



## wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 01:59 PM BST

PDB ID : 3JC5  
EMDB ID: : EMD-6535  
Title : Structure of the eukaryotic replicative CMG helicase and pumpjack motion  
Authors : Li, H.; Bai, L.; Yuan, Z.; Sun, J.; Georgescu, R.E.; Liu, J.; O' Donnell, M.E.  
Deposited on : 2015-11-24  
Resolution : 4.70 Å(reported)  
Based on PDB ID : 2Q9Q

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.  
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.  
We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at  
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

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MolProbity : 4.02b-467  
Mogul : unknown  
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) : trunk27241

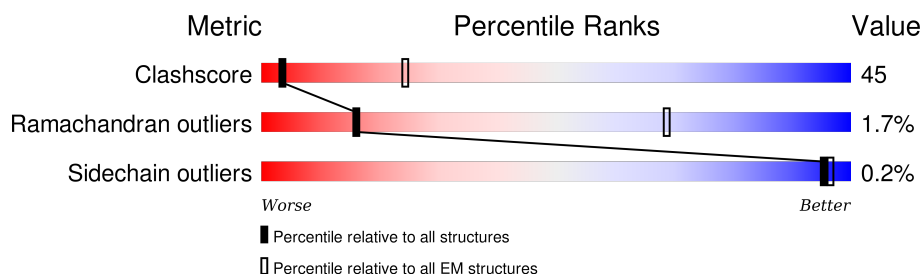
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 4.70 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	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  $\geq 3$ , 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	34% 32% . 33%
2	3	971	27% 32% . 39%
3	4	933	28% 31% . 39%
4	5	775	37% 44% . 16%
5	6	1017	31% 33% . 34%
6	7	845	36% 40% . 23%
7	c	650	84% . 15%
8	D	294	38% 35% . 25%
9	B	213	41% 43% 15%

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Mol	Chain	Length	Quality of chain
10	A	208	<div><div></div><div>40%</div><div>58%</div><div></div></div>
11	C	194	<div><div></div><div>39%</div><div>42%</div><div>18%</div><div></div></div>

## 2 Entry composition

There are 11 unique types of molecules in this entry. The entry contains 40041 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	584	Total	C	N	O	S	0	0
			4600	2904	819	861	16		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	3	588	Total	C	N	O	S	0	0
			4613	2909	820	871	13		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	4	569	Total	C	N	O	S	0	0
			4516	2842	783	864	27		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	5	653	Total	C	N	O	S	0	0
			5171	3251	896	1001	23		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	6	671	Total	C	N	O	S	0	0
			5211	3291	916	981	23		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	7	652	Total	C	N	O	S	0	0
			5148	3249	895	977	27		

- Molecule 7 is a protein called Cell division control protein 45.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	c	553	Total	C	N	O	S	0	0
			4470	2852	759	846	13		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
c	22	ALA	HIS	CONFLICT	UNP Q08032
c	155	GLU	GLN	CONFLICT	UNP Q08032
c	551	THR	TRP	CONFLICT	UNP Q08032

- Molecule 8 is a protein called DNA replication complex GINS protein SLD5.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	D	221	Total	C	N	O	S	0	0
			1820	1159	300	348	13		

- Molecule 9 is a protein called DNA replication complex GINS protein PSF2.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	B	181	Total	C	N	O	S	0	0
			1513	978	261	270	4		

- Molecule 10 is a protein called DNA replication complex GINS protein PSF1.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	A	208	Total	C	N	O	S	0	0
			1691	1062	287	332	10		

There are 3 discrepancies between the modelled and reference sequences:

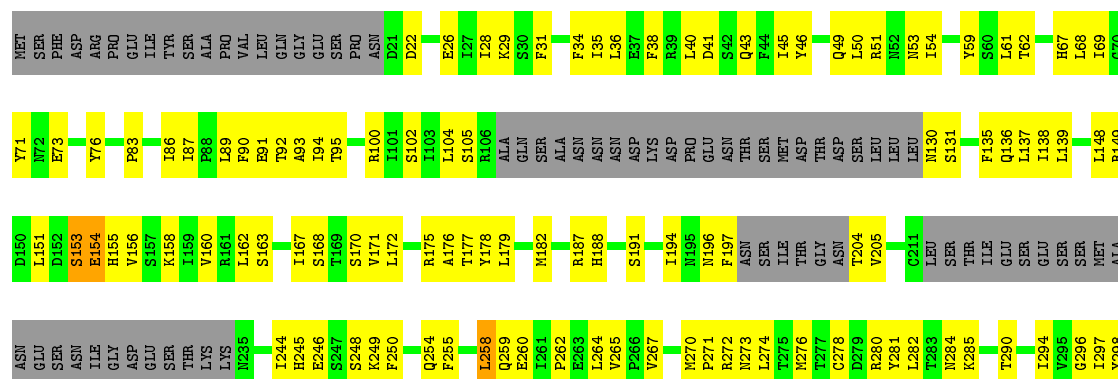
Chain	Residue	Modelled	Actual	Comment	Reference
A	161	ALA	VAL	CONFLICT	UNP Q12488
A	192	GLN	ARG	CONFLICT	UNP Q12488
A	207	LEU	LYS	CONFLICT	UNP Q12488

- Molecule 11 is a protein called DNA replication complex GINS protein PSF3.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	C	159	Total	C	N	O	S	0	0
			1288	843	207	232	6		

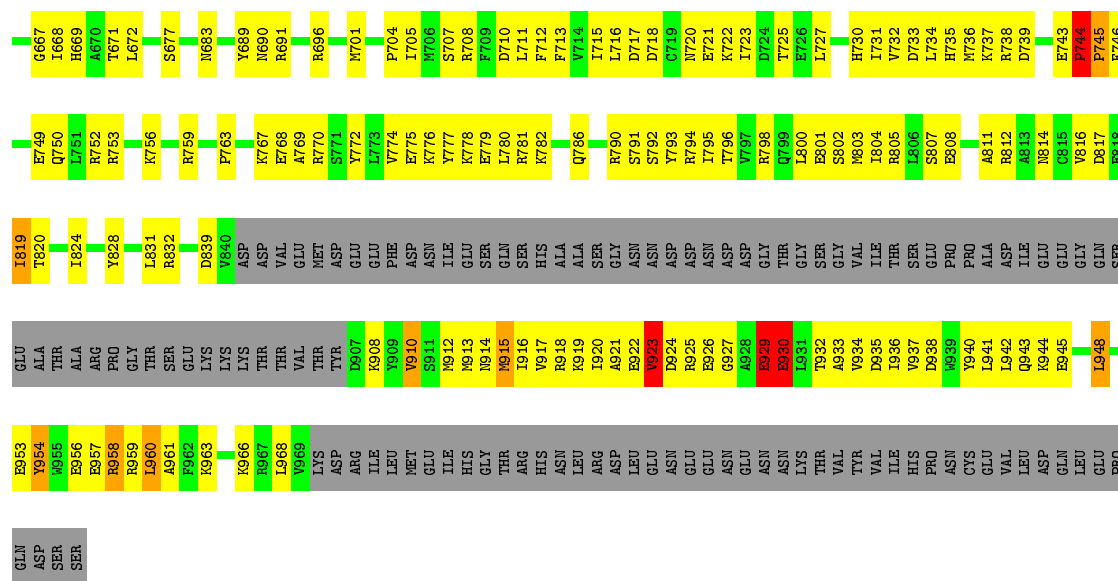






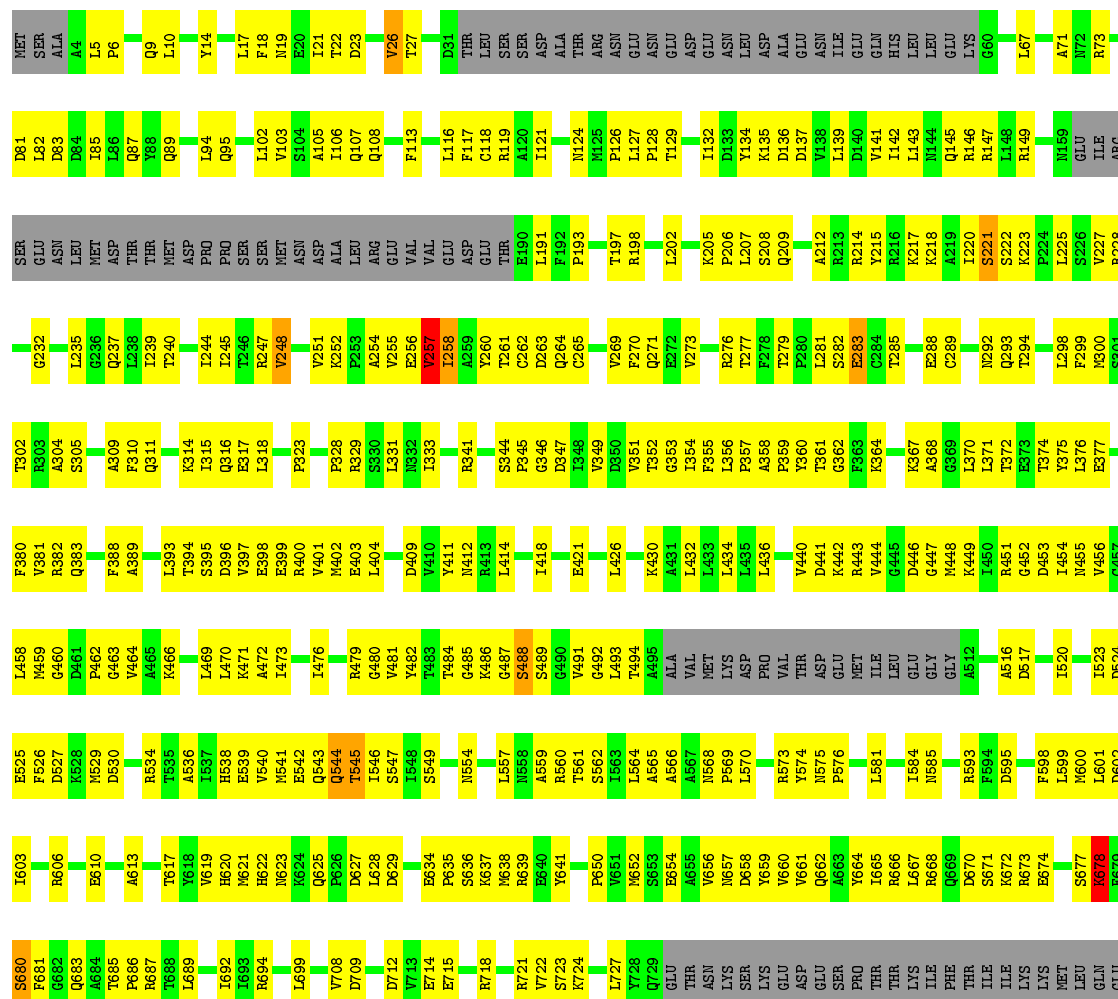




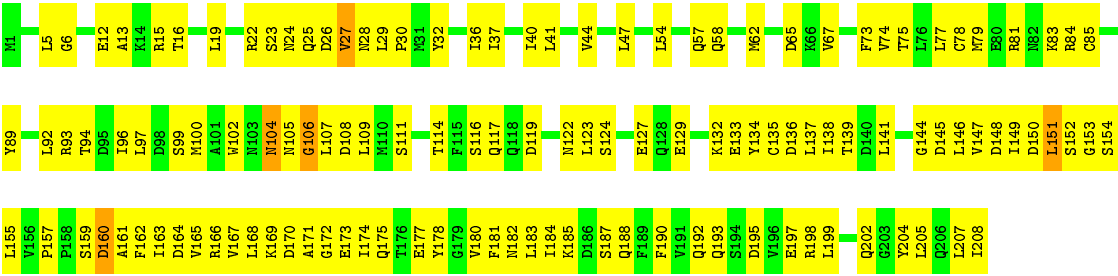


• Molecule 6: DNA replication licensing factor MCM7

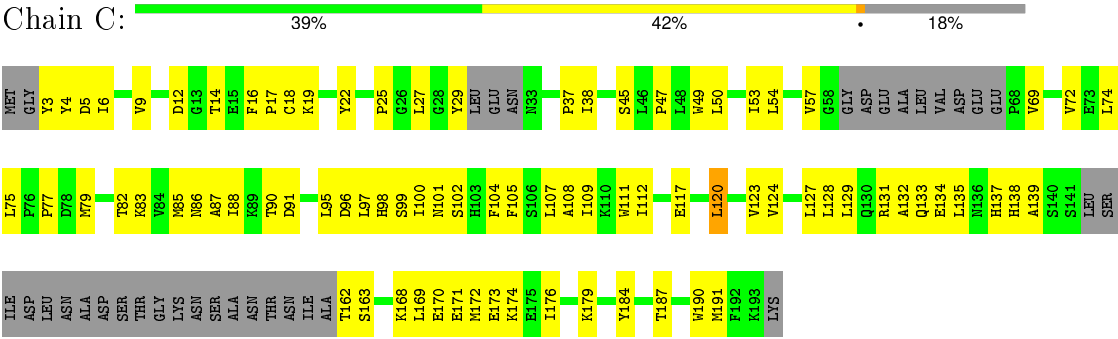
Chain 7: 36% 40% 23%







● Molecule 11: DNA replication complex GINS protein PSF3



## 4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	178530	Depositor
Resolution determination method	FSC 0.143	Depositor
CTF correction method	CTFFIND4	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	50	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	29000	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z  > 2$	RMSZ	# $ Z  > 2$
1	2	0.41	0/4677	0.62	2/6318 (0.0%)
10	A	0.38	0/1713	0.62	0/2309
11	C	0.46	0/1320	0.64	1/1784 (0.1%)
2	3	0.48	1/4691 (0.0%)	0.66	5/6360 (0.1%)
3	4	0.40	0/4574	0.65	1/6172 (0.0%)
4	5	0.48	1/5242 (0.0%)	0.73	7/7075 (0.1%)
5	6	0.48	1/5289 (0.0%)	0.78	13/7139 (0.2%)
6	7	0.42	0/5228	0.64	1/7062 (0.0%)
7	c	0.39	0/4548	0.63	2/6152 (0.0%)
8	D	0.43	0/1853	0.64	0/2500
9	B	0.43	0/1545	0.69	0/2092
All	All	0.44	3/40680 (0.0%)	0.67	32/54963 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	2	0	1
10	A	0	4
2	3	0	3
3	4	0	5
5	6	0	6
6	7	0	7
7	c	0	1
8	D	0	2
All	All	0	29

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	3	232	PRO	N-CD	16.13	1.70	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	6	929	GLU	C-O	7.76	1.38	1.23
4	5	720	ARG	C-N	-7.10	1.17	1.34

All (32) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	6	954	TYR	CB-CG-CD2	-16.55	111.07	121.00
4	5	742	ARG	CA-CB-CG	10.90	137.38	113.40
5	6	954	TYR	CB-CG-CD1	9.43	126.66	121.00
2	3	550	THR	N-CA-C	-9.05	86.57	111.00
4	5	742	ARG	N-CA-C	8.60	134.21	111.00
7	c	27	LEU	CA-CB-CG	7.96	133.61	115.30
4	5	258	LEU	CA-CB-CG	7.60	132.78	115.30
5	6	960	LEU	CB-CG-CD2	-7.30	98.58	111.00
2	3	171	LEU	CA-CB-CG	7.22	131.91	115.30
5	6	948	LEU	CB-CG-CD1	-7.22	98.73	111.00
4	5	758	HIS	O-C-N	6.87	133.69	122.70
5	6	105	ASP	CB-CG-OD1	6.58	124.22	118.30
5	6	958	ARG	NE-CZ-NH1	6.25	123.43	120.30
5	6	915	MET	CG-SD-CE	6.14	110.03	100.20
1	2	436	GLY	N-CA-C	5.96	128.01	113.10
2	3	550	THR	CB-CA-C	5.88	127.48	111.60
5	6	930	GLU	CG-CD-OE1	-5.84	106.62	118.30
11	C	120	LEU	CA-CB-CG	5.77	128.58	115.30
4	5	755	LEU	N-CA-CB	-5.65	99.09	110.40
6	7	127	LEU	CA-CB-CG	5.51	127.97	115.30
7	c	637	LEU	CA-CB-CG	5.48	127.89	115.30
5	6	923	VAL	CA-C-O	-5.42	108.72	120.10
1	2	570	GLY	N-CA-C	5.33	126.42	113.10
3	4	727	LEU	CA-CB-CG	5.28	127.44	115.30
4	5	743	PHE	CB-CG-CD2	5.21	124.45	120.80
5	6	910	VAL	CG1-CB-CG2	-5.20	102.59	110.90
5	6	744	PRO	C-N-CD	5.11	139.14	128.40
4	5	179	LEU	CA-CB-CG	5.10	127.02	115.30
2	3	653	ILE	C-N-CD	5.07	139.05	128.40
2	3	517	ASN	C-N-CD	5.07	139.05	128.40
5	6	743	GLU	C-N-CD	5.06	139.03	128.40
5	6	960	LEU	N-CA-CB	-5.00	100.39	110.40

There are no chirality outliers.

All (29) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	2	803	PHE	Peptide
2	3	163	ALA	Peptide
2	3	165	ALA	Peptide
2	3	428	LEU	Peptide
3	4	202	LYS	Peptide
3	4	245	ALA	Peptide
3	4	372	GLU	Peptide
3	4	377	ASN	Peptide
3	4	448	SER	Peptide
5	6	103	VAL	Peptide
5	6	313	MET	Peptide
5	6	334	PRO	Peptide
5	6	600	GLY	Peptide
5	6	923	VAL	Mainchain
5	6	929	GLU	Peptide
6	7	221	SER	Peptide
6	7	257	VAL	Peptide
6	7	283	GLU	Peptide
6	7	359	PRO	Peptide
6	7	545	THR	Peptide
6	7	678	LYS	Peptide
6	7	680	SER	Peptide
10	A	104	ASN	Peptide
10	A	105	ASN	Peptide
10	A	106	GLY	Peptide
10	A	160	ASP	Peptide
8	D	200	LYS	Peptide
8	D	258	VAL	Peptide
7	c	97	GLU	Peptide

## 5.2 Too-close contacts [i](#)

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	4600	0	4642	458	0
2	3	4613	0	4673	583	0
3	4	4516	0	4542	467	0
4	5	5171	0	5232	691	0
5	6	5211	0	5159	513	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
6	7	5148	0	5219	561	0
7	c	4470	0	4491	0	0
8	D	1820	0	1824	160	0
9	B	1513	0	1558	152	0
10	A	1691	0	1687	259	0
11	C	1288	0	1298	108	0
All	All	40041	0	40325	3360	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 45.

All (3360) 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)
1:2:814:LEU:HD23	4:5:576:HIS:CD2	1.26	1.61
1:2:807:VAL:CB	4:5:572:VAL:HG21	1.31	1.54
3:4:721:ALA:HB2	6:7:664:TYR:CE2	1.42	1.52
3:4:712:VAL:CG1	3:4:715:LYS:HG2	1.39	1.51
1:2:703:HIS:CD2	5:6:804:ILE:HG12	1.44	1.50
1:2:803:PHE:CE2	1:2:805:ILE:O	1.66	1.46
2:3:457:LEU:HD21	2:3:502:ILE:CG1	1.44	1.46
4:5:722:LEU:CD1	4:5:728:THR:HG21	1.47	1.44
4:5:737:PHE:CD2	4:5:743:PHE:CD2	2.06	1.44
4:5:722:LEU:CD1	4:5:728:THR:CG2	1.96	1.42
4:5:38:PHE:CE2	4:5:40:LEU:HD11	1.55	1.40
3:4:676:ASN:HD22	6:7:593:ARG:NH2	1.20	1.38
1:2:794:ARG:CD	4:5:565:ASP:HB3	1.54	1.37
1:2:807:VAL:HB	4:5:572:VAL:CG2	1.53	1.37
2:3:395:ASN:ND2	6:7:635:PRO:HD2	1.38	1.36
6:7:316:GLN:HE21	6:7:328:PRO:CB	1.36	1.35
4:5:737:PHE:CD2	4:5:743:PHE:CE2	2.15	1.33
1:2:814:LEU:CD2	4:5:576:HIS:CD2	2.12	1.32
1:2:234:LEU:HD12	1:2:234:LEU:O	1.18	1.32
10:A:175:GLN:HE22	10:A:199:LEU:CD2	1.41	1.32
10:A:170:ASP:OD2	10:A:204:TYR:HA	1.16	1.31
3:4:676:ASN:ND2	6:7:593:ARG:HH22	1.27	1.31
1:2:592:GLU:HA	4:5:270:MET:CE	1.59	1.30
3:4:721:ALA:CB	6:7:664:TYR:CD2	2.16	1.29
2:3:234:GLU:OE2	2:3:240:LYS:HA	1.27	1.29
4:5:710:GLU:O	4:5:713:ARG:HG2	1.23	1.29
2:3:232:PRO:N	2:3:232:PRO:CD	1.70	1.29

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:721:ALA:HB2	6:7:664:TYR:CD2	1.68	1.28
4:5:341:SER:O	4:5:342:ILE:HG12	1.13	1.28
2:3:122:ILE:HG21	2:3:221:LEU:CD1	1.62	1.28
3:4:243:LEU:HD23	3:4:244:ASP:N	1.51	1.26
2:3:457:LEU:HD21	2:3:502:ILE:CD1	1.64	1.26
4:5:38:PHE:CE2	4:5:40:LEU:CD1	2.18	1.25
1:2:795:ARG:O	1:2:798:ILE:HG12	1.34	1.25
1:2:584:PRO:CB	5:6:667:GLY:HA2	1.66	1.25
6:7:658:ASP:O	6:7:661:VAL:HG12	1.34	1.25
1:2:584:PRO:HB3	5:6:667:GLY:CA	1.65	1.25
4:5:394:GLY:N	4:5:607:ARG:NH2	1.82	1.25
3:4:529:SER:O	3:4:723:HIS:HB3	1.31	1.25
4:5:733:LEU:HD22	4:5:748:LEU:CD1	1.66	1.24
8:D:259:THR:HG22	8:D:269:LEU:CD2	1.67	1.23
3:4:638:SER:CB	6:7:549:SER:H	1.50	1.23
4:5:341:SER:O	4:5:342:ILE:CG1	1.87	1.23
5:6:297:THR:O	5:6:622:THR:CG2	1.88	1.22
4:5:351:GLU:CG	10:A:19:LEU:HD23	1.70	1.22
4:5:38:PHE:CZ	4:5:40:LEU:HD11	1.74	1.22
10:A:173:GLU:CB	10:A:182:ASN:HA	1.69	1.21
6:7:126:PRO:O	6:7:129:THR:HG22	1.40	1.21
2:3:652:THR:CG2	2:3:654:PRO:HD3	1.68	1.21
2:3:122:ILE:CG2	2:3:221:LEU:CD1	2.18	1.21
10:A:182:ASN:CB	11:C:74:LEU:HD23	72.03	1.21
4:5:351:GLU:HG3	10:A:19:LEU:CD2	1.69	1.20
1:2:803:PHE:CD2	1:2:805:ILE:O	1.93	1.20
11:C:83:LYS:O	11:C:86:ASN:OD1	1.55	1.19
2:3:558:ASP:CG	4:5:630:ARG:HG2	1.62	1.19
4:5:393:MET:C	4:5:607:ARG:HH22	1.44	1.19
8:D:259:THR:CG2	8:D:269:LEU:HD23	1.71	1.19
1:2:444:PHE:CE2	5:6:380:ILE:HD13	1.78	1.18
2:3:189:THR:HA	2:3:256:ILE:CD1	1.72	1.18
4:5:393:MET:C	4:5:607:ARG:NH2	1.96	1.18
1:2:636:ILE:HD13	4:5:273:ASN:ND2	1.59	1.18
2:3:457:LEU:HD21	2:3:502:ILE:HG12	1.24	1.17
1:2:592:GLU:HA	4:5:270:MET:SD	1.84	1.17
10:A:175:GLN:NE2	10:A:199:LEU:HD22	1.59	1.17
4:5:394:GLY:N	4:5:607:ARG:HH22	1.38	1.16
1:2:794:ARG:HE	4:5:565:ASP:CB	1.59	1.16
2:3:440:VAL:HA	2:3:461:ALA:HB3	1.23	1.16
3:4:717:ASP:OD2	6:7:668:ARG:NE	1.79	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:687:VAL:HG22	1:2:688:ASP:H	1.07	1.15
1:2:410:LEU:O	1:2:411:LEU:HD12	1.44	1.15
9:B:188:ILE:O	9:B:192:LEU:HD13	1.47	1.14
4:5:450:THR:CG2	4:5:469:MET:HG2	1.76	1.14
10:A:167:VAL:HG23	10:A:187:SER:O	1.42	1.14
3:4:243:LEU:CD2	3:4:244:ASP:H	1.59	1.14
1:2:593:GLY:HA3	1:2:597:VAL:CG2	1.77	1.13
5:6:912:MET:SD	5:6:940:TYR:CE2	2.41	1.13
2:3:443:THR:HG21	2:3:457:LEU:HD13	1.14	1.13
2:3:457:LEU:HD11	2:3:502:ILE:HD11	1.24	1.13
2:3:234:GLU:OE1	2:3:238:GLY:O	1.67	1.13
8:D:211:ASP:OD2	8:D:213:GLU:HB3	1.47	1.12
4:5:737:PHE:CE2	4:5:743:PHE:HE2	1.68	1.12
11:C:173:GLU:O	11:C:176:ILE:HG13	1.50	1.12
3:4:638:SER:HB2	6:7:549:SER:H	1.08	1.12
5:6:819:ILE:HG22	5:6:820:THR:H	0.97	1.12
8:D:259:THR:CG2	8:D:269:LEU:CD2	2.26	1.11
4:5:342:ILE:HB	4:5:343:TRP:HD1	1.07	1.11
4:5:737:PHE:CG	4:5:743:PHE:CD2	2.38	1.11
10:A:168:LEU:O	10:A:168:LEU:HD13	1.51	1.11
4:5:276:MET:SD	4:5:294:ILE:HD13	1.90	1.10
1:2:444:PHE:CE2	5:6:380:ILE:CD1	2.33	1.10
5:6:912:MET:HE2	5:6:961:ALA:CB	1.80	1.10
10:A:182:ASN:HB3	11:C:74:LEU:HD23	72.35	1.10
4:5:351:GLU:HG3	10:A:19:LEU:HD23	1.10	1.10
4:5:551:ASP:OD2	4:5:658:ARG:NH2	1.85	1.10
10:A:145:ASP:HB3	10:A:147:VAL:HG23	1.18	1.10
4:5:450:THR:HG21	4:5:469:MET:HG2	1.11	1.10
5:6:136:TYR:O	5:6:140:ILE:HD12	1.52	1.10
3:4:717:ASP:OD2	6:7:668:ARG:CD	2.00	1.09
2:3:442:LEU:HD12	2:3:444:ALA:H	0.94	1.09
3:4:640:SER:OG	6:7:549:SER:O	1.68	1.09
6:7:316:GLN:NE2	6:7:328:PRO:CB	2.15	1.09
2:3:189:THR:CA	2:3:256:ILE:HD12	1.81	1.09
2:3:652:THR:HG22	2:3:654:PRO:HD3	1.11	1.09
2:3:671:LEU:CB	6:7:621:MET:HA	1.81	1.09
2:3:680:VAL:HG13	6:7:617:THR:HG21	1.10	1.09
2:3:457:LEU:CD1	2:3:502:ILE:HD11	1.83	1.08
3:4:638:SER:CB	6:7:549:SER:N	2.05	1.08
2:3:395:ASN:ND2	6:7:635:PRO:CD	2.15	1.08
4:5:394:GLY:HA3	4:5:607:ARG:HH21	1.15	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:370:ARG:CB	3:4:371:CYS:SG	2.40	1.08
3:4:721:ALA:CB	6:7:664:TYR:CE2	2.34	1.08
2:3:442:LEU:HB2	2:3:497:ILE:HG22	1.32	1.08
2:3:186:VAL:HG13	2:3:256:ILE:CG2	1.84	1.08
3:4:717:ASP:HB2	6:7:668:ARG:HG2	1.16	1.08
4:5:276:MET:HE1	4:5:294:ILE:CD1	1.82	1.08
1:2:794:ARG:NE	4:5:565:ASP:CB	2.17	1.08
4:5:394:GLY:CA	4:5:607:ARG:HH21	1.65	1.08
4:5:722:LEU:HD12	4:5:728:THR:CG2	1.65	1.07
4:5:722:LEU:HD13	4:5:728:THR:HG23	1.29	1.07
10:A:145:ASP:CA	10:A:146:LEU:HB3	1.84	1.07
3:4:640:SER:OG	6:7:549:SER:HB3	1.52	1.07
1:2:636:ILE:HD13	4:5:273:ASN:HD22	1.06	1.07
2:3:195:LYS:NZ	2:3:216:ASP:OD2	1.86	1.07
3:4:676:ASN:ND2	6:7:593:ARG:NH2	1.88	1.07
1:2:402:LEU:HB3	5:6:623:ILE:CD1	1.85	1.07
2:3:443:THR:CG2	2:3:457:LEU:HD13	1.82	1.07
1:2:794:ARG:HD3	4:5:565:ASP:HB3	1.24	1.07
5:6:929:GLU:O	5:6:930:GLU:HG3	1.53	1.07
4:5:276:MET:HE1	4:5:294:ILE:HD12	1.35	1.07
6:7:662:GLN:HB3	6:7:666:ARG:HH12	1.18	1.06
2:3:122:ILE:HG21	2:3:221:LEU:HD11	1.35	1.06
2:3:652:THR:HG22	2:3:653:ILE:N	1.68	1.06
2:3:122:ILE:HG23	2:3:123:PRO:HD3	1.16	1.06
4:5:754:ALA:HA	4:5:757:LYS:HE3	1.38	1.06
10:A:145:ASP:HA	10:A:146:LEU:CB	1.77	1.06
3:4:718:ARG:HB2	6:7:665:ILE:HG12	1.34	1.06
3:4:721:ALA:CB	6:7:664:TYR:HD2	1.63	1.06
1:2:703:HIS:CD2	5:6:804:ILE:CG1	2.38	1.06
2:3:680:VAL:CG1	6:7:617:THR:HG21	1.85	1.06
2:3:671:LEU:HD12	6:7:620:HIS:O	1.56	1.06
4:5:728:THR:HB	4:5:732:THR:HG21	1.31	1.05
1:2:592:GLU:HA	4:5:270:MET:HE1	1.12	1.05
2:3:568:THR:O	2:3:570:ARG:N	1.89	1.05
3:4:717:ASP:OD2	6:7:668:ARG:CZ	2.04	1.05
2:3:445:ALA:HB2	2:3:499:LYS:HG3	1.38	1.05
2:3:395:ASN:CG	6:7:635:PRO:HD2	1.77	1.05
2:3:652:THR:CG2	2:3:653:ILE:H	1.70	1.05
4:5:450:THR:HB	4:5:469:MET:HB2	1.35	1.05
4:5:450:THR:HB	4:5:469:MET:CB	1.87	1.04
3:4:718:ARG:HB3	6:7:665:ILE:HG23	1.35	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:457:LEU:CD2	2:3:502:ILE:HG12	1.85	1.04
2:3:395:ASN:ND2	6:7:634:GLU:HA	1.70	1.04
6:7:316:GLN:NE2	6:7:328:PRO:HB2	1.72	1.04
9:B:188:ILE:HG22	9:B:192:LEU:HD13	1.37	1.04
4:5:104:LEU:HD13	4:5:105:SER:N	1.72	1.04
5:6:801:GLU:O	5:6:804:ILE:HG22	1.58	1.04
3:4:712:VAL:HG11	3:4:715:LYS:CG	1.87	1.04
2:3:457:LEU:HD21	2:3:502:ILE:HD11	1.38	1.04
4:5:737:PHE:CG	4:5:743:PHE:CE2	2.46	1.04
4:5:354:GLU:O	10:A:15:ARG:NH1	1.90	1.04
3:4:712:VAL:CG1	3:4:715:LYS:CG	2.35	1.03
3:4:717:ASP:HB3	6:7:668:ARG:HE	1.17	1.03
2:3:457:LEU:CD2	2:3:502:ILE:CG1	2.35	1.03
4:5:722:LEU:HD13	4:5:728:THR:CG2	1.76	1.03
2:3:122:ILE:CG2	2:3:221:LEU:HD12	1.83	1.03
1:2:442:ASN:OD1	1:2:443:GLY:N	1.90	1.03
1:2:593:GLY:CA	1:2:597:VAL:HG21	1.87	1.03
2:3:409:GLY:HA3	2:3:549:VAL:HG23	1.08	1.03
9:B:118:ASN:OD1	9:B:122:LEU:HD12	1.57	1.03
10:A:108:ASP:HB3	10:A:109:LEU:HB3	1.39	1.03
4:5:737:PHE:HA	4:5:740:THR:CG2	1.88	1.03
10:A:151:LEU:HD22	10:A:152:SER:N	1.74	1.03
4:5:728:THR:HA	4:5:732:THR:HB	1.39	1.03
1:2:592:GLU:CA	4:5:270:MET:HE1	1.89	1.03
2:3:259:GLN:NE2	4:5:463:TYR:CG	2.27	1.03
5:6:296:ARG:HE	5:6:613:VAL:HG11	1.19	1.03
4:5:196:ASN:HA	4:5:197:PHE:HB3	1.37	1.03
1:2:593:GLY:HA3	1:2:597:VAL:HG21	1.05	1.02
2:3:679:ILE:HD11	6:7:620:HIS:HE1	1.21	1.02
2:3:442:LEU:HD12	2:3:444:ALA:N	1.73	1.02
10:A:168:LEU:CD1	10:A:168:LEU:O	2.06	1.02
3:4:717:ASP:OD2	6:7:668:ARG:HD2	1.56	1.02
4:5:276:MET:SD	4:5:294:ILE:CD1	2.47	1.02
2:3:409:GLY:HA3	2:3:549:VAL:O	1.60	1.02
4:5:138:ILE:HG23	4:5:332:GLY:HA3	1.41	1.02
6:7:453:ASP:OD2	6:7:562:SER:OG	1.75	1.02
3:4:572:THR:HA	6:7:686:PRO:HG3	1.40	1.02
1:2:703:HIS:NE2	5:6:804:ILE:HG21	1.74	1.02
4:5:737:PHE:CD2	4:5:743:PHE:HD2	1.55	1.02
1:2:234:LEU:HD21	1:2:241:SER:O	1.57	1.02
10:A:173:GLU:HB3	10:A:182:ASN:HA	1.38	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:409:GLY:HA3	2:3:549:VAL:CG2	1.90	1.02
1:2:684:ARG:HB3	1:2:685:ASP:HB3	1.40	1.02
6:7:482:TYR:OH	6:7:524:ASP:OD2	1.76	1.02
6:7:316:GLN:HE21	6:7:328:PRO:HB2	1.25	1.01
5:6:297:THR:O	5:6:622:THR:HG23	1.58	1.01
4:5:258:LEU:HD21	4:5:294:ILE:HD12	1.40	1.01
3:4:370:ARG:HB2	3:4:371:CYS:SG	1.98	1.01
4:5:354:GLU:C	10:A:15:ARG:NH1	2.13	1.01
1:2:814:LEU:CD2	4:5:576:HIS:CG	2.42	1.01
1:2:703:HIS:CG	5:6:804:ILE:HG12	1.95	1.01
6:7:316:GLN:HE21	6:7:328:PRO:HB3	1.22	1.01
1:2:234:LEU:CD1	1:2:234:LEU:O	2.08	1.01
2:3:652:THR:HG22	2:3:653:ILE:H	0.86	1.01
2:3:197:ILE:HD12	2:3:251:ILE:HG13	1.39	1.01
1:2:807:VAL:CG1	4:5:572:VAL:HG21	1.91	1.00
3:4:717:ASP:CG	6:7:668:ARG:NE	2.14	1.00
4:5:342:ILE:HB	4:5:343:TRP:CD1	1.95	1.00
5:6:301:ARG:HH12	5:6:618:GLY:HA3	1.25	1.00
3:4:712:VAL:HG11	3:4:715:LYS:HG2	1.02	1.00
11:C:83:LYS:HA	11:C:86:ASN:ND2	1.74	1.00
8:D:256:TYR:HB2	8:D:257:THR:HG22	1.38	1.00
8:D:259:THR:HG23	8:D:269:LEU:HD23	1.37	1.00
2:3:409:GLY:O	2:3:415:LYS:NZ	1.95	1.00
2:3:493:GLN:HG3	2:3:509:ARG:HG2	1.43	1.00
3:4:532:GLU:HG3	3:4:533:LEU:H	1.23	1.00
5:6:912:MET:CE	5:6:961:ALA:CB	2.40	1.00
3:4:762:ILE:HG23	3:4:817:VAL:HG11	1.41	1.00
10:A:164:ASP:OD1	10:A:190:PHE:HD1	1.43	1.00
6:7:207:LEU:O	6:7:207:LEU:HD12	1.61	1.00
3:4:532:GLU:HG2	3:4:716:ASN:ND2	1.74	1.00
2:3:652:THR:HG22	2:3:654:PRO:CD	1.90	1.00
2:3:395:ASN:HD21	6:7:634:GLU:HA	1.20	0.99
1:2:444:PHE:HE2	5:6:380:ILE:HD13	1.21	0.99
2:3:456:ARG:HH11	6:7:316:GLN:CD	1.64	0.99
2:3:409:GLY:CA	2:3:549:VAL:HG23	1.92	0.99
1:2:807:VAL:CB	4:5:572:VAL:CG2	2.23	0.99
3:4:717:ASP:CB	6:7:668:ARG:NE	2.24	0.99
10:A:108:ASP:O	10:A:198:ARG:NH1	1.95	0.99
2:3:671:LEU:CD1	6:7:620:HIS:C	2.29	0.99
2:3:519:VAL:CG1	2:3:532:ASN:O	2.10	0.99
3:4:558:TYR:OH	5:6:734:LEU:HD23	1.61	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:351:GLU:OE2	10:A:19:LEU:HD21	1.61	0.99
1:2:687:VAL:HB	5:6:781:ARG:NH1	1.38	0.99
8:D:254:PRO:O	8:D:255:CYS:SG	2.20	0.99
4:5:714:PHE:HB2	4:5:755:LEU:CD1	1.93	0.99
5:6:354:LEU:HD13	5:6:355:ASP:OD2	1.61	0.99
10:A:175:GLN:HG2	10:A:183:LEU:HD21	1.44	0.99
2:3:189:THR:HA	2:3:256:ILE:HD12	1.01	0.99
10:A:149:ILE:HB	10:A:151:LEU:HB3	1.45	0.99
1:2:614:ASP:OD1	1:2:617:ARG:NH1	1.96	0.99
2:3:457:LEU:CD2	2:3:502:ILE:HD11	1.93	0.99
6:7:460:GLY:O	6:7:466:LYS:NZ	1.94	0.99
10:A:175:GLN:NE2	10:A:199:LEU:CD2	2.19	0.99
2:3:122:ILE:HG23	2:3:123:PRO:CD	1.92	0.99
8:D:91:ILE:HD13	10:A:147:VAL:O	1.63	0.99
5:6:786:GLN:HB3	5:6:918:ARG:CZ	1.90	0.98
1:2:403:PRO:HG3	5:6:672:LEU:CD2	1.93	0.98
4:5:450:THR:HG22	4:5:468:ALA:HB3	1.43	0.98
1:2:306:LEU:CD2	1:2:392:GLU:HB2	1.91	0.98
5:6:404:VAL:HG23	5:6:453:SER:OG	1.62	0.98
2:3:502:ILE:HA	6:7:346:GLY:HA3	1.43	0.98
1:2:794:ARG:CD	4:5:565:ASP:CB	2.41	0.98
3:4:243:LEU:HD23	3:4:244:ASP:H	0.83	0.98
5:6:653:HIS:HE1	5:6:657:GLU:OE1	1.46	0.98
5:6:912:MET:CE	5:6:961:ALA:HB2	1.92	0.98
2:3:122:ILE:CG2	2:3:123:PRO:HD3	1.92	0.98
1:2:402:LEU:CB	5:6:623:ILE:HD13	1.92	0.98
1:2:302:THR:HA	1:2:304:TYR:CE1	1.98	0.98
5:6:566:ARG:NH1	5:6:656:MET:O	1.97	0.98
2:3:457:LEU:HD11	2:3:502:ILE:CD1	1.93	0.98
4:5:733:LEU:HD22	4:5:748:LEU:HD11	1.42	0.98
8:D:268:GLU:O	8:D:269:LEU:HD22	1.64	0.98
6:7:715:GLU:OE2	6:7:718:ARG:NH1	1.96	0.98
1:2:814:LEU:HD23	4:5:576:HIS:CG	1.99	0.98
6:7:524:ASP:O	6:7:566:ALA:O	1.82	0.98
2:3:558:ASP:OD2	4:5:630:ARG:HG2	1.63	0.97
5:6:653:HIS:CE1	5:6:657:GLU:OE1	2.16	0.97
10:A:145:ASP:CB	10:A:147:VAL:HG23	1.93	0.97
1:2:403:PRO:CD	5:6:672:LEU:CD2	2.41	0.97
2:3:457:LEU:HD23	2:3:499:LYS:CE	1.93	0.97
1:2:306:LEU:HD23	1:2:392:GLU:HB2	1.01	0.97
1:2:325:THR:OG1	1:2:389:THR:OG1	1.80	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:188:ILE:CG2	9:B:192:LEU:CD1	2.43	0.97
1:2:659:SER:OG	4:5:741:HIS:CE1	2.16	0.97
10:A:175:GLN:HG2	10:A:183:LEU:CD2	1.94	0.97
2:3:502:ILE:HG22	6:7:346:GLY:HA2	1.47	0.97
2:3:122:ILE:HG23	2:3:221:LEU:HD12	1.47	0.97
8:D:70:GLU:O	8:D:150:LYS:NZ	1.97	0.97
6:7:370:LEU:O	6:7:370:LEU:HD13	1.64	0.97
11:C:83:LYS:HA	11:C:86:ASN:HD21	1.30	0.97
1:2:687:VAL:HB	5:6:781:ARG:HH12	1.17	0.97
1:2:327:ARG:HH11	1:2:386:GLN:HE22	1.09	0.97
5:6:532:SER:HB3	5:6:745:PRO:CD	1.94	0.97
2:3:395:ASN:HD22	6:7:635:PRO:HD2	1.21	0.96
1:2:687:VAL:CG2	1:2:692:ASP:OD1	2.11	0.96
1:2:402:LEU:HB3	5:6:623:ILE:HD13	0.98	0.96
3:4:558:TYR:CZ	5:6:734:LEU:HD23	1.99	0.96
1:2:306:LEU:HD23	1:2:392:GLU:CB	1.96	0.96
4:5:450:THR:CB	4:5:469:MET:H	1.77	0.96
2:3:259:GLN:NE2	4:5:463:TYR:CD2	2.31	0.96
1:2:794:ARG:HE	4:5:565:ASP:CA	1.77	0.96
2:3:679:ILE:HD11	6:7:620:HIS:CE1	2.00	0.96
10:A:182:ASN:HB3	11:C:74:LEU:CD2	72.11	0.96
6:7:126:PRO:O	6:7:129:THR:CG2	2.14	0.96
1:2:403:PRO:CG	5:6:672:LEU:HD21	1.95	0.96
6:7:658:ASP:O	6:7:661:VAL:CG1	2.13	0.95
2:3:395:ASN:HB2	6:7:635:PRO:CG	1.96	0.95
10:A:163:ILE:HG22	10:A:164:ASP:N	1.80	0.95
9:B:25:ILE:CD1	9:B:87:ILE:HD11	1.95	0.95
4:5:737:PHE:HA	4:5:740:THR:HG21	1.47	0.95
5:6:819:ILE:HG22	5:6:820:THR:N	1.80	0.95
3:4:633:GLU:OE1	6:7:539:GLU:OE2	1.83	0.95
10:A:170:ASP:OD2	10:A:204:TYR:CA	2.13	0.95
8:D:141:ARG:NH1	10:A:154:SER:OG	1.97	0.95
2:3:234:GLU:OE2	2:3:240:LYS:CA	2.15	0.95
5:6:908:LYS:HB3	5:6:960:LEU:HD21	1.44	0.95
10:A:165:VAL:HG21	10:A:205:LEU:HD13	1.47	0.95
3:4:506:LEU:HB3	3:4:510:ARG:HH12	1.28	0.95
1:2:327:ARG:HH11	1:2:386:GLN:NE2	1.63	0.95
5:6:720:ASN:ND2	5:6:723:ILE:HD13	1.81	0.95
4:5:276:MET:CE	4:5:294:ILE:CD1	2.45	0.94
4:5:437:VAL:CG2	4:5:472:ALA:HB2	1.96	0.94
2:3:652:THR:CG2	2:3:654:PRO:CD	2.42	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:671:LEU:HB3	6:7:621:MET:HA	1.44	0.94
1:2:522:GLY:O	1:2:822:LYS:NZ	1.99	0.94
3:4:717:ASP:HB2	6:7:668:ARG:CG	1.97	0.94
4:5:737:PHE:CE2	4:5:743:PHE:CE2	2.47	0.94
1:2:403:PRO:CG	5:6:672:LEU:CD2	2.45	0.94
2:3:445:ALA:CB	2:3:499:LYS:HG3	1.97	0.94
4:5:725:GLY:O	4:5:728:THR:OG1	1.86	0.94
3:4:717:ASP:CB	6:7:668:ARG:HE	1.78	0.94
2:3:457:LEU:HD23	2:3:499:LYS:HE3	1.49	0.94
4:5:710:GLU:O	4:5:713:ARG:CG	2.16	0.94
2:3:440:VAL:HA	2:3:461:ALA:CB	1.97	0.94
2:3:519:VAL:HG11	2:3:532:ASN:O	1.66	0.94
4:5:728:THR:CA	4:5:732:THR:HB	1.97	0.94
4:5:426:LEU:HD21	4:5:520:LEU:HD22	1.50	0.94
1:2:807:VAL:CG1	4:5:572:VAL:CG2	2.45	0.93
4:5:728:THR:HB	4:5:732:THR:CG2	1.96	0.93
2:3:395:ASN:CG	6:7:635:PRO:CD	2.36	0.93
9:B:188:ILE:CG2	9:B:192:LEU:HD13	1.96	0.93
5:6:963:LYS:HG2	5:6:966:LYS:HE3	1.48	0.93
3:4:712:VAL:O	3:4:713:ASP:OD1	1.84	0.93
1:2:803:PHE:HE2	1:2:805:ILE:O	1.19	0.93
2:3:389:VAL:HG12	2:3:390:GLU:H	1.32	0.93
3:4:712:VAL:HG12	3:4:715:LYS:HG2	1.49	0.93
9:B:195:ILE:HG22	11:C:109:ILE:HD13	1.50	0.93
4:5:394:GLY:CA	4:5:607:ARG:NH2	2.27	0.93
1:2:504:SER:O	1:2:698:PHE:HE2	1.52	0.93
3:4:715:LYS:O	3:4:716:ASN:OD1	1.87	0.93
10:A:175:GLN:HE22	10:A:199:LEU:HD22	0.79	0.93
2:3:553:ILE:HA	2:3:554:ASN:HB2	1.49	0.93
1:2:216:LEU:HD12	1:2:217:GLU:N	1.83	0.93
4:5:722:LEU:CD1	4:5:728:THR:HG23	1.88	0.92
4:5:737:PHE:HD2	4:5:743:PHE:HD2	1.13	0.92
2:3:288:PRO:HB2	4:5:508:GLY:O	1.69	0.92
10:A:93:ARG:O	10:A:97:LEU:HG	1.69	0.92
2:3:671:LEU:HD11	6:7:620:HIS:HB2	1.51	0.92
2:3:457:LEU:CD2	2:3:502:ILE:CD1	2.46	0.92
4:5:726:TRP:CE3	4:5:727:SER:HB2	2.04	0.92
6:7:485:GLY:HA3	6:7:525:GLU:C	1.91	0.92
10:A:173:GLU:OE1	11:C:74:LEU:HD21	70.93	0.92
3:4:529:SER:O	3:4:723:HIS:CB	2.18	0.92
5:6:296:ARG:HE	5:6:613:VAL:CG1	1.82	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:400:VAL:HG23	5:6:455:LEU:HB3	1.52	0.92
8:D:256:TYR:HB2	8:D:257:THR:CG2	1.99	0.92
2:3:517:ASN:HB3	2:3:518:PRO:CD	1.99	0.92
3:4:579:GLN:OE1	6:7:448:MET:HB3	1.70	0.92
10:A:145:ASP:HA	10:A:146:LEU:HB3	0.94	0.91
11:C:134:GLU:OE2	11:C:138:HIS:CD2	2.23	0.91
6:7:147:ARG:HH12	6:7:191:LEU:HD21	1.34	0.91
1:2:637:VAL:HG22	4:5:167:ILE:HG22	1.46	0.91
9:B:139:HIS:H	9:B:142:ARG:HH11	0.97	0.91
4:5:747:ALA:HA	4:5:750:LYS:HE3	1.51	0.91
4:5:450:THR:HG21	4:5:469:MET:CG	2.01	0.91
4:5:717:GLU:OE1	4:5:721:ARG:HG2	1.71	0.91
1:2:794:ARG:NE	4:5:565:ASP:HB3	1.79	0.91
4:5:276:MET:CE	4:5:294:ILE:HD13	2.00	0.91
2:3:502:ILE:HG21	6:7:244:ILE:HG21	1.53	0.91
9:B:191:LYS:HE2	11:C:172:MET:HE3	1.53	0.91
3:4:370:ARG:HA	3:4:371:CYS:SG	2.11	0.91
4:5:467:GLY:O	4:5:471:LEU:N	2.03	0.90
2:3:680:VAL:HG13	6:7:617:THR:CG2	1.97	0.90
2:3:288:PRO:CG	4:5:508:GLY:O	2.20	0.90
2:3:186:VAL:CG1	2:3:256:ILE:HG21	2.02	0.90
4:5:737:PHE:CD2	4:5:743:PHE:HE2	1.74	0.90
10:A:175:GLN:OE1	10:A:199:LEU:HD11	1.72	0.90
5:6:948:LEU:HD11	5:6:954:TYR:HB2	1.49	0.90
6:7:193:PRO:HD3	6:7:270:PHE:CE2	2.06	0.90
1:2:814:LEU:HD23	4:5:576:HIS:HD2	1.34	0.90
6:7:260:TYR:CD1	6:7:298:LEU:HD13	2.07	0.90
3:4:721:ALA:HB2	6:7:664:TYR:HE2	1.12	0.90
1:2:687:VAL:HG22	1:2:688:ASP:N	1.84	0.90
1:2:326:ARG:CD	1:2:592:GLU:OE2	2.20	0.90
3:4:267:GLU:O	3:4:271:ILE:HD12	1.72	0.89
4:5:734:ARG:O	4:5:738:VAL:N	2.06	0.89
5:6:908:LYS:HB3	5:6:960:LEU:CD2	2.01	0.89
2:3:33:ASP:HB2	2:3:39:ARG:HH11	1.36	0.89
10:A:167:VAL:HG11	10:A:185:LYS:HA	1.52	0.89
5:6:575:GLY:O	5:6:581:LYS:NZ	2.04	0.89
2:3:671:LEU:CD1	6:7:620:HIS:HB2	2.02	0.89
2:3:680:VAL:CG1	6:7:617:THR:CG2	2.51	0.89
1:2:403:PRO:HD3	5:6:672:LEU:HD22	1.54	0.89
6:7:685:THR:OG1	6:7:686:PRO:HD2	1.70	0.89
9:B:25:ILE:HD12	9:B:87:ILE:HD11	1.52	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:106:GLY:H	10:A:107:LEU:HB2	1.38	0.89
4:5:606:CYS:O	4:5:665:LYS:NZ	2.05	0.89
2:3:413:THR:HG21	2:3:549:VAL:CB	2.03	0.89
1:2:787:SER:HA	4:5:573:ILE:CD1	2.03	0.89
3:4:550:LYS:HZ1	5:6:737:LYS:HB2	1.37	0.89
5:6:912:MET:HE2	5:6:961:ALA:CA	2.03	0.88
3:4:636:LYS:NZ	6:7:539:GLU:N	2.19	0.88
1:2:584:PRO:HB3	5:6:667:GLY:HA2	0.92	0.88
9:B:191:LYS:HE2	11:C:172:MET:CE	2.01	0.88
10:A:145:ASP:HB3	10:A:147:VAL:CG2	2.02	0.88
2:3:451:GLU:HG3	2:3:452:THR:HG23	1.54	0.88
4:5:351:GLU:CG	10:A:19:LEU:CD2	2.37	0.88
4:5:450:THR:CB	4:5:469:MET:HG2	2.03	0.88
4:5:714:PHE:CD2	4:5:755:LEU:HD12	2.09	0.88
2:3:451:GLU:O	2:3:452:THR:OG1	1.92	0.88
10:A:173:GLU:HB2	10:A:182:ASN:HA	1.55	0.88
9:B:183:PRO:O	9:B:187:GLU:HG3	1.71	0.88
5:6:266:SER:HB2	5:6:458:HIS:HB2	1.54	0.88
4:5:733:LEU:CD2	4:5:748:LEU:CD1	2.52	0.88
1:2:241:SER:OG	1:2:296:ARG:HG2	1.73	0.88
3:4:532:GLU:CG	3:4:716:ASN:ND2	2.36	0.88
2:3:413:THR:HG21	2:3:549:VAL:HB	1.52	0.88
9:B:139:HIS:H	9:B:142:ARG:NH1	1.72	0.87
5:6:288:LEU:H	5:6:399:GLY:HA3	1.39	0.87
3:4:438:THR:HG22	3:4:462:ASP:HB3	1.53	0.87
4:5:407:ARG:HG3	4:5:500:GLN:HG3	1.54	0.87
3:4:284:ILE:HG23	3:4:290:ASP:HB2	1.55	0.87
2:3:445:ALA:O	2:3:447:THR:HG23	1.75	0.87
4:5:755:LEU:HD22	4:5:760:THR:HG21	1.55	0.87
4:5:482:PHE:HE2	4:5:546:ILE:HG21	1.40	0.87
4:5:733:LEU:HD22	4:5:748:LEU:CG	2.05	0.87
3:4:417:LEU:HD13	3:4:463:VAL:HG21	1.56	0.87
1:2:234:LEU:CD2	1:2:241:SER:O	2.23	0.87
2:3:413:THR:HG21	2:3:549:VAL:CG2	2.05	0.87
3:4:721:ALA:HB1	6:7:664:TYR:CD2	2.09	0.86
3:4:370:ARG:CA	3:4:371:CYS:SG	2.63	0.86
1:2:403:PRO:CD	5:6:672:LEU:HD22	2.04	0.86
8:D:190:TRP:HZ3	10:A:94:THR:HG1	1.23	0.86
8:D:256:TYR:HD1	8:D:257:THR:HG23	1.40	0.86
5:6:916:ILE:HA	5:6:919:LYS:HE3	1.57	0.86
1:2:794:ARG:HE	4:5:565:ASP:CG	1.79	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:164:ASP:OD1	10:A:190:PHE:CD1	2.29	0.86
5:6:296:ARG:NE	5:6:613:VAL:HG11	1.89	0.86
2:3:443:THR:HA	2:3:458:GLU:O	1.76	0.86
2:3:703:GLU:O	2:3:706:ILE:HG12	1.75	0.86
1:2:410:LEU:C	1:2:411:LEU:HD12	1.96	0.86
2:3:442:LEU:CD1	2:3:444:ALA:H	1.85	0.86
3:4:718:ARG:CB	6:7:665:ILE:HG23	2.05	0.86
1:2:442:ASN:OD1	1:2:444:PHE:N	2.07	0.86
10:A:177:GLU:HG2	10:A:178:TYR:HD2	1.40	0.86
2:3:523:TYR:O	2:3:527:ARG:CB	2.24	0.86
1:2:635:GLY:O	4:5:168:SER:OG	1.94	0.85
1:2:696:ALA:O	1:2:700:VAL:HG22	1.76	0.85
5:6:923:VAL:HB	5:6:929:GLU:HB2	1.56	0.85
3:4:557:ARG:HH11	3:4:668:ARG:NH2	1.74	0.85
10:A:147:VAL:H	10:A:148:ASP:HA	1.39	0.85
8:D:140:ILE:HD11	10:A:147:VAL:HG11	1.58	0.85
4:5:437:VAL:HG23	4:5:472:ALA:HB2	1.58	0.85
6:7:260:TYR:CE1	6:7:298:LEU:HD22	2.11	0.85
4:5:420:THR:HG21	4:5:556:VAL:HG11	1.59	0.85
1:2:504:SER:O	1:2:698:PHE:CE2	2.30	0.85
3:4:714:GLU:CB	3:4:715:LYS:HA	2.06	0.85
5:6:297:THR:O	5:6:622:THR:HG21	1.72	0.85
10:A:149:ILE:HB	10:A:151:LEU:CB	2.07	0.85
4:5:375:ALA:HB1	4:5:378:ILE:HB	1.56	0.85
3:4:718:ARG:HA	6:7:665:ILE:HG13	1.56	0.85
2:3:123:PRO:HD3	2:3:221:LEU:HD12	1.57	0.85
1:2:794:ARG:HE	4:5:565:ASP:HA	1.40	0.85
3:4:710:ASP:O	3:4:711:LYS:HG3	1.76	0.85
4:5:450:THR:HA	4:5:468:ALA:N	1.92	0.84
2:3:671:LEU:HD13	6:7:620:HIS:C	1.97	0.84
5:6:744:PRO:HB2	5:6:745:PRO:CD	2.05	0.84
2:3:443:THR:HG21	2:3:457:LEU:CD1	2.04	0.84
2:3:502:ILE:CG2	6:7:346:GLY:HA2	2.06	0.84
3:4:762:ILE:CG2	3:4:766:ALA:CB	2.54	0.84
2:3:195:LYS:CE	2:3:216:ASP:OD2	2.26	0.84
5:6:586:LYS:NZ	5:6:597:TYR:OH	2.09	0.84
4:5:392:LEU:O	4:5:607:ARG:NH1	2.10	0.84
3:4:579:GLN:HE21	6:7:444:VAL:HG21	1.43	0.84
5:6:290:ILE:HG12	5:6:454:PHE:CE2	2.11	0.84
4:5:339:THR:O	4:5:340:SER:OG	1.95	0.84
10:A:173:GLU:CB	10:A:182:ASN:CA	2.55	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:149:ILE:HB	10:A:151:LEU:N	1.93	0.84
2:3:368:ALA:HB2	2:3:378:LYS:HE2	1.60	0.84
1:2:573:ALA:HB3	5:6:669:HIS:NE2	1.91	0.84
5:6:804:ILE:HG23	5:6:805:ARG:N	1.93	0.84
9:B:188:ILE:HG23	9:B:192:LEU:CD1	2.05	0.84
5:6:301:ARG:HH12	5:6:618:GLY:CA	1.89	0.84
1:2:403:PRO:HG3	5:6:672:LEU:HD23	1.59	0.84
6:7:601:LEU:HD13	6:7:603:ILE:CD1	2.07	0.84
4:5:38:PHE:HE2	4:5:40:LEU:HD11	1.37	0.84
2:3:197:ILE:CD1	2:3:251:ILE:HG13	2.08	0.84
2:3:288:PRO:CB	4:5:508:GLY:O	2.26	0.84
3:4:768:THR:O	3:4:771:VAL:HG12	1.77	0.84
4:5:729:SER:O	4:5:732:THR:HG22	1.78	0.84
2:3:651:VAL:O	2:3:651:VAL:HG12	1.76	0.84
2:3:502:ILE:HA	6:7:346:GLY:CA	2.07	0.83
4:5:258:LEU:CD2	4:5:294:ILE:CD1	2.56	0.83
2:3:166:LEU:O	2:3:166:LEU:HD12	1.78	0.83
6:7:71:ALA:HB1	6:7:129:THR:HG21	1.60	0.83
3:4:666:ASN:HD22	3:4:668:ARG:HH22	1.26	0.83
2:3:104:ARG:NH1	11:C:86:ASN:O	2.09	0.83
10:A:163:ILE:HG22	10:A:164:ASP:H	1.40	0.83
5:6:532:SER:HB3	5:6:745:PRO:HD2	1.60	0.83
4:5:90:PHE:HD2	4:5:137:LEU:CD2	1.91	0.83
3:4:470:SER:OG	3:4:623:LEU:HD11	1.79	0.83
4:5:40:LEU:HD22	4:5:45:ILE:HG13	1.59	0.83
11:C:18:CYS:HB3	11:C:72:VAL:HG11	1.61	0.83
1:2:543:GLY:HA3	1:2:549:LYS:HD3	1.58	0.83
3:4:717:ASP:CB	6:7:668:ARG:HG2	2.06	0.83
4:5:740:THR:HG23	4:5:742:ARG:HB2	1.60	0.83
4:5:722:LEU:HD12	4:5:728:THR:HG21	0.83	0.83
2:3:488:GLU:OE2	6:7:484:THR:HG23	1.78	0.83
1:2:392:GLU:OE2	1:2:396:THR:OG1	1.95	0.83
6:7:102:LEU:HG	6:7:106:ILE:CD1	2.07	0.83
3:4:489:LYS:NZ	3:4:497:GLU:HB2	1.94	0.83
4:5:94:ILE:HD11	4:5:135:PHE:HB2	1.59	0.83
2:3:395:ASN:ND2	6:7:634:GLU:CA	2.41	0.83
9:B:163:LEU:HD22	9:B:189:MET:HE1	1.59	0.83
1:2:687:VAL:HG23	1:2:692:ASP:OD1	1.76	0.83
5:6:558:SER:HB3	5:6:559:THR:HA	1.58	0.82
3:4:712:VAL:CB	3:4:715:LYS:HG2	2.07	0.82
5:6:944:LYS:NZ	5:6:957:GLU:HB3	1.94	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:258:LEU:HD21	4:5:294:ILE:CD1	2.09	0.82
10:A:163:ILE:CG2	10:A:164:ASP:H	1.91	0.82
3:4:506:LEU:HB3	3:4:510:ARG:NH1	1.93	0.82
5:6:621:TYR:HB3	5:6:668:ILE:HD13	1.61	0.82
2:3:406:LEU:HD12	2:3:543:PHE:HE2	1.42	0.82
2:3:457:LEU:CG	2:3:502:ILE:HD11	2.08	0.82
4:5:449:LEU:CD2	4:5:485:MET:SD	2.67	0.82
2:3:676:ILE:HB	6:7:617:THR:HB	1.62	0.82
2:3:522:GLN:OE1	4:5:643:ARG:O	1.96	0.82
9:B:118:ASN:ND2	9:B:122:LEU:HD11	1.94	0.82
9:B:71:VAL:HB	9:B:75:ILE:HD11	1.60	0.82
2:3:706:ILE:CG2	6:7:620:HIS:ND1	2.43	0.82
3:4:532:GLU:HG2	3:4:716:ASN:HD22	1.45	0.82
5:6:912:MET:SD	5:6:940:TYR:HE2	2.03	0.82
1:2:814:LEU:HD22	4:5:576:HIS:CG	2.13	0.82
2:3:288:PRO:HG2	4:5:508:GLY:O	1.79	0.82
4:5:450:THR:CG2	4:5:468:ALA:HB3	2.10	0.82
5:6:912:MET:HE2	5:6:961:ALA:HA	1.59	0.82
6:7:453:ASP:OD1	6:7:454:ILE:N	2.13	0.82
6:7:357:PRO:HA	6:7:374:THR:HA	1.62	0.82
1:2:798:ILE:HG21	4:5:560:HIS:HB3	1.62	0.81
5:6:941:LEU:HD23	5:6:944:LYS:HE2	1.62	0.81
5:6:819:ILE:CG2	5:6:820:THR:H	1.81	0.81
4:5:365:LYS:HG3	4:5:368:GLU:HB2	1.62	0.81
2:3:456:ARG:HH11	6:7:316:GLN:CG	1.93	0.81
9:B:173:LEU:HD12	9:B:177:GLU:OE1	1.80	0.81
4:5:259:GLN:HE21	4:5:271:PRO:HG2	1.44	0.81
5:6:912:MET:HE2	5:6:961:ALA:HB2	1.53	0.81
2:3:445:ALA:HA	2:3:499:LYS:HD2	1.62	0.81
1:2:592:GLU:CA	4:5:270:MET:SD	2.57	0.81
9:B:187:GLU:OE2	11:C:179:LYS:CE	2.28	0.81
10:A:149:ILE:CB	10:A:151:LEU:HB3	2.10	0.81
5:6:796:THR:HG22	5:6:798:ARG:H	1.46	0.81
4:5:450:THR:HB	4:5:469:MET:H	1.42	0.81
9:B:118:ASN:OD1	9:B:122:LEU:CD1	2.27	0.81
3:4:449:ARG:HG3	3:4:450:GLN:H	1.42	0.81
4:5:737:PHE:CB	4:5:743:PHE:CD2	2.64	0.81
4:5:449:LEU:HD21	4:5:485:MET:SD	2.21	0.81
1:2:591:LEU:HD22	4:5:270:MET:HB2	1.61	0.81
2:3:558:ASP:OD1	4:5:630:ARG:HG2	1.81	0.81
2:3:159:GLY:HA2	2:3:160:SER:HB2	1.61	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:714:GLU:H	3:4:715:LYS:HB2	1.46	0.81
4:5:258:LEU:CD2	4:5:294:ILE:HD12	2.11	0.81
2:3:443:THR:HG23	2:3:497:ILE:HG21	1.63	0.81
4:5:560:HIS:HB3	4:5:565:ASP:OD2	1.80	0.81
3:4:640:SER:CB	6:7:549:SER:O	2.29	0.81
2:3:200:VAL:HG12	2:3:244:GLU:HB2	1.63	0.81
4:5:136:GLN:HB2	4:5:280:ARG:HE	1.45	0.80
4:5:453:VAL:CG1	4:5:506:LYS:HD3	2.11	0.80
6:7:258:ILE:HD13	6:7:305:SER:HB3	1.61	0.80
2:3:171:LEU:O	2:3:172:THR:HG22	1.81	0.80
4:5:137:LEU:HD12	4:5:137:LEU:O	1.80	0.80
2:3:556:ILE:H	2:3:556:ILE:HD12	1.47	0.80
10:A:58:GLN:HA	10:A:62:MET:HB2	1.61	0.80
4:5:338:GLU:O	4:5:339:THR:HB	1.80	0.80
10:A:163:ILE:CG2	10:A:164:ASP:N	2.45	0.80
10:A:173:GLU:HB3	10:A:182:ASN:CA	2.12	0.80
8:D:211:ASP:OD2	8:D:213:GLU:CB	2.29	0.80
2:3:409:GLY:CA	2:3:549:VAL:O	2.30	0.80
1:2:327:ARG:NH1	1:2:386:GLN:HE22	1.80	0.80
4:5:737:PHE:HA	4:5:740:THR:HG22	1.62	0.80
2:3:558:ASP:OD2	4:5:630:ARG:CG	2.29	0.80
1:2:810:LEU:HD21	4:5:573:ILE:HG13	1.64	0.80
1:2:794:ARG:CG	4:5:565:ASP:HB3	2.11	0.80
1:2:444:PHE:CZ	5:6:380:ILE:HD11	2.17	0.80
5:6:828:TYR:OH	5:6:832:ARG:NH2	2.13	0.80
4:5:726:TRP:CZ3	4:5:727:SER:HB2	2.17	0.79
1:2:794:ARG:HD3	4:5:565:ASP:CB	2.06	0.79
2:3:442:LEU:HB2	2:3:497:ILE:CG2	2.10	0.79
4:5:712:ARG:HG2	4:5:755:LEU:HD21	1.62	0.79
4:5:351:GLU:OE2	10:A:19:LEU:CD2	2.29	0.79
2:3:519:VAL:HG12	2:3:532:ASN:O	1.81	0.79
5:6:290:ILE:HD11	5:6:397:PHE:CD2	2.17	0.79
2:3:523:TYR:O	2:3:527:ARG:HB2	1.81	0.79
10:A:104:ASN:OD1	10:A:104:ASN:O	2.00	0.79
2:3:462:MET:SD	2:3:470:VAL:HG21	2.22	0.79
10:A:23:SER:OG	10:A:24:ASN:C	2.20	0.79
2:3:186:VAL:CG1	2:3:256:ILE:CG2	2.58	0.79
5:6:379:VAL:HG22	5:6:454:PHE:HB3	1.64	0.79
4:5:420:THR:CG2	4:5:556:VAL:HG11	2.12	0.79
5:6:597:TYR:OH	5:6:639:ASP:OD2	2.01	0.79
2:3:176:LEU:HA	2:3:298:PHE:HD2	1.48	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:85:ILE:CG2	6:7:102:LEU:HD23	2.13	0.79
4:5:608:LEU:HD11	4:5:609:LYS:NZ	1.97	0.79
2:3:687:ARG:NH2	6:7:602:ASP:OD2	2.16	0.79
1:2:326:ARG:HD2	1:2:592:GLU:OE2	1.82	0.79
4:5:716:GLN:O	4:5:719:LYS:O	2.00	0.79
10:A:168:LEU:C	10:A:168:LEU:HD13	2.03	0.79
2:3:671:LEU:HB2	6:7:621:MET:HA	1.63	0.79
10:A:108:ASP:OD2	10:A:177:GLU:HG3	1.83	0.79
6:7:661:VAL:HG13	6:7:662:GLN:N	1.97	0.79
10:A:149:ILE:HA	10:A:150:ASP:CB	2.11	0.79
2:3:454:GLU:HB3	6:7:247:ARG:HD3	1.64	0.78
2:3:553:ILE:HB	2:3:554:ASN:C	2.04	0.78
4:5:453:VAL:HG11	4:5:506:LYS:HD3	1.64	0.78
6:7:662:GLN:HB3	6:7:666:ARG:NH1	1.97	0.78
10:A:177:GLU:HG2	10:A:178:TYR:CD2	2.19	0.78
2:3:462:MET:O	2:3:508:ALA:HB1	1.83	0.78
5:6:689:TYR:HA	5:6:690:ASN:HB2	1.64	0.78
3:4:315:ARG:HH12	6:7:251:VAL:H	1.30	0.78
5:6:933:ALA:O	5:6:936:ILE:HG12	1.82	0.78
5:6:790:ARG:NH1	5:6:839:ASP:OD2	2.16	0.78
4:5:577:THR:OG1	4:5:578:GLY:HA2	1.83	0.78
2:3:445:ALA:HA	2:3:499:LYS:CD	2.14	0.78
1:2:687:VAL:CG2	1:2:688:ASP:H	1.89	0.78
3:4:718:ARG:CB	6:7:665:ILE:HG12	2.14	0.78
3:4:558:TYR:OH	5:6:734:LEU:CD2	2.32	0.78
1:2:299:ASP:HB3	1:2:319:ARG:NH1	1.98	0.78
10:A:208:ILE:HG13	10:A:208:ILE:O	1.83	0.78
4:5:449:LEU:O	4:5:450:THR:OG1	2.01	0.78
5:6:912:MET:HE3	5:6:915:MET:HE2	1.64	0.78
2:3:406:LEU:HD12	2:3:543:PHE:CE2	2.19	0.78
3:4:638:SER:HB3	6:7:549:SER:N	1.99	0.78
1:2:458:ARG:HH12	1:2:473:VAL:HB	1.49	0.78
8:D:231:HIS:HA	8:D:274:ILE:HG22	1.64	0.78
2:3:457:LEU:HD23	2:3:499:LYS:HE2	1.64	0.78
1:2:794:ARG:NE	4:5:565:ASP:CA	2.43	0.78
2:3:413:THR:CG2	2:3:549:VAL:HB	2.12	0.78
4:5:714:PHE:HD2	4:5:755:LEU:HD12	1.49	0.78
9:B:188:ILE:O	9:B:192:LEU:CD1	2.29	0.78
2:3:122:ILE:CG2	2:3:123:PRO:CD	2.56	0.78
8:D:141:ARG:CD	10:A:149:ILE:HG22	2.14	0.78
6:7:358:ALA:HB2	6:7:375:TYR:HE2	1.48	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:117:TRP:CZ2	9:B:175:LEU:HD22	2.18	0.78
6:7:488:SER:OG	6:7:492:GLY:HA3	1.83	0.78
3:4:572:THR:CA	6:7:686:PRO:HG3	2.13	0.77
3:4:714:GLU:HB2	3:4:715:LYS:HA	1.66	0.77
1:2:794:ARG:CZ	4:5:568:ILE:HD11	2.14	0.77
2:3:216:ASP:OD1	2:3:217:ALA:N	2.16	0.77
1:2:335:LYS:HE3	1:2:383:ARG:HD2	1.66	0.77
1:2:807:VAL:HG11	4:5:572:VAL:HG23	1.64	0.77
3:4:558:TYR:CE2	5:6:734:LEU:HD23	2.18	0.77
5:6:290:ILE:CD1	5:6:361:ILE:HD13	2.14	0.77
1:2:405:HIS:ND1	5:6:621:TYR:CZ	2.32	0.77
3:4:284:ILE:HG13	3:4:297:GLU:OE2	1.85	0.77
3:4:201:PHE:HB2	3:4:202:LYS:HA	1.66	0.77
2:3:186:VAL:HG13	2:3:256:ILE:HG22	1.65	0.77
4:5:450:THR:CG2	4:5:469:MET:H	1.97	0.77
2:3:53:ALA:O	6:7:217:LYS:NZ	2.17	0.77
4:5:717:GLU:O	4:5:721:ARG:HB3	1.83	0.77
2:3:395:ASN:CB	6:7:635:PRO:HD2	2.13	0.77
1:2:638:THR:CG2	4:5:259:GLN:CB	2.59	0.77
10:A:175:GLN:O	10:A:180:VAL:HA	1.85	0.77
11:C:104:PHE:N	11:C:170:GLU:OE2	2.16	0.77
2:3:186:VAL:HG13	2:3:256:ILE:HG21	1.61	0.77
5:6:941:LEU:HD23	5:6:944:LYS:CE	2.14	0.77
4:5:407:ARG:HG3	4:5:500:GLN:CG	2.14	0.77
4:5:196:ASN:CA	4:5:197:PHE:HB3	2.15	0.77
9:B:188:ILE:HD13	11:C:132:ALA:HB2	1.65	0.77
1:2:403:PRO:CD	5:6:672:LEU:HD21	2.12	0.77
4:5:450:THR:HG22	4:5:468:ALA:CB	2.15	0.77
4:5:276:MET:CE	4:5:294:ILE:HD12	2.10	0.77
2:3:706:ILE:HG21	6:7:620:HIS:ND1	2.00	0.77
11:C:117:GLU:OE2	11:C:120:LEU:HD23	1.85	0.76
4:5:463:TYR:N	4:5:509:ILE:HD13	2.00	0.76
2:3:671:LEU:HD13	6:7:621:MET:N	2.00	0.76
1:2:502:ALA:HB3	1:2:512:LYS:HE2	1.66	0.76
5:6:175:TYR:HA	5:6:178:LEU:HD13	1.67	0.76
1:2:506:TYR:HB2	1:2:698:PHE:CG	2.20	0.76
6:7:315:ILE:HD13	6:7:333:ILE:HD12	1.67	0.76
6:7:443:ARG:HH12	6:7:449:LYS:NZ	1.81	0.76
3:4:640:SER:OG	6:7:549:SER:CB	2.31	0.76
1:2:696:ALA:HA	5:6:800:LEU:HD21	1.66	0.76
2:3:187:THR:HG21	4:5:463:TYR:HB3	1.65	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:27:VAL:HG13	10:A:28:ASN:H	1.50	0.76
2:3:679:ILE:CD1	6:7:620:HIS:CE1	2.68	0.76
4:5:735:ARG:HA	4:5:738:VAL:CG1	2.15	0.76
2:3:445:ALA:HB2	2:3:499:LYS:CG	2.14	0.76
2:3:189:THR:CA	2:3:256:ILE:CD1	2.54	0.76
2:3:553:ILE:HD12	2:3:555:GLU:HG2	1.68	0.76
8:D:145:ARG:NH1	10:A:102:TRP:CE3	2.54	0.76
4:5:737:PHE:HB3	4:5:743:PHE:CD2	2.21	0.76
2:3:395:ASN:HD22	6:7:634:GLU:HB2	1.48	0.76
4:5:341:SER:C	4:5:342:ILE:HG12	2.05	0.76
5:6:922:GLU:O	5:6:926:GLU:HG2	1.85	0.76
10:A:165:VAL:CG2	10:A:205:LEU:HD13	2.16	0.76
4:5:577:THR:HA	4:5:579:ASN:N	2.00	0.75
2:3:395:ASN:HB2	6:7:635:PRO:CD	2.17	0.75
9:B:163:LEU:HD22	9:B:189:MET:CE	2.16	0.75
8:D:259:THR:HG22	8:D:269:LEU:HD21	1.65	0.75
5:6:941:LEU:HD13	5:6:958:ARG:NH2	2.01	0.75
2:3:671:LEU:CD1	6:7:620:HIS:O	2.30	0.75
3:4:202:LYS:HB3	3:4:203:TYR:HB3	1.68	0.75
6:7:94:LEU:HB2	6:7:95:GLN:HB2	1.66	0.75
4:5:36:LEU:HD11	4:5:100:ARG:HH22	1.50	0.75
3:4:718:ARG:HB2	6:7:665:ILE:CG1	2.14	0.75
2:3:459:ALA:HB1	2:3:463:VAL:HB	1.68	0.75
1:2:235:GLY:HA2	1:2:283:TYR:HE2	1.50	0.75
1:2:702:SER:OG	5:6:559:THR:HG21	1.86	0.75
11:C:104:PHE:H	11:C:170:GLU:CD	1.88	0.75
6:7:530:ASP:O	6:7:534:ARG:NH1	2.18	0.75
2:3:502:ILE:CB	6:7:346:GLY:HA2	2.15	0.75
8:D:256:TYR:CD1	8:D:257:THR:HG23	2.21	0.75
6:7:485:GLY:HA3	6:7:525:GLU:O	1.87	0.75
2:3:252:ASP:OD1	2:3:253:HIS:N	2.19	0.75
1:2:523:VAL:HG12	1:2:525:LYS:HB3	1.68	0.75
4:5:104:LEU:HD13	4:5:104:LEU:C	2.06	0.75
10:A:108:ASP:OD1	10:A:198:ARG:HD3	1.86	0.75
3:4:470:SER:OG	3:4:623:LEU:CD1	2.35	0.75
3:4:338:VAL:HG23	5:6:375:ARG:HH12	1.52	0.75
5:6:732:VAL:HG12	5:6:736:MET:SD	2.26	0.75
1:2:794:ARG:NE	4:5:565:ASP:HA	2.01	0.75
5:6:792:SER:HA	5:6:793:TYR:HB2	1.67	0.75
2:3:523:TYR:O	2:3:527:ARG:HB3	1.86	0.75
3:4:532:GLU:CD	3:4:716:ASN:ND2	2.40	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:794:ARG:NH2	4:5:568:ILE:HD11	2.02	0.75
3:4:638:SER:HB2	6:7:549:SER:N	1.80	0.75
1:2:687:VAL:CB	5:6:781:ARG:NH1	2.35	0.75
4:5:538:ASP:H	4:5:544:THR:HG22	1.51	0.75
3:4:650:GLU:CD	3:4:796:ARG:HH12	1.90	0.75
11:C:83:LYS:O	11:C:86:ASN:CG	2.24	0.75
3:4:712:VAL:HB	3:4:715:LYS:CB	2.17	0.75
3:4:715:LYS:O	3:4:716:ASN:CG	2.25	0.75
4:5:747:ALA:CA	4:5:750:LYS:HE3	2.15	0.75
3:4:550:LYS:HE2	5:6:735:HIS:O	1.85	0.75
3:4:438:THR:CG2	3:4:462:ASP:HB3	2.15	0.75
5:6:582:SER:HA	5:6:585:LEU:HD12	1.69	0.75
2:3:172:THR:HG23	2:3:172:THR:O	1.87	0.75
5:6:570:ASN:O	5:6:571:ILE:HD13	1.86	0.75
4:5:556:VAL:HG22	4:5:557:LYS:N	2.02	0.74
6:7:677:SER:OG	6:7:678:LYS:N	2.19	0.74
6:7:235:LEU:HD22	6:7:357:PRO:HD3	1.68	0.74
10:A:32:TYR:HB2	10:A:93:ARG:HH12	1.52	0.74
6:7:102:LEU:CG	6:7:106:ILE:HD11	2.16	0.74
9:B:134:PHE:HB2	9:B:137:PRO:HB3	1.68	0.74
2:3:122:ILE:HG21	2:3:221:LEU:HD13	1.67	0.74
5:6:944:LYS:HZ2	5:6:957:GLU:HB3	1.49	0.74
2:3:568:THR:C	2:3:570:ARG:H	1.89	0.74
9:B:157:LEU:HD11	11:C:137:HIS:HD2	1.53	0.74
3:4:764:GLU:HA	3:4:767:LYS:NZ	2.02	0.74
4:5:450:THR:HB	4:5:469:MET:N	2.02	0.74
2:3:671:LEU:HD12	6:7:620:HIS:C	1.99	0.74
3:4:713:ASP:H	3:4:715:LYS:HB2	1.50	0.74
3:4:243:LEU:HD23	3:4:244:ASP:CA	2.16	0.74
6:7:443:ARG:NH1	6:7:449:LYS:NZ	2.35	0.74
10:A:147:VAL:N	10:A:148:ASP:HA	1.98	0.74
5:6:730:HIS:O	5:6:734:LEU:HD13	1.87	0.74
2:3:553:ILE:HB	2:3:555:GLU:N	2.02	0.74
4:5:747:ALA:HA	4:5:750:LYS:CE	2.17	0.74
2:3:493:GLN:CG	2:3:509:ARG:HG2	2.16	0.74
5:6:134:LYS:H	5:6:135:VAL:HA	1.53	0.74
1:2:300:PHE:N	1:2:319:ARG:HH11	1.86	0.74
3:4:717:ASP:CG	6:7:668:ARG:CZ	2.53	0.74
1:2:798:ILE:HG21	4:5:560:HIS:CB	2.18	0.74
4:5:90:PHE:CD2	4:5:137:LEU:HD22	2.22	0.74
5:6:533:ILE:HD12	5:6:544:LYS:HB3	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:638:THR:HG22	4:5:259:GLN:HB3	1.69	0.73
10:A:149:ILE:HA	10:A:150:ASP:HB2	1.70	0.73
10:A:165:VAL:HG21	10:A:205:LEU:CD1	2.18	0.73
9:B:157:LEU:HD11	11:C:137:HIS:CD2	2.22	0.73
10:A:23:SER:H	10:A:24:ASN:HA	1.53	0.73
3:4:512:VAL:HG13	3:4:515:ARG:NH1	2.03	0.73
2:3:33:ASP:HB2	2:3:39:ARG:NH1	2.02	0.73
3:4:484:GLU:O	3:4:488:ASN:N	2.21	0.73
3:4:762:ILE:CG2	3:4:766:ALA:HB3	2.18	0.73
3:4:638:SER:HB3	6:7:549:SER:H	1.51	0.73
2:3:457:LEU:HB3	2:3:499:LYS:HE2	1.70	0.73
6:7:455:ASN:ND2	6:7:541:MET:SD	2.60	0.73
8:D:216:VAL:CG1	8:D:217:ASN:HA	2.19	0.73
8:D:140:ILE:HD11	10:A:147:VAL:CG1	2.19	0.73
3:4:762:ILE:CG2	3:4:766:ALA:HB2	2.19	0.73
8:D:189:ILE:HD13	10:A:133:GLU:CD	2.08	0.73
3:4:676:ASN:CB	6:7:593:ARG:HH21	2.02	0.73
5:6:404:VAL:CG2	5:6:453:SER:OG	2.35	0.73
3:4:532:GLU:HG2	3:4:716:ASN:CG	2.09	0.73
5:6:908:LYS:CB	5:6:960:LEU:HD21	2.17	0.73
2:3:488:GLU:OE2	6:7:484:THR:CG2	2.36	0.73
4:5:556:VAL:HG22	4:5:557:LYS:H	1.51	0.73
3:4:561:ASP:O	3:4:803:ARG:NH2	2.22	0.73
2:3:652:THR:HG21	2:3:654:PRO:HD3	1.64	0.73
5:6:776:LYS:O	5:6:779:GLU:HG2	1.88	0.73
6:7:85:ILE:HG21	6:7:102:LEU:HD23	1.69	0.73
8:D:269:LEU:HD11	8:D:277:MET:HE3	1.70	0.73
1:2:584:PRO:HB3	5:6:667:GLY:C	2.09	0.73
4:5:351:GLU:HG3	10:A:19:LEU:HD21	1.70	0.73
5:6:303:GLU:HG3	5:6:356:TRP:CD1	2.24	0.73
10:A:182:ASN:CG	11:C:74:LEU:HD23	72.96	0.73
1:2:592:GLU:CA	4:5:270:MET:CE	2.53	0.73
1:2:446:VAL:HG21	5:6:356:TRP:HZ2	1.53	0.73
2:3:99:SER:HA	2:3:158:LYS:HB3	1.71	0.73
2:3:671:LEU:HD23	2:3:721:VAL:HG21	1.69	0.72
3:4:572:THR:N	6:7:686:PRO:HG2	2.04	0.72
1:2:636:ILE:CD1	4:5:273:ASN:HD22	1.96	0.72
6:7:601:LEU:CD1	6:7:603:ILE:CD1	2.67	0.72
4:5:441:GLY:HA3	4:5:443:GLY:N	2.04	0.72
3:4:532:GLU:HG3	3:4:533:LEU:N	2.02	0.72
3:4:362:ARG:HH11	6:7:299:PHE:HD2	1.38	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:737:PHE:CZ	4:5:743:PHE:HE2	2.08	0.72
3:4:676:ASN:CB	6:7:593:ARG:NH2	2.52	0.72
3:4:244:ASP:HB2	3:4:247:ASN:HD21	1.54	0.72
2:3:413:THR:HG21	2:3:549:VAL:HG21	1.70	0.72
4:5:90:PHE:HD2	4:5:137:LEU:HD22	1.52	0.72
4:5:153:SER:OG	4:5:154:GLU:N	2.20	0.72
4:5:721:ARG:C	4:5:722:LEU:HG	2.08	0.72
2:3:457:LEU:HD21	2:3:502:ILE:HG13	1.65	0.72
2:3:497:ILE:O	2:3:497:ILE:HG13	1.90	0.72
4:5:714:PHE:CZ	4:5:751:ALA:HB3	2.25	0.72
2:3:234:GLU:OE1	2:3:239:ASN:O	2.08	0.72
6:7:102:LEU:CD1	6:7:106:ILE:HG13	2.20	0.72
6:7:102:LEU:CD2	6:7:106:ILE:HD11	2.20	0.72
2:3:447:THR:HB	2:3:448:THR:HG22	1.72	0.72
2:3:706:ILE:HG22	6:7:620:HIS:CE1	2.25	0.72
5:6:290:ILE:HD13	5:6:361:ILE:HD13	1.71	0.72
3:4:338:VAL:H	5:6:375:ARG:NH1	1.88	0.72
2:3:722:ASN:OD1	2:3:723:LYS:N	2.21	0.72
5:6:335:ASN:H	5:6:338:CYS:H	1.37	0.72
4:5:38:PHE:CZ	4:5:40:LEU:CD1	2.58	0.72
1:2:442:ASN:ND2	1:2:444:PHE:O	2.23	0.72
5:6:124:VAL:HG23	5:6:134:LYS:O	1.89	0.72
6:7:617:THR:HA	6:7:620:HIS:CE1	2.24	0.71
1:2:807:VAL:HG11	4:5:572:VAL:CG2	2.18	0.71
2:3:443:THR:CB	2:3:457:LEU:HB2	2.20	0.71
9:B:183:PRO:O	9:B:187:GLU:CG	2.37	0.71
5:6:566:ARG:HH21	5:6:659:GLN:HB2	1.53	0.71
2:3:96:ILE:HD13	2:3:129:LEU:HD11	1.72	0.71
5:6:727:LEU:HD11	5:6:731:ILE:HD11	1.72	0.71
3:4:714:GLU:N	3:4:715:LYS:HB2	2.03	0.71
1:2:507:GLY:HA3	1:2:512:LYS:HE3	1.70	0.71
4:5:737:PHE:HD2	4:5:743:PHE:CD2	1.88	0.71
5:6:730:HIS:CE1	5:6:734:LEU:HD11	2.25	0.71
3:4:261:LEU:HB2	3:4:268:VAL:HG11	1.71	0.71
1:2:794:ARG:NE	4:5:565:ASP:CG	2.41	0.71
5:6:940:TYR:CD1	5:6:943:GLN:NE2	2.58	0.71
4:5:258:LEU:CD2	4:5:276:MET:SD	2.78	0.71
5:6:532:SER:CB	5:6:745:PRO:HD2	2.20	0.71
4:5:588:GLU:O	4:5:593:GLU:N	2.23	0.71
4:5:711:ILE:HG21	4:5:750:LYS:NZ	2.06	0.71
9:B:188:ILE:HG22	9:B:192:LEU:CD1	2.08	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:517:ASN:HB3	2:3:518:PRO:HD3	1.71	0.71
3:4:527:ALA:HB3	3:4:537:LYS:NZ	2.05	0.71
8:D:224:TRP:CZ3	8:D:283:ARG:HD3	2.26	0.71
2:3:191:LEU:HG	6:7:329:ARG:NH1	2.06	0.71
1:2:339:PHE:HA	1:2:378:GLU:HB3	1.72	0.71
3:4:592:SER:HA	3:4:632:ASP:HB2	1.71	0.71
4:5:342:ILE:CB	4:5:343:TRP:HD1	1.96	0.71
2:3:703:GLU:O	2:3:706:ILE:CG1	2.39	0.71
2:3:561:ILE:O	2:3:565:VAL:HG23	1.90	0.71
4:5:258:LEU:HD21	4:5:276:MET:CE	2.21	0.71
5:6:356:TRP:HZ3	5:6:358:LYS:HB2	1.55	0.71
6:7:298:LEU:HD12	6:7:298:LEU:O	1.90	0.71
6:7:102:LEU:HD21	6:7:106:ILE:HD11	1.72	0.71
1:2:696:ALA:HB1	5:6:774:VAL:HG22	1.72	0.71
2:3:347:ILE:O	2:3:351:ASN:ND2	2.24	0.71
4:5:170:SER:HB3	4:5:255:PHE:HB2	1.73	0.70
2:3:679:ILE:HD11	6:7:617:THR:HG22	1.72	0.70
3:4:633:GLU:CD	6:7:542:GLU:OE1	2.27	0.70
3:4:417:LEU:HD22	3:4:463:VAL:HG11	1.71	0.70
5:6:149:ASN:HB3	5:6:262:VAL:O	1.89	0.70
6:7:316:GLN:HE21	6:7:328:PRO:CG	2.04	0.70
3:4:330:GLY:O	3:4:399:LEU:CD1	2.40	0.70
4:5:467:GLY:H	4:5:470:VAL:HB	1.55	0.70
3:4:328:LEU:HD11	3:4:461:VAL:HG21	1.73	0.70
2:3:406:LEU:HB2	2:3:543:PHE:CD2	2.27	0.70
3:4:483:GLN:HG3	3:4:484:GLU:H	1.56	0.70
2:3:400:ARG:NH2	2:3:544:ASP:OD1	2.24	0.70
6:7:601:LEU:HD13	6:7:603:ILE:HD11	1.73	0.70
1:2:405:HIS:ND1	5:6:621:TYR:CE1	2.48	0.70
6:7:601:LEU:CD1	6:7:603:ILE:HD12	2.22	0.70
2:3:166:LEU:C	2:3:166:LEU:HD12	2.11	0.70
3:4:532:GLU:HG2	3:4:716:ASN:CB	2.22	0.70
8:D:211:ASP:OD1	8:D:213:GLU:CB	2.39	0.70
9:B:187:GLU:OE2	11:C:179:LYS:NZ	2.25	0.70
1:2:402:LEU:CD2	5:6:623:ILE:O	2.36	0.70
3:4:512:VAL:HG13	3:4:515:ARG:HH12	1.57	0.70
1:2:839:LYS:NZ	1:2:864:TYR:HA	2.07	0.70
2:3:186:VAL:HG11	2:3:256:ILE:HG21	1.72	0.70
5:6:575:GLY:N	5:6:581:LYS:HZ3	1.90	0.70
5:6:379:VAL:HG22	5:6:454:PHE:HD2	1.57	0.70
1:2:573:ALA:CB	5:6:669:HIS:NE2	2.55	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:102:LEU:HG	6:7:106:ILE:HD11	1.73	0.70
4:5:441:GLY:HA2	4:5:442:LYS:HB2	1.74	0.70
2:3:395:ASN:CB	6:7:635:PRO:CD	2.69	0.69
4:5:714:PHE:HB2	4:5:755:LEU:HD13	1.71	0.69
4:5:614:LEU:CD1	4:5:614:LEU:H	2.05	0.69
1:2:778:LEU:HD21	1:2:783:MET:HG3	1.73	0.69
3:4:640:SER:HG	6:7:549:SER:C	1.93	0.69
3:4:641:THR:H	6:7:549:SER:HB3	1.55	0.69
1:2:638:THR:CG2	4:5:259:GLN:HB3	2.20	0.69
1:2:641:GLN:CD	4:5:262:PRO:HB2	2.12	0.69
1:2:387:ARG:HH12	4:5:323:ILE:HD11	1.55	0.69
1:2:843:ASP:OD1	1:2:844:SER:N	2.25	0.69
5:6:579:THR:HG21	5:6:715:ILE:HG21	1.75	0.69
8:D:137:LYS:O	8:D:141:ARG:NE	2.26	0.69
6:7:485:GLY:HA3	6:7:525:GLU:CA	2.22	0.69
1:2:241:SER:OG	1:2:296:ARG:CG	2.40	0.69
8:D:211:ASP:OD1	8:D:213:GLU:HB2	1.93	0.69
3:4:633:GLU:OE1	6:7:542:GLU:OE1	2.09	0.69
4:5:441:GLY:CA	4:5:442:LYS:HB2	2.20	0.69
3:4:432:ARG:NH2	6:7:554:ASN:HB2	2.07	0.69
2:3:706:ILE:HG22	6:7:620:HIS:ND1	2.06	0.69
2:3:553:ILE:HA	2:3:554:ASN:CB	2.17	0.69
4:5:608:LEU:HD11	4:5:609:LYS:HZ2	1.56	0.69
3:4:774:TYR:OH	3:4:778:ARG:NH2	2.26	0.69
4:5:737:PHE:CA	4:5:740:THR:HG22	2.21	0.69
10:A:175:GLN:HG3	10:A:181:PHE:HB2	1.73	0.69
4:5:471:LEU:O	4:5:471:LEU:HD12	1.93	0.69
2:3:197:ILE:CD1	2:3:251:ILE:CG1	2.71	0.69
3:4:557:ARG:HH11	3:4:668:ARG:HH21	1.39	0.69
4:5:453:VAL:CG2	4:5:504:ILE:HG21	2.22	0.69
10:A:26:ASP:O	10:A:27:VAL:HG12	1.93	0.69
5:6:600:GLY:HA2	5:6:602:ALA:N	2.08	0.69
3:4:304:ARG:HH12	3:4:423:LEU:HD21	1.56	0.69
1:2:766:TYR:OH	1:2:823:MET:O	2.10	0.69
2:3:502:ILE:HG21	6:7:244:ILE:CG2	2.21	0.69
5:6:299:GLU:OE1	5:6:621:TYR:OH	2.10	0.69
4:5:437:VAL:HG21	4:5:472:ALA:HB2	1.75	0.69
2:3:445:ALA:CB	2:3:499:LYS:CG	2.70	0.68
4:5:38:PHE:HE2	4:5:40:LEU:CD1	1.91	0.68
5:6:924:ASP:OD1	5:6:925:ARG:HG3	1.92	0.68
5:6:730:HIS:O	5:6:734:LEU:CD1	2.41	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:304:ARG:NH1	3:4:423:LEU:HD21	2.07	0.68
6:7:388:PHE:HB2	6:7:389:ALA:HA	1.75	0.68
5:6:379:VAL:HG22	5:6:454:PHE:CD2	2.28	0.68
8:D:145:ARG:HH12	10:A:102:TRP:HE3	1.41	0.68
1:2:375:VAL:HG11	4:5:324:ARG:HH22	1.58	0.68
6:7:118:CYS:SG	6:7:198:ARG:NH2	2.66	0.68
5:6:912:MET:HE1	5:6:961:ALA:CB	2.22	0.68
4:5:258:LEU:HD23	4:5:294:ILE:HD11	1.74	0.68
8:D:141:ARG:HH12	10:A:154:SER:HG	1.39	0.68
4:5:87:ILE:HD13	4:5:331:LEU:HD21	1.74	0.68
4:5:375:ALA:N	4:5:385:LYS:HE3	2.09	0.68
4:5:513:LEU:HD12	4:5:514:ASN:N	2.07	0.68
5:6:804:ILE:CG2	5:6:805:ARG:N	2.57	0.68
2:3:443:THR:HB	2:3:457:LEU:HB2	1.75	0.68
4:5:729:SER:OG	4:5:730:TYR:N	2.26	0.68
9:B:188:ILE:CG2	9:B:192:LEU:HD11	2.20	0.68
2:3:259:GLN:OE1	4:5:463:TYR:HB2	1.93	0.68
4:5:451:ALA:HB2	4:5:470:VAL:HG23	1.74	0.68
4:5:137:LEU:HD12	4:5:137:LEU:C	2.13	0.68
8:D:145:ARG:NH1	10:A:102:TRP:HE3	1.89	0.68
1:2:787:SER:HA	4:5:573:ILE:HD13	1.75	0.68
3:4:716:ASN:O	3:4:719:GLU:N	2.26	0.68
10:A:175:GLN:HG3	10:A:181:PHE:HD2	1.58	0.68
3:4:762:ILE:HG21	3:4:766:ALA:CB	2.22	0.68
1:2:791:ALA:CB	4:5:566:ILE:HG12	2.23	0.68
2:3:43:ARG:HH12	2:3:137:ASP:HB3	1.58	0.68
2:3:195:LYS:HE2	2:3:216:ASP:OD2	1.94	0.68
4:5:375:ALA:H	4:5:385:LYS:HE3	1.58	0.68
5:6:119:LEU:HD11	5:6:188:VAL:HG21	1.74	0.68
3:4:762:ILE:HG23	3:4:817:VAL:CG1	2.21	0.68
5:6:963:LYS:HA	5:6:966:LYS:HE3	1.75	0.68
3:4:395:GLN:HB2	3:4:424:VAL:HG13	1.75	0.68
9:B:94:THR:O	9:B:98:LEU:HG	1.94	0.68
5:6:625:ALA:HB3	5:6:626:GLY:HA2	1.74	0.68
3:4:717:ASP:HB3	6:7:668:ARG:NE	1.91	0.68
6:7:658:ASP:C	6:7:661:VAL:HG12	2.12	0.68
6:7:661:VAL:HG13	6:7:662:GLN:H	1.57	0.68
4:5:737:PHE:C	4:5:740:THR:HG22	2.14	0.68
2:3:492:GLN:OE1	6:7:482:TYR:CE2	2.47	0.68
3:4:236:LEU:HB3	3:4:238:THR:HG23	1.74	0.68
2:3:442:LEU:CB	2:3:497:ILE:HG22	2.17	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:711:ILE:O	4:5:714:PHE:CE1	2.46	0.68
4:5:711:ILE:HG21	4:5:750:LYS:HZ1	1.59	0.68
8:D:259:THR:HG22	8:D:269:LEU:HD22	1.71	0.68
10:A:175:GLN:CD	10:A:199:LEU:CD1	2.62	0.68
1:2:687:VAL:HG21	1:2:692:ASP:OD1	1.94	0.68
2:3:671:LEU:CD1	6:7:621:MET:HA	2.24	0.68
3:4:558:TYR:HE2	5:6:734:LEU:HB3	1.59	0.68
2:3:310:ASN:O	2:3:311:SER:OG	2.07	0.68
1:2:814:LEU:HD23	4:5:576:HIS:NE2	2.02	0.67
6:7:662:GLN:CB	6:7:666:ARG:HH12	2.02	0.67
4:5:351:GLU:CD	10:A:19:LEU:CD2	2.63	0.67
9:B:118:ASN:HD21	9:B:122:LEU:HD11	1.57	0.67
6:7:193:PRO:HG3	6:7:270:PHE:CD1	2.28	0.67
9:B:17:GLN:HA	9:B:20:VAL:HG12	1.76	0.67
2:3:395:ASN:ND2	6:7:634:GLU:CB	2.57	0.67
2:3:118:PRO:O	2:3:122:ILE:HG22	1.94	0.67
5:6:929:GLU:O	5:6:930:GLU:CG	2.39	0.67
1:2:778:LEU:CD2	1:2:783:MET:HG3	2.24	0.67
10:A:29:LEU:HD11	10:A:96:ILE:HG12	1.77	0.67
2:3:272:ARG:HD2	4:5:171:VAL:HG13	1.76	0.67
5:6:267:PHE:HD2	5:6:287:LEU:HD21	1.59	0.67
5:6:540:HIS:O	5:6:542:ALA:N	2.27	0.67
2:3:130:THR:HG22	2:3:153:TRP:HD1	1.59	0.67
5:6:609:THR:HG22	5:6:610:ALA:H	1.59	0.67
2:3:191:LEU:HG	6:7:329:ARG:HH12	1.59	0.67
3:4:830:ARG:HD3	3:4:833:ILE:HD12	1.76	0.67
5:6:910:VAL:HA	5:6:913:MET:SD	2.34	0.67
10:A:167:VAL:CG1	10:A:185:LYS:HA	2.23	0.67
2:3:201:HIS:HE2	2:3:232:PRO:HD2	1.58	0.67
5:6:301:ARG:NH1	5:6:618:GLY:HA3	2.04	0.67
3:4:330:GLY:O	3:4:399:LEU:HD11	1.94	0.67
3:4:330:GLY:C	3:4:399:LEU:HD11	2.15	0.67
1:2:242:LEU:HD13	1:2:275:ALA:HB1	1.77	0.67
3:4:721:ALA:HB1	6:7:664:TYR:HD2	1.49	0.67
8:D:211:ASP:OD1	8:D:216:VAL:HG22	1.94	0.67
3:4:636:LYS:HZ2	6:7:539:GLU:N	1.86	0.67
6:7:543:GLN:HG3	6:7:544:GLN:H	1.60	0.67
1:2:807:VAL:CG1	4:5:572:VAL:HG23	2.20	0.67
11:C:18:CYS:HB3	11:C:72:VAL:CG1	2.25	0.67
6:7:393:LEU:HA	6:7:394:THR:HB	1.77	0.67
4:5:570:ASN:O	4:5:574:ASN:ND2	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:733:LEU:CD2	4:5:748:LEU:CG	2.73	0.66
4:5:733:LEU:HD22	4:5:748:LEU:HD12	1.68	0.66
2:3:122:ILE:CG2	2:3:221:LEU:HD11	2.06	0.66
3:4:550:LYS:HG3	5:6:735:HIS:HA	1.76	0.66
3:4:417:LEU:O	3:4:417:LEU:HD12	1.95	0.66
2:3:317:PHE:HE2	4:5:176:ALA:HB2	1.59	0.66
9:B:112:PHE:HB3	9:B:152:ARG:NH1	2.10	0.66
5:6:963:LYS:CG	5:6:966:LYS:HE3	2.23	0.66
1:2:504:SER:C	1:2:698:PHE:CZ	2.69	0.66
3:4:489:LYS:HZ3	3:4:497:GLU:HB2	1.58	0.66
4:5:264:LEU:HB2	4:5:265:VAL:HG22	1.77	0.66
8:D:267:VAL:HG11	9:B:167:HIS:CE1	2.30	0.66
4:5:450:THR:CG2	4:5:469:MET:CG	2.66	0.66
10:A:108:ASP:OD2	10:A:177:GLU:CG	2.42	0.66
1:2:659:SER:HG	4:5:741:HIS:CE1	2.02	0.66
3:4:432:ARG:HH21	6:7:554:ASN:HB2	1.60	0.66
3:4:563:ASN:ND2	3:4:649:MET:SD	2.68	0.66
5:6:781:ARG:HG2	5:6:795:ILE:HB	1.78	0.66
4:5:735:ARG:HA	4:5:738:VAL:HG12	1.76	0.66
3:4:180:ILE:O	3:4:180:ILE:HD12	1.95	0.66
6:7:135:LYS:HB2	6:7:141:VAL:HG11	1.77	0.66
1:2:803:PHE:HD2	1:2:805:ILE:O	1.75	0.66
4:5:258:LEU:CD2	4:5:294:ILE:HD11	2.24	0.66
6:7:444:VAL:HG22	6:7:448:MET:H	1.60	0.66
2:3:689:ASP:O	2:3:692:THR:OG1	2.10	0.66
4:5:450:THR:HG22	4:5:469:MET:H	1.59	0.66
5:6:767:LYS:HE3	5:6:769:ALA:HB3	1.77	0.66
2:3:408:VAL:C	2:3:549:VAL:HG22	2.15	0.66
3:4:243:LEU:CG	3:4:244:ASP:H	2.08	0.66
4:5:450:THR:CB	4:5:469:MET:CG	2.73	0.66
5:6:811:ALA:HB2	5:6:819:ILE:CG1	2.25	0.66
5:6:759:ARG:HA	5:6:812:ARG:HH21	1.59	0.66
5:6:941:LEU:HD13	5:6:958:ARG:HH21	1.58	0.66
10:A:81:ARG:NH1	11:C:9:VAL:O	2.28	0.66
5:6:912:MET:SD	5:6:940:TYR:CZ	2.89	0.66
4:5:472:ALA:O	4:5:517:THR:HG22	1.96	0.66
1:2:441:LYS:HD2	5:6:616:GLU:O	1.96	0.66
1:2:583:ASP:HB3	1:2:587:LYS:HE3	1.76	0.66
10:A:67:VAL:HG11	11:C:25:PRO:HD2	1.77	0.66
5:6:912:MET:HE3	5:6:915:MET:CE	2.26	0.66
5:6:778:LYS:HG2	5:6:782:LYS:HE3	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:163:ALA:HB3	2:3:164:HIS:CG	2.31	0.66
5:6:541:GLU:O	5:6:545:LYS:NZ	2.28	0.66
8:D:211:ASP:CG	8:D:213:GLU:CB	2.65	0.65
8:D:141:ARG:HD3	10:A:149:ILE:HG22	1.77	0.65
4:5:59:TYR:HD1	4:5:135:PHE:HE1	1.44	0.65
1:2:601:LYS:NZ	1:2:643:ARG:HD2	2.11	0.65
11:C:86:ASN:OD1	11:C:87:ALA:N	2.29	0.65
2:3:701:THR:O	2:3:704:THR:OG1	2.13	0.65
10:A:151:LEU:HD22	10:A:151:LEU:C	2.15	0.65
3:4:710:ASP:O	3:4:711:LYS:CG	2.44	0.65
3:4:398:LYS:NZ	3:4:400:GLN:OE1	2.29	0.65
10:A:175:GLN:CD	10:A:199:LEU:HD11	2.16	0.65
2:3:234:GLU:OE1	2:3:238:GLY:C	2.34	0.65
10:A:147:VAL:H	10:A:148:ASP:CA	2.09	0.65
10:A:151:LEU:CD1	10:A:151:LEU:H	2.10	0.65
3:4:703:ASP:OD1	3:4:800:SER:OG	2.08	0.65
5:6:112:ARG:HH22	5:6:183:LYS:HG3	1.60	0.65
2:3:476:ASP:HA	2:3:483:ARG:HH12	1.61	0.65
1:2:300:PHE:O	1:2:302:THR:OG1	2.10	0.65
2:3:229:ALA:HB1	6:7:370:LEU:HD23	1.79	0.65
1:2:327:ARG:HH12	4:5:272:ARG:NH2	1.94	0.65
6:7:333:ILE:HG12	6:7:376:LEU:HB3	1.78	0.65
4:5:614:LEU:HD13	4:5:614:LEU:H	1.62	0.65
4:5:733:LEU:CD2	4:5:748:LEU:HG	2.25	0.65
9:B:188:ILE:HG22	9:B:188:ILE:O	1.97	0.65
1:2:696:ALA:HB3	5:6:774:VAL:HG13	1.77	0.65
2:3:677:ASN:HA	2:3:680:VAL:CG2	2.27	0.65
4:5:296:GLY:HA2	4:5:331:LEU:H	1.61	0.65
2:3:171:LEU:O	2:3:172:THR:CG2	2.44	0.65
3:4:572:THR:N	6:7:686:PRO:CG	2.59	0.65
4:5:733:LEU:CD2	4:5:748:LEU:HD12	2.23	0.65
1:2:294:HIS:O	1:2:296:ARG:NH1	2.30	0.65
9:B:168:LEU:HD11	9:B:189:MET:HE3	1.78	0.65
2:3:671:LEU:HB2	6:7:621:MET:O	1.96	0.65
2:3:410:ASP:O	2:3:413:THR:OG1	2.11	0.65
2:3:194:PRO:O	6:7:371:LEU:HD12	1.96	0.65
2:3:542:ARG:NH1	2:3:700:ARG:NH1	2.45	0.65
5:6:948:LEU:CD1	5:6:954:TYR:HB2	2.25	0.65
6:7:652:MET:HG2	6:7:708:VAL:HG11	1.77	0.65
1:2:444:PHE:CE2	5:6:380:ILE:HD11	2.28	0.65
4:5:259:GLN:HE21	4:5:271:PRO:CG	2.10	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:923:VAL:CB	5:6:929:GLU:HB2	2.26	0.65
3:4:330:GLY:CA	3:4:399:LEU:HD11	2.26	0.65
2:3:476:ASP:O	2:3:483:ARG:NH1	2.29	0.65
2:3:502:ILE:HG22	6:7:346:GLY:CA	2.23	0.65
4:5:38:PHE:CE2	4:5:40:LEU:HD13	2.26	0.65
5:6:959:ARG:O	5:6:963:LYS:HG3	1.97	0.65
1:2:505:ILE:HG22	1:2:507:GLY:H	1.62	0.65
9:B:7:LEU:N	9:B:8:GLN:HA	2.11	0.65
1:2:305:SER:OG	1:2:308:GLU:HG2	1.96	0.65
4:5:564:ARG:O	4:5:567:SER:OG	2.13	0.65
10:A:108:ASP:HA	10:A:198:ARG:HH11	1.62	0.65
4:5:737:PHE:CA	4:5:740:THR:CG2	2.71	0.64
8:D:269:LEU:HD11	8:D:277:MET:CE	2.27	0.64
3:4:370:ARG:HD3	3:4:379:PRO:HA	1.79	0.64
2:3:197:ILE:HD11	2:3:251:ILE:HB	1.79	0.64
3:4:437:GLY:HA3	3:4:463:VAL:HA	1.80	0.64
1:2:792:ASP:O	1:2:859:ARG:NH1	2.31	0.64
2:3:116:VAL:HG12	2:3:117:GLU:HG3	1.78	0.64
4:5:580:ALA:O	4:5:583:MET:HG2	1.98	0.64
4:5:747:ALA:CB	4:5:750:LYS:HE3	2.27	0.64
5:6:912:MET:CE	5:6:961:ALA:HB1	2.25	0.64
5:6:776:LYS:HD3	5:6:828:TYR:HB2	1.79	0.64
10:A:93:ARG:O	10:A:97:LEU:CG	2.44	0.64
6:7:443:ARG:HH12	6:7:449:LYS:HZ1	1.42	0.64
2:3:193:ARG:CD	6:7:371:LEU:HD11	2.26	0.64
2:3:671:LEU:CD1	6:7:620:HIS:CB	2.75	0.64
2:3:677:ASN:HA	2:3:680:VAL:HG22	1.79	0.64
5:6:400:VAL:HG23	5:6:455:LEU:CB	2.24	0.64
6:7:670:ASP:OD1	6:7:671:SER:N	2.30	0.64
1:2:678:ASP:OD1	1:2:679:ILE:N	2.29	0.64
3:4:315:ARG:NH1	6:7:251:VAL:HG12	2.13	0.64
3:4:718:ARG:CB	6:7:665:ILE:CG1	2.74	0.64
4:5:407:ARG:NH2	4:5:500:GLN:HG3	2.12	0.64
2:3:197:ILE:HD12	2:3:251:ILE:CG1	2.20	0.64
1:2:811:GLU:OE2	1:2:815:ARG:NH1	2.31	0.64
2:3:187:THR:O	2:3:257:THR:OG1	2.12	0.64
4:5:407:ARG:O	4:5:658:ARG:HD3	1.98	0.64
6:7:459:MET:C	6:7:466:LYS:HZ3	2.01	0.64
5:6:290:ILE:HD11	5:6:397:PHE:HD2	1.60	0.64
5:6:379:VAL:CG2	5:6:454:PHE:HD2	2.10	0.64
4:5:36:LEU:HD11	4:5:100:ARG:NH2	2.11	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:436:GLY:N	1:2:437:ASN:HA	2.10	0.64
10:A:168:LEU:O	10:A:168:LEU:HD12	1.98	0.64
2:3:671:LEU:HD13	6:7:620:HIS:CB	2.28	0.64
1:2:601:LYS:NZ	1:2:643:ARG:NH1	2.45	0.64
1:2:305:SER:HG	1:2:308:GLU:HG2	1.62	0.64
3:4:718:ARG:CB	6:7:665:ILE:CG2	2.76	0.64
2:3:445:ALA:CB	2:3:499:LYS:CD	2.76	0.64
3:4:370:ARG:HB3	3:4:371:CYS:SG	2.35	0.64
4:5:156:VAL:HG22	4:5:298:TYR:CE2	2.33	0.64
1:2:671:GLU:OE1	4:5:418:PRO:HG3	1.98	0.64
1:2:495:ASP:CG	1:2:509:ARG:HH12	2.00	0.64
4:5:747:ALA:HA	4:5:750:LYS:CD	2.28	0.64
3:4:676:ASN:CG	6:7:593:ARG:NH2	2.51	0.64
2:3:456:ARG:NH1	6:7:316:GLN:CD	2.46	0.64
2:3:549:VAL:HG23	2:3:549:VAL:O	1.97	0.64
9:B:139:HIS:N	9:B:142:ARG:HH11	1.83	0.64
3:4:709:LEU:HD21	3:4:711:LYS:HD2	1.79	0.64
2:3:437:SER:HA	2:3:439:GLY:H	1.62	0.64
3:4:371:CYS:HB2	3:4:377:ASN:N	2.13	0.64
4:5:94:ILE:CD1	4:5:135:PHE:HB2	2.28	0.64
3:4:650:GLU:OE1	3:4:796:ARG:NH1	2.31	0.64
1:2:791:ALA:HB1	4:5:566:ILE:HG12	1.80	0.64
3:4:386:HIS:CE1	5:6:405:PRO:HD3	2.33	0.64
3:4:640:SER:OG	6:7:549:SER:C	2.34	0.63
8:D:212:THR:N	8:D:213:GLU:HA	2.13	0.63
1:2:689:GLU:HG2	5:6:782:LYS:HE2	1.80	0.63
10:A:149:ILE:CA	10:A:150:ASP:HB2	2.28	0.63
2:3:493:GLN:HE21	2:3:509:ARG:HA	1.63	0.63
3:4:762:ILE:HG22	3:4:762:ILE:O	1.97	0.63
6:7:269:VAL:HG21	6:7:285:THR:HB	1.81	0.63
6:7:102:LEU:CD1	6:7:106:ILE:CG1	2.75	0.63
6:7:491:VAL:HA	6:7:494:THR:HG22	1.81	0.63
8:D:206:LEU:HB3	10:A:83:LYS:NZ	2.12	0.63
5:6:941:LEU:CD2	5:6:958:ARG:HE	2.10	0.63
5:6:775:GLU:O	5:6:779:GLU:N	2.31	0.63
3:4:371:CYS:HB2	3:4:377:ASN:H	1.63	0.63
1:2:327:ARG:HD2	1:2:386:GLN:NE2	2.13	0.63
5:6:290:ILE:CD1	5:6:361:ILE:CD1	2.76	0.63
1:2:524:PRO:HB2	1:2:525:LYS:HA	1.79	0.63
2:3:216:ASP:CG	2:3:217:ALA:H	2.02	0.63
2:3:400:ARG:HG3	2:3:493:GLN:OE1	1.99	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:443:GLY:O	4:5:444:SER:HB2	1.98	0.63
8:D:200:LYS:HB2	8:D:201:TYR:HB2	1.81	0.63
6:7:331:LEU:HD11	6:7:355:PHE:HE1	1.63	0.63
3:4:532:GLU:OE2	3:4:716:ASN:ND2	2.31	0.63
3:4:717:ASP:CB	6:7:668:ARG:CD	2.77	0.63
4:5:167:ILE:HD11	4:5:259:GLN:HB2	1.79	0.63
10:A:151:LEU:HD13	10:A:152:SER:H	1.62	0.63
4:5:156:VAL:HG22	4:5:298:TYR:HE2	1.63	0.63
1:2:302:THR:O	1:2:303:ILE:HG22	1.98	0.63
6:7:193:PRO:HD3	6:7:270:PHE:CD2	2.33	0.63
5:6:335:ASN:H	5:6:337:SER:HA	1.64	0.63
1:2:540:LEU:HB2	1:2:677:PHE:CD2	2.33	0.63
2:3:558:ASP:CG	4:5:630:ARG:CG	2.54	0.63
1:2:593:GLY:CA	1:2:597:VAL:CG2	2.60	0.63
9:B:118:ASN:CG	9:B:122:LEU:CD1	2.66	0.63
10:A:177:GLU:CG	10:A:178:TYR:CD2	2.81	0.63
4:5:31:PHE:CD2	4:5:90:PHE:HD1	2.17	0.63
1:2:334:LEU:HD13	4:5:322:ALA:HB3	1.79	0.63
6:7:262:CYS:SG	6:7:263:ASP:N	2.71	0.63
2:3:395:ASN:CG	6:7:635:PRO:HD3	2.19	0.63
10:A:175:GLN:HG3	10:A:181:PHE:CD2	2.34	0.63
10:A:173:GLU:CG	10:A:182:ASN:HA	2.28	0.63
3:4:641:THR:H	6:7:549:SER:CB	2.10	0.63
4:5:196:ASN:HA	4:5:197:PHE:CB	2.10	0.63
1:2:216:LEU:HD12	1:2:217:GLU:HB3	1.79	0.63
11:C:134:GLU:OE2	11:C:138:HIS:HD2	1.79	0.63
3:4:517:ASP:O	3:4:520:SER:OG	2.14	0.63
4:5:490:ARG:HG2	4:5:494:HIS:CE1	2.33	0.63
2:3:679:ILE:CD1	6:7:617:THR:HG22	2.29	0.63
6:7:258:ILE:HD13	6:7:305:SER:CB	2.27	0.63
9:B:57:ASP:OD1	9:B:58:LYS:N	2.28	0.63
4:5:714:PHE:HB2	4:5:755:LEU:HD11	1.81	0.63
2:3:395:ASN:HD22	6:7:634:GLU:CB	2.12	0.63
9:B:157:LEU:HD21	11:C:137:HIS:NE2	2.13	0.63
6:7:106:ILE:HA	6:7:113:PHE:CE2	2.34	0.63
6:7:82:LEU:HD23	6:7:85:ILE:HD12	1.80	0.63
2:3:676:ILE:HG13	2:3:677:ASN:N	2.14	0.63
4:5:156:VAL:HA	4:5:298:TYR:HD2	1.64	0.63
2:3:487:HIS:ND1	6:7:525:GLU:OE2	2.32	0.63
9:B:115:LEU:HD13	9:B:119:TRP:HE1	1.63	0.63
2:3:445:ALA:CA	2:3:499:LYS:HD2	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:266:GLU:HB3	8:D:268:GLU:HG3	1.81	0.62
5:6:940:TYR:CE1	5:6:943:GLN:NE2	2.67	0.62
2:3:492:GLN:OE1	6:7:482:TYR:HE2	1.82	0.62
4:5:527:TYR:OH	4:5:747:ALA:HB2	1.99	0.62
10:A:173:GLU:HA	10:A:183:LEU:HB2	1.80	0.62
3:4:762:ILE:CD1	3:4:802:ILE:HG13	2.30	0.62
1:2:505:ILE:HD13	1:2:552:ILE:HG13	1.79	0.62
3:4:636:LYS:HZ1	6:7:539:GLU:N	1.97	0.62
6:7:601:LEU:HD13	6:7:603:ILE:HD12	1.82	0.62
5:6:596:VAL:HG23	5:6:631:ALA:HB2	1.79	0.62
4:5:482:PHE:HE2	4:5:546:ILE:CG2	2.10	0.62
1:2:526:ASN:HA	1:2:532:SER:HA	1.81	0.62
6:7:668:ARG:HH12	6:7:685:THR:HA	1.64	0.62
2:3:443:THR:OG1	2:3:457:LEU:HB2	1.99	0.62
4:5:451:ALA:HB2	4:5:470:VAL:CG2	2.29	0.62
10:A:149:ILE:HB	10:A:151:LEU:CA	2.29	0.62
6:7:260:TYR:HA	6:7:300:MET:HA	1.81	0.62
4:5:735:ARG:HA	4:5:738:VAL:HG11	1.81	0.62
5:6:522:ASP:HB2	5:6:525:ILE:HG23	1.81	0.62
4:5:747:ALA:HA	4:5:750:LYS:HG2	1.82	0.62
5:6:941:LEU:HD22	5:6:958:ARG:HE	1.64	0.62
1:2:684:ARG:HB3	1:2:685:ASP:CB	2.23	0.62
3:4:449:ARG:O	3:4:451:ARG:N	2.33	0.62
3:4:527:ALA:HB3	3:4:537:LYS:HZ2	1.64	0.62
6:7:247:ARG:HH21	6:7:314:LYS:HG3	1.61	0.62
6:7:538:HIS:CD2	6:7:593:ARG:HE	2.17	0.62
1:2:402:LEU:HD22	5:6:623:ILE:O	1.99	0.62
6:7:258:ILE:HG22	6:7:258:ILE:O	2.00	0.62
8:D:178:ASP:HA	8:D:181:LYS:NZ	2.14	0.62
2:3:395:ASN:HB2	6:7:635:PRO:HD2	1.81	0.62
4:5:341:SER:O	4:5:342:ILE:HG13	1.97	0.62
2:3:122:ILE:HG13	2:3:155:LEU:HD12	1.82	0.62
6:7:102:LEU:CG	6:7:106:ILE:CD1	2.77	0.62
9:B:115:LEU:HD11	9:B:152:ARG:NH1	2.14	0.62
5:6:932:THR:OG1	5:6:934:VAL:HG12	1.99	0.62
4:5:571:HIS:CE1	4:5:581:ASN:ND2	2.67	0.62
4:5:755:LEU:CD2	4:5:760:THR:HG21	2.28	0.62
11:C:27:LEU:HD12	11:C:38:ILE:HG12	1.81	0.62
4:5:393:MET:CA	4:5:607:ARG:HH22	2.12	0.62
1:2:696:ALA:CB	5:6:774:VAL:HG22	2.30	0.62
10:A:151:LEU:H	10:A:151:LEU:HD13	1.63	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:680:SER:HB2	6:7:681:PHE:HA	1.81	0.62
2:3:105:GLU:OE1	2:3:105:GLU:N	2.33	0.62
2:3:457:LEU:CG	2:3:502:ILE:CD1	2.75	0.62
4:5:721:ARG:O	4:5:722:LEU:HG	2.00	0.62
4:5:728:THR:HB	4:5:732:THR:CB	2.29	0.62
4:5:732:THR:HG23	4:5:733:LEU:N	2.15	0.62
2:3:677:ASN:O	2:3:680:VAL:HG22	2.00	0.62
4:5:62:THR:HG22	4:5:138:ILE:HB	1.82	0.62
6:7:718:ARG:HA	6:7:721:ARG:NH1	2.14	0.62
3:4:489:LYS:HZ1	3:4:497:GLU:HB2	1.64	0.62
4:5:453:VAL:CB	4:5:506:LYS:HD3	2.30	0.62
5:6:550:GLN:HA	5:6:569:ILE:HG21	1.81	0.62
5:6:122:PHE:HA	5:6:123:SER:HB2	1.82	0.62
5:6:804:ILE:HG23	5:6:805:ARG:H	1.63	0.61
8:D:267:VAL:N	8:D:268:GLU:HA	2.15	0.61
4:5:282:LEU:HA	4:5:285:LYS:HE2	1.81	0.61
1:2:216:LEU:HD12	1:2:217:GLU:H	1.65	0.61
8:D:224:TRP:HZ3	8:D:283:ARG:HD3	1.62	0.61
10:A:29:LEU:HB2	10:A:119:ASP:OD2	2.00	0.61
9:B:188:ILE:CG2	9:B:188:ILE:O	2.48	0.61
3:4:493:ASN:O	3:4:494:GLU:HG2	2.01	0.61
3:4:548:THR:N	3:4:806:GLU:OE2	2.33	0.61
3:4:330:GLY:C	3:4:399:LEU:CD1	2.68	0.61
6:7:208:SER:HB2	6:7:209:GLN:HA	1.80	0.61
9:B:28:PHE:HE1	9:B:68:SER:HB2	1.65	0.61
1:2:584:PRO:CA	5:6:667:GLY:HA2	2.30	0.61
6:7:220:ILE:O	6:7:220:ILE:HG13	2.00	0.61
2:3:435:ARG:O	2:3:435:ARG:HG3	2.00	0.61
6:7:276:ARG:HG3	6:7:277:THR:HG23	1.80	0.61
9:B:50:TRP:N	9:B:51:GLN:OE1	2.33	0.61
5:6:912:MET:CE	5:6:915:MET:HE2	2.29	0.61
3:4:469:VAL:HG13	3:4:619:GLY:N	2.16	0.61
2:3:104:ARG:HH22	11:C:86:ASN:HB2	1.66	0.61
10:A:173:GLU:HB2	10:A:182:ASN:CA	2.21	0.61
10:A:175:GLN:CG	10:A:181:PHE:HB2	2.31	0.61
2:3:201:HIS:NE2	2:3:232:PRO:HD2	2.15	0.61
3:4:688:VAL:O	3:4:691:ASN:N	2.33	0.61
2:3:301:LEU:HD21	2:3:320:LEU:HD21	1.83	0.61
10:A:12:GLU:O	10:A:15:ARG:HG2	2.01	0.61
1:2:446:VAL:HG22	5:6:356:TRP:HE1	1.64	0.61
3:4:338:VAL:H	5:6:375:ARG:HH12	1.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:313:THR:OG1	2:3:315:ILE:HG12	2.00	0.61
5:6:804:ILE:CG2	5:6:805:ARG:H	2.14	0.61
4:5:258:LEU:HD23	4:5:276:MET:SD	2.41	0.61
3:4:552:PHE:HE1	5:6:734:LEU:O	1.83	0.61
11:C:162:THR:N	11:C:163:SER:HA	2.15	0.61
3:4:450:GLN:HB3	3:4:452:VAL:HG22	1.80	0.61
6:7:244:ILE:HD11	6:7:318:LEU:HD12	1.83	0.61
11:C:82:THR:HA	11:C:85:MET:HG2	1.82	0.61
3:4:243:LEU:CD2	3:4:245:ALA:N	2.64	0.61
1:2:687:VAL:CG2	1:2:692:ASP:CG	2.68	0.61
4:5:450:THR:HB	4:5:469:MET:CG	2.31	0.61
8:D:218:MET:HA	8:D:220:ASP:N	2.16	0.61
5:6:399:GLY:HA2	5:6:454:PHE:CZ	2.36	0.61
4:5:420:THR:HG21	4:5:556:VAL:CG1	2.30	0.61
6:7:367:LYS:HG2	6:7:371:LEU:CD2	2.30	0.61
1:2:447:PHE:HB2	5:6:302:PRO:HG2	1.81	0.61
11:C:101:ASN:HB2	11:C:102:SER:C	2.21	0.61
6:7:81:ASP:HA	6:7:205:LYS:HG2	1.82	0.61
4:5:757:LYS:HZ1	4:5:758:HIS:CE1	2.19	0.61
1:2:458:ARG:NH1	1:2:473:VAL:HB	2.16	0.61
1:2:338:LYS:HB3	1:2:379:LYS:O	2.01	0.61
8:D:220:ASP:HB3	8:D:221:GLU:HG2	1.82	0.61
4:5:496:ALA:HB2	4:5:502:ILE:HG12	1.81	0.61
2:3:449:ASP:O	2:3:450:ARG:HB2	2.01	0.60
10:A:175:GLN:NE2	10:A:199:LEU:HD21	2.14	0.60
1:2:444:PHE:CZ	5:6:380:ILE:CD1	2.75	0.60
2:3:439:GLY:C	2:3:440:VAL:HG23	2.21	0.60
5:6:708:ARG:HA	5:6:798:ARG:NH2	2.16	0.60
5:6:794:ARG:HB2	5:6:796:THR:N	2.16	0.60
2:3:671:LEU:HD22	6:7:620:HIS:HD2	1.66	0.60
3:4:488:ASN:OD1	3:4:489:LYS:N	2.33	0.60
4:5:626:PHE:CG	4:5:653:LEU:HD12	2.36	0.60
5:6:750:GLN:HA	5:6:753:ARG:NH1	2.16	0.60
4:5:714:PHE:O	4:5:718:LEU:HD13	2.02	0.60
4:5:712:ARG:HA	4:5:751:ALA:HB1	1.81	0.60
1:2:640:LEU:HD21	4:5:259:GLN:NE2	2.16	0.60
5:6:912:MET:CE	5:6:915:MET:CE	2.79	0.60
8:D:231:HIS:CA	8:D:274:ILE:HG22	2.31	0.60
1:2:283:TYR:O	1:2:285:ASP:N	2.30	0.60
8:D:129:MET:SD	9:B:54:THR:HA	2.41	0.60
5:6:768:GLU:HG3	5:6:770:ARG:HH22	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:428:LEU:HB3	2:3:429:ALA:CA	2.31	0.60
3:4:827:ARG:O	3:4:831:SER:N	2.34	0.60
10:A:54:LEU:HD23	10:A:57:GLN:OE1	2.00	0.60
6:7:451:ARG:O	6:7:694:ARG:NH2	2.32	0.60
4:5:755:LEU:HD22	4:5:760:THR:CG2	2.27	0.60
4:5:351:GLU:CD	10:A:19:LEU:HD21	2.21	0.60
2:3:679:ILE:CD1	6:7:620:HIS:HE1	2.01	0.60
3:4:764:GLU:HA	3:4:767:LYS:HZ1	1.66	0.60
1:2:778:LEU:CG	1:2:783:MET:HG3	2.31	0.60
3:4:543:GLN:HA	3:4:562:ILE:HD11	1.82	0.60
11:C:77:PRO:HB2	11:C:79:MET:HG2	1.81	0.60
1:2:796:GLU:OE1	1:2:859:ARG:NE	2.31	0.60
3:4:725:THR:O	6:7:657:ASN:OD1	2.20	0.60
4:5:402:ASP:OD1	4:5:404:MET:HG2	2.01	0.60
9:B:187:GLU:OE2	11:C:179:LYS:HE2	2.01	0.60
4:5:276:MET:HG2	4:5:328:ILE:HB	1.84	0.60
4:5:754:ALA:O	4:5:757:LYS:HG2	2.01	0.60
2:3:300:SER:O	4:5:245:HIS:ND1	2.34	0.60
4:5:69:ILE:HD11	4:5:73:GLU:HG2	1.82	0.60
8:D:88:LEU:HD21	10:A:146:LEU:HG	1.83	0.60
5:6:296:ARG:HH12	5:6:360:ARG:NH1	1.98	0.60
8:D:177:LYS:O	8:D:181:LYS:NZ	2.35	0.60
6:7:146:ARG:HH22	6:7:304:ALA:HB2	1.67	0.60
3:4:717:ASP:CB	6:7:668:ARG:CG	2.75	0.60
2:3:395:ASN:ND2	6:7:634:GLU:HB2	2.17	0.60
4:5:450:THR:CB	4:5:469:MET:CB	2.73	0.60
4:5:355:GLU:HA	10:A:15:ARG:HH11	1.67	0.60
4:5:244:ILE:O	4:5:248:SER:OG	2.20	0.60
4:5:178:TYR:CE1	4:5:191:SER:HB2	2.36	0.60
4:5:571:HIS:NE2	4:5:581:ASN:ND2	2.46	0.60
2:3:372:TYR:HB2	2:3:564:HIS:ND1	2.16	0.60
6:7:454:ILE:HG23	6:7:595:ASP:OD2	2.02	0.60
1:2:653:ASN:O	1:2:658:ASN:ND2	2.35	0.60
5:6:124:VAL:CG2	5:6:134:LYS:O	2.49	0.60
5:6:611:ALA:H	5:6:624:GLU:HG2	1.66	0.60
4:5:177:THR:O	4:5:194:ILE:HG22	2.00	0.60
10:A:175:GLN:CG	10:A:183:LEU:HD21	2.27	0.60
2:3:677:ASN:C	2:3:680:VAL:HG22	2.23	0.60
2:3:408:VAL:O	2:3:549:VAL:N	2.29	0.60
3:4:515:ARG:HG2	3:4:517:ASP:OD1	2.01	0.60
6:7:23:ASP:O	6:7:27:THR:OG1	2.20	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:264:PRO:HG3	1:2:317:LEU:H	1.67	0.60
3:4:243:LEU:CD2	3:4:244:ASP:N	2.36	0.60
5:6:794:ARG:H	5:6:795:ILE:HA	1.66	0.60
5:6:953:GLU:O	5:6:956:GLU:HG2	2.01	0.60
5:6:610:ALA:HB3	5:6:663:ILE:HD13	1.84	0.60
6:7:543:GLN:O	6:7:545:THR:N	2.34	0.60
8:D:124:LEU:HD21	9:B:84:LYS:HD3	1.83	0.60
4:5:388:ILE:HD11	4:5:425:LEU:HD21	1.82	0.60
8:D:225:ASN:HB3	9:B:193:ARG:CZ	2.32	0.60
4:5:451:ALA:CA	4:5:470:VAL:HG23	2.32	0.59
5:6:744:PRO:HB2	5:6:745:PRO:HD3	1.84	0.59
1:2:272:ASP:HB2	1:2:293:ILE:O	2.02	0.59
3:4:712:VAL:HB	3:4:715:LYS:HB3	1.83	0.59
10:A:175:GLN:HE22	10:A:199:LEU:HD21	1.54	0.59
5:6:915:MET:SD	5:6:940:TYR:CG	2.95	0.59
6:7:260:TYR:HE1	6:7:298:LEU:HD22	1.62	0.59
1:2:798:ILE:CG2	4:5:560:HIS:CB	2.80	0.59
8:D:259:THR:CG2	8:D:269:LEU:HD22	2.27	0.59
1:2:409:ILE:HG22	1:2:411:LEU:CD1	2.32	0.59
3:4:550:LYS:HZ3	5:6:737:LYS:H	1.50	0.59
6:7:440:VAL:HG21	6:7:650:PRO:HD2	1.85	0.59
4:5:531:ASP:HA	4:5:534:LYS:HD3	1.84	0.59
2:3:95:ARG:HB3	2:3:154:LYS:HB2	1.84	0.59
8:D:79:TYR:HB3	8:D:173:ASP:O	2.02	0.59
8:D:71:ARG:NH1	9:B:11:PHE:CD1	2.70	0.59
3:4:758:ILE:HG22	3:4:760:PRO:HD3	1.84	0.59
2:3:25:VAL:HG13	2:3:128:ALA:HB2	1.83	0.59
9:B:59:ALA:HB1	9:B:60:LEU:HB2	1.84	0.59
3:4:635:ASP:O	3:4:642:ARG:NH2	2.34	0.59
3:4:559:ARG:NE	3:4:668:ARG:HD3	2.17	0.59
6:7:487:GLY:O	6:7:489:SER:N	2.30	0.59
8:D:143:TYR:CE2	8:D:147:ARG:HD2	2.38	0.59
2:3:653:ILE:H	2:3:654:PRO:HD3	1.66	0.59
2:3:671:LEU:HD13	6:7:620:HIS:CD2	2.38	0.59
2:3:519:VAL:HG13	2:3:519:VAL:O	2.02	0.59
6:7:85:ILE:HG23	6:7:102:LEU:HD23	1.85	0.59
1:2:230:ARG:NH1	1:2:243:GLU:OE1	2.36	0.59
2:3:450:ARG:N	2:3:451:GLU:HA	2.17	0.59
2:3:564:HIS:O	2:3:567:ARG:HG2	2.02	0.59
8:D:138:PHE:HA	8:D:141:ARG:NH2	2.17	0.59
6:7:260:TYR:CE2	6:7:281:LEU:HD11	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:453:VAL:HB	4:5:506:LYS:HD3	1.84	0.59
2:3:314:LEU:N	2:3:314:LEU:HD12	2.18	0.59
3:4:339:ILE:HG21	5:6:416:LYS:HZ1	1.67	0.59
5:6:752:ARG:C	5:6:756:LYS:HZ3	2.06	0.59
6:7:434:LEU:HD21	6:7:699:LEU:HD23	1.84	0.59
4:5:750:LYS:HG3	4:5:751:ALA:N	2.18	0.59
2:3:671:LEU:HD13	6:7:620:HIS:HB2	1.82	0.59
3:4:315:ARG:NH1	6:7:251:VAL:H	1.99	0.59
2:3:502:ILE:HG13	2:3:502:ILE:O	2.02	0.59
5:6:919:LYS:O	5:6:923:VAL:HG23	2.02	0.59
1:2:504:SER:C	1:2:698:PHE:CE2	2.76	0.59
5:6:585:LEU:HD13	5:6:639:ASP:OD1	2.03	0.59
5:6:579:THR:CG2	5:6:715:ILE:HG21	2.31	0.59
2:3:272:ARG:HG2	4:5:171:VAL:HG22	1.84	0.59
4:5:549:ARG:HA	4:5:651:ARG:HH21	1.68	0.59
4:5:722:LEU:HD11	4:5:728:THR:CG2	2.24	0.59
1:2:326:ARG:NE	1:2:592:GLU:OE2	2.36	0.59
2:3:189:THR:HG23	2:3:256:ILE:CD1	2.32	0.59
4:5:35:ILE:HD11	4:5:94:ILE:HG22	1.85	0.59
5:6:932:THR:HG23	5:6:935:ASP:HB3	1.85	0.59
1:2:605:LEU:HD23	1:2:647:ILE:HB	1.85	0.59
3:4:321:ASP:HB2	3:4:324:LYS:HD2	1.84	0.59
3:4:547:GLY:HA3	3:4:560:GLY:HA2	1.85	0.59
6:7:661:VAL:CG1	6:7:662:GLN:N	2.65	0.58
9:B:160:LEU:HD23	11:C:133:GLN:HE22	1.68	0.58
11:C:27:LEU:HD23	11:C:29:TYR:H	1.67	0.58
2:3:23:ASP:OD1	2:3:26:ARG:NH2	2.35	0.58
3:4:303:VAL:HG12	3:4:305:PRO:HD3	1.84	0.58
3:4:718:ARG:CA	6:7:665:ILE:HG13	2.32	0.58
10:A:173:GLU:HG3	10:A:182:ASN:OD1	2.03	0.58
5:6:579:THR:HG21	5:6:715:ILE:CG2	2.33	0.58
4:5:473:ASP:OD2	4:5:514:ASN:O	2.21	0.58
5:6:808:GLU:O	5:6:812:ARG:HG2	2.03	0.58
6:7:584:ILE:HD12	6:7:681:PHE:HZ	1.68	0.58
2:3:428:LEU:HB3	2:3:429:ALA:HA	1.85	0.58
3:4:713:ASP:HB2	3:4:715:LYS:HD3	1.85	0.58
3:4:532:GLU:CG	3:4:716:ASN:HD22	2.11	0.58
3:4:717:ASP:OD2	6:7:668:ARG:NH1	2.36	0.58
2:3:451:GLU:C	2:3:452:THR:HG1	2.00	0.58
9:B:187:GLU:OE2	11:C:179:LYS:HD3	2.03	0.58
2:3:671:LEU:HB2	6:7:621:MET:CA	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:528:LYS:HD2	5:6:745:PRO:HB3	1.85	0.58
1:2:305:SER:OG	1:2:308:GLU:CG	2.51	0.58
10:A:13:ALA:O	10:A:16:THR:HG22	2.04	0.58
3:4:475:ASP:OD1	3:4:476:VAL:N	2.33	0.58
4:5:714:PHE:CD2	4:5:755:LEU:CD1	2.83	0.58
4:5:355:GLU:N	10:A:15:ARG:HH11	2.02	0.58
4:5:331:LEU:HD12	4:5:331:LEU:O	2.03	0.58
1:2:810:LEU:HD23	4:5:572:VAL:HB	1.85	0.58
3:4:803:ARG:O	3:4:806:GLU:HG2	2.03	0.58
5:6:553:GLY:O	5:6:812:ARG:NH1	2.36	0.58
9:B:52:LEU:HD12	9:B:53:ILE:H	1.68	0.58
2:3:245:TYR:CD2	6:7:356:LEU:HD22	2.39	0.58
4:5:663:LEU:HG	4:5:666:LEU:HD12	1.86	0.58
4:5:724:ILE:C	4:5:726:TRP:H	2.07	0.58
1:2:795:ARG:O	1:2:798:ILE:CG1	2.29	0.58
2:3:395:ASN:HB2	6:7:635:PRO:HG3	1.82	0.58
9:B:168:LEU:HD11	9:B:189:MET:CE	2.33	0.58
5:6:941:LEU:HA	5:6:944:LYS:HE2	1.84	0.58
1:2:303:ILE:HA	1:2:319:ARG:HD2	1.86	0.58
2:3:553:ILE:CB	2:3:554:ASN:C	2.71	0.58
5:6:400:VAL:HG21	5:6:455:LEU:HG	1.86	0.58
3:4:438:THR:HG22	3:4:462:ASP:CB	2.32	0.58
4:5:441:GLY:HA3	4:5:442:LYS:C	2.23	0.58
8:D:203:PRO:HB2	8:D:206:LEU:HB2	1.86	0.58
4:5:667:GLU:O	4:5:668:LEU:HB3	2.03	0.58
1:2:760:GLN:HG2	5:6:561:GLU:OE1	2.03	0.58
1:2:508:HIS:HB2	1:2:511:ILE:HG22	1.84	0.58
4:5:728:THR:CB	4:5:732:THR:HB	2.34	0.58
4:5:351:GLU:HG2	10:A:19:LEU:HD23	1.77	0.58
2:3:186:VAL:HG22	2:3:258:VAL:HG22	1.85	0.58
2:3:672:THR:HG21	2:3:720:THR:HB	1.85	0.58
1:2:302:THR:OG1	1:2:303:ILE:N	2.35	0.58
3:4:625:ASP:OD1	3:4:668:ARG:HG2	2.04	0.58
6:7:102:LEU:HD11	6:7:106:ILE:CG1	2.34	0.58
1:2:778:LEU:HD21	1:2:783:MET:CG	2.33	0.58
4:5:410:ILE:O	4:5:411:ASN:ND2	2.36	0.58
3:4:225:TYR:N	3:4:229:GLN:H	2.02	0.58
8:D:146:CYS:O	8:D:149:SER:OG	2.16	0.58
6:7:541:MET:HB2	6:7:593:ARG:HD3	1.85	0.58
5:6:820:THR:O	5:6:824:ILE:HG12	2.04	0.58
5:6:558:SER:CB	5:6:559:THR:HA	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:699:LEU:HB2	6:7:712:ASP:OD1	2.04	0.58
5:6:711:LEU:HG	5:6:712:PHE:H	1.69	0.58
1:2:268:LEU:HD21	1:2:297:ILE:HD11	1.85	0.58
2:3:234:GLU:OE1	2:3:239:ASN:C	2.43	0.58
1:2:687:VAL:CB	5:6:781:ARG:HH12	2.03	0.58
5:6:937:VAL:O	5:6:941:LEU:HG	2.02	0.58
3:4:579:GLN:OE1	6:7:448:MET:CB	2.43	0.58
6:7:470:LEU:HD21	6:7:564:LEU:HD22	1.84	0.58
3:4:477:ASP:OD1	3:4:478:THR:N	2.37	0.58
2:3:502:ILE:CG2	6:7:244:ILE:HG21	2.30	0.58
5:6:912:MET:HE1	5:6:961:ALA:HB2	1.79	0.58
6:7:207:LEU:HD11	6:7:220:ILE:HG22	1.85	0.58
3:4:833:ILE:HA	3:4:836:TYR:CD2	2.39	0.58
6:7:393:LEU:HD13	6:7:395:SER:HB3	1.86	0.58
3:4:343:LYS:O	3:4:360:ILE:HG22	2.04	0.58
4:5:139:LEU:HD12	4:5:139:LEU:O	2.04	0.58
1:2:384:ASN:OD1	1:2:384:ASN:N	2.35	0.58
5:6:801:GLU:O	5:6:804:ILE:CG2	2.44	0.57
2:3:456:ARG:HH11	6:7:316:GLN:HG3	1.69	0.57
3:4:762:ILE:HG22	3:4:766:ALA:HB3	1.86	0.57
4:5:735:ARG:CA	4:5:738:VAL:HG12	2.32	0.57
5:6:910:VAL:HA	5:6:913:MET:HG2	1.84	0.57
2:3:472:ILE:HG21	2:3:475:PHE:HD1	1.68	0.57
1:2:622:GLU:OE2	1:2:626:GLN:NE2	2.37	0.57
11:C:25:PRO:HA	11:C:37:PRO:HA	1.86	0.57
2:3:652:THR:HB	2:3:654:PRO:HD2	1.85	0.57
8:D:141:ARG:CZ	10:A:154:SER:OG	2.53	0.57
4:5:614:LEU:O	4:5:614:LEU:HD22	2.04	0.57
3:4:333:LEU:HD12	3:4:398:LYS:HZ2	1.69	0.57
1:2:807:VAL:HB	4:5:572:VAL:HG21	0.60	0.57
4:5:572:VAL:HA	4:5:575:ILE:HD12	1.86	0.57
2:3:440:VAL:CA	2:3:461:ALA:HB3	2.15	0.57
5:6:940:TYR:O	5:6:943:GLN:HG2	2.04	0.57
2:3:542:ARG:HH12	2:3:700:ARG:NH1	2.01	0.57
3:4:762:ILE:HG23	3:4:766:ALA:HB2	1.86	0.57
6:7:214:ARG:N	6:7:215:TYR:HA	2.19	0.57
3:4:527:ALA:HB1	3:4:530:ILE:HD13	1.86	0.57
2:3:310:ASN:C	2:3:311:SER:HG	2.04	0.57
6:7:256:GLU:HG3	6:7:257:VAL:HG22	1.86	0.57
3:4:401:GLU:HG2	3:4:413:HIS:H	1.69	0.57
10:A:175:GLN:OE1	10:A:199:LEU:CD1	2.51	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:268:GLU:C	8:D:269:LEU:HD22	2.25	0.57
1:2:591:LEU:CD2	4:5:270:MET:HB2	2.31	0.57
2:3:671:LEU:CD1	6:7:621:MET:CA	2.82	0.57
3:4:461:VAL:HG12	3:4:463:VAL:H	1.70	0.57
4:5:614:LEU:C	4:5:614:LEU:HD22	2.25	0.57
4:5:614:LEU:HD13	4:5:614:LEU:N	2.19	0.57
3:4:339:ILE:HG21	5:6:416:LYS:NZ	2.19	0.57
6:7:476:ILE:HD13	6:7:638:MET:HE3	1.86	0.57
10:A:175:GLN:OE1	10:A:199:LEU:HD21	2.05	0.57
3:4:243:LEU:HD23	3:4:244:ASP:C	2.25	0.57
2:3:519:VAL:HG11	2:3:532:ASN:C	2.25	0.57
4:5:643:ARG:NH1	4:5:692:ALA:HA	2.18	0.57
3:4:338:VAL:N	5:6:375:ARG:HH12	2.02	0.57
6:7:136:ASP:CG	6:7:137:ASP:N	2.57	0.57
1:2:495:ASP:OD1	1:2:509:ARG:NH2	2.35	0.57
6:7:9:GLN:O	6:7:10:LEU:HD23	2.04	0.57
2:3:395:ASN:HB2	6:7:635:PRO:HG2	1.86	0.57
5:6:963:LYS:HA	5:6:966:LYS:HG2	1.85	0.57
3:4:443:PRO:HB2	3:4:453:LEU:HD22	1.85	0.57
9:B:193:ARG:HH11	9:B:197:THR:HG21	1.70	0.57
11:C:47:PRO:HB2	11:C:49:TRP:CD1	2.40	0.57
2:3:234:GLU:CD	2:3:239:ASN:O	2.43	0.57
5:6:124:VAL:HG11	5:6:132:VAL:HG23	1.86	0.57
5:6:561:GLU:N	5:6:562:GLY:HA3	2.18	0.57
8:D:57:GLN:HG3	9:B:56:ASP:O	2.03	0.57
1:2:635:GLY:O	4:5:167:ILE:HG22	2.05	0.57
4:5:451:ALA:CB	4:5:470:VAL:HG23	2.34	0.57
6:7:255:VAL:HG13	6:7:273:VAL:HG11	1.85	0.57
2:3:678:VAL:HG21	2:3:723:LYS:HG3	1.87	0.57
2:3:177:ASN:ND2	4:5:246:GLU:O	2.38	0.57
1:2:394:PRO:HB3	5:6:671:THR:OG1	2.04	0.57
5:6:143:MET:HE3	5:6:148:LEU:HB2	1.87	0.57
9:B:12:SER:HB3	9:B:15:GLU:HG3	1.87	0.57
6:7:411:TYR:CE2	6:7:430:LYS:HE2	2.40	0.57
10:A:202:GLN:NE2	10:A:204:TYR:CE2	2.73	0.57
2:3:438:SER:C	2:3:440:VAL:H	2.08	0.57
6:7:207:LEU:CD1	6:7:220:ILE:HG22	2.35	0.57
1:2:405:HIS:O	5:6:621:TYR:OH	2.23	0.57
4:5:437:VAL:HG12	4:5:439:THR:HG23	1.87	0.57
10:A:29:LEU:HD21	10:A:96:ILE:HG21	1.85	0.57
3:4:343:LYS:NZ	3:4:392:ALA:HB3	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:502:THR:HG22	3:4:503:ASP:H	1.70	0.57
4:5:571:HIS:CE1	4:5:581:ASN:HD21	2.22	0.56
5:6:532:SER:HB3	5:6:745:PRO:HD3	1.86	0.56
3:4:337:PRO:HA	5:6:375:ARG:NH1	2.20	0.56
10:A:202:GLN:HE21	10:A:204:TYR:HE2	1.53	0.56
4:5:601:ARG:O	4:5:604:THR:OG1	2.23	0.56
5:6:953:GLU:O	5:6:957:GLU:HG2	2.05	0.56
10:A:165:VAL:O	10:A:188:GLN:HA	2.06	0.56
3:4:764:GLU:HA	3:4:767:LYS:HZ3	1.69	0.56
5:6:573:VAL:HG13	5:6:715:ILE:CD1	2.34	0.56
2:3:712:HIS:ND1	2:3:725:ASP:OD1	2.38	0.56
4:5:278:CYS:SG	4:5:330:ILE:HD12	2.45	0.56
11:C:88:ILE:HB	11:C:127:LEU:HD12	1.87	0.56
10:A:173:GLU:CD	11:C:74:LEU:HD21	71.04	0.56
2:3:126:GLU:OE1	2:3:155:LEU:HG	2.05	0.56
6:7:67:LEU:HD22	6:7:126:PRO:HD2	1.87	0.56
10:A:108:ASP:OD2	10:A:177:GLU:CD	2.44	0.56
3:4:711:LYS:HA	6:7:672:LYS:HE2	1.87	0.56
9:B:50:TRP:N	9:B:51:GLN:HA	2.20	0.56
4:5:178:TYR:HD2	4:5:249:LYS:HZ3	1.51	0.56
10:A:6:GLY:HA3	10:A:85:CYS:SG	2.45	0.56
4:5:685:GLN:OE1	4:5:688:THR:OG1	2.20	0.56
1:2:557:GLU:OE2	1:2:565:PHE:CD1	2.59	0.56
4:5:579:ASN:O	4:5:580:ALA:HB2	2.05	0.56
10:A:169:LYS:HA	10:A:185:LYS:HG2	1.86	0.56
10:A:108:ASP:HB3	10:A:109:LEU:CB	2.26	0.56
3:4:419:VAL:HA	3:4:463:VAL:HG23	1.88	0.56
1:2:215:LEU:HD21	1:2:275:ALA:HA	1.88	0.56
1:2:208:ALA:HA	1:2:211:LEU:HG	1.88	0.56
2:3:652:THR:HG21	2:3:654:PRO:CD	2.29	0.56
5:6:908:LYS:CG	5:6:960:LEU:HD21	2.35	0.56
4:5:170:SER:O	4:5:254:GLN:NE2	2.37	0.56
10:A:144:GLY:O	10:A:146:LEU:HD23	2.06	0.56
6:7:223:LYS:O	6:7:225:LEU:N	2.39	0.56
2:3:39:ARG:HH12	2:3:132:LEU:HD11	1.70	0.56
3:4:364:VAL:HG21	6:7:299:PHE:CZ	2.40	0.56
1:2:778:LEU:HG	1:2:783:MET:HG3	1.88	0.56
6:7:142:ILE:O	6:7:146:ARG:HG2	2.05	0.56
3:4:319:PRO:HG2	6:7:309:ALA:HA	1.87	0.56
4:5:409:ASP:OD1	4:5:410:ILE:HG12	2.06	0.56
6:7:126:PRO:C	6:7:129:THR:HG22	2.21	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:450:THR:HB	4:5:469:MET:CA	2.35	0.56
9:B:191:LYS:CE	11:C:172:MET:CE	2.80	0.56
2:3:677:ASN:O	2:3:680:VAL:CG2	2.53	0.56
2:3:680:VAL:HG23	2:3:681:LYS:N	2.21	0.56
8:D:137:LYS:HG2	8:D:141:ARG:HE	1.70	0.56
2:3:261:MET:HB2	2:3:264:MET:HG2	1.87	0.56
4:5:347:THR:O	4:5:348:MET:HB2	2.04	0.56
2:3:425:THR:HA	2:3:657:ARG:HH11	1.70	0.56
3:4:440:ARG:HG3	3:4:440:ARG:HH11	1.69	0.56
3:4:505:ASP:O	3:4:509:ILE:HD12	2.05	0.56
4:5:754:ALA:HA	4:5:757:LYS:CE	2.25	0.56
10:A:151:LEU:HD22	10:A:152:SER:CA	2.35	0.56
1:2:446:VAL:HG21	5:6:356:TRP:CZ2	2.37	0.56
11:C:134:GLU:O	11:C:137:HIS:HB2	2.06	0.56
6:7:443:ARG:NH1	6:7:449:LYS:HZ2	2.02	0.56
4:5:40:LEU:HD21	4:5:67:HIS:CE1	2.41	0.56
3:4:243:LEU:HD23	3:4:245:ALA:N	2.21	0.56
6:7:102:LEU:HD12	6:7:106:ILE:HG13	1.87	0.56
1:2:778:LEU:HD21	1:2:783:MET:CB	2.35	0.56
9:B:112:PHE:O	9:B:152:ARG:NH1	2.39	0.56
5:6:750:GLN:HA	5:6:753:ARG:HH11	1.69	0.56
8:D:267:VAL:HB	8:D:268:GLU:O	2.06	0.56
1:2:580:VAL:HG21	1:2:636:ILE:HG21	1.88	0.56
4:5:407:ARG:HH12	4:5:516:ARG:HG2	1.71	0.56
1:2:506:TYR:HB2	1:2:698:PHE:CD1	2.41	0.56
6:7:374:THR:OG1	6:7:375:TYR:N	2.35	0.56
9:B:121:VAL:HG22	9:B:176:LEU:HD12	1.88	0.56
4:5:355:GLU:HA	10:A:15:ARG:NH1	2.21	0.56
2:3:409:GLY:CA	2:3:549:VAL:CG2	2.67	0.56
2:3:100:LEU:HB3	2:3:111:TRP:CZ3	2.40	0.56
3:4:315:ARG:HH22	6:7:311:GLN:HE22	1.52	0.56
2:3:113:GLY:HA3	2:3:121:PHE:CE2	2.41	0.56
9:B:160:LEU:O	11:C:133:GLN:NE2	2.37	0.55
8:D:74:PRO:HB3	8:D:226:LYS:HD2	1.88	0.55
1:2:504:SER:C	1:2:698:PHE:HZ	2.09	0.55
3:4:666:ASN:HD22	3:4:668:ARG:NH2	1.97	0.55
6:7:136:ASP:OD1	6:7:137:ASP:N	2.39	0.55
3:4:458:LYS:NZ	5:6:413:PRO:HB3	2.21	0.55
8:D:216:VAL:HG13	8:D:217:ASN:HA	1.89	0.55
2:3:677:ASN:CA	2:3:680:VAL:HG22	2.36	0.55
4:5:355:GLU:N	10:A:15:ARG:NH1	2.54	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:255:ARG:O	2:3:256:ILE:HD13	2.05	0.55
4:5:450:THR:HG22	4:5:469:MET:N	2.21	0.55
5:6:776:LYS:HG3	5:6:779:GLU:OE2	2.07	0.55
1:2:404:ARG:NH2	5:6:357:GLN:OE1	2.26	0.55
8:D:190:TRP:HZ3	10:A:94:THR:OG1	1.87	0.55
1:2:601:LYS:NZ	1:2:643:ARG:HH11	2.03	0.55
2:3:734:ARG:O	2:3:738:LEU:N	2.24	0.55
4:5:362:ARG:HG3	4:5:362:ARG:O	2.07	0.55
4:5:714:PHE:CB	4:5:755:LEU:CD1	2.77	0.55
9:B:160:LEU:HD11	9:B:185:ILE:HD11	1.89	0.55
10:A:166:ARG:HH22	10:A:207:LEU:CD2	2.18	0.55
1:2:302:THR:HA	1:2:304:TYR:HE1	1.63	0.55
5:6:534:ALA:HB3	5:6:544:LYS:HE2	1.88	0.55
5:6:716:LEU:HD23	5:6:717:ASP:N	2.21	0.55
1:2:338:LYS:H	1:2:380:THR:HG22	1.72	0.55
9:B:193:ARG:HG2	9:B:197:THR:HG23	1.88	0.55
8:D:278:ARG:HE	9:B:193:ARG:HD2	1.72	0.55
5:6:696:ARG:O	5:6:696:ARG:NH1	2.36	0.55
10:A:167:VAL:HG11	10:A:185:LYS:CA	2.33	0.55
5:6:915:MET:SD	5:6:940:TYR:CD1	2.99	0.55
8:D:216:VAL:HG12	8:D:217:ASN:HA	1.89	0.55
4:5:258:LEU:HD21	4:5:276:MET:SD	2.46	0.55
1:2:685:ASP:OD1	1:2:686:LEU:N	2.39	0.55
11:C:105:PHE:HD2	11:C:170:GLU:OE1	1.90	0.55
6:7:245:ILE:HA	6:7:315:ILE:HG13	1.89	0.55
3:4:646:HIS:HA	3:4:701:ARG:NH1	2.20	0.55
1:2:601:LYS:HZ2	1:2:643:ARG:HD2	1.71	0.55
6:7:426:LEU:O	6:7:430:LYS:HB2	2.06	0.55
4:5:708:LEU:O	4:5:709:SER:HB3	2.05	0.55
2:3:457:LEU:HD23	2:3:502:ILE:HG12	1.81	0.55
1:2:442:ASN:CG	1:2:444:PHE:H	2.09	0.55
4:5:104:LEU:CD1	4:5:104:LEU:C	2.74	0.55
4:5:472:ALA:O	4:5:517:THR:CG2	2.54	0.55
3:4:771:VAL:HG13	3:4:772:ARG:N	2.22	0.55
2:3:43:ARG:NH1	2:3:137:ASP:HB3	2.22	0.55
6:7:441:ASP:OD1	6:7:442:LYS:N	2.40	0.55
6:7:257:VAL:HG23	6:7:257:VAL:O	2.07	0.55
2:3:375:ASP:O	2:3:379:LYS:HG3	2.06	0.55
8:D:132:GLU:HB2	9:B:74:TRP:CH2	2.42	0.55
2:3:443:THR:O	2:3:444:ALA:HB3	2.05	0.55
1:2:656:ARG:HB3	5:6:794:ARG:HH21	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:211:ASP:OD1	8:D:213:GLU:HA	2.06	0.55
2:3:680:VAL:HG12	6:7:617:THR:HG23	1.88	0.55
10:A:151:LEU:CD2	10:A:152:SER:N	2.62	0.55
3:4:579:GLN:HE21	6:7:444:VAL:CG2	2.18	0.55
2:3:346:ASP:HA	2:3:349:ASN:HD22	1.72	0.55
6:7:661:VAL:CG1	6:7:662:GLN:H	2.20	0.55
6:7:661:VAL:O	6:7:665:ILE:HD12	2.07	0.55
2:3:445:ALA:HA	2:3:499:LYS:HD3	1.88	0.55
9:B:184:PHE:HD2	9:B:185:ILE:HD12	1.70	0.55
2:3:201:HIS:ND1	2:3:243:THR:HA	2.22	0.55
5:6:953:GLU:HA	5:6:956:GLU:CD	2.27	0.55
5:6:561:GLU:HG3	5:6:562:GLY:HA2	1.89	0.55
8:D:135:ARG:NH1	9:B:74:TRP:NE1	2.54	0.55
3:4:352:CYS:SG	5:6:103:VAL:HG22	2.46	0.55
2:3:690:ASP:HA	2:3:693:LYS:HB2	1.89	0.55
2:3:445:ALA:CA	2:3:499:LYS:CD	2.83	0.55
2:3:502:ILE:CG2	6:7:244:ILE:CG2	2.84	0.55
2:3:502:ILE:CA	6:7:346:GLY:HA3	2.28	0.55
4:5:712:ARG:HG2	4:5:755:LEU:CD2	2.36	0.55
2:3:395:ASN:HD21	6:7:634:GLU:CA	2.02	0.55
5:6:290:ILE:HD12	5:6:361:ILE:CD1	2.37	0.55
4:5:513:LEU:CD1	4:5:514:ASN:N	2.69	0.55
2:3:530:HIS:O	2:3:531:GLN:HB2	2.06	0.55
2:3:354:SER:HB3	2:3:717:LEU:HD22	1.89	0.55
6:7:462:PRO:HD3	6:7:573:ARG:HE	1.72	0.55
2:3:227:THR:N	2:3:228:PRO:HD2	2.22	0.55
1:2:438:LEU:O	1:2:440:ALA:N	2.39	0.55
4:5:578:GLY:O	4:5:579:ASN:ND2	2.40	0.55
6:7:316:GLN:NE2	6:7:328:PRO:HB3	2.03	0.55
4:5:754:ALA:C	4:5:758:HIS:CD2	2.80	0.55
6:7:362:GLY:CA	6:7:364:LYS:HG3	2.37	0.55
4:5:38:PHE:CZ	4:5:67:HIS:HB3	2.42	0.54
1:2:597:VAL:HG23	1:2:598:LEU:N	2.23	0.54
5:6:296:ARG:NE	5:6:613:VAL:HG21	2.22	0.54
5:6:296:ARG:HH21	5:6:613:VAL:HG22	1.72	0.54
1:2:506:TYR:HB2	1:2:698:PHE:CD2	2.42	0.54
4:5:339:THR:O	4:5:339:THR:HG23	2.06	0.54
3:4:445:ARG:NH1	3:4:451:ARG:HA	2.22	0.54
4:5:608:LEU:HD11	4:5:609:LYS:HZ3	1.70	0.54
2:3:42:VAL:HG22	2:3:96:ILE:HG12	1.89	0.54
10:A:84:ARG:HD2	11:C:3:TYR:N	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:714:PHE:HE2	4:5:752:LEU:N	2.05	0.54
3:4:676:ASN:HB2	6:7:593:ARG:HH21	1.71	0.54
3:4:449:ARG:CG	3:4:450:GLN:H	2.14	0.54
5:6:601:LYS:HB2	5:6:643:LYS:HB3	1.89	0.54
4:5:376:PRO:HB2	4:5:585:ASN:HD21	1.72	0.54
2:3:502:ILE:HB	6:7:346:GLY:HA2	1.87	0.54
2:3:652:THR:CG2	2:3:654:PRO:HD2	2.36	0.54
5:6:707:SER:OG	5:6:798:ARG:NH1	2.39	0.54
4:5:407:ARG:HH12	4:5:516:ARG:CB	2.20	0.54
1:2:403:PRO:HD2	5:6:672:LEU:CD2	2.35	0.54
1:2:557:GLU:OE2	1:2:565:PHE:HB2	2.07	0.54
4:5:454:GLN:HB3	4:5:465:GLU:HB2	1.87	0.54
5:6:804:ILE:O	5:6:807:SER:OG	2.21	0.54
1:2:692:ASP:OD1	5:6:781:ARG:NH2	2.40	0.54
10:A:164:ASP:O	10:A:207:LEU:O	2.26	0.54
5:6:517:LYS:O	5:6:521:LYS:HG2	2.07	0.54
1:2:309:LEU:O	1:2:310:ARG:NH1	2.34	0.54
11:C:16:PHE:HZ	11:C:107:LEU:HD21	1.72	0.54
3:4:717:ASP:HB2	6:7:668:ARG:CD	2.37	0.54
4:5:543:GLN:HE21	4:5:546:ILE:HD11	1.73	0.54
2:3:171:LEU:HD21	2:3:298:PHE:CZ	2.43	0.54
1:2:339:PHE:HA	1:2:378:GLU:CB	2.37	0.54
2:3:476:ASP:OD1	2:3:477:LYS:N	2.40	0.54
2:3:276:VAL:HG11	2:3:294:VAL:HG11	1.89	0.54
6:7:143:LEU:HD21	6:7:197:THR:HG22	1.89	0.54
3:4:569:ASP:O	3:4:572:THR:OG1	2.19	0.54
4:5:740:THR:O	4:5:742:ARG:HG2	2.08	0.54
1:2:693:GLU:HG3	5:6:778:LYS:NZ	2.23	0.54
4:5:31:PHE:CG	4:5:90:PHE:HD1	2.25	0.54
2:3:342:LEU:O	2:3:346:ASP:HB2	2.07	0.54
6:7:570:LEU:HD13	6:7:585:ASN:HD21	1.73	0.54
3:4:565:LEU:HB2	3:4:702:PHE:CD2	2.42	0.54
2:3:449:ASP:OD1	2:3:453:GLY:HA2	2.08	0.54
5:6:781:ARG:NE	5:6:795:ILE:O	2.41	0.54
9:B:187:GLU:OE2	11:C:179:LYS:CD	2.55	0.54
2:3:680:VAL:HG12	6:7:617:THR:CG2	2.35	0.54
10:A:149:ILE:HG13	10:A:151:LEU:HD12	1.88	0.54
2:3:367:LEU:HD12	2:3:378:LYS:HB3	1.88	0.54
4:5:91:GLU:O	4:5:94:ILE:HG13	2.07	0.54
5:6:732:VAL:CG1	5:6:736:MET:SD	2.96	0.54
1:2:560:ALA:HB3	1:2:563:ALA:HB2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:442:LEU:HD12	2:3:443:THR:N	2.22	0.54
3:4:244:ASP:HB2	3:4:247:ASN:ND2	2.20	0.54
5:6:915:MET:SD	5:6:940:TYR:HB2	2.48	0.54
4:5:276:MET:HE1	4:5:294:ILE:HD13	1.65	0.54
4:5:354:GLU:C	10:A:15:ARG:HH11	2.07	0.54
5:6:963:LYS:HA	5:6:966:LYS:CE	2.38	0.54
6:7:451:ARG:HH11	6:7:687:ARG:NH2	2.06	0.54
1:2:810:LEU:HD21	4:5:573:ILE:CG1	2.37	0.54
4:5:561:ASN:O	4:5:565:ASP:N	2.24	0.54
11:C:83:LYS:CA	11:C:86:ASN:ND2	2.61	0.54
1:2:592:GLU:CB	4:5:270:MET:HE1	2.36	0.54
3:4:435:VAL:HG13	3:4:466:VAL:HG22	1.90	0.54
4:5:569:ALA:O	4:5:573:ILE:HD12	2.08	0.54
5:6:780:LEU:HD12	5:6:828:TYR:CE1	2.43	0.54
5:6:910:VAL:O	5:6:913:MET:HG2	2.08	0.54
3:4:400:GLN:HE21	3:4:412:PRO:HG2	1.73	0.54
5:6:611:ALA:N	5:6:624:GLU:OE2	2.41	0.54
2:3:502:ILE:CA	6:7:346:GLY:CA	2.85	0.53
4:5:40:LEU:O	4:5:41:ASP:HB2	2.08	0.53
6:7:538:HIS:HD2	6:7:593:ARG:HE	1.56	0.53
10:A:151:LEU:N	10:A:151:LEU:HD13	2.23	0.53
3:4:203:TYR:CG	3:4:204:LYS:N	2.73	0.53
1:2:839:LYS:HZ3	1:2:864:TYR:HA	1.72	0.53
8:D:79:TYR:HD1	8:D:147:ARG:HH12	1.55	0.53
4:5:409:ASP:OD1	4:5:410:ILE:HG23	2.09	0.53
1:2:517:CYS:SG	1:2:816:ILE:HG23	2.49	0.53
8:D:72:CYS:SG	8:D:293:LEU:HD23	2.48	0.53
6:7:401:VAL:HG13	6:7:641:TYR:HD1	1.71	0.53
8:D:94:GLN:OE1	9:B:55:THR:CG2	2.56	0.53
6:7:421:GLU:HA	6:7:625:GLN:HE22	1.72	0.53
6:7:664:TYR:HB2	6:7:689:LEU:HD13	1.90	0.53
4:5:714:PHE:CE2	4:5:751:ALA:HB3	2.42	0.53
5:6:908:LYS:HE3	5:6:956:GLU:OE2	2.09	0.53
3:4:762:ILE:HG21	3:4:766:ALA:HB3	1.87	0.53
6:7:485:GLY:HA2	6:7:523:ILE:CG2	2.38	0.53
9:B:115:LEU:HD11	9:B:152:ARG:CZ	2.38	0.53
3:4:713:ASP:O	3:4:714:GLU:HG3	2.08	0.53
8:D:258:VAL:HG13	8:D:260:ILE:HG13	1.90	0.53
6:7:71:ALA:CB	6:7:129:THR:HG21	2.35	0.53
5:6:663:ILE:HD12	5:6:672:LEU:HD12	1.90	0.53
2:3:389:VAL:HG12	2:3:390:GLU:N	2.14	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:482:PHE:CE2	4:5:546:ILE:HG21	2.32	0.53
5:6:603:SER:N	5:6:604:SER:HA	2.24	0.53
3:4:387:ASN:ND2	5:6:402:ILE:HG22	2.23	0.53
5:6:154:ASP:OD2	5:6:156:GLN:HB3	2.09	0.53
4:5:581:ASN:C	4:5:583:MET:H	2.12	0.53
3:4:640:SER:HB3	6:7:549:SER:O	2.07	0.53
4:5:355:GLU:CA	10:A:15:ARG:HH11	2.21	0.53
4:5:482:PHE:CE2	4:5:546:ILE:CG2	2.92	0.53
3:4:448:SER:H	3:4:449:ARG:HB3	1.73	0.53
2:3:100:LEU:HB2	2:3:159:GLY:HA2	1.89	0.53
3:4:315:ARG:HH22	6:7:311:GLN:NE2	2.06	0.53
6:7:487:GLY:C	6:7:489:SER:H	2.12	0.53
1:2:484:PHE:CE1	1:2:766:TYR:HD1	2.25	0.53
4:5:498:GLU:N	4:5:498:GLU:OE1	2.42	0.53
8:D:225:ASN:OD1	8:D:278:ARG:HD3	2.08	0.53
4:5:398:LYS:HD3	4:5:400:LEU:HD23	1.91	0.53
10:A:37:ILE:O	10:A:41:LEU:HG	2.07	0.53
8:D:159:ARG:HH21	8:D:187:SER:HB2	1.74	0.53
4:5:712:ARG:O	4:5:755:LEU:HD21	2.08	0.53
2:3:438:SER:O	2:3:440:VAL:N	2.41	0.53
1:2:327:ARG:HB2	1:2:388:VAL:HG22	1.91	0.53
3:4:331:LEU:HB2	3:4:430:GLY:HA2	1.90	0.53
1:2:438:LEU:C	1:2:440:ALA:H	2.12	0.53
6:7:353:GLY:HA3	6:7:377:GLU:O	2.07	0.53
3:4:572:THR:O	3:4:573:SER:OG	2.18	0.53
10:A:172:GLY:H	10:A:174:ILE:HG23	1.71	0.53
8:D:259:THR:HG21	8:D:268:GLU:HB3	1.90	0.53
4:5:450:THR:CB	4:5:469:MET:HB2	2.23	0.53
5:6:919:LYS:HA	5:6:922:GLU:OE2	2.09	0.53
4:5:175:ARG:HH22	4:5:196:ASN:HD22	1.57	0.53
4:5:138:ILE:CG2	4:5:332:GLY:HA3	2.28	0.53
5:6:730:HIS:ND1	5:6:734:LEU:HD11	2.23	0.53
8:D:231:HIS:CB	8:D:274:ILE:HG22	2.38	0.53
3:4:201:PHE:CB	3:4:202:LYS:HA	2.35	0.53
6:7:493:LEU:HD12	6:7:494:THR:N	2.24	0.53
5:6:935:ASP:HA	5:6:938:ASP:OD2	2.08	0.53
6:7:421:GLU:HA	6:7:625:GLN:NE2	2.23	0.53
4:5:396:SER:HB3	4:5:661:GLU:HG2	1.91	0.53
6:7:244:ILE:HD11	6:7:318:LEU:CD1	2.38	0.53
1:2:794:ARG:HG2	4:5:565:ASP:HB3	1.91	0.53
1:2:241:SER:HG	1:2:296:ARG:HG2	1.69	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:696:ALA:HA	5:6:800:LEU:CD2	2.37	0.53
2:3:671:LEU:HD13	6:7:621:MET:HA	1.91	0.53
2:3:493:GLN:HE21	2:3:509:ARG:CA	2.21	0.53
4:5:685:GLN:O	4:5:688:THR:OG1	2.27	0.53
11:C:5:ASP:OD1	11:C:6:ILE:N	2.41	0.53
5:6:793:TYR:O	5:6:794:ARG:NH1	2.40	0.53
5:6:940:TYR:HD1	5:6:943:GLN:NE2	2.05	0.53
4:5:104:LEU:HD13	4:5:105:SER:CA	2.37	0.53
6:7:207:LEU:O	6:7:222:SER:OG	2.22	0.53
1:2:403:PRO:HD3	5:6:672:LEU:CD2	2.19	0.53
2:3:553:ILE:CA	2:3:554:ASN:HB2	2.32	0.53
4:5:726:TRP:CE3	4:5:727:SER:CB	2.86	0.53
4:5:714:PHE:CZ	4:5:751:ALA:CB	2.92	0.53
3:4:579:GLN:HE22	6:7:448:MET:N	2.07	0.53
6:7:398:GLU:O	6:7:402:MET:HG3	2.08	0.53
6:7:367:LYS:HG2	6:7:371:LEU:HD23	1.91	0.53
5:6:362:GLN:HB2	5:6:376:THR:HG22	1.90	0.53
4:5:747:ALA:O	4:5:750:LYS:HG2	2.09	0.53
10:A:172:GLY:HA2	10:A:183:LEU:HB2	1.90	0.53
3:4:245:ALA:HB3	3:4:306:TYR:O	2.08	0.53
4:5:451:ALA:HA	4:5:470:VAL:CG2	2.39	0.53
4:5:255:PHE:HA	4:5:276:MET:O	2.09	0.53
1:2:327:ARG:HD2	1:2:386:GLN:HE22	1.74	0.53
3:4:714:GLU:CB	3:4:715:LYS:CA	2.86	0.52
3:4:716:ASN:O	3:4:718:ARG:N	2.43	0.52
3:4:718:ARG:HB2	6:7:665:ILE:CG2	2.39	0.52
10:A:145:ASP:CG	10:A:147:VAL:HG23	2.28	0.52
6:7:221:SER:HA	6:7:223:LYS:N	2.24	0.52
11:C:105:PHE:CE1	11:C:128:LEU:HB2	2.45	0.52
10:A:27:VAL:HG13	10:A:28:ASN:N	2.23	0.52
3:4:318:ASN:O	3:4:321:ASP:OD1	2.27	0.52
8:D:94:GLN:OE1	9:B:55:THR:HG23	2.09	0.52
5:6:294:VAL:HG13	5:6:359:VAL:HB	1.89	0.52
3:4:326:ILE:HD12	3:4:439:PHE:HB2	1.92	0.52
4:5:742:ARG:O	4:5:743:PHE:HD1	1.93	0.52
10:A:170:ASP:HB3	10:A:204:TYR:CD1	2.44	0.52
2:3:122:ILE:HG23	2:3:221:LEU:CD1	2.11	0.52
1:2:302:THR:CA	1:2:304:TYR:CE1	2.82	0.52
4:5:90:PHE:CD2	4:5:137:LEU:CD2	2.80	0.52
1:2:793:LEU:HD21	1:2:842:VAL:HG22	1.89	0.52
4:5:49:GLN:NE2	4:5:53:ASN:OD1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:726:TRP:CD2	4:5:727:SER:N	2.76	0.52
2:3:189:THR:CB	2:3:256:ILE:HD12	2.38	0.52
2:3:275:ASP:N	2:3:275:ASP:OD1	2.38	0.52
9:B:191:LYS:CE	11:C:172:MET:HE3	2.33	0.52
6:7:459:MET:HB3	6:7:599:LEU:HA	1.90	0.52
1:2:213:SER:OG	1:2:217:GLU:OE2	2.11	0.52
5:6:529:LEU:O	5:6:533:ILE:HG13	2.09	0.52
2:3:429:ALA:HB3	2:3:469:VAL:O	2.09	0.52
6:7:536:ALA:O	6:7:540:VAL:HG23	2.08	0.52
3:4:712:VAL:HG12	3:4:715:LYS:CG	2.24	0.52
10:A:173:GLU:O	10:A:173:GLU:HG2	2.10	0.52
1:2:637:VAL:O	4:5:167:ILE:HA	2.09	0.52
3:4:715:LYS:HG3	3:4:715:LYS:O	2.09	0.52
4:5:712:ARG:O	4:5:755:LEU:HD11	2.09	0.52
10:A:173:GLU:CB	10:A:183:LEU:N	2.72	0.52
4:5:655:ALA:O	4:5:659:ILE:HD12	2.10	0.52
2:3:671:LEU:HD13	6:7:621:MET:CA	2.39	0.52
1:2:304:TYR:CD1	1:2:304:TYR:N	2.76	0.52
2:3:687:ARG:HH12	2:3:698:THR:HA	1.73	0.52
3:4:307:ASN:H	3:4:436:THR:HG21	1.75	0.52
1:2:809:HIS:HE1	1:2:845:PHE:HB2	1.74	0.52
2:3:445:ALA:CB	2:3:499:LYS:HD2	2.38	0.52
6:7:316:GLN:NE2	6:7:328:PRO:CG	2.70	0.52
2:3:257:THR:HA	2:3:275:ASP:HA	1.91	0.52
3:4:762:ILE:O	3:4:762:ILE:CG2	2.58	0.52
6:7:459:MET:HG3	6:7:460:GLY:H	1.73	0.52
4:5:735:ARG:C	4:5:738:VAL:HG12	2.29	0.52
3:4:354:HIS:CD2	3:4:356:MET:HG2	2.44	0.52
6:7:18:PHE:CE1	6:7:119:ARG:NH1	2.78	0.52
2:3:445:ALA:HB1	2:3:499:LYS:HG3	1.87	0.52
4:5:463:TYR:CA	4:5:509:ILE:HD13	2.40	0.52
8:D:216:VAL:HG13	8:D:217:ASN:CA	2.40	0.52
2:3:705:LEU:CD2	2:3:733:LEU:HD13	2.40	0.52
4:5:556:VAL:CG2	4:5:557:LYS:H	2.19	0.52
4:5:556:VAL:CG2	4:5:557:LYS:N	2.71	0.52
2:3:176:LEU:HA	2:3:298:PHE:CD2	2.36	0.52
2:3:100:LEU:HB3	2:3:111:TRP:HZ3	1.74	0.52
6:7:136:ASP:CG	6:7:137:ASP:H	2.12	0.52
1:2:856:GLN:NE2	1:2:859:ARG:HH21	2.08	0.52
6:7:209:GLN:HB3	6:7:212:ALA:HB2	1.92	0.52
2:3:113:GLY:HA3	2:3:121:PHE:HE2	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:193:LEU:HD11	10:A:127:GLU:OE2	2.10	0.52
3:4:545:PHE:CE1	3:4:751:ILE:HG12	2.43	0.52
1:2:787:SER:HA	4:5:573:ILE:HD11	1.88	0.52
3:4:641:THR:N	6:7:549:SER:HB3	2.24	0.52
4:5:349:PHE:HB3	4:5:353:GLU:OE1	2.10	0.52
5:6:776:LYS:NZ	5:6:824:ILE:HG22	2.24	0.52
4:5:258:LEU:HD23	4:5:294:ILE:CD1	2.35	0.52
9:B:25:ILE:CD1	9:B:87:ILE:CD1	2.80	0.52
4:5:365:LYS:CG	4:5:368:GLU:HB2	2.38	0.52
3:4:338:VAL:N	5:6:375:ARG:NH1	2.56	0.52
8:D:178:ASP:HA	8:D:181:LYS:HZ1	1.75	0.52
6:7:476:ILE:HG21	6:7:638:MET:HE3	1.91	0.52
4:5:149:ARG:HD3	4:5:260:GLU:OE2	2.10	0.52
10:A:30:PRO:O	10:A:122:ASN:ND2	2.43	0.52
3:4:491:ASP:OD1	3:4:492:HIS:N	2.42	0.52
6:7:446:ASP:HB2	6:7:447:GLY:HA2	1.92	0.52
4:5:732:THR:CG2	4:5:733:LEU:N	2.73	0.52
9:B:167:HIS:O	9:B:168:LEU:HD12	2.09	0.52
8:D:254:PRO:C	8:D:255:CYS:SG	2.88	0.52
5:6:609:THR:HG22	5:6:610:ALA:N	2.25	0.52
5:6:174:TYR:HB3	5:6:285:GLY:O	2.10	0.52
4:5:465:GLU:O	4:5:465:GLU:HG3	2.09	0.52
3:4:568:GLY:N	3:4:574:LYS:HZ3	2.07	0.52
4:5:204:THR:HG22	4:5:205:VAL:HG23	1.91	0.52
1:2:814:LEU:HD22	4:5:576:HIS:CB	2.40	0.52
8:D:211:ASP:CG	8:D:213:GLU:HB3	2.20	0.52
9:B:191:LYS:CD	11:C:172:MET:HE1	2.39	0.52
10:A:177:GLU:CG	10:A:178:TYR:CE2	2.92	0.52
1:2:216:LEU:CD1	1:2:217:GLU:OE1	2.58	0.52
2:3:690:ASP:O	2:3:694:LYS:N	2.40	0.52
6:7:73:ARG:HH21	6:7:132:ILE:HA	1.74	0.52
10:A:47:LEU:HD11	10:A:78:CYS:HB3	1.91	0.52
1:2:459:ARG:HA	1:2:460:GLU:HB2	1.92	0.52
10:A:177:GLU:HG3	10:A:178:TYR:CE2	2.45	0.51
5:6:540:HIS:C	5:6:542:ALA:H	2.13	0.51
6:7:541:MET:HB2	6:7:593:ARG:HH11	1.75	0.51
2:3:492:GLN:HG3	6:7:471:LYS:HE2	1.91	0.51
1:2:327:ARG:NH1	1:2:386:GLN:NE2	2.44	0.51
2:3:314:LEU:CD1	2:3:314:LEU:N	2.73	0.51
2:3:168:PRO:HG2	2:3:260:GLU:HB3	1.91	0.51
5:6:167:ALA:O	5:6:171:SER:OG	2.19	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:182:MET:HE3	4:5:187:ARG:HG3	1.91	0.51
10:A:162:PHE:HD1	10:A:192:GLN:HA	1.75	0.51
1:2:253:LYS:HB3	1:2:255:ILE:HG22	1.90	0.51
3:4:718:ARG:HG3	3:4:719:GLU:N	2.26	0.51
1:2:687:VAL:HG21	1:2:692:ASP:CG	2.31	0.51
2:3:171:LEU:C	2:3:172:THR:HG22	2.30	0.51
2:3:466:ASP:OD1	2:3:467:ARG:N	2.43	0.51
6:7:265:CYS:SG	6:7:288:GLU:HB3	2.50	0.51
2:3:500:ALA:O	3:4:409:GLY:HA3	2.10	0.51
4:5:733:LEU:O	4:5:737:PHE:HB2	2.09	0.51
1:2:794:ARG:HD3	4:5:565:ASP:C	2.31	0.51
1:2:855:ARG:HG3	1:2:858:ARG:HH21	1.74	0.51
2:3:250:PHE:HB2	6:7:232:GLY:O	2.09	0.51
1:2:527:VAL:O	1:2:530:LYS:N	2.43	0.51
1:2:805:ILE:H	1:2:805:ILE:HD12	1.74	0.51
11:C:25:PRO:HG3	11:C:37:PRO:HB3	1.91	0.51
1:2:700:VAL:HG23	1:2:701:ASP:N	2.25	0.51
10:A:32:TYR:HA	10:A:93:ARG:HH22	1.75	0.51
3:4:550:LYS:CE	5:6:735:HIS:O	2.56	0.51
2:3:651:VAL:O	2:3:651:VAL:CG1	2.49	0.51
5:6:335:ASN:N	5:6:338:CYS:H	2.07	0.51
5:6:937:VAL:HG12	5:6:941:LEU:HD11	1.91	0.51
2:3:679:ILE:CG1	6:7:617:THR:HG22	2.40	0.51
1:2:405:HIS:CG	5:6:621:TYR:CE1	2.89	0.51
1:2:300:PHE:H	1:2:319:ARG:HH11	1.59	0.51
6:7:485:GLY:CA	6:7:525:GLU:C	2.74	0.51
9:B:112:PHE:HB3	9:B:152:ARG:HH12	1.75	0.51
1:2:815:ARG:O	1:2:818:GLU:HG2	2.11	0.51
4:5:69:ILE:HD12	4:5:73:GLU:HA	1.93	0.51
10:A:77:LEU:HD21	11:C:53:ILE:HD11	1.93	0.51
2:3:422:VAL:O	2:3:426:ALA:HB2	2.10	0.51
6:7:244:ILE:CD1	6:7:318:LEU:HD12	2.41	0.51
4:5:381:ASN:O	4:5:385:LYS:HB2	2.11	0.51
3:4:768:THR:O	3:4:771:VAL:CG1	2.54	0.51
3:4:488:ASN:O	3:4:489:LYS:HB3	2.09	0.51
1:2:235:GLY:HA2	1:2:283:TYR:CE2	2.37	0.51
2:3:345:PHE:O	2:3:349:ASN:ND2	2.44	0.51
1:2:486:LYS:O	1:2:489:ARG:HG2	2.11	0.51
3:4:291:TYR:HB3	3:4:296:ILE:HG21	1.91	0.51
2:3:395:ASN:O	6:7:635:PRO:HG3	2.11	0.51
11:C:72:VAL:HG12	11:C:74:LEU:H	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:214:GLY:HA2	8:D:216:VAL:HA	1.92	0.51
2:3:491:GLU:CD	2:3:700:ARG:HH22	2.14	0.51
2:3:671:LEU:CD1	6:7:621:MET:N	2.66	0.51
2:3:680:VAL:HB	6:7:613:ALA:HB1	1.92	0.51
2:3:676:ILE:CB	6:7:617:THR:HB	2.39	0.51
5:6:296:ARG:CD	5:6:613:VAL:HG11	2.41	0.51
4:5:136:GLN:HE22	4:5:282:LEU:HG	1.75	0.51
8:D:231:HIS:HB2	8:D:274:ILE:HG22	1.92	0.51
6:7:440:VAL:O	6:7:441:ASP:OD1	2.28	0.51
5:6:615:ASP:OD2	5:6:617:GLU:HA	2.10	0.51
4:5:737:PHE:CD1	4:5:743:PHE:CE2	2.98	0.51
4:5:349:PHE:CZ	4:5:604:THR:OG1	2.64	0.51
2:3:653:ILE:N	2:3:654:PRO:CD	2.73	0.51
5:6:914:ASN:O	5:6:918:ARG:HG2	2.11	0.51
5:6:943:GLN:HG3	5:6:944:LYS:N	2.26	0.51
2:3:568:THR:C	2:3:570:ARG:N	2.52	0.51
3:4:636:LYS:HZ2	6:7:539:GLU:H	1.59	0.51
2:3:553:ILE:CA	2:3:554:ASN:C	2.80	0.51
6:7:485:GLY:HA2	6:7:523:ILE:HG23	1.93	0.51
3:4:769:GLU:HA	3:4:772:ARG:HG2	1.93	0.51
9:B:24:PRO:HB2	9:B:70:GLU:OE2	2.10	0.51
2:3:683:TYR:CZ	2:3:687:ARG:HD2	2.46	0.51
8:D:225:ASN:HB3	9:B:193:ARG:NH1	2.25	0.51
6:7:456:VAL:HB	6:7:564:LEU:HG	1.93	0.51
10:A:135:CYS:HA	10:A:138:ILE:HG22	1.93	0.51
6:7:404:LEU:HD11	6:7:414:LEU:HD21	1.91	0.51
1:2:333:GLN:HB2	1:2:385:TYR:HB2	1.92	0.51
1:2:616:ASP:O	1:2:619:SER:OG	2.15	0.51
4:5:577:THR:CA	4:5:579:ASN:N	2.72	0.51
6:7:689:LEU:O	6:7:692:ILE:HG22	2.11	0.51
4:5:451:ALA:CB	4:5:470:VAL:CG2	2.89	0.51
4:5:407:ARG:HH12	4:5:516:ARG:CG	2.23	0.51
2:3:567:ARG:HG3	2:3:568:THR:N	2.26	0.51
10:A:153:GLY:C	10:A:154:SER:HG	2.14	0.51
11:C:138:HIS:ND1	11:C:162:THR:O	2.43	0.51
3:4:449:ARG:C	3:4:451:ARG:H	2.14	0.51
10:A:23:SER:OG	10:A:24:ASN:CA	2.59	0.51
10:A:77:LEU:HD11	11:C:53:ILE:HD11	1.92	0.51
6:7:619:VAL:HG22	6:7:622:HIS:O	2.11	0.51
4:5:747:ALA:HA	4:5:750:LYS:CG	2.42	0.50
1:2:294:HIS:CD2	1:2:296:ARG:HH12	2.29	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:919:LYS:O	5:6:922:GLU:HG2	2.11	0.50
5:6:963:LYS:O	5:6:966:LYS:HG2	2.11	0.50
6:7:193:PRO:HG3	6:7:270:PHE:CG	2.46	0.50
4:5:735:ARG:O	4:5:738:VAL:HG12	2.11	0.50
1:2:481:GLU:O	1:2:485:ARG:HG2	2.10	0.50
6:7:667:LEU:O	6:7:670:ASP:OD1	2.29	0.50
9:B:51:GLN:H	9:B:52:LEU:HA	1.76	0.50
10:A:100:MET:SD	10:A:117:GLN:HG2	2.51	0.50
9:B:188:ILE:HG23	9:B:192:LEU:HD11	1.89	0.50
3:4:197:PHE:HZ	3:4:247:ASN:HB3	1.76	0.50
1:2:546:GLY:HA2	5:6:798:ARG:HD2	1.91	0.50
3:4:799:GLU:O	3:4:802:ILE:HG22	2.11	0.50
5:6:745:PRO:HG2	5:6:746:PHE:H	1.76	0.50
2:3:345:PHE:CE1	2:3:346:ASP:OD1	2.65	0.50
5:6:763:PRO:HG3	5:6:812:ARG:HD3	1.92	0.50
10:A:173:GLU:HB3	10:A:182:ASN:C	2.31	0.50
5:6:775:GLU:HA	5:6:778:LYS:HB3	1.93	0.50
5:6:575:GLY:C	5:6:581:LYS:HZ1	2.08	0.50
2:3:172:THR:CG2	2:3:172:THR:O	2.57	0.50
1:2:387:ARG:NH1	4:5:323:ILE:HD11	2.22	0.50
1:2:509:ARG:O	1:2:513:THR:OG1	2.21	0.50
1:2:423:GLU:HB2	1:2:459:ARG:HD3	1.93	0.50
1:2:520:PHE:CD1	1:2:767:ILE:HG22	2.46	0.50
5:6:194:PRO:O	5:6:261:ARG:NH2	2.44	0.50
4:5:40:LEU:HD12	4:5:40:LEU:N	2.25	0.50
4:5:43:GLN:HG2	4:5:45:ILE:HD13	1.94	0.50
5:6:908:LYS:HB3	5:6:960:LEU:HD23	1.87	0.50
10:A:109:LEU:HG	10:A:111:SER:HB3	1.94	0.50
10:A:177:GLU:HG3	10:A:178:TYR:HE2	1.75	0.50
6:7:489:SER:O	6:7:492:GLY:N	2.31	0.50
3:4:319:PRO:HG2	6:7:309:ALA:CA	2.41	0.50
10:A:124:SER:OG	10:A:127:GLU:HG2	2.12	0.50
1:2:320:VAL:HG21	1:2:451:ILE:HD13	1.93	0.50
4:5:674:GLU:HG3	4:5:675:ARG:N	2.26	0.50
4:5:677:VAL:O	4:5:681:ILE:HD12	2.11	0.50
4:5:393:MET:O	4:5:607:ARG:NH2	2.41	0.50
3:4:550:LYS:NZ	5:6:737:LYS:HB2	2.16	0.50
3:4:335:SER:HB3	3:4:395:GLN:NE2	2.27	0.50
2:3:462:MET:O	2:3:508:ALA:CB	2.57	0.50
1:2:853:VAL:O	1:2:856:GLN:HB3	2.12	0.50
4:5:413:LEU:HD11	4:5:550:PHE:CD2	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:458:LEU:HD23	6:7:598:PHE:HB2	1.94	0.50
1:2:787:SER:HB3	4:5:573:ILE:HG21	1.93	0.50
5:6:777:TYR:CE1	5:6:800:LEU:HB2	2.47	0.50
10:A:108:ASP:CG	10:A:198:ARG:HD3	2.31	0.50
6:7:396:ASP:O	6:7:399:GLU:HB3	2.11	0.50
5:6:105:ASP:O	5:6:108:GLY:N	2.41	0.50
9:B:118:ASN:CG	9:B:122:LEU:HD11	2.29	0.50
1:2:504:SER:CA	1:2:698:PHE:HZ	2.24	0.50
3:4:709:LEU:CD2	3:4:711:LYS:HD2	2.40	0.50
4:5:441:GLY:CA	4:5:443:GLY:N	2.73	0.50
6:7:371:LEU:O	6:7:371:LEU:HG	2.11	0.50
6:7:108:GLN:OE1	6:7:237:GLN:NE2	2.38	0.50
3:4:718:ARG:HA	6:7:665:ILE:CG1	2.34	0.50
3:4:720:LEU:HA	3:4:723:HIS:HD2	1.77	0.50
4:5:728:THR:CB	4:5:732:THR:CB	2.90	0.50
1:2:794:ARG:CZ	4:5:568:ILE:CD1	2.86	0.50
8:D:266:GLU:CB	8:D:268:GLU:HG3	2.41	0.50
2:3:671:LEU:HD13	6:7:620:HIS:CG	2.47	0.50
3:4:552:PHE:CZ	5:6:734:LEU:HG	2.47	0.50
6:7:298:LEU:HD12	6:7:298:LEU:C	2.32	0.50
2:3:521:GLY:C	2:3:523:TYR:H	2.15	0.50
6:7:354:ILE:O	6:7:376:LEU:HD12	2.12	0.50
6:7:362:GLY:HA3	6:7:364:LYS:NZ	2.27	0.50
3:4:345:ALA:O	3:4:357:ALA:HB1	2.11	0.50
5:6:701:MET:HB2	5:6:705:ILE:HD11	1.94	0.50
2:3:389:VAL:H	2:3:714:LYS:NZ	2.10	0.50
5:6:274:HIS:ND1	5:6:288:LEU:HD11	2.26	0.50
5:6:290:ILE:HD12	5:6:290:ILE:O	2.12	0.50
3:4:438:THR:CG2	3:4:462:ASP:CB	2.89	0.50
2:3:522:GLN:O	2:3:524:ASP:N	2.38	0.50
9:B:121:VAL:HG13	11:C:190:TRP:CH2	2.46	0.50
6:7:656:VAL:O	6:7:660:VAL:HG23	2.11	0.50
1:2:585:ILE:HG12	1:2:586:THR:H	1.77	0.50
8:D:59:ASP:HA	8:D:83:LEU:HD11	1.94	0.50
6:7:527:ASP:OD2	6:7:568:ASN:O	2.30	0.50
1:2:597:VAL:HG13	1:2:629:ILE:HD12	1.94	0.49
2:3:403:ILE:HD11	2:3:707:ARG:HB3	1.93	0.49
4:5:87:ILE:HD12	4:5:297:ILE:HD11	1.94	0.49
3:4:550:LYS:NZ	5:6:737:LYS:H	2.10	0.49
4:5:420:THR:CG2	4:5:556:VAL:CG1	2.86	0.49
2:3:406:LEU:HB3	2:3:546:LEU:HD23	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:134:TYR:O	10:A:137:LEU:HB3	2.12	0.49
2:3:435:ARG:NH1	2:3:477:LYS:O	2.45	0.49
6:7:362:GLY:HA2	6:7:364:LYS:HG3	1.93	0.49
3:4:322:ILE:HA	3:4:439:PHE:HD2	1.76	0.49
8:D:98:ILE:HA	8:D:101:ILE:HG22	1.94	0.49
2:3:669:PRO:HG2	2:3:710:THR:HG23	1.93	0.49
3:4:821:ASP:OD1	3:4:821:ASP:C	2.51	0.49
4:5:726:TRP:CG	4:5:727:SER:N	2.80	0.49
9:B:177:GLU:O	9:B:181:LEU:HG	2.12	0.49
9:B:188:ILE:HD13	11:C:132:ALA:CB	2.39	0.49
5:6:912:MET:HE1	5:6:915:MET:HE1	1.94	0.49
6:7:102:LEU:HG	6:7:106:ILE:CG1	2.42	0.49
2:3:522:GLN:C	2:3:524:ASP:H	2.14	0.49
4:5:535:SER:OG	4:5:538:ASP:OD2	2.21	0.49
5:6:942:LEU:HA	5:6:945:GLU:OE1	2.12	0.49
3:4:718:ARG:CA	6:7:665:ILE:CG1	2.89	0.49
2:3:456:ARG:NH1	6:7:316:GLN:HG3	2.27	0.49
4:5:450:THR:HA	4:5:468:ALA:CA	2.42	0.49
3:4:809:ALA:HB2	3:4:817:VAL:HG23	1.94	0.49
10:A:106:GLY:N	10:A:107:LEU:HB2	2.19	0.49
6:7:255:VAL:HG23	6:7:258:ILE:HG12	1.94	0.49
3:4:778:ARG:NH1	5:6:717:ASP:HB3	2.26	0.49
6:7:395:SER:C	6:7:397:VAL:H	2.15	0.49
3:4:352:CYS:N	3:4:353:ASP:HA	2.27	0.49
5:6:547:ILE:HD11	5:6:584:PHE:HB3	1.94	0.49
4:5:629:ILE:HG23	4:5:633:LEU:HD12	1.94	0.49
3:4:407:PRO:HG2	3:4:410:GLN:HB3	1.94	0.49
2:3:492:GLN:HE22	6:7:482:TYR:HD2	1.58	0.49
2:3:553:ILE:HB	2:3:555:GLU:CA	2.42	0.49
1:2:702:SER:HG	5:6:559:THR:HG21	1.75	0.49
2:3:462:MET:CE	2:3:470:VAL:HG21	2.41	0.49
6:7:400:ARG:HB3	6:7:637:LYS:NZ	2.27	0.49
10:A:41:LEU:HA	10:A:44:VAL:HG12	1.95	0.49
4:5:530:TYR:CD1	4:5:533:LEU:HD12	2.48	0.49
6:7:409:ASP:OD2	6:7:412:ASN:HB3	2.12	0.49
3:4:587:ARG:HD2	3:4:625:ASP:O	2.13	0.49
4:5:365:LYS:HG2	4:5:365:LYS:O	2.13	0.49
5:6:153:ILE:HD11	5:6:267:PHE:CD1	2.48	0.49
1:2:846:VAL:O	1:2:853:VAL:HG21	2.12	0.49
1:2:435:ASP:N	1:2:436:GLY:HA3	2.26	0.49
3:4:505:ASP:OD1	3:4:505:ASP:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:158:LYS:O	4:5:160:VAL:HG23	2.12	0.49
1:2:810:LEU:HD23	4:5:572:VAL:CG1	2.43	0.49
4:5:747:ALA:CA	4:5:750:LYS:HG2	2.42	0.49
4:5:351:GLU:CG	10:A:19:LEU:HD21	2.29	0.49
4:5:259:GLN:NE2	4:5:271:PRO:HG2	2.19	0.49
1:2:689:GLU:O	5:6:778:LYS:NZ	2.46	0.49
1:2:216:LEU:HD12	1:2:217:GLU:CB	2.43	0.49
6:7:258:ILE:H	6:7:305:SER:CB	2.25	0.49
1:2:427:THR:OG1	1:2:454:ASN:HB3	2.12	0.49
2:3:97:ILE:HA	2:3:156:SER:OG	2.11	0.49
4:5:565:ASP:O	4:5:568:ILE:HG13	2.13	0.49
4:5:394:GLY:HA3	4:5:607:ARG:NH2	1.98	0.49
3:4:638:SER:C	6:7:549:SER:HB2	2.32	0.49
1:2:636:ILE:HA	4:5:167:ILE:CD1	2.43	0.49
4:5:450:THR:CG2	4:5:469:MET:N	2.74	0.49
2:3:706:ILE:HG13	2:3:707:ARG:N	2.28	0.49
4:5:153:SER:O	4:5:155:HIS:N	2.34	0.49
9:B:51:GLN:N	9:B:52:LEU:HA	2.28	0.49
1:2:264:PRO:HG3	1:2:317:LEU:N	2.28	0.49
9:B:60:LEU:HD12	9:B:61:ASN:H	1.77	0.49
6:7:659:TYR:OH	6:7:714:GLU:OE1	2.27	0.49
2:3:451:GLU:O	2:3:454:GLU:HG2	2.12	0.49
6:7:247:ARG:NH2	6:7:314:LYS:HE3	2.28	0.49
5:6:653:HIS:NE2	5:6:704:PRO:HB2	2.28	0.49
3:4:550:LYS:HE2	5:6:735:HIS:C	2.33	0.49
4:5:420:THR:HG23	4:5:556:VAL:HG11	1.92	0.49
6:7:357:PRO:HB3	6:7:372:THR:HB	1.94	0.49
1:2:791:ALA:HB2	4:5:566:ILE:HG12	1.92	0.49
3:4:545:PHE:HE1	3:4:751:ILE:HG23	1.77	0.49
6:7:436:LEU:HD21	6:7:473:ILE:HG23	1.93	0.49
3:4:532:GLU:HG2	3:4:716:ASN:HB3	1.95	0.49
2:3:443:THR:CB	2:3:457:LEU:HD13	2.41	0.49
4:5:34:PHE:HD1	4:5:71:TYR:CD2	2.30	0.49
1:2:794:ARG:O	1:2:797:SER:OG	2.30	0.49
3:4:245:ALA:HA	3:4:246:ARG:HA	1.61	0.49
2:3:704:THR:HA	2:3:707:ARG:HH11	1.77	0.49
10:A:149:ILE:HD12	10:A:151:LEU:HB3	1.94	0.49
1:2:778:LEU:HD21	1:2:783:MET:HB2	1.94	0.49
4:5:733:LEU:HG	4:5:737:PHE:CD2	2.48	0.49
9:B:160:LEU:O	9:B:163:LEU:HG	2.12	0.49
9:B:163:LEU:HD13	9:B:189:MET:HE2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:270:THR:HG1	8:D:275:TYR:HE2	1.59	0.49
3:4:640:SER:OG	6:7:549:SER:CA	2.61	0.49
8:D:211:ASP:CG	8:D:213:GLU:HA	2.34	0.49
10:A:146:LEU:HG	10:A:146:LEU:O	2.12	0.49
6:7:370:LEU:C	6:7:370:LEU:HD13	2.31	0.49
3:4:448:SER:HB3	3:4:449:ARG:HB3	1.94	0.49
10:A:23:SER:OG	10:A:25:GLN:N	2.46	0.49
3:4:346:PHE:CE2	3:4:348:LYS:HG3	2.47	0.49
5:6:100:VAL:HA	5:6:101:LYS:HA	1.49	0.49
1:2:430:TYR:OH	1:2:449:THR:HG22	2.13	0.49
4:5:724:ILE:O	4:5:726:TRP:N	2.44	0.48
2:3:653:ILE:H	2:3:654:PRO:CD	2.26	0.48
1:2:693:GLU:HG3	5:6:778:LYS:HZ1	1.78	0.48
6:7:459:MET:HG3	6:7:569:PRO:HG3	1.95	0.48
3:4:550:LYS:HZ1	5:6:737:LYS:CB	2.18	0.48
3:4:710:ASP:C	3:4:711:LYS:HG3	2.33	0.48
1:2:481:GLU:HA	1:2:484:PHE:HB3	1.93	0.48
9:B:14:GLU:HG2	9:B:17:GLN:HE21	1.78	0.48
5:6:910:VAL:HA	5:6:913:MET:CG	2.43	0.48
2:3:427:SER:O	2:3:428:LEU:HB2	2.13	0.48
6:7:441:ASP:HB3	6:7:452:GLY:HA2	1.95	0.48
10:A:175:GLN:CD	10:A:199:LEU:CD2	2.82	0.48
4:5:463:TYR:N	4:5:509:ILE:CD1	2.74	0.48
2:3:199:SER:HB3	2:3:212:ARG:HB3	1.94	0.48
2:3:555:GLU:HG2	4:5:634:LEU:HD23	1.95	0.48
1:2:216:LEU:HD12	1:2:217:GLU:CA	2.43	0.48
3:4:497:GLU:HG3	3:4:498:VAL:N	2.28	0.48
5:6:603:SER:H	5:6:604:SER:HA	1.78	0.48
3:4:242:ASN:HA	3:4:304:ARG:HB2	1.95	0.48
4:5:682:ARG:O	4:5:685:GLN:HB3	2.13	0.48
6:7:237:GLN:O	6:7:239:ILE:HG23	2.12	0.48
3:4:239:SER:OG	3:4:240:ASN:N	2.40	0.48
3:4:253:GLN:O	3:4:254:THR:OG1	2.29	0.48
4:5:747:ALA:C	4:5:750:LYS:HG2	2.34	0.48
2:3:555:GLU:O	2:3:557:ARG:N	2.46	0.48
6:7:102:LEU:O	6:7:105:ALA:N	2.46	0.48
1:2:840:VAL:O	1:2:843:ASP:OD1	2.30	0.48
2:3:163:ALA:HB2	11:C:91:ASP:OD2	2.14	0.48
9:B:21:GLU:HA	9:B:73:LEU:HD23	1.95	0.48
1:2:798:ILE:CG2	4:5:560:HIS:HB2	2.43	0.48
10:A:65:ASP:OD2	10:A:67:VAL:HB	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:160:LEU:HD23	11:C:133:GLN:NE2	2.27	0.48
9:B:160:LEU:HD21	9:B:184:PHE:HE2	1.78	0.48
10:A:177:GLU:C	10:A:178:TYR:CD2	2.86	0.48
1:2:435:ASP:HB3	1:2:447:PHE:HD1	1.77	0.48
6:7:636:SER:HA	6:7:639:ARG:HH21	1.78	0.48
6:7:116:LEU:O	6:7:119:ARG:HG2	2.13	0.48
9:B:30:ARG:NH2	9:B:86:SER:OG	2.46	0.48
4:5:303:SER:O	4:5:303:SER:OG	2.18	0.48
10:A:175:GLN:CB	10:A:181:PHE:HB2	2.44	0.48
3:4:241:LEU:HD23	3:4:243:LEU:H	1.79	0.48
1:2:693:GLU:N	5:6:778:LYS:HZ1	2.12	0.48
10:A:178:TYR:OH	10:A:198:ARG:NE	2.47	0.48
5:6:134:LYS:HG2	5:6:137:ARG:HG3	1.96	0.48
2:3:682:ASN:OD1	2:3:734:ARG:NH1	2.35	0.48
10:A:135:CYS:O	10:A:139:THR:HG23	2.13	0.48
2:3:202:TYR:CE2	6:7:14:TYR:HD2	2.31	0.48
1:2:428:GLY:HA3	1:2:453:ALA:HA	1.95	0.48
4:5:489:ASP:O	4:5:493:ILE:HG12	2.14	0.48
3:4:823:GLN:N	3:4:823:GLN:OE1	2.43	0.48
10:A:173:GLU:CB	10:A:183:LEU:H	2.27	0.48
5:6:944:LYS:CE	5:6:957:GLU:HB3	2.44	0.48
10:A:166:ARG:HH22	10:A:207:LEU:HD22	1.77	0.48
5:6:720:ASN:ND2	5:6:723:ILE:CD1	2.65	0.48
5:6:559:THR:HG23	5:6:565:LEU:HD23	1.95	0.48
6:7:394:THR:HG23	6:7:398:GLU:OE2	2.14	0.48
3:4:440:ARG:HG3	3:4:440:ARG:NH1	2.29	0.48
3:4:458:LYS:HZ3	5:6:413:PRO:HB3	1.76	0.48
11:C:187:THR:O	11:C:191:MET:HG2	2.13	0.48
5:6:349:THR:HG23	5:6:350:ARG:NH1	2.28	0.48
5:6:924:ASP:HA	5:6:927:GLY:O	2.14	0.48
8:D:137:LYS:O	8:D:141:ARG:HG3	2.14	0.48
6:7:460:GLY:HA3	6:7:600:MET:O	2.13	0.48
2:3:553:ILE:HG22	2:3:554:ASN:O	2.14	0.48
6:7:672:LYS:HD3	6:7:683:GLN:OE1	2.14	0.48
1:2:335:LYS:HG3	1:2:383:ARG:HB3	1.95	0.48
2:3:347:ILE:HG22	2:3:351:ASN:HD21	1.78	0.48
4:5:667:GLU:O	4:5:668:LEU:CB	2.61	0.48
5:6:154:ASP:OD1	5:6:269:ASN:HB3	2.13	0.48
2:3:480:ASP:O	2:3:484:VAL:HG23	2.12	0.48
1:2:785:LYS:HG3	1:2:788:ARG:NH2	2.29	0.48
3:4:585:THR:HG21	3:4:628:VAL:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:723:SER:OG	6:7:724:LYS:N	2.44	0.48
10:A:171:ALA:HA	10:A:172:GLY:HA3	1.61	0.48
1:2:656:ARG:HB3	5:6:794:ARG:NH2	2.28	0.48
1:2:659:SER:CB	4:5:741:HIS:CE1	2.84	0.48
6:7:260:TYR:CG	6:7:298:LEU:HD13	2.48	0.48
5:6:290:ILE:HG12	5:6:454:PHE:CZ	2.49	0.48
9:B:116:PRO:O	9:B:117:TRP:HB3	2.12	0.48
6:7:21:ILE:HD13	6:7:117:PHE:HA	1.95	0.48
9:B:80:LYS:HE3	9:B:130:ALA:HA	1.96	0.48
3:4:521:LEU:O	3:4:524:ARG:HG2	2.13	0.48
8:D:259:THR:OG1	8:D:260:ILE:N	2.47	0.48
3:4:635:ASP:OD2	3:4:675:ALA:HB1	2.13	0.48
8:D:211:ASP:HB2	8:D:219:ILE:HD11	1.96	0.48
1:2:325:THR:OG1	1:2:389:THR:O	2.31	0.48
5:6:379:VAL:CG2	5:6:454:PHE:CD2	2.92	0.48
4:5:408:GLY:HA2	4:5:409:ASP:HA	1.72	0.48
2:3:670:GLN:HE22	2:3:719:LYS:NZ	2.12	0.48
6:7:628:LEU:N	6:7:629:ASP:HA	2.29	0.48
2:3:457:LEU:CD2	2:3:499:LYS:CE	2.80	0.48
10:A:175:GLN:NE2	10:A:199:LEU:CD1	2.77	0.48
2:3:342:LEU:HB3	2:3:347:ILE:HG13	1.95	0.48
8:D:79:TYR:HD1	8:D:147:ARG:NH1	2.12	0.48
3:4:321:ASP:OD1	3:4:321:ASP:O	2.32	0.48
6:7:17:LEU:O	6:7:21:ILE:HG13	2.13	0.48
11:C:135:LEU:HD11	11:C:169:LEU:HD21	1.96	0.48
1:2:691:ALA:O	1:2:695:LEU:HG	2.14	0.48
9:B:29:PRO:O	9:B:65:ALA:HA	2.14	0.48
2:3:442:LEU:C	2:3:442:LEU:HD12	2.34	0.47
5:6:794:ARG:HB2	5:6:795:ILE:C	2.35	0.47
5:6:780:LEU:HD12	5:6:828:TYR:HE1	1.78	0.47
4:5:754:ALA:C	4:5:758:HIS:HD2	2.16	0.47
4:5:754:ALA:HB1	4:5:758:HIS:NE2	2.28	0.47
5:6:566:ARG:HH12	5:6:656:MET:C	2.04	0.47
1:2:327:ARG:HH12	4:5:272:ARG:HH21	1.60	0.47
2:3:555:GLU:C	2:3:557:ARG:H	2.17	0.47
3:4:202:LYS:CB	3:4:203:TYR:HB3	2.39	0.47
6:7:397:VAL:HA	6:7:400:ARG:HH21	1.78	0.47
6:7:421:GLU:C	6:7:625:GLN:HE22	2.16	0.47
3:4:306:TYR:HB3	3:4:465:HIS:CD2	2.48	0.47
4:5:349:PHE:CE2	4:5:604:THR:OG1	2.66	0.47
5:6:922:GLU:HG3	5:6:923:VAL:N	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:327:ARG:HH22	4:5:272:ARG:HH21	1.63	0.47
5:6:532:SER:HB3	5:6:745:PRO:CG	2.43	0.47
4:5:59:TYR:CD1	4:5:135:PHE:HE1	2.28	0.47
3:4:448:SER:HB3	3:4:449:ARG:CB	2.43	0.47
1:2:339:PHE:HZ	1:2:348:LEU:HB2	1.79	0.47
2:3:317:PHE:CE2	4:5:176:ALA:HB2	2.45	0.47
4:5:264:LEU:HA	4:5:265:VAL:HA	1.67	0.47
5:6:561:GLU:CG	5:6:562:GLY:CA	2.92	0.47
2:3:151:HIS:ND1	2:3:152:PRO:HD2	2.29	0.47
2:3:151:HIS:CG	2:3:152:PRO:HD2	2.48	0.47
3:4:712:VAL:HB	3:4:715:LYS:CG	2.44	0.47
5:6:912:MET:HE1	5:6:961:ALA:HB1	1.90	0.47
8:D:211:ASP:OD1	8:D:213:GLU:CA	2.62	0.47
8:D:216:VAL:CG1	8:D:218:MET:H	2.26	0.47
8:D:226:LYS:HG3	9:B:190:ASP:OD2	2.14	0.47
2:3:679:ILE:HG13	6:7:617:THR:HG22	1.95	0.47
5:6:612:VAL:HG23	5:6:623:ILE:HA	1.95	0.47
10:A:149:ILE:HB	10:A:151:LEU:H	1.74	0.47
5:6:597:TYR:HD1	5:6:637:CYS:SG	2.37	0.47
1:2:334:LEU:HD11	4:5:324:ARG:NE	2.29	0.47
6:7:331:LEU:HD11	6:7:355:PHE:CE1	2.48	0.47
5:6:561:GLU:HG3	5:6:562:GLY:CA	2.43	0.47
8:D:72:CYS:SG	8:D:228:VAL:HB	2.54	0.47
1:2:767:ILE:HG13	1:2:768:HIS:N	2.28	0.47
6:7:228:ARG:NH1	6:7:323:PRO:HD2	2.29	0.47
8:D:161:LEU:O	8:D:169:ILE:HG22	2.14	0.47
8:D:216:VAL:CG1	8:D:219:ILE:HB	2.44	0.47
4:5:258:LEU:HD21	4:5:276:MET:HE1	1.96	0.47
6:7:260:TYR:CZ	6:7:269:VAL:HB	2.48	0.47
2:3:346:ASP:O	2:3:350:ILE:HD12	2.15	0.47
2:3:94:HIS:HB3	2:3:153:TRP:CE3	2.49	0.47
3:4:234:ARG:HD2	3:4:283:LEU:HD21	1.96	0.47
4:5:86:ILE:O	4:5:89:LEU:N	2.43	0.47
6:7:103:VAL:O	6:7:107:GLN:HG2	2.14	0.47
4:5:28:ILE:HG12	4:5:93:ALA:HB2	1.97	0.47
1:2:674:LEU:HD21	1:2:680:LEU:HD21	1.97	0.47
11:C:117:GLU:OE2	11:C:120:LEU:CD2	2.61	0.47
5:6:776:LYS:HZ3	5:6:824:ILE:C	2.17	0.47
4:5:331:LEU:HA	4:5:332:GLY:HA2	1.60	0.47
1:2:503:PRO:O	1:2:698:PHE:CZ	2.68	0.47
1:2:549:LYS:NZ	1:2:651:ASN:OD1	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:488:SER:O	6:7:492:GLY:HA3	2.13	0.47
5:6:568:ASP:OD1	5:6:677:SER:HB3	2.14	0.47
10:A:47:LEU:HD22	10:A:79:MET:SD	2.54	0.47
6:7:414:LEU:O	6:7:418:ILE:HD12	2.15	0.47
1:2:426:VAL:HG12	1:2:456:ILE:HD13	1.95	0.47
4:5:22:ASP:O	4:5:26:GLU:HG2	2.15	0.47
2:3:259:GLN:NE2	4:5:463:TYR:CB	2.77	0.47
1:2:687:VAL:HG21	1:2:692:ASP:OD2	2.14	0.47
3:4:338:VAL:HG23	5:6:375:ARG:NH1	2.24	0.47
8:D:206:LEU:HB3	10:A:83:LYS:HZ1	1.77	0.47
6:7:18:PHE:HA	6:7:21:ILE:HD12	1.97	0.47
2:3:260:GLU:OE2	2:3:271:PRO:HA	2.14	0.47
2:3:178:LYS:O	2:3:180:VAL:HG23	2.14	0.47
3:4:743:PRO:HG2	3:4:747:LEU:HD23	1.96	0.47
1:2:525:LYS:NZ	4:5:576:HIS:CE1	2.83	0.47
4:5:379:PHE:HZ	4:5:571:HIS:CD2	2.33	0.47
1:2:703:HIS:HD2	5:6:804:ILE:HG12	1.50	0.47
1:2:805:ILE:HD11	1:2:845:PHE:CZ	2.50	0.47
2:3:450:ARG:H	2:3:451:GLU:HA	1.79	0.47
2:3:457:LEU:HD12	2:3:457:LEU:C	2.34	0.47
11:C:123:VAL:HG12	11:C:124:VAL:N	2.30	0.47
5:6:811:ALA:HB2	5:6:819:ILE:HG13	1.95	0.47
10:A:145:ASP:CB	10:A:147:VAL:CG2	2.78	0.47
4:5:138:ILE:HG12	4:5:282:LEU:HD21	1.96	0.47
1:2:658:ASN:CB	4:5:741:HIS:NE2	2.72	0.47
5:6:745:PRO:CG	5:6:746:PHE:H	2.27	0.47
5:6:290:ILE:HD12	5:6:361:ILE:HD13	1.94	0.47
3:4:470:SER:HG	3:4:623:LEU:HD11	1.78	0.47
4:5:588:GLU:HB3	4:5:593:GLU:HB2	1.97	0.47
1:2:641:GLN:HG3	4:5:262:PRO:HB2	1.97	0.47
1:2:811:GLU:OE1	1:2:815:ARG:NH1	2.45	0.47
3:4:343:LYS:HZ1	3:4:392:ALA:HB3	1.78	0.47
8:D:94:GLN:HE21	8:D:133:LEU:HG	1.80	0.47
4:5:148:LEU:CD2	4:5:260:GLU:HB3	2.45	0.47
8:D:83:LEU:O	8:D:86:ARG:HG2	2.14	0.47
5:6:403:VAL:HG11	5:6:450:TYR:HB3	1.96	0.47
11:C:22:TYR:OH	11:C:69:VAL:HB	2.15	0.47
9:B:102:ILE:HG23	9:B:148:LEU:HD12	1.97	0.47
3:4:375:ASP:HA	3:4:376:CYS:O	2.15	0.47
5:6:369:PRO:C	5:6:372:SER:OG	2.52	0.47
3:4:712:VAL:HB	3:4:715:LYS:HG2	1.93	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:572:THR:N	6:7:686:PRO:HG3	2.29	0.47
4:5:714:PHE:CE2	4:5:751:ALA:CB	2.98	0.47
8:D:234:GLY:O	8:D:256:TYR:OH	2.29	0.47
4:5:450:THR:CA	4:5:469:MET:H	2.28	0.47
6:7:601:LEU:HD21	6:7:727:LEU:HA	1.97	0.47
9:B:53:ILE:HD12	9:B:53:ILE:H	1.80	0.47
3:4:818:GLU:HG3	3:4:820:GLU:H	1.80	0.47
1:2:576:LEU:HD23	1:2:595:ALA:HB3	1.97	0.47
1:2:359:ILE:HA	1:2:360:ARG:HA	1.65	0.47
1:2:814:LEU:CD2	4:5:576:HIS:CB	2.93	0.47
3:4:721:ALA:HB3	6:7:664:TYR:HD2	1.69	0.47
8:D:258:VAL:HA	8:D:259:THR:OG1	2.14	0.47
5:6:777:TYR:CD1	5:6:800:LEU:HB2	2.50	0.47
8:D:227:PHE:HD2	9:B:190:ASP:OD1	1.98	0.47
5:6:744:PRO:HB2	5:6:745:PRO:HD2	1.92	0.47
2:3:555:GLU:C	2:3:557:ARG:N	2.67	0.47
1:2:240:GLU:O	1:2:293:ILE:HG23	2.15	0.47
6:7:18:PHE:CZ	6:7:119:ARG:NH1	2.83	0.47
2:3:500:ALA:H	2:3:501:GLY:HA3	1.80	0.47
5:6:326:LYS:H	5:6:327:TYR:HA	1.80	0.47
5:6:162:GLU:HG3	5:6:165:ALA:HB3	1.97	0.47
2:3:502:ILE:CB	6:7:346:GLY:CA	2.90	0.47
5:6:912:MET:CE	5:6:915:MET:HE1	2.44	0.47
5:6:923:VAL:O	5:6:927:GLY:N	2.47	0.47
4:5:412:VAL:HB	4:5:520:LEU:HG	1.96	0.47
4:5:557:LYS:HB3	4:5:559:ASP:OD1	2.15	0.47
8:D:145:ARG:HH22	10:A:102:TRP:HB3	1.79	0.47
6:7:570:LEU:HB2	6:7:585:ASN:HD21	1.79	0.47
3:4:444:ILE:HD11	3:4:454:LYS:HD2	1.97	0.47
2:3:456:ARG:NH1	6:7:316:GLN:CG	2.72	0.46
2:3:652:THR:CG2	2:3:653:ILE:N	2.42	0.46
9:B:191:LYS:CE	11:C:172:MET:HE1	2.45	0.46
5:6:767:LYS:HG2	5:6:769:ALA:H	1.79	0.46
1:2:641:GLN:CG	4:5:262:PRO:HB2	2.45	0.46
3:4:563:ASN:HD22	3:4:649:MET:CE	2.28	0.46
6:7:584:ILE:HD12	6:7:681:PHE:CZ	2.47	0.46
3:4:688:VAL:HG12	3:4:692:ILE:HD11	1.96	0.46
11:C:101:ASN:H	11:C:102:SER:HA	1.81	0.46
2:3:656:LEU:O	2:3:660:VAL:HG23	2.16	0.46
1:2:769:TYR:CZ	1:2:773:LYS:HD3	2.50	0.46
11:C:88:ILE:HG22	11:C:95:LEU:HD13	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:215:SER:HA	8:D:216:VAL:HA	1.66	0.46
4:5:407:ARG:HH12	4:5:516:ARG:HB3	1.80	0.46
2:3:700:ARG:O	2:3:704:THR:HG23	2.15	0.46
9:B:72:VAL:O	9:B:75:ILE:HG12	2.15	0.46
6:7:261:THR:N	6:7:299:PHE:O	2.37	0.46
11:C:131:ARG:HA	11:C:131:ARG:HD3	1.71	0.46
5:6:768:GLU:OE1	5:6:768:GLU:N	2.47	0.46
6:7:380:PHE:HE2	6:7:382:ARG:HB2	1.80	0.46
6:7:227:VAL:HB	6:7:317:GLU:OE2	2.16	0.46
10:A:73:PHE:CZ	11:C:57:VAL:HG21	2.51	0.46
8:D:275:TYR:CE1	9:B:169:GLN:HA	2.50	0.46
11:C:139:ALA:HB1	11:C:184:TYR:CE2	2.51	0.46
4:5:349:PHE:HE2	4:5:601:ARG:O	1.98	0.46
2:3:706:ILE:CG2	6:7:620:HIS:CG	2.98	0.46
4:5:355:GLU:CA	10:A:15:ARG:NH1	2.78	0.46
8:D:189:ILE:CD1	10:A:133:GLU:CD	2.82	0.46
3:4:331:LEU:O	3:4:399:LEU:HD12	2.14	0.46
3:4:509:ILE:HG13	3:4:746:PHE:CZ	2.51	0.46
6:7:264:GLN:HB2	6:7:289:CYS:SG	2.55	0.46
8:D:218:MET:HA	8:D:219:ILE:C	2.36	0.46
5:6:769:ALA:O	5:6:772:TYR:HB3	2.16	0.46
10:A:149:ILE:HD12	10:A:151:LEU:HG	1.97	0.46
2:3:488:GLU:O	2:3:492:GLN:HB3	2.16	0.46
8:D:200:LYS:H	8:D:201:TYR:C	2.18	0.46
6:7:570:LEU:HB2	6:7:585:ASN:ND2	2.30	0.46
2:3:422:VAL:HG11	2:3:513:ILE:HD12	1.96	0.46
1:2:660:THR:O	1:2:850:LYS:HG3	2.15	0.46
10:A:5:LEU:HD11	10:A:36:ILE:HD11	1.96	0.46
4:5:711:ILE:O	4:5:714:PHE:CD1	2.68	0.46
1:2:635:GLY:CA	4:5:168:SER:OG	2.63	0.46
4:5:551:ASP:CG	4:5:655:ALA:HB2	2.36	0.46
4:5:50:LEU:HD13	4:5:61:LEU:HD12	1.98	0.46
4:5:290:THR:CG2	4:5:340:SER:OG	2.63	0.46
6:7:102:LEU:HG	6:7:106:ILE:HG13	1.97	0.46
4:5:54:ILE:HG22	4:5:135:PHE:CZ	2.51	0.46
1:2:601:LYS:HZ1	1:2:643:ARG:NH1	2.11	0.46
6:7:470:LEU:CD2	6:7:564:LEU:HD22	2.46	0.46
10:A:129:GLU:HA	10:A:132:LYS:HE3	1.98	0.46
2:3:391:LYS:HE2	6:7:623:ASN:HA	1.22	0.46
1:2:787:SER:HA	4:5:573:ILE:CG1	2.45	0.46
2:3:457:LEU:CD1	2:3:502:ILE:CD1	2.66	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:724:ILE:HD12	4:5:726:TRP:HB3	1.96	0.46
4:5:351:GLU:OE2	10:A:19:LEU:CG	2.64	0.46
1:2:637:VAL:HG13	4:5:167:ILE:HG22	1.97	0.46
4:5:406:LEU:O	4:5:407:ARG:HD2	2.16	0.46
10:A:149:ILE:CB	10:A:151:LEU:N	2.73	0.46
2:3:492:GLN:NE2	6:7:482:TYR:CD2	2.84	0.46
5:6:356:TRP:HB2	5:6:381:LEU:O	2.15	0.46
1:2:404:ARG:NH1	5:6:300:VAL:HG23	2.31	0.46
3:4:636:LYS:CB	6:7:539:GLU:CG	2.66	0.46
4:5:426:LEU:HD23	4:5:426:LEU:HA	1.59	0.46
3:4:579:GLN:NE2	6:7:448:MET:CB	2.66	0.46
3:4:470:SER:OG	3:4:623:LEU:HD12	2.13	0.46
5:6:601:LYS:HA	5:6:644:MET:HG2	1.96	0.46
5:6:603:SER:OG	5:6:644:MET:SD	2.74	0.46
6:7:451:ARG:HA	6:7:452:GLY:HA3	1.62	0.46
5:6:942:LEU:O	5:6:945:GLU:HG2	2.15	0.46
5:6:537:VAL:HG11	5:6:584:PHE:CE1	2.51	0.46
5:6:537:VAL:HG11	5:6:584:PHE:CZ	2.51	0.46
10:A:161:ALA:O	10:A:193:GLN:HB2	2.16	0.46
8:D:168:LEU:HD11	8:D:171:LEU:HD12	1.97	0.46
2:3:414:ALA:O	2:3:418:LEU:N	2.41	0.46
4:5:751:ALA:O	4:5:755:LEU:HG	2.16	0.46
1:2:294:HIS:CD2	1:2:296:ARG:NH1	2.84	0.46
5:6:916:ILE:O	5:6:920:ILE:HG12	2.15	0.46
2:3:680:VAL:HG23	2:3:681:LYS:H	1.79	0.46
3:4:579:GLN:NE2	6:7:448:MET:N	2.62	0.46
4:5:338:GLU:O	4:5:339:THR:CB	2.54	0.46
1:2:839:LYS:HZ2	1:2:864:TYR:HA	1.80	0.46
1:2:861:PHE:O	1:2:864:TYR:HB3	2.15	0.46
5:6:910:VAL:CA	5:6:913:MET:HG2	2.46	0.46
4:5:494:HIS:O	4:5:498:GLU:OE1	2.34	0.46
3:4:688:VAL:O	3:4:692:ILE:HD12	2.16	0.46
10:A:138:ILE:HD12	10:A:141:LEU:HB2	1.96	0.46
4:5:413:LEU:HD23	4:5:415:LEU:HD23	1.98	0.46
6:7:19:ASN:O	6:7:22:THR:OG1	2.26	0.46
6:7:206:PRO:HG3	6:7:352:THR:HG21	1.98	0.46
2:3:442:LEU:CD1	2:3:444:ALA:N	2.61	0.46
9:B:184:PHE:CE1	9:B:188:ILE:HD12	2.50	0.46
4:5:274:LEU:HD12	4:5:328:ILE:HD11	1.96	0.46
10:A:93:ARG:HG3	10:A:97:LEU:HD11	1.98	0.46
9:B:112:PHE:CE1	9:B:156:VAL:HG22	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:549:ARG:HG2	4:5:651:ARG:HH22	1.80	0.46
4:5:549:ARG:HG2	4:5:651:ARG:NH2	2.31	0.46
2:3:225:ILE:HD11	4:5:182:MET:HE1	1.97	0.46
9:B:13:PRO:O	9:B:16:ILE:HG12	2.16	0.46
6:7:67:LEU:HD11	6:7:121:ILE:HG23	1.97	0.46
2:3:254:GLN:NE2	2:3:256:ILE:HD11	2.31	0.46
1:2:636:ILE:CA	4:5:167:ILE:HD13	2.41	0.46
1:2:409:ILE:HG22	1:2:411:LEU:HD11	1.97	0.46
11:C:172:MET:HG3	11:C:173:GLU:N	2.31	0.46
9:B:157:LEU:HD23	9:B:157:LEU:O	2.16	0.46
6:7:282:SER:O	6:7:298:LEU:HD21	2.15	0.46
1:2:583:ASP:OD2	1:2:590:THR:HG23	2.16	0.46
8:D:79:TYR:CE1	8:D:176:SER:HB2	2.51	0.46
9:B:29:PRO:HG2	9:B:63:MET:HB3	1.98	0.46
3:4:519:TYR:CZ	3:4:538:LYS:HD3	2.51	0.46
1:2:569:GLN:CD	1:2:613:ASN:HD22	2.18	0.46
1:2:433:ASN:HB2	1:2:434:TYR:HB3	1.97	0.46
8:D:141:ARG:HG2	10:A:149:ILE:CG2	2.45	0.46
4:5:83:PRO:HB2	4:5:297:ILE:CD1	2.46	0.46
2:3:199:SER:HB2	2:3:214:TYR:CE2	2.51	0.46
1:2:403:PRO:HD2	5:6:672:LEU:HD21	1.91	0.46
10:A:188:GLN:O	10:A:188:GLN:HG3	2.15	0.46
4:5:453:VAL:HG21	4:5:504:ILE:HG21	1.96	0.46
5:6:335:ASN:N	5:6:337:SER:HA	2.29	0.46
9:B:84:LYS:HE3	9:B:84:LYS:HB3	1.77	0.46
3:4:388:ARG:HH22	5:6:176:ARG:HB2	1.81	0.46
6:7:480:GLY:HA2	6:7:520:ILE:O	2.16	0.46
5:6:406:ASP:HB2	5:6:451:LYS:HZ2	1.81	0.46
2:3:234:GLU:OE2	2:3:240:LYS:HD2	2.16	0.45
2:3:652:THR:CB	2:3:654:PRO:HD2	2.46	0.45
2:3:189:THR:HG23	2:3:256:ILE:HD11	1.97	0.45
5:6:776:LYS:HZ2	5:6:824:ILE:HG22	1.81	0.45
2:3:389:VAL:CG1	2:3:390:GLU:H	2.13	0.45
3:4:419:VAL:O	3:4:420:TYR:CG	2.68	0.45
5:6:533:ILE:HD13	5:6:548:LEU:HD13	1.98	0.45
4:5:249:LYS:C	4:5:250:PHE:HD1	2.19	0.45
1:2:855:ARG:HG3	1:2:858:ARG:NH2	2.31	0.45
1:2:785:LYS:HG3	1:2:788:ARG:HH21	1.80	0.45
3:4:578:LEU:HD22	3:4:630:CYS:HB3	1.96	0.45
5:6:802:SER:O	5:6:805:ARG:HG2	2.16	0.45
3:4:593:GLY:C	6:7:547:SER:HB3	2.37	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:569:HIS:O	2:3:570:ARG:HG3	2.17	0.45
5:6:134:LYS:N	5:6:135:VAL:HA	2.21	0.45
2:3:313:THR:C	2:3:314:LEU:HD12	2.37	0.45
4:5:68:LEU:CD2	4:5:76:TYR:HB2	2.46	0.45
1:2:767:ILE:HG13	1:2:768:HIS:H	1.80	0.45
8:D:279:TYR:OH	8:D:286:LEU:CD2	2.64	0.45
8:D:279:TYR:CE1	8:D:286:LEU:HD22	2.52	0.45
3:4:693:ASP:CG	3:4:694:LEU:H	2.19	0.45
4:5:577:THR:HA	4:5:578:GLY:C	2.36	0.45
5:6:355:ASP:HB3	5:6:356:TRP:HA	1.97	0.45
1:2:504:SER:HA	1:2:698:PHE:HZ	1.81	0.45
5:6:398:THR:O	5:6:456:ALA:HA	2.17	0.45
4:5:31:PHE:CG	4:5:90:PHE:CD1	3.04	0.45
3:4:315:ARG:HH12	6:7:251:VAL:N	2.06	0.45
8:D:71:ARG:NH1	9:B:11:PHE:HD1	2.14	0.45
2:3:294:VAL:HG12	2:3:295:VAL:O	2.16	0.45
4:5:450:THR:CA	4:5:468:ALA:HB3	2.47	0.45
5:6:941:LEU:HD23	5:6:944:LYS:NZ	2.30	0.45
3:4:549:ASN:O	3:4:550:LYS:HD2	2.16	0.45
8:D:229:PHE:CD2	9:B:178:ILE:HG23	2.52	0.45
5:6:122:PHE:HB2	5:6:124:VAL:N	2.31	0.45
5:6:133:GLU:HA	5:6:134:LYS:HA	1.71	0.45
8:D:224:TRP:HB3	8:D:280:GLU:HB2	1.98	0.45
9:B:115:LEU:HD22	9:B:119:TRP:CD1	2.52	0.45
6:7:670:ASP:HA	6:7:673:ARG:HG2	1.97	0.45
1:2:537:ILE:HG23	1:2:678:ASP:OD2	2.17	0.45
1:2:435:ASP:HB3	1:2:447:PHE:CD1	2.51	0.45
4:5:663:LEU:HA	4:5:666:LEU:HD12	1.99	0.45
8:D:174:LEU:HG	8:D:175:LEU:HD12	1.99	0.45
8:D:232:VAL:HA	8:D:291:VAL:HG23	1.99	0.45
3:4:696:PRO:N	3:4:697:PRO:HD2	2.31	0.45
6:7:516:ALA:O	6:7:561:THR:HG22	2.16	0.45
6:7:668:ARG:HH22	6:7:686:PRO:HD3	1.81	0.45
5:6:929:GLU:C	5:6:930:GLU:HG3	2.34	0.45
4:5:754:ALA:O	4:5:758:HIS:CD2	2.70	0.45
4:5:757:LYS:NZ	4:5:758:HIS:CE1	2.85	0.45
2:3:409:GLY:N	2:3:549:VAL:CG2	2.80	0.45
2:3:518:PRO:O	2:3:519:VAL:HG12	2.17	0.45
1:2:306:LEU:HD21	1:2:404:ARG:O	2.16	0.45
3:4:438:THR:HG23	3:4:438:THR:O	2.15	0.45
6:7:488:SER:OG	6:7:492:GLY:CA	2.58	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:55:ASN:O	6:7:217:LYS:HD2	2.16	0.45
4:5:151:LEU:HA	4:5:155:HIS:NE2	2.32	0.45
6:7:349:VAL:HG21	6:7:381:VAL:HG13	1.99	0.45
4:5:397:LYS:HD2	4:5:405:ARG:HH11	1.81	0.45
8:D:148:LEU:HD22	8:D:182:TYR:CD2	2.51	0.45
3:4:717:ASP:O	6:7:664:TYR:HE2	1.99	0.45
6:7:443:ARG:HH12	6:7:449:LYS:HZ2	1.58	0.45
4:5:486:ARG:O	4:5:490:ARG:HB2	2.16	0.45
8:D:171:LEU:HB3	8:D:172:THR:H	1.51	0.45
6:7:546:ILE:HD12	6:7:557:LEU:HD11	1.99	0.45
5:6:392:GLY:HA3	5:6:630:LEU:HD13	1.99	0.45
3:4:712:VAL:HG12	3:4:713:ASP:N	2.32	0.45
4:5:744:SER:HB3	4:5:747:ALA:HB3	1.99	0.45
9:B:173:LEU:CD1	9:B:177:GLU:OE1	2.60	0.45
8:D:276:VAL:HG12	9:B:168:LEU:HB2	1.99	0.45
1:2:636:ILE:HA	4:5:167:ILE:HD13	1.99	0.45
4:5:450:THR:O	4:5:451:ALA:C	2.55	0.45
2:3:408:VAL:O	2:3:549:VAL:HG22	2.16	0.45
2:3:197:ILE:CD1	2:3:251:ILE:HB	2.44	0.45
2:3:166:LEU:HD13	2:3:167:SER:O	2.16	0.45
4:5:453:VAL:HG11	4:5:506:LYS:CD	2.41	0.45
3:4:758:ILE:HD13	3:4:813:LEU:HA	1.98	0.45
5:6:560:VAL:HB	5:6:561:GLU:HA	1.99	0.45
5:6:103:VAL:HA	5:6:104:ASP:HA	1.77	0.45
6:7:83:ASP:O	6:7:87:GLN:HG2	2.16	0.45
3:4:717:ASP:CG	6:7:668:ARG:CD	2.72	0.45
10:A:182:ASN:O	10:A:184:ILE:HG12	2.17	0.45
11:C:129:LEU:HD23	11:C:129:LEU:C	2.36	0.45
2:3:189:THR:HA	2:3:256:ILE:HD13	1.83	0.45
2:3:255:ARG:NH2	2:3:275:ASP:OD2	2.49	0.45
4:5:451:ALA:HA	4:5:470:VAL:HG23	1.97	0.45
10:A:145:ASP:CA	10:A:146:LEU:CB	2.59	0.45
4:5:50:LEU:HA	4:5:50:LEU:HD12	1.80	0.45
4:5:62:THR:HA	4:5:138:ILE:O	2.17	0.45
11:C:50:LEU:O	11:C:54:LEU:HG	2.16	0.45
3:4:557:ARG:HH11	3:4:668:ARG:CZ	2.29	0.45
11:C:105:PHE:HE1	11:C:128:LEU:HB2	1.81	0.45
10:A:102:TRP:NE1	10:A:134:TYR:OH	2.50	0.45
5:6:644:MET:HB3	5:6:648:ASP:OD2	2.16	0.45
2:3:476:ASP:CA	2:3:483:ARG:HH12	2.29	0.45
5:6:768:GLU:HA	5:6:770:ARG:NH2	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:328:THR:HA	5:6:329:GLU:HA	1.62	0.45
1:2:493:ILE:HG13	1:2:494:ILE:N	2.32	0.45
5:6:136:TYR:O	5:6:140:ILE:CD1	2.43	0.45
2:3:553:ILE:HB	2:3:555:GLU:HA	1.99	0.45
1:2:216:LEU:CD1	1:2:217:GLU:HB3	2.44	0.45
6:7:581:LEU:HB2	6:7:681:PHE:CE1	2.52	0.45
4:5:605:TYR:HE2	4:5:668:LEU:HD11	1.82	0.45
4:5:182:MET:HA	4:5:188:HIS:O	2.17	0.45
1:2:703:HIS:CD2	5:6:804:ILE:HG21	2.49	0.45
8:D:275:TYR:HD1	9:B:168:LEU:O	2.00	0.45
4:5:351:GLU:C	4:5:353:GLU:N	2.71	0.45
4:5:351:GLU:O	4:5:353:GLU:N	2.50	0.45
2:3:189:THR:HG23	2:3:256:ILE:HD12	1.98	0.45
4:5:448:GLY:O	4:5:450:THR:N	2.50	0.45
6:7:135:LYS:HB2	6:7:141:VAL:CG1	2.46	0.45
2:3:277:ILE:HD12	2:3:320:LEU:HD13	1.98	0.45
9:B:11:PHE:HB2	9:B:179:ASN:ND2	2.32	0.45
6:7:709:ASP:O	6:7:712:ASP:HB3	2.16	0.45
1:2:528:ASN:HA	1:2:529:GLY:HA2	1.49	0.45
1:2:790:TYR:OH	4:5:568:ILE:CD1	2.65	0.44
9:B:188:ILE:CD1	11:C:132:ALA:HB2	2.40	0.44
8:D:257:THR:O	8:D:269:LEU:HB2	2.16	0.44
2:3:122:ILE:HG22	2:3:123:PRO:CD	2.46	0.44
1:2:635:GLY:O	4:5:168:SER:CB	2.64	0.44
5:6:708:ARG:HA	5:6:798:ARG:HH22	1.82	0.44
2:3:671:LEU:CB	6:7:621:MET:CA	2.73	0.44
2:3:702:LEU:HA	2:3:705:LEU:HD12	1.98	0.44
2:3:406:LEU:CD1	2:3:543:PHE:CE2	2.97	0.44
2:3:163:ALA:HB3	2:3:164:HIS:ND1	2.31	0.44
5:6:932:THR:O	5:6:935:ASP:CG	2.55	0.44
6:7:440:VAL:HG12	6:7:440:VAL:O	2.17	0.44
2:3:376:HIS:O	2:3:379:LYS:HB2	2.17	0.44
6:7:606:ARG:O	6:7:610:GLU:HG2	2.17	0.44
1:2:432:ASN:HA	1:2:448:ALA:O	2.17	0.44
1:2:810:LEU:HD23	4:5:572:VAL:CB	2.48	0.44
5:6:940:TYR:O	5:6:944:LYS:HG2	2.17	0.44
5:6:963:LYS:CA	5:6:966:LYS:HE3	2.45	0.44
5:6:400:VAL:CG2	5:6:455:LEU:HG	2.47	0.44
6:7:444:VAL:CG2	6:7:448:MET:H	2.29	0.44
6:7:217:LYS:HG3	6:7:218:LYS:H	1.82	0.44
9:B:134:PHE:O	9:B:137:PRO:HD3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:649:MET:HB3	3:4:701:ARG:HD3	1.99	0.44
3:4:458:LYS:HB3	3:4:458:LYS:HZ2	1.82	0.44
5:6:156:GLN:O	5:6:160:MET:HG2	2.17	0.44
6:7:399:GLU:OE2	6:7:403:GLU:OE2	2.35	0.44
5:6:347:ASN:OD1	5:6:349:THR:HG22	2.17	0.44
6:7:254:ALA:HB2	6:7:310:PHE:HB2	1.99	0.44
5:6:908:LYS:HD3	5:6:908:LYS:HA	1.68	0.44
9:B:191:LYS:HE2	11:C:172:MET:HE1	1.91	0.44
5:6:730:HIS:O	5:6:733:ASP:HB2	2.16	0.44
5:6:303:GLU:HG3	5:6:356:TRP:HD1	1.79	0.44
5:6:379:VAL:HA	5:6:454:PHE:O	2.17	0.44
2:3:347:ILE:HG22	2:3:351:ASN:ND2	2.32	0.44
1:2:481:GLU:O	1:2:484:PHE:HB3	2.18	0.44
2:3:137:ASP:HA	2:3:138:ASP:HA	1.59	0.44
3:4:180:ILE:CD1	3:4:183:THR:HB	2.47	0.44
1:2:811:GLU:CD	1:2:815:ARG:NH1	2.70	0.44
1:2:264:PRO:HG3	1:2:317:LEU:HB2	1.98	0.44
4:5:633:LEU:HB2	4:5:648:ILE:HD11	1.98	0.44
5:6:369:PRO:C	5:6:372:SER:HG	2.20	0.44
3:4:416:SER:O	3:4:460:TYR:HB2	2.18	0.44
1:2:794:ARG:CD	4:5:565:ASP:CA	2.94	0.44
3:4:641:THR:O	3:4:642:ARG:HB2	2.16	0.44
2:3:676:ILE:HG13	2:3:677:ASN:H	1.81	0.44
3:4:762:ILE:HG22	3:4:766:ALA:CB	2.44	0.44
1:2:503:PRO:O	1:2:698:PHE:HZ	2.00	0.44
3:4:579:GLN:NE2	6:7:444:VAL:HG21	2.21	0.44
3:4:557:ARG:NH1	3:4:668:ARG:HH21	2.10	0.44
6:7:215:TYR:HE1	6:7:217:LYS:HD3	1.82	0.44
1:2:387:ARG:HH12	4:5:323:ILE:CD1	2.28	0.44
3:4:302:LYS:HD2	3:4:304:ARG:HH21	1.82	0.44
2:3:94:HIS:HB3	2:3:153:TRP:CZ3	2.52	0.44
5:6:768:GLU:HG3	5:6:770:ARG:NH2	2.32	0.44
4:5:621:LYS:O	4:5:624:SER:OG	2.30	0.44
5:6:721:GLU:N	5:6:721:GLU:OE1	2.51	0.44
2:3:705:LEU:HD21	2:3:733:LEU:HD13	2.00	0.44
10:A:151:LEU:CD2	10:A:151:LEU:C	2.86	0.44
6:7:718:ARG:O	6:7:722:VAL:HG23	2.17	0.44
9:B:25:ILE:HD11	9:B:87:ILE:HD11	1.90	0.44
2:3:158:LYS:HA	2:3:327:TYR:OH	2.17	0.44
6:7:544:GLN:NE2	6:7:560:ARG:HG2	2.32	0.44
3:4:562:ILE:HB	3:4:703:ASP:OD2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:749:GLU:HA	5:6:752:ARG:NH2	2.32	0.44
4:5:438:TYR:OH	4:5:480:ASP:OD2	2.20	0.44
2:3:104:ARG:NH2	11:C:86:ASN:HB2	2.32	0.44
2:3:257:THR:HG22	2:3:275:ASP:HB3	1.99	0.44
2:3:436:GLY:O	2:3:437:SER:HB3	2.18	0.44
1:2:696:ALA:CB	5:6:774:VAL:HG13	2.45	0.44
1:2:543:GLY:HA3	1:2:549:LYS:CD	2.37	0.44
3:4:200:SER:HB3	3:4:202:LYS:HB2	1.99	0.44
5:6:336:PRO:HA	5:6:337:SER:HA	1.48	0.44
8:D:224:TRP:O	8:D:280:GLU:N	2.50	0.44
2:3:311:SER:O	2:3:312:ASN:HB3	2.18	0.44
9:B:58:LYS:HB3	9:B:58:LYS:HE2	1.84	0.44
8:D:79:TYR:HB2	8:D:147:ARG:HH22	1.81	0.44
3:4:351:VAL:HA	3:4:352:CYS:HA	1.56	0.44
4:5:130:ASN:HA	4:5:131:SER:HA	1.68	0.44
6:7:145:GLN:O	6:7:149:ARG:HG2	2.18	0.44
4:5:635:ILE:HA	4:5:638:LEU:HG	2.00	0.44
6:7:526:PHE:O	6:7:526:PHE:CD2	2.70	0.44
4:5:714:PHE:CB	4:5:755:LEU:HD11	2.47	0.44
4:5:450:THR:HA	4:5:468:ALA:H	1.79	0.44
5:6:730:HIS:ND1	5:6:734:LEU:CD1	2.80	0.44
11:C:104:PHE:HB3	11:C:170:GLU:OE1	2.18	0.44
3:4:343:LYS:HD3	3:4:343:LYS:HA	1.76	0.44
1:2:816:ILE:O	1:2:819:SER:OG	2.15	0.44
6:7:421:GLU:CA	6:7:625:GLN:HE22	2.31	0.44
2:3:235:ASP:HB2	6:7:5:LEU:HD13	2.00	0.44
3:4:347:PHE:HB3	3:4:382:MET:SD	2.58	0.44
4:5:387:ALA:HA	4:5:390:CYS:SG	2.58	0.44
2:3:411:PRO:O	2:3:412:SER:OG	2.20	0.44
3:4:532:GLU:CG	3:4:533:LEU:H	2.02	0.44
3:4:719:GLU:HG3	3:4:723:HIS:NE2	2.33	0.44
2:3:447:THR:HA	2:3:448:THR:HA	1.68	0.44
4:5:742:ARG:HB3	4:5:743:PHE:CE1	2.53	0.44
2:3:437:SER:HA	2:3:439:GLY:N	2.31	0.44
5:6:776:LYS:HZ2	5:6:824:ILE:CG2	2.31	0.44
6:7:193:PRO:HD3	6:7:270:PHE:CZ	2.52	0.44
6:7:102:LEU:HD11	6:7:106:ILE:HG12	1.99	0.44
2:3:683:TYR:OH	2:3:687:ARG:HD2	2.18	0.44
4:5:614:LEU:HA	4:5:672:ALA:HB3	1.99	0.44
1:2:484:PHE:CZ	1:2:766:TYR:HD1	2.36	0.44
1:2:484:PHE:CZ	1:2:766:TYR:CD1	3.06	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:163:ALA:H	2:3:164:HIS:HB2	1.83	0.44
3:4:469:VAL:CG1	3:4:619:GLY:N	2.81	0.44
5:6:710:ASP:HA	5:6:711:LEU:HA	1.61	0.44
5:6:403:VAL:CG1	5:6:450:TYR:HB3	2.48	0.44
1:2:433:ASN:HA	1:2:434:TYR:HA	1.81	0.44
2:3:536:PRO:HA	2:3:537:ASP:HA	1.67	0.44
6:7:575:ASN:HA	6:7:576:PRO:HD3	1.87	0.44
5:6:373:MET:HA	5:6:374:PRO:HD2	1.82	0.44
9:B:181:LEU:HD13	9:B:185:ILE:HD13	2.00	0.44
11:C:19:LYS:O	11:C:72:VAL:HG13	2.18	0.44
1:2:656:ARG:HG3	1:2:657:TYR:N	2.32	0.44
10:A:108:ASP:H	10:A:109:LEU:C	2.21	0.44
1:2:301:PRO:HD3	1:2:319:ARG:NH1	2.33	0.44
10:A:165:VAL:HG13	10:A:205:LEU:HB3	1.46	0.44
5:6:571:ILE:HD12	5:6:713:PHE:CE2	2.53	0.44
4:5:602:TYR:O	4:5:605:TYR:HB3	2.18	0.44
10:A:123:LEU:HD21	10:A:127:GLU:HB2	1.99	0.44
3:4:314:MET:HG2	3:4:415:ILE:HG12	2.00	0.44
4:5:172:LEU:HD11	4:5:284:ASN:HD21	1.83	0.44
3:4:534:GLU:N	3:4:534:GLU:OE1	2.38	0.44
2:3:457:LEU:CD2	2:3:499:LYS:HE2	2.42	0.43
4:5:717:GLU:HA	4:5:721:ARG:HB3	2.00	0.43
2:3:259:GLN:CD	4:5:463:TYR:HB2	2.38	0.43
1:2:687:VAL:CG2	1:2:688:ASP:N	2.57	0.43
2:3:671:LEU:C	6:7:621:MET:HG3	2.38	0.43
6:7:222:SER:OG	6:7:222:SER:O	2.33	0.43
1:2:303:ILE:HG13	1:2:319:ARG:HH21	1.83	0.43
2:3:166:LEU:HD11	2:3:171:LEU:HD12	1.99	0.43
6:7:102:LEU:CG	6:7:106:ILE:HG13	2.48	0.43
11:C:16:PHE:O	11:C:45:SER:HA	2.18	0.43
6:7:432:LEU:HD13	6:7:473:ILE:HD11	1.99	0.43
10:A:36:ILE:O	10:A:40:ILE:HG13	2.18	0.43
4:5:363:ASN:HB2	4:5:366:LEU:HB2	1.99	0.43
2:3:215:THR:HB	2:3:219:THR:HG21	1.99	0.43
2:3:103:LEU:HD23	2:3:103:LEU:HA	1.79	0.43
3:4:717:ASP:O	6:7:664:TYR:CE2	2.71	0.43
2:3:443:THR:CA	2:3:458:GLU:O	2.58	0.43
6:7:67:LEU:CD2	6:7:126:PRO:HD2	2.47	0.43
10:A:144:GLY:O	10:A:146:LEU:HB3	2.19	0.43
6:7:393:LEU:HB2	6:7:395:SER:N	2.33	0.43
1:2:856:GLN:NE2	1:2:859:ARG:HD3	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:225:TYR:N	3:4:228:LYS:HB2	2.33	0.43
3:4:322:ILE:HD13	6:7:302:THR:HB	1.99	0.43
10:A:47:LEU:HD21	10:A:75:THR:HB	1.99	0.43
4:5:160:VAL:HG12	4:5:162:LEU:HD23	1.99	0.43
6:7:240:THR:HG23	6:7:352:THR:HG22	1.99	0.43
1:2:271:PHE:CE2	1:2:295:VAL:HG11	2.52	0.43
5:6:577:PRO:O	5:6:578:SER:HB2	2.18	0.43
2:3:448:THR:O	2:3:449:ASP:HB2	2.16	0.43
4:5:744:SER:HB3	4:5:747:ALA:CB	2.48	0.43
3:4:567:CYS:HB3	3:4:675:ALA:HB3	2.00	0.43
2:3:564:HIS:CD2	2:3:564:HIS:C	2.92	0.43
4:5:175:ARG:NH2	4:5:196:ASN:HD22	2.16	0.43
5:6:720:ASN:HD21	5:6:723:ILE:HD13	1.73	0.43
4:5:738:VAL:HG13	4:5:739:ASP:N	2.33	0.43
5:6:575:GLY:C	5:6:581:LYS:NZ	2.71	0.43
3:4:709:LEU:HD11	3:4:711:LYS:HE3	2.01	0.43
2:3:200:VAL:HB	2:3:248:SER:HB3	1.99	0.43
3:4:650:GLU:OE2	3:4:796:ARG:NH1	2.50	0.43
6:7:349:VAL:HB	6:7:383:GLN:HG2	2.01	0.43
4:5:673:GLN:OE1	4:5:676:HIS:CE1	2.71	0.43
3:4:811:MET:O	3:4:812:LYS:HB2	2.18	0.43
4:5:620:GLU:O	4:5:623:SER:OG	2.22	0.43
5:6:151:ILE:HD11	5:6:265:ILE:HG23	2.01	0.43
4:5:639:GLU:O	4:5:640:SER:OG	2.29	0.43
8:D:166:ASN:HA	8:D:167:SER:HA	1.65	0.43
4:5:481:GLU:HB3	4:5:484:LYS:HB2	2.00	0.43
5:6:968:LEU:C	5:6:968:LEU:HD23	2.39	0.43
2:3:464:LEU:O	2:3:464:LEU:HG	2.18	0.43
4:5:731:GLN:HA	4:5:731:GLN:NE2	2.33	0.43
1:2:640:LEU:CD2	4:5:271:PRO:CD	2.97	0.43
1:2:546:GLY:HA2	5:6:798:ARG:CD	2.47	0.43
8:D:216:VAL:HG11	8:D:219:ILE:HB	1.99	0.43
3:4:552:PHE:HZ	5:6:734:LEU:HG	1.83	0.43
5:6:335:ASN:H	5:6:338:CYS:N	2.12	0.43
3:4:388:ARG:HH22	5:6:176:ARG:HD2	1.83	0.43
4:5:301:TYR:CE1	4:5:303:SER:HB3	2.54	0.43
2:3:49:ASN:OD1	2:3:50:SER:N	2.52	0.43
2:3:666:ARG:HA	2:3:667:VAL:HA	1.65	0.43
5:6:390:LYS:HA	5:6:391:PRO:HD3	1.78	0.43
5:6:364:ASN:HB3	5:6:394:ARG:HD3	1.99	0.43
10:A:175:GLN:NE2	10:A:199:LEU:HD13	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:566:ARG:HA	5:6:567:GLY:HA3	1.72	0.43
10:A:32:TYR:HB2	10:A:93:ARG:NH1	2.28	0.43
4:5:59:TYR:HB2	4:5:281:TYR:OH	2.18	0.43
6:7:394:THR:O	6:7:394:THR:HG22	2.18	0.43
6:7:134:TYR:HB2	6:7:141:VAL:HG12	2.00	0.43
9:B:28:PHE:CE1	9:B:68:SER:HB2	2.51	0.43
1:2:268:LEU:HD23	1:2:268:LEU:HA	1.73	0.43
6:7:564:LEU:HD23	6:7:565:ALA:N	2.34	0.43
2:3:730:ALA:O	2:3:734:ARG:HG2	2.17	0.43
3:4:317:LEU:O	6:7:341:ARG:NH2	2.52	0.43
2:3:377:ILE:O	2:3:380:ALA:HB3	2.19	0.43
4:5:712:ARG:HG2	4:5:712:ARG:O	2.18	0.43
10:A:175:GLN:CD	10:A:199:LEU:HD21	2.38	0.43
2:3:189:THR:CG2	2:3:256:ILE:CD1	2.97	0.43
4:5:546:ILE:H	4:5:546:ILE:HD12	1.84	0.43
3:4:489:LYS:HG3	3:4:494:GLU:HG3	2.01	0.43
3:4:761:ILE:HG23	5:6:736:MET:HG2	2.01	0.43
1:2:641:GLN:NE2	4:5:262:PRO:HB2	2.34	0.43
6:7:118:CYS:SG	6:7:202:LEU:HB2	2.58	0.43
6:7:441:ASP:OD1	6:7:441:ASP:C	2.57	0.43
3:4:319:PRO:HG2	6:7:309:ALA:HB2	2.01	0.43
2:3:727:LYS:O	2:3:730:ALA:HB3	2.19	0.43
1:2:566:ALA:HB1	1:2:576:LEU:HG	2.00	0.43
6:7:293:GLN:HA	6:7:294:THR:HA	1.64	0.43
5:6:307:ALA:HA	5:6:351:SER:HB3	2.01	0.43
4:5:745:GLN:HG2	4:5:746:LEU:N	2.33	0.43
4:5:407:ARG:HG3	4:5:500:GLN:HG2	1.98	0.43
4:5:652:GLN:O	4:5:655:ALA:HB3	2.19	0.43
2:3:671:LEU:CG	6:7:621:MET:HA	2.45	0.43
2:3:295:VAL:HG12	2:3:296:GLY:N	2.34	0.43
11:C:168:LYS:HB3	11:C:168:LYS:HE2	1.79	0.43
3:4:676:ASN:HB2	6:7:593:ARG:NH2	2.27	0.43
1:2:442:ASN:CG	1:2:444:PHE:O	2.57	0.43
9:B:191:LYS:HA	9:B:191:LYS:HD3	1.58	0.43
6:7:281:LEU:HB2	6:7:283:GLU:OE2	2.19	0.43
4:5:719:LYS:O	4:5:720:ARG:HG2	2.19	0.43
9:B:175:LEU:HA	9:B:178:ILE:HD12	2.00	0.43
1:2:441:LYS:HB3	1:2:441:LYS:HE3	1.75	0.43
2:3:381:ILE:HD11	2:3:418:LEU:HD21	1.99	0.43
4:5:92:THR:HA	4:5:95:THR:HG22	2.00	0.43
3:4:721:ALA:CB	6:7:664:TYR:HE2	2.03	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:722:LEU:HA	4:5:723:PRO:HD2	1.79	0.43
4:5:40:LEU:HD13	4:5:45:ILE:HG12	2.00	0.43
9:B:185:ILE:O	9:B:189:MET:HG2	2.19	0.43
5:6:455:LEU:HD12	5:6:456:ALA:H	1.84	0.43
5:6:122:PHE:HB2	5:6:124:VAL:HG23	2.01	0.43
9:B:51:GLN:HB2	9:B:52:LEU:HA	2.01	0.43
5:6:155:TYR:CD2	5:6:271:PRO:HD3	2.54	0.43
2:3:656:LEU:O	2:3:659:TYR:HB3	2.19	0.43
2:3:210:HIS:HB3	6:7:5:LEU:HD21	2.01	0.43
5:6:642:ASP:OD2	5:6:683:ASN:O	2.36	0.43
6:7:247:ARG:HH21	6:7:314:LYS:HE3	1.83	0.43
3:4:641:THR:HG22	3:4:642:ARG:H	1.84	0.43
5:6:664:ALA:HB2	5:6:669:HIS:CD2	2.54	0.43
2:3:687:ARG:NH1	2:3:698:THR:HA	2.34	0.43
4:5:441:GLY:C	4:5:443:GLY:H	2.22	0.43
4:5:584:GLN:O	4:5:588:GLU:HG2	2.18	0.43
11:C:97:LEU:HG	11:C:131:ARG:HH22	1.83	0.43
11:C:98:HIS:HA	11:C:102:SER:HB2	2.01	0.43
3:4:354:HIS:NE2	3:4:356:MET:HG2	2.34	0.43
3:4:385:ILE:HG22	3:4:388:ARG:H	1.84	0.43
2:3:480:ASP:OD1	2:3:481:VAL:N	2.52	0.43
4:5:714:PHE:CZ	4:5:733:LEU:HD11	2.54	0.42
6:7:538:HIS:HD2	6:7:593:ARG:NE	2.16	0.42
10:A:175:GLN:CD	10:A:199:LEU:HD13	2.38	0.42
9:B:184:PHE:CZ	11:C:132:ALA:HB1	2.53	0.42
5:6:920:ILE:HG13	5:6:921:ALA:N	2.34	0.42
2:3:542:ARG:NH1	2:3:700:ARG:CZ	2.82	0.42
2:3:676:ILE:O	2:3:680:VAL:HG13	2.19	0.42
2:3:196:LEU:HG	2:3:214:TYR:HD2	1.84	0.42
5:6:354:LEU:CD1	5:6:355:ASP:OD2	2.50	0.42
3:4:419:VAL:HG23	3:4:424:VAL:HG22	2.01	0.42
2:3:156:SER:O	2:3:325:THR:CG2	2.67	0.42
6:7:292:ASN:OD1	6:7:293:GLN:HB2	2.19	0.42
3:4:327:ASN:HB3	3:4:434:GLU:OE2	2.19	0.42
6:7:344:SER:HB2	6:7:347:ASP:OD2	2.19	0.42
5:6:641:PHE:HA	5:6:641:PHE:HD1	1.71	0.42
1:2:807:VAL:O	1:2:810:LEU:HB3	2.19	0.42
2:3:457:LEU:CD2	2:3:499:LYS:HE3	2.34	0.42
10:A:147:VAL:HB	10:A:148:ASP:HA	2.01	0.42
2:3:677:ASN:HA	2:3:680:VAL:HG21	2.01	0.42
2:3:372:TYR:CD2	2:3:561:ILE:HG12	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:151:LEU:CD1	10:A:151:LEU:N	2.78	0.42
1:2:298:SER:OG	1:2:299:ASP:N	2.50	0.42
6:7:485:GLY:CA	6:7:525:GLU:O	2.63	0.42
4:5:290:THR:HG22	4:5:339:THR:O	2.18	0.42
2:3:462:MET:HE1	2:3:470:VAL:HG21	2.01	0.42
3:4:798:LEU:HD23	5:6:731:ILE:HD12	2.02	0.42
8:D:206:LEU:HD22	10:A:83:LYS:HD2	2.01	0.42
9:B:51:GLN:HB2	9:B:53:ILE:HD12	2.00	0.42
4:5:663:LEU:O	4:5:666:LEU:HB2	2.19	0.42
3:4:248:LEU:HB3	3:4:254:THR:O	2.19	0.42
5:6:189:VAL:O	5:6:193:ALA:N	2.51	0.42
4:5:163:SER:O	4:5:163:SER:OG	2.37	0.42
1:2:802:SER:HA	1:2:803:PHE:HA	1.89	0.42
4:5:714:PHE:CG	4:5:755:LEU:CD1	3.02	0.42
10:A:169:LYS:HE2	10:A:169:LYS:HB2	1.88	0.42
11:C:117:GLU:CD	11:C:120:LEU:HD23	2.37	0.42
2:3:701:THR:O	2:3:705:LEU:HG	2.19	0.42
8:D:138:PHE:CZ	10:A:157:PRO:HG3	2.54	0.42
9:B:25:ILE:HD11	9:B:87:ILE:CD1	2.48	0.42
5:6:575:GLY:H	5:6:581:LYS:HZ3	1.67	0.42
3:4:769:GLU:O	3:4:772:ARG:HG2	2.19	0.42
4:5:473:ASP:OD1	4:5:474:GLY:N	2.52	0.42
6:7:367:LYS:HG2	6:7:371:LEU:HD22	2.00	0.42
2:3:388:GLY:HA2	2:3:710:THR:HB	2.01	0.42
3:4:184:ASN:HB3	6:7:145:GLN:HE22	1.83	0.42
4:5:300:ILE:HD13	4:5:326:PRO:HA	2.01	0.42
6:7:360:TYR:O	6:7:361:THR:OG1	2.37	0.42
6:7:252:LYS:HE3	6:7:252:LYS:HB3	1.84	0.42
3:4:716:ASN:O	3:4:717:ASP:C	2.58	0.42
4:5:748:LEU:HD23	4:5:748:LEU:C	2.40	0.42
4:5:43:GLN:N	4:5:43:GLN:OE1	2.48	0.42
5:6:914:ASN:HA	5:6:917:VAL:HG12	2.02	0.42
2:3:409:GLY:C	2:3:415:LYS:HZ1	2.07	0.42
1:2:330:VAL:CG2	4:5:272:ARG:HH12	2.33	0.42
10:A:93:ARG:O	10:A:97:LEU:CD1	2.68	0.42
2:3:487:HIS:NE2	2:3:539:LEU:HG	2.34	0.42
9:B:127:PHE:CE1	9:B:134:PHE:HE2	2.36	0.42
2:3:476:ASP:HA	2:3:483:ARG:NH1	2.33	0.42
6:7:627:ASP:OD1	6:7:628:LEU:N	2.53	0.42
3:4:314:MET:SD	3:4:317:LEU:HD12	2.60	0.42
6:7:469:LEU:O	6:7:472:ALA:HB3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:234:LEU:HD22	1:2:241:SER:O	2.16	0.42
11:C:47:PRO:HB2	11:C:49:TRP:NE1	2.35	0.42
2:3:216:ASP:CG	2:3:217:ALA:N	2.67	0.42
2:3:413:THR:HG23	2:3:549:VAL:HB	2.00	0.42
5:6:356:TRP:CZ3	5:6:358:LYS:HB2	2.44	0.42
11:C:134:GLU:OE2	11:C:138:HIS:NE2	2.50	0.42
2:3:556:ILE:O	2:3:556:ILE:HG22	2.20	0.42
1:2:505:ILE:CD1	1:2:552:ILE:HG13	2.48	0.42
5:6:550:GLN:HA	5:6:569:ILE:CG2	2.49	0.42
3:4:422:GLU:CD	3:4:422:GLU:H	2.23	0.42
2:3:428:LEU:HB3	2:3:429:ALA:HB2	2.00	0.42
6:7:486:LYS:HA	6:7:529:MET:HA	2.00	0.42
5:6:738:ARG:HA	5:6:739:ASP:HA	1.55	0.42
10:A:155:LEU:HD12	10:A:155:LEU:HA	1.91	0.42
1:2:803:PHE:HD2	1:2:805:ILE:N	2.17	0.42
4:5:733:LEU:CD1	4:5:748:LEU:HG	2.49	0.42
4:5:750:LYS:HG3	4:5:751:ALA:H	1.83	0.42
4:5:607:ARG:HA	4:5:665:LYS:CE	2.50	0.42
2:3:189:THR:CG2	2:3:256:ILE:HD12	2.49	0.42
1:2:640:LEU:HD21	4:5:271:PRO:CG	2.50	0.42
5:6:914:ASN:OD1	5:6:918:ARG:CZ	2.68	0.42
5:6:817:ASP:C	5:6:819:ILE:H	2.22	0.42
2:3:671:LEU:HB2	6:7:621:MET:C	2.39	0.42
2:3:705:LEU:HD23	2:3:733:LEU:HD13	2.00	0.42
6:7:601:LEU:HD12	6:7:603:ILE:HD12	1.98	0.42
5:6:732:VAL:O	5:6:736:MET:HG3	2.19	0.42
4:5:513:LEU:C	4:5:513:LEU:HD12	2.39	0.42
10:A:13:ALA:HB1	10:A:92:LEU:HD23	2.00	0.42
6:7:481:VAL:CG2	6:7:516:ALA:HB2	2.50	0.42
4:5:440:SER:OG	4:5:480:ASP:HB2	2.19	0.42
8:D:188:LEU:O	8:D:192:LYS:HG2	2.20	0.42
6:7:271:GLN:NE2	6:7:279:THR:O	2.32	0.42
1:2:609:PHE:HB3	1:2:669:LEU:HD21	2.02	0.42
9:B:155:LYS:HE3	9:B:155:LYS:HB2	1.76	0.42
3:4:572:THR:CA	6:7:686:PRO:CG	2.88	0.42
4:5:726:TRP:C	4:5:728:THR:N	2.73	0.42
4:5:463:TYR:HA	4:5:509:ILE:HD13	2.02	0.42
3:4:636:LYS:CB	6:7:539:GLU:HG3	1.91	0.42
4:5:54:ILE:HD13	4:5:102:SER:HB3	2.01	0.42
1:2:458:ARG:HH12	1:2:473:VAL:CB	2.26	0.42
3:4:794:THR:HG23	3:4:796:ARG:H	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:727:LEU:CD1	5:6:731:ILE:HD11	2.47	0.42
3:4:527:ALA:HA	3:4:528:PRO:HD2	1.90	0.42
5:6:638:ILE:HG21	5:6:644:MET:HE2	2.01	0.42
3:4:758:ILE:CD1	3:4:813:LEU:HA	2.50	0.42
3:4:318:ASN:HA	3:4:319:PRO:HD3	1.81	0.42
1:2:760:GLN:O	1:2:763:LEU:HG	2.19	0.42
4:5:585:ASN:O	4:5:589:GLU:HG2	2.20	0.42
4:5:413:LEU:HA	4:5:521:ALA:O	2.20	0.42
1:2:534:ARG:HG2	1:2:536:ASP:H	1.85	0.42
4:5:571:HIS:O	4:5:575:ILE:HG13	2.20	0.42
10:A:183:LEU:C	10:A:184:ILE:HG12	2.39	0.42
10:A:173:GLU:HB3	10:A:183:LEU:N	2.35	0.42
10:A:167:VAL:CG2	10:A:187:SER:O	2.36	0.42
4:5:342:ILE:HD12	4:5:343:TRP:HE1	1.84	0.42
2:3:703:GLU:HB3	2:3:707:ARG:NH2	2.34	0.42
10:A:149:ILE:CG2	10:A:151:LEU:HB3	2.49	0.42
6:7:221:SER:HA	6:7:222:SER:C	2.40	0.42
1:2:659:SER:OG	4:5:741:HIS:NE2	2.25	0.42
6:7:193:PRO:CD	6:7:270:PHE:CD2	3.03	0.42
3:4:315:ARG:NH2	6:7:311:GLN:HE22	2.14	0.42
1:2:505:ILE:C	1:2:507:GLY:H	2.23	0.42
3:4:777:MET:SD	3:4:830:ARG:NE	2.93	0.42
6:7:671:SER:O	6:7:674:GLU:HB3	2.19	0.42
4:5:244:ILE:CG2	4:5:246:GLU:HG2	2.49	0.42
1:2:557:GLU:CD	1:2:565:PHE:HB2	2.40	0.42
5:6:268:PHE:HD1	5:6:269:ASN:HB2	1.85	0.42
5:6:718:ASP:N	5:6:718:ASP:OD1	2.52	0.42
4:5:750:LYS:CG	4:5:751:ALA:N	2.83	0.42
10:A:182:ASN:CA	11:C:74:LEU:HD23	70.58	0.42
2:3:654:PRO:HD2	2:3:655:PHE:H	1.85	0.42
9:B:187:GLU:O	9:B:190:ASP:N	2.50	0.42
4:5:170:SER:HB3	4:5:254:GLN:O	2.20	0.42
5:6:653:HIS:HB2	5:6:705:ILE:HG22	2.02	0.42
6:7:89:GLN:NE2	6:7:102:LEU:H	2.18	0.42
2:3:111:TRP:CZ2	11:C:90:THR:HG22	2.55	0.42
5:6:791:SER:OG	5:6:839:ASP:OD1	2.17	0.42
5:6:625:ALA:CB	5:6:626:GLY:HA2	2.46	0.42
9:B:14:GLU:CD	9:B:14:GLU:C	2.79	0.42
6:7:139:LEU:HA	6:7:142:ILE:HG13	2.02	0.42
6:7:570:LEU:HD13	6:7:585:ASN:ND2	2.34	0.42
1:2:520:PHE:HD1	1:2:767:ILE:HG22	1.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:441:SER:C	3:4:442:ILE:HD12	2.40	0.42
3:4:262:LEU:HD13	3:4:308:VAL:HB	2.01	0.42
2:3:203:ALA:HB3	2:3:207:GLY:O	2.20	0.42
8:D:260:ILE:HG12	8:D:266:GLU:OE2	2.19	0.42
5:6:956:GLU:O	5:6:960:LEU:HD13	2.20	0.42
2:3:409:GLY:N	2:3:549:VAL:HG22	2.34	0.42
6:7:485:GLY:HA3	6:7:525:GLU:N	2.35	0.42
3:4:557:ARG:HE	3:4:668:ARG:HH21	1.67	0.42
2:3:462:MET:SD	2:3:470:VAL:HG11	2.59	0.42
5:6:153:ILE:HD11	5:6:267:PHE:CE1	2.54	0.42
9:B:54:THR:HB	9:B:57:ASP:OD2	2.20	0.42
11:C:97:LEU:O	11:C:100:ILE:HG12	2.20	0.42
5:6:154:ASP:OD1	5:6:155:TYR:N	2.53	0.42
1:2:533:ILE:HG22	1:2:534:ARG:H	1.85	0.42
5:6:293:THR:HG23	5:6:393:ASP:N	2.35	0.42
1:2:661:LEU:HB3	1:2:662:PRO:HD2	2.02	0.42
2:3:211:TYR:CZ	6:7:6:PRO:HG2	2.55	0.42
8:D:264:LYS:HG2	8:D:265:GLU:N	2.35	0.42
1:2:803:PHE:HD2	1:2:804:PRO:C	2.24	0.41
1:2:795:ARG:HD3	4:5:562:GLU:HB2	2.02	0.41
4:5:451:ALA:CA	4:5:470:VAL:CG2	2.96	0.41
10:A:145:ASP:CG	10:A:147:VAL:CG2	2.88	0.41
4:5:757:LYS:HG3	4:5:758:HIS:N	2.35	0.41
11:C:96:ASP:OD2	11:C:99:SER:HB3	2.19	0.41
11:C:3:TYR:CG	11:C:4:TYR:N	2.88	0.41
3:4:387:ASN:OD1	5:6:402:ILE:HA	2.19	0.41
5:6:162:GLU:O	5:6:163:ASN:HB2	2.20	0.41
9:B:26:LYS:HB2	9:B:88:VAL:HG11	2.02	0.41
6:7:479:ARG:HG3	6:7:479:ARG:O	2.20	0.41
8:D:282:ILE:H	8:D:282:ILE:HG13	1.73	0.41
4:5:577:THR:C	4:5:579:ASN:H	2.24	0.41
4:5:581:ASN:C	4:5:583:MET:N	2.73	0.41
6:7:664:TYR:CD1	6:7:689:LEU:HB2	2.54	0.41
5:6:777:TYR:CZ	5:6:781:ARG:HD2	2.55	0.41
8:D:141:ARG:CG	10:A:149:ILE:HG22	2.50	0.41
2:3:252:ASP:OD2	2:3:283:VAL:HG11	2.20	0.41
5:6:569:ILE:HG13	5:6:570:ASN:N	2.35	0.41
9:B:112:PHE:O	9:B:152:ARG:NH2	2.53	0.41
3:4:183:THR:HG23	3:4:264:TYR:HB3	2.02	0.41
3:4:433:ILE:O	3:4:434:GLU:HB2	2.20	0.41
1:2:289:ILE:HG22	1:2:290:HIS:ND1	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:374:ILE:HG23	4:5:428:PHE:CE2	2.55	0.41
1:2:803:PHE:HB3	1:2:804:PRO:HA	2.01	0.41
5:6:919:LYS:HG3	5:6:920:ILE:N	2.35	0.41
4:5:297:ILE:HG22	4:5:298:TYR:N	2.35	0.41
6:7:595:ASP:OD1	6:7:595:ASP:N	2.51	0.41
5:6:730:HIS:O	5:6:734:LEU:HD12	2.19	0.41
1:2:504:SER:HA	1:2:698:PHE:CZ	2.56	0.41
5:6:568:ASP:CG	5:6:569:ILE:H	2.22	0.41
4:5:677:VAL:HG12	4:5:681:ILE:HD11	2.01	0.41
5:6:126:SER:HB3	5:6:131:GLU:HB3	2.02	0.41
11:C:108:ALA:O	11:C:112:ILE:HG22	2.20	0.41
1:2:770:ALA:O	1:2:774:ILE:HG22	2.20	0.41
4:5:34:PHE:CZ	4:5:46:TYR:HE2	2.39	0.41
10:A:168:LEU:HD13	10:A:169:LYS:HE2	2.03	0.41
1:2:592:GLU:HG2	4:5:270:MET:CE	2.50	0.41
3:4:774:TYR:CE1	3:4:795:THR:HA	2.55	0.41
2:3:153:TRP:HB3	2:3:154:LYS:H	1.65	0.41
4:5:404:MET:HG3	4:5:404:MET:O	2.20	0.41
4:5:69:ILE:HD13	4:5:76:TYR:CD2	2.55	0.41
3:4:568:GLY:O	3:4:574:LYS:NZ	2.52	0.41
10:A:132:LYS:HA	10:A:135:CYS:SG	2.61	0.41
3:4:273:ASP:O	3:4:276:ILE:HG13	2.20	0.41
5:6:264:GLN:CD	5:6:383:GLY:HA2	2.40	0.41
6:7:248:VAL:HG11	6:7:345:PRO:HD3	2.02	0.41
1:2:703:HIS:CE1	5:6:804:ILE:HG21	2.51	0.41
8:D:257:THR:O	8:D:259:THR:HG23	2.21	0.41
4:5:450:THR:HA	4:5:468:ALA:HB3	2.02	0.41
5:6:908:LYS:CB	5:6:960:LEU:CD2	2.86	0.41
8:D:216:VAL:HG13	8:D:218:MET:N	2.35	0.41
8:D:138:PHE:CE2	10:A:157:PRO:HG3	2.55	0.41
2:3:197:ILE:O	2:3:214:TYR:HB2	2.21	0.41
3:4:707:LEU:CD2	3:4:709:LEU:HB2	2.51	0.41
3:4:763:THR:O	3:4:767:LYS:NZ	2.53	0.41
8:D:222:PRO:O	8:D:224:TRP:CD1	2.73	0.41
3:4:649:MET:CB	3:4:701:ARG:HD3	2.51	0.41
6:7:680:SER:CB	6:7:681:PHE:HA	2.50	0.41
3:4:272:MET:HB3	3:4:303:VAL:HG21	2.02	0.41
5:6:537:VAL:HG21	5:6:584:PHE:CE1	2.56	0.41
1:2:777:LYS:H	1:2:828:PHE:HA	1.86	0.41
2:3:40:ASP:OD1	2:3:41:SER:N	2.53	0.41
8:D:153:LYS:HE3	8:D:154:PHE:CE1	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:803:MET:HE1	5:6:831:LEU:HD12	2.02	0.41
5:6:448:LEU:O	5:6:448:LEU:HD12	2.20	0.41
2:3:445:ALA:HB2	2:3:499:LYS:CD	2.46	0.41
4:5:721:ARG:C	4:5:722:LEU:CG	2.86	0.41
1:2:635:GLY:C	4:5:168:SER:OG	2.56	0.41
2:3:438:SER:C	2:3:440:VAL:N	2.73	0.41
4:5:196:ASN:CA	4:5:197:PHE:CB	2.86	0.41
6:7:459:MET:HG3	6:7:460:GLY:N	2.34	0.41
5:6:963:LYS:HA	5:6:966:LYS:CD	2.51	0.41
2:3:521:GLY:C	2:3:523:TYR:N	2.74	0.41
2:3:698:THR:CG2	6:7:463:GLY:CA	2.98	0.41
10:A:99:SER:O	10:A:102:TRP:HB2	2.20	0.41
3:4:302:LYS:NZ	3:4:421:ASP:OD2	2.54	0.41
3:4:832:ALA:HB1	3:4:836:TYR:CZ	2.55	0.41
6:7:135:LYS:HA	6:7:136:ASP:C	2.41	0.41
3:4:346:PHE:CE2	3:4:388:ARG:HD3	2.55	0.41
6:7:559:ALA:HB1	6:7:561:THR:HG23	2.01	0.41
1:2:596:LEU:HD13	1:2:623:ALA:HB2	2.02	0.41
3:4:676:ASN:HB3	6:7:593:ARG:HH21	1.80	0.41
5:6:772:TYR:CE2	5:6:776:LYS:HE3	2.55	0.41
10:A:178:TYR:CE2	10:A:195:ASP:OD1	2.73	0.41
4:5:136:GLN:HE22	4:5:282:LEU:CD1	2.33	0.41
1:2:330:VAL:HG21	4:5:272:ARG:HH12	1.86	0.41
6:7:485:GLY:HA3	6:7:525:GLU:CB	2.51	0.41
5:6:274:HIS:CG	5:6:288:LEU:HD11	2.56	0.41
9:B:24:PRO:HA	9:B:72:VAL:HA	2.01	0.41
9:B:14:GLU:O	9:B:17:GLN:HG2	2.20	0.41
3:4:563:ASN:O	3:4:703:ASP:HB3	2.20	0.41
6:7:135:LYS:HD2	6:7:136:ASP:O	2.21	0.41
6:7:367:LYS:HA	6:7:368:ALA:HB3	2.03	0.41
5:6:752:ARG:C	5:6:756:LYS:NZ	2.74	0.41
3:4:263:ASN:HD22	3:4:324:LYS:HE3	1.86	0.41
2:3:686:LEU:HD21	2:3:734:ARG:NH2	2.36	0.41
6:7:364:LYS:HE2	6:7:364:LYS:HB2	1.92	0.41
11:C:18:CYS:SG	11:C:74:LEU:HA	2.61	0.41
8:D:258:VAL:CG1	8:D:260:ILE:HG13	2.50	0.41
5:6:916:ILE:O	5:6:920:ILE:HG23	2.20	0.41
4:5:757:LYS:O	4:5:759:GLU:HG2	2.21	0.41
1:2:403:PRO:HG3	5:6:672:LEU:HD21	1.68	0.41
1:2:247:ARG:HH12	1:2:301:PRO:HD2	1.85	0.41
2:3:172:THR:HA	2:3:173:ALA:HA	1.81	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:51:ARG:O	4:5:54:ILE:HG13	2.20	0.41
5:6:689:TYR:HB3	5:6:691:ARG:N	2.36	0.41
6:7:94:LEU:CB	6:7:95:GLN:HB2	2.44	0.41
1:2:839:LYS:HD2	1:2:839:LYS:HA	1.80	0.41
5:6:600:GLY:HA2	5:6:601:LYS:C	2.40	0.41
3:4:646:HIS:CE1	3:4:698:LEU:HD13	2.56	0.41
4:5:178:TYR:HE1	4:5:191:SER:HB2	1.84	0.41
5:6:270:LEU:HA	5:6:271:PRO:HD3	1.89	0.41
10:A:136:ASP:O	10:A:139:THR:OG1	2.36	0.41
3:4:181:TRP:CG	3:4:182:GLY:N	2.89	0.41
1:2:803:PHE:CD2	1:2:805:ILE:N	2.89	0.41
4:5:712:ARG:C	4:5:714:PHE:H	2.24	0.41
4:5:726:TRP:C	4:5:728:THR:H	2.24	0.41
1:2:794:ARG:NH1	4:5:560:HIS:HD1	2.19	0.41
8:D:250:GLU:HG3	8:D:256:TYR:HD2	1.85	0.41
8:D:260:ILE:H	8:D:266:GLU:HG3	1.85	0.41
5:6:767:LYS:NZ	5:6:820:THR:HA	2.36	0.41
2:3:517:ASN:HB3	2:3:518:PRO:HD2	1.93	0.41
1:2:306:LEU:HD21	1:2:405:HIS:HA	2.02	0.41
5:6:532:SER:HB2	5:6:745:PRO:HD2	2.01	0.41
3:4:633:GLU:HG3	6:7:542:GLU:HG3	1.28	0.41
6:7:488:SER:O	6:7:489:SER:HB2	2.20	0.41
3:4:561:ASP:OD1	3:4:670:SER:HA	2.21	0.41
3:4:774:TYR:HE1	3:4:795:THR:HA	1.85	0.41
11:C:100:ILE:HG13	11:C:101:ASN:ND2	2.35	0.41
6:7:654:GLU:O	6:7:657:ASN:HB3	2.21	0.41
8:D:176:SER:O	8:D:180:ILE:HG23	2.21	0.41
11:C:14:THR:HG21	11:C:107:LEU:HD12	2.03	0.41
2:3:414:ALA:O	2:3:417:GLN:N	2.54	0.41
9:B:16:ILE:H	9:B:16:ILE:HG12	1.70	0.41
11:C:17:PRO:O	11:C:75:LEU:HB3	2.21	0.41
5:6:722:LYS:O	5:6:725:THR:OG1	2.34	0.41
1:2:419:LYS:HA	1:2:420:PRO:HD2	1.92	0.41
2:3:474:GLU:N	2:3:474:GLU:CD	2.74	0.41
1:2:787:SER:HA	4:5:573:ILE:HG12	2.02	0.41
3:4:716:ASN:C	3:4:718:ARG:N	2.74	0.41
1:2:803:PHE:HE2	1:2:805:ILE:C	2.09	0.41
2:3:442:LEU:O	2:3:444:ALA:N	2.54	0.41
1:2:794:ARG:O	1:2:798:ILE:HG23	2.20	0.41
10:A:167:VAL:HG21	10:A:184:ILE:O	2.20	0.41
2:3:254:GLN:HE21	2:3:256:ILE:HD11	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:687:VAL:O	1:2:688:ASP:HB2	2.20	0.41
5:6:777:TYR:CE1	5:6:781:ARG:HD2	2.56	0.41
8:D:220:ASP:HA	8:D:221:GLU:HA	1.65	0.41
9:B:187:GLU:OE1	11:C:176:ILE:HG22	2.20	0.41
2:3:413:THR:O	2:3:413:THR:HG22	2.21	0.41
4:5:296:GLY:HA3	4:5:329:LYS:O	2.20	0.41
3:4:330:GLY:N	3:4:399:LEU:HD11	2.36	0.41
3:4:304:ARG:HH12	3:4:423:LEU:CD2	2.30	0.41
3:4:304:ARG:NH2	3:4:422:GLU:OE1	2.54	0.41
4:5:418:PRO:O	4:5:558:ASP:HB2	2.21	0.41
8:D:200:LYS:HB2	8:D:201:TYR:CB	2.49	0.41
10:A:74:VAL:O	10:A:77:LEU:HB2	2.21	0.41
3:4:375:ASP:HA	3:4:376:CYS:C	2.41	0.41
9:B:79:LEU:HB2	9:B:85:CYS:SG	2.61	0.41
6:7:26:VAL:HG21	6:7:124:ASN:HB2	2.02	0.41
2:3:490:MET:HB3	2:3:490:MET:HE2	1.85	0.41
11:C:12:ASP:HB3	11:C:49:TRP:HB3	2.02	0.40
6:7:128:PRO:HD2	6:7:129:THR:HA	2.03	0.40
2:3:672:THR:C	6:7:621:MET:SD	3.00	0.40
5:6:296:ARG:NH1	5:6:360:ARG:CZ	2.84	0.40
5:6:528:LYS:HD2	5:6:745:PRO:CB	2.49	0.40
6:7:258:ILE:H	6:7:305:SER:HB2	1.85	0.40
6:7:333:ILE:HD13	6:7:351:VAL:HG11	2.03	0.40
1:2:601:LYS:HZ1	1:2:643:ARG:HD2	1.85	0.40
1:2:337:VAL:HA	1:2:380:THR:HG22	2.03	0.40
10:A:89:TYR:O	10:A:92:LEU:HB3	2.20	0.40
2:3:433:THR:HG22	2:3:473:ASP:HB2	2.02	0.40
1:2:478:GLU:OE2	1:2:482:ARG:HD2	2.20	0.40
10:A:114:THR:C	10:A:116:SER:H	2.25	0.40
4:5:581:ASN:O	4:5:583:MET:N	2.54	0.40
1:2:804:PRO:HD2	1:2:845:PHE:HE1	1.85	0.40
4:5:711:ILE:HD12	4:5:743:PHE:CD1	2.57	0.40
3:4:194:PHE:O	3:4:197:PHE:HB3	2.20	0.40
8:D:214:GLY:HA2	8:D:215:SER:HA	1.32	0.40
2:3:679:ILE:HG13	6:7:617:THR:CG2	2.52	0.40
4:5:61:LEU:HD23	4:5:62:THR:N	2.36	0.40
10:A:166:ARG:HH22	10:A:207:LEU:HD23	1.83	0.40
5:6:963:LYS:CB	5:6:966:LYS:HE3	2.51	0.40
2:3:132:LEU:O	2:3:136:MET:HG2	2.21	0.40
4:5:543:GLN:HG3	4:5:546:ILE:CD1	2.51	0.40
6:7:487:GLY:C	6:7:489:SER:N	2.73	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:704:VAL:HG21	5:6:770:ARG:CD	2.51	0.40
2:3:535:LEU:HD12	2:3:540:LEU:HD12	2.03	0.40
10:A:159:SER:HA	10:A:160:ASP:HA	1.70	0.40
5:6:606:ALA:HA	5:6:607:GLY:C	2.39	0.40
11:C:171:GLU:O	11:C:174:LYS:HB3	2.22	0.40
1:2:810:LEU:HD21	4:5:573:ILE:CD1	2.51	0.40
1:2:794:ARG:HD3	4:5:565:ASP:CA	2.51	0.40
8:D:276:VAL:CG1	9:B:168:LEU:HD13	2.50	0.40
4:5:758:HIS:O	4:5:759:GLU:HB2	2.22	0.40
5:6:963:LYS:C	5:6:966:LYS:HG2	2.42	0.40
3:4:302:LYS:HB3	3:4:302:LYS:HE2	1.90	0.40
10:A:54:LEU:CD2	10:A:57:GLN:OE1	2.68	0.40
9:B:82:GLN:HB3	9:B:84:LYS:HG3	2.02	0.40
6:7:476:ILE:O	6:7:639:ARG:HD3	2.20	0.40
9:B:120:LEU:HD13	9:B:176:LEU:HD22	2.02	0.40
4:5:148:LEU:HD23	4:5:260:GLU:HB3	2.04	0.40
3:4:572:THR:HG21	3:4:708:VAL:HG11	2.02	0.40
2:3:442:LEU:C	2:3:444:ALA:N	2.73	0.40
4:5:711:ILE:HG13	4:5:743:PHE:CZ	2.56	0.40
11:C:129:LEU:HD23	11:C:133:GLN:HG2	2.03	0.40
11:C:74:LEU:HD22	11:C:111:TRP:HZ3	1.86	0.40
8:D:256:TYR:CD1	8:D:257:THR:CG2	2.98	0.40
1:2:544:ASP:OD2	1:2:656:ARG:HB2	2.21	0.40
5:6:917:VAL:HA	5:6:920:ILE:HD11	2.04	0.40
8:D:211:ASP:CG	8:D:213:GLU:CA	2.89	0.40
10:A:108:ASP:OD1	10:A:198:ARG:CD	2.64	0.40
3:4:762:ILE:HD12	3:4:802:ILE:HG13	2.02	0.40
2:3:519:VAL:HG22	2:3:519:VAL:O	2.21	0.40
6:7:599:LEU:HD12	6:7:599:LEU:O	2.21	0.40
5:6:653:HIS:CD2	5:6:704:PRO:HB2	2.56	0.40
10:A:22:ARG:HB3	10:A:23:SER:HA	2.03	0.40
5:6:174:TYR:CE2	5:6:178:LEU:HD11	2.56	0.40
2:3:95:ARG:NH2	2:3:154:LYS:HG3	2.36	0.40
6:7:670:ASP:OD1	6:7:670:ASP:C	2.59	0.40
8:D:225:ASN:HD22	9:B:193:ARG:HH12	1.69	0.40
2:3:156:SER:O	2:3:157:PHE:HB2	2.21	0.40
1:2:606:ILE:O	1:2:648:ALA:HA	2.22	0.40
6:7:517:ASP:N	6:7:517:ASP:OD1	2.52	0.40
3:4:638:SER:HB3	6:7:547:SER:O	2.22	0.40
5:6:915:MET:O	5:6:919:LYS:HG2	2.22	0.40
3:4:550:LYS:NZ	5:6:737:LYS:N	2.69	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:574:TYR:OH	6:7:727:LEU:HB2	2.21	0.40
9:B:112:PHE:CE1	9:B:156:VAL:CG2	3.05	0.40
3:4:646:HIS:HA	3:4:701:ARG:HH12	1.86	0.40
6:7:540:VAL:HG12	6:7:540:VAL:O	2.22	0.40
10:A:36:ILE:HA	10:A:36:ILE:HD12	1.97	0.40
10:A:193:GLN:O	10:A:197:GLU:HG3	2.21	0.40
5:6:311:CYS:HA	5:6:312:ASP:CB	2.51	0.40
5:6:158:LEU:HD21	5:6:170:ILE:HD12	2.03	0.40
5:6:814:ASN:C	5:6:816:VAL:H	2.24	0.40
4:5:352:GLU:OE1	4:5:352:GLU:N	2.47	0.40
4:5:29:LYS:HA	4:5:29:LYS:HD3	1.87	0.40
8:D:85:LYS:HE2	8:D:85:LYS:HB3	1.78	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	574/868 (66%)	521 (91%)	44 (8%)	9 (2%)	12	57
2	3	578/971 (60%)	503 (87%)	57 (10%)	18 (3%)	5	43
3	4	547/933 (59%)	475 (87%)	61 (11%)	11 (2%)	9	53
4	5	637/775 (82%)	555 (87%)	61 (10%)	21 (3%)	5	42
5	6	661/1017 (65%)	591 (89%)	58 (9%)	12 (2%)	11	54
6	7	642/845 (76%)	561 (87%)	73 (11%)	8 (1%)	16	62
7	c	543/650 (84%)	496 (91%)	45 (8%)	2 (0%)	39	80
8	D	215/294 (73%)	197 (92%)	16 (7%)	2 (1%)	21	67
9	B	177/213 (83%)	163 (92%)	14 (8%)	0	100	100
10	A	206/208 (99%)	179 (87%)	26 (13%)	1 (0%)	34	77

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
11	C	151/194 (78%)	144 (95%)	7 (5%)	0	100	100
All	All	4931/6968 (71%)	4385 (89%)	462 (9%)	84 (2%)	16	56

All (84) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	2	291	SER
2	3	499	LYS
2	3	517	ASN
2	3	569	HIS
3	4	450	GLN
4	5	339	THR
4	5	348	MET
4	5	449	LEU
4	5	580	ALA
4	5	596	ILE
5	6	745	PRO
5	6	930	GLU
6	7	26	VAL
6	7	464	VAL
6	7	544	GLN
7	c	601	ILE
2	3	389	VAL
2	3	460	GLY
2	3	521	GLY
2	3	523	TYR
3	4	419	VAL
3	4	494	GLU
3	4	711	LYS
3	4	712	VAL
3	4	714	GLU
3	4	716	ASN
3	4	717	ASP
4	5	342	ILE
4	5	410	ILE
4	5	466	GLY
4	5	579	ASN
5	6	402	ILE
5	6	541	GLU
5	6	560	VAL
5	6	819	ILE
5	6	929	GLU

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Mol	Chain	Res	Type
6	7	488	SER
1	2	435	ASP
1	2	439	ASN
2	3	230	ILE
2	3	520	PHE
4	5	352	GLU
4	5	444	SER
4	5	468	ALA
4	5	582	ALA
4	5	729	SER
4	5	759	GLU
5	6	106	VAL
5	6	744	PRO
1	2	298	SER
1	2	533	ILE
1	2	585	ILE
2	3	158	LYS
2	3	172	THR
2	3	441	GLY
3	4	493	ASN
4	5	153	SER
4	5	154	GLU
4	5	267	VAL
4	5	450	THR
5	6	321	VAL
6	7	257	VAL
8	D	219	ILE
8	D	255	CYS
10	A	27	VAL
2	3	437	SER
2	3	440	VAL
2	3	450	ARG
5	6	410	LEU
5	6	569	ILE
6	7	678	LYS
1	2	297	ILE
2	3	556	ILE
7	c	98	ILE
1	2	687	VAL
2	3	439	GLY
4	5	725	GLY
6	7	258	ILE

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Mol	Chain	Res	Type
1	2	303	ILE
3	4	433	ILE
3	4	463	VAL
4	5	443	GLY
6	7	248	VAL
2	3	326	VAL

### 5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	2	503/770 (65%)	503 (100%)	0	100	100
2	3	511/835 (61%)	511 (100%)	0	100	100
3	4	509/848 (60%)	509 (100%)	0	100	100
4	5	588/688 (86%)	586 (100%)	2 (0%)	94	96
5	6	547/886 (62%)	547 (100%)	0	100	100
6	7	576/753 (76%)	576 (100%)	0	100	100
7	c	498/585 (85%)	495 (99%)	3 (1%)	90	95
8	D	213/279 (76%)	212 (100%)	1 (0%)	92	96
9	B	171/198 (86%)	170 (99%)	1 (1%)	90	95
10	A	192/192 (100%)	191 (100%)	1 (0%)	92	96
11	C	144/173 (83%)	144 (100%)	0	100	100
All	All	4452/6207 (72%)	4444 (100%)	8 (0%)	95	97

All (8) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	5	471	LEU
4	5	614	LEU
7	c	27	LEU
7	c	34	LEU
7	c	152	LEU

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Mol	Chain	Res	Type
8	D	168	LEU
9	B	175	LEU
10	A	151	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (63) such sidechains are listed below:

Mol	Chain	Res	Type
1	2	238	ASN
1	2	386	GLN
1	2	439	ASN
1	2	613	ASN
1	2	658	ASN
1	2	809	HIS
1	2	849	GLN
1	2	856	GLN
2	3	29	GLN
2	3	349	ASN
2	3	351	ASN
2	3	395	ASN
2	3	404	ASN
2	3	493	GLN
2	3	661	GLN
2	3	670	GLN
3	4	184	ASN
3	4	231	ASN
3	4	247	ASN
3	4	579	GLN
3	4	646	HIS
3	4	676	ASN
3	4	757	HIS
4	5	49	GLN
4	5	53	ASN
4	5	58	ASN
4	5	196	ASN
4	5	253	GLN
4	5	259	GLN
4	5	411	ASN
4	5	494	HIS
4	5	500	GLN
4	5	576	HIS
4	5	585	ASN
4	5	716	GLN

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Mol	Chain	Res	Type
5	6	653	HIS
5	6	690	ASN
5	6	698	ASN
6	7	76	ASN
6	7	87	GLN
6	7	89	GLN
6	7	311	GLN
6	7	316	GLN
6	7	455	ASN
6	7	538	HIS
6	7	544	GLN
6	7	585	ASN
6	7	620	HIS
6	7	622	HIS
7	c	243	GLN
7	c	249	ASN
7	c	266	ASN
7	c	550	ASN
7	c	604	ASN
8	D	110	ASN
9	B	62	ASN
9	B	146	GLN
9	B	179	ASN
10	A	104	ASN
10	A	175	GLN
10	A	202	GLN
11	C	41	ASN
11	C	138	HIS

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

### 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.



## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.