA	7:8:362:LYS:NZ	2.15	0.62
7:8:553:GLU:O	7:8:557:ILE:HG12	2.00	0.62
8:9:250:LYS:HG2	8:9:252:PRO:HD2	1.82	0.62
8:9:292:THR:O	8:9:295:GLN:N	2.32	0.62
8:9:422:ILE:HD11	8:9:491:VAL:HG21	1.82	0.62
13:E:164:ILE:CD1	13:E:166:PHE:CE1	2.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:281:PRO:HG2	13:E:282:LEU:HG	1.81	0.62
13:E:82:GLN:NE2	13:E:99:PRO:O	2.24	0.62
16:N:62:DG:N3	16:N:63:DT:N3	2.46	0.62
2:3:276:VAL:HG22	2:3:321:ILE:HB	1.80	0.62
3:4:293:LEU:O	3:4:296:ILE:CG2	2.46	0.62
11:C:495:GLU:HG2	13:E:418:ILE:HG21	1.82	0.62
1:2:430:TYR:HD1	1:2:451:ILE:HG12	1.65	0.62
1:2:589:TRP:HZ3	1:2:633:LYS:HB2	1.64	0.62
5:6:364:ASN:CB	5:6:394:ARG:HH12	2.13	0.62
5:6:595:SER:HB2	5:6:635:ILE:O	2.00	0.62
7:8:293:VAL:HG13	7:8:294:ALA:H	1.65	0.62
8:9:129:LEU:HD23	8:9:165:VAL:HG21	1.82	0.62
1:2:436:GLY:H	1:2:438:LEU:HD23	1.65	0.62
3:4:713:ASP:HB2	3:4:716:ASN:HB2	1.81	0.62
3:4:778:ARG:O	3:4:779:LYS:O	2.17	0.62
1:2:851:VAL:HG11	13:E:473:TYR:HE1	1.64	0.62
1:2:688:ASP:HB2	1:2:691:ALA:HB3	1.75	0.61
2:3:190:SER:HB3	2:3:193:ARG:HH12	1.65	0.61
2:3:722:ASN:OD1	2:3:723:LYS:N	2.32	0.61
3:4:727:LEU:N	3:4:728:TYR:HB3	2.14	0.61
6:7:363:PHE:HA	6:7:364:LYS:HB3	1.82	0.61
1:2:246:TYR:CZ	1:2:300:PHE:CZ	2.80	0.61
1:2:600:ASP:OD2	1:2:601:LYS:HG2	2.00	0.61
2:3:409:GLY:N	2:3:415:LYS:HZ3	1.97	0.61
4:5:262:PRO:O	4:5:431:LYS:NZ	2.33	0.61
11:C:458:ILE:HG23	11:C:459:ASP:N	2.15	0.61
11:C:568:GLU:HG3	11:C:569:LEU:HG	1.81	0.61
12:D:72:PHE:CE1	12:D:287:ALA:HB1	2.34	0.61
1:2:238:ASN:CG	1:2:290:HIS:HE1	2.03	0.61
1:2:537:ILE:HG23	1:2:678:ASP:OD2	1.99	0.61
8:9:221:VAL:HG13	8:9:259:ILE:HG21	1.81	0.61
10:B:589:ASN:O	10:B:601:TRP:N	2.34	0.61
13:E:80:THR:HA	13:E:83:TYR:HD2	1.65	0.61
5:6:614:ARG:NH1	16:N:45:DA:N3	2.46	0.61
2:3:127:LYS:O	2:3:130:THR:OG1	2.16	0.61
2:3:488:GLU:OE2	2:3:496:THR:HG23	2.01	0.61
2:3:535:LEU:HD13	2:3:539:LEU:HD12	1.82	0.61
3:4:304:ARG:NH2	3:4:422:GLU:OE1	2.33	0.61
3:4:432:ARG:NH2	3:4:625:ASP:O	2.34	0.61
3:4:717:ASP:HB2	6:7:664:TYR:HE2	1.65	0.61
7:8:340:LEU:N	7:8:380:GLU:OE2	2.29	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:881:LYS:HG3	9:A:883:THR:H	1.65	0.61
3:4:332:VAL:HG13	3:4:397:ILE:CG2	2.31	0.61
3:4:467:LYS:HG2	3:4:467:LYS:O	1.99	0.61
6:7:149:ARG:HH11	6:7:152:ARG:HE	1.46	0.61
8:9:481:LYS:HG2	9:A:882:GLN:CG	2.30	0.61
12:D:143:ILE:HA	12:D:146:ILE:HG13	1.83	0.61
2:3:182:VAL:N	2:3:294:VAL:O	2.30	0.61
3:4:388:ARG:HB2	5:6:176:ARG:HG3	1.81	0.61
5:6:296:ARG:HH11	5:6:360:ARG:HH22	1.49	0.61
5:6:777:TYR:CD1	5:6:800:LEU:HD13	2.35	0.61
7:8:263:TRP:CD1	7:8:264:PRO:HD2	2.35	0.61
8:9:64:LYS:HA	8:9:67:GLU:HB3	1.83	0.61
9:A:867:ASP:O	9:A:871:ASN:N	2.34	0.61
10:B:438:GLN:HG3	10:B:464:LEU:HD21	1.82	0.61
12:D:64:LEU:HG	12:D:68:GLU:CG	2.24	0.61
13:E:268:LYS:O	13:E:271:SER:OG	2.12	0.61
13:E:417:ASN:C	13:E:419:GLU:N	2.44	0.61
2:3:24:ARG:HH12	2:3:120:TYR:CB	2.06	0.61
2:3:295:VAL:O	2:3:324:ASN:N	2.32	0.61
2:3:389:VAL:O	2:3:390:GLU:C	2.37	0.61
2:3:716:ARG:HD2	2:3:718:SER:HB2	1.81	0.61
6:7:504:ASP:HB3	6:7:505:GLU:HB3	1.83	0.61
7:8:26:GLU:O	7:8:30:LEU:HD11	1.99	0.61
8:9:250:LYS:HZ3	8:9:252:PRO:HB2	1.65	0.61
13:E:127:CYS:HA	13:E:162:ILE:CB	2.30	0.61
2:3:716:ARG:NH1	2:3:722:ASN:HB2	2.16	0.61
3:4:769:GLU:OE2	3:4:823:GLN:HG2	2.01	0.61
5:6:551:MET:HG2	5:6:635:ILE:CD1	2.30	0.61
12:D:458:ASN:HB3	13:E:250:TYR:CE1	2.33	0.61
5:6:901:LYS:HA	5:6:902:THR:C	2.21	0.61
9:A:851:GLN:HG3	9:A:859:GLU:HA	1.83	0.61
2:3:154:LYS:NZ	2:3:220:THR:HG22	2.15	0.61
3:4:550:LYS:HG2	5:6:737:LYS:NZ	2.16	0.61
5:6:551:MET:HG2	5:6:635:ILE:HD11	1.82	0.61
10:B:588:ALA:HA	10:B:602:VAL:HB	1.82	0.61
11:C:248:GLU:CD	13:E:297:ASP:HB3	2.20	0.61
2:3:201:HIS:HB2	2:3:210:HIS:HB2	1.83	0.60
2:3:31:PHE:CD2	2:3:103:LEU:HD21	1.95	0.60
2:3:698:THR:O	2:3:701:THR:OG1	2.16	0.60
3:4:682:TYR:HA	3:4:691:ASN:ND2	2.12	0.60
4:5:148:LEU:HD21	4:5:258:LEU:HD23	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:297:ILE:HA	4:5:328:ILE:HD12	1.81	0.60
6:7:127:LEU:H	6:7:128:PRO:HD2	1.60	0.60
9:A:507:ASP:O	9:A:560:THR:N	2.32	0.60
9:A:907:GLU:CG	9:A:908:ASP:H	2.00	0.60
1:2:439:ASN:O	1:2:442:ASN:ND2	2.34	0.60
1:2:615:GLN:O	1:2:618:THR:OG1	2.16	0.60
1:2:506:TYR:HB2	1:2:698:PHE:CD2	2.36	0.60
3:4:242:ASN:O	3:4:242:ASN:OD1	2.19	0.60
3:4:851:GLN:HA	3:4:855:SER:HB3	1.83	0.60
8:9:481:LYS:HE3	9:A:819:GLU:HB2	1.83	0.60
16:N:71:DC:H2'	16:N:72:DA:C8	2.36	0.60
1:2:488:SER:HA	1:2:493:ILE:HD13	1.83	0.60
3:4:284:ILE:CG2	3:4:296:ILE:HG21	2.32	0.60
3:4:643:SER:CB	5:6:601:LYS:HD3	2.31	0.60
6:7:195:ASN:HA	6:7:198:ARG:HG2	1.81	0.60
6:7:368:ALA:N	6:7:369:GLY:HA3	2.14	0.60
6:7:573:ARG:HD2	6:7:600:MET:O	2.01	0.60
10:B:275:SER:HB2	11:C:582:ILE:HG21	1.83	0.60
6:7:86:LEU:O	6:7:90:ASN:ND2	2.27	0.60
8:9:481:LYS:HG2	9:A:882:GLN:HG3	1.83	0.60
12:D:387:GLU:HA	12:D:459:VAL:HG21	1.82	0.60
2:3:175:HIS:HA	2:3:178:LYS:HD2	1.82	0.60
3:4:387:ASN:HB2	5:6:176:ARG:HD3	1.84	0.60
3:4:242:ASN:ND2	3:4:488:ASN:HD22	1.99	0.60
7:8:131:LYS:HD3	7:8:136:SER:HB3	1.83	0.60
6:7:226:SER:HB3	6:7:229:GLN:HG2	1.82	0.60
10:B:428:ASP:CG	10:B:458:HIS:CB	2.70	0.60
2:3:113:GLY:HA3	2:3:121:PHE:HE2	1.66	0.60
3:4:485:LEU:N	3:4:485:LEU:HD12	2.16	0.60
3:4:891:ASN:ND2	3:4:897:ARG:HD2	2.17	0.60
5:6:178:LEU:HD13	5:6:180:PHE:CA	2.30	0.60
1:2:224:ARG:NE	7:8:245:THR:OG1	2.34	0.60
7:8:389:ASP:N	7:8:390:ASN:HA	2.16	0.60
11:C:323:TYR:CD1	11:C:490:ASN:OD1	2.54	0.60
11:C:521:LEU:HB3	11:C:591:PHE:HZ	1.66	0.60
12:D:185:LEU:HB3	12:D:243:VAL:HG21	1.83	0.60
13:E:343:PRO:CG	13:E:385:ARG:HH12	2.10	0.60
2:3:375:ASP:HA	2:3:378:LYS:HD3	1.83	0.60
3:4:253:GLN:HG2	3:4:253:GLN:O	2.02	0.60
3:4:255:GLU:O	3:4:259:HIS:ND1	2.30	0.60
3:4:548:THR:N	3:4:806:GLU:OE2	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:36:ILE:O	7:8:40:HIS:N	2.35	0.60
9:A:799:PHE:HD1	9:A:803:LEU:HD23	1.66	0.60
13:E:118:GLN:HG3	13:E:119:TYR:HD2	1.67	0.60
13:E:286:LYS:O	13:E:289:ILE:HB	2.02	0.60
2:3:198:ARG:HD2	2:3:248:SER:HA	1.83	0.60
2:3:28:PHE:CD1	2:3:125:ALA:HA	2.37	0.60
5:6:273:VAL:HG22	5:6:396:LYS:NZ	2.17	0.60
7:8:573:GLN:HE22	7:8:577:GLY:HA2	1.66	0.60
7:8:581:TYR:HH	7:8:583:TRP:HE1	1.48	0.60
7:8:73:PHE:HE1	7:8:75:ALA:HB2	1.67	0.60
3:4:196:ASN:O	3:4:200:SER:OG	2.10	0.60
4:5:160:VAL:HB	4:5:296:GLY:HA3	1.83	0.60
1:2:226:VAL:HG22	7:8:211:THR:HG21	1.83	0.60
7:8:184:GLU:OE2	7:8:255:ALA:HB2	2.02	0.60
11:C:411:ARG:HE	11:C:452:ARG:NH1	2.00	0.60
12:D:99:ILE:CD1	12:D:256:ILE:CD1	2.80	0.60
12:D:298:ILE:HG22	12:D:302:VAL:CB	2.12	0.60
12:D:394:ALA:HB1	12:D:406:PHE:CE1	2.37	0.60
13:E:11:ARG:NH2	13:E:192:TYR:OH	2.34	0.60
3:4:562:ILE:CD1	3:4:564:ILE:CD1	2.65	0.59
4:5:504:ILE:HD12	4:5:513:LEU:H	1.67	0.59
5:6:577:PRO:HD3	5:6:683:ASN:CG	2.22	0.59
7:8:232:THR:HG21	7:8:244:HIS:CG	2.37	0.59
7:8:523:LEU:HG	7:8:524:THR:HG23	1.84	0.59
8:9:447:THR:HG23	8:9:510:PRO:HB2	1.84	0.59
10:B:371:ASN:OD1	10:B:372:TYR:N	2.35	0.59
1:2:766:TYR:OH	1:2:823:MET:O	2.19	0.59
5:6:356:TRP:CZ3	5:6:358:LYS:HB2	2.37	0.59
11:C:368:ILE:HG23	11:C:369:LYS:H	1.67	0.59
12:D:101:VAL:O	12:D:276:PRO:HD2	2.02	0.59
12:D:103:PRO:HA	12:D:252:THR:HG23	1.84	0.59
13:E:156:LEU:CD1	13:E:156:LEU:O	2.46	0.59
2:3:31:PHE:CA	2:3:106:PHE:CZ	2.84	0.59
3:4:389:CYS:SG	3:4:391:PHE:CE2	2.95	0.59
3:4:512:VAL:O	3:4:518:LEU:HD12	2.02	0.59
5:6:645:ASP:O	5:6:649:GLN:HG2	2.02	0.59
6:7:727:LEU:HD12	6:7:728:TYR:HB2	1.83	0.59
2:3:716:ARG:HH12	2:3:722:ASN:ND2	1.99	0.59
5:6:788:PHE:HD2	5:6:790:ARG:NH2	1.99	0.59
9:A:703:ALA:HA	9:A:706:ALA:HB3	1.83	0.59
10:B:388:LEU:N	10:B:388:LEU:HD12	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:458:HIS:CE1	10:B:460:TYR:HB2	2.37	0.59
10:B:471:GLN:HB2	11:C:313:ASN:HD22	1.68	0.59
11:C:138:ASN:HB3	11:C:141:MET:HG2	1.83	0.59
3:4:284:ILE:HG13	3:4:285:VAL:N	2.16	0.59
3:4:785:ARG:O	3:4:787:ASP:N	2.33	0.59
4:5:637:GLU:OE2	4:5:645:SER:OG	2.20	0.59
9:A:799:PHE:HE1	9:A:849:LEU:HD11	1.65	0.59
11:C:498:LEU:HG	13:E:417:ASN:HB3	1.79	0.59
1:2:335:LYS:HD2	1:2:383:ARG:NH1	2.16	0.59
2:3:850:GLU:HB3	10:B:567:PHE:O	2.02	0.59
6:7:499:LYS:HE2	6:7:505:GLU:HB2	1.84	0.59
5:6:400:VAL:O	5:6:400:VAL:HG12	2.02	0.59
6:7:687:ARG:NE	17:7:2001:AGS:H5'2	2.14	0.59
8:9:214:LYS:HE2	8:9:216:THR:HA	1.83	0.59
13:E:197:VAL:HG13	13:E:255:ILE:HG22	1.85	0.59
15:M:36:DC:H2"	15:M:37:DA:OP2	2.03	0.59
1:2:289:ILE:CG2	1:2:290:HIS:ND1	2.62	0.59
5:6:306:LYS:NZ	5:6:321:VAL:HA	2.17	0.59
3:4:771:VAL:HG22	5:6:728:ALA:HB1	1.82	0.59
9:A:839:ASN:O	9:A:843:MET:HG2	2.03	0.59
10:B:389:THR:OG1	10:B:403:GLN:OE1	2.05	0.59
12:D:319:ASN:CB	12:D:361:CYS:SG	2.90	0.59
13:E:51:PHE:CE1	13:E:59:ALA:HB3	2.38	0.59
1:2:537:ILE:H	1:2:537:ILE:HD12	1.67	0.59
1:2:607:ASP:HB2	1:2:649:ALA:HB3	1.84	0.59
2:3:519:VAL:HB	2:3:527:ARG:HH12	1.67	0.59
2:3:818:ASP:HA	2:3:821:ASP:HB2	1.85	0.59
3:4:763:THR:OG1	3:4:764:GLU:N	2.34	0.59
8:9:104:LEU:O	8:9:260:GLY:N	2.35	0.59
9:A:799:PHE:O	9:A:803:LEU:HG	2.02	0.59
11:C:302:ILE:HD12	11:C:320:MET:HB3	1.85	0.59
12:D:497:ILE:HG22	13:E:451:LYS:NZ	2.18	0.59
13:E:191:ARG:NE	13:E:253:ASN:ND2	2.50	0.59
13:E:343:PRO:HG3	13:E:385:ARG:NH1	2.09	0.59
13:E:417:ASN:O	13:E:418:ILE:C	2.39	0.59
3:4:289:LEU:HB3	3:4:293:LEU:HD21	1.84	0.59
3:4:605:ILE:HG22	3:4:658:LYS:NZ	2.18	0.59
6:7:729:GLN:NE2	6:7:731:THR:O	2.36	0.59
9:A:853:GLY:HA2	9:A:864:ILE:HD11	1.85	0.59
12:D:176:SER:HB2	12:D:179:GLU:HB2	1.85	0.59
13:E:118:GLN:HG3	13:E:119:TYR:CD2	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:146:PHE:CE2	13:E:179:TYR:HB3	2.33	0.59
1:2:493:ILE:HG13	1:2:494:ILE:N	2.18	0.58
1:2:556:VAL:HG12	1:2:605:LEU:HD11	1.85	0.58
5:6:400:VAL:HG12	5:6:455:LEU:HB3	1.83	0.58
13:E:164:ILE:HD13	13:E:166:PHE:CE1	2.38	0.58
11:C:498:LEU:HG	13:E:417:ASN:CG	2.23	0.58
1:2:333:GLN:HG3	1:2:335:LYS:H	1.68	0.58
2:3:230:ILE:HG13	2:3:231:TYR:N	2.18	0.58
3:4:545:PHE:CE1	3:4:751:ILE:HG12	2.38	0.58
5:6:178:LEU:CD1	5:6:180:PHE:HB2	2.24	0.58
5:6:767:LYS:HE2	5:6:818:GLU:HB3	1.84	0.58
7:8:366:ILE:HD11	7:8:407:ALA:HA	1.85	0.58
8:9:113:GLY:HA2	17:9:2001:AGS:H2'	1.85	0.58
10:B:387:GLU:C	10:B:388:LEU:HD12	2.23	0.58
11:C:185:LEU:HD21	11:C:222:LEU:HD21	1.85	0.58
11:C:550:LYS:NZ	11:C:576:PHE:O	2.34	0.58
13:E:92:ILE:HB	13:E:93:PRO:HD3	1.84	0.58
2:3:116:VAL:HG12	2:3:117:GLU:HG3	1.84	0.58
2:3:557:ARG:O	2:3:561:ILE:HG12	2.03	0.58
3:4:209:LEU:HD22	3:4:502:THR:HG22	1.85	0.58
3:4:428:ARG:NH1	3:4:478:THR:HG22	2.17	0.58
4:5:35:ILE:HG21	4:5:97:VAL:HG21	1.85	0.58
5:6:296:ARG:NH1	5:6:360:ARG:HH22	2.02	0.58
5:6:576:ASP:OD2	5:6:577:PRO:N	2.36	0.58
6:7:543:GLN:HG3	6:7:544:GLN:H	1.66	0.58
9:A:852:GLN:HG2	9:A:855:ASP:H	1.68	0.58
12:D:137:HIS:HA	13:E:106:PHE:HE1	1.69	0.58
12:D:344:LEU:HD11	12:D:364:LEU:HG	1.85	0.58
1:2:238:ASN:HB3	1:2:290:HIS:NE2	2.18	0.58
3:4:480:THR:O	3:4:484:GLU:HG3	2.03	0.58
3:4:543:GLN:HE21	3:4:670:SER:HB3	1.67	0.58
3:4:705:VAL:O	3:4:832:ALA:HB2	2.03	0.58
4:5:563:GLU:HA	4:5:567:SER:HB2	1.85	0.58
4:5:49:GLN:HB3	4:5:61:LEU:HD22	1.85	0.58
6:7:495:ALA:HB1	6:7:497:VAL:HG13	1.84	0.58
7:8:207:TYR:OH	7:8:212:MET:HB2	2.04	0.58
7:8:26:GLU:O	7:8:30:LEU:HD12	1.98	0.58
11:C:440:LEU:HD21	11:C:453:LEU:HD13	1.85	0.58
11:C:550:LYS:HZ2	11:C:580:ALA:HB2	1.67	0.58
11:C:552:GLU:HG3	11:C:553:ILE:HG13	1.86	0.58
12:D:71:ILE:CG2	12:D:114:TYR:CE1	2.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:223:ALA:O	12:D:228:GLN:NE2	2.31	0.58
12:D:99:ILE:HD12	12:D:256:ILE:CD1	2.34	0.58
13:E:70:TRP:CB	13:E:145:LEU:HD21	2.32	0.58
13:E:18:LEU:O	13:E:22:ILE:HG22	2.04	0.58
2:3:701:THR:O	2:3:704:THR:OG1	2.17	0.58
5:6:305:TYR:CE2	5:6:354:LEU:HG	2.38	0.58
5:6:579:THR:O	5:6:580:SER:OG	2.12	0.58
6:7:444:VAL:HG23	6:7:446:ASP:H	1.69	0.58
6:7:452:GLY:H	6:7:694:ARG:HD3	1.67	0.58
6:7:497:VAL:HG22	6:7:548:ILE:HD13	1.86	0.58
8:9:198:GLN:OE1	8:9:204:HIS:ND1	2.36	0.58
9:A:884:MET:HB2	12:D:474:ALA:HA	1.85	0.58
3:4:468:LYS:HD2	3:4:486:MET:CG	2.30	0.58
9:A:853:GLY:CA	9:A:864:ILE:HD11	2.34	0.58
10:B:386:ALA:O	10:B:387:GLU:CB	2.51	0.58
12:D:380:LEU:HD23	12:D:516:ILE:HG21	1.86	0.58
13:E:333:ILE:HD11	13:E:470:ILE:HB	1.84	0.58
1:2:544:ASP:HB3	1:2:683:VAL:CG2	2.31	0.58
2:3:159:GLY:HA2	2:3:160:SER:HB2	1.85	0.58
2:3:163:ALA:HB3	2:3:164:HIS:HB2	1.85	0.58
2:3:483:ARG:NH2	2:3:535:LEU:HD22	2.18	0.58
3:4:509:ILE:HG23	3:4:750:TYR:CE1	2.39	0.58
3:4:659:ALA:N	16:N:48:DA:OP1	2.36	0.58
2:3:566:LEU:HD13	4:5:619:ALA:HB1	1.84	0.58
6:7:149:ARG:HD3	6:7:152:ARG:HH11	1.67	0.58
11:C:185:LEU:HD23	11:C:226:ALA:HB2	1.86	0.58
11:C:253:GLN:H	12:D:461:GLU:CD	2.01	0.58
13:E:22:ILE:O	13:E:22:ILE:HG23	2.03	0.58
3:4:234:ARG:HG2	3:4:291:TYR:HE2	1.68	0.58
3:4:481:ILE:C	3:4:485:LEU:HD13	2.23	0.58
8:9:64:LYS:NZ	9:A:469:SER:HB3	2.19	0.58
11:C:343:VAL:HA	11:C:346:LEU:HD13	1.86	0.58
12:D:97:SER:HG	12:D:269:SER:HG	1.50	0.58
2:3:174:GLN:HE22	4:5:283:THR:HB	1.67	0.58
3:4:352:CYS:N	3:4:353:ASP:HA	2.19	0.58
3:4:664:THR:O	5:6:371:GLY:HA3	2.03	0.58
6:7:213:ARG:NH2	6:7:396:ASP:OD2	2.37	0.58
6:7:664:TYR:OH	6:7:668:ARG:NH1	2.36	0.58
7:8:26:GLU:OE1	7:8:127:GLN:HB3	2.04	0.58
8:9:308:PRO:HG2	8:9:311:ILE:HG22	1.86	0.58
9:A:833:ILE:HD11	9:A:845:ILE:HG22	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:842:VAL:HA	9:A:845:ILE:HD12	1.84	0.58
10:B:432:ILE:HG13	10:B:437:PHE:HD2	1.66	0.58
12:D:253:LYS:HB2	12:D:256:ILE:HG23	1.85	0.58
12:D:319:ASN:HB3	12:D:361:CYS:HB2	1.86	0.58
12:D:64:LEU:HB3	12:D:68:GLU:HG2	1.82	0.58
13:E:336:TYR:CE2	13:E:456:TRP:CD1	2.92	0.58
1:2:855:ARG:HH12	13:E:352:ARG:HH11	1.49	0.58
17:3:2001:AGS:S1G	6:7:461:ASP:HA	2.43	0.58
5:6:178:LEU:HD11	5:6:181:LEU:HG	1.86	0.58
5:6:902:THR:C	5:6:904:VAL:H	2.05	0.58
6:7:727:LEU:HD13	6:7:728:TYR:HD2	1.69	0.58
9:A:620:THR:HG23	9:A:621:ARG:N	2.18	0.58
13:E:277:ASN:HA	13:E:280:GLU:HB3	1.86	0.58
1:2:542:LEU:CG	1:2:683:VAL:CG1	2.81	0.57
3:4:289:LEU:HB3	3:4:293:LEU:CG	2.34	0.57
3:4:234:ARG:CG	3:4:296:ILE:CD1	2.82	0.57
3:4:340:PRO:HB2	3:4:391:PHE:CD1	2.38	0.57
3:4:471:ASP:CG	3:4:472:LYS:N	2.53	0.57
3:4:774:TYR:HE2	5:6:724:ASP:OD2	1.84	0.57
5:6:151:ILE:HD11	5:6:185:LEU:CD1	2.33	0.57
9:A:702:ASP:O	9:A:704:ARG:N	2.37	0.57
8:9:481:LYS:CE	9:A:819:GLU:HB2	2.33	0.57
1:2:479:GLU:HA	1:2:482:ARG:HG2	1.85	0.57
1:2:554:LYS:HA	1:2:557:GLU:CD	2.25	0.57
2:3:791:THR:O	2:3:795:VAL:HG23	2.04	0.57
2:3:800:SER:HA	2:3:803:ARG:HB2	1.86	0.57
6:7:393:LEU:HB2	6:7:395:SER:HB2	1.86	0.57
6:7:441:ASP:H	6:7:452:GLY:HA2	1.69	0.57
7:8:239:TRP:HZ3	7:8:271:SER:H	1.50	0.57
7:8:291:PRO:HB2	7:8:292:LYS:HA	1.86	0.57
10:B:387:GLU:HG2	10:B:388:LEU:H	1.69	0.57
11:C:240:ILE:HG12	11:C:242:THR:H	1.70	0.57
2:3:259:GLN:HA	2:3:273:SER:HA	1.86	0.57
2:3:807:ARG:NE	2:3:856:GLU:OE1	2.33	0.57
4:5:300:ILE:HD12	4:5:326:PRO:HA	1.87	0.57
4:5:46:TYR:O	4:5:61:LEU:HD11	2.03	0.57
8:9:432:THR:HG23	8:9:435:GLU:H	1.69	0.57
10:B:428:ASP:CG	10:B:458:HIS:HB3	2.24	0.57
12:D:365:ASP:O	12:D:368:ASN:HB2	2.04	0.57
1:2:326:ARG:HD2	1:2:592:GLU:HG2	1.85	0.57
1:2:511:ILE:HD11	1:2:541:LEU:HD11	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:283:LYS:O	5:6:286:SER:OG	2.22	0.57
6:7:727:LEU:HD12	6:7:728:TYR:CB	2.33	0.57
7:8:334:THR:H	7:8:336:VAL:HB	1.68	0.57
9:A:863:ILE:CG2	9:A:866:TRP:HE3	2.17	0.57
12:D:317:ARG:CG	12:D:318:SER:N	2.67	0.57
12:D:57:LEU:HD12	12:D:342:ILE:HG22	1.84	0.57
12:D:97:SER:OG	12:D:269:SER:OG	2.20	0.57
13:E:146:PHE:CE2	13:E:179:TYR:CG	2.91	0.57
1:2:387:ARG:HH12	1:2:587:LYS:NZ	2.02	0.57
3:4:234:ARG:HH11	3:4:290:ASP:HB3	1.70	0.57
3:4:212:ARG:HH12	3:4:494:GLU:HG3	1.70	0.57
3:4:685:ASN:H	3:4:841:LYS:HD2	1.68	0.57
3:4:897:ARG:HH22	3:4:900:SER:HB3	1.70	0.57
5:6:832:ARG:HD3	12:D:424:SER:CB	2.35	0.57
5:6:913:MET:CE	12:D:426:ILE:HD13	2.34	0.57
7:8:465:ASN:OD1	7:8:466:SER:N	2.35	0.57
9:A:851:GLN:NE2	9:A:860:GLN:HB2	2.20	0.57
10:B:604:TYR:OH	10:B:608:GLU:OE1	2.22	0.57
13:E:34:ILE:CD1	13:E:176:LEU:HD11	2.35	0.57
4:5:278:CYS:SG	4:5:334:GLN:NE2	2.77	0.57
5:6:273:VAL:HG11	5:6:291:SER:HB3	1.86	0.57
7:8:13:LEU:HD11	7:8:220:VAL:HG11	1.86	0.57
9:A:851:GLN:CD	9:A:860:GLN:H	2.07	0.57
10:B:379:ILE:HG13	10:B:383:LEU:HD13	1.85	0.57
12:D:128:ILE:HD12	12:D:150:LEU:HD11	1.87	0.57
13:E:127:CYS:HA	13:E:162:ILE:HA	1.86	0.57
13:E:201:LEU:HD23	13:E:262:ILE:HD11	1.85	0.57
10:B:395:TYR:N	16:N:77:DT:OP1	2.37	0.57
5:6:516:LEU:O	5:6:520:VAL:HG22	2.04	0.57
5:6:659:GLN:OE1	5:6:675:ARG:HA	2.04	0.57
9:A:609:LEU:HD11	9:A:617:ILE:HD12	1.85	0.57
11:C:495:GLU:HA	13:E:418:ILE:HD13	1.81	0.57
1:2:253:LYS:HE2	1:2:256:LEU:HD11	1.87	0.57
3:4:289:LEU:HB2	3:4:293:LEU:HG	1.84	0.57
3:4:712:VAL:CG1	6:7:672:LYS:HE2	2.34	0.57
7:8:289:ALA:HA	7:8:290:PHE:O	2.04	0.57
12:D:358:ILE:HG13	12:D:359:LYS:H	1.70	0.57
13:E:191:ARG:HH21	13:E:253:ASN:C	2.08	0.57
16:N:56:DA:H1'	16:N:57:DG:C8	2.40	0.57
1:2:409:ILE:HB	1:2:452:GLU:HA	1.87	0.57
1:2:541:LEU:HD21	1:2:549:LYS:HB2	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:605:LEU:HD23	1:2:647:ILE:HB	1.86	0.57
2:3:814:ASN:HD21	2:3:837:ARG:HE	1.51	0.57
3:4:335:SER:HB3	3:4:395:GLN:HE21	1.70	0.57
3:4:428:ARG:HH12	3:4:478:THR:HG23	1.69	0.57
3:4:610:ASP:OD1	3:4:611:THR:N	2.37	0.57
13:E:146:PHE:CG	13:E:179:TYR:CD2	2.87	0.57
1:2:678:ASP:OD2	1:2:679:ILE:HG13	2.05	0.57
1:2:786:VAL:HG21	1:2:834:LEU:HD13	1.86	0.57
2:3:783:ILE:HG13	2:3:784:LYS:HG3	1.87	0.57
3:4:319:PRO:O	3:4:322:ILE:HG12	2.05	0.57
3:4:572:THR:HG21	3:4:708:VAL:CG1	2.34	0.57
6:7:108:GLN:HA	6:7:237:GLN:HG2	1.87	0.57
10:B:316:PHE:HB2	10:B:455:SER:HA	1.86	0.57
12:D:455:ASP:OD1	12:D:456:VAL:N	2.37	0.57
13:E:146:PHE:HE1	13:E:170:MET:CE	2.18	0.57
13:E:197:VAL:CG1	13:E:255:ILE:HG22	2.35	0.57
3:4:234:ARG:HH11	3:4:290:ASP:CB	2.18	0.56
1:2:706:SER:HB3	5:6:558:SER:HB3	1.87	0.56
1:2:551:GLN:CD	5:6:563:ILE:HG23	2.22	0.56
5:6:606:ALA:HB1	5:6:609:THR:O	2.04	0.56
5:6:657:GLU:HG3	5:6:798:ARG:HH21	1.70	0.56
6:7:461:ASP:OD2	6:7:571:TYR:O	2.23	0.56
6:7:69:LYS:NZ	6:7:74:GLU:HB2	2.20	0.56
10:B:484:GLU:HB2	10:B:485:PRO:HD2	1.87	0.56
11:C:84:LYS:HG3	11:C:121:GLU:HB3	1.87	0.56
15:M:18:DT:H3	16:N:72:DA:H61	1.52	0.56
1:2:542:LEU:O	1:2:683:VAL:CB	2.35	0.56
2:3:158:LYS:HG3	2:3:327:TYR:OH	2.05	0.56
3:4:432:ARG:NH1	3:4:625:ASP:O	2.38	0.56
2:3:307:ASN:ND2	4:5:230:GLU:OE2	2.38	0.56
4:5:28:ILE:HG22	4:5:32:LYS:HE3	1.87	0.56
3:4:663:THR:HG21	5:6:373:MET:SD	2.45	0.56
5:6:563:ILE:HD12	5:6:563:ILE:H	1.68	0.56
5:6:566:ARG:NH2	5:6:805:ARG:HH12	2.03	0.56
6:7:460:GLY:N	6:7:466:LYS:NZ	2.54	0.56
1:2:475:SER:HB3	7:8:352:LYS:NZ	2.21	0.56
9:A:463:ALA:HB2	9:A:475:ILE:HD13	1.86	0.56
9:A:510:TYR:O	9:A:531:LYS:NZ	2.36	0.56
9:A:800:THR:HG22	9:A:869:VAL:HG11	1.85	0.56
12:D:304:GLN:NE2	12:D:355:CYS:SG	2.78	0.56
12:D:84:ARG:O	12:D:88:GLN:HG2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:137:SER:O	13:E:138:LEU:HD23	2.05	0.56
3:4:231:ASN:OD1	3:4:234:ARG:NH2	2.37	0.56
5:6:178:LEU:CD1	5:6:181:LEU:N	2.68	0.56
6:7:443:ARG:HH12	6:7:449:LYS:NZ	1.97	0.56
7:8:26:GLU:C	7:8:30:LEU:HG	2.25	0.56
12:D:298:ILE:HG12	12:D:302:VAL:H	1.71	0.56
3:4:735:HIS:HB3	3:4:738:GLN:CG	2.35	0.56
13:E:438:ASN:HD21	13:E:442:ASP:HB2	1.70	0.56
3:4:547:GLY:H	3:4:807:ALA:HB2	1.70	0.56
4:5:59:TYR:CD1	4:5:135:PHE:CE1	2.93	0.56
6:7:369:GLY:H	6:7:370:LEU:HA	1.71	0.56
6:7:369:GLY:N	6:7:370:LEU:HA	2.20	0.56
6:7:497:VAL:HG12	6:7:509:GLU:H	1.69	0.56
9:A:831:LEU:HA	9:A:834:GLU:HG2	1.85	0.56
11:C:430:ASN:HB3	11:C:438:SER:HB2	1.87	0.56
12:D:423:ASN:OD1	12:D:448:ILE:HG12	2.06	0.56
3:4:208:ILE:HG12	3:4:246:ARG:HD2	1.88	0.56
3:4:280:MET:HG3	3:4:301:TYR:CE2	2.41	0.56
3:4:559:ARG:NH1	3:4:563:ASN:HD22	2.04	0.56
5:6:296:ARG:HH11	5:6:360:ARG:NH2	2.03	0.56
6:7:464:VAL:HG23	6:7:573:ARG:NH1	2.20	0.56
7:8:470:PHE:HE2	7:8:473:LYS:CG	2.19	0.56
12:D:50:GLY:O	12:D:54:ARG:HG2	2.06	0.56
12:D:135:PHE:CE2	13:E:147:ASN:HB3	2.41	0.56
13:E:146:PHE:CE2	13:E:179:TYR:HD2	2.21	0.56
10:B:462:PRO:HB2	13:E:421:PHE:HD2	1.70	0.56
10:B:396:TRP:CD1	15:M:17:DT:H5"	2.41	0.56
3:4:736:ILE:HD12	3:4:736:ILE:H	1.71	0.56
4:5:479:ILE:HB	4:5:520:LEU:O	2.05	0.56
5:6:711:LEU:HD12	5:6:794:ARG:CZ	2.36	0.56
6:7:543:GLN:HG3	6:7:544:GLN:N	2.20	0.56
7:8:33:VAL:HG11	7:8:128:LEU:HD13	1.87	0.56
8:9:171:ASN:HA	8:9:223:ASP:HB3	1.88	0.56
8:9:214:LYS:HB3	8:9:215:LYS:C	2.26	0.56
9:A:886:ASN:HD21	9:A:889:ILE:HD11	1.68	0.56
12:D:514:ARG:NH1	12:D:523:TYR:CD1	2.74	0.56
3:4:204:LYS:HD2	3:4:207:LYS:HE3	1.87	0.56
4:5:65:MET:SD	4:5:139:LEU:HB3	2.45	0.56
4:5:62:THR:HA	4:5:138:ILE:HB	1.88	0.56
5:6:335:ASN:N	5:6:338:CYS:O	2.38	0.56
5:6:548:LEU:HG	5:6:548:LEU:O	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:962:PHE:HA	5:6:965:ILE:HG22	1.86	0.56
7:8:518:ASP:OD1	7:8:588:LYS:CD	2.44	0.56
7:8:68:ASP:O	7:8:71:GLN:N	2.35	0.56
2:3:261:MET:HG3	2:3:263:GLU:H	1.71	0.56
2:3:368:ALA:HB2	2:3:378:LYS:HE2	1.88	0.56
2:3:429:ALA:H	2:3:469:VAL:N	2.03	0.56
3:4:567:CYS:HB3	3:4:675:ALA:HB3	1.86	0.56
3:4:712:VAL:CG1	3:4:712:VAL:O	2.52	0.56
4:5:328:ILE:HB	4:5:330:ILE:HG13	1.87	0.56
4:5:330:ILE:HG22	4:5:332:GLY:N	2.16	0.56
4:5:62:THR:HG22	4:5:138:ILE:HG13	1.87	0.56
5:6:692:LYS:HB3	12:D:400:ARG:HB2	1.88	0.56
5:6:794:ARG:HE	5:6:795:ILE:HG22	1.69	0.56
5:6:777:TYR:CE1	5:6:800:LEU:HB2	2.40	0.56
6:7:352:THR:O	6:7:379:GLN:N	2.39	0.56
9:A:479:GLY:H	9:A:485:LYS:NZ	2.03	0.56
9:A:885:LYS:O	9:A:887:ASP:N	2.35	0.56
12:D:108:LYS:HG3	12:D:109:THR:N	2.21	0.56
12:D:301:TRP:HD1	12:D:355:CYS:HG	1.51	0.56
13:E:136:ASP:CB	13:E:171:LEU:N	2.59	0.56
1:2:548:ALA:HB1	1:2:551:GLN:HB3	1.87	0.56
2:3:220:THR:HG21	2:3:224:ARG:NH1	2.20	0.56
2:3:716:ARG:HH22	2:3:722:ASN:HD22	1.53	0.56
3:4:221:ASP:OD1	3:4:222:GLU:N	2.38	0.56
3:4:299:LYS:NZ	3:4:301:TYR:HE1	2.04	0.56
4:5:59:TYR:CE1	4:5:135:PHE:CE1	2.94	0.56
5:6:103:VAL:O	5:6:107:THR:N	2.38	0.56
5:6:794:ARG:NH1	5:6:799:GLN:CD	2.59	0.56
5:6:795:ILE:HB	5:6:799:GLN:HG3	1.88	0.56
9:A:801:ALA:O	9:A:804:PHE:HB3	2.06	0.56
10:B:349:LEU:HB3	10:B:364:ASN:O	2.06	0.56
1:2:562:ARG:HB2	1:2:602:GLY:HA3	1.88	0.56
1:2:567:THR:HG23	1:2:606:ILE:HG23	1.88	0.56
2:3:569:HIS:HB3	4:5:661:GLU:OE2	2.05	0.56
3:4:469:VAL:HG12	3:4:469:VAL:O	2.06	0.56
5:6:777:TYR:OH	5:6:781:ARG:HD2	2.07	0.56
6:7:290:SER:HA	6:7:295:LYS:HE3	1.87	0.56
9:A:852:GLN:CG	9:A:855:ASP:H	2.18	0.56
11:C:199:LEU:HD13	11:C:231:HIS:CE1	2.41	0.56
16:N:69:DA:H2"	16:N:70:DA:C8	2.40	0.56
2:3:233:THR:HG22	2:3:234:GLU:HG2	1.86	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:572:THR:O	3:4:572:THR:CG2	2.53	0.55
4:5:136:GLN:NE2	4:5:279:ASP:OD2	2.38	0.55
4:5:375:ALA:HB1	4:5:378:ILE:HB	1.87	0.55
5:6:119:LEU:HD11	5:6:188:VAL:HG21	1.88	0.55
3:4:181:TRP:CH2	6:7:149:ARG:HG2	2.41	0.55
6:7:413:ARG:HG3	6:7:630:PHE:HE1	1.71	0.55
7:8:189:THR:HG23	7:8:248:PRO:HB3	1.87	0.55
8:9:401:ASN:OD1	8:9:402:SER:N	2.38	0.55
10:B:351:GLN:HB3	10:B:362:ILE:HG13	1.87	0.55
10:B:495:VAL:HG13	10:B:497:LYS:HG2	1.87	0.55
11:C:230:ASP:OD1	11:C:231:HIS:N	2.39	0.55
11:C:498:LEU:HB2	11:C:499:PRO:HD2	1.88	0.55
12:D:298:ILE:HG12	12:D:302:VAL:N	2.21	0.55
13:E:10:PHE:HE2	13:E:199:THR:OG1	1.88	0.55
13:E:285:TYR:O	13:E:289:ILE:HG13	2.06	0.55
1:2:534:ARG:O	1:2:815:ARG:HD3	2.06	0.55
3:4:348:LYS:O	3:4:383:SER:N	2.34	0.55
3:4:340:PRO:HD3	5:6:452:ILE:HG12	1.88	0.55
6:7:409:ASP:OD2	6:7:412:ASN:HB3	2.05	0.55
6:7:735:LYS:HD3	8:9:510:PRO:HA	1.88	0.55
11:C:532:ASN:O	11:C:610:LYS:HE3	2.06	0.55
12:D:323:HIS:CD2	12:D:365:ASP:CG	2.74	0.55
12:D:99:ILE:HD11	12:D:256:ILE:HD12	1.88	0.55
3:4:240:ASN:CG	3:4:481:ILE:HG21	2.26	0.55
4:5:410:ILE:HG23	4:5:658:ARG:HD2	1.88	0.55
4:5:79:LEU:HD11	4:5:87:ILE:HG22	1.87	0.55
5:6:364:ASN:ND2	5:6:394:ARG:NH2	2.55	0.55
5:6:570:ASN:ND2	5:6:678:ILE:H	2.05	0.55
5:6:711:LEU:HG	5:6:712:PHE:N	2.21	0.55
3:4:456:LEU:HD21	6:7:252:LYS:HD3	1.88	0.55
7:8:271:SER:OG	7:8:272:SER:N	2.36	0.55
7:8:348:SER:HB2	7:8:355:ILE:HG22	1.89	0.55
9:A:863:ILE:HG22	9:A:866:TRP:CE3	2.38	0.55
2:3:171:LEU:O	2:3:172:THR:OG1	2.23	0.55
5:6:662:SER:HA	5:6:671:THR:HG22	1.89	0.55
11:C:275:LYS:HB2	11:C:425:ILE:HG23	1.88	0.55
12:D:285:VAL:HG22	12:D:324:ILE:CD1	2.36	0.55
12:D:353:SER:HB3	12:D:358:ILE:HD13	1.89	0.55
1:2:301:PRO:C	7:8:346:GLN:HG2	2.27	0.55
2:3:34:THR:OG1	2:3:106:PHE:CD1	2.49	0.55
5:6:822:SER:O	5:6:825:ALA:HB3	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:543:GLN:NE2	6:7:560:ARG:HA	2.21	0.55
7:8:71:GLN:OE1	7:8:104:ARG:N	2.34	0.55
9:A:577:ASP:HA	9:A:580:TYR:HB3	1.88	0.55
15:M:24:DT:H2"	15:M:25:DG:C8	2.42	0.55
5:6:606:ALA:HA	5:6:608:LEU:N	2.21	0.55
6:7:146:ARG:HH11	6:7:196:LEU:HD21	1.71	0.55
8:9:406:ARG:HA	8:9:409:LYS:HB2	1.89	0.55
9:A:495:GLU:OE1	9:A:495:GLU:N	2.39	0.55
12:D:54:ARG:O	12:D:58:GLN:HG2	2.06	0.55
3:4:432:ARG:NH2	3:4:625:ASP:CB	2.60	0.55
3:4:567:CYS:HB2	3:4:677:PRO:HD3	1.89	0.55
5:6:272:THR:HB	7:8:523:LEU:HD13	1.88	0.55
6:7:139:LEU:HA	6:7:142:ILE:HG12	1.88	0.55
3:4:733:PRO:HG3	6:7:443:ARG:O	2.07	0.55
6:7:664:TYR:CG	6:7:689:LEU:HD22	2.42	0.55
11:C:372:ALA:O	11:C:373:PRO:C	2.44	0.55
13:E:229:ASP:HA	13:E:232:PHE:CD2	2.42	0.55
1:2:224:ARG:NH1	7:8:243:MET:O	2.39	0.55
3:4:575:SER:CB	17:7:2001:AGS:O1B	2.55	0.55
5:6:737:LYS:O	5:6:740:GLU:HB2	2.07	0.55
6:7:103:VAL:HB	6:7:216:ARG:HH11	1.72	0.55
13:E:126:THR:HB	13:E:161:LYS:HE3	1.89	0.55
10:B:477:PHE:CE2	13:E:418:ILE:HD13	2.42	0.55
1:2:321:THR:OG1	1:2:322:GLY:N	2.40	0.55
1:2:398:PRO:HG2	1:2:401:ARG:HD2	1.88	0.55
1:2:534:ARG:HE	1:2:538:ASN:ND2	2.05	0.55
2:3:235:ASP:H	2:3:241:LEU:HD11	1.72	0.55
2:3:414:ALA:HB1	2:3:417:GLN:HB3	1.89	0.55
3:4:389:CYS:SG	3:4:391:PHE:HE2	2.29	0.55
1:2:444:PHE:CE2	5:6:404:VAL:HG22	2.40	0.55
5:6:615:ASP:OD1	5:6:620:ASP:HA	2.05	0.55
6:7:443:ARG:NH1	6:7:449:LYS:HZ1	2.02	0.55
6:7:628:LEU:HD12	6:7:629:ASP:HB3	1.88	0.55
9:A:583:PHE:CZ	9:A:616:ARG:HB2	2.42	0.55
10:B:306:PHE:HE2	11:C:326:MET:HA	1.71	0.55
13:E:247:PHE:O	13:E:251:THR:CG2	2.53	0.55
13:E:97:TYR:O	13:E:99:PRO:CD	2.54	0.55
1:2:660:THR:O	1:2:850:LYS:HA	2.07	0.55
2:3:168:PRO:HD3	2:3:182:VAL:HG13	1.89	0.55
3:4:348:LYS:HG2	3:4:353:ASP:OD2	2.07	0.55
5:6:364:ASN:CG	5:6:394:ARG:NH1	2.60	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:574:VAL:H	7:8:575:ASP:C	2.10	0.55
12:D:132:LEU:HD11	12:D:146:ILE:HD11	1.89	0.55
12:D:72:PHE:CZ	12:D:287:ALA:CB	2.84	0.55
1:2:481:GLU:O	1:2:485:ARG:HG2	2.06	0.54
3:4:543:GLN:HA	3:4:562:ILE:HD11	1.90	0.54
4:5:529:ARG:HH11	4:5:564:ARG:HH22	1.54	0.54
6:7:593:ARG:NH2	17:7:2001:AGS:S1G	2.80	0.54
7:8:470:PHE:CE2	7:8:473:LYS:HD3	2.37	0.54
9:A:872:GLN:NE2	12:D:103:PRO:HB2	2.18	0.54
13:E:254:ASP:N	13:E:254:ASP:OD2	2.39	0.54
13:E:459:ILE:HA	13:E:462:ILE:HG22	1.89	0.54
1:2:534:ARG:HG2	1:2:536:ASP:H	1.71	0.54
1:2:843:ASP:OD1	1:2:844:SER:N	2.40	0.54
2:3:300:SER:HB3	2:3:319:THR:HG22	1.89	0.54
4:5:659:ILE:HG23	4:5:680:ALA:HB1	1.88	0.54
5:6:260:GLU:HA	5:6:352:ARG:NH1	2.22	0.54
6:7:21:ILE:HD13	6:7:117:PHE:HA	1.89	0.54
3:4:476:VAL:HG22	7:8:532:THR:HG22	1.88	0.54
1:2:309:LEU:HD13	1:2:406:ARG:HH12	1.71	0.54
1:2:614:ASP:HA	1:2:617:ARG:NH1	2.22	0.54
2:3:24:ARG:NH1	2:3:120:TYR:O	2.40	0.54
2:3:846:PRO:HA	2:3:856:GLU:HG3	1.88	0.54
5:6:644:MET:HB3	5:6:648:ASP:OD1	2.08	0.54
5:6:918:ARG:HH22	12:D:441:THR:HA	1.72	0.54
7:8:519:ILE:HG22	7:8:520:LEU:N	2.22	0.54
8:9:409:LYS:O	8:9:415:LYS:HE3	2.07	0.54
12:D:344:LEU:CD1	12:D:364:LEU:HG	2.37	0.54
12:D:413:ALA:O	12:D:416:GLU:HG2	2.07	0.54
12:D:90:ILE:HG21	12:D:126:GLN:HE21	1.72	0.54
1:2:335:LYS:HA	1:2:383:ARG:HH12	1.73	0.54
1:2:500:SER:HB3	1:2:757:PRO:HB2	1.90	0.54
3:4:417:LEU:CD2	3:4:435:VAL:HG11	2.37	0.54
5:6:508:LEU:HD21	7:8:547:ASN:HB2	1.90	0.54
1:2:554:LYS:HD2	5:6:658:GLN:NE2	2.23	0.54
7:8:472:TYR:HB3	7:8:475:LYS:NZ	2.22	0.54
9:A:487:LEU:HD23	17:A:2001:AGS:H3'	1.89	0.54
9:A:497:LEU:O	9:A:497:LEU:HD12	2.07	0.54
10:B:297:GLN:HA	10:B:300:MET:HG2	1.89	0.54
10:B:531:THR:HB	10:B:554:VAL:HG22	1.89	0.54
11:C:389:GLU:O	11:C:393:VAL:HG23	2.07	0.54
13:E:118:GLN:HG3	13:E:119:TYR:H	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:246:GLY:O	6:7:108:GLN:NE2	2.41	0.54
3:4:770:LEU:HD21	3:4:802:ILE:CG2	2.38	0.54
8:9:221:VAL:HA	8:9:259:ILE:HG22	1.89	0.54
11:C:305:LYS:HD3	11:C:494:TRP:HE1	1.72	0.54
13:E:197:VAL:HG13	13:E:255:ILE:CG2	2.37	0.54
1:2:313:ASN:ND2	7:8:332:ARG:HH21	2.05	0.54
1:2:855:ARG:HH22	13:E:352:ARG:NH1	2.06	0.54
3:4:188:GLN:O	3:4:190:CYS:N	2.27	0.54
3:4:272:MET:O	3:4:275:THR:OG1	2.18	0.54
6:7:354:ILE:HG13	6:7:377:GLU:HB3	1.89	0.54
11:C:342:ASN:HB3	11:C:345:PHE:HD2	1.73	0.54
12:D:300:PRO:CD	12:D:301:TRP:CH2	2.81	0.54
13:E:136:ASP:HB3	13:E:171:LEU:HB2	1.89	0.54
1:2:238:ASN:CB	1:2:290:HIS:CE1	2.90	0.54
2:3:562:SER:HA	4:5:653:LEU:HD21	1.90	0.54
3:4:282:SER:HA	3:4:285:VAL:HG12	1.89	0.54
3:4:802:ILE:HD11	5:6:735:HIS:CD2	2.43	0.54
6:7:495:ALA:HB2	6:7:548:ILE:HD11	1.81	0.54
7:8:26:GLU:OE1	7:8:127:GLN:CB	2.56	0.54
7:8:66:LEU:HD11	7:8:106:CYS:HB2	1.89	0.54
8:9:475:LYS:HB2	8:9:485:PHE:O	2.08	0.54
10:B:293:LEU:HD12	10:B:296:ILE:HB	1.90	0.54
11:C:132:THR:HG21	11:C:134:LYS:NZ	2.22	0.54
12:D:95:SER:HA	12:D:245:VAL:O	2.08	0.54
12:D:85:ILE:HB	12:D:96:HIS:CE1	2.42	0.54
13:E:240:ILE:HA	13:E:243:ILE:HG12	1.89	0.54
1:2:437:ASN:HA	1:2:438:LEU:C	2.27	0.54
1:2:688:ASP:O	1:2:692:ASP:HB2	2.07	0.54
2:3:103:LEU:O	2:3:107:ASP:N	2.40	0.54
2:3:483:ARG:HB3	2:3:539:LEU:HD11	1.89	0.54
3:4:203:TYR:HD2	3:4:206:ARG:HH11	1.56	0.54
4:5:321:VAL:HG12	4:5:323:ILE:H	1.72	0.54
4:5:46:TYR:O	4:5:61:LEU:HD13	2.08	0.54
8:9:201:ASN:HB2	8:9:204:HIS:HD2	1.72	0.54
9:A:526:GLU:O	9:A:530:ASN:ND2	2.41	0.54
9:A:772:THR:OG1	9:A:773:VAL:N	2.40	0.54
10:B:315:LEU:HD11	10:B:456:THR:HG23	1.89	0.54
10:B:514:LEU:HD23	10:B:517:LEU:HD12	1.90	0.54
11:C:498:LEU:HD21	13:E:421:PHE:CD2	2.43	0.54
11:C:586:GLN:HA	11:C:589:PHE:HD2	1.73	0.54
3:4:836:TYR:HB2	3:4:839:ASP:O	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:264:GLN:HE21	5:6:354:LEU:HD21	1.71	0.54
8:9:105:TYR:HA	8:9:260:GLY:HA3	1.89	0.54
12:D:359:LYS:O	12:D:364:LEU:HB3	2.07	0.54
12:D:397:VAL:HG21	12:D:410:LEU:HD22	1.88	0.54
13:E:118:GLN:HG3	13:E:119:TYR:N	2.23	0.54
1:2:231:ILE:HG23	1:2:279:THR:HG23	1.89	0.54
1:2:302:THR:CG2	1:2:304:TYR:CZ	2.91	0.54
2:3:805:ILE:HG23	2:3:806:LEU:HG	1.90	0.54
6:7:443:ARG:HG2	6:7:445:GLY:H	1.73	0.54
6:7:543:GLN:HE22	6:7:560:ARG:HA	1.73	0.54
8:9:88:VAL:HA	8:9:91:PHE:HD2	1.73	0.54
10:B:525:TYR:HE2	10:B:612:LEU:HD21	1.73	0.54
12:D:72:PHE:CD1	12:D:73:THR:N	2.76	0.54
13:E:32:ASN:ND2	13:E:150:ILE:HA	2.22	0.54
8:9:196:THR:OG1	15:M:12:DA:OP1	2.21	0.54
3:4:188:GLN:C	3:4:190:CYS:H	2.09	0.53
3:4:206:ARG:HB3	3:4:212:ARG:N	2.19	0.53
2:3:391:LYS:HE2	6:7:620:HIS:HB3	1.90	0.53
9:A:604:LEU:N	9:A:605:PRO:HD2	2.23	0.53
9:A:632:LEU:HD23	9:A:697:ALA:HA	1.88	0.53
10:B:317:TYR:OH	10:B:479:ASP:N	2.42	0.53
11:C:331:GLN:HG2	11:C:335:SER:HB3	1.90	0.53
2:3:404:ASN:OD1	2:3:512:VAL:N	2.40	0.53
3:4:199:MET:HA	3:4:224:LEU:HD21	1.91	0.53
3:4:599:VAL:HA	3:4:602:THR:HG22	1.90	0.53
3:4:509:ILE:HG23	3:4:750:TYR:CD1	2.43	0.53
5:6:785:ALA:HB1	5:6:786:GLN:HB3	1.89	0.53
5:6:787:GLY:O	5:6:788:PHE:C	2.47	0.53
6:7:214:ARG:N	6:7:215:TYR:HA	2.24	0.53
6:7:583:ASN:OD1	6:7:584:ILE:HG13	2.08	0.53
6:7:570:LEU:HD21	6:7:585:ASN:HD21	1.73	0.53
12:D:375:ASN:N	13:E:188:MET:HE1	2.23	0.53
12:D:519:LYS:HA	12:D:523:TYR:HE2	1.72	0.53
3:4:354:HIS:CG	3:4:373:ARG:HG2	2.43	0.53
3:4:527:ALA:HB1	3:4:530:ILE:HD12	1.90	0.53
3:4:831:SER:OG	3:4:832:ALA:N	2.41	0.53
7:8:359:ASP:OD1	7:8:362:LYS:NZ	2.28	0.53
8:9:482:THR:CG2	9:A:880:PHE:CD2	2.87	0.53
11:C:72:VAL:HG22	11:C:280:ILE:HG23	1.89	0.53
12:D:140:GLN:HA	12:D:177:LEU:HD12	1.90	0.53
13:E:340:TYR:CD1	13:E:373:PRO:HB2	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:336:TYR:CE2	13:E:456:TRP:HD1	2.26	0.53
16:N:50:DG:H2''	16:N:51:DC:H6	1.72	0.53
2:3:434:GLY:O	2:3:478:MET:HG2	2.08	0.53
3:4:388:ARG:HB2	5:6:176:ARG:NH1	2.23	0.53
6:7:110:ALA:O	6:7:114:THR:HG23	2.09	0.53
12:D:375:ASN:HD21	13:E:173:THR:HG22	1.60	0.53
12:D:397:VAL:HG21	12:D:410:LEU:CD2	2.38	0.53
13:E:31:SER:HB2	13:E:153:ASN:HD22	1.73	0.53
13:E:247:PHE:HB3	13:E:251:THR:CG2	2.38	0.53
15:M:23:DG:H2'	15:M:24:DT:O4'	2.09	0.53
2:3:557:ARG:O	2:3:560:SER:OG	2.18	0.53
3:4:656:ILE:HG22	3:4:658:LYS:H	1.73	0.53
3:4:712:VAL:CG1	6:7:672:LYS:CE	2.86	0.53
3:4:701:ARG:HA	3:4:796:ARG:HH21	1.73	0.53
4:5:49:GLN:HB2	4:5:61:LEU:CD2	2.33	0.53
5:6:580:SER:HB3	17:6:1101:AGS:C5	2.38	0.53
6:7:260:TYR:HB2	6:7:269:VAL:HB	1.90	0.53
6:7:470:LEU:HD13	6:7:522:CYS:HB3	1.91	0.53
1:2:224:ARG:O	7:8:211:THR:HG22	2.08	0.53
3:4:850:VAL:HG11	9:A:806:TYR:CE1	2.43	0.53
11:C:430:ASN:CG	11:C:442:ARG:HH11	2.11	0.53
12:D:72:PHE:CE1	12:D:287:ALA:HB2	2.42	0.53
1:2:574:VAL:HG11	16:N:46:DA:OP2	2.09	0.53
1:2:542:LEU:CD2	1:2:683:VAL:CG1	2.87	0.53
1:2:769:TYR:CZ	1:2:773:LYS:HD3	2.44	0.53
3:4:508:LYS:O	3:4:512:VAL:HG23	2.09	0.53
5:6:139:GLN:O	5:6:143:MET:HG2	2.08	0.53
6:7:664:TYR:CD1	6:7:689:LEU:HB2	2.44	0.53
7:8:37:LEU:HD13	7:8:244:HIS:CE1	2.43	0.53
7:8:493:ARG:O	7:8:497:LEU:N	2.42	0.53
8:9:491:VAL:HG22	8:9:493:LEU:H	1.73	0.53
9:A:511:VAL:HG22	9:A:531:LYS:HD2	1.90	0.53
12:D:499:PHE:HA	12:D:502:ARG:NH1	2.24	0.53
12:D:136:ILE:HG22	13:E:148:LYS:HG3	1.89	0.53
13:E:261:LEU:HD21	13:E:295:THR:HG23	1.90	0.53
13:E:393:ILE:HB	13:E:468:PHE:CE1	2.44	0.53
1:2:424:VAL:HG23	1:2:456:ILE:HG23	1.90	0.53
2:3:372:TYR:CZ	2:3:561:ILE:HA	2.44	0.53
3:4:347:PHE:CE1	3:4:384:LEU:HD12	2.43	0.53
4:5:547:LEU:HD23	4:5:550:PHE:HD2	1.74	0.53
7:8:148:TYR:HE1	7:8:260:LEU:HD11	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:298:ILE:CD1	12:D:301:TRP:HB2	2.37	0.53
12:D:64:LEU:HB2	12:D:68:GLU:HG2	1.86	0.53
13:E:100:LEU:HG	13:E:101:GLN:N	2.23	0.53
13:E:218:ILE:CD1	13:E:232:PHE:CZ	2.91	0.53
1:2:444:PHE:CE2	5:6:404:VAL:CG2	2.92	0.53
1:2:688:ASP:HB2	1:2:692:ASP:CG	2.29	0.53
5:6:902:THR:O	5:6:904:VAL:N	2.42	0.53
8:9:231:ALA:O	8:9:238:SER:OG	2.26	0.53
11:C:430:ASN:CB	11:C:442:ARG:HH11	2.20	0.53
12:D:123:TYR:CB	12:D:126:GLN:HE22	2.22	0.53
1:2:335:LYS:HD2	1:2:383:ARG:HH11	1.73	0.53
1:2:553:LEU:HB2	1:2:605:LEU:HD22	1.91	0.53
3:4:428:ARG:HH12	3:4:478:THR:CG2	2.20	0.53
3:4:485:LEU:CD1	3:4:485:LEU:N	2.72	0.53
3:4:693:ASP:CG	3:4:694:LEU:H	2.11	0.53
4:5:258:LEU:HD22	4:5:294:ILE:HD11	1.90	0.53
11:C:273:GLY:O	11:C:277:GLY:N	2.42	0.53
11:C:383:ASN:OD1	11:C:387:GLY:N	2.42	0.53
12:D:408:PHE:HB3	12:D:500:ASP:HA	1.89	0.53
1:2:552:ILE:O	1:2:555:TYR:HB3	2.09	0.53
2:3:396:GLY:HA3	6:7:421:GLU:OE2	2.09	0.53
3:4:210:ASP:O	3:4:211:GLU:HB2	2.08	0.53
6:7:444:VAL:CG2	6:7:448:MET:HG2	2.38	0.53
7:8:20:LEU:HD21	7:8:48:TYR:HA	1.91	0.53
10:B:319:VAL:HG23	11:C:594:MET:SD	2.49	0.53
11:C:124:ARG:HG2	11:C:125:TYR:H	1.73	0.53
12:D:346:ALA:HB3	13:E:20:SER:HB2	1.90	0.53
13:E:43:LYS:HG3	13:E:44:THR:H	1.74	0.53
1:2:289:ILE:HG22	1:2:290:HIS:HD1	1.72	0.52
3:4:243:LEU:O	3:4:305:PRO:HA	2.09	0.52
3:4:490:VAL:C	3:4:492:HIS:N	2.61	0.52
4:5:599:MET:O	4:5:603:ILE:HG12	2.09	0.52
5:6:937:VAL:HG21	5:6:962:PHE:CZ	2.44	0.52
7:8:270:ILE:HD11	7:8:279:ALA:HB2	1.90	0.52
12:D:82:ILE:HD11	12:D:111:LEU:HD21	1.91	0.52
12:D:477:LEU:HD23	13:E:178:ARG:NH2	2.21	0.52
12:D:478:ARG:O	13:E:142:ASP:CB	2.56	0.52
12:D:79:GLN:O	12:D:83:ASP:HB2	2.09	0.52
13:E:380:LEU:HD23	13:E:451:LYS:HB3	1.90	0.52
11:C:498:LEU:CD2	13:E:421:PHE:HE2	2.21	0.52
1:2:234:LEU:HD22	1:2:239:SER:OG	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:300:SER:HB2	2:3:318:LYS:O	2.09	0.52
3:4:833:ILE:HG23	3:4:836:TYR:CE2	2.43	0.52
3:4:910:LEU:O	3:4:915:LYS:N	2.37	0.52
4:5:442:LYS:HD2	4:5:486:ARG:NH1	2.24	0.52
5:6:551:MET:SD	5:6:591:PHE:HE2	2.32	0.52
5:6:641:PHE:H	5:6:682:ALA:HB2	1.73	0.52
7:8:474:GLU:HA	7:8:475:LYS:C	2.30	0.52
10:B:450:ILE:HD12	10:B:452:ILE:HD11	1.91	0.52
10:B:555:GLU:OE2	10:B:598:GLU:N	2.42	0.52
12:D:298:ILE:HG13	12:D:301:TRP:HE3	1.73	0.52
12:D:412:TYR:OH	12:D:452:LEU:HA	2.10	0.52
5:6:913:MET:HE3	12:D:426:ILE:HD13	1.91	0.52
12:D:511:GLN:O	12:D:514:ARG:HB3	2.09	0.52
13:E:331:LEU:CD2	13:E:424:LEU:HD23	2.31	0.52
2:3:256:ILE:O	2:3:276:VAL:N	2.37	0.52
3:4:206:ARG:CB	3:4:212:ARG:H	2.19	0.52
3:4:229:GLN:HE22	3:4:242:ASN:CG	2.12	0.52
3:4:419:VAL:HG11	3:4:423:LEU:C	2.30	0.52
3:4:476:VAL:CG1	3:4:476:VAL:O	2.57	0.52
3:4:868:GLU:HG2	3:4:890:ILE:HD11	1.91	0.52
5:6:178:LEU:HD13	5:6:180:PHE:N	2.24	0.52
6:7:460:GLY:N	6:7:466:LYS:HZ2	2.07	0.52
9:A:530:ASN:O	9:A:533:SER:O	2.28	0.52
8:9:482:THR:CG2	9:A:880:PHE:CE2	2.92	0.52
9:A:886:ASN:HA	12:D:470:THR:HG21	1.91	0.52
11:C:286:ASP:HA	11:C:402:ILE:HB	1.90	0.52
9:A:785:THR:HA	12:D:271:ARG:CZ	2.39	0.52
2:3:518:PRO:HB3	2:3:524:ASP:HB2	1.92	0.52
3:4:528:PRO:HG2	6:7:446:ASP:OD2	2.09	0.52
4:5:426:LEU:HD13	4:5:478:CYS:HB3	1.91	0.52
3:4:712:VAL:HG11	6:7:672:LYS:CE	2.40	0.52
7:8:387:LYS:HB2	7:8:390:ASN:HB2	1.90	0.52
8:9:416:LEU:HD22	8:9:450:LEU:HD22	1.92	0.52
13:E:328:SER:HA	13:E:423:ASN:HD21	1.73	0.52
1:2:790:TYR:CG	1:2:810:LEU:HD12	2.44	0.52
2:3:394:GLU:OE1	2:3:395:ASN:ND2	2.42	0.52
3:4:562:ILE:HD12	3:4:564:ILE:HD12	1.90	0.52
3:4:559:ARG:HD2	3:4:650:GLU:HA	1.90	0.52
3:4:799:GLU:OE2	5:6:735:HIS:CE1	2.62	0.52
5:6:591:PHE:CZ	5:6:751:LEU:HD22	2.40	0.52
7:8:189:THR:OG1	7:8:206:ARG:NH2	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:237:GLN:O	8:9:241:THR:OG1	2.18	0.52
10:B:432:ILE:HG13	10:B:437:PHE:CE2	2.45	0.52
12:D:358:ILE:HB	12:D:363:PHE:CD2	2.45	0.52
16:N:46:DA:H4'	16:N:47:DA:OP1	2.10	0.52
1:2:813:ILE:HD13	1:2:841:VAL:HG21	1.92	0.52
2:3:164:HIS:O	2:3:181:SER:OG	2.20	0.52
2:3:409:GLY:H	2:3:415:LYS:HZ3	1.56	0.52
3:4:434:GLU:OE1	3:4:467:LYS:HB2	2.09	0.52
4:5:413:LEU:HD23	4:5:415:LEU:HD23	1.90	0.52
5:6:566:ARG:HH21	5:6:805:ARG:HH12	1.58	0.52
6:7:451:ARG:NH1	6:7:593:ARG:O	2.42	0.52
9:A:448:TYR:O	9:A:450:PRO:HD3	2.10	0.52
9:A:798:SER:HB2	12:D:332:ARG:HB2	1.90	0.52
10:B:432:ILE:HA	10:B:437:PHE:HD2	1.73	0.52
12:D:138:SER:H	13:E:106:PHE:HZ	1.58	0.52
2:3:28:PHE:HB2	2:3:125:ALA:HA	1.90	0.52
2:3:163:ALA:HB3	2:3:164:HIS:ND1	2.25	0.52
2:3:34:THR:OG1	2:3:106:PHE:HE1	1.87	0.52
4:5:541:ASP:CG	4:5:542:PHE:H	2.13	0.52
4:5:563:GLU:O	4:5:568:ILE:HG13	2.09	0.52
5:6:270:LEU:HD12	5:6:289:SER:HB2	1.90	0.52
5:6:906:TYR:O	5:6:910:VAL:HG23	2.10	0.52
10:B:428:ASP:OD1	10:B:458:HIS:HB3	2.10	0.52
11:C:411:ARG:HH21	11:C:452:ARG:NH1	2.05	0.52
1:2:700:VAL:O	1:2:704:VAL:HG23	2.10	0.52
2:3:199:SER:HB3	2:3:212:ARG:HB3	1.91	0.52
2:3:392:ASN:HA	2:3:398:HIS:HA	1.90	0.52
3:4:212:ARG:HH12	3:4:494:GLU:CB	2.22	0.52
3:4:238:THR:HG21	3:4:484:GLU:OE1	2.09	0.52
3:4:762:ILE:HD11	5:6:736:MET:HG3	1.91	0.52
8:9:427:LEU:HG	8:9:429:SER:HB3	1.91	0.52
11:C:244:LEU:HD12	11:C:245:SER:N	2.25	0.52
13:E:96:ASP:HB2	13:E:118:GLN:CB	2.33	0.52
1:2:433:ASN:HB2	1:2:434:TYR:HB2	1.92	0.52
2:3:291:ARG:HB2	2:3:329:LEU:HD21	1.91	0.52
3:4:592:SER:H	6:7:547:SER:CB	2.23	0.52
7:8:142:CYS:O	7:8:265:PRO:HD3	2.09	0.52
7:8:206:ARG:HD3	7:8:250:GLN:HB3	1.92	0.52
7:8:336:VAL:O	7:8:338:PRO:HD3	2.10	0.52
8:9:234:SER:HA	8:9:238:SER:HB2	1.91	0.52
9:A:512:GLU:HG3	9:A:564:LEU:HD23	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:529:ILE:HD12	10:B:609:LEU:HD11	1.92	0.52
11:C:154:ALA:O	11:C:158:GLU:HG2	2.10	0.52
12:D:319:ASN:HB3	12:D:361:CYS:CB	2.40	0.52
13:E:191:ARG:NE	13:E:253:ASN:CG	2.60	0.52
1:2:641:GLN:CD	1:2:643:ARG:HH12	2.13	0.52
2:3:113:GLY:HA3	2:3:121:PHE:CE2	2.44	0.52
2:3:286:THR:HB	2:3:290:ASP:OD2	2.10	0.52
2:3:403:ILE:HD11	2:3:707:ARG:HB3	1.91	0.52
2:3:818:ASP:HB3	2:3:822:ILE:HB	1.92	0.52
3:4:490:VAL:C	3:4:492:HIS:H	2.13	0.52
3:4:602:THR:HG23	3:4:603:ALA:O	2.09	0.52
3:4:682:TYR:OH	3:4:707:LEU:HG	2.10	0.52
5:6:134:LYS:HG2	5:6:137:ARG:HG3	1.91	0.52
5:6:289:SER:O	5:6:290:ILE:HD13	2.10	0.52
3:4:614:LEU:HD13	5:6:373:MET:HE2	1.92	0.52
8:9:182:PHE:HB3	8:9:208:PHE:CE2	2.45	0.52
8:9:226:ASP:HA	8:9:229:LEU:HB3	1.91	0.52
8:9:251:LEU:HB3	8:9:252:PRO:HD3	1.92	0.52
10:B:387:GLU:HG2	10:B:388:LEU:N	2.25	0.52
12:D:323:HIS:HE1	12:D:368:ASN:HB3	1.64	0.52
1:2:215:LEU:HD21	1:2:278:ALA:HB2	1.92	0.51
2:3:500:ALA:H	2:3:501:GLY:HA3	1.74	0.51
2:3:683:TYR:CG	2:3:702:LEU:HD12	2.45	0.51
3:4:240:ASN:HD22	3:4:481:ILE:HG21	1.70	0.51
9:A:477:VAL:HG22	9:A:622:ILE:HB	1.91	0.51
10:B:388:LEU:N	10:B:388:LEU:CD1	2.72	0.51
10:B:506:GLY:O	10:B:510:ALA:N	2.41	0.51
11:C:184:ASP:OD1	11:C:185:LEU:N	2.43	0.51
12:D:70:ILE:CD1	12:D:290:ASN:HB3	2.40	0.51
13:E:216:LYS:O	13:E:220:GLU:HG3	2.10	0.51
1:2:292:GLU:HG2	1:2:293:ILE:N	2.25	0.51
1:2:428:GLY:HA3	1:2:453:ALA:HA	1.90	0.51
1:2:541:LEU:HD21	1:2:549:LYS:CB	2.41	0.51
4:5:87:ILE:O	4:5:91:GLU:HG2	2.10	0.51
5:6:355:ASP:HB3	5:6:356:TRP:CA	2.38	0.51
6:7:212:ALA:HA	6:7:216:ARG:HB3	1.93	0.51
6:7:581:LEU:HD22	6:7:681:PHE:CD2	2.45	0.51
10:B:376:PHE:HA	10:B:379:ILE:HG22	1.92	0.51
2:3:838:LEU:HD21	10:B:565:ALA:HA	1.92	0.51
9:A:704:ARG:HH21	12:D:267:ARG:HA	1.74	0.51
12:D:55:ARG:NH2	12:D:297:GLU:O	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:430:ALA:N	12:D:431:PRO:HD3	2.25	0.51
1:2:419:LYS:HZ3	1:2:641:GLN:H	1.58	0.51
1:2:789:VAL:HA	1:2:792:ASP:HB2	1.92	0.51
1:2:488:SER:HB2	1:2:825:LEU:HD13	1.91	0.51
3:4:354:HIS:HB3	3:4:372:GLU:HB2	1.92	0.51
3:4:485:LEU:CD1	3:4:485:LEU:H	2.24	0.51
3:4:685:ASN:N	3:4:841:LYS:HD2	2.26	0.51
3:4:756:GLU:OE1	3:4:756:GLU:N	2.43	0.51
3:4:761:ILE:HG22	3:4:763:THR:H	1.76	0.51
4:5:165:ILE:N	4:5:259:GLN:O	2.42	0.51
4:5:72:ASN:HB3	4:5:75:ILE:HG22	1.90	0.51
8:9:112:THR:CG2	17:9:2001:AGS:O2G	2.57	0.51
10:B:271:ARG:HB3	11:C:578:LYS:HD3	1.92	0.51
13:E:14:GLN:HB3	13:E:189:PHE:HE1	1.75	0.51
13:E:25:ASP:CB	13:E:26:PRO:CD	2.37	0.51
2:3:804:ARG:HG3	8:9:315:MET:HB2	1.91	0.51
2:3:849:ARG:HB2	2:3:855:PRO:HD2	1.92	0.51
3:4:299:LYS:HZ2	3:4:301:TYR:HE1	1.56	0.51
1:2:301:PRO:HB3	7:8:346:GLN:HB3	1.92	0.51
8:9:250:LYS:NZ	8:9:252:PRO:HB2	2.26	0.51
11:C:68:PHE:O	11:C:72:VAL:HG23	2.09	0.51
12:D:128:ILE:HD11	12:D:212:VAL:HG22	1.92	0.51
12:D:57:LEU:HD23	13:E:27:ASP:OD2	2.10	0.51
13:E:38:TYR:O	13:E:41:THR:HG22	2.11	0.51
10:B:467:ASN:ND2	13:E:422:GLN:HB3	2.26	0.51
15:M:12:DA:H61	16:N:78:DT:H3	1.58	0.51
1:2:606:ILE:O	1:2:648:ALA:HA	2.11	0.51
2:3:223:THR:HG22	4:5:244:ILE:HG21	1.92	0.51
2:3:447:THR:HA	2:3:455:ARG:HD2	1.91	0.51
3:4:234:ARG:NH1	3:4:290:ASP:CG	2.64	0.51
3:4:314:MET:HG2	3:4:413:HIS:HD2	1.75	0.51
3:4:662:ILE:HD11	5:6:627:ALA:HA	1.92	0.51
3:4:545:PHE:HE2	3:4:811:MET:HG3	1.75	0.51
2:3:565:VAL:HG12	4:5:657:ILE:HD12	1.90	0.51
5:6:400:VAL:CG1	5:6:402:ILE:HG23	2.40	0.51
5:6:533:ILE:O	5:6:535:PRO:HD3	2.11	0.51
5:6:789:SER:N	5:6:790:ARG:HA	2.22	0.51
5:6:938:ASP:O	5:6:941:LEU:HB3	2.10	0.51
6:7:420:PRO:O	6:7:625:GLN:HB2	2.11	0.51
6:7:444:VAL:HG22	6:7:448:MET:HG2	1.92	0.51
6:7:543:GLN:CG	6:7:544:GLN:H	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:313:ASN:HA	7:8:332:ARG:NH2	2.25	0.51
8:9:182:PHE:HB3	8:9:208:PHE:HE2	1.76	0.51
9:A:782:LEU:HA	9:A:785:THR:HG23	1.93	0.51
10:B:458:HIS:HE1	10:B:460:TYR:HB2	1.75	0.51
11:C:73:ASP:OD1	11:C:74:HIS:N	2.43	0.51
12:D:140:GLN:O	12:D:143:ILE:HG13	2.11	0.51
3:4:189:GLU:O	3:4:192:THR:OG1	2.29	0.51
3:4:204:LYS:HB3	3:4:207:LYS:HD2	1.92	0.51
3:4:614:LEU:HB3	5:6:373:MET:CE	2.38	0.51
3:4:649:MET:HB2	3:4:701:ARG:CD	2.32	0.51
3:4:872:VAL:HG13	3:4:876:GLN:HB3	1.91	0.51
4:5:53:ASN:HD22	4:5:61:LEU:HD23	1.76	0.51
4:5:541:ASP:OD1	4:5:542:PHE:N	2.38	0.51
5:6:280:ARG:HB3	5:6:282:GLU:OE1	2.11	0.51
5:6:303:GLU:OE1	5:6:382:ARG:HD3	2.10	0.51
5:6:406:ASP:O	5:6:449:THR:HB	2.10	0.51
5:6:513:ILE:O	5:6:517:LYS:HG2	2.10	0.51
7:8:125:PHE:HA	7:8:128:LEU:HG	1.91	0.51
7:8:235:LEU:HB2	7:8:283:LEU:HD21	1.91	0.51
9:A:483:VAL:HG23	9:A:485:LYS:HB3	1.92	0.51
11:C:430:ASN:HB3	11:C:442:ARG:HH11	1.75	0.51
1:2:776:PRO:HA	1:2:827:GLU:O	2.11	0.51
2:3:32:LEU:CD2	2:3:132:LEU:HD21	2.33	0.51
3:4:234:ARG:HH12	3:4:290:ASP:HB3	1.75	0.51
3:4:568:GLY:H	3:4:574:LYS:HZ3	1.59	0.51
3:4:634:PHE:HE2	3:4:694:LEU:CD2	2.17	0.51
3:4:891:ASN:ND2	3:4:898:VAL:HG22	2.25	0.51
5:6:543:VAL:HG21	5:6:715:ILE:HD11	1.93	0.51
5:6:573:VAL:HG13	5:6:715:ILE:HD12	1.93	0.51
5:6:792:SER:OG	5:6:794:ARG:O	2.29	0.51
6:7:89:GLN:HG2	6:7:101:ASP:HA	1.93	0.51
6:7:70:VAL:HG21	6:7:78:VAL:HG22	1.92	0.51
9:A:890:CYS:SG	9:A:891:CYS:N	2.83	0.51
10:B:427:LEU:HD21	10:B:465:TRP:HZ2	1.75	0.51
11:C:313:ASN:H	11:C:316:LEU:HD12	1.74	0.51
11:C:491:LEU:HD12	11:C:491:LEU:C	2.31	0.51
13:E:85:LEU:CD2	13:E:118:GLN:HE22	2.24	0.51
1:2:574:VAL:HG23	1:2:579:SER:OG	2.11	0.51
3:4:187:ILE:HG22	3:4:188:GLN:HG3	1.92	0.51
3:4:428:ARG:NH1	3:4:477:ASP:O	2.39	0.51
3:4:802:ILE:CD1	5:6:735:HIS:CG	2.94	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:652:ILE:HG22	5:6:656:MET:HG2	1.92	0.51
7:8:509:LEU:HD12	7:8:557:ILE:HD13	1.92	0.51
17:A:2001:AGS:O2B	17:A:2001:AGS:O2A	2.29	0.51
11:C:498:LEU:CD1	13:E:421:PHE:HE2	2.18	0.51
12:D:340:SER:HA	12:D:371:GLN:OE1	2.11	0.51
12:D:75:LEU:HD12	12:D:77:ASP:CG	2.31	0.51
13:E:242:LEU:HD11	13:E:285:TYR:CE1	2.45	0.51
13:E:444:LEU:HB3	13:E:446:PRO:HD3	1.93	0.51
1:2:686:LEU:HD12	1:2:688:ASP:OD1	2.08	0.51
3:4:532:GLU:HG2	3:4:533:LEU:H	1.76	0.51
7:8:570:SER:N	7:8:581:TYR:HB3	2.22	0.51
8:9:114:LYS:HB2	8:9:288:PHE:HD2	1.76	0.51
9:A:514:ASN:HA	9:A:566:ASP:HB3	1.92	0.51
11:C:461:ILE:CG2	11:C:462:PHE:N	2.68	0.51
13:E:128:LEU:N	13:E:162:ILE:HG13	2.25	0.51
2:3:161:PHE:CZ	2:3:295:VAL:HG11	2.45	0.51
2:3:654:PRO:O	2:3:657:ARG:HG2	2.11	0.51
2:3:668:ILE:CG2	2:3:669:PRO:HD2	2.39	0.51
3:4:212:ARG:HH12	3:4:494:GLU:HB3	1.76	0.51
5:6:561:GLU:CD	5:6:561:GLU:N	2.64	0.51
6:7:126:PRO:C	6:7:128:PRO:HD2	2.29	0.51
7:8:96:THR:HG21	7:8:147:HIS:HA	1.92	0.51
8:9:184:LYS:HA	8:9:187:ASP:OD2	2.11	0.51
9:A:849:LEU:O	9:A:863:ILE:HD12	2.11	0.51
12:D:104:ARG:HH22	12:D:218:GLU:CD	2.10	0.51
12:D:376:LEU:HD12	12:D:379:ARG:HH21	1.76	0.51
13:E:146:PHE:CD2	13:E:179:TYR:CB	2.89	0.51
17:2:2001:AGS:H5'1	5:6:657:GLU:OE2	2.11	0.50
3:4:490:VAL:O	3:4:491:ASP:C	2.50	0.50
3:4:854:LYS:HG3	9:A:806:TYR:CD1	2.46	0.50
5:6:266:SER:HB3	5:6:457:CYS:HB2	1.93	0.50
3:4:339:ILE:HD13	5:6:412:LEU:HD21	1.93	0.50
5:6:560:VAL:HG23	5:6:561:GLU:OE2	2.10	0.50
10:B:575:LEU:O	10:B:578:MET:HG2	2.11	0.50
12:D:101:VAL:HG12	12:D:275:MET:HG2	1.92	0.50
13:E:34:ILE:CD1	13:E:176:LEU:CD1	2.89	0.50
14:F:421:TRP:HA	14:F:424:ARG:HG2	1.93	0.50
1:2:520:PHE:CZ	1:2:766:TYR:HE2	2.29	0.50
3:4:455:SER:OG	3:4:456:LEU:N	2.44	0.50
3:4:701:ARG:HA	3:4:796:ARG:NH2	2.26	0.50
3:4:796:ARG:NH2	3:4:796:ARG:HG2	2.13	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:561:GLU:N	5:6:562:GLY:HA3	2.26	0.50
5:6:580:SER:O	5:6:583:GLN:HB2	2.11	0.50
6:7:433:LEU:O	6:7:437:VAL:HG23	2.11	0.50
6:7:486:LYS:HG2	6:7:529:MET:HA	1.93	0.50
8:9:411:ASN:HB3	8:9:414:GLN:HG3	1.93	0.50
9:A:460:TYR:HD1	9:A:492:VAL:HG13	1.77	0.50
9:A:640:LEU:O	9:A:641:LYS:HG2	2.11	0.50
9:A:808:LEU:HD23	9:A:894:LEU:HD12	1.93	0.50
10:B:490:SER:O	10:B:493:GLN:HG2	2.11	0.50
12:D:70:ILE:HG13	12:D:71:ILE:N	2.27	0.50
13:E:191:ARG:NH2	13:E:254:ASP:H	2.09	0.50
2:3:24:ARG:CB	2:3:124:PRO:HG3	2.40	0.50
3:4:543:GLN:OE1	3:4:564:ILE:HD13	2.12	0.50
3:4:568:GLY:H	3:4:574:LYS:NZ	2.08	0.50
7:8:517:PHE:CE1	7:8:588:LYS:HB2	2.47	0.50
8:9:109:PRO:O	8:9:112:THR:HG23	2.12	0.50
9:A:550:PHE:HD1	9:A:593:LEU:HG	1.77	0.50
10:B:332:ASP:CG	10:B:333:TYR:H	2.15	0.50
12:D:77:ASP:OD1	12:D:78:CYS:N	2.44	0.50
12:D:99:ILE:HD12	12:D:256:ILE:HD12	1.90	0.50
1:2:478:GLU:O	1:2:481:GLU:HG2	2.11	0.50
2:3:28:PHE:CZ	2:3:129:LEU:HA	2.30	0.50
2:3:488:GLU:HG3	2:3:494:THR:O	2.11	0.50
4:5:62:THR:O	4:5:341:SER:OG	2.29	0.50
5:6:556:HIS:HA	5:6:567:GLY:CA	2.41	0.50
6:7:143:LEU:HD11	6:7:197:THR:HG22	1.93	0.50
6:7:461:ASP:H	6:7:573:ARG:CD	2.24	0.50
6:7:653:SER:HB3	6:7:707:MET:O	2.12	0.50
10:B:427:LEU:HB3	10:B:456:THR:HG22	1.92	0.50
12:D:285:VAL:HG22	12:D:324:ILE:HD12	1.93	0.50
12:D:294:VAL:HG22	12:D:296:SER:H	1.76	0.50
13:E:277:ASN:OD1	13:E:284:LEU:HG	2.11	0.50
13:E:285:TYR:CE2	13:E:289:ILE:HD11	2.46	0.50
15:M:18:DT:H2'	15:M:19:DG:C8	2.46	0.50
16:N:58:DG:N2	16:N:59:DC:O2	2.44	0.50
3:4:212:ARG:HH12	3:4:494:GLU:CG	2.25	0.50
17:6:1101:AGS:O1B	17:6:1101:AGS:S1G	2.69	0.50
6:7:366:LEU:HD22	6:7:367:LYS:HA	1.93	0.50
8:9:287:VAL:O	8:9:291:TYR:OH	2.20	0.50
9:A:853:GLY:CA	9:A:864:ILE:CD1	2.90	0.50
10:B:361:LEU:HB3	10:B:422:LEU:HB3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:427:LEU:HA	10:B:432:ILE:HD13	1.92	0.50
11:C:461:ILE:HG22	11:C:462:PHE:H	1.74	0.50
12:D:99:ILE:HD11	12:D:256:ILE:CD1	2.42	0.50
12:D:514:ARG:NH1	12:D:523:TYR:HD1	2.10	0.50
2:3:21:PHE:O	2:3:25:VAL:HG23	2.11	0.50
3:4:432:ARG:HG3	3:4:432:ARG:O	2.11	0.50
3:4:527:ALA:HB3	3:4:537:LYS:HE3	1.93	0.50
4:5:649:THR:HG22	4:5:652:GLN:HG3	1.92	0.50
5:6:137:ARG:NH1	5:6:192:TYR:CE2	2.80	0.50
3:4:366:GLN:HA	5:6:421:LEU:HA	1.93	0.50
1:2:558:LYS:HE3	5:6:562:GLY:H	1.77	0.50
6:7:149:ARG:HD3	6:7:152:ARG:NH1	2.26	0.50
2:3:395:ASN:HB2	6:7:635:PRO:HD3	1.93	0.50
6:7:677:SER:O	6:7:678:LYS:HB2	2.12	0.50
7:8:73:PHE:CE1	7:8:75:ALA:HB2	2.45	0.50
8:9:499:TYR:O	8:9:502:MET:HG2	2.12	0.50
9:A:811:LEU:HG	9:A:820:GLN:NE2	2.26	0.50
10:B:590:ILE:HG22	10:B:600:ILE:HG22	1.92	0.50
11:C:402:ILE:HA	11:C:405:HIS:ND1	2.26	0.50
13:E:288:ALA:HA	13:E:291:LEU:HG	1.93	0.50
2:3:363:LEU:HD22	2:3:656:LEU:HD12	1.94	0.50
3:4:334:ARG:HB3	3:4:615:VAL:HG13	1.94	0.50
5:6:589:VAL:HG21	5:6:597:TYR:HB2	1.94	0.50
10:B:287:LYS:HA	10:B:290:ARG:HE	1.77	0.50
11:C:310:THR:C	11:C:312:HIS:H	2.15	0.50
13:E:442:ASP:OD2	13:E:448:VAL:HG13	2.12	0.50
13:E:380:LEU:HD22	13:E:449:ARG:HB3	1.93	0.50
1:2:414:LEU:HD11	1:2:454:ASN:O	2.12	0.50
2:3:175:HIS:HB3	2:3:180:VAL:HG22	1.93	0.50
2:3:378:LYS:HA	2:3:381:ILE:HD12	1.94	0.50
2:3:797:ALA:O	2:3:800:SER:OG	2.25	0.50
3:4:792:THR:HG21	5:6:688:ARG:NH2	2.24	0.50
5:6:558:SER:HB3	5:6:559:THR:CA	2.42	0.50
6:7:606:ARG:O	6:7:610:GLU:HG2	2.11	0.50
9:A:887:ASP:HB3	12:D:507:GLN:HE22	1.76	0.50
13:E:128:LEU:HB3	13:E:162:ILE:HD11	1.93	0.50
13:E:146:PHE:HB3	13:E:179:TYR:CE2	2.47	0.50
1:2:441:LYS:HA	1:2:442:ASN:C	2.32	0.50
1:2:516:ALA:O	1:2:520:PHE:HB2	2.10	0.50
1:2:533:ILE:HG22	1:2:534:ARG:N	2.27	0.50
1:2:548:ALA:HA	17:2:2001:AGS:PA	2.52	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:467:LYS:C	3:4:468:LYS:HG2	2.31	0.50
4:5:28:ILE:HG12	4:5:89:LEU:HB3	1.94	0.50
5:6:292:GLY:HA2	5:6:364:ASN:CG	2.32	0.50
11:C:136:SER:HB2	11:C:142:MET:HE2	1.92	0.50
11:C:275:LYS:HZ1	11:C:413:LEU:HD21	1.77	0.50
11:C:495:GLU:HB3	13:E:418:ILE:HD12	1.92	0.50
10:B:458:HIS:HA	11:C:594:MET:HA	1.94	0.50
12:D:70:ILE:HB	12:D:290:ASN:HB3	1.92	0.50
12:D:70:ILE:HD13	12:D:290:ASN:C	2.32	0.50
13:E:230:ASP:HA	13:E:233:GLN:OE1	2.11	0.50
1:2:406:ARG:HH11	1:2:430:TYR:HE1	1.54	0.49
2:3:716:ARG:NH1	2:3:722:ASN:HD22	2.08	0.49
5:6:780:LEU:HD12	5:6:828:TYR:CE1	2.46	0.49
8:9:258:LEU:HB2	8:9:281:LEU:HD21	1.93	0.49
9:A:551:LYS:HB2	9:A:590:ASN:ND2	2.27	0.49
9:A:641:LYS:NZ	9:A:643:LEU:HB3	2.27	0.49
10:B:307:GLU:OE2	10:B:478:HIS:HE1	1.94	0.49
11:C:278:ASN:HA	11:C:281:PHE:HD2	1.77	0.49
10:B:303:GLN:HA	11:C:330:PHE:CZ	2.46	0.49
13:E:14:GLN:HG2	13:E:189:PHE:CD1	2.47	0.49
13:E:339:SER:HB2	13:E:378:PRO:HB3	1.94	0.49
3:4:517:ASP:O	3:4:520:SER:N	2.45	0.49
3:4:572:THR:O	3:4:573:SER:OG	2.25	0.49
3:4:855:SER:O	3:4:857:ILE:HG12	2.13	0.49
3:4:895:GLN:HG3	3:4:896:ASP:N	2.27	0.49
4:5:490:ARG:HG2	4:5:494:HIS:HE1	1.77	0.49
4:5:650:ILE:HG23	4:5:651:ARG:H	1.77	0.49
9:A:562:VAL:HA	9:A:594:ILE:HG21	1.94	0.49
10:B:604:TYR:OH	10:B:608:GLU:HB3	2.11	0.49
11:C:440:LEU:HA	11:C:446:CYS:SG	2.51	0.49
12:D:207:ILE:O	12:D:207:ILE:HG12	2.12	0.49
15:M:29:DT:H3	16:N:62:DG:N2	2.10	0.49
1:2:520:PHE:CE1	1:2:767:ILE:HG22	2.46	0.49
3:4:388:ARG:H	5:6:176:ARG:NH1	2.11	0.49
3:4:417:LEU:CG	3:4:461:VAL:HB	2.31	0.49
3:4:550:LYS:HD3	5:6:737:LYS:HZ2	1.76	0.49
4:5:159:ILE:HG12	4:5:295:VAL:HG13	1.92	0.49
4:5:83:PRO:HB3	4:5:159:ILE:HG13	1.93	0.49
4:5:244:ILE:O	4:5:248:SER:OG	2.25	0.49
3:4:643:SER:OG	5:6:601:LYS:HD2	2.11	0.49
5:6:942:LEU:CD2	7:8:476:MET:H	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:460:TYR:CE1	9:A:495:GLU:HG2	2.47	0.49
8:9:482:THR:OG1	9:A:893:LYS:HE2	2.11	0.49
3:4:854:LYS:HE2	9:A:905:MET:HA	1.94	0.49
11:C:132:THR:HG21	11:C:134:LYS:HZ3	1.77	0.49
11:C:248:GLU:OE2	13:E:297:ASP:C	2.51	0.49
10:B:471:GLN:HB2	11:C:313:ASN:ND2	2.28	0.49
12:D:377:THR:O	12:D:380:LEU:HB3	2.12	0.49
13:E:277:ASN:HD21	13:E:284:LEU:HD21	1.77	0.49
14:F:418:TYR:HA	14:F:421:TRP:NE1	2.26	0.49
1:2:286:TYR:CE1	1:2:290:HIS:ND1	2.80	0.49
1:2:525:LYS:HD2	1:2:777:LYS:NZ	2.28	0.49
2:3:252:ASP:OD1	6:7:232:GLY:HA3	2.12	0.49
2:3:496:THR:HA	2:3:505:THR:HG23	1.95	0.49
3:4:621:LEU:HD13	3:4:648:VAL:HG11	1.94	0.49
3:4:689:THR:OG1	3:4:790:ARG:HD2	2.12	0.49
5:6:174:TYR:N	5:6:285:GLY:O	2.44	0.49
5:6:570:ASN:HD22	5:6:678:ILE:H	1.60	0.49
7:8:200:PRO:HD2	7:8:258:VAL:HG13	1.93	0.49
7:8:73:PHE:HA	7:8:92:TYR:HA	1.95	0.49
8:9:214:LYS:H	8:9:215:LYS:HA	1.77	0.49
10:B:324:ASN:OD1	10:B:325:PHE:N	2.46	0.49
13:E:231:GLN:O	13:E:235:VAL:HG23	2.12	0.49
13:E:85:LEU:HD22	13:E:118:GLN:HE22	1.77	0.49
1:2:589:TRP:CZ3	1:2:633:LYS:HB2	2.47	0.49
2:3:113:GLY:O	2:3:117:GLU:N	2.45	0.49
3:4:735:HIS:HB3	3:4:738:GLN:HG3	1.93	0.49
5:6:501:GLN:HB2	7:8:462:TYR:HE1	1.76	0.49
8:9:453:LEU:HD21	8:9:461:ILE:HD12	1.95	0.49
9:A:784:GLU:HA	9:A:787:ASN:OD1	2.12	0.49
11:C:244:LEU:CD1	11:C:248:GLU:HG3	2.43	0.49
12:D:300:PRO:HD2	12:D:301:TRP:CD2	2.23	0.49
12:D:431:PRO:C	12:D:441:THR:HG21	2.32	0.49
13:E:468:PHE:HZ	13:E:473:TYR:HE2	1.60	0.49
1:2:797:SER:HB2	1:2:805:ILE:HD11	1.93	0.49
2:3:366:SER:HB2	2:3:653:ILE:HG12	1.93	0.49
3:4:441:SER:O	3:4:442:ILE:HD13	2.13	0.49
3:4:679:GLY:N	3:4:680:SER:HA	2.26	0.49
3:4:784:SER:OG	3:4:785:ARG:N	2.43	0.49
5:6:511:ASP:HB3	7:8:511:MET:SD	2.52	0.49
12:D:70:ILE:HD13	12:D:291:LEU:N	2.28	0.49
12:D:137:HIS:HA	13:E:106:PHE:CE1	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:481:GLU:O	1:2:484:PHE:HB3	2.12	0.49
1:2:589:TRP:CE3	1:2:634:ALA:HB2	2.48	0.49
2:3:403:ILE:HG23	2:3:544:ASP:OD2	2.12	0.49
4:5:326:PRO:HG2	4:5:328:ILE:HD11	1.95	0.49
4:5:385:LYS:O	4:5:389:VAL:HG23	2.13	0.49
5:6:368:ILE:O	5:6:368:ILE:HD12	2.13	0.49
5:6:364:ASN:CG	5:6:394:ARG:HH12	2.16	0.49
5:6:731:ILE:O	5:6:734:LEU:HB2	2.13	0.49
8:9:409:LYS:NZ	8:9:501:GLU:HG3	2.28	0.49
9:A:620:THR:CG2	9:A:621:ARG:N	2.76	0.49
12:D:116:LEU:HD11	12:D:215:ILE:HD11	1.95	0.49
12:D:341:ILE:O	12:D:344:LEU:HB3	2.13	0.49
12:D:396:ARG:NH2	12:D:524:TYR:HB3	2.26	0.49
13:E:11:ARG:NH2	13:E:192:TYR:CZ	2.81	0.49
2:3:181:SER:HA	2:3:295:VAL:HG22	1.95	0.49
2:3:353:LEU:O	2:3:359:ILE:HG12	2.13	0.49
2:3:849:ARG:HG2	2:3:851:HIS:H	1.78	0.49
3:4:559:ARG:NE	3:4:649:MET:O	2.46	0.49
4:5:649:THR:HB	4:5:652:GLN:HB2	1.95	0.49
5:6:794:ARG:HB2	5:6:795:ILE:HA	1.93	0.49
7:8:42:THR:HG22	7:8:231:HIS:HA	1.93	0.49
2:3:28:PHE:HE2	2:3:128:ALA:CB	2.25	0.49
2:3:712:HIS:CD2	2:3:728:VAL:HG11	2.47	0.49
2:3:802:ALA:O	2:3:804:ARG:NH1	2.46	0.49
4:5:414:LEU:HD13	4:5:422:LYS:HB2	1.95	0.49
5:6:567:GLY:O	5:6:805:ARG:HD3	2.13	0.49
6:7:595:ASP:OD1	6:7:596:ILE:N	2.45	0.49
6:7:68:GLN:O	6:7:72:ASN:N	2.46	0.49
7:8:339:GLU:HB3	7:8:378:ARG:HH21	1.77	0.49
10:B:462:PRO:HG2	11:C:497:VAL:CG1	2.43	0.49
11:C:108:LEU:HD13	11:C:266:LEU:HD22	1.95	0.49
11:C:281:PHE:O	11:C:285:LEU:N	2.35	0.49
12:D:78:CYS:O	12:D:82:ILE:HG12	2.13	0.49
13:E:217:ARG:O	13:E:221:GLU:N	2.46	0.49
2:3:535:LEU:HD13	2:3:539:LEU:HD13	1.94	0.49
3:4:441:SER:HB2	3:4:457:TYR:HB2	1.95	0.49
3:4:612:LYS:O	3:4:613:GLN:NE2	2.46	0.49
3:4:897:ARG:NH2	3:4:898:VAL:O	2.46	0.49
5:6:616:GLU:N	5:6:617:GLU:HA	2.28	0.49
11:C:112:SER:O	11:C:116:ILE:HG12	2.13	0.49
11:C:116:ILE:HD11	11:C:206:LYS:HA	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:312:GLU:HB3	12:D:320:LEU:HD13	1.95	0.49
5:6:918:ARG:HH22	12:D:441:THR:HG23	1.77	0.49
1:2:518:SER:CB	1:2:537:ILE:HB	2.43	0.48
2:3:564:HIS:HA	2:3:567:ARG:HG2	1.95	0.48
3:4:394:LYS:CG	3:4:420:TYR:CE1	2.91	0.48
3:4:543:GLN:NE2	3:4:670:SER:HB3	2.28	0.48
4:5:656:ILE:HG12	4:5:684:PHE:HD2	1.78	0.48
6:7:228:ARG:HH12	6:7:326:HIS:CG	2.31	0.48
6:7:636:SER:HA	6:7:639:ARG:HE	1.78	0.48
8:9:460:GLU:O	8:9:463:THR:OG1	2.15	0.48
10:B:428:ASP:CG	10:B:458:HIS:HB2	2.28	0.48
10:B:558:LEU:HA	10:B:561:HIS:HD2	1.78	0.48
11:C:218:ASN:ND2	13:E:139:GLN:OE1	2.46	0.48
13:E:339:SER:O	13:E:339:SER:OG	2.31	0.48
13:E:85:LEU:CD2	13:E:118:GLN:NE2	2.75	0.48
1:2:524:PRO:HB2	1:2:525:LYS:HA	1.94	0.48
1:2:778:LEU:HB2	1:2:783:MET:HG3	1.94	0.48
2:3:829:ASP:OD2	2:3:831:GLU:HB3	2.13	0.48
3:4:400:GLN:HE21	3:4:412:PRO:HG2	1.78	0.48
3:4:891:ASN:HD21	3:4:898:VAL:N	2.04	0.48
4:5:667:GLU:OE2	4:5:675:ARG:NH2	2.46	0.48
5:6:308:SER:HA	5:6:319:ASP:HA	1.95	0.48
5:6:937:VAL:HG21	5:6:962:PHE:CE2	2.48	0.48
6:7:755:THR:HB	6:7:757:LYS:HG2	1.95	0.48
8:9:293:ALA:HA	8:9:296:MET:HB2	1.95	0.48
9:A:573:THR:O	9:A:573:THR:CG2	2.58	0.48
9:A:812:MET:O	9:A:816:GLY:HA2	2.12	0.48
11:C:244:LEU:HD12	11:C:244:LEU:C	2.34	0.48
11:C:434:GLY:HA3	11:C:437:ASP:HB2	1.94	0.48
11:C:56:LYS:NZ	11:C:60:LEU:HD12	2.28	0.48
13:E:131:ILE:HA	13:E:167:ILE:O	2.14	0.48
13:E:281:PRO:HA	13:E:284:LEU:HD12	1.95	0.48
1:2:394:PRO:HG3	1:2:598:LEU:HG	1.95	0.48
2:3:192:VAL:HG12	2:3:194:PRO:HD3	1.94	0.48
2:3:34:THR:HG21	2:3:106:PHE:CD1	2.48	0.48
2:3:507:ASN:OD1	2:3:507:ASN:O	2.32	0.48
3:4:203:TYR:H	3:4:222:GLU:HB2	1.77	0.48
3:4:568:GLY:HA3	3:4:708:VAL:O	2.13	0.48
3:4:818:GLU:HG3	3:4:820:GLU:H	1.77	0.48
4:5:482:PHE:HE2	4:5:540:ILE:HG21	1.78	0.48
4:5:547:LEU:HD22	4:5:553:ILE:HG12	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:570:ASN:ND2	5:6:678:ILE:HG22	2.28	0.48
7:8:464:ALA:HB1	7:8:465:ASN:HB2	1.96	0.48
7:8:571:VAL:HA	7:8:579:LYS:O	2.12	0.48
7:8:91:GLN:HG3	7:8:153:THR:HG22	1.95	0.48
10:B:349:LEU:HA	10:B:364:ASN:HB3	1.96	0.48
10:B:389:THR:OG1	10:B:403:GLN:CB	2.61	0.48
11:C:108:LEU:HG	11:C:110:SER:H	1.77	0.48
11:C:133:PRO:HA	11:C:211:ILE:HG22	1.95	0.48
11:C:268:VAL:HG13	11:C:270:SER:H	1.78	0.48
12:D:213:VAL:HG13	12:D:213:VAL:O	2.12	0.48
2:3:100:LEU:HB2	2:3:160:SER:HB2	1.95	0.48
2:3:343:THR:O	2:3:347:ILE:N	2.39	0.48
2:3:475:PHE:CE2	2:3:535:LEU:CD2	2.96	0.48
3:4:419:VAL:HG11	3:4:424:VAL:HA	1.96	0.48
3:4:419:VAL:CG1	3:4:424:VAL:N	2.76	0.48
3:4:466:VAL:HG12	3:4:468:LYS:H	1.78	0.48
5:6:543:VAL:HG22	5:6:713:PHE:CD2	2.42	0.48
7:8:392:THR:O	7:8:395:THR:OG1	2.19	0.48
8:9:435:GLU:O	8:9:439:HIS:ND1	2.41	0.48
12:D:281:LEU:HD23	12:D:282:ASP:N	2.27	0.48
12:D:298:ILE:HD11	12:D:301:TRP:CD2	2.45	0.48
13:E:282:LEU:O	13:E:285:TYR:HB3	2.14	0.48
3:4:190:CYS:SG	3:4:257:LEU:HD13	2.54	0.48
3:4:419:VAL:HG13	3:4:423:LEU:CB	2.43	0.48
3:4:428:ARG:HH22	3:4:477:ASP:HA	1.77	0.48
3:4:604:TYR:O	3:4:658:LYS:NZ	2.32	0.48
3:4:799:GLU:O	3:4:803:ARG:HB2	2.13	0.48
5:6:264:GLN:HE21	5:6:354:LEU:CD2	2.26	0.48
5:6:572:CYS:SG	5:6:709:PHE:CG	3.02	0.48
1:2:700:VAL:HG22	5:6:804:ILE:HD11	1.95	0.48
6:7:348:ILE:HG22	6:7:384:HIS:HD2	1.79	0.48
6:7:430:LYS:HZ1	6:7:718:ARG:NH1	2.11	0.48
6:7:460:GLY:HA2	6:7:573:ARG:HD3	1.96	0.48
7:8:203:LYS:O	7:8:205:ILE:N	2.46	0.48
7:8:464:ALA:HB1	7:8:465:ASN:CB	2.43	0.48
13:E:82:GLN:HE21	13:E:115:ILE:HD11	1.78	0.48
2:3:810:ASP:OD2	2:3:812:GLU:HB3	2.14	0.48
2:3:811:ASP:HB2	2:3:852:LEU:HD22	1.96	0.48
3:4:203:TYR:O	3:4:206:ARG:NH1	2.47	0.48
3:4:809:ALA:CB	3:4:817:VAL:HG22	2.43	0.48
5:6:400:VAL:CG1	5:6:455:LEU:HB3	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:320:ALA:HB1	8:9:334:LEU:HD11	1.96	0.48
10:B:368:PRO:HA	10:B:430:PRO:HB3	1.96	0.48
10:B:556:LEU:N	10:B:598:GLU:O	2.41	0.48
11:C:208:VAL:O	11:C:211:ILE:HG13	2.13	0.48
12:D:359:LYS:O	12:D:364:LEU:HD22	2.13	0.48
12:D:88:GLN:HB3	12:D:94:GLU:HG2	1.95	0.48
13:E:143:ALA:HB1	13:E:179:TYR:OH	2.14	0.48
13:E:287:SER:O	13:E:290:LYS:HB2	2.14	0.48
13:E:331:LEU:HD11	13:E:386:LEU:CD2	2.42	0.48
2:3:171:LEU:HD23	2:3:172:THR:HG23	1.94	0.48
2:3:372:TYR:OH	2:3:564:HIS:HB3	2.14	0.48
3:4:221:ASP:CG	3:4:222:GLU:H	2.17	0.48
4:5:65:MET:HB2	4:5:141:SER:HB3	1.95	0.48
6:7:493:LEU:HA	6:7:512:ALA:HB3	1.96	0.48
6:7:601:LEU:HD13	6:7:603:ILE:HG13	1.95	0.48
6:7:82:LEU:HD23	6:7:85:ILE:HD12	1.94	0.48
9:A:484:GLY:O	9:A:487:LEU:HG	2.14	0.48
11:C:293:ASN:OD1	11:C:398:ARG:HG2	2.13	0.48
11:C:413:LEU:HA	11:C:417:LEU:HD12	1.96	0.48
10:B:462:PRO:HG2	11:C:497:VAL:HG11	1.95	0.48
12:D:298:ILE:HG23	12:D:298:ILE:O	2.14	0.48
12:D:82:ILE:HD11	12:D:111:LEU:HD22	1.95	0.48
13:E:444:LEU:HD23	13:E:446:PRO:HG3	1.96	0.48
1:2:542:LEU:CG	1:2:683:VAL:HG11	2.33	0.48
1:2:796:GLU:HB3	1:2:859:ARG:HD3	1.95	0.48
2:3:469:VAL:HG22	2:3:511:SER:OG	2.14	0.48
3:4:291:TYR:O	3:4:295:GLU:HB3	2.14	0.48
3:4:563:ASN:CG	3:4:671:ILE:HG22	2.34	0.48
5:6:296:ARG:NH1	5:6:360:ARG:NH2	2.62	0.48
5:6:807:SER:OG	5:6:808:GLU:N	2.46	0.48
6:7:482:TYR:OH	6:7:524:ASP:OD2	2.22	0.48
6:7:727:LEU:HD12	6:7:728:TYR:CA	2.44	0.48
7:8:359:ASP:HA	7:8:362:LYS:HZ3	1.78	0.48
11:C:140:ARG:NH1	11:C:144:ARG:NH2	2.62	0.48
11:C:281:PHE:CE1	11:C:321:LEU:HD21	2.49	0.48
12:D:82:ILE:O	12:D:85:ILE:HG12	2.13	0.48
13:E:141:LEU:HD13	13:E:145:LEU:HD12	1.95	0.48
13:E:331:LEU:CD2	13:E:424:LEU:CD2	2.77	0.48
3:4:432:ARG:HH22	3:4:625:ASP:CA	2.25	0.48
3:4:863:GLU:O	3:4:867:ARG:HB2	2.13	0.48
5:6:577:PRO:HG3	5:6:683:ASN:ND2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:109:PRO:O	8:9:112:THR:CG2	2.62	0.48
8:9:330:ASP:OD2	8:9:333:LYS:HG2	2.14	0.48
9:A:546:LEU:HB3	9:A:550:PHE:HE2	1.78	0.48
8:9:467:THR:HG23	9:A:601:THR:HG23	1.95	0.48
10:B:462:PRO:HB2	13:E:421:PHE:CD2	2.49	0.48
10:B:536:MET:HG3	10:B:606:TYR:HB3	1.94	0.48
11:C:313:ASN:OD1	11:C:314:LEU:N	2.47	0.48
12:D:75:LEU:HD22	12:D:276:PRO:O	2.14	0.48
13:E:143:ALA:CB	13:E:179:TYR:OH	2.62	0.48
13:E:14:GLN:HG2	13:E:189:PHE:CE1	2.48	0.48
13:E:38:TYR:H	13:E:41:THR:HG22	1.79	0.48
2:3:25:VAL:CG1	2:3:128:ALA:CB	2.78	0.48
3:4:209:LEU:HD12	3:4:212:ARG:HG3	1.95	0.48
3:4:198:LEU:HD12	3:4:226:TYR:CD2	2.49	0.48
3:4:476:VAL:CG2	7:8:532:THR:HG22	2.44	0.48
3:4:331:LEU:HD21	3:4:623:LEU:HD23	1.95	0.48
1:2:687:VAL:CG2	5:6:781:ARG:NH1	2.53	0.48
1:2:224:ARG:NH2	7:8:38:LEU:O	2.28	0.48
8:9:499:TYR:O	8:9:503:THR:HG23	2.13	0.48
9:A:571:MET:HB3	9:A:578:ILE:HG12	1.96	0.48
10:B:287:LYS:HA	10:B:290:ARG:NE	2.28	0.48
11:C:112:SER:HB3	11:C:239:ASN:ND2	2.29	0.48
11:C:368:ILE:HG12	11:C:369:LYS:N	2.29	0.48
11:C:528:TYR:HA	11:C:531:ALA:HB3	1.96	0.48
12:D:413:ALA:HA	12:D:416:GLU:OE2	2.13	0.48
12:D:90:ILE:HG13	12:D:91:ILE:N	2.29	0.48
1:2:258:LEU:HD21	7:8:330:LEU:HD23	1.95	0.47
2:3:353:LEU:HA	2:3:359:ILE:HG21	1.96	0.47
3:4:281:VAL:O	3:4:284:ILE:HG13	2.14	0.47
3:4:314:MET:HG2	3:4:413:HIS:CD2	2.49	0.47
3:4:451:ARG:NH2	6:7:280:PRO:O	2.47	0.47
3:4:647:GLU:CD	3:4:654:ILE:HA	2.34	0.47
5:6:118:PHE:HD1	5:6:161:ARG:HD3	1.78	0.47
5:6:711:LEU:HD21	5:6:834:SER:HA	1.94	0.47
6:7:369:GLY:HA2	6:7:370:LEU:HD23	1.95	0.47
7:8:152:LEU:HD23	7:8:258:VAL:HG23	1.96	0.47
5:6:749:GLU:OE2	7:8:549:ILE:HA	2.14	0.47
8:9:480:GLY:O	8:9:481:LYS:HG3	2.14	0.47
9:A:551:LYS:HE2	9:A:590:ASN:HD21	1.79	0.47
9:A:793:PHE:CD2	12:D:254:LEU:HD11	2.48	0.47
8:9:482:THR:HG1	9:A:880:PHE:HD2	1.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:447:ILE:HB	10:B:450:ILE:HG12	1.96	0.47
11:C:402:ILE:HA	11:C:405:HIS:CE1	2.49	0.47
11:C:305:LYS:HD3	11:C:494:TRP:CD1	2.48	0.47
12:D:380:LEU:HD21	12:D:517:ILE:HG22	1.92	0.47
13:E:85:LEU:HD22	13:E:118:GLN:NE2	2.28	0.47
2:3:673:GLN:HA	2:3:676:ILE:HD12	1.97	0.47
2:3:48:TYR:HE2	2:3:91:ILE:HB	1.79	0.47
3:4:348:LYS:N	3:4:383:SER:O	2.41	0.47
3:4:534:GLU:N	3:4:534:GLU:OE1	2.47	0.47
4:5:430:GLU:HG2	4:5:436:ALA:HB3	1.96	0.47
5:6:508:LEU:HD13	5:6:512:GLU:OE1	2.14	0.47
5:6:550:GLN:NE2	5:6:677:SER:HB3	2.29	0.47
5:6:575:GLY:N	5:6:581:LYS:NZ	2.59	0.47
7:8:470:PHE:CE2	7:8:473:LYS:CG	2.97	0.47
8:9:431:ALA:O	8:9:488:LYS:HA	2.13	0.47
9:A:885:LYS:HG3	9:A:886:ASN:H	1.78	0.47
11:C:400:ASN:HB2	11:C:401:PRO:HD3	1.96	0.47
13:E:34:ILE:HD13	13:E:176:LEU:HD12	1.95	0.47
16:N:57:DG:H2'	16:N:58:DG:O4'	2.13	0.47
2:3:716:ARG:HH12	2:3:722:ASN:HB2	1.76	0.47
3:4:498:VAL:HG13	3:4:499:ARG:HG2	1.96	0.47
5:6:710:ASP:O	5:6:710:ASP:OD1	2.32	0.47
5:6:712:PHE:O	5:6:713:PHE:HB2	2.14	0.47
3:4:575:SER:HB3	17:7:2001:AGS:O2A	2.15	0.47
8:9:481:LYS:NZ	9:A:819:GLU:HB2	2.24	0.47
8:9:467:THR:HG21	9:A:480:THR:HB	1.95	0.47
9:A:496:LEU:HD13	9:A:508:PHE:CE1	2.49	0.47
9:A:606:GLU:HA	9:A:609:LEU:HG	1.96	0.47
9:A:693:SER:HA	9:A:696:VAL:HB	1.95	0.47
9:A:874:LEU:O	9:A:874:LEU:HD23	2.14	0.47
8:9:482:THR:CB	9:A:893:LYS:HZ1	2.26	0.47
12:D:111:LEU:HD23	12:D:111:LEU:C	2.35	0.47
12:D:132:LEU:HB3	12:D:137:HIS:ND1	2.29	0.47
12:D:108:LYS:HE2	17:D:2001:AGS:O2G	2.15	0.47
12:D:72:PHE:CD1	12:D:287:ALA:HA	2.50	0.47
13:E:77:ILE:HG23	13:E:130:LEU:HD11	1.95	0.47
13:E:4:THR:HG22	13:E:8:VAL:HG13	1.96	0.47
16:N:45:DA:C4	16:N:45:DA:H5'	2.48	0.47
1:2:570:GLY:O	5:6:665:LYS:HD3	2.14	0.47
1:2:758:ILE:HD12	1:2:758:ILE:H	1.79	0.47
5:6:127:THR:CA	5:6:132:VAL:HG23	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:611:LYS:CB	5:6:650:VAL:HG11	2.44	0.47
5:6:712:PHE:HD1	5:6:712:PHE:HA	1.49	0.47
6:7:411:TYR:HE2	6:7:430:LYS:HE2	1.79	0.47
6:7:441:ASP:N	6:7:452:GLY:HA2	2.29	0.47
7:8:507:GLN:O	7:8:510:ALA:HB3	2.14	0.47
10:B:316:PHE:CG	10:B:480:ILE:HG21	2.50	0.47
11:C:185:LEU:O	11:C:188:VAL:HB	2.14	0.47
12:D:209:LYS:O	12:D:210:ILE:C	2.52	0.47
12:D:519:LYS:HE2	12:D:519:LYS:HB2	1.60	0.47
13:E:113:HIS:CD2	13:E:158:LYS:HE3	2.50	0.47
1:2:307:ARG:O	1:2:404:ARG:NH1	2.46	0.47
2:3:428:LEU:HD23	2:3:465:ALA:HB1	1.96	0.47
2:3:669:PRO:HG3	2:3:710:THR:O	2.15	0.47
3:4:473:ARG:CG	3:4:474:LEU:N	2.66	0.47
3:4:543:GLN:HE22	3:4:672:LEU:HB2	1.78	0.47
5:6:174:TYR:CD2	5:6:400:VAL:HG22	2.50	0.47
6:7:538:HIS:CD2	6:7:593:ARG:HE	2.32	0.47
6:7:414:LEU:HD22	6:7:638:MET:HG3	1.97	0.47
7:8:569:ILE:HG13	7:8:581:TYR:CE2	2.49	0.47
8:9:498:PHE:HD1	8:9:501:GLU:OE2	1.97	0.47
11:C:544:PHE:HA	11:C:547:THR:HG23	1.96	0.47
12:D:440:SER:O	12:D:441:THR:CB	2.62	0.47
12:D:75:LEU:HG	12:D:78:CYS:SG	2.55	0.47
13:E:127:CYS:HA	13:E:162:ILE:CA	2.44	0.47
13:E:23:SER:OG	13:E:24:ALA:N	2.48	0.47
2:3:372:TYR:HH	2:3:565:VAL:HG23	1.80	0.47
2:3:788:ARG:HB3	2:3:836:ARG:NE	2.30	0.47
3:4:896:ASP:HB2	3:4:897:ARG:H	1.51	0.47
5:6:279:ILE:HD12	5:6:377:LEU:HD21	1.96	0.47
5:6:614:ARG:NH2	16:N:46:DA:N1	2.62	0.47
5:6:573:VAL:CG1	5:6:715:ILE:HD12	2.45	0.47
6:7:413:ARG:HG3	6:7:630:PHE:CE1	2.50	0.47
7:8:340:LEU:HD21	7:8:357:GLN:HB2	1.97	0.47
7:8:470:PHE:HD2	7:8:473:LYS:HB2	1.78	0.47
9:A:896:ILE:O	9:A:897:SER:HB2	2.15	0.47
11:C:410:ALA:HA	11:C:413:LEU:HB2	1.97	0.47
11:C:496:GLN:CG	11:C:497:VAL:H	2.24	0.47
14:F:418:TYR:HD1	14:F:421:TRP:HE1	1.63	0.47
1:2:601:LYS:HZ1	1:2:643:ARG:NH1	2.11	0.47
2:3:216:ASP:O	2:3:219:THR:HG22	2.14	0.47
2:3:470:VAL:HB	2:3:512:VAL:HG22	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:360:PHE:CD1	2:3:715:VAL:HG11	2.47	0.47
3:4:440:ARG:HH11	3:4:440:ARG:HG3	1.79	0.47
3:4:862:GLN:O	3:4:866:SER:OG	2.21	0.47
5:6:640:GLU:HA	5:6:682:ALA:HA	1.96	0.47
17:7:2001:AGS:N3	17:7:2001:AGS:H2'	2.29	0.47
7:8:278:ILE:HG13	7:8:281:HIS:H	1.79	0.47
7:8:34:ARG:HA	7:8:37:LEU:HG	1.97	0.47
8:9:111:GLY:HA2	17:9:2001:AGS:H5'2	1.97	0.47
8:9:218:PHE:HB3	8:9:256:PHE:CZ	2.50	0.47
11:C:118:LEU:HD12	11:C:121:GLU:HG3	1.97	0.47
10:B:394:LYS:HB2	11:C:148:TYR:CE1	2.49	0.47
12:D:300:PRO:HG2	12:D:301:TRP:CD2	2.49	0.47
12:D:475:VAL:HG13	12:D:476:GLY:N	2.28	0.47
13:E:156:LEU:HB2	13:E:158:LYS:CE	2.45	0.47
13:E:455:PRO:O	13:E:458:ILE:CG1	2.56	0.47
1:2:548:ALA:HA	17:2:2001:AGS:O1A	2.15	0.47
3:4:314:MET:HB2	3:4:401:GLU:OE2	2.15	0.47
3:4:802:ILE:HD11	5:6:735:HIS:CG	2.49	0.47
6:7:541:MET:SD	6:7:563:ILE:HD12	2.55	0.47
6:7:543:GLN:O	6:7:545:THR:N	2.48	0.47
7:8:184:GLU:C	7:8:251:ILE:HG22	2.35	0.47
7:8:30:LEU:HB2	7:8:31:PRO:HD3	1.96	0.47
7:8:574:VAL:CB	7:8:575:ASP:HB2	2.38	0.47
7:8:76:ASN:OD1	7:8:291:PRO:HG2	2.14	0.47
10:B:462:PRO:CG	11:C:497:VAL:HG11	2.44	0.47
11:C:115:LYS:O	11:C:118:LEU:HB3	2.14	0.47
13:E:394:PHE:CG	13:E:414:LEU:HD21	2.50	0.47
15:M:17:DT:H2''	15:M:18:DT:O4'	2.15	0.47
16:N:74:DT:H73	16:N:74:DT:OP2	2.14	0.47
1:2:246:TYR:CE2	1:2:300:PHE:CD1	3.02	0.47
3:4:345:ALA:O	3:4:357:ALA:HB1	2.14	0.47
3:4:797:GLN:O	3:4:800:SER:HB2	2.15	0.47
5:6:686:GLY:C	5:6:688:ARG:H	2.18	0.47
6:7:593:ARG:CZ	6:7:687:ARG:HH12	2.27	0.47
6:7:663:ALA:HB1	6:7:717:LEU:HD21	1.96	0.47
7:8:13:LEU:HD13	7:8:214:THR:HG21	1.96	0.47
7:8:206:ARG:HB2	7:8:219:TRP:HB2	1.96	0.47
7:8:48:TYR:CG	7:8:121:LEU:HD12	2.50	0.47
7:8:520:LEU:HD13	7:8:521:PHE:H	1.80	0.47
8:9:340:GLY:O	8:9:344:ILE:HG12	2.15	0.47
8:9:494:ASP:OD2	8:9:497:GLU:HG2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:707:LEU:HD11	17:A:2001:AGS:H1'	1.96	0.47
11:C:391:PHE:HA	11:C:395:PHE:CE2	2.50	0.47
11:C:564:THR:O	11:C:568:GLU:HG2	2.15	0.47
1:2:238:ASN:CG	1:2:290:HIS:CE1	2.88	0.47
1:2:309:LEU:O	1:2:310:ARG:NH1	2.42	0.47
1:2:506:TYR:HD2	1:2:507:GLY:H	1.62	0.47
1:2:686:LEU:C	1:2:686:LEU:HD12	2.34	0.47
2:3:100:LEU:HD21	2:3:157:PHE:CD1	2.49	0.47
2:3:186:VAL:HG13	2:3:256:ILE:HD12	1.97	0.47
3:4:244:ASP:OD1	3:4:245:ALA:N	2.48	0.47
3:4:333:LEU:HD22	3:4:616:LEU:O	2.14	0.47
3:4:880:SER:HA	3:4:924:ARG:O	2.15	0.47
5:6:154:ASP:OD1	5:6:155:TYR:N	2.48	0.47
5:6:577:PRO:HD3	5:6:683:ASN:OD1	2.15	0.47
6:7:575:ASN:HD21	6:7:578:LEU:HD22	1.80	0.47
7:8:515:GLN:NE2	7:8:543:GLN:NE2	2.62	0.47
7:8:572:HIS:H	7:8:579:LYS:HB3	1.79	0.47
7:8:531:GLU:CD	7:8:578:LEU:O	2.53	0.47
9:A:582:PHE:HA	9:A:585:TRP:CE3	2.50	0.47
11:C:283:SER:O	11:C:287:THR:OG1	2.29	0.47
12:D:75:LEU:HD22	12:D:278:ILE:CG2	2.45	0.47
12:D:298:ILE:HG12	12:D:301:TRP:CA	2.45	0.47
12:D:298:ILE:HG21	12:D:302:VAL:HG12	1.64	0.47
12:D:76:GLN:O	12:D:79:GLN:HG2	2.14	0.47
13:E:145:LEU:O	13:E:149:TYR:HD2	1.98	0.47
13:E:34:ILE:CD1	13:E:186:THR:OG1	2.62	0.47
13:E:11:ARG:HD3	13:E:189:PHE:CE1	2.50	0.47
13:E:5:THR:HB	13:E:6:PRO:HD3	1.96	0.47
2:3:474:GLU:OE2	2:3:517:ASN:ND2	2.48	0.47
3:4:306:TYR:HE1	3:4:489:LYS:HZ3	1.63	0.47
3:4:747:LEU:O	3:4:750:TYR:HB3	2.15	0.47
5:6:356:TRP:HB2	5:6:381:LEU:O	2.15	0.47
5:6:585:LEU:HD12	5:6:639:ASP:OD1	2.15	0.47
5:6:708:ARG:HA	5:6:798:ARG:HD2	1.96	0.47
6:7:111:ASN:O	6:7:114:THR:OG1	2.29	0.47
6:7:348:ILE:HG22	6:7:384:HIS:CD2	2.50	0.47
6:7:446:ASP:H	6:7:447:GLY:HA2	1.78	0.47
6:7:428:VAL:HG13	6:7:598:PHE:CD2	2.50	0.47
9:A:472:ALA:HB1	9:A:593:LEU:HB2	1.96	0.47
8:9:481:LYS:HG3	9:A:882:GLN:HE21	1.78	0.47
10:B:353:LYS:HG3	10:B:360:CYS:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:231:GLN:O	13:E:234:ASN:HB2	2.15	0.47
1:2:227:TYR:OH	1:2:245:ASN:N	2.48	0.46
2:3:372:TYR:OH	2:3:565:VAL:HG23	2.15	0.46
3:4:206:ARG:HB3	3:4:211:GLU:HA	1.96	0.46
3:4:281:VAL:C	3:4:284:ILE:HG12	2.33	0.46
3:4:323:ASP:HB2	6:7:303:ARG:NH1	2.29	0.46
3:4:735:HIS:HB3	3:4:738:GLN:HG2	1.96	0.46
3:4:778:ARG:C	3:4:779:LYS:O	2.53	0.46
6:7:495:ALA:HA	6:7:510:GLY:HA2	1.97	0.46
7:8:191:LEU:HD11	7:8:208:LYS:NZ	2.31	0.46
7:8:148:TYR:CE1	7:8:260:LEU:HD11	2.50	0.46
9:A:490:ARG:O	9:A:493:VAL:HG22	2.15	0.46
10:B:432:ILE:CG1	10:B:438:GLN:NE2	2.78	0.46
10:B:319:VAL:HG12	10:B:481:SER:O	2.15	0.46
11:C:254:SER:HA	11:C:257:ARG:HH12	1.77	0.46
12:D:469:PHE:O	12:D:470:THR:HG23	2.15	0.46
2:3:400:ARG:HH12	2:3:700:ARG:HH21	1.64	0.46
3:4:782:ASP:HB2	3:4:783:ASP:CB	2.30	0.46
5:6:606:ALA:HA	5:6:607:GLY:C	2.35	0.46
6:7:373:GLU:O	6:7:374:THR:CG2	2.59	0.46
1:2:247:ARG:NE	7:8:350:MET:O	2.49	0.46
7:8:531:GLU:OE2	7:8:578:LEU:O	2.32	0.46
8:9:113:GLY:HA2	17:9:2001:AGS:H5'1	1.97	0.46
8:9:245:LEU:HB3	8:9:258:LEU:HD11	1.97	0.46
8:9:64:LYS:HZ2	9:A:469:SER:HB3	1.78	0.46
11:C:83:LEU:HA	11:C:86:GLU:OE2	2.14	0.46
13:E:455:PRO:HD2	13:E:458:ILE:HD11	1.96	0.46
1:2:548:ALA:CB	17:2:2001:AGS:H5'2	2.46	0.46
2:3:374:HIS:HB3	2:3:377:ILE:HD12	1.98	0.46
3:4:240:ASN:HB2	3:4:481:ILE:HG23	1.97	0.46
3:4:419:VAL:CG1	3:4:423:LEU:C	2.84	0.46
3:4:726:ASN:O	3:4:727:LEU:HG	2.16	0.46
5:6:512:GLU:OE2	7:8:547:ASN:OD1	2.34	0.46
3:4:767:LYS:NZ	5:6:736:MET:SD	2.86	0.46
5:6:964:VAL:O	5:6:967:ARG:HB3	2.16	0.46
6:7:453:ASP:OD2	6:7:562:SER:HA	2.15	0.46
8:9:218:PHE:HB3	8:9:256:PHE:CE1	2.50	0.46
9:A:483:VAL:HA	9:A:702:ASP:OD1	2.15	0.46
13:E:11:ARG:HD3	13:E:189:PHE:CD1	2.51	0.46
13:E:14:GLN:CB	13:E:189:PHE:HE1	2.29	0.46
13:E:243:ILE:HG13	13:E:244:VAL:H	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:380:LEU:HB3	13:E:449:ARG:HB3	1.97	0.46
1:2:651:ASN:HD21	5:6:704:PRO:HG3	1.80	0.46
3:4:331:LEU:HA	3:4:431:ASP:O	2.14	0.46
3:4:433:ILE:HG12	3:4:468:LYS:O	2.15	0.46
3:4:605:ILE:HA	3:4:605:ILE:HD12	1.78	0.46
4:5:410:ILE:O	4:5:411:ASN:ND2	2.48	0.46
4:5:535:SER:HB3	4:5:643:ARG:HH11	1.80	0.46
5:6:945:GLU:OE1	5:6:945:GLU:N	2.44	0.46
6:7:149:ARG:HH11	6:7:152:ARG:NE	2.13	0.46
6:7:749:LYS:HD2	6:7:752:LEU:HD12	1.96	0.46
11:C:143:LEU:HD11	11:C:185:LEU:HD11	1.98	0.46
11:C:76:ILE:O	11:C:79:ILE:HB	2.15	0.46
12:D:313:LEU:HA	12:D:320:LEU:HD22	1.97	0.46
12:D:344:LEU:HG	12:D:364:LEU:HG	1.96	0.46
12:D:58:GLN:CG	12:D:64:LEU:HD21	2.45	0.46
13:E:136:ASP:OD2	13:E:171:LEU:C	2.52	0.46
13:E:127:CYS:C	13:E:162:ILE:HG13	2.35	0.46
13:E:29:THR:OG1	13:E:165:LYS:HE3	2.14	0.46
1:2:212:LYS:HG3	1:2:274:VAL:HG11	1.97	0.46
1:2:581:ARG:HD2	1:2:592:GLU:OE2	2.16	0.46
1:2:653:ASN:OD1	1:2:668:SER:N	2.49	0.46
1:2:769:TYR:O	1:2:772:THR:OG1	2.23	0.46
2:3:163:ALA:H	2:3:164:HIS:HB2	1.81	0.46
3:4:322:ILE:O	3:4:439:PHE:HB3	2.15	0.46
5:6:264:GLN:HG3	5:6:383:GLY:CA	2.43	0.46
5:6:355:ASP:CB	5:6:356:TRP:HA	2.39	0.46
5:6:689:TYR:CD2	5:6:716:LEU:HD11	2.50	0.46
5:6:919:LYS:HD3	5:6:939:TRP:CZ2	2.50	0.46
8:9:93:ALA:O	8:9:96:ILE:HG12	2.15	0.46
9:A:452:ARG:NH2	9:A:625:THR:O	2.40	0.46
10:B:326:LEU:HD12	10:B:425:HIS:CD2	2.50	0.46
10:B:602:VAL:O	10:B:604:TYR:N	2.47	0.46
11:C:599:PHE:CD1	11:C:608:VAL:HG12	2.50	0.46
12:D:128:ILE:HD13	12:D:150:LEU:HD21	1.97	0.46
12:D:176:SER:HB2	12:D:179:GLU:CB	2.46	0.46
12:D:236:ASP:OD2	12:D:267:ARG:HD3	2.16	0.46
12:D:333:SER:HB2	12:D:335:PRO:HD2	1.96	0.46
1:2:855:ARG:NH1	13:E:352:ARG:NH1	2.61	0.46
13:E:43:LYS:HG3	13:E:44:THR:HG23	1.98	0.46
1:2:302:THR:HG21	1:2:304:TYR:CE2	2.50	0.46
1:2:477:THR:O	1:2:480:GLU:HB2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:787:SER:O	1:2:790:TYR:HB3	2.15	0.46
2:3:100:LEU:HD21	2:3:157:PHE:HD1	1.79	0.46
2:3:553:ILE:HD13	2:3:558:ASP:HB2	1.98	0.46
3:4:312:LYS:NZ	3:4:405:PHE:CE1	2.81	0.46
3:4:641:THR:C	3:4:643:SER:H	2.19	0.46
3:4:651:GLN:HG2	5:6:586:LYS:HD2	1.98	0.46
3:4:508:LYS:NZ	3:4:746:PHE:CG	2.83	0.46
4:5:390:CYS:HB3	4:5:663:LEU:HD23	1.96	0.46
5:6:806:LEU:HA	5:6:806:LEU:HD23	1.81	0.46
5:6:711:LEU:HB2	5:6:831:LEU:HD23	1.96	0.46
5:6:902:THR:C	5:6:904:VAL:N	2.69	0.46
7:8:534:LEU:C	7:8:534:LEU:HD13	2.35	0.46
9:A:799:PHE:CD1	9:A:803:LEU:HD23	2.48	0.46
11:C:364:VAL:HA	11:C:367:LEU:HD12	1.97	0.46
12:D:342:ILE:HG13	12:D:343:PRO:HD3	1.98	0.46
13:E:128:LEU:CB	13:E:162:ILE:HD11	2.45	0.46
13:E:239:PHE:CE1	13:E:243:ILE:CG2	2.99	0.46
13:E:261:LEU:HD23	13:E:261:LEU:HA	1.65	0.46
2:3:390:GLU:OE2	2:3:398:HIS:ND1	2.48	0.46
3:4:307:ASN:H	3:4:436:THR:HG21	1.81	0.46
3:4:823:GLN:O	3:4:826:VAL:HB	2.15	0.46
4:5:181:ILE:HB	4:5:241:TYR:HB3	1.97	0.46
5:6:134:LYS:N	5:6:135:VAL:HA	2.30	0.46
3:4:663:THR:CG2	5:6:373:MET:HE3	2.31	0.46
5:6:657:GLU:C	5:6:659:GLN:H	2.18	0.46
5:6:906:TYR:CE1	12:D:425:ARG:NH1	2.84	0.46
7:8:114:ILE:HA	7:8:117:ARG:HB2	1.97	0.46
2:3:806:LEU:HD21	8:9:390:ILE:HG13	1.98	0.46
8:9:475:LYS:O	8:9:475:LYS:HG3	2.16	0.46
3:4:860:LYS:HZ2	9:A:845:ILE:HG12	1.78	0.46
11:C:116:ILE:HG13	11:C:206:LYS:HG3	1.98	0.46
13:E:146:PHE:HE1	13:E:170:MET:HE2	1.80	0.46
13:E:445:SER:N	13:E:446:PRO:HD3	2.31	0.46
2:3:298:PHE:CZ	2:3:319:THR:HB	2.51	0.46
2:3:377:ILE:O	2:3:381:ILE:HG13	2.16	0.46
2:3:808:PHE:HE2	8:9:316:ALA:HA	1.81	0.46
3:4:417:LEU:HD23	3:4:463:VAL:HG13	1.87	0.46
3:4:710:ASP:OD2	6:7:668:ARG:NH2	2.48	0.46
4:5:140:ASN:HD21	4:5:162:LEU:H	1.64	0.46
5:6:196:LEU:HA	5:6:199:THR:OG1	2.16	0.46
1:2:569:GLN:HG2	5:6:654:GLU:OE2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:535:PRO:HB3	5:6:744:PRO:HD3	1.97	0.46
6:7:114:THR:HG22	6:7:204:PHE:HE2	1.80	0.46
3:4:530:ILE:HA	17:7:2001:AGS:H2	1.97	0.46
6:7:581:LEU:O	6:7:581:LEU:HD23	2.15	0.46
7:8:206:ARG:HB3	7:8:250:GLN:HB3	1.98	0.46
7:8:297:TYR:HB3	7:8:300:ARG:CB	2.45	0.46
9:A:852:GLN:C	9:A:854:SER:N	2.68	0.46
10:B:402:LEU:O	10:B:405:GLN:HB3	2.16	0.46
10:B:585:HIS:HB2	10:B:587:MET:HE2	1.98	0.46
12:D:344:LEU:CG	12:D:364:LEU:HG	2.46	0.46
13:E:393:ILE:HB	13:E:468:PHE:HE1	1.80	0.46
16:N:75:DA:H2"	16:N:76:DC:OP2	2.16	0.46
2:3:409:GLY:C	2:3:415:LYS:HZ1	2.15	0.46
3:4:251:TYR:CD2	3:4:254:THR:HG21	2.40	0.46
3:4:284:ILE:O	3:4:288:ASN:N	2.49	0.46
6:7:265:CYS:HB3	6:7:289:CYS:HB2	1.40	0.46
17:3:2001:AGS:N1	6:7:423:TYR:N	2.62	0.46
6:7:61:PRO:HG2	6:7:64:MET:HG3	1.97	0.46
7:8:131:LYS:HB2	7:8:136:SER:HB3	1.97	0.46
7:8:187:TYR:CG	7:8:249:LEU:HB2	2.51	0.46
10:B:519:VAL:HA	10:B:522:LYS:HE2	1.98	0.46
12:D:312:GLU:CB	12:D:320:LEU:HD13	2.46	0.46
12:D:375:ASN:HD21	13:E:173:THR:HG23	1.59	0.46
12:D:394:ALA:O	12:D:397:VAL:HG12	2.16	0.46
13:E:272:ARG:HG2	13:E:287:SER:OG	2.15	0.46
13:E:444:LEU:HG	13:E:445:SER:H	1.79	0.46
1:2:400:GLY:O	5:6:390:LYS:NZ	2.34	0.46
2:3:46:GLN:HE21	2:3:153:TRP:HH2	1.64	0.46
3:4:235:GLU:O	7:8:582:ARG:NH2	2.35	0.46
3:4:526:ILE:HG23	3:4:580:TYR:CE2	2.50	0.46
3:4:545:PHE:CD2	3:4:811:MET:HB2	2.51	0.46
4:5:165:ILE:HD11	4:5:289:GLY:HA2	1.98	0.46
5:6:158:LEU:HB3	5:6:167:ALA:HB2	1.98	0.46
5:6:508:LEU:HB3	5:6:512:GLU:HB2	1.98	0.46
5:6:779:GLU:HA	5:6:782:LYS:HZ3	1.81	0.46
6:7:322:VAL:HG12	6:7:323:PRO:O	2.15	0.46
3:4:591:THR:HG23	6:7:549:SER:OG	2.10	0.46
6:7:610:GLU:O	6:7:614:GLU:HG3	2.16	0.46
2:3:391:LYS:HD3	6:7:620:HIS:ND1	2.31	0.46
7:8:517:PHE:HE1	7:8:588:LYS:HB2	1.81	0.46
7:8:521:PHE:CZ	7:8:585:SER:HA	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:478:CYS:CB	8:9:484:ARG:HB2	2.45	0.46
12:D:214:PHE:O	12:D:248:PHE:HB3	2.14	0.46
13:E:146:PHE:CE1	13:E:170:MET:CE	2.98	0.46
13:E:127:CYS:CA	13:E:162:ILE:HA	2.46	0.46
15:M:22:DT:H3	16:N:69:DA:N6	2.14	0.46
2:3:494:THR:HA	2:3:508:ALA:N	2.29	0.45
2:3:810:ASP:O	2:3:814:ASN:N	2.47	0.45
3:4:226:TYR:O	3:4:230:LEU:HB2	2.15	0.45
3:4:497:GLU:OE1	3:4:756:GLU:HG2	2.15	0.45
4:5:630:ARG:HD3	4:5:633:LEU:HD12	1.98	0.45
5:6:609:THR:HG22	5:6:610:ALA:N	2.31	0.45
1:2:554:LYS:CG	5:6:658:GLN:HE22	2.29	0.45
5:6:666:ALA:O	5:6:668:ILE:HD12	2.16	0.45
5:6:936:ILE:O	5:6:939:TRP:HB3	2.16	0.45
6:7:689:LEU:O	6:7:692:ILE:HG22	2.16	0.45
2:3:851:HIS:CG	8:9:322:LYS:HZ1	2.34	0.45
9:A:864:ILE:HG23	9:A:865:SER:N	2.29	0.45
10:B:477:PHE:HE2	13:E:418:ILE:CD1	2.29	0.45
11:C:108:LEU:HD21	11:C:112:SER:HA	1.98	0.45
11:C:367:LEU:HD13	11:C:380:LEU:HD22	1.98	0.45
11:C:411:ARG:O	11:C:415:GLU:HG2	2.16	0.45
11:C:549:PRO:O	11:C:552:GLU:HG2	2.16	0.45
9:A:516:LEU:HD12	12:D:263:ARG:NH1	2.31	0.45
12:D:328:PHE:CE1	12:D:332:ARG:NH1	2.84	0.45
13:E:26:PRO:CB	13:E:125:LYS:HB2	2.22	0.45
13:E:23:SER:OG	13:E:27:ASP:HB3	2.16	0.45
13:E:391:GLN:HE22	13:E:414:LEU:HB3	1.81	0.45
1:2:689:GLU:OE1	1:2:689:GLU:HA	2.15	0.45
3:4:468:LYS:HG3	3:4:469:VAL:N	2.31	0.45
5:6:385:SER:HB3	5:6:459:VAL:HG23	1.98	0.45
5:6:549:LEU:HA	5:6:549:LEU:HD23	1.43	0.45
6:7:499:LYS:NZ	6:7:504:ASP:OD1	2.41	0.45
6:7:449:LYS:HG2	6:7:544:GLN:HG3	1.99	0.45
8:9:235:GLU:HG2	8:9:270:ARG:HH21	1.80	0.45
8:9:278:ASP:OD2	8:9:279:ARG:NH1	2.50	0.45
9:A:451:ALA:HB2	9:A:635:ILE:HD11	1.97	0.45
11:C:211:ILE:HD13	11:C:216:LEU:HB2	1.98	0.45
11:C:312:HIS:HE1	11:C:314:LEU:HD23	1.79	0.45
11:C:398:ARG:HD3	11:C:461:ILE:HD11	1.97	0.45
11:C:550:LYS:H	11:C:576:PHE:HE1	1.63	0.45
12:D:304:GLN:HE22	12:D:354:LEU:HD11	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:471:GLU:HA	12:D:505:GLN:H	1.81	0.45
13:E:34:ILE:HD12	13:E:186:THR:OG1	2.16	0.45
13:E:414:LEU:HD23	13:E:414:LEU:HA	1.75	0.45
13:E:417:ASN:C	13:E:419:GLU:H	2.18	0.45
13:E:49:LYS:HD3	13:E:49:LYS:HA	1.77	0.45
8:9:196:THR:HG23	15:M:12:DA:OP2	2.16	0.45
1:2:700:VAL:HG21	5:6:773:LEU:HD22	1.98	0.45
2:3:97:ILE:HA	2:3:156:SER:HB3	1.99	0.45
3:4:432:ARG:HH22	3:4:625:ASP:C	2.19	0.45
3:4:524:ARG:HH11	3:4:740:ASP:HB3	1.82	0.45
4:5:415:LEU:HD11	4:5:555:ILE:HG12	1.98	0.45
5:6:186:ARG:HE	5:6:261:ARG:CB	2.29	0.45
5:6:357:GLN:CD	5:6:387:GLU:H	2.20	0.45
5:6:609:THR:HG21	5:6:661:ILE:HG21	1.99	0.45
5:6:749:GLU:HA	5:6:752:ARG:NH2	2.31	0.45
6:7:209:GLN:HG2	6:7:210:ASN:H	1.81	0.45
6:7:531:GLU:HA	6:7:534:ARG:HB2	1.99	0.45
7:8:64:LYS:HD2	7:8:156:PHE:HE1	1.80	0.45
8:9:236:THR:O	8:9:240:ARG:HB3	2.16	0.45
10:B:321:SER:N	10:B:486:SER:CB	2.52	0.45
10:B:322:LYS:NZ	10:B:457:ASP:OD1	2.49	0.45
11:C:106:PHE:CE2	11:C:237:ILE:HG23	2.40	0.45
12:D:98:VAL:HG13	12:D:248:PHE:CD1	2.52	0.45
13:E:13:TYR:CZ	13:E:17:CYS:SG	3.10	0.45
13:E:466:VAL:HG13	13:E:468:PHE:H	1.81	0.45
15:M:21:DT:H3	16:N:70:DA:H2	1.64	0.45
1:2:541:LEU:CD2	1:2:549:LYS:CB	2.87	0.45
1:2:832:TYR:O	1:2:835:ASP:HB2	2.16	0.45
5:6:274:HIS:HD1	5:6:288:LEU:HD21	1.81	0.45
5:6:708:ARG:HA	5:6:798:ARG:CD	2.46	0.45
5:6:764:ILE:O	5:6:818:GLU:HA	2.15	0.45
7:8:265:PRO:O	7:8:268:THR:HG22	2.17	0.45
9:A:641:LYS:HG3	9:A:643:LEU:H	1.82	0.45
9:A:702:ASP:C	9:A:704:ARG:H	2.18	0.45
10:B:426:ASN:HD21	10:B:489:GLU:CD	2.20	0.45
11:C:258:LEU:HD23	11:C:258:LEU:HA	1.72	0.45
11:C:274:PHE:O	11:C:278:ASN:ND2	2.49	0.45
11:C:409:VAL:HG12	11:C:431:LEU:HD22	1.98	0.45
12:D:361:CYS:HA	12:D:365:ASP:HB2	1.98	0.45
8:9:233:THR:N	16:N:73:DA:OP1	2.49	0.45
1:2:458:ARG:O	1:2:460:GLU:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:442:ILE:HG23	3:4:443:PRO:HD2	1.98	0.45
3:4:507:ALA:O	3:4:511:GLU:HB2	2.16	0.45
3:4:518:LEU:HD23	3:4:518:LEU:C	2.37	0.45
3:4:643:SER:CB	5:6:601:LYS:CD	2.94	0.45
3:4:794:THR:O	3:4:797:GLN:N	2.42	0.45
4:5:237:GLY:HA2	4:5:240:PRO:HD3	1.98	0.45
4:5:65:MET:HG2	4:5:68:LEU:HD23	1.99	0.45
5:6:560:VAL:HB	5:6:561:GLU:HA	1.99	0.45
5:6:560:VAL:O	5:6:563:ILE:O	2.34	0.45
5:6:571:ILE:HG22	5:6:710:ASP:O	2.15	0.45
5:6:689:TYR:HA	5:6:690:ASN:HB3	1.98	0.45
6:7:440:VAL:HG22	6:7:701:LYS:HD2	1.98	0.45
8:9:441:ILE:O	8:9:444:ILE:HG12	2.17	0.45
10:B:427:LEU:HD21	10:B:465:TRP:CZ2	2.52	0.45
10:B:467:ASN:O	10:B:471:GLN:N	2.43	0.45
12:D:135:PHE:CZ	13:E:147:ASN:HB3	2.52	0.45
12:D:59:GLN:NE2	12:D:291:LEU:O	2.47	0.45
12:D:64:LEU:CB	12:D:68:GLU:CG	2.80	0.45
12:D:85:ILE:HD12	12:D:98:VAL:HG11	1.99	0.45
1:2:297:ILE:O	1:2:427:THR:HG21	2.16	0.45
1:2:842:VAL:O	1:2:846:VAL:HG23	2.16	0.45
2:3:494:THR:HG22	2:3:507:ASN:HA	1.97	0.45
2:3:666:ARG:HA	2:3:667:VAL:HA	1.60	0.45
3:4:202:LYS:H	3:4:224:LEU:HD12	1.82	0.45
3:4:593:GLY:C	3:4:595:GLY:H	2.20	0.45
3:4:727:LEU:HB2	6:7:442:LYS:HE2	1.99	0.45
7:8:221:SER:OG	7:8:250:GLN:OE1	2.33	0.45
9:A:605:PRO:O	9:A:609:LEU:HG	2.16	0.45
9:A:865:SER:HB3	12:D:330:THR:HG22	1.99	0.45
10:B:389:THR:HG1	10:B:403:GLN:CD	2.07	0.45
11:C:323:TYR:CD1	11:C:490:ASN:CG	2.90	0.45
11:C:435:LYS:HZ3	11:C:453:LEU:HA	1.82	0.45
12:D:319:ASN:CG	12:D:361:CYS:SG	2.95	0.45
12:D:463:LEU:N	12:D:463:LEU:HD12	2.32	0.45
13:E:213:CYS:O	13:E:216:LYS:HB2	2.16	0.45
1:2:857:LEU:O	1:2:861:PHE:HB2	2.16	0.45
2:3:28:PHE:HE1	2:3:129:LEU:HD12	1.80	0.45
2:3:428:LEU:CB	2:3:429:ALA:HA	2.35	0.45
3:4:333:LEU:HD11	3:4:400:GLN:OE1	2.16	0.45
5:6:178:LEU:CD1	5:6:181:LEU:HG	2.46	0.45
6:7:751:MET:HG2	6:7:765:ILE:HD11	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:424:SER:HA	8:9:439:HIS:CE1	2.52	0.45
9:A:483:VAL:CG2	9:A:485:LYS:HB3	2.46	0.45
10:B:560:ASN:HD21	10:B:575:LEU:HD22	1.82	0.45
11:C:313:ASN:HB3	11:C:316:LEU:HG	1.99	0.45
12:D:318:SER:O	12:D:319:ASN:OD1	2.35	0.45
12:D:60:LEU:O	12:D:338:LYS:HD3	2.17	0.45
12:D:58:GLN:HG3	12:D:64:LEU:HD21	1.99	0.45
1:2:302:THR:HG22	1:2:304:TYR:CZ	2.51	0.45
2:3:96:ILE:HG22	2:3:98:ILE:HG13	1.99	0.45
3:4:821:ASP:OD1	3:4:822:VAL:HG23	2.17	0.45
5:6:644:MET:HE1	5:6:649:GLN:OE1	2.17	0.45
5:6:695:LEU:HG	5:6:699:LEU:HD13	1.99	0.45
6:7:263:ASP:O	6:7:266:GLY:N	2.45	0.45
6:7:402:MET:HA	6:7:405:ILE:HD12	1.97	0.45
7:8:473:LYS:C	7:8:475:LYS:HB3	2.37	0.45
8:9:81:ARG:CZ	8:9:303:LYS:HG2	2.46	0.45
11:C:146:SER:O	11:C:149:LYS:HB3	2.17	0.45
12:D:298:ILE:CG2	12:D:302:VAL:N	2.46	0.45
13:E:162:ILE:O	13:E:162:ILE:HG12	2.17	0.45
13:E:19:ALA:O	13:E:22:ILE:O	2.35	0.45
13:E:277:ASN:OD1	13:E:280:GLU:HG2	2.17	0.45
13:E:448:VAL:O	13:E:449:ARG:HD3	2.17	0.45
2:3:198:ARG:O	2:3:248:SER:HB2	2.16	0.45
2:3:235:ASP:HB3	2:3:241:LEU:HD21	1.99	0.45
2:3:368:ALA:HB1	2:3:371:ILE:O	2.16	0.45
2:3:716:ARG:NH2	2:3:722:ASN:HD22	2.15	0.45
3:4:564:ILE:N	3:4:564:ILE:HD12	2.32	0.45
3:4:865:LEU:O	3:4:869:ILE:HG13	2.16	0.45
6:7:207:LEU:HB2	6:7:209:GLN:HB2	1.98	0.45
6:7:393:LEU:HA	6:7:394:THR:HB	1.98	0.45
6:7:662:GLN:HB3	6:7:666:ARG:NH1	2.22	0.45
7:8:328:ASN:O	7:8:331:SER:OG	2.20	0.45
11:C:405:HIS:HA	11:C:408:PHE:CD2	2.42	0.45
11:C:54:VAL:O	11:C:57:ARG:HG2	2.17	0.45
13:E:262:ILE:H	13:E:262:ILE:HD12	1.82	0.45
15:M:11:DT:H3	16:N:79:DA:H61	1.64	0.45
1:2:272:ASP:OD1	1:2:273:LEU:N	2.50	0.45
2:3:789:ARG:HH12	2:3:793:SER:HB2	1.82	0.45
3:4:299:LYS:NZ	3:4:301:TYR:CE1	2.82	0.45
3:4:276:ILE:HD11	3:4:303:VAL:CG2	2.46	0.45
3:4:605:ILE:O	3:4:661:ILE:HD13	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:636:LYS:HD3	6:7:535:THR:HG22	1.98	0.45
4:5:291:ARG:HB2	4:5:337:VAL:HG12	1.98	0.45
5:6:361:ILE:HD12	5:6:397:PHE:CE2	2.52	0.45
6:7:134:TYR:HA	6:7:141:VAL:HG11	1.98	0.45
7:8:351:MET:C	7:8:353:ARG:H	2.19	0.45
7:8:18:ILE:HG12	7:8:43:PHE:HZ	1.82	0.45
7:8:509:LEU:HG	7:8:513:MET:HE2	1.99	0.45
9:A:855:ASP:OD2	12:D:369:LYS:HA	2.17	0.45
11:C:410:ALA:HA	11:C:413:LEU:HD12	1.99	0.45
11:C:612:VAL:HG12	11:C:614:ARG:H	1.81	0.45
12:D:108:LYS:CE	17:D:2001:AGS:O3B	2.65	0.45
12:D:517:ILE:O	12:D:517:ILE:HD12	2.16	0.45
12:D:521:ASN:OD1	12:D:522:MET:HG2	2.16	0.45
13:E:416:LYS:O	13:E:418:ILE:N	2.48	0.45
1:2:369:SER:HA	1:2:370:LYS:HA	1.77	0.44
1:2:799:SER:HB2	1:2:859:ARG:HH12	1.82	0.44
2:3:95:ARG:HB2	2:3:154:LYS:O	2.17	0.44
2:3:457:LEU:HD22	2:3:497:ILE:HD13	1.98	0.44
2:3:485:ALA:O	2:3:489:VAL:HG23	2.17	0.44
2:3:536:PRO:HA	2:3:537:ASP:HA	1.64	0.44
3:4:401:GLU:HG2	3:4:403:PRO:HD2	1.99	0.44
5:6:576:ASP:O	5:6:579:THR:OG1	2.12	0.44
5:6:601:LYS:HD2	5:6:643:LYS:HB3	2.00	0.44
5:6:901:LYS:N	5:6:903:THR:HG23	2.32	0.44
6:7:469:LEU:O	6:7:473:ILE:HG13	2.18	0.44
13:E:191:ARG:HH21	13:E:253:ASN:CA	2.29	0.44
10:B:396:TRP:HA	16:N:76:DC:H5"	1.98	0.44
1:2:551:GLN:HE22	1:2:554:LYS:HE2	1.81	0.44
2:3:428:LEU:HB3	2:3:429:ALA:CA	2.31	0.44
2:3:408:VAL:HG22	2:3:524:ASP:OD2	2.17	0.44
3:4:241:LEU:HD12	3:4:276:ILE:HD13	1.99	0.44
3:4:325:LEU:HD23	3:4:325:LEU:HA	1.75	0.44
3:4:362:ARG:NH1	6:7:299:PHE:CE2	2.85	0.44
3:4:354:HIS:HB3	3:4:372:GLU:CG	2.46	0.44
3:4:521:LEU:O	3:4:524:ARG:HG2	2.17	0.44
1:2:551:GLN:CD	5:6:563:ILE:CG2	2.84	0.44
3:4:767:LYS:HD3	5:6:733:ASP:OD1	2.16	0.44
6:7:769:VAL:HG21	6:7:779:LEU:HD13	1.99	0.44
8:9:174:SER:HB3	9:A:543:MET:SD	2.57	0.44
10:B:417:ASP:O	10:B:419:LYS:N	2.49	0.44
11:C:112:SER:HB3	11:C:239:ASN:CG	2.38	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:72:PHE:CB	12:D:290:ASN:ND2	2.78	0.44
12:D:400:ARG:CZ	12:D:414:GLU:OE2	2.65	0.44
12:D:64:LEU:HB2	12:D:68:GLU:CG	2.46	0.44
2:3:831:GLU:OE2	2:3:835:GLN:NE2	2.50	0.44
3:4:180:ILE:HB	3:4:183:THR:HB	2.00	0.44
3:4:636:LYS:HD3	6:7:535:THR:HB	2.00	0.44
3:4:650:GLU:HG2	3:4:701:ARG:HD3	1.99	0.44
3:4:856:VAL:HG23	3:4:857:ILE:H	1.80	0.44
4:5:378:ILE:HD12	4:5:378:ILE:H	1.83	0.44
4:5:547:LEU:HD23	4:5:550:PHE:CD2	2.52	0.44
1:2:687:VAL:CA	5:6:781:ARG:HH22	2.28	0.44
5:6:780:LEU:HD23	5:6:795:ILE:HG12	1.99	0.44
6:7:228:ARG:NH2	6:7:327:ILE:O	2.50	0.44
6:7:286:SER:O	6:7:290:SER:N	2.50	0.44
7:8:68:ASP:OD1	7:8:68:ASP:N	2.38	0.44
8:9:498:PHE:HA	8:9:501:GLU:OE2	2.17	0.44
9:A:641:LYS:HG3	9:A:643:LEU:HB3	1.99	0.44
10:B:471:GLN:OE1	11:C:313:ASN:ND2	2.50	0.44
12:D:433:THR:O	12:D:434:ASN:CG	2.55	0.44
12:D:52:LEU:HD23	12:D:56:LEU:HD12	1.99	0.44
13:E:163:ASN:OD1	13:E:165:LYS:HE3	2.14	0.44
11:C:498:LEU:CD1	13:E:421:PHE:HZ	2.12	0.44
15:M:14:DG:H2'	15:M:15:DT:C6	2.53	0.44
1:2:478:GLU:OE2	1:2:482:ARG:HD2	2.18	0.44
1:2:534:ARG:CZ	1:2:538:ASN:ND2	2.80	0.44
1:2:520:PHE:HZ	1:2:766:TYR:HE2	1.64	0.44
2:3:849:ARG:HB3	2:3:853:HIS:O	2.18	0.44
3:4:493:ASN:CG	3:4:494:GLU:H	2.20	0.44
3:4:632:ASP:HA	3:4:674:SER:OG	2.17	0.44
4:5:384:ILE:HD13	4:5:414:LEU:HD23	1.98	0.44
5:6:611:ALA:N	5:6:624:GLU:OE2	2.50	0.44
5:6:727:LEU:HA	5:6:727:LEU:HD23	1.76	0.44
6:7:363:PHE:HA	6:7:364:LYS:CB	2.47	0.44
3:4:731:ASP:C	6:7:442:LYS:NZ	2.70	0.44
6:7:451:ARG:HA	6:7:452:GLY:HA3	1.59	0.44
6:7:559:ALA:HB1	6:7:561:THR:HG23	1.99	0.44
7:8:136:SER:O	7:8:139:LEU:HG	2.17	0.44
7:8:520:LEU:HD13	7:8:521:PHE:N	2.33	0.44
7:8:591:PHE:HA	7:8:594:LEU:HG	1.99	0.44
8:9:214:LYS:HB3	8:9:216:THR:N	2.33	0.44
8:9:500:ASP:O	8:9:503:THR:OG1	2.24	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:A:496:LEU:CD1	9:A:508:PHE:CE1	3.01	0.44
8:9:110:PRO:HG3	9:A:612:LYS:HA	2.00	0.44
9:A:826:VAL:HA	9:A:829:ILE:HD12	2.00	0.44
11:C:244:LEU:HD13	11:C:248:GLU:HG3	2.00	0.44
11:C:435:LYS:HE3	11:C:455:PHE:HB3	2.00	0.44
12:D:495:THR:O	12:D:497:ILE:N	2.49	0.44
12:D:53:GLN:HE21	12:D:346:ALA:HA	1.82	0.44
12:D:98:VAL:HG23	12:D:272:VAL:O	2.18	0.44
13:E:468:PHE:CZ	13:E:473:TYR:HE2	2.35	0.44
2:3:28:PHE:HD2	2:3:128:ALA:CB	2.17	0.44
3:4:234:ARG:HG2	3:4:291:TYR:CE2	2.51	0.44
3:4:393:ASP:HB3	3:4:424:VAL:HG21	2.00	0.44
3:4:809:ALA:HB2	3:4:817:VAL:HG22	1.99	0.44
17:6:1101:AGS:O1A	17:6:1101:AGS:O2B	2.36	0.44
5:6:401:GLU:O	5:6:402:ILE:HG12	2.18	0.44
5:6:950:SER:OG	5:6:951:LEU:N	2.50	0.44
6:7:504:ASP:CB	6:7:505:GLU:HB3	2.47	0.44
7:8:472:TYR:HB3	7:8:475:LYS:HZ2	1.82	0.44
7:8:72:GLY:N	7:8:93:ILE:O	2.50	0.44
10:B:460:TYR:O	10:B:463:LEU:N	2.50	0.44
12:D:312:GLU:O	12:D:320:LEU:HD22	2.17	0.44
13:E:212:SER:HB2	13:E:216:LYS:HE3	2.00	0.44
13:E:254:ASP:O	13:E:258:LEU:HD13	2.18	0.44
13:E:381:PHE:HB3	13:E:382:ALA:O	2.17	0.44
1:2:205:ARG:O	1:2:208:ALA:HB3	2.18	0.44
2:3:372:TYR:CE1	2:3:564:HIS:HB3	2.53	0.44
3:4:565:LEU:HD23	3:4:566:LEU:N	2.33	0.44
3:4:770:LEU:HD21	3:4:802:ILE:HG22	1.98	0.44
3:4:871:ASN:O	3:4:875:ASP:N	2.51	0.44
4:5:60:SER:H	4:5:135:PHE:HB3	1.82	0.44
4:5:367:TYR:HE1	4:5:663:LEU:HD22	1.83	0.44
5:6:306:LYS:HZ2	5:6:321:VAL:HA	1.82	0.44
5:6:577:PRO:O	5:6:579:THR:OG1	2.36	0.44
3:4:576:GLN:HE21	6:7:448:MET:CG	2.30	0.44
6:7:244:ILE:CD1	6:7:479:ARG:HH12	2.24	0.44
6:7:543:GLN:HE22	6:7:560:ARG:CA	2.31	0.44
6:7:656:VAL:O	6:7:660:VAL:HG23	2.18	0.44
7:8:238:ARG:NH1	7:8:282:LEU:HD22	2.33	0.44
7:8:314:VAL:O	7:8:317:LEU:HB3	2.18	0.44
7:8:512:LYS:HA	7:8:512:LYS:HD3	1.69	0.44
9:A:583:PHE:O	9:A:586:THR:HG22	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:B:423:VAL:HA	10:B:453:VAL:O	2.18	0.44
12:D:298:ILE:CG1	12:D:302:VAL:H	2.29	0.44
13:E:11:ARG:HH22	13:E:41:THR:HG1	1.55	0.44
13:E:329:LYS:HG3	13:E:462:ILE:HG13	1.98	0.44
1:2:300:PHE:HD1	1:2:300:PHE:HA	1.70	0.44
1:2:387:ARG:HH12	1:2:587:LYS:CE	2.30	0.44
1:2:614:ASP:O	1:2:618:THR:HG23	2.16	0.44
2:3:439:GLY:C	2:3:440:VAL:HG22	2.38	0.44
3:4:411:THR:OG1	3:4:412:PRO:HD2	2.17	0.44
4:5:406:LEU:HG	4:5:654:GLU:OE2	2.18	0.44
6:7:495:ALA:HB2	6:7:557:LEU:CD2	2.48	0.44
3:4:636:LYS:HD3	6:7:535:THR:CB	2.48	0.44
6:7:615:HIS:CE1	6:7:625:GLN:HG3	2.52	0.44
6:7:724:LYS:HB3	6:7:724:LYS:HE3	1.80	0.44
6:7:727:LEU:HD13	6:7:728:TYR:CD2	2.50	0.44
6:7:730:GLU:HA	6:7:731:THR:HA	1.63	0.44
6:7:69:LYS:HZ3	6:7:74:GLU:HB2	1.82	0.44
7:8:66:LEU:HD22	7:8:104:ARG:HG3	2.00	0.44
9:A:838:SER:HA	9:A:842:VAL:HB	2.00	0.44
10:B:349:LEU:HG	10:B:367:ASN:HB3	1.99	0.44
11:C:268:VAL:HG22	11:C:269:SER:H	1.83	0.44
11:C:605:TYR:O	11:C:608:VAL:HG13	2.18	0.44
12:D:426:ILE:HG23	12:D:427:PRO:HD2	2.00	0.44
12:D:456:VAL:O	12:D:459:VAL:HG12	2.17	0.44
13:E:250:TYR:O	13:E:250:TYR:CD1	2.71	0.44
13:E:62:LEU:HD23	13:E:62:LEU:HA	1.86	0.44
13:E:89:TYR:HB3	13:E:93:PRO:HG2	2.00	0.44
1:2:292:GLU:CG	1:2:293:ILE:N	2.81	0.44
1:2:436:GLY:HA2	1:2:446:VAL:O	2.18	0.44
3:4:272:MET:O	3:4:276:ILE:HG13	2.17	0.44
5:6:400:VAL:HG13	5:6:402:ILE:HG23	1.99	0.44
5:6:713:PHE:CZ	5:6:830:LEU:HD11	2.53	0.44
6:7:593:ARG:NH2	17:7:2001:AGS:O3B	2.51	0.44
7:8:125:PHE:CD1	7:8:128:LEU:HD11	2.53	0.44
7:8:311:MET:SD	7:8:407:ALA:HB1	2.57	0.44
8:9:389:TYR:O	8:9:393:VAL:HG23	2.18	0.44
9:A:885:LYS:C	9:A:887:ASP:N	2.70	0.44
11:C:113:THR:HG23	11:C:206:LYS:HE3	2.00	0.44
12:D:497:ILE:HG22	13:E:451:LYS:HZ1	1.81	0.44
13:E:144:ALA:O	13:E:148:LYS:CB	2.61	0.44
13:E:380:LEU:HD21	13:E:451:LYS:HD3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:476:ASP:OD1	13:E:476:ASP:N	2.50	0.44
3:4:609:VAL:HG21	15:M:45:DT:OP1	2.18	0.44
1:2:262:LYS:HG2	1:2:263:CYS:SG	2.58	0.44
1:2:671:GLU:HB3	1:2:672:PRO:HD3	1.99	0.44
2:3:28:PHE:CE1	2:3:129:LEU:HD12	2.53	0.44
3:4:543:GLN:HB2	3:4:564:ILE:HD13	2.00	0.44
3:4:834:LYS:HD2	3:4:834:LYS:HA	1.82	0.44
4:5:537:GLY:HA2	4:5:547:LEU:HD12	1.99	0.44
5:6:789:SER:HB2	5:6:791:SER:N	2.24	0.44
6:7:429:LYS:HA	6:7:432:LEU:HB2	2.00	0.44
6:7:517:ASP:C	6:7:519:GLY:H	2.19	0.44
7:8:344:LEU:HG	7:8:355:ILE:HG23	1.99	0.44
7:8:570:SER:CB	7:8:579:LYS:HZ1	2.25	0.44
7:8:66:LEU:HB2	7:8:72:GLY:HA3	2.00	0.44
8:9:181:ILE:O	8:9:185:ILE:HG13	2.17	0.44
8:9:467:THR:O	9:A:602:MET:HB3	2.18	0.44
6:7:790:ASN:HD21	9:A:629:HIS:CE1	2.35	0.44
8:9:481:LYS:HZ2	9:A:819:GLU:CB	2.30	0.44
10:B:400:VAL:HA	10:B:403:GLN:HG2	2.00	0.44
11:C:298:PHE:O	11:C:302:ILE:HG12	2.17	0.44
12:D:181:PHE:O	12:D:184:ILE:HG12	2.18	0.44
12:D:376:LEU:HD12	12:D:379:ARG:NH2	2.33	0.44
12:D:433:THR:O	12:D:434:ASN:OD1	2.36	0.44
13:E:22:ILE:CG2	13:E:22:ILE:O	2.66	0.44
16:N:74:DT:O4	16:N:75:DA:N6	2.51	0.44
2:3:182:VAL:O	2:3:294:VAL:N	2.40	0.43
1:2:374:ARG:NH1	2:3:309:SER:HB3	2.29	0.43
2:3:32:LEU:O	2:3:35:PHE:O	2.36	0.43
2:3:441:GLY:HA3	2:3:462:MET:HB2	2.00	0.43
2:3:682:ASN:O	2:3:686:LEU:HG	2.18	0.43
2:3:829:ASP:OD1	2:3:830:GLU:N	2.51	0.43
2:3:851:HIS:CG	8:9:322:LYS:NZ	2.85	0.43
3:4:253:GLN:CG	3:4:253:GLN:O	2.65	0.43
3:4:737:SER:O	3:4:740:ASP:OD2	2.36	0.43
3:4:822:VAL:O	3:4:826:VAL:HG23	2.18	0.43
5:6:178:LEU:HD12	5:6:181:LEU:H	1.81	0.43
5:6:772:TYR:OH	5:6:776:LYS:HE3	2.17	0.43
6:7:129:THR:CG2	6:7:130:LYS:N	2.68	0.43
2:3:500:ALA:HB1	6:7:509:GLU:OE2	2.17	0.43
6:7:727:LEU:CD1	6:7:728:TYR:HB2	2.47	0.43
7:8:581:TYR:OH	7:8:583:TRP:NE1	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:169:SER:HA	8:9:221:VAL:HB	1.99	0.43
8:9:94:LYS:HB2	8:9:101:SER:HA	2.00	0.43
9:A:805:ILE:HD11	9:A:873:LEU:HD11	2.00	0.43
9:A:851:GLN:CG	9:A:860:GLN:H	2.31	0.43
9:A:873:LEU:HD23	9:A:879:LEU:HB2	2.00	0.43
10:B:374:ASP:OD1	10:B:375:VAL:N	2.48	0.43
10:B:495:VAL:HG11	11:C:589:PHE:CZ	2.53	0.43
12:D:72:PHE:C	12:D:72:PHE:CD1	2.90	0.43
13:E:277:ASN:O	13:E:280:GLU:N	2.42	0.43
13:E:328:SER:OG	13:E:423:ASN:OD1	2.12	0.43
13:E:89:TYR:HB3	13:E:93:PRO:CG	2.48	0.43
1:2:777:LYS:HD3	4:5:576:HIS:HA	1.98	0.43
2:3:172:THR:HA	2:3:173:ALA:HA	1.57	0.43
2:3:799:PRO:O	2:3:803:ARG:N	2.51	0.43
4:5:257:LYS:HD3	4:5:273:ASN:HD21	1.83	0.43
5:6:141:GLU:OE2	5:6:193:ALA:HB2	2.18	0.43
5:6:778:LYS:HG2	5:6:782:LYS:NZ	2.33	0.43
7:8:17:VAL:HG12	7:8:44:LEU:HD23	1.99	0.43
7:8:297:TYR:HB3	7:8:300:ARG:HB2	1.99	0.43
7:8:389:ASP:H	7:8:390:ASN:HA	1.83	0.43
9:A:796:ARG:HH11	12:D:277:GLN:HG3	1.81	0.43
9:A:838:SER:O	9:A:842:VAL:HB	2.18	0.43
11:C:116:ILE:O	11:C:119:LYS:HB3	2.18	0.43
12:D:354:LEU:O	12:D:358:ILE:HG12	2.18	0.43
13:E:326:ILE:HD12	13:E:329:LYS:NZ	2.34	0.43
1:2:506:TYR:CD2	1:2:507:GLY:N	2.84	0.43
3:4:240:ASN:HB2	3:4:481:ILE:CG2	2.48	0.43
3:4:783:ASP:HA	3:4:784:SER:HA	1.37	0.43
4:5:652:GLN:O	4:5:656:ILE:HG13	2.17	0.43
5:6:302:PRO:HA	5:6:355:ASP:O	2.17	0.43
5:6:460:ILE:HD11	5:6:462:ILE:HD12	1.99	0.43
6:7:444:VAL:CG2	6:7:446:ASP:HB2	2.48	0.43
6:7:635:PRO:O	6:7:639:ARG:HG3	2.19	0.43
6:7:680:SER:CB	6:7:681:PHE:HA	2.33	0.43
7:8:374:GLU:N	7:8:374:GLU:OE1	2.50	0.43
11:C:277:GLY:O	11:C:280:ILE:HB	2.18	0.43
12:D:100:LEU:HD23	12:D:100:LEU:HA	1.79	0.43
9:A:796:ARG:O	12:D:332:ARG:NE	2.51	0.43
12:D:376:LEU:O	12:D:379:ARG:HB3	2.18	0.43
12:D:446:ASN:O	12:D:447:THR:HG22	2.18	0.43
12:D:49:PHE:HE1	12:D:301:TRP:CE2	2.36	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:229:ASP:O	13:E:232:PHE:HB2	2.17	0.43
13:E:282:LEU:O	13:E:286:LYS:HG3	2.18	0.43
1:2:793:LEU:HD12	1:2:863:ILE:HD13	1.99	0.43
2:3:665:GLU:HG2	2:3:666:ARG:HG3	2.01	0.43
2:3:814:ASN:OD1	2:3:818:ASP:HB2	2.18	0.43
3:4:341:ASP:OD1	3:4:342:MET:N	2.51	0.43
3:4:440:ARG:NH1	3:4:440:ARG:HG3	2.34	0.43
3:4:728:TYR:CG	3:4:729:LEU:N	2.86	0.43
4:5:442:LYS:HD2	4:5:486:ARG:HH11	1.83	0.43
4:5:595:SER:HB3	4:5:598:LYS:HD3	2.00	0.43
5:6:918:ARG:NH2	12:D:441:THR:HG23	2.33	0.43
6:7:491:VAL:O	6:7:496:ALA:HB2	2.18	0.43
6:7:652:MET:HA	6:7:708:VAL:HG21	1.99	0.43
7:8:39:GLN:O	7:8:213:ALA:HB2	2.18	0.43
7:8:572:HIS:O	7:8:579:LYS:N	2.38	0.43
8:9:273:SER:O	8:9:277:LEU:HB3	2.18	0.43
9:A:479:GLY:C	9:A:485:LYS:NZ	2.72	0.43
9:A:629:HIS:HA	9:A:697:ALA:HB1	1.99	0.43
11:C:435:LYS:HE3	11:C:455:PHE:O	2.18	0.43
11:C:544:PHE:HB3	11:C:584:PHE:CZ	2.53	0.43
13:E:239:PHE:CE1	13:E:243:ILE:HG21	2.49	0.43
15:M:42:DT:C2	16:N:49:DG:N2	2.86	0.43
1:2:374:ARG:HH12	2:3:309:SER:CB	2.27	0.43
2:3:194:PRO:HA	2:3:252:ASP:HA	2.00	0.43
3:4:227:ILE:HD11	3:4:283:LEU:HD13	2.00	0.43
3:4:435:VAL:HG11	3:4:463:VAL:HG12	1.99	0.43
3:4:738:GLN:HA	3:4:739:ASP:HA	1.62	0.43
4:5:29:LYS:HA	4:5:32:LYS:HD2	2.00	0.43
4:5:408:GLY:HA2	4:5:409:ASP:HA	1.59	0.43
5:6:716:LEU:HD23	5:6:716:LEU:HA	1.67	0.43
6:7:444:VAL:HG22	6:7:448:MET:H	1.83	0.43
8:9:449:THR:O	8:9:450:LEU:HD12	2.19	0.43
8:9:479:LYS:HG3	8:9:479:LYS:O	2.19	0.43
9:A:436:LYS:O	9:A:440:LEU:HG	2.18	0.43
11:C:202:VAL:HA	11:C:235:SER:O	2.18	0.43
13:E:148:LYS:HE3	13:E:148:LYS:HB2	1.91	0.43
13:E:175:PHE:C	13:E:175:PHE:CD2	2.92	0.43
1:2:224:ARG:HD2	7:8:212:MET:HA	2.01	0.43
3:4:271:ILE:O	3:4:275:THR:HG23	2.19	0.43
3:4:473:ARG:CG	3:4:474:LEU:H	2.05	0.43
3:4:525:SER:O	3:4:528:PRO:HD3	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:789:LYS:HE2	5:6:691:ARG:NH1	2.34	0.43
4:5:410:ILE:HG22	4:5:551:ASP:OD2	2.18	0.43
4:5:59:TYR:CD1	4:5:135:PHE:CD1	3.07	0.43
4:5:614:LEU:HD12	4:5:672:ALA:HB3	2.00	0.43
4:5:49:GLN:CA	4:5:61:LEU:HD21	2.44	0.43
4:5:94:ILE:HA	4:5:97:VAL:HG22	2.01	0.43
5:6:134:LYS:HZ3	5:6:137:ARG:CD	2.30	0.43
5:6:641:PHE:N	5:6:682:ALA:HB2	2.34	0.43
8:9:348:GLU:HB2	8:9:350:ARG:HG3	2.01	0.43
8:9:401:ASN:CB	8:9:404:ARG:HB3	2.48	0.43
8:9:498:PHE:O	8:9:501:GLU:HG2	2.18	0.43
11:C:181:VAL:HG12	11:C:182:SER:O	2.19	0.43
12:D:431:PRO:HB2	12:D:441:THR:HG21	2.01	0.43
12:D:466:LEU:CD2	12:D:468:PHE:HD1	2.32	0.43
12:D:75:LEU:HD22	12:D:278:ILE:HG21	2.00	0.43
12:D:458:ASN:CG	13:E:250:TYR:CE1	2.92	0.43
13:E:191:ARG:NE	13:E:253:ASN:CB	2.56	0.43
13:E:291:LEU:HD12	13:E:292:PHE:CE1	2.53	0.43
2:3:823:MET:SD	2:3:833:GLU:HG3	2.58	0.43
3:4:689:THR:HG22	3:4:791:ILE:HG13	2.01	0.43
4:5:490:ARG:HG2	4:5:494:HIS:CE1	2.53	0.43
4:5:384:ILE:HG12	4:5:554:PHE:HD2	1.83	0.43
5:6:196:LEU:HB3	5:6:261:ARG:NH1	2.34	0.43
1:2:570:GLY:HA3	5:6:664:ALA:H	1.84	0.43
5:6:505:LEU:HD21	5:6:757:TYR:HE1	1.83	0.43
5:6:769:ALA:O	5:6:772:TYR:HB3	2.19	0.43
7:8:71:GLN:CD	7:8:104:ARG:H	2.17	0.43
8:9:179:SER:OG	8:9:180:SER:N	2.51	0.43
10:B:364:ASN:HA	10:B:425:HIS:HB2	2.01	0.43
10:B:466:ASP:OD2	10:B:468:MET:N	2.46	0.43
11:C:107:LEU:HA	11:C:107:LEU:HD23	1.66	0.43
11:C:253:GLN:N	12:D:461:GLU:CD	2.68	0.43
12:D:344:LEU:HA	12:D:367:TYR:CD2	2.54	0.43
13:E:62:LEU:HB2	13:E:131:ILE:O	2.19	0.43
13:E:269:TYR:OH	13:E:284:LEU:HD13	2.17	0.43
1:2:283:TYR:HB3	1:2:286:TYR:HB2	2.01	0.43
1:2:303:ILE:O	1:2:303:ILE:CG2	2.61	0.43
2:3:429:ALA:N	2:3:469:VAL:H	2.13	0.43
3:4:585:THR:HA	3:4:586:PRO:HD2	1.75	0.43
3:4:802:ILE:HG13	3:4:803:ARG:N	2.34	0.43
4:5:529:ARG:NH1	4:5:564:ARG:NH2	2.63	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:303:GLU:HB2	5:6:356:TRP:HD1	1.77	0.43
5:6:277:ARG:NH1	5:6:367:GLU:OE2	2.25	0.43
5:6:568:ASP:O	5:6:569:ILE:HB	2.19	0.43
5:6:609:THR:CG2	5:6:661:ILE:HG21	2.48	0.43
5:6:784:ASP:OD1	5:6:785:ALA:N	2.52	0.43
6:7:333:ILE:HG12	6:7:376:LEU:HB3	2.00	0.43
7:8:118:LEU:HD22	7:8:121:LEU:HD13	1.99	0.43
7:8:21:ASN:O	7:8:24:SER:HB3	2.19	0.43
7:8:74:ASP:O	7:8:90:GLU:HA	2.18	0.43
8:9:289:GLN:HG2	8:9:291:TYR:CE1	2.54	0.43
9:A:811:LEU:HD21	9:A:828:GLU:CG	2.43	0.43
10:B:401:ILE:HD11	10:B:443:PHE:HD2	1.84	0.43
11:C:415:GLU:HG3	11:C:416:GLU:HG2	2.00	0.43
12:D:379:ARG:HD3	13:E:38:TYR:OH	2.19	0.43
12:D:137:HIS:CD2	13:E:106:PHE:HE1	2.36	0.43
13:E:262:ILE:O	13:E:266:TRP:HB2	2.18	0.43
13:E:82:GLN:O	13:E:86:LYS:HG3	2.18	0.43
1:2:601:LYS:HZ2	1:2:643:ARG:HD2	1.84	0.43
1:2:503:PRO:HB3	1:2:755:ILE:HG21	2.01	0.43
1:2:484:PHE:CZ	1:2:766:TYR:HA	2.54	0.43
2:3:204:ALA:HB1	2:3:205:LYS:HD2	2.00	0.43
2:3:123:PRO:HG3	2:3:222:THR:HG21	2.01	0.43
2:3:220:THR:O	2:3:322:LEU:HD13	2.18	0.43
2:3:440:VAL:HG23	2:3:442:LEU:H	1.82	0.43
2:3:849:ARG:HD3	2:3:853:HIS:HB2	1.99	0.43
3:4:273:ASP:CG	3:4:302:LYS:HA	2.39	0.43
3:4:319:PRO:HD3	6:7:341:ARG:HH22	1.84	0.43
3:4:394:LYS:CD	3:4:420:TYR:HE1	2.31	0.43
3:4:328:LEU:O	3:4:434:GLU:HG2	2.19	0.43
5:6:576:ASP:OD2	5:6:577:PRO:O	2.37	0.43
5:6:807:SER:HB3	5:6:824:ILE:HD13	2.01	0.43
6:7:206:PRO:HG3	6:7:238:LEU:HD21	2.01	0.43
8:9:400:ASN:HA	8:9:401:ASN:HB2	2.01	0.43
9:A:593:LEU:N	9:A:594:ILE:HD12	2.34	0.43
10:B:556:LEU:HB2	10:B:598:GLU:HB3	2.01	0.43
11:C:131:LEU:HD11	11:C:142:MET:HG3	2.00	0.43
12:D:107:TYR:O	12:D:111:LEU:N	2.35	0.43
12:D:52:LEU:HD12	12:D:298:ILE:HD13	2.00	0.43
12:D:391:LEU:HA	12:D:391:LEU:HD12	1.84	0.43
13:E:243:ILE:HG13	13:E:244:VAL:N	2.34	0.43
1:2:238:ASN:OD1	1:2:286:TYR:HE1	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:326:ARG:HB2	1:2:591:LEU:O	2.19	0.43
2:3:835:GLN:O	2:3:838:LEU:HB3	2.19	0.43
4:5:295:VAL:HG21	4:5:331:LEU:HG	2.01	0.43
4:5:679:GLU:O	4:5:683:LEU:HG	2.19	0.43
6:7:149:ARG:CD	6:7:152:ARG:HH11	2.32	0.43
5:6:757:TYR:CZ	7:8:463:LEU:HD12	2.53	0.43
10:B:398:ASN:HB3	10:B:400:VAL:HG23	2.01	0.43
11:C:255:THR:O	11:C:258:LEU:HB2	2.18	0.43
11:C:72:VAL:HG13	11:C:280:ILE:HD13	2.01	0.43
12:D:59:GLN:NE2	12:D:293:THR:O	2.42	0.43
12:D:380:LEU:HD23	12:D:516:ILE:HG22	1.99	0.43
13:E:240:ILE:HA	13:E:243:ILE:CG1	2.49	0.43
3:4:346:PHE:CE1	3:4:388:ARG:HD2	2.54	0.42
5:6:284:ILE:HG13	5:6:401:GLU:OE1	2.19	0.42
5:6:403:VAL:HG22	5:6:452:ILE:HD13	1.99	0.42
5:6:601:LYS:C	5:6:603:SER:H	2.21	0.42
5:6:685:VAL:C	5:6:687:GLY:H	2.21	0.42
6:7:460:GLY:H	6:7:466:LYS:HZ2	1.66	0.42
6:7:574:TYR:OH	6:7:580:PRO:HG3	2.18	0.42
6:7:727:LEU:HD12	6:7:728:TYR:H	1.74	0.42
10:B:414:GLN:HA	10:B:415:PRO:HD2	1.79	0.42
11:C:188:VAL:HA	11:C:191:PHE:CD2	2.54	0.42
11:C:372:ALA:O	11:C:374:ALA:N	2.52	0.42
11:C:433:ILE:HD12	11:C:442:ARG:NH1	2.16	0.42
12:D:108:LYS:HE2	17:D:2001:AGS:PG	2.59	0.42
9:A:886:ASN:O	12:D:507:GLN:NE2	2.51	0.42
11:C:364:VAL:HG12	14:F:422:LYS:HE3	2.00	0.42
1:2:578:ALA:H	1:2:629:ILE:HD13	1.84	0.42
2:3:794:SER:O	2:3:798:THR:OG1	2.27	0.42
4:5:136:GLN:HE22	4:5:280:ARG:NE	2.16	0.42
5:6:172:GLU:OE1	5:6:173:GLN:HG2	2.19	0.42
5:6:939:TRP:O	5:6:943:GLN:HG2	2.19	0.42
6:7:420:PRO:HA	6:7:625:GLN:OE1	2.19	0.42
7:8:569:ILE:HG13	7:8:581:TYR:CZ	2.53	0.42
9:A:885:LYS:HA	9:A:885:LYS:HD2	1.90	0.42
11:C:204:ASN:HA	11:C:237:ILE:HB	2.01	0.42
11:C:274:PHE:HD2	11:C:429:HIS:CD2	2.37	0.42
12:D:298:ILE:HG13	12:D:301:TRP:H	1.83	0.42
12:D:373:SER:OG	13:E:188:MET:HG3	2.20	0.42
13:E:436:THR:HB	13:E:451:LYS:HE3	2.00	0.42
1:2:434:TYR:CG	1:2:435:ASP:N	2.86	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:789:VAL:O	1:2:793:LEU:N	2.52	0.42
3:4:603:ALA:HB2	3:4:619:GLY:N	2.35	0.42
3:4:578:LEU:CD2	3:4:672:LEU:HD22	2.49	0.42
5:6:111:VAL:CG1	5:6:178:LEU:HD21	2.49	0.42
5:6:296:ARG:NH1	5:6:360:ARG:CZ	2.81	0.42
5:6:560:VAL:HB	5:6:561:GLU:CA	2.49	0.42
5:6:573:VAL:HG13	5:6:715:ILE:CD1	2.49	0.42
6:7:459:MET:C	6:7:466:LYS:HZ1	2.22	0.42
8:9:210:GLU:HA	8:9:215:LYS:HD2	2.00	0.42
9:A:907:GLU:CG	9:A:908:ASP:N	2.69	0.42
10:B:425:HIS:HA	10:B:455:SER:OG	2.19	0.42
11:C:83:LEU:HB2	11:C:118:LEU:HD11	2.01	0.42
12:D:222:PHE:O	12:D:225:PRO:HD2	2.20	0.42
12:D:301:TRP:HD1	12:D:355:CYS:SG	2.42	0.42
13:E:215:ARG:HA	13:E:218:ILE:HB	2.01	0.42
13:E:427:LEU:HD12	13:E:432:LEU:HD12	2.01	0.42
1:2:505:ILE:HD13	1:2:552:ILE:HG12	2.01	0.42
1:2:518:SER:OG	1:2:537:ILE:O	2.33	0.42
3:4:678:ILE:H	3:4:678:ILE:HD12	1.83	0.42
3:4:862:GLN:HE22	3:4:913:GLU:CD	2.21	0.42
4:5:141:SER:H	4:5:161:ARG:HD2	1.84	0.42
5:6:373:MET:HA	5:6:374:PRO:HD2	1.85	0.42
5:6:270:LEU:HD11	5:6:398:THR:HG23	2.01	0.42
5:6:505:LEU:HA	5:6:505:LEU:HD23	1.85	0.42
5:6:561:GLU:CD	5:6:561:GLU:H	2.22	0.42
5:6:560:VAL:HB	5:6:561:GLU:HG3	2.01	0.42
5:6:778:LYS:HG2	5:6:782:LYS:HZ3	1.84	0.42
5:6:977:ILE:HG22	5:6:978:HIS:CD2	2.54	0.42
6:7:142:ILE:O	6:7:146:ARG:HG3	2.19	0.42
6:7:745:PHE:O	6:7:749:LYS:HG2	2.19	0.42
8:9:64:LYS:HD3	9:A:465:SER:O	2.19	0.42
9:A:485:LYS:HD2	9:A:599:ALA:CB	2.46	0.42
9:A:845:ILE:O	9:A:849:LEU:HB2	2.20	0.42
12:D:334:LEU:HA	12:D:334:LEU:HD12	1.81	0.42
13:E:327:ILE:CD1	13:E:419:GLU:HG3	2.46	0.42
2:3:161:PHE:CE2	2:3:295:VAL:HG11	2.55	0.42
3:4:435:VAL:CG1	3:4:463:VAL:HG12	2.49	0.42
4:5:401:PRO:HA	4:5:402:ASP:HA	1.72	0.42
4:5:656:ILE:O	4:5:660:THR:HG23	2.19	0.42
5:6:645:ASP:HB3	5:6:646:ILE:H	1.55	0.42
6:7:149:ARG:NH1	6:7:152:ARG:HH11	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:228:ARG:HH12	6:7:326:HIS:CD2	2.38	0.42
6:7:537:ILE:O	6:7:540:VAL:N	2.53	0.42
17:9:2001:AGS:O2B	17:9:2001:AGS:O3G	2.36	0.42
8:9:448:ASP:HA	8:9:449:THR:HA	1.72	0.42
8:9:481:LYS:HE3	9:A:819:GLU:HB3	1.90	0.42
1:2:591:LEU:CD1	1:2:631:ILE:HD13	2.47	0.42
1:2:695:LEU:O	1:2:699:VAL:HG23	2.19	0.42
2:3:535:LEU:CD1	2:3:539:LEU:HB2	2.50	0.42
3:4:385:ILE:HG21	5:6:176:ARG:CZ	2.50	0.42
3:4:525:SER:HA	3:4:742:LEU:HD22	2.01	0.42
3:4:894:SER:HB2	9:A:840:LYS:CE	2.50	0.42
4:5:568:ILE:O	4:5:572:VAL:HG23	2.19	0.42
5:6:370:THR:HA	5:6:371:GLY:HA2	1.68	0.42
5:6:576:ASP:CG	5:6:577:PRO:N	2.72	0.42
6:7:435:LEU:HG	6:7:520:ILE:HG12	2.00	0.42
6:7:500:ASP:HA	6:7:501:PRO:HD2	1.87	0.42
8:9:333:LYS:O	8:9:337:VAL:HG23	2.19	0.42
10:B:296:ILE:O	10:B:299:LYS:HG2	2.20	0.42
10:B:436:THR:HG22	10:B:440:MET:HE2	2.01	0.42
11:C:77:ASP:O	11:C:80:GLU:HB2	2.20	0.42
12:D:448:ILE:O	12:D:449:LYS:HB2	2.19	0.42
13:E:165:LYS:HA	13:E:165:LYS:HD3	1.81	0.42
13:E:74:LEU:HD22	13:E:108:LEU:HD22	2.01	0.42
15:M:18:DT:H1'	16:N:74:DT:O2	2.20	0.42
1:2:548:ALA:CB	17:2:2001:AGS:H8	2.39	0.42
1:2:686:LEU:HD11	1:2:688:ASP:OD1	2.16	0.42
1:2:533:ILE:CG2	1:2:811:GLU:OE2	2.67	0.42
2:3:116:VAL:O	2:3:178:LYS:HG2	2.19	0.42
2:3:100:LEU:HB2	2:3:159:GLY:HA2	2.01	0.42
3:4:203:TYR:HD2	3:4:206:ARG:NH1	2.17	0.42
3:4:377:ASN:HA	3:4:378:GLU:HA	1.68	0.42
4:5:148:LEU:HD11	4:5:258:LEU:HG	2.02	0.42
5:6:309:PHE:HA	5:6:345:THR:O	2.20	0.42
5:6:644:MET:SD	5:6:649:GLN:OE1	2.78	0.42
6:7:374:THR:OG1	6:7:375:TYR:N	2.48	0.42
6:7:634:GLU:OE2	6:7:637:LYS:HE2	2.19	0.42
7:8:292:LYS:HE2	7:8:292:LYS:HB3	1.94	0.42
8:9:482:THR:HB	8:9:483:LYS:C	2.40	0.42
9:A:602:MET:O	9:A:604:LEU:N	2.44	0.42
10:B:353:LYS:HG3	10:B:360:CYS:C	2.40	0.42
10:B:281:PHE:HZ	11:C:565:LYS:HD2	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:128:ILE:HB	12:D:150:LEU:HD11	2.01	0.42
12:D:146:ILE:O	12:D:150:LEU:HB2	2.19	0.42
12:D:298:ILE:HG13	12:D:301:TRP:N	2.35	0.42
12:D:304:GLN:HA	12:D:307:GLU:HG2	2.02	0.42
12:D:292:LEU:HB3	12:D:309:LEU:HD11	2.01	0.42
9:A:800:THR:HG21	12:D:330:THR:O	2.20	0.42
13:E:452:VAL:HG13	13:E:454:VAL:HG22	2.01	0.42
1:2:302:THR:HB	1:2:304:TYR:CE2	2.55	0.42
2:3:28:PHE:HE1	2:3:129:LEU:CD1	2.33	0.42
3:4:277:LYS:O	3:4:281:VAL:HG23	2.19	0.42
3:4:360:ILE:HD12	3:4:365:ILE:HG12	2.02	0.42
3:4:591:THR:HG22	3:4:592:SER:O	2.20	0.42
4:5:473:ASP:OD1	4:5:516:ARG:HB3	2.19	0.42
6:7:248:VAL:HG11	6:7:345:PRO:HD3	2.00	0.42
6:7:356:LEU:HA	6:7:357:PRO:HD3	1.92	0.42
6:7:440:VAL:C	6:7:441:ASP:OD1	2.54	0.42
6:7:466:LYS:HB3	6:7:466:LYS:HE2	1.87	0.42
6:7:738:GLU:HA	6:7:739:SER:HA	1.65	0.42
6:7:81:ASP:N	6:7:81:ASP:OD1	2.51	0.42
7:8:195:VAL:HB	7:8:236:LEU:HB2	2.02	0.42
7:8:193:THR:HG21	7:8:287:ILE:HD12	2.02	0.42
7:8:76:ASN:HB3	7:8:89:LEU:HD11	2.01	0.42
8:9:180:SER:OG	8:9:181:ILE:N	2.52	0.42
8:9:399:ASN:HB2	10:B:573:ILE:HD11	2.02	0.42
10:B:474:ASN:HA	11:C:319:LYS:HZ3	1.85	0.42
10:B:509:GLY:O	10:B:513:VAL:HG23	2.19	0.42
11:C:217:ASP:OD2	11:C:252:ARG:HG3	2.20	0.42
11:C:377:ILE:HA	11:C:380:LEU:HD12	2.01	0.42
7:8:471:MET:SD	12:D:431:PRO:HB3	2.59	0.42
12:D:469:PHE:O	12:D:470:THR:CG2	2.68	0.42
13:E:92:ILE:HD12	13:E:92:ILE:H	1.84	0.42
1:2:533:ILE:CG2	1:2:534:ARG:N	2.82	0.42
2:3:103:LEU:HA	2:3:106:PHE:HB3	2.02	0.42
3:4:426:SER:HB3	3:4:482:GLU:HG2	2.02	0.42
3:4:652:GLN:OE1	3:4:668:ARG:HA	2.20	0.42
3:4:651:GLN:O	3:4:653:THR:HG23	2.20	0.42
4:5:50:LEU:HD12	4:5:60:SER:CB	2.47	0.42
5:6:306:LYS:HZ3	5:6:321:VAL:HA	1.82	0.42
5:6:585:LEU:HD23	5:6:585:LEU:HA	1.34	0.42
5:6:710:ASP:HA	5:6:711:LEU:HA	1.33	0.42
5:6:761:PHE:HE2	5:6:815:CYS:HB3	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:332:ARG:C	7:8:334:THR:HA	2.39	0.42
8:9:180:SER:H	8:9:199:ILE:HD12	1.84	0.42
8:9:481:LYS:CD	9:A:891:CYS:CB	2.90	0.42
8:9:486:VAL:HG22	8:9:487:ASP:N	2.35	0.42
9:A:495:GLU:N	9:A:495:GLU:CD	2.73	0.42
9:A:602:MET:C	9:A:604:LEU:H	2.22	0.42
9:A:617:ILE:HG12	9:A:617:ILE:O	2.20	0.42
11:C:417:LEU:HD13	11:C:424:LEU:HD22	2.02	0.42
11:C:544:PHE:HD1	11:C:547:THR:HG21	1.85	0.42
12:D:137:HIS:CD2	13:E:106:PHE:CE1	3.08	0.42
12:D:128:ILE:HG13	12:D:212:VAL:HA	2.01	0.42
1:2:384:ASN:N	1:2:384:ASN:OD1	2.53	0.42
2:3:493:GLN:HB3	2:3:509:ARG:HG2	2.02	0.42
3:4:212:ARG:NH1	3:4:494:GLU:HB3	2.34	0.42
3:4:509:ILE:HG23	3:4:750:TYR:HE1	1.85	0.42
3:4:568:GLY:N	3:4:574:LYS:NZ	2.68	0.42
3:4:796:ARG:HA	3:4:796:ARG:HD3	1.75	0.42
3:4:900:SER:O	3:4:903:ILE:HB	2.19	0.42
3:4:913:GLU:HB2	3:4:915:LYS:HG2	2.02	0.42
5:6:558:SER:HB3	5:6:559:THR:HG22	2.01	0.42
5:6:600:GLY:HA2	5:6:603:SER:OG	2.20	0.42
5:6:755:ILE:O	5:6:758:ALA:N	2.53	0.42
6:7:106:ILE:O	6:7:110:ALA:HB2	2.20	0.42
2:3:502:ILE:HG23	6:7:328:PRO:HD2	2.01	0.42
6:7:581:LEU:HB3	6:7:681:PHE:CD2	2.55	0.42
7:8:284:GLU:HA	7:8:287:ILE:HG22	2.02	0.42
5:6:518:GLU:OE2	7:8:504:ARG:HD2	2.18	0.42
8:9:437:PHE:O	8:9:440:TYR:HB3	2.19	0.42
9:A:840:LYS:HD3	9:A:840:LYS:HA	1.78	0.42
10:B:349:LEU:HD12	10:B:370:CYS:CB	2.49	0.42
11:C:265:LYS:HE3	11:C:271:ASN:ND2	2.34	0.42
11:C:491:LEU:CD1	11:C:492:LEU:HG	2.49	0.42
12:D:298:ILE:CG1	12:D:301:TRP:H	2.33	0.42
13:E:243:ILE:CG1	13:E:244:VAL:N	2.82	0.42
13:E:283:ALA:HA	13:E:286:LYS:HE3	2.02	0.42
1:2:419:LYS:HB3	1:2:422:GLU:CD	2.39	0.41
1:2:523:VAL:HG13	1:2:525:LYS:HE3	2.01	0.41
3:4:236:LEU:HD21	7:8:579:LYS:HG3	2.02	0.41
3:4:678:ILE:CD1	3:4:693:ASP:HB2	2.42	0.41
4:5:151:LEU:HD23	4:5:151:LEU:HA	1.76	0.41
4:5:371:THR:HA	4:5:389:VAL:HG21	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:697:PRO:HB3	5:6:577:PRO:CG	2.50	0.41
5:6:951:LEU:O	5:6:954:TYR:HB3	2.19	0.41
6:7:731:THR:OG1	6:7:732:ASN:N	2.52	0.41
7:8:194:GLY:HA2	7:8:263:TRP:HD1	1.84	0.41
7:8:323:THR:HG22	7:8:396:ASN:HD21	1.85	0.41
7:8:561:LEU:HA	7:8:564:ILE:HG12	2.02	0.41
8:9:483:LYS:O	8:9:485:PHE:N	2.53	0.41
8:9:97:SER:C	8:9:99:HIS:H	2.23	0.41
10:B:435:ASN:OD1	10:B:436:THR:N	2.53	0.41
10:B:443:PHE:CE2	11:C:113:THR:HG21	2.54	0.41
10:B:422:LEU:HD11	10:B:452:ILE:HD12	2.01	0.41
12:D:211:THR:HG23	12:D:211:THR:O	2.20	0.41
12:D:349:LYS:C	12:D:351:PHE:H	2.23	0.41
12:D:376:LEU:HD23	12:D:377:THR:N	2.35	0.41
12:D:452:LEU:O	12:D:452:LEU:HD12	2.19	0.41
12:D:506:MET:SD	12:D:509:ILE:HG22	2.59	0.41
12:D:58:GLN:NE2	12:D:64:LEU:HD11	2.35	0.41
1:2:538:ASN:HB3	1:2:677:PHE:CD1	2.55	0.41
1:2:583:ASP:OD2	1:2:588:GLU:O	2.38	0.41
1:2:813:ILE:HG12	1:2:813:ILE:H	1.75	0.41
3:4:192:THR:HG22	3:4:195:ARG:NH2	2.35	0.41
3:4:205:PHE:HZ	3:4:246:ARG:NH2	2.16	0.41
3:4:311:CYS:SG	3:4:312:LYS:N	2.93	0.41
3:4:519:TYR:CZ	3:4:538:LYS:HD3	2.55	0.41
4:5:148:LEU:HD12	4:5:260:GLU:N	2.35	0.41
4:5:612:PRO:HG3	4:5:665:LYS:HG3	2.01	0.41
4:5:91:GLU:HA	4:5:94:ILE:HG22	2.03	0.41
5:6:740:GLU:C	5:6:742:ILE:H	2.23	0.41
7:8:572:HIS:N	7:8:579:LYS:HB3	2.35	0.41
11:C:276:TYR:O	11:C:280:ILE:HG13	2.20	0.41
13:E:118:GLN:NE2	13:E:119:TYR:HE2	2.09	0.41
12:D:467:ASP:HB2	13:E:172:GLU:CD	2.40	0.41
13:E:285:TYR:HE2	13:E:289:ILE:HD11	1.85	0.41
13:E:247:PHE:CE1	13:E:293:LEU:O	2.73	0.41
1:2:302:THR:CG2	1:2:304:TYR:CE2	3.03	0.41
1:2:419:LYS:HE3	1:2:422:GLU:OE2	2.21	0.41
2:3:379:LYS:O	2:3:383:LEU:HG	2.20	0.41
2:3:673:GLN:O	2:3:676:ILE:HB	2.19	0.41
3:4:284:ILE:HG21	3:4:296:ILE:HG23	1.99	0.41
3:4:538:LYS:HE3	3:4:538:LYS:HB2	1.79	0.41
3:4:526:ILE:O	3:4:580:TYR:CZ	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:725:THR:HG21	6:7:657:ASN:HA	2.02	0.41
3:4:784:SER:C	3:4:786:SER:H	2.22	0.41
3:4:897:ARG:HG3	3:4:898:VAL:O	2.21	0.41
2:3:174:GLN:HG3	4:5:281:TYR:HA	2.02	0.41
5:6:132:VAL:HG22	5:6:133:GLU:OE1	2.20	0.41
5:6:767:LYS:HG2	5:6:818:GLU:O	2.19	0.41
5:6:794:ARG:HB2	5:6:795:ILE:HG22	2.02	0.41
6:7:113:PHE:O	6:7:117:PHE:HB3	2.21	0.41
6:7:398:GLU:O	6:7:402:MET:HG3	2.19	0.41
6:7:397:VAL:HA	6:7:400:ARG:HH21	1.84	0.41
6:7:537:ILE:HA	6:7:540:VAL:HG23	2.03	0.41
7:8:586:LEU:HB2	7:8:591:PHE:HE2	1.84	0.41
8:9:291:TYR:N	8:9:296:MET:SD	2.93	0.41
8:9:296:MET:HB3	8:9:331:LEU:HD11	2.02	0.41
9:A:528:LEU:HD11	9:A:563:VAL:HG22	2.02	0.41
10:B:276:LEU:HA	10:B:279:ASN:ND2	2.34	0.41
10:B:366:TYR:C	10:B:430:PRO:CG	2.71	0.41
5:6:918:ARG:NH1	12:D:442:PHE:O	2.52	0.41
13:E:33:LEU:CD1	13:E:185:PRO:O	2.59	0.41
1:2:763:LEU:HA	1:2:766:TYR:HB3	2.02	0.41
2:3:164:HIS:HD2	2:3:179:LEU:O	2.04	0.41
2:3:197:ILE:HD12	2:3:251:ILE:HD12	2.03	0.41
2:3:261:MET:HG3	2:3:263:GLU:N	2.36	0.41
2:3:490:MET:SD	2:3:542:ARG:HB3	2.60	0.41
2:3:833:GLU:O	2:3:837:ARG:HG2	2.20	0.41
3:4:388:ARG:N	5:6:176:ARG:HG3	2.35	0.41
3:4:413:HIS:ND1	6:7:250:ASP:OD2	2.53	0.41
3:4:846:ASP:OD1	3:4:846:ASP:N	2.53	0.41
3:4:894:SER:HB2	9:A:840:LYS:HZ1	1.85	0.41
6:7:593:ARG:HH11	6:7:593:ARG:HG2	1.85	0.41
7:8:199:PHE:HB2	7:8:258:VAL:O	2.20	0.41
7:8:203:LYS:C	7:8:205:ILE:H	2.24	0.41
7:8:48:TYR:CG	7:8:49:ALA:N	2.89	0.41
7:8:510:ALA:O	7:8:514:THR:HG23	2.20	0.41
8:9:100:ARG:NH1	8:9:253:THR:OG1	2.52	0.41
9:A:708:LYS:HZ2	12:D:270:GLN:N	2.18	0.41
11:C:83:LEU:HD13	11:C:118:LEU:HD21	2.03	0.41
12:D:98:VAL:HG13	12:D:248:PHE:CE1	2.55	0.41
1:2:581:ARG:HE	16:N:45:DA:H5"	1.86	0.41
2:3:202:TYR:CE1	2:3:207:GLY:HA2	2.55	0.41
2:3:200:VAL:O	2:3:244:GLU:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:196:LEU:HD12	2:3:250:PHE:HE1	1.84	0.41
2:3:394:GLU:OE2	2:3:395:ASN:HB3	2.20	0.41
2:3:441:GLY:HA2	2:3:460:GLY:HA3	2.01	0.41
2:3:783:ILE:HA	2:3:787:PRO:HG2	2.03	0.41
3:4:198:LEU:HA	3:4:226:TYR:HD2	1.86	0.41
3:4:404:ASP:OD1	3:4:405:PHE:N	2.53	0.41
3:4:497:GLU:HA	3:4:498:VAL:HA	1.52	0.41
4:5:393:MET:HE3	4:5:665:LYS:HB3	2.02	0.41
4:5:618:ALA:HB1	4:5:677:VAL:HG21	2.02	0.41
3:4:478:THR:HB	5:6:280:ARG:NH1	2.35	0.41
1:2:444:PHE:CE1	5:6:404:VAL:HG22	2.45	0.41
5:6:780:LEU:CD2	5:6:795:ILE:HG12	2.51	0.41
6:7:479:ARG:HH11	6:7:515:LEU:HD11	1.86	0.41
6:7:581:LEU:HD22	6:7:681:PHE:HD2	1.85	0.41
6:7:650:PRO:HD3	6:7:701:LYS:HG2	2.03	0.41
6:7:674:GLU:OE2	6:7:677:SER:O	2.39	0.41
6:7:679:PHE:O	6:7:680:SER:OG	2.33	0.41
6:7:763:GLU:HG2	6:7:764:ASN:N	2.35	0.41
7:8:322:GLU:HG2	7:8:323:THR:N	2.35	0.41
7:8:539:VAL:HG21	7:8:551:THR:HA	2.03	0.41
8:9:481:LYS:HZ1	9:A:819:GLU:CB	2.15	0.41
9:A:809:LEU:HD23	9:A:809:LEU:HA	1.74	0.41
10:B:323:ARG:NH1	10:B:488:VAL:HG11	2.36	0.41
10:B:379:ILE:O	10:B:383:LEU:HB3	2.20	0.41
11:C:251:LEU:HD23	11:C:251:LEU:HA	1.83	0.41
11:C:328:TYR:OH	11:C:338:ILE:HG22	2.21	0.41
11:C:372:ALA:C	11:C:374:ALA:N	2.72	0.41
12:D:61:TYR:CD2	12:D:63:THR:HB	2.55	0.41
13:E:433:ILE:HD12	13:E:452:VAL:HA	2.03	0.41
1:2:331:PHE:HZ	1:2:387:ARG:HH12	1.68	0.41
1:2:486:LYS:O	1:2:489:ARG:HG2	2.21	0.41
2:3:402:ASP:N	2:3:402:ASP:OD1	2.51	0.41
3:4:639:ASP:HA	3:4:642:ARG:HD3	2.01	0.41
4:5:239:ASP:N	4:5:239:ASP:OD1	2.52	0.41
5:6:560:VAL:CG2	5:6:561:GLU:OE2	2.68	0.41
5:6:555:VAL:HG13	5:6:808:GLU:OE1	2.19	0.41
6:7:244:ILE:HD11	6:7:479:ARG:NH1	2.22	0.41
6:7:400:ARG:HB3	6:7:637:LYS:HZ1	1.83	0.41
6:7:504:ASP:HA	6:7:505:GLU:HA	1.93	0.41
6:7:715:GLU:OE2	6:7:718:ARG:CZ	2.68	0.41
6:7:744:ILE:O	6:7:748:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:8:282:LEU:O	7:8:285:GLN:HB2	2.19	0.41
10:B:467:ASN:HA	10:B:470:ALA:HB3	2.03	0.41
11:C:377:ILE:HA	11:C:380:LEU:HB2	2.03	0.41
11:C:387:GLY:O	11:C:390:GLU:HB3	2.20	0.41
11:C:65:HIS:ND1	11:C:69:HIS:HB2	2.35	0.41
11:C:84:LYS:HB3	11:C:84:LYS:HE3	1.88	0.41
12:D:366:ILE:O	12:D:369:LYS:HB2	2.20	0.41
2:3:342:LEU:HD21	2:3:661:GLN:HE21	1.86	0.41
2:3:393:LEU:HD22	6:7:623:ASN:HA	2.03	0.41
2:3:425:THR:HB	2:3:657:ARG:HB3	2.03	0.41
2:3:669:PRO:O	2:3:720:THR:HA	2.20	0.41
3:4:197:PHE:CD1	3:4:254:THR:HG21	2.56	0.41
4:5:146:ILE:HB	4:5:160:VAL:HG13	2.03	0.41
4:5:237:GLY:HA2	4:5:240:PRO:HG3	2.02	0.41
4:5:567:SER:HA	4:5:570:ASN:HB2	2.02	0.41
5:6:772:TYR:CZ	12:D:430:ALA:HB1	2.56	0.41
5:6:909:TYR:O	5:6:912:MET:HB2	2.20	0.41
6:7:210:ASN:O	6:7:213:ARG:HG2	2.20	0.41
6:7:349:VAL:HG21	6:7:381:VAL:HG13	2.03	0.41
6:7:466:LYS:HA	6:7:469:LEU:HD13	2.03	0.41
7:8:192:PRO:HD3	7:8:231:HIS:CE1	2.56	0.41
7:8:281:HIS:O	7:8:285:GLN:HG3	2.21	0.41
7:8:574:VAL:N	7:8:575:ASP:O	2.54	0.41
9:A:511:VAL:HG22	9:A:531:LYS:NZ	2.36	0.41
9:A:587:THR:HB	9:A:616:ARG:NH2	2.35	0.41
11:C:524:LEU:HA	11:C:544:PHE:HZ	1.85	0.41
12:D:317:ARG:CG	12:D:318:SER:H	2.32	0.41
12:D:419:ILE:HD12	12:D:420:LYS:N	2.36	0.41
13:E:128:LEU:H	13:E:162:ILE:HG13	1.85	0.41
13:E:11:ARG:NH1	13:E:189:PHE:HB3	2.36	0.41
13:E:1:MET:N	13:E:3:VAL:HG22	2.36	0.41
13:E:431:LYS:HD2	13:E:431:LYS:HA	1.83	0.41
1:2:815:ARG:O	1:2:818:GLU:HG2	2.21	0.41
3:4:880:SER:HA	3:4:925:ARG:HA	2.03	0.41
4:5:293:THR:O	4:5:333:ILE:HG21	2.21	0.41
4:5:426:LEU:HB3	4:5:478:CYS:HB3	2.02	0.41
5:6:185:LEU:O	5:6:188:VAL:HB	2.21	0.41
5:6:355:ASP:OD2	5:6:383:GLY:O	2.39	0.41
5:6:522:ASP:HB2	5:6:525:ILE:HG23	2.02	0.41
5:6:703:ALA:N	5:6:704:PRO:HD2	2.36	0.41
5:6:793:TYR:HA	5:6:794:ARG:HA	1.91	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:824:ILE:HG23	5:6:824:ILE:HD12	1.88	0.41
5:6:916:ILE:HG23	5:6:917:VAL:N	2.36	0.41
8:9:198:GLN:HB3	8:9:208:PHE:CZ	2.55	0.41
8:9:68:LEU:HG	8:9:332:ARG:HD2	2.03	0.41
9:A:486:THR:HG22	17:A:2001:AGS:O1A	2.20	0.41
9:A:886:ASN:HD21	9:A:889:ILE:CD1	2.34	0.41
11:C:107:LEU:HB2	11:C:265:LYS:HG3	2.03	0.41
11:C:349:ASP:O	11:C:353:ILE:HG12	2.20	0.41
11:C:491:LEU:CD1	11:C:492:LEU:N	2.74	0.41
12:D:285:VAL:HG22	12:D:324:ILE:HD11	2.02	0.41
12:D:298:ILE:HD11	12:D:301:TRP:HB2	2.03	0.41
12:D:144:ASN:HD22	13:E:110:LYS:NZ	2.17	0.41
13:E:70:TRP:CB	13:E:145:LEU:CD2	2.95	0.41
1:2:855:ARG:NH1	13:E:352:ARG:CZ	2.83	0.41
11:C:498:LEU:CG	13:E:417:ASN:CB	2.84	0.41
1:2:419:LYS:HG3	1:2:420:PRO:HD2	2.02	0.41
1:2:459:ARG:HG3	1:2:460:GLU:C	2.41	0.41
3:4:373:ARG:HA	3:4:373:ARG:HD3	1.78	0.41
3:4:543:GLN:CA	3:4:562:ILE:HD11	2.51	0.41
5:6:702:THR:OG1	5:6:704:PRO:HD2	2.21	0.41
5:6:802:SER:HB2	5:6:805:ARG:HH21	1.85	0.41
5:6:971:ASP:OD2	5:6:973:ILE:HG13	2.20	0.41
6:7:401:VAL:HG12	6:7:405:ILE:HG13	2.03	0.41
6:7:631:THR:O	6:7:631:THR:CG2	2.66	0.41
6:7:650:PRO:HG2	6:7:697:GLN:HG2	2.02	0.41
7:8:470:PHE:CE2	7:8:473:LYS:CB	3.01	0.41
7:8:541:SER:C	7:8:543:GLN:H	2.24	0.41
8:9:241:THR:O	8:9:245:LEU:HG	2.21	0.41
8:9:481:LYS:H	8:9:483:LYS:CB	2.34	0.41
9:A:571:MET:O	9:A:578:ILE:HG21	2.20	0.41
10:B:419:LYS:HA	10:B:449:GLN:O	2.21	0.41
11:C:292:LEU:HD11	11:C:328:TYR:CE2	2.55	0.41
12:D:112:LEU:HD21	12:D:215:ILE:CD1	2.49	0.41
13:E:197:VAL:CG1	13:E:201:LEU:HD13	2.51	0.41
13:E:63:GLU:HB3	13:E:66:GLU:HG2	2.02	0.41
1:2:679:ILE:C	1:2:680:LEU:HD12	2.41	0.41
3:4:332:VAL:HG13	3:4:397:ILE:HG23	2.03	0.41
3:4:332:VAL:CG1	3:4:397:ILE:CG2	2.99	0.41
3:4:647:GLU:OE2	3:4:654:ILE:CA	2.63	0.41
3:4:919:LEU:HD22	3:4:925:ARG:HB2	2.02	0.41
4:5:94:ILE:HG21	4:5:137:LEU:HG	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:527:VAL:CG2	4:5:572:VAL:HG13	2.39	0.41
5:6:580:SER:HB3	17:6:1101:AGS:N7	2.35	0.41
6:7:208:SER:HA	6:7:222:SER:HB2	2.02	0.41
6:7:592:SER:HB2	6:7:685:THR:HG21	2.03	0.41
6:7:646:LYS:HA	6:7:701:LYS:NZ	2.35	0.41
6:7:80:ILE:O	6:7:204:PHE:HA	2.20	0.41
8:9:437:PHE:CE1	8:9:455:ARG:HA	2.55	0.41
10:B:520:ASN:O	10:B:524:MET:HG3	2.21	0.41
11:C:292:LEU:HD11	11:C:328:TYR:CZ	2.56	0.41
12:D:108:LYS:HE2	17:D:2001:AGS:O3B	2.21	0.41
12:D:457:LYS:HD3	12:D:499:PHE:CE1	2.55	0.41
13:E:108:LEU:O	13:E:112:LEU:HG	2.21	0.41
13:E:217:ARG:CA	13:E:220:GLU:HB2	2.44	0.41
1:2:353:GLN:HA	1:2:354:ASP:HA	1.80	0.41
1:2:490:ASP:OD2	1:2:492:GLY:N	2.46	0.41
1:2:832:TYR:HA	1:2:835:ASP:OD2	2.21	0.41
2:3:28:PHE:CD1	2:3:125:ALA:CA	3.04	0.41
3:4:718:ARG:O	3:4:722:LYS:HG2	2.21	0.41
4:5:50:LEU:N	4:5:61:LEU:HD11	2.36	0.41
5:6:540:HIS:C	5:6:542:ALA:H	2.24	0.41
6:7:318:LEU:HD22	6:7:320:GLN:HG2	2.03	0.41
6:7:470:LEU:HA	6:7:470:LEU:HD23	1.82	0.41
6:7:482:TYR:HA	6:7:522:CYS:HB2	2.03	0.41
6:7:543:GLN:CG	6:7:544:GLN:N	2.82	0.41
6:7:763:GLU:N	6:7:763:GLU:OE1	2.54	0.41
9:A:592:LYS:C	9:A:593:LEU:HD12	2.41	0.41
10:B:276:LEU:HD23	10:B:279:ASN:ND2	2.35	0.41
10:B:282:ASN:HA	10:B:285:PHE:CD2	2.56	0.41
10:B:321:SER:HB2	10:B:486:SER:HB2	0.42	0.41
11:C:458:ILE:CG2	11:C:459:ASP:H	2.24	0.41
12:D:298:ILE:CG1	12:D:301:TRP:N	2.83	0.41
13:E:277:ASN:ND2	13:E:284:LEU:HD21	2.36	0.41
16:N:71:DC:N3	16:N:72:DA:N6	2.69	0.41
1:2:392:GLU:OE1	1:2:397:VAL:HG22	2.22	0.40
1:2:323:VAL:HG21	1:2:394:PRO:HD2	2.03	0.40
1:2:804:PRO:HG2	1:2:845:PHE:CE1	2.55	0.40
2:3:164:HIS:CD2	2:3:175:HIS:HD2	2.39	0.40
2:3:243:THR:HB	2:3:245:TYR:CE2	2.56	0.40
2:3:400:ARG:O	2:3:707:ARG:NH2	2.51	0.40
3:4:565:LEU:HD12	3:4:702:PHE:CE2	2.56	0.40
4:5:156:VAL:HA	4:5:297:ILE:HG23	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:274:HIS:ND1	5:6:288:LEU:HD21	2.36	0.40
5:6:294:VAL:HG23	5:6:393:ASP:O	2.20	0.40
7:8:196:LEU:HG	7:8:230:PHE:HZ	1.84	0.40
8:9:409:LYS:HZ3	8:9:501:GLU:CG	2.34	0.40
9:A:791:ILE:HD13	9:A:903:ARG:NH1	2.24	0.40
10:B:400:VAL:HG13	10:B:403:GLN:HE21	1.85	0.40
11:C:119:LYS:HG2	11:C:128:LEU:HD21	2.02	0.40
11:C:325:LEU:O	11:C:328:TYR:N	2.51	0.40
12:D:299:SER:CB	12:D:300:PRO:CD	2.96	0.40
12:D:364:LEU:O	12:D:367:TYR:N	2.54	0.40
12:D:458:ASN:ND2	13:E:250:TYR:O	2.54	0.40
16:N:53:DT:H6	16:N:53:DT:H2'	1.74	0.40
1:2:230:ARG:NH1	1:2:243:GLU:HB3	2.37	0.40
1:2:696:ALA:HB3	5:6:774:VAL:HG13	2.03	0.40
2:3:364:SER:HB3	2:3:375:ASP:HB3	2.03	0.40
2:3:676:ILE:HA	2:3:679:ILE:HG12	2.04	0.40
5:6:326:LYS:H	5:6:327:TYR:HA	1.85	0.40
6:7:531:GLU:O	6:7:535:THR:HG23	2.20	0.40
6:7:461:ASP:N	6:7:573:ARG:HD3	2.30	0.40
7:8:291:PRO:CB	7:8:292:LYS:HA	2.52	0.40
7:8:305:LEU:O	7:8:309:ASP:N	2.54	0.40
7:8:515:GLN:NE2	7:8:543:GLN:HE21	2.19	0.40
9:A:529:TRP:CH2	9:A:545:SER:HB2	2.56	0.40
12:D:338:LYS:HE3	12:D:338:LYS:HB2	1.84	0.40
12:D:468:PHE:O	12:D:469:PHE:HD1	2.04	0.40
12:D:396:ARG:NH2	12:D:524:TYR:CD1	2.89	0.40
13:E:243:ILE:HD12	13:E:244:VAL:N	2.36	0.40
1:2:540:LEU:HD12	1:2:648:ALA:HB3	2.02	0.40
2:3:176:LEU:O	2:3:178:LYS:HG3	2.21	0.40
3:4:281:VAL:HA	3:4:284:ILE:HG12	2.04	0.40
3:4:526:ILE:O	3:4:580:TYR:CE2	2.74	0.40
3:4:725:THR:O	3:4:728:TYR:HB2	2.21	0.40
3:4:765:ALA:O	3:4:819:LEU:HD12	2.21	0.40
4:5:60:SER:N	4:5:135:PHE:HB3	2.36	0.40
5:6:115:PHE:O	5:6:118:PHE:HB3	2.22	0.40
5:6:401:GLU:C	5:6:401:GLU:CD	2.80	0.40
5:6:520:VAL:HG23	5:6:521:LYS:N	2.36	0.40
5:6:949:GLY:O	5:6:953:GLU:HB2	2.21	0.40
6:7:743:LYS:O	6:7:746:THR:OG1	2.23	0.40
7:8:131:LYS:HD3	7:8:136:SER:CB	2.51	0.40
7:8:41:ASP:HB2	7:8:245:THR:HB	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:9:209:LEU:HG	8:9:250:LYS:HD2	2.02	0.40
8:9:401:ASN:HB3	8:9:405:THR:H	1.86	0.40
10:B:292:LYS:O	10:B:296:ILE:HG12	2.21	0.40
10:B:393:THR:HA	10:B:399:HIS:HD2	1.86	0.40
11:C:136:SER:HB2	11:C:142:MET:CE	2.51	0.40
11:C:275:LYS:HD2	11:C:425:ILE:HG13	2.04	0.40
10:B:471:GLN:CB	11:C:313:ASN:HD22	2.33	0.40
11:C:368:ILE:O	11:C:369:LYS:HB2	2.21	0.40
12:D:108:LYS:HE3	17:D:2001:AGS:O3B	2.21	0.40
12:D:358:ILE:HB	12:D:363:PHE:CE2	2.56	0.40
5:6:833:GLN:HE21	12:D:425:ARG:HA	1.86	0.40
12:D:70:ILE:C	12:D:71:ILE:HG13	2.41	0.40
13:E:215:ARG:HA	13:E:218:ILE:HD12	2.02	0.40
13:E:42:GLY:HA2	17:E:2001:AGS:H5'2	2.02	0.40
14:F:415:ASP:OD1	14:F:416:ASP:N	2.54	0.40
15:M:11:DT:H2"	15:M:12:DA:C8	2.56	0.40
1:2:622:GLU:O	1:2:625:GLU:HB3	2.21	0.40
2:3:34:THR:HG21	2:3:106:PHE:HD1	1.86	0.40
2:3:261:MET:HB3	2:3:264:MET:HB2	2.04	0.40
3:4:367:GLU:N	3:4:367:GLU:OE1	2.53	0.40
3:4:417:LEU:HD23	3:4:435:VAL:HG11	2.01	0.40
3:4:568:GLY:C	3:4:574:LYS:HZ1	2.24	0.40
3:4:828:LEU:HA	3:4:828:LEU:HD23	1.83	0.40
3:4:879:ASP:HB2	3:4:925:ARG:HG3	2.03	0.40
5:6:759:ARG:HG3	5:6:759:ARG:HH11	1.87	0.40
6:7:763:GLU:HG2	6:7:764:ASN:H	1.87	0.40
7:8:367:TRP:NE1	7:8:370:ALA:HB2	2.37	0.40
8:9:289:GLN:OE1	10:B:515:GLN:HG2	2.20	0.40
8:9:401:ASN:O	8:9:405:THR:OG1	2.33	0.40
8:9:80:ALA:HB2	8:9:120:MET:HG2	2.02	0.40
9:A:470:ASP:HB3	9:A:592:LYS:HZ2	1.85	0.40
9:A:629:HIS:HD2	9:A:697:ALA:HB3	1.86	0.40
9:A:830:LYS:HE2	12:D:515:ARG:NH2	2.36	0.40
10:B:471:GLN:NE2	11:C:114:THR:HG21	2.36	0.40
10:B:591:THR:HG22	10:B:601:TRP:HB3	2.03	0.40
11:C:325:LEU:HA	11:C:325:LEU:HD23	1.88	0.40
11:C:84:LYS:HA	11:C:87:ILE:HG22	2.03	0.40
12:D:111:LEU:O	12:D:114:TYR:HB3	2.21	0.40
12:D:116:LEU:HD23	12:D:116:LEU:HA	1.82	0.40
12:D:77:ASP:N	12:D:77:ASP:OD1	2.55	0.40
12:D:90:ILE:HG13	12:D:91:ILE:H	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:D:339:ASN:OD1	13:E:185:PRO:HB3	2.21	0.40
13:E:433:ILE:HD12	13:E:433:ILE:HA	1.88	0.40
13:E:442:ASP:CG	13:E:448:VAL:HG22	2.41	0.40
15:M:18:DT:H3	16:N:72:DA:N6	2.18	0.40
1:2:237:MET:O	1:2:238:ASN:HB2	2.22	0.40
3:4:760:PRO:HA	3:4:815:ASN:O	2.22	0.40
5:6:556:HIS:HB2	5:6:675:ARG:HH21	1.86	0.40
7:8:207:TYR:OH	7:8:213:ALA:O	2.24	0.40
8:9:125:LYS:O	8:9:129:LEU:HB2	2.21	0.40
8:9:274:ARG:HH12	10:B:346:GLU:CB	2.27	0.40
9:A:868:PHE:O	9:A:872:GLN:HB3	2.21	0.40
10:B:555:GLU:HA	10:B:599:ILE:HA	2.04	0.40
11:C:143:LEU:HD22	11:C:222:LEU:HD11	2.03	0.40
12:D:136:ILE:CG2	13:E:148:LYS:HG3	2.52	0.40
13:E:340:TYR:CE1	13:E:373:PRO:HD2	2.57	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	597/868 (69%)	545 (91%)	51 (8%)	1 (0%)	52	86
2	3	645/971 (66%)	599 (93%)	43 (7%)	3 (0%)	34	76
3	4	749/933 (80%)	633 (84%)	100 (13%)	16 (2%)	9	51
4	5	568/775 (73%)	538 (95%)	29 (5%)	1 (0%)	52	86
5	6	683/1017 (67%)	609 (89%)	63 (9%)	11 (2%)	12	56
6	7	716/845 (85%)	643 (90%)	58 (8%)	15 (2%)	9	51
7	8	509/604 (84%)	445 (87%)	56 (11%)	8 (2%)	12	56
8	9	368/513 (72%)	333 (90%)	30 (8%)	5 (1%)	14	58

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	A	362/914 (40%)	311 (86%)	47 (13%)	4 (1%)	17	63
10	B	309/620 (50%)	288 (93%)	17 (6%)	4 (1%)	15	59
11	C	502/616 (82%)	452 (90%)	41 (8%)	9 (2%)	11	54
12	D	441/529 (83%)	382 (87%)	45 (10%)	14 (3%)	5	43
13	E	407/479 (85%)	356 (88%)	44 (11%)	7 (2%)	11	55
14	F	13/435 (3%)	13 (100%)	0	0	100	100
All	All	6869/10119 (68%)	6147 (90%)	624 (9%)	98 (1%)	19	58

All (98) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	4	189	GLU
3	4	491	ASP
3	4	779	LYS
3	4	896	ASP
5	6	317	ILE
5	6	402	ILE
5	6	560	VAL
5	6	788	PHE
6	7	129	THR
6	7	464	VAL
6	7	544	GLN
10	B	418	ILE
10	B	430	PRO
11	C	458	ILE
11	C	498	LEU
12	D	300	PRO
13	E	25	ASP
2	3	844	VAL
3	4	490	VAL
3	4	609	VAL
3	4	856	VAL
3	4	857	ILE
5	6	133	GLU
5	6	569	ILE
6	7	26	VAL
6	7	365	ALA
6	7	441	ASP
6	7	531	GLU
8	9	448	ASP

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Mol	Chain	Res	Type
8	9	484	ARG
10	B	387	GLU
11	C	461	ILE
12	D	73	THR
12	D	441	THR
12	D	481	ALA
13	E	95	THR
13	E	278	ILE
3	4	786	SER
3	4	895	GLN
4	5	410	ILE
5	6	321	VAL
6	7	502	VAL
6	7	679	PHE
8	9	181	ILE
8	9	292	THR
9	A	898	VAL
11	C	460	THR
12	D	496	MET
13	E	161	LYS
2	3	440	VAL
3	4	501	ILE
3	4	783	ASP
6	7	375	TYR
6	7	628	LEU
7	8	134	VAL
7	8	204	ALA
7	8	529	TYR
7	8	575	ASP
11	C	427	LEU
11	C	497	VAL
12	D	210	ILE
12	D	319	ASN
12	D	475	VAL
12	D	480	ASN
2	3	172	THR
3	4	694	LEU
5	6	305	TYR
5	6	400	VAL
6	7	248	VAL
6	7	530	ASP
7	8	333	SER

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Mol	Chain	Res	Type
9	A	838	SER
11	C	456	GLU
12	D	435	VAL
13	E	418	ILE
1	2	224	ARG
3	4	743	PRO
5	6	577	PRO
6	7	677	SER
7	8	67	PRO
7	8	108	ASN
12	D	492	PHE
12	D	493	GLN
7	8	528	PRO
8	9	486	VAL
9	A	594	ILE
13	E	273	ILE
9	A	889	ILE
10	B	415	PRO
3	4	744	VAL
3	4	840	PRO
6	7	708	VAL
11	C	234	ILE
11	C	268	VAL
13	E	26	PRO
5	6	819	ILE
12	D	243	VAL
12	D	497	ILE

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	2	512/770 (66%)	510 (100%)	2 (0%)	93	97
2	3	573/835 (69%)	572 (100%)	1 (0%)	95	97
3	4	677/848 (80%)	676 (100%)	1 (0%)	95	97

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	5	516/688 (75%)	516 (100%)	0	100	100
5	6	569/886 (64%)	566 (100%)	3 (0%)	92	96
6	7	647/753 (86%)	647 (100%)	0	100	100
7	8	474/545 (87%)	473 (100%)	1 (0%)	95	97
8	9	343/470 (73%)	342 (100%)	1 (0%)	94	97
9	A	328/813 (40%)	327 (100%)	1 (0%)	94	97
10	B	296/573 (52%)	295 (100%)	1 (0%)	94	97
11	C	476/576 (83%)	476 (100%)	0	100	100
12	D	411/488 (84%)	410 (100%)	1 (0%)	95	97
13	E	388/440 (88%)	386 (100%)	2 (0%)	92	96
14	F	15/406 (4%)	15 (100%)	0	100	100
All	All	6225/9091 (68%)	6211 (100%)	14 (0%)	95	97

All (14) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	2	300	PHE
1	2	609	PHE
2	3	28	PHE
3	4	796	ARG
5	6	594	ARG
5	6	712	PHE
5	6	788	PHE
7	8	520	LEU
8	9	485	PHE
9	A	497	LEU
10	B	475	PHE
12	D	468	PHE
13	E	209	LEU
13	E	416	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (59) such sidechains are listed below:

Mol	Chain	Res	Type
1	2	290	HIS
1	2	538	ASN
1	2	551	GLN

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Mol	Chain	Res	Type
1	2	627	GLN
2	3	164	HIS
2	3	239	ASN
2	3	507	ASN
2	3	814	ASN
3	4	193	ASN
3	4	229	GLN
3	4	242	ASN
3	4	247	ASN
3	4	387	ASN
3	4	493	ASN
3	4	666	ASN
3	4	691	ASN
3	4	891	ASN
4	5	53	ASN
4	5	543	GLN
5	6	570	ASN
5	6	658	GLN
5	6	683	ASN
5	6	690	ASN
5	6	833	GLN
6	7	543	GLN
6	7	585	ASN
7	8	244	HIS
7	8	396	ASN
7	8	515	GLN
7	8	543	GLN
9	A	530	ASN
9	A	590	ASN
9	A	629	HIS
9	A	851	GLN
9	A	872	GLN
9	A	882	GLN
9	A	886	ASN
10	B	279	ASN
10	B	286	GLN
10	B	356	ASN
10	B	426	ASN
10	B	467	ASN
10	B	478	HIS
11	C	218	ASN
11	C	231	HIS

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Mol	Chain	Res	Type
11	C	241	ASN
11	C	312	HIS
11	C	331	GLN
11	C	490	ASN
12	D	96	HIS
12	D	144	ASN
12	D	233	ASN
12	D	290	ASN
12	D	323	HIS
12	D	407	ASN
13	E	118	GLN
13	E	123	GLN
13	E	153	ASN
13	E	253	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

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	2	2001	1,5	26,33,33	1.03	1 (3%)	24,52,52	1.77	4 (16%)
17	AGS	3	2001	2,6	26,33,33	0.84	2 (7%)	24,52,52	1.33	1 (4%)
17	AGS	6	1101	5	26,33,33	1.23	2 (7%)	24,52,52	1.03	2 (8%)
17	AGS	7	2001	6	26,33,33	0.87	1 (3%)	24,52,52	1.31	1 (4%)
17	AGS	9	2001	-	26,33,33	1.11	1 (3%)	24,52,52	0.67	1 (4%)
17	AGS	A	2001	9	26,33,33	0.80	1 (3%)	24,52,52	0.94	1 (4%)
17	AGS	D	2001	12	26,33,33	0.98	2 (7%)	24,52,52	0.90	1 (4%)
17	AGS	E	2001	-	26,33,33	0.80	1 (3%)	24,52,52	1.34	1 (4%)

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	2	2001	1,5	-	0/17/38/38	0/3/3/3
17	AGS	3	2001	2,6	-	0/17/38/38	0/3/3/3
17	AGS	6	1101	5	-	0/17/38/38	0/3/3/3
17	AGS	7	2001	6	-	0/17/38/38	0/3/3/3
17	AGS	9	2001	-	-	0/17/38/38	0/3/3/3
17	AGS	A	2001	9	-	0/17/38/38	0/3/3/3
17	AGS	D	2001	12	-	0/17/38/38	0/3/3/3
17	AGS	E	2001	-	-	0/17/38/38	0/3/3/3

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	3	2001	AGS	C8-N7	-2.08	1.30	1.34
17	D	2001	AGS	C8-N7	-2.01	1.30	1.34
17	3	2001	AGS	PG-S1G	2.07	1.94	1.90
17	A	2001	AGS	PG-S1G	2.31	1.94	1.90
17	E	2001	AGS	PG-S1G	2.47	1.95	1.90
17	7	2001	AGS	PG-S1G	2.68	1.95	1.90
17	2	2001	AGS	PG-S1G	2.73	1.95	1.90
17	D	2001	AGS	PG-S1G	2.81	1.95	1.90
17	6	1101	AGS	PG-S1G	3.44	1.96	1.90
17	6	1101	AGS	PA-O2A	3.85	1.71	1.55
17	9	2001	AGS	PG-S1G	4.42	1.98	1.90

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	2	2001	AGS	PB-O3B-PG	-7.04	107.19	132.71
17	E	2001	AGS	PB-O3B-PG	-5.70	112.04	132.71
17	3	2001	AGS	PB-O3B-PG	-5.50	112.75	132.71
17	7	2001	AGS	PB-O3B-PG	-5.06	114.37	132.71
17	A	2001	AGS	PB-O3B-PG	-4.22	117.39	132.71
17	D	2001	AGS	PB-O3B-PG	-3.55	119.85	132.71
17	6	1101	AGS	PB-O3B-PG	-3.12	121.40	132.71
17	9	2001	AGS	PB-O3B-PG	-2.64	123.14	132.71
17	2	2001	AGS	C1'-N9-C4	-2.15	124.41	126.81
17	6	1101	AGS	O2A-PA-O3A	2.00	113.84	105.27
17	2	2001	AGS	O5'-PA-O1A	2.18	118.15	109.21
17	2	2001	AGS	O2A-PA-O3A	2.52	116.08	105.27

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

8 monomers are involved in 53 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
17	2	2001	AGS	10	0
17	3	2001	AGS	2	0
17	6	1101	AGS	10	0
17	7	2001	AGS	9	0
17	9	2001	AGS	8	0
17	A	2001	AGS	6	0
17	D	2001	AGS	6	0
17	E	2001	AGS	2	0

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.