Full wwPDB EM Validation Report ⓘ

Nov 22, 2022 – 01:11 AM EST

PDB ID	:	3J5P
EMDB ID	:	EMD-5778
Title	:	Structure of TRPV1 ion channel determined by single particle electron cryo-microscopy
Authors	:	Liao, M.; Cao, E.; Julius, D.; Cheng, Y.
Deposited on	:	2013-10-28
Resolution	:	3.27 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

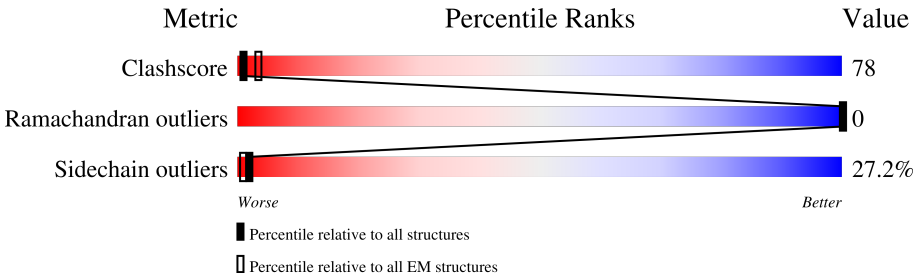
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.27 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	598	21% 37% 42% 19%
1	B	598	21% 37% 42% 19%
1	C	598	21% 37% 43% 19%
1	D	598	21% 37% 43% 19%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 18636 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 Transient receptor potential cation channel subfamily V member 1.

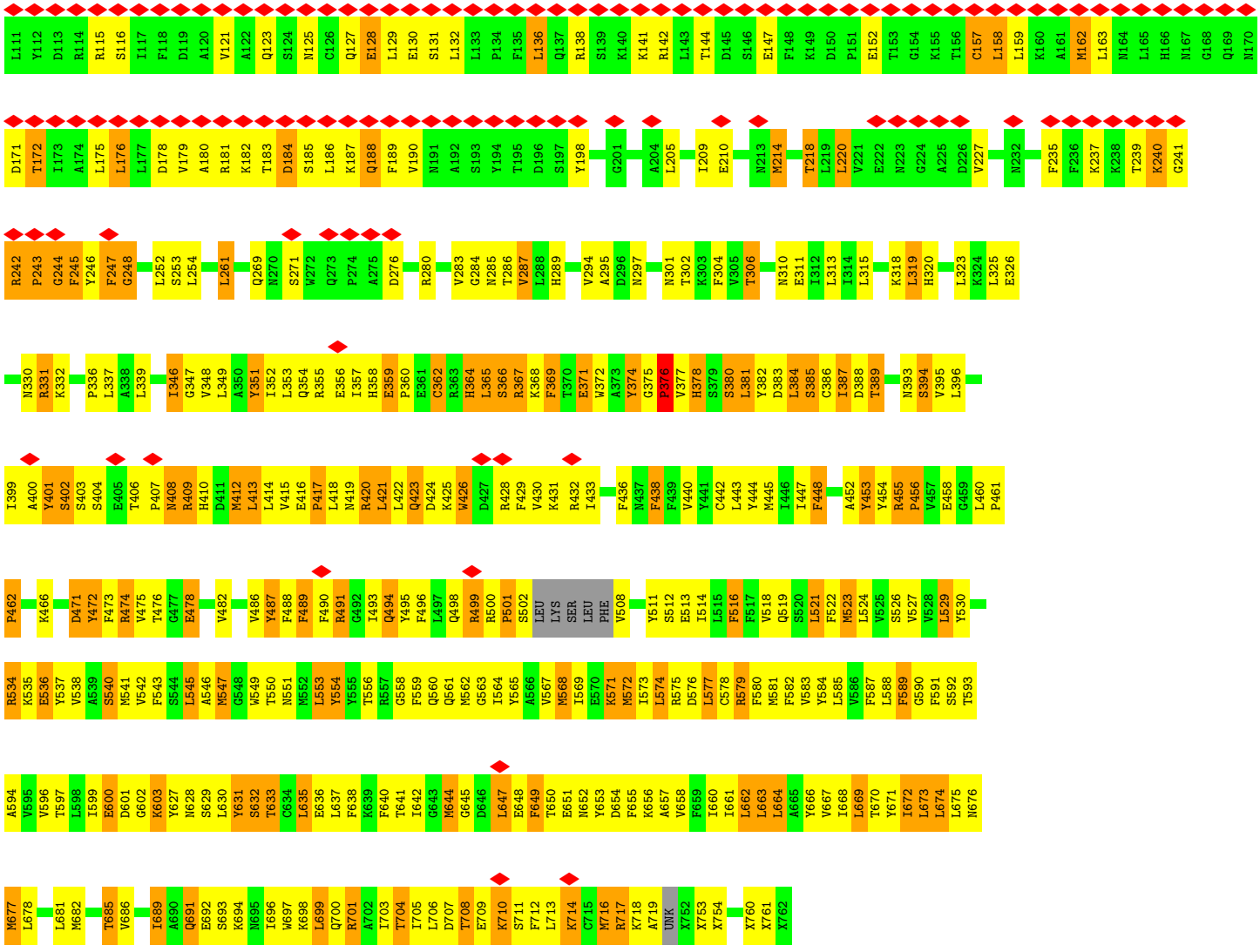
Mol	Chain	Residues	Atoms					AltConf	Trace
1	B	592	Total	C	N	O	S	0	0
			4659	3027	765	842	25		
1	A	592	Total	C	N	O	S	0	0
			4659	3027	765	842	25		
1	C	592	Total	C	N	O	S	0	0
			4659	3027	765	842	25		
1	D	592	Total	C	N	O	S	0	0
			4659	3027	765	842	25		

3 Residue-property plots (i)

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.

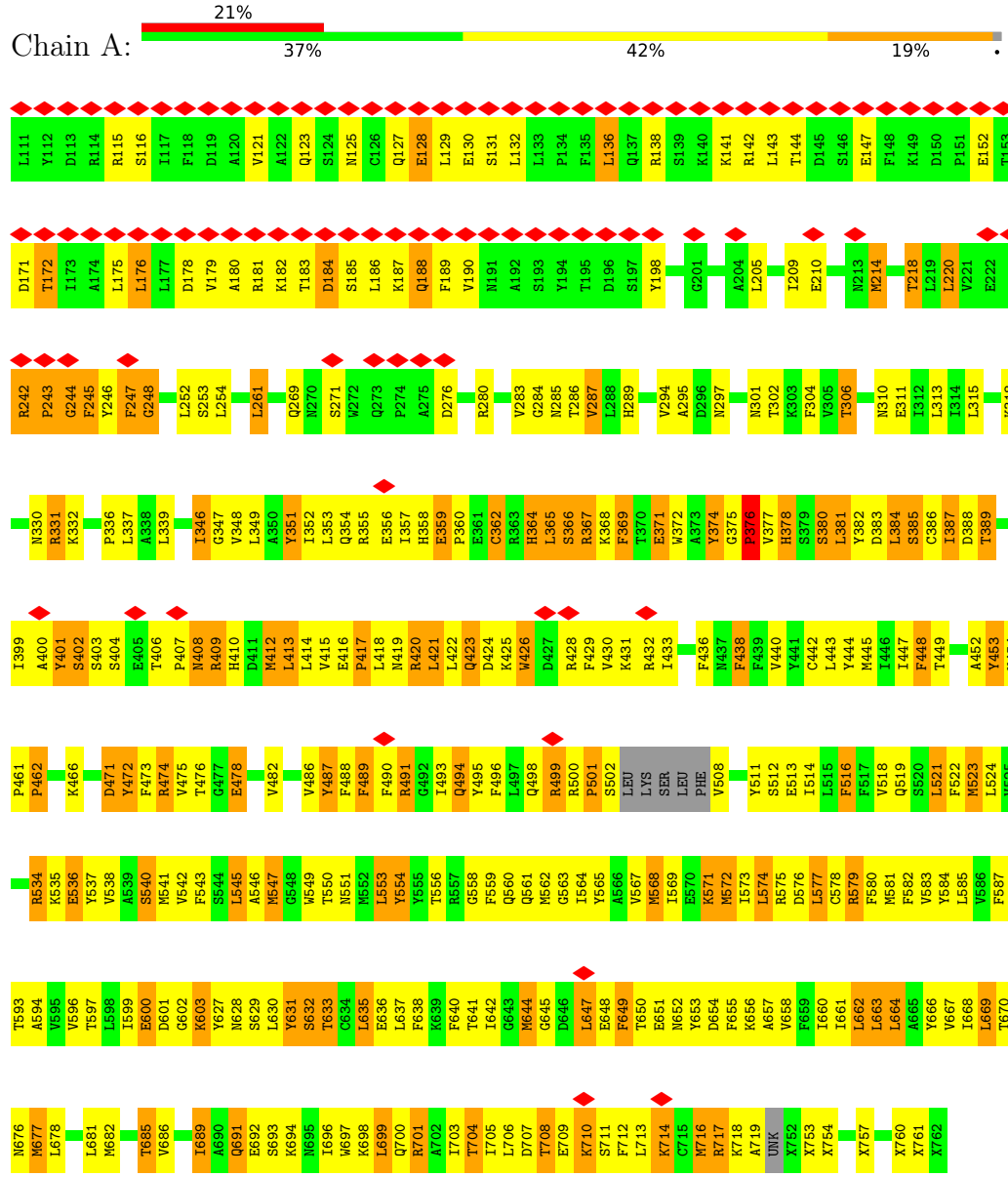
• Molecule 1: Transient receptor potential cation channel subfamily V member 1

Chain B:



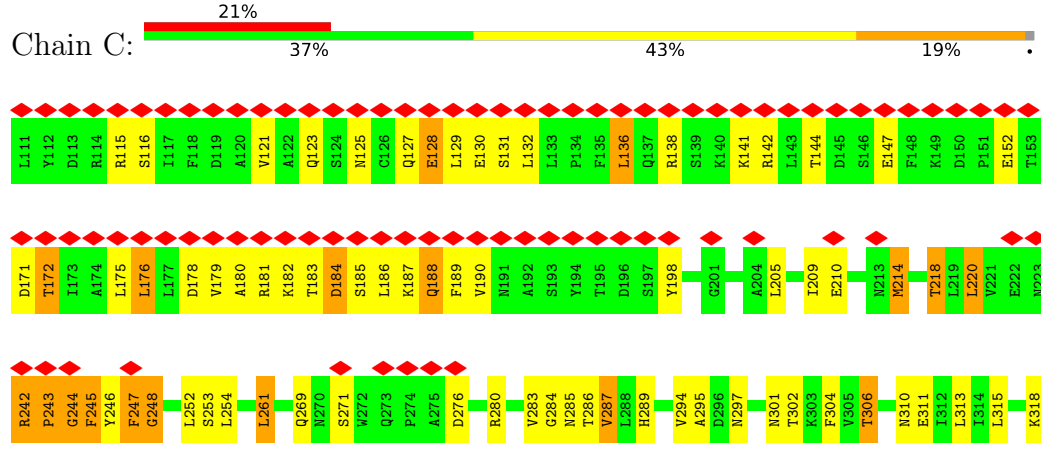
• Molecule 1: Transient receptor potential cation channel subfamily V member 1

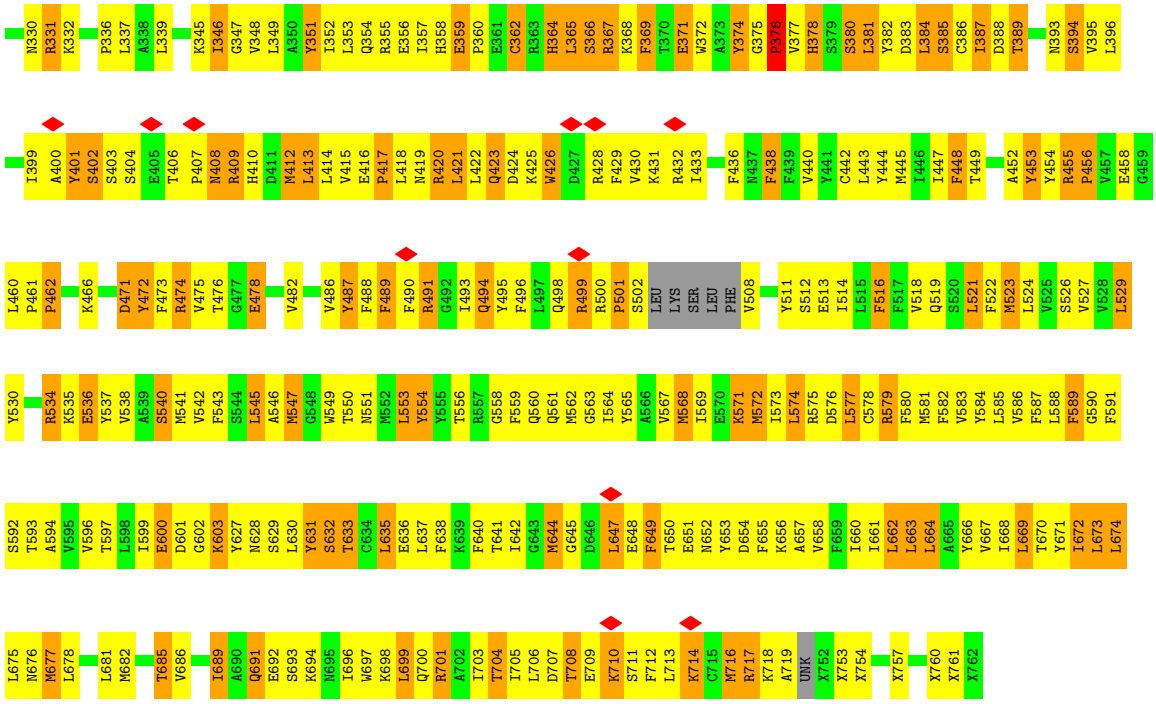
Chain A:



• Molecule 1: Transient receptor potential cation channel subfamily V member 1

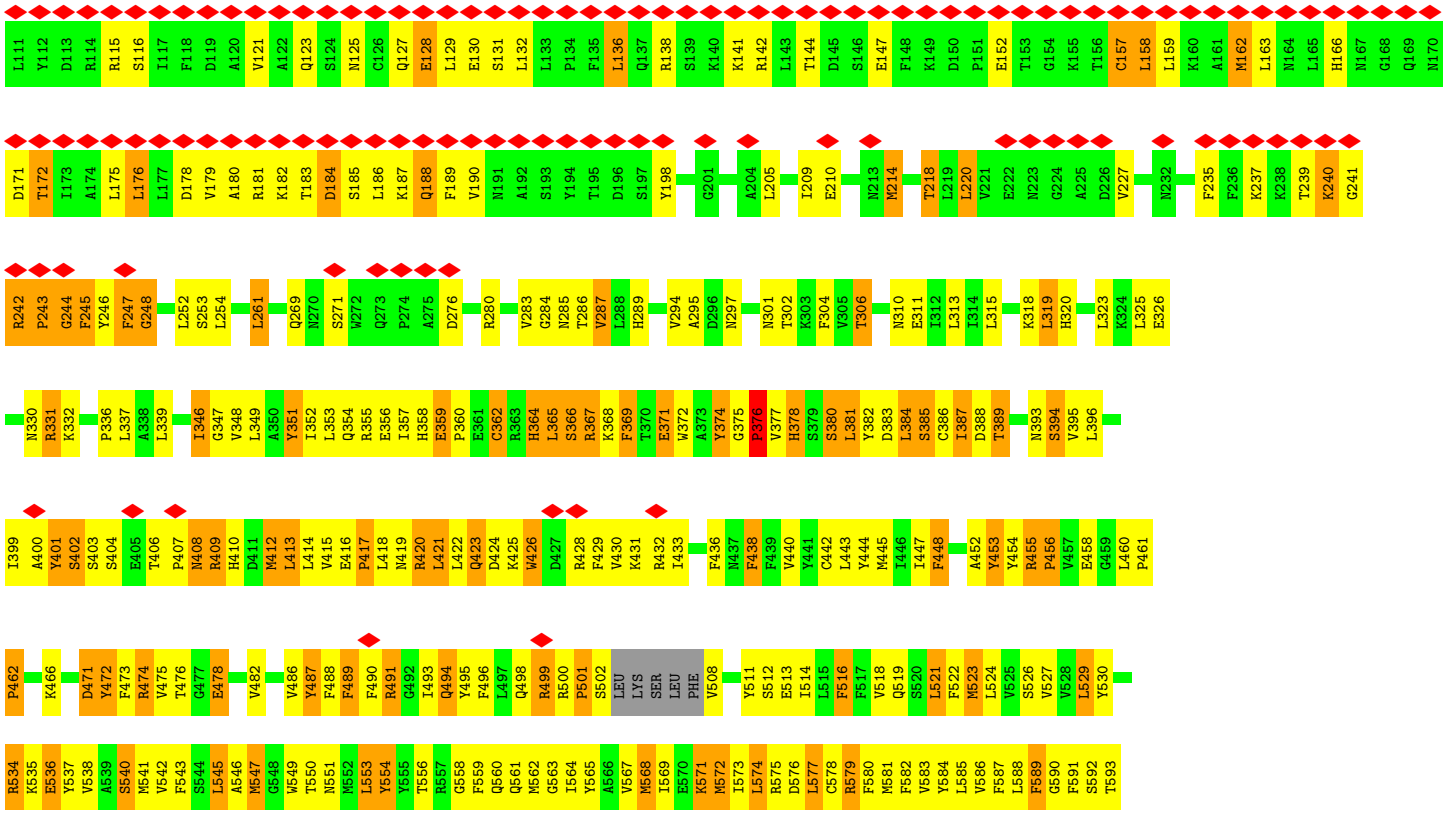
Chain C:

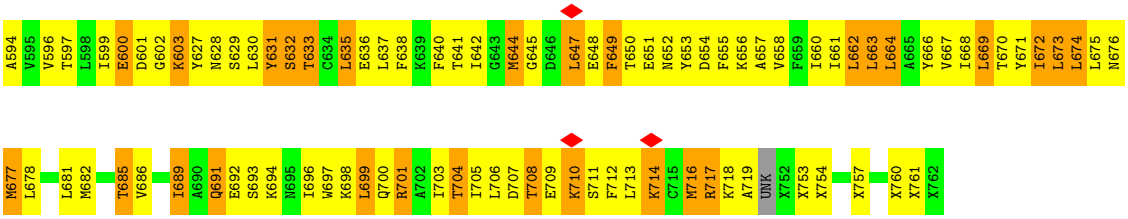




• Molecule 1: Transient receptor potential cation channel subfamily V member 1

Chain D:




A594 V595 V596 T597 L598 I599 E600 D601 G602 K603 Y627 N628 S629 L630 Y631 S632 T633 C634 L635 E636 L637 F638 K639 F640 T641 I642 G643 M644 G645 D646 L647 E648 F649 T650 E651 N652 Y653 D654 F655 K656 A657 V658 F659 I660 I661 L662 L663 L664 A665 Y666 V667 I668 L669 T670 Y671 I672 L673 L674 L675 N676
M677 L678 L681 M682 T685 V686 I689 A690 Q691 E692 S693 K694 N695 I696 W697 K698 L699 Q700 R701 A702 I703 T704 I705 L706 D707 T708 E709 K710 S711 F712 L713 K714 C715 M716 R717 K718 A719 UNK X752 X753 X754 X757 X760 X761 X762

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C4	Depositor
Number of particles used	35645	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Each particle	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	21	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	31000	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	26.520	Depositor
Minimum map value	-13.649	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	7.0	Depositor
Map size (Å)	311.1936, 311.1936, 311.1936	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.2156, 1.2156, 1.2156	Depositor

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	0.52	9/4706 (0.2%)	0.66	6/6370 (0.1%)
1	B	0.52	9/4706 (0.2%)	0.66	6/6370 (0.1%)
1	C	0.52	9/4706 (0.2%)	0.66	6/6370 (0.1%)
1	D	0.52	9/4706 (0.2%)	0.66	6/6370 (0.1%)
All	All	0.52	36/18824 (0.2%)	0.66	24/25480 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	6
1	B	0	6
1	C	0	6
1	D	0	6
All	All	0	24

All (36) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	162	MET	CG-SD	7.74	2.01	1.81
1	D	162	MET	CG-SD	7.72	2.01	1.81
1	C	162	MET	CG-SD	7.71	2.01	1.81
1	A	162	MET	CG-SD	7.71	2.01	1.81
1	A	214	MET	CG-SD	6.28	1.97	1.81
1	D	214	MET	CG-SD	6.27	1.97	1.81
1	B	214	MET	CG-SD	6.26	1.97	1.81
1	C	214	MET	CG-SD	6.23	1.97	1.81
1	B	407	PRO	N-CD	5.32	1.55	1.47
1	D	407	PRO	N-CD	5.28	1.55	1.47
1	A	407	PRO	N-CD	5.27	1.55	1.47
1	C	407	PRO	N-CD	5.26	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	501	PRO	N-CD	5.22	1.55	1.47
1	B	461	PRO	N-CD	5.20	1.55	1.47
1	A	461	PRO	N-CD	5.20	1.55	1.47
1	C	456	PRO	N-CD	5.17	1.55	1.47
1	D	456	PRO	N-CD	5.17	1.55	1.47
1	B	501	PRO	N-CD	5.17	1.55	1.47
1	D	501	PRO	N-CD	5.17	1.55	1.47
1	D	461	PRO	N-CD	5.16	1.55	1.47
1	B	417	PRO	N-CD	5.16	1.55	1.47
1	B	456	PRO	N-CD	5.15	1.55	1.47
1	A	456	PRO	N-CD	5.15	1.55	1.47
1	A	501	PRO	N-CD	5.13	1.55	1.47
1	C	461	PRO	N-CD	5.13	1.55	1.47
1	A	462	PRO	N-CD	5.13	1.55	1.47
1	D	462	PRO	N-CD	5.10	1.54	1.47
1	B	462	PRO	N-CD	5.09	1.54	1.47
1	C	462	PRO	N-CD	5.09	1.54	1.47
1	D	417	PRO	N-CD	5.09	1.54	1.47
1	A	417	PRO	N-CD	5.06	1.54	1.47
1	C	417	PRO	N-CD	5.06	1.54	1.47
1	B	376	PRO	N-CD	5.04	1.54	1.47
1	A	376	PRO	N-CD	5.01	1.54	1.47
1	C	376	PRO	N-CD	5.01	1.54	1.47
1	D	376	PRO	N-CD	5.01	1.54	1.47

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	460	LEU	C-N-CD	5.71	140.39	128.40
1	A	460	LEU	C-N-CD	5.70	140.37	128.40
1	C	500	ARG	C-N-CD	5.69	140.35	128.40
1	B	460	LEU	C-N-CD	5.68	140.34	128.40
1	B	500	ARG	C-N-CD	5.68	140.33	128.40
1	D	460	LEU	C-N-CD	5.68	140.33	128.40
1	A	500	ARG	C-N-CD	5.68	140.32	128.40
1	D	500	ARG	C-N-CD	5.68	140.32	128.40
1	B	408	ASN	N-CA-C	5.66	126.27	111.00
1	D	455	ARG	C-N-CD	5.66	140.28	128.40
1	B	455	ARG	C-N-CD	5.65	140.26	128.40
1	A	408	ASN	N-CA-C	5.65	126.24	111.00
1	A	455	ARG	C-N-CD	5.65	140.26	128.40
1	C	408	ASN	N-CA-C	5.65	126.24	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	455	ARG	C-N-CD	5.64	140.25	128.40
1	D	408	ASN	N-CA-C	5.64	126.23	111.00
1	B	461	PRO	C-N-CD	5.45	139.85	128.40
1	C	461	PRO	C-N-CD	5.45	139.85	128.40
1	D	461	PRO	C-N-CD	5.44	139.82	128.40
1	A	461	PRO	C-N-CD	5.42	139.78	128.40
1	C	184	ASP	CB-CG-OD2	5.19	122.97	118.30
1	D	184	ASP	CB-CG-OD2	5.18	122.97	118.30
1	A	184	ASP	CB-CG-OD2	5.16	122.94	118.30
1	B	184	ASP	CB-CG-OD2	5.12	122.91	118.30

There are no chirality outliers.

All (24) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	243	PRO	Peptide
1	A	244	GLY	Peptide
1	A	247	PHE	Peptide
1	A	248	GLY	Peptide
1	A	376	PRO	Peptide
1	A	689	ILE	Peptide
1	B	243	PRO	Peptide
1	B	244	GLY	Peptide
1	B	247	PHE	Peptide
1	B	248	GLY	Peptide
1	B	376	PRO	Peptide
1	B	689	ILE	Peptide
1	C	243	PRO	Peptide
1	C	244	GLY	Peptide
1	C	247	PHE	Peptide
1	C	248	GLY	Peptide
1	C	376	PRO	Peptide
1	C	689	ILE	Peptide
1	D	243	PRO	Peptide
1	D	244	GLY	Peptide
1	D	247	PHE	Peptide
1	D	248	GLY	Peptide
1	D	376	PRO	Peptide
1	D	689	ILE	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	A	4659	0	4609	782	0
1	B	4659	0	4609	778	0
1	C	4659	0	4609	780	0
1	D	4659	0	4609	773	0
All	All	18636	0	18436	2888	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 78.

All (2888) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:374:TYR:CE2	1:A:235:PHE:CE1	1.86	1.62
1:C:374:TYR:CE2	1:D:235:PHE:CE1	1.89	1.61
1:C:374:TYR:CD2	1:D:235:PHE:CZ	1.90	1.59
1:B:235:PHE:CZ	1:D:374:TYR:CD2	1.91	1.58
1:B:374:TYR:CD2	1:A:235:PHE:CZ	1.88	1.58
1:A:374:TYR:CE2	1:C:235:PHE:CE1	1.89	1.57
1:B:235:PHE:CE1	1:D:374:TYR:CE2	1.90	1.55
1:A:374:TYR:CD2	1:C:235:PHE:CZ	1.90	1.55
1:B:396:LEU:CD1	1:B:418:LEU:HD22	1.44	1.47
1:A:396:LEU:CD1	1:A:418:LEU:HD22	1.44	1.46
1:C:396:LEU:CD1	1:C:418:LEU:HD22	1.44	1.45
1:D:396:LEU:CD1	1:D:418:LEU:HD22	1.44	1.43
1:C:337:LEU:HD21	1:C:395:VAL:CG2	1.62	1.30
1:D:337:LEU:HD21	1:D:395:VAL:CG2	1.62	1.29
1:A:396:LEU:CD1	1:A:418:LEU:CD2	2.11	1.29
1:A:337:LEU:HD21	1:A:395:VAL:CG2	1.62	1.29
1:D:359:GLU:CD	1:D:360:PRO:HD2	1.53	1.29
1:B:396:LEU:CD1	1:B:418:LEU:CD2	2.11	1.28
1:D:496:PHE:CA	1:D:501:PRO:HG3	1.61	1.28
1:B:337:LEU:HD21	1:B:395:VAL:CG2	1.62	1.28
1:D:466:LYS:N	1:D:471:ASP:OD2	1.67	1.27
1:B:496:PHE:CA	1:B:501:PRO:HG3	1.61	1.26
1:C:489:PHE:CE2	1:C:493:ILE:HD11	1.70	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:466:LYS:N	1:B:471:ASP:OD2	1.67	1.26
1:A:359:GLU:CD	1:A:360:PRO:HD2	1.53	1.26
1:A:374:TYR:CE2	1:C:235:PHE:CZ	2.15	1.26
1:B:359:GLU:CD	1:B:360:PRO:HD2	1.53	1.26
1:C:396:LEU:CD1	1:C:418:LEU:CD2	2.11	1.26
1:B:574:LEU:O	1:B:578:CYS:HB2	1.34	1.26
1:A:496:PHE:CA	1:A:501:PRO:HG3	1.61	1.26
1:A:489:PHE:CE2	1:A:493:ILE:HD11	1.70	1.26
1:B:376:PRO:HG2	1:A:245:PHE:CD2	1.68	1.25
1:A:376:PRO:HG2	1:C:245:PHE:CD2	1.70	1.25
1:C:374:TYR:CE2	1:D:235:PHE:CZ	2.13	1.25
1:C:466:LYS:N	1:C:471:ASP:OD2	1.67	1.25
1:B:235:PHE:CZ	1:D:374:TYR:CE2	2.16	1.25
1:D:596:VAL:CG2	1:D:633:THR:HG21	1.65	1.25
1:D:666:TYR:O	1:D:670:THR:CG2	1.85	1.25
1:A:466:LYS:N	1:A:471:ASP:OD2	1.67	1.25
1:C:359:GLU:CD	1:C:360:PRO:HD2	1.53	1.25
1:D:396:LEU:CD1	1:D:418:LEU:CD2	2.11	1.25
1:A:416:GLU:OE1	1:A:420:ARG:NH2	1.68	1.25
1:D:572:MET:HE3	1:D:686:VAL:CG2	1.67	1.25
1:B:596:VAL:CG2	1:B:633:THR:HG21	1.65	1.25
1:C:596:VAL:CG2	1:C:633:THR:HG21	1.65	1.24
1:D:489:PHE:CE2	1:D:493:ILE:HD11	1.70	1.24
1:C:416:GLU:OE1	1:C:420:ARG:NH2	1.69	1.24
1:D:708:THR:O	1:D:712:PHE:CB	1.86	1.24
1:B:489:PHE:CE2	1:B:493:ILE:HD11	1.70	1.24
1:B:708:THR:O	1:B:712:PHE:CB	1.86	1.24
1:D:416:GLU:OE1	1:D:420:ARG:NH2	1.69	1.24
1:B:245:PHE:CD2	1:D:376:PRO:HG2	1.72	1.24
1:A:596:VAL:CG2	1:A:633:THR:HG21	1.65	1.24
1:C:496:PHE:CA	1:C:501:PRO:HG3	1.61	1.24
1:A:708:THR:O	1:A:712:PHE:CB	1.86	1.24
1:A:666:TYR:O	1:A:670:THR:CG2	1.85	1.23
1:C:708:THR:O	1:C:712:PHE:CB	1.86	1.23
1:C:666:TYR:O	1:C:670:THR:CG2	1.85	1.23
1:B:666:TYR:O	1:B:670:THR:CG2	1.85	1.23
1:C:376:PRO:HG2	1:D:245:PHE:CD2	1.74	1.23
1:C:708:THR:O	1:C:712:PHE:HB2	1.37	1.23
1:B:416:GLU:OE1	1:B:420:ARG:NH2	1.69	1.22
1:C:572:MET:HE3	1:C:686:VAL:CG2	1.67	1.22
1:B:374:TYR:CE2	1:A:235:PHE:CZ	2.14	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:574:LEU:O	1:A:578:CYS:HB2	1.34	1.21
1:C:574:LEU:O	1:C:578:CYS:HB2	1.34	1.21
1:D:708:THR:O	1:D:712:PHE:HB2	1.37	1.21
1:B:355:ARG:NH1	1:B:365:LEU:O	1.73	1.21
1:A:514:ILE:O	1:A:518:VAL:HG23	1.40	1.21
1:B:708:THR:O	1:B:712:PHE:HB2	1.37	1.20
1:A:355:ARG:NH1	1:A:365:LEU:O	1.72	1.20
1:A:572:MET:HE3	1:A:686:VAL:CG2	1.72	1.20
1:D:359:GLU:OE2	1:D:360:PRO:HD2	1.39	1.20
1:B:359:GLU:OE2	1:B:360:PRO:HD2	1.39	1.20
1:C:355:ARG:NH1	1:C:365:LEU:O	1.73	1.20
1:D:574:LEU:O	1:D:578:CYS:HB2	1.34	1.19
1:D:355:ARG:NH1	1:D:365:LEU:O	1.73	1.19
1:B:514:ILE:O	1:B:518:VAL:HG23	1.40	1.19
1:C:569:ILE:O	1:C:573:ILE:HG13	1.43	1.19
1:A:708:THR:O	1:A:712:PHE:HB2	1.37	1.18
1:B:572:MET:HE3	1:B:686:VAL:HG23	1.20	1.18
1:C:514:ILE:O	1:C:518:VAL:HG23	1.40	1.18
1:A:359:GLU:OE2	1:A:360:PRO:HD2	1.39	1.17
1:C:359:GLU:OE2	1:C:360:PRO:HD2	1.39	1.17
1:D:514:ILE:O	1:D:518:VAL:HG23	1.40	1.17
1:D:569:ILE:O	1:D:573:ILE:HG13	1.43	1.17
1:C:374:TYR:HE2	1:D:235:PHE:CE1	1.41	1.17
1:C:313:LEU:HB3	1:C:365:LEU:HD11	1.24	1.17
1:B:462:PRO:HB3	1:B:530:TYR:OH	1.45	1.16
1:C:710:LYS:HE2	1:C:711:SER:OG	1.45	1.16
1:D:664:LEU:O	1:D:668:ILE:HD12	1.43	1.16
1:A:569:ILE:O	1:A:573:ILE:HG13	1.43	1.16
1:A:462:PRO:HB3	1:A:530:TYR:OH	1.45	1.16
1:A:664:LEU:O	1:A:668:ILE:HD12	1.44	1.15
1:A:710:LYS:HE2	1:A:711:SER:OG	1.45	1.15
1:A:601:ASP:O	1:A:652:ASN:ND2	1.79	1.15
1:D:689:ILE:HG22	1:D:693:SER:HB3	1.16	1.15
1:B:664:LEU:O	1:B:668:ILE:HD12	1.43	1.15
1:C:495:TYR:O	1:C:499:ARG:HB3	1.46	1.15
1:A:495:TYR:O	1:A:499:ARG:HB3	1.47	1.15
1:B:569:ILE:O	1:B:573:ILE:HG13	1.43	1.15
1:A:313:LEU:HB3	1:A:365:LEU:HD11	1.24	1.15
1:C:462:PRO:HB3	1:C:530:TYR:OH	1.45	1.15
1:C:601:ASP:O	1:C:652:ASN:ND2	1.79	1.15
1:D:313:LEU:HB3	1:D:365:LEU:HD11	1.24	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:664:LEU:O	1:C:668:ILE:HD12	1.43	1.14
1:C:689:ILE:HG22	1:C:693:SER:HB3	1.16	1.14
1:B:376:PRO:HB2	1:B:377:VAL:HG23	1.15	1.14
1:B:386:CYS:HB2	1:B:395:VAL:HB	1.16	1.14
1:B:572:MET:HE3	1:B:686:VAL:CG2	1.77	1.14
1:D:376:PRO:HB2	1:D:377:VAL:HG23	1.15	1.14
1:B:471:ASP:O	1:B:475:VAL:HG23	1.49	1.13
1:B:495:TYR:O	1:B:499:ARG:HB3	1.46	1.13
1:A:243:PRO:HB2	1:A:244:GLY:HA3	1.30	1.13
1:A:313:LEU:CB	1:A:365:LEU:HD11	1.78	1.13
1:D:601:ASP:O	1:D:652:ASN:ND2	1.79	1.13
1:A:471:ASP:O	1:A:475:VAL:HG23	1.49	1.13
1:C:376:PRO:HB2	1:C:377:VAL:HG23	1.15	1.13
1:D:462:PRO:HB3	1:D:530:TYR:OH	1.45	1.13
1:D:471:ASP:O	1:D:475:VAL:HG23	1.49	1.13
1:D:495:TYR:O	1:D:499:ARG:HB3	1.47	1.13
1:B:689:ILE:HG22	1:B:693:SER:HB3	1.16	1.13
1:A:386:CYS:HB2	1:A:395:VAL:HB	1.16	1.13
1:D:710:LYS:HE2	1:D:711:SER:OG	1.45	1.13
1:B:376:PRO:HG2	1:A:245:PHE:CG	1.83	1.12
1:B:313:LEU:CB	1:B:365:LEU:HD11	1.78	1.12
1:B:601:ASP:O	1:B:652:ASN:ND2	1.79	1.12
1:D:313:LEU:CB	1:D:365:LEU:HD11	1.78	1.12
1:B:710:LYS:HE2	1:B:711:SER:OG	1.45	1.12
1:A:462:PRO:HB3	1:A:530:TYR:CZ	1.85	1.12
1:C:313:LEU:CB	1:C:365:LEU:HD11	1.78	1.12
1:C:462:PRO:HB3	1:C:530:TYR:CZ	1.85	1.12
1:B:462:PRO:HB3	1:B:530:TYR:CZ	1.85	1.12
1:C:471:ASP:O	1:C:475:VAL:HG23	1.49	1.11
1:C:572:MET:HE3	1:C:686:VAL:HG23	1.14	1.11
1:A:376:PRO:HG2	1:C:245:PHE:CG	1.84	1.11
1:A:496:PHE:HA	1:A:501:PRO:CG	1.80	1.11
1:A:689:ILE:HG22	1:A:693:SER:HB3	1.16	1.11
1:C:243:PRO:HB2	1:C:244:GLY:HA3	1.30	1.11
1:C:710:LYS:HA	1:C:714:LYS:HE2	1.32	1.11
1:B:313:LEU:HB3	1:B:365:LEU:HD11	1.24	1.11
1:B:243:PRO:HB2	1:B:244:GLY:HA3	1.30	1.11
1:D:496:PHE:HA	1:D:501:PRO:CG	1.80	1.11
1:B:386:CYS:HB3	1:B:395:VAL:CG2	1.81	1.10
1:A:386:CYS:CB	1:A:395:VAL:HB	1.81	1.10
1:A:376:PRO:HB2	1:A:377:VAL:HG23	1.15	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:572:MET:HE3	1:A:686:VAL:HG23	1.16	1.10
1:C:386:CYS:CB	1:C:395:VAL:HB	1.81	1.10
1:D:386:CYS:HB3	1:D:395:VAL:CG2	1.81	1.10
1:A:386:CYS:HB3	1:A:395:VAL:CG2	1.81	1.10
1:D:462:PRO:HB3	1:D:530:TYR:CZ	1.85	1.10
1:B:430:VAL:O	1:B:433:ILE:HG22	1.51	1.10
1:B:386:CYS:CB	1:B:395:VAL:HB	1.81	1.09
1:C:386:CYS:HB3	1:C:395:VAL:CG2	1.81	1.09
1:A:710:LYS:HA	1:A:714:LYS:HE2	1.32	1.09
1:D:386:CYS:CB	1:D:395:VAL:HB	1.81	1.09
1:D:430:VAL:O	1:D:433:ILE:HG22	1.51	1.09
1:B:426:TRP:HA	1:B:430:VAL:HG12	1.10	1.09
1:B:491:ARG:O	1:B:494:GLN:HG3	1.52	1.08
1:C:380:SER:O	1:C:754:UNK:CA	2.02	1.08
1:C:386:CYS:HB2	1:C:395:VAL:HB	1.16	1.08
1:B:245:PHE:CG	1:D:376:PRO:HG2	1.87	1.08
1:C:430:VAL:O	1:C:433:ILE:HG22	1.51	1.08
1:C:496:PHE:HA	1:C:501:PRO:CG	1.80	1.08
1:D:243:PRO:HB2	1:D:244:GLY:HA3	1.30	1.08
1:D:380:SER:O	1:D:754:UNK:CA	2.02	1.08
1:D:426:TRP:HA	1:D:430:VAL:HG12	1.10	1.08
1:D:596:VAL:HG13	1:D:628:ASN:O	1.51	1.08
1:B:235:PHE:CE1	1:D:374:TYR:HE2	1.43	1.08
1:A:337:LEU:HD21	1:A:395:VAL:HG22	1.36	1.08
1:A:430:VAL:O	1:A:433:ILE:HG22	1.51	1.08
1:A:596:VAL:HG13	1:A:628:ASN:O	1.52	1.07
1:C:491:ARG:O	1:C:494:GLN:HG3	1.52	1.07
1:D:386:CYS:HB2	1:D:395:VAL:HB	1.16	1.07
1:D:491:ARG:O	1:D:494:GLN:HG3	1.52	1.07
1:B:374:TYR:HE2	1:A:235:PHE:CE1	1.42	1.07
1:B:596:VAL:HG13	1:B:628:ASN:O	1.52	1.07
1:D:572:MET:HE3	1:D:686:VAL:HG23	1.14	1.07
1:A:491:ARG:O	1:A:494:GLN:HG3	1.52	1.07
1:A:380:SER:O	1:A:754:UNK:CA	2.02	1.07
1:A:666:TYR:O	1:A:670:THR:HG22	0.89	1.07
1:D:359:GLU:H	1:D:362:CYS:HB3	1.18	1.07
1:D:708:THR:O	1:D:712:PHE:N	1.88	1.06
1:B:389:THR:HG23	1:B:394:SER:HA	1.36	1.06
1:B:666:TYR:O	1:B:670:THR:HG22	0.89	1.06
1:A:374:TYR:HE2	1:C:235:PHE:CE1	1.44	1.06
1:B:380:SER:O	1:B:754:UNK:CA	2.01	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:508:VAL:HG12	1:A:511:TYR:CE1	1.91	1.06
1:C:596:VAL:HG13	1:C:628:ASN:O	1.51	1.06
1:C:666:TYR:O	1:C:670:THR:HG22	0.89	1.06
1:A:708:THR:O	1:A:712:PHE:N	1.88	1.06
1:C:376:PRO:HG2	1:D:245:PHE:CG	1.89	1.06
1:D:666:TYR:O	1:D:670:THR:HG22	0.89	1.06
1:C:426:TRP:HA	1:C:430:VAL:HG12	1.10	1.06
1:C:508:VAL:HG12	1:C:511:TYR:CE1	1.91	1.06
1:A:396:LEU:HD12	1:A:418:LEU:CD2	1.81	1.05
1:D:508:VAL:HG12	1:D:511:TYR:CE1	1.91	1.05
1:D:596:VAL:HG22	1:D:633:THR:HG21	1.36	1.05
1:B:508:VAL:HG12	1:B:511:TYR:CE1	1.91	1.05
1:A:389:THR:HG23	1:A:394:SER:HA	1.35	1.05
1:C:352:ILE:O	1:C:367:ARG:CD	2.05	1.05
1:B:352:ILE:O	1:B:367:ARG:CD	2.05	1.05
1:B:710:LYS:HA	1:B:714:LYS:HE2	1.32	1.05
1:A:426:TRP:HA	1:A:430:VAL:HG12	1.10	1.05
1:C:353:LEU:HB3	1:C:417:PRO:HG2	1.38	1.05
1:D:710:LYS:HA	1:D:714:LYS:HE2	1.32	1.05
1:B:376:PRO:CG	1:A:245:PHE:CD2	2.38	1.05
1:B:708:THR:O	1:B:712:PHE:N	1.88	1.05
1:A:352:ILE:O	1:A:367:ARG:CD	2.05	1.05
1:A:689:ILE:CG2	1:A:693:SER:HB3	1.86	1.05
1:B:337:LEU:HD21	1:B:395:VAL:HG22	1.36	1.04
1:B:689:ILE:CG2	1:B:693:SER:HB3	1.86	1.04
1:C:708:THR:O	1:C:712:PHE:N	1.88	1.04
1:D:689:ILE:CG2	1:D:693:SER:HB3	1.86	1.04
1:C:389:THR:HG23	1:C:394:SER:HA	1.36	1.04
1:B:426:TRP:CD1	1:B:430:VAL:HG13	1.93	1.04
1:A:376:PRO:CG	1:C:245:PHE:CD2	2.40	1.04
1:A:596:VAL:HG22	1:A:633:THR:HG21	1.36	1.04
1:C:508:VAL:HG12	1:C:511:TYR:HE1	1.22	1.04
1:B:571:LYS:NZ	1:B:692:GLU:OE1	1.90	1.04
1:B:653:TYR:CE1	1:B:656:LYS:HG2	1.93	1.04
1:D:389:THR:HG23	1:D:394:SER:HA	1.35	1.04
1:B:496:PHE:HA	1:B:501:PRO:CG	1.80	1.03
1:A:353:LEU:HB3	1:A:417:PRO:HG2	1.38	1.03
1:C:571:LYS:NZ	1:C:692:GLU:OE1	1.90	1.03
1:D:571:LYS:NZ	1:D:692:GLU:OE1	1.90	1.03
1:A:426:TRP:CD1	1:A:430:VAL:HG13	1.93	1.03
1:D:352:ILE:O	1:D:367:ARG:CD	2.05	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:353:LEU:HB3	1:D:417:PRO:HG2	1.38	1.03
1:A:669:LEU:HD12	1:A:670:THR:N	1.74	1.03
1:C:489:PHE:HE2	1:C:493:ILE:CD1	1.71	1.03
1:D:396:LEU:HD12	1:D:418:LEU:CD2	1.81	1.03
1:D:489:PHE:HE2	1:D:493:ILE:CD1	1.71	1.03
1:D:653:TYR:CE1	1:D:656:LYS:HG2	1.93	1.03
1:D:669:LEU:HD12	1:D:670:THR:N	1.74	1.03
1:B:359:GLU:H	1:B:362:CYS:HB3	1.18	1.03
1:C:359:GLU:H	1:C:362:CYS:HB3	1.18	1.03
1:C:653:TYR:CE1	1:C:656:LYS:HG2	1.93	1.03
1:D:426:TRP:CD1	1:D:430:VAL:HG13	1.93	1.03
1:B:669:LEU:HD12	1:B:670:THR:N	1.74	1.03
1:A:359:GLU:H	1:A:362:CYS:HB3	1.18	1.03
1:C:689:ILE:CG2	1:C:693:SER:HB3	1.86	1.03
1:A:426:TRP:HA	1:A:430:VAL:CG1	1.89	1.02
1:A:571:LYS:NZ	1:A:692:GLU:OE1	1.90	1.02
1:A:653:TYR:CE1	1:A:656:LYS:HG2	1.93	1.02
1:C:596:VAL:HG22	1:C:633:THR:HG21	1.36	1.02
1:B:489:PHE:HE2	1:B:493:ILE:CD1	1.71	1.02
1:A:357:ILE:N	1:A:366:SER:OG	1.92	1.02
1:C:426:TRP:HA	1:C:430:VAL:CG1	1.89	1.02
1:C:426:TRP:CD1	1:C:430:VAL:HG13	1.93	1.02
1:D:337:LEU:HD21	1:D:395:VAL:HG22	1.36	1.02
1:D:707:ASP:O	1:D:711:SER:HB2	1.60	1.02
1:B:376:PRO:HB2	1:B:377:VAL:CG2	1.89	1.02
1:A:653:TYR:CZ	1:A:656:LYS:HG2	1.94	1.02
1:D:376:PRO:HB2	1:D:377:VAL:CG2	1.89	1.02
1:D:700:GLN:O	1:D:704:THR:HG23	1.59	1.02
1:A:576:ASP:OD2	1:A:685:THR:HG21	1.60	1.02
1:A:700:GLN:O	1:A:704:THR:HG23	1.59	1.02
1:B:653:TYR:CZ	1:B:656:LYS:HG2	1.94	1.02
1:B:700:GLN:O	1:B:704:THR:HG23	1.59	1.02
1:B:245:PHE:CD2	1:D:376:PRO:CG	2.42	1.01
1:C:669:LEU:HD12	1:C:670:THR:N	1.74	1.01
1:D:653:TYR:OH	1:D:656:LYS:HG2	1.60	1.01
1:D:653:TYR:CZ	1:D:656:LYS:HG2	1.94	1.01
1:A:489:PHE:HE2	1:A:493:ILE:CD1	1.71	1.01
1:A:707:ASP:O	1:A:711:SER:HB2	1.60	1.01
1:C:653:TYR:OH	1:C:656:LYS:HG2	1.60	1.01
1:B:357:ILE:N	1:B:366:SER:OG	1.92	1.01
1:B:426:TRP:HA	1:B:430:VAL:CG1	1.89	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:576:ASP:OD2	1:B:685:THR:HG21	1.60	1.01
1:C:653:TYR:CZ	1:C:656:LYS:HG2	1.94	1.01
1:A:376:PRO:HB2	1:A:377:VAL:CG2	1.89	1.01
1:C:337:LEU:HD21	1:C:395:VAL:HG22	1.36	1.01
1:C:376:PRO:HB2	1:C:377:VAL:CG2	1.89	1.01
1:D:239:THR:OG1	1:D:243:PRO:HB3	1.60	1.01
1:B:707:ASP:O	1:B:711:SER:HB2	1.60	1.01
1:C:576:ASP:OD2	1:C:685:THR:HG21	1.60	1.01
1:B:353:LEU:HB3	1:B:417:PRO:HG2	1.38	1.00
1:C:357:ILE:N	1:C:366:SER:OG	1.92	1.00
1:A:599:ILE:HD11	1:A:628:ASN:CA	1.91	1.00
1:A:653:TYR:OH	1:A:656:LYS:HG2	1.60	1.00
1:C:599:ILE:HD11	1:C:628:ASN:CA	1.91	1.00
1:D:426:TRP:HA	1:D:430:VAL:CG1	1.89	1.00
1:C:700:GLN:O	1:C:704:THR:HG23	1.59	1.00
1:B:596:VAL:HG22	1:B:633:THR:HG21	1.36	1.00
1:C:239:THR:OG1	1:C:243:PRO:HB3	1.60	1.00
1:A:359:GLU:CD	1:A:360:PRO:CD	2.30	1.00
1:C:376:PRO:CG	1:D:245:PHE:CD2	2.44	1.00
1:B:359:GLU:CD	1:B:360:PRO:CD	2.30	1.00
1:B:396:LEU:HD12	1:B:418:LEU:CD2	1.80	1.00
1:D:357:ILE:N	1:D:366:SER:OG	1.92	1.00
1:D:576:ASP:OD2	1:D:685:THR:CG2	2.10	1.00
1:D:599:ILE:HD11	1:D:628:ASN:CA	1.91	1.00
1:A:239:THR:OG1	1:A:243:PRO:HB3	1.61	0.99
1:A:576:ASP:OD2	1:A:685:THR:CG2	2.10	0.99
1:C:576:ASP:OD2	1:C:685:THR:CG2	2.10	0.99
1:B:653:TYR:OH	1:B:656:LYS:HG2	1.60	0.99
1:B:576:ASP:OD2	1:B:685:THR:CG2	2.10	0.99
1:C:359:GLU:CD	1:C:360:PRO:CD	2.30	0.99
1:B:599:ILE:HD11	1:B:628:ASN:CA	1.91	0.99
1:C:707:ASP:O	1:C:711:SER:HB2	1.59	0.99
1:A:666:TYR:CD1	1:A:670:THR:HG21	1.98	0.99
1:D:508:VAL:HG12	1:D:511:TYR:HE1	1.22	0.99
1:B:239:THR:OG1	1:B:243:PRO:HB3	1.60	0.99
1:B:374:TYR:CE2	1:A:235:PHE:HE1	1.71	0.99
1:B:508:VAL:HG12	1:B:511:TYR:HE1	1.22	0.99
1:B:599:ILE:HD11	1:B:628:ASN:N	1.78	0.98
1:D:572:MET:CE	1:D:686:VAL:CG2	2.41	0.98
1:D:666:TYR:CD1	1:D:670:THR:HG21	1.98	0.98
1:C:389:THR:CG2	1:C:394:SER:HA	1.94	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:599:ILE:HD11	1:C:628:ASN:N	1.78	0.98
1:B:572:MET:CE	1:B:686:VAL:CG2	2.41	0.98
1:A:508:VAL:O	1:A:511:TYR:CE1	2.17	0.98
1:C:508:VAL:O	1:C:511:TYR:CE1	2.17	0.98
1:C:573:ILE:HG12	1:D:673:LEU:HD11	1.44	0.98
1:D:359:GLU:CD	1:D:360:PRO:CD	2.30	0.98
1:D:389:THR:CG2	1:D:394:SER:HA	1.93	0.98
1:A:599:ILE:HD11	1:A:628:ASN:N	1.78	0.98
1:C:376:PRO:CB	1:C:377:VAL:HG23	1.93	0.98
1:C:666:TYR:CD1	1:C:670:THR:HG21	1.98	0.98
1:D:384:LEU:HD13	1:D:387:ILE:CG2	1.94	0.98
1:D:495:TYR:CE1	1:D:499:ARG:HG2	1.99	0.98
1:D:576:ASP:OD2	1:D:685:THR:HG21	1.60	0.98
1:B:495:TYR:CE1	1:B:499:ARG:HG2	1.99	0.98
1:C:717:ARG:HA	1:C:717:ARG:CZ	1.94	0.98
1:A:376:PRO:CB	1:A:377:VAL:HG23	1.93	0.98
1:D:198:TYR:CE1	1:D:242:ARG:HD2	1.99	0.98
1:B:508:VAL:O	1:B:511:TYR:CE1	2.17	0.98
1:B:666:TYR:CD1	1:B:670:THR:HG21	1.98	0.98
1:A:573:ILE:HG12	1:C:673:LEU:HD11	1.44	0.98
1:C:384:LEU:HD13	1:C:387:ILE:CG2	1.94	0.98
1:B:384:LEU:HD13	1:B:387:ILE:CG2	1.94	0.97
1:B:389:THR:CG2	1:B:394:SER:HA	1.93	0.97
1:C:495:TYR:CE1	1:C:499:ARG:HG2	1.99	0.97
1:A:717:ARG:HA	1:A:717:ARG:CZ	1.94	0.97
1:D:508:VAL:O	1:D:511:TYR:CE1	2.17	0.97
1:D:717:ARG:CZ	1:D:717:ARG:HA	1.94	0.97
1:A:384:LEU:HD13	1:A:387:ILE:CG2	1.94	0.97
1:D:599:ILE:HD11	1:D:628:ASN:N	1.78	0.97
1:A:389:THR:CG2	1:A:394:SER:HA	1.93	0.97
1:A:572:MET:CE	1:A:686:VAL:CG2	2.41	0.97
1:B:198:TYR:CE1	1:B:242:ARG:HD2	1.99	0.97
1:B:376:PRO:CB	1:B:377:VAL:HG23	1.93	0.97
1:C:198:TYR:CE1	1:C:242:ARG:HD2	1.99	0.97
1:C:396:LEU:HD12	1:C:418:LEU:CD2	1.80	0.97
1:A:495:TYR:CE1	1:A:499:ARG:HG2	1.99	0.97
1:D:376:PRO:CB	1:D:377:VAL:HG23	1.94	0.97
1:B:710:LYS:CA	1:B:714:LYS:HE2	1.95	0.96
1:C:572:MET:CE	1:C:686:VAL:CG2	2.41	0.96
1:B:235:PHE:HE1	1:D:374:TYR:CE2	1.74	0.96
1:B:489:PHE:HE2	1:B:493:ILE:HD11	0.80	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:717:ARG:CZ	1:B:717:ARG:HA	1.94	0.96
1:A:489:PHE:HE2	1:A:493:ILE:HD11	0.80	0.96
1:A:496:PHE:CA	1:A:501:PRO:CG	2.41	0.96
1:A:198:TYR:CE1	1:A:242:ARG:HD2	1.99	0.96
1:D:710:LYS:CA	1:D:714:LYS:HE2	1.95	0.96
1:C:410:HIS:ND1	1:C:699:LEU:HD12	1.81	0.96
1:B:573:ILE:HG12	1:A:673:LEU:HD11	1.44	0.95
1:A:384:LEU:H	1:A:384:LEU:HD12	1.31	0.95
1:B:235:PHE:CZ	1:D:374:TYR:HD2	1.66	0.95
1:A:710:LYS:CA	1:A:714:LYS:HE2	1.95	0.95
1:D:498:GLN:HE22	1:D:710:LYS:HZ3	1.04	0.95
1:C:498:GLN:HE22	1:C:710:LYS:HZ3	1.02	0.95
1:A:410:HIS:ND1	1:A:699:LEU:HD12	1.81	0.95
1:B:410:HIS:ND1	1:B:699:LEU:HD12	1.81	0.95
1:C:337:LEU:HD21	1:C:395:VAL:HG21	1.49	0.95
1:D:489:PHE:HE2	1:D:493:ILE:HD11	0.80	0.95
1:A:508:VAL:HG12	1:A:511:TYR:HE1	1.22	0.95
1:C:384:LEU:H	1:C:384:LEU:HD12	1.31	0.95
1:C:489:PHE:HE2	1:C:493:ILE:HD11	0.80	0.94
1:C:710:LYS:CA	1:C:714:LYS:HE2	1.95	0.94
1:D:410:HIS:ND1	1:D:699:LEU:HD12	1.81	0.94
1:B:386:CYS:O	1:B:394:SER:OG	1.86	0.94
1:C:432:ARG:HA	1:C:432:ARG:HE	1.32	0.94
1:D:337:LEU:HD21	1:D:395:VAL:HG21	1.49	0.94
1:D:374:TYR:HD1	1:D:375:GLY:H	1.06	0.94
1:B:673:LEU:HD11	1:D:573:ILE:HG12	1.46	0.94
1:C:707:ASP:O	1:C:711:SER:N	2.01	0.94
1:B:635:LEU:HD11	1:A:647:LEU:CD1	1.97	0.94
1:B:707:ASP:O	1:B:711:SER:N	2.01	0.94
1:D:386:CYS:O	1:D:394:SER:OG	1.86	0.94
1:B:352:ILE:O	1:B:367:ARG:HD2	1.67	0.93
1:A:707:ASP:O	1:A:711:SER:N	2.01	0.93
1:B:426:TRP:CD1	1:B:430:VAL:CG1	2.51	0.93
1:D:384:LEU:H	1:D:384:LEU:HD12	1.31	0.93
1:A:426:TRP:CD1	1:A:430:VAL:CG1	2.51	0.93
1:C:386:CYS:O	1:C:394:SER:OG	1.85	0.93
1:B:374:TYR:HD1	1:B:375:GLY:H	1.06	0.93
1:D:426:TRP:HH2	1:D:558:GLY:O	1.52	0.93
1:B:432:ARG:HA	1:B:432:ARG:HE	1.32	0.93
1:C:352:ILE:O	1:C:367:ARG:HD2	1.67	0.93
1:B:426:TRP:HH2	1:B:558:GLY:O	1.52	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:596:VAL:HG23	1:A:633:THR:HG21	1.51	0.93
1:C:635:LEU:HD11	1:D:647:LEU:CD1	1.98	0.93
1:D:415:VAL:HG12	1:D:417:PRO:HD2	1.50	0.93
1:C:415:VAL:HG12	1:C:417:PRO:HD2	1.50	0.93
1:C:496:PHE:HA	1:C:501:PRO:HG3	0.94	0.93
1:B:498:GLN:HE22	1:B:710:LYS:HZ3	1.05	0.93
1:C:496:PHE:CA	1:C:501:PRO:CG	2.41	0.93
1:C:374:TYR:CE2	1:D:235:PHE:HE1	1.74	0.93
1:C:426:TRP:HH2	1:C:558:GLY:O	1.52	0.92
1:B:647:LEU:CD1	1:D:635:LEU:HD11	1.98	0.92
1:C:374:TYR:HD1	1:C:375:GLY:H	1.06	0.92
1:C:596:VAL:HG23	1:C:633:THR:HG21	1.51	0.92
1:B:596:VAL:HG23	1:B:633:THR:HG21	1.51	0.92
1:D:432:ARG:HA	1:D:432:ARG:HE	1.32	0.92
1:B:415:VAL:HG12	1:B:417:PRO:HD2	1.50	0.92
1:B:666:TYR:CE1	1:B:670:THR:HG21	2.05	0.92
1:D:352:ILE:O	1:D:367:ARG:HD2	1.67	0.92
1:B:337:LEU:HD21	1:B:395:VAL:HG21	1.49	0.92
1:A:496:PHE:HA	1:A:501:PRO:HG3	0.94	0.92
1:A:635:LEU:HD11	1:C:647:LEU:CD1	1.99	0.92
1:C:426:TRP:CD1	1:C:430:VAL:CG1	2.52	0.92
1:C:666:TYR:CE1	1:C:670:THR:HG21	2.05	0.92
1:C:697:TRP:CZ3	1:C:698:LYS:HD3	2.05	0.92
1:A:337:LEU:HD21	1:A:395:VAL:HG21	1.49	0.92
1:A:432:ARG:HA	1:A:432:ARG:HE	1.32	0.92
1:A:666:TYR:CE1	1:A:670:THR:HG21	2.05	0.92
1:D:666:TYR:CE1	1:D:670:THR:HG21	2.05	0.92
1:D:697:TRP:CZ3	1:D:698:LYS:HD3	2.05	0.92
1:D:707:ASP:O	1:D:711:SER:N	2.01	0.92
1:A:352:ILE:O	1:A:367:ARG:HD2	1.67	0.92
1:D:426:TRP:CD1	1:D:430:VAL:CG1	2.52	0.92
1:D:596:VAL:HG23	1:D:633:THR:HG21	1.51	0.92
1:B:384:LEU:HD12	1:B:384:LEU:H	1.31	0.91
1:B:496:PHE:HA	1:B:501:PRO:HG3	0.94	0.91
1:A:386:CYS:O	1:A:394:SER:OG	1.86	0.91
1:A:374:TYR:HD1	1:A:375:GLY:H	1.06	0.91
1:C:572:MET:SD	1:C:685:THR:OG1	2.29	0.91
1:A:374:TYR:CD2	1:C:235:PHE:HZ	1.63	0.91
1:A:374:TYR:HD2	1:C:235:PHE:CZ	1.67	0.91
1:A:572:MET:SD	1:A:685:THR:OG1	2.29	0.91
1:C:242:ARG:H	1:C:243:PRO:HA	1.33	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:374:TYR:HD2	1:D:235:PHE:CZ	1.66	0.91
1:B:697:TRP:CZ3	1:B:698:LYS:HD3	2.05	0.91
1:A:697:TRP:CZ3	1:A:698:LYS:HD3	2.05	0.91
1:A:426:TRP:HH2	1:A:558:GLY:O	1.52	0.91
1:D:242:ARG:H	1:D:243:PRO:HA	1.34	0.90
1:D:572:MET:SD	1:D:685:THR:OG1	2.29	0.90
1:D:627:TYR:HD2	1:D:650:THR:HB	1.36	0.90
1:A:491:ARG:O	1:A:494:GLN:CG	2.19	0.90
1:C:491:ARG:O	1:C:494:GLN:CG	2.20	0.90
1:C:346:ILE:HD12	1:C:408:ASN:OD1	1.71	0.90
1:B:346:ILE:HD12	1:B:408:ASN:OD1	1.71	0.90
1:D:496:PHE:HA	1:D:501:PRO:HG3	0.93	0.90
1:B:426:TRP:HD1	1:B:430:VAL:CG1	1.85	0.90
1:A:415:VAL:HG12	1:A:417:PRO:HD2	1.51	0.90
1:A:346:ILE:HD12	1:A:408:ASN:OD1	1.71	0.89
1:B:242:ARG:H	1:B:243:PRO:HA	1.33	0.89
1:B:627:TYR:HD2	1:B:650:THR:HB	1.36	0.89
1:B:627:TYR:CD2	1:B:650:THR:HB	2.08	0.89
1:C:426:TRP:HD1	1:C:430:VAL:CG1	1.85	0.89
1:D:426:TRP:HD1	1:D:430:VAL:CG1	1.85	0.89
1:D:653:TYR:OH	1:D:656:LYS:CG	2.20	0.89
1:A:374:TYR:CE2	1:C:235:PHE:HE1	1.74	0.89
1:B:572:MET:SD	1:B:685:THR:OG1	2.29	0.89
1:A:337:LEU:CD2	1:A:395:VAL:CG2	2.51	0.89
1:D:627:TYR:CD2	1:D:650:THR:HB	2.08	0.89
1:B:359:GLU:H	1:B:362:CYS:CB	1.85	0.89
1:B:491:ARG:O	1:B:494:GLN:CG	2.20	0.89
1:A:242:ARG:H	1:A:243:PRO:HA	1.34	0.89
1:A:547:MET:O	1:A:551:ASN:ND2	2.06	0.89
1:A:704:THR:O	1:A:708:THR:HG23	1.72	0.89
1:A:708:THR:O	1:A:712:PHE:CA	2.21	0.89
1:C:627:TYR:CD2	1:C:650:THR:HB	2.08	0.89
1:D:346:ILE:HD12	1:D:408:ASN:OD1	1.71	0.89
1:D:359:GLU:H	1:D:362:CYS:CB	1.85	0.89
1:C:627:TYR:HD2	1:C:650:THR:HB	1.36	0.89
1:D:491:ARG:O	1:D:494:GLN:CG	2.19	0.89
1:D:704:THR:O	1:D:708:THR:HG23	1.72	0.89
1:D:547:MET:O	1:D:551:ASN:ND2	2.06	0.89
1:A:426:TRP:CH2	1:A:558:GLY:O	2.26	0.89
1:C:704:THR:O	1:C:708:THR:HG23	1.72	0.89
1:B:496:PHE:CA	1:B:501:PRO:CG	2.41	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:704:THR:O	1:B:708:THR:HG23	1.72	0.88
1:C:337:LEU:CD2	1:C:395:VAL:CG2	2.51	0.88
1:C:359:GLU:O	1:C:362:CYS:HB3	1.73	0.88
1:C:402:SER:HB2	1:C:409:ARG:HG3	1.55	0.88
1:B:426:TRP:CH2	1:B:558:GLY:O	2.26	0.88
1:A:402:SER:HB2	1:A:409:ARG:HG3	1.55	0.88
1:A:627:TYR:CD2	1:A:650:THR:HB	2.08	0.88
1:B:369:PHE:O	1:B:381:LEU:HB2	1.74	0.88
1:B:389:THR:OG1	1:B:393:ASN:O	1.92	0.88
1:B:653:TYR:OH	1:B:656:LYS:CG	2.20	0.88
1:A:359:GLU:O	1:A:362:CYS:HB3	1.73	0.88
1:A:369:PHE:O	1:A:381:LEU:HB2	1.74	0.88
1:C:359:GLU:H	1:C:362:CYS:CB	1.85	0.88
1:C:389:THR:OG1	1:C:393:ASN:O	1.92	0.88
1:C:708:THR:O	1:C:712:PHE:CA	2.21	0.88
1:D:359:GLU:O	1:D:362:CYS:HB3	1.73	0.88
1:A:426:TRP:HD1	1:A:430:VAL:CG1	1.85	0.88
1:B:708:THR:O	1:B:712:PHE:CA	2.21	0.88
1:C:426:TRP:CH2	1:C:558:GLY:O	2.26	0.88
1:B:547:MET:O	1:B:551:ASN:ND2	2.06	0.88
1:A:359:GLU:H	1:A:362:CYS:CB	1.85	0.88
1:C:369:PHE:O	1:C:381:LEU:HB2	1.74	0.88
1:B:402:SER:HB2	1:B:409:ARG:HG3	1.55	0.88
1:A:389:THR:OG1	1:A:393:ASN:O	1.92	0.88
1:C:547:MET:O	1:C:551:ASN:ND2	2.06	0.88
1:B:359:GLU:O	1:B:362:CYS:HB3	1.73	0.88
1:A:653:TYR:OH	1:A:656:LYS:CG	2.20	0.88
1:C:653:TYR:OH	1:C:656:LYS:CG	2.20	0.87
1:D:426:TRP:CH2	1:D:558:GLY:O	2.26	0.87
1:A:498:GLN:NE2	1:A:710:LYS:HZ3	1.72	0.87
1:B:399:ILE:HD13	1:B:412:MET:HB3	1.57	0.87
1:B:660:ILE:HD13	1:D:631:TYR:OH	1.74	0.87
1:D:399:ILE:HD13	1:D:412:MET:HB3	1.57	0.87
1:C:701:ARG:CB	1:C:701:ARG:HH11	1.88	0.87
1:B:337:LEU:CD2	1:B:395:VAL:CG2	2.51	0.87
1:D:708:THR:O	1:D:712:PHE:CA	2.21	0.87
1:A:627:TYR:HD2	1:A:650:THR:HB	1.36	0.87
1:C:399:ILE:HD13	1:C:412:MET:HB3	1.57	0.87
1:D:369:PHE:O	1:D:381:LEU:HB2	1.74	0.87
1:B:584:TYR:OH	1:B:641:THR:CB	2.23	0.86
1:B:384:LEU:HD13	1:B:387:ILE:HG22	1.57	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:402:SER:HB2	1:D:409:ARG:HG3	1.55	0.86
1:B:498:GLN:HE22	1:B:710:LYS:NZ	1.73	0.86
1:D:584:TYR:OH	1:D:641:THR:CB	2.23	0.86
1:B:374:TYR:CD2	1:A:235:PHE:HZ	1.61	0.86
1:C:121:VAL:HG22	1:C:172:THR:HG21	1.58	0.86
1:B:313:LEU:HB3	1:B:365:LEU:CD1	2.06	0.86
1:B:374:TYR:HD2	1:A:235:PHE:CZ	1.64	0.86
1:A:498:GLN:HE22	1:A:710:LYS:NZ	1.73	0.86
1:D:496:PHE:CA	1:D:501:PRO:CG	2.41	0.86
1:B:356:GLU:HA	1:B:366:SER:OG	1.76	0.86
1:B:635:LEU:CD1	1:A:647:LEU:HD12	2.05	0.86
1:A:356:GLU:HA	1:A:366:SER:OG	1.76	0.86
1:A:399:ILE:HD13	1:A:412:MET:HB3	1.57	0.86
1:A:631:TYR:OH	1:C:660:ILE:HD13	1.76	0.86
1:C:386:CYS:CB	1:C:395:VAL:CB	2.54	0.86
1:C:635:LEU:CD1	1:D:647:LEU:HD12	2.06	0.86
1:D:701:ARG:CB	1:D:701:ARG:HH11	1.88	0.86
1:B:376:PRO:HG3	1:A:245:PHE:CE2	2.11	0.86
1:B:631:TYR:OH	1:A:660:ILE:HD13	1.74	0.86
1:D:386:CYS:CB	1:D:395:VAL:CB	2.54	0.86
1:D:389:THR:OG1	1:D:393:ASN:O	1.92	0.86
1:B:386:CYS:CB	1:B:395:VAL:CB	2.54	0.86
1:B:478:GLU:O	1:B:482:VAL:HG23	1.76	0.86
1:A:121:VAL:HG22	1:A:172:THR:HG21	1.58	0.86
1:A:474:ARG:CD	1:A:478:GLU:OE2	2.24	0.86
1:A:579:ARG:HG2	1:A:579:ARG:HH11	1.41	0.86
1:C:584:TYR:OH	1:C:641:THR:CB	2.23	0.86
1:A:396:LEU:HD12	1:A:418:LEU:HD22	0.86	0.86
1:B:647:LEU:HD12	1:D:635:LEU:CD1	2.06	0.85
1:A:478:GLU:O	1:A:482:VAL:HG23	1.76	0.85
1:C:239:THR:CB	1:C:243:PRO:HB3	2.06	0.85
1:D:313:LEU:HB3	1:D:365:LEU:CD1	2.06	0.85
1:D:352:ILE:O	1:D:367:ARG:HD3	1.76	0.85
1:D:474:ARG:CD	1:D:478:GLU:OE2	2.24	0.85
1:A:482:VAL:HG13	1:A:527:VAL:HG21	1.58	0.85
1:C:386:CYS:HB2	1:C:395:VAL:CB	2.05	0.85
1:D:121:VAL:HG22	1:D:172:THR:HG21	1.58	0.85
1:A:386:CYS:CB	1:A:395:VAL:CB	2.54	0.85
1:D:239:THR:CB	1:D:243:PRO:HB3	2.06	0.85
1:B:701:ARG:CB	1:B:701:ARG:HH11	1.88	0.85
1:A:357:ILE:H	1:A:366:SER:HG	1.20	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:396:LEU:CD1	1:A:418:LEU:HD23	2.06	0.85
1:A:424:ASP:O	1:A:428:ARG:HG2	1.77	0.85
1:C:239:THR:OG1	1:C:241:GLY:HA2	1.77	0.85
1:C:482:VAL:HG13	1:C:527:VAL:HG21	1.58	0.85
1:B:424:ASP:O	1:B:428:ARG:HG2	1.77	0.85
1:A:313:LEU:HB3	1:A:365:LEU:CD1	2.05	0.85
1:C:443:LEU:O	1:C:447:ILE:HD13	1.77	0.85
1:C:631:TYR:OH	1:D:660:ILE:HD13	1.75	0.85
1:D:356:GLU:HA	1:D:366:SER:OG	1.76	0.85
1:D:367:ARG:HH22	1:D:385:SER:HB2	1.41	0.85
1:D:389:THR:CG2	1:D:393:ASN:O	2.25	0.85
1:D:478:GLU:O	1:D:482:VAL:HG23	1.76	0.85
1:D:482:VAL:HG13	1:D:527:VAL:HG21	1.58	0.85
1:B:472:TYR:O	1:B:476:THR:HG23	1.76	0.85
1:B:482:VAL:HG13	1:B:527:VAL:HG21	1.58	0.85
1:A:239:THR:CB	1:A:243:PRO:HB3	2.06	0.85
1:A:384:LEU:HD13	1:A:387:ILE:HG22	1.57	0.85
1:C:472:TYR:O	1:C:476:THR:HG23	1.76	0.85
1:D:579:ARG:HG2	1:D:579:ARG:HH11	1.41	0.85
1:B:239:THR:CB	1:B:243:PRO:HB3	2.06	0.85
1:C:474:ARG:CD	1:C:478:GLU:OE2	2.24	0.85
1:B:136:LEU:HD23	1:B:136:LEU:H	1.41	0.85
1:A:701:ARG:CB	1:A:701:ARG:HH11	1.88	0.85
1:C:456:PRO:HD2	1:C:474:ARG:HH11	1.42	0.85
1:C:136:LEU:HD23	1:C:136:LEU:H	1.41	0.85
1:B:396:LEU:HD11	1:B:418:LEU:CD2	2.07	0.84
1:C:313:LEU:HB3	1:C:365:LEU:CD1	2.06	0.84
1:B:121:VAL:HG22	1:B:172:THR:HG21	1.58	0.84
1:B:396:LEU:HD12	1:B:418:LEU:HD22	0.86	0.84
1:A:376:PRO:HG3	1:C:245:PHE:CE2	2.13	0.84
1:A:596:VAL:CG2	1:A:633:THR:CG2	2.55	0.84
1:A:635:LEU:CD1	1:C:647:LEU:HD12	2.07	0.84
1:C:352:ILE:O	1:C:367:ARG:HD3	1.76	0.84
1:C:498:GLN:HE22	1:C:710:LYS:NZ	1.73	0.84
1:D:396:LEU:HD12	1:D:418:LEU:HD22	0.86	0.84
1:D:472:TYR:O	1:D:476:THR:HG23	1.76	0.84
1:B:367:ARG:HH22	1:B:385:SER:HB2	1.41	0.84
1:B:474:ARG:CD	1:B:478:GLU:OE2	2.24	0.84
1:C:386:CYS:HB3	1:C:395:VAL:HG21	1.58	0.84
1:D:396:LEU:CD1	1:D:418:LEU:HD23	2.07	0.84
1:D:657:ALA:O	1:D:660:ILE:HG22	1.78	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:389:THR:CG2	1:B:393:ASN:O	2.25	0.84
1:B:701:ARG:HH11	1:B:701:ARG:HB2	1.43	0.84
1:A:239:THR:OG1	1:A:241:GLY:HA2	1.77	0.84
1:A:389:THR:CG2	1:A:393:ASN:O	2.25	0.84
1:C:384:LEU:HD13	1:C:387:ILE:HG22	1.57	0.84
1:C:396:LEU:HD12	1:C:418:LEU:HD22	0.86	0.84
1:C:478:GLU:O	1:C:482:VAL:HG23	1.76	0.84
1:B:443:LEU:O	1:B:447:ILE:HD13	1.77	0.84
1:A:127:GLN:O	1:A:130:GLU:HG3	1.78	0.84
1:C:356:GLU:HA	1:C:366:SER:OG	1.76	0.84
1:C:374:TYR:CD2	1:D:235:PHE:HZ	1.59	0.84
1:D:498:GLN:HE22	1:D:710:LYS:NZ	1.73	0.84
1:B:127:GLN:O	1:B:130:GLU:HG3	1.78	0.84
1:A:136:LEU:HD23	1:A:136:LEU:H	1.41	0.84
1:A:584:TYR:OH	1:A:641:THR:CB	2.23	0.84
1:C:389:THR:CG2	1:C:393:ASN:O	2.25	0.84
1:B:235:PHE:HZ	1:D:374:TYR:CD2	1.62	0.84
1:B:657:ALA:O	1:B:660:ILE:HG22	1.78	0.84
1:B:352:ILE:O	1:B:367:ARG:HD3	1.76	0.84
1:A:443:LEU:O	1:A:447:ILE:HD13	1.77	0.84
1:C:367:ARG:HH22	1:C:385:SER:HB2	1.41	0.84
1:D:337:LEU:CD2	1:D:395:VAL:CG2	2.51	0.84
1:D:386:CYS:HB3	1:D:395:VAL:HG21	1.58	0.84
1:A:472:TYR:O	1:A:476:THR:HG23	1.76	0.84
1:D:136:LEU:HD23	1:D:136:LEU:H	1.41	0.84
1:D:239:THR:OG1	1:D:241:GLY:HA2	1.77	0.84
1:B:456:PRO:HD2	1:B:474:ARG:HH11	1.42	0.83
1:A:657:ALA:O	1:A:660:ILE:HG22	1.78	0.83
1:D:127:GLN:O	1:D:130:GLU:HG3	1.78	0.83
1:B:358:HIS:HA	1:B:362:CYS:SG	2.18	0.83
1:B:386:CYS:HB3	1:B:395:VAL:HG21	1.59	0.83
1:B:387:ILE:HG13	1:B:421:LEU:HD11	1.61	0.83
1:C:127:GLN:O	1:C:130:GLU:HG3	1.78	0.83
1:C:579:ARG:HH11	1:C:579:ARG:HG2	1.41	0.83
1:B:239:THR:OG1	1:B:241:GLY:HA2	1.77	0.83
1:B:596:VAL:HG22	1:B:633:THR:CG2	2.08	0.83
1:C:596:VAL:CG2	1:C:633:THR:CG2	2.55	0.83
1:D:456:PRO:HD2	1:D:474:ARG:HH11	1.42	0.83
1:B:396:LEU:CD1	1:B:418:LEU:HD23	2.06	0.83
1:A:358:HIS:HA	1:A:362:CYS:SG	2.18	0.83
1:A:462:PRO:CB	1:A:530:TYR:OH	2.26	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:596:VAL:HG22	1:A:633:THR:CG2	2.08	0.83
1:C:424:ASP:O	1:C:428:ARG:HG2	1.77	0.83
1:A:456:PRO:HD2	1:A:474:ARG:HH11	1.42	0.83
1:C:387:ILE:HG13	1:C:421:LEU:HD11	1.61	0.83
1:A:243:PRO:HB2	1:A:244:GLY:CA	2.08	0.83
1:C:358:HIS:HA	1:C:362:CYS:SG	2.18	0.83
1:D:384:LEU:HD13	1:D:387:ILE:HG22	1.57	0.83
1:B:579:ARG:HG2	1:B:579:ARG:HH11	1.41	0.83
1:A:352:ILE:O	1:A:367:ARG:HD3	1.76	0.83
1:A:386:CYS:HB3	1:A:395:VAL:HG21	1.58	0.83
1:D:462:PRO:CB	1:D:530:TYR:OH	2.26	0.83
1:B:710:LYS:HE3	1:B:710:LYS:C	1.99	0.83
1:A:367:ARG:HH22	1:A:385:SER:HB2	1.41	0.83
1:C:657:ALA:O	1:C:660:ILE:HG22	1.78	0.83
1:D:358:HIS:HA	1:D:362:CYS:SG	2.18	0.83
1:D:387:ILE:HG13	1:D:421:LEU:HD11	1.60	0.83
1:D:443:LEU:O	1:D:447:ILE:HD13	1.77	0.83
1:B:462:PRO:CB	1:B:530:TYR:OH	2.26	0.83
1:A:386:CYS:HB2	1:A:395:VAL:CB	2.05	0.83
1:C:672:ILE:HD13	1:C:673:LEU:N	1.94	0.83
1:D:424:ASP:O	1:D:428:ARG:HG2	1.77	0.83
1:D:672:ILE:HD13	1:D:673:LEU:N	1.94	0.83
1:D:701:ARG:HH11	1:D:701:ARG:HB2	1.43	0.83
1:A:396:LEU:HD11	1:A:418:LEU:CD2	2.07	0.82
1:C:701:ARG:HH11	1:C:701:ARG:HB2	1.43	0.82
1:D:396:LEU:HD11	1:D:418:LEU:CD2	2.07	0.82
1:D:710:LYS:HE3	1:D:710:LYS:C	1.99	0.82
1:B:672:ILE:HD13	1:B:673:LEU:N	1.94	0.82
1:A:710:LYS:HE3	1:A:710:LYS:C	1.99	0.82
1:C:574:LEU:O	1:C:578:CYS:CB	2.24	0.82
1:C:710:LYS:C	1:C:710:LYS:HE3	1.99	0.82
1:B:572:MET:CE	1:B:686:VAL:HG22	2.08	0.82
1:C:396:LEU:CD1	1:C:418:LEU:HD23	2.07	0.82
1:C:396:LEU:HD11	1:C:418:LEU:CD2	2.07	0.82
1:D:337:LEU:CD2	1:D:395:VAL:HG22	2.10	0.82
1:A:672:ILE:HD13	1:A:673:LEU:N	1.94	0.82
1:C:337:LEU:CD2	1:C:395:VAL:HG22	2.10	0.82
1:A:387:ILE:HG13	1:A:421:LEU:HD11	1.61	0.82
1:C:596:VAL:HG22	1:C:633:THR:CG2	2.08	0.82
1:B:474:ARG:NE	1:B:478:GLU:OE2	2.13	0.82
1:C:462:PRO:CB	1:C:530:TYR:OH	2.26	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:596:VAL:CG2	1:D:633:THR:CG2	2.55	0.82
1:B:572:MET:HE1	1:B:686:VAL:HG22	1.61	0.82
1:D:516:PHE:HE2	1:D:554:TYR:CE2	1.98	0.82
1:B:245:PHE:CE2	1:D:376:PRO:HG3	2.15	0.82
1:C:243:PRO:HB2	1:C:244:GLY:CA	2.08	0.82
1:B:516:PHE:HE2	1:B:554:TYR:CE2	1.98	0.81
1:C:474:ARG:NE	1:C:478:GLU:OE2	2.13	0.81
1:A:474:ARG:NE	1:A:478:GLU:OE2	2.13	0.81
1:A:572:MET:CE	1:A:686:VAL:HG22	2.08	0.81
1:C:357:ILE:H	1:C:366:SER:HG	1.27	0.81
1:C:649:PHE:HE2	1:C:663:LEU:HD11	1.46	0.81
1:D:596:VAL:HG22	1:D:633:THR:CG2	2.08	0.81
1:B:666:TYR:C	1:B:670:THR:HG22	1.99	0.81
1:B:636:GLU:HG2	1:B:649:PHE:CD1	2.16	0.81
1:C:516:PHE:HE2	1:C:554:TYR:CE2	1.98	0.81
1:D:243:PRO:HB2	1:D:244:GLY:CA	2.08	0.81
1:A:701:ARG:HH11	1:A:701:ARG:HB2	1.43	0.81
1:C:359:GLU:CG	1:C:360:PRO:HD2	2.11	0.81
1:C:666:TYR:C	1:C:670:THR:HG22	1.99	0.81
1:D:415:VAL:HG12	1:D:417:PRO:CD	2.11	0.81
1:D:474:ARG:NE	1:D:478:GLU:OE2	2.13	0.81
1:D:710:LYS:HG2	1:D:714:LYS:CE	2.11	0.81
1:A:489:PHE:CE2	1:A:493:ILE:CD1	2.55	0.81
1:A:516:PHE:HE2	1:A:554:TYR:CE2	1.98	0.81
1:A:636:GLU:HG2	1:A:649:PHE:CD1	2.16	0.81
1:C:572:MET:CE	1:C:686:VAL:HG22	2.08	0.81
1:C:710:LYS:HG2	1:C:714:LYS:CE	2.11	0.81
1:D:653:TYR:HE1	1:D:656:LYS:CB	1.94	0.81
1:A:666:TYR:C	1:A:670:THR:HG22	1.99	0.81
1:B:649:PHE:HE2	1:B:663:LEU:HD11	1.46	0.81
1:C:653:TYR:HE1	1:C:656:LYS:CB	1.94	0.81
1:D:636:GLU:HG2	1:D:649:PHE:CD1	2.16	0.81
1:D:572:MET:CE	1:D:686:VAL:HG22	2.08	0.80
1:D:649:PHE:HE2	1:D:663:LEU:HD11	1.46	0.80
1:B:359:GLU:CG	1:B:360:PRO:HD2	2.11	0.80
1:B:710:LYS:HG2	1:B:714:LYS:CE	2.11	0.80
1:C:386:CYS:CB	1:C:395:VAL:CG2	2.60	0.80
1:C:432:ARG:HA	1:C:432:ARG:NE	1.95	0.80
1:D:386:CYS:CB	1:D:395:VAL:CG2	2.60	0.80
1:D:489:PHE:CE2	1:D:493:ILE:CD1	2.55	0.80
1:B:384:LEU:HD13	1:B:387:ILE:HG21	1.63	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:546:ALA:O	1:B:550:THR:HG23	1.81	0.80
1:C:384:LEU:HD13	1:C:387:ILE:HG21	1.62	0.80
1:D:359:GLU:CG	1:D:360:PRO:HD2	2.11	0.80
1:D:760:UNK:HA	1:D:761:UNK:CB	2.11	0.80
1:C:415:VAL:HG12	1:C:417:PRO:CD	2.11	0.80
1:A:359:GLU:CG	1:A:360:PRO:HD2	2.11	0.80
1:A:386:CYS:CB	1:A:395:VAL:CG2	2.60	0.80
1:A:495:TYR:O	1:A:499:ARG:CB	2.29	0.80
1:A:653:TYR:HE1	1:A:656:LYS:CB	1.94	0.80
1:B:337:LEU:CD2	1:B:395:VAL:HG22	2.10	0.80
1:A:546:ALA:O	1:A:550:THR:HG23	1.81	0.80
1:C:636:GLU:HG2	1:C:649:PHE:CD1	2.16	0.80
1:A:653:TYR:CE1	1:A:656:LYS:CG	2.65	0.80
1:C:376:PRO:HG3	1:D:245:PHE:CE2	2.17	0.80
1:C:760:UNK:HA	1:C:761:UNK:CB	2.11	0.80
1:D:546:ALA:O	1:D:550:THR:HG23	1.81	0.80
1:B:574:LEU:O	1:B:578:CYS:CB	2.24	0.80
1:B:653:TYR:CE1	1:B:656:LYS:CG	2.65	0.80
1:A:337:LEU:CD2	1:A:395:VAL:HG22	2.10	0.80
1:C:495:TYR:O	1:C:499:ARG:CB	2.28	0.80
1:B:415:VAL:HG12	1:B:417:PRO:CD	2.11	0.80
1:C:546:ALA:O	1:C:550:THR:HG23	1.81	0.80
1:B:374:TYR:HD1	1:B:375:GLY:N	1.81	0.79
1:B:386:CYS:CB	1:B:395:VAL:CG2	2.60	0.79
1:A:384:LEU:HD13	1:A:387:ILE:HG21	1.63	0.79
1:C:653:TYR:CE1	1:C:656:LYS:CG	2.65	0.79
1:D:359:GLU:N	1:D:362:CYS:HB3	1.97	0.79
1:A:710:LYS:HG2	1:A:714:LYS:CE	2.11	0.79
1:B:653:TYR:HE1	1:B:656:LYS:CB	1.94	0.79
1:A:508:VAL:O	1:A:511:TYR:CZ	2.36	0.79
1:A:413:LEU:HD13	1:A:422:LEU:CD1	2.13	0.79
1:A:415:VAL:HG12	1:A:417:PRO:CD	2.11	0.79
1:D:384:LEU:HD13	1:D:387:ILE:HG21	1.63	0.79
1:B:374:TYR:HD2	1:A:235:PHE:CE2	1.99	0.79
1:B:413:LEU:HD13	1:B:422:LEU:CD1	2.13	0.79
1:A:374:TYR:HD1	1:A:375:GLY:N	1.81	0.79
1:A:584:TYR:OH	1:A:641:THR:OG1	2.01	0.79
1:A:760:UNK:HA	1:A:761:UNK:CB	2.11	0.79
1:C:359:GLU:N	1:C:362:CYS:HB3	1.97	0.79
1:B:596:VAL:CG2	1:B:633:THR:CG2	2.55	0.79
1:A:359:GLU:N	1:A:362:CYS:HB3	1.97	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:649:PHE:HE2	1:A:663:LEU:HD11	1.46	0.79
1:B:359:GLU:N	1:B:362:CYS:HB3	1.97	0.79
1:B:386:CYS:HB2	1:B:395:VAL:CB	2.05	0.79
1:A:432:ARG:HA	1:A:432:ARG:NE	1.95	0.79
1:D:432:ARG:HA	1:D:432:ARG:NE	1.95	0.79
1:D:374:TYR:HD1	1:D:375:GLY:N	1.81	0.78
1:B:243:PRO:HB2	1:B:244:GLY:CA	2.08	0.78
1:D:653:TYR:CE1	1:D:656:LYS:CG	2.65	0.78
1:D:669:LEU:CD1	1:D:670:THR:HB	2.14	0.78
1:B:760:UNK:HA	1:B:761:UNK:CB	2.11	0.78
1:D:495:TYR:O	1:D:499:ARG:CB	2.29	0.78
1:D:508:VAL:O	1:D:511:TYR:CZ	2.36	0.78
1:B:682:MET:CE	1:A:673:LEU:HD23	2.14	0.78
1:D:413:LEU:HD13	1:D:422:LEU:CD1	2.13	0.78
1:D:386:CYS:HB2	1:D:395:VAL:CB	2.05	0.78
1:D:574:LEU:O	1:D:578:CYS:CB	2.24	0.78
1:B:669:LEU:CD1	1:B:670:THR:HB	2.14	0.78
1:A:426:TRP:CA	1:A:430:VAL:HG12	2.05	0.78
1:C:508:VAL:O	1:C:511:TYR:CZ	2.36	0.78
1:C:413:LEU:HD13	1:C:422:LEU:CD1	2.13	0.78
1:A:707:ASP:O	1:A:711:SER:CB	2.32	0.78
1:D:666:TYR:C	1:D:670:THR:HG22	1.99	0.78
1:A:374:TYR:HD2	1:C:235:PHE:CE2	2.01	0.78
1:A:669:LEU:CD1	1:A:670:THR:HB	2.13	0.78
1:C:489:PHE:CE2	1:C:493:ILE:CD1	2.55	0.78
1:C:669:LEU:CD1	1:C:670:THR:HB	2.13	0.78
1:D:364:HIS:H	1:D:364:HIS:CD2	2.02	0.78
1:A:574:LEU:O	1:A:578:CYS:CB	2.24	0.77
1:C:584:TYR:OH	1:C:641:THR:OG1	2.01	0.77
1:B:364:HIS:H	1:B:364:HIS:CD2	2.02	0.77
1:A:402:SER:CB	1:A:409:ARG:HG3	2.15	0.77
1:C:707:ASP:O	1:C:711:SER:CB	2.32	0.77
1:D:584:TYR:OH	1:D:641:THR:OG1	2.01	0.77
1:B:685:THR:O	1:B:689:ILE:HG13	1.85	0.77
1:C:409:ARG:HE	1:C:699:LEU:HD11	1.50	0.77
1:C:685:THR:O	1:C:689:ILE:HG13	1.85	0.77
1:B:402:SER:CB	1:B:409:ARG:HG3	2.14	0.77
1:B:584:TYR:OH	1:B:641:THR:OG1	2.01	0.77
1:A:359:GLU:OE2	1:A:360:PRO:CD	2.28	0.77
1:C:359:GLU:OE2	1:C:360:PRO:CD	2.28	0.77
1:D:685:THR:O	1:D:689:ILE:HG13	1.85	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:673:LEU:HD23	1:D:682:MET:CE	2.15	0.77
1:A:396:LEU:HD13	1:A:418:LEU:CD2	2.15	0.77
1:C:374:TYR:HD1	1:C:375:GLY:N	1.81	0.77
1:B:359:GLU:OE2	1:B:360:PRO:CD	2.28	0.77
1:B:508:VAL:O	1:B:511:TYR:CZ	2.36	0.77
1:B:495:TYR:O	1:B:499:ARG:CB	2.29	0.77
1:A:685:THR:O	1:A:689:ILE:HG13	1.85	0.77
1:A:697:TRP:CE3	1:A:698:LYS:HD3	2.20	0.77
1:C:374:TYR:HD2	1:D:235:PHE:CE2	2.01	0.77
1:A:682:MET:CE	1:C:673:LEU:HD23	2.14	0.77
1:C:366:SER:HB3	1:C:369:PHE:HE1	1.50	0.77
1:C:456:PRO:HD2	1:C:474:ARG:NH1	2.00	0.77
1:D:409:ARG:HE	1:D:699:LEU:HD11	1.50	0.77
1:B:432:ARG:HA	1:B:432:ARG:NE	1.95	0.76
1:C:402:SER:CB	1:C:409:ARG:HG3	2.15	0.76
1:C:697:TRP:CE3	1:C:698:LYS:HD3	2.20	0.76
1:D:242:ARG:N	1:D:243:PRO:HA	1.98	0.76
1:D:366:SER:HB3	1:D:369:PHE:HE1	1.50	0.76
1:D:697:TRP:CE3	1:D:698:LYS:HD3	2.20	0.76
1:B:210:GLU:HG2	1:D:374:TYR:HE1	1.50	0.76
1:B:235:PHE:CE2	1:D:374:TYR:HD2	2.02	0.76
1:A:409:ARG:HE	1:A:699:LEU:HD11	1.50	0.76
1:C:242:ARG:N	1:C:243:PRO:HA	1.98	0.76
1:B:374:TYR:HE1	1:A:210:GLU:HG2	1.50	0.76
1:C:410:HIS:CE1	1:C:699:LEU:HD12	2.21	0.76
1:D:402:SER:CB	1:D:409:ARG:HG3	2.14	0.76
1:D:707:ASP:O	1:D:711:SER:CB	2.32	0.76
1:B:494:GLN:O	1:B:498:GLN:HB3	1.86	0.76
1:B:565:TYR:HB2	1:A:579:ARG:NH1	2.00	0.76
1:A:565:TYR:HB2	1:C:579:ARG:NH1	2.00	0.76
1:A:410:HIS:CE1	1:A:699:LEU:HD12	2.21	0.76
1:A:456:PRO:HD2	1:A:474:ARG:NH1	2.00	0.76
1:C:239:THR:HG1	1:C:243:PRO:HB3	1.49	0.76
1:C:396:LEU:HD13	1:C:418:LEU:CD2	2.15	0.76
1:D:456:PRO:HD2	1:D:474:ARG:NH1	2.00	0.76
1:C:498:GLN:NE2	1:C:710:LYS:NZ	2.34	0.76
1:C:682:MET:CE	1:D:673:LEU:HD23	2.16	0.76
1:D:571:LYS:HE3	1:D:696:ILE:CD1	2.16	0.76
1:B:127:GLN:HG2	1:B:130:GLU:OE2	1.85	0.76
1:C:498:GLN:NE2	1:C:710:LYS:HZ3	1.81	0.76
1:D:410:HIS:CE1	1:D:699:LEU:HD12	2.21	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:410:HIS:CE1	1:B:699:LEU:HD12	2.21	0.76
1:D:498:GLN:NE2	1:D:710:LYS:NZ	2.34	0.76
1:B:697:TRP:CE3	1:B:698:LYS:HD3	2.20	0.75
1:C:571:LYS:HE3	1:C:696:ILE:CD1	2.16	0.75
1:D:487:TYR:HE1	1:D:491:ARG:CD	1.99	0.75
1:B:376:PRO:CG	1:A:245:PHE:CE2	2.69	0.75
1:B:571:LYS:HE3	1:B:696:ILE:CD1	2.16	0.75
1:B:579:ARG:NH1	1:D:565:TYR:HB2	2.01	0.75
1:C:565:TYR:HB2	1:D:579:ARG:NH1	2.01	0.75
1:B:456:PRO:HD2	1:B:474:ARG:NH1	2.00	0.75
1:B:707:ASP:O	1:B:711:SER:CB	2.32	0.75
1:A:366:SER:HB3	1:A:369:PHE:HE1	1.50	0.75
1:A:494:GLN:O	1:A:498:GLN:HB3	1.86	0.75
1:D:127:GLN:HG2	1:D:130:GLU:OE2	1.85	0.75
1:D:494:GLN:O	1:D:498:GLN:HB3	1.86	0.75
1:B:409:ARG:HE	1:B:699:LEU:HD11	1.50	0.75
1:C:374:TYR:HE1	1:D:210:GLU:HG2	1.51	0.75
1:B:498:GLN:NE2	1:B:710:LYS:NZ	2.34	0.75
1:C:127:GLN:HG2	1:C:130:GLU:OE2	1.85	0.75
1:C:494:GLN:O	1:C:498:GLN:HB3	1.86	0.75
1:C:635:LEU:CD1	1:D:647:LEU:CD1	2.63	0.75
1:D:243:PRO:CB	1:D:244:GLY:HA3	2.15	0.75
1:B:366:SER:HB3	1:B:369:PHE:HE1	1.50	0.75
1:B:489:PHE:CE2	1:B:493:ILE:CD1	2.55	0.75
1:A:127:GLN:HG2	1:A:130:GLU:OE2	1.85	0.75
1:C:487:TYR:HE1	1:C:491:ARG:CD	1.99	0.75
1:B:647:LEU:CD1	1:D:635:LEU:CD1	2.63	0.75
1:A:501:PRO:CB	1:A:502:SER:HB3	2.17	0.75
1:A:572:MET:HE1	1:A:686:VAL:HG22	1.67	0.75
1:B:413:LEU:HD13	1:B:422:LEU:HD13	1.68	0.74
1:A:376:PRO:CG	1:C:245:PHE:CE2	2.70	0.74
1:C:364:HIS:H	1:C:364:HIS:CD2	2.02	0.74
1:B:396:LEU:HD13	1:B:418:LEU:CD2	2.15	0.74
1:A:487:TYR:HE1	1:A:491:ARG:CD	1.99	0.74
1:A:364:HIS:CD2	1:A:364:HIS:H	2.02	0.74
1:A:389:THR:HG23	1:A:394:SER:CA	2.16	0.74
1:A:501:PRO:CA	1:A:502:SER:HB3	2.17	0.74
1:C:243:PRO:CB	1:C:244:GLY:HA3	2.15	0.74
1:C:494:GLN:O	1:C:498:GLN:N	2.20	0.74
1:A:413:LEU:HD13	1:A:422:LEU:HD13	1.68	0.74
1:C:682:MET:HE1	1:D:673:LEU:HD23	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:PRO:CA	1:C:502:SER:HB3	2.17	0.74
1:D:494:GLN:O	1:D:498:GLN:N	2.20	0.74
1:B:494:GLN:O	1:B:498:GLN:N	2.20	0.74
1:A:242:ARG:N	1:A:243:PRO:HA	1.98	0.74
1:C:400:ALA:O	1:C:703:ILE:HD11	1.88	0.74
1:D:413:LEU:HD13	1:D:422:LEU:HD13	1.68	0.74
1:B:426:TRP:CA	1:B:430:VAL:HG12	2.05	0.74
1:B:487:TYR:HE1	1:B:491:ARG:CD	1.99	0.74
1:B:501:PRO:CA	1:B:502:SER:HB3	2.17	0.74
1:B:682:MET:HE1	1:A:673:LEU:HD23	1.69	0.74
1:A:571:LYS:HE3	1:A:696:ILE:CD1	2.16	0.74
1:C:589:PHE:O	1:C:593:THR:HG23	1.88	0.74
1:C:635:LEU:HD11	1:D:647:LEU:HD12	1.67	0.74
1:D:400:ALA:O	1:D:703:ILE:HD11	1.88	0.74
1:D:501:PRO:CA	1:D:502:SER:HB3	2.17	0.74
1:B:400:ALA:O	1:B:703:ILE:HD11	1.88	0.74
1:A:400:ALA:O	1:A:703:ILE:HD11	1.88	0.74
1:A:589:PHE:O	1:A:593:THR:HG23	1.88	0.74
1:B:245:PHE:CE2	1:D:376:PRO:CG	2.71	0.73
1:A:669:LEU:HD12	1:A:670:THR:HB	1.70	0.73
1:C:474:ARG:CZ	1:C:478:GLU:OE2	2.36	0.73
1:D:656:LYS:HD2	1:D:656:LYS:C	2.09	0.73
1:C:501:PRO:CB	1:C:502:SER:HB3	2.17	0.73
1:A:474:ARG:CZ	1:A:478:GLU:OE2	2.36	0.73
1:A:494:GLN:O	1:A:498:GLN:N	2.20	0.73
1:A:498:GLN:NE2	1:A:710:LYS:NZ	2.34	0.73
1:A:374:TYR:HE1	1:C:210:GLU:HG2	1.52	0.73
1:C:413:LEU:HD13	1:C:422:LEU:HD13	1.68	0.73
1:B:243:PRO:CB	1:B:244:GLY:HA3	2.15	0.73
1:B:501:PRO:CB	1:B:502:SER:HB3	2.17	0.73
1:B:656:LYS:HD2	1:B:656:LYS:C	2.08	0.73
1:B:669:LEU:HD12	1:B:670:THR:HB	1.70	0.73
1:A:656:LYS:HD2	1:A:656:LYS:C	2.09	0.73
1:C:514:ILE:O	1:C:518:VAL:CG2	2.30	0.73
1:D:489:PHE:CD1	1:D:524:LEU:HD12	2.24	0.73
1:D:514:ILE:O	1:D:518:VAL:CG2	2.30	0.73
1:C:426:TRP:CA	1:C:430:VAL:HG12	2.05	0.73
1:C:423:GLN:NE2	1:C:423:GLN:O	2.22	0.73
1:C:669:LEU:HD12	1:C:670:THR:HB	1.70	0.73
1:D:396:LEU:HD13	1:D:418:LEU:CD2	2.15	0.73
1:D:474:ARG:CZ	1:D:478:GLU:OE2	2.36	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:501:PRO:CB	1:D:502:SER:HB3	2.17	0.73
1:B:489:PHE:CD1	1:B:524:LEU:HD12	2.24	0.73
1:A:489:PHE:CD1	1:A:524:LEU:HD12	2.24	0.73
1:A:576:ASP:CG	1:A:685:THR:HG21	2.09	0.73
1:B:389:THR:HG23	1:B:394:SER:CA	2.16	0.73
1:B:589:PHE:O	1:B:593:THR:HG23	1.88	0.73
1:C:389:THR:HG23	1:C:394:SER:CA	2.16	0.73
1:C:413:LEU:CD1	1:C:422:LEU:HD13	2.19	0.73
1:B:596:VAL:CG1	1:B:628:ASN:O	2.35	0.72
1:B:644:MET:HG3	1:A:645:GLY:O	1.89	0.72
1:A:413:LEU:CD1	1:A:422:LEU:HD13	2.19	0.72
1:C:136:LEU:HB2	1:C:141:LYS:O	1.89	0.72
1:C:656:LYS:HD2	1:C:656:LYS:C	2.09	0.72
1:D:413:LEU:CD1	1:D:422:LEU:HD13	2.19	0.72
1:B:423:GLN:NE2	1:B:423:GLN:O	2.22	0.72
1:C:489:PHE:CD1	1:C:524:LEU:HD12	2.24	0.72
1:D:387:ILE:CG1	1:D:421:LEU:HD11	2.19	0.72
1:D:589:PHE:O	1:D:593:THR:HG23	1.88	0.72
1:B:474:ARG:CZ	1:B:478:GLU:OE2	2.37	0.72
1:B:635:LEU:CD1	1:A:647:LEU:CD1	2.62	0.72
1:A:710:LYS:HE2	1:A:711:SER:HG	1.52	0.72
1:A:710:LYS:HE3	1:A:711:SER:N	2.05	0.72
1:D:669:LEU:HD12	1:D:670:THR:HB	1.70	0.72
1:D:710:LYS:HE3	1:D:711:SER:N	2.05	0.72
1:B:387:ILE:CG1	1:B:421:LEU:HD11	2.19	0.72
1:D:423:GLN:O	1:D:423:GLN:NE2	2.22	0.72
1:B:136:LEU:HB2	1:B:141:LYS:O	1.89	0.72
1:B:716:MET:SD	1:B:717:ARG:N	2.63	0.72
1:A:716:MET:SD	1:A:717:ARG:N	2.63	0.72
1:A:423:GLN:O	1:A:423:GLN:NE2	2.22	0.72
1:C:386:CYS:HB3	1:C:395:VAL:CB	2.17	0.72
1:B:576:ASP:CG	1:B:685:THR:HG21	2.09	0.71
1:A:136:LEU:HB2	1:A:141:LYS:O	1.89	0.71
1:A:644:MET:HG3	1:C:645:GLY:O	1.90	0.71
1:C:198:TYR:HE1	1:C:242:ARG:HD2	1.55	0.71
1:D:136:LEU:HB2	1:D:141:LYS:O	1.89	0.71
1:D:653:TYR:HE1	1:D:656:LYS:CG	2.02	0.71
1:A:389:THR:HG23	1:A:393:ASN:O	1.90	0.71
1:C:357:ILE:HG22	1:C:362:CYS:HB2	1.72	0.71
1:C:644:MET:HG3	1:D:645:GLY:O	1.90	0.71
1:C:653:TYR:HE1	1:C:656:LYS:CG	2.02	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:386:CYS:HB3	1:D:395:VAL:CB	2.17	0.71
1:D:498:GLN:NE2	1:D:710:LYS:HZ3	1.83	0.71
1:D:576:ASP:CG	1:D:685:THR:HG21	2.09	0.71
1:D:669:LEU:O	1:D:673:LEU:HB3	1.91	0.71
1:B:413:LEU:CD1	1:B:422:LEU:HD13	2.19	0.71
1:B:635:LEU:HD11	1:A:647:LEU:HD12	1.68	0.71
1:B:653:TYR:HE1	1:B:656:LYS:CG	2.02	0.71
1:B:710:LYS:HE3	1:B:711:SER:N	2.05	0.71
1:A:243:PRO:CB	1:A:244:GLY:HA3	2.15	0.71
1:C:387:ILE:CG1	1:C:421:LEU:HD11	2.19	0.71
1:C:576:ASP:CG	1:C:685:THR:HG21	2.09	0.71
1:C:387:ILE:HD13	1:C:387:ILE:O	1.91	0.71
1:C:716:MET:SD	1:C:717:ARG:N	2.63	0.71
1:D:389:THR:HG23	1:D:394:SER:CA	2.16	0.71
1:B:669:LEU:O	1:B:673:LEU:HB3	1.91	0.71
1:A:596:VAL:CG1	1:A:628:ASN:O	2.35	0.71
1:C:389:THR:HG23	1:C:393:ASN:O	1.90	0.71
1:D:389:THR:HG23	1:D:393:ASN:O	1.90	0.71
1:B:673:LEU:HD23	1:D:682:MET:HE1	1.73	0.71
1:A:387:ILE:CG1	1:A:421:LEU:HD11	2.19	0.71
1:A:387:ILE:O	1:A:387:ILE:HD13	1.91	0.71
1:A:669:LEU:O	1:A:673:LEU:HB3	1.91	0.71
1:C:710:LYS:HE3	1:C:711:SER:N	2.05	0.71
1:D:357:ILE:HG22	1:D:362:CYS:HB2	1.72	0.71
1:A:653:TYR:HE1	1:A:656:LYS:CG	2.02	0.71
1:C:596:VAL:CG1	1:C:628:ASN:O	2.35	0.71
1:C:669:LEU:O	1:C:673:LEU:HB3	1.91	0.71
1:D:359:GLU:OE2	1:D:360:PRO:CD	2.28	0.71
1:D:426:TRP:HD1	1:D:430:VAL:HG11	1.56	0.71
1:A:635:LEU:CD1	1:C:647:LEU:CD1	2.64	0.71
1:B:384:LEU:HD12	1:B:384:LEU:N	2.06	0.71
1:A:495:TYR:O	1:A:501:PRO:HD3	1.91	0.71
1:D:426:TRP:CA	1:D:430:VAL:HG12	2.05	0.71
1:D:596:VAL:CG1	1:D:628:ASN:O	2.35	0.71
1:B:426:TRP:HD1	1:B:430:VAL:HG11	1.56	0.71
1:C:401:TYR:CD2	1:C:499:ARG:NH2	2.59	0.71
1:D:401:TYR:CG	1:D:499:ARG:NH2	2.59	0.71
1:B:717:ARG:HE	1:B:718:LYS:H	1.39	0.70
1:D:198:TYR:HE1	1:D:242:ARG:HD2	1.55	0.70
1:B:357:ILE:HG22	1:B:362:CYS:HB2	1.73	0.70
1:B:596:VAL:HG21	1:B:630:LEU:HA	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:495:TYR:O	1:B:501:PRO:HD3	1.91	0.70
1:A:401:TYR:CG	1:A:499:ARG:NH2	2.59	0.70
1:A:401:TYR:CD2	1:A:499:ARG:NH2	2.59	0.70
1:B:389:THR:HG23	1:B:393:ASN:O	1.90	0.70
1:B:487:TYR:CE1	1:B:491:ARG:HG3	2.26	0.70
1:A:596:VAL:HG21	1:A:630:LEU:HA	1.73	0.70
1:D:716:MET:SD	1:D:717:ARG:N	2.63	0.70
1:B:645:GLY:O	1:D:644:MET:HG3	1.90	0.70
1:A:487:TYR:CE1	1:A:491:ARG:HG3	2.26	0.70
1:C:401:TYR:CG	1:C:499:ARG:NH2	2.59	0.70
1:C:495:TYR:O	1:C:501:PRO:HD3	1.91	0.70
1:D:717:ARG:HE	1:D:718:LYS:H	1.39	0.70
1:B:401:TYR:CG	1:B:499:ARG:NH2	2.59	0.70
1:A:514:ILE:O	1:A:518:VAL:CG2	2.30	0.70
1:D:495:TYR:O	1:D:501:PRO:HD3	1.91	0.70
1:B:386:CYS:HB3	1:B:395:VAL:HG23	1.74	0.70
1:B:387:ILE:O	1:B:387:ILE:HD13	1.91	0.70
1:C:426:TRP:HD1	1:C:430:VAL:HG11	1.56	0.70
1:C:596:VAL:HG21	1:C:630:LEU:HA	1.73	0.70
1:D:487:TYR:CE1	1:D:491:ARG:HG3	2.26	0.70
1:A:682:MET:HE2	1:C:673:LEU:HD23	1.74	0.70
1:D:387:ILE:O	1:D:387:ILE:HD13	1.91	0.70
1:B:386:CYS:HB3	1:B:395:VAL:CB	2.17	0.70
1:B:436:PHE:O	1:B:440:VAL:HG23	1.92	0.70
1:A:386:CYS:HB3	1:A:395:VAL:CB	2.17	0.70
1:A:562:MET:CE	1:C:582:PHE:HB3	2.22	0.70
1:D:489:PHE:HD1	1:D:524:LEU:HD12	1.57	0.70
1:B:374:TYR:HE2	1:A:235:PHE:CD1	2.07	0.69
1:B:514:ILE:O	1:B:518:VAL:CG2	2.30	0.69
1:B:649:PHE:H	1:B:649:PHE:HD2	1.39	0.69
1:A:357:ILE:HG22	1:A:362:CYS:HB2	1.72	0.69
1:A:717:ARG:HE	1:A:718:LYS:H	1.39	0.69
1:C:487:TYR:CE1	1:C:491:ARG:HG3	2.26	0.69
1:D:401:TYR:CD2	1:D:499:ARG:NH2	2.59	0.69
1:B:562:MET:CE	1:A:582:PHE:HB3	2.22	0.69
1:A:584:TYR:OH	1:A:641:THR:HB	1.91	0.69
1:A:649:PHE:H	1:A:649:PHE:HD2	1.39	0.69
1:C:436:PHE:O	1:C:440:VAL:HG23	1.92	0.69
1:D:649:PHE:H	1:D:649:PHE:HD2	1.39	0.69
1:A:426:TRP:HD1	1:A:430:VAL:HG11	1.56	0.69
1:B:516:PHE:CE2	1:B:554:TYR:CD2	2.81	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:386:CYS:HB3	1:D:395:VAL:HG23	1.74	0.69
1:D:584:TYR:OH	1:D:641:THR:HB	1.91	0.69
1:B:401:TYR:CD2	1:B:499:ARG:NH2	2.59	0.69
1:A:184:ASP:C	1:A:186:LEU:H	1.96	0.69
1:A:436:PHE:O	1:A:440:VAL:HG23	1.92	0.69
1:D:516:PHE:CE2	1:D:554:TYR:CD2	2.81	0.69
1:B:466:LYS:CA	1:B:471:ASP:OD2	2.41	0.69
1:B:584:TYR:OH	1:B:641:THR:HB	1.91	0.69
1:B:669:LEU:HD12	1:B:670:THR:CA	2.22	0.69
1:A:357:ILE:HD12	1:A:365:LEU:HB3	1.75	0.69
1:A:717:ARG:NE	1:A:718:LYS:H	1.91	0.69
1:C:516:PHE:CE2	1:C:554:TYR:CD2	2.81	0.69
1:C:584:TYR:OH	1:C:641:THR:HB	1.91	0.69
1:C:717:ARG:HE	1:C:718:LYS:H	1.39	0.69
1:C:717:ARG:NE	1:C:718:LYS:H	1.91	0.69
1:D:436:PHE:O	1:D:440:VAL:HG23	1.92	0.69
1:D:572:MET:HE1	1:D:686:VAL:HG22	1.74	0.69
1:D:669:LEU:HD12	1:D:670:THR:CA	2.22	0.69
1:C:376:PRO:CG	1:D:245:PHE:CE2	2.74	0.69
1:B:717:ARG:NE	1:B:718:LYS:H	1.91	0.69
1:A:516:PHE:CE2	1:A:554:TYR:CD2	2.81	0.69
1:C:346:ILE:HG21	1:C:408:ASN:OD1	1.93	0.69
1:C:669:LEU:HD12	1:C:670:THR:CA	2.22	0.69
1:B:198:TYR:HE1	1:B:242:ARG:HD2	1.55	0.68
1:B:538:VAL:O	1:B:541:MET:N	2.26	0.68
1:A:538:VAL:O	1:A:541:MET:N	2.26	0.68
1:A:669:LEU:HD12	1:A:670:THR:CA	2.22	0.68
1:D:346:ILE:HG21	1:D:408:ASN:OD1	1.93	0.68
1:D:596:VAL:HG21	1:D:630:LEU:HA	1.73	0.68
1:D:717:ARG:NE	1:D:718:LYS:H	1.91	0.68
1:A:357:ILE:CD1	1:A:365:LEU:HD12	2.23	0.68
1:A:489:PHE:HD1	1:A:524:LEU:HD12	1.57	0.68
1:C:348:VAL:O	1:C:352:ILE:HG13	1.94	0.68
1:D:346:ILE:HG22	1:D:412:MET:SD	2.33	0.68
1:B:348:VAL:O	1:B:352:ILE:HG13	1.94	0.68
1:C:466:LYS:CA	1:C:471:ASP:OD2	2.41	0.68
1:D:366:SER:HB3	1:D:369:PHE:CE1	2.28	0.68
1:B:302:THR:O	1:B:306:THR:HB	1.93	0.68
1:B:346:ILE:HG22	1:B:412:MET:SD	2.33	0.68
1:B:357:ILE:CD1	1:B:365:LEU:HD12	2.23	0.68
1:A:384:LEU:HD12	1:A:384:LEU:N	2.06	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:498:GLN:HE22	1:A:710:LYS:HZ3	1.28	0.68
1:C:184:ASP:C	1:C:186:LEU:H	1.96	0.68
1:C:346:ILE:HG22	1:C:412:MET:SD	2.33	0.68
1:D:357:ILE:CD1	1:D:365:LEU:HD12	2.23	0.68
1:C:572:MET:HE1	1:C:686:VAL:HG22	1.74	0.68
1:D:357:ILE:HD12	1:D:365:LEU:HB3	1.75	0.68
1:D:482:VAL:CG1	1:D:527:VAL:HG21	2.23	0.68
1:B:489:PHE:HD1	1:B:524:LEU:HD12	1.57	0.68
1:B:582:PHE:HB3	1:D:562:MET:CE	2.24	0.68
1:C:489:PHE:HD1	1:C:524:LEU:HD12	1.57	0.68
1:D:521:LEU:HD23	1:D:522:PHE:N	2.09	0.68
1:B:521:LEU:C	1:B:521:LEU:HD23	2.14	0.68
1:B:647:LEU:HD12	1:D:635:LEU:HD11	1.69	0.68
1:A:302:THR:O	1:A:306:THR:HB	1.94	0.68
1:C:357:ILE:CD1	1:C:365:LEU:HD12	2.23	0.68
1:B:543:PHE:CE1	1:A:662:LEU:CD2	2.77	0.68
1:C:538:VAL:O	1:C:541:MET:N	2.26	0.68
1:D:466:LYS:CA	1:D:471:ASP:OD2	2.41	0.68
1:B:383:ASP:HB3	1:B:384:LEU:HA	1.76	0.68
1:A:521:LEU:HD23	1:A:521:LEU:C	2.14	0.68
1:C:482:VAL:CG1	1:C:527:VAL:HG21	2.23	0.68
1:C:521:LEU:HD23	1:C:522:PHE:N	2.09	0.68
1:D:383:ASP:HB3	1:D:384:LEU:HA	1.76	0.68
1:A:466:LYS:CA	1:A:471:ASP:OD2	2.41	0.68
1:C:521:LEU:HD23	1:C:521:LEU:C	2.14	0.68
1:D:348:VAL:O	1:D:352:ILE:HG13	1.94	0.68
1:D:474:ARG:HD3	1:D:478:GLU:OE2	1.94	0.68
1:A:346:ILE:HG22	1:A:412:MET:SD	2.33	0.67
1:A:474:ARG:HD3	1:A:478:GLU:OE2	1.94	0.67
1:C:576:ASP:OD2	1:C:685:THR:HG23	1.94	0.67
1:D:521:LEU:HD23	1:D:521:LEU:C	2.14	0.67
1:D:538:VAL:O	1:D:541:MET:N	2.26	0.67
1:B:346:ILE:HG22	1:B:412:MET:HG3	1.75	0.67
1:B:346:ILE:HG21	1:B:408:ASN:OD1	1.93	0.67
1:B:662:LEU:CD2	1:D:543:PHE:CE1	2.77	0.67
1:A:482:VAL:CG1	1:A:527:VAL:HG21	2.23	0.67
1:C:357:ILE:HD12	1:C:365:LEU:HB3	1.75	0.67
1:D:184:ASP:C	1:D:186:LEU:H	1.96	0.67
1:D:302:THR:O	1:D:306:THR:HB	1.93	0.67
1:A:198:TYR:HE1	1:A:242:ARG:HD2	1.55	0.67
1:A:346:ILE:HG21	1:A:408:ASN:OD1	1.93	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:357:ILE:HD12	1:B:365:LEU:HB3	1.75	0.67
1:A:346:ILE:HG22	1:A:412:MET:HG3	1.75	0.67
1:D:346:ILE:HG22	1:D:412:MET:HG3	1.75	0.67
1:B:366:SER:HB3	1:B:369:PHE:CE1	2.28	0.67
1:A:348:VAL:O	1:A:352:ILE:HG13	1.94	0.67
1:A:648:GLU:O	1:A:648:GLU:HG3	1.95	0.67
1:C:302:THR:O	1:C:306:THR:HB	1.94	0.67
1:D:708:THR:C	1:D:712:PHE:HB2	2.14	0.67
1:B:482:VAL:CG1	1:B:527:VAL:HG21	2.23	0.67
1:C:672:ILE:HD13	1:C:672:ILE:C	2.15	0.67
1:D:280:ARG:HG2	1:D:284:GLY:O	1.95	0.67
1:D:576:ASP:OD2	1:D:685:THR:HG23	1.94	0.67
1:D:601:ASP:C	1:D:652:ASN:HD21	1.95	0.67
1:B:235:PHE:CD1	1:D:374:TYR:HE2	2.11	0.67
1:A:280:ARG:HG2	1:A:284:GLY:O	1.95	0.67
1:A:366:SER:HB3	1:A:369:PHE:CE1	2.28	0.67
1:A:601:ASP:C	1:A:652:ASN:HD21	1.95	0.67
1:A:672:ILE:HD13	1:A:672:ILE:C	2.15	0.67
1:C:374:TYR:HE2	1:D:235:PHE:CD1	2.10	0.67
1:C:718:LYS:O	1:C:719:ALA:HB2	1.95	0.67
1:B:184:ASP:C	1:B:186:LEU:H	1.96	0.67
1:B:521:LEU:HD23	1:B:522:PHE:N	2.09	0.67
1:A:346:ILE:HG12	1:A:347:GLY:N	2.09	0.67
1:A:708:THR:C	1:A:712:PHE:HB2	2.14	0.67
1:C:562:MET:CE	1:D:582:PHE:HB3	2.24	0.67
1:C:599:ILE:HD11	1:C:628:ASN:CB	2.25	0.67
1:D:374:TYR:O	1:D:377:VAL:N	2.26	0.67
1:D:346:ILE:HG12	1:D:347:GLY:N	2.09	0.67
1:A:239:THR:HB	1:A:243:PRO:HB3	1.76	0.67
1:C:280:ARG:HG2	1:C:284:GLY:O	1.95	0.67
1:B:242:ARG:N	1:B:243:PRO:HA	1.98	0.66
1:B:280:ARG:HG2	1:B:284:GLY:O	1.95	0.66
1:B:489:PHE:CD1	1:B:524:LEU:CD1	2.79	0.66
1:B:672:ILE:HD13	1:B:672:ILE:C	2.15	0.66
1:C:346:ILE:HG12	1:C:347:GLY:N	2.09	0.66
1:C:383:ASP:HB3	1:C:384:LEU:HA	1.76	0.66
1:C:386:CYS:HB3	1:C:395:VAL:HG23	1.74	0.66
1:A:383:ASP:HB3	1:A:384:LEU:HA	1.77	0.66
1:B:356:GLU:HA	1:B:366:SER:HG	1.61	0.66
1:A:521:LEU:HD23	1:A:522:PHE:N	2.09	0.66
1:B:474:ARG:HD3	1:B:478:GLU:OE2	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:489:PHE:CD1	1:A:524:LEU:CD1	2.79	0.66
1:C:366:SER:HB3	1:C:369:PHE:CE1	2.28	0.66
1:C:374:TYR:O	1:C:377:VAL:N	2.26	0.66
1:C:142:ARG:HD3	1:C:183:THR:HG21	1.78	0.66
1:C:346:ILE:HG22	1:C:412:MET:HG3	1.75	0.66
1:D:384:LEU:HD12	1:D:384:LEU:N	2.06	0.66
1:B:239:THR:HB	1:B:243:PRO:HB3	1.76	0.66
1:A:374:TYR:O	1:A:377:VAL:N	2.26	0.66
1:A:599:ILE:HD11	1:A:628:ASN:CB	2.25	0.66
1:C:649:PHE:H	1:C:649:PHE:HD2	1.39	0.66
1:C:708:THR:C	1:C:712:PHE:HB2	2.14	0.66
1:D:718:LYS:O	1:D:719:ALA:HB2	1.95	0.66
1:B:599:ILE:HD11	1:B:628:ASN:CB	2.25	0.66
1:B:708:THR:C	1:B:712:PHE:HB2	2.14	0.66
1:A:374:TYR:HE2	1:C:235:PHE:CD1	2.09	0.66
1:A:576:ASP:OD2	1:A:685:THR:HG23	1.94	0.66
1:C:543:PHE:CE1	1:D:662:LEU:CD2	2.78	0.66
1:D:359:GLU:CG	1:D:360:PRO:CD	2.74	0.66
1:B:210:GLU:HG2	1:D:374:TYR:CE1	2.30	0.66
1:B:576:ASP:OD2	1:B:685:THR:HG23	1.94	0.66
1:B:631:TYR:OH	1:A:660:ILE:CD1	2.44	0.66
1:B:660:ILE:CD1	1:D:631:TYR:OH	2.44	0.66
1:A:543:PHE:CE1	1:C:662:LEU:CD2	2.78	0.66
1:A:562:MET:HE1	1:C:582:PHE:CB	2.25	0.66
1:A:599:ILE:HD11	1:A:628:ASN:HA	1.77	0.66
1:C:239:THR:HB	1:C:243:PRO:HB3	1.77	0.66
1:D:489:PHE:CD1	1:D:524:LEU:CD1	2.79	0.66
1:D:599:ILE:HD11	1:D:628:ASN:CB	2.25	0.66
1:D:672:ILE:HD13	1:D:672:ILE:C	2.15	0.66
1:B:346:ILE:HG12	1:B:347:GLY:N	2.09	0.65
1:B:374:TYR:O	1:B:377:VAL:N	2.26	0.65
1:B:718:LYS:O	1:B:719:ALA:HB2	1.95	0.65
1:A:718:LYS:O	1:A:719:ALA:HB2	1.94	0.65
1:C:399:ILE:HG21	1:C:413:LEU:HD23	1.78	0.65
1:C:589:PHE:O	1:C:589:PHE:HD2	1.79	0.65
1:D:355:ARG:O	1:D:368:LYS:N	2.27	0.65
1:D:589:PHE:O	1:D:589:PHE:HD2	1.80	0.65
1:C:355:ARG:O	1:C:368:LYS:N	2.27	0.65
1:C:489:PHE:CD1	1:C:524:LEU:CD1	2.79	0.65
1:D:710:LYS:HG2	1:D:714:LYS:NZ	2.12	0.65
1:C:710:LYS:HG2	1:C:714:LYS:NZ	2.12	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:669:LEU:HD12	1:D:670:THR:CB	2.27	0.65
1:D:239:THR:CB	1:D:243:PRO:CB	2.75	0.65
1:A:710:LYS:HG2	1:A:714:LYS:NZ	2.11	0.65
1:B:158:LEU:HD21	1:B:162:MET:CE	2.27	0.65
1:A:562:MET:HE1	1:C:582:PHE:HB3	1.78	0.65
1:C:562:MET:HE1	1:D:582:PHE:CB	2.26	0.65
1:C:631:TYR:OH	1:D:660:ILE:CD1	2.44	0.65
1:D:381:LEU:HA	1:D:753:UNK:O	1.97	0.65
1:A:142:ARG:HD3	1:A:183:THR:HG21	1.78	0.65
1:A:158:LEU:HD21	1:A:162:MET:CE	2.27	0.65
1:C:239:THR:CB	1:C:243:PRO:CB	2.75	0.65
1:B:581:MET:O	1:B:585:LEU:HG	1.97	0.65
1:A:399:ILE:HG21	1:A:413:LEU:HD23	1.78	0.65
1:C:474:ARG:HD3	1:C:478:GLU:OE2	1.94	0.65
1:D:648:GLU:HG3	1:D:648:GLU:O	1.95	0.65
1:B:381:LEU:HA	1:B:753:UNK:O	1.97	0.65
1:B:644:MET:CG	1:A:645:GLY:O	2.45	0.65
1:A:501:PRO:HA	1:A:502:SER:HB3	1.79	0.65
1:C:374:TYR:CE1	1:D:210:GLU:HG2	2.32	0.65
1:C:648:GLU:HG3	1:C:648:GLU:O	1.95	0.65
1:C:669:LEU:HD12	1:C:670:THR:CB	2.27	0.65
1:D:717:ARG:HA	1:D:717:ARG:NE	2.12	0.65
1:B:399:ILE:HG21	1:B:413:LEU:HD23	1.78	0.65
1:B:669:LEU:HD12	1:B:670:THR:CB	2.27	0.65
1:C:717:ARG:HA	1:C:717:ARG:NE	2.12	0.65
1:B:448:PHE:HD2	1:B:448:PHE:O	1.81	0.64
1:B:589:PHE:O	1:B:589:PHE:HD2	1.79	0.64
1:A:359:GLU:CG	1:A:360:PRO:CD	2.74	0.64
1:C:313:LEU:HB2	1:C:365:LEU:HD11	1.74	0.64
1:C:487:TYR:CD1	1:C:491:ARG:HG3	2.32	0.64
1:D:142:ARG:HD3	1:D:183:THR:HG21	1.78	0.64
1:B:487:TYR:O	1:B:487:TYR:HD1	1.81	0.64
1:A:691:GLN:NE2	1:A:691:GLN:H	1.95	0.64
1:C:158:LEU:HD21	1:C:162:MET:CE	2.27	0.64
1:D:158:LEU:HD21	1:D:162:MET:CE	2.27	0.64
1:B:382:TYR:N	1:B:753:UNK:O	2.29	0.64
1:B:601:ASP:C	1:B:652:ASN:HD21	1.95	0.64
1:B:710:LYS:HG2	1:B:714:LYS:NZ	2.12	0.64
1:B:717:ARG:HA	1:B:717:ARG:NE	2.12	0.64
1:A:313:LEU:HD22	1:A:365:LEU:HD21	1.80	0.64
1:A:386:CYS:HB3	1:A:395:VAL:HG23	1.74	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:631:TYR:OH	1:C:660:ILE:CD1	2.46	0.64
1:C:188:GLN:HE21	1:C:188:GLN:H	1.46	0.64
1:C:381:LEU:HA	1:C:753:UNK:O	1.97	0.64
1:C:581:MET:O	1:C:585:LEU:HG	1.97	0.64
1:D:516:PHE:HE2	1:D:554:TYR:HE2	1.46	0.64
1:A:313:LEU:HB2	1:A:365:LEU:HD11	1.74	0.64
1:A:355:ARG:O	1:A:368:LYS:N	2.27	0.64
1:A:381:LEU:HA	1:A:753:UNK:O	1.97	0.64
1:A:589:PHE:O	1:A:589:PHE:HD2	1.80	0.64
1:C:313:LEU:HD22	1:C:365:LEU:HD21	1.80	0.64
1:C:487:TYR:O	1:C:487:TYR:HD1	1.81	0.64
1:D:356:GLU:HA	1:D:366:SER:HG	1.63	0.64
1:D:599:ILE:HD11	1:D:628:ASN:HA	1.78	0.64
1:B:648:GLU:HG3	1:B:648:GLU:O	1.95	0.64
1:A:487:TYR:CD1	1:A:491:ARG:HG3	2.32	0.64
1:A:487:TYR:HD1	1:A:487:TYR:O	1.81	0.64
1:A:516:PHE:HE2	1:A:554:TYR:CD2	2.16	0.64
1:C:562:MET:HE1	1:D:582:PHE:HB3	1.79	0.64
1:D:487:TYR:HD1	1:D:487:TYR:O	1.81	0.64
1:B:706:LEU:HD22	1:B:706:LEU:N	2.13	0.64
1:C:706:LEU:HD22	1:C:706:LEU:N	2.13	0.64
1:D:313:LEU:HD22	1:D:365:LEU:HD21	1.80	0.64
1:D:581:MET:O	1:D:585:LEU:HG	1.97	0.64
1:A:669:LEU:HD12	1:A:670:THR:CB	2.27	0.64
1:C:359:GLU:CG	1:C:360:PRO:CD	2.74	0.64
1:C:691:GLN:NE2	1:C:691:GLN:H	1.95	0.64
1:D:239:THR:HB	1:D:243:PRO:HB3	1.76	0.64
1:D:357:ILE:H	1:D:366:SER:HG	1.43	0.64
1:D:487:TYR:CD1	1:D:491:ARG:HG3	2.32	0.64
1:B:487:TYR:CD1	1:B:491:ARG:HG3	2.32	0.64
1:B:599:ILE:HD11	1:B:628:ASN:HA	1.78	0.64
1:A:239:THR:CB	1:A:243:PRO:CB	2.75	0.64
1:A:706:LEU:HD22	1:A:706:LEU:N	2.13	0.64
1:C:516:PHE:HE2	1:C:554:TYR:HE2	1.46	0.64
1:C:644:MET:CG	1:D:645:GLY:O	2.46	0.64
1:B:188:GLN:HE21	1:B:188:GLN:H	1.46	0.64
1:B:359:GLU:CG	1:B:360:PRO:CD	2.74	0.64
1:A:421:LEU:CD2	1:A:425:LYS:HE3	2.28	0.64
1:A:638:PHE:CE1	1:A:642:ILE:HD11	2.33	0.64
1:D:399:ILE:HG21	1:D:413:LEU:HD23	1.78	0.64
1:B:142:ARG:HD3	1:B:183:THR:HG21	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:313:LEU:HD22	1:B:365:LEU:HD21	1.80	0.64
1:B:645:GLY:O	1:D:644:MET:CG	2.46	0.64
1:A:188:GLN:HE21	1:A:188:GLN:H	1.46	0.64
1:D:638:PHE:CE1	1:D:642:ILE:HD11	2.33	0.64
1:B:635:LEU:HD11	1:A:647:LEU:HD11	1.79	0.63
1:B:710:LYS:HE3	1:B:711:SER:CA	2.28	0.63
1:C:421:LEU:CD2	1:C:425:LYS:HE3	2.28	0.63
1:B:689:ILE:O	1:B:692:GLU:N	2.31	0.63
1:A:448:PHE:O	1:A:448:PHE:HD2	1.81	0.63
1:A:710:LYS:HE3	1:A:711:SER:CA	2.28	0.63
1:A:717:ARG:HA	1:A:717:ARG:NE	2.12	0.63
1:A:239:THR:HB	1:A:243:PRO:CB	2.29	0.63
1:A:581:MET:O	1:A:585:LEU:HG	1.97	0.63
1:C:142:ARG:CD	1:C:183:THR:HG21	2.29	0.63
1:C:710:LYS:HE2	1:C:711:SER:HG	1.62	0.63
1:B:638:PHE:CE1	1:B:642:ILE:HD11	2.33	0.63
1:B:669:LEU:HD12	1:B:669:LEU:C	2.19	0.63
1:C:689:ILE:O	1:C:692:GLU:N	2.31	0.63
1:D:239:THR:HB	1:D:243:PRO:CB	2.29	0.63
1:D:313:LEU:HB2	1:D:365:LEU:HD11	1.74	0.63
1:D:516:PHE:HE2	1:D:554:TYR:CD2	2.16	0.63
1:D:641:THR:HG23	1:D:675:LEU:HD21	1.81	0.63
1:B:421:LEU:CD2	1:B:425:LYS:HE3	2.28	0.63
1:A:142:ARG:CD	1:A:183:THR:HG21	2.29	0.63
1:A:356:GLU:CA	1:A:366:SER:OG	2.47	0.63
1:C:239:THR:OG1	1:C:241:GLY:CA	2.47	0.63
1:C:501:PRO:HA	1:C:502:SER:HB3	1.79	0.63
1:C:638:PHE:CE1	1:C:642:ILE:HD11	2.33	0.63
1:D:421:LEU:CD2	1:D:425:LYS:HE3	2.28	0.63
1:D:689:ILE:O	1:D:692:GLU:N	2.31	0.63
1:B:313:LEU:HB2	1:B:365:LEU:HD11	1.74	0.63
1:A:158:LEU:HD22	1:A:158:LEU:O	1.99	0.63
1:A:644:MET:CG	1:C:645:GLY:O	2.46	0.63
1:D:188:GLN:HE21	1:D:188:GLN:H	1.46	0.63
1:B:239:THR:CB	1:B:243:PRO:CB	2.75	0.63
1:B:410:HIS:CE1	1:B:699:LEU:CD1	2.82	0.63
1:B:691:GLN:NE2	1:B:691:GLN:H	1.96	0.63
1:B:516:PHE:HE2	1:B:554:TYR:HE2	1.46	0.63
1:D:448:PHE:O	1:D:448:PHE:HD2	1.81	0.63
1:D:710:LYS:HE3	1:D:711:SER:CA	2.28	0.63
1:B:641:THR:HG23	1:B:675:LEU:HD21	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:647:LEU:HD11	1:D:635:LEU:HD11	1.79	0.63
1:C:382:TYR:N	1:C:753:UNK:O	2.29	0.63
1:C:448:PHE:HD2	1:C:448:PHE:O	1.81	0.63
1:C:710:LYS:HE3	1:C:711:SER:CA	2.28	0.63
1:B:239:THR:HB	1:B:243:PRO:CB	2.29	0.62
1:A:584:TYR:HH	1:A:641:THR:CB	2.10	0.62
1:D:706:LEU:N	1:D:706:LEU:HD22	2.13	0.62
1:A:374:TYR:CE1	1:C:210:GLU:HG2	2.33	0.62
1:A:410:HIS:CE1	1:A:699:LEU:CD1	2.82	0.62
1:A:689:ILE:O	1:A:692:GLU:N	2.31	0.62
1:C:384:LEU:HD12	1:C:384:LEU:N	2.06	0.62
1:D:142:ARG:CD	1:D:183:THR:HG21	2.29	0.62
1:D:501:PRO:HA	1:D:502:SER:HB3	1.79	0.62
1:B:158:LEU:O	1:B:158:LEU:HD22	1.99	0.62
1:C:410:HIS:CE1	1:C:699:LEU:CD1	2.82	0.62
1:D:239:THR:OG1	1:D:241:GLY:CA	2.47	0.62
1:D:410:HIS:CE1	1:D:699:LEU:CD1	2.82	0.62
1:B:142:ARG:CD	1:B:183:THR:HG21	2.29	0.62
1:A:516:PHE:HE2	1:A:554:TYR:HE2	1.46	0.62
1:C:641:THR:HG23	1:C:675:LEU:HD21	1.81	0.62
1:D:691:GLN:NE2	1:D:691:GLN:H	1.96	0.62
1:D:710:LYS:CG	1:D:714:LYS:NZ	2.63	0.62
1:B:253:SER:HA	1:B:287:VAL:HG13	1.81	0.62
1:B:501:PRO:HA	1:B:502:SER:HB3	1.79	0.62
1:C:198:TYR:CE1	1:C:242:ARG:CD	2.81	0.62
1:A:641:THR:HG23	1:A:675:LEU:HD21	1.81	0.62
1:C:239:THR:HB	1:C:243:PRO:CB	2.29	0.62
1:C:320:HIS:HB3	1:C:323:LEU:HD23	1.82	0.62
1:C:599:ILE:HD11	1:C:628:ASN:HA	1.78	0.62
1:C:669:LEU:HD12	1:C:669:LEU:C	2.19	0.62
1:D:158:LEU:O	1:D:158:LEU:HD22	1.99	0.62
1:C:158:LEU:O	1:C:158:LEU:HD22	1.99	0.62
1:D:382:TYR:N	1:D:753:UNK:O	2.29	0.62
1:B:346:ILE:HG22	1:B:412:MET:CG	2.30	0.62
1:B:357:ILE:H	1:B:366:SER:HG	1.45	0.62
1:C:253:SER:HA	1:C:287:VAL:HG13	1.81	0.62
1:D:356:GLU:CA	1:D:366:SER:OG	2.47	0.62
1:B:516:PHE:HE2	1:B:554:TYR:CD2	2.16	0.62
1:A:320:HIS:HB3	1:A:323:LEU:HD23	1.82	0.62
1:C:710:LYS:CG	1:C:714:LYS:NZ	2.63	0.62
1:D:346:ILE:HG22	1:D:412:MET:CG	2.30	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:320:HIS:HB3	1:B:323:LEU:HD23	1.82	0.62
1:B:355:ARG:O	1:B:368:LYS:N	2.27	0.62
1:B:409:ARG:NE	1:B:699:LEU:HD11	2.15	0.62
1:A:583:VAL:HG12	1:A:587:PHE:CD2	2.35	0.62
1:A:653:TYR:CE1	1:A:656:LYS:HA	2.35	0.62
1:A:669:LEU:HD12	1:A:669:LEU:C	2.19	0.62
1:D:669:LEU:HD12	1:D:669:LEU:C	2.19	0.62
1:B:418:LEU:O	1:B:422:LEU:HD12	2.00	0.61
1:B:550:THR:O	1:B:553:LEU:HB2	2.00	0.61
1:B:653:TYR:CE1	1:B:656:LYS:HA	2.35	0.61
1:B:710:LYS:CG	1:B:714:LYS:NZ	2.63	0.61
1:A:253:SER:HA	1:A:287:VAL:HG13	1.81	0.61
1:A:346:ILE:HG22	1:A:412:MET:CG	2.30	0.61
1:D:320:HIS:HB3	1:D:323:LEU:HD23	1.82	0.61
1:D:653:TYR:CE1	1:D:656:LYS:HA	2.35	0.61
1:B:374:TYR:CE1	1:A:210:GLU:HG2	2.32	0.61
1:B:673:LEU:HD23	1:D:682:MET:HE2	1.82	0.61
1:C:346:ILE:HG22	1:C:412:MET:CG	2.30	0.61
1:A:239:THR:OG1	1:A:241:GLY:CA	2.47	0.61
1:A:550:THR:O	1:A:553:LEU:HB2	2.00	0.61
1:C:371:GLU:HB3	1:C:372:TRP:CD1	2.36	0.61
1:C:550:THR:O	1:C:553:LEU:HB2	2.00	0.61
1:A:409:ARG:NE	1:A:699:LEU:HD11	2.15	0.61
1:C:508:VAL:CG1	1:C:511:TYR:HE1	2.08	0.61
1:C:583:VAL:HG12	1:C:587:PHE:CD2	2.35	0.61
1:D:253:SER:HA	1:D:287:VAL:HG13	1.81	0.61
1:B:565:TYR:CG	1:A:579:ARG:NH1	2.68	0.61
1:B:583:VAL:HG12	1:B:587:PHE:CD2	2.35	0.61
1:A:710:LYS:HE2	1:A:711:SER:CB	2.31	0.61
1:A:710:LYS:CG	1:A:714:LYS:NZ	2.63	0.61
1:D:198:TYR:CE1	1:D:242:ARG:CD	2.81	0.61
1:B:579:ARG:NH1	1:D:565:TYR:CG	2.69	0.61
1:A:371:GLU:HB3	1:A:372:TRP:CD1	2.36	0.61
1:A:635:LEU:HD11	1:C:647:LEU:HD11	1.81	0.61
1:C:242:ARG:HB3	1:C:243:PRO:O	2.01	0.61
1:D:371:GLU:HB3	1:D:372:TRP:CD1	2.36	0.61
1:D:583:VAL:HG12	1:D:587:PHE:HD2	1.66	0.61
1:B:242:ARG:HB3	1:B:243:PRO:O	2.01	0.61
1:B:371:GLU:HB3	1:B:372:TRP:CD1	2.36	0.61
1:A:418:LEU:O	1:A:422:LEU:HD12	2.00	0.61
1:D:242:ARG:HB3	1:D:243:PRO:O	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:583:VAL:HG12	1:D:587:PHE:CD2	2.35	0.61
1:C:516:PHE:HE2	1:C:554:TYR:CD2	2.16	0.61
1:C:583:VAL:HG12	1:C:587:PHE:HD2	1.66	0.61
1:C:664:LEU:C	1:C:668:ILE:HD12	2.21	0.61
1:D:550:THR:O	1:D:553:LEU:HB2	2.00	0.61
1:D:710:LYS:HE2	1:D:711:SER:CB	2.31	0.61
1:B:239:THR:OG1	1:B:241:GLY:CA	2.47	0.61
1:B:421:LEU:O	1:B:421:LEU:HD23	2.01	0.61
1:A:583:VAL:HG12	1:A:587:PHE:HD2	1.66	0.61
1:A:682:MET:HE1	1:C:673:LEU:HD23	1.81	0.61
1:C:142:ARG:NE	1:C:183:THR:CG2	2.64	0.61
1:C:565:TYR:CG	1:D:579:ARG:NH1	2.69	0.61
1:C:635:LEU:HD11	1:D:647:LEU:HD11	1.79	0.61
1:D:418:LEU:O	1:D:422:LEU:HD12	2.00	0.61
1:A:242:ARG:HB3	1:A:243:PRO:O	2.01	0.61
1:B:682:MET:HE2	1:A:673:LEU:HD23	1.83	0.60
1:A:367:ARG:CG	1:A:367:ARG:HH11	2.14	0.60
1:A:565:TYR:CG	1:C:579:ARG:NH1	2.69	0.60
1:D:664:LEU:C	1:D:668:ILE:HD12	2.21	0.60
1:A:526:SER:HB2	1:A:540:SER:HB3	1.83	0.60
1:A:701:ARG:HH11	1:A:701:ARG:CG	2.14	0.60
1:D:421:LEU:HD23	1:D:421:LEU:O	2.01	0.60
1:B:367:ARG:HH11	1:B:367:ARG:CG	2.14	0.60
1:B:526:SER:HB2	1:B:540:SER:HB3	1.83	0.60
1:C:584:TYR:HH	1:C:641:THR:CB	2.09	0.60
1:C:653:TYR:CE1	1:C:656:LYS:HA	2.35	0.60
1:D:142:ARG:NE	1:D:183:THR:CG2	2.64	0.60
1:B:142:ARG:NE	1:B:183:THR:CG2	2.64	0.60
1:C:409:ARG:NE	1:C:699:LEU:HD11	2.15	0.60
1:C:701:ARG:HH11	1:C:701:ARG:CG	2.14	0.60
1:B:413:LEU:O	1:B:419:ASN:HB2	2.02	0.60
1:B:579:ARG:HH11	1:B:579:ARG:CG	2.14	0.60
1:A:421:LEU:HD23	1:A:421:LEU:O	2.01	0.60
1:A:487:TYR:HE1	1:A:491:ARG:CG	2.13	0.60
1:A:571:LYS:HE3	1:A:696:ILE:HD12	1.83	0.60
1:C:418:LEU:O	1:C:422:LEU:HD12	2.00	0.60
1:C:487:TYR:HE1	1:C:491:ARG:CG	2.13	0.60
1:B:583:VAL:HG12	1:B:587:PHE:HD2	1.66	0.60
1:A:198:TYR:CE1	1:A:242:ARG:CD	2.81	0.60
1:C:710:LYS:HE2	1:C:711:SER:CB	2.31	0.60
1:B:356:GLU:CA	1:B:366:SER:OG	2.47	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:487:TYR:HE1	1:B:491:ARG:CG	2.13	0.60
1:C:526:SER:HB2	1:C:540:SER:HB3	1.83	0.60
1:D:526:SER:HB2	1:D:540:SER:HB3	1.83	0.60
1:A:142:ARG:NE	1:A:183:THR:CG2	2.64	0.60
1:C:421:LEU:HD23	1:C:421:LEU:O	2.01	0.60
1:C:647:LEU:O	1:C:649:PHE:HD2	1.85	0.60
1:D:462:PRO:HB3	1:D:530:TYR:CE2	2.36	0.60
1:B:571:LYS:HE3	1:B:696:ILE:HD12	1.83	0.59
1:C:496:PHE:CB	1:C:501:PRO:HG3	2.31	0.59
1:D:409:ARG:NE	1:D:699:LEU:HD11	2.15	0.59
1:D:487:TYR:HE1	1:D:491:ARG:CG	2.13	0.59
1:D:647:LEU:O	1:D:649:PHE:HD2	1.85	0.59
1:B:198:TYR:CE1	1:B:242:ARG:CD	2.81	0.59
1:A:413:LEU:O	1:A:419:ASN:HB2	2.02	0.59
1:A:583:VAL:CG1	1:A:587:PHE:CE2	2.85	0.59
1:D:496:PHE:CB	1:D:501:PRO:HG3	2.31	0.59
1:A:462:PRO:HB3	1:A:530:TYR:CE2	2.36	0.59
1:C:356:GLU:CA	1:C:366:SER:OG	2.47	0.59
1:C:367:ARG:HH11	1:C:367:ARG:CG	2.14	0.59
1:D:367:ARG:CG	1:D:367:ARG:HH11	2.14	0.59
1:C:400:ALA:O	1:C:703:ILE:CD1	2.51	0.59
1:C:413:LEU:O	1:C:419:ASN:HB2	2.02	0.59
1:C:601:ASP:C	1:C:652:ASN:HD21	1.95	0.59
1:D:359:GLU:CB	1:D:360:PRO:HD2	2.33	0.59
1:C:516:PHE:CE2	1:C:554:TYR:HD2	2.21	0.59
1:C:571:LYS:HE3	1:C:696:ILE:HD12	1.83	0.59
1:C:685:THR:O	1:C:689:ILE:CG1	2.51	0.59
1:D:583:VAL:CG1	1:D:587:PHE:CE2	2.85	0.59
1:B:359:GLU:CB	1:B:360:PRO:HD2	2.33	0.59
1:D:367:ARG:NH2	1:D:385:SER:HB2	2.16	0.59
1:B:246:TYR:CE1	1:B:248:GLY:CA	2.86	0.59
1:B:403:SER:O	1:B:404:SER:HB3	2.03	0.59
1:B:458:GLU:OE1	1:B:458:GLU:HA	2.03	0.59
1:B:462:PRO:HB3	1:B:530:TYR:CE2	2.36	0.59
1:B:583:VAL:CG1	1:B:587:PHE:CE2	2.85	0.59
1:B:685:THR:O	1:B:689:ILE:CG1	2.51	0.59
1:A:400:ALA:O	1:A:703:ILE:CD1	2.51	0.59
1:A:516:PHE:CE2	1:A:554:TYR:HD2	2.21	0.59
1:A:685:THR:O	1:A:689:ILE:CG1	2.51	0.59
1:C:353:LEU:HD13	1:C:417:PRO:HB2	1.84	0.59
1:A:359:GLU:CB	1:A:360:PRO:HD2	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:571:LYS:HE3	1:D:696:ILE:HD12	1.83	0.59
1:B:125:ASN:ND2	1:B:128:GLU:HG2	2.18	0.59
1:A:382:TYR:N	1:A:753:UNK:O	2.29	0.59
1:D:246:TYR:CE1	1:D:248:GLY:CA	2.86	0.59
1:D:458:GLU:OE1	1:D:458:GLU:HA	2.03	0.59
1:B:508:VAL:CG1	1:B:511:TYR:HE1	2.07	0.58
1:D:400:ALA:O	1:D:703:ILE:CD1	2.51	0.58
1:D:508:VAL:CG1	1:D:511:TYR:HE1	2.07	0.58
1:B:353:LEU:HD13	1:B:417:PRO:HB2	1.85	0.58
1:B:516:PHE:CE2	1:B:554:TYR:HD2	2.21	0.58
1:C:583:VAL:CG1	1:C:587:PHE:CE2	2.85	0.58
1:D:403:SER:O	1:D:404:SER:HB3	2.03	0.58
1:B:662:LEU:CD2	1:D:543:PHE:HE1	2.16	0.58
1:B:701:ARG:HH11	1:B:701:ARG:CG	2.14	0.58
1:A:246:TYR:CE1	1:A:248:GLY:CA	2.86	0.58
1:C:599:ILE:HD11	1:C:628:ASN:HB2	1.85	0.58
1:B:400:ALA:O	1:B:703:ILE:CD1	2.51	0.58
1:B:697:TRP:HZ3	1:B:698:LYS:HD3	1.67	0.58
1:A:125:ASN:ND2	1:A:128:GLU:HG2	2.18	0.58
1:A:353:LEU:HD13	1:A:417:PRO:HB2	1.84	0.58
1:C:246:TYR:CE1	1:C:248:GLY:CA	2.86	0.58
1:B:121:VAL:HG22	1:B:172:THR:CG2	2.33	0.58
1:A:403:SER:O	1:A:404:SER:HB3	2.03	0.58
1:A:543:PHE:HE1	1:C:662:LEU:CD2	2.17	0.58
1:B:403:SER:OG	1:B:406:THR:HG23	2.04	0.58
1:B:647:LEU:O	1:B:649:PHE:HD2	1.85	0.58
1:B:710:LYS:HE2	1:B:711:SER:CB	2.31	0.58
1:D:125:ASN:ND2	1:D:128:GLU:HG2	2.18	0.58
1:D:353:LEU:HD13	1:D:417:PRO:HB2	1.84	0.58
1:D:516:PHE:CE2	1:D:554:TYR:HD2	2.21	0.58
1:D:701:ARG:HH11	1:D:701:ARG:CG	2.14	0.58
1:A:579:ARG:HG2	1:A:579:ARG:NH1	2.17	0.58
1:A:599:ILE:HD11	1:A:628:ASN:HB2	1.85	0.58
1:A:647:LEU:O	1:A:649:PHE:HD2	1.85	0.58
1:C:242:ARG:HH11	1:C:242:ARG:CG	2.17	0.58
1:C:579:ARG:HG2	1:C:579:ARG:NH1	2.17	0.58
1:D:413:LEU:O	1:D:419:ASN:HB2	2.02	0.58
1:B:496:PHE:CB	1:B:501:PRO:HG3	2.31	0.58
1:A:385:SER:O	1:A:389:THR:HG22	2.04	0.58
1:C:359:GLU:CB	1:C:360:PRO:HD2	2.33	0.58
1:B:543:PHE:HE1	1:A:662:LEU:CD2	2.16	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:ARG:CG	1:A:242:ARG:HH11	2.17	0.58
1:A:496:PHE:CB	1:A:501:PRO:HG3	2.31	0.58
1:B:159:LEU:O	1:B:163:LEU:HD22	2.04	0.58
1:C:159:LEU:O	1:C:163:LEU:HD22	2.04	0.58
1:B:175:LEU:O	1:B:179:VAL:HG23	2.04	0.57
1:A:159:LEU:O	1:A:163:LEU:HD22	2.04	0.57
1:C:403:SER:O	1:C:404:SER:HB3	2.03	0.57
1:D:159:LEU:O	1:D:163:LEU:HD22	2.04	0.57
1:D:579:ARG:HH11	1:D:579:ARG:CG	2.14	0.57
1:B:242:ARG:HH11	1:B:242:ARG:CG	2.17	0.57
1:B:710:LYS:HE2	1:B:711:SER:HG	1.67	0.57
1:A:403:SER:OG	1:A:406:THR:HG23	2.04	0.57
1:C:462:PRO:HB3	1:C:530:TYR:CE2	2.36	0.57
1:B:592:SER:CB	1:B:637:LEU:HD12	2.35	0.57
1:A:396:LEU:HD11	1:A:418:LEU:HD23	1.80	0.57
1:A:458:GLU:OE1	1:A:458:GLU:HA	2.03	0.57
1:C:125:ASN:ND2	1:C:128:GLU:HG2	2.18	0.57
1:C:458:GLU:OE1	1:C:458:GLU:HA	2.03	0.57
1:C:487:TYR:CE1	1:C:491:ARG:CD	2.85	0.57
1:C:710:LYS:HE3	1:C:711:SER:HA	1.87	0.57
1:D:175:LEU:O	1:D:179:VAL:HG23	2.04	0.57
1:B:664:LEU:C	1:B:668:ILE:HD12	2.21	0.57
1:D:239:THR:OG1	1:D:243:PRO:CB	2.45	0.57
1:D:372:TRP:CD1	1:D:372:TRP:N	2.73	0.57
1:D:403:SER:OG	1:D:406:THR:HG23	2.04	0.57
1:D:599:ILE:HD11	1:D:628:ASN:HB2	1.85	0.57
1:B:240:LYS:NZ	1:B:240:LYS:HB3	2.20	0.57
1:B:385:SER:O	1:B:389:THR:HG22	2.04	0.57
1:A:508:VAL:CG1	1:A:511:TYR:HE1	2.07	0.57
1:C:385:SER:O	1:C:389:THR:HG22	2.04	0.57
1:D:456:PRO:CD	1:D:474:ARG:NH1	2.68	0.57
1:C:403:SER:OG	1:C:406:THR:HG23	2.04	0.57
1:D:385:SER:O	1:D:389:THR:HG22	2.04	0.57
1:C:536:GLU:O	1:C:537:TYR:C	2.43	0.57
1:D:242:ARG:HH11	1:D:242:ARG:CG	2.17	0.57
1:D:592:SER:CB	1:D:637:LEU:HD12	2.35	0.57
1:B:599:ILE:HD11	1:B:628:ASN:HB2	1.85	0.57
1:A:367:ARG:HG3	1:A:367:ARG:NH1	2.20	0.57
1:A:592:SER:CB	1:A:637:LEU:HD12	2.35	0.57
1:A:710:LYS:O	1:A:714:LYS:CE	2.53	0.57
1:D:389:THR:CB	1:D:393:ASN:O	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:710:LYS:O	1:D:714:LYS:CE	2.53	0.57
1:B:247:PHE:CE1	1:B:254:LEU:HD13	2.40	0.57
1:B:371:GLU:HB3	1:B:372:TRP:HD1	1.70	0.57
1:A:247:PHE:CE1	1:A:254:LEU:HD13	2.40	0.57
1:A:568:MET:O	1:A:572:MET:HB2	2.05	0.57
1:C:121:VAL:HG22	1:C:172:THR:CG2	2.33	0.57
1:C:568:MET:O	1:C:572:MET:HB2	2.05	0.57
1:C:592:SER:CB	1:C:637:LEU:HD12	2.35	0.57
1:D:247:PHE:CE1	1:D:254:LEU:HD13	2.40	0.57
1:A:240:LYS:H	1:A:242:ARG:N	2.03	0.56
1:C:367:ARG:NH2	1:C:385:SER:HB2	2.16	0.56
1:D:697:TRP:HZ3	1:D:698:LYS:HD3	1.67	0.56
1:A:389:THR:CB	1:A:393:ASN:O	2.53	0.56
1:C:205:LEU:HA	1:C:220:LEU:HD23	1.86	0.56
1:B:184:ASP:C	1:B:186:LEU:N	2.59	0.56
1:B:374:TYR:CZ	1:A:235:PHE:HE1	2.21	0.56
1:B:389:THR:CB	1:B:393:ASN:O	2.53	0.56
1:B:568:MET:O	1:B:572:MET:HB2	2.05	0.56
1:B:579:ARG:HG2	1:B:579:ARG:NH1	2.17	0.56
1:B:582:PHE:HB3	1:D:562:MET:HE1	1.88	0.56
1:B:672:ILE:HD13	1:B:673:LEU:CA	2.36	0.56
1:A:240:LYS:NZ	1:A:240:LYS:HB3	2.20	0.56
1:A:697:TRP:HZ3	1:A:698:LYS:HD3	1.67	0.56
1:A:710:LYS:HE3	1:A:711:SER:HA	1.86	0.56
1:C:240:LYS:NZ	1:C:240:LYS:HB3	2.20	0.56
1:C:367:ARG:HG3	1:C:367:ARG:NH1	2.20	0.56
1:C:710:LYS:O	1:C:714:LYS:CE	2.53	0.56
1:D:240:LYS:HZ2	1:D:240:LYS:HB3	1.71	0.56
1:B:239:THR:OG1	1:B:243:PRO:CB	2.45	0.56
1:B:240:LYS:HB3	1:B:240:LYS:HZ2	1.69	0.56
1:B:416:GLU:CD	1:B:420:ARG:NH2	2.56	0.56
1:A:710:LYS:CE	1:A:711:SER:CA	2.84	0.56
1:C:247:PHE:CE1	1:C:254:LEU:HD13	2.40	0.56
1:C:456:PRO:CD	1:C:474:ARG:NH1	2.68	0.56
1:D:240:LYS:HB3	1:D:240:LYS:NZ	2.20	0.56
1:D:710:LYS:CE	1:D:711:SER:CA	2.84	0.56
1:A:175:LEU:O	1:A:179:VAL:HG23	2.04	0.56
1:A:494:GLN:O	1:A:498:GLN:CB	2.54	0.56
1:A:672:ILE:HD13	1:A:673:LEU:CA	2.36	0.56
1:D:371:GLU:HB3	1:D:372:TRP:HD1	1.70	0.56
1:D:685:THR:O	1:D:689:ILE:CG1	2.51	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:710:LYS:HG2	1:B:714:LYS:HE3	1.88	0.56
1:B:710:LYS:CE	1:B:711:SER:CA	2.84	0.56
1:C:175:LEU:O	1:C:179:VAL:HG23	2.04	0.56
1:C:387:ILE:HB	1:C:421:LEU:HD11	1.87	0.56
1:D:672:ILE:HD13	1:D:673:LEU:CA	2.36	0.56
1:B:357:ILE:O	1:B:362:CYS:SG	2.63	0.56
1:A:205:LEU:HA	1:A:220:LEU:HD23	1.86	0.56
1:A:456:PRO:CD	1:A:474:ARG:NH1	2.68	0.56
1:C:285:ASN:HA	1:C:289:HIS:CD2	2.41	0.56
1:C:672:ILE:HD13	1:C:673:LEU:CA	2.36	0.56
1:B:205:LEU:HA	1:B:220:LEU:HD23	1.86	0.56
1:C:180:ALA:O	1:C:185:SER:N	2.39	0.56
1:C:286:THR:H	1:C:289:HIS:CD2	2.24	0.56
1:C:389:THR:CB	1:C:393:ASN:O	2.53	0.56
1:C:543:PHE:HE1	1:D:662:LEU:CD2	2.18	0.56
1:D:158:LEU:HD21	1:D:162:MET:HE2	1.88	0.56
1:D:180:ALA:O	1:D:185:SER:N	2.39	0.56
1:D:447:ILE:N	1:D:447:ILE:HD12	2.21	0.56
1:D:710:LYS:HE3	1:D:711:SER:HA	1.86	0.56
1:B:180:ALA:O	1:B:185:SER:N	2.39	0.56
1:B:240:LYS:H	1:B:242:ARG:N	2.03	0.56
1:B:246:TYR:CE1	1:B:248:GLY:HA3	2.41	0.56
1:B:562:MET:HE1	1:A:582:PHE:HB3	1.87	0.56
1:A:286:THR:H	1:A:289:HIS:CD2	2.24	0.56
1:C:158:LEU:HD21	1:C:162:MET:HE2	1.88	0.56
1:D:184:ASP:C	1:D:186:LEU:N	2.59	0.56
1:D:205:LEU:HA	1:D:220:LEU:HD23	1.86	0.56
1:D:240:LYS:H	1:D:242:ARG:N	2.03	0.56
1:D:359:GLU:N	1:D:362:CYS:CB	2.64	0.56
1:D:285:ASN:HA	1:D:289:HIS:CD2	2.41	0.56
1:B:543:PHE:CZ	1:A:658:VAL:HG13	2.41	0.55
1:C:240:LYS:H	1:C:242:ARG:N	2.03	0.55
1:C:447:ILE:N	1:C:447:ILE:HD12	2.21	0.55
1:D:242:ARG:N	1:D:243:PRO:CA	2.69	0.55
1:B:710:LYS:HE3	1:B:711:SER:HA	1.86	0.55
1:B:710:LYS:O	1:B:714:LYS:CE	2.53	0.55
1:A:367:ARG:NH2	1:A:385:SER:HB2	2.16	0.55
1:A:543:PHE:CZ	1:C:658:VAL:HG13	2.41	0.55
1:C:184:ASP:C	1:C:186:LEU:N	2.59	0.55
1:C:372:TRP:CD1	1:C:372:TRP:N	2.73	0.55
1:D:286:THR:H	1:D:289:HIS:CD2	2.24	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:387:ILE:HD13	1:B:387:ILE:C	2.27	0.55
1:A:180:ALA:O	1:A:185:SER:N	2.39	0.55
1:C:371:GLU:HB3	1:C:372:TRP:HD1	1.70	0.55
1:C:710:LYS:HG2	1:C:714:LYS:HE3	1.88	0.55
1:B:456:PRO:CD	1:B:474:ARG:NH1	2.68	0.55
1:A:246:TYR:CE1	1:A:248:GLY:HA3	2.41	0.55
1:A:387:ILE:HB	1:A:421:LEU:HD11	1.87	0.55
1:C:357:ILE:O	1:C:362:CYS:SG	2.63	0.55
1:D:494:GLN:O	1:D:498:GLN:CB	2.54	0.55
1:A:357:ILE:O	1:A:362:CYS:SG	2.63	0.55
1:A:710:LYS:HG2	1:A:714:LYS:HE3	1.88	0.55
1:C:396:LEU:HD11	1:C:418:LEU:HD23	1.81	0.55
1:C:402:SER:HB2	1:C:409:ARG:CG	2.33	0.55
1:D:357:ILE:O	1:D:362:CYS:SG	2.63	0.55
1:D:568:MET:O	1:D:572:MET:HB2	2.05	0.55
1:B:286:THR:H	1:B:289:HIS:CD2	2.24	0.55
1:B:494:GLN:O	1:B:498:GLN:CB	2.54	0.55
1:B:536:GLU:O	1:B:537:TYR:C	2.43	0.55
1:B:582:PHE:CB	1:D:562:MET:HE1	2.37	0.55
1:D:367:ARG:NH1	1:D:367:ARG:HG3	2.20	0.55
1:B:562:MET:HE1	1:A:582:PHE:CB	2.37	0.55
1:A:387:ILE:HD13	1:A:387:ILE:C	2.27	0.55
1:C:682:MET:HE2	1:D:673:LEU:HD23	1.88	0.55
1:C:710:LYS:CE	1:C:711:SER:CA	2.84	0.55
1:D:399:ILE:HG12	1:D:412:MET:HE3	1.88	0.55
1:B:285:ASN:HA	1:B:289:HIS:CD2	2.41	0.55
1:B:447:ILE:HD12	1:B:447:ILE:N	2.21	0.55
1:B:562:MET:CE	1:A:582:PHE:CB	2.85	0.55
1:C:157:CYS:HB2	1:C:176:LEU:HD21	1.89	0.55
1:C:246:TYR:CE1	1:C:248:GLY:HA3	2.41	0.55
1:D:297:ASN:OD1	1:D:346:ILE:HD13	2.07	0.55
1:D:489:PHE:HD1	1:D:524:LEU:CD1	2.18	0.55
1:B:367:ARG:HG3	1:B:367:ARG:NH1	2.20	0.55
1:B:487:TYR:CE1	1:B:491:ARG:CD	2.85	0.55
1:B:499:ARG:HA	1:B:499:ARG:HE	1.72	0.55
1:A:285:ASN:HA	1:A:289:HIS:CD2	2.41	0.55
1:A:653:TYR:OH	1:A:656:LYS:HG3	2.06	0.55
1:C:565:TYR:CB	1:D:579:ARG:NH1	2.70	0.55
1:D:246:TYR:CE1	1:D:248:GLY:HA3	2.41	0.55
1:D:579:ARG:HG2	1:D:579:ARG:NH1	2.17	0.55
1:B:706:LEU:H	1:B:706:LEU:CD2	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:536:GLU:O	1:A:537:TYR:C	2.43	0.55
1:A:669:LEU:HD11	1:A:670:THR:HB	1.89	0.55
1:D:387:ILE:HD13	1:D:387:ILE:C	2.27	0.55
1:D:402:SER:HB2	1:D:409:ARG:CG	2.33	0.55
1:C:320:HIS:CB	1:C:323:LEU:HD23	2.37	0.54
1:D:121:VAL:HG22	1:D:172:THR:CG2	2.33	0.54
1:D:157:CYS:HB2	1:D:176:LEU:HD21	1.89	0.54
1:D:387:ILE:HB	1:D:421:LEU:HD11	1.87	0.54
1:D:511:TYR:HA	1:D:514:ILE:HD12	1.89	0.54
1:B:402:SER:HB2	1:B:409:ARG:CG	2.34	0.54
1:B:511:TYR:HA	1:B:514:ILE:HD12	1.89	0.54
1:A:562:MET:CE	1:C:582:PHE:CB	2.85	0.54
1:A:592:SER:CA	1:A:637:LEU:HD12	2.38	0.54
1:C:242:ARG:N	1:C:243:PRO:CA	2.69	0.54
1:C:511:TYR:HA	1:C:514:ILE:HD12	1.89	0.54
1:D:487:TYR:CE1	1:D:491:ARG:CD	2.85	0.54
1:D:499:ARG:HA	1:D:499:ARG:HE	1.72	0.54
1:B:158:LEU:HD21	1:B:162:MET:HE2	1.88	0.54
1:B:396:LEU:HD11	1:B:418:LEU:HD23	1.81	0.54
1:A:157:CYS:HB2	1:A:176:LEU:HD21	1.89	0.54
1:A:297:ASN:OD1	1:A:346:ILE:HD13	2.07	0.54
1:A:371:GLU:HB3	1:A:372:TRP:HD1	1.70	0.54
1:A:383:ASP:CB	1:A:384:LEU:HA	2.36	0.54
1:C:374:TYR:CZ	1:D:235:PHE:HE1	2.23	0.54
1:B:369:PHE:N	1:B:369:PHE:CD1	2.73	0.54
1:B:387:ILE:HB	1:B:421:LEU:HD11	1.87	0.54
1:B:669:LEU:HD11	1:B:670:THR:HB	1.90	0.54
1:A:402:SER:HB2	1:A:409:ARG:CG	2.33	0.54
1:A:416:GLU:CD	1:A:420:ARG:NH2	2.56	0.54
1:A:511:TYR:HA	1:A:514:ILE:HD12	1.89	0.54
1:A:565:TYR:CB	1:C:579:ARG:NH1	2.69	0.54
1:A:573:ILE:HG12	1:C:673:LEU:CD1	2.30	0.54
1:A:678:LEU:HD23	1:C:676:ASN:ND2	2.23	0.54
1:C:239:THR:OG1	1:C:243:PRO:CB	2.45	0.54
1:C:416:GLU:CD	1:C:420:ARG:NH2	2.56	0.54
1:A:158:LEU:HD21	1:A:162:MET:HE2	1.89	0.54
1:A:447:ILE:N	1:A:447:ILE:HD12	2.21	0.54
1:C:297:ASN:OD1	1:C:346:ILE:HD13	2.07	0.54
1:C:384:LEU:CD1	1:C:387:ILE:HG21	2.35	0.54
1:C:429:PHE:HZ	1:C:709:GLU:OE2	1.91	0.54
1:C:560:GLN:OE1	1:C:697:TRP:CZ3	2.61	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:697:TRP:HZ3	1:C:698:LYS:HD3	1.67	0.54
1:D:704:THR:O	1:D:708:THR:CG2	2.52	0.54
1:B:242:ARG:N	1:B:243:PRO:CA	2.69	0.54
1:B:297:ASN:OD1	1:B:346:ILE:HD13	2.07	0.54
1:B:487:TYR:CE1	1:B:491:ARG:CG	2.90	0.54
1:A:560:GLN:OE1	1:A:697:TRP:CZ3	2.61	0.54
1:C:399:ILE:HG12	1:C:412:MET:HE3	1.89	0.54
1:C:629:SER:O	1:C:633:THR:HG22	2.08	0.54
1:D:396:LEU:HD11	1:D:418:LEU:HD23	1.81	0.54
1:B:629:SER:O	1:B:633:THR:HG22	2.08	0.54
1:A:499:ARG:HA	1:A:499:ARG:HE	1.72	0.54
1:A:629:SER:O	1:A:633:THR:HG22	2.08	0.54
1:C:387:ILE:HD13	1:C:387:ILE:C	2.27	0.54
1:C:592:SER:CA	1:C:637:LEU:HD12	2.38	0.54
1:C:706:LEU:H	1:C:706:LEU:CD2	2.20	0.54
1:B:560:GLN:OE1	1:B:697:TRP:CZ3	2.61	0.54
1:B:658:VAL:HG13	1:D:543:PHE:CZ	2.42	0.54
1:A:320:HIS:CB	1:A:323:LEU:HD23	2.37	0.54
1:D:320:HIS:CB	1:D:323:LEU:HD23	2.37	0.54
1:D:369:PHE:N	1:D:369:PHE:CD1	2.73	0.54
1:B:592:SER:CA	1:B:637:LEU:HD12	2.38	0.54
1:C:374:TYR:O	1:C:376:PRO:N	2.41	0.54
1:D:536:GLU:O	1:D:537:TYR:C	2.43	0.54
1:B:214:MET:CE	1:B:218:THR:OG1	2.56	0.54
1:B:240:LYS:HE3	1:B:242:ARG:HG2	1.90	0.54
1:B:498:GLN:NE2	1:B:710:LYS:HZ3	1.84	0.54
1:C:543:PHE:CZ	1:D:658:VAL:HG13	2.43	0.54
1:C:717:ARG:HG3	1:C:718:LYS:N	2.23	0.54
1:D:592:SER:CA	1:D:637:LEU:HD12	2.38	0.54
1:A:214:MET:CE	1:A:218:THR:OG1	2.56	0.53
1:A:489:PHE:HD1	1:A:524:LEU:CD1	2.18	0.53
1:A:706:LEU:H	1:A:706:LEU:CD2	2.20	0.53
1:C:579:ARG:HH11	1:C:579:ARG:CG	2.14	0.53
1:D:240:LYS:N	1:D:241:GLY:CA	2.71	0.53
1:D:710:LYS:HG2	1:D:714:LYS:HE3	1.88	0.53
1:B:374:TYR:O	1:B:376:PRO:N	2.41	0.53
1:B:562:MET:HE2	1:A:582:PHE:HB3	1.90	0.53
1:B:565:TYR:CB	1:A:579:ARG:NH1	2.69	0.53
1:A:240:LYS:HE3	1:A:242:ARG:HG2	1.90	0.53
1:A:374:TYR:O	1:A:376:PRO:N	2.41	0.53
1:C:494:GLN:O	1:C:498:GLN:CB	2.54	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:704:THR:O	1:C:708:THR:CG2	2.52	0.53
1:D:429:PHE:HZ	1:D:709:GLU:OE2	1.91	0.53
1:D:516:PHE:CE2	1:D:554:TYR:CE2	2.88	0.53
1:D:706:LEU:H	1:D:706:LEU:CD2	2.20	0.53
1:D:718:LYS:O	1:D:719:ALA:CB	2.57	0.53
1:B:240:LYS:N	1:B:241:GLY:CA	2.72	0.53
1:B:320:HIS:CB	1:B:323:LEU:HD23	2.37	0.53
1:A:374:TYR:CD2	1:C:235:PHE:CE2	2.72	0.53
1:A:708:THR:O	1:A:712:PHE:HB3	1.99	0.53
1:A:718:LYS:O	1:A:719:ALA:CB	2.56	0.53
1:C:240:LYS:N	1:C:241:GLY:CA	2.71	0.53
1:D:286:THR:H	1:D:289:HIS:HD2	1.57	0.53
1:D:717:ARG:HG3	1:D:718:LYS:N	2.23	0.53
1:A:664:LEU:C	1:A:668:ILE:HD12	2.21	0.53
1:A:666:TYR:CG	1:A:670:THR:HG21	2.43	0.53
1:D:560:GLN:OE1	1:D:697:TRP:CZ3	2.61	0.53
1:B:157:CYS:HB2	1:B:176:LEU:HD21	1.88	0.53
1:B:372:TRP:CD1	1:B:372:TRP:N	2.73	0.53
1:A:429:PHE:HZ	1:A:709:GLU:OE2	1.91	0.53
1:C:286:THR:H	1:C:289:HIS:HD2	1.57	0.53
1:C:669:LEU:HD11	1:C:670:THR:HB	1.90	0.53
1:C:718:LYS:O	1:C:719:ALA:CB	2.57	0.53
1:B:386:CYS:CB	1:B:395:VAL:HG23	2.37	0.53
1:B:600:GLU:OE1	1:B:654:ASP:OD2	2.27	0.53
1:A:372:TRP:CD1	1:A:372:TRP:N	2.73	0.53
1:D:374:TYR:O	1:D:376:PRO:N	2.41	0.53
1:D:383:ASP:CB	1:D:384:LEU:HA	2.36	0.53
1:B:448:PHE:CE1	1:B:523:MET:HG2	2.44	0.53
1:A:184:ASP:C	1:A:186:LEU:N	2.59	0.53
1:D:387:ILE:CB	1:D:421:LEU:HD11	2.39	0.53
1:D:416:GLU:CD	1:D:420:ARG:NH2	2.56	0.53
1:D:629:SER:O	1:D:633:THR:HG22	2.08	0.53
1:B:577:LEU:HG	1:A:673:LEU:HG	1.90	0.53
1:B:582:PHE:CB	1:D:562:MET:CE	2.87	0.53
1:B:717:ARG:HG3	1:B:718:LYS:N	2.23	0.53
1:A:487:TYR:CE1	1:A:491:ARG:CD	2.85	0.53
1:C:214:MET:CE	1:C:218:THR:OG1	2.56	0.53
1:C:346:ILE:CG2	1:C:408:ASN:OD1	2.56	0.53
1:C:600:GLU:OE1	1:C:654:ASP:OD2	2.27	0.53
1:C:678:LEU:HD23	1:D:676:ASN:ND2	2.23	0.53
1:D:668:ILE:O	1:D:672:ILE:HG23	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:669:LEU:HD11	1:D:670:THR:HB	1.90	0.53
1:B:142:ARG:CZ	1:B:183:THR:HG22	2.39	0.53
1:B:678:LEU:HD23	1:A:676:ASN:ND2	2.24	0.53
1:A:142:ARG:CZ	1:A:183:THR:HG22	2.39	0.53
1:C:653:TYR:OH	1:C:656:LYS:HG3	2.07	0.53
1:D:346:ILE:CG2	1:D:408:ASN:OD1	2.56	0.53
1:B:235:PHE:HE1	1:D:374:TYR:CZ	2.24	0.53
1:B:286:THR:H	1:B:289:HIS:HD2	1.57	0.53
1:A:242:ARG:N	1:A:243:PRO:CA	2.69	0.53
1:A:369:PHE:N	1:A:369:PHE:CD1	2.73	0.53
1:A:399:ILE:HG12	1:A:412:MET:HE3	1.89	0.53
1:A:717:ARG:HG3	1:A:718:LYS:N	2.23	0.53
1:C:487:TYR:CE1	1:C:491:ARG:CG	2.90	0.53
1:D:760:UNK:CA	1:D:761:UNK:CB	2.87	0.53
1:B:387:ILE:CB	1:B:421:LEU:HD11	2.39	0.52
1:B:579:ARG:NH1	1:D:565:TYR:CB	2.70	0.52
1:A:121:VAL:HG22	1:A:172:THR:CG2	2.33	0.52
1:A:376:PRO:CG	1:A:377:VAL:HG23	2.39	0.52
1:A:448:PHE:CE1	1:A:523:MET:HG2	2.44	0.52
1:C:240:LYS:HB3	1:C:240:LYS:HZ2	1.73	0.52
1:C:425:LYS:HB3	1:C:429:PHE:HE1	1.74	0.52
1:D:214:MET:CE	1:D:218:THR:OG1	2.56	0.52
1:D:448:PHE:CE1	1:D:523:MET:HG2	2.44	0.52
1:D:666:TYR:CG	1:D:670:THR:HG21	2.43	0.52
1:A:326:GLU:O	1:A:336:PRO:HD2	2.10	0.52
1:C:369:PHE:N	1:C:369:PHE:CD1	2.73	0.52
1:D:707:ASP:O	1:D:711:SER:CA	2.57	0.52
1:B:359:GLU:N	1:B:362:CYS:CB	2.64	0.52
1:B:429:PHE:HZ	1:B:709:GLU:OE2	1.91	0.52
1:A:346:ILE:CG2	1:A:408:ASN:OD1	2.56	0.52
1:A:384:LEU:CD1	1:A:387:ILE:HG21	2.35	0.52
1:C:142:ARG:CZ	1:C:183:THR:HG22	2.39	0.52
1:C:717:ARG:NE	1:C:717:ARG:CA	2.73	0.52
1:D:384:LEU:CD1	1:D:387:ILE:HG21	2.35	0.52
1:A:286:THR:H	1:A:289:HIS:HD2	1.57	0.52
1:A:668:ILE:O	1:A:672:ILE:HG23	2.09	0.52
1:C:448:PHE:CE1	1:C:523:MET:HG2	2.44	0.52
1:C:580:PHE:HE2	1:C:674:LEU:HB3	1.75	0.52
1:C:668:ILE:O	1:C:672:ILE:HG23	2.09	0.52
1:D:142:ARG:CZ	1:D:183:THR:HG22	2.39	0.52
1:D:240:LYS:HE3	1:D:242:ARG:HG2	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:326:GLU:O	1:D:336:PRO:HD2	2.10	0.52
1:B:399:ILE:HG12	1:B:412:MET:HE3	1.91	0.52
1:B:653:TYR:OH	1:B:656:LYS:HG3	2.07	0.52
1:B:668:ILE:O	1:B:672:ILE:HG23	2.08	0.52
1:B:673:LEU:HG	1:D:577:LEU:HG	1.92	0.52
1:A:374:TYR:CZ	1:C:235:PHE:HE1	2.23	0.52
1:C:376:PRO:CG	1:C:377:VAL:HG23	2.40	0.52
1:C:499:ARG:HA	1:C:499:ARG:HE	1.72	0.52
1:C:666:TYR:CG	1:C:670:THR:HG21	2.43	0.52
1:C:707:ASP:O	1:C:711:SER:CA	2.57	0.52
1:D:376:PRO:CG	1:D:377:VAL:HG23	2.39	0.52
1:D:600:GLU:OE1	1:D:654:ASP:OD2	2.27	0.52
1:B:367:ARG:NH2	1:B:385:SER:HB2	2.16	0.52
1:B:707:ASP:O	1:B:711:SER:CA	2.57	0.52
1:C:579:ARG:NH1	1:C:579:ARG:CG	2.73	0.52
1:D:706:LEU:N	1:D:706:LEU:CD2	2.73	0.52
1:D:710:LYS:HE2	1:D:711:SER:HG	1.70	0.52
1:B:374:TYR:CD1	1:B:375:GLY:N	2.69	0.52
1:B:718:LYS:O	1:B:719:ALA:CB	2.57	0.52
1:A:682:MET:HE2	1:C:673:LEU:CD2	2.40	0.52
1:C:240:LYS:HE3	1:C:242:ARG:HG2	1.90	0.52
1:C:601:ASP:C	1:C:652:ASN:ND2	2.60	0.52
1:B:326:GLU:O	1:B:336:PRO:HD2	2.10	0.52
1:B:425:LYS:HB3	1:B:429:PHE:HE1	1.73	0.52
1:B:447:ILE:N	1:B:447:ILE:CD1	2.73	0.52
1:B:489:PHE:HD1	1:B:524:LEU:CD1	2.18	0.52
1:A:240:LYS:N	1:A:241:GLY:CA	2.72	0.52
1:A:425:LYS:HB3	1:A:429:PHE:HE1	1.74	0.52
1:A:447:ILE:N	1:A:447:ILE:CD1	2.73	0.52
1:D:425:LYS:HB3	1:D:429:PHE:HE1	1.74	0.52
1:B:580:PHE:HE2	1:B:674:LEU:HB3	1.75	0.52
1:B:692:GLU:O	1:B:696:ILE:HG13	2.10	0.52
1:A:583:VAL:CG1	1:A:587:PHE:HE2	2.23	0.52
1:A:717:ARG:NE	1:A:717:ARG:CA	2.73	0.52
1:C:682:MET:O	1:C:686:VAL:HG23	2.10	0.52
1:D:580:PHE:HE2	1:D:674:LEU:HB3	1.75	0.52
1:A:158:LEU:HD21	1:A:162:MET:HE3	1.90	0.52
1:A:239:THR:OG1	1:A:243:PRO:CB	2.45	0.52
1:A:600:GLU:OE1	1:A:654:ASP:OD2	2.27	0.52
1:C:346:ILE:CG2	1:C:412:MET:HG3	2.40	0.52
1:C:387:ILE:CB	1:C:421:LEU:HD11	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:710:LYS:O	1:B:714:LYS:HE3	2.10	0.51
1:A:656:LYS:HD2	1:A:656:LYS:O	2.10	0.51
1:C:326:GLU:O	1:C:336:PRO:HD2	2.10	0.51
1:C:489:PHE:HD1	1:C:524:LEU:CD1	2.19	0.51
1:C:656:LYS:HD2	1:C:656:LYS:O	2.10	0.51
1:C:692:GLU:O	1:C:696:ILE:HG13	2.10	0.51
1:D:575:ARG:CG	1:D:576:ASP:N	2.74	0.51
1:A:682:MET:O	1:A:686:VAL:HG23	2.10	0.51
1:A:707:ASP:O	1:A:711:SER:CA	2.57	0.51
1:C:706:LEU:N	1:C:706:LEU:CD2	2.73	0.51
1:D:717:ARG:NE	1:D:717:ARG:CA	2.73	0.51
1:B:346:ILE:CG2	1:B:412:MET:HG3	2.40	0.51
1:B:589:PHE:CE2	1:B:593:THR:CG2	2.94	0.51
1:B:671:TYR:O	1:B:675:LEU:HB2	2.11	0.51
1:A:375:GLY:N	1:A:376:PRO:CD	2.74	0.51
1:A:577:LEU:HG	1:C:673:LEU:HG	1.92	0.51
1:A:699:LEU:O	1:A:699:LEU:HD23	2.11	0.51
1:B:158:LEU:HD21	1:B:162:MET:HE3	1.92	0.51
1:B:346:ILE:CG2	1:B:408:ASN:OD1	2.56	0.51
1:B:583:VAL:CG1	1:B:587:PHE:HE2	2.23	0.51
1:A:386:CYS:CB	1:A:395:VAL:HG23	2.37	0.51
1:A:709:GLU:HA	1:A:712:PHE:HB3	1.93	0.51
1:C:375:GLY:N	1:C:376:PRO:CD	2.74	0.51
1:D:692:GLU:O	1:D:696:ILE:HG13	2.10	0.51
1:B:575:ARG:CG	1:B:576:ASP:N	2.74	0.51
1:B:682:MET:O	1:B:686:VAL:HG23	2.10	0.51
1:B:709:GLU:HA	1:B:712:PHE:HB3	1.93	0.51
1:A:387:ILE:CB	1:A:421:LEU:HD11	2.39	0.51
1:A:706:LEU:N	1:A:706:LEU:CD2	2.73	0.51
1:C:452:ALA:C	1:D:597:THR:HG22	2.30	0.51
1:C:589:PHE:CE2	1:C:593:THR:CG2	2.94	0.51
1:D:682:MET:O	1:D:686:VAL:HG23	2.10	0.51
1:B:556:THR:O	1:B:559:PHE:HD2	1.94	0.51
1:B:710:LYS:CE	1:B:711:SER:N	2.73	0.51
1:A:556:THR:O	1:A:559:PHE:HD2	1.94	0.51
1:A:579:ARG:HH11	1:A:579:ARG:CG	2.14	0.51
1:C:136:LEU:H	1:C:136:LEU:CD2	2.19	0.51
1:C:575:ARG:CG	1:C:576:ASP:N	2.74	0.51
1:C:577:LEU:HG	1:D:673:LEU:HG	1.93	0.51
1:C:583:VAL:CG1	1:C:587:PHE:HE2	2.23	0.51
1:B:676:ASN:ND2	1:D:678:LEU:HD23	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:706:LEU:N	1:B:706:LEU:CD2	2.73	0.51
1:B:708:THR:O	1:B:712:PHE:HB3	1.99	0.51
1:A:671:TYR:O	1:A:675:LEU:HB2	2.11	0.51
1:C:709:GLU:HA	1:C:712:PHE:HB3	1.93	0.51
1:D:198:TYR:CD1	1:D:242:ARG:HD2	2.45	0.51
1:D:346:ILE:CG2	1:D:412:MET:HG3	2.40	0.51
1:D:375:GLY:N	1:D:376:PRO:CD	2.74	0.51
1:D:499:ARG:HA	1:D:499:ARG:NE	2.26	0.51
1:D:710:LYS:O	1:D:714:LYS:HE3	2.10	0.51
1:B:375:GLY:N	1:B:376:PRO:CD	2.74	0.51
1:B:499:ARG:HA	1:B:499:ARG:NE	2.26	0.51
1:A:178:ASP:O	1:A:182:LYS:HG2	2.11	0.51
1:A:499:ARG:HA	1:A:499:ARG:NE	2.26	0.51
1:A:551:ASN:O	1:A:554:TYR:HB3	2.11	0.51
1:A:589:PHE:CE2	1:A:593:THR:CG2	2.94	0.51
1:A:710:LYS:O	1:A:714:LYS:HE3	2.10	0.51
1:D:556:THR:O	1:D:559:PHE:HD2	1.94	0.51
1:D:589:PHE:CE2	1:D:593:THR:CG2	2.94	0.51
1:B:178:ASP:O	1:B:182:LYS:HG2	2.11	0.51
1:A:580:PHE:HE2	1:A:674:LEU:HB3	1.75	0.51
1:C:556:THR:O	1:C:559:PHE:HD2	1.94	0.51
1:B:377:VAL:HG12	1:B:378:HIS:N	2.26	0.51
1:B:383:ASP:CB	1:B:384:LEU:HA	2.36	0.51
1:B:471:ASP:O	1:B:475:VAL:CG2	2.41	0.51
1:B:597:THR:HG22	1:D:452:ALA:C	2.31	0.51
1:B:699:LEU:O	1:B:699:LEU:HD23	2.11	0.51
1:B:717:ARG:NE	1:B:717:ARG:CA	2.73	0.51
1:A:198:TYR:HE1	1:A:242:ARG:CD	2.23	0.51
1:A:498:GLN:HE22	1:A:710:LYS:HZ1	1.56	0.51
1:C:387:ILE:HG23	1:C:388:ASP:N	2.26	0.51
1:C:447:ILE:N	1:C:447:ILE:CD1	2.73	0.51
1:C:710:LYS:O	1:C:714:LYS:HE3	2.10	0.51
1:D:386:CYS:CB	1:D:395:VAL:HG23	2.37	0.51
1:A:367:ARG:CG	1:A:367:ARG:NH1	2.73	0.50
1:A:516:PHE:CE2	1:A:554:TYR:CE2	2.88	0.50
1:A:575:ARG:CG	1:A:576:ASP:N	2.74	0.50
1:A:710:LYS:CE	1:A:711:SER:N	2.73	0.50
1:C:399:ILE:CG2	1:C:413:LEU:HD23	2.42	0.50
1:D:178:ASP:O	1:D:182:LYS:HG2	2.11	0.50
1:D:240:LYS:N	1:D:241:GLY:HA2	2.26	0.50
1:D:403:SER:HG	1:D:406:THR:HG23	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:447:ILE:N	1:D:447:ILE:CD1	2.73	0.50
1:D:671:TYR:O	1:D:675:LEU:HB2	2.11	0.50
1:B:198:TYR:HE1	1:B:242:ARG:CD	2.23	0.50
1:B:452:ALA:C	1:A:597:THR:HG22	2.32	0.50
1:B:573:ILE:HG12	1:A:673:LEU:CD1	2.30	0.50
1:A:601:ASP:C	1:A:652:ASN:ND2	2.60	0.50
1:D:181:ARG:C	1:D:184:ASP:H	2.15	0.50
1:D:377:VAL:HG12	1:D:378:HIS:N	2.26	0.50
1:D:699:LEU:O	1:D:699:LEU:HD23	2.11	0.50
1:D:709:GLU:HA	1:D:712:PHE:HB3	1.93	0.50
1:B:319:LEU:HB3	1:B:320:HIS:CD2	2.47	0.50
1:B:656:LYS:HD2	1:B:656:LYS:O	2.10	0.50
1:C:240:LYS:N	1:C:241:GLY:HA2	2.26	0.50
1:B:181:ARG:C	1:B:184:ASP:H	2.15	0.50
1:B:666:TYR:CG	1:B:670:THR:HG21	2.43	0.50
1:B:673:LEU:CD1	1:D:573:ILE:HG12	2.32	0.50
1:B:704:THR:O	1:B:708:THR:CG2	2.53	0.50
1:A:452:ALA:C	1:C:597:THR:HG22	2.31	0.50
1:A:692:GLU:O	1:A:696:ILE:HG13	2.10	0.50
1:C:383:ASP:CB	1:C:384:LEU:HA	2.36	0.50
1:B:376:PRO:CG	1:B:377:VAL:HG23	2.39	0.50
1:B:551:ASN:O	1:B:554:TYR:HB3	2.11	0.50
1:C:158:LEU:HD21	1:C:162:MET:HE3	1.91	0.50
1:C:699:LEU:HD23	1:C:699:LEU:O	2.11	0.50
1:D:158:LEU:HD21	1:D:162:MET:HE3	1.91	0.50
1:D:399:ILE:CG2	1:D:413:LEU:HD23	2.42	0.50
1:A:387:ILE:HG23	1:A:388:ASP:N	2.26	0.50
1:A:599:ILE:CD1	1:A:628:ASN:HB2	2.42	0.50
1:A:653:TYR:HE1	1:A:656:LYS:CA	2.25	0.50
1:A:653:TYR:C	1:A:653:TYR:CD1	2.85	0.50
1:C:181:ARG:C	1:C:184:ASP:H	2.15	0.50
1:C:653:TYR:C	1:C:653:TYR:CD1	2.85	0.50
1:D:319:LEU:HB3	1:D:320:HIS:CD2	2.47	0.50
1:B:374:TYR:O	1:B:375:GLY:C	2.50	0.50
1:B:387:ILE:HG23	1:B:388:ASP:N	2.26	0.50
1:B:691:GLN:H	1:B:691:GLN:CD	2.15	0.50
1:A:319:LEU:HB3	1:A:320:HIS:CD2	2.47	0.50
1:A:346:ILE:CG2	1:A:412:MET:HG3	2.40	0.50
1:A:377:VAL:HG12	1:A:378:HIS:N	2.26	0.50
1:A:487:TYR:HD1	1:A:487:TYR:C	2.15	0.50
1:C:374:TYR:CD1	1:C:375:GLY:N	2.69	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:377:VAL:HG12	1:C:378:HIS:N	2.26	0.50
1:C:653:TYR:HE1	1:C:656:LYS:CA	2.25	0.50
1:C:710:LYS:CE	1:C:711:SER:N	2.73	0.50
1:D:374:TYR:O	1:D:375:GLY:C	2.50	0.50
1:D:387:ILE:HG23	1:D:388:ASP:N	2.26	0.50
1:D:653:TYR:OH	1:D:656:LYS:HG3	2.07	0.50
1:B:240:LYS:NZ	1:B:240:LYS:CB	2.73	0.50
1:B:384:LEU:CD1	1:B:387:ILE:HG21	2.35	0.50
1:B:421:LEU:HD22	1:B:425:LYS:HE3	1.94	0.50
1:B:487:TYR:HD1	1:B:487:TYR:C	2.15	0.50
1:B:582:PHE:HB3	1:D:562:MET:HE2	1.93	0.50
1:B:631:TYR:C	1:B:631:TYR:CD2	2.86	0.50
1:B:653:TYR:HE1	1:B:656:LYS:CA	2.25	0.50
1:A:351:TYR:CD2	1:A:351:TYR:C	2.86	0.50
1:A:472:TYR:C	1:A:472:TYR:CD2	2.85	0.50
1:A:694:LYS:O	1:A:698:LYS:HG2	2.12	0.50
1:A:704:THR:O	1:A:708:THR:CG2	2.52	0.50
1:C:444:TYR:CE1	1:C:488:PHE:HE2	2.30	0.50
1:C:671:TYR:O	1:C:675:LEU:HB2	2.11	0.50
1:D:351:TYR:C	1:D:351:TYR:CD2	2.86	0.50
1:D:551:ASN:O	1:D:554:TYR:HB3	2.11	0.50
1:D:653:TYR:CD1	1:D:653:TYR:C	2.85	0.50
1:D:710:LYS:HE3	1:D:710:LYS:O	2.12	0.50
1:A:127:GLN:HA	1:A:130:GLU:HG3	1.94	0.50
1:A:399:ILE:CG2	1:A:413:LEU:HD23	2.42	0.50
1:A:631:TYR:C	1:A:631:TYR:CD2	2.86	0.50
1:C:158:LEU:HB2	1:C:189:PHE:CZ	2.47	0.50
1:C:472:TYR:C	1:C:472:TYR:CD2	2.85	0.50
1:C:599:ILE:CD1	1:C:628:ASN:HB2	2.42	0.50
1:C:694:LYS:O	1:C:698:LYS:HG2	2.12	0.50
1:D:448:PHE:C	1:D:448:PHE:CD2	2.86	0.50
1:D:472:TYR:C	1:D:472:TYR:CD2	2.85	0.50
1:D:653:TYR:HE1	1:D:656:LYS:HB2	1.76	0.50
1:B:198:TYR:CD1	1:B:242:ARG:HD2	2.45	0.49
1:B:367:ARG:CG	1:B:367:ARG:NH1	2.73	0.49
1:B:694:LYS:O	1:B:698:LYS:HG2	2.12	0.49
1:A:448:PHE:C	1:A:448:PHE:CD2	2.86	0.49
1:C:178:ASP:O	1:C:182:LYS:HG2	2.11	0.49
1:C:319:LEU:HB3	1:C:320:HIS:CD2	2.47	0.49
1:C:487:TYR:HD1	1:C:487:TYR:C	2.15	0.49
1:C:691:GLN:H	1:C:691:GLN:CD	2.15	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:374:TYR:CD1	1:D:375:GLY:N	2.69	0.49
1:D:421:LEU:HD22	1:D:425:LYS:HE3	1.94	0.49
1:D:599:ILE:CD1	1:D:628:ASN:HB2	2.42	0.49
1:B:351:TYR:C	1:B:351:TYR:CD2	2.86	0.49
1:B:472:TYR:C	1:B:472:TYR:CD2	2.85	0.49
1:C:367:ARG:CG	1:C:367:ARG:NH1	2.73	0.49
1:C:374:TYR:O	1:C:375:GLY:C	2.50	0.49
1:D:656:LYS:HD2	1:D:656:LYS:O	2.10	0.49
1:B:158:LEU:HB2	1:B:189:PHE:CZ	2.47	0.49
1:B:599:ILE:CD1	1:B:628:ASN:HB2	2.42	0.49
1:A:181:ARG:C	1:A:184:ASP:H	2.15	0.49
1:A:579:ARG:NH1	1:A:579:ARG:CG	2.73	0.49
1:A:701:ARG:CG	1:A:701:ARG:NH1	2.73	0.49
1:C:359:GLU:N	1:C:362:CYS:CB	2.64	0.49
1:C:448:PHE:C	1:C:448:PHE:CD2	2.86	0.49
1:C:551:ASN:O	1:C:554:TYR:HB3	2.11	0.49
1:C:562:MET:CE	1:D:582:PHE:CB	2.88	0.49
1:C:631:TYR:C	1:C:631:TYR:CD2	2.86	0.49
1:D:158:LEU:HB2	1:D:189:PHE:CZ	2.47	0.49
1:D:487:TYR:CD1	1:D:487:TYR:C	2.85	0.49
1:D:583:VAL:CG1	1:D:587:PHE:HE2	2.23	0.49
1:B:247:PHE:CZ	1:B:254:LEU:HD13	2.48	0.49
1:B:590:GLY:HA2	1:D:549:TRP:CD1	2.48	0.49
1:A:421:LEU:HD22	1:A:425:LYS:HE3	1.94	0.49
1:A:444:TYR:CE1	1:A:488:PHE:HE2	2.30	0.49
1:A:501:PRO:HA	1:A:502:SER:CB	2.40	0.49
1:A:635:LEU:HD11	1:C:647:LEU:HD12	1.69	0.49
1:C:127:GLN:HA	1:C:130:GLU:HG3	1.94	0.49
1:C:710:LYS:HE3	1:C:710:LYS:O	2.12	0.49
1:D:367:ARG:CG	1:D:367:ARG:NH1	2.73	0.49
1:D:710:LYS:CE	1:D:711:SER:N	2.73	0.49
1:B:240:LYS:N	1:B:241:GLY:HA2	2.26	0.49
1:B:577:LEU:HD21	1:A:672:ILE:HD12	1.94	0.49
1:B:710:LYS:HE3	1:B:710:LYS:O	2.12	0.49
1:A:374:TYR:O	1:A:375:GLY:C	2.50	0.49
1:A:376:PRO:CG	1:C:245:PHE:CG	2.75	0.49
1:A:487:TYR:CD1	1:A:487:TYR:C	2.85	0.49
1:A:554:TYR:C	1:A:554:TYR:CD1	2.85	0.49
1:C:247:PHE:CZ	1:C:254:LEU:HD13	2.48	0.49
1:C:499:ARG:HA	1:C:499:ARG:NE	2.26	0.49
1:D:247:PHE:CZ	1:D:254:LEU:HD13	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:487:TYR:HD1	1:D:487:TYR:C	2.15	0.49
1:B:127:GLN:HA	1:B:130:GLU:HG3	1.94	0.49
1:A:240:LYS:N	1:A:241:GLY:HA2	2.26	0.49
1:A:583:VAL:CG1	1:A:587:PHE:CD2	2.96	0.49
1:A:707:ASP:C	1:A:711:SER:HB2	2.31	0.49
1:C:198:TYR:CD1	1:C:242:ARG:HD2	2.45	0.49
1:C:583:VAL:CG1	1:C:587:PHE:CD2	2.95	0.49
1:D:691:GLN:H	1:D:691:GLN:CD	2.15	0.49
1:D:717:ARG:NE	1:D:718:LYS:N	2.60	0.49
1:B:579:ARG:NH1	1:B:579:ARG:CG	2.73	0.49
1:C:386:CYS:CB	1:C:395:VAL:HG23	2.37	0.49
1:D:421:LEU:HD21	1:D:425:LYS:HE3	1.95	0.49
1:D:554:TYR:C	1:D:554:TYR:CD1	2.85	0.49
1:D:649:PHE:CE2	1:D:663:LEU:HD11	2.37	0.49
1:A:710:LYS:C	1:A:714:LYS:HE2	2.33	0.49
1:C:487:TYR:CD1	1:C:487:TYR:C	2.85	0.49
1:D:444:TYR:CE1	1:D:488:PHE:HE2	2.30	0.49
1:A:240:LYS:NZ	1:A:240:LYS:CB	2.73	0.49
1:A:462:PRO:HB3	1:A:530:TYR:HH	1.71	0.49
1:C:708:THR:O	1:C:712:PHE:HB3	1.99	0.49
1:D:127:GLN:HA	1:D:130:GLU:HG3	1.94	0.49
1:D:501:PRO:HA	1:D:502:SER:CB	2.40	0.49
1:D:631:TYR:CD2	1:D:631:TYR:C	2.86	0.49
1:D:653:TYR:HE1	1:D:656:LYS:CA	2.25	0.49
1:B:376:PRO:CG	1:A:245:PHE:CG	2.74	0.49
1:B:444:TYR:CE1	1:B:488:PHE:HE2	2.30	0.49
1:B:489:PHE:C	1:B:489:PHE:CD2	2.87	0.49
1:B:554:TYR:CD1	1:B:554:TYR:C	2.85	0.49
1:B:640:PHE:HA	1:B:645:GLY:HA3	1.94	0.49
1:A:359:GLU:N	1:A:362:CYS:CB	2.64	0.49
1:A:549:TRP:CD1	1:C:590:GLY:HA2	2.48	0.49
1:A:710:LYS:HE3	1:A:710:LYS:O	2.12	0.49
1:C:158:LEU:O	1:C:158:LEU:CD2	2.61	0.49
1:C:198:TYR:HE1	1:C:242:ARG:CD	2.23	0.49
1:C:489:PHE:C	1:C:489:PHE:CD2	2.87	0.49
1:C:577:LEU:HD21	1:D:672:ILE:HD12	1.94	0.49
1:C:602:GLY:O	1:C:603:LYS:HD3	2.13	0.49
1:D:214:MET:HE2	1:D:218:THR:OG1	2.12	0.49
1:D:583:VAL:CG1	1:D:587:PHE:CD2	2.95	0.49
1:A:136:LEU:H	1:A:136:LEU:CD2	2.19	0.48
1:A:158:LEU:HB2	1:A:189:PHE:CZ	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:421:LEU:HD21	1:A:425:LYS:HE3	1.95	0.48
1:D:142:ARG:CD	1:D:183:THR:CG2	2.91	0.48
1:D:640:PHE:HA	1:D:645:GLY:HA3	1.95	0.48
1:B:583:VAL:CG1	1:B:587:PHE:CD2	2.95	0.48
1:B:701:ARG:CG	1:B:701:ARG:NH1	2.73	0.48
1:B:710:LYS:CE	1:B:711:SER:HA	2.44	0.48
1:A:198:TYR:CD1	1:A:242:ARG:HD2	2.45	0.48
1:A:247:PHE:CZ	1:A:254:LEU:HD13	2.48	0.48
1:A:519:GLN:HB2	1:A:547:MET:HB3	1.95	0.48
1:C:421:LEU:HD22	1:C:425:LYS:HE3	1.94	0.48
1:B:448:PHE:C	1:B:448:PHE:CD2	2.85	0.48
1:A:717:ARG:NE	1:A:718:LYS:N	2.61	0.48
1:C:701:ARG:CG	1:C:701:ARG:NH1	2.73	0.48
1:D:602:GLY:O	1:D:603:LYS:HD3	2.13	0.48
1:D:694:LYS:O	1:D:698:LYS:HG2	2.12	0.48
1:B:142:ARG:CD	1:B:183:THR:CG2	2.91	0.48
1:B:158:LEU:O	1:B:158:LEU:CD2	2.61	0.48
1:A:710:LYS:CE	1:A:711:SER:HA	2.44	0.48
1:C:589:PHE:HD2	1:C:589:PHE:C	2.16	0.48
1:D:198:TYR:HE1	1:D:242:ARG:CD	2.23	0.48
1:B:706:LEU:HD22	1:B:706:LEU:H	1.77	0.48
1:A:142:ARG:CD	1:A:183:THR:CG2	2.91	0.48
1:C:351:TYR:C	1:C:351:TYR:CD2	2.86	0.48
1:C:549:TRP:CD1	1:D:590:GLY:HA2	2.48	0.48
1:C:573:ILE:HG12	1:D:673:LEU:CD1	2.30	0.48
1:C:589:PHE:C	1:C:589:PHE:CD2	2.87	0.48
1:D:436:PHE:CE1	1:D:440:VAL:HG21	2.49	0.48
1:B:487:TYR:CD1	1:B:487:TYR:C	2.85	0.48
1:B:549:TRP:CD1	1:A:590:GLY:HA2	2.48	0.48
1:B:602:GLY:O	1:B:603:LYS:HD3	2.13	0.48
1:A:367:ARG:HH11	1:A:367:ARG:HG3	1.78	0.48
1:A:374:TYR:C	1:A:376:PRO:CD	2.82	0.48
1:A:426:TRP:CE3	1:A:431:LYS:HE2	2.49	0.48
1:A:486:VAL:HG12	1:A:490:PHE:CE2	2.49	0.48
1:A:589:PHE:HD2	1:A:589:PHE:C	2.16	0.48
1:A:602:GLY:O	1:A:603:LYS:HD3	2.13	0.48
1:C:310:ASN:HB2	1:C:351:TYR:OH	2.14	0.48
1:C:426:TRP:CE3	1:C:431:LYS:HE2	2.49	0.48
1:C:707:ASP:C	1:C:711:SER:HB2	2.31	0.48
1:D:589:PHE:C	1:D:589:PHE:CD2	2.87	0.48
1:B:374:TYR:C	1:B:376:PRO:CD	2.82	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:436:PHE:CE1	1:B:440:VAL:HG21	2.49	0.48
1:B:653:TYR:CD1	1:B:653:TYR:C	2.85	0.48
1:A:205:LEU:O	1:A:209:ILE:HG13	2.14	0.48
1:A:403:SER:HG	1:A:406:THR:HG23	1.78	0.48
1:C:710:LYS:C	1:C:714:LYS:HE2	2.33	0.48
1:D:426:TRP:CE3	1:D:431:LYS:HE2	2.49	0.48
1:D:489:PHE:CD2	1:D:489:PHE:C	2.87	0.48
1:D:519:GLN:HB2	1:D:547:MET:HB3	1.95	0.48
1:B:710:LYS:C	1:B:714:LYS:HE2	2.33	0.48
1:A:592:SER:O	1:A:596:VAL:HG23	2.14	0.48
1:C:205:LEU:O	1:C:209:ILE:HG13	2.14	0.48
1:C:240:LYS:NZ	1:C:240:LYS:CB	2.73	0.48
1:C:717:ARG:NE	1:C:718:LYS:N	2.60	0.48
1:D:438:PHE:CD1	1:D:438:PHE:C	2.86	0.48
1:B:421:LEU:HD21	1:B:425:LYS:HE3	1.95	0.48
1:B:594:ALA:HB1	1:D:542:VAL:HG13	1.96	0.48
1:A:577:LEU:HD21	1:C:672:ILE:HD12	1.94	0.48
1:C:313:LEU:HD13	1:C:365:LEU:CD1	2.44	0.48
1:C:374:TYR:C	1:C:376:PRO:CD	2.82	0.48
1:D:313:LEU:HD13	1:D:365:LEU:CD1	2.44	0.48
1:D:710:LYS:CE	1:D:711:SER:HA	2.44	0.48
1:B:214:MET:HE3	1:B:218:THR:OG1	2.13	0.48
1:A:310:ASN:HB2	1:A:351:TYR:OH	2.14	0.48
1:A:387:ILE:HB	1:A:421:LEU:CD1	2.44	0.48
1:A:448:PHE:HD2	1:A:448:PHE:C	2.18	0.48
1:A:649:PHE:CD2	1:A:649:PHE:N	2.73	0.48
1:A:691:GLN:H	1:A:691:GLN:CD	2.15	0.48
1:D:136:LEU:H	1:D:136:LEU:CD2	2.19	0.48
1:D:240:LYS:NZ	1:D:240:LYS:CB	2.73	0.48
1:D:310:ASN:HB2	1:D:351:TYR:OH	2.14	0.48
1:D:589:PHE:HD2	1:D:589:PHE:C	2.16	0.48
1:D:710:LYS:C	1:D:714:LYS:HE2	2.33	0.48
1:B:426:TRP:CE3	1:B:431:LYS:HE2	2.49	0.47
1:B:589:PHE:HD2	1:B:589:PHE:C	2.16	0.47
1:B:589:PHE:C	1:B:589:PHE:CD2	2.87	0.47
1:A:313:LEU:HD13	1:A:365:LEU:CD1	2.44	0.47
1:D:158:LEU:O	1:D:158:LEU:CD2	2.61	0.47
1:B:448:PHE:HD2	1:B:448:PHE:C	2.17	0.47
1:A:436:PHE:CE1	1:A:440:VAL:HG21	2.49	0.47
1:A:438:PHE:CD1	1:A:438:PHE:C	2.86	0.47
1:C:387:ILE:HB	1:C:421:LEU:CD1	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:436:PHE:CE1	1:C:440:VAL:HG21	2.49	0.47
1:C:519:GLN:HB2	1:C:547:MET:HB3	1.95	0.47
1:C:640:PHE:HA	1:C:645:GLY:HA3	1.94	0.47
1:C:760:UNK:CA	1:C:761:UNK:CB	2.86	0.47
1:D:374:TYR:C	1:D:376:PRO:CD	2.82	0.47
1:B:592:SER:O	1:B:596:VAL:HG23	2.14	0.47
1:A:487:TYR:CE1	1:A:491:ARG:CG	2.90	0.47
1:C:554:TYR:CD1	1:C:554:TYR:C	2.85	0.47
1:B:310:ASN:HB2	1:B:351:TYR:OH	2.14	0.47
1:B:387:ILE:HB	1:B:421:LEU:CD1	2.44	0.47
1:B:431:LYS:HB2	1:B:431:LYS:HZ3	1.78	0.47
1:A:640:PHE:HA	1:A:645:GLY:HA3	1.94	0.47
1:A:710:LYS:O	1:A:714:LYS:HE2	2.15	0.47
1:C:589:PHE:HE2	1:C:593:THR:CG2	2.28	0.47
1:C:592:SER:O	1:C:596:VAL:HG23	2.14	0.47
1:D:129:LEU:HD22	1:D:132:LEU:HD22	1.97	0.47
1:D:592:SER:O	1:D:596:VAL:HG23	2.14	0.47
1:D:710:LYS:CG	1:D:714:LYS:CE	2.90	0.47
1:B:399:ILE:CG2	1:B:413:LEU:HD23	2.42	0.47
1:A:589:PHE:HE2	1:A:593:THR:CG2	2.28	0.47
1:C:136:LEU:HD23	1:C:136:LEU:N	2.21	0.47
1:C:448:PHE:HD2	1:C:448:PHE:C	2.18	0.47
1:C:471:ASP:O	1:C:475:VAL:CG2	2.41	0.47
1:D:367:ARG:HH11	1:D:367:ARG:HG3	1.78	0.47
1:D:387:ILE:HB	1:D:421:LEU:CD1	2.44	0.47
1:B:129:LEU:HD22	1:B:132:LEU:HD22	1.97	0.47
1:B:205:LEU:O	1:B:209:ILE:HG13	2.14	0.47
1:B:474:ARG:HD2	1:B:474:ARG:C	2.35	0.47
1:A:172:THR:O	1:A:176:LEU:HB2	2.15	0.47
1:A:239:THR:HA	1:A:243:PRO:HA	1.97	0.47
1:A:242:ARG:CG	1:A:242:ARG:NH1	2.75	0.47
1:A:706:LEU:HD22	1:A:706:LEU:H	1.76	0.47
1:C:142:ARG:CD	1:C:183:THR:CG2	2.91	0.47
1:C:242:ARG:CG	1:C:242:ARG:NH1	2.75	0.47
1:C:710:LYS:CE	1:C:711:SER:HA	2.44	0.47
1:D:242:ARG:CG	1:D:242:ARG:NH1	2.75	0.47
1:B:172:THR:O	1:B:176:LEU:HB2	2.15	0.47
1:B:367:ARG:HH11	1:B:367:ARG:HG3	1.78	0.47
1:B:486:VAL:HG12	1:B:490:PHE:CE2	2.49	0.47
1:B:491:ARG:HA	1:B:494:GLN:HG2	1.97	0.47
1:B:670:THR:O	1:B:674:LEU:HB2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:672:ILE:HD12	1:D:577:LEU:HD21	1.96	0.47
1:A:489:PHE:C	1:A:489:PHE:CD2	2.87	0.47
1:A:587:PHE:O	1:A:591:PHE:HD1	1.98	0.47
1:A:589:PHE:C	1:A:589:PHE:CD2	2.87	0.47
1:A:681:LEU:O	1:A:685:THR:HG23	2.15	0.47
1:C:129:LEU:HD22	1:C:132:LEU:HD22	1.97	0.47
1:C:239:THR:HA	1:C:243:PRO:HA	1.97	0.47
1:C:313:LEU:CD1	1:C:365:LEU:HD11	2.45	0.47
1:C:486:VAL:HG12	1:C:490:PHE:CE2	2.49	0.47
1:C:710:LYS:CG	1:C:714:LYS:CE	2.90	0.47
1:D:239:THR:HA	1:D:243:PRO:HA	1.97	0.47
1:D:670:THR:O	1:D:674:LEU:HB2	2.15	0.47
1:B:313:LEU:CD1	1:B:365:LEU:HD11	2.45	0.47
1:B:519:GLN:HB2	1:B:547:MET:HB3	1.95	0.47
1:A:374:TYR:CD1	1:A:375:GLY:N	2.69	0.47
1:A:670:THR:O	1:A:674:LEU:HB2	2.15	0.47
1:C:115:ARG:O	1:C:115:ARG:HD3	2.15	0.47
1:C:516:PHE:CE2	1:C:554:TYR:CE2	2.88	0.47
1:D:708:THR:O	1:D:712:PHE:HB3	1.99	0.47
1:B:239:THR:HA	1:B:243:PRO:HA	1.97	0.47
1:B:313:LEU:HD13	1:B:365:LEU:CD1	2.44	0.47
1:B:501:PRO:HA	1:B:502:SER:CB	2.40	0.47
1:A:158:LEU:O	1:A:158:LEU:CD2	2.61	0.47
1:A:313:LEU:CD1	1:A:365:LEU:HD11	2.45	0.47
1:A:571:LYS:HE3	1:A:696:ILE:HD11	1.94	0.47
1:A:689:ILE:HG22	1:A:693:SER:CB	2.11	0.47
1:C:214:MET:HE2	1:C:218:THR:OG1	2.15	0.47
1:C:594:ALA:O	1:C:597:THR:OG1	2.33	0.47
1:C:670:THR:O	1:C:674:LEU:HB2	2.15	0.47
1:D:205:LEU:O	1:D:209:ILE:HG13	2.14	0.47
1:D:486:VAL:HG12	1:D:490:PHE:CE2	2.49	0.47
1:B:563:GLY:O	1:B:567:VAL:HG23	2.15	0.47
1:B:707:ASP:C	1:B:711:SER:HB2	2.31	0.47
1:A:240:LYS:HB3	1:A:240:LYS:HZ2	1.79	0.47
1:A:452:ALA:HB1	1:C:597:THR:HG21	1.97	0.47
1:C:356:GLU:HA	1:C:366:SER:HG	1.78	0.47
1:C:587:PHE:O	1:C:591:PHE:HD1	1.98	0.47
1:D:563:GLY:O	1:D:567:VAL:HG23	2.15	0.47
1:B:542:VAL:HG13	1:A:594:ALA:HB1	1.97	0.46
1:A:657:ALA:O	1:A:661:ILE:HG13	2.15	0.46
1:C:172:THR:O	1:C:176:LEU:HB2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:491:ARG:O	1:C:494:GLN:HG2	2.14	0.46
1:C:710:LYS:O	1:C:714:LYS:HE2	2.15	0.46
1:D:707:ASP:C	1:D:711:SER:HB2	2.31	0.46
1:B:491:ARG:O	1:B:494:GLN:HG2	2.14	0.46
1:B:584:TYR:HH	1:B:641:THR:CB	2.16	0.46
1:B:589:PHE:HE2	1:B:593:THR:CG2	2.28	0.46
1:A:545:LEU:HD23	1:A:545:LEU:O	2.15	0.46
1:D:115:ARG:O	1:D:115:ARG:HD3	2.15	0.46
1:D:368:LYS:C	1:D:369:PHE:CD1	2.89	0.46
1:D:589:PHE:HE2	1:D:593:THR:CG2	2.28	0.46
1:B:368:LYS:C	1:B:369:PHE:CD1	2.89	0.46
1:B:717:ARG:NE	1:B:718:LYS:N	2.61	0.46
1:A:136:LEU:HD23	1:A:136:LEU:N	2.21	0.46
1:D:313:LEU:CD1	1:D:365:LEU:HD11	2.45	0.46
1:A:142:ARG:NE	1:A:183:THR:HG22	2.31	0.46
1:A:214:MET:HE3	1:A:218:THR:OG1	2.14	0.46
1:A:474:ARG:HD2	1:A:474:ARG:C	2.35	0.46
1:C:214:MET:HE3	1:C:218:THR:OG1	2.15	0.46
1:C:545:LEU:O	1:C:545:LEU:HD23	2.15	0.46
1:D:142:ARG:NE	1:D:183:THR:HG22	2.31	0.46
1:D:474:ARG:HD2	1:D:474:ARG:C	2.35	0.46
1:D:508:VAL:O	1:D:511:TYR:CD1	2.67	0.46
1:D:710:LYS:O	1:D:714:LYS:HE2	2.15	0.46
1:B:142:ARG:NE	1:B:183:THR:HG22	2.31	0.46
1:B:571:LYS:HE3	1:B:696:ILE:HD11	1.94	0.46
1:A:354:GLN:O	1:A:354:GLN:NE2	2.49	0.46
1:A:382:TYR:H	1:A:753:UNK:C	2.27	0.46
1:A:594:ALA:O	1:A:597:THR:OG1	2.33	0.46
1:C:563:GLY:O	1:C:567:VAL:HG23	2.15	0.46
1:D:587:PHE:O	1:D:591:PHE:HD1	1.98	0.46
1:B:594:ALA:O	1:B:597:THR:OG1	2.33	0.46
1:B:597:THR:HG21	1:D:452:ALA:HB1	1.96	0.46
1:B:635:LEU:HD22	1:B:635:LEU:HA	1.77	0.46
1:B:653:TYR:HH	1:B:656:LYS:HG2	1.74	0.46
1:B:657:ALA:O	1:B:661:ILE:HG13	2.15	0.46
1:B:681:LEU:O	1:B:685:THR:HG23	2.15	0.46
1:A:129:LEU:HD22	1:A:132:LEU:HD22	1.97	0.46
1:A:188:GLN:H	1:A:188:GLN:NE2	2.13	0.46
1:A:383:ASP:HB3	1:A:384:LEU:CA	2.45	0.46
1:A:401:TYR:CD1	1:A:401:TYR:N	2.84	0.46
1:C:452:ALA:HB1	1:D:597:THR:HG21	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:PRO:HA	1:C:502:SER:CB	2.40	0.46
1:C:681:LEU:O	1:C:685:THR:HG23	2.15	0.46
1:C:712:PHE:O	1:C:713:LEU:CB	2.64	0.46
1:C:716:MET:SD	1:C:716:MET:C	2.94	0.46
1:B:543:PHE:CE1	1:A:662:LEU:HD21	2.51	0.46
1:A:368:LYS:C	1:A:369:PHE:CD1	2.89	0.46
1:C:354:GLN:O	1:C:354:GLN:NE2	2.49	0.46
1:C:474:ARG:HD2	1:C:474:ARG:C	2.35	0.46
1:D:448:PHE:HD2	1:D:448:PHE:C	2.17	0.46
1:B:115:ARG:O	1:B:115:ARG:HD3	2.15	0.46
1:B:529:LEU:HD13	1:B:529:LEU:HA	1.83	0.46
1:B:592:SER:HA	1:B:637:LEU:HD12	1.98	0.46
1:A:240:LYS:HD3	1:A:242:ARG:HG2	1.98	0.46
1:A:242:ARG:HB3	1:A:243:PRO:C	2.36	0.46
1:A:589:PHE:CE2	1:A:593:THR:HG21	2.51	0.46
1:A:716:MET:SD	1:A:716:MET:C	2.94	0.46
1:C:401:TYR:CD1	1:C:401:TYR:N	2.84	0.46
1:C:421:LEU:HD21	1:C:425:LYS:HE3	1.95	0.46
1:D:657:ALA:O	1:D:661:ILE:HG13	2.15	0.46
1:B:498:GLN:NE2	1:B:710:LYS:HZ2	2.14	0.46
1:B:545:LEU:O	1:B:545:LEU:HD23	2.15	0.46
1:B:685:THR:O	1:B:689:ILE:CD1	2.64	0.46
1:A:542:VAL:HG13	1:C:594:ALA:HB1	1.98	0.46
1:C:356:GLU:C	1:C:366:SER:OG	2.54	0.46
1:C:453:TYR:C	1:C:453:TYR:CD2	2.89	0.46
1:C:685:THR:O	1:C:689:ILE:CD1	2.64	0.46
1:D:172:THR:O	1:D:176:LEU:HB2	2.15	0.46
1:D:685:THR:O	1:D:689:ILE:CD1	2.64	0.46
1:B:354:GLN:NE2	1:B:354:GLN:O	2.49	0.46
1:A:491:ARG:HA	1:A:494:GLN:HG2	1.97	0.46
1:A:710:LYS:HG2	1:A:714:LYS:HZ1	1.81	0.46
1:D:529:LEU:HD12	1:D:534:ARG:HB2	1.98	0.46
1:D:545:LEU:HD23	1:D:545:LEU:O	2.15	0.46
1:D:706:LEU:HD22	1:D:706:LEU:H	1.77	0.46
1:D:716:MET:SD	1:D:716:MET:C	2.94	0.46
1:B:452:ALA:HB1	1:A:597:THR:HG21	1.97	0.45
1:B:712:PHE:O	1:B:713:LEU:CB	2.64	0.45
1:A:592:SER:HA	1:A:637:LEU:HD12	1.98	0.45
1:A:647:LEU:HD22	1:A:647:LEU:HA	1.83	0.45
1:C:242:ARG:HB3	1:C:243:PRO:C	2.36	0.45
1:C:368:LYS:C	1:C:369:PHE:CD1	2.89	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:706:LEU:HD22	1:C:706:LEU:H	1.77	0.45
1:D:354:GLN:O	1:D:354:GLN:NE2	2.49	0.45
1:D:491:ARG:HA	1:D:494:GLN:HG2	1.97	0.45
1:B:242:ARG:HB3	1:B:243:PRO:C	2.36	0.45
1:B:359:GLU:CB	1:B:360:PRO:CD	2.94	0.45
1:B:383:ASP:HB3	1:B:384:LEU:CA	2.45	0.45
1:A:431:LYS:HZ3	1:A:431:LYS:HB2	1.81	0.45
1:A:529:LEU:HD12	1:A:534:ARG:HB2	1.98	0.45
1:C:359:GLU:CB	1:C:360:PRO:CD	2.94	0.45
1:D:242:ARG:HB3	1:D:243:PRO:C	2.36	0.45
1:D:401:TYR:N	1:D:401:TYR:CD1	2.84	0.45
1:D:571:LYS:HE3	1:D:696:ILE:HD11	1.94	0.45
1:D:701:ARG:HB2	1:D:701:ARG:NH1	2.23	0.45
1:B:242:ARG:CG	1:B:242:ARG:NH1	2.75	0.45
1:B:401:TYR:CD1	1:B:401:TYR:N	2.84	0.45
1:B:716:MET:SD	1:B:716:MET:C	2.94	0.45
1:A:563:GLY:O	1:A:567:VAL:HG23	2.15	0.45
1:A:760:UNK:HA	1:A:761:UNK:C	2.47	0.45
1:C:240:LYS:HD3	1:C:242:ARG:HG2	1.98	0.45
1:C:508:VAL:O	1:C:511:TYR:CD1	2.67	0.45
1:C:573:ILE:O	1:C:577:LEU:HB2	2.17	0.45
1:C:589:PHE:CE2	1:C:593:THR:HG21	2.51	0.45
1:D:431:LYS:HZ3	1:D:431:LYS:HB2	1.80	0.45
1:B:136:LEU:H	1:B:136:LEU:CD2	2.19	0.45
1:B:188:GLN:H	1:B:188:GLN:NE2	2.13	0.45
1:B:356:GLU:C	1:B:366:SER:OG	2.54	0.45
1:B:589:PHE:CE2	1:B:593:THR:HG21	2.51	0.45
1:B:601:ASP:C	1:B:652:ASN:ND2	2.60	0.45
1:A:710:LYS:CG	1:A:714:LYS:CE	2.90	0.45
1:C:377:VAL:CG1	1:C:378:HIS:N	2.80	0.45
1:C:491:ARG:HA	1:C:494:GLN:HG2	1.97	0.45
1:C:649:PHE:CE2	1:C:663:LEU:HD11	2.37	0.45
1:C:657:ALA:O	1:C:661:ILE:HG13	2.15	0.45
1:B:587:PHE:O	1:B:591:PHE:HD1	1.98	0.45
1:A:115:ARG:O	1:A:115:ARG:HD3	2.15	0.45
1:A:508:VAL:O	1:A:511:TYR:CD1	2.67	0.45
1:A:685:THR:O	1:A:689:ILE:CD1	2.64	0.45
1:A:712:PHE:O	1:A:713:LEU:CB	2.64	0.45
1:D:240:LYS:HD3	1:D:242:ARG:HG2	1.98	0.45
1:D:471:ASP:O	1:D:475:VAL:CG2	2.41	0.45
1:D:594:ALA:O	1:D:597:THR:OG1	2.33	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:649:PHE:CE2	1:B:663:LEU:HD11	2.37	0.45
1:A:453:TYR:CD2	1:A:453:TYR:O	2.70	0.45
1:A:562:MET:HE2	1:C:582:PHE:HB3	1.98	0.45
1:A:573:ILE:O	1:A:577:LEU:HB2	2.17	0.45
1:C:542:VAL:HG13	1:D:594:ALA:HB1	1.97	0.45
1:D:589:PHE:CE2	1:D:593:THR:HG21	2.51	0.45
1:D:681:LEU:O	1:D:685:THR:HG23	2.15	0.45
1:B:486:VAL:HG12	1:B:490:PHE:CZ	2.52	0.45
1:B:573:ILE:O	1:B:577:LEU:HB2	2.17	0.45
1:B:650:THR:O	1:B:653:TYR:CE2	2.70	0.45
1:B:710:LYS:O	1:B:714:LYS:HE2	2.15	0.45
1:A:214:MET:HE2	1:A:218:THR:OG1	2.16	0.45
1:A:486:VAL:HG12	1:A:490:PHE:CZ	2.52	0.45
1:C:554:TYR:CD1	1:C:554:TYR:O	2.70	0.45
1:D:462:PRO:HB3	1:D:530:TYR:HH	1.71	0.45
1:D:573:ILE:O	1:D:577:LEU:HB2	2.17	0.45
1:D:701:ARG:CG	1:D:701:ARG:NH1	2.73	0.45
1:B:438:PHE:C	1:B:438:PHE:CD1	2.86	0.45
1:A:491:ARG:O	1:A:494:GLN:HG2	2.13	0.45
1:A:650:THR:O	1:A:653:TYR:CE2	2.70	0.45
1:C:188:GLN:H	1:C:188:GLN:NE2	2.13	0.45
1:C:486:VAL:HG12	1:C:490:PHE:CZ	2.52	0.45
1:D:409:ARG:C	1:D:409:ARG:CD	2.86	0.45
1:D:474:ARG:CD	1:D:474:ARG:C	2.85	0.45
1:D:669:LEU:CD1	1:D:669:LEU:C	2.86	0.45
1:B:669:LEU:CD1	1:B:669:LEU:C	2.85	0.45
1:A:474:ARG:CD	1:A:474:ARG:C	2.85	0.45
1:D:421:LEU:CD2	1:D:421:LEU:C	2.86	0.45
1:D:601:ASP:C	1:D:652:ASN:ND2	2.60	0.45
1:B:242:ARG:CB	1:B:243:PRO:CA	2.95	0.45
1:B:409:ARG:C	1:B:409:ARG:CD	2.85	0.45
1:B:453:TYR:CD2	1:B:453:TYR:O	2.70	0.45
1:B:474:ARG:CD	1:B:474:ARG:C	2.85	0.45
1:B:672:ILE:HD13	1:B:673:LEU:HA	1.99	0.45
1:C:242:ARG:CB	1:C:243:PRO:CA	2.95	0.45
1:C:438:PHE:CD1	1:C:438:PHE:C	2.86	0.45
1:C:653:TYR:HE1	1:C:656:LYS:HB2	1.76	0.45
1:D:359:GLU:CB	1:D:360:PRO:CD	2.94	0.45
1:D:382:TYR:H	1:D:753:UNK:C	2.27	0.45
1:D:486:VAL:HG12	1:D:490:PHE:CZ	2.52	0.45
1:B:313:LEU:HB3	1:B:365:LEU:CG	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:382:TYR:H	1:B:753:UNK:C	2.27	0.44
1:A:543:PHE:CE1	1:C:662:LEU:HD21	2.52	0.44
1:C:712:PHE:O	1:C:712:PHE:CG	2.71	0.44
1:D:588:LEU:O	1:D:592:SER:HB3	2.17	0.44
1:B:396:LEU:HD13	1:B:418:LEU:HD23	1.90	0.44
1:A:689:ILE:O	1:A:692:GLU:HB3	2.17	0.44
1:C:383:ASP:HB3	1:C:384:LEU:CA	2.45	0.44
1:C:421:LEU:CD2	1:C:421:LEU:C	2.86	0.44
1:C:689:ILE:O	1:C:692:GLU:HB3	2.17	0.44
1:D:377:VAL:CG1	1:D:378:HIS:N	2.80	0.44
1:D:453:TYR:O	1:D:453:TYR:CD2	2.70	0.44
1:D:672:ILE:HD13	1:D:673:LEU:HA	1.99	0.44
1:B:421:LEU:CD2	1:B:421:LEU:C	2.86	0.44
1:B:653:TYR:CE1	1:B:656:LYS:CA	3.00	0.44
1:B:710:LYS:CG	1:B:714:LYS:CE	2.90	0.44
1:B:712:PHE:O	1:B:712:PHE:CG	2.71	0.44
1:A:491:ARG:HE	1:A:491:ARG:HB3	1.52	0.44
1:A:554:TYR:CD1	1:A:554:TYR:O	2.70	0.44
1:C:588:LEU:O	1:C:592:SER:HB3	2.17	0.44
1:C:653:TYR:CE1	1:C:656:LYS:CA	3.00	0.44
1:B:240:LYS:HD3	1:B:242:ARG:HG2	1.98	0.44
1:A:242:ARG:CB	1:A:243:PRO:CA	2.95	0.44
1:A:313:LEU:HB3	1:A:365:LEU:CG	2.48	0.44
1:A:359:GLU:CB	1:A:360:PRO:CD	2.94	0.44
1:A:409:ARG:CD	1:A:409:ARG:C	2.85	0.44
1:C:583:VAL:HG13	1:C:587:PHE:CE2	2.53	0.44
1:C:760:UNK:HA	1:C:761:UNK:C	2.47	0.44
1:D:242:ARG:CB	1:D:243:PRO:CA	2.95	0.44
1:D:313:LEU:HB3	1:D:365:LEU:CG	2.47	0.44
1:D:712:PHE:O	1:D:713:LEU:CB	2.64	0.44
1:B:554:TYR:CD1	1:B:554:TYR:O	2.70	0.44
1:C:472:TYR:O	1:C:472:TYR:CD2	2.70	0.44
1:C:529:LEU:HD12	1:C:534:ARG:HB2	1.98	0.44
1:C:573:ILE:O	1:C:577:LEU:CB	2.66	0.44
1:C:647:LEU:HD22	1:C:647:LEU:HA	1.83	0.44
1:D:261:LEU:HD21	1:D:311:GLU:HG2	2.00	0.44
1:D:472:TYR:O	1:D:472:TYR:CD2	2.70	0.44
1:D:487:TYR:CE1	1:D:491:ARG:HD3	2.53	0.44
1:B:237:LYS:HE3	1:B:237:LYS:HB2	1.67	0.44
1:B:330:ASN:O	1:B:331:ARG:C	2.56	0.44
1:B:453:TYR:CD2	1:B:453:TYR:C	2.89	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:472:TYR:C	1:B:472:TYR:HD2	2.21	0.44
1:B:760:UNK:HA	1:B:761:UNK:C	2.47	0.44
1:A:472:TYR:C	1:A:472:TYR:HD2	2.21	0.44
1:C:453:TYR:CD2	1:C:453:TYR:O	2.70	0.44
1:C:650:THR:O	1:C:653:TYR:CE2	2.70	0.44
1:D:453:TYR:CD2	1:D:453:TYR:C	2.89	0.44
1:D:579:ARG:NH1	1:D:579:ARG:CG	2.73	0.44
1:D:700:GLN:O	1:D:704:THR:CG2	2.50	0.44
1:B:573:ILE:O	1:B:577:LEU:CB	2.66	0.44
1:A:573:ILE:O	1:A:577:LEU:CB	2.66	0.44
1:A:760:UNK:CA	1:A:761:UNK:CB	2.87	0.44
1:C:474:ARG:CD	1:C:474:ARG:C	2.85	0.44
1:C:489:PHE:CD1	1:C:524:LEU:HD11	2.53	0.44
1:C:577:LEU:HD21	1:D:672:ILE:CD1	2.47	0.44
1:C:672:ILE:HD13	1:C:673:LEU:HA	1.99	0.44
1:D:377:VAL:O	1:D:378:HIS:HD2	2.01	0.44
1:D:650:THR:O	1:D:653:TYR:CE2	2.70	0.44
1:D:689:ILE:O	1:D:692:GLU:HB3	2.17	0.44
1:B:239:THR:C	1:B:241:GLY:HA2	2.38	0.44
1:B:245:PHE:CG	1:D:376:PRO:CG	2.79	0.44
1:B:431:LYS:HB2	1:B:431:LYS:NZ	2.33	0.44
1:B:529:LEU:HD12	1:B:534:ARG:HB2	1.98	0.44
1:A:577:LEU:HD23	1:A:577:LEU:HA	1.85	0.44
1:A:635:LEU:HD22	1:A:635:LEU:HA	1.77	0.44
1:A:712:PHE:O	1:A:712:PHE:CG	2.71	0.44
1:C:239:THR:C	1:C:241:GLY:HA2	2.38	0.44
1:C:491:ARG:HE	1:C:491:ARG:HB3	1.53	0.44
1:C:640:PHE:CD1	1:C:667:VAL:CG2	3.01	0.44
1:D:383:ASP:HB3	1:D:384:LEU:CA	2.45	0.44
1:D:495:TYR:CD1	1:D:499:ARG:HG2	2.50	0.44
1:B:489:PHE:C	1:B:489:PHE:HD2	2.21	0.44
1:B:588:LEU:O	1:B:592:SER:HB3	2.17	0.44
1:A:261:LEU:HD21	1:A:311:GLU:HG2	2.00	0.44
1:A:453:TYR:CD2	1:A:453:TYR:C	2.89	0.44
1:C:377:VAL:O	1:C:378:HIS:HD2	2.01	0.44
1:C:571:LYS:HE3	1:C:696:ILE:HD11	1.94	0.44
1:D:431:LYS:HB2	1:D:431:LYS:NZ	2.33	0.44
1:D:472:TYR:O	1:D:472:TYR:HD2	2.01	0.44
1:D:573:ILE:O	1:D:577:LEU:CB	2.66	0.44
1:B:214:MET:HE2	1:B:218:THR:OG1	2.18	0.43
1:B:269:GLN:HE22	1:B:318:LYS:NZ	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:377:VAL:CG1	1:B:378:HIS:N	2.80	0.43
1:B:472:TYR:O	1:B:472:TYR:CD2	2.70	0.43
1:B:472:TYR:O	1:B:472:TYR:HD2	2.01	0.43
1:B:577:LEU:HD21	1:A:672:ILE:CD1	2.48	0.43
1:A:239:THR:C	1:A:241:GLY:HA2	2.38	0.43
1:A:472:TYR:O	1:A:472:TYR:CD2	2.70	0.43
1:C:409:ARG:C	1:C:409:ARG:CD	2.86	0.43
1:D:239:THR:C	1:D:241:GLY:HA2	2.38	0.43
1:D:554:TYR:CD1	1:D:554:TYR:O	2.70	0.43
1:B:583:VAL:HG13	1:B:587:PHE:CE2	2.53	0.43
1:A:588:LEU:O	1:A:592:SER:HB3	2.17	0.43
1:C:592:SER:HA	1:C:637:LEU:HD12	1.98	0.43
1:C:669:LEU:CD1	1:C:669:LEU:C	2.86	0.43
1:C:700:GLN:O	1:C:704:THR:CG2	2.50	0.43
1:B:644:MET:HG2	1:A:645:GLY:O	2.17	0.43
1:B:689:ILE:O	1:B:692:GLU:HB3	2.18	0.43
1:A:158:LEU:HD22	1:A:158:LEU:C	2.38	0.43
1:A:672:ILE:HD13	1:A:673:LEU:HA	1.99	0.43
1:C:487:TYR:CE1	1:C:491:ARG:HD3	2.53	0.43
1:D:142:ARG:C	1:D:144:THR:H	2.22	0.43
1:D:399:ILE:HG21	1:D:413:LEU:CD2	2.47	0.43
1:D:592:SER:HA	1:D:637:LEU:HD12	1.98	0.43
1:B:142:ARG:C	1:B:144:THR:H	2.22	0.43
1:B:261:LEU:HD21	1:B:311:GLU:HG2	2.00	0.43
1:B:487:TYR:CE1	1:B:491:ARG:HD3	2.53	0.43
1:B:645:GLY:O	1:D:644:MET:HG2	2.19	0.43
1:A:269:GLN:HE22	1:A:318:LYS:NZ	2.17	0.43
1:A:330:ASN:O	1:A:331:ARG:C	2.56	0.43
1:A:377:VAL:CG1	1:A:378:HIS:N	2.80	0.43
1:A:421:LEU:CD2	1:A:421:LEU:C	2.86	0.43
1:C:142:ARG:NE	1:C:183:THR:HG22	2.31	0.43
1:C:431:LYS:HZ3	1:C:431:LYS:HB2	1.83	0.43
1:D:356:GLU:C	1:D:366:SER:OG	2.54	0.43
1:D:576:ASP:CG	1:D:685:THR:CG2	2.80	0.43
1:D:640:PHE:CD1	1:D:667:VAL:CG2	3.01	0.43
1:B:355:ARG:HB3	1:B:367:ARG:HB2	2.01	0.43
1:B:495:TYR:CD1	1:B:499:ARG:HG2	2.50	0.43
1:A:583:VAL:HG13	1:A:587:PHE:CE2	2.53	0.43
1:A:653:TYR:CE1	1:A:656:LYS:CA	3.00	0.43
1:C:421:LEU:O	1:C:425:LYS:HG3	2.19	0.43
1:C:562:MET:HE1	1:D:582:PHE:HB2	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:644:MET:HG2	1:D:645:GLY:O	2.18	0.43
1:D:330:ASN:O	1:D:331:ARG:C	2.56	0.43
1:D:355:ARG:HB3	1:D:367:ARG:HB2	2.01	0.43
1:B:240:LYS:N	1:B:242:ARG:N	2.67	0.43
1:B:415:VAL:HG12	1:B:417:PRO:HD3	1.97	0.43
1:B:560:GLN:OE1	1:B:697:TRP:CH2	2.72	0.43
1:B:571:LYS:HZ2	1:B:571:LYS:HG3	1.76	0.43
1:B:635:LEU:CD1	1:A:647:LEU:HD11	2.44	0.43
1:B:640:PHE:CD1	1:B:667:VAL:CG2	3.01	0.43
1:B:653:TYR:HE1	1:B:656:LYS:HB2	1.76	0.43
1:B:682:MET:HE2	1:A:673:LEU:CD2	2.48	0.43
1:A:431:LYS:HB2	1:A:431:LYS:NZ	2.33	0.43
1:A:560:GLN:OE1	1:A:697:TRP:CH2	2.72	0.43
1:A:574:LEU:H	1:A:574:LEU:HG	1.51	0.43
1:A:640:PHE:CD1	1:A:667:VAL:CG2	3.01	0.43
1:C:472:TYR:O	1:C:472:TYR:HD2	2.01	0.43
1:C:673:LEU:HD22	1:C:677:MET:HG3	2.01	0.43
1:D:712:PHE:O	1:D:712:PHE:CG	2.71	0.43
1:B:592:SER:HA	1:B:637:LEU:CD1	2.49	0.43
1:A:377:VAL:O	1:A:378:HIS:HD2	2.01	0.43
1:A:472:TYR:O	1:A:472:TYR:HD2	2.01	0.43
1:A:590:GLY:O	1:A:593:THR:OG1	2.31	0.43
1:C:142:ARG:C	1:C:144:THR:H	2.22	0.43
1:C:313:LEU:HB3	1:C:365:LEU:CG	2.47	0.43
1:C:560:GLN:OE1	1:C:697:TRP:CH2	2.72	0.43
1:D:381:LEU:HD12	1:D:754:UNK:CA	2.49	0.43
1:D:489:PHE:C	1:D:489:PHE:HD2	2.21	0.43
1:D:584:TYR:HH	1:D:641:THR:CB	2.17	0.43
1:D:760:UNK:HA	1:D:761:UNK:C	2.47	0.43
1:B:377:VAL:O	1:B:378:HIS:HD2	2.01	0.43
1:A:413:LEU:CD1	1:A:422:LEU:CD1	2.87	0.43
1:A:495:TYR:CD1	1:A:499:ARG:HG2	2.50	0.43
1:A:629:SER:HB3	1:A:632:SER:HB2	2.01	0.43
1:C:640:PHE:HZ	1:C:647:LEU:HA	1.84	0.43
1:D:240:LYS:N	1:D:242:ARG:N	2.66	0.43
1:D:417:PRO:O	1:D:421:LEU:HB2	2.19	0.43
1:D:472:TYR:C	1:D:472:TYR:HD2	2.21	0.43
1:B:647:LEU:HB3	1:B:648:GLU:H	1.62	0.43
1:A:417:PRO:O	1:A:421:LEU:HB2	2.19	0.43
1:A:640:PHE:HZ	1:A:647:LEU:HA	1.84	0.43
1:A:653:TYR:HE1	1:A:656:LYS:HB2	1.77	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:357:ILE:N	1:C:366:SER:HG	1.97	0.43
1:C:576:ASP:CG	1:C:685:THR:CG2	2.80	0.43
1:D:560:GLN:OE1	1:D:697:TRP:CH2	2.72	0.43
1:D:583:VAL:HG13	1:D:587:PHE:CE2	2.53	0.43
1:D:599:ILE:CD1	1:D:628:ASN:N	2.67	0.43
1:B:640:PHE:HZ	1:B:647:LEU:HA	1.84	0.43
1:A:142:ARG:C	1:A:144:THR:H	2.22	0.43
1:A:471:ASP:O	1:A:475:VAL:CG2	2.41	0.43
1:C:629:SER:HB3	1:C:632:SER:HB2	2.01	0.43
1:D:269:GLN:HE22	1:D:318:LYS:NZ	2.17	0.43
1:D:489:PHE:CD1	1:D:524:LEU:HD11	2.53	0.43
1:D:649:PHE:CD2	1:D:649:PHE:N	2.73	0.43
1:D:673:LEU:HD22	1:D:677:MET:HG3	2.01	0.43
1:B:381:LEU:HD12	1:B:754:UNK:CA	2.49	0.42
1:B:421:LEU:O	1:B:425:LYS:HG3	2.19	0.42
1:B:438:PHE:CD1	1:B:438:PHE:O	2.72	0.42
1:B:677:MET:HE2	1:D:572:MET:HE2	1.54	0.42
1:A:438:PHE:CD1	1:A:438:PHE:O	2.72	0.42
1:C:158:LEU:HD22	1:C:158:LEU:C	2.39	0.42
1:C:431:LYS:HB2	1:C:431:LYS:NZ	2.33	0.42
1:C:472:TYR:C	1:C:472:TYR:HD2	2.21	0.42
1:D:136:LEU:HD23	1:D:136:LEU:N	2.21	0.42
1:D:387:ILE:CG2	1:D:388:ASP:N	2.82	0.42
1:D:438:PHE:CD1	1:D:438:PHE:O	2.72	0.42
1:D:640:PHE:HZ	1:D:647:LEU:HA	1.84	0.42
1:B:662:LEU:HD21	1:D:543:PHE:CE1	2.51	0.42
1:A:355:ARG:HB3	1:A:367:ARG:HB2	2.01	0.42
1:C:240:LYS:N	1:C:242:ARG:N	2.66	0.42
1:C:381:LEU:HD12	1:C:754:UNK:CA	2.49	0.42
1:C:403:SER:HG	1:C:406:THR:HG23	1.82	0.42
1:C:717:ARG:CG	1:C:718:LYS:N	2.83	0.42
1:D:487:TYR:CE1	1:D:491:ARG:CG	2.90	0.42
1:B:399:ILE:HG21	1:B:413:LEU:CD2	2.47	0.42
1:B:560:GLN:NE2	1:B:564:ILE:HD11	2.34	0.42
1:A:577:LEU:HD21	1:C:672:ILE:CD1	2.48	0.42
1:C:330:ASN:O	1:C:331:ARG:C	2.56	0.42
1:C:396:LEU:HD13	1:C:418:LEU:HD23	1.90	0.42
1:C:489:PHE:C	1:C:489:PHE:HD2	2.21	0.42
1:D:560:GLN:NE2	1:D:564:ILE:HD11	2.34	0.42
1:D:599:ILE:O	1:D:599:ILE:HG13	2.20	0.42
1:B:158:LEU:HD22	1:B:158:LEU:C	2.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:387:ILE:CG2	1:B:388:ASP:N	2.82	0.42
1:B:572:MET:HE2	1:A:677:MET:SD	2.49	0.42
1:B:575:ARG:HE	1:B:575:ARG:HB3	1.73	0.42
1:A:357:ILE:N	1:A:366:SER:HG	1.92	0.42
1:A:399:ILE:HG21	1:A:413:LEU:CD2	2.47	0.42
1:A:415:VAL:HG12	1:A:417:PRO:HD3	1.97	0.42
1:C:269:GLN:HE22	1:C:318:LYS:NZ	2.17	0.42
1:C:295:ALA:HA	1:C:301:ASN:HD21	1.84	0.42
1:C:355:ARG:HB3	1:C:367:ARG:HB2	2.01	0.42
1:C:367:ARG:HH11	1:C:367:ARG:HG3	1.78	0.42
1:D:158:LEU:HD22	1:D:158:LEU:C	2.39	0.42
1:D:629:SER:HB3	1:D:632:SER:HB2	2.01	0.42
1:B:629:SER:HB3	1:B:632:SER:HB2	2.01	0.42
1:A:240:LYS:N	1:A:242:ARG:N	2.66	0.42
1:A:489:PHE:C	1:A:489:PHE:HD2	2.21	0.42
1:A:560:GLN:NE2	1:A:564:ILE:HD11	2.34	0.42
1:A:669:LEU:CD1	1:A:669:LEU:C	2.86	0.42
1:C:261:LEU:HD21	1:C:311:GLU:HG2	2.00	0.42
1:C:673:LEU:HD22	1:C:673:LEU:O	2.20	0.42
1:D:501:PRO:CA	1:D:502:SER:CB	2.87	0.42
1:D:673:LEU:HD22	1:D:673:LEU:O	2.20	0.42
1:D:710:LYS:HG2	1:D:714:LYS:HZ1	1.84	0.42
1:B:516:PHE:CE2	1:B:554:TYR:CE2	2.88	0.42
1:B:640:PHE:CZ	1:B:647:LEU:HA	2.55	0.42
1:B:673:LEU:CD2	1:D:682:MET:HE2	2.47	0.42
1:A:640:PHE:CZ	1:A:647:LEU:HA	2.55	0.42
1:C:640:PHE:CZ	1:C:647:LEU:HA	2.55	0.42
1:D:592:SER:HA	1:D:637:LEU:CD1	2.49	0.42
1:B:417:PRO:O	1:B:421:LEU:HB2	2.19	0.42
1:B:673:LEU:HD22	1:B:677:MET:HG3	2.01	0.42
1:B:717:ARG:CG	1:B:718:LYS:N	2.83	0.42
1:A:142:ARG:NE	1:A:183:THR:HG21	2.35	0.42
1:A:295:ALA:HA	1:A:301:ASN:HD21	1.84	0.42
1:A:387:ILE:CG2	1:A:388:ASP:N	2.82	0.42
1:A:421:LEU:O	1:A:425:LYS:HG3	2.19	0.42
1:A:673:LEU:HD22	1:A:677:MET:HG3	2.01	0.42
1:C:417:PRO:O	1:C:421:LEU:HB2	2.19	0.42
1:C:438:PHE:CD1	1:C:438:PHE:O	2.72	0.42
1:C:697:TRP:CZ3	1:C:698:LYS:CD	2.92	0.42
1:D:421:LEU:O	1:D:425:LYS:HG3	2.19	0.42
1:B:242:ARG:CB	1:B:243:PRO:HA	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:538:VAL:O	1:B:542:VAL:N	2.48	0.42
1:B:672:ILE:CD1	1:D:577:LEU:HD21	2.50	0.42
1:A:423:GLN:NE2	1:A:423:GLN:C	2.73	0.42
1:A:487:TYR:CE1	1:A:491:ARG:HD3	2.53	0.42
1:A:712:PHE:O	1:A:712:PHE:CD1	2.73	0.42
1:C:543:PHE:CE1	1:D:662:LEU:HD21	2.53	0.42
1:C:710:LYS:CG	1:C:714:LYS:HZ3	2.32	0.42
1:B:142:ARG:NE	1:B:183:THR:HG21	2.35	0.42
1:B:545:LEU:CD2	1:B:549:TRP:CD1	3.03	0.42
1:A:592:SER:HA	1:A:637:LEU:CD1	2.49	0.42
1:A:599:ILE:O	1:A:599:ILE:HG13	2.20	0.42
1:A:701:ARG:HG2	1:A:705:ILE:HD12	2.02	0.42
1:C:387:ILE:CG2	1:C:388:ASP:N	2.82	0.42
1:C:482:VAL:HG13	1:C:527:VAL:CG2	2.41	0.42
1:C:712:PHE:O	1:C:712:PHE:CD1	2.73	0.42
1:D:242:ARG:CB	1:D:243:PRO:HA	2.50	0.42
1:D:423:GLN:NE2	1:D:423:GLN:C	2.73	0.42
1:B:521:LEU:C	1:B:521:LEU:CD2	2.85	0.42
1:B:599:ILE:O	1:B:599:ILE:HG13	2.20	0.42
1:A:381:LEU:HD12	1:A:754:UNK:CA	2.49	0.42
1:A:487:TYR:HE1	1:A:491:ARG:HD2	1.83	0.42
1:A:644:MET:HG2	1:C:645:GLY:O	2.17	0.42
1:A:717:ARG:CG	1:A:718:LYS:N	2.83	0.42
1:C:382:TYR:H	1:C:753:UNK:C	2.27	0.42
1:C:649:PHE:CD2	1:C:649:PHE:N	2.73	0.42
1:D:188:GLN:H	1:D:188:GLN:NE2	2.13	0.42
1:D:276:ASP:C	1:D:276:ASP:OD1	2.59	0.42
1:D:640:PHE:CD1	1:D:667:VAL:HG22	2.55	0.42
1:D:712:PHE:O	1:D:712:PHE:CD1	2.73	0.42
1:B:295:ALA:HA	1:B:301:ASN:HD21	1.84	0.41
1:B:712:PHE:O	1:B:712:PHE:CD1	2.73	0.41
1:C:423:GLN:NE2	1:C:423:GLN:C	2.73	0.41
1:C:599:ILE:O	1:C:599:ILE:HG13	2.20	0.41
1:C:701:ARG:HG2	1:C:705:ILE:HD12	2.02	0.41
1:C:717:ARG:HE	1:C:718:LYS:N	2.13	0.41
1:D:295:ALA:HA	1:D:301:ASN:HD21	1.84	0.41
1:D:575:ARG:HG2	1:D:576:ASP:H	1.85	0.41
1:D:627:TYR:HD2	1:D:650:THR:CB	2.20	0.41
1:D:640:PHE:CZ	1:D:647:LEU:HA	2.55	0.41
1:B:210:GLU:CD	1:D:374:TYR:HH	2.24	0.41
1:B:276:ASP:C	1:B:276:ASP:OD1	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:529:LEU:HD13	1:A:529:LEU:HA	1.83	0.41
1:C:560:GLN:NE2	1:C:564:ILE:HD11	2.34	0.41
1:C:592:SER:HA	1:C:637:LEU:CD1	2.49	0.41
1:B:599:ILE:CD1	1:B:628:ASN:N	2.67	0.41
1:B:701:ARG:HG2	1:B:705:ILE:HD12	2.02	0.41
1:A:357:ILE:CD1	1:A:365:LEU:CD1	2.97	0.41
1:C:276:ASP:C	1:C:276:ASP:OD1	2.59	0.41
1:B:423:GLN:NE2	1:B:423:GLN:C	2.73	0.41
1:B:647:LEU:HA	1:B:647:LEU:HD22	1.83	0.41
1:C:242:ARG:CB	1:C:243:PRO:HA	2.50	0.41
1:C:627:TYR:HD2	1:C:650:THR:CB	2.20	0.41
1:C:640:PHE:CD1	1:C:667:VAL:HG22	2.55	0.41
1:D:545:LEU:CD2	1:D:549:TRP:CD1	3.03	0.41
1:D:717:ARG:CG	1:D:718:LYS:N	2.83	0.41
1:A:673:LEU:HD22	1:A:673:LEU:O	2.20	0.41
1:C:357:ILE:CD1	1:C:365:LEU:CD1	2.97	0.41
1:C:529:LEU:HD13	1:C:529:LEU:HA	1.83	0.41
1:D:498:GLN:NE2	1:D:710:LYS:HZ2	2.16	0.41
1:D:668:ILE:HA	1:D:672:ILE:CG2	2.50	0.41
1:B:575:ARG:HG2	1:B:576:ASP:H	1.85	0.41
1:B:589:PHE:HE2	1:B:593:THR:HG21	1.86	0.41
1:A:589:PHE:HE2	1:A:593:THR:HG21	1.86	0.41
1:A:701:ARG:HB2	1:A:701:ARG:NH1	2.23	0.41
1:C:589:PHE:HE2	1:C:593:THR:HG21	1.86	0.41
1:D:166:HIS:O	1:D:166:HIS:CG	2.74	0.41
1:D:374:TYR:C	1:D:376:PRO:HD2	2.41	0.41
1:B:630:LEU:O	1:B:633:THR:HG23	2.21	0.41
1:B:701:ARG:HB2	1:B:701:ARG:NH1	2.23	0.41
1:A:653:TYR:CE1	1:A:656:LYS:CB	2.86	0.41
1:C:630:LEU:O	1:C:633:THR:HG23	2.21	0.41
1:D:214:MET:HE3	1:D:218:THR:OG1	2.18	0.41
1:B:158:LEU:CD2	1:B:158:LEU:C	2.89	0.41
1:B:158:LEU:CD2	1:B:162:MET:HE2	2.51	0.41
1:B:673:LEU:HD22	1:B:673:LEU:O	2.20	0.41
1:A:143:LEU:HD12	1:A:143:LEU:HA	1.95	0.41
1:C:142:ARG:NE	1:C:183:THR:HG21	2.34	0.41
1:C:295:ALA:HB3	1:C:345:LYS:HD2	2.03	0.41
1:D:158:LEU:CD2	1:D:162:MET:HE2	2.51	0.41
1:B:359:GLU:O	1:B:362:CYS:CB	2.59	0.41
1:B:508:VAL:O	1:B:511:TYR:CD1	2.67	0.41
1:B:562:MET:HE2	1:A:582:PHE:CB	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:627:TYR:HD2	1:B:650:THR:CB	2.20	0.41
1:A:180:ALA:O	1:A:184:ASP:N	2.54	0.41
1:A:378:HIS:O	1:A:757:UNK:N	2.54	0.41
1:A:482:VAL:HG13	1:A:527:VAL:CG2	2.41	0.41
1:A:562:MET:HE1	1:C:582:PHE:HB2	1.98	0.41
1:A:567:VAL:HG11	1:A:696:ILE:HB	2.03	0.41
1:A:675:LEU:HD13	1:A:675:LEU:HA	1.90	0.41
1:C:378:HIS:O	1:C:757:UNK:N	2.54	0.41
1:C:545:LEU:CD2	1:C:549:TRP:CD1	3.03	0.41
1:C:567:VAL:HG11	1:C:696:ILE:HB	2.03	0.41
1:C:666:TYR:CZ	1:C:670:THR:HG21	2.53	0.41
1:C:668:ILE:HA	1:C:672:ILE:CG2	2.50	0.41
1:D:237:LYS:HB2	1:D:237:LYS:HE3	1.67	0.41
1:D:491:ARG:HE	1:D:491:ARG:HB3	1.53	0.41
1:D:582:PHE:O	1:D:586:VAL:HG23	2.21	0.41
1:D:701:ARG:HG2	1:D:705:ILE:HD12	2.02	0.41
1:D:710:LYS:HE2	1:D:711:SER:CA	2.50	0.41
1:B:640:PHE:CD1	1:B:667:VAL:HG22	2.55	0.41
1:B:649:PHE:CD2	1:B:649:PHE:N	2.73	0.41
1:B:668:ILE:HA	1:B:672:ILE:CG2	2.50	0.41
1:A:158:LEU:CD2	1:A:158:LEU:C	2.89	0.41
1:A:395:VAL:O	1:A:399:ILE:HG13	2.21	0.41
1:A:545:LEU:CD2	1:A:549:TRP:CD1	3.03	0.41
1:A:640:PHE:CD1	1:A:667:VAL:HG22	2.55	0.41
1:A:649:PHE:CE2	1:A:663:LEU:HD11	2.37	0.41
1:C:158:LEU:CD2	1:C:158:LEU:C	2.89	0.41
1:C:399:ILE:HG21	1:C:413:LEU:CD2	2.47	0.41
1:C:710:LYS:HE2	1:C:711:SER:CA	2.51	0.41
1:D:630:LEU:O	1:D:633:THR:HG23	2.21	0.41
1:B:489:PHE:CD1	1:B:524:LEU:HD11	2.53	0.40
1:A:125:ASN:HD22	1:A:128:GLU:HG2	1.86	0.40
1:A:276:ASP:C	1:A:276:ASP:OD1	2.59	0.40
1:A:630:LEU:O	1:A:633:THR:HG23	2.21	0.40
1:A:668:ILE:HA	1:A:672:ILE:CG2	2.50	0.40
1:A:710:LYS:CG	1:A:714:LYS:HZ1	2.32	0.40
1:C:355:ARG:CB	1:C:367:ARG:HB2	2.51	0.40
1:C:575:ARG:HG2	1:C:576:ASP:H	1.85	0.40
1:C:701:ARG:HB2	1:C:701:ARG:NH1	2.23	0.40
1:B:355:ARG:CB	1:B:367:ARG:HB2	2.51	0.40
1:B:374:TYR:C	1:B:376:PRO:HD2	2.41	0.40
1:B:395:VAL:O	1:B:399:ILE:HG13	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:701:ARG:HG2	1:B:705:ILE:CD1	2.52	0.40
1:B:760:UNK:CA	1:B:761:UNK:CB	2.87	0.40
1:C:166:HIS:O	1:C:166:HIS:CG	2.74	0.40
1:C:399:ILE:HD12	1:C:418:LEU:HD13	2.04	0.40
1:C:449:THR:HG23	1:D:593:THR:HB	2.04	0.40
1:C:582:PHE:O	1:C:586:VAL:HG23	2.21	0.40
1:D:158:LEU:CD2	1:D:158:LEU:C	2.89	0.40
1:D:396:LEU:HD23	1:D:706:LEU:HD11	2.04	0.40
1:D:529:LEU:HD13	1:D:529:LEU:HA	1.83	0.40
1:B:635:LEU:HD13	1:A:647:LEU:HD12	1.99	0.40
1:B:689:ILE:HG22	1:B:693:SER:CB	2.11	0.40
1:A:449:THR:HG23	1:C:593:THR:HB	2.04	0.40
1:D:180:ALA:O	1:D:184:ASP:N	2.54	0.40
1:D:378:HIS:O	1:D:757:UNK:N	2.54	0.40
1:D:399:ILE:HD12	1:D:418:LEU:HD13	2.04	0.40
1:D:701:ARG:HG2	1:D:705:ILE:CD1	2.52	0.40
1:B:653:TYR:CD1	1:B:653:TYR:O	2.75	0.40
1:A:352:ILE:C	1:A:367:ARG:HD3	2.39	0.40
1:A:568:MET:CE	1:C:681:LEU:HD21	2.51	0.40
1:C:180:ALA:O	1:C:184:ASP:N	2.54	0.40
1:C:374:TYR:C	1:C:376:PRO:HD2	2.41	0.40
1:C:681:LEU:HD23	1:C:681:LEU:HA	1.93	0.40
1:D:396:LEU:HD13	1:D:418:LEU:HD23	1.90	0.40
1:D:537:TYR:O	1:D:540:SER:HB2	2.22	0.40
1:D:571:LYS:HD2	1:D:571:LYS:HA	1.91	0.40
1:D:577:LEU:HD23	1:D:577:LEU:HA	1.85	0.40
1:D:710:LYS:CG	1:D:714:LYS:HZ1	2.35	0.40
1:B:487:TYR:HE1	1:B:491:ARG:HD2	1.83	0.40
1:B:590:GLY:O	1:B:593:THR:OG1	2.31	0.40
1:A:489:PHE:CD1	1:A:524:LEU:HD11	2.53	0.40
1:A:599:ILE:CD1	1:A:628:ASN:N	2.67	0.40
1:A:710:LYS:HE2	1:A:711:SER:CA	2.50	0.40
1:C:396:LEU:HD23	1:C:706:LEU:HD11	2.04	0.40
1:C:538:VAL:O	1:C:542:VAL:N	2.48	0.40
1:C:653:TYR:CD1	1:C:653:TYR:O	2.75	0.40
1:D:399:ILE:HD13	1:D:412:MET:CB	2.41	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	577/598 (96%)	544 (94%)	33 (6%)	0	100	100
1	B	577/598 (96%)	544 (94%)	33 (6%)	0	100	100
1	C	577/598 (96%)	544 (94%)	33 (6%)	0	100	100
1	D	577/598 (96%)	544 (94%)	33 (6%)	0	100	100
All	All	2308/2392 (96%)	2176 (94%)	132 (6%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	493/519 (95%)	359 (73%)	134 (27%)	0	1
1	B	493/519 (95%)	359 (73%)	134 (27%)	0	1
1	C	493/519 (95%)	359 (73%)	134 (27%)	0	1
1	D	493/519 (95%)	359 (73%)	134 (27%)	0	1
All	All	1972/2076 (95%)	1436 (73%)	536 (27%)	2	1

All (536) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	116	SER
1	B	123	GLN

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Mol	Chain	Res	Type
1	B	128	GLU
1	B	131	SER
1	B	136	LEU
1	B	138	ARG
1	B	147	GLU
1	B	152	GLU
1	B	157	CYS
1	B	158	LEU
1	B	171	ASP
1	B	172	THR
1	B	176	LEU
1	B	187	LYS
1	B	188	GLN
1	B	190	VAL
1	B	218	THR
1	B	220	LEU
1	B	227	VAL
1	B	240	LYS
1	B	242	ARG
1	B	245	PHE
1	B	252	LEU
1	B	261	LEU
1	B	271	SER
1	B	283	VAL
1	B	287	VAL
1	B	294	VAL
1	B	304	PHE
1	B	306	THR
1	B	315	LEU
1	B	319	LEU
1	B	325	LEU
1	B	331	ARG
1	B	332	LYS
1	B	339	LEU
1	B	346	ILE
1	B	349	LEU
1	B	351	TYR
1	B	359	GLU
1	B	362	CYS
1	B	364	HIS
1	B	365	LEU
1	B	366	SER

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Mol	Chain	Res	Type
1	B	367	ARG
1	B	369	PHE
1	B	371	GLU
1	B	374	TYR
1	B	378	HIS
1	B	380	SER
1	B	381	LEU
1	B	384	LEU
1	B	385	SER
1	B	387	ILE
1	B	389	THR
1	B	394	SER
1	B	401	TYR
1	B	402	SER
1	B	409	ARG
1	B	412	MET
1	B	413	LEU
1	B	414	LEU
1	B	420	ARG
1	B	421	LEU
1	B	423	GLN
1	B	426	TRP
1	B	438	PHE
1	B	442	CYS
1	B	445	MET
1	B	448	PHE
1	B	453	TYR
1	B	454	TYR
1	B	455	ARG
1	B	471	ASP
1	B	472	TYR
1	B	473	PHE
1	B	474	ARG
1	B	478	GLU
1	B	487	TYR
1	B	489	PHE
1	B	491	ARG
1	B	494	GLN
1	B	499	ARG
1	B	512	SER
1	B	513	GLU
1	B	516	PHE

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Mol	Chain	Res	Type
1	B	521	LEU
1	B	523	MET
1	B	529	LEU
1	B	534	ARG
1	B	535	LYS
1	B	536	GLU
1	B	540	SER
1	B	545	LEU
1	B	547	MET
1	B	553	LEU
1	B	554	TYR
1	B	561	GLN
1	B	568	MET
1	B	571	LYS
1	B	572	MET
1	B	574	LEU
1	B	577	LEU
1	B	579	ARG
1	B	589	PHE
1	B	600	GLU
1	B	603	LYS
1	B	631	TYR
1	B	632	SER
1	B	633	THR
1	B	635	LEU
1	B	644	MET
1	B	647	LEU
1	B	649	PHE
1	B	651	GLU
1	B	655	PHE
1	B	662	LEU
1	B	663	LEU
1	B	664	LEU
1	B	669	LEU
1	B	672	ILE
1	B	673	LEU
1	B	674	LEU
1	B	677	MET
1	B	685	THR
1	B	691	GLN
1	B	699	LEU
1	B	701	ARG

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Mol	Chain	Res	Type
1	B	704	THR
1	B	708	THR
1	B	710	LYS
1	B	714	LYS
1	B	716	MET
1	B	717	ARG
1	A	116	SER
1	A	123	GLN
1	A	128	GLU
1	A	131	SER
1	A	136	LEU
1	A	138	ARG
1	A	147	GLU
1	A	152	GLU
1	A	157	CYS
1	A	158	LEU
1	A	171	ASP
1	A	172	THR
1	A	176	LEU
1	A	187	LYS
1	A	188	GLN
1	A	190	VAL
1	A	218	THR
1	A	220	LEU
1	A	227	VAL
1	A	240	LYS
1	A	242	ARG
1	A	245	PHE
1	A	252	LEU
1	A	261	LEU
1	A	271	SER
1	A	283	VAL
1	A	287	VAL
1	A	294	VAL
1	A	304	PHE
1	A	306	THR
1	A	315	LEU
1	A	319	LEU
1	A	325	LEU
1	A	331	ARG
1	A	332	LYS
1	A	339	LEU

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Mol	Chain	Res	Type
1	A	346	ILE
1	A	349	LEU
1	A	351	TYR
1	A	359	GLU
1	A	362	CYS
1	A	364	HIS
1	A	365	LEU
1	A	366	SER
1	A	367	ARG
1	A	369	PHE
1	A	371	GLU
1	A	374	TYR
1	A	378	HIS
1	A	380	SER
1	A	381	LEU
1	A	384	LEU
1	A	385	SER
1	A	387	ILE
1	A	389	THR
1	A	394	SER
1	A	401	TYR
1	A	402	SER
1	A	409	ARG
1	A	412	MET
1	A	413	LEU
1	A	414	LEU
1	A	420	ARG
1	A	421	LEU
1	A	423	GLN
1	A	426	TRP
1	A	438	PHE
1	A	442	CYS
1	A	445	MET
1	A	448	PHE
1	A	453	TYR
1	A	454	TYR
1	A	455	ARG
1	A	471	ASP
1	A	472	TYR
1	A	473	PHE
1	A	474	ARG
1	A	478	GLU

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Mol	Chain	Res	Type
1	A	487	TYR
1	A	489	PHE
1	A	491	ARG
1	A	494	GLN
1	A	499	ARG
1	A	512	SER
1	A	513	GLU
1	A	516	PHE
1	A	521	LEU
1	A	523	MET
1	A	529	LEU
1	A	534	ARG
1	A	535	LYS
1	A	536	GLU
1	A	540	SER
1	A	545	LEU
1	A	547	MET
1	A	553	LEU
1	A	554	TYR
1	A	561	GLN
1	A	568	MET
1	A	571	LYS
1	A	572	MET
1	A	574	LEU
1	A	577	LEU
1	A	579	ARG
1	A	589	PHE
1	A	600	GLU
1	A	603	LYS
1	A	631	TYR
1	A	632	SER
1	A	633	THR
1	A	635	LEU
1	A	644	MET
1	A	647	LEU
1	A	649	PHE
1	A	651	GLU
1	A	655	PHE
1	A	662	LEU
1	A	663	LEU
1	A	664	LEU
1	A	669	LEU

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Mol	Chain	Res	Type
1	A	672	ILE
1	A	673	LEU
1	A	674	LEU
1	A	677	MET
1	A	685	THR
1	A	691	GLN
1	A	699	LEU
1	A	701	ARG
1	A	704	THR
1	A	708	THR
1	A	710	LYS
1	A	714	LYS
1	A	716	MET
1	A	717	ARG
1	C	116	SER
1	C	123	GLN
1	C	128	GLU
1	C	131	SER
1	C	136	LEU
1	C	138	ARG
1	C	147	GLU
1	C	152	GLU
1	C	157	CYS
1	C	158	LEU
1	C	171	ASP
1	C	172	THR
1	C	176	LEU
1	C	187	LYS
1	C	188	GLN
1	C	190	VAL
1	C	218	THR
1	C	220	LEU
1	C	227	VAL
1	C	240	LYS
1	C	242	ARG
1	C	245	PHE
1	C	252	LEU
1	C	261	LEU
1	C	271	SER
1	C	283	VAL
1	C	287	VAL
1	C	294	VAL

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Mol	Chain	Res	Type
1	C	304	PHE
1	C	306	THR
1	C	315	LEU
1	C	319	LEU
1	C	325	LEU
1	C	331	ARG
1	C	332	LYS
1	C	339	LEU
1	C	346	ILE
1	C	349	LEU
1	C	351	TYR
1	C	359	GLU
1	C	362	CYS
1	C	364	HIS
1	C	365	LEU
1	C	366	SER
1	C	367	ARG
1	C	369	PHE
1	C	371	GLU
1	C	374	TYR
1	C	378	HIS
1	C	380	SER
1	C	381	LEU
1	C	384	LEU
1	C	385	SER
1	C	387	ILE
1	C	389	THR
1	C	394	SER
1	C	401	TYR
1	C	402	SER
1	C	409	ARG
1	C	412	MET
1	C	413	LEU
1	C	414	LEU
1	C	420	ARG
1	C	421	LEU
1	C	423	GLN
1	C	426	TRP
1	C	438	PHE
1	C	442	CYS
1	C	445	MET
1	C	448	PHE

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Mol	Chain	Res	Type
1	C	453	TYR
1	C	454	TYR
1	C	455	ARG
1	C	471	ASP
1	C	472	TYR
1	C	473	PHE
1	C	474	ARG
1	C	478	GLU
1	C	487	TYR
1	C	489	PHE
1	C	491	ARG
1	C	494	GLN
1	C	499	ARG
1	C	512	SER
1	C	513	GLU
1	C	516	PHE
1	C	521	LEU
1	C	523	MET
1	C	529	LEU
1	C	534	ARG
1	C	535	LYS
1	C	536	GLU
1	C	540	SER
1	C	545	LEU
1	C	547	MET
1	C	553	LEU
1	C	554	TYR
1	C	561	GLN
1	C	568	MET
1	C	571	LYS
1	C	572	MET
1	C	574	LEU
1	C	577	LEU
1	C	579	ARG
1	C	589	PHE
1	C	600	GLU
1	C	603	LYS
1	C	631	TYR
1	C	632	SER
1	C	633	THR
1	C	635	LEU
1	C	644	MET

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Mol	Chain	Res	Type
1	C	647	LEU
1	C	649	PHE
1	C	651	GLU
1	C	655	PHE
1	C	662	LEU
1	C	663	LEU
1	C	664	LEU
1	C	669	LEU
1	C	672	ILE
1	C	673	LEU
1	C	674	LEU
1	C	677	MET
1	C	685	THR
1	C	691	GLN
1	C	699	LEU
1	C	701	ARG
1	C	704	THR
1	C	708	THR
1	C	710	LYS
1	C	714	LYS
1	C	716	MET
1	C	717	ARG
1	D	116	SER
1	D	123	GLN
1	D	128	GLU
1	D	131	SER
1	D	136	LEU
1	D	138	ARG
1	D	147	GLU
1	D	152	GLU
1	D	157	CYS
1	D	158	LEU
1	D	171	ASP
1	D	172	THR
1	D	176	LEU
1	D	187	LYS
1	D	188	GLN
1	D	190	VAL
1	D	218	THR
1	D	220	LEU
1	D	227	VAL
1	D	240	LYS

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Mol	Chain	Res	Type
1	D	242	ARG
1	D	245	PHE
1	D	252	LEU
1	D	261	LEU
1	D	271	SER
1	D	283	VAL
1	D	287	VAL
1	D	294	VAL
1	D	304	PHE
1	D	306	THR
1	D	315	LEU
1	D	319	LEU
1	D	325	LEU
1	D	331	ARG
1	D	332	LYS
1	D	339	LEU
1	D	346	ILE
1	D	349	LEU
1	D	351	TYR
1	D	359	GLU
1	D	362	CYS
1	D	364	HIS
1	D	365	LEU
1	D	366	SER
1	D	367	ARG
1	D	369	PHE
1	D	371	GLU
1	D	374	TYR
1	D	378	HIS
1	D	380	SER
1	D	381	LEU
1	D	384	LEU
1	D	385	SER
1	D	387	ILE
1	D	389	THR
1	D	394	SER
1	D	401	TYR
1	D	402	SER
1	D	409	ARG
1	D	412	MET
1	D	413	LEU
1	D	414	LEU

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Mol	Chain	Res	Type
1	D	420	ARG
1	D	421	LEU
1	D	423	GLN
1	D	426	TRP
1	D	438	PHE
1	D	442	CYS
1	D	445	MET
1	D	448	PHE
1	D	453	TYR
1	D	454	TYR
1	D	455	ARG
1	D	471	ASP
1	D	472	TYR
1	D	473	PHE
1	D	474	ARG
1	D	478	GLU
1	D	487	TYR
1	D	489	PHE
1	D	491	ARG
1	D	494	GLN
1	D	499	ARG
1	D	512	SER
1	D	513	GLU
1	D	516	PHE
1	D	521	LEU
1	D	523	MET
1	D	529	LEU
1	D	534	ARG
1	D	535	LYS
1	D	536	GLU
1	D	540	SER
1	D	545	LEU
1	D	547	MET
1	D	553	LEU
1	D	554	TYR
1	D	561	GLN
1	D	568	MET
1	D	571	LYS
1	D	572	MET
1	D	574	LEU
1	D	577	LEU
1	D	579	ARG

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Mol	Chain	Res	Type
1	D	589	PHE
1	D	600	GLU
1	D	603	LYS
1	D	631	TYR
1	D	632	SER
1	D	633	THR
1	D	635	LEU
1	D	644	MET
1	D	647	LEU
1	D	649	PHE
1	D	651	GLU
1	D	655	PHE
1	D	662	LEU
1	D	663	LEU
1	D	664	LEU
1	D	669	LEU
1	D	672	ILE
1	D	673	LEU
1	D	674	LEU
1	D	677	MET
1	D	685	THR
1	D	691	GLN
1	D	699	LEU
1	D	701	ARG
1	D	704	THR
1	D	708	THR
1	D	710	LYS
1	D	714	LYS
1	D	716	MET
1	D	717	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (43) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	125	ASN
1	B	188	GLN
1	B	269	GLN
1	B	289	HIS
1	B	320	HIS
1	B	364	HIS
1	B	378	HIS
1	B	419	ASN

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Mol	Chain	Res	Type
1	B	423	GLN
1	B	498	GLN
1	B	691	GLN
1	A	125	ASN
1	A	188	GLN
1	A	269	GLN
1	A	289	HIS
1	A	320	HIS
1	A	364	HIS
1	A	378	HIS
1	A	419	ASN
1	A	423	GLN
1	A	498	GLN
1	A	691	GLN
1	C	125	ASN
1	C	188	GLN
1	C	269	GLN
1	C	289	HIS
1	C	364	HIS
1	C	378	HIS
1	C	419	ASN
1	C	423	GLN
1	C	498	GLN
1	C	691	GLN
1	D	125	ASN
1	D	188	GLN
1	D	269	GLN
1	D	289	HIS
1	D	320	HIS
1	D	364	HIS
1	D	378	HIS
1	D	419	ASN
1	D	423	GLN
1	D	498	GLN
1	D	691	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

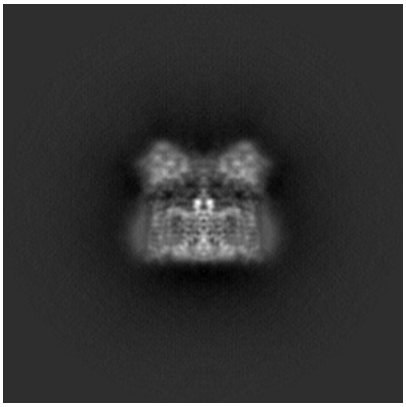
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-5778. These allow visual inspection of the internal detail of the map and identification of artifacts.

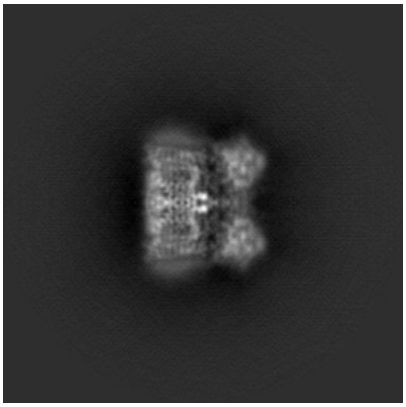
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

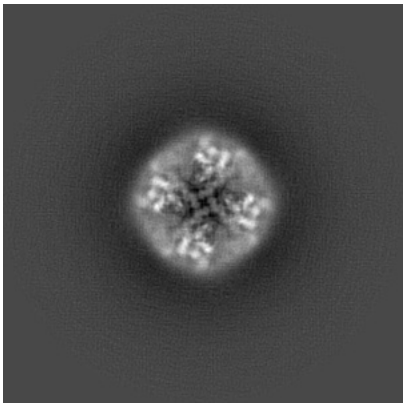
6.1.1 Primary map



X



Y

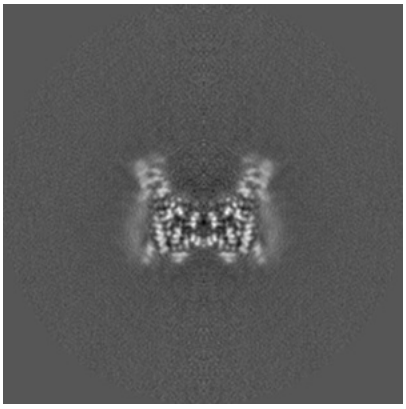


Z

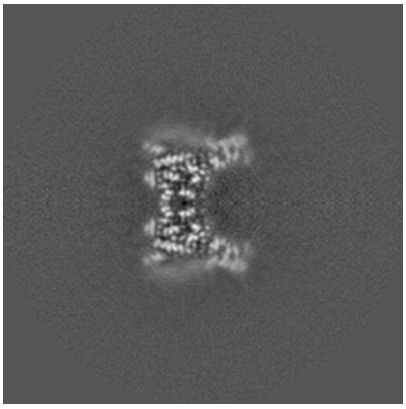
The images above show the map projected in three orthogonal directions.

6.2 Central slices

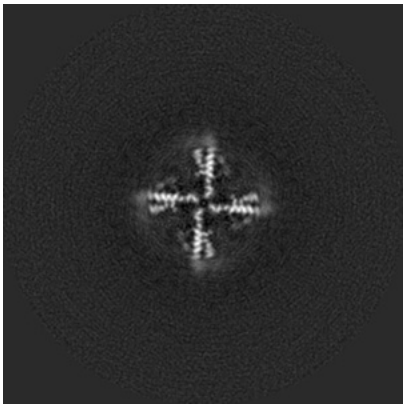
6.2.1 Primary map



X Index: 128



Y Index: 128

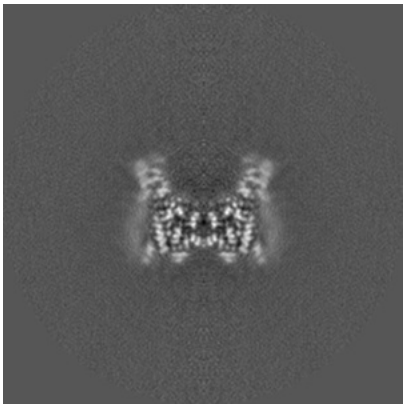


Z Index: 128

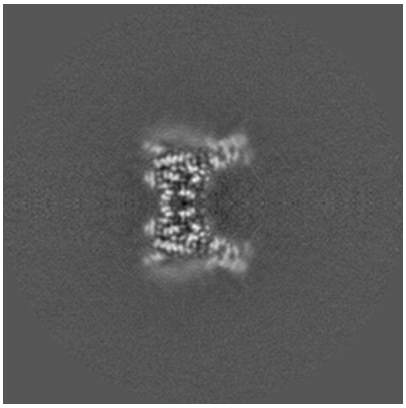
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

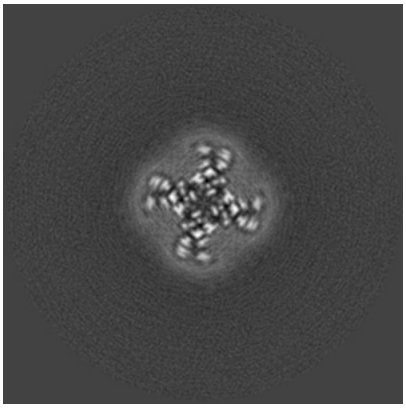
6.3.1 Primary map



X Index: 128



Y Index: 128

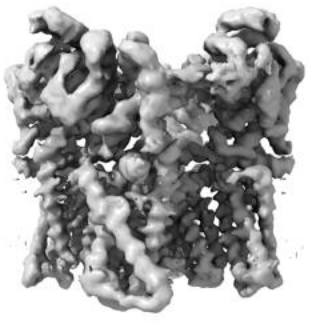


Z Index: 99

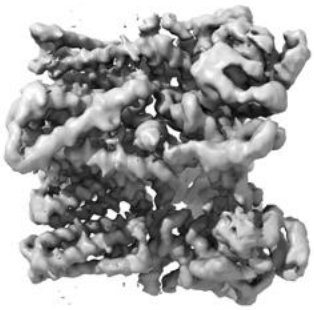
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

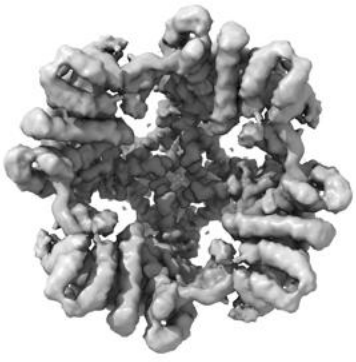
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 7.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

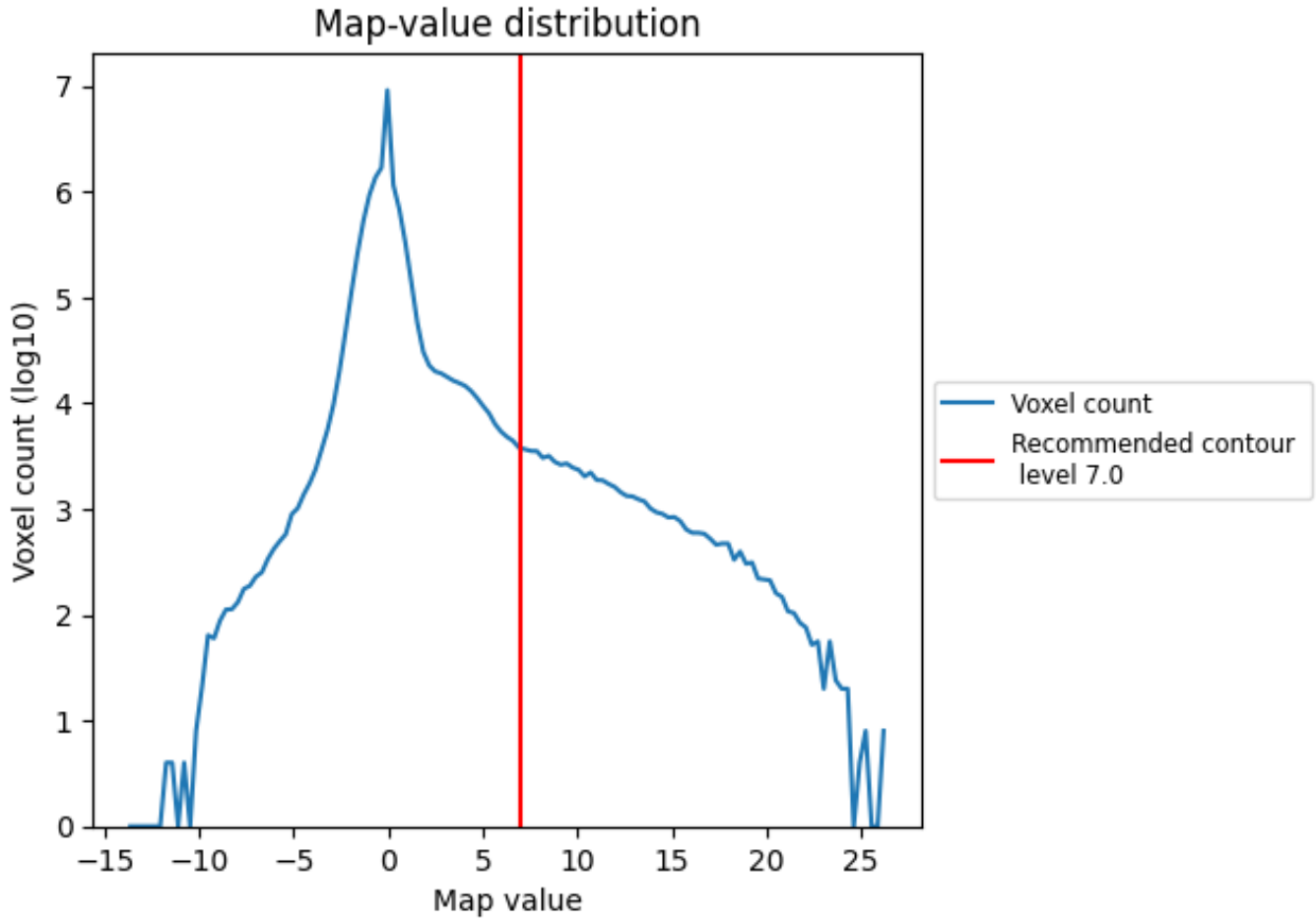
6.5 Mask visualisation (i)

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

7 Map analysis

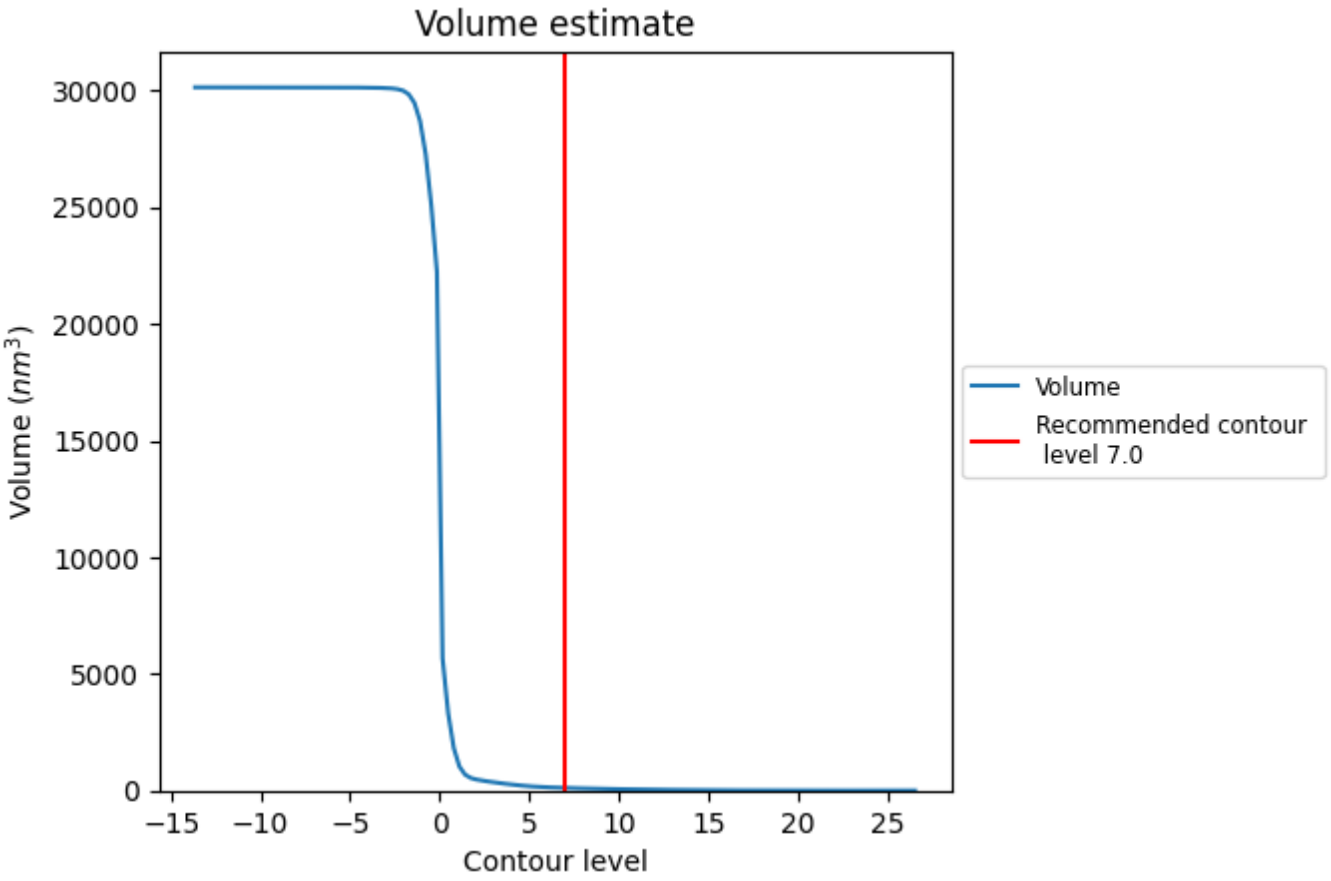
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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.

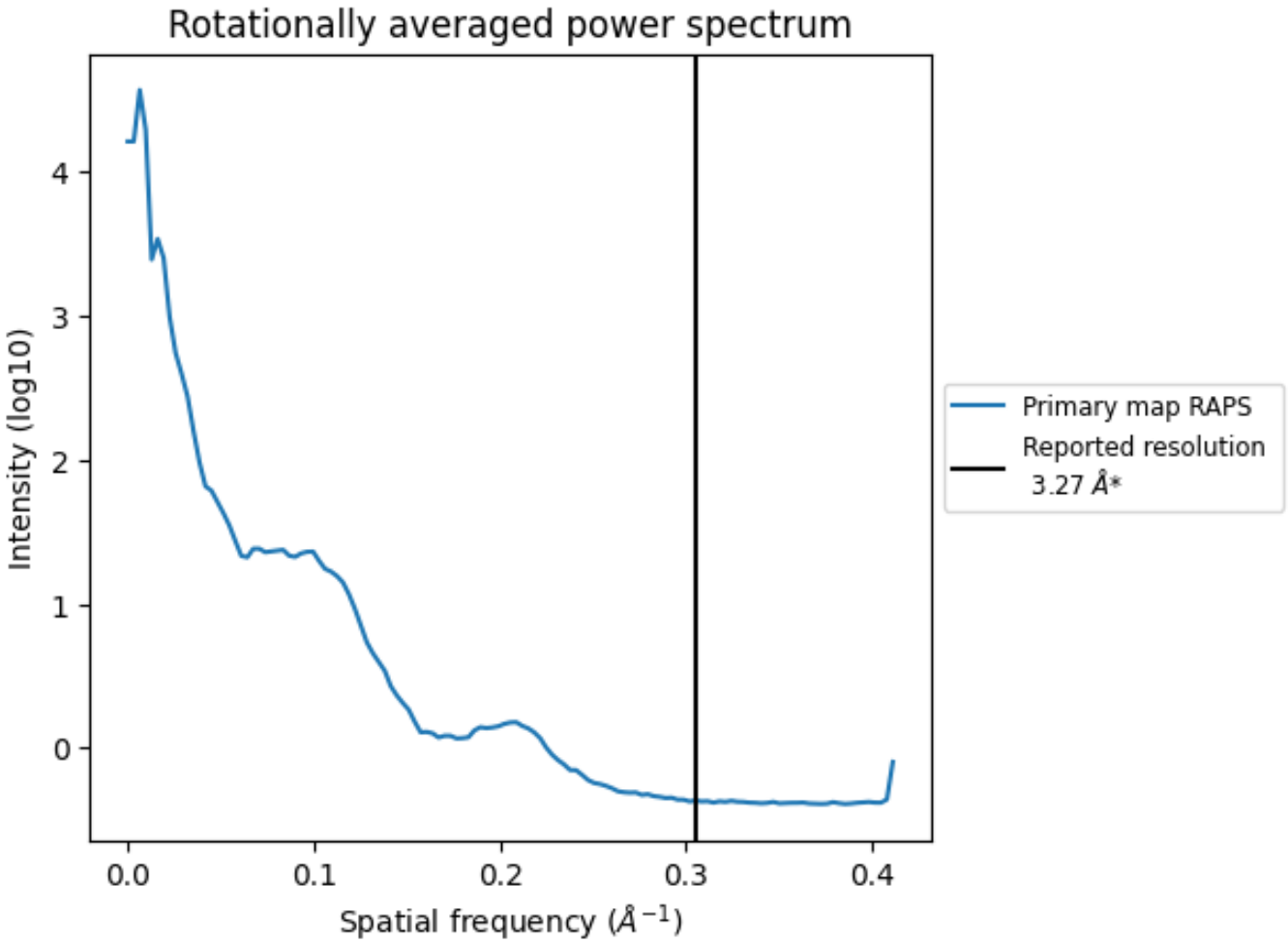
7.2 Volume estimate



The volume at the recommended contour level is 113 nm^3; this corresponds to an approximate mass of 102 kDa.

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

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.305 Å^{-1}

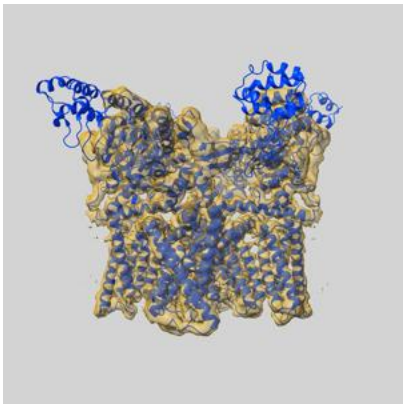
8 Fourier-Shell correlation (i)

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

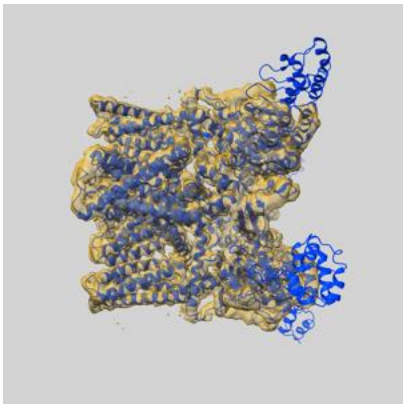
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-5778 and PDB model 3J5P. Per-residue inclusion information can be found in section 3 on page 4.

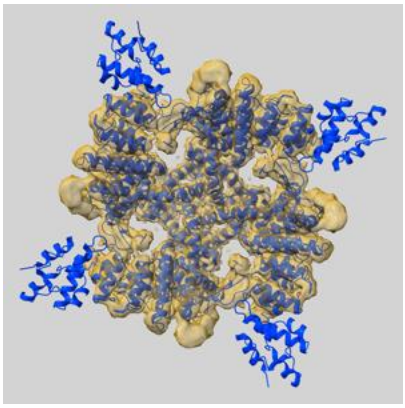
9.1 Map-model overlay



X



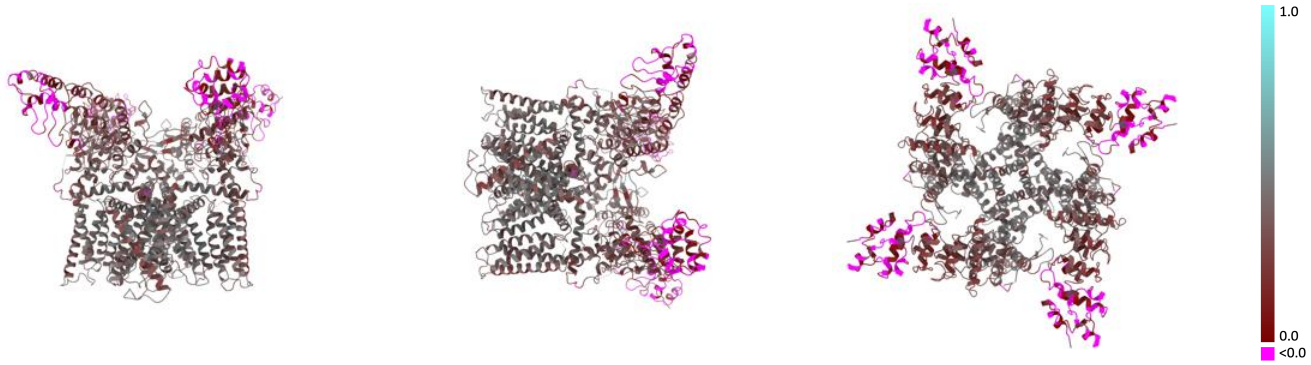
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 7.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

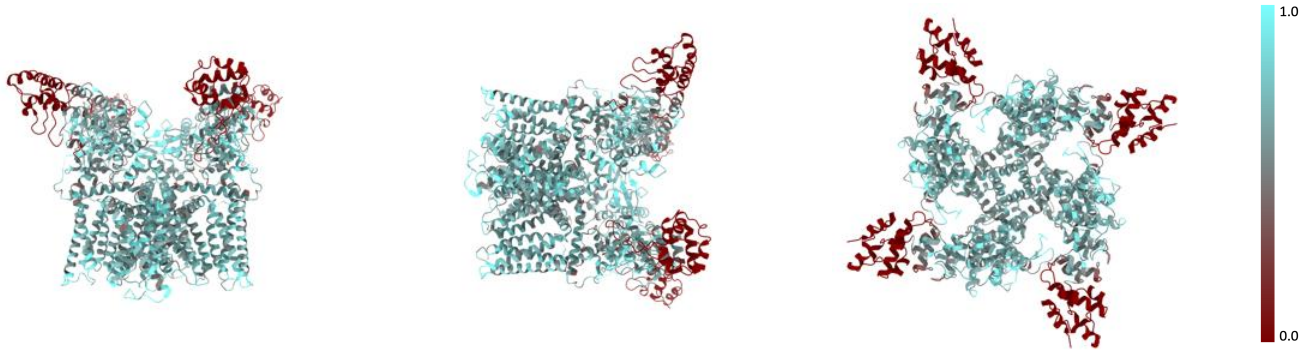
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

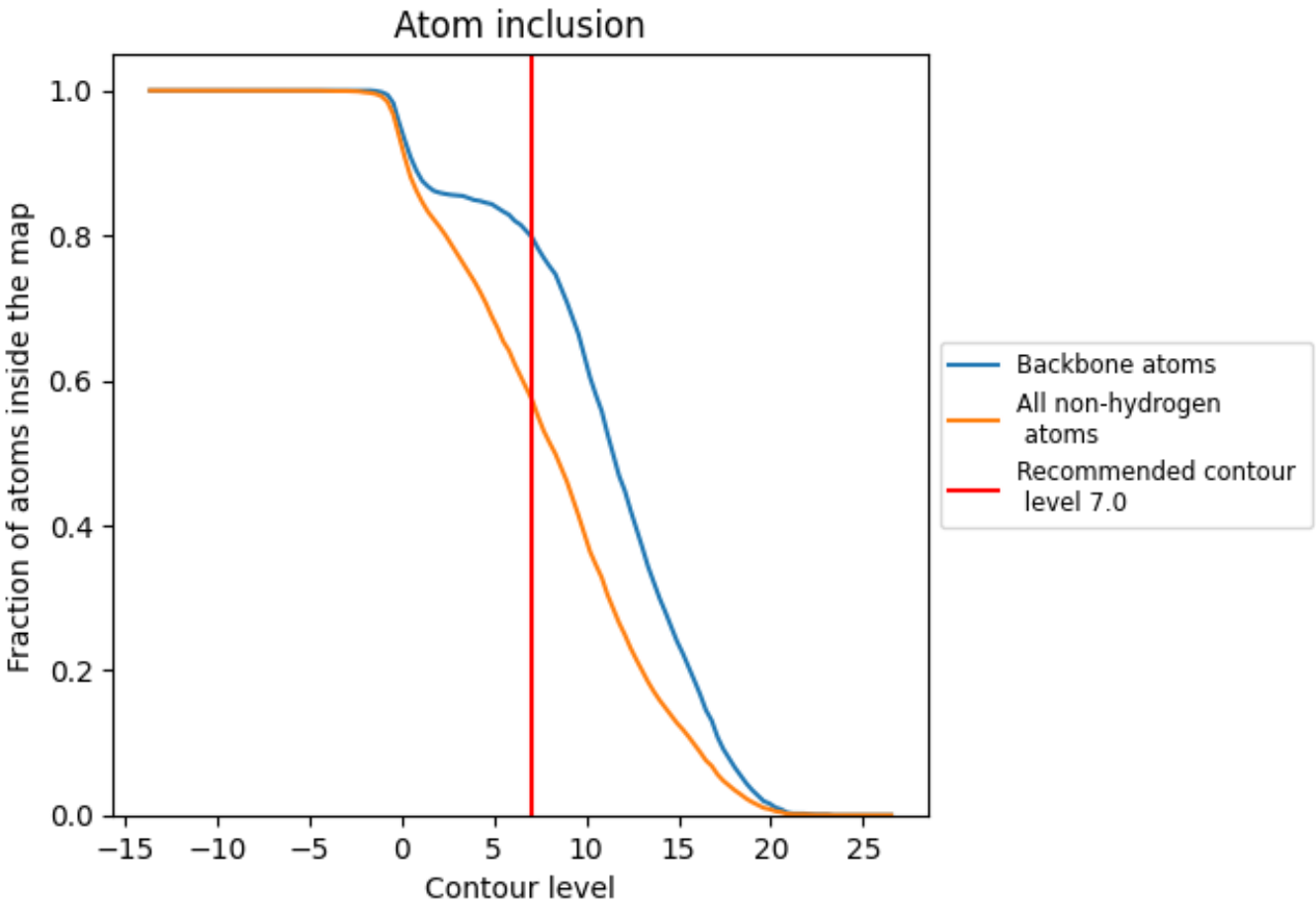
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

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 (7.0).

9.4 Atom inclusion (i)



At the recommended contour level, 80% of all backbone atoms, 58% 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 (7.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5763	0.3050
A	0.5766	0.3050
B	0.5759	0.3040
C	0.5759	0.3070
D	0.5768	0.3040