



Full wwPDB EM Validation Report ⓘ

Mar 10, 2026 – 02:46 AM UTC

PDB ID : 3JC7 / pdb_00003jc7
EMDB ID : EMD-6536
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 : 4.80 Å(reported)
Based on initial model : 2Q9Q

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

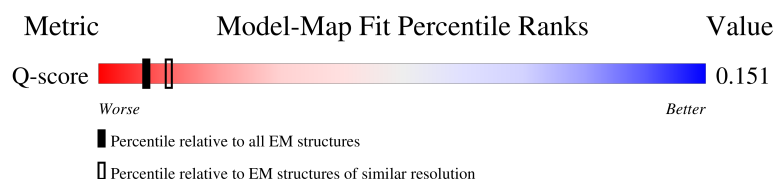
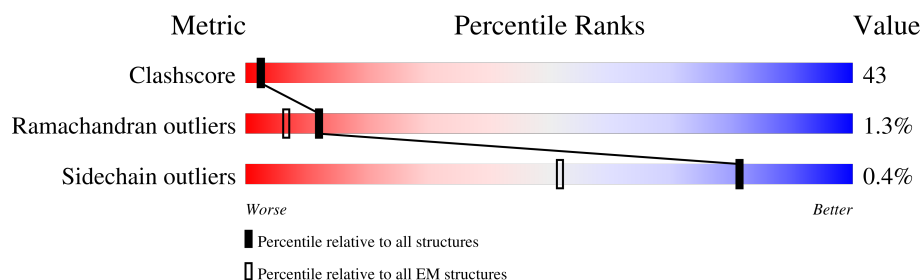
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

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 4.80 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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	1575 (4.30 - 5.30)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	2	868	
2	3	971	
3	4	933	
4	5	775	

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Mol	Chain	Length	Quality of chain
5	6	1017	35%31%32%34%
6	7	845	33%35%40%22%
7	c	650	33%45%38%15%
8	D	294	24%37%36%25%
9	B	213	30%39%45%15%
10	A	208	45%38%57%
11	C	194	31%40%41%18%

2 Entry composition

There are 12 unique types of molecules in this entry. The entry contains 40298 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	576	Total	C	N	O	S	0	0
			4531	2859	809	847	16		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	3	577	Total	C	N	O	S	0	0
			4521	2857	800	851	13		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	4	621	Total	C	N	O	S	0	0
			4911	3092	845	947	27		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	5	654	Total	C	N	O	S	0	0
			5172	3250	897	1001	24		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	6	668	Total	C	N	O	S	0	0
			5204	3290	913	978	23		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	7	657	Total	C	N	O	S	0	0
			5176	3266	900	982	28		

- 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		

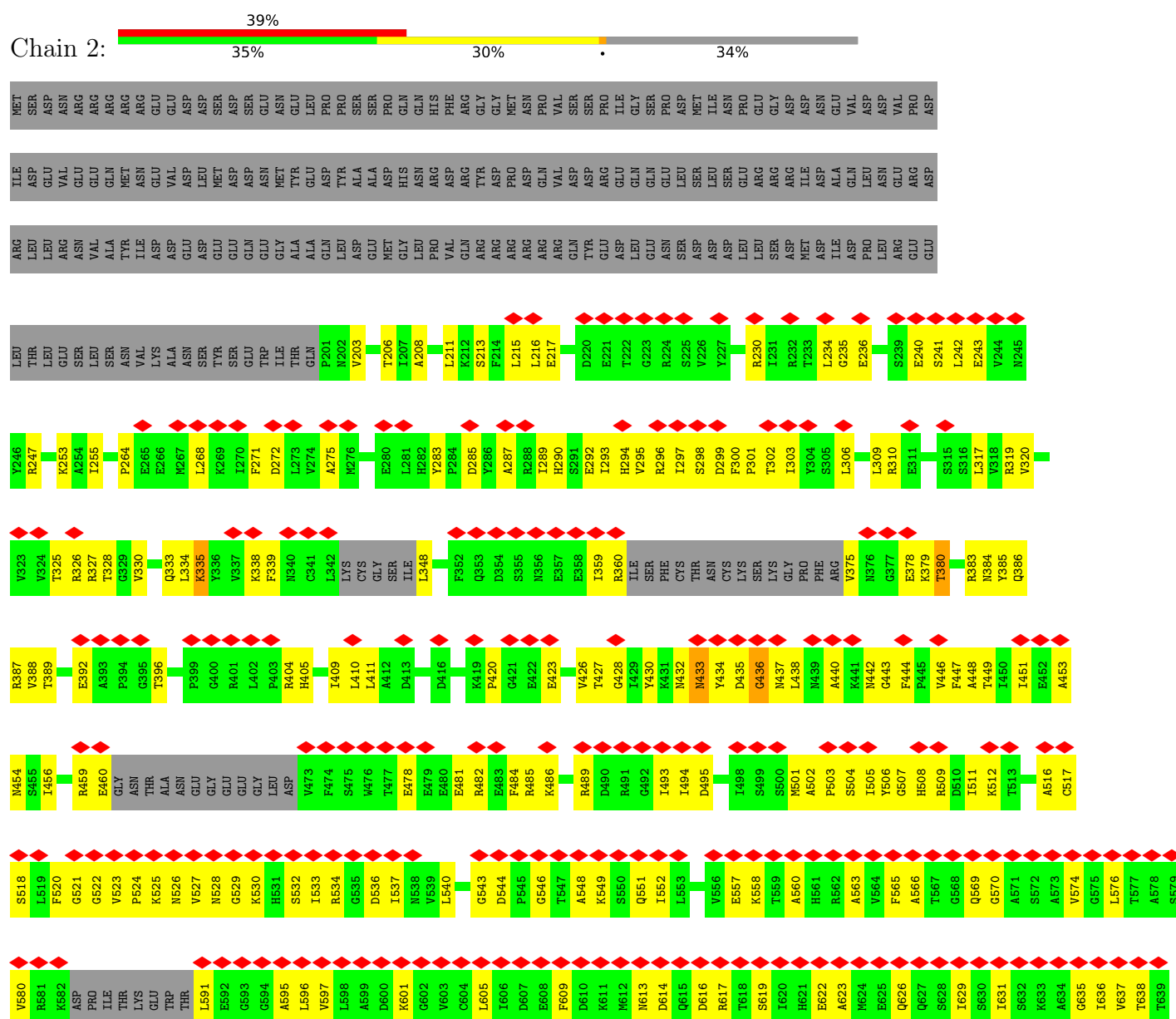
- Molecule 12 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
12	7	1	Total 1	Zn 1	0

3 Residue-property plots

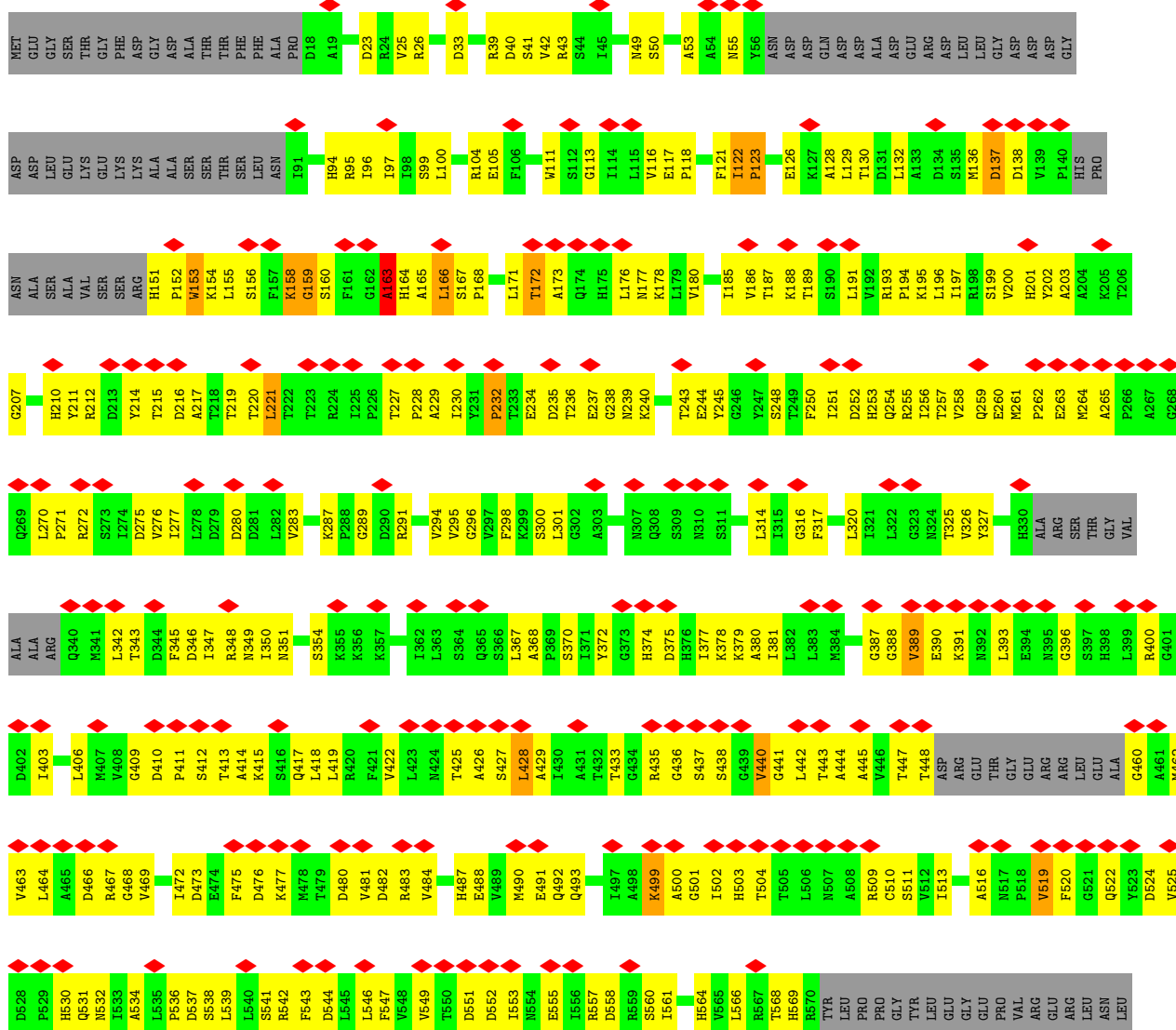
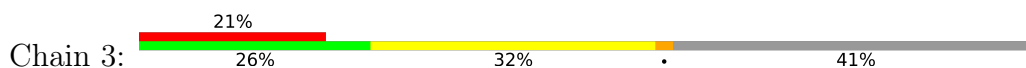
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

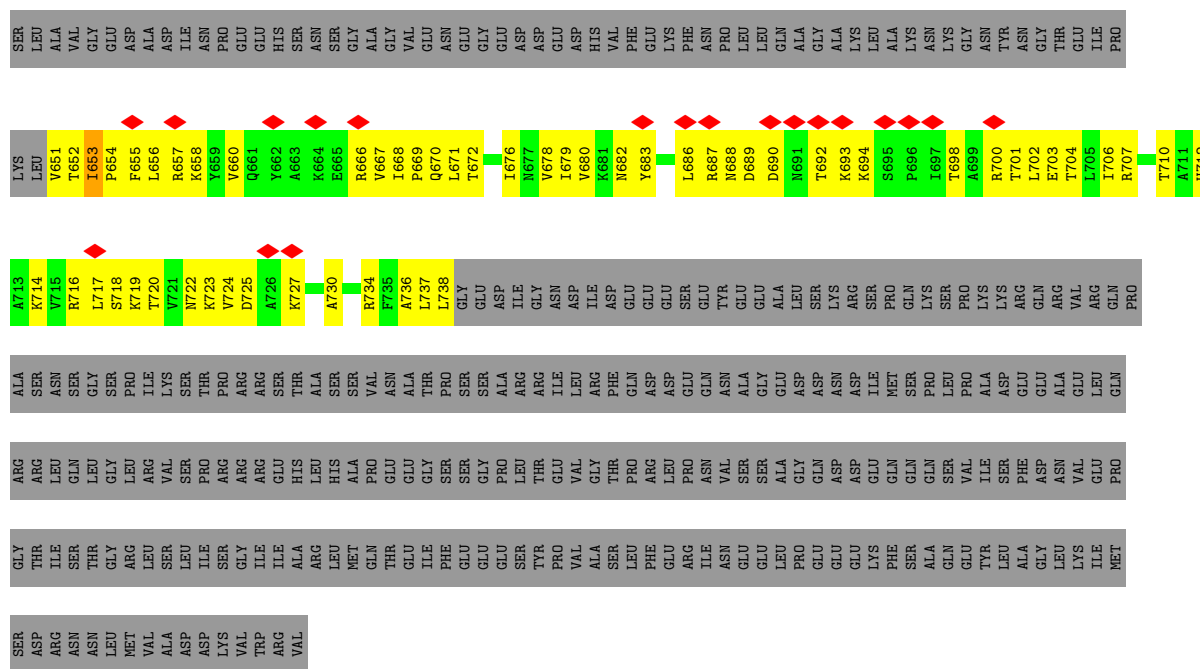
- Molecule 1: DNA replication licensing factor MCM2



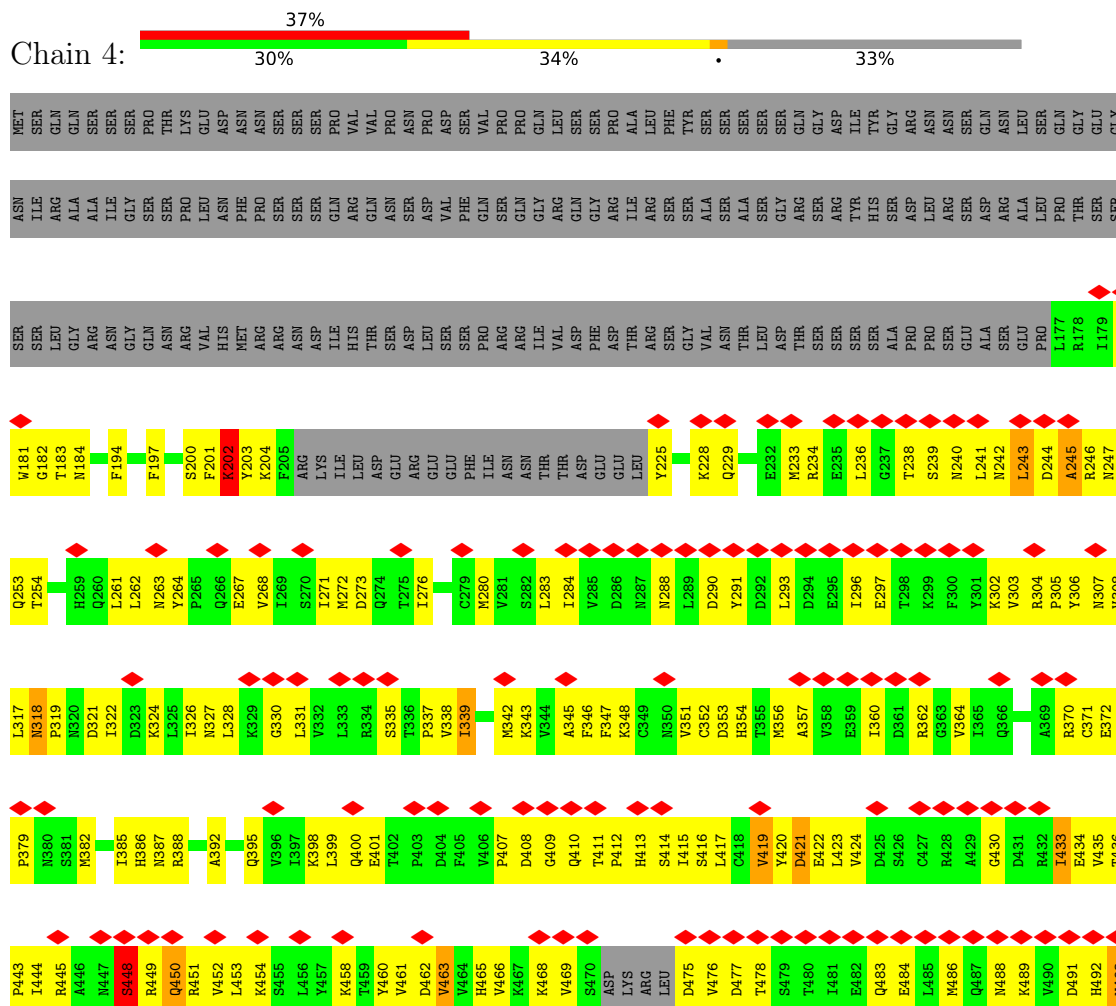


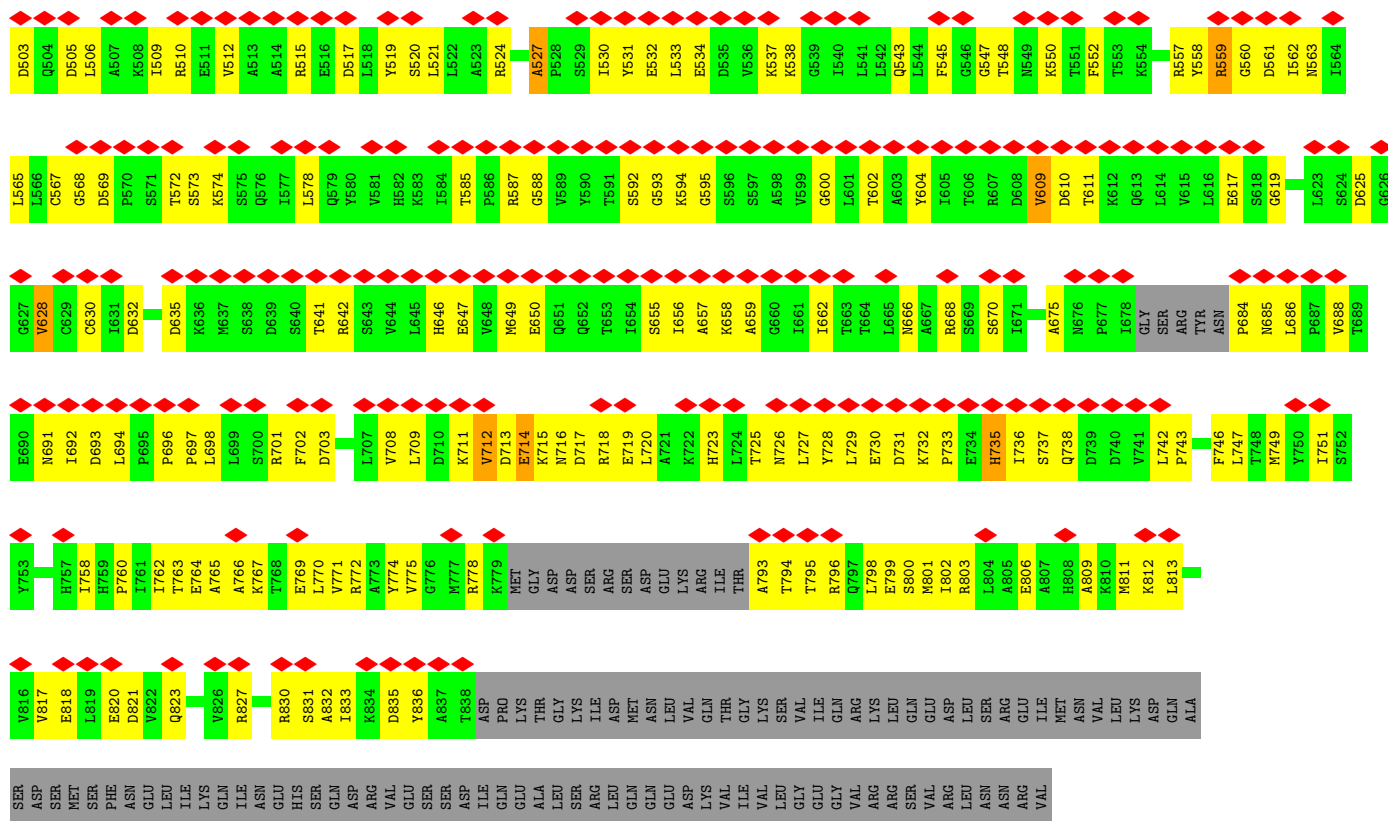
• Molecule 2: DNA replication licensing factor MCM3



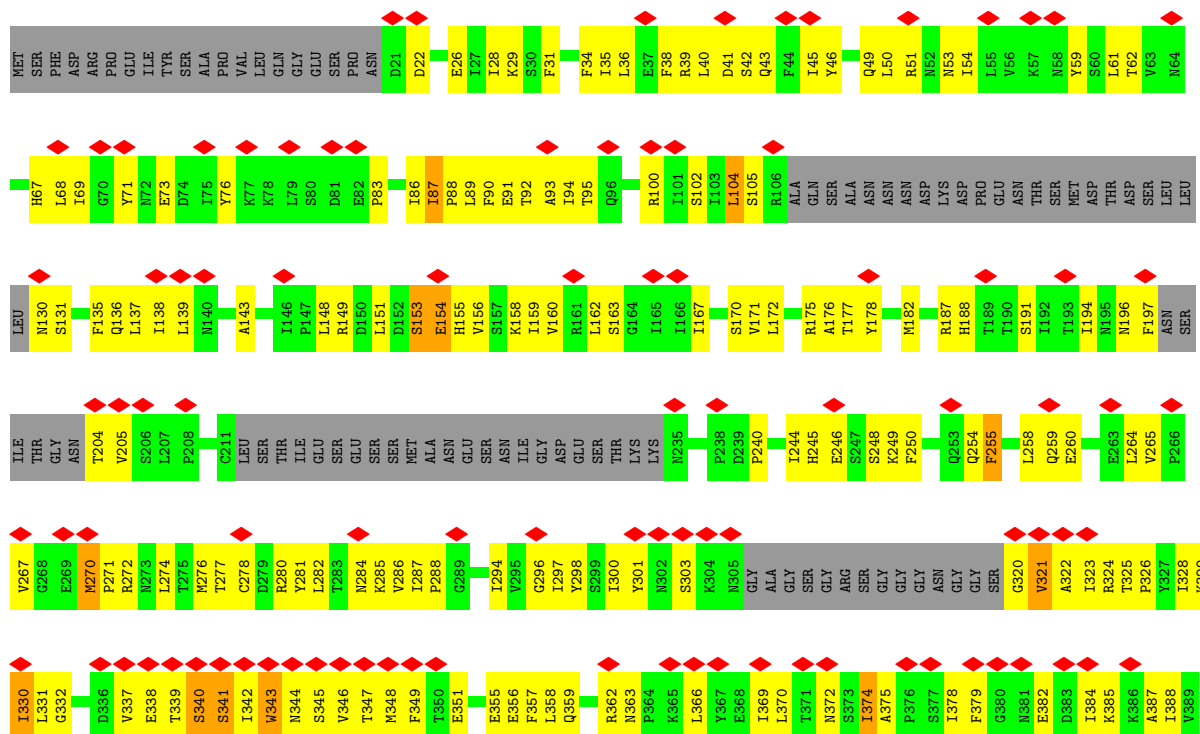


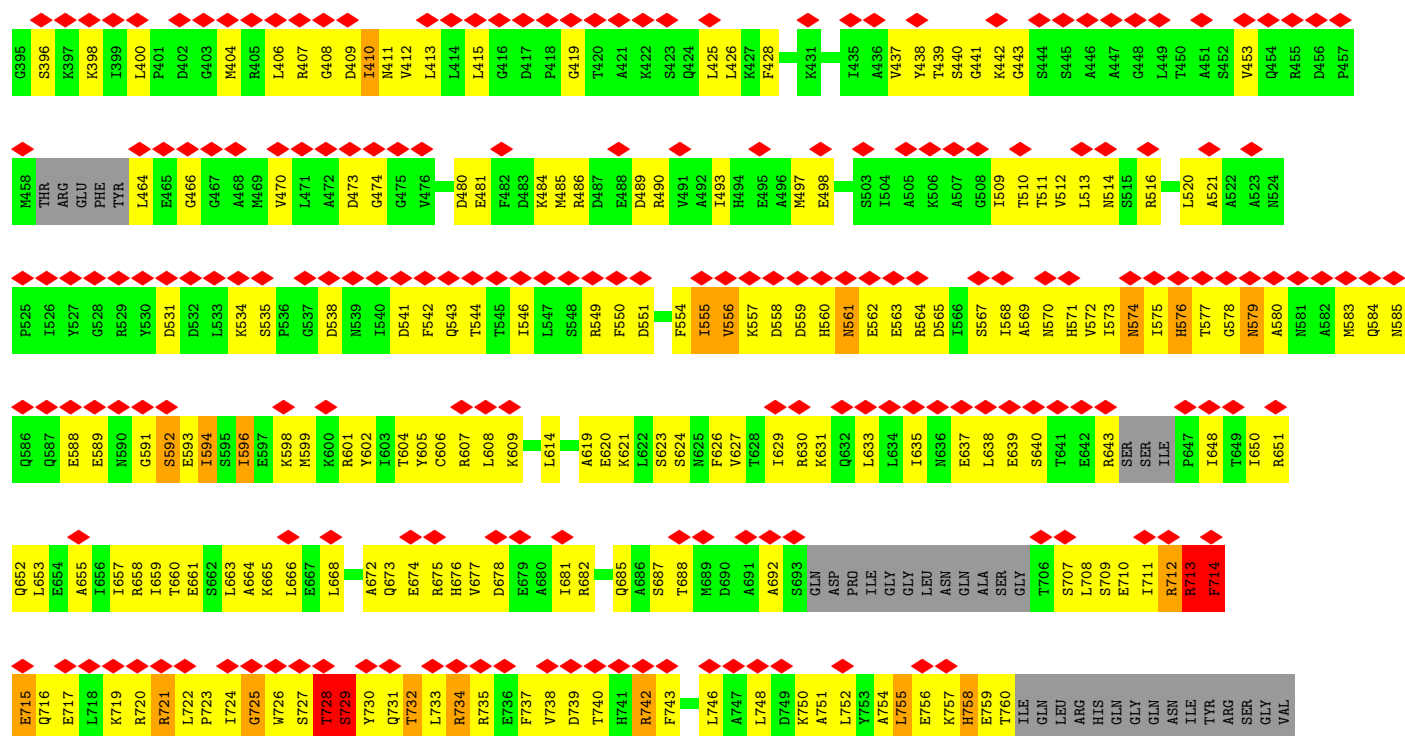
• Molecule 3: DNA replication licensing factor MCM4



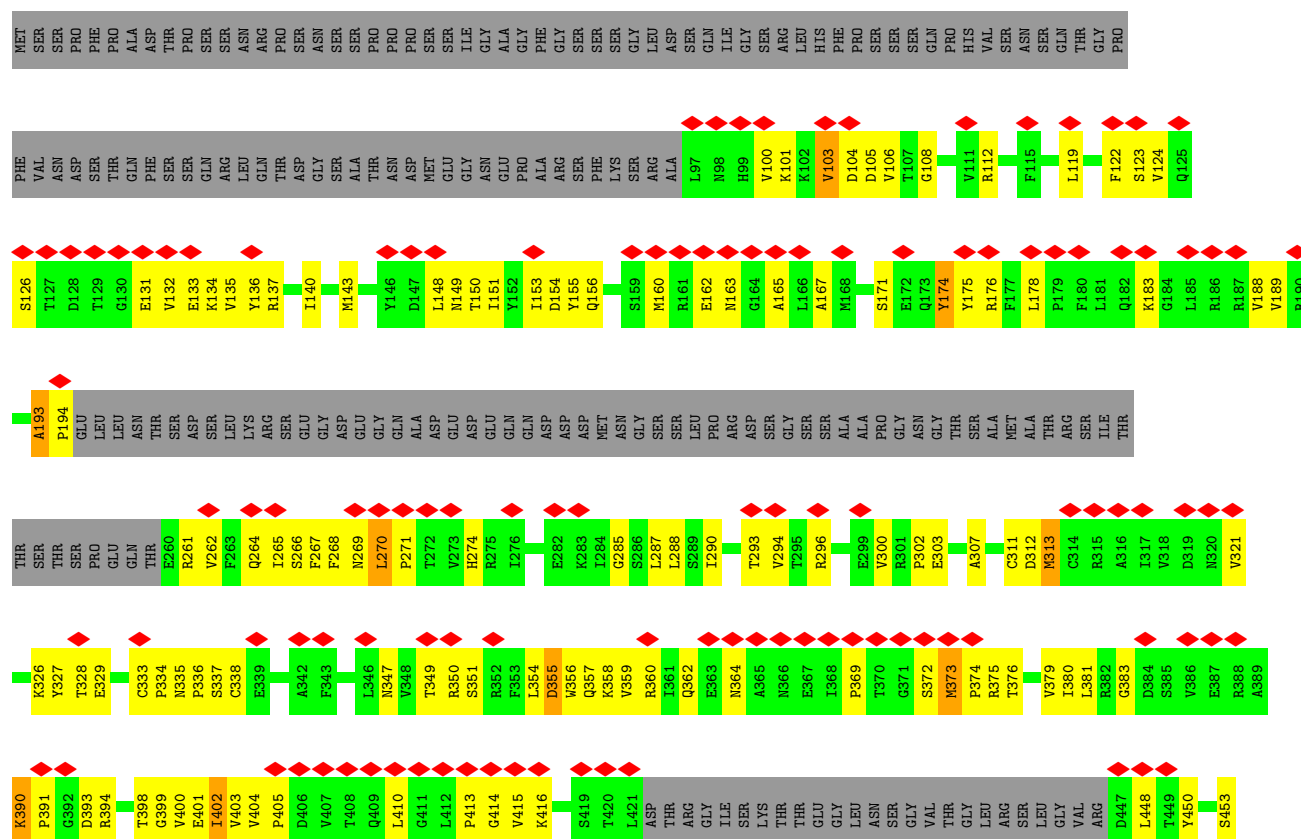


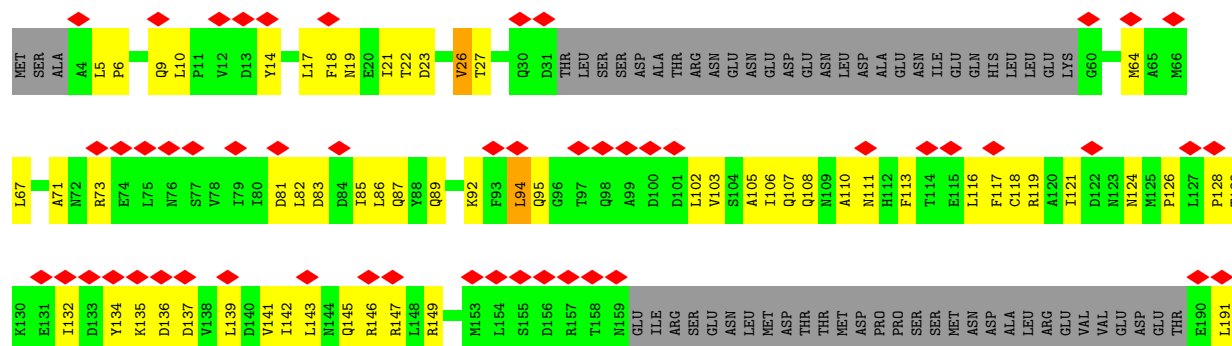
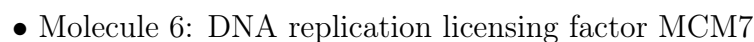
• Molecule 4: Minichromosome maintenance protein 5



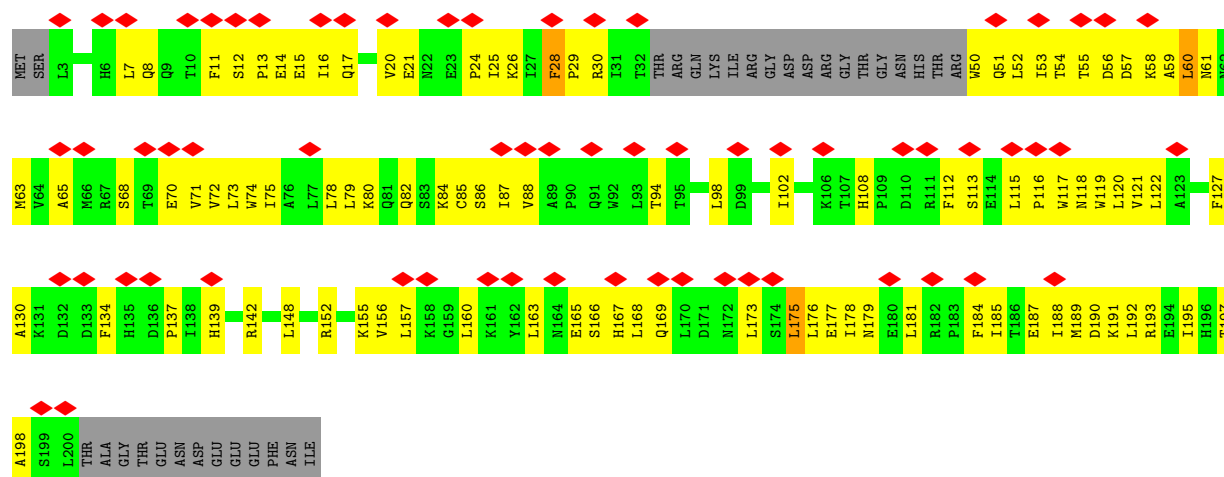


• Molecule 5: DNA replication licensing factor MCM6

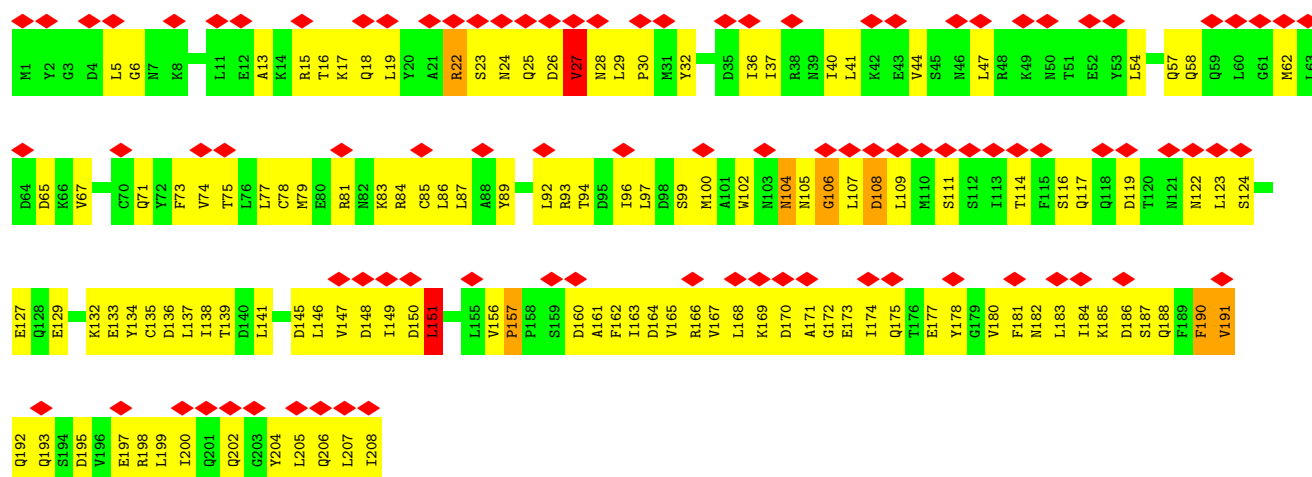




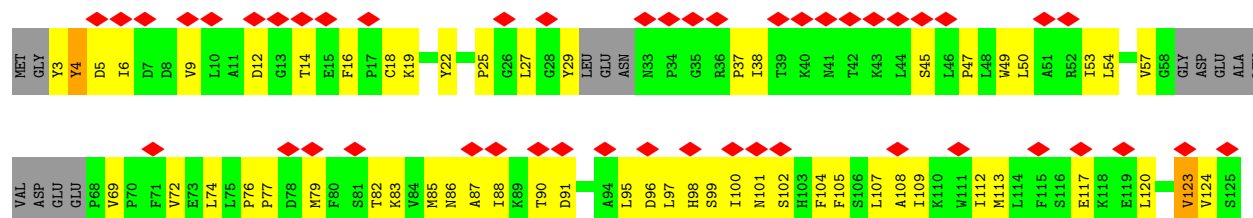
Chain B: 30% 39% 45% 15%

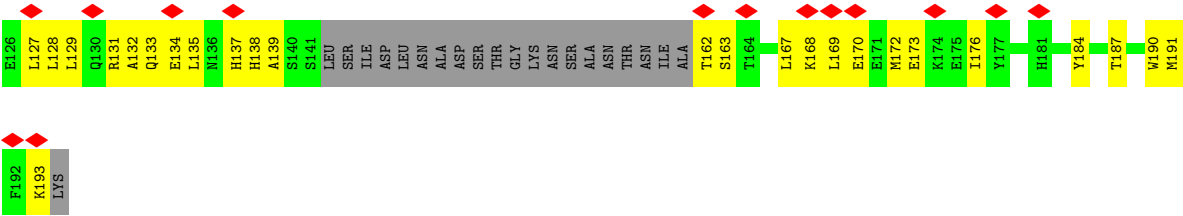


Chain A:



Chain C: 31% 40% 41% 18%





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	86822	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	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	49505	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.061	Depositor
Minimum map value	-0.025	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.004	Depositor
Recommended contour level	0.018	Depositor
Map size ($\text{\AA}$)	258.56, 258.56, 258.56	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.01, 1.01, 1.01	Depositor

5 Model quality

5.1 Standard geometry

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	2	0.53	0/4604	0.98	10/6215 (0.2%)
2	3	0.64	1/4597 (0.0%)	1.05	25/6232 (0.4%)
3	4	0.55	0/4981	1.06	31/6734 (0.5%)
4	5	0.71	8/5243 (0.2%)	1.23	39/7075 (0.6%)
5	6	0.64	4/5282 (0.1%)	1.10	25/7129 (0.4%)
6	7	0.55	0/5256	1.01	20/7099 (0.3%)
7	c	0.50	0/4548	0.94	10/6152 (0.2%)
8	D	0.54	0/1853	1.00	5/2500 (0.2%)
9	B	0.58	0/1545	1.02	6/2092 (0.3%)
10	A	0.52	1/1713 (0.1%)	1.02	10/2309 (0.4%)
11	C	0.56	0/1320	0.90	1/1784 (0.1%)
All	All	0.59	14/40942 (0.0%)	1.05	182/55321 (0.3%)

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
2	3	0	3
3	4	0	5
4	5	0	2
5	6	0	6
6	7	0	6
7	c	0	1
8	D	0	2
10	A	0	4
All	All	0	30

All (14) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	3	232	PRO	N-CD	16.22	1.70	1.47
5	6	929	GLU	C-O	11.22	1.38	1.24
5	6	930	GLU	C-N	7.73	1.44	1.33
4	5	714	PHE	C-O	-7.70	1.14	1.24
5	6	929	GLU	C-N	-6.75	1.24	1.33
4	5	729	SER	C-O	-6.62	1.15	1.24
4	5	742	ARG	C-N	6.48	1.42	1.33
5	6	926	GLU	C-N	6.32	1.40	1.32
10	A	27	VAL	CA-CB	5.84	1.62	1.54
4	5	729	SER	CA-C	5.83	1.60	1.52
4	5	742	ARG	C-O	-5.40	1.17	1.24
4	5	758	HIS	CG-ND1	-5.16	1.32	1.38
4	5	721	ARG	C-O	5.07	1.30	1.24
4	5	713	ARG	C-O	-5.03	1.17	1.24

All (182) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	5	325	THR	CA-C-N	18.99	140.34	119.83
4	5	325	THR	C-N-CA	18.99	140.34	119.83
4	5	732	THR	OG1-CB-CG2	15.87	141.04	109.30
3	4	378	GLU	CA-C-N	14.63	134.49	119.56
3	4	378	GLU	C-N-CA	14.63	134.49	119.56
5	6	333	CYS	CA-C-N	13.10	136.22	119.84
5	6	333	CYS	C-N-CA	13.10	136.22	119.84
4	5	742	ARG	CA-CB-CG	11.64	137.38	114.10
6	7	94	LEU	N-CA-C	11.40	123.78	111.36
4	5	742	ARG	N-CA-C	10.99	134.22	110.80
5	6	923	VAL	CA-C-O	-10.77	108.84	120.47
4	5	732	THR	CA-CB-CG2	-10.47	92.70	110.50
4	5	728	THR	N-CA-CB	9.62	126.75	110.49
1	2	570	GLY	N-CA-C	9.60	126.47	114.37
4	5	556	VAL	N-CA-C	9.48	122.65	108.80
4	5	728	THR	OG1-CB-CG2	9.41	128.12	109.30
4	5	714	PHE	CA-C-N	9.31	133.10	120.44
4	5	714	PHE	C-N-CA	9.31	133.10	120.44
5	6	373	MET	CA-C-N	9.24	129.32	119.90
5	6	373	MET	C-N-CA	9.24	129.32	119.90
10	A	156	VAL	CA-C-N	9.19	129.84	120.38
10	A	156	VAL	C-N-CA	9.19	129.84	120.38
6	7	486	LYS	N-CA-C	9.14	124.16	112.92
3	4	765	ALA	N-CA-C	8.74	120.81	111.28
3	4	686	LEU	CA-C-N	-8.73	110.73	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	4	686	LEU	C-N-CA	-8.73	110.73	119.90
5	6	908	LYS	N-CA-CB	-8.59	97.62	110.07
2	3	153	TRP	CB-CA-C	-8.03	106.23	115.79
4	5	87	ILE	CA-C-N	-8.01	111.47	119.56
4	5	87	ILE	C-N-CA	-8.01	111.47	119.56
8	D	267	VAL	N-CA-C	7.84	118.43	110.82
6	7	374	THR	CB-CA-C	-7.57	106.78	115.79
4	5	742	ARG	CA-C-N	-7.55	112.34	122.99
4	5	742	ARG	C-N-CA	-7.55	112.34	122.99
6	7	356	LEU	CA-C-N	7.47	128.06	120.14
6	7	356	LEU	C-N-CA	7.47	128.06	120.14
1	2	433	ASN	N-CA-C	7.42	119.88	110.24
6	7	542	GLU	N-CA-C	-7.39	103.99	113.16
4	5	755	LEU	N-CA-CB	-7.23	99.09	110.22
4	5	712	ARG	N-CA-C	-7.18	103.78	112.54
1	2	335	LYS	CB-CA-C	-7.13	108.34	116.54
3	4	714	GLU	N-CA-C	7.09	122.36	113.43
2	3	668	ILE	CA-C-N	7.08	127.24	119.87
2	3	668	ILE	C-N-CA	7.08	127.24	119.87
5	6	193	ALA	N-CA-C	7.08	116.46	108.25
6	7	648	LYS	N-CA-C	6.97	119.91	111.40
3	4	318	ASN	CA-C-N	6.92	127.07	119.87
3	4	318	ASN	C-N-CA	6.92	127.07	119.87
2	3	163	ALA	CA-C-N	6.88	134.09	121.70
2	3	163	ALA	C-N-CA	6.88	134.09	121.70
2	3	343	THR	CB-CA-C	-6.87	107.61	115.79
8	D	258	VAL	CA-C-N	6.86	134.04	121.70
8	D	258	VAL	C-N-CA	6.86	134.04	121.70
4	5	555	ILE	N-CA-C	-6.84	100.75	109.30
7	c	541	ASN	CA-C-N	6.83	127.11	119.32
7	c	541	ASN	C-N-CA	6.83	127.11	119.32
3	4	714	GLU	CA-C-N	6.75	133.85	121.70
3	4	714	GLU	C-N-CA	6.75	133.85	121.70
4	5	721	ARG	CA-C-O	-6.74	110.87	120.51
3	4	421	ASP	CB-CA-C	-6.73	108.80	116.54
4	5	715	GLU	N-CA-C	-6.73	103.87	111.14
5	6	960	LEU	N-CA-CB	-6.69	100.37	110.07
6	7	374	THR	N-CA-C	6.68	121.61	109.32
10	A	108	ASP	CA-C-N	6.59	133.56	121.70
10	A	108	ASP	C-N-CA	6.59	133.56	121.70
3	4	527	ALA	CA-C-N	6.54	125.97	118.85
3	4	527	ALA	C-N-CA	6.54	125.97	118.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	B	113	SER	CB-CA-C	-6.53	107.20	116.34
2	3	123	PRO	N-CA-C	6.49	118.62	110.70
6	7	326	HIS	CB-CA-C	-6.49	108.06	115.79
5	6	601	LYS	N-CA-C	6.48	122.07	111.37
3	4	339	ILE	CA-C-N	6.47	126.23	119.76
3	4	339	ILE	C-N-CA	6.47	126.23	119.76
5	6	954	TYR	CB-CG-CD2	-6.46	111.12	120.80
4	5	286	VAL	N-CA-C	6.45	117.31	107.77
5	6	174	TYR	N-CA-C	6.35	118.72	111.11
6	7	372	THR	N-CA-C	6.34	119.00	111.33
3	4	448	SER	CA-C-N	6.32	133.07	121.70
3	4	448	SER	C-N-CA	6.32	133.07	121.70
5	6	390	LYS	CA-C-N	6.32	126.53	119.90
5	6	390	LYS	C-N-CA	6.32	126.53	119.90
4	5	143	ALA	CB-CA-C	-6.27	109.33	116.54
2	3	137	ASP	N-CA-C	6.25	118.59	108.41
8	D	253	LYS	CA-C-N	-6.23	112.06	118.85
8	D	253	LYS	C-N-CA	-6.23	112.06	118.85
2	3	122	ILE	CA-C-N	-6.23	113.97	120.38
2	3	122	ILE	C-N-CA	-6.23	113.97	120.38
7	c	284	TYR	CB-CA-C	-6.21	108.40	115.79
9	B	113	SER	N-CA-C	6.16	117.11	108.00
4	5	270	MET	CA-C-N	6.13	125.89	119.76
4	5	270	MET	C-N-CA	6.13	125.89	119.76
7	c	59	VAL	N-CA-C	6.13	114.72	107.73
2	3	280	ASP	CB-CA-C	-6.12	109.53	116.63
6	7	267	TYR	CB-CA-C	-6.10	107.80	116.34
1	2	287	ALA	N-CA-C	-6.07	104.58	112.23
4	5	732	THR	N-CA-CB	6.06	118.86	110.07
3	4	559	ARG	CB-CA-C	-6.06	108.58	115.79
5	6	601	LYS	CA-C-N	-6.06	113.51	122.41
5	6	601	LYS	C-N-CA	-6.06	113.51	122.41
7	c	435	GLY	N-CA-C	-6.05	106.97	115.32
4	5	330	ILE	N-CA-C	6.00	116.25	107.37
4	5	728	THR	CA-C-O	-6.00	111.92	120.51
2	3	499	LYS	N-CA-C	5.99	118.33	111.02
1	2	521	GLY	N-CA-C	5.98	118.04	110.38
5	6	712	PHE	N-CA-C	5.98	119.04	111.69
3	4	373	ARG	N-CA-C	5.96	123.50	110.80
3	4	202	LYS	CA-C-N	5.95	132.40	121.70
3	4	202	LYS	C-N-CA	5.95	132.40	121.70
4	5	713	ARG	N-CA-CB	5.89	120.44	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	5	729	SER	CA-C-O	5.87	128.91	120.51
5	6	355	ASP	CA-C-N	5.83	132.20	121.70
5	6	355	ASP	C-N-CA	5.83	132.20	121.70
3	4	421	ASP	N-CA-C	5.79	117.12	108.31
3	4	659	ALA	CB-CA-C	-5.75	109.96	116.63
2	3	166	LEU	N-CA-C	5.73	118.58	110.50
3	4	288	ASN	CB-CA-C	-5.72	109.99	116.63
3	4	685	ASN	CB-CA-C	-5.70	109.00	115.79
4	5	39	ARG	N-CA-C	5.70	118.17	108.02
10	A	190	PHE	CA-C-N	5.68	130.91	123.06
10	A	190	PHE	C-N-CA	5.68	130.91	123.06
11	C	4	TYR	N-CA-C	5.65	118.38	111.82
10	A	151	LEU	N-CA-C	-5.64	104.75	111.69
4	5	163	SER	N-CA-C	5.64	117.62	108.26
9	B	28	PHE	CA-C-N	5.62	125.38	119.76
9	B	28	PHE	C-N-CA	5.62	125.38	119.76
2	3	159	GLY	CA-C-N	5.59	131.76	121.70
2	3	159	GLY	C-N-CA	5.59	131.76	121.70
7	c	559	SER	CA-C-N	5.56	131.71	121.70
7	c	559	SER	C-N-CA	5.56	131.71	121.70
2	3	316	GLY	N-CA-C	5.56	118.70	110.42
1	2	773	LYS	N-CA-C	5.54	118.15	111.40
5	6	313	MET	N-CA-C	5.53	122.59	110.80
3	4	735	HIS	CB-CA-C	-5.53	110.22	116.63
4	5	255	PHE	N-CA-C	5.51	117.36	110.91
1	2	644	CYS	N-CA-C	5.50	118.00	110.24
2	3	220	THR	CB-CA-C	-5.48	110.24	116.54
3	4	376	CYS	CA-C-N	5.45	131.50	121.70
3	4	376	CYS	C-N-CA	5.45	131.50	121.70
4	5	374	ILE	N-CA-C	5.43	116.16	110.62
10	A	157	PRO	N-CA-C	5.43	117.33	110.70
2	3	265	ALA	CA-C-N	5.43	124.77	118.85
2	3	265	ALA	C-N-CA	5.43	124.77	118.85
4	5	713	ARG	CA-C-O	-5.42	112.76	120.51
6	7	257	VAL	CA-C-N	5.39	131.41	121.70
6	7	257	VAL	C-N-CA	5.39	131.41	121.70
6	7	678	LYS	CB-CA-C	-5.38	110.35	116.54
6	7	220	ILE	N-CA-C	5.38	116.12	107.73
4	5	732	THR	CB-CA-C	-5.34	102.47	110.90
7	c	292	TYR	CA-C-N	-5.32	113.43	118.97
7	c	292	TYR	C-N-CA	-5.32	113.43	118.97
2	3	270	LEU	CA-C-N	5.31	125.07	119.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	3	270	LEU	C-N-CA	5.31	125.07	119.76
9	B	108	HIS	CA-C-N	5.28	124.95	119.56
9	B	108	HIS	C-N-CA	5.28	124.95	119.56
2	3	510	CYS	N-CA-C	5.25	117.65	110.24
4	5	419	GLY	N-CA-C	-5.25	108.07	115.32
6	7	655	ALA	N-CA-C	5.25	117.00	111.28
3	4	243	LEU	CB-CA-C	-5.23	108.99	115.89
5	6	929	GLU	CA-C-N	5.22	131.51	121.54
5	6	929	GLU	C-N-CA	5.22	131.51	121.54
6	7	255	VAL	N-CA-C	5.21	115.77	108.17
6	7	703	ARG	N-CA-C	-5.19	106.79	113.23
3	4	588	GLY	N-CA-C	5.17	118.02	112.33
2	3	653	ILE	O-C-N	5.16	123.73	120.07
3	4	628	VAL	N-CA-C	5.15	115.46	107.78
10	A	22	ARG	N-CA-C	5.14	116.97	111.36
4	5	240	PRO	CA-C-O	-5.13	117.52	121.31
5	6	930	GLU	CG-CD-OE1	-5.09	106.69	118.40
6	7	94	LEU	CA-C-N	5.09	130.85	121.70
6	7	94	LEU	C-N-CA	5.09	130.85	121.70
4	5	742	ARG	N-CA-CB	-5.08	101.90	110.49
7	c	153	GLY	N-CA-C	-5.08	107.73	115.66
4	5	734	ARG	CA-C-O	-5.08	115.47	120.70
5	6	270	LEU	CA-C-N	5.08	125.11	119.32
5	6	270	LEU	C-N-CA	5.08	125.11	119.32
10	A	191	VAL	N-CA-C	5.07	115.79	108.48
1	2	436	GLY	N-CA-C	5.07	128.00	113.30
2	3	387	GLY	N-CA-C	5.04	125.12	113.18
5	6	591	PHE	N-CA-C	5.03	116.62	111.03
2	3	221	LEU	N-CA-C	-5.03	105.38	112.12
1	2	380	THR	CA-C-N	-5.01	116.12	122.43
1	2	380	THR	C-N-CA	-5.01	116.12	122.43

There are no chirality outliers.

All (30) 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

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Mol	Chain	Res	Type	Group
3	4	372	GLU	Peptide
3	4	377	ASN	Peptide
3	4	448	SER	Peptide
4	5	725	GLY	Mainchain
4	5	728	THR	Mainchain
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	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	4531	0	4575	368	0
2	3	4521	0	4581	535	0
3	4	4911	0	4948	455	0
4	5	5172	0	5224	672	0
5	6	5204	0	5167	466	0
6	7	5176	0	5245	521	0
7	c	4470	0	4491	302	0
8	D	1820	0	1823	205	0
9	B	1513	0	1558	149	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	A	1691	0	1686	323	0
11	C	1288	0	1298	115	0
12	7	1	0	0	0	0
All	All	40298	0	40596	3485	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 43.

All (3485) 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)
2:3:502:ILE:HG21	6:7:244:ILE:CG1	1.24	1.67
2:3:484:VAL:HG21	6:7:486:LYS:CB	1.16	1.62
4:5:197:PHE:CE2	4:5:329:LYS:HG2	1.19	1.60
1:2:684:ARG:HB3	1:2:685:ASP:CB	1.11	1.58
2:3:502:ILE:CG2	6:7:244:ILE:HG12	1.12	1.55
6:7:17:LEU:HD11	6:7:102:LEU:CD2	1.37	1.54
2:3:484:VAL:CG2	6:7:486:LYS:HB2	1.28	1.54
1:2:684:ARG:CB	1:2:685:ASP:HB3	1.07	1.53
5:6:290:ILE:HD13	5:6:454:PHE:CZ	1.40	1.51
2:3:520:PHE:CZ	4:5:756:GLU:HG3	1.47	1.47
1:2:803:PHE:CE2	1:2:805:ILE:O	1.65	1.46
9:B:187:GLU:CD	11:C:176:ILE:HG22	1.07	1.46
4:5:348:MET:CG	11:C:167:LEU:HD12	1.46	1.45
3:4:342:MET:HB3	3:4:360:ILE:CD1	1.45	1.43
2:3:519:VAL:HG12	2:3:520:PHE:CD2	1.54	1.42
9:B:187:GLU:OE2	11:C:176:ILE:CG2	1.65	1.41
9:B:187:GLU:CD	11:C:176:ILE:CG2	1.94	1.40
10:A:149:ILE:HG23	10:A:151:LEU:N	1.23	1.40
1:2:794:ARG:HD3	4:5:565:ASP:CG	1.44	1.40
10:A:149:ILE:CG2	10:A:151:LEU:N	1.85	1.40
4:5:197:PHE:CE2	4:5:329:LYS:CG	2.04	1.39
8:D:141:ARG:NH2	10:A:147:VAL:HG12	1.06	1.38
4:5:348:MET:HG2	11:C:167:LEU:CD1	1.50	1.37
2:3:706:ILE:HG21	6:7:620:HIS:CD2	1.61	1.36
3:4:558:TYR:CE2	5:6:735:HIS:ND1	1.92	1.36
10:A:149:ILE:HG21	10:A:151:LEU:CB	1.55	1.36
1:2:234:LEU:HD12	1:2:234:LEU:O	1.18	1.35
2:3:492:GLN:CD	6:7:471:LYS:HE3	1.50	1.35
8:D:161:LEU:O	8:D:169:ILE:CD1	1.74	1.34
8:D:141:ARG:NH2	10:A:147:VAL:CG1	1.91	1.33

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:170:ASP:OD2	10:A:204:TYR:HA	1.16	1.33
5:6:290:ILE:CD1	5:6:454:PHE:CZ	2.12	1.33
10:A:175:GLN:HE22	10:A:199:LEU:CD2	1.41	1.32
3:4:771:VAL:HG22	5:6:728:ALA:CB	1.57	1.32
5:6:948:LEU:HD12	5:6:948:LEU:O	1.15	1.32
2:3:234:GLU:OE2	2:3:240:LYS:HA	1.27	1.32
6:7:259:ALA:HB2	6:7:270:PHE:CD1	1.64	1.32
2:3:568:THR:O	4:5:400:LEU:HD22	1.15	1.31
4:5:197:PHE:HZ	4:5:329:LYS:NZ	1.29	1.31
3:4:558:TYR:CD2	5:6:735:HIS:ND1	1.95	1.31
2:3:687:ARG:NH2	6:7:602:ASP:OD2	1.64	1.31
2:3:568:THR:O	4:5:400:LEU:CD2	1.79	1.30
2:3:122:ILE:HG21	2:3:221:LEU:CD1	1.62	1.29
2:3:232:PRO:N	2:3:232:PRO:CD	1.70	1.29
3:4:531:TYR:CD2	3:4:720:LEU:HB2	1.67	1.29
4:5:197:PHE:CZ	4:5:329:LYS:CE	2.16	1.27
10:A:149:ILE:HG23	10:A:151:LEU:CA	1.64	1.27
3:4:778:ARG:CG	5:6:719:CYS:HB3	1.62	1.27
10:A:168:LEU:CD2	10:A:206:GLN:CB	2.12	1.27
10:A:168:LEU:HD21	10:A:206:GLN:CB	1.66	1.26
7:c:34:LEU:O	7:c:34:LEU:HD13	1.34	1.26
3:4:243:LEU:HD23	3:4:244:ASP:N	1.51	1.25
10:A:169:LYS:HG3	10:A:185:LYS:CE	1.64	1.25
6:7:17:LEU:CD1	6:7:102:LEU:HD21	1.64	1.25
10:A:149:ILE:CG2	10:A:151:LEU:HB3	1.65	1.25
4:5:197:PHE:CZ	4:5:329:LYS:HE3	1.71	1.25
7:c:326:LEU:HD21	7:c:337:SER:OG	1.32	1.24
8:D:229:PHE:HD1	8:D:276:VAL:CG2	1.50	1.24
10:A:149:ILE:CG2	10:A:151:LEU:CB	2.15	1.24
4:5:588:GLU:O	4:5:592:SER:HB2	1.35	1.23
6:7:110:ALA:O	6:7:354:ILE:HD11	1.35	1.23
2:3:698:THR:CG2	6:7:462:PRO:HG2	1.68	1.23
4:5:351:GLU:OE2	10:A:18:GLN:HB3	1.08	1.23
4:5:197:PHE:CZ	4:5:329:LYS:NZ	2.01	1.22
10:A:169:LYS:HD3	10:A:185:LYS:NZ	1.54	1.22
2:3:502:ILE:CG2	6:7:244:ILE:CG1	1.93	1.22
8:D:259:THR:HG22	8:D:269:LEU:CD2	1.67	1.22
2:3:122:ILE:CG2	2:3:221:LEU:CD1	2.18	1.22
2:3:393:LEU:HD22	6:7:623:ASN:O	1.40	1.21
7:c:600:PRO:O	7:c:601:ILE:HG13	1.35	1.21
10:A:173:GLU:CB	10:A:182:ASN:HA	1.69	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:803:PHE:CD2	1:2:805:ILE:O	1.93	1.20
2:3:291:ARG:NH1	4:5:512:VAL:O	1.74	1.20
2:3:558:ASP:OD2	4:5:627:VAL:CG1	1.88	1.20
2:3:558:ASP:OD2	4:5:627:VAL:HG13	1.02	1.20
2:3:680:VAL:HG22	6:7:613:ALA:HB1	1.24	1.20
2:3:189:THR:HA	2:3:256:ILE:CD1	1.72	1.19
7:c:81:LEU:HD13	7:c:82:LEU:N	1.54	1.19
11:C:83:LYS:O	11:C:86:ASN:OD1	1.55	1.19
9:B:187:GLU:OE2	11:C:176:ILE:HG22	1.04	1.19
10:A:168:LEU:CD2	10:A:206:GLN:HB2	1.68	1.19
4:5:711:ILE:HD12	4:5:743:PHE:CD1	1.76	1.19
6:7:126:PRO:O	6:7:129:THR:HG22	1.40	1.19
2:3:396:GLY:HA3	6:7:421:GLU:OE2	1.41	1.19
1:2:444:PHE:CE2	5:6:380:ILE:HD13	1.78	1.18
1:2:794:ARG:CD	4:5:565:ASP:CG	2.13	1.18
1:2:506:TYR:OH	1:2:694:ARG:HB3	1.36	1.18
8:D:259:THR:CG2	8:D:269:LEU:HD23	1.71	1.18
10:A:175:GLN:NE2	10:A:199:LEU:HD22	1.59	1.18
1:2:551:GLN:HE22	5:6:563:ILE:HG21	1.03	1.17
8:D:229:PHE:CD1	8:D:276:VAL:HG21	1.78	1.17
1:2:795:ARG:HB3	4:5:560:HIS:CE1	1.78	1.17
2:3:391:LYS:HE2	6:7:622:HIS:O	1.40	1.17
4:5:560:HIS:HB2	4:5:564:ARG:HB3	1.17	1.17
2:3:566:LEU:HD22	4:5:614:LEU:CD1	1.75	1.17
4:5:348:MET:CG	11:C:167:LEU:CD1	2.15	1.17
3:4:770:LEU:HD21	3:4:802:ILE:HG22	1.28	1.16
8:D:141:ARG:CZ	10:A:147:VAL:CG1	2.22	1.16
10:A:169:LYS:HA	10:A:185:LYS:HD3	1.25	1.16
7:c:266:ASN:HB2	7:c:269:ASN:ND2	1.58	1.15
4:5:358:LEU:HD13	10:A:15:ARG:HH22	1.11	1.15
10:A:167:VAL:HG23	10:A:187:SER:O	1.42	1.15
7:c:33:CYS:SG	7:c:61:ILE:O	2.04	1.15
8:D:229:PHE:CD1	8:D:276:VAL:CG2	2.30	1.15
2:3:671:LEU:HD22	6:7:621:MET:HB2	1.17	1.14
7:c:74:LEU:CD1	10:A:184:ILE:HD11	1.76	1.14
7:c:74:LEU:HD11	10:A:184:ILE:HD11	1.25	1.14
1:2:326:ARG:HB3	1:2:637:VAL:HG22	1.30	1.14
7:c:74:LEU:HD13	10:A:182:ASN:OD1	1.48	1.14
3:4:243:LEU:CD2	3:4:244:ASP:H	1.59	1.14
4:5:197:PHE:HE2	4:5:329:LYS:CG	1.45	1.14
4:5:358:LEU:HD13	10:A:15:ARG:NH2	1.63	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:188:ILE:O	9:B:192:LEU:HD13	1.47	1.14
1:2:703:HIS:CB	5:6:804:ILE:HG21	1.76	1.13
2:3:502:ILE:HA	6:7:346:GLY:CA	1.78	1.13
5:6:290:ILE:HD13	5:6:454:PHE:CE1	1.83	1.13
1:2:410:LEU:O	1:2:411:LEU:HD12	1.44	1.13
8:D:259:THR:CG2	8:D:269:LEU:CD2	2.26	1.13
2:3:234:GLU:OE1	2:3:238:GLY:O	1.67	1.13
1:2:546:GLY:HA3	5:6:796:THR:HG23	1.29	1.12
4:5:588:GLU:O	4:5:592:SER:CB	1.94	1.13
7:c:74:LEU:HD22	10:A:182:ASN:OD1	1.49	1.12
4:5:711:ILE:HD12	4:5:743:PHE:HD1	1.08	1.12
4:5:737:PHE:HB3	4:5:743:PHE:CD2	1.84	1.12
11:C:173:GLU:O	11:C:176:ILE:HG13	1.50	1.12
3:4:726:ASN:C	3:4:728:TYR:HB3	1.74	1.12
1:2:703:HIS:HB2	5:6:804:ILE:HD13	1.19	1.12
2:3:492:GLN:NE2	6:7:471:LYS:CD	2.10	1.12
3:4:718:ARG:CG	6:7:661:VAL:HG11	1.79	1.12
2:3:391:LYS:HZ1	6:7:622:HIS:C	1.57	1.12
1:2:700:VAL:HG21	5:6:773:LEU:HD22	1.32	1.11
2:3:492:GLN:CD	6:7:471:LYS:CE	2.13	1.11
1:2:326:ARG:CB	1:2:637:VAL:HG22	1.80	1.11
1:2:444:PHE:CE2	5:6:380:ILE:CD1	2.33	1.11
2:3:566:LEU:HD11	4:5:619:ALA:HB1	1.29	1.11
4:5:196:ASN:HB3	4:5:197:PHE:HD1	1.12	1.11
4:5:358:LEU:HD22	10:A:15:ARG:HH21	0.98	1.11
5:6:290:ILE:CD1	5:6:454:PHE:CE1	2.33	1.10
8:D:211:ASP:OD2	8:D:213:GLU:HB3	1.47	1.10
2:3:519:VAL:CG1	2:3:520:PHE:CD2	2.34	1.10
4:5:276:MET:SD	4:5:294:ILE:HD13	1.90	1.10
2:3:568:THR:HG22	4:5:400:LEU:CD2	1.81	1.10
5:6:136:TYR:O	5:6:140:ILE:HD12	1.52	1.10
3:4:342:MET:CB	3:4:360:ILE:CD1	2.30	1.09
4:5:276:MET:HE1	4:5:294:ILE:HD12	1.32	1.09
7:c:74:LEU:HD13	10:A:182:ASN:CG	1.66	1.09
2:3:520:PHE:CZ	4:5:756:GLU:CG	2.35	1.09
6:7:662:GLN:HB3	6:7:666:ARG:HH12	1.17	1.09
10:A:149:ILE:CG2	10:A:151:LEU:CA	2.25	1.09
3:4:370:ARG:CB	3:4:371:CYS:SG	2.40	1.09
4:5:571:HIS:O	4:5:575:ILE:HG13	1.49	1.09
8:D:141:ARG:NH2	10:A:148:ASP:O	1.83	1.09
10:A:169:LYS:CD	10:A:185:LYS:NZ	2.14	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:189:THR:CA	2:3:256:ILE:HD12	1.81	1.09
2:3:412:SER:HB2	4:5:650:ILE:HG12	1.27	1.09
2:3:553:ILE:CG2	4:5:630:ARG:CD	2.29	1.09
5:6:929:GLU:O	5:6:930:GLU:HG3	1.53	1.09
3:4:778:ARG:HG2	5:6:719:CYS:HB3	1.27	1.08
8:D:161:LEU:O	8:D:169:ILE:HD12	1.45	1.08
8:D:282:ILE:HD13	8:D:286:LEU:HD11	1.22	1.08
1:2:703:HIS:CB	5:6:804:ILE:HD13	1.84	1.08
2:3:186:VAL:HG13	2:3:256:ILE:CG2	1.84	1.08
6:7:668:ARG:NH2	6:7:684:ALA:O	1.87	1.08
10:A:168:LEU:HD21	10:A:206:GLN:HB3	1.11	1.08
2:3:263:GLU:HB2	4:5:516:ARG:HH12	0.99	1.08
4:5:415:LEU:HD11	4:5:555:ILE:HG12	1.35	1.08
2:3:195:LYS:NZ	2:3:216:ASP:OD2	1.86	1.08
4:5:362:ARG:HD3	10:A:30:PRO:HB3	1.13	1.08
7:c:81:LEU:HD12	7:c:120:ILE:HG23	1.32	1.08
1:2:790:TYR:HE2	4:5:565:ASP:OD1	1.37	1.07
2:3:568:THR:HG22	4:5:400:LEU:HD21	1.24	1.07
4:5:351:GLU:OE2	10:A:18:GLN:CB	2.01	1.07
4:5:711:ILE:CD1	4:5:743:PHE:CD1	2.37	1.07
10:A:168:LEU:CD2	10:A:206:GLN:HB3	1.80	1.07
3:4:771:VAL:HG22	5:6:728:ALA:HB3	1.27	1.07
8:D:229:PHE:HD1	8:D:276:VAL:HG22	1.18	1.07
4:5:348:MET:HG3	11:C:167:LEU:HD12	1.36	1.07
6:7:259:ALA:HB2	6:7:270:PHE:CE1	1.88	1.07
2:3:396:GLY:CA	6:7:421:GLU:OE2	2.02	1.07
2:3:698:THR:HG23	6:7:462:PRO:HG2	1.37	1.06
3:4:468:LYS:HG2	3:4:609:VAL:HG11	1.11	1.06
10:A:169:LYS:CD	10:A:185:LYS:HZ3	1.68	1.06
1:2:790:TYR:CE2	4:5:565:ASP:OD1	2.07	1.06
2:3:122:ILE:HG23	2:3:123:PRO:HD3	1.16	1.06
5:6:819:ILE:HG22	5:6:820:THR:H	0.95	1.06
10:A:169:LYS:HG3	10:A:185:LYS:HE2	1.07	1.06
2:3:391:LYS:CE	6:7:622:HIS:O	2.02	1.06
10:A:163:ILE:HD13	10:A:208:ILE:HG23	1.34	1.06
2:3:122:ILE:HG21	2:3:221:LEU:HD11	1.35	1.05
2:3:391:LYS:NZ	6:7:623:ASN:N	2.02	1.05
1:2:703:HIS:HB3	5:6:804:ILE:HG21	1.08	1.05
3:4:778:ARG:HG3	5:6:719:CYS:HB3	1.38	1.05
3:4:342:MET:HB3	3:4:360:ILE:HD11	1.08	1.05
3:4:468:LYS:HG2	3:4:609:VAL:CG1	1.85	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:531:TYR:HD2	3:4:720:LEU:HD12	1.14	1.05
3:4:550:LYS:HD2	5:6:735:HIS:O	1.57	1.04
9:B:188:ILE:HG22	9:B:192:LEU:HD13	1.37	1.04
10:A:149:ILE:HG22	10:A:151:LEU:H	1.16	1.04
1:2:442:ASN:OD1	1:2:443:GLY:N	1.90	1.04
2:3:566:LEU:CD2	4:5:614:LEU:HD11	1.86	1.04
4:5:358:LEU:CD2	10:A:15:ARG:HH21	1.70	1.04
4:5:711:ILE:CD1	4:5:743:PHE:HD1	1.71	1.04
4:5:737:PHE:HB3	4:5:743:PHE:HD2	1.17	1.04
4:5:104:LEU:HD13	4:5:105:SER:N	1.72	1.03
9:B:118:ASN:OD1	9:B:122:LEU:HD12	1.57	1.03
5:6:945:GLU:O	5:6:948:LEU:HG	1.57	1.03
8:D:229:PHE:CE1	8:D:276:VAL:HG21	1.93	1.03
1:2:234:LEU:HD21	1:2:241:SER:O	1.57	1.03
2:3:520:PHE:CE1	4:5:756:GLU:HG3	1.93	1.03
4:5:197:PHE:CD2	4:5:329:LYS:HG2	1.94	1.03
7:c:74:LEU:CD1	10:A:182:ASN:OD1	2.07	1.03
9:B:187:GLU:OE1	11:C:176:ILE:HG22	1.59	1.03
2:3:502:ILE:HA	6:7:346:GLY:C	1.84	1.02
4:5:442:LYS:NZ	4:5:484:LYS:O	1.92	1.02
7:c:326:LEU:CD2	7:c:337:SER:OG	2.07	1.02
8:D:141:ARG:CZ	10:A:147:VAL:HG12	1.87	1.02
8:D:259:THR:HG23	8:D:269:LEU:HD23	1.37	1.02
10:A:108:ASP:HB3	10:A:109:LEU:HB3	1.39	1.02
2:3:122:ILE:CG2	2:3:221:LEU:HD12	1.83	1.02
2:3:492:GLN:NE2	6:7:471:LYS:NZ	2.07	1.02
7:c:33:CYS:SG	7:c:62:PHE:HA	1.98	1.02
8:D:141:ARG:CZ	10:A:147:VAL:HG11	1.88	1.02
10:A:175:GLN:NE2	10:A:199:LEU:CD2	2.19	1.02
3:4:370:ARG:HB2	3:4:371:CYS:SG	1.98	1.02
6:7:453:ASP:OD2	6:7:562:SER:OG	1.75	1.02
3:4:771:VAL:CG2	5:6:728:ALA:HB3	1.90	1.02
1:2:551:GLN:NE2	5:6:563:ILE:HG21	1.75	1.02
2:3:464:LEU:HD22	6:7:323:PRO:O	1.57	1.02
5:6:948:LEU:O	5:6:948:LEU:CD1	2.07	1.02
10:A:173:GLU:HB3	10:A:182:ASN:HA	1.38	1.02
1:2:326:ARG:HB3	1:2:637:VAL:CG2	1.90	1.01
8:D:256:TYR:HB2	8:D:257:THR:HG22	1.38	1.01
8:D:269:LEU:HD11	8:D:277:MET:HE1	1.42	1.01
1:2:444:PHE:HE2	5:6:380:ILE:HD13	1.21	1.01
4:5:138:ILE:HG23	4:5:332:GLY:HA3	1.41	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:258:LEU:HD21	4:5:294:ILE:HD12	1.40	1.01
4:5:415:LEU:CD1	4:5:555:ILE:HG12	1.90	1.01
4:5:711:ILE:HG13	4:5:743:PHE:CE1	1.95	1.01
3:4:468:LYS:CG	3:4:609:VAL:HG11	1.90	1.01
3:4:725:THR:O	3:4:728:TYR:HB2	1.59	1.01
3:4:531:TYR:CD2	3:4:720:LEU:CB	2.44	1.01
4:5:276:MET:SD	4:5:294:ILE:CD1	2.47	1.01
2:3:484:VAL:HG21	6:7:486:LYS:HB3	1.43	1.01
8:D:137:LYS:O	8:D:141:ARG:NH1	1.94	1.01
3:4:718:ARG:CB	6:7:661:VAL:HG11	1.91	1.00
7:c:74:LEU:CD2	10:A:182:ASN:OD1	2.10	1.00
11:C:83:LYS:HA	11:C:86:ASN:ND2	1.74	1.00
1:2:234:LEU:O	1:2:234:LEU:CD1	2.08	1.00
2:3:189:THR:HA	2:3:256:ILE:HD12	1.01	1.00
2:3:197:ILE:HD12	2:3:251:ILE:HG13	1.38	1.00
6:7:207:LEU:HD12	6:7:207:LEU:O	1.61	1.00
10:A:164:ASP:OD1	10:A:190:PHE:HD1	1.43	1.00
10:A:175:GLN:HG2	10:A:183:LEU:HD21	1.44	1.00
2:3:501:GLY:O	6:7:346:GLY:HA3	1.61	1.00
2:3:492:GLN:NE2	6:7:471:LYS:CE	0.85	1.00
5:6:354:LEU:HD13	5:6:355:ASP:OD2	1.61	1.00
2:3:566:LEU:HD11	4:5:619:ALA:CB	1.91	0.99
5:6:948:LEU:HD12	5:6:948:LEU:C	1.86	0.99
7:c:15:ILE:HD13	7:c:121:TYR:CE2	1.97	0.99
1:2:702:SER:OG	5:6:559:THR:HG21	1.63	0.99
2:3:706:ILE:CG2	6:7:620:HIS:CD2	2.46	0.99
1:2:506:TYR:CZ	1:2:694:ARG:HB3	1.97	0.99
2:3:568:THR:C	4:5:400:LEU:HD22	1.87	0.99
6:7:460:GLY:O	6:7:466:LYS:NZ	1.94	0.99
8:D:254:PRO:O	8:D:255:CYS:SG	2.20	0.99
4:5:711:ILE:CG1	4:5:743:PHE:CE1	2.44	0.99
5:6:404:VAL:HG23	5:6:453:SER:OG	1.63	0.99
2:3:122:ILE:CG2	2:3:123:PRO:HD3	1.92	0.99
2:3:122:ILE:HG23	2:3:123:PRO:CD	1.92	0.99
5:6:819:ILE:HG22	5:6:820:THR:N	1.78	0.99
10:A:108:ASP:O	10:A:198:ARG:NH1	1.95	0.99
4:5:560:HIS:CB	4:5:564:ARG:HB3	1.92	0.98
2:3:391:LYS:NZ	6:7:623:ASN:CA	2.26	0.98
2:3:409:GLY:O	2:3:415:LYS:NZ	1.95	0.98
1:2:325:THR:OG1	1:2:389:THR:OG1	1.80	0.98
1:2:794:ARG:HD3	4:5:565:ASP:OD2	1.63	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:552:PHE:O	5:6:737:LYS:NZ	1.95	0.98
9:B:191:LYS:HE2	11:C:172:MET:HE1	1.45	0.98
3:4:243:LEU:HD23	3:4:244:ASP:H	0.83	0.98
3:4:718:ARG:HG3	6:7:661:VAL:HG11	1.42	0.98
4:5:384:ILE:HD11	4:5:556:VAL:HG21	1.42	0.98
4:5:754:ALA:HA	4:5:757:LYS:HE3	1.46	0.98
10:A:175:GLN:HG2	10:A:183:LEU:CD2	1.94	0.98
7:c:15:ILE:HD13	7:c:121:TYR:HE2	1.29	0.98
2:3:502:ILE:HA	6:7:346:GLY:O	1.64	0.97
6:7:715:GLU:OE2	6:7:718:ARG:NH1	1.96	0.97
9:B:188:ILE:CG2	9:B:192:LEU:CD1	2.43	0.97
5:6:566:ARG:NH1	5:6:656:MET:O	1.97	0.97
8:D:190:TRP:HZ3	10:A:94:THR:HG1	1.03	0.97
1:2:504:SER:C	1:2:698:PHE:HE2	1.72	0.97
1:2:614:ASP:OD1	1:2:617:ARG:NH1	1.96	0.97
3:4:713:ASP:HB3	3:4:716:ASN:HB2	1.46	0.97
11:C:83:LYS:HA	11:C:86:ASN:HD21	1.29	0.97
2:3:484:VAL:HG11	6:7:486:LYS:N	1.79	0.97
8:D:268:GLU:O	8:D:269:LEU:HD22	1.64	0.97
6:7:370:LEU:O	6:7:370:LEU:HD13	1.64	0.96
8:D:70:GLU:O	8:D:150:LYS:NZ	1.97	0.96
8:D:169:ILE:HG22	8:D:170:SER:H	1.29	0.96
10:A:168:LEU:HD23	10:A:206:GLN:HB2	1.44	0.96
10:A:169:LYS:HD3	10:A:185:LYS:HZ3	1.14	0.96
2:3:443:THR:HG22	6:7:319:SER:OG	1.65	0.96
4:5:339:THR:O	4:5:340:SER:O	1.83	0.96
2:3:122:ILE:HG23	2:3:221:LEU:HD12	1.47	0.96
10:A:163:ILE:HG22	10:A:164:ASP:N	1.80	0.96
1:2:794:ARG:CD	4:5:565:ASP:OD2	2.14	0.96
5:6:819:ILE:CG2	5:6:820:THR:H	1.79	0.96
10:A:149:ILE:CG2	10:A:151:LEU:H	1.62	0.96
2:3:391:LYS:NZ	6:7:622:HIS:C	2.22	0.96
7:c:266:ASN:HB2	7:c:269:ASN:HD22	1.29	0.96
6:7:126:PRO:O	6:7:129:THR:CG2	2.14	0.96
1:2:522:GLY:O	1:2:822:LYS:NZ	1.99	0.95
6:7:110:ALA:O	6:7:354:ILE:CD1	2.13	0.95
10:A:165:VAL:HG21	10:A:205:LEU:HD13	1.47	0.95
10:A:170:ASP:OD2	10:A:204:TYR:CA	2.13	0.95
1:2:696:ALA:HA	5:6:800:LEU:HD21	1.47	0.95
2:3:566:LEU:HD22	4:5:614:LEU:HD11	0.96	0.95
1:2:327:ARG:HH11	1:2:386:GLN:HE22	1.09	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:234:GLU:OE2	2:3:240:LYS:CA	2.15	0.95
2:3:706:ILE:HG21	6:7:620:HIS:HD2	1.23	0.95
3:4:506:LEU:HB3	3:4:510:ARG:HH12	1.28	0.95
3:4:771:VAL:CG2	5:6:728:ALA:CB	2.44	0.95
1:2:326:ARG:CD	1:2:637:VAL:HG22	1.97	0.95
2:3:519:VAL:HG22	2:3:534:ALA:HB2	1.47	0.95
9:B:25:ILE:CD1	9:B:87:ILE:HD11	1.95	0.95
9:B:188:ILE:CG2	9:B:192:LEU:HD13	1.96	0.95
1:2:794:ARG:CB	4:5:565:ASP:OD2	2.14	0.95
2:3:389:VAL:HG12	2:3:390:GLU:H	1.32	0.95
4:5:276:MET:CE	4:5:294:ILE:CD1	2.45	0.94
4:5:40:LEU:HG	4:5:40:LEU:O	1.66	0.94
4:5:196:ASN:HB3	4:5:197:PHE:CD1	2.01	0.94
4:5:276:MET:HE1	4:5:294:ILE:CD1	1.95	0.94
1:2:697:THR:HG22	5:6:774:VAL:HG21	1.48	0.94
4:5:739:ASP:CG	5:6:697:GLY:HA3	1.92	0.94
2:3:520:PHE:HZ	4:5:756:GLU:HG3	1.20	0.94
3:4:770:LEU:HD21	3:4:802:ILE:CG2	1.97	0.94
4:5:415:LEU:HD11	4:5:555:ILE:CG1	1.96	0.94
8:D:137:LYS:C	8:D:141:ARG:HH11	1.76	0.94
9:B:195:ILE:HG22	11:C:109:ILE:HD13	1.50	0.94
8:D:282:ILE:CD1	8:D:286:LEU:HD11	1.96	0.94
10:A:175:GLN:HE22	10:A:199:LEU:HD22	0.79	0.94
1:2:327:ARG:HH11	1:2:386:GLN:NE2	1.63	0.94
2:3:391:LYS:HZ1	6:7:623:ASN:N	1.61	0.94
4:5:348:MET:HG2	11:C:167:LEU:HD12	0.99	0.94
10:A:169:LYS:CG	10:A:185:LYS:HZ3	1.81	0.94
3:4:531:TYR:CD2	3:4:720:LEU:HD12	2.01	0.93
3:4:531:TYR:CE2	3:4:716:ASN:OD1	2.21	0.93
3:4:718:ARG:HB2	6:7:661:VAL:CG1	1.97	0.93
2:3:263:GLU:HB2	4:5:516:ARG:NH1	1.83	0.93
2:3:680:VAL:HG22	6:7:613:ALA:CB	1.98	0.93
4:5:358:LEU:HD22	10:A:15:ARG:NH2	1.82	0.93
4:5:739:ASP:CB	5:6:697:GLY:HA3	1.99	0.93
4:5:349:PHE:HZ	4:5:609:LYS:HZ1	1.16	0.93
7:c:43:LYS:HG2	7:c:484:LEU:CD2	1.97	0.93
6:7:17:LEU:CD1	6:7:102:LEU:CD2	2.34	0.93
2:3:502:ILE:HA	6:7:346:GLY:HA2	1.51	0.93
4:5:426:LEU:HD21	4:5:520:LEU:HD22	1.50	0.93
1:2:216:LEU:HD12	1:2:217:GLU:N	1.83	0.92
2:3:569:HIS:ND1	4:5:398:LYS:HG3	1.84	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:17:LEU:HD11	6:7:102:LEU:HD23	1.49	0.92
6:7:147:ARG:HH12	6:7:191:LEU:HD21	1.34	0.92
3:4:725:THR:O	3:4:728:TYR:CB	2.17	0.92
4:5:362:ARG:CD	10:A:30:PRO:HB3	1.98	0.92
2:3:488:GLU:OE1	6:7:482:TYR:HE2	1.51	0.92
2:3:443:THR:CG2	6:7:319:SER:OG	2.17	0.92
3:4:531:TYR:CE2	3:4:720:LEU:HB2	2.04	0.92
5:6:400:VAL:HG23	5:6:455:LEU:HB3	1.52	0.92
4:5:713:ARG:C	4:5:715:GLU:H	1.77	0.92
8:D:256:TYR:HB2	8:D:257:THR:CG2	1.99	0.92
11:C:134:GLU:OE2	11:C:138:HIS:CD2	2.23	0.92
10:A:149:ILE:HG22	10:A:151:LEU:HD12	1.49	0.92
10:A:93:ARG:O	10:A:97:LEU:HG	1.69	0.92
5:6:777:TYR:OH	5:6:781:ARG:NH2	2.02	0.91
8:D:162:ASN:OD1	8:D:169:ILE:HG21	1.70	0.91
4:5:197:PHE:CE1	4:5:329:LYS:HE3	2.05	0.91
10:A:15:ARG:HH12	10:A:30:PRO:HG2	1.30	0.91
2:3:502:ILE:HG23	6:7:244:ILE:CG1	1.98	0.91
10:A:149:ILE:HG22	10:A:151:LEU:CD1	2.00	0.91
9:B:139:HIS:H	9:B:142:ARG:HH11	0.97	0.91
3:4:370:ARG:HA	3:4:371:CYS:SG	2.11	0.91
1:2:703:HIS:HB3	5:6:804:ILE:CG2	1.98	0.91
3:4:647:GLU:OE2	3:4:655:SER:N	2.02	0.91
4:5:276:MET:CE	4:5:294:ILE:HD13	2.01	0.91
4:5:556:VAL:HG12	4:5:557:LYS:N	1.86	0.91
4:5:569:ALA:O	4:5:573:ILE:HD12	1.68	0.91
1:2:410:LEU:C	1:2:411:LEU:HD12	1.97	0.90
1:2:503:PRO:O	1:2:698:PHE:CZ	2.24	0.90
5:6:575:GLY:O	5:6:581:LYS:NZ	2.04	0.90
8:D:141:ARG:HH22	10:A:147:VAL:HG12	1.32	0.90
10:A:169:LYS:CA	10:A:185:LYS:HD3	2.00	0.90
2:3:186:VAL:CG1	2:3:256:ILE:HG21	2.02	0.90
10:A:168:LEU:HD23	10:A:206:GLN:CB	1.98	0.90
2:3:502:ILE:HG13	6:7:346:GLY:HA2	1.53	0.90
8:D:141:ARG:HH21	10:A:147:VAL:HG12	1.25	0.90
3:4:531:TYR:OH	3:4:719:GLU:HB2	1.71	0.90
3:4:778:ARG:CG	5:6:719:CYS:CB	2.50	0.90
9:B:191:LYS:CE	11:C:172:MET:HE1	2.01	0.90
2:3:519:VAL:HG12	2:3:520:PHE:CE2	2.05	0.90
2:3:33:ASP:HB2	2:3:39:ARG:HH11	1.37	0.90
3:4:714:GLU:H	3:4:715:LYS:HB3	1.36	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:175:GLN:OE1	10:A:199:LEU:HD11	1.72	0.90
6:7:260:TYR:CD1	6:7:298:LEU:HD13	2.07	0.90
6:7:660:VAL:HG22	6:7:713:VAL:HG11	1.52	0.90
7:c:30:PHE:CE2	7:c:81:LEU:HD21	2.06	0.90
1:2:794:ARG:HD3	4:5:565:ASP:CB	2.01	0.89
7:c:316:LEU:HD11	7:c:413:LEU:C	1.97	0.89
10:A:167:VAL:HG11	10:A:185:LYS:HA	1.52	0.89
9:B:191:LYS:HE2	11:C:172:MET:CE	2.01	0.89
7:c:83:LEU:HD21	7:c:86:PHE:HB2	1.54	0.89
2:3:569:HIS:O	4:5:398:LYS:HD2	1.72	0.89
4:5:737:PHE:CB	4:5:743:PHE:CD2	2.55	0.89
7:c:316:LEU:HD11	7:c:414:GLY:N	1.87	0.89
10:A:200:ILE:CD1	10:A:208:ILE:HD11	2.03	0.89
3:4:411:THR:N	6:7:498:MET:O	2.05	0.89
3:4:267:GLU:O	3:4:271:ILE:HD12	1.72	0.89
2:3:671:LEU:CD2	6:7:621:MET:HB2	2.01	0.89
4:5:737:PHE:CG	4:5:743:PHE:CD2	2.60	0.89
8:D:141:ARG:HE	10:A:149:ILE:HG12	1.37	0.89
5:6:778:LYS:HG2	5:6:782:LYS:HZ2	1.39	0.88
10:A:169:LYS:CG	10:A:185:LYS:NZ	2.36	0.88
1:2:703:HIS:CG	5:6:804:ILE:HD13	2.07	0.88
1:2:794:ARG:HB3	4:5:565:ASP:OD2	1.72	0.88
2:3:519:VAL:CG1	2:3:520:PHE:CE2	2.56	0.88
4:5:606:CYS:O	4:5:665:LYS:NZ	2.05	0.88
6:7:659:TYR:OH	6:7:714:GLU:OE1	1.91	0.88
9:B:25:ILE:HD12	9:B:87:ILE:HD11	1.52	0.88
10:A:106:GLY:H	10:A:107:LEU:HB2	1.38	0.88
7:c:74:LEU:CD1	10:A:182:ASN:CG	2.45	0.88
10:A:147:VAL:HB	10:A:149:ILE:HG13	1.56	0.88
5:6:691:ARG:HH11	5:6:716:LEU:HD22	1.38	0.88
5:6:288:LEU:H	5:6:399:GLY:HA3	1.39	0.88
2:3:289:GLY:N	4:5:509:ILE:HB	1.87	0.88
3:4:531:TYR:HD2	3:4:720:LEU:CD1	1.87	0.88
1:2:241:SER:OG	1:2:296:ARG:HG2	1.73	0.88
3:4:438:THR:HG22	3:4:462:ASP:HB3	1.53	0.88
4:5:570:ASN:HA	4:5:573:ILE:HD13	1.57	0.88
3:4:284:ILE:HG23	3:4:290:ASP:HB2	1.55	0.87
4:5:711:ILE:HB	4:5:743:PHE:HE1	1.37	0.87
8:D:162:ASN:HA	8:D:169:ILE:HD12	1.55	0.87
3:4:342:MET:HB3	3:4:360:ILE:HD13	1.55	0.87
5:6:266:SER:HB2	5:6:458:HIS:HB2	1.54	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:139:HIS:H	9:B:142:ARG:NH1	1.72	0.87
3:4:417:LEU:HD13	3:4:463:VAL:HG21	1.57	0.87
3:4:558:TYR:CE2	5:6:735:HIS:CE1	2.61	0.87
2:3:484:VAL:HG11	6:7:486:LYS:CA	2.05	0.87
2:3:502:ILE:CA	6:7:346:GLY:HA2	2.03	0.87
3:4:572:THR:HG21	3:4:708:VAL:HG11	1.55	0.87
4:5:348:MET:HG2	11:C:167:LEU:HD11	1.51	0.87
1:2:325:THR:HG22	1:2:636:ILE:HD13	1.55	0.87
8:D:282:ILE:HD13	8:D:286:LEU:CD1	2.04	0.87
8:D:282:ILE:CD1	8:D:286:LEU:CD1	2.52	0.87
2:3:502:ILE:CG2	6:7:244:ILE:HG13	2.05	0.87
6:7:678:LYS:HG3	6:7:679:PHE:H	1.38	0.87
1:2:234:LEU:CD2	1:2:241:SER:O	2.23	0.87
10:A:173:GLU:HB2	10:A:182:ASN:HA	1.55	0.87
3:4:727:LEU:N	3:4:728:TYR:HB3	1.89	0.86
4:5:739:ASP:OD2	5:6:697:GLY:HA3	1.75	0.86
1:2:442:ASN:OD1	1:2:444:PHE:N	2.07	0.86
2:3:520:PHE:HZ	4:5:756:GLU:CG	1.78	0.86
2:3:698:THR:HG21	6:7:463:GLY:N	1.90	0.86
5:6:916:ILE:HA	5:6:919:LYS:HE3	1.57	0.86
4:5:340:SER:O	4:5:342:ILE:N	2.08	0.86
4:5:711:ILE:CB	4:5:743:PHE:HE1	1.88	0.86
5:6:923:VAL:HB	5:6:929:GLU:HB2	1.56	0.86
1:2:696:ALA:HA	5:6:800:LEU:CD2	2.04	0.86
8:D:161:LEU:O	8:D:169:ILE:HD11	1.74	0.86
8:D:256:TYR:HD1	8:D:257:THR:HG23	1.41	0.86
4:5:348:MET:SD	11:C:167:LEU:HG	2.14	0.86
10:A:169:LYS:CG	10:A:185:LYS:HE2	2.01	0.86
6:7:259:ALA:CB	6:7:270:PHE:CE1	2.59	0.86
3:4:370:ARG:CA	3:4:371:CYS:SG	2.63	0.86
3:4:557:ARG:HH11	3:4:668:ARG:NH2	1.74	0.86
10:A:149:ILE:HG23	10:A:150:ASP:C	2.00	0.86
10:A:164:ASP:OD1	10:A:190:PHE:CD1	2.29	0.86
2:3:698:THR:HB	6:7:463:GLY:HA3	1.56	0.86
5:6:290:ILE:HD13	5:6:454:PHE:CE2	2.08	0.86
5:6:558:SER:HB3	5:6:559:THR:HA	1.57	0.86
9:B:187:GLU:OE2	11:C:176:ILE:HG23	1.72	0.86
1:2:684:ARG:CA	1:2:685:ASP:HB3	2.06	0.86
4:5:740:THR:HG23	4:5:742:ARG:HB2	1.58	0.86
7:c:74:LEU:HD21	10:A:173:GLU:OE1	1.76	0.86
4:5:551:ASP:OD2	4:5:658:ARG:NH2	2.09	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:778:LYS:O	5:6:782:LYS:NZ	2.09	0.85
7:c:325:TYR:CZ	7:c:406:ARG:HD2	2.11	0.85
2:3:123:PRO:HD3	2:3:221:LEU:HD12	1.58	0.85
1:2:326:ARG:CB	1:2:637:VAL:CG2	2.50	0.85
2:3:569:HIS:CE1	4:5:406:LEU:HD22	2.11	0.85
1:2:506:TYR:OH	1:2:694:ARG:CB	2.23	0.85
2:3:698:THR:HG21	6:7:462:PRO:HG2	1.57	0.85
5:6:290:ILE:HD11	5:6:454:PHE:CE1	2.12	0.85
8:D:141:ARG:NE	10:A:149:ILE:HG12	1.91	0.85
5:6:586:LYS:NZ	5:6:597:TYR:OH	2.09	0.85
10:A:168:LEU:CG	10:A:206:GLN:HB2	2.06	0.85
2:3:412:SER:HB2	4:5:650:ILE:CG1	2.06	0.85
3:4:725:THR:HG21	6:7:657:ASN:ND2	1.92	0.85
3:4:770:LEU:CD2	3:4:802:ILE:HG22	2.05	0.85
3:4:778:ARG:HG3	5:6:719:CYS:CB	2.05	0.85
4:5:594:ILE:H	4:5:594:ILE:HD12	1.39	0.85
4:5:725:GLY:O	4:5:728:THR:HG23	1.77	0.85
10:A:177:GLU:HG2	10:A:178:TYR:HD2	1.40	0.85
2:3:502:ILE:HG21	6:7:244:ILE:CD1	2.07	0.85
3:4:771:VAL:HG22	5:6:728:ALA:HB1	1.59	0.85
8:D:169:ILE:HG22	8:D:170:SER:N	1.90	0.85
9:B:188:ILE:HG23	9:B:192:LEU:CD1	2.05	0.85
1:2:543:GLY:HA3	1:2:549:LYS:HD3	1.58	0.85
2:3:519:VAL:HB	2:3:527:ARG:HH12	1.38	0.85
4:5:375:ALA:HB1	4:5:378:ILE:HB	1.56	0.85
6:7:601:LEU:HD13	6:7:603:ILE:CD1	2.07	0.85
6:7:260:TYR:CE1	6:7:298:LEU:HD22	2.11	0.84
9:B:163:LEU:HD22	9:B:189:MET:HE1	1.58	0.84
2:3:185:ILE:HG23	4:5:511:THR:HG21	1.59	0.84
2:3:502:ILE:CA	6:7:346:GLY:CA	2.55	0.84
4:5:708:LEU:HD22	4:5:712:ARG:HH21	1.42	0.84
2:3:558:ASP:CG	4:5:627:VAL:HG13	2.02	0.84
10:A:23:SER:OG	10:A:24:ASN:C	2.20	0.84
1:2:795:ARG:CB	4:5:560:HIS:CE1	2.60	0.84
2:3:195:LYS:CE	2:3:216:ASP:OD2	2.26	0.84
2:3:502:ILE:CB	6:7:244:ILE:HG12	2.00	0.84
4:5:358:LEU:CD1	10:A:15:ARG:NH2	2.40	0.84
10:A:147:VAL:HG21	10:A:149:ILE:HD11	1.59	0.84
10:A:169:LYS:CG	10:A:185:LYS:CE	2.54	0.84
4:5:572:VAL:HA	4:5:575:ILE:CD1	2.08	0.84
2:3:484:VAL:HG11	6:7:486:LYS:H	1.42	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:755:LEU:HD22	4:5:760:THR:HG21	1.59	0.84
6:7:71:ALA:HB1	6:7:129:THR:HG21	1.60	0.84
4:5:737:PHE:CG	4:5:743:PHE:CE2	2.65	0.84
10:A:147:VAL:HG21	10:A:149:ILE:CD1	2.08	0.84
10:A:163:ILE:HG22	10:A:164:ASP:H	1.40	0.84
10:A:173:GLU:CB	10:A:182:ASN:CA	2.55	0.84
1:2:803:PHE:HE2	1:2:805:ILE:O	1.19	0.83
2:3:289:GLY:HA3	4:5:511:THR:H	1.43	0.83
4:5:258:LEU:CD2	4:5:294:ILE:CD1	2.56	0.83
2:3:197:ILE:CD1	2:3:251:ILE:HG13	2.07	0.83
3:4:506:LEU:HB3	3:4:510:ARG:NH1	1.93	0.83
2:3:104:ARG:NH1	11:C:86:ASN:O	2.09	0.83
2:3:687:ARG:NH2	6:7:602:ASP:CG	2.35	0.83
3:4:666:ASN:HD22	3:4:668:ARG:HH22	1.26	0.83
7:c:34:LEU:O	7:c:34:LEU:CD1	2.25	0.83
2:3:368:ALA:HB2	2:3:378:LYS:HE2	1.60	0.83
2:3:488:GLU:OE1	6:7:482:TYR:CE2	2.31	0.83
3:4:411:THR:CA	6:7:498:MET:O	2.27	0.83
4:5:90:PHE:HD2	4:5:137:LEU:CD2	1.91	0.83
4:5:737:PHE:CD1	4:5:743:PHE:CE2	2.66	0.83
1:2:551:GLN:HE22	5:6:563:ILE:CG2	1.89	0.83
2:3:166:LEU:HD12	2:3:166:LEU:O	1.78	0.83
4:5:94:ILE:HD11	4:5:135:PHE:HB2	1.59	0.83
11:C:18:CYS:HB3	11:C:72:VAL:HG11	1.61	0.83
10:A:169:LYS:HD3	10:A:185:LYS:HZ1	1.41	0.83
4:5:728:THR:HA	4:5:732:THR:HG21	1.61	0.82
3:4:489:LYS:NZ	3:4:497:GLU:HB2	1.94	0.82
4:5:258:LEU:HD21	4:5:294:ILE:CD1	2.09	0.82
9:B:71:VAL:HB	9:B:75:ILE:HD11	1.60	0.82
9:B:188:ILE:HG22	9:B:192:LEU:CD1	2.08	0.82
5:6:737:LYS:O	5:6:738:ARG:NH1	2.11	0.82
4:5:556:VAL:HG12	4:5:557:LYS:H	1.43	0.82
4:5:259:GLN:HE21	4:5:271:PRO:HG2	1.44	0.82
4:5:591:GLY:O	4:5:593:GLU:N	2.12	0.82
7:c:76:ASP:OD2	10:A:180:VAL:HG21	1.78	0.82
5:6:621:TYR:HB3	5:6:668:ILE:HD13	1.61	0.82
6:7:660:VAL:CG2	6:7:713:VAL:HG11	2.09	0.82
1:2:392:GLU:OE2	1:2:396:THR:OG1	1.95	0.82
1:2:326:ARG:HD3	1:2:637:VAL:HG13	1.59	0.82
1:2:546:GLY:HA3	5:6:796:THR:CG2	2.08	0.82
4:5:197:PHE:CE2	4:5:329:LYS:CE	2.62	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:357:PRO:HA	6:7:374:THR:HA	1.62	0.82
7:c:81:LEU:HD13	7:c:81:LEU:C	2.05	0.82
4:5:349:PHE:HB3	4:5:601:ARG:HH21	1.43	0.82
9:B:118:ASN:OD1	9:B:122:LEU:CD1	2.27	0.82
1:2:697:THR:CG2	5:6:774:VAL:HG21	2.09	0.81
10:A:163:ILE:CG2	10:A:164:ASP:H	1.91	0.81
2:3:159:GLY:HA2	2:3:160:SER:HB2	1.61	0.81
2:3:185:ILE:CG2	4:5:511:THR:HG21	2.10	0.81
3:4:449:ARG:HG3	3:4:450:GLN:H	1.42	0.81
2:3:186:VAL:CG1	2:3:256:ILE:CG2	2.58	0.81
4:5:343:TRP:CE3	4:5:344:ASN:OD1	2.33	0.81
5:6:828:TYR:OH	5:6:832:ARG:NH2	2.13	0.81
7:c:43:LYS:HG2	7:c:484:LEU:HD21	1.61	0.81
9:B:118:ASN:ND2	9:B:122:LEU:HD11	1.94	0.81
9:B:173:LEU:HD12	9:B:177:GLU:OE1	1.80	0.81
2:3:259:GLN:NE2	4:5:464:LEU:N	2.27	0.81
3:4:342:MET:CB	3:4:360:ILE:HD13	2.07	0.81
4:5:258:LEU:CD2	4:5:294:ILE:HD12	2.11	0.81
3:4:602:THR:HA	3:4:619:GLY:HA3	1.63	0.81
3:4:762:ILE:O	3:4:763:THR:OG1	1.98	0.81
8:D:211:ASP:OD2	8:D:213:GLU:CB	2.29	0.81
2:3:200:VAL:HG12	2:3:244:GLU:HB2	1.63	0.81
4:5:362:ARG:HD3	10:A:30:PRO:CB	2.05	0.81
4:5:712:ARG:HG2	4:5:755:LEU:HD21	1.62	0.81
7:c:74:LEU:HD22	10:A:173:GLU:CD	2.05	0.81
2:3:656:LEU:O	2:3:660:VAL:HG23	1.80	0.81
3:4:718:ARG:CB	6:7:661:VAL:CG1	2.57	0.81
4:5:136:GLN:HB2	4:5:280:ARG:HE	1.45	0.81
8:D:169:ILE:CG2	8:D:170:SER:H	1.95	0.81
10:A:169:LYS:HG3	10:A:185:LYS:NZ	1.93	0.81
4:5:137:LEU:HD12	4:5:137:LEU:O	1.81	0.80
2:3:287:LYS:HE2	4:5:510:THR:OG1	1.79	0.80
2:3:568:THR:O	4:5:400:LEU:HD23	1.79	0.80
5:6:796:THR:HG22	5:6:798:ARG:H	1.46	0.80
6:7:453:ASP:OD1	6:7:454:ILE:N	2.13	0.80
10:A:104:ASN:OD1	10:A:104:ASN:O	2.00	0.80
1:2:700:VAL:CG2	5:6:773:LEU:HD22	2.09	0.80
7:c:74:LEU:CD2	10:A:173:GLU:CD	2.54	0.80
4:5:196:ASN:CB	4:5:197:PHE:HD1	1.94	0.80
6:7:258:ILE:HD13	6:7:305:SER:HB3	1.61	0.80
6:7:529:MET:HE1	6:7:537:ILE:HD12	1.61	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:37:ASP:OD2	7:c:251:ILE:HG12	1.81	0.80
10:A:58:GLN:HA	10:A:62:MET:HB2	1.61	0.80
1:2:306:LEU:HD21	1:2:405:HIS:HA	1.62	0.80
2:3:171:LEU:O	2:3:172:THR:HG22	1.82	0.80
4:5:104:LEU:HD13	4:5:104:LEU:C	2.06	0.80
10:A:163:ILE:CG2	10:A:164:ASP:N	2.45	0.80
2:3:391:LYS:HE2	6:7:620:HIS:O	1.81	0.80
10:A:173:GLU:HB3	10:A:182:ASN:CA	2.12	0.80
1:2:444:PHE:CZ	5:6:380:ILE:HD11	2.17	0.80
6:7:662:GLN:HB3	6:7:666:ARG:NH1	1.97	0.80
2:3:501:GLY:C	6:7:346:GLY:HA3	2.07	0.80
3:4:411:THR:HA	6:7:498:MET:O	1.82	0.80
4:5:608:LEU:HD11	4:5:609:LYS:NZ	1.97	0.80
3:4:650:GLU:CD	3:4:796:ARG:HH12	1.90	0.79
4:5:739:ASP:CB	5:6:697:GLY:CA	2.60	0.79
5:6:689:TYR:HA	5:6:690:ASN:HB2	1.64	0.79
11:C:104:PHE:H	11:C:170:GLU:CD	1.88	0.79
1:2:327:ARG:NH1	1:2:386:GLN:HE22	1.80	0.79
5:6:597:TYR:OH	5:6:639:ASP:OD2	2.01	0.79
7:c:325:TYR:CE1	7:c:406:ARG:HD2	2.17	0.79
5:6:379:VAL:HG22	5:6:454:PHE:HB3	1.64	0.79
5:6:790:ARG:NH1	5:6:839:ASP:OD2	2.15	0.79
7:c:410:VAL:HG22	7:c:420:SER:HA	1.63	0.79
2:3:391:LYS:NZ	6:7:623:ASN:HA	1.96	0.79
4:5:570:ASN:HA	4:5:573:ILE:CD1	2.12	0.79
4:5:717:GLU:O	4:5:721:ARG:HB3	1.82	0.79
8:D:231:HIS:HA	8:D:274:ILE:HG22	1.64	0.79
1:2:299:ASP:HB3	1:2:319:ARG:NH1	1.98	0.79
2:3:176:LEU:HA	2:3:298:PHE:HD2	1.48	0.79
2:3:504:THR:OG1	6:7:348:ILE:HD11	1.81	0.79
4:5:571:HIS:O	4:5:575:ILE:CG1	2.28	0.79
7:c:74:LEU:CD2	10:A:173:GLU:OE1	2.31	0.79
2:3:437:SER:HB3	2:3:438:SER:HA	1.63	0.79
3:4:550:LYS:HE3	5:6:735:HIS:HB3	1.63	0.79
10:A:108:ASP:OD2	10:A:177:GLU:HG3	1.83	0.79
4:5:175:ARG:NH2	4:5:196:ASN:OD1	2.16	0.79
2:3:391:LYS:HE3	6:7:623:ASN:HA	1.65	0.79
4:5:710:GLU:O	4:5:713:ARG:HG2	1.83	0.79
5:6:691:ARG:HE	5:6:716:LEU:HD13	1.49	0.79
4:5:560:HIS:CD2	4:5:565:ASP:HB2	2.17	0.78
4:5:734:ARG:O	4:5:738:VAL:HB	1.83	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:933:ALA:O	5:6:936:ILE:HG12	1.82	0.78
6:7:443:ARG:HH12	6:7:449:LYS:NZ	1.81	0.78
11:C:83:LYS:O	11:C:86:ASN:CG	2.24	0.78
2:3:569:HIS:O	4:5:398:LYS:CE	2.31	0.78
10:A:177:GLU:HG2	10:A:178:TYR:CD2	2.19	0.78
3:4:315:ARG:HH12	6:7:251:VAL:H	1.30	0.78
9:B:117:TRP:CZ2	9:B:175:LEU:HD22	2.19	0.78
2:3:216:ASP:OD1	2:3:217:ALA:N	2.16	0.78
2:3:558:ASP:CG	4:5:627:VAL:CG1	2.56	0.78
8:D:137:LYS:CD	8:D:141:ARG:HH22	1.96	0.78
8:D:282:ILE:HD12	8:D:286:LEU:HD13	1.65	0.78
8:D:137:LYS:CD	8:D:141:ARG:NH2	2.30	0.78
2:3:122:ILE:CG2	2:3:123:PRO:CD	2.56	0.78
6:7:17:LEU:HD11	6:7:102:LEU:HD21	0.80	0.78
7:c:43:LYS:HG2	7:c:484:LEU:HD23	1.64	0.78
2:3:391:LYS:CE	6:7:623:ASN:HA	2.13	0.78
3:4:550:LYS:CD	5:6:735:HIS:O	2.30	0.78
3:4:771:VAL:HG11	5:6:725:THR:HA	1.65	0.78
10:A:147:VAL:H	10:A:148:ASP:HA	1.49	0.78
1:2:795:ARG:CA	4:5:560:HIS:HE1	1.97	0.78
1:2:794:ARG:HD2	4:5:565:ASP:CG	2.07	0.78
2:3:186:VAL:HG13	2:3:256:ILE:HG22	1.65	0.78
3:4:201:PHE:HB2	3:4:202:LYS:HA	1.66	0.78
4:5:358:LEU:HD22	10:A:15:ARG:HD2	1.64	0.78
10:A:145:ASP:HA	10:A:146:LEU:HB3	1.65	0.78
10:A:149:ILE:HG21	10:A:151:LEU:HB3	0.79	0.78
3:4:778:ARG:HG2	5:6:719:CYS:CB	2.10	0.77
4:5:711:ILE:CG1	4:5:743:PHE:HE1	1.93	0.77
8:D:189:ILE:HD13	10:A:133:GLU:CD	2.08	0.77
1:2:502:ALA:HB3	1:2:512:LYS:HE2	1.66	0.77
1:2:546:GLY:CA	5:6:796:THR:HG23	2.12	0.77
3:4:284:ILE:HG13	3:4:297:GLU:OE2	1.85	0.77
9:B:188:ILE:HD13	11:C:132:ALA:HB2	1.65	0.77
10:A:169:LYS:CD	10:A:185:LYS:HZ1	1.93	0.77
2:3:53:ALA:O	6:7:217:LYS:NZ	2.17	0.77
9:B:188:ILE:O	9:B:192:LEU:CD1	2.29	0.77
1:2:335:LYS:HE3	1:2:383:ARG:HD2	1.66	0.77
4:5:276:MET:CE	4:5:294:ILE:HD12	2.11	0.77
6:7:358:ALA:HB2	6:7:375:TYR:HE2	1.48	0.77
7:c:600:PRO:C	7:c:601:ILE:HG13	2.09	0.77
10:A:175:GLN:O	10:A:180:VAL:HA	1.85	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:104:PHE:N	11:C:170:GLU:OE2	2.16	0.77
2:3:289:GLY:CA	4:5:509:ILE:HB	2.15	0.77
2:3:568:THR:C	4:5:400:LEU:CD2	2.50	0.77
3:4:519:TYR:HD1	3:4:811:MET:HE1	1.49	0.77
3:4:713:ASP:HB3	3:4:716:ASN:CB	2.14	0.77
3:4:794:THR:HB	5:6:578:SER:CB	2.14	0.77
4:5:258:LEU:HD21	4:5:276:MET:HE1	1.65	0.77
10:A:163:ILE:HD13	10:A:208:ILE:CG2	2.13	0.77
3:4:714:GLU:HB3	6:7:665:ILE:HG12	1.67	0.77
4:5:711:ILE:HD12	4:5:743:PHE:CE1	2.19	0.77
5:6:175:TYR:HA	5:6:178:LEU:HD13	1.67	0.77
8:D:141:ARG:HH21	10:A:148:ASP:C	1.93	0.77
3:4:558:TYR:CD2	5:6:735:HIS:CE1	2.72	0.77
6:7:660:VAL:HG22	6:7:713:VAL:CG1	2.14	0.77
10:A:27:VAL:HG13	10:A:28:ASN:H	1.50	0.77
4:5:722:LEU:HD12	4:5:728:THR:HB	1.65	0.76
6:7:315:ILE:HD13	6:7:333:ILE:HD12	1.67	0.76
8:D:137:LYS:CE	8:D:141:ARG:HH22	1.99	0.76
2:3:412:SER:CB	4:5:650:ILE:HG12	2.11	0.76
6:7:94:LEU:HB2	6:7:95:GLN:HB2	1.66	0.76
10:A:147:VAL:CB	10:A:149:ILE:HG13	2.15	0.76
2:3:263:GLU:CB	4:5:516:ARG:HH12	1.90	0.76
2:3:289:GLY:N	4:5:509:ILE:CG2	2.36	0.76
2:3:558:ASP:CB	4:5:627:VAL:CG1	2.64	0.76
4:5:36:LEU:HD11	4:5:100:ARG:HH22	1.50	0.76
2:3:186:VAL:HG13	2:3:256:ILE:HG21	1.61	0.76
6:7:530:ASP:O	6:7:534:ARG:NH1	2.18	0.76
8:D:279:TYR:CE1	8:D:286:LEU:CD2	2.69	0.76
10:A:165:VAL:CG2	10:A:205:LEU:HD13	2.16	0.76
11:C:117:GLU:OE2	11:C:120:LEU:HD23	1.85	0.76
1:2:306:LEU:HD23	1:2:392:GLU:HB2	1.67	0.76
3:4:726:ASN:C	3:4:727:LEU:HG	2.10	0.76
10:A:108:ASP:OD1	10:A:198:ARG:HD3	1.86	0.76
3:4:438:THR:CG2	3:4:462:ASP:HB3	2.15	0.76
4:5:556:VAL:CG1	4:5:557:LYS:H	1.97	0.76
8:D:145:ARG:NH1	10:A:102:TRP:CE3	2.54	0.76
1:2:235:GLY:HA2	1:2:283:TYR:HE2	1.50	0.75
3:4:408:ASP:OD2	6:7:510:GLY:N	2.18	0.75
9:B:163:LEU:HD22	9:B:189:MET:CE	2.16	0.75
2:3:252:ASP:OD1	2:3:253:HIS:N	2.19	0.75
3:4:726:ASN:CA	3:4:728:TYR:HB3	2.15	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:74:LEU:CG	10:A:182:ASN:OD1	2.33	0.75
3:4:775:VAL:HG11	5:6:721:GLU:HG3	1.67	0.75
5:6:691:ARG:NH1	5:6:716:LEU:HD22	2.00	0.75
7:c:377:TRP:NE1	7:c:385:LYS:HZ2	1.84	0.75
3:4:202:LYS:HB3	3:4:203:TYR:HB3	1.68	0.75
1:2:558:LYS:HE3	5:6:562:GLY:HA2	1.68	0.75
3:4:709:LEU:HD23	3:4:835:ASP:HA	1.68	0.75
1:2:523:VAL:HG12	1:2:525:LYS:HB3	1.68	0.75
6:7:455:ASN:ND2	6:7:541:MET:SD	2.60	0.75
2:3:569:HIS:O	4:5:398:LYS:CD	2.34	0.75
3:4:338:VAL:HG23	5:6:375:ARG:HH12	1.51	0.75
3:4:531:TYR:HB3	3:4:720:LEU:HG	1.67	0.74
3:4:731:ASP:OD1	3:4:732:LYS:N	2.20	0.74
5:6:582:SER:HA	5:6:585:LEU:HD12	1.69	0.74
5:6:792:SER:HA	5:6:793:TYR:HB2	1.67	0.74
7:c:491:LEU:C	7:c:491:LEU:HD12	2.11	0.74
2:3:259:GLN:CD	4:5:464:LEU:N	2.45	0.74
4:5:355:GLU:O	4:5:358:LEU:HG	1.87	0.74
2:3:189:THR:CA	2:3:256:ILE:CD1	2.54	0.74
4:5:407:ARG:NH2	4:5:658:ARG:HH12	1.85	0.74
6:7:443:ARG:NH1	6:7:449:LYS:NZ	2.35	0.74
7:c:469:LEU:HD11	7:c:540:ARG:HD3	1.69	0.74
8:D:256:TYR:CD1	8:D:257:THR:HG23	2.21	0.74
9:B:157:LEU:HD11	11:C:137:HIS:HD2	1.53	0.74
2:3:259:GLN:HE22	4:5:464:LEU:N	1.85	0.74
8:D:259:THR:HG22	8:D:269:LEU:HD21	1.65	0.74
2:3:172:THR:O	2:3:172:THR:HG23	1.87	0.74
2:3:488:GLU:CD	6:7:482:TYR:HE2	1.95	0.74
3:4:684:PRO:HD2	6:7:588:ALA:CB	2.17	0.74
4:5:90:PHE:CD2	4:5:137:LEU:HD22	2.22	0.74
4:5:711:ILE:CD1	4:5:743:PHE:CE1	2.69	0.74
5:6:909:TYR:HA	5:6:912:MET:HE3	1.68	0.74
10:A:32:TYR:HB2	10:A:93:ARG:HH12	1.52	0.74
3:4:243:LEU:HD23	3:4:244:ASP:CA	2.16	0.74
9:B:134:PHE:HB2	9:B:137:PRO:HB3	1.68	0.74
1:2:300:PHE:N	1:2:319:ARG:HH11	1.86	0.74
2:3:33:ASP:HB2	2:3:39:ARG:NH1	2.02	0.74
2:3:166:LEU:HD12	2:3:166:LEU:C	2.11	0.74
4:5:349:PHE:HZ	4:5:609:LYS:NZ	1.85	0.74
8:D:229:PHE:HA	8:D:276:VAL:HG22	1.68	0.74
9:B:157:LEU:HD11	11:C:137:HIS:CD2	2.22	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:411:THR:HB	6:7:498:MET:C	2.13	0.74
5:6:533:ILE:HD12	5:6:544:LYS:HB3	1.70	0.74
4:5:197:PHE:CE2	4:5:329:LYS:CD	2.70	0.74
3:4:409:GLY:HA3	6:7:498:MET:HE3	1.70	0.73
4:5:538:ASP:H	4:5:544:THR:HG22	1.52	0.73
10:A:23:SER:H	10:A:24:ASN:HA	1.53	0.73
4:5:137:LEU:HD12	4:5:137:LEU:C	2.13	0.73
4:5:569:ALA:C	4:5:573:ILE:HD12	2.13	0.73
5:6:134:LYS:H	5:6:135:VAL:HA	1.53	0.73
5:6:404:VAL:CG2	5:6:453:SER:OG	2.35	0.73
6:7:235:LEU:HD22	6:7:357:PRO:HD3	1.68	0.73
2:3:259:GLN:OE1	4:5:464:LEU:N	2.21	0.73
2:3:504:THR:CB	6:7:348:ILE:HD11	2.18	0.73
3:4:512:VAL:HG13	3:4:515:ARG:NH1	2.03	0.73
8:D:216:VAL:CG1	8:D:217:ASN:HA	2.19	0.73
2:3:676:ILE:HG23	6:7:617:THR:HG21	1.70	0.73
4:5:560:HIS:HB2	4:5:564:ARG:CB	2.10	0.73
10:A:165:VAL:HG21	10:A:205:LEU:CD1	2.18	0.73
1:2:504:SER:C	1:2:698:PHE:CE2	2.62	0.73
2:3:99:SER:HA	2:3:158:LYS:HB3	1.71	0.73
2:3:122:ILE:HG21	2:3:221:LEU:HD13	1.67	0.73
4:5:348:MET:CG	11:C:167:LEU:CG	2.66	0.73
4:5:737:PHE:HA	4:5:740:THR:CG2	2.19	0.73
6:7:656:VAL:HG12	6:7:710:ILE:HA	1.71	0.73
3:4:714:GLU:HB3	6:7:665:ILE:HG23	1.70	0.73
5:6:566:ARG:HH21	5:6:659:GLN:HB2	1.53	0.73
6:7:678:LYS:HG3	6:7:679:PHE:N	2.03	0.73
7:c:15:ILE:O	7:c:19:SER:OG	2.05	0.73
1:2:325:THR:HA	1:2:636:ILE:CD1	2.18	0.73
1:2:504:SER:O	1:2:698:PHE:HE2	1.72	0.73
3:4:244:ASP:HB2	3:4:247:ASN:HD21	1.54	0.73
4:5:560:HIS:CD2	4:5:565:ASP:CB	2.72	0.72
5:6:303:GLU:HG3	5:6:356:TRP:CD1	2.24	0.72
5:6:335:ASN:H	5:6:338:CYS:H	1.37	0.72
6:7:601:LEU:CD1	6:7:603:ILE:CD1	2.67	0.72
1:2:507:GLY:HA3	1:2:512:LYS:HE3	1.70	0.72
1:2:591:LEU:HD11	1:2:631:ILE:HD11	1.70	0.72
5:6:776:LYS:O	5:6:779:GLU:HG2	1.88	0.72
3:4:484:GLU:O	3:4:488:ASN:N	2.21	0.72
1:2:700:VAL:HG21	5:6:773:LEU:CD2	2.17	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)
4:5:90:PHE:HD2	4:5:137:LEU:HD22	1.52	0.72
5:6:124:VAL:HG23	5:6:134:LYS:O	1.89	0.72
7:c:28:VAL:O	7:c:81:LEU:HD22	1.89	0.72
2:3:186:VAL:O	4:5:509:ILE:CG2	2.38	0.72
3:4:592:SER:HA	3:4:632:ASP:HB2	1.71	0.72
8:D:161:LEU:C	8:D:169:ILE:HD12	2.14	0.72
1:2:442:ASN:ND2	1:2:444:PHE:O	2.23	0.72
1:2:446:VAL:HG21	5:6:356:TRP:HZ2	1.53	0.72
2:3:234:GLU:OE1	2:3:239:ASN:O	2.08	0.72
2:3:492:GLN:NE2	6:7:471:LYS:HE2	1.05	0.72
3:4:338:VAL:H	5:6:375:ARG:NH1	1.88	0.72
6:7:354:ILE:HG22	6:7:356:LEU:HG	1.72	0.72
2:3:722:ASN:OD1	2:3:723:LYS:N	2.21	0.72
4:5:358:LEU:CD2	10:A:15:ARG:HD2	2.20	0.72
4:5:728:THR:HA	4:5:732:THR:CG2	2.19	0.72
10:A:175:GLN:CD	10:A:199:LEU:CD1	2.62	0.72
10:A:168:LEU:HG	10:A:206:GLN:HB2	1.70	0.72
1:2:839:LYS:HZ3	1:2:864:TYR:HA	1.52	0.72
2:3:519:VAL:HB	2:3:527:ARG:NH1	2.03	0.72
3:4:330:GLY:C	3:4:399:LEU:HD11	2.15	0.72
3:4:527:ALA:HB3	3:4:537:LYS:NZ	2.05	0.72
4:5:355:GLU:HG3	10:A:19:LEU:HD22	1.71	0.71
4:5:556:VAL:CG1	4:5:557:LYS:N	2.52	0.71
5:6:149:ASN:HB3	5:6:262:VAL:O	1.89	0.71
1:2:326:ARG:HD3	1:2:637:VAL:HG22	1.71	0.71
1:2:504:SER:HA	1:2:698:PHE:CZ	2.25	0.71
2:3:484:VAL:CG2	6:7:486:LYS:CB	2.13	0.71
3:4:261:LEU:HB2	3:4:268:VAL:HG11	1.71	0.71
4:5:182:MET:HE3	4:5:187:ARG:HG3	1.70	0.71
4:5:712:ARG:O	4:5:755:LEU:HD21	1.89	0.71
6:7:110:ALA:C	6:7:354:ILE:CD1	2.63	0.71
9:B:168:LEU:HD11	9:B:189:MET:HE3	1.71	0.71
3:4:561:ASP:O	3:4:803:ARG:NH2	2.22	0.71
4:5:258:LEU:CD2	4:5:276:MET:SD	2.78	0.71
7:c:347:LYS:HD2	7:c:401:LEU:HD23	1.72	0.71
1:2:339:PHE:HA	1:2:378:GLU:HB3	1.73	0.71
8:D:224:TRP:CZ3	8:D:283:ARG:HD3	2.26	0.71
2:3:96:ILE:HD13	2:3:129:LEU:HD11	1.72	0.71
4:5:728:THR:OG1	4:5:732:THR:OG1	1.75	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

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:141:ARG:NE	10:A:147:VAL:HG11	2.05	0.71
10:A:166:ARG:O	10:A:168:LEU:CD2	2.39	0.71
2:3:555:GLU:HA	4:5:627:VAL:HG11	1.72	0.71
6:7:110:ALA:C	6:7:354:ILE:HD11	2.13	0.71
7:c:318:LEU:HA	7:c:411:ARG:HA	1.72	0.71
2:3:197:ILE:HD12	2:3:251:ILE:CG1	2.20	0.71
3:4:610:ASP:OD1	3:4:611:THR:N	2.23	0.71
2:3:191:LEU:HG	6:7:329:ARG:NH1	2.06	0.71
2:3:551:ASP:O	4:5:630:ARG:NH1	2.24	0.71
4:5:722:LEU:HD13	4:5:728:THR:CG2	2.21	0.71
6:7:482:TYR:OH	6:7:524:ASP:OD2	2.03	0.71
1:2:387:ARG:HH12	4:5:323:ILE:HD11	1.55	0.70
1:2:795:ARG:HB3	4:5:560:HIS:NE2	2.04	0.70
2:3:393:LEU:CD2	6:7:623:ASN:O	2.30	0.70
3:4:328:LEU:HD11	3:4:461:VAL:HG21	1.73	0.70
4:5:153:SER:OG	4:5:154:GLU:N	2.20	0.70
7:c:266:ASN:CB	7:c:269:ASN:ND2	2.48	0.70
1:2:703:HIS:CG	5:6:804:ILE:CD1	2.73	0.70
1:2:839:LYS:NZ	1:2:864:TYR:HA	2.07	0.70
2:3:291:ARG:HH12	4:5:512:VAL:C	1.96	0.70
2:3:502:ILE:HG23	6:7:244:ILE:HG13	1.66	0.70
2:3:671:LEU:HD22	6:7:621:MET:CB	2.11	0.70
6:7:662:GLN:CB	6:7:666:ARG:HH12	2.02	0.70
2:3:400:ARG:NH2	2:3:544:ASP:OD1	2.24	0.70
3:4:330:GLY:O	3:4:399:LEU:CD1	2.40	0.70
3:4:417:LEU:HD22	3:4:463:VAL:HG11	1.71	0.70
4:5:737:PHE:CD1	4:5:743:PHE:HE2	2.07	0.70
7:c:81:LEU:HD13	7:c:82:LEU:CA	2.20	0.70
7:c:349:SER:HA	7:c:351:TRP:CZ3	2.26	0.70
8:D:269:LEU:CD1	8:D:277:MET:HE1	2.21	0.70
4:5:71:TYR:HD1	7:c:415:TYR:HE1	1.39	0.70
4:5:170:SER:HB3	4:5:255:PHE:HB2	1.73	0.70
6:7:601:LEU:CD1	6:7:603:ILE:HD12	2.22	0.70
9:B:188:ILE:CG2	9:B:192:LEU:HD11	2.20	0.70
1:2:241:SER:OG	1:2:296:ARG:CG	2.40	0.70
4:5:355:GLU:CG	10:A:19:LEU:HD22	2.22	0.70
5:6:781:ARG:HG2	5:6:795:ILE:HB	1.74	0.70
4:5:349:PHE:CZ	4:5:609:LYS:NZ	2.57	0.70
4:5:407:ARG:CZ	4:5:658:ARG:HH12	2.04	0.70
10:A:175:GLN:HG3	10:A:181:PHE:HB2	1.73	0.70
5:6:909:TYR:HA	5:6:912:MET:CE	2.20	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:161:LEU:O	8:D:169:ILE:HD13	1.89	0.70
1:2:690:GLU:O	1:2:694:ARG:CG	2.39	0.70
2:3:716:ARG:HH22	2:3:724:VAL:HB	1.57	0.70
4:5:343:TRP:CG	4:5:344:ASN:H	2.09	0.70
7:c:526:ARG:HH11	7:c:565:LEU:HB2	1.57	0.70
1:2:766:TYR:OH	1:2:823:MET:O	2.10	0.70
2:3:347:ILE:O	2:3:351:ASN:ND2	2.24	0.70
3:4:726:ASN:O	3:4:727:LEU:HG	1.92	0.70
1:2:843:ASP:OD1	1:2:844:SER:N	2.25	0.69
2:3:122:ILE:CG2	2:3:221:LEU:HD11	2.06	0.69
3:4:552:PHE:CZ	5:6:734:LEU:O	2.44	0.69
10:A:175:GLN:CD	10:A:199:LEU:HD11	2.16	0.69
2:3:186:VAL:O	4:5:509:ILE:HG21	1.92	0.69
3:4:512:VAL:HG13	3:4:515:ARG:HH12	1.57	0.69
4:5:355:GLU:HA	10:A:19:LEU:HD21	1.73	0.69
5:6:379:VAL:HG22	5:6:454:PHE:HD2	1.57	0.69
5:6:940:TYR:CD1	5:6:943:GLN:NE2	2.58	0.69
8:D:211:ASP:OD1	8:D:213:GLU:HB2	1.92	0.69
8:D:211:ASP:CG	8:D:213:GLU:CB	2.65	0.69
1:2:495:ASP:CG	1:2:509:ARG:HH12	2.00	0.69
1:2:690:GLU:O	1:2:694:ARG:HG2	1.92	0.69
2:3:234:GLU:OE1	2:3:238:GLY:C	2.34	0.69
3:4:531:TYR:CZ	3:4:719:GLU:HB2	2.27	0.69
4:5:708:LEU:HD22	4:5:712:ARG:NH2	2.07	0.69
2:3:440:VAL:HG21	2:3:482:ASP:OD2	1.92	0.69
4:5:554:PHE:O	4:5:556:VAL:HG23	1.92	0.69
4:5:594:ILE:HD12	4:5:594:ILE:N	2.08	0.69
5:6:625:ALA:HB3	5:6:626:GLY:HA2	1.74	0.69
6:7:601:LEU:HD13	6:7:603:ILE:HD11	1.73	0.69
4:5:358:LEU:HD22	10:A:15:ARG:CD	2.23	0.69
8:D:137:LYS:HD3	8:D:141:ARG:NH2	2.07	0.69
4:5:721:ARG:C	4:5:722:LEU:HG	2.16	0.69
5:6:575:GLY:N	5:6:581:LYS:HZ3	1.90	0.69
8:D:211:ASP:OD1	8:D:213:GLU:CB	2.39	0.69
9:B:118:ASN:HD21	9:B:122:LEU:HD11	1.57	0.69
1:2:326:ARG:CG	1:2:637:VAL:HG22	2.22	0.69
2:3:186:VAL:HG11	2:3:256:ILE:HG21	1.72	0.69
2:3:197:ILE:CD1	2:3:251:ILE:CG1	2.71	0.69
3:4:304:ARG:NH1	3:4:423:LEU:HD21	2.07	0.69
4:5:258:LEU:HD21	4:5:276:MET:CE	2.21	0.69
4:5:572:VAL:HA	4:5:575:ILE:HD11	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:15:ILE:CD1	7:c:121:TYR:HE2	2.05	0.69
7:c:434:VAL:HG13	7:c:498:LEU:HD13	1.75	0.69
8:D:145:ARG:NH1	10:A:102:TRP:HE3	1.89	0.69
8:D:145:ARG:HH12	10:A:102:TRP:HE3	1.41	0.69
3:4:557:ARG:HH11	3:4:668:ARG:HH21	1.39	0.69
4:5:369:ILE:HG13	4:5:593:GLU:CG	2.23	0.69
4:5:258:LEU:HD23	4:5:294:ILE:HD11	1.74	0.69
5:6:290:ILE:HD12	5:6:454:PHE:CZ	2.25	0.69
7:c:84:VAL:HG22	7:c:123:LEU:HD12	1.73	0.69
7:c:559:SER:HA	7:c:560:GLU:HB3	1.73	0.69
3:4:304:ARG:HH12	3:4:423:LEU:HD21	1.56	0.68
3:4:774:TYR:OH	3:4:778:ARG:NH2	2.26	0.68
5:6:945:GLU:O	5:6:948:LEU:CG	2.37	0.68
10:A:26:ASP:O	10:A:27:VAL:HG12	1.93	0.68
3:4:531:TYR:CZ	3:4:716:ASN:OD1	2.46	0.68
1:2:504:SER:HA	1:2:698:PHE:CE2	2.28	0.68
4:5:722:LEU:CD1	4:5:728:THR:HB	2.23	0.68
3:4:236:LEU:HB3	3:4:238:THR:HG23	1.74	0.68
3:4:483:GLN:HG3	3:4:484:GLU:H	1.56	0.68
5:6:119:LEU:HD11	5:6:188:VAL:HG21	1.74	0.68
5:6:600:GLY:HA2	5:6:602:ALA:N	2.08	0.68
8:D:137:LYS:HE2	8:D:141:ARG:HH22	1.58	0.68
1:2:236:GLU:OE2	7:c:361:LYS:HB2	1.92	0.68
1:2:375:VAL:HG11	4:5:324:ARG:HH22	1.58	0.68
1:2:696:ALA:CA	5:6:800:LEU:HD21	2.23	0.68
2:3:195:LYS:HE2	2:3:216:ASP:OD2	1.93	0.68
3:4:713:ASP:CB	3:4:716:ASN:HB2	2.21	0.68
3:4:714:GLU:HB3	6:7:665:ILE:CG1	2.23	0.68
4:5:375:ALA:N	4:5:385:LYS:HE3	2.09	0.68
4:5:415:LEU:CD1	4:5:555:ILE:CG1	2.64	0.68
3:4:762:ILE:HG13	3:4:763:THR:N	2.09	0.68
4:5:87:ILE:HD13	4:5:331:LEU:HD21	1.74	0.68
4:5:560:HIS:O	4:5:562:GLU:N	2.23	0.68
4:5:737:PHE:CB	4:5:743:PHE:HD2	1.95	0.68
9:B:94:THR:O	9:B:98:LEU:HG	1.94	0.68
10:A:149:ILE:CG2	10:A:151:LEU:HD12	2.22	0.68
10:A:167:VAL:CG1	10:A:185:LYS:HA	2.23	0.68
3:4:342:MET:CB	3:4:360:ILE:HD11	2.04	0.68
3:4:395:GLN:HB2	3:4:424:VAL:HG13	1.75	0.68
4:5:574:ASN:O	4:5:576:HIS:ND1	2.27	0.68
9:B:17:GLN:HA	9:B:20:VAL:HG12	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:191:LEU:HG	6:7:329:ARG:HH12	1.59	0.68
2:3:216:ASP:CG	2:3:217:ALA:H	2.02	0.68
5:6:916:ILE:HD13	5:6:919:LYS:HE3	1.76	0.68
6:7:118:CYS:SG	6:7:198:ARG:NH2	2.66	0.68
7:c:125:ALA:HB1	7:c:247:VAL:HG13	1.74	0.68
10:A:166:ARG:O	10:A:168:LEU:HD22	1.94	0.68
10:A:175:GLN:HG3	10:A:181:PHE:HD2	1.58	0.68
2:3:43:ARG:HH12	2:3:137:ASP:HB3	1.58	0.68
3:4:330:GLY:O	3:4:399:LEU:HD11	1.94	0.68
4:5:40:LEU:O	4:5:40:LEU:CG	2.42	0.68
4:5:343:TRP:CZ3	4:5:344:ASN:OD1	2.47	0.68
4:5:594:ILE:H	4:5:594:ILE:CD1	2.06	0.68
7:c:285:ALA:HB1	7:c:288:TYR:HB3	1.76	0.68
2:3:391:LYS:CE	6:7:622:HIS:C	2.66	0.67
3:4:798:LEU:HD21	5:6:728:ALA:HA	1.75	0.67
4:5:375:ALA:H	4:5:385:LYS:HE3	1.58	0.67
7:c:315:THR:N	7:c:316:LEU:HB3	2.09	0.67
7:c:249:ASN:HB2	7:c:254:GLN:HE22	1.58	0.67
1:2:242:LEU:HD13	1:2:275:ALA:HB1	1.77	0.67
2:3:130:THR:HG22	2:3:153:TRP:HD1	1.59	0.67
2:3:487:HIS:HE2	2:3:539:LEU:HG	1.57	0.67
4:5:572:VAL:HA	4:5:575:ILE:HD12	1.74	0.67
5:6:759:ARG:HA	5:6:812:ARG:HH21	1.59	0.67
6:7:459:MET:C	6:7:466:LYS:HZ3	2.01	0.67
3:4:563:ASN:ND2	3:4:649:MET:SD	2.68	0.67
8:D:162:ASN:CA	8:D:169:ILE:HD12	2.25	0.67
10:A:149:ILE:CG2	10:A:151:LEU:CD1	2.71	0.67
1:2:213:SER:OG	1:2:217:GLU:OE2	2.10	0.67
2:3:289:GLY:N	4:5:509:ILE:CB	2.34	0.67
3:4:370:ARG:HB3	3:4:371:CYS:SG	2.35	0.67
5:6:379:VAL:HG22	5:6:454:PHE:CD2	2.28	0.67
6:7:388:PHE:HB2	6:7:389:ALA:HA	1.75	0.67
7:c:79:ASN:O	7:c:118:ARG:HA	1.93	0.67
8:D:229:PHE:CD1	8:D:276:VAL:HG22	2.11	0.67
10:A:29:LEU:HD11	10:A:96:ILE:HG12	1.77	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
8:D:141:ARG:HE	10:A:149:ILE:CG1	2.07	0.67
8:D:230:ILE:HD11	8:D:277:MET:HE3	1.75	0.67
8:D:282:ILE:O	8:D:286:LEU:HD13	1.94	0.67
9:B:118:ASN:CG	9:B:122:LEU:CD1	2.66	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:108:ASP:OD2	10:A:177:GLU:CG	2.42	0.67
2:3:118:PRO:O	2:3:122:ILE:HG22	1.94	0.67
2:3:201:HIS:HD1	2:3:243:THR:HA	1.58	0.67
2:3:689:ASP:O	2:3:692:THR:OG1	2.10	0.67
4:5:342:ILE:HG13	4:5:342:ILE:O	1.94	0.67
10:A:145:ASP:HB3	10:A:147:VAL:HG23	1.77	0.67
3:4:180:ILE:O	3:4:180:ILE:HD12	1.95	0.67
3:4:830:ARG:HD3	3:4:833:ILE:HD12	1.76	0.67
4:5:264:LEU:HB2	4:5:265:VAL:HG22	1.77	0.67
6:7:443:ARG:HH12	6:7:449:LYS:HZ1	1.43	0.67
3:4:417:LEU:HD12	3:4:417:LEU:O	1.95	0.67
4:5:739:ASP:HB2	5:6:697:GLY:CA	2.24	0.67
6:7:593:ARG:HG2	6:7:687:ARG:NH1	2.10	0.67
3:4:410:GLN:C	6:7:498:MET:O	2.37	0.67
4:5:258:LEU:CD2	4:5:294:ILE:HD11	2.24	0.67
4:5:722:LEU:HD13	4:5:728:THR:HG22	1.76	0.67
5:6:811:ALA:HB2	5:6:819:ILE:CG1	2.24	0.67
8:D:259:THR:HG22	8:D:269:LEU:HD22	1.70	0.67
3:4:532:GLU:HG2	3:4:533:LEU:H	1.59	0.66
5:6:400:VAL:HG23	5:6:455:LEU:CB	2.24	0.66
6:7:428:VAL:HG21	6:7:600:MET:HE2	1.77	0.66
6:7:652:MET:HG2	6:7:708:VAL:HG11	1.77	0.66
7:c:308:ASN:HA	7:c:309:SER:HB2	1.76	0.66
3:4:330:GLY:C	3:4:399:LEU:CD1	2.68	0.66
3:4:714:GLU:O	6:7:665:ILE:CG1	2.43	0.66
8:D:211:ASP:CG	8:D:213:GLU:HB3	2.20	0.66
2:3:484:VAL:CB	6:7:486:LYS:HB2	2.21	0.66
2:3:688:ASN:OD1	6:7:604:PRO:HB2	1.94	0.66
4:5:71:TYR:HD1	7:c:415:TYR:CE1	2.13	0.66
6:7:135:LYS:HB2	6:7:141:VAL:HG11	1.77	0.66
7:c:29:ILE:HG22	7:c:82:LEU:HB3	1.77	0.66
1:2:503:PRO:O	1:2:698:PHE:HZ	1.76	0.66
6:7:484:THR:HG23	6:7:487:GLY:HA2	1.76	0.66
1:2:684:ARG:HB3	1:2:685:ASP:HB2	1.60	0.66
2:3:272:ARG:HD2	4:5:171:VAL:HG13	1.76	0.66
2:3:568:THR:CG2	4:5:400:LEU:CD2	2.67	0.66
5:6:945:GLU:HA	5:6:948:LEU:HD23	1.77	0.66
2:3:443:THR:HG21	6:7:319:SER:OG	1.94	0.66
2:3:566:LEU:CD2	4:5:614:LEU:CD1	2.60	0.66
5:6:112:ARG:HH22	5:6:183:LYS:HG3	1.60	0.66
8:D:267:VAL:HG11	9:B:167:HIS:CE1	2.30	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:698:THR:CG2	6:7:463:GLY:N	2.58	0.66
3:4:243:LEU:CG	3:4:244:ASP:H	2.08	0.66
5:6:767:LYS:HE3	5:6:769:ALA:HB3	1.77	0.66
6:7:543:GLN:HG3	6:7:544:GLN:H	1.60	0.66
8:D:211:ASP:OD1	8:D:216:VAL:HG22	1.94	0.66
8:D:282:ILE:HD12	8:D:286:LEU:CD1	2.19	0.66
9:B:112:PHE:HB3	9:B:152:ARG:NH1	2.10	0.66
3:4:398:LYS:NZ	3:4:400:GLN:OE1	2.29	0.66
3:4:509:ILE:HD11	3:4:749:MET:HE2	1.77	0.66
4:5:346:VAL:HG12	4:5:347:THR:H	1.60	0.66
5:6:923:VAL:CB	5:6:929:GLU:HB2	2.26	0.66
11:C:18:CYS:HB3	11:C:72:VAL:CG1	2.25	0.66
1:2:678:ASP:OD1	1:2:679:ILE:N	2.29	0.66
4:5:560:HIS:CG	4:5:565:ASP:HB2	2.31	0.66
5:6:609:THR:HG22	5:6:610:ALA:H	1.59	0.66
2:3:317:PHE:HE2	4:5:176:ALA:HB2	1.60	0.66
3:4:714:GLU:CD	6:7:665:ILE:HG23	2.20	0.66
6:7:444:VAL:HG22	6:7:448:MET:H	1.60	0.66
11:C:101:ASN:HB2	11:C:102:SER:C	2.21	0.65
1:2:703:HIS:CE1	5:6:801:GLU:HG2	2.31	0.65
2:3:492:GLN:CD	6:7:471:LYS:HE2	2.04	0.65
4:5:372:ASN:CB	4:5:593:GLU:OE2	2.44	0.65
6:7:659:TYR:CG	6:7:710:ILE:HD11	2.31	0.65
7:c:151:THR:HA	7:c:152:LEU:HB3	1.76	0.65
10:A:67:VAL:HG11	11:C:25:PRO:HD2	1.77	0.65
1:2:601:LYS:NZ	1:2:643:ARG:HD2	2.11	0.65
2:3:566:LEU:CD1	4:5:619:ALA:CB	2.73	0.65
3:4:714:GLU:O	6:7:665:ILE:HG13	1.96	0.65
7:c:540:ARG:HH22	7:c:574:GLU:HB2	1.62	0.65
10:A:81:ARG:NH1	11:C:9:VAL:O	2.28	0.65
1:2:601:LYS:NZ	1:2:643:ARG:NH1	2.45	0.65
2:3:229:ALA:HB1	6:7:370:LEU:HD23	1.79	0.65
2:3:502:ILE:CA	6:7:346:GLY:O	2.43	0.65
4:5:355:GLU:HB2	10:A:19:LEU:CD2	2.27	0.65
4:5:739:ASP:HB2	5:6:697:GLY:HA3	1.75	0.65
5:6:959:ARG:O	5:6:963:LYS:HG3	1.97	0.65
6:7:670:ASP:OD1	6:7:671:SER:N	2.30	0.65
2:3:525:VAL:HG11	2:3:552:ASP:OD2	1.97	0.65
3:4:726:ASN:HA	3:4:728:TYR:CD2	2.32	0.65
4:5:711:ILE:CB	4:5:743:PHE:CE1	2.76	0.65
6:7:259:ALA:CB	6:7:270:PHE:CD1	2.60	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:331:HIS:ND1	7:c:496:ILE:HD13	2.12	0.65
4:5:59:TYR:HD1	4:5:135:PHE:HE1	1.44	0.65
11:C:86:ASN:OD1	11:C:87:ALA:N	2.29	0.65
11:C:134:GLU:OE2	11:C:138:HIS:HD2	1.79	0.65
4:5:737:PHE:HA	4:5:740:THR:HG22	1.78	0.65
9:B:188:ILE:O	9:B:188:ILE:HG22	1.97	0.65
1:2:283:TYR:O	1:2:285:ASP:N	2.30	0.65
1:2:703:HIS:HA	5:6:565:LEU:CD2	2.27	0.65
2:3:524:ASP:OD1	2:3:532:ASN:ND2	2.30	0.65
2:3:542:ARG:NH1	2:3:700:ARG:NH1	2.45	0.65
2:3:701:THR:O	2:3:704:THR:OG1	2.14	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
2:3:391:LYS:HG3	6:7:623:ASN:OD1	1.95	0.65
3:4:233:MET:HE3	3:4:239:SER:HA	1.77	0.65
5:6:541:GLU:O	5:6:545:LYS:NZ	2.28	0.65
6:7:393:LEU:HA	6:7:394:THR:HB	1.77	0.65
7:c:57:GLN:OE1	10:A:187:SER:OG	2.15	0.65
8:D:206:LEU:HB3	10:A:83:LYS:NZ	2.12	0.65
10:A:108:ASP:HA	10:A:198:ARG:HH11	1.62	0.65
1:2:294:HIS:O	1:2:296:ARG:NH1	2.29	0.65
1:2:327:ARG:HH12	4:5:272:ARG:NH2	1.94	0.65
1:2:436:GLY:N	1:2:437:ASN:HA	2.10	0.65
1:2:505:ILE:HD13	1:2:552:ILE:HG13	1.79	0.65
2:3:116:VAL:HG12	2:3:117:GLU:HG3	1.78	0.65
2:3:163:ALA:HB3	2:3:164:HIS:CG	2.31	0.65
2:3:193:ARG:CD	6:7:371:LEU:HD11	2.26	0.65
2:3:410:ASP:O	2:3:413:THR:OG1	2.11	0.65
3:4:330:GLY:CA	3:4:399:LEU:HD11	2.26	0.65
4:5:36:LEU:HD11	4:5:100:ARG:NH2	2.11	0.65
1:2:300:PHE:O	1:2:302:THR:OG1	2.10	0.64
1:2:505:ILE:HG22	1:2:507:GLY:H	1.62	0.64
2:3:194:PRO:O	6:7:371:LEU:HD12	1.97	0.64
2:3:391:LYS:CE	6:7:620:HIS:O	2.44	0.64
2:3:476:ASP:HA	2:3:483:ARG:HH12	1.61	0.64
2:3:671:LEU:HB3	6:7:621:MET:CB	2.26	0.64
2:3:197:ILE:HD11	2:3:251:ILE:HB	1.79	0.64
3:4:315:ARG:NH1	6:7:251:VAL:HG12	2.13	0.64
4:5:369:ILE:CG1	4:5:593:GLU:CG	2.75	0.64
5:6:379:VAL:CG2	5:6:454:PHE:HD2	2.10	0.64
7:c:74:LEU:HD22	10:A:182:ASN:CG	2.20	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:596:VAL:HG23	5:6:631:ALA:HB2	1.79	0.64
5:6:776:LYS:HD3	5:6:828:TYR:HB2	1.79	0.64
6:7:333:ILE:HG12	6:7:376:LEU:HB3	1.78	0.64
7:c:34:LEU:HD13	7:c:34:LEU:C	2.18	0.64
9:B:7:LEU:N	9:B:8:GLN:HA	2.10	0.64
9:B:57:ASP:OD1	9:B:58:LYS:N	2.28	0.64
10:A:93:ARG:O	10:A:97:LEU:CG	2.44	0.64
2:3:476:ASP:O	2:3:483:ARG:NH1	2.29	0.64
4:5:534:LYS:NZ	4:5:746:LEU:HD11	2.12	0.64
7:c:621:ARG:HB3	7:c:623:ASP:OD2	1.96	0.64
1:2:811:GLU:OE2	1:2:815:ARG:NH1	2.31	0.64
3:4:437:GLY:HA3	3:4:463:VAL:HA	1.80	0.64
3:4:489:LYS:HZ1	3:4:497:GLU:HB2	1.61	0.64
4:5:167:ILE:HD11	4:5:259:GLN:HB2	1.79	0.64
7:c:267:LEU:HD21	7:c:302:LEU:HD13	1.79	0.64
2:3:568:THR:HG22	4:5:400:LEU:HD22	1.76	0.64
4:5:259:GLN:HE21	4:5:271:PRO:CG	2.10	0.64
7:c:401:LEU:HB3	7:c:404:ILE:HD11	1.80	0.64
7:c:561:ASP:HB3	7:c:562:LYS:HG2	1.80	0.64
4:5:94:ILE:CD1	4:5:135:PHE:HB2	2.28	0.64
5:6:531:ARG:HD2	5:6:745:PRO:HG3	1.80	0.64
5:6:956:GLU:O	5:6:960:LEU:HG	1.98	0.64
1:2:792:ASP:O	1:2:859:ARG:NH1	2.31	0.64
4:5:156:VAL:HG22	4:5:298:TYR:CE2	2.33	0.64
5:6:696:ARG:HA	5:6:706:MET:HE1	1.78	0.64
8:D:212:THR:N	8:D:213:GLU:HA	2.13	0.64
2:3:187:THR:O	2:3:257:THR:OG1	2.12	0.64
2:3:519:VAL:CG1	2:3:520:PHE:HD2	2.05	0.64
3:4:370:ARG:HD3	3:4:379:PRO:HA	1.79	0.64
3:4:371:CYS:HB2	3:4:377:ASN:N	2.13	0.64
6:7:258:ILE:HD13	6:7:305:SER:CB	2.28	0.64
7:c:585:THR:HG22	7:c:603:ASN:HB2	1.79	0.64
1:2:540:LEU:HB2	1:2:677:PHE:CD2	2.33	0.64
4:5:588:GLU:O	4:5:592:SER:N	2.31	0.64
4:5:725:GLY:C	4:5:728:THR:CG2	2.71	0.64
1:2:302:THR:O	1:2:303:ILE:HG22	1.98	0.63
1:2:327:ARG:HD2	1:2:386:GLN:NE2	2.13	0.63
4:5:712:ARG:O	4:5:755:LEU:HD11	1.99	0.63
7:c:92:LEU:HA	7:c:95:PHE:HB3	1.79	0.63
9:B:115:LEU:HD13	9:B:119:TRP:HE1	1.63	0.63
10:A:173:GLU:HA	10:A:183:LEU:HB2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:177:GLU:CG	10:A:178:TYR:CD2	2.81	0.63
1:2:524:PRO:HB2	1:2:525:LYS:HA	1.79	0.63
4:5:392:LEU:O	4:5:607:ARG:NH2	2.30	0.63
6:7:269:VAL:HG21	6:7:285:THR:HB	1.81	0.63
3:4:371:CYS:HB2	3:4:377:ASN:H	1.63	0.63
4:5:156:VAL:HG22	4:5:298:TYR:HE2	1.63	0.63
3:4:386:HIS:CE1	5:6:405:PRO:HD3	2.33	0.63
3:4:517:ASP:O	3:4:520:SER:OG	2.14	0.63
5:6:811:ALA:HB2	5:6:819:ILE:HG12	1.80	0.63
7:c:281:ASP:OD2	7:c:406:ARG:NH1	2.30	0.63
8:D:137:LYS:C	8:D:141:ARG:NH1	2.32	0.63
2:3:390:GLU:HG2	2:3:509:ARG:HH12	1.64	0.63
4:5:31:PHE:CD2	4:5:90:PHE:HD1	2.17	0.63
5:6:335:ASN:H	5:6:337:SER:HA	1.64	0.63
6:7:106:ILE:HA	6:7:113:PHE:CE2	2.34	0.63
7:c:588:TYR:OH	7:c:601:ILE:HG21	1.98	0.63
6:7:331:LEU:HD11	6:7:355:PHE:HE1	1.63	0.63
1:2:216:LEU:HD12	1:2:217:GLU:HB3	1.79	0.63
3:4:650:GLU:OE1	3:4:796:ARG:NH1	2.31	0.63
4:5:197:PHE:HE2	4:5:329:LYS:HG3	1.58	0.63
4:5:554:PHE:HE1	4:5:687:SER:HB2	1.63	0.63
5:6:566:ARG:HH12	5:6:656:MET:C	2.04	0.63
6:7:82:LEU:HD23	6:7:85:ILE:HD12	1.80	0.63
2:3:287:LYS:HD2	4:5:510:THR:CG2	2.28	0.63
2:3:679:ILE:HD11	6:7:617:THR:CG2	2.29	0.63
3:4:714:GLU:N	3:4:715:LYS:HB3	2.11	0.63
4:5:369:ILE:CG1	4:5:593:GLU:HG2	2.28	0.63
4:5:713:ARG:C	4:5:715:GLU:N	2.52	0.63
5:6:940:TYR:CE1	5:6:943:GLN:NE2	2.67	0.63
7:c:81:LEU:CD1	7:c:82:LEU:N	2.48	0.63
8:D:200:LYS:HB2	8:D:201:TYR:HB2	1.81	0.63
1:2:334:LEU:HD13	4:5:322:ALA:HB3	1.79	0.63
2:3:400:ARG:HG3	2:3:493:GLN:OE1	1.98	0.63
4:5:156:VAL:HA	4:5:298:TYR:HD2	1.64	0.63
4:5:415:LEU:O	4:5:555:ILE:HA	1.99	0.63
4:5:608:LEU:HD11	4:5:609:LYS:HZ3	1.63	0.63
6:7:260:TYR:HA	6:7:300:MET:HA	1.81	0.63
6:7:476:ILE:HD13	6:7:638:MET:HE1	1.79	0.63
10:A:175:GLN:HG3	10:A:181:PHE:CD2	2.34	0.63
2:3:445:ALA:HB3	2:3:499:LYS:HD2	1.81	0.62
3:4:558:TYR:CZ	5:6:735:HIS:CE1	2.87	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:725:THR:O	3:4:728:TYR:CG	2.52	0.62
4:5:608:LEU:HD11	4:5:609:LYS:HZ2	1.62	0.62
4:5:733:LEU:HD23	4:5:733:LEU:C	2.24	0.62
5:6:775:GLU:O	5:6:779:GLU:N	2.31	0.62
6:7:208:SER:HB2	6:7:209:GLN:HA	1.80	0.62
6:7:262:CYS:SG	6:7:263:ASP:N	2.70	0.62
7:c:32:SER:OG	7:c:84:VAL:O	2.17	0.62
2:3:396:GLY:HA2	6:7:421:GLU:OE2	1.96	0.62
3:4:531:TYR:CD2	3:4:720:LEU:CD1	2.74	0.62
6:7:538:HIS:CD2	6:7:593:ARG:HE	2.17	0.62
8:D:224:TRP:HZ3	8:D:283:ARG:HD3	1.62	0.62
10:A:173:GLU:CG	10:A:182:ASN:HA	2.28	0.62
6:7:680:SER:HB2	6:7:681:PHE:HA	1.82	0.62
7:c:81:LEU:C	7:c:81:LEU:CD1	2.71	0.62
8:D:266:GLU:HB3	8:D:268:GLU:HG3	1.81	0.62
5:6:290:ILE:CD1	5:6:454:PHE:HZ	2.03	0.62
5:6:550:GLN:HA	5:6:569:ILE:HG21	1.81	0.62
7:c:413:LEU:HD23	7:c:416:ARG:HD2	1.81	0.62
11:C:27:LEU:HD12	11:C:38:ILE:HG12	1.81	0.62
2:3:234:GLU:OE1	2:3:239:ASN:C	2.43	0.62
2:3:467:ARG:NH1	2:3:509:ARG:CZ	2.63	0.62
3:4:398:LYS:HZ3	3:4:414:SER:HB2	1.65	0.62
7:c:29:ILE:HD11	7:c:58:ILE:HG12	1.81	0.62
7:c:31:VAL:HG22	7:c:42:THR:HG21	1.80	0.62
1:2:446:VAL:HG22	5:6:356:TRP:HE1	1.64	0.62
1:2:447:PHE:HB2	5:6:302:PRO:HG2	1.81	0.62
3:4:339:ILE:HG21	5:6:416:LYS:HZ2	1.65	0.62
5:6:122:PHE:HA	5:6:123:SER:HB2	1.81	0.62
5:6:932:THR:OG1	5:6:934:VAL:HG12	1.99	0.62
6:7:276:ARG:HG3	6:7:277:THR:HG23	1.80	0.62
7:c:150:ASP:H	7:c:151:THR:HA	1.63	0.62
7:c:516:LYS:HE2	7:c:518:LEU:HD11	1.80	0.62
9:B:139:HIS:N	9:B:142:ARG:HH11	1.83	0.62
10:A:169:LYS:H	10:A:185:LYS:CD	2.12	0.62
2:3:105:GLU:OE1	2:3:105:GLU:N	2.33	0.62
3:4:450:GLN:HB3	3:4:452:VAL:HG22	1.80	0.62
4:5:348:MET:HG3	11:C:167:LEU:CD1	2.08	0.62
4:5:722:LEU:CD1	4:5:728:THR:CG2	2.77	0.62
5:6:522:ASP:HB2	5:6:525:ILE:HG23	1.82	0.62
10:A:173:GLU:HB2	10:A:182:ASN:CA	2.21	0.62
2:3:679:ILE:HD11	6:7:617:THR:HG22	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:449:ARG:O	3:4:451:ARG:N	2.33	0.62
3:4:519:TYR:CD1	3:4:811:MET:HE1	2.33	0.62
4:5:346:VAL:HG12	4:5:347:THR:N	2.14	0.62
4:5:754:ALA:O	4:5:757:LYS:HG2	1.99	0.62
5:6:916:ILE:HD13	5:6:919:LYS:CE	2.29	0.62
6:7:81:ASP:HA	6:7:205:LYS:HG2	1.81	0.62
6:7:718:ARG:HA	6:7:721:ARG:NH1	2.14	0.62
8:D:178:ASP:HA	8:D:181:LYS:NZ	2.14	0.62
9:B:157:LEU:HD21	11:C:137:HIS:NE2	2.13	0.62
1:2:216:LEU:HD12	1:2:217:GLU:H	1.65	0.62
1:2:794:ARG:HD2	4:5:565:ASP:OD1	2.00	0.62
4:5:708:LEU:CD2	4:5:712:ARG:HE	2.12	0.62
1:2:526:ASN:HA	1:2:532:SER:HA	1.81	0.62
2:3:122:ILE:HG13	2:3:155:LEU:HD12	1.82	0.62
3:4:243:LEU:HD23	3:4:244:ASP:C	2.25	0.62
3:4:489:LYS:HZ3	3:4:497:GLU:HB2	1.61	0.62
7:c:526:ARG:NH1	7:c:565:LEU:HB2	2.14	0.62
8:D:268:GLU:C	8:D:269:LEU:HD22	2.25	0.62
9:B:188:ILE:O	9:B:188:ILE:CG2	2.48	0.62
11:C:162:THR:N	11:C:163:SER:HA	2.15	0.62
3:4:411:THR:CA	6:7:498:MET:C	2.73	0.61
5:6:908:LYS:HE3	5:6:956:GLU:OE2	1.99	0.61
6:7:491:VAL:HA	6:7:494:THR:HG22	1.81	0.61
8:D:267:VAL:N	8:D:268:GLU:HA	2.15	0.61
9:B:28:PHE:HE1	9:B:68:SER:HB2	1.65	0.61
4:5:369:ILE:HG13	4:5:593:GLU:HG3	1.82	0.61
4:5:730:TYR:CE2	4:5:731:GLN:HG2	2.34	0.61
6:7:659:TYR:CD2	6:7:710:ILE:HD11	2.35	0.61
7:c:392:PHE:HA	7:c:396:LEU:HD23	1.82	0.61
4:5:561:ASN:C	4:5:563:GLU:H	2.08	0.61
6:7:678:LYS:O	6:7:679:PHE:C	2.43	0.61
3:4:543:GLN:HA	3:4:562:ILE:HD11	1.82	0.61
3:4:552:PHE:CD1	5:6:740:GLU:OE2	2.53	0.61
3:4:725:THR:HG21	6:7:657:ASN:HD22	1.64	0.61
8:D:162:ASN:HA	8:D:169:ILE:HG23	1.80	0.61
3:4:475:ASP:OD1	3:4:476:VAL:N	2.33	0.61
8:D:218:MET:HA	8:D:220:ASP:N	2.16	0.61
9:B:50:TRP:N	9:B:51:GLN:OE1	2.33	0.61
1:2:703:HIS:HA	5:6:565:LEU:HD22	1.81	0.61
2:3:234:GLU:CD	2:3:239:ASN:O	2.44	0.61
2:3:519:VAL:HG12	2:3:520:PHE:HD2	1.51	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:342:MET:HB2	3:4:360:ILE:HD13	1.82	0.61
4:5:62:THR:HG22	4:5:138:ILE:HB	1.82	0.61
4:5:282:LEU:HA	4:5:285:LYS:HE2	1.81	0.61
4:5:626:PHE:CG	4:5:653:LEU:HD12	2.36	0.61
6:7:126:PRO:C	6:7:129:THR:HG22	2.21	0.61
9:B:115:LEU:HD11	9:B:152:ARG:NH1	2.14	0.61
10:A:29:LEU:HB2	10:A:119:ASP:OD2	2.00	0.61
3:4:548:THR:N	3:4:806:GLU:OE2	2.33	0.61
3:4:714:GLU:HB3	6:7:665:ILE:CG2	2.29	0.61
4:5:357:PHE:CE1	4:5:598:LYS:HE2	2.36	0.61
6:7:258:ILE:HG22	6:7:258:ILE:O	2.00	0.61
1:2:338:LYS:HB3	1:2:379:LYS:O	2.01	0.61
2:3:301:LEU:HD21	2:3:320:LEU:HD21	1.83	0.61
2:3:444:ALA:HA	2:3:499:LYS:HZ1	1.64	0.61
3:4:449:ARG:CG	3:4:450:GLN:H	2.14	0.61
4:5:258:LEU:HD23	4:5:276:MET:SD	2.41	0.61
4:5:724:ILE:HG13	4:5:726:TRP:H	1.65	0.61
5:6:914:ASN:O	5:6:918:ARG:HG3	2.00	0.61
10:A:108:ASP:OD2	10:A:177:GLU:CD	2.44	0.61
10:A:175:GLN:CG	10:A:181:PHE:HB2	2.31	0.61
2:3:104:ARG:HH22	11:C:86:ASN:HB2	1.65	0.61
4:5:343:TRP:O	4:5:344:ASN:HB2	1.99	0.61
5:6:296:ARG:HH12	5:6:360:ARG:NH1	1.98	0.61
5:6:803:MET:HE1	5:6:828:TYR:HA	1.82	0.61
5:6:953:GLU:O	5:6:956:GLU:HG2	2.01	0.61
6:7:244:ILE:HD11	6:7:318:LEU:HD12	1.83	0.61
6:7:367:LYS:HG2	6:7:371:LEU:CD2	2.30	0.61
2:3:484:VAL:CG1	6:7:486:LYS:H	2.12	0.61
3:4:338:VAL:H	5:6:375:ARG:HH12	1.48	0.61
3:4:515:ARG:HG2	3:4:517:ASP:OD1	2.01	0.61
4:5:177:THR:O	4:5:194:ILE:HG22	2.00	0.61
4:5:534:LYS:HZ1	4:5:746:LEU:HD11	1.63	0.61
4:5:731:GLN:O	4:5:734:ARG:HB3	2.01	0.61
5:6:611:ALA:H	5:6:624:GLU:HG2	1.65	0.61
5:6:752:ARG:C	5:6:756:LYS:HZ3	2.07	0.61
5:6:948:LEU:CD1	5:6:948:LEU:C	2.68	0.61
6:7:580:PRO:HD2	6:7:678:LYS:HA	1.81	0.61
11:C:77:PRO:HB2	11:C:79:MET:HG2	1.81	0.61
1:2:653:ASN:O	1:2:658:ASN:ND2	2.35	0.60
3:4:243:LEU:CD2	3:4:245:ALA:N	2.64	0.60
3:4:827:ARG:O	3:4:831:SER:N	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:178:TYR:CE1	4:5:191:SER:HB2	2.36	0.60
4:5:372:ASN:HB3	4:5:593:GLU:OE2	2.00	0.60
4:5:441:GLY:HA3	4:5:443:GLY:N	2.16	0.60
5:6:399:GLY:HA2	5:6:454:PHE:CZ	2.36	0.60
6:7:543:GLN:O	6:7:545:THR:N	2.33	0.60
10:A:175:GLN:CG	10:A:183:LEU:HD21	2.27	0.60
11:C:82:THR:HA	11:C:85:MET:HG2	1.82	0.60
2:3:201:HIS:NE2	2:3:232:PRO:HD2	2.16	0.60
4:5:564:ARG:O	4:5:567:SER:OG	2.03	0.60
4:5:714:PHE:O	4:5:717:GLU:HB2	2.00	0.60
10:A:54:LEU:HD23	10:A:57:GLN:OE1	2.00	0.60
2:3:287:LYS:HD2	4:5:510:THR:HG21	1.81	0.60
2:3:520:PHE:HZ	4:5:756:GLU:CD	2.08	0.60
10:A:149:ILE:HG21	10:A:151:LEU:CG	2.29	0.60
1:2:420:PRO:HB2	1:2:638:THR:HG22	1.83	0.60
2:3:553:ILE:CG2	4:5:630:ARG:HD2	2.30	0.60
4:5:388:ILE:HD11	4:5:425:LEU:HD21	1.82	0.60
4:5:708:LEU:HD12	4:5:750:LYS:CD	2.32	0.60
4:5:739:ASP:OD2	5:6:697:GLY:CA	2.48	0.60
6:7:136:ASP:CG	6:7:137:ASP:N	2.57	0.60
7:c:586:PRO:HD2	7:c:601:ILE:HD13	1.83	0.60
8:D:220:ASP:HB3	8:D:221:GLU:HG2	1.82	0.60
1:2:444:PHE:CZ	5:6:380:ILE:CD1	2.75	0.60
1:2:702:SER:HG	5:6:559:THR:HG21	1.65	0.60
1:2:794:ARG:HD3	4:5:565:ASP:HB2	1.81	0.60
3:4:758:ILE:HG22	3:4:760:PRO:HD3	1.84	0.60
4:5:531:ASP:HA	4:5:534:LYS:HD3	1.84	0.60
4:5:594:ILE:HB	4:5:599:MET:HE2	1.83	0.60
7:c:266:ASN:HD22	7:c:269:ASN:HD21	1.46	0.60
8:D:129:MET:SD	9:B:54:THR:HA	2.41	0.60
3:4:729:LEU:HD22	3:4:730:GLU:HA	1.83	0.60
5:6:794:ARG:H	5:6:795:ILE:HA	1.67	0.60
6:7:23:ASP:O	6:7:27:THR:OG1	2.20	0.60
6:7:146:ARG:HH22	6:7:304:ALA:HB2	1.67	0.60
6:7:220:ILE:O	6:7:220:ILE:HG13	2.00	0.60
8:D:124:LEU:HD21	9:B:84:LYS:HD3	1.83	0.60
8:D:231:HIS:CA	8:D:274:ILE:HG22	2.31	0.60
2:3:300:SER:O	4:5:245:HIS:ND1	2.34	0.60
2:3:553:ILE:HG23	4:5:630:ARG:HD2	1.83	0.60
2:3:698:THR:CG2	6:7:462:PRO:CG	2.62	0.60
3:4:559:ARG:NE	3:4:668:ARG:HD3	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:276:MET:HG2	4:5:328:ILE:HB	1.84	0.60
5:6:794:ARG:HB2	5:6:796:THR:N	2.16	0.60
5:6:915:MET:SD	5:6:940:TYR:CG	2.95	0.60
5:6:937:VAL:O	5:6:941:LEU:HG	2.02	0.60
7:c:74:LEU:CD1	10:A:184:ILE:CD1	2.68	0.60
8:D:177:LYS:O	8:D:181:LYS:NZ	2.35	0.60
1:2:241:SER:HG	1:2:296:ARG:HG2	1.66	0.60
1:2:272:ASP:HB2	1:2:293:ILE:O	2.02	0.60
2:3:428:LEU:HB3	2:3:429:ALA:CA	2.32	0.60
3:4:493:ASN:O	3:4:494:GLU:HG2	2.01	0.60
5:6:778:LYS:HG2	5:6:782:LYS:NZ	2.14	0.60
5:6:811:ALA:HB2	5:6:819:ILE:HD11	1.83	0.60
7:c:50:LYS:HG2	10:A:190:PHE:CZ	2.37	0.60
2:3:569:HIS:O	4:5:398:LYS:NZ	2.34	0.60
3:4:488:ASN:OD1	3:4:489:LYS:N	2.33	0.60
3:4:666:ASN:HD22	3:4:668:ARG:NH2	1.97	0.60
3:4:688:VAL:O	3:4:691:ASN:N	2.33	0.60
3:4:717:ASP:OD2	6:7:664:TYR:CE2	2.54	0.60
4:5:415:LEU:HD11	4:5:555:ILE:HG13	1.82	0.60
5:6:750:GLN:HA	5:6:753:ARG:NH1	2.16	0.60
6:7:443:ARG:NH1	6:7:449:LYS:HZ2	2.00	0.60
7:c:474:VAL:HG12	10:A:186:ASP:HB3	1.84	0.60
4:5:69:ILE:HD11	4:5:73:GLU:HG2	1.82	0.60
5:6:124:VAL:CG2	5:6:134:LYS:O	2.49	0.60
7:c:348:LEU:HD11	7:c:401:LEU:HD11	1.84	0.60
8:D:225:ASN:HB3	9:B:193:ARG:CZ	2.32	0.60
2:3:370:SER:OG	4:5:404:MET:SD	2.54	0.59
3:4:735:HIS:HB3	3:4:738:GLN:HG2	1.82	0.59
8:D:71:ARG:NH1	9:B:11:PHE:CD1	2.71	0.59
1:2:230:ARG:NH1	1:2:243:GLU:OE1	2.36	0.59
1:2:409:ILE:HG22	1:2:411:LEU:CD1	2.32	0.59
4:5:104:LEU:C	4:5:104:LEU:CD1	2.74	0.59
4:5:685:GLN:OE1	4:5:688:THR:OG1	2.20	0.59
5:6:919:LYS:O	5:6:923:VAL:HG23	2.02	0.59
6:7:470:LEU:HD21	6:7:564:LEU:HD22	1.84	0.59
1:2:264:PRO:HG3	1:2:317:LEU:H	1.67	0.59
2:3:734:ARG:O	2:3:738:LEU:N	2.24	0.59
3:4:635:ASP:O	3:4:642:ARG:NH2	2.35	0.59
4:5:244:ILE:O	4:5:248:SER:OG	2.20	0.59
4:5:725:GLY:C	4:5:728:THR:HG23	2.26	0.59
2:3:272:ARG:HG2	4:5:171:VAL:HG22	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:531:TYR:HE2	3:4:716:ASN:OD1	1.81	0.59
3:4:803:ARG:O	3:4:806:GLU:HG2	2.03	0.59
4:5:708:LEU:HD23	4:5:712:ARG:HB2	1.84	0.59
5:6:610:ALA:HB3	5:6:663:ILE:HD13	1.84	0.59
6:7:260:TYR:CE2	6:7:281:LEU:HD11	2.37	0.59
6:7:486:LYS:N	6:7:487:GLY:HA3	2.17	0.59
2:3:504:THR:OG1	6:7:348:ILE:CD1	2.51	0.59
3:4:315:ARG:NH1	6:7:251:VAL:H	1.99	0.59
3:4:321:ASP:HB2	3:4:324:LYS:HD2	1.84	0.59
4:5:355:GLU:CB	10:A:19:LEU:CD2	2.81	0.59
5:6:585:LEU:HD13	5:6:639:ASP:OD1	2.03	0.59
5:6:929:GLU:O	5:6:930:GLU:CG	2.40	0.59
6:7:434:LEU:HD21	6:7:699:LEU:HD23	1.84	0.59
7:c:272:LEU:HD21	7:c:484:LEU:HD11	1.82	0.59
3:4:303:VAL:HG12	3:4:305:PRO:HD3	1.84	0.59
1:2:442:ASN:CG	1:2:444:PHE:H	2.09	0.59
2:3:25:VAL:HG13	2:3:128:ALA:HB2	1.83	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
5:6:553:GLY:O	5:6:812:ARG:NH1	2.36	0.59
7:c:147:THR:HG22	7:c:249:ASN:HD22	1.67	0.59
7:c:556:CYS:O	7:c:560:GLU:HG2	2.02	0.59
8:D:143:TYR:CE2	8:D:147:ARG:HD2	2.38	0.59
1:2:508:HIS:HB2	1:2:511:ILE:HG22	1.84	0.59
2:3:95:ARG:HB3	2:3:154:LYS:HB2	1.84	0.59
2:3:557:ARG:O	2:3:561:ILE:HG12	2.02	0.59
4:5:358:LEU:CD2	10:A:15:ARG:NH2	2.53	0.59
4:5:358:LEU:CG	10:A:15:ARG:HH21	2.13	0.59
4:5:755:LEU:HD22	4:5:760:THR:CG2	2.29	0.59
1:2:795:ARG:CB	4:5:560:HIS:HE1	2.09	0.59
2:3:520:PHE:CE1	4:5:756:GLU:CG	2.76	0.59
4:5:40:LEU:HD22	4:5:45:ILE:HD11	1.85	0.59
4:5:549:ARG:HA	4:5:651:ARG:HH21	1.68	0.59
5:6:953:GLU:HA	5:6:956:GLU:CD	2.27	0.59
6:7:451:ARG:O	6:7:694:ARG:NH2	2.32	0.59
7:c:491:LEU:HD12	7:c:492:LEU:N	2.18	0.59
8:D:79:TYR:HB3	8:D:173:ASP:O	2.02	0.59
1:2:796:GLU:OE1	1:2:859:ARG:NE	2.30	0.59
4:5:369:ILE:HG13	4:5:593:GLU:HG2	1.83	0.59
4:5:410:ILE:O	4:5:411:ASN:ND2	2.36	0.59
6:7:454:ILE:HG23	6:7:595:ASP:OD2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:526:PHE:HB3	6:7:567:ALA:HB2	1.84	0.59
1:2:326:ARG:CD	1:2:637:VAL:CG2	2.76	0.58
4:5:358:LEU:CG	10:A:15:ARG:NH2	2.66	0.58
5:6:546:GLY:O	5:6:571:ILE:CD1	2.51	0.58
6:7:584:ILE:HD12	6:7:681:PHE:HZ	1.68	0.58
5:6:561:GLU:N	5:6:562:GLY:HA3	2.18	0.58
6:7:440:VAL:HG21	6:7:650:PRO:HD2	1.85	0.58
6:7:656:VAL:HG12	6:7:710:ILE:CA	2.33	0.58
7:c:637:LEU:O	7:c:641:LEU:HG	2.03	0.58
9:B:160:LEU:HD23	11:C:133:GLN:HE22	1.68	0.58
1:2:306:LEU:CD2	1:2:392:GLU:HB2	2.32	0.58
2:3:672:THR:HG21	2:3:720:THR:HB	1.85	0.58
4:5:663:LEU:HG	4:5:666:LEU:HD12	1.86	0.58
7:c:33:CYS:SG	7:c:62:PHE:CA	2.84	0.58
1:2:268:LEU:HD21	1:2:297:ILE:HD11	1.85	0.58
1:2:546:GLY:CA	5:6:796:THR:CG2	2.76	0.58
3:4:527:ALA:HB3	3:4:537:LYS:HZ2	1.68	0.58
4:5:331:LEU:HD12	4:5:331:LEU:O	2.03	0.58
4:5:708:LEU:HD23	4:5:708:LEU:C	2.29	0.58
5:6:400:VAL:HG21	5:6:455:LEU:HG	1.85	0.58
8:D:203:PRO:HB2	8:D:206:LEU:HB2	1.86	0.58
9:B:59:ALA:HB1	9:B:60:LEU:HB2	1.84	0.58
2:3:441:GLY:HA3	2:3:462:MET:HB3	1.85	0.58
7:c:25:CYS:SG	7:c:27:LEU:HD12	2.43	0.58
10:A:13:ALA:O	10:A:16:THR:HG22	2.03	0.58
1:2:684:ARG:CB	1:2:685:ASP:CB	2.03	0.58
2:3:245:TYR:CD2	6:7:356:LEU:HD22	2.39	0.58
2:3:261:MET:HE3	2:3:262:PRO:HD2	1.85	0.58
6:7:260:TYR:HE1	6:7:298:LEU:HD22	1.62	0.58
6:7:579:SER:OG	6:7:678:LYS:N	2.36	0.58
7:c:313:PRO:HG3	7:c:415:TYR:OH	2.03	0.58
9:B:52:LEU:HD12	9:B:53:ILE:H	1.68	0.58
11:C:27:LEU:HD23	11:C:29:TYR:H	1.67	0.58
2:3:706:ILE:HD13	6:7:620:HIS:HD2	1.69	0.58
3:4:625:ASP:OD1	3:4:668:ARG:HG2	2.04	0.58
4:5:347:THR:O	4:5:348:MET:HE2	2.04	0.58
4:5:727:SER:O	4:5:732:THR:HG21	2.04	0.58
5:6:912:MET:SD	5:6:960:LEU:C	2.87	0.58
6:7:635:PRO:HA	6:7:638:MET:HE2	1.86	0.58
2:3:484:VAL:HG11	6:7:486:LYS:C	2.29	0.58
3:4:225:TYR:N	3:4:229:GLN:H	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:795:THR:HG22	5:6:578:SER:HB3	1.86	0.58
4:5:737:PHE:HA	4:5:740:THR:HG21	1.84	0.58
10:A:175:GLN:NE2	10:A:199:LEU:HD21	2.14	0.58
2:3:493:GLN:HE21	2:3:509:ARG:HA	1.68	0.58
3:4:531:TYR:CD2	3:4:720:LEU:CG	2.86	0.58
3:4:547:GLY:HA3	3:4:560:GLY:HA2	1.85	0.58
5:6:143:MET:HE2	5:6:150:THR:H	1.69	0.58
6:7:256:GLU:HG3	6:7:257:VAL:HG22	1.86	0.58
6:7:668:ARG:CZ	6:7:684:ALA:O	2.51	0.58
1:2:794:ARG:CD	4:5:565:ASP:OD1	2.50	0.58
2:3:502:ILE:N	6:7:346:GLY:HA2	2.19	0.58
4:5:707:SER:HB2	5:6:946:ASN:HD22	1.69	0.58
4:5:725:GLY:O	4:5:728:THR:CG2	2.51	0.58
5:6:808:GLU:O	5:6:812:ARG:HG2	2.03	0.58
5:6:932:THR:HG23	5:6:935:ASP:HB3	1.85	0.58
6:7:393:LEU:HD13	6:7:395:SER:HB3	1.86	0.58
9:B:168:LEU:HD11	9:B:189:MET:CE	2.33	0.58
1:2:302:THR:OG1	1:2:303:ILE:N	2.35	0.57
1:2:303:ILE:HA	1:2:319:ARG:HD2	1.86	0.57
1:2:605:LEU:HD23	1:2:647:ILE:HB	1.85	0.57
1:2:622:GLU:OE2	1:2:626:GLN:NE2	2.37	0.57
3:4:833:ILE:HA	3:4:836:TYR:CD2	2.38	0.57
5:6:124:VAL:HG11	5:6:132:VAL:HG23	1.86	0.57
5:6:711:LEU:HG	5:6:712:PHE:H	1.69	0.57
6:7:214:ARG:N	6:7:215:TYR:HA	2.19	0.57
7:c:626:GLU:HB3	7:c:629:ILE:HG22	1.85	0.57
10:A:185:LYS:HG3	10:A:186:ASP:OD1	2.03	0.57
3:4:527:ALA:HB1	3:4:530:ILE:HD13	1.86	0.57
4:5:731:GLN:NE2	4:5:734:ARG:HE	2.02	0.57
6:7:207:LEU:HD11	6:7:220:ILE:HG22	1.85	0.57
9:B:118:ASN:CG	9:B:122:LEU:HD11	2.29	0.57
11:C:25:PRO:HA	11:C:37:PRO:HA	1.86	0.57
3:4:401:GLU:HG2	3:4:413:HIS:H	1.69	0.57
3:4:443:PRO:HB2	3:4:453:LEU:HD22	1.85	0.57
4:5:139:LEU:O	4:5:139:LEU:HD12	2.04	0.57
5:6:540:HIS:C	5:6:542:ALA:H	2.13	0.57
5:6:940:TYR:O	5:6:943:GLN:HG2	2.04	0.57
7:c:133:ASN:O	7:c:140:ILE:HD11	2.04	0.57
8:D:282:ILE:CD1	8:D:286:LEU:HD13	2.28	0.57
3:4:774:TYR:HB2	3:4:801:MET:HE1	1.87	0.57
8:D:254:PRO:C	8:D:255:CYS:SG	2.88	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:198:ALA:HB3	11:C:113:MET:HE3	1.85	0.57
10:A:29:LEU:HD21	10:A:96:ILE:HG21	1.85	0.57
10:A:108:ASP:HB3	10:A:109:LEU:CB	2.26	0.57
10:A:175:GLN:OE1	10:A:199:LEU:HD21	2.05	0.57
11:C:47:PRO:HB2	11:C:49:TRP:CD1	2.40	0.57
1:2:803:PHE:HD2	1:2:805:ILE:O	1.75	0.57
2:3:186:VAL:O	4:5:509:ILE:HG22	2.04	0.57
2:3:186:VAL:HG22	2:3:258:VAL:HG22	1.85	0.57
2:3:569:HIS:HE1	4:5:406:LEU:HD22	1.66	0.57
3:4:461:VAL:HG12	3:4:463:VAL:H	1.70	0.57
3:4:477:ASP:OD1	3:4:478:THR:N	2.37	0.57
5:6:820:THR:O	5:6:824:ILE:HG12	2.04	0.57
6:7:207:LEU:CD1	6:7:220:ILE:HG22	2.35	0.57
6:7:255:VAL:HG13	6:7:273:VAL:HG11	1.85	0.57
8:D:57:GLN:HG3	9:B:56:ASP:O	2.04	0.57
8:D:269:LEU:HD11	8:D:277:MET:CE	2.27	0.57
11:C:88:ILE:HB	11:C:127:LEU:HD12	1.87	0.57
2:3:390:GLU:HB2	2:3:509:ARG:HH22	1.68	0.57
2:3:472:ILE:HG21	2:3:475:PHE:HD1	1.68	0.57
3:4:703:ASP:OD1	3:4:800:SER:OG	2.08	0.57
4:5:755:LEU:CD2	4:5:760:THR:HG21	2.33	0.57
5:6:551:MET:HE1	5:6:591:PHE:HE2	1.69	0.57
7:c:55:GLN:OE1	10:A:191:VAL:HA	2.05	0.57
2:3:492:GLN:NE2	6:7:471:LYS:CG	2.68	0.57
2:3:678:VAL:HG21	2:3:723:LYS:HG3	1.86	0.57
4:5:170:SER:O	4:5:254:GLN:NE2	2.37	0.57
4:5:348:MET:CG	11:C:167:LEU:HG	2.32	0.57
6:7:67:LEU:HD22	6:7:126:PRO:HD2	1.87	0.57
2:3:23:ASP:OD1	2:3:26:ARG:NH2	2.35	0.57
2:3:428:LEU:HB3	2:3:429:ALA:HA	1.85	0.57
3:4:319:PRO:HG2	6:7:309:ALA:HA	1.86	0.57
3:4:502:THR:HG22	3:4:503:ASP:H	1.70	0.57
4:5:437:VAL:HG12	4:5:439:THR:HG23	1.87	0.57
6:7:411:TYR:CE2	6:7:430:LYS:HE2	2.40	0.57
6:7:541:MET:HB2	6:7:593:ARG:HD3	1.85	0.57
8:D:206:LEU:HB3	10:A:83:LYS:HZ2	1.68	0.57
1:2:438:LEU:C	1:2:440:ALA:H	2.12	0.57
2:3:39:ARG:HH12	2:3:132:LEU:HD11	1.70	0.57
2:3:542:ARG:HH12	2:3:700:ARG:NH1	2.02	0.57
3:4:338:VAL:N	5:6:375:ARG:HH12	2.02	0.57
3:4:531:TYR:HB3	3:4:720:LEU:CG	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:355:GLU:CA	10:A:19:LEU:HD21	2.35	0.57
4:5:621:LYS:O	4:5:624:SER:OG	2.21	0.57
5:6:953:GLU:O	5:6:957:GLU:HG2	2.05	0.57
6:7:9:GLN:O	6:7:10:LEU:HD23	2.04	0.57
2:3:177:ASN:ND2	4:5:246:GLU:O	2.38	0.57
3:4:438:THR:HG22	3:4:462:ASP:CB	2.32	0.57
3:4:726:ASN:C	3:4:728:TYR:CB	2.64	0.57
4:5:278:CYS:SG	4:5:330:ILE:HD12	2.45	0.57
4:5:339:THR:C	4:5:340:SER:O	2.47	0.57
4:5:643:ARG:NH1	4:5:692:ALA:HA	2.18	0.57
4:5:711:ILE:CG1	4:5:743:PHE:CD1	2.84	0.57
9:B:193:ARG:HH11	9:B:197:THR:HG21	1.70	0.57
10:A:149:ILE:HA	10:A:150:ASP:HB2	1.86	0.57
10:A:202:GLN:NE2	10:A:204:TYR:CE2	2.73	0.57
7:c:267:LEU:CD2	7:c:302:LEU:HD13	2.34	0.56
1:2:325:THR:HA	1:2:636:ILE:HD12	1.84	0.56
1:2:326:ARG:HB2	1:2:637:VAL:CG2	2.35	0.56
1:2:506:TYR:CZ	1:2:694:ARG:CB	2.82	0.56
4:5:343:TRP:CG	4:5:344:ASN:N	2.73	0.56
4:5:464:LEU:HD11	4:5:470:VAL:HG21	1.87	0.56
6:7:699:LEU:HB2	6:7:712:ASP:OD1	2.04	0.56
1:2:208:ALA:HA	1:2:211:LEU:HG	1.88	0.56
1:2:794:ARG:HB2	4:5:565:ASP:OD2	2.03	0.56
2:3:171:LEU:C	2:3:172:THR:HG22	2.30	0.56
2:3:411:PRO:O	2:3:412:SER:OG	2.20	0.56
2:3:503:HIS:N	6:7:346:GLY:O	2.39	0.56
2:3:520:PHE:HZ	4:5:756:GLU:OE2	1.87	0.56
3:4:339:ILE:HG21	5:6:416:LYS:NZ	2.19	0.56
3:4:646:HIS:HA	3:4:701:ARG:NH1	2.21	0.56
4:5:348:MET:HG3	11:C:167:LEU:CG	2.31	0.56
4:5:409:ASP:OD1	4:5:410:ILE:HG12	2.06	0.56
6:7:674:GLU:O	6:7:675:MET:HB2	2.05	0.56
7:c:15:ILE:HD12	7:c:80:SER:HB2	1.86	0.56
7:c:281:ASP:OD2	7:c:288:TYR:CE2	2.59	0.56
7:c:345:ASN:HA	7:c:350:LEU:HD12	1.87	0.56
7:c:487:ARG:HB2	11:C:193:LYS:NZ	2.20	0.56
8:D:137:LYS:HG3	10:A:147:VAL:CG1	2.35	0.56
8:D:279:TYR:CE1	8:D:286:LEU:HD22	2.39	0.56
9:B:12:SER:HB3	9:B:15:GLU:HG3	1.87	0.56
10:A:165:VAL:O	10:A:188:GLN:HA	2.06	0.56
10:A:175:GLN:HE22	10:A:199:LEU:HD21	1.54	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:315:ARG:HH22	6:7:311:GLN:HE22	1.52	0.56
3:4:343:LYS:NZ	3:4:392:ALA:HB3	2.20	0.56
3:4:419:VAL:HA	3:4:463:VAL:HG23	1.88	0.56
4:5:588:GLU:O	4:5:592:SER:HB3	2.02	0.56
3:4:203:TYR:CG	3:4:204:LYS:N	2.73	0.56
3:4:440:ARG:HH11	3:4:440:ARG:HG3	1.69	0.56
3:4:714:GLU:OE1	6:7:665:ILE:HG23	2.06	0.56
4:5:178:TYR:HD2	4:5:249:LYS:HZ3	1.52	0.56
7:c:121:TYR:CD1	7:c:141:GLN:HG3	2.41	0.56
7:c:474:VAL:HG12	10:A:186:ASP:CB	2.35	0.56
10:A:200:ILE:HD13	10:A:208:ILE:HD11	1.87	0.56
2:3:375:ASP:O	2:3:379:LYS:HG3	2.06	0.56
3:4:364:VAL:HG21	6:7:299:PHE:CZ	2.40	0.56
4:5:712:ARG:HG2	4:5:755:LEU:CD2	2.35	0.56
4:5:733:LEU:HD21	4:5:737:PHE:HD2	1.71	0.56
9:B:121:VAL:HG22	9:B:176:LEU:HD12	1.88	0.56
9:B:184:PHE:HD2	9:B:185:ILE:HD12	1.70	0.56
10:A:166:ARG:HH22	10:A:207:LEU:CD2	2.18	0.56
10:A:169:LYS:N	10:A:185:LYS:HZ3	2.03	0.56
1:2:384:ASN:N	1:2:384:ASN:OD1	2.34	0.56
2:3:367:LEU:HD12	2:3:378:LYS:HB3	1.88	0.56
3:4:505:ASP:O	3:4:509:ILE:HD12	2.05	0.56
3:4:714:GLU:CB	6:7:665:ILE:HG23	2.36	0.56
4:5:594:ILE:HG22	4:5:596:ILE:H	1.69	0.56
5:6:543:VAL:HG21	5:6:715:ILE:HD11	1.88	0.56
6:7:223:LYS:O	6:7:225:LEU:N	2.39	0.56
6:7:678:LYS:CG	6:7:679:PHE:H	2.06	0.56
10:A:6:GLY:HA3	10:A:85:CYS:SG	2.45	0.56
1:2:326:ARG:HB3	1:2:637:VAL:HG23	1.82	0.56
1:2:557:GLU:OE2	1:2:565:PHE:CD1	2.59	0.56
6:7:142:ILE:O	6:7:146:ARG:HG2	2.05	0.56
8:D:259:THR:CG2	8:D:269:LEU:HD22	2.27	0.56
1:2:404:ARG:NH2	5:6:357:GLN:OE1	2.26	0.56
3:4:243:LEU:HD23	3:4:245:ALA:N	2.21	0.56
3:4:243:LEU:CD2	3:4:244:ASP:N	2.36	0.56
3:4:337:PRO:HA	5:6:375:ARG:NH1	2.20	0.56
3:4:728:TYR:CG	3:4:729:LEU:N	2.73	0.56
4:5:258:LEU:HD21	4:5:276:MET:SD	2.46	0.56
4:5:341:SER:O	4:5:345:SER:HB3	2.06	0.56
4:5:713:ARG:O	4:5:715:GLU:N	2.37	0.56
6:7:136:ASP:CG	6:7:137:ASP:H	2.12	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:74:PRO:HB3	8:D:226:LYS:HD2	1.88	0.56
9:B:193:ARG:HG2	9:B:197:THR:HG23	1.88	0.56
10:A:202:GLN:HE21	10:A:204:TYR:HE2	1.53	0.56
2:3:255:ARG:O	2:3:256:ILE:HD13	2.05	0.56
2:3:475:PHE:HB3	2:3:516:ALA:HB2	1.87	0.56
2:3:491:GLU:CD	2:3:700:ARG:HH22	2.14	0.56
5:6:750:GLN:HA	5:6:753:ARG:HH11	1.69	0.56
6:7:136:ASP:OD1	6:7:137:ASP:N	2.39	0.56
10:A:149:ILE:CG2	10:A:151:LEU:CG	2.83	0.56
1:2:326:ARG:HH21	1:2:635:GLY:HA2	1.71	0.55
1:2:504:SER:CA	1:2:698:PHE:CE2	2.88	0.55
1:2:855:ARG:HG3	1:2:858:ARG:HH21	1.70	0.55
2:3:261:MET:HB2	2:3:264:MET:HG2	1.87	0.55
2:3:547:PHE:HE1	2:3:736:ALA:HB2	1.70	0.55
2:3:558:ASP:HB2	4:5:627:VAL:HG12	1.88	0.55
3:4:449:ARG:C	3:4:451:ARG:H	2.14	0.55
5:6:558:SER:CB	5:6:559:THR:HA	2.33	0.55
5:6:791:SER:OG	5:6:839:ASP:OD1	2.17	0.55
7:c:74:LEU:CD2	10:A:173:GLU:OE2	2.54	0.55
7:c:313:PRO:O	7:c:316:LEU:HD22	2.07	0.55
9:B:160:LEU:O	11:C:133:GLN:NE2	2.37	0.55
11:C:134:GLU:O	11:C:137:HIS:HB2	2.06	0.55
1:2:215:LEU:HD21	1:2:275:ALA:HA	1.88	0.55
1:2:446:VAL:HG21	5:6:356:TRP:CZ2	2.37	0.55
4:5:485:MET:HE3	4:5:490:ARG:HA	1.88	0.55
4:5:675:ARG:HG3	4:5:676:HIS:N	2.21	0.55
8:D:229:PHE:HE1	8:D:276:VAL:HG21	1.63	0.55
9:B:50:TRP:N	9:B:51:GLN:HA	2.20	0.55
9:B:112:PHE:O	9:B:152:ARG:NH1	2.39	0.55
1:2:338:LYS:H	1:2:380:THR:HG22	1.72	0.55
2:3:100:LEU:HB3	2:3:111:TRP:CZ3	2.40	0.55
2:3:126:GLU:OE1	2:3:155:LEU:HG	2.05	0.55
2:3:425:THR:HA	2:3:657:ARG:HH11	1.70	0.55
2:3:671:LEU:HB3	6:7:621:MET:HB2	1.88	0.55
4:5:631:LYS:HE3	4:5:635:ILE:HD11	1.88	0.55
6:7:401:VAL:HG13	6:7:641:TYR:HD1	1.71	0.55
8:D:267:VAL:HB	8:D:268:GLU:O	2.07	0.55
1:2:495:ASP:OD1	1:2:509:ARG:NH2	2.35	0.55
1:2:601:LYS:NZ	1:2:643:ARG:HH11	2.03	0.55
2:3:43:ARG:NH1	2:3:137:ASP:HB3	2.22	0.55
2:3:113:GLY:HA3	2:3:121:PHE:CE2	2.41	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:391:LYS:CG	6:7:623:ASN:OD1	2.55	0.55
2:3:690:ASP:HA	2:3:693:LYS:HB2	1.89	0.55
5:6:811:ALA:HB2	5:6:819:ILE:CD1	2.36	0.55
6:7:426:LEU:O	6:7:430:LYS:HB2	2.06	0.55
8:D:216:VAL:HG12	8:D:217:ASN:HA	1.89	0.55
9:B:160:LEU:HD11	9:B:185:ILE:HD11	1.89	0.55
10:A:108:ASP:CG	10:A:198:ARG:HD3	2.31	0.55
11:C:105:PHE:HD2	11:C:170:GLU:OE1	1.90	0.55
2:3:676:ILE:HG12	6:7:617:THR:HB	1.88	0.55
5:6:517:LYS:O	5:6:521:LYS:HG2	2.07	0.55
6:7:362:GLY:CA	6:7:364:LYS:HG3	2.37	0.55
1:2:693:GLU:HA	5:6:774:VAL:CG1	2.37	0.55
2:3:493:GLN:HE21	2:3:509:ARG:CA	2.19	0.55
3:4:709:LEU:HD22	3:4:835:ASP:O	2.06	0.55
3:4:717:ASP:OD2	6:7:664:TYR:HE2	1.90	0.55
5:6:912:MET:SD	5:6:961:ALA:N	2.79	0.55
5:6:966:LYS:O	5:6:969:VAL:HG12	2.07	0.55
6:7:245:ILE:HA	6:7:315:ILE:HG13	1.89	0.55
6:7:421:GLU:HA	6:7:625:GLN:HE22	1.72	0.55
7:c:272:LEU:CD2	7:c:484:LEU:HD11	2.37	0.55
6:7:257:VAL:HG23	6:7:257:VAL:O	2.07	0.55
7:c:324:TYR:CE1	7:c:405:ILE:HG13	2.41	0.55
8:D:216:VAL:HG13	8:D:217:ASN:HA	1.89	0.55
8:D:278:ARG:HE	9:B:193:ARG:HD2	1.72	0.55
10:A:169:LYS:N	10:A:185:LYS:NZ	2.54	0.55
1:2:504:SER:CA	1:2:698:PHE:HE2	2.19	0.55
2:3:393:LEU:HD21	6:7:619:VAL:CG1	2.37	0.55
3:4:458:LYS:NZ	5:6:413:PRO:HB3	2.21	0.55
6:7:298:LEU:HD12	6:7:298:LEU:C	2.32	0.55
7:c:313:PRO:O	7:c:316:LEU:CD2	2.55	0.55
8:D:135:ARG:NH1	9:B:74:TRP:NE1	2.54	0.55
10:A:200:ILE:HD12	10:A:208:ILE:HD11	1.87	0.55
2:3:522:GLN:NE2	4:5:637:GLU:OE1	2.39	0.55
3:4:726:ASN:HA	3:4:728:TYR:HD2	1.70	0.55
4:5:196:ASN:CB	4:5:197:PHE:CD1	2.79	0.55
4:5:724:ILE:HG13	4:5:725:GLY:N	2.22	0.55
5:6:912:MET:CE	5:6:960:LEU:HB3	2.37	0.55
5:6:915:MET:SD	5:6:940:TYR:CD1	2.99	0.55
6:7:441:ASP:OD1	6:7:442:LYS:N	2.40	0.55
7:c:380:MET:HB2	7:c:385:LYS:HE2	1.88	0.55
1:2:438:LEU:O	1:2:440:ALA:N	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:227:THR:N	2:3:228:PRO:HD2	2.22	0.55
2:3:504:THR:HB	6:7:348:ILE:HD11	1.89	0.55
3:4:342:MET:C	3:4:360:ILE:HD12	2.32	0.55
4:5:438:TYR:OH	4:5:480:ASP:OD2	2.20	0.55
4:5:724:ILE:HD12	4:5:726:TRP:HB3	1.88	0.55
5:6:804:ILE:O	5:6:807:SER:OG	2.21	0.55
7:c:619:LYS:HG2	7:c:636:ASP:OD2	2.07	0.55
8:D:162:ASN:HA	8:D:169:ILE:CG2	2.37	0.55
1:2:580:VAL:HG21	1:2:636:ILE:HG21	1.88	0.54
2:3:42:VAL:HG22	2:3:96:ILE:HG12	1.89	0.54
2:3:276:VAL:HG11	2:3:294:VAL:HG11	1.89	0.54
2:3:354:SER:HB3	2:3:717:LEU:HD22	1.89	0.54
2:3:372:TYR:OH	2:3:561:ILE:O	2.21	0.54
3:4:445:ARG:NH1	3:4:451:ARG:HA	2.22	0.54
3:4:771:VAL:HG21	5:6:728:ALA:HB3	1.86	0.54
5:6:534:ALA:HB3	5:6:544:LYS:HE2	1.88	0.54
5:6:696:ARG:O	5:6:696:ARG:NH1	2.36	0.54
6:7:462:PRO:HD3	6:7:573:ARG:HE	1.72	0.54
7:c:512:ALA:O	7:c:516:LYS:NZ	2.36	0.54
8:D:211:ASP:OD1	8:D:213:GLU:HA	2.06	0.54
10:A:173:GLU:HB3	10:A:182:ASN:C	2.31	0.54
11:C:16:PHE:HZ	11:C:107:LEU:HD21	1.72	0.54
1:2:326:ARG:HD3	1:2:637:VAL:CG1	2.35	0.54
2:3:201:HIS:ND1	2:3:243:THR:HA	2.22	0.54
3:4:244:ASP:HB2	3:4:247:ASN:ND2	2.20	0.54
4:5:358:LEU:C	4:5:358:LEU:HD12	2.33	0.54
4:5:577:THR:OG1	4:5:578:GLY:HA2	2.07	0.54
5:6:915:MET:SD	5:6:940:TYR:HB2	2.48	0.54
6:7:71:ALA:CB	6:7:129:THR:HG21	2.35	0.54
6:7:661:VAL:O	6:7:665:ILE:HD12	2.07	0.54
8:D:132:GLU:HB2	9:B:74:TRP:CH2	2.42	0.54
8:D:178:ASP:HA	8:D:181:LYS:HZ1	1.72	0.54
1:2:309:LEU:O	1:2:310:ARG:NH1	2.34	0.54
1:2:484:PHE:CE1	1:2:766:TYR:HD1	2.25	0.54
4:5:38:PHE:CZ	4:5:67:HIS:HB3	2.42	0.54
4:5:197:PHE:HE2	4:5:329:LYS:HG2	0.76	0.54
3:4:352:CYS:SG	5:6:103:VAL:HG22	2.46	0.54
4:5:31:PHE:CG	4:5:90:PHE:HD1	2.25	0.54
5:6:601:LYS:HB2	5:6:643:LYS:HB3	1.90	0.54
5:6:780:LEU:HD12	5:6:828:TYR:CE1	2.43	0.54
6:7:421:GLU:HA	6:7:625:GLN:NE2	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:676:ASP:O	6:7:677:SER:HB2	2.06	0.54
7:c:85:GLY:N	7:c:123:LEU:O	2.28	0.54
10:A:167:VAL:C	10:A:168:LEU:HD22	2.32	0.54
4:5:91:GLU:O	4:5:94:ILE:HG13	2.07	0.54
4:5:588:GLU:O	4:5:592:SER:CA	2.53	0.54
4:5:708:LEU:HD12	4:5:750:LYS:HD2	1.89	0.54
4:5:721:ARG:O	4:5:722:LEU:HG	2.06	0.54
7:c:114:GLN:HG2	7:c:115:SER:H	1.72	0.54
7:c:312:THR:HB	9:B:139:HIS:CD2	2.42	0.54
10:A:84:ARG:HD2	11:C:3:TYR:N	2.22	0.54
10:A:172:GLY:H	10:A:174:ILE:HG23	1.71	0.54
2:3:171:LEU:HD21	2:3:298:PHE:CZ	2.43	0.54
4:5:711:ILE:HB	4:5:743:PHE:CE1	2.29	0.54
6:7:353:GLY:HA3	6:7:377:GLU:O	2.07	0.54
10:A:149:ILE:HG23	10:A:151:LEU:HA	1.79	0.54
2:3:289:GLY:N	4:5:509:ILE:HG22	1.81	0.54
5:6:776:LYS:HG3	5:6:779:GLU:OE2	2.07	0.54
5:6:940:TYR:HD1	5:6:943:GLN:NE2	2.05	0.54
10:A:164:ASP:O	10:A:207:LEU:O	2.26	0.54
2:3:555:GLU:HA	4:5:627:VAL:CG1	2.38	0.54
3:4:565:LEU:HB2	3:4:702:PHE:CD2	2.42	0.54
6:7:143:LEU:HD21	6:7:197:THR:HG22	1.89	0.54
8:D:72:CYS:SG	8:D:293:LEU:HD23	2.48	0.54
1:2:339:PHE:HA	1:2:378:GLU:CB	2.37	0.54
3:4:486:MET:HE2	3:4:498:VAL:HG21	1.90	0.54
4:5:372:ASN:HB2	4:5:593:GLU:OE2	2.07	0.54
6:7:398:GLU:O	6:7:402:MET:HG3	2.08	0.54
6:7:459:MET:HB3	6:7:599:LEU:HA	1.90	0.54
6:7:570:LEU:HD13	6:7:585:ASN:HD21	1.73	0.54
1:2:557:GLU:OE2	1:2:565:PHE:HB2	2.07	0.54
2:3:712:HIS:ND1	2:3:725:ASP:OD1	2.38	0.54
3:4:342:MET:HB3	3:4:360:ILE:HD12	1.72	0.54
3:4:435:VAL:HG13	3:4:466:VAL:HG22	1.90	0.54
5:6:663:ILE:HD12	5:6:672:LEU:HD12	1.90	0.54
6:7:536:ALA:O	6:7:540:VAL:HG23	2.08	0.54
7:c:288:TYR:HA	7:c:291:LEU:HB2	1.89	0.54
8:D:91:ILE:HD13	10:A:147:VAL:O	2.08	0.54
8:D:94:GLN:OE1	9:B:55:THR:CG2	2.56	0.54
2:3:492:GLN:NE2	6:7:471:LYS:HE3	0.59	0.53
2:3:687:ARG:HH12	2:3:698:THR:HA	1.73	0.53
3:4:821:ASP:C	3:4:821:ASP:OD1	2.51	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:441:GLY:HA3	4:5:443:GLY:H	1.73	0.53
4:5:543:GLN:HE21	4:5:546:ILE:HD11	1.73	0.53
4:5:560:HIS:HB2	4:5:565:ASP:H	1.74	0.53
5:6:154:ASP:OD2	5:6:156:GLN:HB3	2.09	0.53
5:6:575:GLY:C	5:6:581:LYS:HZ1	2.08	0.53
5:6:611:ALA:N	5:6:624:GLU:OE2	2.41	0.53
7:c:81:LEU:HD13	7:c:82:LEU:C	2.32	0.53
7:c:140:ILE:HD13	7:c:142:CYS:HB3	1.90	0.53
7:c:588:TYR:OH	7:c:601:ILE:CG2	2.56	0.53
8:D:258:VAL:HG13	8:D:260:ILE:HG13	1.90	0.53
9:B:115:LEU:HD11	9:B:152:ARG:CZ	2.38	0.53
11:C:83:LYS:CA	11:C:86:ASN:ND2	2.61	0.53
1:2:517:CYS:SG	1:2:816:ILE:HG23	2.49	0.53
8:D:231:HIS:CB	8:D:274:ILE:HG22	2.38	0.53
8:D:259:THR:HG21	8:D:268:GLU:HB3	1.90	0.53
1:2:506:TYR:CD2	1:2:695:LEU:HA	2.43	0.53
1:2:560:ALA:HB3	1:2:563:ALA:HB2	1.89	0.53
1:2:794:ARG:CG	4:5:565:ASP:OD2	2.56	0.53
2:3:346:ASP:HA	2:3:349:ASN:HD22	1.72	0.53
2:3:502:ILE:CG1	6:7:346:GLY:HA2	2.31	0.53
2:3:690:ASP:O	2:3:694:LYS:N	2.40	0.53
3:4:318:ASN:O	3:4:321:ASP:OD1	2.27	0.53
3:4:558:TYR:HE2	5:6:735:HIS:HA	1.74	0.53
3:4:657:ALA:HA	3:4:662:ILE:HG23	1.90	0.53
3:4:684:PRO:HD2	6:7:588:ALA:HB1	1.88	0.53
4:5:40:LEU:O	4:5:41:ASP:HB2	2.08	0.53
4:5:396:SER:HB3	4:5:661:GLU:HG2	1.91	0.53
6:7:459:MET:HG3	6:7:460:GLY:H	1.73	0.53
7:c:580:LEU:HD11	7:c:629:ILE:HD11	1.89	0.53
7:c:586:PRO:CG	7:c:601:ILE:HD13	2.38	0.53
8:D:141:ARG:CD	10:A:149:ILE:HG12	2.39	0.53
8:D:211:ASP:CG	8:D:213:GLU:HA	2.33	0.53
3:4:331:LEU:HB2	3:4:430:GLY:HA2	1.90	0.53
4:5:41:ASP:HB2	7:c:416:ARG:HH22	1.72	0.53
4:5:685:GLN:O	4:5:688:THR:OG1	2.27	0.53
5:6:603:SER:N	5:6:604:SER:HA	2.24	0.53
3:4:245:ALA:HB3	3:4:306:TYR:O	2.08	0.53
3:4:387:ASN:ND2	5:6:402:ILE:HG22	2.23	0.53
3:4:400:GLN:HE21	3:4:412:PRO:HG2	1.73	0.53
3:4:794:THR:HB	5:6:578:SER:OG	2.08	0.53
3:4:798:LEU:CD2	5:6:728:ALA:HA	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:358:LEU:HD21	10:A:19:LEU:HD11	1.89	0.53
5:6:935:ASP:HA	5:6:938:ASP:OD2	2.08	0.53
6:7:370:LEU:HD13	6:7:370:LEU:C	2.31	0.53
9:B:187:GLU:CD	11:C:176:ILE:HG21	2.19	0.53
10:A:27:VAL:HG13	10:A:28:ASN:N	2.22	0.53
10:A:37:ILE:O	10:A:41:LEU:HG	2.07	0.53
10:A:175:GLN:CD	10:A:199:LEU:CD2	2.82	0.53
1:2:504:SER:O	1:2:698:PHE:CE2	2.58	0.53
2:3:558:ASP:HB3	4:5:627:VAL:HG11	1.91	0.53
2:3:568:THR:CG2	4:5:400:LEU:HD22	2.37	0.53
3:4:315:ARG:HH22	6:7:311:GLN:NE2	2.06	0.53
3:4:726:ASN:HA	3:4:728:TYR:HB3	1.89	0.53
4:5:709:SER:O	4:5:712:ARG:HB3	2.09	0.53
5:6:919:LYS:HA	5:6:922:GLU:OE2	2.08	0.53
7:c:154:GLU:OE2	7:c:240:TYR:HB2	2.08	0.53
7:c:558:GLU:N	7:c:559:SER:HA	2.24	0.53
7:c:579:TYR:CE2	7:c:634:ARG:HB3	2.43	0.53
11:C:5:ASP:OD1	11:C:6:ILE:N	2.41	0.53
1:2:327:ARG:HD2	1:2:386:GLN:HE22	1.74	0.53
1:2:807:VAL:HG11	4:5:568:ILE:HG13	1.90	0.53
2:3:444:ALA:O	2:3:499:LYS:NZ	2.37	0.53
3:4:545:PHE:CE1	3:4:751:ILE:HG12	2.43	0.53
4:5:49:GLN:NE2	4:5:53:ASN:OD1	2.42	0.53
4:5:409:ASP:OD1	4:5:410:ILE:HG23	2.09	0.53
6:7:244:ILE:HD11	6:7:318:LEU:CD1	2.38	0.53
7:c:149:ASP:HB3	7:c:150:ASP:HA	1.91	0.53
1:2:793:LEU:HD21	1:2:842:VAL:HG22	1.89	0.53
2:3:100:LEU:HB2	2:3:159:GLY:HA2	1.89	0.53
2:3:429:ALA:HB3	2:3:469:VAL:O	2.09	0.53
2:3:501:GLY:C	6:7:346:GLY:CA	2.81	0.53
3:4:488:ASN:O	3:4:489:LYS:HB3	2.09	0.53
4:5:379:PHE:HD2	4:5:564:ARG:HD2	1.74	0.53
5:6:529:LEU:O	5:6:533:ILE:HG13	2.09	0.53
6:7:367:LYS:HG2	6:7:371:LEU:HD23	1.91	0.53
6:7:493:LEU:HD12	6:7:494:THR:N	2.24	0.53
10:A:102:TRP:HZ3	10:A:151:LEU:HD23	1.73	0.53
1:2:327:ARG:HB2	1:2:388:VAL:HG22	1.91	0.53
5:6:776:LYS:NZ	5:6:824:ILE:HG22	2.24	0.53
8:D:79:TYR:HD1	8:D:147:ARG:HH12	1.55	0.53
8:D:159:ARG:HH21	8:D:187:SER:HB2	1.74	0.53
10:A:172:GLY:HA2	10:A:183:LEU:HB2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:177:GLU:C	10:A:178:TYR:CD2	2.86	0.53
2:3:440:VAL:HG12	2:3:441:GLY:H	1.73	0.53
3:4:326:ILE:HD12	3:4:439:PHE:HB2	1.91	0.53
4:5:255:PHE:HA	4:5:276:MET:O	2.09	0.53
5:6:764:ILE:O	5:6:764:ILE:HG13	2.09	0.53
7:c:151:THR:HB	7:c:153:GLY:N	2.24	0.53
8:D:225:ASN:OD1	8:D:278:ARG:HD3	2.08	0.53
1:2:327:ARG:NH1	1:2:386:GLN:NE2	2.44	0.52
1:2:807:VAL:HG11	4:5:568:ILE:CG1	2.38	0.52
2:3:113:GLY:HA3	2:3:121:PHE:HE2	1.74	0.52
2:3:275:ASP:N	2:3:275:ASP:OD1	2.38	0.52
2:3:553:ILE:HD11	4:5:631:LYS:N	2.24	0.52
2:3:698:THR:HB	6:7:463:GLY:CA	2.35	0.52
3:4:338:VAL:N	5:6:375:ARG:NH1	2.55	0.52
4:5:498:GLU:OE1	4:5:498:GLU:N	2.42	0.52
4:5:621:LYS:HG2	4:5:674:GLU:OE2	2.08	0.52
4:5:678:ASP:O	4:5:682:ARG:NH1	2.42	0.52
5:6:294:VAL:HG13	5:6:359:VAL:HB	1.89	0.52
5:6:776:LYS:HZ3	5:6:824:ILE:C	2.16	0.52
6:7:404:LEU:HD11	6:7:414:LEU:HD21	1.91	0.52
6:7:601:LEU:HD13	6:7:603:ILE:HD12	1.81	0.52
7:c:28:VAL:HG22	7:c:57:GLN:HB3	1.91	0.52
7:c:74:LEU:HD12	10:A:184:ILE:HD11	1.85	0.52
7:c:124:ASP:OD1	7:c:126:HIS:ND1	2.42	0.52
7:c:290:ARG:O	7:c:293:PRO:HD2	2.09	0.52
7:c:536:LEU:HD12	7:c:571:SER:HB2	1.92	0.52
8:D:279:TYR:HE1	8:D:286:LEU:CD2	2.20	0.52
9:B:167:HIS:O	9:B:168:LEU:HD12	2.09	0.52
10:A:169:LYS:N	10:A:185:LYS:HD3	2.24	0.52
1:2:809:HIS:HE1	1:2:845:PHE:HB2	1.74	0.52
3:4:354:HIS:CD2	3:4:356:MET:HG2	2.44	0.52
4:5:356:GLU:CD	4:5:598:LYS:HZ2	2.17	0.52
4:5:369:ILE:O	4:5:593:GLU:HG2	2.09	0.52
6:7:73:ARG:HH21	6:7:132:ILE:HA	1.74	0.52
6:7:221:SER:HA	6:7:223:LYS:N	2.24	0.52
6:7:395:SER:C	6:7:397:VAL:H	2.15	0.52
6:7:484:THR:O	6:7:488:SER:N	2.26	0.52
7:c:287:VAL:O	7:c:290:ARG:HG2	2.08	0.52
11:C:105:PHE:CE1	11:C:128:LEU:HB2	2.45	0.52
5:6:794:ARG:HB2	5:6:795:ILE:C	2.35	0.52
5:6:937:VAL:HG12	5:6:941:LEU:HD11	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:284:CYS:HG	6:7:286:SER:HG	1.58	0.52
7:c:86:PHE:CE1	7:c:625:PHE:HB2	2.43	0.52
7:c:586:PRO:HD2	7:c:601:ILE:CD1	2.39	0.52
10:A:177:GLU:CG	10:A:178:TYR:CE2	2.92	0.52
1:2:235:GLY:HA2	1:2:283:TYR:CE2	2.37	0.52
1:2:795:ARG:HA	1:2:798:ILE:HD12	1.90	0.52
2:3:391:LYS:CD	6:7:620:HIS:O	2.57	0.52
2:3:682:ASN:OD1	2:3:734:ARG:NH1	2.36	0.52
3:4:448:SER:H	3:4:449:ARG:HB3	1.73	0.52
3:4:568:GLY:N	3:4:574:LYS:HZ3	2.07	0.52
3:4:572:THR:O	3:4:573:SER:OG	2.18	0.52
4:5:104:LEU:HD13	4:5:105:SER:CA	2.37	0.52
4:5:560:HIS:CD2	4:5:565:ASP:HB3	2.43	0.52
6:7:538:HIS:HD2	6:7:593:ARG:HE	1.56	0.52
7:c:566:PRO:HB2	7:c:605:PHE:HE2	1.75	0.52
10:A:173:GLU:CB	10:A:183:LEU:N	2.73	0.52
1:2:790:TYR:CG	1:2:810:LEU:HD12	2.45	0.52
5:6:369:PRO:C	5:6:372:SER:OG	2.52	0.52
6:7:440:VAL:O	6:7:441:ASP:OD1	2.28	0.52
6:7:663:ALA:HB1	6:7:717:LEU:HD21	1.92	0.52
2:3:189:THR:CB	2:3:256:ILE:HD12	2.38	0.52
2:3:389:VAL:HG12	2:3:390:GLU:N	2.14	0.52
2:3:488:GLU:CD	6:7:482:TYR:CE2	2.82	0.52
2:3:569:HIS:CG	4:5:398:LYS:HG3	2.45	0.52
2:3:687:ARG:CZ	6:7:602:ASP:OD2	2.51	0.52
3:4:291:TYR:HB3	3:4:296:ILE:HG21	1.91	0.52
7:c:519:ILE:HA	7:c:528:CYS:SG	2.50	0.52
8:D:94:GLN:OE1	9:B:55:THR:HG23	2.09	0.52
9:B:25:ILE:CD1	9:B:87:ILE:CD1	2.80	0.52
2:3:519:VAL:HG11	2:3:520:PHE:CD2	2.40	0.52
4:5:535:SER:OG	4:5:538:ASP:OD2	2.21	0.52
8:D:216:VAL:HG13	8:D:217:ASN:CA	2.40	0.52
2:3:257:THR:HA	2:3:275:ASP:HA	1.91	0.52
4:5:733:LEU:O	4:5:737:PHE:HB2	2.10	0.52
5:6:174:TYR:HB3	5:6:285:GLY:O	2.10	0.52
6:7:18:PHE:CE1	6:7:119:ARG:NH1	2.78	0.52
6:7:265:CYS:SG	6:7:288:GLU:HB3	2.50	0.52
6:7:421:GLU:C	6:7:625:GLN:HE22	2.16	0.52
1:2:387:ARG:NH1	4:5:323:ILE:HD11	2.22	0.52
2:3:168:PRO:HG2	2:3:260:GLU:HB3	1.91	0.52
2:3:466:ASP:OD1	2:3:467:ARG:N	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:552:PHE:CA	5:6:737:LYS:HZ3	2.23	0.52
3:4:735:HIS:HB3	3:4:738:GLN:CG	2.40	0.52
4:5:86:ILE:O	4:5:89:LEU:N	2.43	0.52
5:6:362:GLN:HB2	5:6:376:THR:HG22	1.90	0.52
9:B:112:PHE:HB3	9:B:152:ARG:HH12	1.75	0.52
10:A:47:LEU:HD11	10:A:78:CYS:HB3	1.91	0.52
10:A:170:ASP:HB3	10:A:204:TYR:CD1	2.44	0.52
10:A:177:GLU:HG3	10:A:178:TYR:CE2	2.45	0.52
1:2:253:LYS:HB3	1:2:255:ILE:HG22	1.91	0.52
2:3:250:PHE:HB2	6:7:232:GLY:O	2.09	0.52
2:3:476:ASP:OD1	2:3:477:LYS:N	2.43	0.52
3:4:458:LYS:HZ3	5:6:413:PRO:HB3	1.74	0.52
3:4:531:TYR:HD2	3:4:720:LEU:HB2	1.54	0.52
4:5:754:ALA:C	4:5:758:HIS:CD2	2.88	0.52
6:7:209:GLN:HB3	6:7:212:ALA:HB2	1.92	0.52
7:c:150:ASP:HB3	7:c:151:THR:C	2.35	0.52
7:c:311:LYS:N	7:c:312:THR:HA	2.25	0.52
7:c:401:LEU:HB3	7:c:404:ILE:CD1	2.39	0.52
9:B:188:ILE:HG23	9:B:192:LEU:HD11	1.89	0.52
1:2:527:VAL:O	1:2:530:LYS:N	2.43	0.51
2:3:100:LEU:HB3	2:3:111:TRP:HZ3	1.75	0.51
2:3:176:LEU:HA	2:3:298:PHE:CD2	2.36	0.51
2:3:502:ILE:N	6:7:346:GLY:CA	2.72	0.51
4:5:204:THR:HG22	4:5:205:VAL:HG23	1.91	0.51
4:5:601:ARG:O	4:5:604:THR:OG1	2.27	0.51
4:5:726:TRP:O	4:5:728:THR:HG22	2.10	0.51
6:7:541:MET:HB2	6:7:593:ARG:HH11	1.75	0.51
10:A:173:GLU:O	10:A:173:GLU:HG2	2.09	0.51
1:2:501:MET:HE3	1:2:516:ALA:HA	1.92	0.51
3:4:307:ASN:H	3:4:436:THR:HG21	1.75	0.51
4:5:71:TYR:CD1	7:c:415:TYR:HE1	2.23	0.51
4:5:149:ARG:HD3	4:5:260:GLU:OE2	2.10	0.51
8:D:193:LEU:HD11	10:A:127:GLU:OE2	2.10	0.51
11:C:25:PRO:HG3	11:C:37:PRO:HB3	1.91	0.51
1:2:326:ARG:HD2	1:2:637:VAL:HG22	1.89	0.51
6:7:108:GLN:OE1	6:7:237:GLN:NE2	2.38	0.51
7:c:5:ILE:HG12	7:c:142:CYS:SG	2.50	0.51
7:c:25:CYS:HB3	7:c:26:GLN:HA	1.92	0.51
10:A:32:TYR:HA	10:A:93:ARG:HH22	1.74	0.51
1:2:551:GLN:NE2	5:6:563:ILE:CG2	2.58	0.51
2:3:372:TYR:CE2	2:3:561:ILE:HG23	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:558:ASP:CB	4:5:627:VAL:HG12	2.39	0.51
3:4:729:LEU:HA	3:4:730:GLU:C	2.35	0.51
4:5:197:PHE:HZ	4:5:329:LYS:HZ2	0.57	0.51
4:5:259:GLN:NE2	4:5:271:PRO:HG2	2.19	0.51
4:5:575:ILE:O	4:5:575:ILE:HG22	2.11	0.51
4:5:740:THR:O	4:5:742:ARG:HG2	2.09	0.51
7:c:139:ILE:HG13	7:c:140:ILE:HG23	1.91	0.51
8:D:141:ARG:NE	10:A:149:ILE:CG1	2.70	0.51
10:A:30:PRO:O	10:A:122:ASN:ND2	2.43	0.51
10:A:77:LEU:HD21	11:C:53:ILE:HD11	1.93	0.51
1:2:522:GLY:C	1:2:822:LYS:HZ1	2.06	0.51
1:2:569:GLN:CD	1:2:613:ASN:HD22	2.18	0.51
5:6:778:LYS:C	5:6:782:LYS:NZ	2.67	0.51
6:7:446:ASP:HB2	6:7:447:GLY:HA2	1.92	0.51
6:7:656:VAL:O	6:7:660:VAL:HG23	2.11	0.51
7:c:613:THR:HG21	7:c:622:ILE:HD11	1.93	0.51
8:D:225:ASN:HB3	9:B:193:ARG:NH1	2.25	0.51
9:B:14:GLU:C	9:B:14:GLU:CD	2.79	0.51
9:B:24:PRO:HB2	9:B:70:GLU:OE2	2.10	0.51
9:B:188:ILE:CD1	11:C:132:ALA:HB2	2.39	0.51
10:A:162:PHE:HD1	10:A:192:GLN:HA	1.75	0.51
11:C:138:HIS:ND1	11:C:162:THR:O	2.43	0.51
1:2:459:ARG:HA	1:2:460:GLU:HB2	1.92	0.51
1:2:703:HIS:CG	5:6:804:ILE:HG21	2.43	0.51
1:2:805:ILE:H	1:2:805:ILE:HD12	1.74	0.51
1:2:856:GLN:NE2	1:2:859:ARG:HH21	2.08	0.51
2:3:422:VAL:O	2:3:426:ALA:HB2	2.10	0.51
4:5:69:ILE:HD12	4:5:73:GLU:HA	1.93	0.51
4:5:655:ALA:O	4:5:659:ILE:HD12	2.10	0.51
5:6:335:ASN:N	5:6:338:CYS:H	2.07	0.51
1:2:216:LEU:CD1	1:2:217:GLU:OE1	2.58	0.51
1:2:320:VAL:HG21	1:2:451:ILE:HD13	1.93	0.51
1:2:689:GLU:O	1:2:693:GLU:HB2	2.11	0.51
3:4:411:THR:CB	6:7:498:MET:C	2.82	0.51
3:4:558:TYR:CE2	5:6:735:HIS:CG	2.90	0.51
6:7:396:ASP:O	6:7:399:GLU:HB3	2.11	0.51
7:c:420:SER:HB2	7:c:423:GLU:HG2	1.91	0.51
7:c:572:ILE:HD13	7:c:579:TYR:H	1.76	0.51
8:D:214:GLY:HA2	8:D:216:VAL:HA	1.92	0.51
9:B:188:ILE:HD13	11:C:132:ALA:CB	2.39	0.51
10:A:23:SER:OG	10:A:24:ASN:CA	2.59	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:A:135:CYS:HA	10:A:138:ILE:HG22	1.93	0.51
1:2:300:PHE:H	1:2:319:ARG:HH11	1.59	0.51
1:2:520:PHE:CD1	1:2:767:ILE:HG22	2.46	0.51
1:2:790:TYR:CD1	1:2:810:LEU:HD12	2.46	0.51
3:4:552:PHE:C	5:6:737:LYS:HZ3	2.18	0.51
3:4:693:ASP:CG	3:4:694:LEU:H	2.19	0.51
5:6:775:GLU:HA	5:6:778:LYS:HB3	1.93	0.51
5:6:793:TYR:O	5:6:794:ARG:NH1	2.40	0.51
6:7:110:ALA:C	6:7:354:ILE:HD13	2.34	0.51
6:7:667:LEU:O	6:7:670:ASP:OD1	2.29	0.51
7:c:249:ASN:HB2	7:c:254:GLN:NE2	2.26	0.51
1:2:333:GLN:HB2	1:2:385:TYR:HB2	1.92	0.51
5:6:919:LYS:O	5:6:922:GLU:HG2	2.11	0.51
8:D:200:LYS:H	8:D:201:TYR:C	2.18	0.51
9:B:51:GLN:H	9:B:52:LEU:HA	1.76	0.51
10:A:27:VAL:HG11	10:A:100:MET:HE1	1.93	0.51
3:4:197:PHE:HZ	3:4:247:ASN:HB3	1.76	0.51
3:4:712:VAL:O	3:4:712:VAL:HG12	2.11	0.51
5:6:609:THR:HG22	5:6:610:ALA:N	2.25	0.51
6:7:400:ARG:HB3	6:7:637:LYS:NZ	2.26	0.51
1:2:481:GLU:O	1:2:485:ARG:HG2	2.10	0.50
4:5:136:GLN:HE22	4:5:282:LEU:HG	1.75	0.50
6:7:244:ILE:CD1	6:7:318:LEU:HD12	2.41	0.50
8:D:218:MET:HA	8:D:219:ILE:C	2.36	0.50
10:A:100:MET:SD	10:A:117:GLN:HG2	2.52	0.50
1:2:423:GLU:HB2	1:2:459:ARG:HD3	1.93	0.50
3:4:345:ALA:O	3:4:357:ALA:HB1	2.11	0.50
7:c:266:ASN:O	7:c:269:ASN:HB2	2.10	0.50
10:A:77:LEU:HD11	11:C:53:ILE:HD11	1.92	0.50
10:A:109:LEU:HG	10:A:111:SER:HB3	1.94	0.50
11:C:72:VAL:HG12	11:C:74:LEU:H	1.76	0.50
1:2:435:ASP:N	1:2:436:GLY:HA3	2.26	0.50
1:2:703:HIS:HB2	5:6:804:ILE:CD1	2.14	0.50
2:3:389:VAL:H	2:3:714:LYS:NZ	2.10	0.50
3:4:335:SER:HB3	3:4:395:GLN:NE2	2.27	0.50
3:4:491:ASP:OD1	3:4:492:HIS:N	2.42	0.50
4:5:370:LEU:HG	4:5:599:MET:HE1	1.94	0.50
4:5:607:ARG:HA	4:5:665:LYS:CE	2.42	0.50
5:6:274:HIS:ND1	5:6:288:LEU:HD11	2.26	0.50
5:6:763:PRO:HG3	5:6:812:ARG:HD3	1.92	0.50
6:7:619:VAL:HG22	6:7:622:HIS:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:318:LEU:HD12	7:c:318:LEU:C	2.36	0.50
1:2:486:LYS:O	1:2:489:ARG:HG2	2.11	0.50
3:4:411:THR:N	6:7:498:MET:C	2.69	0.50
3:4:769:GLU:HA	3:4:772:ARG:HG2	1.93	0.50
4:5:355:GLU:HG3	10:A:19:LEU:CD2	2.41	0.50
1:2:236:GLU:OE1	7:c:357:LYS:HB3	2.11	0.50
3:4:322:ILE:HA	3:4:439:PHE:HD2	1.76	0.50
4:5:560:HIS:CA	4:5:564:ARG:HB3	2.41	0.50
6:7:689:LEU:O	6:7:692:ILE:HG22	2.11	0.50
8:D:279:TYR:CE1	8:D:286:LEU:HD21	2.46	0.50
10:A:124:SER:OG	10:A:127:GLU:HG2	2.12	0.50
10:A:134:TYR:O	10:A:137:LEU:HB3	2.12	0.50
1:2:294:HIS:CD2	1:2:296:ARG:HH12	2.29	0.50
1:2:853:VAL:O	1:2:856:GLN:HB3	2.12	0.50
2:3:263:GLU:HB3	4:5:514:ASN:HB2	1.92	0.50
2:3:403:ILE:HD11	2:3:707:ARG:HB3	1.93	0.50
2:3:669:PRO:HG2	2:3:710:THR:HG23	1.93	0.50
2:3:683:TYR:CZ	2:3:687:ARG:HD2	2.46	0.50
2:3:698:THR:HG21	6:7:462:PRO:CG	2.35	0.50
3:4:823:GLN:OE1	3:4:823:GLN:N	2.44	0.50
4:5:677:VAL:O	4:5:681:ILE:HD12	2.12	0.50
5:6:943:GLN:HG3	5:6:944:LYS:N	2.26	0.50
6:7:362:GLY:HA3	6:7:364:LYS:NZ	2.27	0.50
7:c:41:ALA:HB1	7:c:255:ILE:HD12	1.94	0.50
7:c:324:TYR:HD2	7:c:329:LEU:HD13	1.77	0.50
10:A:177:GLU:HG3	10:A:178:TYR:HE2	1.75	0.50
1:2:696:ALA:CA	5:6:800:LEU:CD2	2.85	0.50
1:2:815:ARG:O	1:2:818:GLU:HG2	2.11	0.50
5:6:105:ASP:O	5:6:108:GLY:N	2.41	0.50
6:7:354:ILE:O	6:7:376:LEU:HD12	2.12	0.50
6:7:409:ASP:OD2	6:7:412:ASN:HB3	2.12	0.50
1:2:803:PHE:CE2	1:2:805:ILE:C	2.74	0.50
2:3:464:LEU:CD2	6:7:322:VAL:O	2.59	0.50
2:3:704:THR:HA	2:3:707:ARG:HH11	1.77	0.50
3:4:407:PRO:HG2	3:4:410:GLN:HB3	1.94	0.50
4:5:138:ILE:CG2	4:5:332:GLY:HA3	2.28	0.50
4:5:560:HIS:C	4:5:562:GLU:H	2.17	0.50
5:6:546:GLY:O	5:6:571:ILE:HD12	2.11	0.50
5:6:735:HIS:O	5:6:736:MET:HE2	2.12	0.50
5:6:942:LEU:HA	5:6:945:GLU:OE1	2.12	0.50
6:7:371:LEU:O	6:7:371:LEU:HG	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:436:LEU:HD21	6:7:473:ILE:HG23	1.93	0.50
6:7:580:PRO:HD2	6:7:678:LYS:C	2.37	0.50
1:2:811:GLU:CD	1:2:815:ARG:NH1	2.70	0.50
2:3:372:TYR:OH	2:3:564:HIS:HB3	2.12	0.50
5:6:143:MET:HE1	5:6:148:LEU:HB2	1.94	0.50
5:6:777:TYR:CE1	5:6:800:LEU:HB2	2.47	0.50
7:c:147:THR:HG22	7:c:249:ASN:ND2	2.26	0.50
7:c:148:VAL:HG12	7:c:152:LEU:HD22	1.93	0.50
8:D:231:HIS:HB2	8:D:274:ILE:HG22	1.93	0.50
11:C:117:GLU:CD	11:C:120:LEU:HD23	2.37	0.50
1:2:795:ARG:HA	4:5:560:HIS:HE1	1.76	0.49
2:3:389:VAL:H	2:3:714:LYS:HZ2	1.58	0.49
3:4:239:SER:OG	3:4:240:ASN:N	2.40	0.49
3:4:319:PRO:HG2	6:7:309:ALA:CA	2.41	0.49
3:4:343:LYS:HZ1	3:4:392:ALA:HB3	1.76	0.49
4:5:87:ILE:HD12	4:5:297:ILE:HD11	1.94	0.49
5:6:194:PRO:O	5:6:261:ARG:NH2	2.44	0.49
6:7:456:VAL:HB	6:7:564:LEU:HG	1.93	0.49
7:c:324:TYR:HE1	7:c:405:ILE:HG13	1.77	0.49
2:3:538:SER:O	2:3:541:SER:OG	2.24	0.49
3:4:202:LYS:CB	3:4:203:TYR:HB3	2.39	0.49
4:5:570:ASN:CA	4:5:573:ILE:CD1	2.87	0.49
5:6:701:MET:HB2	5:6:705:ILE:HD11	1.94	0.49
6:7:584:ILE:HD12	6:7:681:PHE:CZ	2.48	0.49
10:A:41:LEU:HA	10:A:44:VAL:HG12	1.95	0.49
1:2:306:LEU:CD2	1:2:404:ARG:O	2.60	0.49
1:2:543:GLY:HA3	1:2:549:LYS:CD	2.37	0.49
1:2:846:VAL:O	1:2:853:VAL:HG21	2.12	0.49
2:3:289:GLY:H	4:5:509:ILE:HG22	1.73	0.49
2:3:435:ARG:NH1	2:3:477:LYS:O	2.45	0.49
4:5:249:LYS:C	4:5:250:PHE:HD1	2.19	0.49
4:5:369:ILE:HG12	4:5:593:GLU:HG2	1.93	0.49
4:5:413:LEU:HD11	4:5:550:PHE:CD2	2.47	0.49
5:6:653:HIS:NE2	5:6:704:PRO:HB2	2.28	0.49
8:D:59:ASP:HA	8:D:83:LEU:HD11	1.95	0.49
8:D:98:ILE:HA	8:D:101:ILE:HG22	1.94	0.49
8:D:266:GLU:CB	8:D:268:GLU:HG3	2.41	0.49
9:B:60:LEU:HD12	9:B:61:ASN:H	1.77	0.49
1:2:430:TYR:OH	1:2:449:THR:HG22	2.13	0.49
1:2:481:GLU:HA	1:2:484:PHE:HB3	1.93	0.49
2:3:97:ILE:HA	2:3:156:SER:OG	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:187:THR:CB	4:5:509:ILE:HD13	2.42	0.49
2:3:406:LEU:HB3	2:3:546:LEU:HD23	1.94	0.49
2:3:698:THR:CB	6:7:463:GLY:HA3	2.36	0.49
3:4:438:THR:CG2	3:4:462:ASP:CB	2.89	0.49
4:5:359:GLN:HG2	4:5:362:ARG:HH21	1.77	0.49
4:5:481:GLU:HB3	4:5:484:LYS:HB2	1.94	0.49
4:5:629:ILE:HG23	4:5:633:LEU:HD12	1.93	0.49
4:5:733:LEU:HD22	4:5:748:LEU:CD1	2.42	0.49
5:6:547:ILE:HD11	5:6:584:PHE:HB3	1.94	0.49
5:6:932:THR:O	5:6:935:ASP:CG	2.55	0.49
6:7:255:VAL:HG23	6:7:258:ILE:HG12	1.94	0.49
6:7:258:ILE:H	6:7:305:SER:CB	2.25	0.49
6:7:460:GLY:HA3	6:7:600:MET:O	2.13	0.49
7:c:575:ASN:O	7:c:578:THR:HG23	2.13	0.49
9:B:160:LEU:O	9:B:163:LEU:HG	2.12	0.49
11:C:129:LEU:HD23	11:C:129:LEU:C	2.36	0.49
1:2:306:LEU:HD23	1:2:404:ARG:O	2.12	0.49
1:2:684:ARG:CB	1:2:685:ASP:CG	2.83	0.49
1:2:790:TYR:CD2	4:5:565:ASP:OD1	2.62	0.49
2:3:374:HIS:HE1	2:3:549:VAL:HG11	1.76	0.49
3:4:352:CYS:N	3:4:353:ASP:HA	2.27	0.49
4:5:34:PHE:HD1	4:5:71:TYR:CD2	2.30	0.49
4:5:359:GLN:HA	4:5:362:ARG:HE	1.78	0.49
7:c:127:ARG:NH2	7:c:147:THR:OG1	2.41	0.49
7:c:328:LEU:H	7:c:423:GLU:CD	2.21	0.49
10:A:175:GLN:CD	10:A:199:LEU:HD13	2.38	0.49
2:3:172:THR:O	2:3:172:THR:CG2	2.58	0.49
3:4:346:PHE:CE2	3:4:348:LYS:HG3	2.47	0.49
3:4:521:LEU:O	3:4:524:ARG:HG2	2.13	0.49
3:4:569:ASP:O	3:4:572:THR:OG1	2.19	0.49
3:4:600:GLY:HA2	3:4:604:TYR:HE1	1.77	0.49
4:5:708:LEU:HD12	4:5:750:LYS:HD3	1.93	0.49
5:6:153:ILE:HD11	5:6:267:PHE:CD1	2.48	0.49
5:6:840:VAL:HG13	5:6:925:ARG:HH21	1.78	0.49
6:7:458:LEU:HD23	6:7:598:PHE:HB2	1.94	0.49
8:D:164:ASP:O	8:D:169:ILE:HD11	2.13	0.49
1:2:840:VAL:O	1:2:843:ASP:OD1	2.30	0.49
2:3:187:THR:HB	4:5:509:ILE:HD13	1.94	0.49
3:4:448:SER:HB3	3:4:449:ARG:HB3	1.94	0.49
6:7:362:GLY:HA2	6:7:364:LYS:HG3	1.93	0.49
7:c:271:TRP:O	7:c:275:LEU:HG	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:121:VAL:HG13	11:C:190:TRP:CH2	2.46	0.49
3:4:587:ARG:HD2	3:4:625:ASP:O	2.13	0.49
5:6:167:ALA:O	5:6:171:SER:OG	2.19	0.49
6:7:237:GLN:O	6:7:239:ILE:HG23	2.13	0.49
6:7:441:ASP:HB3	6:7:452:GLY:HA2	1.95	0.49
7:c:431:LEU:HD22	7:c:479:LEU:HD23	1.95	0.49
7:c:546:LEU:O	7:c:550:ASN:HB2	2.12	0.49
9:B:14:GLU:HG2	9:B:17:GLN:HE21	1.78	0.49
10:A:23:SER:OG	10:A:25:GLN:N	2.45	0.49
1:2:264:PRO:HG3	1:2:317:LEU:N	2.28	0.49
1:2:427:THR:OG1	1:2:454:ASN:HB3	2.12	0.49
2:3:569:HIS:CE1	4:5:406:LEU:CD2	2.91	0.49
3:4:242:ASN:HA	3:4:304:ARG:HB2	1.95	0.49
3:4:497:GLU:HG3	3:4:498:VAL:N	2.28	0.49
4:5:158:LYS:O	4:5:160:VAL:HG23	2.12	0.49
4:5:197:PHE:CE2	4:5:329:LYS:HE3	2.30	0.49
4:5:338:GLU:N	4:5:339:THR:HA	2.28	0.49
4:5:407:ARG:O	4:5:658:ARG:HD3	2.13	0.49
5:6:644:MET:HE3	5:6:649:GLN:OE1	2.13	0.49
6:7:397:VAL:HA	6:7:400:ARG:HH21	1.78	0.49
6:7:458:LEU:HD22	6:7:600:MET:HE3	1.93	0.49
7:c:256:TYR:HB2	7:c:273:ASN:OD1	2.13	0.49
7:c:316:LEU:CD1	7:c:414:GLY:N	2.68	0.49
8:D:189:ILE:CD1	10:A:133:GLU:CD	2.82	0.49
1:2:327:ARG:HH12	4:5:272:ARG:HH21	1.60	0.49
1:2:597:VAL:HG23	1:2:629:ILE:HD12	1.94	0.49
2:3:262:PRO:HG3	4:5:513:LEU:HB2	1.95	0.49
2:3:414:ALA:O	2:3:418:LEU:N	2.41	0.49
2:3:447:THR:HB	2:3:448:THR:HG22	1.95	0.49
2:3:480:ASP:O	2:3:484:VAL:HG23	2.12	0.49
3:4:545:PHE:HE1	3:4:751:ILE:HG23	1.77	0.49
3:4:809:ALA:HB2	3:4:817:VAL:HG23	1.94	0.49
6:7:394:THR:HG23	6:7:398:GLU:OE2	2.13	0.49
7:c:150:ASP:H	7:c:152:LEU:HB3	1.78	0.49
10:A:65:ASP:OD2	10:A:67:VAL:HB	2.13	0.49
1:2:216:LEU:HD12	1:2:217:GLU:CB	2.43	0.48
2:3:393:LEU:HD23	6:7:623:ASN:HA	1.94	0.48
4:5:355:GLU:CB	10:A:19:LEU:HD21	2.42	0.48
10:A:108:ASP:H	10:A:109:LEU:C	2.21	0.48
10:A:168:LEU:HD21	10:A:206:GLN:CG	2.40	0.48
1:2:504:SER:HA	1:2:698:PHE:HZ	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:601:LYS:HZ2	1:2:643:ARG:HD2	1.77	0.48
2:3:427:SER:O	2:3:428:LEU:HB2	2.13	0.48
3:4:531:TYR:HB3	3:4:720:LEU:CD1	2.44	0.48
6:7:459:MET:HG3	6:7:569:PRO:HG3	1.95	0.48
7:c:335:TYR:HB2	7:c:373:ALA:HB1	1.94	0.48
7:c:586:PRO:CD	7:c:601:ILE:HD13	2.43	0.48
9:B:177:GLU:O	9:B:181:LEU:HG	2.12	0.48
10:A:23:SER:HG	10:A:24:ASN:C	2.20	0.48
10:A:175:GLN:CD	10:A:199:LEU:HD21	2.38	0.48
1:2:656:ARG:HB3	5:6:794:ARG:NE	2.28	0.48
1:2:767:ILE:HG13	1:2:768:HIS:N	2.29	0.48
2:3:202:TYR:CE2	6:7:14:TYR:HD2	2.31	0.48
2:3:393:LEU:CD2	6:7:623:ASN:HA	2.43	0.48
3:4:635:ASP:OD2	3:4:675:ALA:HB1	2.13	0.48
3:4:714:GLU:OE2	6:7:669:GLN:HB2	2.12	0.48
5:6:288:LEU:O	5:6:290:ILE:HD12	2.12	0.48
6:7:102:LEU:O	6:7:105:ALA:N	2.46	0.48
6:7:116:LEU:O	6:7:119:ARG:HG2	2.13	0.48
6:7:476:ILE:HG21	6:7:638:MET:HE3	1.95	0.48
6:7:723:SER:OG	6:7:724:LYS:N	2.44	0.48
11:C:187:THR:O	11:C:191:MET:HG2	2.13	0.48
1:2:601:LYS:HZ1	1:2:643:ARG:NH1	2.11	0.48
3:4:505:ASP:OD1	3:4:505:ASP:N	2.46	0.48
4:5:711:ILE:HG13	4:5:743:PHE:CD1	2.45	0.48
5:6:154:ASP:OD1	5:6:269:ASN:HB3	2.13	0.48
5:6:559:THR:HG23	5:6:565:LEU:HD23	1.95	0.48
5:6:603:SER:H	5:6:604:SER:HA	1.78	0.48
5:6:909:TYR:O	5:6:913:MET:HG2	2.14	0.48
5:6:929:GLU:C	5:6:930:GLU:HG3	2.33	0.48
7:c:154:GLU:CD	7:c:240:TYR:HB2	2.38	0.48
7:c:431:LEU:HD13	7:c:480:SER:HA	1.96	0.48
7:c:529:VAL:HG23	7:c:570:ALA:HB3	1.95	0.48
9:B:29:PRO:O	9:B:65:ALA:HA	2.14	0.48
10:A:135:CYS:O	10:A:139:THR:HG23	2.13	0.48
1:2:435:ASP:HB3	1:2:447:PHE:HD1	1.77	0.48
1:2:705:ARG:O	1:2:706:SER:HB2	2.13	0.48
2:3:122:ILE:HG23	2:3:221:LEU:CD1	2.11	0.48
2:3:199:SER:HB3	2:3:212:ARG:HB3	1.94	0.48
3:4:409:GLY:O	6:7:498:MET:O	2.31	0.48
3:4:440:ARG:HG3	3:4:440:ARG:NH1	2.29	0.48
4:5:40:LEU:CD2	4:5:45:ILE:HD11	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:739:ASP:HB3	5:6:697:GLY:CA	2.43	0.48
5:6:924:ASP:HA	5:6:927:GLY:O	2.14	0.48
6:7:17:LEU:O	6:7:21:ILE:HG13	2.13	0.48
6:7:260:TYR:CG	6:7:298:LEU:HD13	2.48	0.48
6:7:357:PRO:HB3	6:7:372:THR:HB	1.94	0.48
8:D:79:TYR:HD1	8:D:147:ARG:NH1	2.12	0.48
9:B:30:ARG:NH2	9:B:86:SER:OG	2.46	0.48
10:A:175:GLN:CB	10:A:181:PHE:HB2	2.44	0.48
1:2:216:LEU:CD1	1:2:217:GLU:HB3	2.44	0.48
1:2:689:GLU:O	1:2:693:GLU:CB	2.61	0.48
2:3:151:HIS:CG	2:3:152:PRO:HD2	2.48	0.48
2:3:317:PHE:CE2	4:5:176:ALA:HB2	2.46	0.48
3:4:241:LEU:HD23	3:4:243:LEU:H	1.78	0.48
4:5:464:LEU:HD12	4:5:513:LEU:HD22	1.95	0.48
4:5:733:LEU:HD23	4:5:733:LEU:O	2.14	0.48
5:6:612:VAL:HG23	5:6:623:ILE:HA	1.96	0.48
5:6:767:LYS:HG2	5:6:769:ALA:H	1.78	0.48
7:c:243:GLN:HE21	7:c:602:LEU:HD21	1.78	0.48
8:D:72:CYS:SG	8:D:228:VAL:HB	2.54	0.48
9:B:51:GLN:N	9:B:52:LEU:HA	2.28	0.48
10:A:106:GLY:N	10:A:107:LEU:HB2	2.19	0.48
1:2:216:LEU:HD12	1:2:217:GLU:CA	2.43	0.48
1:2:428:GLY:HA3	1:2:453:ALA:HA	1.95	0.48
2:3:163:ALA:HB2	11:C:91:ASP:OD2	2.14	0.48
2:3:698:THR:HG21	6:7:462:PRO:C	2.39	0.48
3:4:762:ILE:HD11	5:6:732:VAL:HG11	1.95	0.48
5:6:134:LYS:HG2	5:6:137:ARG:HG3	1.96	0.48
6:7:678:LYS:O	6:7:679:PHE:O	2.30	0.48
7:c:558:GLU:OE1	7:c:560:GLU:HB2	2.14	0.48
7:c:613:THR:O	7:c:617:ASP:HB3	2.12	0.48
9:B:80:LYS:HE3	9:B:130:ALA:HA	1.96	0.48
10:A:178:TYR:OH	10:A:198:ARG:NE	2.47	0.48
1:2:325:THR:OG1	1:2:389:THR:O	2.31	0.48
3:4:234:ARG:HD2	3:4:283:LEU:HD21	1.96	0.48
3:4:321:ASP:OD1	3:4:321:ASP:O	2.32	0.48
4:5:735:ARG:HA	4:5:738:VAL:CG1	2.43	0.48
6:7:636:SER:HA	6:7:639:ARG:HH21	1.77	0.48
7:c:328:LEU:HD23	7:c:423:GLU:OE1	2.14	0.48
9:B:21:GLU:HA	9:B:73:LEU:HD23	1.95	0.48
10:A:173:GLU:CB	10:A:183:LEU:H	2.27	0.48
1:2:794:ARG:HH11	4:5:564:ARG:HH12	1.62	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:811:GLU:OE1	1:2:815:ARG:NH1	2.45	0.48
3:4:306:TYR:HB3	3:4:465:HIS:CD2	2.48	0.48
3:4:775:VAL:HG22	5:6:724:ASP:CB	2.44	0.48
3:4:778:ARG:HG3	5:6:719:CYS:SG	2.54	0.48
4:5:489:ASP:O	4:5:493:ILE:HG12	2.14	0.48
4:5:570:ASN:CA	4:5:573:ILE:HD12	2.44	0.48
5:6:379:VAL:CG2	5:6:454:PHE:CD2	2.93	0.48
5:6:568:ASP:CG	5:6:569:ILE:H	2.21	0.48
5:6:912:MET:SD	5:6:960:LEU:HB3	2.53	0.48
5:6:945:GLU:O	5:6:948:LEU:CD2	2.62	0.48
6:7:628:LEU:N	6:7:629:ASP:HA	2.29	0.48
7:c:335:TYR:HD1	7:c:363:PHE:HE2	1.59	0.48
10:A:15:ARG:NH1	10:A:30:PRO:HG2	2.13	0.48
10:A:71:GLN:O	10:A:75:THR:OG1	2.31	0.48
10:A:171:ALA:HA	10:A:172:GLY:HA3	1.62	0.48
1:2:325:THR:CG2	1:2:636:ILE:HD13	2.35	0.48
1:2:326:ARG:HD2	1:2:637:VAL:CG2	2.44	0.48
3:4:351:VAL:HA	3:4:352:CYS:HA	1.56	0.48
3:4:557:ARG:NH1	3:4:668:ARG:HH21	2.10	0.48
5:6:968:LEU:HD23	5:6:968:LEU:C	2.39	0.48
6:7:21:ILE:HD13	6:7:117:PHE:HA	1.95	0.48
6:7:441:ASP:OD1	6:7:441:ASP:C	2.57	0.48
7:c:558:GLU:H	7:c:560:GLU:CB	2.27	0.48
8:D:211:ASP:HB2	8:D:219:ILE:HD11	1.96	0.48
8:D:259:THR:OG1	8:D:260:ILE:N	2.47	0.48
9:B:160:LEU:HD23	11:C:133:GLN:NE2	2.27	0.48
10:A:166:ARG:HH22	10:A:207:LEU:HD22	1.77	0.48
10:A:175:GLN:NE2	10:A:199:LEU:CD1	2.77	0.48
1:2:426:VAL:HG12	1:2:456:ILE:HD13	1.95	0.47
1:2:442:ASN:CG	1:2:444:PHE:O	2.57	0.47
3:4:448:SER:HB3	3:4:449:ARG:CB	2.43	0.47
5:6:336:PRO:HA	5:6:337:SER:HA	1.48	0.47
5:6:780:LEU:HD12	5:6:828:TYR:HE1	1.78	0.47
5:6:922:GLU:HG3	5:6:923:VAL:N	2.29	0.47
6:7:26:VAL:HG13	6:7:64:MET:HE2	1.95	0.47
6:7:103:VAL:O	6:7:107:GLN:HG2	2.14	0.47
7:c:259:LEU:CD2	7:c:264:GLU:O	2.62	0.47
8:D:215:SER:HA	8:D:216:VAL:HA	1.66	0.47
9:B:160:LEU:HD21	9:B:184:PHE:HE2	1.79	0.47
10:A:169:LYS:N	10:A:185:LYS:CD	2.76	0.47
1:2:327:ARG:HH22	4:5:272:ARG:HH21	1.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:816:ILE:O	1:2:819:SER:OG	2.16	0.47
2:3:94:HIS:HB3	2:3:153:TRP:CE3	2.49	0.47
2:3:390:GLU:HG2	2:3:509:ARG:NH1	2.29	0.47
2:3:524:ASP:O	2:3:532:ASN:ND2	2.47	0.47
3:4:245:ALA:HA	3:4:246:ARG:HA	1.61	0.47
3:4:585:THR:HG21	3:4:628:VAL:H	1.78	0.47
3:4:762:ILE:O	3:4:817:VAL:HG12	2.14	0.47
3:4:764:GLU:OE1	3:4:764:GLU:HA	2.14	0.47
5:6:597:TYR:HD1	5:6:637:CYS:SG	2.37	0.47
6:7:260:TYR:CZ	6:7:269:VAL:HB	2.48	0.47
7:c:539:TYR:HB3	7:c:545:LEU:HD11	1.95	0.47
1:2:335:LYS:HG3	1:2:383:ARG:HB3	1.95	0.47
2:3:468:GLY:O	2:3:511:SER:OG	2.27	0.47
3:4:714:GLU:C	6:7:665:ILE:HG12	2.39	0.47
6:7:580:PRO:HD2	6:7:678:LYS:CA	2.42	0.47
7:c:88:GLY:HA3	7:c:124:ASP:OD2	2.13	0.47
7:c:227:LYS:HD3	7:c:230:ILE:HD12	1.96	0.47
1:2:359:ILE:HA	1:2:360:ARG:HA	1.65	0.47
1:2:576:LEU:HD23	1:2:595:ALA:HB3	1.97	0.47
2:3:347:ILE:HG12	2:3:351:ASN:HD21	1.79	0.47
2:3:680:VAL:CG2	6:7:613:ALA:CB	2.83	0.47
3:4:656:ILE:HG23	3:4:658:LYS:HG2	1.97	0.47
4:5:412:VAL:HB	4:5:520:LEU:HG	1.96	0.47
6:7:228:ARG:NH1	6:7:323:PRO:HD2	2.29	0.47
6:7:451:ARG:HA	6:7:452:GLY:HA3	1.62	0.47
8:D:216:VAL:CG1	8:D:219:ILE:HB	2.44	0.47
8:D:234:GLY:O	8:D:256:TYR:OH	2.29	0.47
1:2:326:ARG:HD3	1:2:637:VAL:CG2	2.43	0.47
1:2:334:LEU:HD11	4:5:324:ARG:NE	2.29	0.47
1:2:339:PHE:HZ	1:2:348:LEU:HB2	1.79	0.47
1:2:805:ILE:HD11	1:2:845:PHE:CZ	2.50	0.47
2:3:670:GLN:HE22	2:3:719:LYS:NZ	2.12	0.47
2:3:680:VAL:CG2	6:7:613:ALA:HB1	2.17	0.47
4:5:28:ILE:HG12	4:5:93:ALA:HB2	1.97	0.47
4:5:369:ILE:HG12	4:5:593:GLU:CG	2.44	0.47
5:6:349:THR:HG23	5:6:350:ARG:NH1	2.28	0.47
5:6:403:VAL:HG11	5:6:450:TYR:HB3	1.96	0.47
5:6:777:TYR:CD1	5:6:800:LEU:HB2	2.50	0.47
7:c:469:LEU:HD21	7:c:473:TRP:CZ2	2.49	0.47
8:D:216:VAL:CG1	8:D:218:MET:H	2.26	0.47
11:C:22:TYR:OH	11:C:69:VAL:HB	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:135:LEU:HD11	11:C:169:LEU:HD21	1.96	0.47
2:3:289:GLY:CA	4:5:511:THR:H	2.21	0.47
2:3:569:HIS:HE1	4:5:406:LEU:CD2	2.28	0.47
2:3:655:PHE:HA	2:3:658:LYS:NZ	2.29	0.47
3:4:444:ILE:HD11	3:4:454:LYS:HD2	1.97	0.47
3:4:688:VAL:HG12	3:4:692:ILE:HD11	1.96	0.47
4:5:426:LEU:HA	4:5:426:LEU:HD23	1.59	0.47
5:6:390:LYS:HA	5:6:391:PRO:HD3	1.78	0.47
5:6:601:LYS:HA	5:6:644:MET:HG2	1.96	0.47
6:7:414:LEU:O	6:7:418:ILE:HD12	2.15	0.47
6:7:570:LEU:HB2	6:7:585:ASN:HD21	1.79	0.47
8:D:94:GLN:HE21	8:D:133:LEU:HG	1.80	0.47
8:D:145:ARG:HH22	10:A:102:TRP:HB3	1.79	0.47
8:D:146:CYS:O	8:D:149:SER:OG	2.16	0.47
8:D:168:LEU:HD11	8:D:171:LEU:HD12	1.96	0.47
9:B:116:PRO:O	9:B:117:TRP:HB3	2.12	0.47
10:A:47:LEU:HD22	10:A:79:MET:SD	2.54	0.47
10:A:147:VAL:CG1	10:A:149:ILE:HG13	2.45	0.47
1:2:549:LYS:NZ	1:2:651:ASN:OD1	2.47	0.47
1:2:616:ASP:O	1:2:619:SER:OG	2.15	0.47
1:2:684:ARG:HB3	1:2:685:ASP:CA	2.21	0.47
1:2:795:ARG:N	4:5:560:HIS:HE1	2.12	0.47
1:2:803:PHE:HE2	1:2:805:ILE:C	2.09	0.47
2:3:151:HIS:ND1	2:3:152:PRO:HD2	2.29	0.47
2:3:216:ASP:CG	2:3:217:ALA:N	2.67	0.47
2:3:530:HIS:C	2:3:532:ASN:H	2.22	0.47
3:4:422:GLU:H	3:4:422:GLU:CD	2.23	0.47
3:4:531:TYR:HE2	3:4:716:ASN:CG	2.21	0.47
4:5:138:ILE:HG12	4:5:282:LEU:HD21	1.96	0.47
5:6:162:GLU:HG3	5:6:165:ALA:HB3	1.97	0.47
5:6:328:THR:HA	5:6:329:GLU:HA	1.62	0.47
5:6:356:TRP:HB2	5:6:381:LEU:O	2.15	0.47
5:6:768:GLU:OE1	5:6:768:GLU:N	2.47	0.47
5:6:916:ILE:O	5:6:920:ILE:HG12	2.15	0.47
6:7:331:LEU:HD11	6:7:355:PHE:CE1	2.48	0.47
6:7:670:ASP:HA	6:7:673:ARG:HG2	1.97	0.47
7:c:34:LEU:CD1	7:c:34:LEU:C	2.83	0.47
7:c:121:TYR:CE1	7:c:141:GLN:CG	2.98	0.47
7:c:147:THR:HB	7:c:248:VAL:HG11	1.95	0.47
7:c:474:VAL:CG1	10:A:186:ASP:CB	2.93	0.47
8:D:83:LEU:O	8:D:86:ARG:HG2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:169:ILE:CG2	8:D:170:SER:N	2.58	0.47
8:D:226:LYS:HG3	9:B:190:ASP:OD2	2.14	0.47
9:B:53:ILE:H	9:B:53:ILE:HD12	1.80	0.47
1:2:794:ARG:O	1:2:797:SER:OG	2.30	0.47
2:3:342:LEU:O	2:3:346:ASP:HB2	2.14	0.47
2:3:422:VAL:HG11	2:3:513:ILE:HD12	1.96	0.47
2:3:460:GLY:O	2:3:464:LEU:HG	2.15	0.47
2:3:656:LEU:HD23	2:3:656:LEU:C	2.40	0.47
3:4:531:TYR:OH	3:4:716:ASN:OD1	2.32	0.47
4:5:148:LEU:CD2	4:5:260:GLU:HB3	2.45	0.47
4:5:707:SER:O	4:5:711:ILE:HG22	2.15	0.47
4:5:728:THR:HA	4:5:732:THR:CB	2.44	0.47
5:6:840:VAL:HG13	5:6:925:ARG:HE	1.79	0.47
5:6:906:TYR:CD2	5:6:910:VAL:HG23	2.50	0.47
5:6:908:LYS:HB3	5:6:960:LEU:HD13	1.96	0.47
6:7:18:PHE:HA	6:7:21:ILE:HD12	1.97	0.47
6:7:685:THR:HB	6:7:686:PRO:HD2	1.97	0.47
7:c:15:ILE:CD1	7:c:80:SER:HB2	2.45	0.47
7:c:28:VAL:O	7:c:81:LEU:CD2	2.62	0.47
7:c:527:LEU:HD23	7:c:528:CYS:N	2.30	0.47
1:2:601:LYS:HZ1	1:2:643:ARG:HD2	1.79	0.47
1:2:861:PHE:O	1:2:864:TYR:HB3	2.15	0.47
2:3:178:LYS:O	2:3:180:VAL:HG23	2.14	0.47
2:3:569:HIS:C	4:5:398:LYS:HD2	2.38	0.47
3:4:375:ASP:HA	3:4:376:CYS:O	2.15	0.47
3:4:531:TYR:CB	3:4:720:LEU:HG	2.40	0.47
3:4:552:PHE:CG	5:6:740:GLU:OE2	2.68	0.47
3:4:818:GLU:HG3	3:4:820:GLU:H	1.80	0.47
4:5:757:LYS:NZ	4:5:758:HIS:CE1	2.83	0.47
5:6:568:ASP:OD1	5:6:677:SER:HB3	2.14	0.47
5:6:579:THR:HG23	5:6:717:ASP:OD2	2.15	0.47
6:7:380:PHE:HE2	6:7:382:ARG:HB2	1.80	0.47
8:D:137:LYS:O	8:D:141:ARG:HG3	2.15	0.47
8:D:211:ASP:OD1	8:D:213:GLU:CA	2.62	0.47
8:D:227:PHE:HD2	9:B:190:ASP:OD1	1.98	0.47
9:B:102:ILE:HG23	9:B:148:LEU:HD12	1.97	0.47
11:C:123:VAL:HG12	11:C:124:VAL:N	2.30	0.47
1:2:703:HIS:ND1	5:6:804:ILE:CD1	2.78	0.47
1:2:769:TYR:CZ	1:2:773:LYS:HD3	2.50	0.47
2:3:137:ASP:HA	2:3:138:ASP:HA	1.59	0.47
2:3:409:GLY:H	2:3:415:LYS:HZ3	1.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:153:SER:O	4:5:155:HIS:N	2.34	0.47
4:5:270:MET:SD	4:5:271:PRO:HD2	2.55	0.47
4:5:739:ASP:HB3	5:6:697:GLY:HA2	1.97	0.47
4:5:748:LEU:C	4:5:748:LEU:HD23	2.40	0.47
5:6:326:LYS:H	5:6:327:TYR:HA	1.80	0.47
5:6:699:LEU:HD23	5:6:701:MET:HE3	1.97	0.47
6:7:264:GLN:HB2	6:7:289:CYS:SG	2.55	0.47
6:7:570:LEU:HB2	6:7:585:ASN:ND2	2.30	0.47
9:B:184:PHE:CE1	9:B:188:ILE:HD12	2.50	0.47
9:B:191:LYS:CD	11:C:172:MET:HE1	2.43	0.47
1:2:240:GLU:O	1:2:293:ILE:HG23	2.15	0.46
1:2:785:LYS:HG3	1:2:788:ARG:HH21	1.80	0.46
1:2:785:LYS:HG3	1:2:788:ARG:NH2	2.29	0.46
2:3:260:GLU:OE2	2:3:271:PRO:HA	2.15	0.46
2:3:700:ARG:O	2:3:704:THR:HG23	2.15	0.46
3:4:743:PRO:HG2	3:4:747:LEU:HD23	1.96	0.46
4:5:22:ASP:O	4:5:26:GLU:HG2	2.15	0.46
4:5:54:ILE:HG22	4:5:135:PHE:CZ	2.51	0.46
4:5:673:GLN:OE1	4:5:675:ARG:NH2	2.47	0.46
4:5:733:LEU:HG	4:5:737:PHE:CD2	2.50	0.46
5:6:136:TYR:O	5:6:140:ILE:CD1	2.43	0.46
5:6:817:ASP:C	5:6:819:ILE:H	2.22	0.46
5:6:923:VAL:O	5:6:927:GLY:N	2.47	0.46
5:6:944:LYS:HD2	5:6:947:ASP:OD2	2.15	0.46
7:c:586:PRO:HG2	7:c:601:ILE:HD13	1.97	0.46
11:C:131:ARG:HD3	11:C:131:ARG:HA	1.71	0.46
4:5:342:ILE:N	4:5:343:TRP:O	2.48	0.46
4:5:561:ASN:C	4:5:563:GLU:N	2.73	0.46
5:6:576:ASP:O	5:6:579:THR:OG1	2.23	0.46
5:6:752:ARG:C	5:6:756:LYS:NZ	2.74	0.46
6:7:221:SER:HA	6:7:222:SER:C	2.40	0.46
6:7:484:THR:HG23	6:7:487:GLY:CA	2.44	0.46
7:c:15:ILE:HD13	7:c:121:TYR:CD2	2.48	0.46
7:c:337:SER:O	7:c:341:SER:OG	2.32	0.46
7:c:558:GLU:O	7:c:589:PRO:HB3	2.15	0.46
10:A:138:ILE:HD12	10:A:141:LEU:HB2	1.96	0.46
11:C:139:ALA:HB1	11:C:184:TYR:CE2	2.51	0.46
1:2:767:ILE:HG13	1:2:768:HIS:H	1.81	0.46
2:3:555:GLU:O	2:3:558:ASP:HB3	2.15	0.46
3:4:234:ARG:HB3	3:4:280:MET:HE1	1.97	0.46
3:4:315:ARG:HH12	6:7:251:VAL:N	2.06	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:563:ASN:HD22	3:4:649:MET:CE	2.27	0.46
3:4:578:LEU:HD22	3:4:630:CYS:HB3	1.96	0.46
4:5:357:PHE:HE1	4:5:598:LYS:HE2	1.79	0.46
4:5:554:PHE:CE1	4:5:687:SER:HB2	2.46	0.46
4:5:570:ASN:HA	4:5:573:ILE:HD12	1.94	0.46
4:5:578:GLY:C	4:5:580:ALA:H	2.23	0.46
4:5:708:LEU:CD1	4:5:750:LYS:CD	2.93	0.46
4:5:708:LEU:CD1	4:5:750:LYS:HD2	2.45	0.46
6:7:18:PHE:CZ	6:7:119:ARG:NH1	2.83	0.46
6:7:374:THR:OG1	6:7:375:TYR:N	2.35	0.46
7:c:15:ILE:HB	7:c:121:TYR:CE2	2.50	0.46
7:c:29:ILE:CG1	7:c:58:ILE:HG12	2.44	0.46
8:D:258:VAL:HA	8:D:259:THR:OG1	2.14	0.46
11:C:101:ASN:H	11:C:102:SER:HA	1.81	0.46
1:2:409:ILE:HG22	1:2:411:LEU:HD11	1.97	0.46
1:2:693:GLU:HB2	5:6:778:LYS:HZ1	1.80	0.46
3:4:441:SER:C	3:4:442:ILE:HD12	2.40	0.46
4:5:59:TYR:CD1	4:5:135:PHE:HE1	2.28	0.46
9:B:173:LEU:CD1	9:B:177:GLU:OE1	2.60	0.46
10:A:5:LEU:HD11	10:A:36:ILE:HD11	1.96	0.46
10:A:183:LEU:C	10:A:184:ILE:HG12	2.39	0.46
10:A:185:LYS:HG3	10:A:186:ASP:CG	2.41	0.46
1:2:404:ARG:NH1	5:6:300:VAL:HG23	2.30	0.46
1:2:551:GLN:CD	5:6:563:ILE:HG21	2.38	0.46
3:4:331:LEU:O	3:4:399:LEU:HD12	2.15	0.46
3:4:641:THR:O	3:4:642:ARG:HB2	2.16	0.46
4:5:68:LEU:CD2	4:5:76:TYR:HB2	2.46	0.46
4:5:561:ASN:O	4:5:563:GLU:N	2.48	0.46
4:5:717:GLU:HA	4:5:721:ARG:HB3	1.98	0.46
5:6:776:LYS:HZ2	5:6:824:ILE:HG22	1.79	0.46
6:7:67:LEU:HD11	6:7:121:ILE:HG23	1.98	0.46
6:7:206:PRO:HG3	6:7:352:THR:HG21	1.98	0.46
6:7:227:VAL:HB	6:7:317:GLU:OE2	2.16	0.46
9:B:157:LEU:HD23	9:B:157:LEU:O	2.16	0.46
1:2:505:ILE:C	1:2:507:GLY:H	2.23	0.46
2:3:199:SER:HB2	2:3:214:TYR:CE2	2.51	0.46
2:3:346:ASP:O	2:3:350:ILE:HD12	2.14	0.46
4:5:413:LEU:HD23	4:5:415:LEU:HD23	1.98	0.46
4:5:549:ARG:HG2	4:5:651:ARG:NH2	2.31	0.46
4:5:558:ASP:OD1	4:5:558:ASP:N	2.43	0.46
5:6:600:GLY:HA2	5:6:601:LYS:C	2.40	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:769:ALA:O	5:6:772:TYR:HB3	2.16	0.46
7:c:413:LEU:HD12	7:c:413:LEU:HA	1.66	0.46
8:D:275:TYR:CE1	9:B:169:GLN:HA	2.50	0.46
1:2:294:HIS:CD2	1:2:296:ARG:NH1	2.84	0.46
1:2:843:ASP:OD1	1:2:843:ASP:C	2.59	0.46
2:3:345:PHE:HE1	2:3:348:ARG:HH21	1.64	0.46
2:3:484:VAL:HG21	6:7:486:LYS:HB2	0.47	0.46
4:5:274:LEU:HD12	4:5:328:ILE:HD11	1.96	0.46
4:5:340:SER:C	4:5:342:ILE:N	2.73	0.46
4:5:722:LEU:CD1	4:5:728:THR:HG21	2.45	0.46
6:7:17:LEU:CG	6:7:102:LEU:HD21	2.40	0.46
7:c:563:GLN:O	7:c:565:LEU:HG	2.16	0.46
9:B:13:PRO:O	9:B:16:ILE:HG12	2.16	0.46
10:A:73:PHE:CZ	11:C:57:VAL:HG21	2.51	0.46
10:A:161:ALA:O	10:A:193:GLN:HB2	2.16	0.46
10:A:167:VAL:HG11	10:A:185:LYS:CA	2.33	0.46
11:C:88:ILE:HG22	11:C:95:LEU:HD13	1.98	0.46
1:2:674:LEU:HD21	1:2:680:LEU:HD21	1.97	0.46
1:2:803:PHE:HD2	1:2:804:PRO:C	2.23	0.46
2:3:393:LEU:HD21	6:7:619:VAL:HG11	1.97	0.46
3:4:419:VAL:O	3:4:420:TYR:CG	2.68	0.46
4:5:50:LEU:HD13	4:5:61:LEU:HD12	1.98	0.46
4:5:733:LEU:CD2	4:5:737:PHE:HD2	2.29	0.46
5:6:264:GLN:CD	5:6:383:GLY:HA2	2.40	0.46
5:6:566:ARG:HA	5:6:567:GLY:HA3	1.72	0.46
5:6:730:HIS:O	5:6:733:ASP:HB2	2.16	0.46
7:c:243:GLN:HG2	7:c:602:LEU:HD23	1.96	0.46
7:c:401:LEU:O	7:c:404:ILE:HG13	2.16	0.46
7:c:618:ALA:HB1	7:c:636:ASP:HB3	1.97	0.46
8:D:79:TYR:CE1	8:D:176:SER:HB2	2.51	0.46
9:B:72:VAL:O	9:B:75:ILE:HG12	2.15	0.46
10:A:93:ARG:HG3	10:A:97:LEU:HD11	1.98	0.46
10:A:129:GLU:HA	10:A:132:LYS:HE3	1.98	0.46
1:2:433:ASN:HB2	1:2:434:TYR:HB3	1.97	0.46
1:2:557:GLU:CD	1:2:565:PHE:HB2	2.40	0.46
3:4:438:THR:HG23	3:4:438:THR:O	2.15	0.46
4:5:549:ARG:HG2	4:5:651:ARG:HH22	1.80	0.46
5:6:606:ALA:HA	5:6:607:GLY:C	2.39	0.46
5:6:732:VAL:O	5:6:736:MET:HG2	2.16	0.46
6:7:135:LYS:HA	6:7:136:ASP:C	2.41	0.46
7:c:634:ARG:HA	7:c:637:LEU:HD23	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:189:THR:HG23	2:3:256:ILE:HD11	1.97	0.46
2:3:294:VAL:HG12	2:3:295:VAL:O	2.16	0.46
2:3:467:ARG:NH2	2:3:509:ARG:NH1	2.64	0.46
3:4:509:ILE:HG13	3:4:746:PHE:CZ	2.51	0.46
3:4:519:TYR:CZ	3:4:538:LYS:HD3	2.51	0.46
3:4:727:LEU:N	3:4:728:TYR:CB	2.72	0.46
4:5:83:PRO:HB2	4:5:297:ILE:CD1	2.46	0.46
5:6:335:ASN:N	5:6:337:SER:HA	2.29	0.46
9:B:112:PHE:CE1	9:B:156:VAL:HG22	2.51	0.46
2:3:189:THR:HA	2:3:256:ILE:HD13	1.83	0.45
2:3:314:LEU:CD2	4:5:277:THR:HG21	2.45	0.45
6:7:261:THR:N	6:7:299:PHE:O	2.37	0.45
6:7:601:LEU:HD21	6:7:727:LEU:HA	1.97	0.45
7:c:34:LEU:O	7:c:543:LEU:HD11	2.12	0.45
7:c:127:ARG:HG3	7:c:248:VAL:HG23	1.98	0.45
7:c:242:SER:HB2	7:c:607:MET:HE3	1.98	0.45
8:D:211:ASP:CG	8:D:213:GLU:CA	2.89	0.45
8:D:229:PHE:CD2	9:B:178:ILE:HG23	2.52	0.45
10:A:188:GLN:HG3	10:A:188:GLN:O	2.15	0.45
1:2:660:THR:O	1:2:850:LYS:HG3	2.16	0.45
2:3:166:LEU:HD13	2:3:167:SER:O	2.15	0.45
3:4:375:ASP:HA	3:4:376:CYS:C	2.41	0.45
3:4:388:ARG:HH22	5:6:176:ARG:HB2	1.81	0.45
3:4:527:ALA:HB3	3:4:537:LYS:HZ3	1.78	0.45
3:4:719:GLU:O	3:4:723:HIS:ND1	2.48	0.45
4:5:560:HIS:C	4:5:562:GLU:N	2.75	0.45
6:7:516:ALA:O	6:7:561:THR:HG22	2.16	0.45
6:7:581:LEU:HB2	6:7:681:PHE:CE1	2.52	0.45
7:c:240:TYR:C	7:c:242:SER:H	2.24	0.45
8:D:71:ARG:NH1	9:B:11:PHE:HD1	2.14	0.45
9:B:115:LEU:HD22	9:B:119:TRP:CD1	2.52	0.45
10:A:114:THR:C	10:A:116:SER:H	2.25	0.45
1:2:410:LEU:C	1:2:411:LEU:CD1	2.81	0.45
2:3:234:GLU:OE2	2:3:240:LYS:HD2	2.16	0.45
2:3:484:VAL:CG1	6:7:487:GLY:N	2.79	0.45
2:3:488:GLU:OE2	2:3:492:GLN:HG2	2.16	0.45
3:4:769:GLU:OE2	3:4:823:GLN:HG3	2.15	0.45
4:5:626:PHE:HZ	4:5:630:ARG:HH21	1.63	0.45
5:6:398:THR:O	5:6:456:ALA:HA	2.17	0.45
5:6:537:VAL:HG11	5:6:584:PHE:CE1	2.51	0.45
5:6:802:SER:O	5:6:805:ARG:HG2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:814:ASN:C	5:6:816:VAL:H	2.25	0.45
5:6:942:LEU:O	5:6:945:GLU:HG2	2.15	0.45
6:7:222:SER:O	6:7:222:SER:OG	2.33	0.45
8:D:174:LEU:HG	8:D:175:LEU:HD12	1.99	0.45
10:A:165:VAL:HG13	10:A:205:LEU:HB3	1.46	0.45
1:2:537:ILE:HG23	1:2:678:ASP:OD2	2.17	0.45
3:4:338:VAL:HG23	5:6:375:ARG:NH1	2.24	0.45
3:4:688:VAL:O	3:4:692:ILE:HD12	2.16	0.45
3:4:714:GLU:OE1	6:7:665:ILE:CG2	2.65	0.45
3:4:758:ILE:HD13	3:4:813:LEU:HA	1.98	0.45
3:4:793:ALA:C	3:4:794:THR:HG23	2.42	0.45
4:5:31:PHE:CG	4:5:90:PHE:CD1	3.04	0.45
4:5:151:LEU:HA	4:5:155:HIS:NE2	2.32	0.45
4:5:663:LEU:HA	4:5:666:LEU:HD12	1.99	0.45
4:5:728:THR:O	4:5:729:SER:C	2.58	0.45
5:6:537:VAL:HG11	5:6:584:PHE:CZ	2.51	0.45
6:7:217:LYS:HG3	6:7:218:LYS:H	1.82	0.45
6:7:546:ILE:HD12	6:7:557:LEU:HD11	1.99	0.45
6:7:670:ASP:OD1	6:7:670:ASP:C	2.59	0.45
6:7:709:ASP:O	6:7:712:ASP:HB3	2.16	0.45
9:B:165:GLU:HA	9:B:166:SER:HA	1.34	0.45
11:C:172:MET:HG3	11:C:173:GLU:N	2.31	0.45
2:3:163:ALA:HB3	2:3:164:HIS:ND1	2.31	0.45
2:3:277:ILE:HD12	2:3:320:LEU:HD13	1.98	0.45
3:4:714:GLU:C	6:7:665:ILE:CG1	2.89	0.45
5:6:956:GLU:O	5:6:960:LEU:CG	2.65	0.45
7:c:29:ILE:CD1	7:c:58:ILE:HG12	2.44	0.45
8:D:232:VAL:HA	8:D:291:VAL:HG23	1.99	0.45
1:2:387:ARG:HH12	4:5:323:ILE:CD1	2.28	0.45
3:4:696:PRO:N	3:4:697:PRO:HD2	2.31	0.45
3:4:769:GLU:OE2	3:4:823:GLN:CD	2.60	0.45
4:5:62:THR:HA	4:5:138:ILE:O	2.17	0.45
5:6:355:ASP:HB3	5:6:356:TRP:HA	1.97	0.45
5:6:400:VAL:CG2	5:6:455:LEU:HG	2.47	0.45
5:6:575:GLY:C	5:6:581:LYS:NZ	2.71	0.45
5:6:603:SER:OG	5:6:644:MET:SD	2.74	0.45
6:7:135:LYS:HB2	6:7:141:VAL:CG1	2.46	0.45
6:7:252:LYS:HE3	6:7:252:LYS:HB3	1.84	0.45
6:7:399:GLU:OE2	6:7:403:GLU:OE2	2.35	0.45
7:c:277:THR:HG21	7:c:295:LEU:HD11	1.98	0.45
7:c:559:SER:HA	7:c:560:GLU:CB	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:570:ALA:HB2	7:c:581:VAL:HG22	1.98	0.45
8:D:148:LEU:HD22	8:D:182:TYR:CD2	2.51	0.45
8:D:257:THR:O	8:D:269:LEU:HB2	2.16	0.45
11:C:50:LEU:O	11:C:54:LEU:HG	2.16	0.45
2:3:254:GLN:NE2	2:3:256:ILE:HD11	2.31	0.45
2:3:255:ARG:NH2	2:3:275:ASP:OD2	2.49	0.45
2:3:484:VAL:HG11	6:7:487:GLY:N	2.31	0.45
3:4:771:VAL:HG22	5:6:728:ALA:HB2	1.79	0.45
4:5:320:GLY:HA2	4:5:321:VAL:HA	1.71	0.45
4:5:358:LEU:HD22	10:A:15:ARG:CG	2.47	0.45
4:5:633:LEU:HB2	4:5:648:ILE:HD11	1.98	0.45
5:6:379:VAL:HA	5:6:454:PHE:O	2.17	0.45
8:D:224:TRP:HB3	8:D:280:GLU:HB2	1.98	0.45
10:A:102:TRP:NE1	10:A:134:TYR:OH	2.50	0.45
10:A:169:LYS:H	10:A:185:LYS:NZ	2.14	0.45
4:5:486:ARG:O	4:5:490:ARG:HB2	2.16	0.45
4:5:578:GLY:C	4:5:580:ALA:N	2.73	0.45
4:5:722:LEU:HA	4:5:723:PRO:HD2	1.83	0.45
5:6:533:ILE:HD13	5:6:548:LEU:HD13	1.98	0.45
6:7:349:VAL:HG21	6:7:381:VAL:HG13	1.99	0.45
6:7:480:GLY:HA2	6:7:520:ILE:O	2.16	0.45
6:7:495:ALA:HA	6:7:510:GLY:HA2	1.99	0.45
6:7:541:MET:C	6:7:543:GLN:H	2.24	0.45
7:c:81:LEU:HD13	7:c:82:LEU:H	1.67	0.45
11:C:105:PHE:HE1	11:C:128:LEU:HB2	1.81	0.45
2:3:197:ILE:CD1	2:3:251:ILE:HB	2.44	0.45
2:3:289:GLY:HA3	4:5:509:ILE:HB	1.93	0.45
4:5:342:ILE:HA	4:5:343:TRP:C	2.42	0.45
4:5:355:GLU:CB	10:A:19:LEU:HD22	2.47	0.45
5:6:122:PHE:HB2	5:6:124:VAL:N	2.31	0.45
7:c:73:GLN:HG2	7:c:74:LEU:HG	1.99	0.45
7:c:269:ASN:O	7:c:272:LEU:HB2	2.16	0.45
7:c:637:LEU:HD12	7:c:638:SER:N	2.32	0.45
10:A:169:LYS:CA	10:A:185:LYS:CD	2.85	0.45
1:2:656:ARG:HG3	1:2:657:TYR:N	2.32	0.45
2:3:94:HIS:HB3	2:3:153:TRP:CZ3	2.52	0.45
2:3:189:THR:HG23	2:3:256:ILE:HD12	1.98	0.45
3:4:409:GLY:HA3	6:7:498:MET:CE	2.43	0.45
3:4:649:MET:HB3	3:4:701:ARG:HD3	1.99	0.45
3:4:714:GLU:CG	6:7:665:ILE:HG23	2.46	0.45
3:4:735:HIS:CG	3:4:738:GLN:HG3	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:707:SER:HB2	5:6:946:ASN:ND2	2.31	0.45
4:5:752:LEU:HD23	4:5:752:LEU:C	2.42	0.45
5:6:156:GLN:O	5:6:160:MET:HG2	2.17	0.45
5:6:644:MET:HB3	5:6:648:ASP:OD2	2.16	0.45
6:7:282:SER:O	6:7:298:LEU:HD21	2.16	0.45
6:7:606:ARG:O	6:7:610:GLU:HG2	2.17	0.45
7:c:148:VAL:HG12	7:c:152:LEU:CD2	2.47	0.45
9:B:11:PHE:HB2	9:B:179:ASN:ND2	2.32	0.45
10:A:168:LEU:CG	10:A:206:GLN:CB	2.80	0.45
11:C:112:ILE:HG23	11:C:113:MET:HE2	1.99	0.45
1:2:432:ASN:HA	1:2:448:ALA:O	2.18	0.44
1:2:435:ASP:HB3	1:2:447:PHE:CD1	2.51	0.44
2:3:122:ILE:HG22	2:3:123:PRO:CD	2.46	0.44
2:3:391:LYS:HD2	6:7:620:HIS:O	2.16	0.44
2:3:569:HIS:O	4:5:398:LYS:HE2	2.16	0.44
4:5:605:TYR:HE2	4:5:668:LEU:HD11	1.81	0.44
4:5:664:ALA:N	4:5:676:HIS:HE1	2.15	0.44
6:7:601:LEU:HD12	6:7:603:ILE:HD12	1.98	0.44
7:c:22:ALA:HA	7:c:23:SER:HA	1.72	0.44
7:c:280:LEU:O	7:c:283:ALA:N	2.48	0.44
9:B:29:PRO:HG2	9:B:63:MET:HB3	1.98	0.44
10:A:182:ASN:O	10:A:184:ILE:HG12	2.17	0.44
1:2:264:PRO:HG3	1:2:317:LEU:HB2	1.98	0.44
2:3:55:ASN:O	6:7:217:LYS:HD2	2.16	0.44
2:3:412:SER:HB2	4:5:650:ILE:CD1	2.47	0.44
2:3:730:ALA:O	2:3:734:ARG:HG2	2.17	0.44
3:4:416:SER:O	3:4:460:TYR:HB2	2.18	0.44
4:5:182:MET:HA	4:5:188:HIS:O	2.17	0.44
4:5:331:LEU:HA	4:5:332:GLY:HA2	1.60	0.44
7:c:483:ALA:HA	7:c:491:LEU:HD11	1.99	0.44
8:D:224:TRP:O	8:D:280:GLU:N	2.50	0.44
8:D:282:ILE:O	8:D:286:LEU:CD1	2.64	0.44
9:B:25:ILE:HD11	9:B:87:ILE:HD11	1.90	0.44
9:B:78:LEU:HD23	9:B:78:LEU:C	2.42	0.44
1:2:528:ASN:HA	1:2:529:GLY:HA2	1.50	0.44
2:3:287:LYS:CE	4:5:510:THR:OG1	2.59	0.44
3:4:343:LYS:HD3	3:4:343:LYS:HA	1.76	0.44
4:5:363:ASN:HB2	4:5:366:LEU:HB2	1.99	0.44
4:5:716:GLN:O	4:5:719:LYS:O	2.34	0.44
4:5:719:LYS:O	4:5:720:ARG:HG2	2.16	0.44
4:5:728:THR:O	4:5:729:SER:O	2.35	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:731:GLN:NE2	4:5:734:ARG:NE	2.64	0.44
4:5:754:ALA:C	4:5:758:HIS:HD2	2.24	0.44
5:6:560:VAL:HB	5:6:561:GLU:HA	1.99	0.44
6:7:254:ALA:HB2	6:7:310:PHE:HB2	1.99	0.44
6:7:470:LEU:CD2	6:7:564:LEU:HD22	2.46	0.44
1:2:271:PHE:CE2	1:2:295:VAL:HG11	2.52	0.44
2:3:200:VAL:HB	2:3:248:SER:HB3	1.99	0.44
2:3:235:ASP:HB2	6:7:5:LEU:HD13	2.00	0.44
2:3:237:GLU:H	2:3:237:GLU:CD	2.25	0.44
2:3:345:PHE:O	2:3:349:ASN:ND2	2.51	0.44
3:4:563:ASN:HD22	3:4:649:MET:HE1	1.83	0.44
3:4:726:ASN:O	3:4:727:LEU:CG	2.64	0.44
3:4:737:SER:HB2	3:4:742:LEU:HD11	1.99	0.44
5:6:738:ARG:HA	5:6:739:ASP:HA	1.54	0.44
5:6:776:LYS:HZ2	5:6:824:ILE:CG2	2.30	0.44
5:6:929:GLU:C	5:6:929:GLU:CD	2.86	0.44
7:c:318:LEU:HD12	7:c:318:LEU:O	2.18	0.44
7:c:327:PHE:CE2	7:c:503:GLN:HG3	2.53	0.44
7:c:561:ASP:HB3	7:c:562:LYS:CG	2.47	0.44
8:D:275:TYR:HD1	9:B:168:LEU:O	2.00	0.44
2:3:381:ILE:HD11	2:3:418:LEU:HD21	1.99	0.44
3:4:811:MET:O	3:4:812:LYS:HB2	2.18	0.44
4:5:737:PHE:CD2	4:5:743:PHE:CE2	3.05	0.44
5:6:335:ASN:H	5:6:338:CYS:N	2.12	0.44
5:6:778:LYS:C	5:6:782:LYS:HZ3	2.13	0.44
5:6:951:LEU:C	5:6:951:LEU:HD23	2.43	0.44
7:c:380:MET:HB2	7:c:385:LYS:CE	2.48	0.44
7:c:491:LEU:C	7:c:491:LEU:CD1	2.82	0.44
1:2:493:ILE:HG13	1:2:494:ILE:N	2.32	0.44
1:2:703:HIS:NE2	5:6:801:GLU:HG2	2.33	0.44
2:3:166:LEU:HD11	2:3:171:LEU:HD12	1.98	0.44
2:3:476:ASP:CA	2:3:483:ARG:HH12	2.29	0.44
2:3:488:GLU:O	2:3:492:GLN:HB3	2.17	0.44
2:3:671:LEU:HB3	6:7:621:MET:HA	2.00	0.44
3:4:532:GLU:OE2	3:4:713:ASP:OD2	2.35	0.44
4:5:347:THR:C	4:5:348:MET:HE2	2.43	0.44
4:5:635:ILE:HA	4:5:638:LEU:HG	2.00	0.44
5:6:303:GLU:HG3	5:6:356:TRP:HD1	1.79	0.44
5:6:560:VAL:C	5:6:562:GLY:HA3	2.43	0.44
6:7:393:LEU:HB2	6:7:395:SER:N	2.33	0.44
8:D:79:TYR:HB2	8:D:147:ARG:HH22	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:D:256:TYR:CD1	8:D:257:THR:CG2	2.98	0.44
1:2:481:GLU:O	1:2:484:PHE:HB3	2.18	0.44
2:3:104:ARG:NH2	11:C:86:ASN:HB2	2.32	0.44
2:3:158:LYS:HA	2:3:327:TYR:OH	2.17	0.44
2:3:257:THR:HG22	2:3:275:ASP:HB3	1.99	0.44
3:4:180:ILE:CD1	3:4:183:THR:HB	2.47	0.44
3:4:200:SER:HB3	3:4:202:LYS:HB2	2.00	0.44
3:4:458:LYS:HZ2	3:4:458:LYS:HB3	1.83	0.44
3:4:562:ILE:HB	3:4:703:ASP:OD2	2.18	0.44
4:5:137:LEU:C	4:5:137:LEU:CD1	2.84	0.44
6:7:538:HIS:HD2	6:7:593:ARG:NE	2.16	0.44
6:7:668:ARG:HH22	6:7:684:ALA:C	2.22	0.44
6:7:718:ARG:O	6:7:722:VAL:HG23	2.17	0.44
1:2:484:PHE:CZ	1:2:766:TYR:HD1	2.36	0.44
1:2:855:ARG:HG3	1:2:858:ARG:NH2	2.32	0.44
2:3:215:THR:HB	2:3:219:THR:HG21	1.99	0.44
3:4:302:LYS:HD2	3:4:304:ARG:HH21	1.82	0.44
3:4:314:MET:HG2	3:4:415:ILE:HG12	2.00	0.44
3:4:534:GLU:OE1	3:4:534:GLU:N	2.38	0.44
4:5:358:LEU:HD11	10:A:19:LEU:HD11	1.99	0.44
4:5:382:GLU:OE1	4:5:382:GLU:N	2.36	0.44
4:5:387:ALA:HA	4:5:390:CYS:SG	2.58	0.44
5:6:403:VAL:CG1	5:6:450:TYR:HB3	2.48	0.44
6:7:83:ASP:O	6:7:87:GLN:HG2	2.16	0.44
6:7:394:THR:O	6:7:394:THR:HG22	2.18	0.44
6:7:440:VAL:O	6:7:440:VAL:HG12	2.17	0.44
6:7:544:GLN:NE2	6:7:560:ARG:HG2	2.32	0.44
7:c:326:LEU:HD22	7:c:329:LEU:HD12	1.99	0.44
7:c:502:LEU:HA	7:c:502:LEU:HD23	1.68	0.44
7:c:619:LYS:HB3	7:c:633:ARG:HG2	1.99	0.44
9:B:134:PHE:O	9:B:137:PRO:HD3	2.17	0.44
10:A:36:ILE:O	10:A:40:ILE:HG13	2.18	0.44
10:A:136:ASP:O	10:A:139:THR:OG1	2.36	0.44
1:2:303:ILE:HG13	1:2:319:ARG:HH21	1.83	0.44
2:3:163:ALA:H	2:3:164:HIS:HB2	1.83	0.44
2:3:447:THR:HA	2:3:448:THR:HA	1.71	0.44
3:4:347:PHE:HB3	3:4:382:MET:SD	2.58	0.44
3:4:558:TYR:CG	5:6:735:HIS:CE1	3.06	0.44
3:4:572:THR:CG2	3:4:708:VAL:HG11	2.37	0.44
3:4:762:ILE:HB	3:4:766:ALA:HB3	2.00	0.44
4:5:369:ILE:CG1	4:5:593:GLU:HG3	2.43	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:134:TYR:HB2	6:7:141:VAL:HG12	2.00	0.44
6:7:215:TYR:HE1	6:7:217:LYS:HD3	1.82	0.44
7:c:32:SER:HA	7:c:33:CYS:HA	1.28	0.44
7:c:514:LEU:HD11	7:c:555:CYS:SG	2.57	0.44
10:A:57:GLN:HE21	10:A:62:MET:HE3	1.82	0.44
2:3:652:THR:HB	2:3:654:PRO:HD2	1.99	0.43
3:4:775:VAL:HG22	5:6:724:ASP:HB3	2.00	0.43
4:5:408:GLY:HA2	4:5:409:ASP:HA	1.72	0.43
4:5:602:TYR:O	4:5:605:TYR:HB3	2.18	0.43
5:6:103:VAL:HA	5:6:104:ASP:HA	1.77	0.43
5:6:133:GLU:HA	5:6:134:LYS:HA	1.71	0.43
5:6:347:ASN:OD1	5:6:349:THR:HG22	2.17	0.43
5:6:532:SER:HB3	5:6:745:PRO:HG2	1.99	0.43
6:7:111:ASN:CA	6:7:354:ILE:HD13	2.48	0.43
6:7:421:GLU:CA	6:7:625:GLN:HE22	2.31	0.43
6:7:619:VAL:HA	6:7:620:HIS:C	2.43	0.43
8:D:282:ILE:C	8:D:286:LEU:HD13	2.42	0.43
9:B:84:LYS:HE3	9:B:84:LYS:HB3	1.77	0.43
9:B:181:LEU:HD13	9:B:185:ILE:HD13	2.00	0.43
10:A:47:LEU:HD21	10:A:75:THR:HB	1.99	0.43
11:C:76:PRO:HA	11:C:77:PRO:HD3	1.81	0.43
1:2:301:PRO:HD3	1:2:319:ARG:NH1	2.33	0.43
1:2:484:PHE:CZ	1:2:766:TYR:CD1	3.06	0.43
3:4:225:TYR:N	3:4:228:LYS:HB2	2.33	0.43
3:4:728:TYR:CD2	3:4:729:LEU:N	2.73	0.43
3:4:799:GLU:O	3:4:802:ILE:HG12	2.18	0.43
4:5:301:TYR:CE1	4:5:303:SER:HB3	2.54	0.43
4:5:584:GLN:O	4:5:588:GLU:HG2	2.18	0.43
5:6:749:GLU:HA	5:6:752:ARG:NH2	2.32	0.43
6:7:359:PRO:HA	6:7:360:TYR:HA	1.80	0.43
7:c:24:SER:HA	7:c:25:CYS:HA	1.57	0.43
7:c:43:LYS:CG	7:c:484:LEU:HD23	2.42	0.43
7:c:349:SER:HA	7:c:351:TRP:CH2	2.54	0.43
10:A:123:LEU:HD21	10:A:127:GLU:HB2	1.99	0.43
11:C:104:PHE:HB3	11:C:170:GLU:OE1	2.18	0.43
1:2:298:SER:OG	1:2:299:ASP:N	2.50	0.43
1:2:688:ASP:HB2	1:2:691:ALA:HB3	1.99	0.43
2:3:49:ASN:OD1	2:3:50:SER:N	2.52	0.43
2:3:393:LEU:HD12	6:7:421:GLU:HG3	1.99	0.43
2:3:437:SER:CB	2:3:438:SER:HA	2.40	0.43
2:3:553:ILE:HD13	4:5:630:ARG:HB3	1.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:184:ASN:HB3	6:7:145:GLN:HE22	1.83	0.43
4:5:172:LEU:HD11	4:5:284:ASN:HD21	1.83	0.43
4:5:735:ARG:O	4:5:738:VAL:HG12	2.19	0.43
5:6:364:ASN:HB3	5:6:394:ARG:HD3	1.99	0.43
5:6:691:ARG:HH11	5:6:716:LEU:CD2	2.17	0.43
6:7:111:ASN:HA	6:7:354:ILE:HD13	1.99	0.43
6:7:145:GLN:O	6:7:149:ARG:HG2	2.18	0.43
6:7:240:THR:HG23	6:7:352:THR:HG22	1.99	0.43
7:c:272:LEU:HD21	7:c:484:LEU:HD21	1.98	0.43
9:B:184:PHE:CZ	11:C:132:ALA:HB1	2.53	0.43
11:C:19:LYS:O	11:C:72:VAL:HG13	2.18	0.43
2:3:189:THR:CG2	2:3:256:ILE:CD1	2.97	0.43
2:3:536:PRO:HA	2:3:537:ASP:HA	1.67	0.43
3:4:319:PRO:HG2	6:7:309:ALA:HB2	2.01	0.43
3:4:322:ILE:HD13	6:7:302:THR:HB	2.00	0.43
4:5:160:VAL:HG12	4:5:162:LEU:HD23	1.99	0.43
4:5:355:GLU:HA	4:5:358:LEU:HD21	2.00	0.43
4:5:575:ILE:O	4:5:576:HIS:CG	2.71	0.43
4:5:579:ASN:O	4:5:583:MET:HG2	2.17	0.43
4:5:606:CYS:C	4:5:665:LYS:HZ2	2.11	0.43
5:6:134:LYS:N	5:6:135:VAL:HA	2.21	0.43
6:7:668:ARG:NH2	6:7:684:ALA:C	2.71	0.43
7:c:36:ILE:HD12	7:c:425:VAL:HG13	1.98	0.43
9:B:175:LEU:HA	9:B:178:ILE:HD12	2.00	0.43
10:A:166:ARG:HH22	10:A:207:LEU:HD23	1.83	0.43
10:A:169:LYS:HA	10:A:185:LYS:CD	2.19	0.43
10:A:175:GLN:NE2	10:A:199:LEU:HD13	2.34	0.43
11:C:16:PHE:O	11:C:45:SER:HA	2.19	0.43
1:2:566:ALA:HB1	1:2:576:LEU:HG	2.00	0.43
1:2:856:GLN:NE2	1:2:859:ARG:HD3	2.33	0.43
2:3:166:LEU:C	2:3:166:LEU:CD1	2.83	0.43
2:3:377:ILE:O	2:3:380:ALA:HB3	2.18	0.43
3:4:317:LEU:O	6:7:341:ARG:NH2	2.52	0.43
3:4:531:TYR:CE2	3:4:532:GLU:HB2	2.54	0.43
3:4:711:LYS:O	3:4:712:VAL:HB	2.17	0.43
4:5:678:ASP:HB3	4:5:682:ARG:HH12	1.83	0.43
5:6:122:PHE:HB2	5:6:124:VAL:HG23	2.01	0.43
5:6:189:VAL:O	5:6:193:ALA:N	2.51	0.43
5:6:307:ALA:HA	5:6:351:SER:HB3	2.01	0.43
6:7:564:LEU:HD23	6:7:565:ALA:N	2.34	0.43
7:c:40:CYS:O	7:c:44:MET:HG2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:316:LEU:HD12	7:c:412:THR:O	2.18	0.43
8:D:266:GLU:H	8:D:266:GLU:CD	2.27	0.43
9:B:51:GLN:HB2	9:B:53:ILE:HD12	2.00	0.43
10:A:32:TYR:HB2	10:A:93:ARG:NH1	2.28	0.43
1:2:520:PHE:HD1	1:2:767:ILE:HG22	1.83	0.43
2:3:295:VAL:HG12	2:3:296:GLY:N	2.34	0.43
2:3:419:LEU:HD23	2:3:419:LEU:HA	1.73	0.43
2:3:683:TYR:OH	2:3:687:ARG:HD2	2.18	0.43
2:3:706:ILE:CD1	6:7:620:HIS:HD2	2.31	0.43
2:3:716:ARG:C	2:3:718:SER:H	2.27	0.43
3:4:419:VAL:HG23	3:4:424:VAL:HG22	2.01	0.43
4:5:546:ILE:HD12	4:5:546:ILE:H	1.84	0.43
4:5:620:GLU:O	4:5:623:SER:OG	2.22	0.43
4:5:657:ILE:O	4:5:660:THR:OG1	2.26	0.43
6:7:67:LEU:CD2	6:7:126:PRO:HD2	2.47	0.43
6:7:293:GLN:HA	6:7:294:THR:HA	1.64	0.43
6:7:432:LEU:HD13	6:7:473:ILE:HD11	1.99	0.43
9:B:165:GLU:H	9:B:165:GLU:CD	2.26	0.43
2:3:156:SER:O	2:3:325:THR:CG2	2.67	0.43
2:3:210:HIS:HB3	6:7:5:LEU:HD21	2.01	0.43
2:3:428:LEU:HB3	2:3:429:ALA:HB2	2.00	0.43
2:3:502:ILE:HG13	6:7:346:GLY:CA	2.38	0.43
2:3:558:ASP:OD1	2:3:558:ASP:C	2.61	0.43
3:4:489:LYS:HG3	3:4:494:GLU:HG3	2.01	0.43
3:4:771:VAL:CG2	5:6:728:ALA:HB1	2.33	0.43
4:5:652:GLN:O	4:5:655:ALA:HB3	2.19	0.43
5:6:151:ILE:HD11	5:6:265:ILE:HG23	2.01	0.43
5:6:691:ARG:NE	5:6:716:LEU:HD13	2.27	0.43
7:c:525:TYR:HE1	7:c:527:LEU:HD12	1.82	0.43
11:C:104:PHE:O	11:C:108:ALA:N	2.42	0.43
2:3:389:VAL:CG1	2:3:390:GLU:H	2.13	0.43
3:4:385:ILE:HG22	3:4:388:ARG:H	1.84	0.43
3:4:532:GLU:HG2	3:4:533:LEU:N	2.31	0.43
3:4:567:CYS:HB3	3:4:675:ALA:HB3	2.00	0.43
4:5:43:GLN:OE1	4:5:43:GLN:N	2.48	0.43
4:5:639:GLU:O	4:5:640:SER:OG	2.29	0.43
4:5:708:LEU:O	4:5:712:ARG:N	2.49	0.43
4:5:712:ARG:O	4:5:713:ARG:O	2.36	0.43
4:5:724:ILE:HG13	4:5:726:TRP:N	2.33	0.43
4:5:737:PHE:CD2	4:5:743:PHE:CD2	3.05	0.43
6:7:111:ASN:N	6:7:354:ILE:HD13	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:98:ILE:N	7:c:99:ASP:HB3	2.34	0.43
7:c:291:LEU:HD23	7:c:294:LEU:HD12	1.99	0.43
7:c:365:ARG:HH12	7:c:398:ARG:CD	2.32	0.43
9:B:51:GLN:HB2	9:B:52:LEU:HA	2.01	0.43
9:B:191:LYS:HD3	9:B:191:LYS:HA	1.59	0.43
1:2:505:ILE:CD1	1:2:552:ILE:HG13	2.48	0.43
1:2:760:GLN:O	1:2:763:LEU:HG	2.19	0.43
2:3:189:THR:CG2	2:3:256:ILE:HD12	2.49	0.43
2:3:196:LEU:HG	2:3:214:TYR:HD2	1.84	0.43
4:5:348:MET:HE3	11:C:167:LEU:HD11	2.01	0.43
4:5:379:PHE:CD2	4:5:564:ARG:HD2	2.54	0.43
4:5:746:LEU:C	4:5:746:LEU:HD23	2.43	0.43
5:6:155:TYR:CD2	5:6:271:PRO:HD3	2.54	0.43
6:7:19:ASN:O	6:7:22:THR:OG1	2.26	0.43
6:7:118:CYS:SG	6:7:202:LEU:HB2	2.58	0.43
7:c:36:ILE:HD11	7:c:429:THR:HG23	2.01	0.43
7:c:359:LEU:O	7:c:362:MET:HB2	2.19	0.43
7:c:626:GLU:HB3	7:c:629:ILE:CG2	2.49	0.43
11:C:97:LEU:HG	11:C:131:ARG:HH22	1.83	0.43
1:2:296:ARG:HA	1:2:296:ARG:HD3	1.77	0.43
2:3:671:LEU:HB3	6:7:621:MET:HG3	2.01	0.43
3:4:248:LEU:HB3	3:4:254:THR:O	2.19	0.43
3:4:388:ARG:HH22	5:6:176:ARG:HD2	1.83	0.43
3:4:552:PHE:CB	5:6:740:GLU:OE2	2.67	0.43
4:5:92:THR:HA	4:5:95:THR:HG22	2.00	0.43
4:5:733:LEU:HD22	4:5:748:LEU:HD11	2.01	0.43
5:6:455:LEU:HD12	5:6:456:ALA:H	1.84	0.43
6:7:281:LEU:HB2	6:7:283:GLU:OE2	2.19	0.43
6:7:349:VAL:HB	6:7:383:GLN:HG2	2.01	0.43
6:7:400:ARG:HB3	6:7:637:LYS:HZ2	1.83	0.43
7:c:223:ARG:O	7:c:227:LYS:HG2	2.19	0.43
7:c:416:ARG:HG3	7:c:416:ARG:NH1	2.33	0.43
2:3:388:GLY:HA2	2:3:710:THR:HB	2.01	0.42
2:3:542:ARG:NH1	2:3:700:ARG:CZ	2.82	0.42
3:4:314:MET:SD	3:4:317:LEU:HD12	2.60	0.42
4:5:560:HIS:O	4:5:560:HIS:CG	2.72	0.42
5:6:577:PRO:O	5:6:578:SER:HB2	2.18	0.42
3:4:729:LEU:HA	3:4:729:LEU:HD23	1.86	0.42
4:5:130:ASN:HA	4:5:131:SER:HA	1.68	0.42
5:6:943:GLN:HG3	5:6:944:LYS:HG2	2.01	0.42
6:7:128:PRO:HB2	6:7:129:THR:C	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:470:ARG:O	7:c:474:VAL:HG23	2.19	0.42
8:D:216:VAL:HG11	8:D:219:ILE:HB	1.99	0.42
1:2:802:SER:HA	1:2:803:PHE:HA	1.89	0.42
2:3:435:ARG:HA	2:3:436:GLY:HA3	1.65	0.42
2:3:464:LEU:HD23	6:7:322:VAL:O	2.19	0.42
2:3:484:VAL:HG11	6:7:487:GLY:CA	2.49	0.42
2:3:530:HIS:O	2:3:531:GLN:HB2	2.19	0.42
2:3:737:LEU:C	2:3:738:LEU:HD12	2.44	0.42
3:4:354:HIS:NE2	3:4:356:MET:HG2	2.34	0.42
4:5:50:LEU:HD12	4:5:50:LEU:HA	1.80	0.42
4:5:59:TYR:HB2	4:5:281:TYR:OH	2.18	0.42
4:5:663:LEU:O	4:5:666:LEU:HB2	2.19	0.42
6:7:481:VAL:CG2	6:7:516:ALA:HB2	2.50	0.42
7:c:377:TRP:NE1	7:c:385:LYS:NZ	2.61	0.42
7:c:561:ASP:HA	7:c:562:LYS:HA	1.80	0.42
9:B:127:PHE:CE1	9:B:134:PHE:HE2	2.36	0.42
1:2:700:VAL:HA	5:6:804:ILE:HD11	2.00	0.42
1:2:803:PHE:HD2	1:2:805:ILE:N	2.16	0.42
2:3:236:THR:HA	2:3:237:GLU:C	2.44	0.42
3:4:468:LYS:HE3	3:4:609:VAL:HG13	2.00	0.42
3:4:568:GLY:O	3:4:574:LYS:NZ	2.52	0.42
3:4:650:GLU:OE2	3:4:796:ARG:NH1	2.50	0.42
3:4:769:GLU:O	3:4:772:ARG:HG2	2.19	0.42
4:5:276:MET:SD	4:5:294:ILE:HD11	2.54	0.42
4:5:300:ILE:HD13	4:5:326:PRO:HA	2.01	0.42
5:6:625:ALA:CB	5:6:626:GLY:HA2	2.46	0.42
7:c:334:LEU:O	7:c:337:SER:HB3	2.20	0.42
7:c:487:ARG:HB2	11:C:193:LYS:HZ3	1.84	0.42
8:D:206:LEU:HD22	10:A:83:LYS:HD2	2.01	0.42
9:B:163:LEU:HD13	9:B:189:MET:HE2	2.02	0.42
10:A:93:ARG:O	10:A:97:LEU:CD1	2.68	0.42
1:2:442:ASN:CG	1:2:443:GLY:N	2.71	0.42
1:2:533:ILE:HG22	1:2:534:ARG:H	1.85	0.42
2:3:480:ASP:OD1	2:3:481:VAL:N	2.52	0.42
3:4:641:THR:HG22	3:4:642:ARG:H	1.85	0.42
4:5:54:ILE:HD13	4:5:102:SER:HB3	2.01	0.42
4:5:170:SER:HB3	4:5:254:GLN:O	2.20	0.42
4:5:413:LEU:HA	4:5:521:ALA:O	2.20	0.42
4:5:664:ALA:N	4:5:676:HIS:CE1	2.87	0.42
4:5:757:LYS:HG3	4:5:758:HIS:N	2.33	0.42
5:6:664:ALA:HB2	5:6:669:HIS:CD2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:776:LYS:NZ	5:6:824:ILE:C	2.77	0.42
6:7:570:LEU:HD13	6:7:585:ASN:ND2	2.34	0.42
7:c:164:GLU:CD	7:c:164:GLU:H	2.28	0.42
7:c:365:ARG:HH12	7:c:398:ARG:NE	2.17	0.42
8:D:138:PHE:CZ	10:A:157:PRO:HG3	2.54	0.42
8:D:188:LEU:O	8:D:192:LYS:HG2	2.20	0.42
8:D:260:ILE:HG12	8:D:266:GLU:OE2	2.19	0.42
10:A:151:LEU:H	10:A:151:LEU:HD13	1.83	0.42
11:C:168:LYS:HE2	11:C:168:LYS:HB3	1.79	0.42
2:3:500:ALA:H	2:3:501:GLY:HA3	1.83	0.42
2:3:519:VAL:HG23	2:3:532:ASN:O	2.19	0.42
3:4:262:LEU:HD13	3:4:308:VAL:HB	2.01	0.42
4:5:374:ILE:HG23	4:5:428:PHE:CE2	2.55	0.42
4:5:717:GLU:C	4:5:721:ARG:HB3	2.44	0.42
5:6:356:TRP:CZ3	5:6:358:LYS:HB2	2.44	0.42
5:6:653:HIS:HB2	5:6:705:ILE:HG22	2.02	0.42
5:6:790:ARG:NH1	5:6:839:ASP:CG	2.77	0.42
6:7:344:SER:HB2	6:7:347:ASP:OD2	2.19	0.42
6:7:559:ALA:HB1	6:7:561:THR:HG23	2.01	0.42
7:c:9:SER:O	7:c:12:TYR:HB3	2.19	0.42
7:c:283:ALA:O	7:c:284:TYR:CG	2.73	0.42
9:B:185:ILE:O	9:B:189:MET:HG2	2.19	0.42
9:B:187:GLU:O	9:B:190:ASP:N	2.50	0.42
1:2:703:HIS:CB	5:6:804:ILE:CG2	2.70	0.42
2:3:111:TRP:CZ2	11:C:90:THR:HG22	2.55	0.42
2:3:442:LEU:O	2:3:460:GLY:N	2.53	0.42
2:3:443:THR:HG22	6:7:319:SER:CB	2.45	0.42
2:3:703:GLU:HB3	2:3:707:ARG:NH2	2.34	0.42
3:4:327:ASN:HB3	3:4:434:GLU:OE2	2.20	0.42
3:4:433:ILE:O	3:4:434:GLU:HB2	2.20	0.42
5:6:162:GLU:O	5:6:163:ASN:HB2	2.20	0.42
5:6:765:LEU:CD2	5:6:770:ARG:HB3	2.49	0.42
5:6:907:ASP:OD1	5:6:908:LYS:HG2	2.20	0.42
5:6:919:LYS:HG3	5:6:920:ILE:N	2.35	0.42
6:7:89:GLN:NE2	6:7:102:LEU:H	2.18	0.42
6:7:292:ASN:OD1	6:7:293:GLN:HB2	2.19	0.42
6:7:469:LEU:O	6:7:472:ALA:HB3	2.19	0.42
6:7:485:GLY:C	6:7:487:GLY:HA3	2.44	0.42
6:7:627:ASP:OD1	6:7:628:LEU:N	2.53	0.42
8:D:138:PHE:CE2	10:A:157:PRO:HG3	2.55	0.42
11:C:98:HIS:HA	11:C:102:SER:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:211:TYR:CZ	6:7:6:PRO:HG2	2.55	0.42
2:3:463:VAL:CG1	6:7:320:GLN:HA	2.50	0.42
2:3:467:ARG:CZ	2:3:509:ARG:NH1	2.82	0.42
3:4:646:HIS:HE1	3:4:698:LEU:HB2	1.85	0.42
4:5:46:TYR:HD1	4:5:46:TYR:HA	1.75	0.42
4:5:578:GLY:O	4:5:580:ALA:N	2.53	0.42
4:5:607:ARG:HA	4:5:665:LYS:NZ	2.35	0.42
5:6:100:VAL:HA	5:6:101:LYS:HA	1.49	0.42
5:6:268:PHE:HD1	5:6:269:ASN:HB2	1.85	0.42
5:6:916:ILE:O	5:6:920:ILE:HG23	2.20	0.42
6:7:523:ILE:HG21	6:7:526:PHE:HD1	1.84	0.42
7:c:328:LEU:CD1	7:c:500:GLN:HG2	2.50	0.42
7:c:392:PHE:O	7:c:396:LEU:HB2	2.20	0.42
8:D:264:LYS:HG2	8:D:265:GLU:N	2.35	0.42
9:B:54:THR:HB	9:B:57:ASP:OD2	2.20	0.42
10:A:13:ALA:HB1	10:A:92:LEU:HD23	2.00	0.42
10:A:172:GLY:HA2	10:A:173:GLU:HA	1.80	0.42
10:A:173:GLU:HB3	10:A:183:LEU:N	2.35	0.42
1:2:518:SER:OG	1:2:537:ILE:O	2.23	0.42
2:3:252:ASP:OD2	2:3:283:VAL:HG11	2.20	0.42
2:3:671:LEU:HB3	6:7:621:MET:CG	2.50	0.42
3:4:468:LYS:CG	3:4:609:VAL:CG1	2.70	0.42
4:5:407:ARG:HD3	4:5:498:GLU:O	2.20	0.42
4:5:614:LEU:HA	4:5:672:ALA:HB3	2.00	0.42
4:5:714:PHE:HD1	4:5:755:LEU:HD13	1.85	0.42
5:6:759:ARG:CA	5:6:812:ARG:HH21	2.30	0.42
6:7:476:ILE:O	6:7:639:ARG:HD3	2.20	0.42
6:7:595:ASP:N	6:7:595:ASP:OD1	2.51	0.42
7:c:324:TYR:C	7:c:326:LEU:N	2.75	0.42
7:c:536:LEU:HA	7:c:539:TYR:HD2	1.85	0.42
8:D:171:LEU:HB3	8:D:172:THR:H	1.51	0.42
8:D:212:THR:HB	8:D:213:GLU:C	2.45	0.42
9:B:24:PRO:HA	9:B:72:VAL:HA	2.01	0.42
10:A:86:LEU:HD23	10:A:86:LEU:HA	1.90	0.42
11:C:47:PRO:HB2	11:C:49:TRP:NE1	2.35	0.42
1:2:534:ARG:HG2	1:2:536:ASP:H	1.85	0.42
2:3:429:ALA:HB3	2:3:469:VAL:C	2.44	0.42
5:6:126:SER:HB3	5:6:131:GLU:HB3	2.02	0.42
5:6:399:GLY:O	5:6:400:VAL:C	2.63	0.42
5:6:642:ASP:OD2	5:6:683:ASN:O	2.37	0.42
5:6:685:VAL:HG23	5:6:698:ASN:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:920:ILE:HG13	5:6:921:ALA:N	2.34	0.42
8:D:137:LYS:HE2	8:D:141:ARG:NH2	2.28	0.42
8:D:153:LYS:HE3	8:D:154:PHE:CE1	2.54	0.42
9:B:16:ILE:HG12	9:B:16:ILE:H	1.70	0.42
9:B:58:LYS:HE2	9:B:58:LYS:HB3	1.84	0.42
1:2:478:GLU:OE2	1:2:482:ARG:HD2	2.20	0.41
1:2:609:PHE:HB3	1:2:669:LEU:HD21	2.02	0.41
1:2:826:SER:C	1:2:828:PHE:H	2.28	0.41
2:3:490:MET:HE1	2:3:543:PHE:CD1	2.55	0.41
2:3:557:ARG:O	2:3:560:SER:OG	2.34	0.41
2:3:727:LYS:O	2:3:730:ALA:HB3	2.19	0.41
3:4:273:ASP:O	3:4:276:ILE:HG13	2.20	0.41
4:5:287:ILE:HD13	4:5:343:TRP:HB3	2.02	0.41
4:5:677:VAL:HG12	4:5:681:ILE:HD11	2.01	0.41
6:7:196:LEU:HD23	6:7:196:LEU:C	2.45	0.41
6:7:248:VAL:HG11	6:7:345:PRO:HD3	2.02	0.41
6:7:367:LYS:HG2	6:7:371:LEU:HD22	2.00	0.41
7:c:316:LEU:CD1	7:c:412:THR:O	2.68	0.41
1:2:330:VAL:CG2	4:5:272:ARG:HH12	2.33	0.41
2:3:203:ALA:HB3	2:3:207:GLY:O	2.20	0.41
2:3:553:ILE:CD1	4:5:631:LYS:N	2.83	0.41
2:3:687:ARG:NH1	2:3:698:THR:HA	2.34	0.41
3:4:272:MET:HB3	3:4:303:VAL:HG21	2.03	0.41
3:4:315:ARG:NH2	6:7:311:GLN:HE22	2.14	0.41
3:4:387:ASN:OD1	5:6:402:ILE:HA	2.19	0.41
4:5:29:LYS:HD3	4:5:29:LYS:HA	1.87	0.41
4:5:34:PHE:CZ	4:5:46:TYR:HE2	2.39	0.41
4:5:440:SER:OG	4:5:480:ASP:HB2	2.19	0.41
4:5:453:VAL:HG11	4:5:509:ILE:HD11	2.03	0.41
5:6:293:THR:HG23	5:6:393:ASP:N	2.35	0.41
5:6:906:TYR:HD2	5:6:910:VAL:HG23	1.85	0.41
5:6:914:ASN:HA	5:6:917:VAL:HG12	2.01	0.41
6:7:139:LEU:HA	6:7:142:ILE:HG13	2.02	0.41
6:7:459:MET:HG3	6:7:460:GLY:N	2.34	0.41
7:c:56:SER:H	10:A:190:PHE:HB3	1.85	0.41
7:c:74:LEU:CD2	10:A:182:ASN:CG	2.83	0.41
7:c:151:THR:HB	7:c:152:LEU:C	2.45	0.41
8:D:222:PRO:O	8:D:224:TRP:CD1	2.73	0.41
8:D:257:THR:O	8:D:259:THR:HG23	2.21	0.41
9:B:25:ILE:HD11	9:B:87:ILE:CD1	2.48	0.41
10:A:87:LEU:HA	10:A:87:LEU:HD23	1.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:C:12:ASP:HB3	11:C:49:TRP:HB3	2.02	0.41
1:2:438:LEU:C	1:2:440:ALA:N	2.77	0.41
1:2:803:PHE:HB3	1:2:804:PRO:HA	2.01	0.41
2:3:40:ASP:OD1	2:3:41:SER:N	2.53	0.41
3:4:183:THR:HG23	3:4:264:TYR:HB3	2.03	0.41
3:4:302:LYS:NZ	3:4:421:ASP:OD2	2.54	0.41
3:4:604:TYR:HD2	3:4:617:GLU:OE1	2.03	0.41
3:4:758:ILE:CD1	3:4:813:LEU:HA	2.50	0.41
5:6:154:ASP:OD1	5:6:155:TYR:N	2.53	0.41
5:6:270:LEU:HA	5:6:271:PRO:HD3	1.89	0.41
6:7:479:ARG:HG3	6:7:479:ARG:O	2.20	0.41
11:C:96:ASP:OD2	11:C:99:SER:HB3	2.19	0.41
11:C:97:LEU:O	11:C:100:ILE:HG12	2.20	0.41
1:2:268:LEU:HD23	1:2:268:LEU:HA	1.73	0.41
1:2:544:ASP:H	1:2:549:LYS:HD3	1.85	0.41
1:2:777:LYS:H	1:2:828:PHE:HA	1.86	0.41
1:2:803:PHE:CD2	1:2:805:ILE:C	2.89	0.41
4:5:41:ASP:HA	4:5:42:SER:HA	1.76	0.41
4:5:244:ILE:CG2	4:5:246:GLU:HG2	2.49	0.41
4:5:493:ILE:HG22	4:5:497:MET:HE2	2.01	0.41
5:6:569:ILE:HG13	5:6:570:ASN:N	2.36	0.41
5:6:641:PHE:HD1	5:6:641:PHE:HA	1.71	0.41
5:6:956:GLU:HG3	5:6:957:GLU:N	2.36	0.41
7:c:26:GLN:O	7:c:78:ILE:HG23	2.20	0.41
7:c:269:ASN:HA	7:c:272:LEU:HD12	2.01	0.41
7:c:634:ARG:HA	7:c:637:LEU:CD2	2.51	0.41
8:D:200:LYS:HB2	8:D:201:TYR:CB	2.49	0.41
8:D:258:VAL:CG1	8:D:260:ILE:HG13	2.50	0.41
8:D:260:ILE:H	8:D:266:GLU:HG3	1.85	0.41
9:B:26:LYS:HB2	9:B:88:VAL:HG11	2.03	0.41
10:A:178:TYR:CE2	10:A:195:ASP:OD1	2.73	0.41
11:C:3:TYR:CG	11:C:4:TYR:N	2.88	0.41
11:C:134:GLU:OE2	11:C:138:HIS:NE2	2.50	0.41
1:2:591:LEU:HD11	1:2:631:ILE:CD1	2.47	0.41
2:3:234:GLU:CD	2:3:239:ASN:C	2.89	0.41
2:3:686:LEU:HD21	2:3:734:ARG:NH2	2.36	0.41
3:4:253:GLN:O	3:4:254:THR:OG1	2.29	0.41
3:4:346:PHE:CE2	3:4:388:ARG:HD3	2.55	0.41
4:5:51:ARG:O	4:5:54:ILE:HG13	2.21	0.41
4:5:86:ILE:C	4:5:88:PRO:HD2	2.46	0.41
4:5:90:PHE:CD2	4:5:137:LEU:CD2	2.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:5:346:VAL:CG1	4:5:347:THR:H	2.32	0.41
5:6:153:ILE:HD11	5:6:267:PHE:CE1	2.55	0.41
5:6:448:LEU:HD12	5:6:448:LEU:O	2.20	0.41
6:7:94:LEU:CB	6:7:95:GLN:HB2	2.44	0.41
6:7:437:VAL:HG21	6:7:702:LEU:HD21	2.03	0.41
6:7:529:MET:HE2	6:7:534:ARG:N	2.36	0.41
7:c:163:LEU:HA	7:c:164:GLU:HA	1.57	0.41
8:D:166:ASN:HA	8:D:167:SER:HA	1.65	0.41
10:A:132:LYS:HA	10:A:135:CYS:SG	2.61	0.41
11:C:108:ALA:O	11:C:112:ILE:HG22	2.20	0.41
1:2:289:ILE:HG22	1:2:290:HIS:ND1	2.35	0.41
1:2:544:ASP:OD2	1:2:656:ARG:HB2	2.21	0.41
2:3:172:THR:HA	2:3:173:ALA:HA	1.81	0.41
3:4:263:ASN:HD22	3:4:324:LYS:HE3	1.86	0.41
3:4:531:TYR:OH	3:4:719:GLU:CB	2.57	0.41
3:4:559:ARG:HB3	3:4:560:GLY:H	1.65	0.41
3:4:561:ASP:OD1	3:4:670:SER:HA	2.21	0.41
3:4:820:GLU:O	3:4:821:ASP:CG	2.63	0.41
4:5:287:ILE:HA	4:5:288:PRO:HD2	1.88	0.41
4:5:297:ILE:HG22	4:5:298:TYR:N	2.35	0.41
4:5:453:VAL:CG1	4:5:509:ILE:HD11	2.50	0.41
4:5:585:ASN:O	4:5:589:GLU:HG2	2.20	0.41
4:5:663:LEU:HB3	4:5:676:HIS:CE1	2.55	0.41
4:5:726:TRP:CG	4:5:727:SER:N	2.89	0.41
5:6:274:HIS:CG	5:6:288:LEU:HD11	2.56	0.41
5:6:710:ASP:HA	5:6:711:LEU:HA	1.61	0.41
7:c:284:TYR:HB2	7:c:285:ALA:H	1.59	0.41
9:B:155:LYS:HB2	9:B:155:LYS:HE3	1.76	0.41
10:A:36:ILE:HD12	10:A:36:ILE:HA	1.97	0.41
10:A:167:VAL:CG2	10:A:187:SER:O	2.37	0.41
1:2:247:ARG:HH12	1:2:301:PRO:HD2	1.85	0.41
2:3:413:THR:O	2:3:413:THR:HG22	2.21	0.41
2:3:414:ALA:O	2:3:417:GLN:N	2.54	0.41
2:3:653:ILE:N	2:3:654:PRO:HD2	2.35	0.41
2:3:666:ARG:HA	2:3:667:VAL:HA	1.69	0.41
3:4:252:LYS:HE3	3:4:252:LYS:HB3	1.93	0.41
3:4:593:GLY:C	3:4:595:GLY:H	2.28	0.41
5:6:354:LEU:CD1	5:6:355:ASP:OD2	2.50	0.41
5:6:414:GLY:HA3	5:6:415:VAL:HA	1.85	0.41
5:6:689:TYR:HD2	5:6:716:LEU:HD12	1.85	0.41
6:7:17:LEU:CD1	6:7:102:LEU:HD23	2.32	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:128:PRO:HD2	6:7:129:THR:HA	2.03	0.41
6:7:367:LYS:HA	6:7:368:ALA:HB3	2.03	0.41
8:D:176:SER:O	8:D:180:ILE:HG23	2.21	0.41
11:C:100:ILE:HG13	11:C:101:ASN:ND2	2.35	0.41
1:2:330:VAL:HG21	4:5:272:ARG:HH12	1.86	0.41
1:2:706:SER:C	5:6:764:ILE:CG2	2.93	0.41
1:2:804:PRO:HD2	1:2:845:PHE:HE1	1.85	0.41
2:3:197:ILE:O	2:3:214:TYR:HB2	2.21	0.41
2:3:254:GLN:HE21	2:3:256:ILE:HD11	1.86	0.41
2:3:569:HIS:CB	4:5:398:LYS:HG3	2.50	0.41
3:4:181:TRP:CG	3:4:182:GLY:N	2.89	0.41
3:4:194:PHE:O	3:4:197:PHE:HB3	2.20	0.41
3:4:201:PHE:CB	3:4:202:LYS:HA	2.35	0.41
3:4:317:LEU:HA	3:4:317:LEU:HD23	1.87	0.41
3:4:832:ALA:HB1	3:4:836:TYR:CZ	2.55	0.41
4:5:136:GLN:HE22	4:5:282:LEU:CD1	2.33	0.41
4:5:159:ILE:H	4:5:159:ILE:HG13	1.63	0.41
6:7:92:LYS:HD2	6:7:92:LYS:HA	1.86	0.41
6:7:362:GLY:HA3	6:7:364:LYS:HZ2	1.86	0.41
7:c:87:GLY:O	7:c:133:ASN:ND2	2.51	0.41
7:c:88:GLY:HA2	7:c:129:TRP:CE3	2.54	0.41
7:c:140:ILE:HA	7:c:141:GLN:HB3	2.02	0.41
7:c:280:LEU:HD11	7:c:285:ALA:O	2.20	0.41
7:c:295:LEU:HB3	7:c:409:PHE:HE2	1.85	0.41
10:A:150:ASP:OD1	10:A:198:ARG:CZ	2.69	0.41
10:A:151:LEU:H	10:A:151:LEU:CD1	2.33	0.41
10:A:167:VAL:HG21	10:A:184:ILE:O	2.20	0.41
11:C:14:THR:HG21	11:C:107:LEU:HD12	2.03	0.41
11:C:117:GLU:OE2	11:C:120:LEU:CD2	2.61	0.41
1:2:548:ALA:O	1:2:552:ILE:HD12	2.21	0.41
1:2:596:LEU:HD13	1:2:623:ALA:HB2	2.02	0.41
1:2:661:LEU:HB3	1:2:662:PRO:HD2	2.02	0.41
1:2:807:VAL:O	1:2:810:LEU:HB3	2.21	0.41
2:3:132:LEU:O	2:3:136:MET:HG2	2.21	0.41
2:3:372:TYR:CE1	2:3:564:HIS:HB3	2.55	0.41
2:3:443:THR:C	2:3:445:ALA:H	2.28	0.41
2:3:687:ARG:HH21	6:7:602:ASP:CG	2.22	0.41
3:4:552:PHE:C	5:6:737:LYS:NZ	2.71	0.41
3:4:557:ARG:HE	3:4:668:ARG:HH21	1.68	0.41
3:4:711:LYS:C	3:4:712:VAL:HG23	2.46	0.41
3:4:718:ARG:CD	6:7:661:VAL:HG11	2.44	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:4:762:ILE:HD12	3:4:767:LYS:HG3	2.02	0.41
4:5:69:ILE:HD13	4:5:76:TYR:CD2	2.55	0.41
4:5:543:GLN:HG3	4:5:546:ILE:CD1	2.51	0.41
4:5:712:ARG:HA	4:5:751:ALA:HB1	2.03	0.41
4:5:722:LEU:HD12	4:5:728:THR:CB	2.45	0.41
5:6:373:MET:HA	5:6:374:PRO:HD2	1.82	0.41
5:6:537:VAL:HG21	5:6:584:PHE:CE1	2.55	0.41
5:6:683:ASN:HA	5:6:684:PRO:HD3	1.89	0.41
6:7:26:VAL:HG21	6:7:124:ASN:HB2	2.02	0.41
6:7:258:ILE:H	6:7:305:SER:HB2	1.85	0.41
6:7:333:ILE:HD13	6:7:351:VAL:HG11	2.03	0.41
6:7:517:ASP:OD1	6:7:517:ASP:N	2.52	0.41
6:7:573:ARG:O	6:7:574:TYR:C	2.63	0.41
7:c:15:ILE:HB	7:c:121:TYR:CZ	2.55	0.41
7:c:97:GLU:HA	7:c:98:ILE:O	2.21	0.41
7:c:128:PRO:HB2	7:c:240:TYR:CZ	2.55	0.41
7:c:621:ARG:HB2	7:c:631:GLU:HB2	2.03	0.41
8:D:216:VAL:HG13	8:D:218:MET:N	2.35	0.41
10:A:74:VAL:O	10:A:77:LEU:HB2	2.21	0.41
10:A:89:TYR:O	10:A:92:LEU:HB3	2.20	0.41
1:2:770:ALA:O	1:2:774:ILE:HG22	2.20	0.41
3:4:557:ARG:HH11	3:4:668:ARG:CZ	2.30	0.41
3:4:563:ASN:O	3:4:703:ASP:HB3	2.20	0.41
4:5:355:GLU:CG	10:A:19:LEU:CD2	2.94	0.41
4:5:473:ASP:OD1	4:5:474:GLY:N	2.54	0.41
5:6:296:ARG:NH1	5:6:360:ARG:CZ	2.84	0.41
6:7:135:LYS:HD2	6:7:136:ASP:O	2.21	0.41
7:c:97:GLU:HG3	7:c:97:GLU:O	2.20	0.41
7:c:338:PHE:HB3	7:c:359:LEU:HD11	2.03	0.41
7:c:412:THR:HG22	7:c:418:SER:OG	2.21	0.41
9:B:82:GLN:HB3	9:B:84:LYS:HG3	2.02	0.41
10:A:99:SER:O	10:A:102:TRP:HB2	2.20	0.41
11:C:18:CYS:SG	11:C:74:LEU:HA	2.61	0.41
1:2:328:THR:HG22	1:2:387:ARG:H	1.86	0.40
2:3:702:LEU:CD2	6:7:616:VAL:HG11	2.51	0.40
3:4:304:ARG:NH2	3:4:422:GLU:OE1	2.54	0.40
3:4:318:ASN:HA	3:4:319:PRO:HD3	1.81	0.40
4:5:348:MET:SD	11:C:167:LEU:CG	2.98	0.40
4:5:722:LEU:HD12	4:5:728:THR:CG2	2.50	0.40
5:6:174:TYR:CE2	5:6:178:LEU:HD11	2.56	0.40
5:6:767:LYS:NZ	5:6:820:THR:HA	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:7:680:SER:CB	6:7:681:PHE:HA	2.50	0.40
7:c:12:TYR:HA	7:c:15:ILE:HG22	2.02	0.40
7:c:124:ASP:OD1	7:c:125:ALA:N	2.53	0.40
7:c:525:TYR:CE1	7:c:527:LEU:HD12	2.55	0.40
8:D:217:ASN:HD22	10:A:84:ARG:HH12	1.69	0.40
9:B:120:LEU:HD13	9:B:176:LEU:HD22	2.02	0.40
11:C:16:PHE:CZ	11:C:107:LEU:HD21	2.55	0.40
1:2:203:VAL:O	1:2:206:THR:OG1	2.31	0.40
2:3:440:VAL:HG12	2:3:441:GLY:N	2.36	0.40
3:4:469:VAL:CG2	3:4:609:VAL:HG21	2.52	0.40
4:5:148:LEU:HD23	4:5:260:GLU:HB3	2.04	0.40
5:6:290:ILE:HD12	5:6:454:PHE:HZ	1.75	0.40
5:6:401:GLU:O	5:6:402:ILE:HG12	2.21	0.40
5:6:559:THR:O	5:6:560:VAL:HG22	2.21	0.40
6:7:316:GLN:HG3	6:7:330:SER:HB3	2.03	0.40
6:7:441:ASP:O	6:7:442:LYS:HB2	2.21	0.40
7:c:43:LYS:CG	7:c:484:LEU:CD2	2.85	0.40
7:c:152:LEU:HD11	7:c:155:GLU:HB3	2.02	0.40
10:A:17:LYS:HE2	10:A:17:LYS:HB3	1.75	0.40
1:2:574:VAL:H	1:2:574:VAL:HG22	1.67	0.40
2:3:193:ARG:CG	6:7:371:LEU:HD11	2.51	0.40
2:3:393:LEU:HD12	6:7:421:GLU:CG	2.51	0.40
2:3:433:THR:HG22	2:3:473:ASP:HB2	2.02	0.40
2:3:703:GLU:C	2:3:707:ARG:NH1	2.79	0.40
3:4:572:THR:O	3:4:572:THR:HG22	2.21	0.40
3:4:594:LYS:HZ1	6:7:549:SER:HB3	1.22	0.40
3:4:725:THR:HG21	6:7:657:ASN:HD21	1.80	0.40
3:4:793:ALA:O	3:4:794:THR:CG2	2.69	0.40
4:5:61:LEU:HD23	4:5:62:THR:N	2.36	0.40
4:5:296:GLY:HA3	4:5:329:LYS:O	2.21	0.40
4:5:337:VAL:HA	4:5:338:GLU:HA	1.77	0.40
4:5:569:ALA:C	4:5:573:ILE:CD1	2.88	0.40
5:6:132:VAL:HG22	5:6:133:GLU:CD	2.46	0.40
5:6:134:LYS:HG2	5:6:137:ARG:CG	2.51	0.40
5:6:311:CYS:HA	5:6:312:ASP:CB	2.51	0.40
5:6:640:GLU:N	5:6:681:ALA:O	2.47	0.40
5:6:909:TYR:HA	5:6:912:MET:HE2	2.01	0.40
6:7:421:GLU:HA	6:7:625:GLN:CD	2.46	0.40
6:7:574:TYR:OH	6:7:727:LEU:HB2	2.21	0.40
7:c:34:LEU:HD12	7:c:543:LEU:HD21	1.62	0.40
7:c:266:ASN:HD22	7:c:269:ASN:ND2	2.16	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:c:326:LEU:HD23	7:c:326:LEU:C	2.46	0.40
7:c:540:ARG:HG2	7:c:540:ARG:HH11	1.86	0.40
1:2:290:HIS:O	1:2:292:GLU:N	2.55	0.40
1:2:299:ASP:C	1:2:319:ARG:HH11	2.28	0.40
1:2:696:ALA:CB	5:6:800:LEU:HD22	2.51	0.40
1:2:856:GLN:HE22	1:2:859:ARG:HD3	1.87	0.40
2:3:187:THR:HA	2:3:188:LYS:HA	1.91	0.40
2:3:228:PRO:HA	2:3:229:ALA:HA	1.90	0.40
2:3:393:LEU:HA	6:7:623:ASN:HB3	2.03	0.40
3:4:181:TRP:CG	3:4:182:GLY:H	2.38	0.40
3:4:319:PRO:HG2	6:7:309:ALA:CB	2.52	0.40
4:5:178:TYR:HE1	4:5:191:SER:HB2	1.84	0.40
4:5:594:ILE:CB	4:5:599:MET:HE2	2.51	0.40
4:5:726:TRP:C	4:5:728:THR:N	2.79	0.40
5:6:772:TYR:CE2	5:6:776:LYS:HE3	2.55	0.40
5:6:915:MET:O	5:6:919:LYS:HG2	2.22	0.40
5:6:917:VAL:HA	5:6:920:ILE:HD11	2.03	0.40
6:7:599:LEU:O	6:7:599:LEU:HD12	2.21	0.40
7:c:162:LEU:HD22	7:c:165:LEU:HD23	2.03	0.40
7:c:256:TYR:CD1	7:c:273:ASN:ND2	2.85	0.40
7:c:270:LEU:HD12	7:c:270:LEU:HA	1.91	0.40
7:c:358:ARG:O	7:c:362:MET:HG3	2.22	0.40
7:c:558:GLU:H	7:c:560:GLU:HB2	1.86	0.40
7:c:572:ILE:HG21	7:c:579:TYR:CZ	2.56	0.40
8:D:77:LEU:HB3	8:D:78:PRO:HD2	2.04	0.40
9:B:14:GLU:O	9:B:17:GLN:HG2	2.20	0.40
10:A:22:ARG:HB3	10:A:23:SER:HA	2.03	0.40
10:A:54:LEU:CD2	10:A:57:GLN:OE1	2.68	0.40
1:2:433:ASN:HA	1:2:434:TYR:HA	1.81	0.40
2:3:95:ARG:NH2	2:3:154:LYS:HG3	2.36	0.40
2:3:502:ILE:HG21	6:7:244:ILE:HG12	0.42	0.40
3:4:353:ASP:OD1	3:4:354:HIS:N	2.54	0.40
3:4:531:TYR:CE2	3:4:716:ASN:CG	2.94	0.40
3:4:794:THR:CB	5:6:578:SER:OG	2.70	0.40
4:5:345:SER:HB2	4:5:601:ARG:NH1	2.36	0.40
4:5:415:LEU:O	4:5:415:LEU:HD12	2.22	0.40
4:5:464:LEU:HD23	4:5:466:GLY:N	2.36	0.40
4:5:541:ASP:CG	4:5:542:PHE:H	2.29	0.40
4:5:554:PHE:HE1	4:5:687:SER:CB	2.31	0.40
4:5:675:ARG:HA	4:5:678:ASP:OD2	2.20	0.40
5:6:525:ILE:O	5:6:529:LEU:HG	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:6:738:ARG:HA	5:6:738:ARG:HD3	1.94	0.40
5:6:942:LEU:HD23	5:6:942:LEU:C	2.46	0.40
7:c:416:ARG:HG3	7:c:416:ARG:HH11	1.87	0.40
7:c:478:TRP:HA	7:c:481:TRP:HB3	2.03	0.40
8:D:84:MET:HE1	8:D:143:TYR:CD2	2.57	0.40
8:D:250:GLU:HG3	8:D:256:TYR:HD2	1.85	0.40
8:D:275:TYR:HE1	9:B:169:GLN:CB	2.34	0.40
9:B:79:LEU:HB2	9:B:85:CYS:SG	2.61	0.40
9:B:112:PHE:O	9:B:152:ARG:NH2	2.53	0.40
10:A:108:ASP:OD1	10:A:198:ARG:CD	2.64	0.40
10:A:193:GLN:O	10:A:197:GLU:HG3	2.21	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	45/868 (5%)	41 (91%)	4 (9%)	0	100	100
2	3	534/971 (55%)	487 (91%)	40 (8%)	7 (1%)	9	41
3	4	609/933 (65%)	534 (88%)	65 (11%)	10 (2%)	7	37
4	5	638/775 (82%)	571 (90%)	49 (8%)	18 (3%)	4	24
5	6	656/1017 (64%)	594 (90%)	52 (8%)	10 (2%)	8	38
6	7	647/845 (77%)	572 (88%)	66 (10%)	9 (1%)	9	39
7	c	543/650 (84%)	496 (91%)	45 (8%)	2 (0%)	30	67
8	D	215/294 (73%)	197 (92%)	16 (7%)	2 (1%)	14	49
9	B	177/213 (83%)	163 (92%)	14 (8%)	0	100	100
10	A	206/208 (99%)	181 (88%)	24 (12%)	1 (0%)	24	63
11	C	151/194 (78%)	144 (95%)	7 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
All	All	4421/6968 (63%)	3980 (90%)	382 (9%)	59 (1%)	12	41

All (59) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	4	450	GLN
3	4	609	VAL
3	4	736	ILE
4	5	340	SER
4	5	561	ASN
4	5	592	SER
4	5	596	ILE
4	5	713	ARG
4	5	729	SER
5	6	930	GLU
6	7	26	VAL
6	7	464	VAL
6	7	544	GLN
6	7	679	PHE
7	c	601	ILE
2	3	389	VAL
3	4	419	VAL
3	4	494	GLU
3	4	712	VAL
4	5	341	SER
4	5	410	ILE
4	5	574	ASN
4	5	714	PHE
4	5	759	GLU
5	6	402	ILE
5	6	541	GLU
5	6	560	VAL
5	6	819	ILE
5	6	929	GLU
2	3	230	ILE
4	5	559	ASP
5	6	106	VAL
2	3	158	LYS
2	3	172	THR
3	4	493	ASN
4	5	153	SER
4	5	154	GLU

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Mol	Chain	Res	Type
4	5	267	VAL
4	5	343	TRP
4	5	576	HIS
5	6	321	VAL
6	7	257	VAL
6	7	675	MET
6	7	677	SER
8	D	219	ILE
8	D	255	CYS
10	A	27	VAL
2	3	440	VAL
4	5	579	ASN
5	6	410	LEU
5	6	569	ILE
7	c	98	ILE
2	3	519	VAL
6	7	258	ILE
3	4	433	ILE
3	4	463	VAL
6	7	248	VAL
2	3	326	VAL
3	4	733	PRO

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	2	495/770 (64%)	495 (100%)	0	100	100
2	3	502/835 (60%)	501 (100%)	1 (0%)	87	86
3	4	554/848 (65%)	553 (100%)	1 (0%)	87	86
4	5	589/688 (86%)	586 (100%)	3 (0%)	81	82
5	6	548/886 (62%)	548 (100%)	0	100	100
6	7	578/753 (77%)	575 (100%)	3 (0%)	81	82
7	c	498/585 (85%)	492 (99%)	6 (1%)	63	73

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
8	D	213/279 (76%)	211 (99%)	2 (1%)	70	77
9	B	171/198 (86%)	169 (99%)	2 (1%)	63	73
10	A	192/192 (100%)	191 (100%)	1 (0%)	81	82
11	C	144/173 (83%)	143 (99%)	1 (1%)	76	79
All	All	4484/6207 (72%)	4464 (100%)	20 (0%)	81	83

All (20) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	3	651	VAL
3	4	293	LEU
4	5	104	LEU
4	5	321	VAL
4	5	594	ILE
6	7	86	LEU
6	7	315	ILE
6	7	370	LEU
7	c	27	LEU
7	c	34	LEU
7	c	81	LEU
7	c	152	LEU
7	c	162	LEU
7	c	529	VAL
8	D	168	LEU
8	D	258	VAL
9	B	60	LEU
9	B	175	LEU
10	A	151	LEU
11	C	123	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (88) such sidechains are listed below:

Mol	Chain	Res	Type
1	2	386	GLN
1	2	439	ASN
1	2	551	GLN
1	2	561	HIS
1	2	613	ASN
1	2	779	HIS
1	2	809	HIS

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Mol	Chain	Res	Type
1	2	849	GLN
1	2	856	GLN
2	3	29	GLN
2	3	239	ASN
2	3	349	ASN
2	3	351	ASN
2	3	374	HIS
2	3	493	GLN
2	3	554	ASN
2	3	670	GLN
3	4	231	ASN
3	4	247	ASN
3	4	410	GLN
3	4	413	HIS
3	4	579	GLN
3	4	582	HIS
3	4	646	HIS
3	4	757	HIS
3	4	759	HIS
3	4	797	GLN
4	5	49	GLN
4	5	53	ASN
4	5	58	ASN
4	5	136	GLN
4	5	253	GLN
4	5	259	GLN
4	5	284	ASN
4	5	372	ASN
4	5	411	ASN
4	5	494	HIS
4	5	543	GLN
4	5	560	HIS
4	5	590	ASN
4	5	676	HIS
4	5	716	GLN
4	5	731	GLN
4	5	741	HIS
4	5	758	HIS
5	6	139	GLN
5	6	364	ASN
5	6	540	HIS
5	6	659	GLN

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Mol	Chain	Res	Type
5	6	669	HIS
5	6	690	ASN
5	6	698	ASN
6	7	87	GLN
6	7	90	ASN
6	7	311	GLN
6	7	455	ASN
6	7	543	GLN
6	7	544	GLN
6	7	585	ASN
6	7	620	HIS
7	c	26	GLN
7	c	243	GLN
7	c	249	ASN
7	c	266	ASN
7	c	273	ASN
7	c	286	GLN
7	c	289	ASN
7	c	521	HIS
7	c	550	ASN
7	c	563	GLN
7	c	575	ASN
7	c	604	ASN
7	c	624	ASN
8	D	109	GLN
8	D	110	ASN
8	D	231	HIS
9	B	17	GLN
9	B	128	ASN
9	B	146	GLN
9	B	167	HIS
10	A	50	ASN
10	A	104	ASN
10	A	126	GLN
10	A	175	GLN
10	A	188	GLN
10	A	202	GLN
11	C	41	ASN
11	C	101	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 1 ligands modelled in this entry, 1 is monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
6	7	1
2	3	1
3	4	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	7	386:LYS	C	387:LYS	N	6.57
1	3	310:ASN	C	311:SER	N	5.65
1	4	467:LYS	C	468:LYS	N	3.57

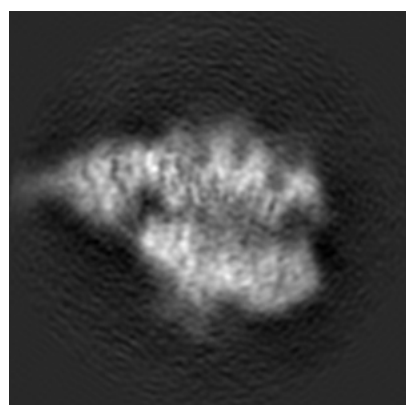
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-6536. These allow visual inspection of the internal detail of the map and identification of artifacts.

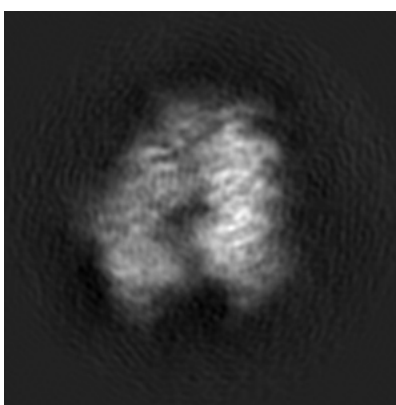
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

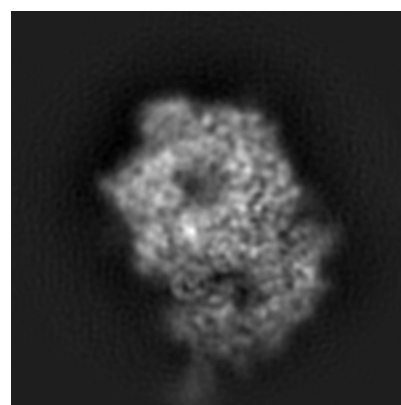
6.1.1 Primary map



X



Y

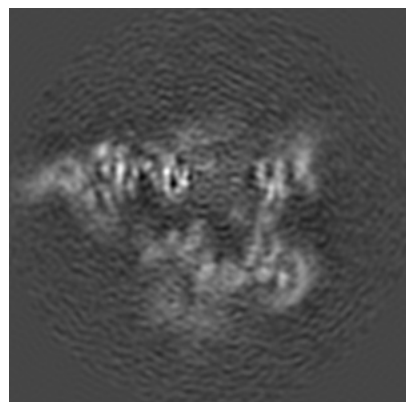


Z

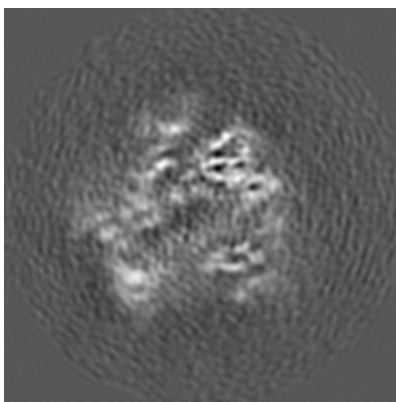
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

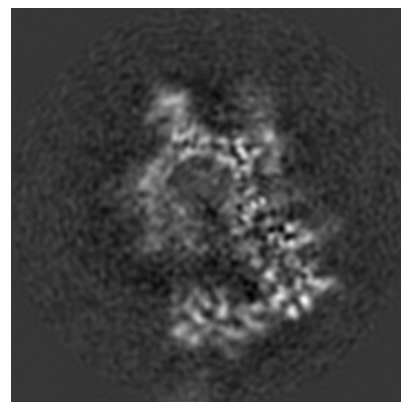
6.2.1 Primary map



X Index: 128



Y Index: 128

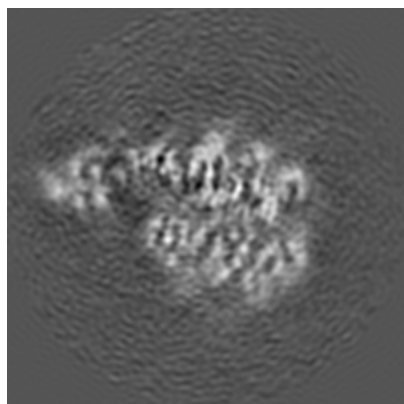


Z Index: 128

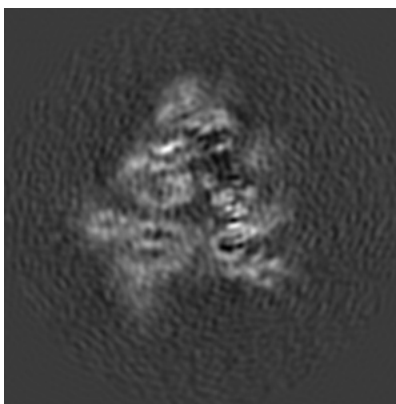
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

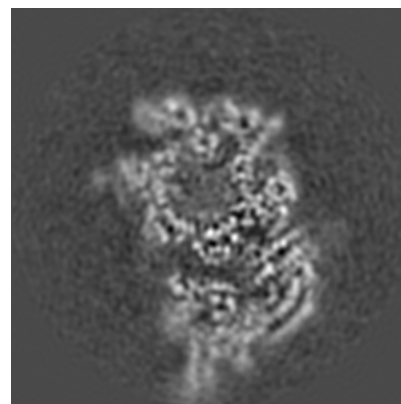
6.3.1 Primary map



X Index: 146



Y Index: 113

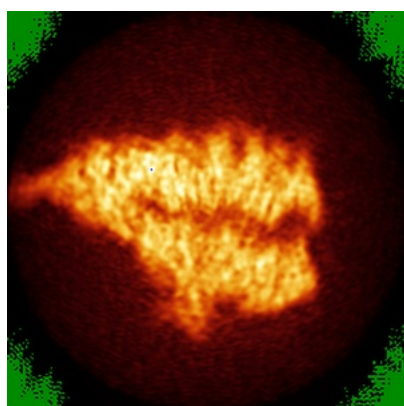


Z Index: 143

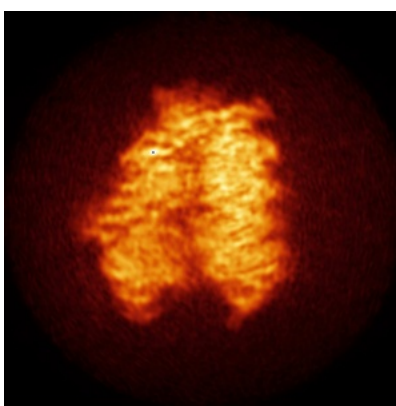
The images above show the largest variance slices of the map in three orthogonal directions.

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

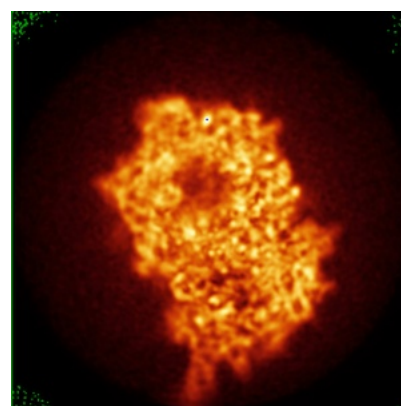
6.4.1 Primary map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.018. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

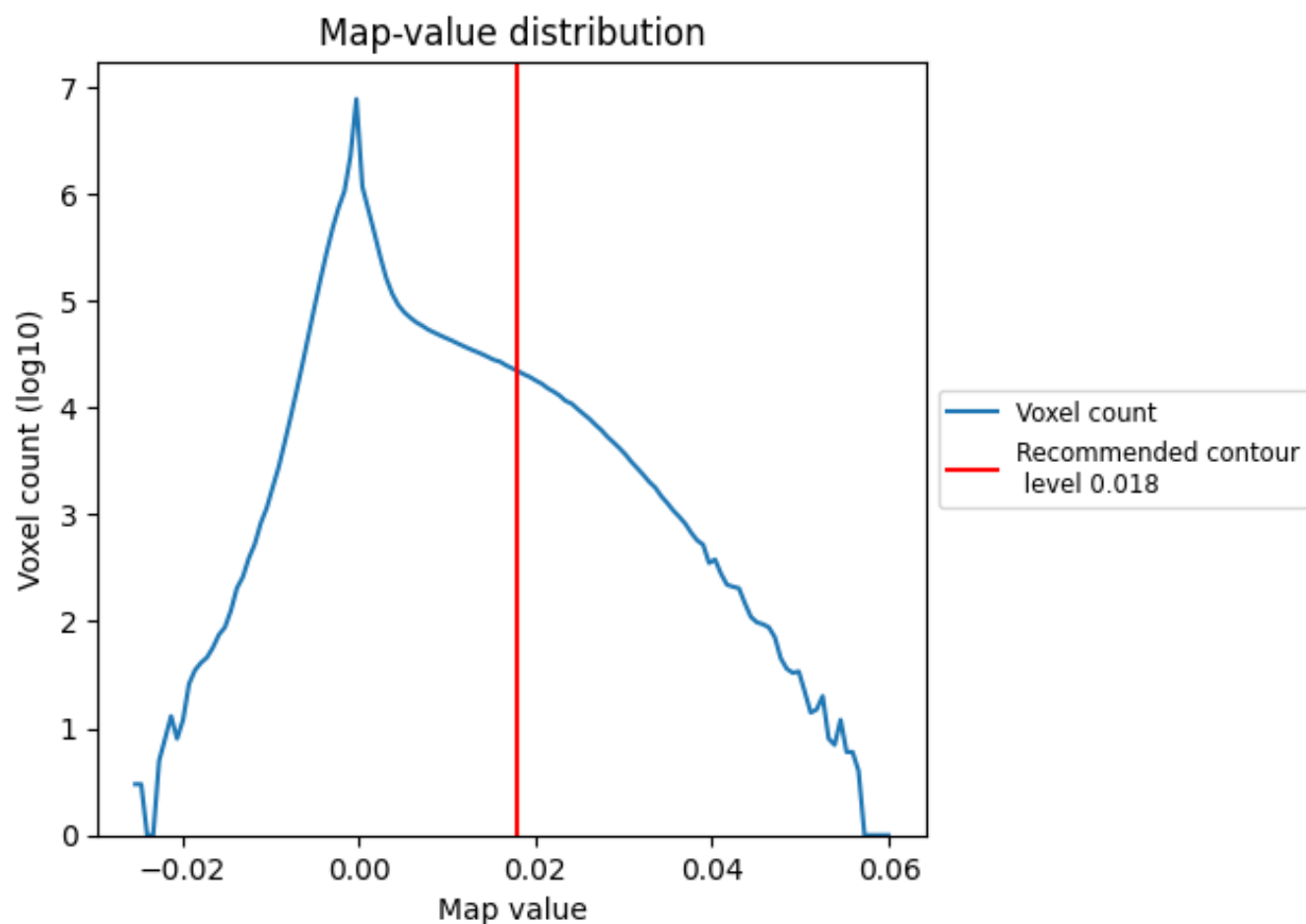
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

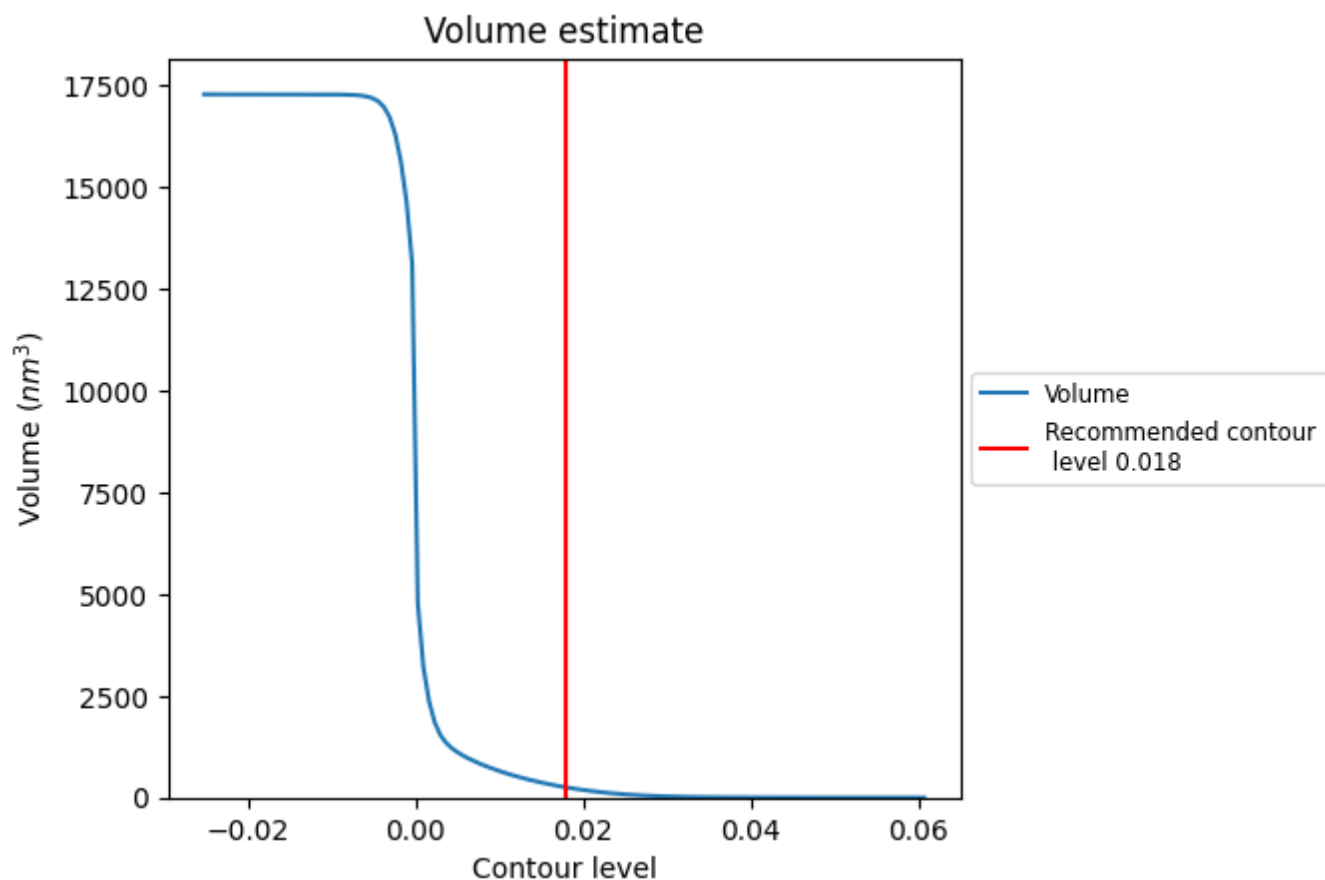
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

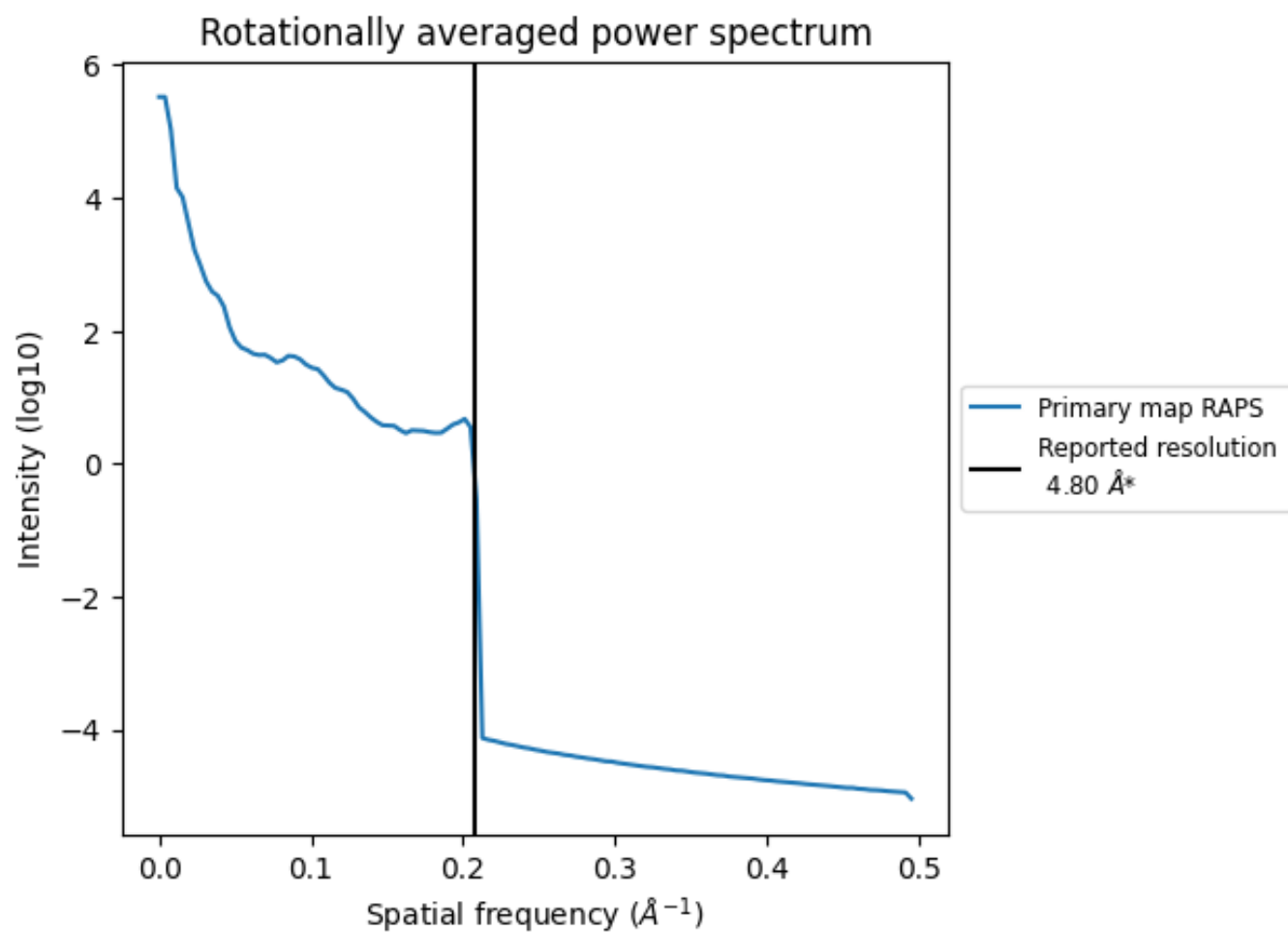
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 248 nm³; this corresponds to an approximate mass of 224 kDa.

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

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.208 Å⁻¹

8 Fourier-Shell correlation

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

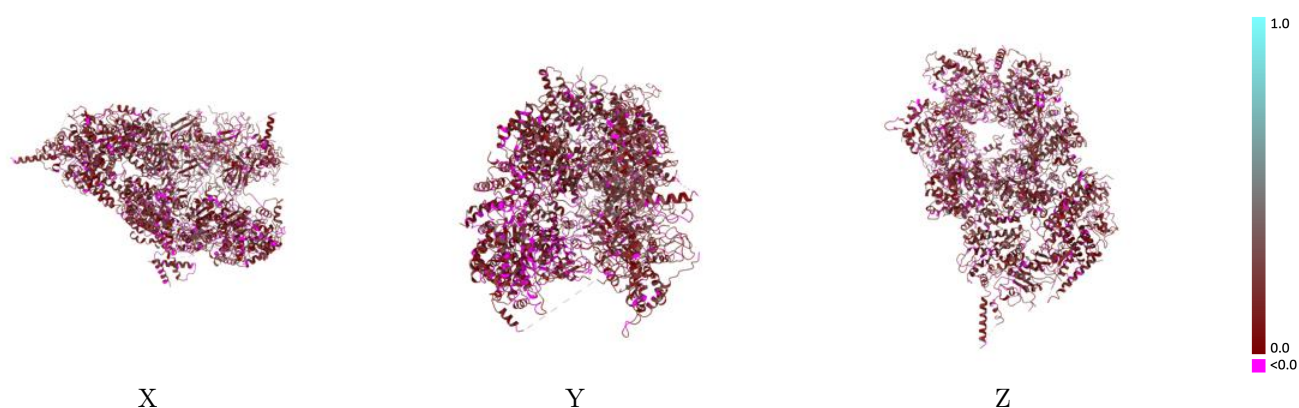
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-6536 and PDB model 3JC7. Per-residue inclusion information can be found in section 3 on page 7.

9.1 Map-model overlay [i](#)

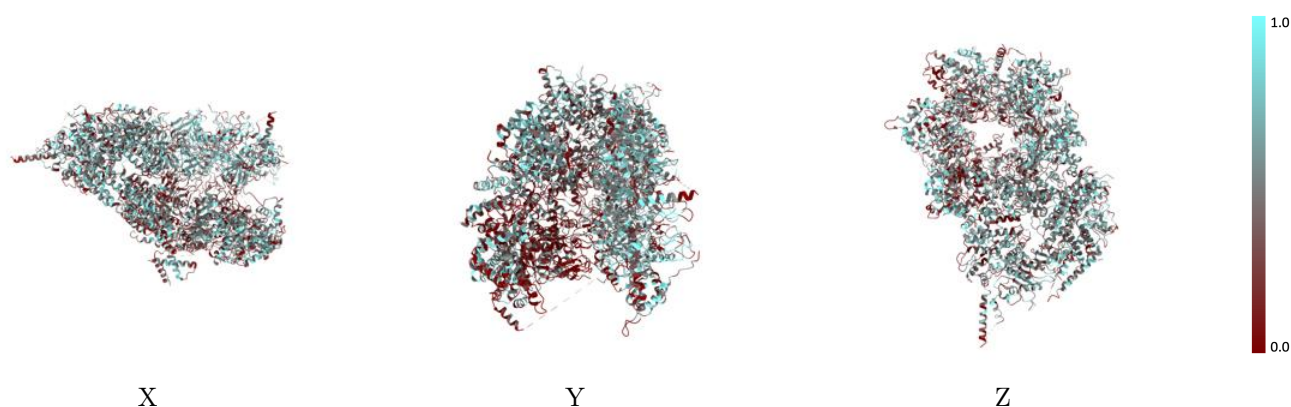
This section was not generated.

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



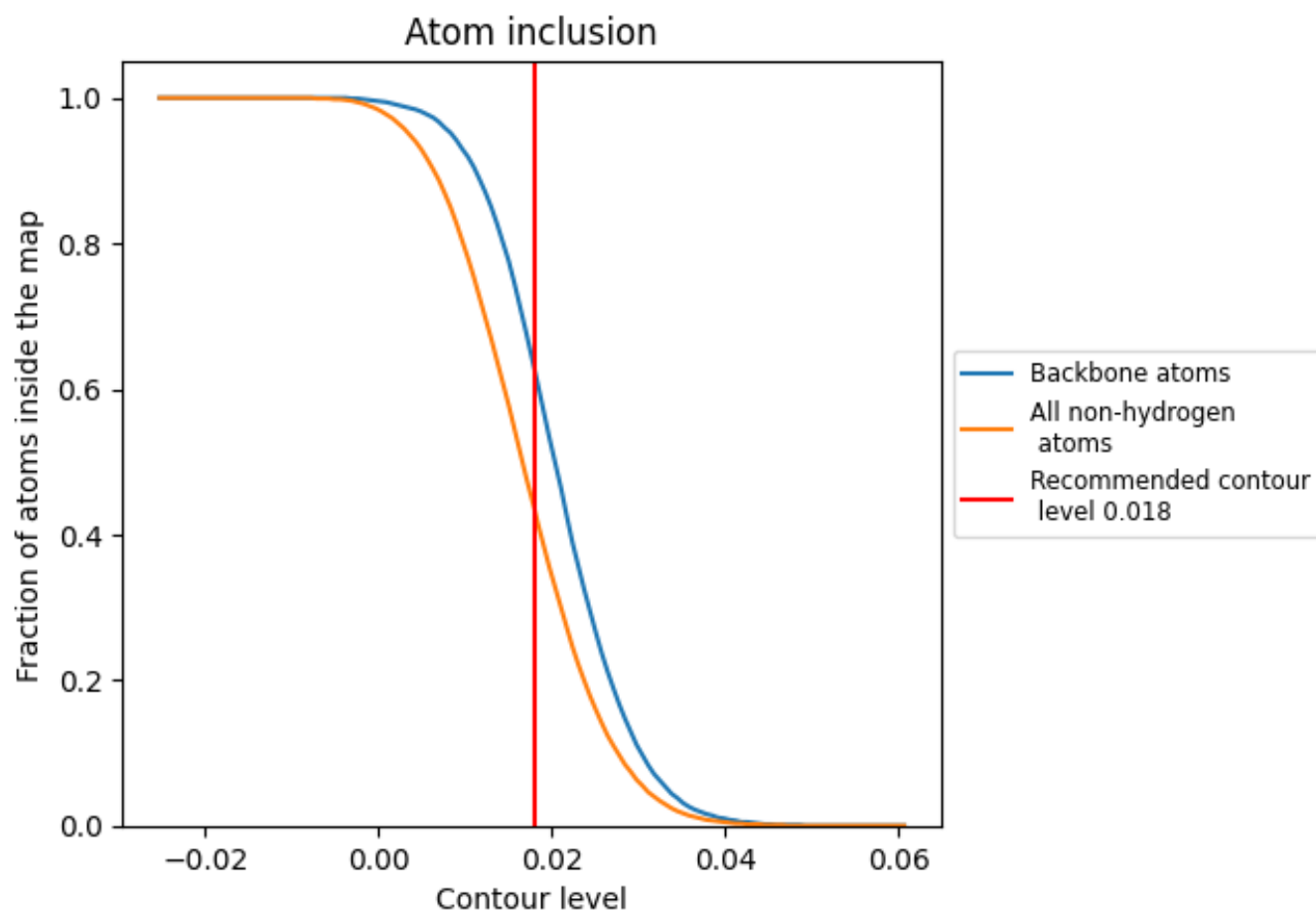
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.018).

9.4 Atom inclusion [i](#)



At the recommended contour level, 63% of all backbone atoms, 43% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.018) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.4340	0.1510
2	0.3590	0.1370
3	0.5000	0.1760
4	0.3660	0.1200
5	0.4160	0.1670
6	0.4070	0.1290
7	0.4540	0.1510
A	0.4430	0.1580
B	0.4910	0.1370
C	0.4890	0.1930
D	0.5270	0.1530
c	0.4670	0.1730

1.0

0.0

<0.0