Full wwPDB EM Validation Report ⓘ

Feb 12, 2024 – 04:42 AM EST

PDB ID	:	3H3W
EMDB ID	:	EMD-1048
Title	:	Fitting of the gp6 crystal structure into 3D cryo-EM reconstruction of bacteriophage T4 dome-shaped baseplate
Authors	:	Aksyuk, A.A.; Leiman, P.G.; Shneider, M.M.; Mesyanzhinov, V.V.; Rossmann, M.G.
Deposited on	:	2009-04-17
Resolution	:	12.00 Å(reported)
Based on initial model	:	3H2T

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:

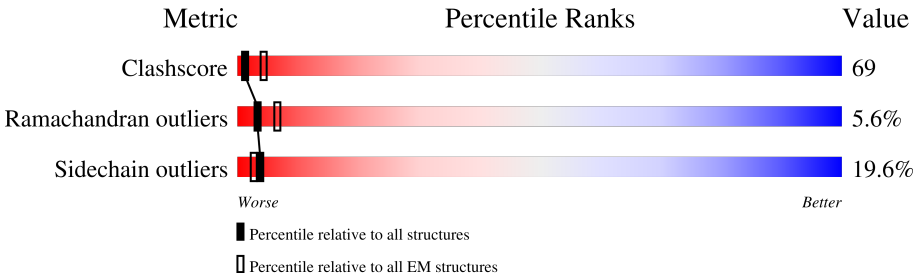
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

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 12.00 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	335	32% 36% 46% 14% • •
1	B	335	18% 35% 44% 17% • •
1	C	335	17% 36% 46% 14% • •
1	D	335	31% 34% 44% 17% • •
1	E	335	32% 35% 47% 14% • •
1	F	335	17% 34% 44% 16% • •
1	G	335	32% 35% 47% 14% • •
1	H	335	18% 35% 44% 16% • •

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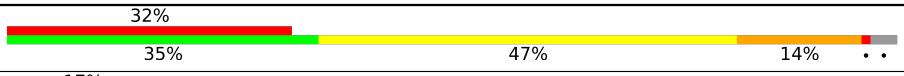
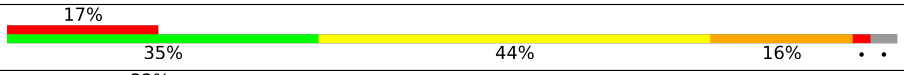
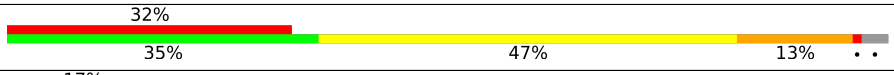
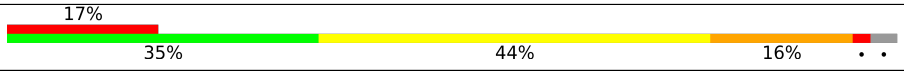
Mol	Chain	Length	Quality of chain
1	I	335	
1	J	335	
1	K	335	
1	L	335	

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 31380 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 Baseplate structural protein Gp6.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	B	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		
1	C	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	D	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		
1	E	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	F	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		
1	G	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	H	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		
1	I	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	J	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		
1	K	326	Total	C	N	O	S	0	0
			2622	1667	424	528	3		
1	L	324	Total	C	N	O	S	0	0
			2608	1658	422	525	3		

There are 96 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	661	LEU	-	expression tag	UNP P19060
A	662	GLU	-	expression tag	UNP P19060
A	663	HIS	-	expression tag	UNP P19060
A	664	HIS	-	expression tag	UNP P19060
A	665	HIS	-	expression tag	UNP P19060
A	666	HIS	-	expression tag	UNP P19060

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Chain	Residue	Modelled	Actual	Comment	Reference
A	667	HIS	-	expression tag	UNP P19060
A	668	HIS	-	expression tag	UNP P19060
B	661	LEU	-	expression tag	UNP P19060
B	662	GLU	-	expression tag	UNP P19060
B	663	HIS	-	expression tag	UNP P19060
B	664	HIS	-	expression tag	UNP P19060
B	665	HIS	-	expression tag	UNP P19060
B	666	HIS	-	expression tag	UNP P19060
B	667	HIS	-	expression tag	UNP P19060
B	668	HIS	-	expression tag	UNP P19060
C	661	LEU	-	expression tag	UNP P19060
C	662	GLU	-	expression tag	UNP P19060
C	663	HIS	-	expression tag	UNP P19060
C	664	HIS	-	expression tag	UNP P19060
C	665	HIS	-	expression tag	UNP P19060
C	666	HIS	-	expression tag	UNP P19060
C	667	HIS	-	expression tag	UNP P19060
C	668	HIS	-	expression tag	UNP P19060
D	661	LEU	-	expression tag	UNP P19060
D	662	GLU	-	expression tag	UNP P19060
D	663	HIS	-	expression tag	UNP P19060
D	664	HIS	-	expression tag	UNP P19060
D	665	HIS	-	expression tag	UNP P19060
D	666	HIS	-	expression tag	UNP P19060
D	667	HIS	-	expression tag	UNP P19060
D	668	HIS	-	expression tag	UNP P19060
E	661	LEU	-	expression tag	UNP P19060
E	662	GLU	-	expression tag	UNP P19060
E	663	HIS	-	expression tag	UNP P19060
E	664	HIS	-	expression tag	UNP P19060
E	665	HIS	-	expression tag	UNP P19060
E	666	HIS	-	expression tag	UNP P19060
E	667	HIS	-	expression tag	UNP P19060
E	668	HIS	-	expression tag	UNP P19060
F	661	LEU	-	expression tag	UNP P19060
F	662	GLU	-	expression tag	UNP P19060
F	663	HIS	-	expression tag	UNP P19060
F	664	HIS	-	expression tag	UNP P19060
F	665	HIS	-	expression tag	UNP P19060
F	666	HIS	-	expression tag	UNP P19060
F	667	HIS	-	expression tag	UNP P19060
F	668	HIS	-	expression tag	UNP P19060

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Chain	Residue	Modelled	Actual	Comment	Reference
G	661	LEU	-	expression tag	UNP P19060
G	662	GLU	-	expression tag	UNP P19060
G	663	HIS	-	expression tag	UNP P19060
G	664	HIS	-	expression tag	UNP P19060
G	665	HIS	-	expression tag	UNP P19060
G	666	HIS	-	expression tag	UNP P19060
G	667	HIS	-	expression tag	UNP P19060
G	668	HIS	-	expression tag	UNP P19060
H	661	LEU	-	expression tag	UNP P19060
H	662	GLU	-	expression tag	UNP P19060
H	663	HIS	-	expression tag	UNP P19060
H	664	HIS	-	expression tag	UNP P19060
H	665	HIS	-	expression tag	UNP P19060
H	666	HIS	-	expression tag	UNP P19060
H	667	HIS	-	expression tag	UNP P19060
H	668	HIS	-	expression tag	UNP P19060
I	661	LEU	-	expression tag	UNP P19060
I	662	GLU	-	expression tag	UNP P19060
I	663	HIS	-	expression tag	UNP P19060
I	664	HIS	-	expression tag	UNP P19060
I	665	HIS	-	expression tag	UNP P19060
I	666	HIS	-	expression tag	UNP P19060
I	667	HIS	-	expression tag	UNP P19060
I	668	HIS	-	expression tag	UNP P19060
J	661	LEU	-	expression tag	UNP P19060
J	662	GLU	-	expression tag	UNP P19060
J	663	HIS	-	expression tag	UNP P19060
J	664	HIS	-	expression tag	UNP P19060
J	665	HIS	-	expression tag	UNP P19060
J	666	HIS	-	expression tag	UNP P19060
J	667	HIS	-	expression tag	UNP P19060
J	668	HIS	-	expression tag	UNP P19060
K	661	LEU	-	expression tag	UNP P19060
K	662	GLU	-	expression tag	UNP P19060
K	663	HIS	-	expression tag	UNP P19060
K	664	HIS	-	expression tag	UNP P19060
K	665	HIS	-	expression tag	UNP P19060
K	666	HIS	-	expression tag	UNP P19060
K	667	HIS	-	expression tag	UNP P19060
K	668	HIS	-	expression tag	UNP P19060
L	661	LEU	-	expression tag	UNP P19060
L	662	GLU	-	expression tag	UNP P19060

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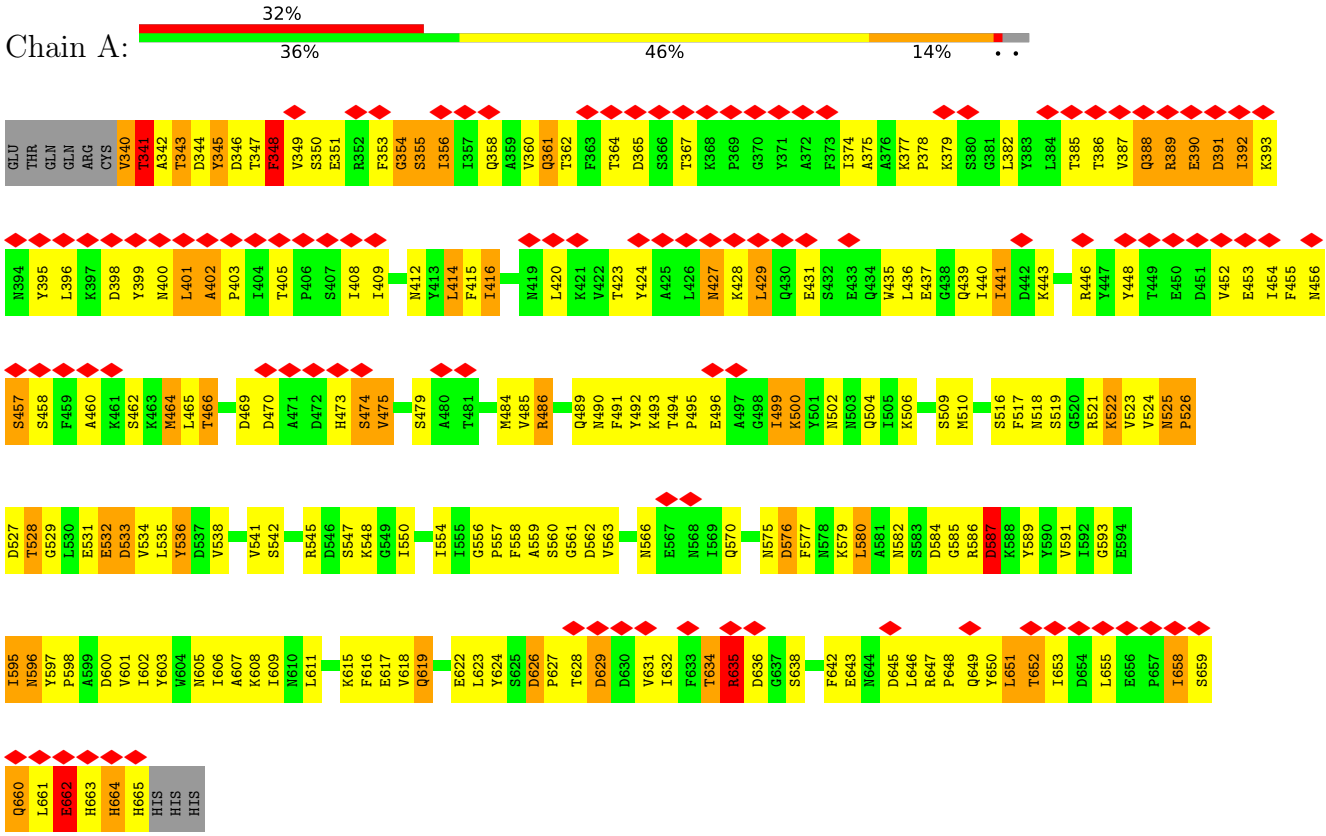
Chain	Residue	Modelled	Actual	Comment	Reference
L	663	HIS	-	expression tag	UNP P19060
L	664	HIS	-	expression tag	UNP P19060
L	665	HIS	-	expression tag	UNP P19060
L	666	HIS	-	expression tag	UNP P19060
L	667	HIS	-	expression tag	UNP P19060
L	668	HIS	-	expression tag	UNP P19060

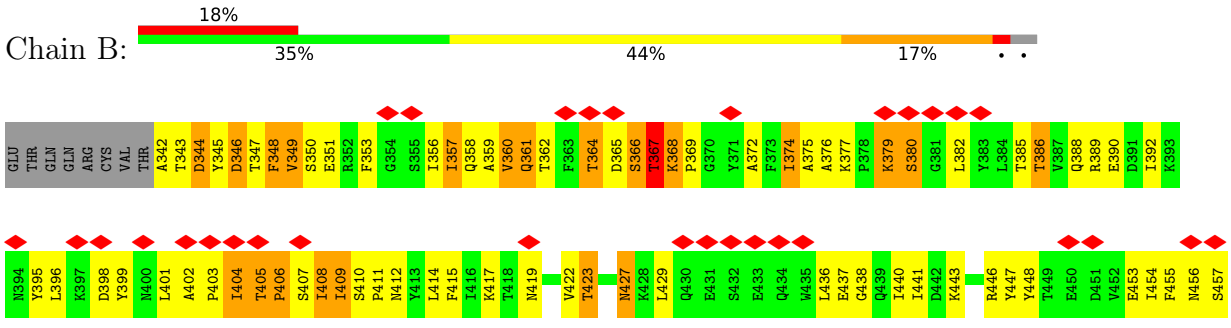
3 Residue-property plots (i)

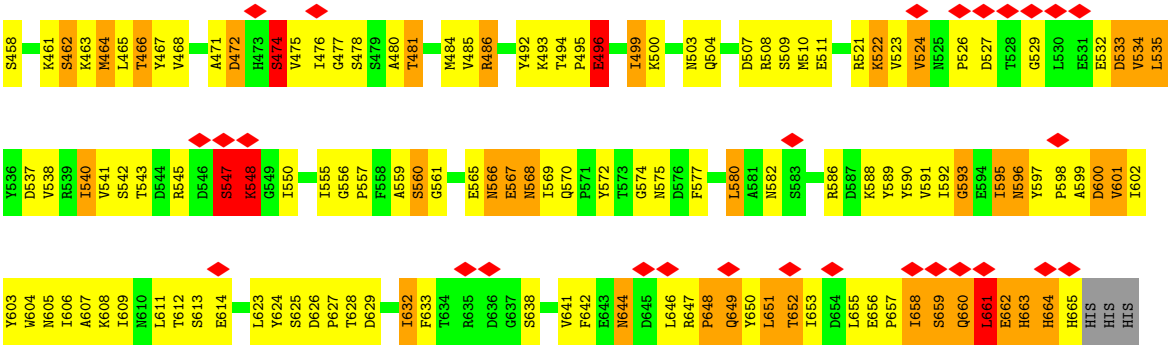
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Baseplate structural protein Gp6



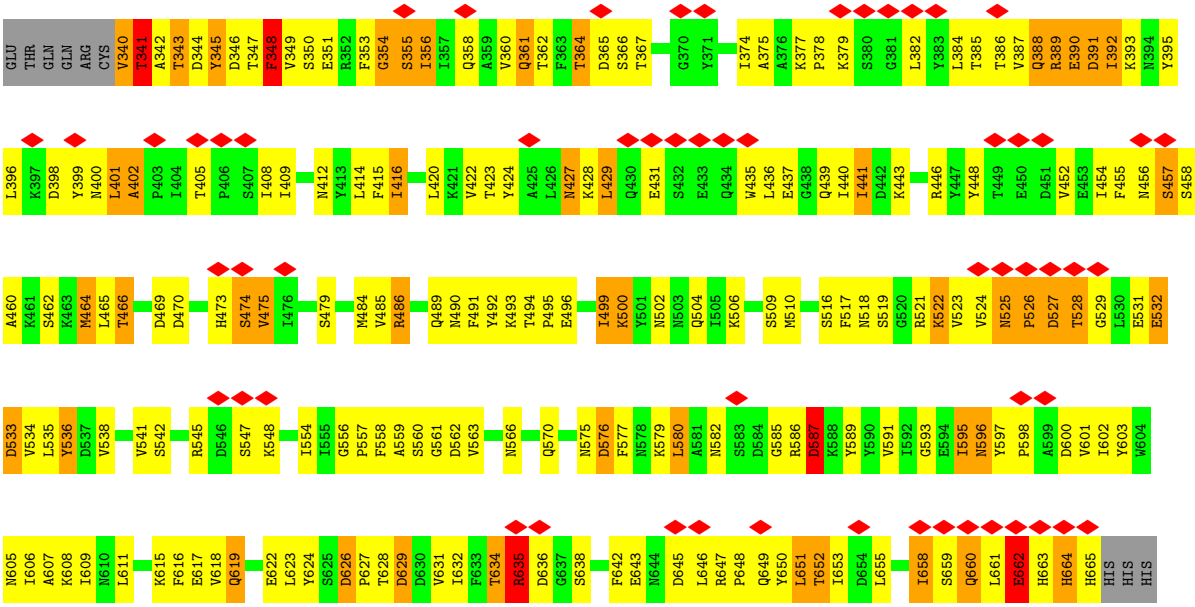
• Molecule 1: Baseplate structural protein Gp6





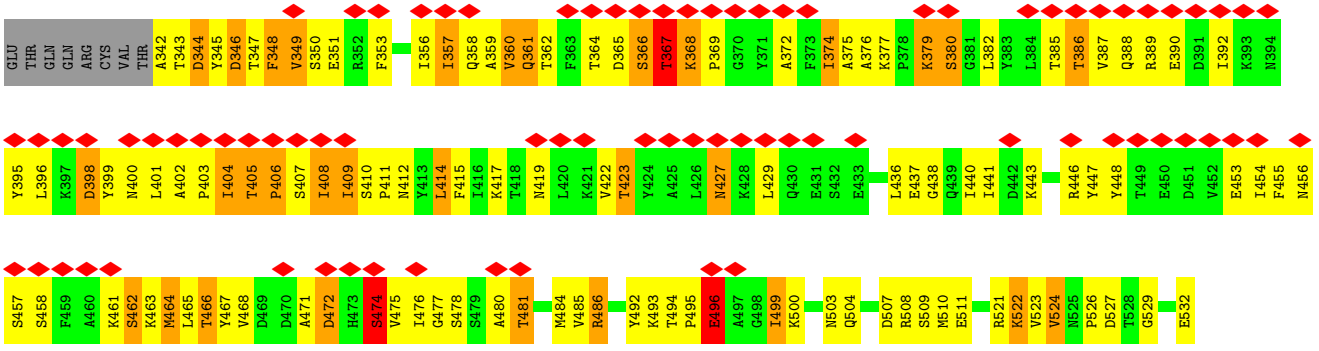
• Molecule 1: Baseplate structural protein Gp6

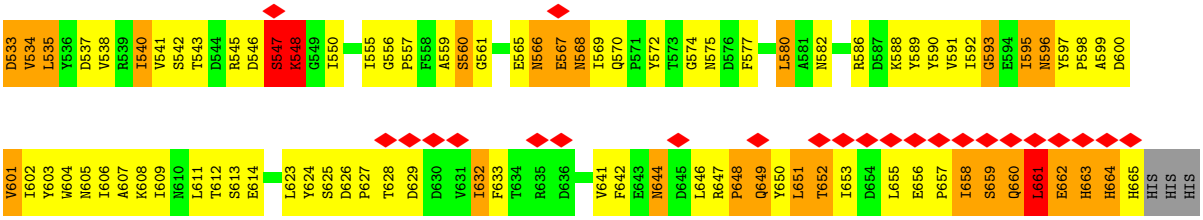
Chain C:



• Molecule 1: Baseplate structural protein Gp6

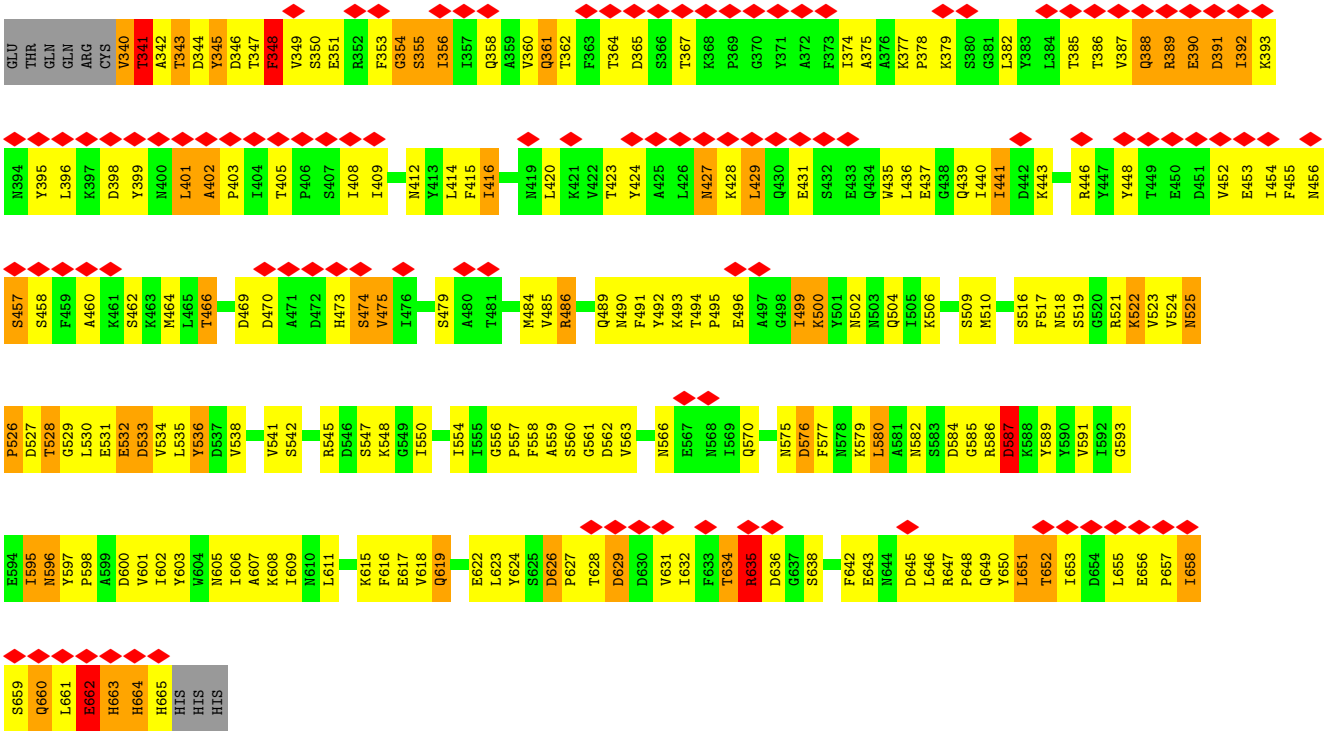
Chain D:





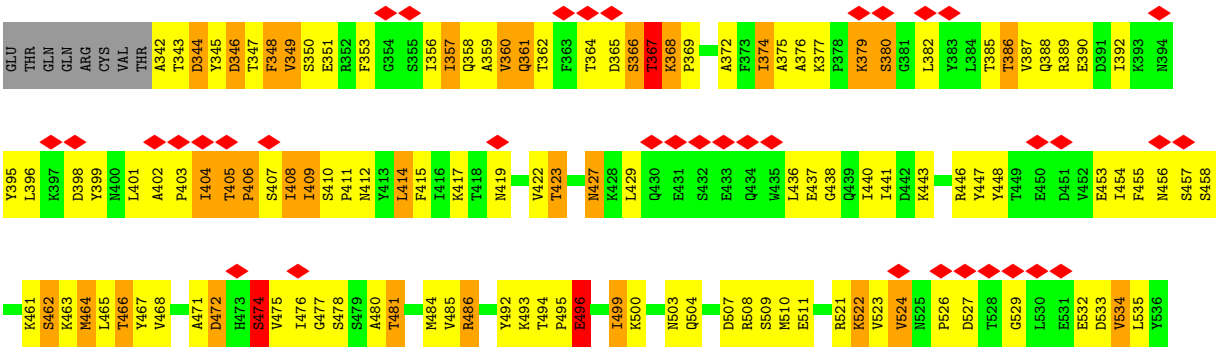
• Molecule 1: Baseplate structural protein Gp6

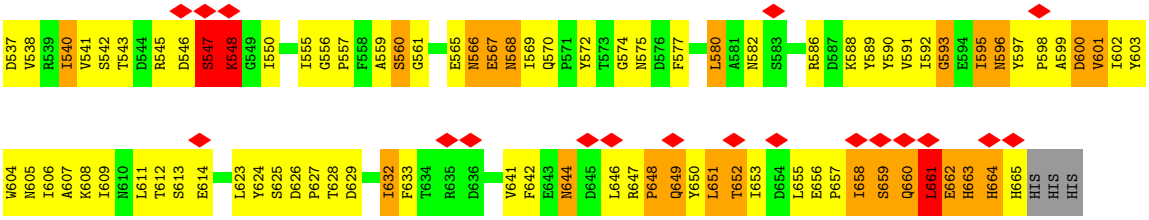
Chain E:



• Molecule 1: Baseplate structural protein Gp6

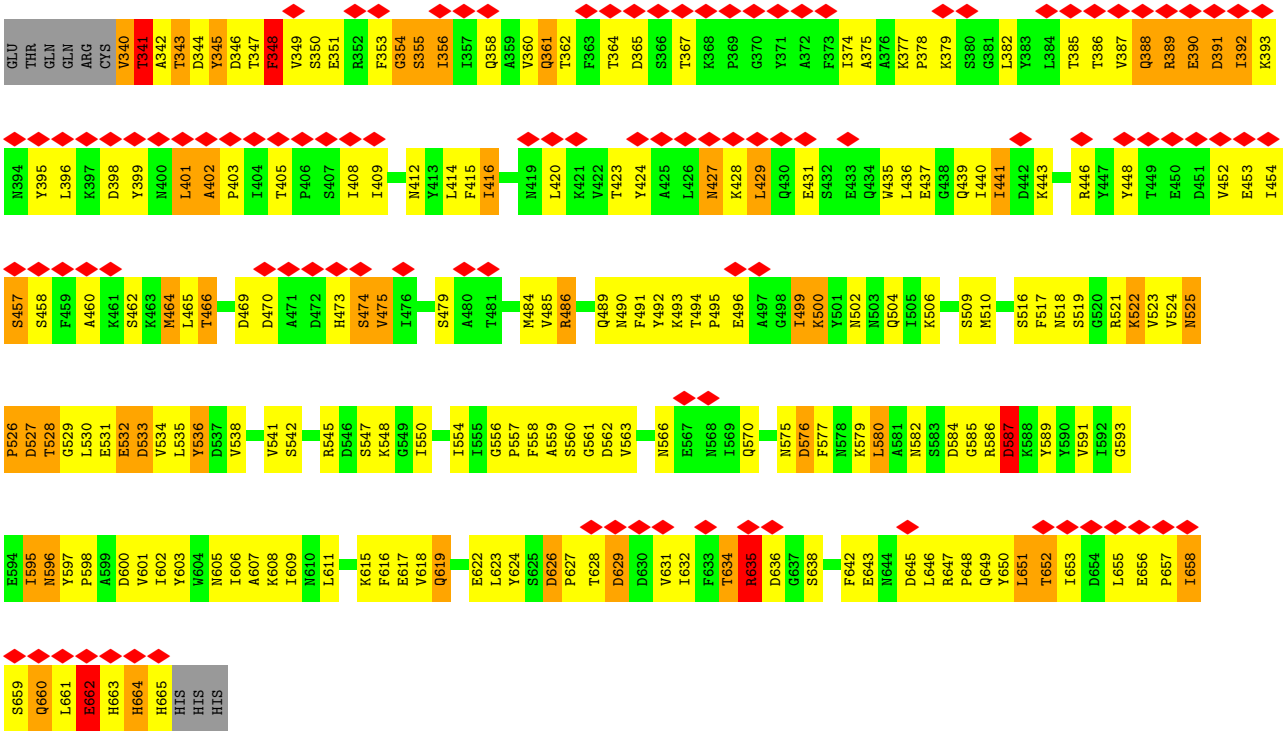
Chain F:





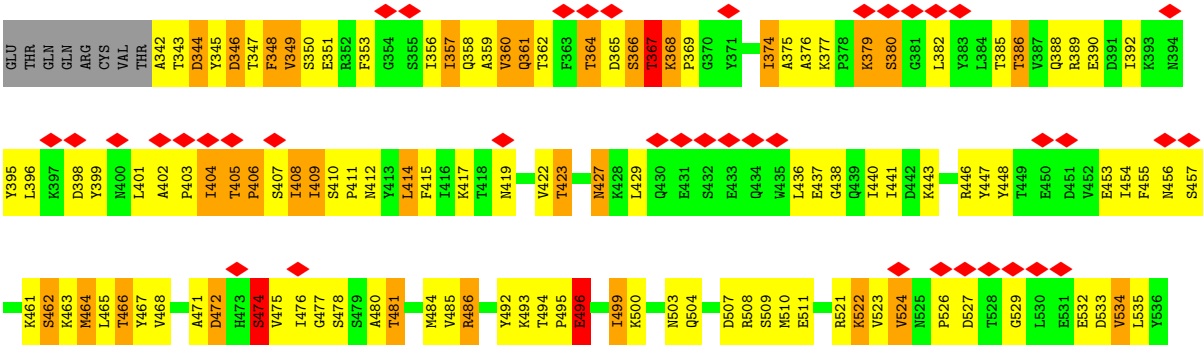
• Molecule 1: Baseplate structural protein Gp6

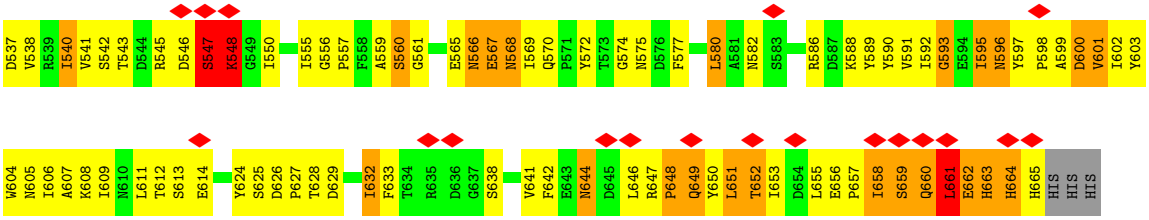
Chain G:



• Molecule 1: Baseplate structural protein Gp6

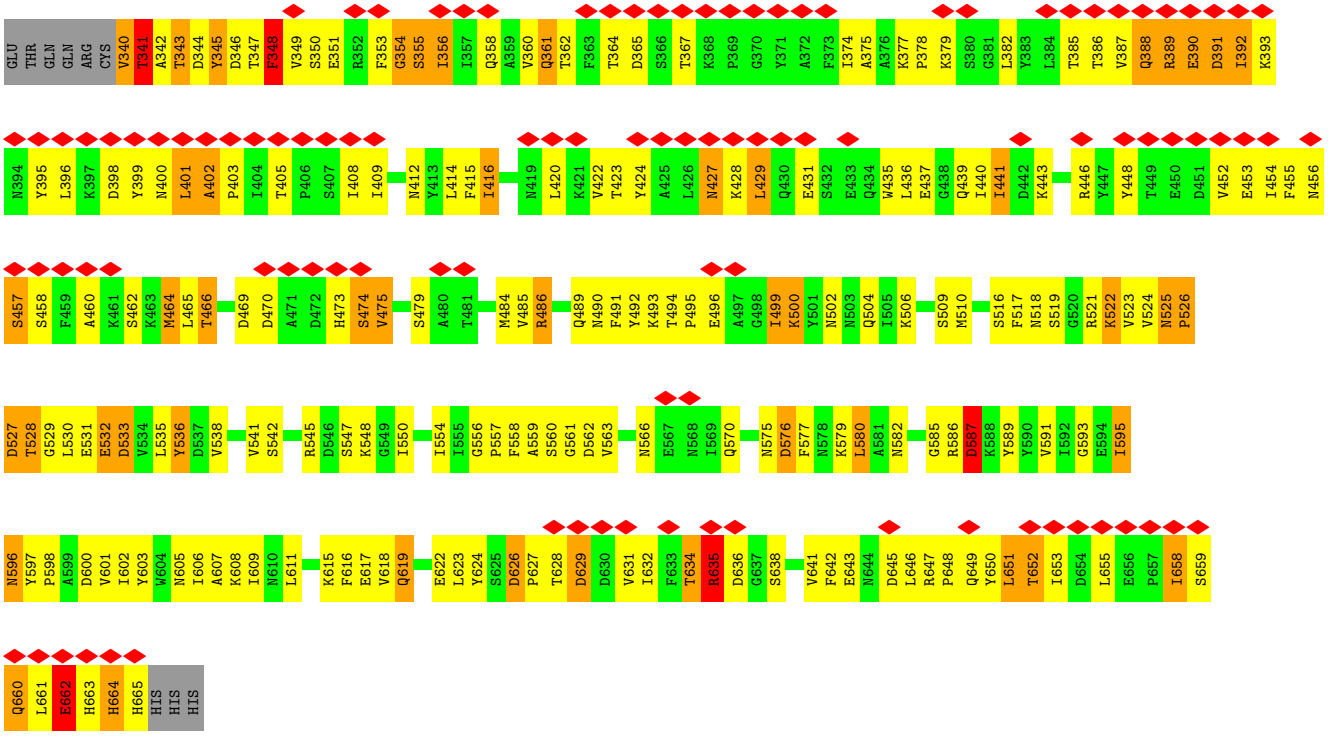
Chain H:





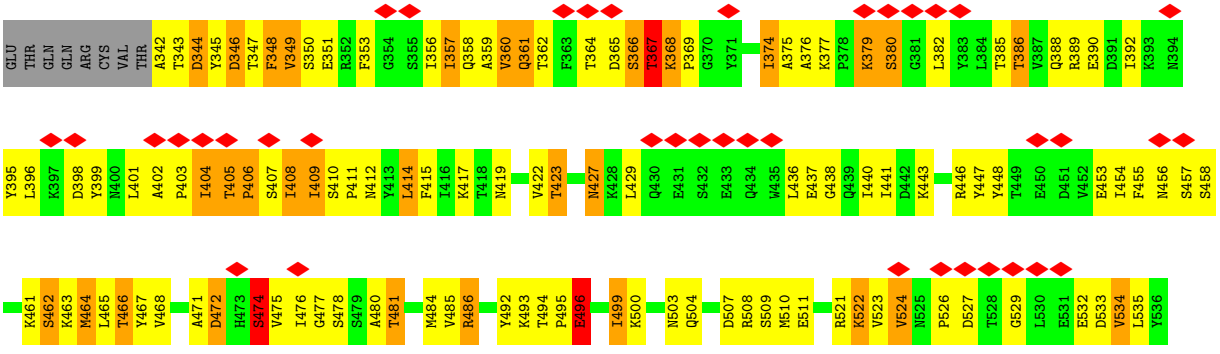
• Molecule 1: Baseplate structural protein Gp6

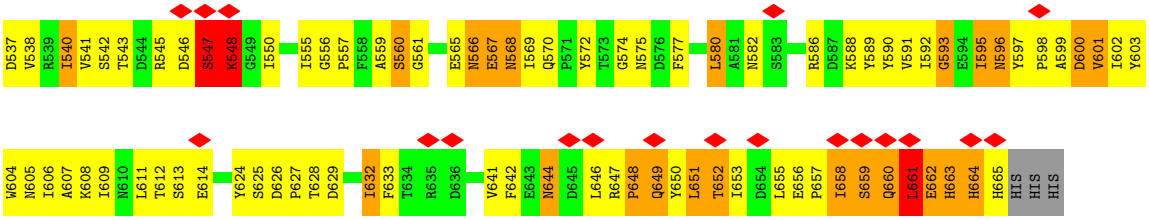
Chain I:



• Molecule 1: Baseplate structural protein Gp6

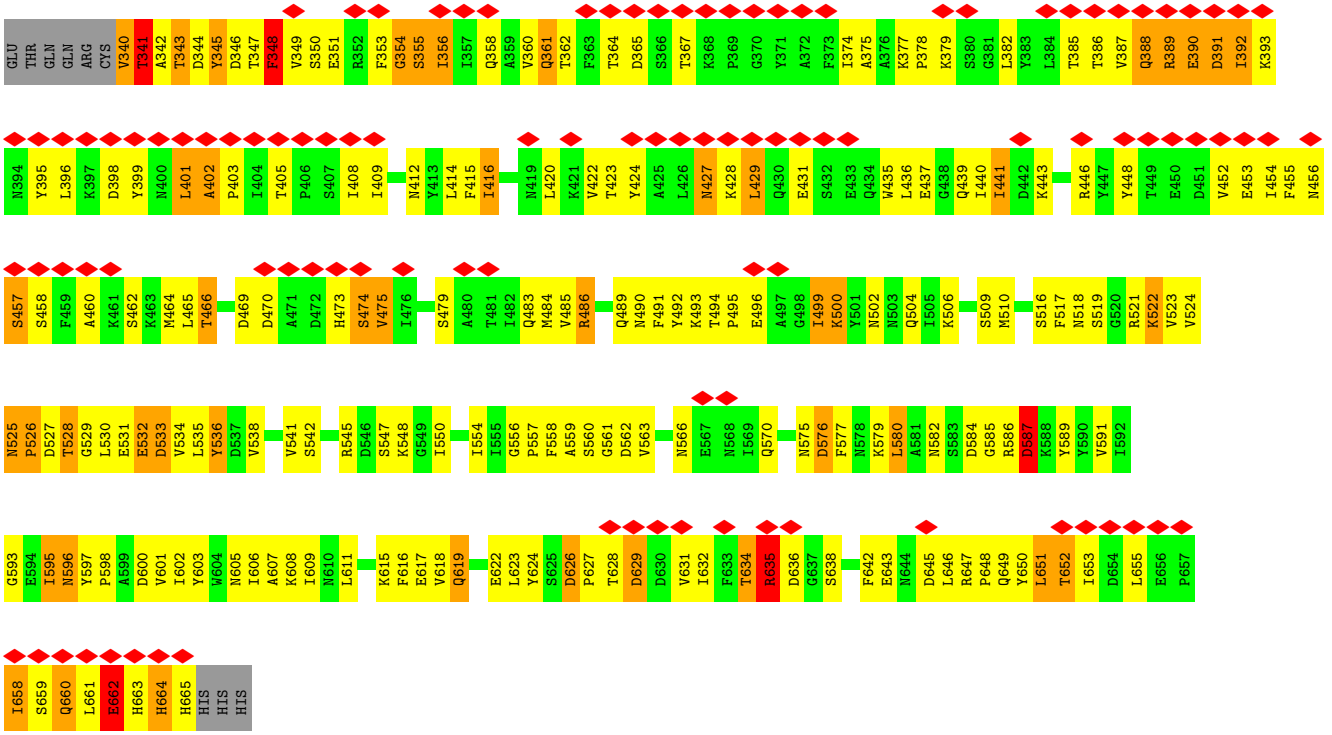
Chain J:





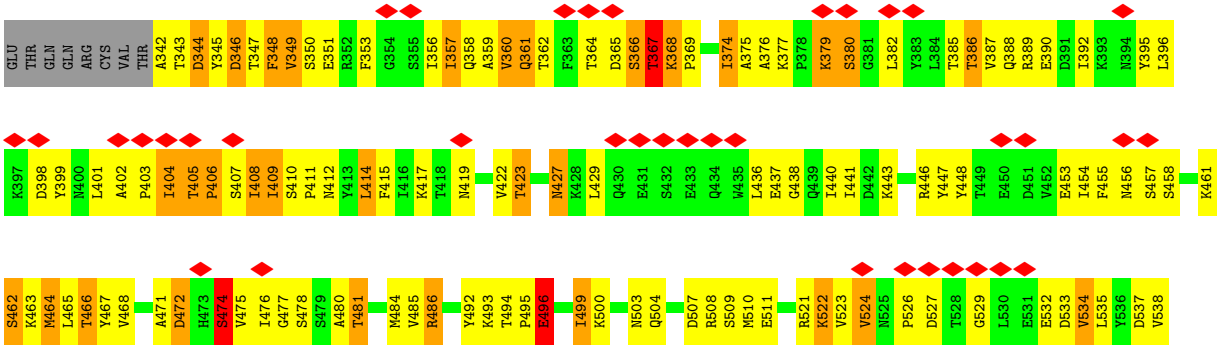
• Molecule 1: Baseplate structural protein Gp6

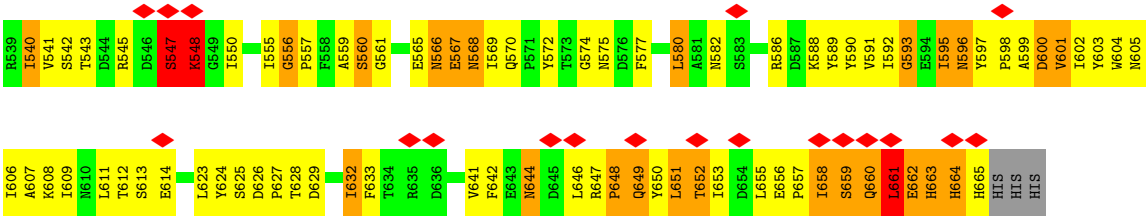
Chain K:



• Molecule 1: Baseplate structural protein Gp6

Chain L:




R539 I540 V541 S542 T543 D544 R545 D546 S547 K548 G549 I550 I555 G556 P557 F558 A559 S560 G561 E565 N566 E567 N568 I569 Q570 P571 Y572 T573 G574 N575 D576 F577 L580 A581 N582 S583 R586 D587 K588 Y589 Y590 V591 I592 G593 E594 I595 N596 Y597 P598 A599 D600 V601 I602 Y603 W604 N605
I606 A607 K608 I609 N610 L611 T612 S613 E614 L623 Y624 S625 D626 P627 T628 D629 I632 F633 T634 R635 D636 V641 F642 E643 N644 D645 L646 R647 P648 Q649 Y650 L651 T652 I653 D654 L655 E656 P657 I658 S659 Q660 L661 E662 H663 H664 H665 HIS HIS HIS

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C6	Depositor
Number of particles used	945	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI/PHILIPS CM300FEG/T	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	25	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	47000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	10.345	Depositor
Minimum map value	-7.648	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	1.45	Depositor
Map size (Å)	583.8291, 583.8291, 583.8291	wwPDB
Map dimensions	196, 196, 196	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.97872, 2.97872, 2.97872	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	0.50	0/2677	0.80	7/3637 (0.2%)
1	B	0.51	0/2663	0.96	11/3617 (0.3%)
1	C	0.50	0/2677	0.80	7/3637 (0.2%)
1	D	0.51	0/2663	0.96	11/3617 (0.3%)
1	E	0.50	0/2677	0.80	7/3637 (0.2%)
1	F	0.51	0/2663	0.96	11/3617 (0.3%)
1	G	0.50	0/2677	0.80	7/3637 (0.2%)
1	H	0.51	0/2663	0.96	11/3617 (0.3%)
1	I	0.50	0/2677	0.80	7/3637 (0.2%)
1	J	0.51	0/2663	0.96	11/3617 (0.3%)
1	K	0.50	0/2677	0.80	7/3637 (0.2%)
1	L	0.51	0/2663	0.96	11/3617 (0.3%)
All	All	0.51	0/32040	0.88	108/43524 (0.2%)

There are no bond length outliers.

All (108) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	J	405	THR	C-N-CD	-29.01	56.77	120.60
1	H	405	THR	C-N-CD	-29.01	56.77	120.60
1	D	405	THR	C-N-CD	-29.01	56.78	120.60
1	F	405	THR	C-N-CD	-29.00	56.79	120.60
1	L	405	THR	C-N-CD	-29.00	56.80	120.60
1	B	405	THR	C-N-CD	-29.00	56.81	120.60
1	B	474	SER	N-CA-CB	-10.98	94.03	110.50
1	L	474	SER	N-CA-CB	-10.98	94.03	110.50
1	D	474	SER	N-CA-CB	-10.97	94.04	110.50
1	F	474	SER	N-CA-CB	-10.97	94.05	110.50
1	H	474	SER	N-CA-CB	-10.96	94.06	110.50
1	J	474	SER	N-CA-CB	-10.96	94.07	110.50
1	G	646	LEU	N-CA-CB	-10.48	89.45	110.40
1	A	646	LEU	N-CA-CB	-10.47	89.47	110.40
1	E	646	LEU	N-CA-CB	-10.46	89.48	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	646	LEU	N-CA-CB	-10.45	89.50	110.40
1	K	646	LEU	N-CA-CB	-10.45	89.51	110.40
1	C	646	LEU	N-CA-CB	-10.44	89.53	110.40
1	B	548	LYS	N-CA-C	9.97	137.91	111.00
1	D	548	LYS	N-CA-C	9.96	137.88	111.00
1	L	548	LYS	N-CA-C	9.95	137.85	111.00
1	F	548	LYS	N-CA-C	9.94	137.84	111.00
1	H	548	LYS	N-CA-C	9.94	137.83	111.00
1	J	548	LYS	N-CA-C	9.94	137.83	111.00
1	J	534	VAL	N-CA-CB	-9.74	90.06	111.50
1	H	534	VAL	N-CA-CB	-9.73	90.10	111.50
1	D	534	VAL	N-CA-CB	-9.72	90.11	111.50
1	L	534	VAL	N-CA-CB	-9.72	90.11	111.50
1	F	534	VAL	N-CA-CB	-9.72	90.12	111.50
1	B	534	VAL	N-CA-CB	-9.71	90.13	111.50
1	A	457	SER	N-CA-CB	9.62	124.93	110.50
1	I	457	SER	N-CA-CB	9.62	124.93	110.50
1	E	457	SER	N-CA-CB	9.60	124.90	110.50
1	C	457	SER	N-CA-CB	9.60	124.89	110.50
1	G	457	SER	N-CA-CB	9.59	124.88	110.50
1	K	457	SER	N-CA-CB	9.59	124.88	110.50
1	I	456	ASN	CB-CA-C	-8.73	92.94	110.40
1	E	456	ASN	CB-CA-C	-8.73	92.95	110.40
1	K	456	ASN	CB-CA-C	-8.73	92.95	110.40
1	C	456	ASN	CB-CA-C	-8.72	92.96	110.40
1	A	456	ASN	CB-CA-C	-8.72	92.97	110.40
1	G	456	ASN	CB-CA-C	-8.71	92.97	110.40
1	B	472	ASP	CB-CA-C	8.47	127.34	110.40
1	J	472	ASP	CB-CA-C	8.46	127.31	110.40
1	H	472	ASP	CB-CA-C	8.45	127.30	110.40
1	L	472	ASP	CB-CA-C	8.45	127.30	110.40
1	F	472	ASP	CB-CA-C	8.45	127.29	110.40
1	D	472	ASP	CB-CA-C	8.44	127.29	110.40
1	H	398	ASP	CB-CA-C	7.99	126.38	110.40
1	F	398	ASP	CB-CA-C	7.99	126.37	110.40
1	L	398	ASP	CB-CA-C	7.99	126.37	110.40
1	B	398	ASP	CB-CA-C	7.97	126.34	110.40
1	D	398	ASP	CB-CA-C	7.97	126.34	110.40
1	J	398	ASP	CB-CA-C	7.96	126.32	110.40
1	G	645	ASP	CB-CA-C	7.88	126.17	110.40
1	A	645	ASP	CB-CA-C	7.88	126.16	110.40
1	E	645	ASP	CB-CA-C	7.86	126.13	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	645	ASP	CB-CA-C	7.86	126.12	110.40
1	K	645	ASP	CB-CA-C	7.85	126.10	110.40
1	C	645	ASP	CB-CA-C	7.84	126.09	110.40
1	C	527	ASP	C-N-CA	-6.15	106.33	121.70
1	I	527	ASP	C-N-CA	-6.15	106.33	121.70
1	K	527	ASP	C-N-CA	-6.14	106.35	121.70
1	A	527	ASP	C-N-CA	-6.13	106.36	121.70
1	G	527	ASP	C-N-CA	-6.13	106.38	121.70
1	E	457	SER	N-CA-C	-6.11	94.49	111.00
1	E	527	ASP	C-N-CA	-6.11	106.42	121.70
1	G	457	SER	N-CA-C	-6.10	94.54	111.00
1	C	457	SER	N-CA-C	-6.09	94.54	111.00
1	K	457	SER	N-CA-C	-6.09	94.55	111.00
1	A	457	SER	N-CA-C	-6.09	94.56	111.00
1	D	644	ASN	CB-CA-C	-6.08	98.23	110.40
1	I	457	SER	N-CA-C	-6.08	94.57	111.00
1	J	644	ASN	CB-CA-C	-6.08	98.24	110.40
1	F	644	ASN	CB-CA-C	-6.08	98.24	110.40
1	L	644	ASN	CB-CA-C	-6.08	98.24	110.40
1	B	644	ASN	CB-CA-C	-6.08	98.25	110.40
1	H	644	ASN	CB-CA-C	-6.07	98.26	110.40
1	J	547	SER	N-CA-C	-6.02	94.74	111.00
1	L	547	SER	N-CA-C	-6.01	94.78	111.00
1	D	547	SER	N-CA-C	-6.00	94.79	111.00
1	F	547	SER	N-CA-C	-6.00	94.79	111.00
1	H	547	SER	N-CA-C	-6.00	94.80	111.00
1	B	547	SER	N-CA-C	-6.00	94.80	111.00
1	C	525	ASN	C-N-CD	-5.91	107.60	120.60
1	A	525	ASN	C-N-CD	-5.90	107.61	120.60
1	G	525	ASN	C-N-CD	-5.88	107.66	120.60
1	I	525	ASN	C-N-CD	-5.88	107.66	120.60
1	E	525	ASN	C-N-CD	-5.88	107.67	120.60
1	K	525	ASN	C-N-CD	-5.88	107.67	120.60
1	F	533	ASP	N-CA-C	-5.78	95.39	111.00
1	D	533	ASP	N-CA-C	-5.78	95.39	111.00
1	B	533	ASP	N-CA-C	-5.76	95.43	111.00
1	J	533	ASP	N-CA-C	-5.76	95.44	111.00
1	L	533	ASP	N-CA-C	-5.76	95.44	111.00
1	H	533	ASP	N-CA-C	-5.76	95.45	111.00
1	L	533	ASP	CB-CA-C	-5.66	99.09	110.40
1	J	533	ASP	CB-CA-C	-5.63	99.13	110.40
1	H	533	ASP	CB-CA-C	-5.63	99.14	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	533	ASP	CB-CA-C	-5.63	99.14	110.40
1	B	533	ASP	CB-CA-C	-5.62	99.15	110.40
1	D	533	ASP	CB-CA-C	-5.62	99.16	110.40
1	F	367	THR	CB-CA-C	-5.36	97.13	111.60
1	B	367	THR	CB-CA-C	-5.36	97.13	111.60
1	D	367	THR	CB-CA-C	-5.36	97.14	111.60
1	J	367	THR	CB-CA-C	-5.35	97.14	111.60
1	H	367	THR	CB-CA-C	-5.35	97.15	111.60
1	L	367	THR	CB-CA-C	-5.35	97.15	111.60

There are no chirality outliers.

There are no planarity outliers.

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	2622	0	2545	394	0
1	B	2608	0	2530	369	0
1	C	2622	0	2545	396	0
1	D	2608	0	2530	375	0
1	E	2622	0	2543	440	0
1	F	2608	0	2530	338	0
1	G	2622	0	2543	376	0
1	H	2608	0	2530	367	0
1	I	2622	0	2544	376	0
1	J	2608	0	2530	334	0
1	K	2622	0	2543	414	0
1	L	2608	0	2530	339	0
All	All	31380	0	30443	4266	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 69.

All (4266) 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:366:SER:CB	1:K:403:PRO:HB3	1.21	1.65
1:A:664:HIS:NE2	1:K:348:PHE:CZ	1.70	1.60
1:I:400:ASN:ND2	1:K:664:HIS:CE1	1.69	1.58
1:B:364:THR:CG2	1:K:401:LEU:CD1	1.79	1.58
1:E:348:PHE:CZ	1:G:664:HIS:NE2	1.68	1.57
1:E:401:LEU:CD1	1:H:364:THR:CG2	1.78	1.56
1:E:403:PRO:HB3	1:H:366:SER:CB	1.18	1.54
1:E:348:PHE:HZ	1:G:664:HIS:CD2	1.24	1.53
1:E:401:LEU:CD1	1:H:364:THR:HG21	1.34	1.53
1:A:664:HIS:CD2	1:K:348:PHE:HZ	1.28	1.51
1:B:364:THR:HG21	1:K:401:LEU:CD1	1.34	1.51
1:D:398:ASP:OD2	1:E:663:HIS:CD2	1.65	1.49
1:E:403:PRO:CB	1:H:366:SER:HB3	1.42	1.49
1:B:366:SER:HB3	1:K:403:PRO:CB	1.45	1.47
1:E:403:PRO:CA	1:H:366:SER:HB3	1.46	1.44
1:D:400:ASN:ND2	1:E:662:GLU:HG2	1.32	1.44
1:A:403:PRO:CG	1:C:366:SER:HB2	1.45	1.42
1:B:366:SER:HB3	1:K:403:PRO:CA	1.48	1.42
1:E:348:PHE:HZ	1:G:664:HIS:NE2	1.02	1.41
1:D:400:ASN:HD22	1:E:662:GLU:CG	1.33	1.39
1:E:403:PRO:HB3	1:H:366:SER:CA	1.50	1.39
1:I:400:ASN:HD21	1:K:664:HIS:CD2	1.40	1.39
1:I:400:ASN:ND2	1:K:664:HIS:ND1	1.62	1.39
1:A:661:LEU:HD13	1:A:662:GLU:N	1.06	1.38
1:B:366:SER:CB	1:K:403:PRO:CB	1.99	1.38
1:K:661:LEU:HD13	1:K:662:GLU:N	1.06	1.38
1:B:366:SER:CA	1:K:403:PRO:HB3	1.52	1.38
1:C:661:LEU:HD13	1:C:662:GLU:N	1.06	1.38
1:E:403:PRO:CB	1:H:366:SER:CB	1.97	1.36
1:I:400:ASN:ND2	1:K:664:HIS:CG	1.92	1.36
1:I:661:LEU:HD13	1:I:662:GLU:N	1.06	1.35
1:G:661:LEU:HD13	1:G:662:GLU:N	1.06	1.34
1:D:661:LEU:C	1:D:661:LEU:HD13	1.48	1.33
1:E:661:LEU:HD13	1:E:662:GLU:N	1.06	1.33
1:A:664:HIS:NE2	1:K:348:PHE:HZ	1.02	1.32
1:A:559:ALA:C	1:A:561:GLY:HA3	1.49	1.32
1:D:398:ASP:OD2	1:E:663:HIS:CG	1.82	1.32
1:F:661:LEU:HD13	1:F:661:LEU:C	1.48	1.32
1:C:559:ALA:C	1:C:561:GLY:HA3	1.49	1.31
1:G:559:ALA:C	1:G:561:GLY:HA3	1.49	1.30
1:H:661:LEU:HD13	1:H:661:LEU:C	1.48	1.30
1:E:559:ALA:C	1:E:561:GLY:HA3	1.49	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:525:ASN:CB	1:I:526:PRO:HD2	1.59	1.30
1:I:559:ALA:C	1:I:561:GLY:HA3	1.49	1.29
1:K:559:ALA:C	1:K:561:GLY:HA3	1.49	1.29
1:G:525:ASN:CB	1:G:526:PRO:HD2	1.59	1.29
1:E:385:THR:OG1	1:E:387:VAL:HG23	1.33	1.28
1:A:525:ASN:CB	1:A:526:PRO:HD2	1.58	1.26
1:A:401:LEU:CD1	1:C:364:THR:HG23	1.64	1.26
1:F:408:ILE:C	1:F:408:ILE:HD12	1.56	1.26
1:D:408:ILE:C	1:D:408:ILE:HD12	1.56	1.25
1:D:646:LEU:HD23	1:D:646:LEU:O	1.36	1.25
1:C:385:THR:OG1	1:C:387:VAL:HG23	1.33	1.25
1:K:401:LEU:C	1:K:401:LEU:HD23	1.55	1.25
1:E:401:LEU:HD23	1:E:401:LEU:C	1.55	1.25
1:D:400:ASN:ND2	1:E:662:GLU:CG	1.91	1.24
1:E:525:ASN:CB	1:E:526:PRO:HD2	1.59	1.24
1:L:661:LEU:C	1:L:661:LEU:HD13	1.48	1.24
1:G:385:THR:OG1	1:G:387:VAL:HG23	1.33	1.24
1:G:401:LEU:HD23	1:G:401:LEU:C	1.55	1.24
1:J:408:ILE:C	1:J:408:ILE:HD12	1.56	1.24
1:A:401:LEU:HD23	1:A:401:LEU:C	1.55	1.23
1:B:661:LEU:C	1:B:661:LEU:HD13	1.48	1.23
1:H:408:ILE:C	1:H:408:ILE:HD12	1.56	1.23
1:G:559:ALA:O	1:G:561:GLY:HA3	1.40	1.23
1:J:646:LEU:O	1:J:646:LEU:HD23	1.36	1.23
1:A:385:THR:OG1	1:A:387:VAL:HG23	1.33	1.22
1:L:408:ILE:C	1:L:408:ILE:HD12	1.56	1.22
1:E:559:ALA:O	1:E:561:GLY:HA3	1.40	1.22
1:F:646:LEU:HD23	1:F:646:LEU:O	1.36	1.22
1:I:559:ALA:O	1:I:561:GLY:HA3	1.39	1.22
1:L:661:LEU:O	1:L:663:HIS:N	1.72	1.22
1:B:646:LEU:O	1:B:646:LEU:HD23	1.36	1.22
1:G:401:LEU:HD23	1:G:402:ALA:N	1.54	1.22
1:L:409:ILE:C	1:L:409:ILE:HD12	1.59	1.22
1:C:401:LEU:HD23	1:C:402:ALA:N	1.54	1.22
1:K:629:ASP:HA	1:L:664:HIS:CE1	1.75	1.22
1:A:401:LEU:HD23	1:A:402:ALA:N	1.54	1.22
1:I:629:ASP:HA	1:J:664:HIS:CE1	1.75	1.22
1:C:629:ASP:HA	1:D:664:HIS:CE1	1.75	1.21
1:I:401:LEU:HD23	1:I:401:LEU:C	1.55	1.21
1:K:525:ASN:CB	1:K:526:PRO:HD2	1.59	1.21
1:A:661:LEU:HD13	1:A:661:LEU:C	1.58	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:409:ILE:HD12	1:H:409:ILE:C	1.59	1.21
1:A:629:ASP:HA	1:B:664:HIS:CE1	1.75	1.21
1:J:661:LEU:O	1:J:663:HIS:N	1.72	1.21
1:K:385:THR:OG1	1:K:387:VAL:HG23	1.33	1.21
1:B:408:ILE:C	1:B:408:ILE:HD12	1.56	1.21
1:B:661:LEU:O	1:B:663:HIS:N	1.72	1.21
1:D:661:LEU:O	1:D:663:HIS:N	1.72	1.21
1:E:348:PHE:CZ	1:G:664:HIS:CD2	2.16	1.21
1:E:401:LEU:HD23	1:E:402:ALA:N	1.54	1.21
1:H:646:LEU:O	1:H:646:LEU:HD23	1.36	1.21
1:I:385:THR:OG1	1:I:387:VAL:HG23	1.33	1.21
1:J:661:LEU:C	1:J:661:LEU:HD13	1.48	1.21
1:I:401:LEU:HD23	1:I:402:ALA:N	1.54	1.20
1:E:629:ASP:HA	1:F:664:HIS:CE1	1.75	1.20
1:L:646:LEU:HD23	1:L:646:LEU:O	1.36	1.20
1:A:664:HIS:CD2	1:K:348:PHE:CZ	2.19	1.20
1:E:661:LEU:CD1	1:E:662:GLU:N	2.03	1.20
1:F:661:LEU:O	1:F:663:HIS:N	1.72	1.20
1:J:367:THR:O	1:J:369:PRO:HD3	1.42	1.20
1:B:367:THR:O	1:B:369:PRO:HD3	1.42	1.20
1:G:661:LEU:CD1	1:G:662:GLU:N	2.03	1.20
1:J:409:ILE:C	1:J:409:ILE:HD12	1.59	1.20
1:A:661:LEU:CD1	1:A:662:GLU:N	2.03	1.20
1:C:661:LEU:CD1	1:C:662:GLU:N	2.03	1.20
1:D:367:THR:O	1:D:369:PRO:HD3	1.42	1.20
1:A:340:VAL:HA	1:A:345:TYR:OH	1.43	1.19
1:C:502:ASN:HD22	1:C:635:ARG:HB3	1.08	1.19
1:C:525:ASN:CB	1:C:526:PRO:HD2	1.59	1.19
1:K:401:LEU:HD23	1:K:402:ALA:N	1.54	1.19
1:G:629:ASP:HA	1:H:664:HIS:CE1	1.75	1.19
1:G:525:ASN:O	1:G:528:THR:HG23	1.43	1.19
1:I:661:LEU:CD1	1:I:662:GLU:N	2.03	1.19
1:A:403:PRO:HG3	1:C:366:SER:HB2	1.24	1.19
1:H:661:LEU:O	1:H:663:HIS:N	1.72	1.19
1:K:661:LEU:CD1	1:K:662:GLU:N	2.03	1.19
1:K:559:ALA:O	1:K:561:GLY:HA3	1.39	1.19
1:K:340:VAL:HA	1:K:345:TYR:OH	1.43	1.18
1:L:367:THR:O	1:L:369:PRO:HD3	1.42	1.18
1:D:409:ILE:C	1:D:409:ILE:HD12	1.59	1.18
1:H:367:THR:O	1:H:369:PRO:HD3	1.42	1.18
1:C:525:ASN:O	1:C:528:THR:HG23	1.43	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:401:LEU:HD23	1:C:401:LEU:C	1.55	1.18
1:D:409:ILE:HD12	1:D:409:ILE:O	1.44	1.18
1:L:409:ILE:HD12	1:L:409:ILE:O	1.44	1.18
1:C:559:ALA:O	1:C:561:GLY:HA3	1.39	1.17
1:E:340:VAL:HA	1:E:345:TYR:OH	1.43	1.17
1:E:525:ASN:O	1:E:528:THR:HG23	1.43	1.17
1:B:409:ILE:HD12	1:B:409:ILE:O	1.44	1.17
1:I:340:VAL:HA	1:I:345:TYR:OH	1.43	1.17
1:J:409:ILE:HD12	1:J:409:ILE:O	1.44	1.17
1:K:635:ARG:HG2	1:K:636:ASP:H	1.09	1.17
1:A:525:ASN:O	1:A:528:THR:HG23	1.43	1.16
1:G:340:VAL:HA	1:G:345:TYR:OH	1.43	1.16
1:K:525:ASN:O	1:K:528:THR:HG23	1.43	1.16
1:A:403:PRO:CB	1:C:366:SER:HB2	1.76	1.16
1:A:635:ARG:HG2	1:A:636:ASP:H	1.09	1.16
1:E:401:LEU:HD11	1:H:364:THR:CG2	1.55	1.16
1:C:661:LEU:HD13	1:C:661:LEU:C	1.58	1.16
1:D:647:ARG:NH1	1:D:649:GLN:OE1	1.78	1.16
1:F:647:ARG:NH1	1:F:649:GLN:OE1	1.78	1.16
1:I:525:ASN:O	1:I:528:THR:HG23	1.43	1.16
1:A:403:PRO:CD	1:C:366:SER:HB3	1.76	1.16
1:A:559:ALA:O	1:A:561:GLY:HA3	1.40	1.16
1:B:409:ILE:HD12	1:B:409:ILE:C	1.59	1.16
1:E:525:ASN:HB3	1:E:526:PRO:HD2	1.25	1.16
1:F:409:ILE:C	1:F:409:ILE:HD12	1.59	1.16
1:A:403:PRO:HD3	1:C:366:SER:CB	1.74	1.15
1:A:502:ASN:HD22	1:A:635:ARG:HB3	1.08	1.15
1:C:340:VAL:C	1:C:345:TYR:HE1	1.49	1.15
1:G:525:ASN:HB3	1:G:526:PRO:HD2	1.25	1.15
1:E:661:LEU:HD13	1:E:661:LEU:C	1.58	1.15
1:A:403:PRO:CD	1:C:366:SER:CB	2.23	1.15
1:F:367:THR:O	1:F:369:PRO:HD3	1.42	1.15
1:A:353:PHE:O	1:A:355:SER:N	1.80	1.15
1:E:353:PHE:O	1:E:355:SER:N	1.80	1.15
1:G:340:VAL:C	1:G:345:TYR:HE1	1.49	1.15
1:H:409:ILE:HD12	1:H:409:ILE:O	1.44	1.15
1:I:353:PHE:O	1:I:355:SER:N	1.80	1.15
1:J:647:ARG:NH1	1:J:649:GLN:OE1	1.78	1.15
1:E:340:VAL:C	1:E:345:TYR:HE1	1.49	1.15
1:I:502:ASN:HD22	1:I:635:ARG:HB3	1.08	1.15
1:C:340:VAL:HA	1:C:345:TYR:OH	1.43	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:340:VAL:C	1:A:345:TYR:HE1	1.49	1.14
1:A:525:ASN:HB3	1:A:526:PRO:HD2	1.25	1.14
1:E:385:THR:HG21	1:E:389:ARG:CA	1.78	1.14
1:J:366:SER:C	1:J:367:THR:HG22	1.68	1.14
1:K:661:LEU:HD13	1:K:661:LEU:C	1.58	1.14
1:K:340:VAL:C	1:K:345:TYR:HE1	1.49	1.14
1:L:647:ARG:NH1	1:L:649:GLN:OE1	1.78	1.14
1:C:385:THR:HG21	1:C:389:ARG:CA	1.78	1.14
1:I:340:VAL:C	1:I:345:TYR:HE1	1.49	1.14
1:I:385:THR:HG21	1:I:389:ARG:CA	1.78	1.14
1:F:409:ILE:HD12	1:F:409:ILE:O	1.44	1.14
1:G:502:ASN:HD22	1:G:635:ARG:HB3	1.08	1.14
1:K:353:PHE:O	1:K:355:SER:N	1.80	1.14
1:K:385:THR:HG21	1:K:389:ARG:CA	1.78	1.14
1:B:364:THR:CG2	1:K:401:LEU:HD11	1.58	1.13
1:I:635:ARG:HG2	1:I:636:ASP:H	1.09	1.13
1:C:353:PHE:O	1:C:355:SER:N	1.80	1.13
1:D:398:ASP:OD2	1:E:663:HIS:CB	1.97	1.13
1:G:385:THR:HG21	1:G:389:ARG:CA	1.78	1.13
1:G:661:LEU:HD13	1:G:661:LEU:C	1.58	1.13
1:B:647:ARG:NH1	1:B:649:GLN:OE1	1.78	1.13
1:G:353:PHE:O	1:G:355:SER:N	1.80	1.12
1:H:647:ARG:NH1	1:H:649:GLN:OE1	1.78	1.12
1:J:353:PHE:HZ	1:J:395:TYR:CE2	1.67	1.12
1:E:401:LEU:HD12	1:H:364:THR:CG2	1.63	1.12
1:I:631:VAL:HG21	1:J:476:ILE:CG2	1.80	1.12
1:G:631:VAL:HG21	1:H:476:ILE:CG2	1.80	1.12
1:J:367:THR:HG23	1:J:368:LYS:H	1.00	1.12
1:C:631:VAL:HG21	1:D:476:ILE:CG2	1.80	1.11
1:G:502:ASN:ND2	1:G:635:ARG:HB3	1.66	1.11
1:H:353:PHE:HZ	1:H:395:TYR:CE2	1.67	1.11
1:A:385:THR:HG21	1:A:389:ARG:CA	1.78	1.11
1:B:353:PHE:HZ	1:B:395:TYR:CE2	1.67	1.11
1:D:353:PHE:HZ	1:D:395:TYR:CE2	1.67	1.11
1:G:385:THR:CG2	1:G:389:ARG:H	1.63	1.11
1:I:661:LEU:HD13	1:I:661:LEU:C	1.58	1.11
1:K:631:VAL:HG21	1:L:476:ILE:CG2	1.80	1.11
1:L:366:SER:C	1:L:367:THR:HG22	1.68	1.11
1:D:565:GLU:HB3	1:D:570:GLN:HE21	0.95	1.11
1:E:401:LEU:CG	1:H:364:THR:CG2	2.29	1.11
1:E:502:ASN:ND2	1:E:635:ARG:HB3	1.66	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:385:THR:CG2	1:C:389:ARG:H	1.63	1.11
1:C:525:ASN:HB3	1:C:526:PRO:HD2	1.25	1.11
1:E:385:THR:CG2	1:E:389:ARG:H	1.63	1.11
1:E:631:VAL:HG21	1:F:476:ILE:CG2	1.80	1.11
1:E:635:ARG:HG2	1:E:636:ASP:H	1.09	1.11
1:F:353:PHE:HZ	1:F:395:TYR:CE2	1.67	1.11
1:I:502:ASN:ND2	1:I:635:ARG:HB3	1.66	1.11
1:A:631:VAL:HG21	1:B:476:ILE:CG2	1.80	1.10
1:E:502:ASN:HD22	1:E:635:ARG:HB3	1.08	1.10
1:G:635:ARG:HG2	1:G:636:ASP:H	1.09	1.10
1:K:525:ASN:HB3	1:K:526:PRO:HD2	1.25	1.10
1:I:385:THR:CG2	1:I:389:ARG:H	1.63	1.10
1:L:353:PHE:HZ	1:L:395:TYR:CE2	1.67	1.10
1:I:400:ASN:ND2	1:K:664:HIS:NE2	1.98	1.10
1:D:408:ILE:HD12	1:D:408:ILE:O	1.52	1.10
1:K:502:ASN:HD22	1:K:635:ARG:HB3	1.08	1.10
1:B:364:THR:HG21	1:K:401:LEU:CG	1.82	1.09
1:K:502:ASN:ND2	1:K:635:ARG:HB3	1.66	1.09
1:A:385:THR:CG2	1:A:389:ARG:H	1.63	1.09
1:K:385:THR:CG2	1:K:389:ARG:H	1.63	1.09
1:A:502:ASN:ND2	1:A:635:ARG:HB3	1.65	1.09
1:B:366:SER:C	1:B:367:THR:HG22	1.68	1.09
1:B:367:THR:HG23	1:B:368:LYS:H	1.00	1.09
1:B:364:THR:CG2	1:K:401:LEU:CG	2.30	1.09
1:F:565:GLU:HB3	1:F:570:GLN:HE21	0.95	1.08
1:H:366:SER:C	1:H:367:THR:HG22	1.68	1.08
1:C:502:ASN:ND2	1:C:635:ARG:HB3	1.66	1.08
1:J:565:GLU:HB3	1:J:570:GLN:HE21	0.95	1.08
1:E:401:LEU:CG	1:H:364:THR:HG21	1.82	1.08
1:D:399:TYR:HA	1:E:664:HIS:HB2	1.36	1.07
1:A:403:PRO:HD3	1:C:366:SER:HB3	1.08	1.07
1:L:408:ILE:HD12	1:L:408:ILE:O	1.52	1.07
1:C:635:ARG:HG2	1:C:636:ASP:H	1.09	1.07
1:D:366:SER:C	1:D:367:THR:HG22	1.68	1.07
1:D:367:THR:HG23	1:D:368:LYS:H	1.00	1.07
1:F:366:SER:C	1:F:367:THR:HG22	1.68	1.07
1:F:408:ILE:HD12	1:F:408:ILE:O	1.52	1.07
1:G:525:ASN:CG	1:G:526:PRO:HD2	1.74	1.07
1:J:408:ILE:HD12	1:J:408:ILE:O	1.52	1.07
1:C:385:THR:OG1	1:C:387:VAL:CG2	2.03	1.07
1:C:525:ASN:CG	1:C:526:PRO:HD2	1.74	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:367:THR:HG23	1:F:368:LYS:H	1.00	1.07
1:H:408:ILE:HD12	1:H:408:ILE:O	1.52	1.07
1:A:385:THR:OG1	1:A:387:VAL:CG2	2.03	1.07
1:B:565:GLU:HB3	1:B:570:GLN:HE21	0.94	1.07
1:E:348:PHE:CE2	1:G:664:HIS:NE2	2.23	1.07
1:B:408:ILE:HD12	1:B:408:ILE:O	1.52	1.06
1:I:525:ASN:HB3	1:I:526:PRO:HD2	1.25	1.06
1:K:385:THR:OG1	1:K:387:VAL:CG2	2.03	1.06
1:A:401:LEU:HD12	1:C:364:THR:HG23	1.32	1.06
1:F:569:ILE:O	1:F:569:ILE:HG22	1.55	1.06
1:A:403:PRO:CG	1:C:366:SER:CB	2.32	1.06
1:D:398:ASP:CG	1:E:663:HIS:CD2	2.29	1.06
1:D:398:ASP:HA	1:E:663:HIS:HB3	1.32	1.06
1:H:367:THR:HG23	1:H:368:LYS:H	1.00	1.06
1:E:385:THR:OG1	1:E:387:VAL:CG2	2.03	1.06
1:I:385:THR:OG1	1:I:387:VAL:CG2	2.03	1.06
1:A:525:ASN:CG	1:A:526:PRO:HD2	1.74	1.06
1:B:364:THR:CG2	1:K:401:LEU:HD12	1.63	1.06
1:E:661:LEU:O	1:E:662:GLU:O	1.74	1.06
1:G:385:THR:OG1	1:G:387:VAL:CG2	2.03	1.06
1:K:340:VAL:C	1:K:345:TYR:CE1	2.30	1.06
1:A:401:LEU:HD11	1:C:364:THR:HG23	1.35	1.05
1:C:661:LEU:O	1:C:662:GLU:O	1.74	1.05
1:L:367:THR:HG23	1:L:368:LYS:H	1.00	1.05
1:A:340:VAL:C	1:A:345:TYR:CE1	2.30	1.05
1:E:525:ASN:CG	1:E:526:PRO:HD2	1.74	1.05
1:H:569:ILE:O	1:H:569:ILE:HG22	1.55	1.05
1:K:525:ASN:CG	1:K:526:PRO:HD2	1.74	1.05
1:I:340:VAL:C	1:I:345:TYR:CE1	2.30	1.05
1:C:340:VAL:C	1:C:345:TYR:CE1	2.30	1.05
1:H:565:GLU:HB3	1:H:570:GLN:HE21	0.95	1.05
1:I:525:ASN:CG	1:I:526:PRO:HD2	1.74	1.05
1:L:565:GLU:HB3	1:L:570:GLN:HE21	0.95	1.05
1:G:661:LEU:O	1:G:662:GLU:O	1.74	1.05
1:E:403:PRO:HA	1:H:366:SER:HB3	1.39	1.04
1:A:661:LEU:O	1:A:662:GLU:O	1.74	1.04
1:D:399:TYR:HA	1:E:664:HIS:CB	1.88	1.04
1:G:353:PHE:CD1	1:G:395:TYR:CE2	2.46	1.04
1:D:569:ILE:HG22	1:D:569:ILE:O	1.55	1.04
1:E:353:PHE:CD1	1:E:395:TYR:CE2	2.46	1.04
1:G:340:VAL:C	1:G:345:TYR:CE1	2.30	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:353:PHE:CD1	1:I:395:TYR:CE2	2.46	1.04
1:E:340:VAL:C	1:E:345:TYR:CE1	2.30	1.03
1:F:367:THR:HG23	1:F:368:LYS:N	1.70	1.03
1:C:353:PHE:CD1	1:C:395:TYR:CE2	2.46	1.03
1:F:660:GLN:HA	1:F:661:LEU:HB2	1.41	1.03
1:B:364:THR:HG22	1:K:401:LEU:CD1	1.87	1.03
1:I:661:LEU:O	1:I:662:GLU:O	1.74	1.03
1:K:661:LEU:O	1:K:662:GLU:O	1.74	1.03
1:A:353:PHE:CD1	1:A:395:TYR:CE2	2.46	1.03
1:E:635:ARG:CG	1:E:636:ASP:H	1.70	1.03
1:J:569:ILE:HG22	1:J:569:ILE:O	1.55	1.03
1:A:635:ARG:CG	1:A:636:ASP:H	1.70	1.02
1:A:664:HIS:NE2	1:K:348:PHE:CE2	2.27	1.02
1:B:364:THR:HG22	1:K:401:LEU:HD12	1.38	1.02
1:E:401:LEU:HD12	1:H:364:THR:HG22	1.38	1.02
1:K:353:PHE:CD1	1:K:395:TYR:CE2	2.46	1.02
1:F:565:GLU:CB	1:F:570:GLN:HE21	1.73	1.02
1:L:660:GLN:HA	1:L:661:LEU:HB2	1.41	1.02
1:B:565:GLU:CB	1:B:570:GLN:HE21	1.73	1.02
1:A:401:LEU:CD1	1:C:364:THR:CG2	2.37	1.02
1:E:661:LEU:CD1	1:E:662:GLU:HB2	1.89	1.02
1:G:661:LEU:CD1	1:G:662:GLU:HB2	1.89	1.02
1:H:565:GLU:CB	1:H:570:GLN:HE21	1.73	1.02
1:I:661:LEU:CD1	1:I:662:GLU:HB2	1.89	1.02
1:H:660:GLN:HA	1:H:661:LEU:HB2	1.41	1.02
1:J:565:GLU:CB	1:J:570:GLN:HE21	1.73	1.02
1:J:367:THR:HG23	1:J:368:LYS:N	1.70	1.01
1:K:661:LEU:CD1	1:K:662:GLU:HB2	1.89	1.01
1:J:661:LEU:O	1:J:661:LEU:HD22	1.60	1.01
1:C:661:LEU:CD1	1:C:662:GLU:HB2	1.89	1.01
1:F:661:LEU:HD13	1:F:661:LEU:O	1.60	1.01
1:H:661:LEU:HD13	1:H:661:LEU:O	1.60	1.01
1:H:661:LEU:O	1:H:661:LEU:HD22	1.60	1.01
1:L:565:GLU:CB	1:L:570:GLN:HE21	1.73	1.01
1:B:569:ILE:HG22	1:B:569:ILE:O	1.55	1.01
1:F:403:PRO:O	1:F:405:THR:CG2	2.09	1.01
1:F:661:LEU:O	1:F:661:LEU:HD22	1.60	1.01
1:H:403:PRO:O	1:H:405:THR:CG2	2.09	1.01
1:L:569:ILE:HG22	1:L:569:ILE:O	1.55	1.01
1:D:403:PRO:O	1:D:405:THR:CG2	2.09	1.01
1:D:661:LEU:O	1:D:661:LEU:HD22	1.60	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:662:GLU:O	1:D:663:HIS:HB2	1.60	1.01
1:I:400:ASN:ND2	1:K:664:HIS:CD2	2.11	1.01
1:J:403:PRO:O	1:J:405:THR:CG2	2.09	1.01
1:K:635:ARG:CG	1:K:636:ASP:H	1.70	1.01
1:L:661:LEU:O	1:L:661:LEU:HD22	1.60	1.01
1:D:565:GLU:CB	1:D:570:GLN:HE21	1.73	1.00
1:H:662:GLU:O	1:H:663:HIS:HB2	1.60	1.00
1:L:367:THR:HG23	1:L:368:LYS:N	1.70	1.00
1:A:661:LEU:CD1	1:A:662:GLU:HB2	1.89	1.00
1:E:559:ALA:C	1:E:561:GLY:CA	2.30	1.00
1:F:662:GLU:O	1:F:663:HIS:HB2	1.60	1.00
1:E:401:LEU:CD1	1:H:364:THR:HG22	1.85	1.00
1:G:525:ASN:CG	1:G:526:PRO:CD	2.30	1.00
1:K:559:ALA:C	1:K:561:GLY:CA	2.30	1.00
1:L:403:PRO:O	1:L:405:THR:CG2	2.09	1.00
1:A:403:PRO:CD	1:C:366:SER:HB2	1.90	1.00
1:B:366:SER:HB3	1:K:403:PRO:HA	1.39	1.00
1:E:525:ASN:CG	1:E:526:PRO:CD	2.30	1.00
1:C:525:ASN:CG	1:C:526:PRO:CD	2.30	1.00
1:J:661:LEU:O	1:J:661:LEU:HD13	1.60	1.00
1:C:559:ALA:C	1:C:561:GLY:CA	2.30	1.00
1:A:525:ASN:CG	1:A:526:PRO:CD	2.30	0.99
1:G:665:HIS:CE1	1:H:342:ALA:HB3	1.97	0.99
1:D:399:TYR:HA	1:E:664:HIS:CG	1.88	0.99
1:D:660:GLN:HA	1:D:661:LEU:HB2	1.41	0.99
1:H:367:THR:HG23	1:H:368:LYS:N	1.70	0.99
1:J:660:GLN:HA	1:J:661:LEU:HB2	1.41	0.99
1:A:559:ALA:C	1:A:561:GLY:CA	2.30	0.99
1:B:660:GLN:HA	1:B:661:LEU:HB2	1.41	0.99
1:C:635:ARG:CG	1:C:636:ASP:H	1.70	0.99
1:G:559:ALA:C	1:G:561:GLY:CA	2.30	0.99
1:E:665:HIS:CE1	1:F:342:ALA:HB3	1.98	0.99
1:G:385:THR:HG23	1:G:389:ARG:H	1.27	0.99
1:B:403:PRO:O	1:B:405:THR:CG2	2.09	0.99
1:B:662:GLU:O	1:B:663:HIS:HB2	1.60	0.99
1:A:665:HIS:CE1	1:B:342:ALA:HB3	1.97	0.99
1:K:385:THR:HG23	1:K:389:ARG:H	1.27	0.99
1:D:409:ILE:C	1:D:409:ILE:CD1	2.29	0.99
1:H:661:LEU:C	1:H:661:LEU:CD1	2.30	0.99
1:B:661:LEU:HD13	1:B:661:LEU:O	1.60	0.99
1:B:661:LEU:O	1:B:661:LEU:HD22	1.60	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:559:ALA:C	1:I:561:GLY:CA	2.30	0.99
1:K:665:HIS:CE1	1:L:342:ALA:HB3	1.98	0.99
1:D:661:LEU:HD13	1:D:661:LEU:O	1.60	0.99
1:F:661:LEU:C	1:F:661:LEU:CD1	2.30	0.99
1:I:385:THR:HG23	1:I:389:ARG:H	1.27	0.99
1:I:525:ASN:CG	1:I:526:PRO:CD	2.30	0.98
1:D:367:THR:HG23	1:D:368:LYS:N	1.70	0.98
1:D:398:ASP:HA	1:E:663:HIS:CB	1.92	0.98
1:L:353:PHE:CZ	1:L:395:TYR:CE2	2.51	0.98
1:F:353:PHE:CZ	1:F:395:TYR:CE2	2.51	0.98
1:G:635:ARG:CG	1:G:636:ASP:H	1.70	0.98
1:K:401:LEU:C	1:K:401:LEU:CD2	2.30	0.98
1:L:662:GLU:O	1:L:663:HIS:HB2	1.60	0.98
1:I:635:ARG:CG	1:I:636:ASP:H	1.70	0.98
1:I:665:HIS:CE1	1:J:342:ALA:HB3	1.98	0.98
1:K:525:ASN:CG	1:K:526:PRO:CD	2.30	0.98
1:L:661:LEU:HD13	1:L:661:LEU:O	1.60	0.98
1:B:353:PHE:CZ	1:B:395:TYR:CE2	2.51	0.98
1:G:661:LEU:CD1	1:G:661:LEU:C	2.29	0.98
1:C:665:HIS:CE1	1:D:342:ALA:HB3	1.97	0.98
1:B:403:PRO:O	1:B:405:THR:HG23	1.64	0.98
1:L:565:GLU:HB3	1:L:570:GLN:NE2	1.79	0.97
1:C:389:ARG:HA	1:C:392:ILE:HG12	1.46	0.97
1:I:661:LEU:CD1	1:I:661:LEU:C	2.29	0.97
1:J:353:PHE:CZ	1:J:395:TYR:CE2	2.51	0.97
1:D:353:PHE:CZ	1:D:395:TYR:CE2	2.51	0.97
1:J:565:GLU:HB3	1:J:570:GLN:NE2	1.79	0.97
1:D:403:PRO:O	1:D:405:THR:HG23	1.64	0.97
1:F:403:PRO:O	1:F:405:THR:HG23	1.64	0.97
1:A:385:THR:HG23	1:A:389:ARG:H	1.27	0.97
1:B:565:GLU:HB3	1:B:570:GLN:NE2	1.79	0.97
1:A:389:ARG:HA	1:A:392:ILE:HG12	1.46	0.97
1:E:403:PRO:HB3	1:H:366:SER:HB2	1.43	0.97
1:B:409:ILE:C	1:B:409:ILE:CD1	2.29	0.97
1:H:353:PHE:CZ	1:H:395:TYR:CE2	2.51	0.97
1:D:398:ASP:CA	1:E:663:HIS:HB3	1.94	0.97
1:D:660:GLN:HA	1:D:661:LEU:CB	1.95	0.97
1:H:403:PRO:O	1:H:405:THR:HG23	1.64	0.97
1:D:661:LEU:C	1:D:661:LEU:CD1	2.30	0.96
1:J:662:GLU:O	1:J:663:HIS:HB2	1.60	0.96
1:I:389:ARG:HA	1:I:392:ILE:HG12	1.46	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:660:GLN:HA	1:L:661:LEU:CB	1.95	0.96
1:B:660:GLN:HA	1:B:661:LEU:CB	1.95	0.96
1:D:343:THR:O	1:D:347:THR:HG23	1.65	0.96
1:E:385:THR:HG23	1:E:389:ARG:H	1.27	0.96
1:H:660:GLN:HA	1:H:661:LEU:CB	1.95	0.96
1:L:403:PRO:O	1:L:405:THR:HG23	1.64	0.96
1:B:367:THR:HG23	1:B:368:LYS:N	1.70	0.96
1:J:660:GLN:HA	1:J:661:LEU:CB	1.95	0.96
1:L:343:THR:O	1:L:347:THR:HG23	1.65	0.96
1:C:340:VAL:HA	1:C:345:TYR:CZ	2.01	0.96
1:D:398:ASP:OD2	1:E:663:HIS:HD2	1.32	0.96
1:I:353:PHE:CD1	1:I:395:TYR:HE2	1.84	0.96
1:J:661:LEU:C	1:J:661:LEU:CD1	2.30	0.96
1:H:565:GLU:HB3	1:H:570:GLN:NE2	1.79	0.96
1:J:403:PRO:O	1:J:405:THR:HG23	1.64	0.96
1:C:661:LEU:HD13	1:C:662:GLU:H	1.26	0.96
1:D:565:GLU:HB3	1:D:570:GLN:NE2	1.79	0.96
1:F:503:ASN:HD21	1:F:633:PHE:H	0.96	0.96
1:F:565:GLU:HB3	1:F:570:GLN:NE2	1.79	0.96
1:I:401:LEU:HD23	1:I:402:ALA:CB	1.96	0.96
1:I:401:LEU:C	1:I:401:LEU:CD2	2.30	0.96
1:K:525:ASN:CB	1:K:526:PRO:CD	2.44	0.96
1:E:661:LEU:HD13	1:E:662:GLU:H	1.26	0.95
1:F:660:GLN:HA	1:F:661:LEU:CB	1.95	0.95
1:C:401:LEU:HD23	1:C:402:ALA:CB	1.96	0.95
1:B:503:ASN:HD21	1:B:633:PHE:H	0.96	0.95
1:C:401:LEU:CD2	1:C:402:ALA:N	2.29	0.95
1:F:343:THR:O	1:F:347:THR:HG23	1.65	0.95
1:C:661:LEU:CD1	1:C:661:LEU:C	2.29	0.95
1:I:525:ASN:CB	1:I:526:PRO:CD	2.44	0.95
1:A:525:ASN:CB	1:A:526:PRO:CD	2.44	0.95
1:B:343:THR:O	1:B:347:THR:HG23	1.65	0.95
1:G:389:ARG:HA	1:G:392:ILE:HG12	1.46	0.95
1:H:343:THR:O	1:H:347:THR:HG23	1.65	0.95
1:K:401:LEU:HD23	1:K:402:ALA:CB	1.96	0.95
1:C:385:THR:HG23	1:C:389:ARG:H	1.27	0.95
1:G:401:LEU:CD2	1:G:402:ALA:N	2.30	0.95
1:I:401:LEU:CD2	1:I:402:ALA:N	2.30	0.95
1:L:503:ASN:HD21	1:L:633:PHE:H	0.96	0.95
1:C:353:PHE:CD1	1:C:395:TYR:HE2	1.83	0.95
1:D:400:ASN:HD22	1:E:662:GLU:HG3	1.28	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:343:THR:O	1:J:347:THR:HG23	1.65	0.95
1:A:340:VAL:HA	1:A:345:TYR:CZ	2.01	0.94
1:A:401:LEU:C	1:A:401:LEU:CD2	2.30	0.94
1:E:340:VAL:HA	1:E:345:TYR:CZ	2.01	0.94
1:E:401:LEU:CD2	1:E:402:ALA:N	2.30	0.94
1:J:408:ILE:C	1:J:408:ILE:CD1	2.30	0.94
1:J:409:ILE:C	1:J:409:ILE:CD1	2.29	0.94
1:G:401:LEU:HD23	1:G:402:ALA:CB	1.96	0.94
1:K:340:VAL:HA	1:K:345:TYR:CZ	2.01	0.94
1:E:401:LEU:HD23	1:E:402:ALA:CB	1.96	0.94
1:J:503:ASN:HD21	1:J:633:PHE:H	0.96	0.94
1:E:401:LEU:HD23	1:E:402:ALA:CA	1.97	0.94
1:G:525:ASN:CB	1:G:526:PRO:CD	2.44	0.94
1:K:389:ARG:HA	1:K:392:ILE:HG12	1.46	0.94
1:C:525:ASN:CB	1:C:526:PRO:CD	2.44	0.94
1:I:340:VAL:HA	1:I:345:TYR:CZ	2.01	0.94
1:I:385:THR:HG1	1:I:387:VAL:HG23	1.32	0.94
1:A:401:LEU:CD2	1:A:402:ALA:N	2.30	0.94
1:D:503:ASN:HD21	1:D:633:PHE:H	0.96	0.94
1:E:525:ASN:CB	1:E:526:PRO:CD	2.45	0.94
1:A:385:THR:CG2	1:A:389:ARG:N	2.31	0.94
1:A:401:LEU:HD23	1:A:402:ALA:CB	1.96	0.94
1:B:366:SER:HB2	1:K:403:PRO:HB3	1.45	0.94
1:E:401:LEU:C	1:E:401:LEU:CD2	2.30	0.94
1:G:340:VAL:HA	1:G:345:TYR:CZ	2.01	0.94
1:G:353:PHE:CD1	1:G:395:TYR:HE2	1.84	0.94
1:G:401:LEU:C	1:G:401:LEU:CD2	2.30	0.94
1:H:408:ILE:C	1:H:408:ILE:CD1	2.30	0.94
1:H:503:ASN:HD21	1:H:633:PHE:H	0.96	0.94
1:I:401:LEU:HD23	1:I:402:ALA:CA	1.97	0.94
1:K:401:LEU:HD23	1:K:402:ALA:CA	1.97	0.94
1:L:409:ILE:C	1:L:409:ILE:CD1	2.29	0.94
1:C:401:LEU:C	1:C:401:LEU:CD2	2.30	0.94
1:D:398:ASP:CG	1:E:663:HIS:HD2	1.64	0.94
1:K:353:PHE:CD1	1:K:395:TYR:HE2	1.84	0.94
1:C:401:LEU:HD23	1:C:402:ALA:CA	1.97	0.93
1:E:389:ARG:HA	1:E:392:ILE:HG12	1.46	0.93
1:E:385:THR:CG2	1:E:389:ARG:N	2.31	0.93
1:B:364:THR:HG23	1:K:401:LEU:HG	1.50	0.93
1:B:661:LEU:C	1:B:661:LEU:CD1	2.30	0.93
1:H:566:ASN:N	1:H:570:GLN:HE22	1.66	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:661:LEU:C	1:A:661:LEU:CD1	2.29	0.93
1:G:401:LEU:HD23	1:G:402:ALA:CA	1.97	0.93
1:K:385:THR:CG2	1:K:389:ARG:N	2.31	0.93
1:E:401:LEU:HG	1:H:364:THR:HG23	1.49	0.93
1:F:408:ILE:C	1:F:408:ILE:CD1	2.30	0.93
1:K:401:LEU:CD2	1:K:402:ALA:N	2.30	0.93
1:A:401:LEU:HD23	1:A:402:ALA:CA	1.97	0.93
1:C:385:THR:HG21	1:C:389:ARG:C	1.89	0.93
1:E:385:THR:HG21	1:E:389:ARG:C	1.89	0.93
1:G:385:THR:HG21	1:G:389:ARG:C	1.89	0.93
1:F:409:ILE:C	1:F:409:ILE:CD1	2.29	0.93
1:F:557:PRO:HG2	1:F:580:LEU:HD11	1.51	0.93
1:B:557:PRO:HG2	1:B:580:LEU:HD11	1.51	0.93
1:J:566:ASN:N	1:J:570:GLN:HE22	1.66	0.93
1:E:401:LEU:CD1	1:H:364:THR:HG23	1.98	0.92
1:E:340:VAL:C	1:E:341:THR:HG23	1.89	0.92
1:G:661:LEU:HD13	1:G:662:GLU:H	1.26	0.92
1:I:340:VAL:C	1:I:341:THR:HG23	1.89	0.92
1:I:385:THR:HG21	1:I:389:ARG:C	1.89	0.92
1:L:408:ILE:C	1:L:408:ILE:CD1	2.30	0.92
1:L:566:ASN:N	1:L:570:GLN:HE22	1.66	0.92
1:A:387:VAL:HG21	1:A:390:GLU:OE1	1.70	0.92
1:G:385:THR:CG2	1:G:389:ARG:N	2.31	0.92
1:K:340:VAL:C	1:K:341:THR:HG23	1.89	0.92
1:A:353:PHE:CD1	1:A:395:TYR:HE2	1.84	0.92
1:C:387:VAL:HG21	1:C:390:GLU:OE1	1.69	0.92
1:K:387:VAL:HG21	1:K:390:GLU:OE1	1.70	0.92
1:C:385:THR:CG2	1:C:389:ARG:N	2.31	0.92
1:L:647:ARG:CG	1:L:650:TYR:CD1	2.53	0.92
1:B:647:ARG:CG	1:B:650:TYR:CD1	2.53	0.92
1:A:403:PRO:CB	1:C:366:SER:CB	2.48	0.92
1:A:661:LEU:HD13	1:A:662:GLU:H	1.26	0.92
1:E:403:PRO:HB3	1:H:366:SER:HA	1.52	0.92
1:F:647:ARG:CG	1:F:650:TYR:CD1	2.53	0.92
1:G:340:VAL:C	1:G:341:THR:HG23	1.89	0.92
1:H:647:ARG:CG	1:H:650:TYR:CD1	2.53	0.92
1:I:385:THR:CG2	1:I:389:ARG:N	2.31	0.92
1:K:401:LEU:CD2	1:K:402:ALA:HB2	2.00	0.92
1:A:401:LEU:CD2	1:A:402:ALA:HB2	2.00	0.91
1:B:566:ASN:N	1:B:570:GLN:HE22	1.66	0.91
1:D:647:ARG:CG	1:D:650:TYR:CD1	2.53	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:557:PRO:HG2	1:H:580:LEU:HD11	1.51	0.91
1:L:557:PRO:HG2	1:L:580:LEU:HD11	1.51	0.91
1:A:403:PRO:HB3	1:C:366:SER:CB	2.00	0.91
1:C:436:LEU:HD22	1:C:655:LEU:HD21	1.53	0.91
1:I:401:LEU:CD2	1:I:402:ALA:HB2	2.00	0.91
1:A:403:PRO:HB3	1:C:366:SER:HB2	1.52	0.91
1:C:401:LEU:CD2	1:C:402:ALA:HB2	2.00	0.91
1:H:409:ILE:C	1:H:409:ILE:CD1	2.29	0.91
1:J:557:PRO:HG2	1:J:580:LEU:HD11	1.52	0.91
1:E:519:SER:HB2	1:E:562:ASP:OD1	1.71	0.91
1:C:519:SER:HB2	1:C:562:ASP:OD1	1.71	0.91
1:K:436:LEU:HD22	1:K:655:LEU:HD21	1.52	0.91
1:I:387:VAL:HG21	1:I:390:GLU:OE1	1.70	0.91
1:A:385:THR:HG1	1:A:387:VAL:HG23	1.31	0.91
1:A:635:ARG:CG	1:A:636:ASP:N	2.30	0.91
1:B:364:THR:HG23	1:K:401:LEU:CD1	2.01	0.91
1:G:387:VAL:HG21	1:G:390:GLU:OE1	1.70	0.91
1:K:661:LEU:CD1	1:K:661:LEU:C	2.29	0.91
1:A:385:THR:HG21	1:A:389:ARG:C	1.89	0.91
1:F:566:ASN:N	1:F:570:GLN:HE22	1.66	0.91
1:G:401:LEU:CD2	1:G:402:ALA:HB2	2.00	0.91
1:G:519:SER:HB2	1:G:562:ASP:OD1	1.71	0.91
1:K:635:ARG:CG	1:K:636:ASP:N	2.30	0.91
1:C:517:PHE:HD2	1:C:536:TYR:HE2	1.18	0.91
1:E:401:LEU:CD2	1:E:402:ALA:HB2	2.00	0.91
1:G:517:PHE:HD2	1:G:536:TYR:HE2	1.18	0.91
1:K:385:THR:HG21	1:K:389:ARG:C	1.89	0.91
1:D:566:ASN:N	1:D:570:GLN:HE22	1.66	0.91
1:J:647:ARG:CG	1:J:650:TYR:CD1	2.53	0.91
1:I:436:LEU:HD22	1:I:655:LEU:HD21	1.53	0.90
1:E:387:VAL:HG21	1:E:390:GLU:OE1	1.70	0.90
1:I:519:SER:HB2	1:I:562:ASP:OD1	1.71	0.90
1:B:364:THR:CG2	1:K:401:LEU:HG	1.97	0.90
1:D:557:PRO:HG2	1:D:580:LEU:HD11	1.51	0.90
1:I:635:ARG:HH22	1:J:661:LEU:HD12	1.36	0.90
1:K:661:LEU:HD13	1:K:662:GLU:H	1.26	0.90
1:A:340:VAL:C	1:A:341:THR:HG23	1.89	0.90
1:B:409:ILE:HD13	1:B:410:SER:O	1.72	0.90
1:D:409:ILE:HD13	1:D:410:SER:O	1.72	0.90
1:E:353:PHE:CD1	1:E:395:TYR:HE2	1.84	0.90
1:C:635:ARG:HH22	1:D:661:LEU:HD12	1.36	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:517:PHE:HD2	1:E:536:TYR:HE2	1.18	0.90
1:E:635:ARG:HH22	1:F:661:LEU:HD12	1.36	0.90
1:J:409:ILE:HD13	1:J:410:SER:O	1.72	0.90
1:K:385:THR:HG1	1:K:387:VAL:HG23	1.37	0.90
1:L:409:ILE:HD13	1:L:410:SER:O	1.72	0.90
1:A:436:LEU:HD22	1:A:655:LEU:HD21	1.53	0.90
1:C:629:ASP:HA	1:D:664:HIS:NE2	1.87	0.90
1:E:631:VAL:HG21	1:F:476:ILE:HG21	1.53	0.90
1:E:664:HIS:O	1:E:665:HIS:CG	2.25	0.90
1:I:635:ARG:CG	1:I:636:ASP:N	2.30	0.90
1:I:664:HIS:O	1:I:665:HIS:CG	2.25	0.90
1:B:364:THR:HG23	1:K:401:LEU:CG	2.02	0.90
1:C:340:VAL:C	1:C:341:THR:HG23	1.89	0.90
1:G:664:HIS:O	1:G:665:HIS:CG	2.25	0.90
1:H:409:ILE:HD13	1:H:410:SER:O	1.72	0.90
1:I:517:PHE:HD2	1:I:536:TYR:HE2	1.18	0.90
1:I:629:ASP:HA	1:J:664:HIS:NE2	1.87	0.90
1:I:661:LEU:HD13	1:I:662:GLU:H	1.26	0.90
1:B:366:SER:CA	1:K:403:PRO:CB	2.41	0.90
1:C:353:PHE:CZ	1:C:395:TYR:CD2	2.60	0.90
1:K:629:ASP:HA	1:L:664:HIS:NE2	1.87	0.90
1:K:631:VAL:HG21	1:L:476:ILE:HG21	1.53	0.90
1:E:401:LEU:HG	1:H:364:THR:CG2	1.97	0.89
1:F:409:ILE:HD13	1:F:410:SER:O	1.72	0.89
1:K:664:HIS:O	1:K:665:HIS:CG	2.25	0.89
1:B:366:SER:HA	1:K:403:PRO:HB3	1.52	0.89
1:G:353:PHE:CZ	1:G:395:TYR:CD2	2.61	0.89
1:I:353:PHE:CZ	1:I:395:TYR:CD2	2.61	0.89
1:B:647:ARG:HG2	1:B:650:TYR:CD1	2.08	0.89
1:C:631:VAL:HG21	1:D:476:ILE:HG21	1.53	0.89
1:A:519:SER:HB2	1:A:562:ASP:OD1	1.71	0.89
1:D:408:ILE:C	1:D:408:ILE:CD1	2.30	0.89
1:J:366:SER:O	1:J:367:THR:HG22	1.73	0.89
1:K:661:LEU:O	1:K:662:GLU:C	2.08	0.89
1:F:366:SER:O	1:F:367:THR:HG22	1.73	0.89
1:G:436:LEU:HD22	1:G:655:LEU:HD21	1.52	0.89
1:K:517:PHE:HD2	1:K:536:TYR:HE2	1.18	0.89
1:E:353:PHE:CZ	1:E:395:TYR:CD2	2.61	0.89
1:G:635:ARG:CG	1:G:636:ASP:N	2.30	0.89
1:H:366:SER:O	1:H:367:THR:HG22	1.73	0.89
1:E:401:LEU:CG	1:H:364:THR:HG23	2.00	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:661:LEU:HG	1:F:456:ASN:HB3	1.55	0.89
1:A:664:HIS:O	1:A:665:HIS:CG	2.25	0.89
1:D:366:SER:O	1:D:367:THR:HG22	1.73	0.89
1:H:662:GLU:O	1:H:663:HIS:CB	2.20	0.89
1:K:353:PHE:CZ	1:K:395:TYR:CD2	2.60	0.89
1:K:519:SER:HB2	1:K:562:ASP:OD1	1.71	0.89
1:L:366:SER:O	1:L:367:THR:HG22	1.73	0.89
1:A:353:PHE:CZ	1:A:395:TYR:CD2	2.61	0.88
1:A:517:PHE:HD2	1:A:536:TYR:HE2	1.18	0.88
1:C:635:ARG:CG	1:C:636:ASP:N	2.30	0.88
1:C:664:HIS:O	1:C:665:HIS:CG	2.25	0.88
1:G:635:ARG:HH22	1:H:661:LEU:HD12	1.36	0.88
1:K:340:VAL:O	1:K:345:TYR:HE1	1.55	0.88
1:E:340:VAL:O	1:E:345:TYR:HE1	1.55	0.88
1:G:661:LEU:HG	1:H:456:ASN:HB3	1.55	0.88
1:A:347:THR:OG1	1:A:348:PHE:N	2.05	0.88
1:B:408:ILE:C	1:B:408:ILE:CD1	2.30	0.88
1:G:340:VAL:O	1:G:345:TYR:HE1	1.55	0.88
1:L:647:ARG:HG2	1:L:650:TYR:CD1	2.08	0.88
1:A:629:ASP:HA	1:B:664:HIS:NE2	1.87	0.88
1:A:635:ARG:HH22	1:B:661:LEU:HD12	1.36	0.88
1:C:340:VAL:O	1:C:345:TYR:HE1	1.55	0.88
1:E:436:LEU:HD22	1:E:655:LEU:HD21	1.53	0.88
1:E:401:LEU:HD23	1:E:402:ALA:HB2	1.55	0.88
1:G:661:LEU:O	1:G:662:GLU:C	2.08	0.88
1:I:401:LEU:HD23	1:I:402:ALA:HB2	1.55	0.88
1:I:661:LEU:HG	1:J:456:ASN:HB3	1.55	0.88
1:C:401:LEU:HD23	1:C:402:ALA:HB2	1.56	0.88
1:G:631:VAL:HG21	1:H:476:ILE:HG21	1.53	0.88
1:A:340:VAL:O	1:A:345:TYR:HE1	1.55	0.87
1:C:661:LEU:O	1:C:662:GLU:C	2.08	0.87
1:A:661:LEU:O	1:A:662:GLU:C	2.08	0.87
1:G:401:LEU:HD23	1:G:402:ALA:HB2	1.56	0.87
1:E:629:ASP:HA	1:F:664:HIS:NE2	1.87	0.87
1:I:631:VAL:HG21	1:J:476:ILE:HG21	1.53	0.87
1:I:661:LEU:O	1:I:662:GLU:C	2.08	0.87
1:L:661:LEU:C	1:L:661:LEU:CD1	2.30	0.87
1:C:631:VAL:HG21	1:D:476:ILE:HG22	1.57	0.87
1:D:647:ARG:HG2	1:D:650:TYR:CD1	2.08	0.87
1:E:635:ARG:CG	1:E:636:ASP:N	2.30	0.87
1:G:629:ASP:HA	1:H:664:HIS:NE2	1.87	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:340:VAL:CA	1:I:345:TYR:CE1	2.58	0.87
1:I:347:THR:OG1	1:I:348:PHE:N	2.05	0.87
1:A:631:VAL:HG21	1:B:476:ILE:HG21	1.53	0.87
1:A:635:ARG:HG2	1:A:636:ASP:N	1.90	0.87
1:G:660:GLN:HG3	1:G:661:LEU:N	1.90	0.87
1:J:647:ARG:HG2	1:J:650:TYR:CD1	2.08	0.87
1:K:340:VAL:CA	1:K:345:TYR:CE1	2.58	0.87
1:C:385:THR:HG1	1:C:387:VAL:HG23	1.36	0.87
1:I:340:VAL:O	1:I:345:TYR:HE1	1.55	0.87
1:A:340:VAL:CA	1:A:345:TYR:CE1	2.58	0.87
1:D:367:THR:CG2	1:D:368:LYS:H	1.87	0.87
1:C:340:VAL:CA	1:C:345:TYR:CE1	2.58	0.87
1:B:366:SER:O	1:B:367:THR:HG22	1.73	0.86
1:F:647:ARG:HG2	1:F:650:TYR:CD1	2.08	0.86
1:C:660:GLN:HG3	1:C:661:LEU:N	1.90	0.86
1:H:647:ARG:HG2	1:H:650:TYR:CD1	2.08	0.86
1:C:347:THR:OG1	1:C:348:PHE:N	2.05	0.86
1:G:340:VAL:CA	1:G:345:TYR:CE1	2.58	0.86
1:A:661:LEU:HG	1:B:456:ASN:HB3	1.55	0.86
1:I:631:VAL:HG21	1:J:476:ILE:HG22	1.57	0.86
1:K:661:LEU:HG	1:L:456:ASN:HB3	1.55	0.86
1:E:661:LEU:O	1:E:662:GLU:C	2.08	0.86
1:B:364:THR:HG21	1:K:401:LEU:HD11	0.87	0.86
1:K:635:ARG:HH22	1:L:661:LEU:HD12	1.37	0.86
1:A:560:SER:N	1:A:561:GLY:CA	2.39	0.86
1:K:347:THR:OG1	1:K:348:PHE:N	2.05	0.86
1:A:660:GLN:HG3	1:A:661:LEU:N	1.90	0.86
1:I:341:THR:HG1	1:I:344:ASP:HB2	1.41	0.86
1:K:341:THR:HG1	1:K:344:ASP:HB2	1.41	0.86
1:K:560:SER:N	1:K:561:GLY:CA	2.39	0.86
1:K:631:VAL:HG21	1:L:476:ILE:HG22	1.57	0.86
1:L:664:HIS:CG	1:L:664:HIS:O	2.29	0.86
1:A:401:LEU:HD12	1:C:364:THR:CG2	2.05	0.85
1:I:353:PHE:CE1	1:I:395:TYR:CE2	2.65	0.85
1:C:661:LEU:HG	1:D:456:ASN:HB3	1.55	0.85
1:D:400:ASN:CG	1:E:662:GLU:HG2	1.97	0.85
1:E:340:VAL:CA	1:E:345:TYR:CE1	2.58	0.85
1:K:401:LEU:HD23	1:K:402:ALA:HB2	1.55	0.85
1:L:353:PHE:HZ	1:L:395:TYR:HE2	1.21	0.85
1:E:560:SER:N	1:E:561:GLY:CA	2.39	0.85
1:E:401:LEU:HD11	1:H:364:THR:HG21	0.86	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:341:THR:O	1:A:345:TYR:CD1	2.30	0.85
1:J:662:GLU:O	1:J:663:HIS:CB	2.20	0.85
1:B:353:PHE:HZ	1:B:395:TYR:HE2	1.21	0.85
1:C:341:THR:O	1:C:345:TYR:CD1	2.30	0.85
1:E:341:THR:HG1	1:E:344:ASP:HB2	1.40	0.85
1:B:664:HIS:CG	1:B:664:HIS:O	2.29	0.85
1:E:353:PHE:CE1	1:E:395:TYR:CE2	2.65	0.85
1:E:660:GLN:HG3	1:E:661:LEU:N	1.90	0.85
1:J:345:TYR:O	1:J:345:TYR:CD1	2.30	0.85
1:L:345:TYR:O	1:L:345:TYR:CD1	2.30	0.85
1:B:662:GLU:O	1:B:663:HIS:CB	2.20	0.85
1:G:385:THR:HA	1:G:387:VAL:HG22	1.59	0.85
1:I:660:GLN:HG3	1:I:661:LEU:N	1.90	0.85
1:J:353:PHE:HZ	1:J:395:TYR:HE2	1.21	0.85
1:D:345:TYR:O	1:D:345:TYR:CD1	2.30	0.85
1:H:345:TYR:CD1	1:H:345:TYR:O	2.30	0.85
1:I:635:ARG:HG2	1:I:636:ASP:N	1.90	0.85
1:D:662:GLU:O	1:D:663:HIS:CB	2.20	0.84
1:G:631:VAL:HG21	1:H:476:ILE:HG22	1.57	0.84
1:D:496:GLU:H	1:D:496:GLU:CD	1.80	0.84
1:E:341:THR:O	1:E:345:TYR:CD1	2.30	0.84
1:E:347:THR:OG1	1:E:348:PHE:N	2.05	0.84
1:E:385:THR:HA	1:E:387:VAL:HG22	1.59	0.84
1:F:345:TYR:CD1	1:F:345:TYR:O	2.30	0.84
1:I:341:THR:O	1:I:345:TYR:CD1	2.30	0.84
1:I:385:THR:HA	1:I:387:VAL:HG22	1.59	0.84
1:C:353:PHE:CE1	1:C:395:TYR:CE2	2.65	0.84
1:C:560:SER:N	1:C:561:GLY:CA	2.39	0.84
1:G:353:PHE:CE1	1:G:395:TYR:CE2	2.65	0.84
1:K:341:THR:O	1:K:345:TYR:CD1	2.30	0.84
1:L:367:THR:CG2	1:L:368:LYS:H	1.87	0.84
1:L:496:GLU:H	1:L:496:GLU:CD	1.80	0.84
1:B:345:TYR:O	1:B:345:TYR:CD1	2.30	0.84
1:B:496:GLU:CD	1:B:496:GLU:H	1.80	0.84
1:F:664:HIS:O	1:F:664:HIS:CG	2.29	0.84
1:E:385:THR:HG1	1:E:387:VAL:HG23	1.37	0.84
1:E:403:PRO:CB	1:H:366:SER:CA	2.39	0.84
1:H:664:HIS:CG	1:H:664:HIS:O	2.29	0.84
1:K:660:GLN:HG3	1:K:661:LEU:N	1.90	0.84
1:B:567:GLU:HA	1:B:570:GLN:OE1	1.78	0.84
1:D:664:HIS:CG	1:D:664:HIS:O	2.29	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:560:SER:N	1:G:561:GLY:CA	2.39	0.84
1:I:340:VAL:CA	1:I:345:TYR:HE1	1.90	0.84
1:C:635:ARG:HG2	1:C:636:ASP:N	1.90	0.84
1:A:631:VAL:HG21	1:B:476:ILE:HG22	1.57	0.84
1:F:567:GLU:HA	1:F:570:GLN:OE1	1.78	0.84
1:F:662:GLU:O	1:F:663:HIS:CB	2.20	0.84
1:K:353:PHE:CE1	1:K:395:TYR:CE2	2.65	0.84
1:A:353:PHE:CE1	1:A:395:TYR:CE2	2.65	0.84
1:A:401:LEU:HD11	1:C:364:THR:CG2	2.01	0.84
1:B:543:THR:HG22	1:B:577:PHE:HB3	1.60	0.84
1:H:353:PHE:HZ	1:H:395:TYR:HE2	1.21	0.84
1:H:543:THR:HG22	1:H:577:PHE:HB3	1.60	0.84
1:D:353:PHE:HZ	1:D:395:TYR:HE2	1.21	0.83
1:H:366:SER:C	1:H:367:THR:CG2	2.42	0.83
1:I:557:PRO:HB3	1:I:587:ASP:HA	1.60	0.83
1:K:340:VAL:CA	1:K:345:TYR:HE1	1.90	0.83
1:E:661:LEU:CD1	1:E:661:LEU:C	2.29	0.83
1:G:341:THR:O	1:G:345:TYR:CD1	2.30	0.83
1:L:662:GLU:O	1:L:663:HIS:CB	2.20	0.83
1:F:582:ASN:HD21	1:F:586:ARG:HB2	1.44	0.83
1:G:347:THR:OG1	1:G:348:PHE:N	2.05	0.83
1:H:567:GLU:HA	1:H:570:GLN:OE1	1.78	0.83
1:H:657:PRO:C	1:H:658:ILE:HD13	1.99	0.83
1:J:496:GLU:CD	1:J:496:GLU:H	1.80	0.83
1:B:582:ASN:HD21	1:B:586:ARG:HB2	1.43	0.83
1:C:340:VAL:CA	1:C:345:TYR:HE1	1.90	0.83
1:D:582:ASN:HD21	1:D:586:ARG:HB2	1.44	0.83
1:E:557:PRO:HB3	1:E:587:ASP:HA	1.60	0.83
1:J:664:HIS:CG	1:J:664:HIS:O	2.29	0.83
1:F:353:PHE:HZ	1:F:395:TYR:HE2	1.21	0.83
1:F:543:THR:HG22	1:F:577:PHE:HB3	1.60	0.83
1:L:657:PRO:C	1:L:658:ILE:HD13	1.99	0.83
1:E:345:TYR:N	1:E:345:TYR:HD1	1.77	0.83
1:K:635:ARG:HG2	1:K:636:ASP:N	1.90	0.83
1:L:543:THR:HG22	1:L:577:PHE:HB3	1.60	0.83
1:E:340:VAL:CA	1:E:345:TYR:HE1	1.90	0.83
1:E:631:VAL:HG21	1:F:476:ILE:HG22	1.57	0.83
1:F:657:PRO:C	1:F:658:ILE:HD13	1.99	0.83
1:G:345:TYR:N	1:G:345:TYR:HD1	1.77	0.83
1:L:567:GLU:HA	1:L:570:GLN:OE1	1.78	0.83
1:H:367:THR:CG2	1:H:368:LYS:H	1.87	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:345:TYR:CE1	1:J:349:VAL:HG23	2.14	0.83
1:J:657:PRO:C	1:J:658:ILE:HD13	1.99	0.83
1:D:657:PRO:C	1:D:658:ILE:HD13	1.99	0.82
1:J:567:GLU:HA	1:J:570:GLN:OE1	1.78	0.82
1:A:345:TYR:N	1:A:345:TYR:HD1	1.77	0.82
1:B:379:LYS:HG3	1:B:380:SER:N	1.94	0.82
1:D:345:TYR:CE1	1:D:349:VAL:HG23	2.14	0.82
1:G:340:VAL:CA	1:G:345:TYR:HE1	1.90	0.82
1:G:557:PRO:HB3	1:G:587:ASP:HA	1.60	0.82
1:H:503:ASN:ND2	1:H:633:PHE:H	1.77	0.82
1:I:560:SER:N	1:I:561:GLY:CA	2.39	0.82
1:K:385:THR:HA	1:K:387:VAL:HG22	1.59	0.82
1:D:379:LYS:HG3	1:D:380:SER:N	1.94	0.82
1:H:496:GLU:H	1:H:496:GLU:CD	1.80	0.82
1:H:582:ASN:HD21	1:H:586:ARG:HB2	1.44	0.82
1:J:582:ASN:HD21	1:J:586:ARG:HB2	1.43	0.82
1:J:659:SER:O	1:J:660:GLN:HG3	1.80	0.82
1:K:661:LEU:HD13	1:K:662:GLU:CA	2.10	0.82
1:A:519:SER:HB2	1:A:562:ASP:CG	2.00	0.82
1:B:345:TYR:CE1	1:B:349:VAL:HG23	2.14	0.82
1:L:582:ASN:HD21	1:L:586:ARG:HB2	1.43	0.82
1:C:519:SER:HB2	1:C:562:ASP:CG	2.00	0.82
1:G:519:SER:HB2	1:G:562:ASP:CG	2.00	0.82
1:I:661:LEU:HD13	1:I:662:GLU:CA	2.10	0.82
1:A:385:THR:HA	1:A:387:VAL:HG22	1.59	0.82
1:B:657:PRO:C	1:B:658:ILE:HD13	1.99	0.82
1:F:659:SER:O	1:F:660:GLN:HG3	1.80	0.82
1:G:385:THR:HG1	1:G:387:VAL:HG23	1.40	0.82
1:A:340:VAL:CA	1:A:345:TYR:HE1	1.90	0.82
1:A:401:LEU:HD23	1:A:402:ALA:HB2	1.55	0.82
1:D:567:GLU:HA	1:D:570:GLN:OE1	1.78	0.82
1:F:345:TYR:CE1	1:F:349:VAL:HG23	2.14	0.82
1:F:496:GLU:H	1:F:496:GLU:CD	1.80	0.82
1:I:396:LEU:HD22	1:I:408:ILE:HD13	1.62	0.82
1:C:557:PRO:HB3	1:C:587:ASP:HA	1.60	0.82
1:D:543:THR:HG22	1:D:577:PHE:HB3	1.60	0.82
1:G:396:LEU:HD22	1:G:408:ILE:HD13	1.62	0.82
1:L:345:TYR:CE1	1:L:349:VAL:HG23	2.14	0.82
1:A:661:LEU:HD13	1:A:662:GLU:CA	2.10	0.81
1:J:503:ASN:ND2	1:J:633:PHE:H	1.77	0.81
1:K:519:SER:HB2	1:K:562:ASP:CG	2.00	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:635:ARG:NH2	1:D:661:LEU:HD12	1.95	0.81
1:D:503:ASN:ND2	1:D:633:PHE:H	1.77	0.81
1:F:379:LYS:HG3	1:F:380:SER:N	1.94	0.81
1:G:661:LEU:HD13	1:G:662:GLU:CA	2.10	0.81
1:J:543:THR:HG22	1:J:577:PHE:HB3	1.60	0.81
1:C:340:VAL:HA	1:C:345:TYR:CE1	2.15	0.81
1:C:385:THR:HA	1:C:387:VAL:HG22	1.59	0.81
1:D:399:TYR:CA	1:E:664:HIS:CG	2.61	0.81
1:D:659:SER:O	1:D:660:GLN:HG3	1.80	0.81
1:G:340:VAL:HA	1:G:345:TYR:CE1	2.15	0.81
1:H:659:SER:O	1:H:660:GLN:HG3	1.80	0.81
1:I:519:SER:HB2	1:I:562:ASP:CG	2.00	0.81
1:L:595:ILE:H	1:L:595:ILE:HD12	1.45	0.81
1:E:519:SER:HB2	1:E:562:ASP:CG	2.00	0.81
1:H:345:TYR:CE1	1:H:349:VAL:HG23	2.14	0.81
1:I:340:VAL:HA	1:I:345:TYR:CE1	2.15	0.81
1:A:635:ARG:NH2	1:B:661:LEU:HD12	1.95	0.81
1:E:403:PRO:CA	1:H:366:SER:CB	2.42	0.81
1:A:557:PRO:HB3	1:A:587:ASP:HA	1.60	0.81
1:C:345:TYR:N	1:C:345:TYR:HD1	1.77	0.81
1:K:396:LEU:HD22	1:K:408:ILE:HD13	1.62	0.81
1:I:345:TYR:N	1:I:345:TYR:HD1	1.77	0.81
1:L:379:LYS:HG3	1:L:380:SER:N	1.94	0.81
1:E:396:LEU:HD22	1:E:408:ILE:HD13	1.62	0.81
1:F:595:ILE:HD12	1:F:595:ILE:H	1.45	0.81
1:K:557:PRO:HB3	1:K:587:ASP:HA	1.60	0.81
1:L:659:SER:O	1:L:660:GLN:CG	2.29	0.81
1:A:340:VAL:HA	1:A:345:TYR:CE1	2.15	0.80
1:F:659:SER:O	1:F:660:GLN:CG	2.29	0.80
1:G:525:ASN:OD1	1:G:526:PRO:CD	2.30	0.80
1:B:366:SER:O	1:B:367:THR:CG2	2.29	0.80
1:B:595:ILE:H	1:B:595:ILE:HD12	1.45	0.80
1:B:659:SER:O	1:B:660:GLN:HG3	1.80	0.80
1:C:661:LEU:HD13	1:C:662:GLU:CA	2.10	0.80
1:D:661:LEU:O	1:D:661:LEU:CD1	2.29	0.80
1:E:403:PRO:CB	1:H:366:SER:HA	2.10	0.80
1:E:635:ARG:NH2	1:F:661:LEU:HD12	1.95	0.80
1:J:661:LEU:O	1:J:661:LEU:CD1	2.29	0.80
1:D:659:SER:O	1:D:660:GLN:CG	2.29	0.80
1:G:388:GLN:O	1:G:389:ARG:CG	2.30	0.80
1:J:595:ILE:H	1:J:595:ILE:HD12	1.45	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:525:ASN:OD1	1:A:526:PRO:CD	2.30	0.80
1:E:661:LEU:HD13	1:E:662:GLU:CA	2.10	0.80
1:K:525:ASN:OD1	1:K:526:PRO:CD	2.30	0.80
1:J:659:SER:O	1:J:660:GLN:CG	2.29	0.80
1:L:366:SER:O	1:L:367:THR:CG2	2.29	0.80
1:D:400:ASN:ND2	1:E:662:GLU:CD	2.34	0.80
1:H:408:ILE:O	1:H:408:ILE:CD1	2.30	0.80
1:H:659:SER:O	1:H:660:GLN:CG	2.29	0.80
1:J:567:GLU:O	1:J:568:ASN:CB	2.30	0.80
1:J:661:LEU:O	1:J:661:LEU:CD2	2.29	0.80
1:K:340:VAL:HA	1:K:345:TYR:CE1	2.15	0.80
1:K:388:GLN:O	1:K:389:ARG:CG	2.30	0.80
1:L:659:SER:O	1:L:660:GLN:HG3	1.80	0.80
1:A:341:THR:HG1	1:A:344:ASP:HB2	1.45	0.80
1:B:366:SER:O	1:B:367:THR:CB	2.30	0.80
1:B:408:ILE:O	1:B:408:ILE:CD1	2.30	0.80
1:C:385:THR:CG2	1:C:389:ARG:CA	2.60	0.80
1:E:353:PHE:CE1	1:E:395:TYR:CD2	2.70	0.80
1:I:525:ASN:OD1	1:I:526:PRO:CD	2.30	0.80
1:L:661:LEU:O	1:L:661:LEU:CD2	2.29	0.80
1:A:629:ASP:HA	1:B:664:HIS:HE1	1.47	0.80
1:B:367:THR:CG2	1:B:368:LYS:H	1.87	0.80
1:C:525:ASN:OD1	1:C:526:PRO:CD	2.30	0.80
1:D:366:SER:O	1:D:367:THR:CB	2.30	0.80
1:D:567:GLU:O	1:D:568:ASN:CB	2.30	0.80
1:E:385:THR:CG2	1:E:389:ARG:CA	2.60	0.80
1:G:635:ARG:NH2	1:H:661:LEU:HD12	1.95	0.80
1:H:379:LYS:HG3	1:H:380:SER:N	1.94	0.80
1:I:353:PHE:CE1	1:I:395:TYR:CD2	2.70	0.80
1:I:635:ARG:NH2	1:J:661:LEU:HD12	1.95	0.80
1:J:366:SER:C	1:J:367:THR:CG2	2.42	0.80
1:J:379:LYS:HG3	1:J:380:SER:N	1.94	0.80
1:K:353:PHE:CE1	1:K:395:TYR:CD2	2.70	0.80
1:L:503:ASN:HD21	1:L:633:PHE:N	1.79	0.80
1:A:385:THR:CG2	1:A:389:ARG:CA	2.60	0.80
1:A:396:LEU:HD22	1:A:408:ILE:HD13	1.62	0.80
1:B:659:SER:O	1:B:660:GLN:CG	2.29	0.80
1:D:595:ILE:H	1:D:595:ILE:HD12	1.45	0.80
1:K:635:ARG:NH2	1:L:661:LEU:HD12	1.96	0.80
1:C:396:LEU:HD22	1:C:408:ILE:HD13	1.62	0.80
1:G:353:PHE:CE1	1:G:395:TYR:CD2	2.70	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:661:LEU:O	1:H:661:LEU:CD2	2.29	0.80
1:E:340:VAL:HA	1:E:345:TYR:CE1	2.15	0.79
1:F:567:GLU:O	1:F:568:ASN:CB	2.30	0.79
1:E:388:GLN:O	1:E:389:ARG:CB	2.30	0.79
1:E:388:GLN:O	1:E:389:ARG:CG	2.30	0.79
1:H:595:ILE:H	1:H:595:ILE:HD12	1.46	0.79
1:L:503:ASN:ND2	1:L:633:PHE:H	1.77	0.79
1:F:661:LEU:O	1:F:661:LEU:CD1	2.29	0.79
1:I:440:ILE:HD11	1:I:653:ILE:HD13	1.64	0.79
1:A:353:PHE:CE1	1:A:395:TYR:CD2	2.70	0.79
1:B:661:LEU:O	1:B:661:LEU:CD2	2.29	0.79
1:I:388:GLN:O	1:I:389:ARG:CG	2.30	0.79
1:A:388:GLN:O	1:A:389:ARG:CG	2.30	0.79
1:D:661:LEU:O	1:D:661:LEU:CD2	2.29	0.79
1:F:366:SER:O	1:F:367:THR:CG2	2.29	0.79
1:F:503:ASN:HD21	1:F:633:PHE:N	1.79	0.79
1:J:366:SER:O	1:J:367:THR:CG2	2.29	0.79
1:L:567:GLU:O	1:L:568:ASN:CB	2.30	0.79
1:C:353:PHE:CE1	1:C:395:TYR:CD2	2.70	0.79
1:D:366:SER:O	1:D:367:THR:CG2	2.29	0.79
1:D:503:ASN:HD21	1:D:633:PHE:N	1.79	0.79
1:C:385:THR:HG21	1:C:389:ARG:HA	1.64	0.79
1:C:388:GLN:O	1:C:389:ARG:CG	2.30	0.79
1:F:661:LEU:O	1:F:661:LEU:CD2	2.30	0.79
1:K:345:TYR:N	1:K:345:TYR:HD1	1.77	0.79
1:K:388:GLN:O	1:K:389:ARG:CB	2.30	0.79
1:E:440:ILE:HD11	1:E:653:ILE:HD13	1.64	0.79
1:G:361:GLN:HG2	1:G:455:PHE:CG	2.18	0.79
1:G:385:THR:HG21	1:G:389:ARG:HA	1.64	0.79
1:H:366:SER:O	1:H:367:THR:CB	2.30	0.79
1:I:388:GLN:O	1:I:389:ARG:CB	2.30	0.79
1:I:532:GLU:N	1:I:532:GLU:CD	2.36	0.79
1:L:408:ILE:O	1:L:408:ILE:CD1	2.30	0.79
1:A:385:THR:CA	1:A:387:VAL:HG22	2.13	0.79
1:B:567:GLU:O	1:B:568:ASN:CB	2.30	0.79
1:B:647:ARG:HD2	1:B:650:TYR:CE1	2.19	0.79
1:K:385:THR:CA	1:K:387:VAL:HG22	2.13	0.79
1:D:374:ILE:HG12	1:D:408:ILE:HA	1.65	0.78
1:E:403:PRO:CG	1:H:366:SER:HA	2.13	0.78
1:I:385:THR:CA	1:I:387:VAL:HG22	2.13	0.78
1:J:503:ASN:HD21	1:J:633:PHE:N	1.79	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:385:THR:HG21	1:A:389:ARG:HA	1.64	0.78
1:A:532:GLU:N	1:A:532:GLU:CD	2.37	0.78
1:C:388:GLN:O	1:C:389:ARG:CB	2.30	0.78
1:G:388:GLN:O	1:G:389:ARG:CB	2.30	0.78
1:G:532:GLU:CD	1:G:532:GLU:N	2.36	0.78
1:A:457:SER:H	1:A:634:THR:CG2	1.97	0.78
1:G:440:ILE:HD11	1:G:653:ILE:HD13	1.64	0.78
1:H:503:ASN:HD21	1:H:633:PHE:N	1.79	0.78
1:L:661:LEU:O	1:L:661:LEU:CD1	2.29	0.78
1:B:374:ILE:HG12	1:B:408:ILE:HA	1.65	0.78
1:C:361:GLN:HG2	1:C:455:PHE:CG	2.19	0.78
1:C:457:SER:H	1:C:634:THR:CG2	1.97	0.78
1:I:361:GLN:HG2	1:I:455:PHE:CG	2.19	0.78
1:J:647:ARG:HD2	1:J:650:TYR:CE1	2.19	0.78
1:B:503:ASN:ND2	1:B:633:PHE:H	1.77	0.78
1:E:361:GLN:HG2	1:E:455:PHE:CG	2.19	0.78
1:F:503:ASN:ND2	1:F:633:PHE:H	1.77	0.78
1:H:374:ILE:HG12	1:H:408:ILE:HA	1.65	0.78
1:I:385:THR:HG21	1:I:389:ARG:HA	1.64	0.78
1:D:408:ILE:O	1:D:408:ILE:CD1	2.30	0.78
1:E:525:ASN:OD1	1:E:526:PRO:CD	2.30	0.78
1:E:629:ASP:HA	1:F:664:HIS:HE1	1.47	0.78
1:J:569:ILE:O	1:J:569:ILE:CG2	2.30	0.78
1:K:532:GLU:CD	1:K:532:GLU:N	2.36	0.78
1:C:532:GLU:CD	1:C:532:GLU:N	2.37	0.78
1:A:388:GLN:O	1:A:389:ARG:CB	2.30	0.78
1:D:366:SER:C	1:D:367:THR:CG2	2.42	0.78
1:F:374:ILE:HG12	1:F:408:ILE:HA	1.65	0.78
1:G:341:THR:HG1	1:G:344:ASP:HB2	1.48	0.78
1:G:524:VAL:HG22	1:G:529:GLY:O	1.84	0.78
1:H:567:GLU:O	1:H:568:ASN:CB	2.30	0.78
1:I:353:PHE:CE2	1:I:395:TYR:HD2	2.02	0.78
1:K:361:GLN:HG2	1:K:455:PHE:CG	2.18	0.78
1:C:440:ILE:HD11	1:C:653:ILE:HD13	1.64	0.78
1:H:647:ARG:HD2	1:H:650:TYR:CE1	2.19	0.78
1:J:374:ILE:HG12	1:J:408:ILE:HA	1.65	0.78
1:K:353:PHE:CE2	1:K:395:TYR:HD2	2.02	0.78
1:C:385:THR:CA	1:C:387:VAL:HG22	2.14	0.78
1:E:345:TYR:CD1	1:E:345:TYR:N	2.51	0.78
1:J:367:THR:CG2	1:J:368:LYS:H	1.88	0.78
1:L:374:ILE:HG12	1:L:408:ILE:HA	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:647:ARG:HD2	1:D:650:TYR:CE1	2.19	0.77
1:L:647:ARG:HD2	1:L:650:TYR:CE1	2.19	0.77
1:D:646:LEU:HD23	1:D:646:LEU:C	2.05	0.77
1:G:385:THR:CA	1:G:387:VAL:HG22	2.13	0.77
1:J:366:SER:O	1:J:367:THR:CB	2.30	0.77
1:K:440:ILE:HD11	1:K:653:ILE:HD13	1.64	0.77
1:E:385:THR:HG21	1:E:389:ARG:HA	1.64	0.77
1:H:366:SER:O	1:H:367:THR:CG2	2.29	0.77
1:A:361:GLN:HG2	1:A:455:PHE:CG	2.19	0.77
1:A:403:PRO:HB3	1:C:366:SER:OG	1.85	0.77
1:A:440:ILE:HD11	1:A:653:ILE:HD13	1.64	0.77
1:E:385:THR:CA	1:E:387:VAL:HG22	2.14	0.77
1:F:646:LEU:HD23	1:F:646:LEU:C	2.05	0.77
1:E:353:PHE:CE2	1:E:395:TYR:HD2	2.02	0.77
1:F:647:ARG:HD2	1:F:650:TYR:CE1	2.18	0.77
1:H:403:PRO:O	1:H:405:THR:HG22	1.85	0.77
1:I:524:VAL:HG22	1:I:529:GLY:O	1.84	0.77
1:A:340:VAL:CA	1:A:345:TYR:OH	2.30	0.77
1:B:661:LEU:O	1:B:661:LEU:CD1	2.29	0.77
1:A:353:PHE:CE2	1:A:395:TYR:HD2	2.02	0.77
1:A:524:VAL:HG22	1:A:529:GLY:O	1.84	0.77
1:C:355:SER:OG	1:C:356:ILE:HG23	1.85	0.77
1:D:367:THR:O	1:D:369:PRO:CD	2.30	0.77
1:H:646:LEU:HD23	1:H:646:LEU:C	2.05	0.77
1:H:661:LEU:O	1:H:661:LEU:CD1	2.29	0.77
1:L:569:ILE:O	1:L:569:ILE:CG2	2.30	0.77
1:E:355:SER:OG	1:E:356:ILE:HG23	1.85	0.77
1:E:524:VAL:HG22	1:E:529:GLY:O	1.84	0.77
1:K:524:VAL:HG22	1:K:529:GLY:O	1.84	0.77
1:G:353:PHE:CE2	1:G:395:TYR:HD2	2.02	0.77
1:L:403:PRO:O	1:L:405:THR:HG22	1.85	0.77
1:A:345:TYR:CD1	1:A:345:TYR:N	2.51	0.76
1:C:353:PHE:CE2	1:C:395:TYR:HD2	2.02	0.76
1:F:367:THR:CG2	1:F:368:LYS:H	1.88	0.76
1:E:532:GLU:CD	1:E:532:GLU:N	2.37	0.76
1:G:355:SER:OG	1:G:356:ILE:HG23	1.85	0.76
1:K:457:SER:H	1:K:634:THR:CG2	1.97	0.76
1:B:366:SER:CB	1:K:403:PRO:CA	2.44	0.76
1:B:367:THR:O	1:B:369:PRO:CD	2.30	0.76
1:D:408:ILE:O	1:D:409:ILE:CG2	2.34	0.76
1:J:403:PRO:O	1:J:405:THR:HG22	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:340:VAL:O	1:A:345:TYR:CE1	2.37	0.76
1:B:366:SER:HA	1:K:403:PRO:CG	2.15	0.76
1:J:646:LEU:HD23	1:J:646:LEU:C	2.05	0.76
1:C:629:ASP:HA	1:D:664:HIS:HE1	1.47	0.76
1:J:367:THR:O	1:J:369:PRO:CD	2.30	0.76
1:L:408:ILE:O	1:L:409:ILE:CG2	2.34	0.76
1:L:646:LEU:HD23	1:L:646:LEU:C	2.05	0.76
1:B:408:ILE:O	1:B:409:ILE:CG2	2.34	0.76
1:C:524:VAL:HG22	1:C:529:GLY:O	1.84	0.76
1:D:408:ILE:HD12	1:D:409:ILE:N	2.01	0.76
1:D:661:LEU:HD13	1:D:662:GLU:N	2.01	0.76
1:E:457:SER:H	1:E:634:THR:CG2	1.97	0.76
1:B:646:LEU:HD23	1:B:646:LEU:C	2.05	0.76
1:F:661:LEU:HD13	1:F:662:GLU:N	2.01	0.76
1:L:345:TYR:HE1	1:L:349:VAL:CG2	1.99	0.76
1:L:366:SER:O	1:L:367:THR:CB	2.30	0.76
1:A:355:SER:OG	1:A:356:ILE:HG23	1.85	0.76
1:B:408:ILE:HD12	1:B:409:ILE:N	2.01	0.76
1:F:408:ILE:O	1:F:409:ILE:CG2	2.34	0.76
1:G:345:TYR:CD1	1:G:345:TYR:N	2.51	0.76
1:G:401:LEU:O	1:G:402:ALA:HB3	1.84	0.76
1:A:401:LEU:O	1:A:402:ALA:HB3	1.84	0.76
1:B:345:TYR:HE1	1:B:349:VAL:CG2	1.99	0.76
1:B:427:ASN:ND2	1:B:427:ASN:H	1.84	0.76
1:C:416:ILE:HG13	1:C:448:TYR:OH	1.86	0.76
1:F:403:PRO:O	1:F:405:THR:HG22	1.85	0.76
1:A:560:SER:N	1:A:561:GLY:HA3	2.01	0.76
1:C:340:VAL:CA	1:C:345:TYR:OH	2.30	0.76
1:J:408:ILE:O	1:J:408:ILE:CD1	2.30	0.76
1:K:385:THR:HG21	1:K:389:ARG:HA	1.64	0.76
1:J:408:ILE:HD12	1:J:409:ILE:N	2.01	0.75
1:K:401:LEU:O	1:K:402:ALA:HB3	1.84	0.75
1:B:366:SER:HA	1:K:403:PRO:CB	2.11	0.75
1:H:408:ILE:O	1:H:409:ILE:CG2	2.34	0.75
1:K:416:ILE:HG13	1:K:448:TYR:OH	1.86	0.75
1:A:416:ILE:HG13	1:A:448:TYR:OH	1.86	0.75
1:B:403:PRO:O	1:B:405:THR:HG22	1.85	0.75
1:B:644:ASN:O	1:B:644:ASN:ND2	2.20	0.75
1:F:366:SER:O	1:F:367:THR:CB	2.30	0.75
1:I:355:SER:OG	1:I:356:ILE:HG23	1.85	0.75
1:J:408:ILE:O	1:J:409:ILE:CG2	2.34	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:355:SER:OG	1:K:356:ILE:HG23	1.85	0.75
1:D:398:ASP:OD2	1:E:663:HIS:HB3	1.86	0.75
1:E:340:VAL:CA	1:E:345:TYR:OH	2.30	0.75
1:C:401:LEU:O	1:C:402:ALA:HB3	1.85	0.75
1:D:400:ASN:HB3	1:E:662:GLU:HA	1.66	0.75
1:H:345:TYR:HE1	1:H:349:VAL:CG2	1.99	0.75
1:I:526:PRO:O	1:I:528:THR:HG22	1.87	0.75
1:K:340:VAL:CA	1:K:345:TYR:OH	2.30	0.75
1:L:367:THR:O	1:L:369:PRO:CD	2.30	0.75
1:C:526:PRO:O	1:C:528:THR:HG22	1.87	0.75
1:D:427:ASN:ND2	1:D:427:ASN:H	1.84	0.75
1:E:416:ILE:HG13	1:E:448:TYR:OH	1.86	0.75
1:G:416:ILE:HG13	1:G:448:TYR:OH	1.86	0.75
1:H:367:THR:O	1:H:369:PRO:CD	2.30	0.75
1:H:661:LEU:HD13	1:H:662:GLU:N	2.01	0.75
1:J:345:TYR:HE1	1:J:349:VAL:CG2	1.99	0.75
1:K:340:VAL:O	1:K:345:TYR:CE1	2.37	0.75
1:K:526:PRO:O	1:K:528:THR:HG22	1.87	0.75
1:L:661:LEU:HD13	1:L:662:GLU:N	2.01	0.75
1:D:345:TYR:HE1	1:D:349:VAL:CG2	1.99	0.75
1:F:427:ASN:ND2	1:F:427:ASN:H	1.84	0.75
1:F:644:ASN:ND2	1:F:644:ASN:O	2.20	0.75
1:G:526:PRO:O	1:G:528:THR:HG22	1.87	0.75
1:I:401:LEU:O	1:I:402:ALA:HB3	1.84	0.75
1:K:345:TYR:CD1	1:K:345:TYR:N	2.52	0.75
1:L:366:SER:C	1:L:367:THR:CG2	2.42	0.75
1:C:341:THR:HG1	1:C:344:ASP:HB2	1.48	0.75
1:E:347:THR:O	1:E:349:VAL:N	2.20	0.75
1:E:401:LEU:O	1:E:402:ALA:HB3	1.85	0.75
1:H:408:ILE:HD12	1:H:409:ILE:N	2.01	0.75
1:L:408:ILE:HD12	1:L:409:ILE:N	2.01	0.75
1:D:403:PRO:O	1:D:405:THR:HG22	1.85	0.75
1:F:345:TYR:HE1	1:F:349:VAL:CG2	1.99	0.75
1:B:569:ILE:O	1:B:569:ILE:CG2	2.30	0.74
1:B:661:LEU:HD13	1:B:662:GLU:N	2.01	0.74
1:I:340:VAL:O	1:I:345:TYR:CE1	2.37	0.74
1:L:427:ASN:ND2	1:L:427:ASN:H	1.84	0.74
1:L:644:ASN:O	1:L:644:ASN:ND2	2.20	0.74
1:A:526:PRO:O	1:A:528:THR:HG22	1.87	0.74
1:G:347:THR:O	1:G:349:VAL:N	2.20	0.74
1:E:526:PRO:O	1:E:528:THR:HG22	1.87	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:408:ILE:HD12	1:F:409:ILE:N	2.01	0.74
1:G:385:THR:HG21	1:G:389:ARG:N	2.01	0.74
1:G:457:SER:H	1:G:634:THR:CG2	1.97	0.74
1:G:629:ASP:HA	1:H:664:HIS:HE1	1.47	0.74
1:D:644:ASN:O	1:D:644:ASN:ND2	2.20	0.74
1:H:496:GLU:CD	1:H:496:GLU:N	2.41	0.74
1:I:416:ILE:HG13	1:I:448:TYR:OH	1.86	0.74
1:J:496:GLU:CD	1:J:496:GLU:N	2.41	0.74
1:A:347:THR:O	1:A:349:VAL:N	2.20	0.74
1:C:347:THR:O	1:C:349:VAL:N	2.20	0.74
1:D:437:GLU:O	1:D:441:ILE:HG22	1.88	0.74
1:I:457:SER:H	1:I:634:THR:CG2	1.97	0.74
1:L:496:GLU:CD	1:L:496:GLU:N	2.41	0.74
1:F:437:GLU:O	1:F:441:ILE:HG22	1.88	0.74
1:I:345:TYR:CD1	1:I:345:TYR:N	2.51	0.74
1:B:503:ASN:HD21	1:B:633:PHE:N	1.79	0.73
1:H:437:GLU:O	1:H:441:ILE:HG22	1.88	0.73
1:J:661:LEU:HD13	1:J:662:GLU:N	2.01	0.73
1:L:437:GLU:O	1:L:441:ILE:HG22	1.88	0.73
1:I:347:THR:O	1:I:349:VAL:N	2.20	0.73
1:K:347:THR:O	1:K:349:VAL:N	2.20	0.73
1:J:437:GLU:O	1:J:441:ILE:HG22	1.88	0.73
1:B:496:GLU:CD	1:B:496:GLU:N	2.41	0.73
1:E:635:ARG:HG2	1:E:636:ASP:N	1.90	0.73
1:G:665:HIS:CE1	1:H:342:ALA:CB	2.71	0.73
1:I:665:HIS:CE1	1:J:342:ALA:CB	2.71	0.73
1:K:629:ASP:HB3	1:K:631:VAL:O	1.89	0.73
1:E:665:HIS:CE1	1:F:342:ALA:CB	2.71	0.73
1:H:644:ASN:O	1:H:644:ASN:ND2	2.20	0.73
1:I:340:VAL:CA	1:I:345:TYR:OH	2.30	0.73
1:J:644:ASN:O	1:J:644:ASN:ND2	2.20	0.73
1:A:518:ASN:OD1	1:A:533:ASP:HB2	1.88	0.73
1:B:408:ILE:O	1:B:409:ILE:HG22	1.89	0.73
1:C:665:HIS:CE1	1:D:342:ALA:CB	2.71	0.73
1:G:340:VAL:CA	1:G:345:TYR:OH	2.30	0.73
1:I:385:THR:HG21	1:I:389:ARG:N	2.01	0.73
1:I:629:ASP:HB3	1:I:631:VAL:O	1.89	0.73
1:A:629:ASP:HB3	1:A:631:VAL:O	1.89	0.73
1:G:340:VAL:O	1:G:345:TYR:CE1	2.37	0.73
1:E:629:ASP:HB3	1:E:631:VAL:O	1.88	0.73
1:F:408:ILE:O	1:F:409:ILE:HG22	1.89	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:427:ASN:H	1:H:427:ASN:ND2	1.84	0.73
1:L:408:ILE:O	1:L:409:ILE:HG22	1.89	0.73
1:A:665:HIS:CE1	1:B:342:ALA:CB	2.71	0.73
1:C:518:ASN:OD1	1:C:533:ASP:HB2	1.89	0.73
1:D:496:GLU:CD	1:D:496:GLU:N	2.41	0.73
1:G:635:ARG:HG2	1:G:636:ASP:N	1.90	0.73
1:B:437:GLU:O	1:B:441:ILE:HG22	1.88	0.72
1:D:398:ASP:OD1	1:E:663:HIS:HD2	1.71	0.72
1:K:665:HIS:CE1	1:L:342:ALA:CB	2.71	0.72
1:E:340:VAL:O	1:E:345:TYR:CE1	2.37	0.72
1:C:345:TYR:HD1	1:C:345:TYR:H	1.36	0.72
1:F:367:THR:O	1:F:369:PRO:CD	2.30	0.72
1:F:408:ILE:O	1:F:408:ILE:CD1	2.30	0.72
1:H:408:ILE:O	1:H:409:ILE:HG22	1.89	0.72
1:J:427:ASN:ND2	1:J:427:ASN:H	1.84	0.72
1:G:629:ASP:HB3	1:G:631:VAL:O	1.89	0.72
1:I:345:TYR:HD1	1:I:345:TYR:H	1.36	0.72
1:K:518:ASN:OD1	1:K:533:ASP:HB2	1.88	0.72
1:E:518:ASN:OD1	1:E:533:ASP:HB2	1.89	0.72
1:E:664:HIS:O	1:E:665:HIS:ND1	2.23	0.72
1:A:385:THR:HG21	1:A:389:ARG:N	2.01	0.72
1:C:340:VAL:O	1:C:345:TYR:CE1	2.37	0.72
1:C:385:THR:HG21	1:C:389:ARG:N	2.01	0.72
1:E:385:THR:HG23	1:E:389:ARG:N	2.02	0.72
1:G:518:ASN:OD1	1:G:533:ASP:HB2	1.89	0.72
1:I:664:HIS:O	1:I:665:HIS:ND1	2.23	0.72
1:J:408:ILE:O	1:J:409:ILE:HG22	1.89	0.72
1:C:664:HIS:O	1:C:665:HIS:ND1	2.23	0.72
1:A:517:PHE:CD2	1:A:536:TYR:HE2	2.07	0.72
1:I:518:ASN:OD1	1:I:533:ASP:HB2	1.89	0.72
1:B:366:SER:C	1:B:367:THR:CG2	2.42	0.72
1:K:385:THR:HG23	1:K:389:ARG:N	2.02	0.72
1:I:385:THR:HG23	1:I:389:ARG:N	2.02	0.71
1:A:664:HIS:O	1:A:665:HIS:ND1	2.23	0.71
1:C:345:TYR:CD1	1:C:345:TYR:N	2.51	0.71
1:C:629:ASP:HB3	1:C:631:VAL:O	1.89	0.71
1:K:664:HIS:O	1:K:665:HIS:ND1	2.23	0.71
1:A:340:VAL:O	1:A:344:ASP:HB2	1.91	0.71
1:E:340:VAL:O	1:E:344:ASP:HB2	1.91	0.71
1:K:345:TYR:HD1	1:K:345:TYR:H	1.36	0.71
1:D:398:ASP:OD1	1:E:663:HIS:CD2	2.43	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:345:TYR:HD1	1:G:345:TYR:H	1.36	0.71
1:D:408:ILE:O	1:D:409:ILE:HG22	1.89	0.71
1:F:496:GLU:CD	1:F:496:GLU:N	2.41	0.71
1:G:664:HIS:O	1:G:665:HIS:ND1	2.23	0.71
1:K:353:PHE:CZ	1:K:395:TYR:HD2	2.09	0.71
1:C:340:VAL:O	1:C:344:ASP:HB2	1.91	0.71
1:D:398:ASP:O	1:E:663:HIS:N	2.20	0.71
1:E:358:GLN:HB2	1:E:379:LYS:HA	1.73	0.71
1:H:342:ALA:C	1:H:346:ASP:OD2	2.29	0.71
1:B:342:ALA:O	1:B:346:ASP:CG	2.29	0.71
1:I:340:VAL:O	1:I:344:ASP:HB2	1.91	0.71
1:K:340:VAL:O	1:K:344:ASP:HB2	1.91	0.71
1:D:568:ASN:CG	1:D:569:ILE:H	1.94	0.71
1:G:661:LEU:CD1	1:G:662:GLU:CB	2.68	0.71
1:K:353:PHE:CG	1:K:395:TYR:HE2	2.09	0.71
1:L:342:ALA:C	1:L:346:ASP:OD2	2.29	0.71
1:A:587:ASP:OD2	1:A:587:ASP:C	2.30	0.71
1:E:517:PHE:CD2	1:E:536:TYR:HE2	2.07	0.71
1:F:344:ASP:C	1:F:344:ASP:OD1	2.29	0.71
1:F:385:THR:HG23	1:F:388:GLN:H	1.56	0.71
1:I:629:ASP:HA	1:J:664:HIS:HE1	1.47	0.71
1:B:385:THR:HG23	1:B:388:GLN:H	1.56	0.70
1:C:661:LEU:HD12	1:C:662:GLU:HB2	1.73	0.70
1:H:342:ALA:O	1:H:346:ASP:CG	2.30	0.70
1:I:353:PHE:CG	1:I:395:TYR:HE2	2.09	0.70
1:L:344:ASP:C	1:L:344:ASP:OD1	2.29	0.70
1:A:353:PHE:CG	1:A:395:TYR:HE2	2.09	0.70
1:B:342:ALA:C	1:B:346:ASP:OD2	2.29	0.70
1:B:344:ASP:C	1:B:344:ASP:OD1	2.29	0.70
1:G:340:VAL:O	1:G:344:ASP:HB2	1.91	0.70
1:K:385:THR:HG21	1:K:389:ARG:N	2.01	0.70
1:K:587:ASP:C	1:K:587:ASP:OD2	2.30	0.70
1:L:385:THR:HG23	1:L:388:GLN:H	1.56	0.70
1:A:358:GLN:HB2	1:A:379:LYS:HA	1.73	0.70
1:E:522:LYS:N	1:E:522:LYS:HD3	2.07	0.70
1:H:344:ASP:C	1:H:344:ASP:OD1	2.29	0.70
1:I:358:GLN:HB2	1:I:379:LYS:HA	1.73	0.70
1:A:522:LYS:HD3	1:A:522:LYS:N	2.07	0.70
1:A:587:ASP:CG	1:A:587:ASP:O	2.30	0.70
1:F:342:ALA:C	1:F:346:ASP:OD2	2.29	0.70
1:G:353:PHE:CG	1:G:395:TYR:HE2	2.09	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:401:LEU:O	1:G:402:ALA:CB	2.40	0.70
1:H:385:THR:HG23	1:H:388:GLN:H	1.56	0.70
1:J:385:THR:HG23	1:J:388:GLN:H	1.56	0.70
1:L:342:ALA:O	1:L:346:ASP:CG	2.29	0.70
1:L:568:ASN:CG	1:L:569:ILE:H	1.94	0.70
1:B:345:TYR:CE1	1:B:349:VAL:CG2	2.74	0.70
1:E:401:LEU:O	1:E:402:ALA:CB	2.40	0.70
1:I:388:GLN:O	1:I:389:ARG:HB2	1.91	0.70
1:J:342:ALA:C	1:J:346:ASP:OD2	2.29	0.70
1:J:342:ALA:O	1:J:346:ASP:CG	2.29	0.70
1:J:659:SER:O	1:J:660:GLN:CD	2.30	0.70
1:K:522:LYS:HD3	1:K:522:LYS:N	2.07	0.70
1:A:661:LEU:HD12	1:A:662:GLU:HB2	1.73	0.70
1:B:568:ASN:CG	1:B:569:ILE:H	1.94	0.70
1:D:342:ALA:C	1:D:346:ASP:OD2	2.29	0.70
1:D:567:GLU:O	1:D:568:ASN:CG	2.30	0.70
1:E:353:PHE:CG	1:E:395:TYR:HE2	2.09	0.70
1:K:661:LEU:CD1	1:K:662:GLU:CB	2.68	0.70
1:A:385:THR:HG23	1:A:389:ARG:N	2.02	0.70
1:B:364:THR:HG23	1:K:401:LEU:HD12	1.68	0.70
1:D:344:ASP:OD1	1:D:344:ASP:C	2.29	0.70
1:E:388:GLN:O	1:E:389:ARG:HG3	1.92	0.70
1:I:401:LEU:O	1:I:402:ALA:CB	2.40	0.70
1:I:440:ILE:HD11	1:I:653:ILE:CD1	2.21	0.70
1:J:568:ASN:CG	1:J:569:ILE:H	1.94	0.70
1:K:385:THR:CG2	1:K:389:ARG:CA	2.60	0.70
1:L:659:SER:O	1:L:660:GLN:CD	2.30	0.70
1:A:506:LYS:O	1:A:509:SER:HB3	1.92	0.70
1:C:353:PHE:CZ	1:C:395:TYR:HD2	2.09	0.70
1:C:353:PHE:CG	1:C:395:TYR:HE2	2.09	0.70
1:C:388:GLN:O	1:C:389:ARG:HG3	1.92	0.70
1:D:345:TYR:CE1	1:D:349:VAL:CG2	2.74	0.70
1:D:567:GLU:O	1:D:568:ASN:HB3	1.92	0.70
1:E:401:LEU:HD23	1:E:401:LEU:O	1.92	0.70
1:E:440:ILE:HD11	1:E:653:ILE:CD1	2.21	0.70
1:E:587:ASP:CG	1:E:587:ASP:O	2.30	0.70
1:G:388:GLN:O	1:G:389:ARG:HB2	1.91	0.70
1:G:440:ILE:HD11	1:G:653:ILE:CD1	2.21	0.70
1:G:517:PHE:CD2	1:G:536:TYR:HE2	2.07	0.70
1:J:344:ASP:C	1:J:344:ASP:OD1	2.29	0.70
1:K:358:GLN:HB2	1:K:379:LYS:HA	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:567:GLU:O	1:B:568:ASN:HB3	1.92	0.70
1:D:385:THR:HG23	1:D:388:GLN:H	1.56	0.70
1:E:587:ASP:C	1:E:587:ASP:OD2	2.30	0.70
1:F:342:ALA:O	1:F:346:ASP:CG	2.29	0.70
1:G:401:LEU:HD23	1:G:401:LEU:O	1.92	0.70
1:G:522:LYS:HD3	1:G:522:LYS:N	2.07	0.70
1:H:567:GLU:O	1:H:568:ASN:CG	2.30	0.70
1:H:659:SER:O	1:H:660:GLN:CD	2.30	0.70
1:K:440:ILE:HD11	1:K:653:ILE:CD1	2.21	0.70
1:C:388:GLN:O	1:C:389:ARG:HB2	1.91	0.70
1:E:342:ALA:HB1	1:E:362:THR:HB	1.74	0.70
1:I:506:LYS:O	1:I:509:SER:HB3	1.92	0.70
1:K:457:SER:H	1:K:634:THR:HG23	1.56	0.70
1:L:567:GLU:O	1:L:568:ASN:CG	2.30	0.70
1:C:358:GLN:HB2	1:C:379:LYS:HA	1.73	0.69
1:C:587:ASP:C	1:C:587:ASP:OD2	2.30	0.69
1:H:345:TYR:CE1	1:H:349:VAL:CG2	2.74	0.69
1:K:388:GLN:O	1:K:389:ARG:HB2	1.91	0.69
1:K:506:LYS:O	1:K:509:SER:HB3	1.92	0.69
1:B:567:GLU:O	1:B:568:ASN:CG	2.30	0.69
1:D:342:ALA:O	1:D:346:ASP:CG	2.29	0.69
1:F:567:GLU:O	1:F:568:ASN:CG	2.30	0.69
1:G:358:GLN:HB2	1:G:379:LYS:HA	1.73	0.69
1:I:661:LEU:CD1	1:I:662:GLU:CB	2.68	0.69
1:A:661:LEU:CD1	1:A:662:GLU:CB	2.68	0.69
1:C:342:ALA:HB1	1:C:362:THR:HB	1.74	0.69
1:G:353:PHE:CZ	1:G:395:TYR:HD2	2.09	0.69
1:J:345:TYR:CD1	1:J:345:TYR:C	2.65	0.69
1:J:345:TYR:CE1	1:J:349:VAL:CG2	2.74	0.69
1:L:345:TYR:CE1	1:L:349:VAL:CG2	2.74	0.69
1:A:388:GLN:O	1:A:389:ARG:HB2	1.91	0.69
1:B:345:TYR:CD1	1:B:345:TYR:C	2.65	0.69
1:C:440:ILE:HD11	1:C:653:ILE:CD1	2.21	0.69
1:D:398:ASP:C	1:E:663:HIS:HB3	2.13	0.69
1:E:403:PRO:CB	1:H:366:SER:HB2	2.09	0.69
1:F:659:SER:O	1:F:660:GLN:CD	2.30	0.69
1:G:385:THR:HG23	1:G:389:ARG:N	2.02	0.69
1:G:661:LEU:HD12	1:G:662:GLU:HB2	1.73	0.69
1:H:345:TYR:CD1	1:H:345:TYR:C	2.65	0.69
1:I:522:LYS:HD3	1:I:522:LYS:N	2.07	0.69
1:J:401:LEU:HG	1:J:403:PRO:HD2	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:345:TYR:HD1	1:A:345:TYR:H	1.36	0.69
1:D:659:SER:O	1:D:660:GLN:CD	2.30	0.69
1:E:661:LEU:HD12	1:E:662:GLU:HB2	1.73	0.69
1:G:342:ALA:HB1	1:G:362:THR:HB	1.74	0.69
1:G:347:THR:O	1:G:350:SER:N	2.26	0.69
1:I:347:THR:O	1:I:350:SER:N	2.26	0.69
1:J:567:GLU:O	1:J:568:ASN:CG	2.30	0.69
1:K:587:ASP:O	1:K:587:ASP:CG	2.30	0.69
1:A:440:ILE:HD11	1:A:653:ILE:CD1	2.21	0.69
1:B:659:SER:O	1:B:660:GLN:CD	2.30	0.69
1:C:506:LYS:O	1:C:509:SER:HB3	1.92	0.69
1:D:345:TYR:CD1	1:D:345:TYR:C	2.65	0.69
1:D:566:ASN:N	1:D:570:GLN:NE2	2.41	0.69
1:F:345:TYR:CE1	1:F:349:VAL:CG2	2.74	0.69
1:F:568:ASN:CG	1:F:569:ILE:H	1.94	0.69
1:G:457:SER:H	1:G:634:THR:HG23	1.56	0.69
1:I:342:ALA:HB1	1:I:362:THR:HB	1.74	0.69
1:A:347:THR:O	1:A:350:SER:N	2.26	0.69
1:A:401:LEU:HD23	1:A:401:LEU:O	1.92	0.69
1:B:523:VAL:HG12	1:B:532:GLU:H	1.58	0.69
1:C:347:THR:O	1:C:350:SER:N	2.26	0.69
1:C:661:LEU:CD1	1:C:662:GLU:CB	2.68	0.69
1:E:388:GLN:O	1:E:389:ARG:HB2	1.91	0.69
1:E:506:LYS:O	1:E:509:SER:HB3	1.92	0.69
1:F:345:TYR:CD1	1:F:345:TYR:C	2.65	0.69
1:H:568:ASN:CG	1:H:569:ILE:H	1.94	0.69
1:I:457:SER:H	1:I:634:THR:HG23	1.56	0.69
1:I:587:ASP:CG	1:I:587:ASP:O	2.30	0.69
1:K:401:LEU:O	1:K:402:ALA:CB	2.40	0.69
1:L:401:LEU:HG	1:L:403:PRO:HD2	1.75	0.69
1:L:567:GLU:O	1:L:568:ASN:HB3	1.92	0.69
1:C:401:LEU:O	1:C:402:ALA:CB	2.40	0.69
1:E:345:TYR:HD1	1:E:345:TYR:H	1.36	0.69
1:I:517:PHE:CD2	1:I:536:TYR:HE2	2.07	0.69
1:K:347:THR:O	1:K:350:SER:N	2.26	0.69
1:C:457:SER:H	1:C:634:THR:HG23	1.56	0.69
1:C:522:LYS:HD3	1:C:522:LYS:N	2.07	0.69
1:F:660:GLN:CA	1:F:661:LEU:CB	2.71	0.69
1:G:587:ASP:OD2	1:G:587:ASP:C	2.30	0.69
1:H:401:LEU:HG	1:H:403:PRO:HD2	1.75	0.69
1:J:567:GLU:O	1:J:568:ASN:HB3	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:401:LEU:HD23	1:K:401:LEU:O	1.92	0.69
1:L:345:TYR:CD1	1:L:345:TYR:C	2.65	0.69
1:G:506:LYS:O	1:G:509:SER:HB3	1.92	0.68
1:I:563:VAL:HG22	1:I:611:LEU:HD21	1.75	0.68
1:K:629:ASP:HA	1:L:664:HIS:HE1	1.47	0.68
1:C:587:ASP:O	1:C:587:ASP:CG	2.30	0.68
1:E:563:VAL:HG22	1:E:611:LEU:HD21	1.75	0.68
1:G:587:ASP:CG	1:G:587:ASP:O	2.30	0.68
1:I:388:GLN:O	1:I:389:ARG:HG3	1.92	0.68
1:I:661:LEU:HD12	1:I:662:GLU:HB2	1.73	0.68
1:D:523:VAL:HG12	1:D:532:GLU:H	1.58	0.68
1:E:347:THR:O	1:E:350:SER:N	2.26	0.68
1:G:388:GLN:O	1:G:389:ARG:HG3	1.92	0.68
1:H:523:VAL:HG12	1:H:532:GLU:H	1.58	0.68
1:K:563:VAL:HG22	1:K:611:LEU:HD21	1.75	0.68
1:A:401:LEU:O	1:A:402:ALA:CB	2.40	0.68
1:C:401:LEU:HD23	1:C:401:LEU:O	1.92	0.68
1:A:563:VAL:HG22	1:A:611:LEU:HD21	1.75	0.68
1:C:563:VAL:HG22	1:C:611:LEU:HD21	1.75	0.68
1:E:385:THR:HG21	1:E:389:ARG:N	2.01	0.68
1:F:521:ARG:HH22	1:F:559:ALA:HB3	1.59	0.68
1:G:563:VAL:HG22	1:G:611:LEU:HD21	1.75	0.68
1:I:587:ASP:OD2	1:I:587:ASP:C	2.30	0.68
1:K:385:THR:HG22	1:K:392:ILE:HG23	1.76	0.68
1:K:388:GLN:O	1:K:389:ARG:HG3	1.92	0.68
1:D:521:ARG:HH22	1:D:559:ALA:HB3	1.59	0.68
1:F:401:LEU:HG	1:F:403:PRO:HD2	1.75	0.68
1:I:385:THR:HG22	1:I:392:ILE:HG23	1.76	0.68
1:K:342:ALA:HB1	1:K:362:THR:HB	1.74	0.68
1:K:395:TYR:HB2	1:K:408:ILE:HG12	1.76	0.68
1:A:388:GLN:O	1:A:389:ARG:HG3	1.92	0.68
1:B:521:ARG:HH22	1:B:559:ALA:HB3	1.59	0.68
1:J:647:ARG:HG3	1:J:650:TYR:CD1	2.29	0.68
1:K:661:LEU:HD12	1:K:662:GLU:HB2	1.73	0.68
1:I:395:TYR:HB2	1:I:408:ILE:HG12	1.76	0.68
1:I:401:LEU:HD23	1:I:401:LEU:O	1.92	0.68
1:I:401:LEU:CG	1:I:402:ALA:N	2.57	0.68
1:J:523:VAL:HG12	1:J:532:GLU:H	1.58	0.68
1:A:342:ALA:HB1	1:A:362:THR:HB	1.74	0.68
1:A:385:THR:HG22	1:A:392:ILE:HG23	1.76	0.68
1:D:647:ARG:HG3	1:D:650:TYR:CD1	2.29	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:395:TYR:HB2	1:E:408:ILE:HG12	1.76	0.68
1:H:521:ARG:HH22	1:H:559:ALA:HB3	1.59	0.68
1:F:523:VAL:HG12	1:F:532:GLU:H	1.58	0.67
1:K:401:LEU:CG	1:K:402:ALA:N	2.57	0.67
1:B:401:LEU:HG	1:B:403:PRO:HD2	1.75	0.67
1:D:401:LEU:HG	1:D:403:PRO:HD2	1.75	0.67
1:E:629:ASP:CA	1:F:664:HIS:NE2	2.57	0.67
1:G:440:ILE:HG13	1:G:441:ILE:N	2.09	0.67
1:I:440:ILE:HG13	1:I:441:ILE:N	2.09	0.67
1:F:366:SER:C	1:F:367:THR:CG2	2.42	0.67
1:F:567:GLU:O	1:F:568:ASN:HB3	1.92	0.67
1:L:408:ILE:C	1:L:409:ILE:HG23	2.15	0.67
1:L:566:ASN:N	1:L:570:GLN:NE2	2.41	0.67
1:C:395:TYR:HB2	1:C:408:ILE:HG12	1.76	0.67
1:G:401:LEU:CG	1:G:402:ALA:N	2.57	0.67
1:H:647:ARG:HG3	1:H:650:TYR:CD1	2.29	0.67
1:I:353:PHE:CZ	1:I:395:TYR:HD2	2.09	0.67
1:L:521:ARG:HH22	1:L:559:ALA:HB3	1.59	0.67
1:A:340:VAL:O	1:A:341:THR:HG23	1.95	0.67
1:C:440:ILE:HG13	1:C:441:ILE:N	2.09	0.67
1:G:385:THR:CG2	1:G:389:ARG:CA	2.60	0.67
1:H:567:GLU:O	1:H:568:ASN:HB3	1.92	0.67
1:J:521:ARG:HH22	1:J:559:ALA:HB3	1.59	0.67
1:L:647:ARG:HG3	1:L:650:TYR:CD1	2.29	0.67
1:F:647:ARG:HG3	1:F:650:TYR:CD1	2.29	0.67
1:G:340:VAL:O	1:G:341:THR:HG23	1.95	0.67
1:K:340:VAL:O	1:K:341:THR:HG23	1.95	0.67
1:K:517:PHE:CD2	1:K:536:TYR:HE2	2.07	0.67
1:A:395:TYR:HB2	1:A:408:ILE:HG12	1.76	0.67
1:C:401:LEU:CG	1:C:402:ALA:N	2.57	0.67
1:D:540:ILE:HG22	1:D:555:ILE:HG13	1.77	0.67
1:D:660:GLN:CA	1:D:661:LEU:CB	2.71	0.67
1:E:661:LEU:CD1	1:E:662:GLU:CB	2.68	0.67
1:G:385:THR:HG22	1:G:392:ILE:HG23	1.76	0.67
1:J:408:ILE:C	1:J:409:ILE:HG23	2.15	0.67
1:L:523:VAL:HG12	1:L:532:GLU:H	1.58	0.67
1:A:401:LEU:CG	1:A:402:ALA:N	2.57	0.67
1:K:440:ILE:HG13	1:K:441:ILE:N	2.09	0.67
1:A:556:GLY:HA3	1:A:589:TYR:CD1	2.30	0.67
1:B:566:ASN:N	1:B:570:GLN:NE2	2.41	0.67
1:C:424:TYR:CE2	1:C:429:LEU:HD12	2.30	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:440:ILE:HG13	1:E:441:ILE:N	2.09	0.67
1:I:424:TYR:CE2	1:I:429:LEU:HD12	2.30	0.67
1:L:647:ARG:HD2	1:L:650:TYR:CZ	2.30	0.67
1:C:556:GLY:HA3	1:C:589:TYR:CD1	2.30	0.67
1:D:396:LEU:CD2	1:D:406:PRO:HG2	2.25	0.67
1:E:340:VAL:O	1:E:341:THR:HG23	1.95	0.67
1:E:385:THR:HG22	1:E:392:ILE:HG23	1.76	0.67
1:E:556:GLY:HA3	1:E:589:TYR:CD1	2.30	0.67
1:F:540:ILE:HG22	1:F:555:ILE:HG13	1.77	0.67
1:J:647:ARG:HD2	1:J:650:TYR:CZ	2.30	0.67
1:D:647:ARG:HD2	1:D:650:TYR:CZ	2.30	0.66
1:E:424:TYR:CE2	1:E:429:LEU:HD12	2.30	0.66
1:G:629:ASP:CA	1:H:664:HIS:NE2	2.57	0.66
1:H:540:ILE:HG22	1:H:555:ILE:HG13	1.77	0.66
1:J:540:ILE:HG22	1:J:555:ILE:HG13	1.77	0.66
1:K:424:TYR:CE2	1:K:429:LEU:HD12	2.30	0.66
1:K:556:GLY:HA3	1:K:589:TYR:CD1	2.30	0.66
1:E:401:LEU:CG	1:E:402:ALA:N	2.57	0.66
1:F:566:ASN:N	1:F:570:GLN:NE2	2.41	0.66
1:H:647:ARG:HD2	1:H:650:TYR:CZ	2.30	0.66
1:A:424:TYR:CE2	1:A:429:LEU:HD12	2.30	0.66
1:B:408:ILE:C	1:B:409:ILE:HG23	2.15	0.66
1:D:408:ILE:C	1:D:409:ILE:HG23	2.15	0.66
1:F:365:ASP:OD1	1:F:367:THR:HG21	1.95	0.66
1:G:424:TYR:CE2	1:G:429:LEU:HD12	2.30	0.66
1:G:454:ILE:CG2	1:G:455:PHE:N	2.58	0.66
1:I:340:VAL:O	1:I:341:THR:HG23	1.95	0.66
1:A:661:LEU:HD11	1:A:662:GLU:HB2	1.78	0.66
1:B:396:LEU:CD2	1:B:406:PRO:HG2	2.25	0.66
1:C:385:THR:HG22	1:C:392:ILE:HG23	1.76	0.66
1:C:629:ASP:CA	1:D:664:HIS:NE2	2.57	0.66
1:D:365:ASP:OD1	1:D:367:THR:HG21	1.95	0.66
1:G:395:TYR:HB2	1:G:408:ILE:HG12	1.76	0.66
1:B:647:ARG:HD2	1:B:650:TYR:CZ	2.30	0.66
1:C:342:ALA:CB	1:C:362:THR:HG22	2.26	0.66
1:F:396:LEU:CD2	1:F:406:PRO:HG2	2.25	0.66
1:K:661:LEU:HD11	1:K:662:GLU:HB2	1.78	0.66
1:A:342:ALA:CB	1:A:362:THR:HG22	2.26	0.66
1:B:365:ASP:OD1	1:B:367:THR:HG21	1.96	0.66
1:B:366:SER:O	1:B:367:THR:HB	1.96	0.66
1:C:454:ILE:CG2	1:C:455:PHE:N	2.58	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:454:ILE:CG2	1:E:455:PHE:N	2.59	0.66
1:I:595:ILE:HD13	1:I:597:TYR:CE2	2.31	0.66
1:I:661:LEU:HD11	1:I:662:GLU:HB2	1.78	0.66
1:K:595:ILE:HD13	1:K:597:TYR:CE2	2.31	0.66
1:B:540:ILE:HG22	1:B:555:ILE:HG13	1.77	0.66
1:C:661:LEU:HD11	1:C:662:GLU:HB2	1.78	0.66
1:E:353:PHE:CZ	1:E:395:TYR:HD2	2.09	0.66
1:F:366:SER:O	1:F:367:THR:HB	1.96	0.66
1:F:408:ILE:C	1:F:409:ILE:HG23	2.15	0.66
1:G:401:LEU:CD2	1:G:402:ALA:CA	2.74	0.66
1:H:348:PHE:O	1:H:351:GLU:N	2.21	0.66
1:I:454:ILE:CG2	1:I:455:PHE:N	2.58	0.66
1:I:629:ASP:CA	1:J:664:HIS:NE2	2.57	0.66
1:L:540:ILE:HG22	1:L:555:ILE:HG13	1.77	0.66
1:B:647:ARG:HG3	1:B:650:TYR:CD1	2.29	0.66
1:C:595:ILE:HD13	1:C:597:TYR:CE2	2.31	0.66
1:E:341:THR:OG1	1:E:344:ASP:HB2	1.96	0.66
1:G:556:GLY:HA3	1:G:589:TYR:CD1	2.30	0.66
1:H:408:ILE:C	1:H:409:ILE:HG23	2.15	0.66
1:H:569:ILE:O	1:H:569:ILE:CG2	2.30	0.66
1:I:342:ALA:CB	1:I:362:THR:HG22	2.26	0.66
1:J:566:ASN:N	1:J:570:GLN:NE2	2.41	0.66
1:A:629:ASP:CA	1:B:664:HIS:NE2	2.57	0.65
1:E:457:SER:H	1:E:634:THR:HG23	1.56	0.65
1:H:557:PRO:HG2	1:H:580:LEU:CD1	2.26	0.65
1:I:556:GLY:HA3	1:I:589:TYR:CD1	2.30	0.65
1:A:387:VAL:HG21	1:A:390:GLU:CD	2.17	0.65
1:A:403:PRO:HG3	1:C:366:SER:CB	2.13	0.65
1:F:647:ARG:HD2	1:F:650:TYR:CZ	2.30	0.65
1:K:387:VAL:HG21	1:K:390:GLU:CD	2.17	0.65
1:C:392:ILE:O	1:C:396:LEU:HD23	1.97	0.65
1:E:548:LYS:O	1:E:548:LYS:HG2	1.96	0.65
1:G:516:SER:HB2	1:G:617:GLU:CD	2.17	0.65
1:G:595:ILE:HD13	1:G:597:TYR:CE2	2.31	0.65
1:J:557:PRO:HG2	1:J:580:LEU:CD1	2.26	0.65
1:K:454:ILE:CG2	1:K:455:PHE:N	2.58	0.65
1:L:365:ASP:OD1	1:L:367:THR:HG21	1.96	0.65
1:L:396:LEU:CD2	1:L:406:PRO:HG2	2.25	0.65
1:A:385:THR:HG1	1:A:387:VAL:CG2	1.97	0.65
1:A:440:ILE:HG13	1:A:441:ILE:N	2.09	0.65
1:A:595:ILE:HD13	1:A:597:TYR:CE2	2.31	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:340:VAL:O	1:C:341:THR:HG23	1.95	0.65
1:K:342:ALA:CB	1:K:362:THR:HG22	2.26	0.65
1:E:392:ILE:O	1:E:396:LEU:HD23	1.97	0.65
1:E:634:THR:OG1	1:E:635:ARG:N	2.30	0.65
1:H:365:ASP:OD1	1:H:367:THR:HG21	1.96	0.65
1:H:366:SER:O	1:H:367:THR:HB	1.96	0.65
1:J:348:PHE:O	1:J:351:GLU:N	2.21	0.65
1:J:396:LEU:CD2	1:J:406:PRO:HG2	2.25	0.65
1:K:516:SER:HB2	1:K:617:GLU:CD	2.17	0.65
1:K:629:ASP:CA	1:L:664:HIS:NE2	2.57	0.65
1:C:341:THR:OG1	1:C:344:ASP:HB2	1.96	0.65
1:E:595:ILE:HD13	1:E:597:TYR:CE2	2.31	0.65
1:F:348:PHE:O	1:F:351:GLU:N	2.21	0.65
1:H:343:THR:O	1:H:347:THR:CG2	2.44	0.65
1:H:396:LEU:CD2	1:H:406:PRO:HG2	2.25	0.65
1:L:365:ASP:C	1:L:367:THR:HG22	2.17	0.65
1:A:454:ILE:CG2	1:A:455:PHE:N	2.58	0.65
1:F:557:PRO:HG2	1:F:580:LEU:CD1	2.26	0.65
1:G:341:THR:OG1	1:G:344:ASP:HB2	1.96	0.65
1:G:519:SER:CB	1:G:562:ASP:OD1	2.44	0.65
1:I:343:THR:CG2	1:I:344:ASP:N	2.60	0.65
1:I:516:SER:HB2	1:I:617:GLU:CD	2.17	0.65
1:J:646:LEU:O	1:J:646:LEU:CD2	2.30	0.65
1:K:343:THR:CG2	1:K:344:ASP:N	2.60	0.65
1:L:659:SER:O	1:L:660:GLN:NE2	2.30	0.65
1:A:341:THR:OG1	1:A:344:ASP:HB2	1.96	0.65
1:D:398:ASP:O	1:E:663:HIS:CB	2.41	0.65
1:E:516:SER:HB2	1:E:617:GLU:CD	2.17	0.65
1:G:392:ILE:O	1:G:396:LEU:HD23	1.97	0.65
1:I:341:THR:OG1	1:I:344:ASP:HB2	1.96	0.65
1:J:365:ASP:C	1:J:367:THR:HG22	2.17	0.65
1:J:440:ILE:HG22	1:J:471:ALA:HB3	1.79	0.65
1:L:366:SER:O	1:L:367:THR:HB	1.96	0.65
1:B:659:SER:O	1:B:660:GLN:NE2	2.30	0.65
1:C:385:THR:HG23	1:C:389:ARG:N	2.02	0.65
1:D:366:SER:O	1:D:367:THR:HB	1.96	0.65
1:H:566:ASN:O	1:H:570:GLN:NE2	2.30	0.65
1:J:366:SER:O	1:J:367:THR:HB	1.96	0.65
1:K:548:LYS:HG2	1:K:548:LYS:O	1.96	0.65
1:L:440:ILE:HG22	1:L:471:ALA:HB3	1.79	0.65
1:B:440:ILE:HG22	1:B:471:ALA:HB3	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:548:LYS:HG2	1:C:548:LYS:O	1.96	0.65
1:C:634:THR:OG1	1:C:635:ARG:N	2.30	0.65
1:D:398:ASP:HA	1:E:663:HIS:HB2	1.79	0.65
1:D:659:SER:O	1:D:660:GLN:NE2	2.30	0.65
1:F:566:ASN:O	1:F:570:GLN:NE2	2.30	0.65
1:J:659:SER:O	1:J:660:GLN:NE2	2.30	0.65
1:A:343:THR:CG2	1:A:344:ASP:N	2.60	0.64
1:D:365:ASP:C	1:D:367:THR:HG22	2.17	0.64
1:E:545:ARG:HB3	1:E:597:TYR:CD2	2.32	0.64
1:J:365:ASP:OD1	1:J:367:THR:HG21	1.96	0.64
1:K:519:SER:CB	1:K:562:ASP:OD1	2.44	0.64
1:L:557:PRO:HG2	1:L:580:LEU:CD1	2.26	0.64
1:A:516:SER:HB2	1:A:617:GLU:CD	2.17	0.64
1:D:566:ASN:O	1:D:570:GLN:NE2	2.30	0.64
1:E:342:ALA:CB	1:E:362:THR:HG22	2.26	0.64
1:G:545:ARG:HB3	1:G:597:TYR:CD2	2.32	0.64
1:I:548:LYS:HG2	1:I:548:LYS:O	1.96	0.64
1:A:392:ILE:O	1:A:396:LEU:HD23	1.97	0.64
1:F:647:ARG:HH11	1:F:649:GLN:CD	1.99	0.64
1:G:342:ALA:CB	1:G:362:THR:HG22	2.26	0.64
1:H:422:VAL:CG1	1:H:475:VAL:HG13	2.27	0.64
1:J:347:THR:OG1	1:J:348:PHE:N	2.30	0.64
1:J:566:ASN:O	1:J:570:GLN:NE2	2.30	0.64
1:J:660:GLN:CA	1:J:661:LEU:CB	2.71	0.64
1:K:341:THR:OG1	1:K:344:ASP:HB2	1.96	0.64
1:A:519:SER:CB	1:A:562:ASP:OD1	2.44	0.64
1:C:343:THR:CG2	1:C:344:ASP:N	2.60	0.64
1:C:387:VAL:HG21	1:C:390:GLU:CD	2.16	0.64
1:C:516:SER:HB2	1:C:617:GLU:CD	2.17	0.64
1:F:659:SER:O	1:F:660:GLN:NE2	2.30	0.64
1:G:343:THR:CG2	1:G:344:ASP:N	2.60	0.64
1:B:347:THR:OG1	1:B:348:PHE:N	2.30	0.64
1:B:365:ASP:C	1:B:367:THR:HG22	2.17	0.64
1:C:517:PHE:CD2	1:C:536:TYR:HE2	2.07	0.64
1:E:343:THR:HG22	1:E:344:ASP:N	2.13	0.64
1:F:422:VAL:CG1	1:F:475:VAL:HG13	2.27	0.64
1:H:365:ASP:C	1:H:367:THR:HG22	2.17	0.64
1:H:440:ILE:HG22	1:H:471:ALA:HB3	1.79	0.64
1:H:566:ASN:N	1:H:570:GLN:NE2	2.41	0.64
1:A:597:TYR:HB2	1:A:598:PRO:HD3	1.80	0.64
1:F:440:ILE:HG22	1:F:471:ALA:HB3	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:392:ILE:O	1:I:396:LEU:HD23	1.97	0.64
1:I:545:ARG:HB3	1:I:597:TYR:CD2	2.32	0.64
1:L:345:TYR:HE1	1:L:349:VAL:HG21	1.62	0.64
1:C:518:ASN:HA	1:C:535:LEU:HD22	1.80	0.64
1:D:557:PRO:HG2	1:D:580:LEU:CD1	2.26	0.64
1:G:387:VAL:HG21	1:G:390:GLU:CD	2.17	0.64
1:G:597:TYR:HB2	1:G:598:PRO:HD3	1.80	0.64
1:H:344:ASP:OD1	1:H:345:TYR:N	2.31	0.64
1:K:634:THR:OG1	1:K:635:ARG:N	2.30	0.64
1:L:422:VAL:CG1	1:L:475:VAL:HG13	2.27	0.64
1:L:566:ASN:O	1:L:570:GLN:NE2	2.30	0.64
1:B:345:TYR:HE1	1:B:349:VAL:HG21	1.62	0.64
1:B:557:PRO:HG2	1:B:580:LEU:CD1	2.26	0.64
1:D:347:THR:OG1	1:D:348:PHE:N	2.30	0.64
1:E:518:ASN:HA	1:E:535:LEU:HD22	1.80	0.64
1:G:661:LEU:HD11	1:G:662:GLU:HB2	1.78	0.64
1:H:659:SER:O	1:H:660:GLN:NE2	2.30	0.64
1:I:387:VAL:HG21	1:I:390:GLU:CD	2.17	0.64
1:J:422:VAL:CG1	1:J:475:VAL:HG13	2.27	0.64
1:K:392:ILE:O	1:K:396:LEU:HD23	1.97	0.64
1:B:422:VAL:CG1	1:B:475:VAL:HG13	2.27	0.64
1:D:343:THR:O	1:D:347:THR:CG2	2.44	0.64
1:G:401:LEU:CD2	1:G:402:ALA:CB	2.69	0.64
1:L:646:LEU:O	1:L:646:LEU:CD2	2.30	0.64
1:A:343:THR:HG22	1:A:344:ASP:N	2.13	0.64
1:A:548:LYS:HG2	1:A:548:LYS:O	1.96	0.64
1:B:566:ASN:O	1:B:570:GLN:NE2	2.30	0.64
1:C:401:LEU:CD2	1:C:402:ALA:CA	2.74	0.64
1:G:343:THR:HG22	1:G:344:ASP:N	2.13	0.64
1:G:385:THR:HG21	1:G:392:ILE:H	1.63	0.64
1:J:404:ILE:HD13	1:J:404:ILE:H	1.63	0.64
1:L:343:THR:O	1:L:347:THR:CG2	2.44	0.64
1:D:465:LEU:HD21	1:D:480:ALA:HB2	1.81	0.63
1:I:385:THR:HG21	1:I:392:ILE:H	1.63	0.63
1:I:519:SER:CB	1:I:562:ASP:OD1	2.44	0.63
1:I:634:THR:OG1	1:I:635:ARG:N	2.30	0.63
1:K:545:ARG:HB3	1:K:597:TYR:CD2	2.32	0.63
1:L:465:LEU:HD21	1:L:480:ALA:HB2	1.81	0.63
1:A:545:ARG:HB3	1:A:597:TYR:CD2	2.32	0.63
1:C:385:THR:HG21	1:C:392:ILE:H	1.63	0.63
1:D:440:ILE:HG22	1:D:471:ALA:HB3	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:340:VAL:C	1:G:341:THR:CG2	2.62	0.63
1:G:518:ASN:HA	1:G:535:LEU:HD22	1.80	0.63
1:J:344:ASP:OD1	1:J:345:TYR:N	2.31	0.63
1:J:345:TYR:HE1	1:J:349:VAL:HG21	1.62	0.63
1:J:647:ARG:CD	1:J:650:TYR:CE1	2.81	0.63
1:K:597:TYR:HB2	1:K:598:PRO:HD3	1.80	0.63
1:L:344:ASP:OD1	1:L:345:TYR:N	2.31	0.63
1:C:545:ARG:HB3	1:C:597:TYR:CD2	2.32	0.63
1:D:404:ILE:HD13	1:D:404:ILE:H	1.63	0.63
1:D:422:VAL:CG1	1:D:475:VAL:HG13	2.27	0.63
1:E:403:PRO:HA	1:H:366:SER:CB	2.22	0.63
1:F:344:ASP:OD1	1:F:345:TYR:N	2.31	0.63
1:H:499:ILE:HD12	1:H:500:LYS:N	2.14	0.63
1:B:366:SER:HB2	1:K:403:PRO:CB	2.12	0.63
1:B:396:LEU:O	1:B:399:TYR:O	2.17	0.63
1:B:465:LEU:HD21	1:B:480:ALA:HB2	1.81	0.63
1:B:657:PRO:C	1:B:658:ILE:CD1	2.67	0.63
1:D:344:ASP:OD1	1:D:345:TYR:N	2.31	0.63
1:E:385:THR:HG21	1:E:392:ILE:H	1.63	0.63
1:F:365:ASP:C	1:F:367:THR:HG22	2.17	0.63
1:H:647:ARG:CD	1:H:650:TYR:CE1	2.81	0.63
1:I:343:THR:HG22	1:I:344:ASP:N	2.13	0.63
1:I:385:THR:CG2	1:I:389:ARG:CA	2.60	0.63
1:A:385:THR:CG2	1:A:392:ILE:H	2.12	0.63
1:C:517:PHE:HD2	1:C:536:TYR:CE2	2.09	0.63
1:C:597:TYR:HB2	1:C:598:PRO:HD3	1.80	0.63
1:E:340:VAL:HG12	1:E:345:TYR:OH	1.99	0.63
1:E:387:VAL:HG21	1:E:390:GLU:CD	2.17	0.63
1:J:499:ILE:HD12	1:J:500:LYS:N	2.14	0.63
1:A:524:VAL:HG13	1:A:529:GLY:O	1.99	0.63
1:C:519:SER:CB	1:C:562:ASP:OD1	2.44	0.63
1:E:436:LEU:HD23	1:E:436:LEU:C	2.19	0.63
1:E:597:TYR:HB2	1:E:598:PRO:HD3	1.80	0.63
1:G:340:VAL:HG12	1:G:345:TYR:OH	1.99	0.63
1:I:385:THR:CG2	1:I:392:ILE:H	2.12	0.63
1:E:385:THR:CG2	1:E:392:ILE:H	2.12	0.63
1:G:548:LYS:O	1:G:548:LYS:HG2	1.96	0.63
1:I:378:PRO:O	1:I:379:LYS:HB3	1.99	0.63
1:I:597:TYR:HB2	1:I:598:PRO:HD3	1.80	0.63
1:L:396:LEU:O	1:L:399:TYR:O	2.17	0.63
1:L:404:ILE:HD13	1:L:404:ILE:H	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:345:TYR:HE1	1:D:349:VAL:HG21	1.62	0.63
1:E:343:THR:CG2	1:E:344:ASP:N	2.60	0.63
1:E:519:SER:CB	1:E:562:ASP:OD1	2.44	0.63
1:G:378:PRO:O	1:G:379:LYS:HB3	1.99	0.63
1:I:525:ASN:OD1	1:I:526:PRO:HD3	1.99	0.63
1:J:396:LEU:O	1:J:399:TYR:O	2.17	0.63
1:L:499:ILE:HD12	1:L:500:LYS:N	2.14	0.63
1:E:661:LEU:HD11	1:E:662:GLU:HB2	1.78	0.63
1:F:465:LEU:HD21	1:F:480:ALA:HB2	1.81	0.63
1:F:647:ARG:CD	1:F:650:TYR:CE1	2.81	0.63
1:I:436:LEU:HD23	1:I:436:LEU:C	2.19	0.63
1:L:647:ARG:CD	1:L:650:TYR:CE1	2.81	0.63
1:A:340:VAL:HG12	1:A:345:TYR:OH	1.99	0.62
1:B:344:ASP:OD1	1:B:345:TYR:N	2.31	0.62
1:C:340:VAL:HG12	1:C:345:TYR:OH	1.99	0.62
1:C:378:PRO:O	1:C:379:LYS:HB3	1.99	0.62
1:C:524:VAL:HG13	1:C:529:GLY:O	1.99	0.62
1:D:647:ARG:HH11	1:D:649:GLN:CD	2.00	0.62
1:B:499:ILE:HD12	1:B:500:LYS:N	2.14	0.62
1:C:385:THR:CG2	1:C:392:ILE:H	2.12	0.62
1:H:404:ILE:H	1:H:404:ILE:HD13	1.63	0.62
1:H:465:LEU:HD21	1:H:480:ALA:HB2	1.81	0.62
1:I:533:ASP:OD2	1:I:533:ASP:N	2.32	0.62
1:K:340:VAL:HG12	1:K:345:TYR:OH	1.99	0.62
1:K:385:THR:HG21	1:K:392:ILE:H	1.63	0.62
1:A:634:THR:OG1	1:A:635:ARG:N	2.30	0.62
1:D:499:ILE:HD12	1:D:500:LYS:N	2.14	0.62
1:E:408:ILE:H	1:E:408:ILE:HD12	1.64	0.62
1:F:499:ILE:HD12	1:F:500:LYS:N	2.14	0.62
1:G:385:THR:CG2	1:G:392:ILE:H	2.12	0.62
1:H:660:GLN:CA	1:H:661:LEU:CB	2.71	0.62
1:K:517:PHE:HD2	1:K:536:TYR:CE2	2.09	0.62
1:K:525:ASN:OD1	1:K:526:PRO:HD3	1.98	0.62
1:A:517:PHE:HD2	1:A:536:TYR:CE2	2.09	0.62
1:A:518:ASN:HA	1:A:535:LEU:HD22	1.80	0.62
1:A:533:ASP:OD2	1:A:533:ASP:N	2.32	0.62
1:C:343:THR:HG22	1:C:344:ASP:N	2.13	0.62
1:C:415:PHE:HB2	1:C:485:VAL:HB	1.81	0.62
1:D:376:ALA:O	1:D:411:PRO:HD3	2.00	0.62
1:E:358:GLN:HB2	1:E:379:LYS:CA	2.30	0.62
1:G:356:ILE:O	1:G:356:ILE:HG12	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:408:ILE:HD12	1:G:408:ILE:H	1.64	0.62
1:G:533:ASP:OD2	1:G:533:ASP:N	2.32	0.62
1:J:465:LEU:HD21	1:J:480:ALA:HB2	1.81	0.62
1:A:378:PRO:O	1:A:379:LYS:HB3	1.99	0.62
1:B:376:ALA:O	1:B:411:PRO:HD3	1.99	0.62
1:D:647:ARG:CD	1:D:650:TYR:CE1	2.81	0.62
1:E:389:ARG:O	1:E:392:ILE:N	2.31	0.62
1:G:436:LEU:HD23	1:G:436:LEU:C	2.19	0.62
1:I:340:VAL:CG1	1:I:345:TYR:OH	2.48	0.62
1:J:647:ARG:HH11	1:J:649:GLN:CD	1.99	0.62
1:J:657:PRO:C	1:J:658:ILE:CD1	2.67	0.62
1:K:436:LEU:C	1:K:436:LEU:HD23	2.19	0.62
1:L:657:PRO:C	1:L:658:ILE:CD1	2.67	0.62
1:A:385:THR:HG21	1:A:392:ILE:H	1.63	0.62
1:A:408:ILE:H	1:A:408:ILE:HD12	1.64	0.62
1:C:340:VAL:CG1	1:C:345:TYR:OH	2.48	0.62
1:E:533:ASP:OD2	1:E:533:ASP:N	2.32	0.62
1:F:404:ILE:HD13	1:F:404:ILE:H	1.63	0.62
1:F:566:ASN:C	1:F:570:GLN:HE22	2.03	0.62
1:F:657:PRO:C	1:F:658:ILE:CD1	2.67	0.62
1:G:415:PHE:HB2	1:G:485:VAL:HB	1.81	0.62
1:H:660:GLN:CA	1:H:661:LEU:HB2	2.26	0.62
1:I:340:VAL:HG12	1:I:345:TYR:OH	1.99	0.62
1:I:518:ASN:HA	1:I:535:LEU:HD22	1.80	0.62
1:D:415:PHE:HB2	1:D:485:VAL:HB	1.82	0.62
1:G:341:THR:O	1:G:345:TYR:CE1	2.53	0.62
1:G:389:ARG:O	1:G:392:ILE:N	2.31	0.62
1:H:647:ARG:HG2	1:H:650:TYR:CE1	2.35	0.62
1:J:660:GLN:CA	1:J:661:LEU:HB2	2.26	0.62
1:K:340:VAL:CG1	1:K:345:TYR:OH	2.48	0.62
1:K:353:PHE:CG	1:K:395:TYR:CE2	2.87	0.62
1:K:524:VAL:HG13	1:K:529:GLY:O	1.99	0.62
1:B:647:ARG:CD	1:B:650:TYR:CE1	2.81	0.62
1:D:396:LEU:O	1:D:399:TYR:O	2.17	0.62
1:G:525:ASN:OD1	1:G:526:PRO:HD3	1.98	0.62
1:H:657:PRO:C	1:H:658:ILE:CD1	2.67	0.62
1:L:647:ARG:HG2	1:L:650:TYR:CE1	2.35	0.62
1:B:647:ARG:HH11	1:B:649:GLN:CD	1.99	0.62
1:E:401:LEU:CD2	1:E:402:ALA:CA	2.74	0.62
1:E:525:ASN:OD1	1:E:526:PRO:HD3	1.99	0.62
1:I:408:ILE:H	1:I:408:ILE:HD12	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:647:ARG:HG2	1:J:650:TYR:CE1	2.35	0.62
1:K:356:ILE:O	1:K:356:ILE:HG12	1.98	0.62
1:L:647:ARG:HH11	1:L:649:GLN:CD	2.00	0.62
1:A:340:VAL:CG1	1:A:345:TYR:OH	2.48	0.62
1:B:404:ILE:HD13	1:B:404:ILE:H	1.63	0.62
1:B:647:ARG:HG2	1:B:650:TYR:CE1	2.35	0.62
1:B:660:GLN:CA	1:B:661:LEU:CB	2.71	0.62
1:C:408:ILE:H	1:C:408:ILE:HD12	1.64	0.62
1:F:646:LEU:O	1:F:646:LEU:CD2	2.30	0.62
1:F:647:ARG:HG2	1:F:650:TYR:CE1	2.35	0.62
1:G:358:GLN:HB2	1:G:379:LYS:CA	2.30	0.62
1:G:524:VAL:HG13	1:G:529:GLY:O	1.99	0.62
1:H:376:ALA:O	1:H:411:PRO:HD3	2.00	0.62
1:H:396:LEU:O	1:H:399:TYR:O	2.17	0.62
1:I:356:ILE:O	1:I:356:ILE:HG12	1.99	0.62
1:J:376:ALA:O	1:J:411:PRO:HD3	2.00	0.62
1:K:343:THR:HG22	1:K:344:ASP:N	2.13	0.62
1:K:378:PRO:O	1:K:379:LYS:HB3	1.99	0.62
1:K:385:THR:CG2	1:K:392:ILE:H	2.12	0.62
1:A:341:THR:O	1:A:345:TYR:CE1	2.53	0.61
1:C:341:THR:O	1:C:345:TYR:CE1	2.53	0.61
1:C:353:PHE:CG	1:C:395:TYR:CE2	2.87	0.61
1:C:436:LEU:C	1:C:436:LEU:HD23	2.19	0.61
1:C:525:ASN:OD1	1:C:526:PRO:HD3	1.98	0.61
1:E:415:PHE:HB2	1:E:485:VAL:HB	1.81	0.61
1:E:427:ASN:ND2	1:E:660:GLN:HB2	2.15	0.61
1:E:521:ARG:O	1:E:533:ASP:HA	2.00	0.61
1:G:521:ARG:O	1:G:533:ASP:HA	2.00	0.61
1:J:566:ASN:C	1:J:570:GLN:HE22	2.03	0.61
1:L:408:ILE:C	1:L:409:ILE:CG2	2.68	0.61
1:L:566:ASN:C	1:L:570:GLN:HE22	2.03	0.61
1:L:660:GLN:CA	1:L:661:LEU:HB2	2.25	0.61
1:A:415:PHE:HB2	1:A:485:VAL:HB	1.81	0.61
1:A:427:ASN:ND2	1:A:660:GLN:HB2	2.15	0.61
1:A:521:ARG:O	1:A:533:ASP:HA	2.00	0.61
1:B:408:ILE:C	1:B:409:ILE:CG2	2.68	0.61
1:C:401:LEU:CD2	1:C:402:ALA:CB	2.69	0.61
1:C:427:ASN:ND2	1:C:660:GLN:HB2	2.15	0.61
1:E:340:VAL:CG1	1:E:345:TYR:OH	2.48	0.61
1:F:345:TYR:HE1	1:F:349:VAL:HG21	1.62	0.61
1:F:396:LEU:O	1:F:399:TYR:O	2.17	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:537:ASP:O	1:F:538:VAL:HG23	2.00	0.61
1:H:408:ILE:C	1:H:409:ILE:CG2	2.68	0.61
1:I:341:THR:O	1:I:345:TYR:CE1	2.53	0.61
1:L:347:THR:OG1	1:L:348:PHE:N	2.30	0.61
1:B:646:LEU:O	1:B:646:LEU:CD2	2.30	0.61
1:C:389:ARG:CA	1:C:392:ILE:HG12	2.28	0.61
1:E:341:THR:O	1:E:345:TYR:CE1	2.53	0.61
1:E:524:VAL:HG13	1:E:529:GLY:O	1.99	0.61
1:F:343:THR:O	1:F:347:THR:CG2	2.44	0.61
1:G:427:ASN:ND2	1:G:660:GLN:HB2	2.15	0.61
1:H:345:TYR:HE1	1:H:349:VAL:HG21	1.62	0.61
1:H:347:THR:OG1	1:H:348:PHE:N	2.30	0.61
1:I:385:THR:HG1	1:I:387:VAL:CG2	1.98	0.61
1:I:500:LYS:HB3	1:I:600:ASP:O	2.00	0.61
1:K:521:ARG:O	1:K:533:ASP:HA	2.00	0.61
1:L:660:GLN:CA	1:L:661:LEU:CB	2.71	0.61
1:C:533:ASP:OD2	1:C:533:ASP:N	2.32	0.61
1:D:408:ILE:C	1:D:409:ILE:CG2	2.68	0.61
1:D:647:ARG:HG2	1:D:650:TYR:CE1	2.35	0.61
1:F:568:ASN:OD1	1:F:569:ILE:N	2.30	0.61
1:G:525:ASN:CG	1:G:526:PRO:HD3	2.20	0.61
1:I:342:ALA:HB1	1:I:362:THR:CB	2.30	0.61
1:I:517:PHE:HD2	1:I:536:TYR:CE2	2.09	0.61
1:K:408:ILE:H	1:K:408:ILE:HD12	1.64	0.61
1:K:415:PHE:HB2	1:K:485:VAL:HB	1.81	0.61
1:K:500:LYS:HB3	1:K:600:ASP:O	2.00	0.61
1:K:518:ASN:HA	1:K:535:LEU:HD22	1.80	0.61
1:L:415:PHE:HB2	1:L:485:VAL:HB	1.82	0.61
1:A:342:ALA:HB1	1:A:362:THR:CB	2.30	0.61
1:A:436:LEU:HD23	1:A:436:LEU:C	2.19	0.61
1:E:356:ILE:HG12	1:E:356:ILE:O	1.98	0.61
1:E:378:PRO:O	1:E:379:LYS:HB3	1.99	0.61
1:G:634:THR:OG1	1:G:635:ARG:N	2.30	0.61
1:I:415:PHE:HB2	1:I:485:VAL:HB	1.81	0.61
1:I:436:LEU:HD22	1:I:655:LEU:CD2	2.29	0.61
1:I:524:VAL:HG13	1:I:529:GLY:O	1.99	0.61
1:K:358:GLN:HB2	1:K:379:LYS:CA	2.30	0.61
1:K:533:ASP:OD2	1:K:533:ASP:N	2.32	0.61
1:A:353:PHE:CG	1:A:395:TYR:CE2	2.87	0.61
1:B:348:PHE:O	1:B:351:GLU:N	2.21	0.61
1:D:657:PRO:C	1:D:658:ILE:CD1	2.67	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:340:VAL:CG1	1:G:345:TYR:OH	2.48	0.61
1:J:348:PHE:O	1:J:349:VAL:C	2.39	0.61
1:J:537:ASP:O	1:J:538:VAL:HG23	2.00	0.61
1:K:342:ALA:HB1	1:K:362:THR:CB	2.30	0.61
1:A:401:LEU:CD2	1:A:402:ALA:CA	2.74	0.61
1:C:521:ARG:O	1:C:533:ASP:HA	2.00	0.61
1:D:348:PHE:O	1:D:351:GLU:N	2.21	0.61
1:E:500:LYS:HB3	1:E:600:ASP:O	2.00	0.61
1:G:342:ALA:HB1	1:G:362:THR:CB	2.30	0.61
1:G:517:PHE:HD2	1:G:536:TYR:CE2	2.09	0.61
1:K:401:LEU:CD2	1:K:402:ALA:CA	2.74	0.61
1:K:427:ASN:ND2	1:K:660:GLN:HB2	2.15	0.61
1:L:376:ALA:O	1:L:411:PRO:HD3	2.00	0.61
1:A:647:ARG:HG3	1:A:650:TYR:CD1	2.36	0.61
1:B:566:ASN:C	1:B:570:GLN:HE22	2.03	0.61
1:C:358:GLN:HB2	1:C:379:LYS:CA	2.30	0.61
1:C:525:ASN:CG	1:C:526:PRO:HD3	2.20	0.61
1:D:566:ASN:C	1:D:570:GLN:HE22	2.03	0.61
1:G:436:LEU:HD22	1:G:655:LEU:CD2	2.29	0.61
1:G:500:LYS:HB3	1:G:600:ASP:O	2.00	0.61
1:H:647:ARG:HH11	1:H:649:GLN:CD	2.00	0.61
1:A:389:ARG:CA	1:A:392:ILE:HG12	2.28	0.61
1:A:457:SER:H	1:A:634:THR:HG23	1.56	0.61
1:A:500:LYS:HB3	1:A:600:ASP:O	2.00	0.61
1:B:415:PHE:HB2	1:B:485:VAL:HB	1.82	0.61
1:E:517:PHE:HD2	1:E:536:TYR:CE2	2.09	0.61
1:G:504:GLN:HE22	1:G:598:PRO:HA	1.66	0.61
1:I:353:PHE:CG	1:I:395:TYR:CE2	2.87	0.61
1:I:504:GLN:HE22	1:I:598:PRO:HA	1.66	0.61
1:I:521:ARG:O	1:I:533:ASP:HA	2.00	0.61
1:L:537:ASP:O	1:L:538:VAL:HG23	2.00	0.61
1:A:525:ASN:CG	1:A:526:PRO:HD3	2.20	0.61
1:A:525:ASN:OD1	1:A:526:PRO:HD3	1.98	0.61
1:C:385:THR:HG1	1:C:387:VAL:CG2	2.04	0.61
1:H:566:ASN:C	1:H:570:GLN:HE22	2.03	0.61
1:I:427:ASN:ND2	1:I:660:GLN:HB2	2.15	0.61
1:J:415:PHE:HB2	1:J:485:VAL:HB	1.81	0.61
1:K:389:ARG:CA	1:K:392:ILE:HG12	2.28	0.61
1:K:647:ARG:HG3	1:K:650:TYR:CD1	2.36	0.61
1:A:358:GLN:HB2	1:A:379:LYS:CA	2.30	0.60
1:C:443:LYS:HE3	1:C:470:ASP:O	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:647:ARG:HG3	1:C:650:TYR:CD1	2.36	0.60
1:F:376:ALA:O	1:F:411:PRO:HD3	2.00	0.60
1:E:443:LYS:HE3	1:E:470:ASP:O	2.01	0.60
1:H:348:PHE:O	1:H:349:VAL:C	2.39	0.60
1:J:408:ILE:C	1:J:409:ILE:CG2	2.68	0.60
1:K:443:LYS:HE3	1:K:470:ASP:O	2.01	0.60
1:A:353:PHE:CZ	1:A:395:TYR:HD2	2.09	0.60
1:C:342:ALA:HB1	1:C:362:THR:CB	2.30	0.60
1:E:429:LEU:HD22	1:E:431:GLU:O	2.01	0.60
1:E:457:SER:H	1:E:634:THR:HG21	1.66	0.60
1:H:415:PHE:HB2	1:H:485:VAL:HB	1.81	0.60
1:I:358:GLN:HB2	1:I:379:LYS:CA	2.30	0.60
1:K:341:THR:O	1:K:345:TYR:CE1	2.53	0.60
1:K:429:LEU:HD22	1:K:431:GLU:O	2.01	0.60
1:A:504:GLN:HE22	1:A:598:PRO:HA	1.66	0.60
1:E:342:ALA:HB1	1:E:362:THR:CB	2.30	0.60
1:E:504:GLN:HE22	1:E:598:PRO:HA	1.66	0.60
1:H:537:ASP:O	1:H:538:VAL:HG23	2.01	0.60
1:I:525:ASN:CG	1:I:526:PRO:HD3	2.20	0.60
1:I:647:ARG:HG3	1:I:650:TYR:CD1	2.36	0.60
1:J:593:GLY:HA3	1:J:603:TYR:O	2.02	0.60
1:B:348:PHE:O	1:B:349:VAL:C	2.39	0.60
1:D:398:ASP:CG	1:E:663:HIS:HB3	2.22	0.60
1:D:537:ASP:O	1:D:538:VAL:HG23	2.00	0.60
1:F:347:THR:OG1	1:F:348:PHE:N	2.30	0.60
1:I:443:LYS:HE3	1:I:470:ASP:O	2.01	0.60
1:E:647:ARG:HG3	1:E:650:TYR:CD1	2.36	0.60
1:G:647:ARG:HG3	1:G:650:TYR:CD1	2.36	0.60
1:J:664:HIS:O	1:J:664:HIS:CD2	2.54	0.60
1:L:656:GLU:OE1	1:L:664:HIS:O	2.20	0.60
1:B:664:HIS:O	1:B:664:HIS:CD2	2.54	0.60
1:C:500:LYS:HB3	1:C:600:ASP:O	2.00	0.60
1:C:504:GLN:HE22	1:C:598:PRO:HA	1.66	0.60
1:G:429:LEU:HD22	1:G:431:GLU:O	2.02	0.60
1:A:429:LEU:HD22	1:A:431:GLU:O	2.02	0.60
1:A:443:LYS:HE3	1:A:470:ASP:O	2.02	0.60
1:C:342:ALA:HB1	1:C:362:THR:O	2.02	0.60
1:J:343:THR:O	1:J:347:THR:CG2	2.44	0.60
1:B:656:GLU:OE1	1:B:664:HIS:O	2.20	0.60
1:C:356:ILE:O	1:C:356:ILE:HG12	1.98	0.60
1:F:593:GLY:HA3	1:F:603:TYR:O	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:647:ARG:CG	1:F:650:TYR:CE1	2.85	0.60
1:G:443:LYS:HE3	1:G:470:ASP:O	2.01	0.60
1:G:457:SER:H	1:G:634:THR:HG21	1.66	0.60
1:K:342:ALA:HB1	1:K:362:THR:O	2.02	0.60
1:C:566:ASN:O	1:C:570:GLN:NE2	2.35	0.60
1:D:350:SER:HA	1:D:357:ILE:HD11	1.84	0.60
1:D:409:ILE:HD12	1:D:410:SER:N	2.17	0.60
1:E:342:ALA:HB1	1:E:362:THR:O	2.02	0.60
1:E:525:ASN:CG	1:E:526:PRO:HD3	2.20	0.60
1:F:415:PHE:HB2	1:F:485:VAL:HB	1.81	0.60
1:J:409:ILE:HD12	1:J:410:SER:N	2.16	0.60
1:J:464:MET:HG3	1:J:465:LEU:N	2.17	0.60
1:K:436:LEU:HD22	1:K:655:LEU:CD2	2.29	0.60
1:L:348:PHE:O	1:L:349:VAL:C	2.39	0.60
1:L:593:GLY:HA3	1:L:603:TYR:O	2.02	0.60
1:L:664:HIS:O	1:L:664:HIS:CD2	2.55	0.60
1:B:343:THR:O	1:B:347:THR:CG2	2.44	0.59
1:B:359:ALA:HB1	1:B:455:PHE:CE2	2.37	0.59
1:D:647:ARG:CG	1:D:650:TYR:CE1	2.85	0.59
1:D:656:GLU:OE1	1:D:664:HIS:O	2.20	0.59
1:L:359:ALA:HB1	1:L:455:PHE:CE2	2.37	0.59
1:L:464:MET:HG3	1:L:465:LEU:N	2.17	0.59
1:D:359:ALA:HB1	1:D:455:PHE:CE2	2.37	0.59
1:F:409:ILE:HD12	1:F:410:SER:N	2.17	0.59
1:H:359:ALA:HB1	1:H:455:PHE:CE2	2.37	0.59
1:H:409:ILE:HD12	1:H:410:SER:N	2.17	0.59
1:H:568:ASN:OD1	1:H:569:ILE:N	2.30	0.59
1:J:550:ILE:HD13	1:J:596:ASN:HA	1.84	0.59
1:B:537:ASP:O	1:B:538:VAL:HG23	2.00	0.59
1:B:593:GLY:HA3	1:B:603:TYR:O	2.02	0.59
1:B:660:GLN:CA	1:B:661:LEU:HB2	2.26	0.59
1:C:429:LEU:HD22	1:C:431:GLU:O	2.02	0.59
1:D:664:HIS:O	1:D:664:HIS:CD2	2.55	0.59
1:E:385:THR:O	1:E:388:GLN:N	2.35	0.59
1:F:359:ALA:HB1	1:F:455:PHE:CE2	2.37	0.59
1:G:509:SER:OG	1:G:626:ASP:N	2.34	0.59
1:H:646:LEU:O	1:H:646:LEU:CD2	2.30	0.59
1:I:385:THR:O	1:I:388:GLN:N	2.35	0.59
1:K:531:GLU:C	1:K:532:GLU:CD	2.61	0.59
1:A:342:ALA:HB1	1:A:362:THR:O	2.02	0.59
1:A:356:ILE:O	1:A:356:ILE:HG12	1.98	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:557:PRO:HG3	1:B:589:TYR:CZ	2.38	0.59
1:D:398:ASP:O	1:E:663:HIS:HB3	2.02	0.59
1:G:385:THR:O	1:G:388:GLN:N	2.35	0.59
1:H:464:MET:HG3	1:H:465:LEU:N	2.17	0.59
1:H:593:GLY:HA3	1:H:603:TYR:O	2.02	0.59
1:A:457:SER:H	1:A:634:THR:HG21	1.66	0.59
1:A:531:GLU:C	1:A:532:GLU:CD	2.61	0.59
1:B:440:ILE:HG22	1:B:471:ALA:CB	2.33	0.59
1:E:436:LEU:HD22	1:E:655:LEU:CD2	2.29	0.59
1:F:408:ILE:C	1:F:409:ILE:CG2	2.68	0.59
1:F:464:MET:HG3	1:F:465:LEU:N	2.17	0.59
1:F:557:PRO:HG3	1:F:589:TYR:CZ	2.38	0.59
1:F:664:HIS:O	1:F:664:HIS:CD2	2.54	0.59
1:H:647:ARG:CG	1:H:650:TYR:CE1	2.85	0.59
1:I:389:ARG:O	1:I:392:ILE:N	2.31	0.59
1:L:647:ARG:CG	1:L:650:TYR:CE1	2.85	0.59
1:D:453:GLU:CD	1:D:641:VAL:HG23	2.23	0.59
1:E:340:VAL:C	1:E:341:THR:CG2	2.62	0.59
1:F:656:GLU:OE1	1:F:664:HIS:O	2.20	0.59
1:I:342:ALA:HB1	1:I:362:THR:O	2.02	0.59
1:I:429:LEU:HD22	1:I:431:GLU:O	2.01	0.59
1:J:656:GLU:OE1	1:J:664:HIS:O	2.20	0.59
1:L:550:ILE:HD13	1:L:596:ASN:HA	1.84	0.59
1:L:557:PRO:HG3	1:L:589:TYR:CZ	2.38	0.59
1:B:568:ASN:OD1	1:B:569:ILE:N	2.30	0.59
1:D:402:ALA:N	1:D:403:PRO:CD	2.66	0.59
1:D:440:ILE:HG22	1:D:471:ALA:CB	2.33	0.59
1:D:646:LEU:O	1:D:646:LEU:CD2	2.30	0.59
1:F:350:SER:HA	1:F:357:ILE:HD11	1.84	0.59
1:F:440:ILE:HG22	1:F:471:ALA:CB	2.33	0.59
1:F:509:SER:OG	1:F:626:ASP:N	2.32	0.59
1:G:353:PHE:CG	1:G:395:TYR:CE2	2.87	0.59
1:G:566:ASN:O	1:G:570:GLN:NE2	2.35	0.59
1:I:531:GLU:C	1:I:532:GLU:CD	2.61	0.59
1:L:440:ILE:HG22	1:L:471:ALA:CB	2.33	0.59
1:C:509:SER:OG	1:C:626:ASP:N	2.34	0.59
1:D:348:PHE:O	1:D:349:VAL:C	2.39	0.59
1:E:531:GLU:C	1:E:532:GLU:CD	2.61	0.59
1:H:664:HIS:O	1:H:664:HIS:CD2	2.54	0.59
1:K:504:GLN:HE22	1:K:598:PRO:HA	1.66	0.59
1:L:350:SER:HA	1:L:357:ILE:HD11	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:350:SER:HA	1:B:357:ILE:HD11	1.84	0.59
1:B:367:THR:CG2	1:B:368:LYS:N	2.44	0.59
1:D:593:GLY:HA3	1:D:603:TYR:O	2.02	0.59
1:G:531:GLU:C	1:G:532:GLU:CD	2.61	0.59
1:H:557:PRO:HG3	1:H:589:TYR:CZ	2.38	0.59
1:J:359:ALA:HB1	1:J:455:PHE:CE2	2.37	0.59
1:J:453:GLU:CD	1:J:641:VAL:HG23	2.23	0.59
1:L:346:ASP:OD2	1:L:361:GLN:HA	2.03	0.59
1:B:550:ILE:HD13	1:B:596:ASN:HA	1.84	0.59
1:B:464:MET:HG3	1:B:465:LEU:N	2.17	0.58
1:F:453:GLU:CD	1:F:641:VAL:HG23	2.23	0.58
1:G:342:ALA:HB1	1:G:362:THR:O	2.02	0.58
1:J:647:ARG:CG	1:J:650:TYR:CE1	2.85	0.58
1:A:385:THR:O	1:A:388:GLN:N	2.35	0.58
1:C:385:THR:O	1:C:388:GLN:N	2.35	0.58
1:C:389:ARG:O	1:C:392:ILE:N	2.31	0.58
1:C:617:GLU:HG3	1:C:618:VAL:HG13	1.85	0.58
1:D:464:MET:HG3	1:D:465:LEU:N	2.17	0.58
1:F:346:ASP:OD2	1:F:361:GLN:HA	2.03	0.58
1:F:550:ILE:HD13	1:F:596:ASN:HA	1.84	0.58
1:H:402:ALA:N	1:H:403:PRO:CD	2.66	0.58
1:H:440:ILE:HG22	1:H:471:ALA:CB	2.33	0.58
1:H:550:ILE:HD13	1:H:596:ASN:HA	1.84	0.58
1:L:409:ILE:HD12	1:L:410:SER:N	2.17	0.58
1:A:385:THR:OG1	1:A:389:ARG:N	2.37	0.58
1:A:436:LEU:HD22	1:A:655:LEU:CD2	2.29	0.58
1:D:396:LEU:HD21	1:D:406:PRO:HG2	1.85	0.58
1:H:509:SER:OG	1:H:626:ASP:N	2.32	0.58
1:I:524:VAL:HG13	1:I:529:GLY:H	1.69	0.58
1:J:346:ASP:OD2	1:J:361:GLN:HA	2.03	0.58
1:J:557:PRO:HG3	1:J:589:TYR:CZ	2.38	0.58
1:K:385:THR:O	1:K:388:GLN:N	2.35	0.58
1:L:453:GLU:CD	1:L:641:VAL:HG23	2.23	0.58
1:A:524:VAL:HG13	1:A:529:GLY:H	1.69	0.58
1:B:647:ARG:CG	1:B:650:TYR:CE1	2.85	0.58
1:C:531:GLU:C	1:C:532:GLU:CD	2.61	0.58
1:C:664:HIS:O	1:C:665:HIS:CB	2.51	0.58
1:D:346:ASP:OD2	1:D:361:GLN:HA	2.03	0.58
1:E:524:VAL:HG13	1:E:529:GLY:H	1.68	0.58
1:G:385:THR:OG1	1:G:389:ARG:N	2.37	0.58
1:G:524:VAL:HG13	1:G:529:GLY:H	1.69	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:440:ILE:HG22	1:J:471:ALA:CB	2.33	0.58
1:K:524:VAL:HG13	1:K:529:GLY:H	1.69	0.58
1:K:664:HIS:O	1:K:665:HIS:CB	2.51	0.58
1:L:402:ALA:N	1:L:403:PRO:CD	2.66	0.58
1:A:664:HIS:O	1:A:665:HIS:CB	2.51	0.58
1:C:385:THR:OG1	1:C:389:ARG:N	2.37	0.58
1:D:557:PRO:HG3	1:D:589:TYR:CZ	2.38	0.58
1:I:457:SER:H	1:I:634:THR:HG21	1.66	0.58
1:K:389:ARG:O	1:K:392:ILE:N	2.31	0.58
1:K:499:ILE:HD11	1:K:623:LEU:HD23	1.86	0.58
1:L:504:GLN:NE2	1:L:597:TYR:O	2.37	0.58
1:A:408:ILE:HD12	1:A:408:ILE:N	2.19	0.58
1:B:346:ASP:OD2	1:B:361:GLN:HA	2.03	0.58
1:B:402:ALA:N	1:B:403:PRO:CD	2.66	0.58
1:E:389:ARG:CA	1:E:392:ILE:HG12	2.28	0.58
1:H:453:GLU:CD	1:H:641:VAL:HG23	2.23	0.58
1:I:385:THR:OG1	1:I:389:ARG:N	2.37	0.58
1:I:386:THR:C	1:I:388:GLN:H	2.07	0.58
1:I:499:ILE:HD11	1:I:623:LEU:HD23	1.86	0.58
1:K:408:ILE:HD12	1:K:408:ILE:N	2.19	0.58
1:C:385:THR:CB	1:C:389:ARG:H	2.17	0.58
1:D:476:ILE:HG22	1:D:477:GLY:N	2.18	0.58
1:E:353:PHE:CG	1:E:395:TYR:CE2	2.87	0.58
1:G:486:ARG:NH1	1:G:500:LYS:O	2.36	0.58
1:H:656:GLU:OE1	1:H:664:HIS:O	2.20	0.58
1:I:401:LEU:CD2	1:I:402:ALA:CA	2.74	0.58
1:K:617:GLU:HG3	1:K:618:VAL:HG13	1.85	0.58
1:B:453:GLU:CD	1:B:641:VAL:HG23	2.23	0.58
1:D:504:GLN:NE2	1:D:597:TYR:O	2.37	0.58
1:F:389:ARG:NH2	1:F:410:SER:OG	2.37	0.58
1:G:408:ILE:HD12	1:G:408:ILE:N	2.19	0.58
1:G:499:ILE:HD11	1:G:623:LEU:HD23	1.86	0.58
1:J:350:SER:HA	1:J:357:ILE:HD11	1.84	0.58
1:J:396:LEU:HD21	1:J:406:PRO:HG2	1.85	0.58
1:K:525:ASN:CG	1:K:526:PRO:HD3	2.20	0.58
1:K:635:ARG:HG3	1:K:636:ASP:N	2.19	0.58
1:L:409:ILE:CD1	1:L:410:SER:O	2.50	0.58
1:L:593:GLY:HA3	1:L:604:TRP:HA	1.86	0.58
1:A:566:ASN:O	1:A:570:GLN:NE2	2.35	0.58
1:A:635:ARG:HG3	1:A:636:ASP:N	2.19	0.58
1:C:424:TYR:CB	1:C:475:VAL:H	2.17	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:389:ARG:NH2	1:D:410:SER:OG	2.37	0.58
1:D:593:GLY:HA3	1:D:604:TRP:HA	1.86	0.58
1:F:348:PHE:O	1:F:349:VAL:C	2.39	0.58
1:G:525:ASN:HB3	1:G:526:PRO:CD	2.17	0.58
1:H:346:ASP:OD2	1:H:361:GLN:HA	2.03	0.58
1:C:408:ILE:HD12	1:C:408:ILE:N	2.19	0.58
1:C:524:VAL:HG13	1:C:529:GLY:H	1.69	0.58
1:E:349:VAL:C	1:E:351:GLU:H	2.08	0.58
1:E:566:ASN:O	1:E:570:GLN:NE2	2.35	0.58
1:H:350:SER:HA	1:H:357:ILE:HD11	1.84	0.58
1:K:385:THR:OG1	1:K:389:ARG:N	2.37	0.58
1:A:499:ILE:HD11	1:A:623:LEU:HD23	1.86	0.57
1:A:536:TYR:CD1	1:A:586:ARG:HD3	2.39	0.57
1:B:565:GLU:C	1:B:570:GLN:NE2	2.58	0.57
1:C:536:TYR:CD1	1:C:586:ARG:HD3	2.39	0.57
1:E:493:LYS:HE2	1:E:494:THR:O	2.04	0.57
1:F:402:ALA:N	1:F:403:PRO:CD	2.66	0.57
1:F:504:GLN:NE2	1:F:597:TYR:O	2.37	0.57
1:L:389:ARG:NH2	1:L:410:SER:OG	2.37	0.57
1:L:396:LEU:HD13	1:L:406:PRO:HD2	1.86	0.57
1:A:386:THR:C	1:A:388:GLN:H	2.07	0.57
1:A:389:ARG:O	1:A:392:ILE:N	2.31	0.57
1:C:486:ARG:NH1	1:C:500:LYS:O	2.36	0.57
1:E:385:THR:OG1	1:E:389:ARG:N	2.37	0.57
1:E:408:ILE:HD12	1:E:408:ILE:N	2.19	0.57
1:F:396:LEU:HD21	1:F:406:PRO:HG2	1.85	0.57
1:F:593:GLY:HA3	1:F:604:TRP:HA	1.86	0.57
1:G:424:TYR:CB	1:G:475:VAL:H	2.17	0.57
1:H:389:ARG:NH2	1:H:410:SER:OG	2.37	0.57
1:H:656:GLU:OE1	1:H:664:HIS:HB2	2.04	0.57
1:I:617:GLU:HG3	1:I:618:VAL:HG13	1.86	0.57
1:L:565:GLU:C	1:L:570:GLN:NE2	2.58	0.57
1:A:424:TYR:CB	1:A:475:VAL:H	2.17	0.57
1:B:396:LEU:HD21	1:B:406:PRO:HG2	1.85	0.57
1:C:499:ILE:HD11	1:C:623:LEU:HD23	1.86	0.57
1:D:396:LEU:HD13	1:D:406:PRO:HD2	1.87	0.57
1:E:385:THR:CG2	1:E:392:ILE:HG23	2.35	0.57
1:F:657:PRO:O	1:F:658:ILE:CD1	2.53	0.57
1:H:504:GLN:NE2	1:H:597:TYR:O	2.37	0.57
1:I:424:TYR:CB	1:I:475:VAL:H	2.17	0.57
1:J:389:ARG:NH2	1:J:410:SER:OG	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:593:GLY:HA3	1:J:604:TRP:HA	1.86	0.57
1:K:457:SER:H	1:K:634:THR:HG21	1.66	0.57
1:K:509:SER:OG	1:K:626:ASP:N	2.34	0.57
1:K:536:TYR:CD1	1:K:586:ARG:HD3	2.39	0.57
1:L:656:GLU:OE1	1:L:664:HIS:HB2	2.04	0.57
1:B:389:ARG:NH2	1:B:410:SER:OG	2.37	0.57
1:B:657:PRO:O	1:B:658:ILE:CD1	2.53	0.57
1:E:424:TYR:CB	1:E:475:VAL:H	2.17	0.57
1:F:409:ILE:CD1	1:F:410:SER:N	2.67	0.57
1:F:656:GLU:OE1	1:F:664:HIS:HB2	2.04	0.57
1:H:565:GLU:C	1:H:570:GLN:NE2	2.58	0.57
1:J:656:GLU:OE1	1:J:664:HIS:HB2	2.04	0.57
1:K:424:TYR:CB	1:K:475:VAL:H	2.17	0.57
1:A:509:SER:OG	1:A:626:ASP:N	2.34	0.57
1:A:617:GLU:HG3	1:A:618:VAL:HG13	1.86	0.57
1:B:409:ILE:HD12	1:B:410:SER:N	2.16	0.57
1:C:386:THR:C	1:C:388:GLN:H	2.07	0.57
1:C:436:LEU:HD22	1:C:655:LEU:CD2	2.29	0.57
1:D:656:GLU:OE1	1:D:664:HIS:HB2	2.04	0.57
1:G:349:VAL:C	1:G:351:GLU:H	2.08	0.57
1:H:646:LEU:C	1:H:646:LEU:CD2	2.72	0.57
1:I:385:THR:HG21	1:I:389:ARG:O	2.04	0.57
1:I:664:HIS:O	1:I:665:HIS:CB	2.51	0.57
1:K:385:THR:HG21	1:K:389:ARG:O	2.04	0.57
1:K:566:ASN:O	1:K:570:GLN:NE2	2.35	0.57
1:C:349:VAL:C	1:C:351:GLU:H	2.08	0.57
1:C:493:LYS:HE2	1:C:494:THR:O	2.04	0.57
1:D:550:ILE:HD13	1:D:596:ASN:HA	1.84	0.57
1:D:657:PRO:O	1:D:658:ILE:CD1	2.53	0.57
1:E:499:ILE:HD11	1:E:623:LEU:HD23	1.86	0.57
1:F:656:GLU:OE1	1:F:664:HIS:CB	2.53	0.57
1:G:493:LYS:HE2	1:G:494:THR:O	2.04	0.57
1:H:657:PRO:O	1:H:658:ILE:CD1	2.53	0.57
1:I:566:ASN:O	1:I:570:GLN:NE2	2.35	0.57
1:K:387:VAL:C	1:K:388:GLN:CG	2.73	0.57
1:L:656:GLU:OE1	1:L:664:HIS:CB	2.53	0.57
1:B:504:GLN:NE2	1:B:597:TYR:O	2.37	0.57
1:B:656:GLU:OE1	1:B:664:HIS:HB2	2.04	0.57
1:D:565:GLU:C	1:D:570:GLN:NE2	2.58	0.57
1:E:486:ARG:NH1	1:E:500:LYS:O	2.36	0.57
1:F:346:ASP:OD1	1:F:362:THR:OG1	2.23	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:385:THR:HG21	1:G:389:ARG:O	2.04	0.57
1:I:408:ILE:HD12	1:I:408:ILE:N	2.19	0.57
1:I:493:LYS:HE2	1:I:494:THR:O	2.04	0.57
1:J:565:GLU:C	1:J:570:GLN:NE2	2.58	0.57
1:J:656:GLU:OE1	1:J:664:HIS:CB	2.53	0.57
1:K:493:LYS:HE2	1:K:494:THR:O	2.04	0.57
1:L:409:ILE:CD1	1:L:410:SER:N	2.67	0.57
1:L:646:LEU:C	1:L:646:LEU:CD2	2.72	0.57
1:C:635:ARG:HH22	1:D:661:LEU:CD1	2.14	0.57
1:G:379:LYS:O	1:G:379:LYS:HG2	2.05	0.57
1:I:536:TYR:CD1	1:I:586:ARG:HD3	2.39	0.57
1:B:509:SER:OG	1:B:626:ASP:N	2.32	0.57
1:D:409:ILE:CD1	1:D:410:SER:N	2.67	0.57
1:D:656:GLU:OE1	1:D:664:HIS:CB	2.53	0.57
1:E:536:TYR:CD1	1:E:586:ARG:HD3	2.39	0.57
1:F:565:GLU:C	1:F:570:GLN:NE2	2.58	0.57
1:G:386:THR:C	1:G:388:GLN:H	2.07	0.57
1:G:536:TYR:CD1	1:G:586:ARG:HD3	2.39	0.57
1:I:385:THR:CG2	1:I:392:ILE:HG23	2.35	0.57
1:J:657:PRO:O	1:J:658:ILE:CD1	2.53	0.57
1:A:385:THR:CB	1:A:389:ARG:H	2.17	0.57
1:C:385:THR:CG2	1:C:392:ILE:HG23	2.35	0.57
1:C:387:VAL:C	1:C:388:GLN:CG	2.73	0.57
1:E:382:LEU:HD21	1:E:643:GLU:HG3	1.87	0.57
1:F:405:THR:O	1:F:406:PRO:O	2.23	0.57
1:G:385:THR:CG2	1:G:392:ILE:HG23	2.35	0.57
1:H:656:GLU:OE1	1:H:664:HIS:CB	2.53	0.57
1:I:349:VAL:C	1:I:351:GLU:H	2.08	0.57
1:I:387:VAL:C	1:I:388:GLN:CG	2.73	0.57
1:J:504:GLN:NE2	1:J:597:TYR:O	2.37	0.57
1:K:385:THR:CG2	1:K:392:ILE:HG23	2.35	0.57
1:L:396:LEU:HD21	1:L:406:PRO:HG2	1.85	0.57
1:A:493:LYS:HE2	1:A:494:THR:O	2.04	0.56
1:B:346:ASP:OD1	1:B:362:THR:OG1	2.23	0.56
1:G:617:GLU:HG3	1:G:618:VAL:HG13	1.85	0.56
1:H:396:LEU:HD21	1:H:406:PRO:HG2	1.85	0.56
1:I:387:VAL:O	1:I:388:GLN:CD	2.44	0.56
1:K:379:LYS:HG2	1:K:379:LYS:O	2.05	0.56
1:K:454:ILE:HG22	1:K:455:PHE:N	2.20	0.56
1:A:385:THR:HG21	1:A:389:ARG:O	2.05	0.56
1:A:387:VAL:O	1:A:388:GLN:CD	2.44	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:405:THR:O	1:B:406:PRO:O	2.23	0.56
1:D:568:ASN:OD1	1:D:569:ILE:N	2.30	0.56
1:G:388:GLN:O	1:G:389:ARG:NE	2.39	0.56
1:G:389:ARG:CA	1:G:392:ILE:HG12	2.28	0.56
1:G:664:HIS:O	1:G:665:HIS:CB	2.51	0.56
1:H:409:ILE:CD1	1:H:410:SER:N	2.67	0.56
1:H:593:GLY:HA3	1:H:604:TRP:HA	1.86	0.56
1:J:402:ALA:N	1:J:403:PRO:CD	2.66	0.56
1:L:568:ASN:OD1	1:L:569:ILE:N	2.30	0.56
1:A:349:VAL:C	1:A:351:GLU:H	2.08	0.56
1:A:385:THR:CG2	1:A:392:ILE:HG23	2.35	0.56
1:A:387:VAL:C	1:A:388:GLN:CG	2.73	0.56
1:A:525:ASN:HB3	1:A:526:PRO:CD	2.17	0.56
1:B:499:ILE:HG23	1:B:602:ILE:HB	1.87	0.56
1:C:427:ASN:ND2	1:C:427:ASN:H	2.03	0.56
1:D:409:ILE:CD1	1:D:410:SER:O	2.50	0.56
1:E:386:THR:C	1:E:388:GLN:H	2.07	0.56
1:E:635:ARG:HH22	1:F:661:LEU:CD1	2.14	0.56
1:G:387:VAL:O	1:G:388:GLN:CD	2.44	0.56
1:H:405:THR:O	1:H:406:PRO:O	2.23	0.56
1:I:427:ASN:ND2	1:I:427:ASN:H	2.03	0.56
1:K:349:VAL:C	1:K:351:GLU:H	2.08	0.56
1:K:387:VAL:O	1:K:388:GLN:CD	2.44	0.56
1:K:388:GLN:O	1:K:389:ARG:NE	2.39	0.56
1:L:476:ILE:HG22	1:L:477:GLY:N	2.18	0.56
1:B:656:GLU:OE1	1:B:664:HIS:CB	2.53	0.56
1:C:385:THR:HG21	1:C:389:ARG:O	2.04	0.56
1:C:457:SER:H	1:C:634:THR:HG21	1.66	0.56
1:D:346:ASP:OD1	1:D:362:THR:OG1	2.23	0.56
1:E:385:THR:HG21	1:E:389:ARG:O	2.04	0.56
1:G:403:PRO:CD	1:J:366:SER:HA	2.24	0.56
1:H:596:ASN:HD22	1:H:599:ALA:H	1.54	0.56
1:J:396:LEU:HD13	1:J:406:PRO:HD2	1.86	0.56
1:J:509:SER:OG	1:J:626:ASP:N	2.32	0.56
1:K:382:LEU:HD21	1:K:643:GLU:HG3	1.87	0.56
1:K:387:VAL:HG21	1:K:390:GLU:HB2	1.88	0.56
1:K:486:ARG:NH1	1:K:500:LYS:O	2.36	0.56
1:A:486:ARG:NH1	1:A:500:LYS:O	2.36	0.56
1:C:387:VAL:O	1:C:388:GLN:CD	2.44	0.56
1:D:499:ILE:HG23	1:D:602:ILE:HB	1.87	0.56
1:G:387:VAL:C	1:G:388:GLN:CG	2.73	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:427:ASN:ND2	1:G:427:ASN:H	2.03	0.56
1:I:385:THR:CB	1:I:389:ARG:H	2.17	0.56
1:K:385:THR:CB	1:K:389:ARG:H	2.17	0.56
1:K:525:ASN:HB3	1:K:526:PRO:CD	2.17	0.56
1:L:657:PRO:O	1:L:658:ILE:CD1	2.53	0.56
1:A:342:ALA:CB	1:A:362:THR:CG2	2.84	0.56
1:A:388:GLN:O	1:A:389:ARG:NE	2.38	0.56
1:B:409:ILE:CD1	1:B:410:SER:N	2.67	0.56
1:B:409:ILE:CD1	1:B:410:SER:O	2.50	0.56
1:B:593:GLY:HA3	1:B:604:TRP:HA	1.86	0.56
1:B:644:ASN:ND2	1:B:644:ASN:C	2.59	0.56
1:D:568:ASN:CG	1:D:569:ILE:N	2.59	0.56
1:E:389:ARG:HA	1:E:392:ILE:CG1	2.29	0.56
1:F:396:LEU:HD13	1:F:406:PRO:HD2	1.86	0.56
1:I:387:VAL:HG21	1:I:390:GLU:HB2	1.88	0.56
1:I:509:SER:OG	1:I:626:ASP:N	2.34	0.56
1:J:646:LEU:C	1:J:646:LEU:CD2	2.72	0.56
1:L:346:ASP:OD1	1:L:362:THR:OG1	2.23	0.56
1:A:387:VAL:HG21	1:A:390:GLU:HB2	1.88	0.56
1:B:396:LEU:HD13	1:B:406:PRO:HD2	1.86	0.56
1:E:664:HIS:O	1:E:665:HIS:CB	2.51	0.56
1:G:560:SER:N	1:G:561:GLY:HA2	2.20	0.56
1:H:568:ASN:CG	1:H:569:ILE:N	2.59	0.56
1:L:405:THR:O	1:L:406:PRO:O	2.23	0.56
1:L:568:ASN:CG	1:L:569:ILE:N	2.59	0.56
1:E:379:LYS:HG2	1:E:379:LYS:O	2.05	0.56
1:E:387:VAL:O	1:E:388:GLN:CD	2.44	0.56
1:E:509:SER:OG	1:E:626:ASP:N	2.34	0.56
1:F:596:ASN:HD22	1:F:599:ALA:H	1.54	0.56
1:F:644:ASN:ND2	1:F:644:ASN:C	2.59	0.56
1:G:387:VAL:HG21	1:G:390:GLU:HB2	1.88	0.56
1:I:379:LYS:O	1:I:379:LYS:HG2	2.05	0.56
1:I:389:ARG:HA	1:I:392:ILE:CG1	2.29	0.56
1:J:405:THR:O	1:J:406:PRO:O	2.23	0.56
1:K:347:THR:O	1:K:348:PHE:C	2.44	0.56
1:K:386:THR:C	1:K:388:GLN:H	2.07	0.56
1:A:379:LYS:O	1:A:379:LYS:HG2	2.05	0.56
1:E:387:VAL:HG21	1:E:390:GLU:HB2	1.88	0.56
1:E:617:GLU:HG3	1:E:618:VAL:HG13	1.85	0.56
1:K:448:TYR:CD1	1:K:642:PHE:HB2	2.41	0.56
1:L:596:ASN:HD22	1:L:599:ALA:H	1.54	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:427:ASN:ND2	1:A:427:ASN:H	2.03	0.56
1:B:366:SER:CB	1:K:403:PRO:HA	2.22	0.56
1:B:658:ILE:HD13	1:B:658:ILE:N	2.21	0.56
1:C:388:GLN:O	1:C:389:ARG:NE	2.39	0.56
1:D:359:ALA:O	1:D:376:ALA:HA	2.06	0.56
1:D:647:ARG:HD3	1:D:649:GLN:HG3	1.88	0.56
1:E:401:LEU:HD12	1:H:364:THR:HG23	1.67	0.56
1:E:448:TYR:CD1	1:E:642:PHE:HB2	2.41	0.56
1:E:454:ILE:HG22	1:E:455:PHE:N	2.20	0.56
1:H:396:LEU:HD13	1:H:406:PRO:HD2	1.87	0.56
1:I:342:ALA:CB	1:I:362:THR:CG2	2.84	0.56
1:A:454:ILE:HG22	1:A:455:PHE:N	2.20	0.55
1:B:596:ASN:HD22	1:B:599:ALA:H	1.54	0.55
1:D:644:ASN:ND2	1:D:644:ASN:C	2.59	0.55
1:E:385:THR:HG1	1:E:387:VAL:CG2	2.05	0.55
1:E:427:ASN:ND2	1:E:427:ASN:H	2.03	0.55
1:I:388:GLN:O	1:I:389:ARG:NE	2.39	0.55
1:J:596:ASN:HD22	1:J:599:ALA:H	1.54	0.55
1:K:385:THR:HG1	1:K:387:VAL:CG2	2.05	0.55
1:L:359:ALA:O	1:L:376:ALA:HA	2.06	0.55
1:A:382:LEU:HD21	1:A:643:GLU:HG3	1.87	0.55
1:B:359:ALA:O	1:B:376:ALA:HA	2.06	0.55
1:D:405:THR:O	1:D:406:PRO:O	2.23	0.55
1:G:342:ALA:CB	1:G:362:THR:CG2	2.84	0.55
1:I:342:ALA:HB1	1:I:362:THR:CG2	2.37	0.55
1:I:358:GLN:OE1	1:I:377:LYS:HE3	2.07	0.55
1:I:448:TYR:CD1	1:I:642:PHE:HB2	2.41	0.55
1:J:346:ASP:OD1	1:J:362:THR:OG1	2.23	0.55
1:J:568:ASN:CG	1:J:569:ILE:N	2.59	0.55
1:K:358:GLN:OE1	1:K:377:LYS:HE3	2.07	0.55
1:A:560:SER:N	1:A:561:GLY:HA2	2.20	0.55
1:C:382:LEU:HD21	1:C:643:GLU:HG3	1.87	0.55
1:C:385:THR:HB	1:C:391:ASP:CG	2.27	0.55
1:D:356:ILE:O	1:D:379:LYS:HB3	2.06	0.55
1:D:509:SER:OG	1:D:626:ASP:N	2.32	0.55
1:D:658:ILE:HD13	1:D:658:ILE:N	2.21	0.55
1:G:382:LEU:HD21	1:G:643:GLU:HG3	1.87	0.55
1:G:454:ILE:HG22	1:G:455:PHE:N	2.20	0.55
1:J:409:ILE:CD1	1:J:410:SER:N	2.67	0.55
1:K:342:ALA:CB	1:K:362:THR:CG2	2.84	0.55
1:L:644:ASN:ND2	1:L:644:ASN:C	2.59	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:347:THR:O	1:A:348:PHE:C	2.44	0.55
1:A:448:TYR:CD1	1:A:642:PHE:HB2	2.41	0.55
1:D:398:ASP:OD2	1:E:663:HIS:HB2	2.00	0.55
1:D:398:ASP:CG	1:E:663:HIS:CG	2.71	0.55
1:E:388:GLN:O	1:E:389:ARG:NE	2.39	0.55
1:E:526:PRO:O	1:E:528:THR:CG2	2.55	0.55
1:I:560:SER:N	1:I:561:GLY:HA2	2.20	0.55
1:J:356:ILE:O	1:J:379:LYS:HB3	2.06	0.55
1:A:358:GLN:OE1	1:A:377:LYS:HE3	2.07	0.55
1:C:342:ALA:CB	1:C:362:THR:CG2	2.84	0.55
1:C:448:TYR:CD1	1:C:642:PHE:HB2	2.41	0.55
1:C:454:ILE:HG22	1:C:455:PHE:N	2.20	0.55
1:H:499:ILE:HG23	1:H:602:ILE:HB	1.87	0.55
1:I:347:THR:O	1:I:348:PHE:C	2.44	0.55
1:I:382:LEU:HD21	1:I:643:GLU:HG3	1.87	0.55
1:I:486:ARG:NH1	1:I:500:LYS:O	2.36	0.55
1:I:532:GLU:N	1:I:532:GLU:OE2	2.39	0.55
1:K:427:ASN:ND2	1:K:427:ASN:H	2.03	0.55
1:E:342:ALA:CB	1:E:362:THR:CG2	2.84	0.55
1:E:403:PRO:HG3	1:H:366:SER:HA	1.87	0.55
1:H:644:ASN:ND2	1:H:644:ASN:C	2.59	0.55
1:K:389:ARG:HA	1:K:392:ILE:CG1	2.29	0.55
1:C:379:LYS:HG2	1:C:379:LYS:O	2.05	0.55
1:C:387:VAL:HG21	1:C:390:GLU:HB2	1.88	0.55
1:E:348:PHE:CZ	1:G:664:HIS:HD2	2.13	0.55
1:F:499:ILE:HG23	1:F:602:ILE:HB	1.87	0.55
1:F:647:ARG:HD3	1:F:649:GLN:HG3	1.88	0.55
1:H:346:ASP:OD1	1:H:362:THR:OG1	2.23	0.55
1:K:385:THR:HB	1:K:391:ASP:CG	2.27	0.55
1:K:532:GLU:N	1:K:532:GLU:OE2	2.39	0.55
1:K:560:SER:N	1:K:561:GLY:HA2	2.20	0.55
1:C:342:ALA:HB1	1:C:362:THR:CG2	2.37	0.55
1:E:525:ASN:HB3	1:E:526:PRO:CD	2.17	0.55
1:G:342:ALA:HB1	1:G:362:THR:CG2	2.37	0.55
1:G:385:THR:CB	1:G:389:ARG:H	2.17	0.55
1:G:448:TYR:CD1	1:G:642:PHE:HB2	2.41	0.55
1:G:526:PRO:O	1:G:528:THR:CG2	2.55	0.55
1:J:499:ILE:HG23	1:J:602:ILE:HB	1.87	0.55
1:J:647:ARG:HD3	1:J:649:GLN:HG3	1.88	0.55
1:B:365:ASP:O	1:B:367:THR:N	2.40	0.55
1:D:400:ASN:HD21	1:E:662:GLU:CD	2.10	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:648:PRO:HD2	1:D:649:GLN:HG2	1.89	0.55
1:E:387:VAL:C	1:E:388:GLN:CG	2.73	0.55
1:F:534:VAL:O	1:F:534:VAL:HG12	2.07	0.55
1:G:358:GLN:OE1	1:G:377:LYS:HE3	2.07	0.55
1:I:454:ILE:HG22	1:I:455:PHE:N	2.20	0.55
1:K:631:VAL:CG2	1:L:476:ILE:CG2	2.72	0.55
1:L:648:PRO:HD2	1:L:649:GLN:HG2	1.89	0.55
1:B:568:ASN:CG	1:B:569:ILE:N	2.59	0.55
1:B:648:PRO:HD2	1:B:649:GLN:HG2	1.89	0.55
1:G:347:THR:O	1:G:348:PHE:C	2.44	0.55
1:G:532:GLU:N	1:G:532:GLU:OE2	2.39	0.55
1:H:365:ASP:OD1	1:H:367:THR:CG2	2.55	0.55
1:L:658:ILE:HD13	1:L:658:ILE:N	2.21	0.55
1:A:403:PRO:N	1:C:366:SER:HB3	2.21	0.54
1:B:347:THR:O	1:B:348:PHE:C	2.45	0.54
1:B:647:ARG:HD3	1:B:649:GLN:HG3	1.88	0.54
1:C:532:GLU:N	1:C:532:GLU:OE2	2.40	0.54
1:C:560:SER:N	1:C:561:GLY:HA2	2.20	0.54
1:D:596:ASN:HD22	1:D:599:ALA:H	1.54	0.54
1:F:646:LEU:C	1:F:646:LEU:CD2	2.72	0.54
1:G:631:VAL:CG2	1:H:476:ILE:HG22	2.34	0.54
1:H:356:ILE:O	1:H:379:LYS:HB3	2.07	0.54
1:I:385:THR:HB	1:I:391:ASP:CG	2.27	0.54
1:K:342:ALA:HB1	1:K:362:THR:CG2	2.37	0.54
1:L:365:ASP:OD1	1:L:367:THR:CG2	2.55	0.54
1:L:365:ASP:O	1:L:367:THR:N	2.40	0.54
1:L:499:ILE:HG23	1:L:602:ILE:HB	1.88	0.54
1:A:532:GLU:N	1:A:532:GLU:OE2	2.39	0.54
1:A:605:ASN:HB3	1:A:608:LYS:HG3	1.89	0.54
1:C:526:PRO:O	1:C:528:THR:CG2	2.55	0.54
1:F:568:ASN:CG	1:F:569:ILE:N	2.59	0.54
1:G:385:THR:HB	1:G:391:ASP:CG	2.27	0.54
1:G:389:ARG:HA	1:G:392:ILE:CG1	2.29	0.54
1:J:359:ALA:O	1:J:376:ALA:HA	2.06	0.54
1:J:644:ASN:ND2	1:J:644:ASN:C	2.59	0.54
1:L:509:SER:OG	1:L:626:ASP:N	2.32	0.54
1:A:342:ALA:HB1	1:A:362:THR:CG2	2.37	0.54
1:A:385:THR:HB	1:A:391:ASP:CG	2.27	0.54
1:C:605:ASN:HB3	1:C:608:LYS:HG3	1.89	0.54
1:E:342:ALA:HB1	1:E:362:THR:CG2	2.37	0.54
1:E:532:GLU:N	1:E:532:GLU:OE2	2.39	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:658:ILE:HD13	1:F:658:ILE:N	2.21	0.54
1:H:658:ILE:HD13	1:H:658:ILE:N	2.21	0.54
1:L:356:ILE:O	1:L:379:LYS:HB3	2.06	0.54
1:A:389:ARG:HA	1:A:392:ILE:CG1	2.29	0.54
1:D:657:PRO:O	1:D:658:ILE:HD12	2.08	0.54
1:E:385:THR:HB	1:E:391:ASP:CG	2.27	0.54
1:F:359:ALA:O	1:F:376:ALA:HA	2.06	0.54
1:H:365:ASP:O	1:H:367:THR:N	2.40	0.54
1:J:534:VAL:O	1:J:534:VAL:HG12	2.07	0.54
1:K:631:VAL:CG2	1:L:476:ILE:HG22	2.34	0.54
1:L:534:VAL:O	1:L:534:VAL:HG12	2.07	0.54
1:B:427:ASN:ND2	1:B:427:ASN:N	2.54	0.54
1:E:358:GLN:OE1	1:E:377:LYS:HE3	2.07	0.54
1:E:385:THR:CB	1:E:389:ARG:H	2.17	0.54
1:G:635:ARG:HH22	1:H:661:LEU:CD1	2.15	0.54
1:I:631:VAL:CG2	1:J:476:ILE:HG22	2.34	0.54
1:J:657:PRO:O	1:J:658:ILE:HD12	2.08	0.54
1:B:356:ILE:O	1:B:379:LYS:HB3	2.07	0.54
1:D:365:ASP:O	1:D:367:THR:N	2.40	0.54
1:E:347:THR:O	1:E:348:PHE:C	2.44	0.54
1:E:560:SER:N	1:E:561:GLY:HA2	2.20	0.54
1:H:647:ARG:HD3	1:H:649:GLN:HG3	1.88	0.54
1:I:353:PHE:CE2	1:I:395:TYR:CD2	2.86	0.54
1:K:526:PRO:O	1:K:528:THR:CG2	2.55	0.54
1:K:605:ASN:HB3	1:K:608:LYS:HG3	1.89	0.54
1:C:347:THR:O	1:C:348:PHE:C	2.44	0.54
1:C:358:GLN:OE1	1:C:377:LYS:HE3	2.07	0.54
1:F:365:ASP:O	1:F:367:THR:N	2.40	0.54
1:H:359:ALA:O	1:H:376:ALA:HA	2.07	0.54
1:I:526:PRO:O	1:I:528:THR:CG2	2.55	0.54
1:L:647:ARG:HD3	1:L:649:GLN:HG3	1.88	0.54
1:B:534:VAL:O	1:B:534:VAL:HG12	2.07	0.54
1:H:347:THR:O	1:H:348:PHE:C	2.46	0.54
1:H:657:PRO:O	1:H:658:ILE:HD12	2.08	0.54
1:J:648:PRO:HD2	1:J:649:GLN:HG2	1.89	0.54
1:L:657:PRO:O	1:L:658:ILE:HD12	2.08	0.54
1:A:536:TYR:HB2	1:A:586:ARG:NH1	2.23	0.54
1:B:365:ASP:OD1	1:B:367:THR:CG2	2.55	0.54
1:B:646:LEU:C	1:B:646:LEU:CD2	2.72	0.54
1:D:595:ILE:HD12	1:D:595:ILE:N	2.21	0.54
1:I:389:ARG:CA	1:I:392:ILE:HG12	2.28	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:359:ALA:HB1	1:B:455:PHE:HE2	1.73	0.54
1:E:635:ARG:HG3	1:E:636:ASP:N	2.19	0.54
1:F:356:ILE:O	1:F:379:LYS:HB3	2.06	0.54
1:F:409:ILE:CD1	1:F:410:SER:O	2.50	0.54
1:G:605:ASN:HB3	1:G:608:LYS:HG3	1.89	0.54
1:G:635:ARG:HG3	1:G:636:ASP:N	2.19	0.54
1:H:596:ASN:ND2	1:H:599:ALA:H	2.06	0.54
1:A:526:PRO:O	1:A:528:THR:CG2	2.55	0.53
1:C:389:ARG:HA	1:C:392:ILE:CG1	2.29	0.53
1:D:365:ASP:OD1	1:D:367:THR:CG2	2.55	0.53
1:D:396:LEU:HD22	1:D:406:PRO:HG2	1.90	0.53
1:D:534:VAL:O	1:D:534:VAL:HG12	2.07	0.53
1:D:646:LEU:C	1:D:646:LEU:CD2	2.72	0.53
1:I:631:VAL:CG2	1:J:476:ILE:CG2	2.72	0.53
1:J:365:ASP:OD1	1:J:367:THR:CG2	2.55	0.53
1:J:658:ILE:HD13	1:J:658:ILE:N	2.21	0.53
1:K:412:ASN:O	1:K:638:SER:HA	2.08	0.53
1:B:526:PRO:HA	1:B:529:GLY:O	2.09	0.53
1:B:657:PRO:O	1:B:658:ILE:HD12	2.08	0.53
1:D:359:ALA:HB1	1:D:455:PHE:HE2	1.73	0.53
1:D:526:PRO:HA	1:D:529:GLY:O	2.09	0.53
1:D:596:ASN:HB3	1:D:601:VAL:HG23	1.90	0.53
1:F:359:ALA:HB1	1:F:455:PHE:HE2	1.73	0.53
1:F:526:PRO:HA	1:F:529:GLY:O	2.08	0.53
1:J:365:ASP:O	1:J:367:THR:N	2.40	0.53
1:F:559:ALA:O	1:F:561:GLY:N	2.42	0.53
1:H:559:ALA:O	1:H:561:GLY:N	2.41	0.53
1:I:605:ASN:HB3	1:I:608:LYS:HG3	1.89	0.53
1:I:635:ARG:HH22	1:J:661:LEU:CD1	2.14	0.53
1:K:382:LEU:HD12	1:K:647:ARG:HH21	1.74	0.53
1:K:536:TYR:HB2	1:K:586:ARG:NH1	2.23	0.53
1:L:526:PRO:HA	1:L:529:GLY:O	2.08	0.53
1:L:559:ALA:O	1:L:561:GLY:N	2.42	0.53
1:A:631:VAL:CG2	1:B:476:ILE:CG2	2.72	0.53
1:B:542:SER:HB2	1:B:595:ILE:HG12	1.91	0.53
1:E:412:ASN:O	1:E:638:SER:HA	2.09	0.53
1:E:536:TYR:HB2	1:E:586:ARG:NH1	2.23	0.53
1:F:365:ASP:OD1	1:F:367:THR:CG2	2.55	0.53
1:H:526:PRO:HA	1:H:529:GLY:O	2.09	0.53
1:H:534:VAL:HG12	1:H:534:VAL:O	2.07	0.53
1:H:596:ASN:HB3	1:H:601:VAL:HG23	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:412:ASN:O	1:I:638:SER:HA	2.08	0.53
1:K:635:ARG:HH22	1:L:661:LEU:CD1	2.15	0.53
1:L:542:SER:HB2	1:L:595:ILE:HG12	1.91	0.53
1:A:382:LEU:HD12	1:A:647:ARG:HH21	1.74	0.53
1:B:476:ILE:HG22	1:B:477:GLY:N	2.18	0.53
1:E:605:ASN:HB3	1:E:608:LYS:HG3	1.89	0.53
1:G:428:LYS:HD2	1:G:473:HIS:HD2	1.74	0.53
1:H:648:PRO:HD2	1:H:649:GLN:HG2	1.89	0.53
1:J:542:SER:HB2	1:J:595:ILE:HG12	1.91	0.53
1:J:596:ASN:ND2	1:J:599:ALA:H	2.06	0.53
1:C:382:LEU:HD12	1:C:647:ARG:HH21	1.74	0.53
1:D:400:ASN:H	1:E:664:HIS:HB2	1.74	0.53
1:F:657:PRO:O	1:F:658:ILE:HD12	2.08	0.53
1:G:412:ASN:O	1:G:638:SER:HA	2.08	0.53
1:A:428:LYS:HD2	1:A:473:HIS:HD2	1.74	0.53
1:A:619:GLN:HA	1:A:619:GLN:HE21	1.74	0.53
1:B:565:GLU:C	1:B:570:GLN:HE22	2.12	0.53
1:C:619:GLN:HA	1:C:619:GLN:HE21	1.74	0.53
1:D:559:ALA:O	1:D:561:GLY:N	2.41	0.53
1:E:385:THR:CG2	1:E:389:ARG:C	2.73	0.53
1:F:453:GLU:O	1:F:454:ILE:HG13	2.09	0.53
1:G:343:THR:O	1:G:347:THR:HG23	2.09	0.53
1:G:536:TYR:HB2	1:G:586:ARG:NH1	2.23	0.53
1:H:409:ILE:CD1	1:H:410:SER:O	2.50	0.53
1:I:635:ARG:HG3	1:I:636:ASP:N	2.19	0.53
1:L:348:PHE:O	1:L:351:GLU:N	2.21	0.53
1:L:565:GLU:C	1:L:570:GLN:HE22	2.12	0.53
1:A:387:VAL:C	1:A:388:GLN:CD	2.68	0.53
1:A:631:VAL:CG2	1:B:476:ILE:HG22	2.34	0.53
1:B:596:ASN:ND2	1:B:599:ALA:H	2.06	0.53
1:B:596:ASN:HB3	1:B:601:VAL:HG23	1.90	0.53
1:C:387:VAL:C	1:C:388:GLN:CD	2.68	0.53
1:C:536:TYR:HB2	1:C:586:ARG:NH1	2.23	0.53
1:D:343:THR:HB	1:D:347:THR:CG2	2.39	0.53
1:D:542:SER:HB2	1:D:595:ILE:HG12	1.91	0.53
1:D:596:ASN:ND2	1:D:599:ALA:H	2.06	0.53
1:F:648:PRO:HD2	1:F:649:GLN:HG2	1.89	0.53
1:I:343:THR:O	1:I:347:THR:HG23	2.09	0.53
1:J:559:ALA:O	1:J:561:GLY:N	2.41	0.53
1:J:565:GLU:C	1:J:570:GLN:HE22	2.12	0.53
1:K:387:VAL:C	1:K:388:GLN:CD	2.68	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:428:LYS:HD2	1:K:473:HIS:HD2	1.74	0.53
1:C:412:ASN:O	1:C:638:SER:HA	2.08	0.53
1:D:347:THR:O	1:D:348:PHE:C	2.45	0.53
1:H:453:GLU:O	1:H:454:ILE:HG13	2.09	0.53
1:I:382:LEU:HD12	1:I:647:ARG:HH21	1.74	0.53
1:I:536:TYR:HB2	1:I:586:ARG:NH1	2.23	0.53
1:K:385:THR:CG2	1:K:389:ARG:C	2.73	0.53
1:B:396:LEU:HD22	1:B:406:PRO:HG2	1.90	0.53
1:D:547:SER:O	1:D:548:LYS:HG2	2.09	0.53
1:E:651:LEU:CD2	1:E:653:ILE:HG13	2.39	0.53
1:F:565:GLU:C	1:F:570:GLN:HE22	2.12	0.53
1:F:596:ASN:HB3	1:F:601:VAL:HG23	1.90	0.53
1:H:343:THR:HB	1:H:347:THR:CG2	2.39	0.53
1:J:343:THR:HB	1:J:347:THR:CG2	2.39	0.53
1:J:568:ASN:OD1	1:J:569:ILE:N	2.30	0.53
1:A:343:THR:O	1:A:347:THR:HG23	2.09	0.52
1:B:440:ILE:HD11	1:B:653:ILE:HD13	1.91	0.52
1:B:547:SER:O	1:B:548:LYS:HG2	2.09	0.52
1:B:559:ALA:O	1:B:561:GLY:N	2.41	0.52
1:E:631:VAL:CG2	1:F:476:ILE:HG22	2.34	0.52
1:F:343:THR:HB	1:F:347:THR:CG2	2.39	0.52
1:G:382:LEU:HD12	1:G:647:ARG:HH21	1.74	0.52
1:G:385:THR:CB	1:G:387:VAL:CG2	2.88	0.52
1:G:619:GLN:HE21	1:G:619:GLN:HA	1.74	0.52
1:H:565:GLU:C	1:H:570:GLN:HE22	2.12	0.52
1:I:385:THR:CB	1:I:387:VAL:CG2	2.88	0.52
1:I:525:ASN:HB3	1:I:526:PRO:CD	2.17	0.52
1:J:408:ILE:O	1:J:409:ILE:HG23	2.09	0.52
1:L:343:THR:HB	1:L:347:THR:CG2	2.39	0.52
1:L:408:ILE:HD12	1:L:409:ILE:CA	2.40	0.52
1:C:452:VAL:HG22	1:C:458:SER:O	2.10	0.52
1:D:565:GLU:C	1:D:570:GLN:HE22	2.12	0.52
1:E:556:GLY:HA3	1:E:589:TYR:HD1	1.74	0.52
1:G:353:PHE:CE2	1:G:395:TYR:CD2	2.86	0.52
1:H:542:SER:HB2	1:H:595:ILE:HG12	1.91	0.52
1:I:491:PHE:CZ	1:I:616:PHE:HB2	2.45	0.52
1:K:343:THR:O	1:K:347:THR:HG23	2.09	0.52
1:L:547:SER:O	1:L:548:LYS:HG2	2.09	0.52
1:C:631:VAL:CG2	1:D:476:ILE:HG22	2.34	0.52
1:D:400:ASN:CB	1:E:662:GLU:HG2	2.39	0.52
1:D:453:GLU:O	1:D:454:ILE:HG13	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:408:ILE:O	1:F:409:ILE:HG23	2.09	0.52
1:H:408:ILE:O	1:H:409:ILE:HG23	2.09	0.52
1:H:565:GLU:CB	1:H:570:GLN:NE2	2.55	0.52
1:I:619:GLN:HA	1:I:619:GLN:HE21	1.74	0.52
1:I:651:LEU:CD2	1:I:653:ILE:HG13	2.39	0.52
1:J:347:THR:O	1:J:348:PHE:C	2.46	0.52
1:J:453:GLU:O	1:J:454:ILE:HG13	2.09	0.52
1:K:556:GLY:HA3	1:K:589:TYR:HD1	1.74	0.52
1:K:619:GLN:HA	1:K:619:GLN:HE21	1.74	0.52
1:D:440:ILE:HD11	1:D:653:ILE:HD13	1.91	0.52
1:E:382:LEU:HD12	1:E:647:ARG:HH21	1.74	0.52
1:F:408:ILE:HD12	1:F:409:ILE:CA	2.40	0.52
1:F:476:ILE:HG22	1:F:477:GLY:N	2.18	0.52
1:F:547:SER:O	1:F:548:LYS:HG2	2.09	0.52
1:I:428:LYS:HD2	1:I:473:HIS:HD2	1.74	0.52
1:J:359:ALA:HB1	1:J:455:PHE:HE2	1.73	0.52
1:L:440:ILE:HD11	1:L:653:ILE:HD13	1.91	0.52
1:L:596:ASN:ND2	1:L:599:ALA:H	2.07	0.52
1:A:635:ARG:HH22	1:B:661:LEU:CD1	2.14	0.52
1:C:651:LEU:CD2	1:C:653:ILE:HG13	2.39	0.52
1:E:343:THR:O	1:E:347:THR:HG23	2.09	0.52
1:E:619:GLN:HA	1:E:619:GLN:HE21	1.74	0.52
1:F:472:ASP:OD2	1:F:474:SER:HB3	2.10	0.52
1:F:542:SER:HB2	1:F:595:ILE:HG12	1.91	0.52
1:G:452:VAL:HG22	1:G:458:SER:O	2.10	0.52
1:G:651:LEU:CD2	1:G:653:ILE:HG13	2.39	0.52
1:I:387:VAL:C	1:I:388:GLN:CD	2.68	0.52
1:J:472:ASP:OD2	1:J:474:SER:HB3	2.10	0.52
1:J:596:ASN:HB3	1:J:601:VAL:HG23	1.90	0.52
1:L:359:ALA:HB1	1:L:455:PHE:HE2	1.73	0.52
1:L:453:GLU:O	1:L:454:ILE:HG13	2.09	0.52
1:L:486:ARG:HG2	1:L:499:ILE:CD1	2.40	0.52
1:A:385:THR:CB	1:A:387:VAL:CG2	2.88	0.52
1:A:412:ASN:O	1:A:638:SER:HA	2.08	0.52
1:C:343:THR:O	1:C:347:THR:HG23	2.09	0.52
1:D:660:GLN:CA	1:D:661:LEU:HB2	2.26	0.52
1:F:486:ARG:HG2	1:F:499:ILE:CD1	2.40	0.52
1:H:396:LEU:HD22	1:H:406:PRO:HG2	1.90	0.52
1:K:385:THR:CB	1:K:387:VAL:CG2	2.88	0.52
1:A:491:PHE:CZ	1:A:616:PHE:HB2	2.45	0.52
1:D:486:ARG:HG2	1:D:499:ILE:CD1	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:387:VAL:C	1:E:388:GLN:CD	2.68	0.52
1:F:596:ASN:ND2	1:F:599:ALA:H	2.06	0.52
1:L:595:ILE:HD12	1:L:595:ILE:N	2.21	0.52
1:B:408:ILE:HD12	1:B:409:ILE:CA	2.40	0.52
1:C:533:ASP:O	1:C:535:LEU:HD23	2.10	0.52
1:C:556:GLY:HA3	1:C:589:TYR:HD1	1.74	0.52
1:E:342:ALA:CB	1:E:362:THR:O	2.58	0.52
1:F:348:PHE:O	1:F:350:SER:N	2.43	0.52
1:F:382:LEU:HD12	1:F:646:LEU:HD13	1.92	0.52
1:F:440:ILE:HD11	1:F:653:ILE:HD13	1.91	0.52
1:F:660:GLN:CA	1:F:661:LEU:HB2	2.26	0.52
1:G:387:VAL:C	1:G:388:GLN:CD	2.68	0.52
1:G:448:TYR:CE1	1:G:642:PHE:HB2	2.45	0.52
1:G:491:PHE:CZ	1:G:616:PHE:HB2	2.45	0.52
1:J:526:PRO:HA	1:J:529:GLY:O	2.09	0.52
1:L:596:ASN:HB3	1:L:601:VAL:HG23	1.90	0.52
1:A:388:GLN:C	1:A:389:ARG:HG3	2.30	0.52
1:A:651:LEU:CD2	1:A:653:ILE:HG13	2.39	0.52
1:B:343:THR:HB	1:B:347:THR:CG2	2.39	0.52
1:B:453:GLU:O	1:B:454:ILE:HG13	2.09	0.52
1:J:348:PHE:O	1:J:350:SER:N	2.43	0.52
1:J:486:ARG:HG2	1:J:499:ILE:CD1	2.40	0.52
1:K:554:ILE:HG22	1:K:591:VAL:HA	1.92	0.52
1:A:342:ALA:CB	1:A:362:THR:O	2.58	0.52
1:B:472:ASP:OD2	1:B:474:SER:HB3	2.10	0.52
1:B:628:THR:HG22	1:B:629:ASP:OD1	2.10	0.52
1:E:388:GLN:C	1:E:389:ARG:HG3	2.30	0.52
1:E:428:LYS:HD2	1:E:473:HIS:HD2	1.74	0.52
1:E:448:TYR:CE1	1:E:642:PHE:HB2	2.45	0.52
1:F:661:LEU:O	1:F:661:LEU:CG	2.58	0.52
1:H:359:ALA:HB1	1:H:455:PHE:HE2	1.73	0.52
1:J:396:LEU:HD22	1:J:406:PRO:HG2	1.90	0.52
1:J:409:ILE:CD1	1:J:410:SER:O	2.50	0.52
1:A:342:ALA:HA	1:A:362:THR:HG21	1.93	0.51
1:B:348:PHE:O	1:B:350:SER:N	2.43	0.51
1:B:523:VAL:HG11	1:B:532:GLU:HB2	1.92	0.51
1:C:342:ALA:CB	1:C:362:THR:O	2.58	0.51
1:C:448:TYR:CE1	1:C:642:PHE:HB2	2.45	0.51
1:C:491:PHE:CZ	1:C:616:PHE:HB2	2.45	0.51
1:D:427:ASN:ND2	1:D:427:ASN:N	2.54	0.51
1:D:523:VAL:HG11	1:D:532:GLU:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:491:PHE:CZ	1:E:616:PHE:HB2	2.45	0.51
1:G:556:GLY:HA3	1:G:589:TYR:HD1	1.74	0.51
1:H:382:LEU:HD12	1:H:646:LEU:HD13	1.92	0.51
1:H:486:ARG:HG2	1:H:499:ILE:CD1	2.40	0.51
1:I:448:TYR:CE1	1:I:642:PHE:HB2	2.45	0.51
1:K:491:PHE:CZ	1:K:616:PHE:HB2	2.45	0.51
1:L:348:PHE:O	1:L:350:SER:N	2.43	0.51
1:B:365:ASP:HB3	1:B:368:LYS:HB2	1.92	0.51
1:C:635:ARG:HG3	1:C:636:ASP:N	2.19	0.51
1:E:452:VAL:HG22	1:E:458:SER:O	2.10	0.51
1:E:554:ILE:HG22	1:E:591:VAL:HA	1.92	0.51
1:I:533:ASP:O	1:I:535:LEU:HD23	2.10	0.51
1:J:408:ILE:HD12	1:J:409:ILE:CA	2.40	0.51
1:K:462:SER:HB3	1:L:478:SER:O	2.11	0.51
1:B:409:ILE:HD13	1:B:410:SER:C	2.31	0.51
1:B:486:ARG:HG2	1:B:499:ILE:CD1	2.40	0.51
1:E:462:SER:HB3	1:F:478:SER:O	2.11	0.51
1:E:533:ASP:O	1:E:535:LEU:HD23	2.10	0.51
1:G:388:GLN:C	1:G:389:ARG:HG3	2.30	0.51
1:H:661:LEU:O	1:H:661:LEU:CG	2.58	0.51
1:I:342:ALA:HA	1:I:362:THR:HG21	1.93	0.51
1:I:554:ILE:HG22	1:I:591:VAL:HA	1.92	0.51
1:J:409:ILE:CD1	1:J:410:SER:C	2.79	0.51
1:J:547:SER:O	1:J:548:LYS:HG2	2.10	0.51
1:J:567:GLU:CA	1:J:570:GLN:OE1	2.56	0.51
1:J:595:ILE:HD12	1:J:595:ILE:N	2.21	0.51
1:K:533:ASP:O	1:K:535:LEU:HD23	2.10	0.51
1:C:387:VAL:CG2	1:C:390:GLU:CD	2.79	0.51
1:C:522:LYS:N	1:C:522:LYS:CD	2.72	0.51
1:F:365:ASP:CG	1:F:367:THR:HG21	2.31	0.51
1:F:628:THR:HG22	1:F:629:ASP:OD1	2.10	0.51
1:H:348:PHE:O	1:H:350:SER:N	2.43	0.51
1:H:440:ILE:HD11	1:H:653:ILE:HD13	1.91	0.51
1:H:547:SER:O	1:H:548:LYS:HG2	2.09	0.51
1:I:342:ALA:CB	1:I:362:THR:O	2.58	0.51
1:J:440:ILE:HD11	1:J:653:ILE:HD13	1.91	0.51
1:K:388:GLN:C	1:K:389:ARG:HG3	2.30	0.51
1:L:472:ASP:OD2	1:L:474:SER:HB3	2.10	0.51
1:B:658:ILE:CD1	1:B:658:ILE:N	2.73	0.51
1:C:428:LYS:HD2	1:C:473:HIS:HD2	1.74	0.51
1:E:353:PHE:CE2	1:E:395:TYR:CD2	2.86	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:385:THR:CG2	1:G:389:ARG:C	2.73	0.51
1:G:462:SER:HB3	1:H:478:SER:O	2.11	0.51
1:G:492:TYR:O	1:G:606:ILE:HG13	2.11	0.51
1:G:533:ASP:O	1:G:535:LEU:HD23	2.10	0.51
1:H:443:LYS:HG3	1:H:471:ALA:HB2	1.93	0.51
1:H:476:ILE:HG22	1:H:477:GLY:N	2.18	0.51
1:K:342:ALA:HA	1:K:362:THR:HG21	1.93	0.51
1:A:448:TYR:CE1	1:A:642:PHE:HB2	2.45	0.51
1:A:457:SER:N	1:A:634:THR:HG23	2.26	0.51
1:A:462:SER:HB3	1:B:478:SER:O	2.11	0.51
1:C:492:TYR:O	1:C:606:ILE:HG13	2.11	0.51
1:C:554:ILE:HG22	1:C:591:VAL:HA	1.92	0.51
1:F:443:LYS:HG3	1:F:471:ALA:HB2	1.93	0.51
1:F:565:GLU:CB	1:F:570:GLN:NE2	2.55	0.51
1:H:409:ILE:HD13	1:H:410:SER:C	2.31	0.51
1:I:452:VAL:HG22	1:I:458:SER:O	2.10	0.51
1:I:462:SER:HB3	1:J:478:SER:O	2.11	0.51
1:L:365:ASP:HB3	1:L:368:LYS:HB2	1.92	0.51
1:A:387:VAL:CG2	1:A:390:GLU:CD	2.79	0.51
1:A:403:PRO:N	1:C:366:SER:CB	2.73	0.51
1:B:365:ASP:CG	1:B:367:THR:HG21	2.31	0.51
1:B:595:ILE:HD12	1:B:595:ILE:N	2.21	0.51
1:C:385:THR:CB	1:C:387:VAL:CG2	2.88	0.51
1:D:348:PHE:O	1:D:350:SER:N	2.43	0.51
1:D:408:ILE:HD12	1:D:409:ILE:CA	2.40	0.51
1:D:660:GLN:HA	1:D:661:LEU:HB3	1.90	0.51
1:I:388:GLN:C	1:I:389:ARG:HG3	2.30	0.51
1:J:628:THR:HG22	1:J:629:ASP:OD1	2.10	0.51
1:K:387:VAL:CG2	1:K:390:GLU:CD	2.79	0.51
1:K:452:VAL:HG22	1:K:458:SER:O	2.10	0.51
1:A:340:VAL:O	1:A:341:THR:O	2.29	0.51
1:A:492:TYR:O	1:A:606:ILE:HG13	2.11	0.51
1:A:533:ASP:O	1:A:535:LEU:HD23	2.10	0.51
1:A:554:ILE:HG22	1:A:591:VAL:HA	1.92	0.51
1:A:651:LEU:HD23	1:A:652:THR:N	2.26	0.51
1:C:353:PHE:O	1:C:354:GLY:C	2.48	0.51
1:C:388:GLN:C	1:C:389:ARG:HG3	2.30	0.51
1:D:472:ASP:OD2	1:D:474:SER:HB3	2.10	0.51
1:D:492:TYR:CE1	1:D:606:ILE:HB	2.46	0.51
1:E:340:VAL:O	1:E:341:THR:O	2.29	0.51
1:F:396:LEU:HD22	1:F:406:PRO:HG2	1.90	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:402:ALA:H	1:H:403:PRO:CD	2.24	0.51
1:J:661:LEU:O	1:J:661:LEU:CG	2.58	0.51
1:K:448:TYR:CE1	1:K:642:PHE:HB2	2.45	0.51
1:K:492:TYR:O	1:K:606:ILE:HG13	2.11	0.51
1:K:651:LEU:HD23	1:K:652:THR:N	2.26	0.51
1:L:402:ALA:H	1:L:403:PRO:CD	2.24	0.51
1:L:409:ILE:CD1	1:L:410:SER:C	2.79	0.51
1:L:523:VAL:HG11	1:L:532:GLU:HB2	1.92	0.51
1:B:366:SER:HA	1:K:403:PRO:HG3	1.89	0.51
1:B:409:ILE:CD1	1:B:410:SER:C	2.79	0.51
1:C:340:VAL:O	1:C:341:THR:O	2.29	0.51
1:C:651:LEU:HD23	1:C:652:THR:N	2.26	0.51
1:F:365:ASP:HB3	1:F:368:LYS:HB2	1.93	0.51
1:H:365:ASP:CG	1:H:367:THR:HG21	2.31	0.51
1:H:408:ILE:HD12	1:H:409:ILE:CA	2.40	0.51
1:H:409:ILE:CD1	1:H:410:SER:C	2.79	0.51
1:H:628:THR:HG22	1:H:629:ASP:OD1	2.10	0.51
1:J:361:GLN:HE22	1:J:456:ASN:HD21	1.57	0.51
1:J:409:ILE:HD13	1:J:410:SER:C	2.31	0.51
1:K:353:PHE:CE2	1:K:395:TYR:CD2	2.86	0.51
1:K:651:LEU:CD2	1:K:653:ILE:HG13	2.39	0.51
1:A:452:VAL:HG22	1:A:458:SER:O	2.10	0.51
1:D:402:ALA:H	1:D:403:PRO:CD	2.24	0.51
1:F:396:LEU:HD13	1:F:405:THR:O	2.11	0.51
1:F:567:GLU:O	1:F:568:ASN:OD1	2.29	0.51
1:G:342:ALA:CB	1:G:362:THR:O	2.58	0.51
1:G:554:ILE:HG22	1:G:591:VAL:HA	1.92	0.51
1:G:559:ALA:O	1:G:561:GLY:CA	2.34	0.51
1:H:361:GLN:HE22	1:H:456:ASN:HD21	1.57	0.51
1:H:595:ILE:HD12	1:H:595:ILE:N	2.21	0.51
1:I:387:VAL:CG2	1:I:390:GLU:CD	2.79	0.51
1:J:342:ALA:O	1:J:346:ASP:OD2	2.29	0.51
1:K:340:VAL:O	1:K:341:THR:O	2.29	0.51
1:L:396:LEU:HD22	1:L:406:PRO:HG2	1.90	0.51
1:L:628:THR:HG22	1:L:629:ASP:OD1	2.10	0.51
1:B:382:LEU:HD12	1:B:646:LEU:HD13	1.92	0.50
1:B:443:LYS:HG3	1:B:471:ALA:HB2	1.93	0.50
1:B:661:LEU:O	1:B:661:LEU:CG	2.58	0.50
1:D:342:ALA:O	1:D:346:ASP:OD2	2.29	0.50
1:D:361:GLN:HE22	1:D:456:ASN:HD21	1.57	0.50
1:D:409:ILE:HD13	1:D:410:SER:C	2.31	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:628:THR:HG22	1:D:629:ASP:OD1	2.10	0.50
1:F:402:ALA:H	1:F:403:PRO:CD	2.24	0.50
1:H:492:TYR:CE1	1:H:606:ILE:HB	2.46	0.50
1:H:523:VAL:HG11	1:H:532:GLU:HB2	1.92	0.50
1:J:382:LEU:HD12	1:J:646:LEU:HD13	1.92	0.50
1:K:342:ALA:CB	1:K:362:THR:O	2.58	0.50
1:L:382:LEU:HD12	1:L:646:LEU:HD13	1.92	0.50
1:L:408:ILE:O	1:L:409:ILE:HG23	2.09	0.50
1:A:556:GLY:HA3	1:A:589:TYR:HD1	1.74	0.50
1:B:402:ALA:H	1:B:403:PRO:CD	2.24	0.50
1:D:510:MET:HB3	1:D:542:SER:HB3	1.94	0.50
1:E:387:VAL:CG2	1:E:390:GLU:CD	2.79	0.50
1:E:492:TYR:O	1:E:606:ILE:HG13	2.11	0.50
1:F:409:ILE:CD1	1:F:410:SER:C	2.79	0.50
1:F:565:GLU:OE2	1:F:590:TYR:OH	2.28	0.50
1:G:340:VAL:O	1:G:341:THR:O	2.29	0.50
1:H:472:ASP:OD2	1:H:474:SER:HB3	2.10	0.50
1:H:567:GLU:O	1:H:568:ASN:OD1	2.29	0.50
1:I:466:THR:HB	1:J:466:THR:HB	1.94	0.50
1:I:651:LEU:HD23	1:I:652:THR:N	2.26	0.50
1:J:492:TYR:CE1	1:J:606:ILE:HB	2.46	0.50
1:J:565:GLU:OE2	1:J:590:TYR:OH	2.28	0.50
1:K:457:SER:N	1:K:634:THR:HG23	2.26	0.50
1:L:342:ALA:O	1:L:346:ASP:OD2	2.29	0.50
1:L:443:LYS:HG3	1:L:471:ALA:HB2	1.93	0.50
1:L:660:GLN:HA	1:L:661:LEU:HB3	1.90	0.50
1:A:342:ALA:HB1	1:A:362:THR:HG22	1.94	0.50
1:A:495:PRO:HD2	1:A:499:ILE:HG22	1.93	0.50
1:D:365:ASP:CG	1:D:367:THR:HG21	2.31	0.50
1:D:365:ASP:HB3	1:D:368:LYS:HB2	1.93	0.50
1:D:396:LEU:HD13	1:D:405:THR:O	2.11	0.50
1:D:409:ILE:CD1	1:D:410:SER:C	2.79	0.50
1:D:423:THR:HB	1:D:656:GLU:HB3	1.94	0.50
1:D:661:LEU:O	1:D:661:LEU:CG	2.58	0.50
1:F:361:GLN:HE22	1:F:456:ASN:HD21	1.57	0.50
1:F:409:ILE:HD13	1:F:410:SER:C	2.31	0.50
1:G:342:ALA:HA	1:G:362:THR:HG21	1.93	0.50
1:H:342:ALA:O	1:H:346:ASP:OD2	2.29	0.50
1:H:396:LEU:HD13	1:H:405:THR:O	2.11	0.50
1:H:565:GLU:OE2	1:H:590:TYR:OH	2.28	0.50
1:I:403:PRO:CD	1:L:366:SER:HA	2.28	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:423:THR:HB	1:L:656:GLU:HB3	1.94	0.50
1:L:510:MET:HB3	1:L:542:SER:HB3	1.93	0.50
1:A:348:PHE:HZ	1:A:400:ASN:HD21	1.58	0.50
1:B:492:TYR:CE1	1:B:606:ILE:HB	2.46	0.50
1:B:567:GLU:O	1:B:568:ASN:OD1	2.29	0.50
1:C:340:VAL:O	1:C:341:THR:OG1	2.30	0.50
1:D:342:ALA:O	1:D:346:ASP:OD1	2.30	0.50
1:D:382:LEU:HD12	1:D:646:LEU:HD13	1.92	0.50
1:D:566:ASN:O	1:D:570:GLN:OE1	2.30	0.50
1:E:495:PRO:HD2	1:E:499:ILE:HG22	1.93	0.50
1:I:340:VAL:O	1:I:341:THR:O	2.29	0.50
1:J:566:ASN:O	1:J:568:ASN:OD1	2.30	0.50
1:K:466:THR:HB	1:L:466:THR:HB	1.94	0.50
1:L:347:THR:O	1:L:348:PHE:C	2.46	0.50
1:L:661:LEU:O	1:L:661:LEU:CG	2.58	0.50
1:A:517:PHE:HE1	1:A:615:LYS:HD2	1.77	0.50
1:C:342:ALA:HA	1:C:362:THR:HG21	1.93	0.50
1:C:385:THR:CG2	1:C:389:ARG:C	2.73	0.50
1:C:631:VAL:CG2	1:D:476:ILE:CG2	2.72	0.50
1:D:567:GLU:O	1:D:568:ASN:OD1	2.29	0.50
1:E:466:THR:HB	1:F:466:THR:HB	1.94	0.50
1:E:510:MET:HB3	1:E:542:SER:OG	2.12	0.50
1:F:347:THR:O	1:F:348:PHE:O	2.30	0.50
1:H:342:ALA:O	1:H:346:ASP:OD1	2.30	0.50
1:I:437:GLU:C	1:I:439:GLN:H	2.15	0.50
1:J:402:ALA:H	1:J:403:PRO:CD	2.24	0.50
1:J:523:VAL:HG11	1:J:532:GLU:HB2	1.92	0.50
1:L:566:ASN:O	1:L:568:ASN:OD1	2.30	0.50
1:A:437:GLU:C	1:A:439:GLN:H	2.15	0.50
1:B:342:ALA:O	1:B:346:ASP:OD2	2.29	0.50
1:C:387:VAL:O	1:C:388:GLN:OE1	2.30	0.50
1:E:385:THR:CB	1:E:387:VAL:CG2	2.88	0.50
1:F:523:VAL:HG11	1:F:532:GLU:HB2	1.92	0.50
1:G:651:LEU:HD23	1:G:652:THR:N	2.26	0.50
1:H:567:GLU:CA	1:H:570:GLN:OE1	2.56	0.50
1:J:347:THR:O	1:J:348:PHE:O	2.30	0.50
1:J:443:LYS:HG3	1:J:471:ALA:HB2	1.93	0.50
1:J:476:ILE:HG22	1:J:477:GLY:N	2.18	0.50
1:J:510:MET:HB3	1:J:542:SER:HB3	1.94	0.50
1:K:340:VAL:C	1:K:341:THR:CG2	2.62	0.50
1:K:517:PHE:HE1	1:K:615:LYS:HD2	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:361:GLN:HE22	1:B:456:ASN:HD21	1.57	0.50
1:B:423:THR:HB	1:B:656:GLU:HB3	1.94	0.50
1:B:448:TYR:O	1:B:453:GLU:HG3	2.12	0.50
1:E:517:PHE:HE1	1:E:615:LYS:HD2	1.77	0.50
1:F:492:TYR:CE1	1:F:606:ILE:HB	2.46	0.50
1:G:437:GLU:C	1:G:439:GLN:H	2.15	0.50
1:G:510:MET:HB3	1:G:542:SER:OG	2.12	0.50
1:I:517:PHE:HE1	1:I:615:LYS:HD2	1.77	0.50
1:J:567:GLU:O	1:J:568:ASN:OD1	2.29	0.50
1:J:655:LEU:HD12	1:J:655:LEU:N	2.27	0.50
1:K:387:VAL:O	1:K:388:GLN:OE1	2.30	0.50
1:L:448:TYR:O	1:L:453:GLU:HG3	2.12	0.50
1:A:466:THR:HB	1:B:466:THR:HB	1.94	0.50
1:B:507:ASP:OD1	1:B:545:ARG:HG3	2.12	0.50
1:C:462:SER:HB3	1:D:478:SER:O	2.11	0.50
1:C:525:ASN:HB3	1:C:526:PRO:CD	2.17	0.50
1:E:342:ALA:HA	1:E:362:THR:HG21	1.93	0.50
1:G:387:VAL:CG2	1:G:390:GLU:CD	2.79	0.50
1:H:365:ASP:HB3	1:H:368:LYS:HB2	1.92	0.50
1:I:492:TYR:O	1:I:606:ILE:HG13	2.11	0.50
1:I:510:MET:HB3	1:I:542:SER:OG	2.12	0.50
1:J:396:LEU:HD13	1:J:405:THR:O	2.11	0.50
1:K:495:PRO:HD2	1:K:499:ILE:HG22	1.93	0.50
1:L:365:ASP:CG	1:L:367:THR:HG21	2.31	0.50
1:L:409:ILE:HD13	1:L:410:SER:C	2.31	0.50
1:B:566:ASN:O	1:B:570:GLN:OE1	2.30	0.50
1:D:655:LEU:HD12	1:D:655:LEU:N	2.27	0.50
1:E:342:ALA:HB2	1:E:362:THR:HG22	1.94	0.50
1:E:607:ALA:O	1:E:609:ILE:O	2.30	0.50
1:G:466:THR:HB	1:H:466:THR:HB	1.94	0.50
1:H:347:THR:O	1:H:348:PHE:O	2.30	0.50
1:I:587:ASP:O	1:I:587:ASP:OD2	2.30	0.50
1:I:607:ALA:O	1:I:609:ILE:O	2.30	0.50
1:J:365:ASP:HB3	1:J:368:LYS:HB2	1.93	0.50
1:K:401:LEU:HG	1:K:402:ALA:N	2.27	0.50
1:K:437:GLU:C	1:K:439:GLN:H	2.15	0.50
1:L:347:THR:O	1:L:348:PHE:O	2.30	0.50
1:L:492:TYR:CE1	1:L:606:ILE:HB	2.46	0.50
1:L:567:GLU:O	1:L:568:ASN:OD1	2.29	0.50
1:A:361:GLN:NE2	1:A:361:GLN:HA	2.27	0.49
1:C:466:THR:HB	1:D:466:THR:HB	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:510:MET:HB3	1:C:542:SER:OG	2.12	0.49
1:D:448:TYR:O	1:D:453:GLU:HG3	2.12	0.49
1:D:566:ASN:O	1:D:568:ASN:OD1	2.30	0.49
1:E:651:LEU:HD23	1:E:652:THR:N	2.26	0.49
1:F:347:THR:O	1:F:348:PHE:C	2.46	0.49
1:F:567:GLU:CA	1:F:570:GLN:OE1	2.56	0.49
1:G:340:VAL:O	1:G:341:THR:OG1	2.30	0.49
1:J:365:ASP:CG	1:J:367:THR:HG21	2.31	0.49
1:J:566:ASN:O	1:J:570:GLN:OE1	2.30	0.49
1:K:342:ALA:HB1	1:K:362:THR:HG22	1.94	0.49
1:A:342:ALA:HB2	1:A:362:THR:HG22	1.93	0.49
1:B:492:TYR:CE1	1:B:611:LEU:O	2.66	0.49
1:B:510:MET:HB3	1:B:542:SER:HB3	1.94	0.49
1:C:342:ALA:HB2	1:C:362:THR:HG22	1.93	0.49
1:C:353:PHE:CE2	1:C:395:TYR:CD2	2.86	0.49
1:D:443:LYS:HG3	1:D:471:ALA:HB2	1.93	0.49
1:D:567:GLU:C	1:D:568:ASN:OD1	2.51	0.49
1:F:566:ASN:O	1:F:568:ASN:OD1	2.30	0.49
1:G:387:VAL:O	1:G:388:GLN:OE1	2.30	0.49
1:H:655:LEU:HD12	1:H:655:LEU:N	2.27	0.49
1:I:391:ASP:OD1	1:I:391:ASP:N	2.46	0.49
1:I:556:GLY:HA3	1:I:589:TYR:HD1	1.74	0.49
1:L:361:GLN:HE22	1:L:456:ASN:HD21	1.57	0.49
1:A:387:VAL:O	1:A:388:GLN:OE1	2.30	0.49
1:A:510:MET:HB3	1:A:542:SER:OG	2.12	0.49
1:B:347:THR:O	1:B:348:PHE:O	2.30	0.49
1:B:566:ASN:O	1:B:568:ASN:OD1	2.30	0.49
1:B:566:ASN:CA	1:B:570:GLN:HE22	2.26	0.49
1:B:567:GLU:C	1:B:568:ASN:OD1	2.51	0.49
1:C:348:PHE:HZ	1:C:400:ASN:HD21	1.59	0.49
1:C:517:PHE:HE1	1:C:615:LYS:HD2	1.77	0.49
1:C:607:ALA:O	1:C:609:ILE:O	2.30	0.49
1:D:492:TYR:CE1	1:D:611:LEU:O	2.65	0.49
1:E:361:GLN:HA	1:E:361:GLN:NE2	2.27	0.49
1:E:457:SER:N	1:E:634:THR:HG23	2.26	0.49
1:F:567:GLU:C	1:F:568:ASN:OD1	2.51	0.49
1:G:361:GLN:NE2	1:G:361:GLN:HA	2.27	0.49
1:G:495:PRO:HD2	1:G:499:ILE:HG22	1.93	0.49
1:J:507:ASP:OD1	1:J:545:ARG:HG3	2.12	0.49
1:K:607:ALA:O	1:K:609:ILE:O	2.30	0.49
1:L:492:TYR:CE1	1:L:611:LEU:O	2.66	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:507:ASP:OD1	1:L:545:ARG:HG3	2.12	0.49
1:L:655:LEU:HD12	1:L:655:LEU:N	2.27	0.49
1:B:567:GLU:CA	1:B:570:GLN:OE1	2.56	0.49
1:C:437:GLU:C	1:C:439:GLN:H	2.15	0.49
1:E:437:GLU:C	1:E:439:GLN:H	2.15	0.49
1:F:507:ASP:OD1	1:F:545:ARG:HG3	2.12	0.49
1:H:566:ASN:O	1:H:568:ASN:OD1	2.30	0.49
1:H:566:ASN:O	1:H:570:GLN:OE1	2.30	0.49
1:I:457:SER:N	1:I:634:THR:HG23	2.26	0.49
1:J:342:ALA:O	1:J:346:ASP:OD1	2.30	0.49
1:J:565:GLU:CB	1:J:570:GLN:NE2	2.55	0.49
1:K:510:MET:HB3	1:K:542:SER:OG	2.12	0.49
1:A:401:LEU:HG	1:A:402:ALA:N	2.28	0.49
1:B:353:PHE:CZ	1:B:395:TYR:HE2	2.11	0.49
1:B:396:LEU:HD13	1:B:405:THR:O	2.11	0.49
1:D:566:ASN:CA	1:D:570:GLN:HE22	2.26	0.49
1:D:567:GLU:CA	1:D:570:GLN:OE1	2.56	0.49
1:E:342:ALA:HB1	1:E:362:THR:HG22	1.94	0.49
1:F:342:ALA:O	1:F:346:ASP:OD1	2.30	0.49
1:F:566:ASN:O	1:F:570:GLN:OE1	2.30	0.49
1:F:655:LEU:N	1:F:655:LEU:HD12	2.27	0.49
1:G:342:ALA:HB2	1:G:362:THR:HG22	1.93	0.49
1:K:361:GLN:HA	1:K:361:GLN:NE2	2.27	0.49
1:B:342:ALA:O	1:B:346:ASP:OD1	2.30	0.49
1:B:366:SER:HB3	1:K:403:PRO:N	2.17	0.49
1:B:448:TYR:CD1	1:B:642:PHE:HB2	2.48	0.49
1:C:495:PRO:HD2	1:C:499:ILE:HG22	1.93	0.49
1:E:522:LYS:N	1:E:522:LYS:CD	2.72	0.49
1:G:607:ALA:O	1:G:609:ILE:O	2.30	0.49
1:I:387:VAL:O	1:I:388:GLN:OE1	2.30	0.49
1:I:495:PRO:HD2	1:I:499:ILE:HG22	1.93	0.49
1:J:427:ASN:ND2	1:J:427:ASN:N	2.54	0.49
1:K:342:ALA:HB2	1:K:362:THR:HG22	1.94	0.49
1:L:396:LEU:HD13	1:L:405:THR:O	2.11	0.49
1:L:567:GLU:CA	1:L:570:GLN:OE1	2.56	0.49
1:B:447:TYR:HB2	1:B:467:TYR:CG	2.48	0.49
1:C:587:ASP:OD2	1:C:587:ASP:O	2.30	0.49
1:D:408:ILE:HD12	1:D:409:ILE:HA	1.95	0.49
1:D:507:ASP:OD1	1:D:545:ARG:HG3	2.12	0.49
1:E:587:ASP:O	1:E:587:ASP:OD2	2.30	0.49
1:F:492:TYR:CE1	1:F:611:LEU:O	2.66	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:401:LEU:HG	1:G:402:ALA:N	2.27	0.49
1:G:466:THR:CG2	1:H:466:THR:HB	2.43	0.49
1:H:346:ASP:HB3	1:H:360:VAL:HB	1.95	0.49
1:H:448:TYR:O	1:H:453:GLU:HG3	2.12	0.49
1:H:510:MET:HB3	1:H:542:SER:HB3	1.94	0.49
1:J:540:ILE:HG22	1:J:555:ILE:CG1	2.43	0.49
1:L:597:TYR:HB2	1:L:598:PRO:HD3	1.95	0.49
1:C:385:THR:C	1:C:387:VAL:N	2.66	0.49
1:D:347:THR:O	1:D:348:PHE:O	2.30	0.49
1:E:387:VAL:O	1:E:388:GLN:OE1	2.30	0.49
1:F:566:ASN:CA	1:F:570:GLN:HE22	2.26	0.49
1:J:448:TYR:CD1	1:J:642:PHE:HB2	2.48	0.49
1:L:567:GLU:C	1:L:568:ASN:OD1	2.51	0.49
1:A:385:THR:HG23	1:A:385:THR:O	2.12	0.49
1:A:522:LYS:N	1:A:522:LYS:CD	2.72	0.49
1:A:607:ALA:O	1:A:609:ILE:O	2.30	0.49
1:B:412:ASN:ND2	1:B:486:ARG:NH2	2.61	0.49
1:C:340:VAL:C	1:C:341:THR:CG2	2.62	0.49
1:C:361:GLN:HA	1:C:361:GLN:NE2	2.27	0.49
1:D:401:LEU:CG	1:D:403:PRO:HD2	2.42	0.49
1:D:448:TYR:CD1	1:D:642:PHE:HB2	2.48	0.49
1:F:346:ASP:HB3	1:F:360:VAL:HB	1.95	0.49
1:F:423:THR:HB	1:F:656:GLU:HB3	1.94	0.49
1:G:391:ASP:N	1:G:391:ASP:OD1	2.46	0.49
1:G:457:SER:N	1:G:634:THR:HG23	2.26	0.49
1:G:587:ASP:OD2	1:G:587:ASP:O	2.30	0.49
1:G:631:VAL:CG2	1:H:476:ILE:CG2	2.72	0.49
1:H:507:ASP:OD1	1:H:545:ARG:HG3	2.12	0.49
1:I:361:GLN:NE2	1:I:361:GLN:HA	2.27	0.49
1:J:412:ASN:ND2	1:J:486:ARG:NH2	2.61	0.49
1:L:447:TYR:HB2	1:L:467:TYR:CG	2.48	0.49
1:L:448:TYR:CD1	1:L:642:PHE:HB2	2.48	0.49
1:L:566:ASN:CA	1:L:570:GLN:HE22	2.26	0.49
1:A:391:ASP:OD1	1:A:391:ASP:N	2.46	0.49
1:C:385:THR:HG23	1:C:385:THR:O	2.12	0.49
1:C:401:LEU:HG	1:C:402:ALA:N	2.27	0.49
1:D:662:GLU:O	1:D:662:GLU:HG2	2.13	0.49
1:E:340:VAL:HA	1:E:345:TYR:HH	1.68	0.49
1:F:540:ILE:HG22	1:F:555:ILE:CG1	2.43	0.49
1:H:412:ASN:ND2	1:H:486:ARG:NH2	2.61	0.49
1:H:447:TYR:HB2	1:H:467:TYR:CG	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:423:THR:HB	1:J:656:GLU:HB3	1.94	0.49
1:J:447:TYR:HB2	1:J:467:TYR:CG	2.48	0.49
1:J:448:TYR:O	1:J:453:GLU:HG3	2.12	0.49
1:J:662:GLU:O	1:J:662:GLU:HG2	2.13	0.49
1:K:358:GLN:HB2	1:K:379:LYS:CB	2.43	0.49
1:K:385:THR:HG23	1:K:385:THR:O	2.12	0.49
1:K:466:THR:CG2	1:L:466:THR:HB	2.43	0.49
1:L:566:ASN:O	1:L:570:GLN:OE1	2.30	0.49
1:A:531:GLU:C	1:A:532:GLU:OE1	2.52	0.48
1:A:536:TYR:CD1	1:A:586:ARG:CD	2.96	0.48
1:C:391:ASP:OD1	1:C:391:ASP:N	2.46	0.48
1:C:466:THR:CG2	1:D:466:THR:HB	2.43	0.48
1:C:518:ASN:OD1	1:C:533:ASP:CB	2.60	0.48
1:E:403:PRO:N	1:H:366:SER:HB3	2.16	0.48
1:G:385:THR:HG23	1:G:385:THR:O	2.12	0.48
1:G:518:ASN:OD1	1:G:533:ASP:CB	2.60	0.48
1:H:448:TYR:CD1	1:H:642:PHE:HB2	2.48	0.48
1:H:567:GLU:C	1:H:568:ASN:OD1	2.51	0.48
1:I:353:PHE:O	1:I:354:GLY:C	2.48	0.48
1:I:385:THR:HG23	1:I:385:THR:O	2.12	0.48
1:I:466:THR:CG2	1:J:466:THR:HB	2.43	0.48
1:I:558:PHE:O	1:I:586:ARG:HB3	2.13	0.48
1:J:597:TYR:HB2	1:J:598:PRO:HD3	1.95	0.48
1:K:536:TYR:CD1	1:K:586:ARG:CD	2.96	0.48
1:B:346:ASP:HB3	1:B:360:VAL:HB	1.95	0.48
1:B:401:LEU:CG	1:B:403:PRO:HD2	2.42	0.48
1:D:414:LEU:HD23	1:D:414:LEU:HA	1.70	0.48
1:E:536:TYR:CD1	1:E:586:ARG:CD	2.96	0.48
1:F:510:MET:HB3	1:F:542:SER:HB3	1.94	0.48
1:F:661:LEU:C	1:F:663:HIS:N	2.61	0.48
1:H:492:TYR:CE1	1:H:611:LEU:O	2.66	0.48
1:K:531:GLU:C	1:K:532:GLU:OE1	2.52	0.48
1:A:358:GLN:HB2	1:A:379:LYS:CB	2.43	0.48
1:C:358:GLN:HB2	1:C:379:LYS:CB	2.43	0.48
1:D:508:ARG:HG2	1:D:577:PHE:HA	1.96	0.48
1:E:358:GLN:HB2	1:E:379:LYS:CB	2.43	0.48
1:F:412:ASN:ND2	1:F:486:ARG:NH2	2.61	0.48
1:F:447:TYR:HB2	1:F:467:TYR:CG	2.48	0.48
1:G:342:ALA:HB1	1:G:362:THR:HG22	1.94	0.48
1:G:517:PHE:HE1	1:G:615:LYS:HD2	1.77	0.48
1:H:423:THR:HB	1:H:656:GLU:HB3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:342:ALA:HB1	1:I:362:THR:HG22	1.94	0.48
1:I:358:GLN:HB2	1:I:379:LYS:CB	2.43	0.48
1:I:385:THR:C	1:I:387:VAL:N	2.66	0.48
1:J:346:ASP:HB3	1:J:360:VAL:HB	1.95	0.48
1:A:385:THR:C	1:A:387:VAL:N	2.66	0.48
1:B:597:TYR:HB2	1:B:598:PRO:HD3	1.95	0.48
1:B:655:LEU:HD12	1:B:655:LEU:N	2.27	0.48
1:C:342:ALA:HB1	1:C:362:THR:HG22	1.94	0.48
1:C:361:GLN:CG	1:C:455:PHE:CD1	2.97	0.48
1:C:424:TYR:HB3	1:C:475:VAL:H	1.78	0.48
1:D:658:ILE:CD1	1:D:658:ILE:N	2.74	0.48
1:E:385:THR:HG23	1:E:385:THR:O	2.12	0.48
1:E:466:THR:CG2	1:F:466:THR:HB	2.43	0.48
1:F:662:GLU:O	1:F:662:GLU:HG2	2.13	0.48
1:G:353:PHE:O	1:G:354:GLY:C	2.48	0.48
1:J:492:TYR:CE1	1:J:611:LEU:O	2.66	0.48
1:J:567:GLU:C	1:J:568:ASN:OD1	2.51	0.48
1:F:448:TYR:O	1:F:453:GLU:HG3	2.12	0.48
1:F:595:ILE:HD12	1:F:595:ILE:N	2.21	0.48
1:G:358:GLN:HB2	1:G:379:LYS:CB	2.43	0.48
1:G:545:ARG:HB3	1:G:597:TYR:CE2	2.49	0.48
1:I:342:ALA:HB2	1:I:362:THR:HG22	1.93	0.48
1:I:401:LEU:HG	1:I:402:ALA:N	2.27	0.48
1:J:408:ILE:HD12	1:J:409:ILE:HA	1.95	0.48
1:K:558:PHE:O	1:K:586:ARG:HB3	2.13	0.48
1:L:565:GLU:CB	1:L:570:GLN:NE2	2.55	0.48
1:A:545:ARG:HB3	1:A:597:TYR:CE2	2.48	0.48
1:B:492:TYR:HE1	1:B:611:LEU:O	1.97	0.48
1:B:662:GLU:O	1:B:662:GLU:HG2	2.13	0.48
1:D:412:ASN:ND2	1:D:486:ARG:NH2	2.61	0.48
1:D:565:GLU:OE2	1:D:590:TYR:OH	2.28	0.48
1:E:361:GLN:CG	1:E:455:PHE:CD1	2.97	0.48
1:E:545:ARG:HB3	1:E:597:TYR:CE2	2.49	0.48
1:G:558:PHE:O	1:G:586:ARG:HB3	2.13	0.48
1:H:658:ILE:CD1	1:H:658:ILE:N	2.74	0.48
1:I:385:THR:CG2	1:I:389:ARG:C	2.73	0.48
1:A:466:THR:CG2	1:B:466:THR:HB	2.43	0.48
1:A:518:ASN:OD1	1:A:533:ASP:CB	2.60	0.48
1:C:536:TYR:CD1	1:C:586:ARG:CD	2.96	0.48
1:C:545:ARG:HB3	1:C:597:TYR:CE2	2.48	0.48
1:E:340:VAL:O	1:E:341:THR:OG1	2.30	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:387:VAL:CG2	1:E:390:GLU:OE1	2.55	0.48
1:G:531:GLU:C	1:G:532:GLU:OE1	2.52	0.48
1:J:401:LEU:CG	1:J:403:PRO:HD2	2.42	0.48
1:L:342:ALA:O	1:L:346:ASP:OD1	2.30	0.48
1:A:575:ASN:O	1:A:576:ASP:HB2	2.13	0.48
1:E:401:LEU:HG	1:E:402:ALA:N	2.27	0.48
1:F:408:ILE:HD12	1:F:409:ILE:HA	1.95	0.48
1:F:448:TYR:CD1	1:F:642:PHE:HB2	2.48	0.48
1:H:540:ILE:HG22	1:H:555:ILE:CG1	2.43	0.48
1:J:508:ARG:HG2	1:J:577:PHE:HA	1.96	0.48
1:L:414:LEU:HD23	1:L:414:LEU:HA	1.70	0.48
1:L:508:ARG:HG2	1:L:577:PHE:HA	1.96	0.48
1:A:587:ASP:OD2	1:A:587:ASP:O	2.30	0.48
1:F:651:LEU:HD22	1:F:652:THR:N	2.29	0.48
1:H:597:TYR:HB2	1:H:598:PRO:HD3	1.95	0.48
1:J:486:ARG:HG2	1:J:499:ILE:HD11	1.96	0.48
1:J:566:ASN:CA	1:J:570:GLN:HE22	2.26	0.48
1:K:522:LYS:N	1:K:522:LYS:CD	2.72	0.48
1:K:575:ASN:O	1:K:576:ASP:HB2	2.13	0.48
1:L:492:TYR:O	1:L:606:ILE:HG12	2.14	0.48
1:L:653:ILE:HG22	1:L:655:LEU:HD12	1.96	0.48
1:L:662:GLU:O	1:L:662:GLU:HG2	2.13	0.48
1:A:361:GLN:CG	1:A:455:PHE:CD1	2.97	0.48
1:B:486:ARG:HG2	1:B:499:ILE:HD11	1.96	0.48
1:D:447:TYR:HB2	1:D:467:TYR:CG	2.48	0.48
1:D:492:TYR:O	1:D:606:ILE:HG12	2.14	0.48
1:D:653:ILE:HG22	1:D:655:LEU:HD12	1.96	0.48
1:F:345:TYR:C	1:F:345:TYR:HD1	2.18	0.48
1:F:508:ARG:HG2	1:F:577:PHE:HA	1.96	0.48
1:H:566:ASN:CA	1:H:570:GLN:HE22	2.26	0.48
1:H:651:LEU:HD22	1:H:652:THR:N	2.29	0.48
1:J:651:LEU:HD22	1:J:652:THR:N	2.29	0.48
1:J:653:ILE:HG22	1:J:655:LEU:HD12	1.96	0.48
1:L:346:ASP:HB3	1:L:360:VAL:HB	1.95	0.48
1:L:408:ILE:HD12	1:L:409:ILE:HA	1.95	0.48
1:L:412:ASN:ND2	1:L:486:ARG:NH2	2.61	0.48
1:B:463:LYS:O	1:B:466:THR:HG23	2.14	0.47
1:B:540:ILE:HG22	1:B:555:ILE:CG1	2.43	0.47
1:B:651:LEU:HD22	1:B:652:THR:N	2.29	0.47
1:C:457:SER:N	1:C:634:THR:HG23	2.26	0.47
1:C:575:ASN:O	1:C:576:ASP:HB2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:651:LEU:HD22	1:D:652:THR:N	2.29	0.47
1:E:391:ASP:N	1:E:391:ASP:OD1	2.46	0.47
1:E:558:PHE:O	1:E:586:ARG:HB3	2.13	0.47
1:F:492:TYR:HE1	1:F:611:LEU:O	1.97	0.47
1:G:424:TYR:HB3	1:G:475:VAL:H	1.79	0.47
1:G:575:ASN:O	1:G:576:ASP:HB2	2.14	0.47
1:K:545:ARG:HB3	1:K:597:TYR:CE2	2.49	0.47
1:L:492:TYR:HE1	1:L:611:LEU:O	1.97	0.47
1:C:340:VAL:CA	1:C:345:TYR:CZ	2.82	0.47
1:C:448:TYR:CG	1:C:642:PHE:HB2	2.50	0.47
1:E:531:GLU:C	1:E:532:GLU:OE1	2.52	0.47
1:G:579:LYS:HB3	1:G:589:TYR:OH	2.15	0.47
1:H:486:ARG:HG2	1:H:499:ILE:HD11	1.96	0.47
1:A:424:TYR:HB3	1:A:475:VAL:H	1.79	0.47
1:B:408:ILE:HD12	1:B:409:ILE:HA	1.95	0.47
1:C:387:VAL:CG2	1:C:390:GLU:OE1	2.54	0.47
1:C:531:GLU:C	1:C:532:GLU:OE1	2.52	0.47
1:C:579:LYS:HB3	1:C:589:TYR:OH	2.15	0.47
1:G:385:THR:C	1:G:387:VAL:H	2.16	0.47
1:H:492:TYR:O	1:H:606:ILE:HG12	2.14	0.47
1:H:662:GLU:O	1:H:662:GLU:HG2	2.13	0.47
1:I:361:GLN:CG	1:I:455:PHE:CD1	2.97	0.47
1:I:536:TYR:CD1	1:I:586:ARG:CD	2.96	0.47
1:K:448:TYR:CG	1:K:642:PHE:HB2	2.49	0.47
1:K:518:ASN:OD1	1:K:533:ASP:CB	2.60	0.47
1:L:427:ASN:ND2	1:L:427:ASN:N	2.54	0.47
1:C:558:PHE:O	1:C:586:ARG:HB3	2.13	0.47
1:D:353:PHE:CE2	1:D:392:ILE:HD13	2.50	0.47
1:D:492:TYR:HE1	1:D:611:LEU:O	1.97	0.47
1:E:361:GLN:HG2	1:E:455:PHE:CD1	2.50	0.47
1:F:597:TYR:HB2	1:F:598:PRO:HD3	1.95	0.47
1:G:361:GLN:CG	1:G:455:PHE:CD1	2.97	0.47
1:H:408:ILE:HD12	1:H:409:ILE:HA	1.95	0.47
1:H:448:TYR:CE1	1:H:642:PHE:HB2	2.50	0.47
1:H:653:ILE:HG22	1:H:655:LEU:HD12	1.96	0.47
1:I:536:TYR:HD1	1:I:586:ARG:HD3	1.79	0.47
1:K:361:GLN:CG	1:K:455:PHE:CD1	2.97	0.47
1:L:346:ASP:OD1	1:L:346:ASP:N	2.48	0.47
1:L:353:PHE:CE2	1:L:392:ILE:HD13	2.50	0.47
1:L:651:LEU:HD22	1:L:652:THR:N	2.29	0.47
1:A:340:VAL:O	1:A:341:THR:OG1	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:353:PHE:CE2	1:A:395:TYR:CD2	2.86	0.47
1:D:346:ASP:HB3	1:D:360:VAL:HB	1.95	0.47
1:D:385:THR:HG22	1:D:388:GLN:OE1	2.15	0.47
1:D:448:TYR:CE1	1:D:642:PHE:HB2	2.50	0.47
1:E:626:ASP:HA	1:E:627:PRO:HD3	1.65	0.47
1:F:342:ALA:O	1:F:346:ASP:OD2	2.29	0.47
1:F:486:ARG:HG2	1:F:499:ILE:HD11	1.96	0.47
1:G:626:ASP:HA	1:G:627:PRO:HD3	1.65	0.47
1:I:424:TYR:HB3	1:I:475:VAL:H	1.79	0.47
1:I:545:ARG:HB3	1:I:597:TYR:CE2	2.49	0.47
1:I:596:ASN:HB3	1:I:601:VAL:HG22	1.97	0.47
1:J:463:LYS:O	1:J:466:THR:HG23	2.14	0.47
1:L:565:GLU:OE2	1:L:590:TYR:OH	2.28	0.47
1:B:408:ILE:O	1:B:409:ILE:HG23	2.09	0.47
1:F:401:LEU:CG	1:F:403:PRO:HD2	2.42	0.47
1:F:448:TYR:CE1	1:F:642:PHE:HB2	2.50	0.47
1:F:592:ILE:O	1:F:593:GLY:O	2.32	0.47
1:F:653:ILE:HG22	1:F:655:LEU:HD12	1.96	0.47
1:G:596:ASN:HB3	1:G:601:VAL:HG22	1.97	0.47
1:I:531:GLU:C	1:I:532:GLU:OE1	2.52	0.47
1:J:353:PHE:CE2	1:J:392:ILE:HD13	2.50	0.47
1:A:340:VAL:C	1:A:341:THR:CG2	2.62	0.47
1:A:361:GLN:HG2	1:A:455:PHE:CD1	2.50	0.47
1:B:492:TYR:O	1:B:606:ILE:HG12	2.14	0.47
1:B:508:ARG:HG2	1:B:577:PHE:HA	1.96	0.47
1:B:653:ILE:HG22	1:B:655:LEU:HD12	1.96	0.47
1:D:592:ILE:O	1:D:593:GLY:O	2.32	0.47
1:E:424:TYR:HB3	1:E:475:VAL:H	1.78	0.47
1:E:575:ASN:O	1:E:576:ASP:HB2	2.14	0.47
1:G:385:THR:C	1:G:387:VAL:N	2.66	0.47
1:G:536:TYR:CD1	1:G:586:ARG:CD	2.96	0.47
1:H:492:TYR:HE1	1:H:611:LEU:O	1.97	0.47
1:H:592:ILE:O	1:H:593:GLY:O	2.32	0.47
1:J:346:ASP:OD1	1:J:346:ASP:N	2.47	0.47
1:J:448:TYR:CE1	1:J:642:PHE:HB2	2.50	0.47
1:J:492:TYR:HE1	1:J:611:LEU:O	1.97	0.47
1:J:660:GLN:HA	1:J:661:LEU:HB3	1.90	0.47
1:K:579:LYS:HB3	1:K:589:TYR:OH	2.15	0.47
1:K:587:ASP:OD2	1:K:587:ASP:O	2.30	0.47
1:L:401:LEU:CG	1:L:403:PRO:HD2	2.42	0.47
1:L:486:ARG:HG2	1:L:499:ILE:HD11	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:558:PHE:O	1:A:586:ARG:HB3	2.13	0.47
1:B:353:PHE:CE2	1:B:392:ILE:HD13	2.50	0.47
1:B:385:THR:HG22	1:B:388:GLN:OE1	2.15	0.47
1:D:597:TYR:HB2	1:D:598:PRO:HD3	1.95	0.47
1:E:385:THR:C	1:E:387:VAL:H	2.16	0.47
1:E:386:THR:C	1:E:388:GLN:N	2.67	0.47
1:E:579:LYS:HB3	1:E:589:TYR:OH	2.14	0.47
1:E:596:ASN:HB3	1:E:601:VAL:HG22	1.97	0.47
1:G:403:PRO:HD3	1:J:366:SER:HA	1.96	0.47
1:G:448:TYR:CG	1:G:642:PHE:HB2	2.50	0.47
1:I:356:ILE:O	1:I:356:ILE:CG1	2.63	0.47
1:I:559:ALA:O	1:I:561:GLY:CA	2.34	0.47
1:I:579:LYS:HB3	1:I:589:TYR:OH	2.15	0.47
1:J:592:ILE:O	1:J:593:GLY:O	2.32	0.47
1:K:431:GLU:HB2	1:K:435:TRP:CE3	2.50	0.47
1:A:448:TYR:CG	1:A:642:PHE:HB2	2.50	0.47
1:D:664:HIS:O	1:D:665:HIS:CB	2.63	0.47
1:J:492:TYR:O	1:J:606:ILE:HG12	2.14	0.47
1:K:420:LEU:HD12	1:K:479:SER:O	2.15	0.47
1:L:463:LYS:O	1:L:466:THR:HG23	2.14	0.47
1:C:596:ASN:HB3	1:C:601:VAL:HG22	1.97	0.47
1:D:455:PHE:O	1:D:456:ASN:HB2	2.16	0.47
1:F:463:LYS:O	1:F:466:THR:HG23	2.14	0.47
1:F:522:LYS:HG2	1:F:524:VAL:HG23	1.97	0.47
1:H:353:PHE:CE2	1:H:392:ILE:HD13	2.50	0.47
1:H:463:LYS:O	1:H:466:THR:HG23	2.14	0.47
1:H:656:GLU:OE1	1:H:664:HIS:CG	2.68	0.47
1:I:431:GLU:HB2	1:I:435:TRP:CE3	2.50	0.47
1:L:455:PHE:O	1:L:456:ASN:HB2	2.15	0.47
1:A:420:LEU:HD12	1:A:479:SER:O	2.15	0.46
1:C:420:LEU:HD12	1:C:479:SER:O	2.15	0.46
1:D:398:ASP:CB	1:E:663:HIS:HB3	2.44	0.46
1:D:463:LYS:O	1:D:466:THR:HG23	2.14	0.46
1:E:448:TYR:CG	1:E:642:PHE:HB2	2.49	0.46
1:F:492:TYR:O	1:F:606:ILE:HG12	2.14	0.46
1:H:385:THR:HG22	1:H:388:GLN:OE1	2.15	0.46
1:H:664:HIS:O	1:H:665:HIS:CB	2.63	0.46
1:I:448:TYR:CG	1:I:642:PHE:HB2	2.50	0.46
1:L:540:ILE:HG22	1:L:555:ILE:CG1	2.43	0.46
1:A:431:GLU:HB2	1:A:435:TRP:CE3	2.50	0.46
1:B:365:ASP:HB3	1:B:367:THR:HG23	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:656:GLU:OE1	1:B:664:HIS:CG	2.68	0.46
1:D:399:TYR:CA	1:E:664:HIS:HB2	2.24	0.46
1:D:540:ILE:HG22	1:D:555:ILE:CG1	2.43	0.46
1:E:431:GLU:HB2	1:E:435:TRP:CE3	2.50	0.46
1:J:522:LYS:HG2	1:J:524:VAL:HG23	1.97	0.46
1:K:596:ASN:HB3	1:K:601:VAL:HG22	1.97	0.46
1:L:656:GLU:OE1	1:L:664:HIS:CG	2.68	0.46
1:A:340:VAL:O	1:A:341:THR:CG2	2.64	0.46
1:B:366:SER:N	1:B:367:THR:HG22	2.31	0.46
1:C:536:TYR:HD1	1:C:586:ARG:HD3	1.79	0.46
1:C:559:ALA:O	1:C:561:GLY:CA	2.34	0.46
1:D:365:ASP:HB3	1:D:367:THR:HG23	1.97	0.46
1:D:486:ARG:HG2	1:D:499:ILE:HD11	1.96	0.46
1:D:656:GLU:OE1	1:D:664:HIS:CG	2.68	0.46
1:E:536:TYR:HD1	1:E:586:ARG:HD3	1.79	0.46
1:F:353:PHE:CE2	1:F:392:ILE:HD13	2.50	0.46
1:G:431:GLU:HB2	1:G:435:TRP:CE3	2.50	0.46
1:J:656:GLU:OE1	1:J:664:HIS:CG	2.68	0.46
1:J:664:HIS:O	1:J:665:HIS:CB	2.63	0.46
1:K:353:PHE:O	1:K:354:GLY:C	2.48	0.46
1:K:424:TYR:HB3	1:K:475:VAL:H	1.79	0.46
1:L:366:SER:N	1:L:367:THR:HG22	2.31	0.46
1:L:448:TYR:CE1	1:L:642:PHE:HB2	2.50	0.46
1:A:401:LEU:CD2	1:A:402:ALA:CB	2.69	0.46
1:B:448:TYR:CE1	1:B:642:PHE:HB2	2.50	0.46
1:C:340:VAL:O	1:C:341:THR:CB	2.63	0.46
1:C:431:GLU:HB2	1:C:435:TRP:CE3	2.50	0.46
1:D:408:ILE:O	1:D:409:ILE:HG23	2.09	0.46
1:E:519:SER:O	1:E:533:ASP:HB2	2.16	0.46
1:F:401:LEU:HD12	1:F:401:LEU:HA	1.63	0.46
1:G:361:GLN:HG2	1:G:455:PHE:CD1	2.49	0.46
1:G:519:SER:O	1:G:533:ASP:HB2	2.16	0.46
1:G:536:TYR:HD1	1:G:586:ARG:HD3	1.79	0.46
1:H:455:PHE:O	1:H:456:ASN:HB2	2.15	0.46
1:J:596:ASN:ND2	1:J:598:PRO:HD2	2.31	0.46
1:K:361:GLN:HG2	1:K:455:PHE:CD1	2.49	0.46
1:L:592:ILE:O	1:L:593:GLY:O	2.32	0.46
1:A:385:THR:C	1:A:387:VAL:H	2.16	0.46
1:A:396:LEU:O	1:A:399:TYR:CE1	2.69	0.46
1:A:579:LYS:HB3	1:A:589:TYR:OH	2.15	0.46
1:B:592:ILE:O	1:B:593:GLY:O	2.32	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:596:ASN:ND2	1:B:598:PRO:HD2	2.31	0.46
1:C:519:SER:O	1:C:533:ASP:HB2	2.16	0.46
1:D:366:SER:N	1:D:367:THR:HG22	2.31	0.46
1:D:401:LEU:HD12	1:D:401:LEU:HA	1.63	0.46
1:D:565:GLU:CB	1:D:570:GLN:NE2	2.55	0.46
1:E:341:THR:O	1:E:341:THR:OG1	2.33	0.46
1:E:385:THR:C	1:E:387:VAL:N	2.66	0.46
1:E:386:THR:O	1:E:388:GLN:HG3	2.16	0.46
1:F:455:PHE:O	1:F:456:ASN:HB2	2.16	0.46
1:F:541:VAL:HG12	1:F:542:SER:N	2.31	0.46
1:G:420:LEU:HD12	1:G:479:SER:O	2.15	0.46
1:I:396:LEU:O	1:I:399:TYR:CE1	2.69	0.46
1:I:401:LEU:CD2	1:I:402:ALA:CB	2.69	0.46
1:J:500:LYS:HB3	1:J:500:LYS:HE2	1.81	0.46
1:A:596:ASN:HB3	1:A:601:VAL:HG22	1.97	0.46
1:B:405:THR:OG1	1:B:406:PRO:HD2	2.15	0.46
1:C:386:THR:O	1:C:388:GLN:HG3	2.16	0.46
1:E:353:PHE:O	1:E:354:GLY:C	2.48	0.46
1:E:356:ILE:O	1:E:356:ILE:CG1	2.63	0.46
1:F:385:THR:HG22	1:F:388:GLN:OE1	2.15	0.46
1:F:386:THR:O	1:F:390:GLU:HG3	2.16	0.46
1:F:656:GLU:OE1	1:F:664:HIS:CG	2.68	0.46
1:G:386:THR:O	1:G:388:GLN:HG3	2.16	0.46
1:G:522:LYS:N	1:G:522:LYS:CD	2.72	0.46
1:H:508:ARG:HG2	1:H:577:PHE:HA	1.96	0.46
1:I:522:LYS:N	1:I:522:LYS:CD	2.72	0.46
1:I:575:ASN:O	1:I:576:ASP:HB2	2.13	0.46
1:K:536:TYR:HD1	1:K:586:ARG:HD3	1.79	0.46
1:A:386:THR:O	1:A:388:GLN:HG3	2.16	0.46
1:C:485:VAL:HG22	1:C:624:TYR:CD2	2.51	0.46
1:E:420:LEU:HD12	1:E:479:SER:O	2.15	0.46
1:F:405:THR:OG1	1:F:406:PRO:HD2	2.15	0.46
1:F:596:ASN:ND2	1:F:598:PRO:HD2	2.31	0.46
1:L:522:LYS:HG2	1:L:524:VAL:HG23	1.97	0.46
1:A:485:VAL:HG22	1:A:624:TYR:CD2	2.51	0.46
1:A:536:TYR:HD1	1:A:586:ARG:HD3	1.79	0.46
1:A:559:ALA:O	1:A:561:GLY:CA	2.34	0.46
1:B:660:GLN:HA	1:B:661:LEU:HB3	1.90	0.46
1:D:596:ASN:ND2	1:D:598:PRO:HD2	2.31	0.46
1:E:396:LEU:O	1:E:399:TYR:CE1	2.69	0.46
1:F:607:ALA:C	1:F:609:ILE:H	2.20	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:522:LYS:HG2	1:H:524:VAL:HG23	1.97	0.46
1:I:361:GLN:HG2	1:I:455:PHE:CD1	2.50	0.46
1:I:626:ASP:HA	1:I:627:PRO:HD3	1.65	0.46
1:J:481:THR:O	1:J:481:THR:HG22	2.16	0.46
1:J:541:VAL:HG12	1:J:542:SER:N	2.31	0.46
1:L:541:VAL:HG12	1:L:542:SER:N	2.30	0.46
1:L:596:ASN:ND2	1:L:598:PRO:HD2	2.31	0.46
1:A:492:TYR:HA	1:A:606:ILE:HD12	1.98	0.46
1:B:455:PHE:O	1:B:456:ASN:HB2	2.15	0.46
1:B:522:LYS:HG2	1:B:524:VAL:HG23	1.97	0.46
1:B:565:GLU:OE2	1:B:590:TYR:OH	2.28	0.46
1:C:387:VAL:HB	1:C:390:GLU:CD	2.36	0.46
1:D:607:ALA:C	1:D:609:ILE:H	2.20	0.46
1:E:559:ALA:O	1:E:561:GLY:CA	2.34	0.46
1:H:401:LEU:CD1	1:H:403:PRO:HD2	2.46	0.46
1:H:541:VAL:HG12	1:H:542:SER:N	2.31	0.46
1:J:366:SER:N	1:J:367:THR:HG22	2.31	0.46
1:J:385:THR:HG22	1:J:388:GLN:OE1	2.15	0.46
1:K:356:ILE:O	1:K:356:ILE:CG1	2.63	0.46
1:L:365:ASP:HB3	1:L:367:THR:HG23	1.97	0.46
1:A:387:VAL:HB	1:A:390:GLU:CD	2.37	0.46
1:B:386:THR:O	1:B:390:GLU:HG3	2.16	0.46
1:B:644:ASN:C	1:B:644:ASN:HD22	2.20	0.46
1:E:403:PRO:CD	1:H:366:SER:HA	2.45	0.46
1:I:386:THR:O	1:I:388:GLN:HG3	2.16	0.46
1:K:385:THR:HG1	1:K:388:GLN:N	2.14	0.46
1:K:391:ASP:C	1:K:393:LYS:H	2.20	0.46
1:B:565:GLU:CB	1:B:570:GLN:NE2	2.55	0.45
1:C:391:ASP:C	1:C:393:LYS:H	2.20	0.45
1:D:481:THR:O	1:D:481:THR:HG22	2.16	0.45
1:D:522:LYS:HG2	1:D:524:VAL:HG23	1.97	0.45
1:F:401:LEU:CD1	1:F:403:PRO:HD2	2.46	0.45
1:F:660:GLN:HA	1:F:661:LEU:HB3	1.90	0.45
1:G:391:ASP:C	1:G:393:LYS:H	2.20	0.45
1:H:386:THR:O	1:H:390:GLU:HG3	2.16	0.45
1:K:391:ASP:OD1	1:K:391:ASP:N	2.46	0.45
1:B:401:LEU:CD1	1:B:403:PRO:HD2	2.46	0.45
1:B:545:ARG:NH1	1:B:597:TYR:HB3	2.32	0.45
1:C:396:LEU:O	1:C:399:TYR:CE1	2.69	0.45
1:D:346:ASP:OD1	1:D:346:ASP:N	2.47	0.45
1:D:408:ILE:O	1:D:408:ILE:CG1	2.64	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:492:TYR:HA	1:E:606:ILE:HD12	1.98	0.45
1:E:631:VAL:CG2	1:F:476:ILE:CG2	2.72	0.45
1:F:365:ASP:HB3	1:F:367:THR:HG23	1.97	0.45
1:F:500:LYS:HB3	1:F:500:LYS:HE2	1.80	0.45
1:G:629:ASP:HB2	1:G:632:ILE:HD13	1.98	0.45
1:H:607:ALA:C	1:H:609:ILE:H	2.20	0.45
1:H:644:ASN:C	1:H:644:ASN:HD22	2.20	0.45
1:I:518:ASN:OD1	1:I:533:ASP:CB	2.60	0.45
1:J:345:TYR:C	1:J:345:TYR:HD1	2.18	0.45
1:J:545:ARG:NH1	1:J:597:TYR:HB3	2.32	0.45
1:K:396:LEU:O	1:K:399:TYR:CE1	2.69	0.45
1:K:485:VAL:HG22	1:K:624:TYR:CD2	2.51	0.45
1:L:481:THR:O	1:L:481:THR:HG22	2.16	0.45
1:A:502:ASN:ND2	1:A:635:ARG:CB	2.59	0.45
1:D:401:LEU:CD1	1:D:403:PRO:HD2	2.46	0.45
1:D:545:ARG:NH1	1:D:597:TYR:HB3	2.32	0.45
1:E:629:ASP:HB2	1:E:632:ILE:HD13	1.99	0.45
1:F:664:HIS:O	1:F:665:HIS:CB	2.63	0.45
1:G:358:GLN:HB2	1:G:379:LYS:HB2	1.99	0.45
1:G:440:ILE:CG1	1:G:441:ILE:N	2.79	0.45
1:H:481:THR:HG22	1:H:481:THR:O	2.16	0.45
1:J:455:PHE:O	1:J:456:ASN:HB2	2.15	0.45
1:J:644:ASN:C	1:J:644:ASN:HD22	2.20	0.45
1:K:387:VAL:HB	1:K:390:GLU:CD	2.37	0.45
1:A:629:ASP:HB2	1:A:632:ILE:HD13	1.99	0.45
1:B:541:VAL:HG12	1:B:542:SER:N	2.30	0.45
1:D:484:MET:O	1:D:624:TYR:HA	2.17	0.45
1:D:541:VAL:HG12	1:D:542:SER:N	2.31	0.45
1:F:566:ASN:O	1:F:570:GLN:CD	2.55	0.45
1:G:385:THR:HG1	1:G:388:GLN:N	2.14	0.45
1:H:427:ASN:ND2	1:H:427:ASN:N	2.54	0.45
1:J:484:MET:O	1:J:624:TYR:HA	2.17	0.45
1:K:340:VAL:O	1:K:341:THR:OG1	2.30	0.45
1:K:385:THR:C	1:K:387:VAL:N	2.66	0.45
1:L:385:THR:HG22	1:L:388:GLN:OE1	2.15	0.45
1:L:664:HIS:O	1:L:665:HIS:CB	2.63	0.45
1:B:366:SER:HA	1:K:403:PRO:CD	2.47	0.45
1:B:607:ALA:C	1:B:609:ILE:H	2.20	0.45
1:C:346:ASP:OD1	1:C:362:THR:HB	2.17	0.45
1:C:356:ILE:O	1:C:356:ILE:CG1	2.63	0.45
1:C:440:ILE:CG1	1:C:441:ILE:N	2.79	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:629:ASP:HB2	1:C:632:ILE:HD13	1.99	0.45
1:F:508:ARG:HA	1:F:542:SER:O	2.17	0.45
1:G:340:VAL:O	1:G:341:THR:CB	2.63	0.45
1:G:396:LEU:O	1:G:399:TYR:CE1	2.69	0.45
1:G:660:GLN:HG3	1:G:661:LEU:H	1.77	0.45
1:I:485:VAL:HG22	1:I:624:TYR:CD2	2.51	0.45
1:I:629:ASP:HB2	1:I:632:ILE:HD13	1.99	0.45
1:J:401:LEU:CD1	1:J:403:PRO:HD2	2.46	0.45
1:J:566:ASN:O	1:J:570:GLN:CD	2.55	0.45
1:K:629:ASP:HB2	1:K:632:ILE:HD13	1.99	0.45
1:A:519:SER:O	1:A:533:ASP:HB2	2.16	0.45
1:B:648:PRO:HD2	1:B:649:GLN:H	1.81	0.45
1:E:460:ALA:HB2	1:E:631:VAL:HG22	1.99	0.45
1:E:582:ASN:HB2	1:E:585:GLY:C	2.37	0.45
1:F:484:MET:O	1:F:624:TYR:HA	2.17	0.45
1:G:460:ALA:HB2	1:G:631:VAL:HG22	1.99	0.45
1:G:485:VAL:HG22	1:G:624:TYR:CD2	2.51	0.45
1:H:366:SER:N	1:H:367:THR:HG22	2.31	0.45
1:H:596:ASN:ND2	1:H:598:PRO:HD2	2.31	0.45
1:I:420:LEU:HD12	1:I:479:SER:O	2.15	0.45
1:I:582:ASN:HB2	1:I:585:GLY:C	2.37	0.45
1:J:605:ASN:OD1	1:J:607:ALA:HB3	2.17	0.45
1:K:386:THR:O	1:K:388:GLN:HG3	2.16	0.45
1:K:626:ASP:HA	1:K:627:PRO:HD3	1.65	0.45
1:L:405:THR:OG1	1:L:406:PRO:HD2	2.15	0.45
1:L:484:MET:O	1:L:624:TYR:HA	2.17	0.45
1:A:440:ILE:CG1	1:A:441:ILE:N	2.79	0.45
1:B:605:ASN:OD1	1:B:607:ALA:HB3	2.17	0.45
1:B:623:LEU:HD12	1:B:623:LEU:HA	1.86	0.45
1:B:664:HIS:O	1:B:665:HIS:CB	2.63	0.45
1:D:644:ASN:C	1:D:644:ASN:HD22	2.19	0.45
1:D:658:ILE:CG2	1:D:659:SER:N	2.79	0.45
1:E:391:ASP:C	1:E:393:LYS:H	2.20	0.45
1:F:353:PHE:CZ	1:F:395:TYR:HE2	2.11	0.45
1:G:387:VAL:HB	1:G:390:GLU:CD	2.37	0.45
1:G:582:ASN:HB2	1:G:585:GLY:C	2.37	0.45
1:H:401:LEU:CG	1:H:403:PRO:HD2	2.42	0.45
1:H:605:ASN:OD1	1:H:607:ALA:HB3	2.17	0.45
1:H:660:GLN:HA	1:H:661:LEU:HB3	1.90	0.45
1:I:358:GLN:HB2	1:I:379:LYS:HB2	1.99	0.45
1:K:559:ALA:O	1:K:561:GLY:CA	2.34	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:545:ARG:NH1	1:L:597:TYR:HB3	2.32	0.45
1:L:644:ASN:C	1:L:644:ASN:HD22	2.20	0.45
1:L:648:PRO:HD2	1:L:649:GLN:H	1.82	0.45
1:A:582:ASN:HB2	1:A:585:GLY:C	2.37	0.45
1:B:511:GLU:HG3	1:B:511:GLU:O	2.17	0.45
1:B:572:TYR:HB2	1:B:591:VAL:HG23	1.99	0.45
1:D:389:ARG:HA	1:D:392:ILE:HG22	1.99	0.45
1:D:508:ARG:HA	1:D:542:SER:O	2.17	0.45
1:E:358:GLN:HB2	1:E:379:LYS:HB2	1.99	0.45
1:E:387:VAL:HB	1:E:390:GLU:CD	2.37	0.45
1:E:485:VAL:HG22	1:E:624:TYR:CD2	2.51	0.45
1:E:518:ASN:OD1	1:E:533:ASP:CB	2.60	0.45
1:F:366:SER:N	1:F:367:THR:HG22	2.31	0.45
1:F:605:ASN:OD1	1:F:607:ALA:HB3	2.17	0.45
1:F:648:PRO:HD2	1:F:649:GLN:H	1.82	0.45
1:G:346:ASP:OD1	1:G:362:THR:HB	2.17	0.45
1:H:545:ARG:NH1	1:H:597:TYR:HB3	2.32	0.45
1:H:566:ASN:O	1:H:570:GLN:CD	2.55	0.45
1:J:508:ARG:HA	1:J:542:SER:O	2.17	0.45
1:J:607:ALA:C	1:J:609:ILE:H	2.20	0.45
1:K:492:TYR:HA	1:K:606:ILE:HD12	1.98	0.45
1:L:605:ASN:OD1	1:L:607:ALA:HB3	2.17	0.45
1:A:554:ILE:HD11	1:A:577:PHE:CD2	2.52	0.45
1:C:361:GLN:HG2	1:C:455:PHE:CD1	2.50	0.45
1:D:572:TYR:HB2	1:D:591:VAL:HG23	1.99	0.45
1:E:340:VAL:O	1:E:341:THR:CB	2.63	0.45
1:G:658:ILE:HA	1:G:658:ILE:HD13	1.52	0.45
1:I:595:ILE:HG23	1:I:602:ILE:HG12	1.99	0.45
1:J:658:ILE:CD1	1:J:658:ILE:N	2.74	0.45
1:L:658:ILE:CD1	1:L:658:ILE:N	2.74	0.45
1:A:385:THR:CG2	1:A:389:ARG:C	2.73	0.45
1:B:438:GLY:HA2	1:B:441:ILE:CG2	2.47	0.45
1:G:341:THR:O	1:G:341:THR:OG1	2.33	0.45
1:G:387:VAL:CG2	1:G:390:GLU:OE1	2.55	0.45
1:G:517:PHE:CE1	1:G:615:LYS:HB3	2.52	0.45
1:H:346:ASP:OD1	1:H:346:ASP:N	2.48	0.45
1:H:365:ASP:HB3	1:H:367:THR:HG23	1.97	0.45
1:I:530:LEU:HD23	1:I:530:LEU:HA	1.82	0.45
1:J:648:PRO:HD2	1:J:649:GLN:H	1.82	0.45
1:K:341:THR:O	1:K:341:THR:OG1	2.33	0.45
1:L:508:ARG:HA	1:L:542:SER:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:517:PHE:CE1	1:A:615:LYS:HB3	2.52	0.44
1:B:524:VAL:O	1:B:524:VAL:HG12	2.17	0.44
1:B:658:ILE:CG2	1:B:659:SER:N	2.79	0.44
1:C:441:ILE:O	1:C:441:ILE:HG13	2.17	0.44
1:C:582:ASN:HB2	1:C:585:GLY:C	2.37	0.44
1:D:462:SER:O	1:D:466:THR:CG2	2.66	0.44
1:E:595:ILE:HG23	1:E:602:ILE:HG12	1.99	0.44
1:F:438:GLY:HA2	1:F:441:ILE:CG2	2.48	0.44
1:F:658:ILE:CG2	1:F:659:SER:N	2.79	0.44
1:H:353:PHE:CZ	1:H:395:TYR:HE2	2.11	0.44
1:H:572:TYR:HB2	1:H:591:VAL:HG23	1.99	0.44
1:I:340:VAL:O	1:I:341:THR:CB	2.63	0.44
1:I:346:ASP:OD1	1:I:362:THR:HB	2.17	0.44
1:I:387:VAL:CG2	1:I:390:GLU:HB2	2.47	0.44
1:I:387:VAL:HB	1:I:390:GLU:CD	2.37	0.44
1:I:441:ILE:O	1:I:441:ILE:HG13	2.17	0.44
1:I:492:TYR:HA	1:I:606:ILE:HD12	1.98	0.44
1:J:365:ASP:HB3	1:J:367:THR:HG23	1.97	0.44
1:J:401:LEU:HD12	1:J:401:LEU:HA	1.63	0.44
1:K:519:SER:O	1:K:533:ASP:HB2	2.16	0.44
1:L:358:GLN:HB3	1:L:379:LYS:HA	1.99	0.44
1:L:386:THR:O	1:L:390:GLU:HG3	2.16	0.44
1:L:607:ALA:C	1:L:609:ILE:H	2.20	0.44
1:A:391:ASP:C	1:A:393:LYS:H	2.20	0.44
1:B:377:LYS:HB2	1:B:411:PRO:HG2	1.99	0.44
1:B:484:MET:O	1:B:624:TYR:HA	2.17	0.44
1:B:508:ARG:HA	1:B:542:SER:O	2.17	0.44
1:C:385:THR:HG1	1:C:388:GLN:N	2.15	0.44
1:C:492:TYR:HA	1:C:606:ILE:HD12	1.98	0.44
1:D:353:PHE:CZ	1:D:395:TYR:HE2	2.11	0.44
1:E:385:THR:HG1	1:E:388:GLN:N	2.14	0.44
1:F:377:LYS:HB2	1:F:411:PRO:HG2	1.99	0.44
1:G:510:MET:SD	1:G:602:ILE:HG21	2.58	0.44
1:K:340:VAL:O	1:K:341:THR:CG2	2.64	0.44
1:L:389:ARG:HA	1:L:392:ILE:HG22	1.99	0.44
1:L:566:ASN:O	1:L:570:GLN:CD	2.55	0.44
1:A:358:GLN:HB2	1:A:379:LYS:HB2	1.99	0.44
1:A:460:ALA:HB2	1:A:631:VAL:HG22	1.99	0.44
1:A:556:GLY:CA	1:A:589:TYR:CD1	3.01	0.44
1:D:605:ASN:OD1	1:D:607:ALA:HB3	2.17	0.44
1:D:648:PRO:HD2	1:D:649:GLN:H	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:510:MET:SD	1:E:602:ILE:HG21	2.57	0.44
1:F:389:ARG:HA	1:F:392:ILE:HG22	1.99	0.44
1:F:427:ASN:ND2	1:F:427:ASN:N	2.54	0.44
1:F:572:TYR:HB2	1:F:591:VAL:HG23	1.99	0.44
1:G:492:TYR:HA	1:G:606:ILE:HD12	1.98	0.44
1:H:664:HIS:CD2	1:H:664:HIS:C	2.89	0.44
1:I:377:LYS:HA	1:I:378:PRO:HD3	1.84	0.44
1:I:510:MET:SD	1:I:602:ILE:HG21	2.57	0.44
1:I:519:SER:O	1:I:533:ASP:HB2	2.16	0.44
1:J:358:GLN:HB3	1:J:379:LYS:HA	1.99	0.44
1:K:346:ASP:OD1	1:K:362:THR:HB	2.17	0.44
1:K:440:ILE:CG1	1:K:441:ILE:N	2.79	0.44
1:K:582:ASN:HB2	1:K:585:GLY:C	2.37	0.44
1:L:438:GLY:HA2	1:L:441:ILE:CG2	2.47	0.44
1:B:481:THR:O	1:B:481:THR:HG22	2.16	0.44
1:C:460:ALA:HB2	1:C:631:VAL:HG22	1.99	0.44
1:D:566:ASN:O	1:D:570:GLN:CD	2.55	0.44
1:E:387:VAL:CG2	1:E:390:GLU:HB2	2.48	0.44
1:E:554:ILE:HD11	1:E:577:PHE:CD2	2.52	0.44
1:F:511:GLU:O	1:F:511:GLU:HG3	2.17	0.44
1:F:644:ASN:C	1:F:644:ASN:HD22	2.20	0.44
1:H:448:TYR:CG	1:H:642:PHE:HB2	2.53	0.44
1:H:458:SER:HB2	1:H:632:ILE:O	2.17	0.44
1:H:462:SER:O	1:H:466:THR:CG2	2.66	0.44
1:I:502:ASN:ND2	1:I:635:ARG:CB	2.59	0.44
1:K:510:MET:SD	1:K:602:ILE:HG21	2.57	0.44
1:L:658:ILE:CG2	1:L:659:SER:N	2.79	0.44
1:A:346:ASP:OD1	1:A:362:THR:HB	2.17	0.44
1:A:353:PHE:O	1:A:354:GLY:C	2.48	0.44
1:B:389:ARG:HA	1:B:392:ILE:HG22	1.99	0.44
1:C:510:MET:SD	1:C:602:ILE:HG21	2.58	0.44
1:C:517:PHE:CE1	1:C:615:LYS:HB3	2.52	0.44
1:D:511:GLU:HG3	1:D:511:GLU:O	2.17	0.44
1:E:401:LEU:HD21	1:E:402:ALA:HB2	1.96	0.44
1:E:441:ILE:HG13	1:E:441:ILE:O	2.17	0.44
1:F:458:SER:HB2	1:F:632:ILE:O	2.17	0.44
1:F:545:ARG:NH1	1:F:597:TYR:HB3	2.32	0.44
1:F:664:HIS:CD2	1:F:664:HIS:C	2.89	0.44
1:G:484:MET:HG3	1:G:627:PRO:HG3	2.00	0.44
1:H:405:THR:OG1	1:H:406:PRO:HD2	2.16	0.44
1:H:508:ARG:HA	1:H:542:SER:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:353:PHE:CZ	1:J:395:TYR:HE2	2.11	0.44
1:J:458:SER:HB2	1:J:632:ILE:O	2.17	0.44
1:J:524:VAL:O	1:J:524:VAL:HG12	2.17	0.44
1:L:462:SER:O	1:L:466:THR:CG2	2.66	0.44
1:C:556:GLY:CA	1:C:589:TYR:CD1	3.01	0.44
1:D:377:LYS:HB2	1:D:411:PRO:HG2	1.99	0.44
1:E:484:MET:HG3	1:E:627:PRO:HG3	2.00	0.44
1:F:481:THR:HG22	1:F:481:THR:O	2.16	0.44
1:F:560:SER:HB2	1:F:588:LYS:NZ	2.33	0.44
1:I:391:ASP:C	1:I:393:LYS:H	2.20	0.44
1:I:484:MET:HG3	1:I:627:PRO:HG3	2.00	0.44
1:I:517:PHE:CE1	1:I:615:LYS:HB3	2.53	0.44
1:J:386:THR:O	1:J:390:GLU:HG3	2.16	0.44
1:K:441:ILE:O	1:K:441:ILE:HG13	2.17	0.44
1:K:460:ALA:HB2	1:K:631:VAL:HG22	1.99	0.44
1:K:554:ILE:HD11	1:K:577:PHE:CD2	2.52	0.44
1:L:377:LYS:HB2	1:L:411:PRO:HG2	1.99	0.44
1:L:401:LEU:CD1	1:L:403:PRO:HD2	2.46	0.44
1:L:484:MET:HG3	1:L:627:PRO:HG3	2.00	0.44
1:L:511:GLU:O	1:L:511:GLU:HG3	2.17	0.44
1:A:385:THR:HG1	1:A:388:GLN:N	2.16	0.44
1:A:387:VAL:CG2	1:A:390:GLU:HB2	2.48	0.44
1:A:510:MET:SD	1:A:602:ILE:HG21	2.57	0.44
1:B:461:LYS:O	1:B:461:LYS:HG2	2.18	0.44
1:E:650:TYR:O	1:E:651:LEU:HB2	2.18	0.44
1:E:658:ILE:HA	1:E:658:ILE:HD13	1.52	0.44
1:F:365:ASP:O	1:F:366:SER:C	2.54	0.44
1:F:462:SER:O	1:F:466:THR:CG2	2.66	0.44
1:H:377:LYS:HB2	1:H:411:PRO:HG2	1.99	0.44
1:H:524:VAL:HG12	1:H:524:VAL:O	2.17	0.44
1:H:648:PRO:HD2	1:H:649:GLN:H	1.81	0.44
1:I:554:ILE:HD11	1:I:577:PHE:CD2	2.52	0.44
1:J:389:ARG:HA	1:J:392:ILE:HG22	1.99	0.44
1:J:438:GLY:HA2	1:J:441:ILE:CG2	2.47	0.44
1:K:530:LEU:HD23	1:K:530:LEU:HA	1.82	0.44
1:L:500:LYS:HB3	1:L:500:LYS:HE2	1.80	0.44
1:L:524:VAL:O	1:L:524:VAL:HG12	2.17	0.44
1:B:462:SER:O	1:B:466:THR:CG2	2.66	0.44
1:B:484:MET:HG3	1:B:627:PRO:HG3	2.00	0.44
1:B:500:LYS:HB3	1:B:500:LYS:HE2	1.80	0.44
1:B:566:ASN:O	1:B:570:GLN:CD	2.55	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:358:GLN:HB2	1:C:379:LYS:HB2	1.99	0.44
1:C:660:GLN:HG3	1:C:661:LEU:H	1.77	0.44
1:D:367:THR:CG2	1:D:368:LYS:N	2.45	0.44
1:D:405:THR:OG1	1:D:406:PRO:HD2	2.15	0.44
1:D:524:VAL:O	1:D:524:VAL:HG12	2.17	0.44
1:D:560:SER:HB2	1:D:588:LYS:NZ	2.33	0.44
1:E:517:PHE:CE1	1:E:615:LYS:HB3	2.52	0.44
1:F:658:ILE:HD12	1:F:658:ILE:HA	1.67	0.44
1:G:375:ALA:HA	1:G:409:ILE:HD12	2.00	0.44
1:G:441:ILE:HG13	1:G:441:ILE:O	2.17	0.44
1:H:661:LEU:C	1:H:663:HIS:N	2.61	0.44
1:I:341:THR:O	1:I:341:THR:OG1	2.33	0.44
1:I:385:THR:HG1	1:I:388:GLN:N	2.15	0.44
1:I:403:PRO:HD3	1:L:366:SER:HA	2.00	0.44
1:K:379:LYS:O	1:K:379:LYS:CG	2.66	0.44
1:B:458:SER:HB2	1:B:632:ILE:O	2.17	0.44
1:C:582:ASN:C	1:C:585:GLY:H	2.21	0.44
1:C:595:ILE:HG23	1:C:602:ILE:HG12	1.99	0.44
1:D:358:GLN:HB3	1:D:379:LYS:HA	1.99	0.44
1:E:379:LYS:O	1:E:379:LYS:CG	2.66	0.44
1:F:346:ASP:OD1	1:F:346:ASP:N	2.48	0.44
1:G:365:ASP:OD2	1:G:367:THR:HB	2.18	0.44
1:G:607:ALA:C	1:G:609:ILE:O	2.57	0.44
1:H:438:GLY:HA2	1:H:441:ILE:CG2	2.47	0.44
1:I:340:VAL:O	1:I:341:THR:OG1	2.30	0.44
1:I:379:LYS:O	1:I:379:LYS:CG	2.66	0.44
1:I:635:ARG:HE	1:I:635:ARG:HB2	1.66	0.44
1:J:405:THR:OG1	1:J:406:PRO:HD2	2.15	0.44
1:J:658:ILE:CG2	1:J:659:SER:N	2.79	0.44
1:K:517:PHE:CE1	1:K:615:LYS:HB3	2.52	0.44
1:K:556:GLY:CA	1:K:589:TYR:CD1	3.01	0.44
1:L:458:SER:HB2	1:L:632:ILE:O	2.17	0.44
1:A:516:SER:HB2	1:A:617:GLU:OE1	2.18	0.43
1:D:386:THR:O	1:D:390:GLU:HG3	2.16	0.43
1:E:530:LEU:HD23	1:E:530:LEU:HA	1.82	0.43
1:E:607:ALA:C	1:E:609:ILE:O	2.57	0.43
1:F:464:MET:O	1:F:468:VAL:HG23	2.18	0.43
1:G:650:TYR:O	1:G:651:LEU:HB2	2.18	0.43
1:H:484:MET:O	1:H:624:TYR:HA	2.17	0.43
1:H:560:SER:HB2	1:H:588:LYS:NZ	2.33	0.43
1:I:460:ALA:HB2	1:I:631:VAL:HG22	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:607:ALA:C	1:I:609:ILE:O	2.57	0.43
1:K:358:GLN:HB2	1:K:379:LYS:HB2	1.99	0.43
1:K:484:MET:HG3	1:K:627:PRO:HG3	2.00	0.43
1:L:461:LYS:O	1:L:461:LYS:HG2	2.18	0.43
1:L:557:PRO:CG	1:L:580:LEU:HD11	2.37	0.43
1:A:650:TYR:O	1:A:651:LEU:HB2	2.18	0.43
1:B:560:SER:HB2	1:B:588:LYS:NZ	2.33	0.43
1:C:650:TYR:O	1:C:651:LEU:HB2	2.18	0.43
1:D:438:GLY:HA2	1:D:441:ILE:CG2	2.47	0.43
1:E:408:ILE:H	1:E:408:ILE:CD1	2.30	0.43
1:E:635:ARG:HE	1:E:635:ARG:HB2	1.66	0.43
1:F:461:LYS:O	1:F:461:LYS:HG2	2.18	0.43
1:F:484:MET:HG3	1:F:627:PRO:HG3	2.00	0.43
1:G:541:VAL:CG1	1:G:542:SER:N	2.82	0.43
1:G:554:ILE:HD11	1:G:577:PHE:CD2	2.52	0.43
1:H:648:PRO:CD	1:H:649:GLN:H	2.32	0.43
1:H:658:ILE:CG2	1:H:659:SER:N	2.79	0.43
1:I:340:VAL:O	1:I:341:THR:CG2	2.64	0.43
1:I:375:ALA:HA	1:I:409:ILE:HD12	2.00	0.43
1:J:462:SER:O	1:J:466:THR:CG2	2.66	0.43
1:K:387:VAL:CG2	1:K:390:GLU:HB2	2.47	0.43
1:K:595:ILE:HG23	1:K:602:ILE:HG12	1.99	0.43
1:A:356:ILE:O	1:A:356:ILE:CG1	2.63	0.43
1:A:361:GLN:HA	1:A:361:GLN:HE21	1.84	0.43
1:A:379:LYS:O	1:A:379:LYS:CG	2.66	0.43
1:A:541:VAL:CG1	1:A:542:SER:N	2.81	0.43
1:A:664:HIS:HD2	1:K:348:PHE:CZ	2.17	0.43
1:B:377:LYS:CE	1:B:641:VAL:HG21	2.48	0.43
1:C:365:ASP:OD2	1:C:367:THR:HB	2.18	0.43
1:C:385:THR:C	1:C:387:VAL:H	2.16	0.43
1:C:401:LEU:HD21	1:C:402:ALA:HB2	1.96	0.43
1:C:541:VAL:CG1	1:C:542:SER:N	2.82	0.43
1:C:635:ARG:HE	1:C:635:ARG:HB2	1.66	0.43
1:D:623:LEU:HD12	1:D:623:LEU:HA	1.86	0.43
1:E:375:ALA:HA	1:E:409:ILE:HD12	2.00	0.43
1:E:656:GLU:HA	1:E:657:PRO:HD3	1.82	0.43
1:H:464:MET:O	1:H:468:VAL:HG23	2.18	0.43
1:H:557:PRO:CG	1:H:580:LEU:HD11	2.37	0.43
1:I:385:THR:OG1	1:I:387:VAL:HG22	2.11	0.43
1:K:516:SER:HB2	1:K:617:GLU:OE1	2.18	0.43
1:K:541:VAL:CG1	1:K:542:SER:N	2.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:484:MET:HG3	1:C:627:PRO:HG3	2.00	0.43
1:D:458:SER:HB2	1:D:632:ILE:O	2.17	0.43
1:E:346:ASP:OD1	1:E:362:THR:HB	2.17	0.43
1:E:365:ASP:OD2	1:E:367:THR:HB	2.18	0.43
1:E:661:LEU:HD13	1:E:662:GLU:CB	2.42	0.43
1:F:524:VAL:O	1:F:524:VAL:HG12	2.17	0.43
1:H:389:ARG:HA	1:H:392:ILE:HG22	1.99	0.43
1:I:541:VAL:CG1	1:I:542:SER:N	2.82	0.43
1:J:377:LYS:CE	1:J:641:VAL:HG21	2.48	0.43
1:J:448:TYR:CG	1:J:642:PHE:HB2	2.53	0.43
1:K:375:ALA:HA	1:K:409:ILE:HD12	2.00	0.43
1:L:353:PHE:CZ	1:L:395:TYR:CD2	3.05	0.43
1:A:365:ASP:OD2	1:A:367:THR:HB	2.18	0.43
1:B:358:GLN:HB3	1:B:379:LYS:HA	1.99	0.43
1:B:366:SER:C	1:K:403:PRO:HB3	2.29	0.43
1:B:664:HIS:CD2	1:B:664:HIS:C	2.90	0.43
1:D:464:MET:O	1:D:468:VAL:HG23	2.18	0.43
1:F:375:ALA:HA	1:F:409:ILE:O	2.19	0.43
1:F:448:TYR:C	1:F:453:GLU:HG3	2.39	0.43
1:F:648:PRO:CD	1:F:649:GLN:H	2.32	0.43
1:G:516:SER:HB2	1:G:617:GLU:OE1	2.18	0.43
1:H:375:ALA:HA	1:H:409:ILE:O	2.19	0.43
1:H:511:GLU:HG3	1:H:511:GLU:O	2.17	0.43
1:I:658:ILE:HD13	1:I:658:ILE:HA	1.52	0.43
1:J:353:PHE:CZ	1:J:395:TYR:CD2	3.05	0.43
1:J:511:GLU:HG3	1:J:511:GLU:O	2.17	0.43
1:K:385:THR:C	1:K:387:VAL:H	2.16	0.43
1:K:650:TYR:O	1:K:651:LEU:HB2	2.18	0.43
1:K:661:LEU:HA	1:K:661:LEU:HD22	1.75	0.43
1:L:560:SER:HB2	1:L:588:LYS:NZ	2.33	0.43
1:A:349:VAL:C	1:A:351:GLU:N	2.71	0.43
1:A:484:MET:HG3	1:A:627:PRO:HG3	2.00	0.43
1:A:582:ASN:C	1:A:585:GLY:H	2.21	0.43
1:B:447:TYR:HB2	1:B:467:TYR:CD1	2.54	0.43
1:C:387:VAL:CG2	1:C:390:GLU:HB2	2.47	0.43
1:C:607:ALA:C	1:C:609:ILE:O	2.57	0.43
1:D:345:TYR:C	1:D:345:TYR:HD1	2.18	0.43
1:D:664:HIS:CD2	1:D:664:HIS:C	2.90	0.43
1:E:349:VAL:C	1:E:351:GLU:N	2.71	0.43
1:E:541:VAL:CG1	1:E:542:SER:N	2.82	0.43
1:G:595:ILE:HG23	1:G:602:ILE:HG12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:377:LYS:CE	1:H:641:VAL:HG21	2.48	0.43
1:H:461:LYS:O	1:H:461:LYS:HG2	2.18	0.43
1:I:361:GLN:HA	1:I:361:GLN:HE21	1.84	0.43
1:I:582:ASN:C	1:I:585:GLY:H	2.21	0.43
1:I:593:GLY:HA3	1:I:603:TYR:O	2.19	0.43
1:J:572:TYR:HB2	1:J:591:VAL:CG2	2.49	0.43
1:J:572:TYR:HB2	1:J:591:VAL:HG23	1.99	0.43
1:K:401:LEU:CD2	1:K:402:ALA:CB	2.68	0.43
1:L:448:TYR:C	1:L:453:GLU:HG3	2.39	0.43
1:L:572:TYR:HB2	1:L:591:VAL:CG2	2.49	0.43
1:A:375:ALA:HA	1:A:409:ILE:HD12	2.00	0.43
1:A:533:ASP:O	1:A:535:LEU:CD2	2.67	0.43
1:B:448:TYR:CG	1:B:642:PHE:HB2	2.53	0.43
1:B:653:ILE:HG22	1:B:655:LEU:CD1	2.49	0.43
1:C:375:ALA:HA	1:C:409:ILE:HD12	2.00	0.43
1:C:379:LYS:O	1:C:379:LYS:CG	2.66	0.43
1:C:661:LEU:HA	1:C:661:LEU:HD22	1.75	0.43
1:D:448:TYR:C	1:D:453:GLU:HG3	2.39	0.43
1:E:361:GLN:HA	1:E:361:GLN:HE21	1.84	0.43
1:E:469:ASP:HA	1:E:475:VAL:HG11	2.01	0.43
1:F:358:GLN:HB3	1:F:379:LYS:HA	1.99	0.43
1:F:448:TYR:CG	1:F:642:PHE:HB2	2.53	0.43
1:G:593:GLY:HA3	1:G:603:TYR:O	2.19	0.43
1:I:408:ILE:H	1:I:408:ILE:CD1	2.30	0.43
1:J:365:ASP:O	1:J:366:SER:C	2.54	0.43
1:J:377:LYS:HB2	1:J:411:PRO:HG2	1.99	0.43
1:K:469:ASP:HA	1:K:475:VAL:HG11	2.00	0.43
1:K:607:ALA:C	1:K:609:ILE:O	2.57	0.43
1:K:623:LEU:HD12	1:K:623:LEU:HA	1.79	0.43
1:L:377:LYS:CE	1:L:641:VAL:HG21	2.48	0.43
1:L:494:THR:HG22	1:L:499:ILE:HG22	2.01	0.43
1:L:572:TYR:HB2	1:L:591:VAL:HG23	1.99	0.43
1:L:592:ILE:CD1	1:L:606:ILE:HD13	2.49	0.43
1:L:653:ILE:HG22	1:L:655:LEU:CD1	2.49	0.43
1:L:664:HIS:CD2	1:L:664:HIS:C	2.90	0.43
1:A:626:ASP:HA	1:A:627:PRO:HD3	1.65	0.43
1:B:410:SER:HA	1:B:411:PRO:HD3	1.81	0.43
1:B:494:THR:HG22	1:B:499:ILE:HG22	2.01	0.43
1:C:516:SER:HB2	1:C:617:GLU:OE1	2.18	0.43
1:C:554:ILE:HD11	1:C:577:PHE:CD2	2.52	0.43
1:D:377:LYS:CE	1:D:641:VAL:HG21	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:448:TYR:CG	1:D:642:PHE:HB2	2.53	0.43
1:E:492:TYR:CE1	1:E:606:ILE:HB	2.54	0.43
1:E:533:ASP:O	1:E:535:LEU:CD2	2.67	0.43
1:F:377:LYS:CE	1:F:641:VAL:HG21	2.48	0.43
1:F:592:ILE:CD1	1:F:606:ILE:HD13	2.49	0.43
1:G:379:LYS:O	1:G:379:LYS:CG	2.66	0.43
1:G:387:VAL:CG2	1:G:390:GLU:HB2	2.48	0.43
1:H:388:GLN:O	1:H:392:ILE:HG22	2.19	0.43
1:H:484:MET:HG3	1:H:627:PRO:HG3	2.00	0.43
1:K:533:ASP:O	1:K:535:LEU:CD2	2.67	0.43
1:K:593:GLY:HA3	1:K:603:TYR:O	2.19	0.43
1:L:353:PHE:CZ	1:L:395:TYR:HE2	2.11	0.43
1:L:375:ALA:HA	1:L:409:ILE:O	2.19	0.43
1:A:441:ILE:O	1:A:441:ILE:HG13	2.17	0.43
1:C:349:VAL:C	1:C:351:GLU:N	2.71	0.43
1:C:386:THR:C	1:C:388:GLN:N	2.67	0.43
1:C:408:ILE:H	1:C:408:ILE:CD1	2.30	0.43
1:C:593:GLY:HA3	1:C:603:TYR:O	2.19	0.43
1:D:353:PHE:CZ	1:D:395:TYR:CD2	3.05	0.43
1:F:465:LEU:HD21	1:F:480:ALA:CB	2.49	0.43
1:G:530:LEU:HD23	1:G:530:LEU:HA	1.82	0.43
1:H:401:LEU:HD12	1:H:401:LEU:HA	1.62	0.43
1:H:572:TYR:HB2	1:H:591:VAL:CG2	2.49	0.43
1:H:653:ILE:HG22	1:H:655:LEU:CD1	2.49	0.43
1:I:492:TYR:CE1	1:I:606:ILE:HB	2.54	0.43
1:I:533:ASP:O	1:I:535:LEU:CD2	2.67	0.43
1:I:557:PRO:HD3	1:I:580:LEU:HD11	2.01	0.43
1:K:557:PRO:HD3	1:K:580:LEU:HD11	2.01	0.43
1:A:408:ILE:H	1:A:408:ILE:CD1	2.30	0.43
1:A:607:ALA:C	1:A:609:ILE:O	2.57	0.43
1:B:464:MET:O	1:B:468:VAL:HG23	2.19	0.43
1:B:592:ILE:CD1	1:B:606:ILE:HD13	2.49	0.43
1:D:365:ASP:CG	1:D:367:THR:CG2	2.88	0.43
1:D:422:VAL:HG11	1:D:475:VAL:HG13	2.01	0.43
1:D:447:TYR:HB2	1:D:467:TYR:CD1	2.54	0.43
1:D:484:MET:HG3	1:D:627:PRO:HG3	2.00	0.43
1:D:557:PRO:CG	1:D:580:LEU:HD11	2.37	0.43
1:D:592:ILE:CD1	1:D:606:ILE:HD13	2.49	0.43
1:E:440:ILE:CG1	1:E:441:ILE:N	2.79	0.43
1:F:388:GLN:O	1:F:392:ILE:HG22	2.19	0.43
1:G:533:ASP:O	1:G:535:LEU:CD2	2.67	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:386:THR:C	1:I:388:GLN:N	2.67	0.43
1:J:388:GLN:O	1:J:392:ILE:HG22	2.19	0.43
1:J:648:PRO:CD	1:J:649:GLN:H	2.32	0.43
1:K:340:VAL:O	1:K:341:THR:CB	2.63	0.43
1:K:365:ASP:OD2	1:K:367:THR:HB	2.18	0.43
1:K:377:LYS:HA	1:K:378:PRO:HD3	1.84	0.43
1:L:388:GLN:O	1:L:392:ILE:HG22	2.19	0.43
1:B:401:LEU:HA	1:B:401:LEU:HD12	1.62	0.42
1:B:448:TYR:C	1:B:453:GLU:HG3	2.39	0.42
1:B:465:LEU:HD21	1:B:480:ALA:CB	2.49	0.42
1:B:572:TYR:HB2	1:B:591:VAL:CG2	2.49	0.42
1:C:458:SER:HB2	1:C:632:ILE:O	2.19	0.42
1:D:465:LEU:HD21	1:D:480:ALA:CB	2.49	0.42
1:D:607:ALA:O	1:D:609:ILE:N	2.52	0.42
1:E:340:VAL:O	1:E:341:THR:CG2	2.64	0.42
1:E:516:SER:HB2	1:E:617:GLU:OE1	2.18	0.42
1:F:447:TYR:HB2	1:F:467:TYR:CD1	2.54	0.42
1:H:358:GLN:HB3	1:H:379:LYS:HA	1.99	0.42
1:H:542:SER:HB2	1:H:595:ILE:CD1	2.49	0.42
1:H:607:ALA:O	1:H:609:ILE:N	2.52	0.42
1:I:650:TYR:O	1:I:651:LEU:HB2	2.18	0.42
1:J:375:ALA:HA	1:J:409:ILE:O	2.19	0.42
1:J:414:LEU:HD23	1:J:414:LEU:HA	1.70	0.42
1:J:448:TYR:C	1:J:453:GLU:HG3	2.39	0.42
1:K:582:ASN:C	1:K:585:GLY:H	2.21	0.42
1:L:448:TYR:CG	1:L:642:PHE:HB2	2.53	0.42
1:A:464:MET:CG	1:A:465:LEU:N	2.82	0.42
1:B:345:TYR:C	1:B:345:TYR:HD1	2.18	0.42
1:C:387:VAL:CB	1:C:390:GLU:CD	2.87	0.42
1:C:469:ASP:HA	1:C:475:VAL:HG11	2.00	0.42
1:C:533:ASP:O	1:C:535:LEU:CD2	2.67	0.42
1:C:647:ARG:N	1:C:648:PRO:HD3	2.34	0.42
1:D:375:ALA:HA	1:D:409:ILE:O	2.19	0.42
1:F:492:TYR:OH	1:F:611:LEU:O	2.34	0.42
1:F:653:ILE:HG22	1:F:655:LEU:CD1	2.49	0.42
1:G:388:GLN:C	1:G:389:ARG:CG	2.88	0.42
1:G:623:LEU:HD12	1:G:623:LEU:HA	1.79	0.42
1:H:345:TYR:C	1:H:345:TYR:HD1	2.18	0.42
1:H:422:VAL:HG11	1:H:475:VAL:HG13	2.01	0.42
1:I:454:ILE:HG23	1:I:455:PHE:N	2.34	0.42
1:I:660:GLN:HG3	1:I:661:LEU:H	1.77	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:464:MET:O	1:J:468:VAL:HG23	2.18	0.42
1:J:592:ILE:CD1	1:J:606:ILE:HD13	2.49	0.42
1:L:607:ALA:O	1:L:609:ILE:N	2.52	0.42
1:A:469:ASP:HA	1:A:475:VAL:HG11	2.01	0.42
1:A:595:ILE:HG23	1:A:602:ILE:HG12	1.99	0.42
1:A:661:LEU:CD1	1:A:662:GLU:CA	2.85	0.42
1:D:572:TYR:HB2	1:D:591:VAL:CG2	2.49	0.42
1:E:458:SER:HB2	1:E:632:ILE:O	2.19	0.42
1:E:661:LEU:HD22	1:E:661:LEU:HA	1.75	0.42
1:G:340:VAL:CA	1:G:345:TYR:CZ	2.82	0.42
1:G:454:ILE:HG23	1:G:455:PHE:N	2.34	0.42
1:H:365:ASP:CG	1:H:367:THR:CG2	2.88	0.42
1:I:346:ASP:OD1	1:I:362:THR:CB	2.67	0.42
1:I:365:ASP:OD2	1:I:367:THR:HB	2.18	0.42
1:J:365:ASP:CG	1:J:367:THR:CG2	2.88	0.42
1:J:461:LYS:HG2	1:J:461:LYS:O	2.18	0.42
1:J:484:MET:HG3	1:J:627:PRO:HG3	1.99	0.42
1:J:560:SER:HB2	1:J:588:LYS:NZ	2.33	0.42
1:K:647:ARG:N	1:K:648:PRO:HD3	2.34	0.42
1:L:365:ASP:CG	1:L:367:THR:CG2	2.88	0.42
1:L:464:MET:O	1:L:468:VAL:HG23	2.18	0.42
1:L:542:SER:HB2	1:L:595:ILE:CD1	2.50	0.42
1:C:492:TYR:CE1	1:C:606:ILE:HB	2.54	0.42
1:D:658:ILE:HD12	1:D:658:ILE:HA	1.67	0.42
1:E:556:GLY:CA	1:E:589:TYR:CD1	3.01	0.42
1:F:365:ASP:CG	1:F:367:THR:CG2	2.87	0.42
1:F:557:PRO:CG	1:F:580:LEU:HD11	2.37	0.42
1:G:408:ILE:H	1:G:408:ILE:CD1	2.30	0.42
1:G:469:ASP:HA	1:G:475:VAL:HG11	2.00	0.42
1:G:582:ASN:C	1:G:585:GLY:H	2.21	0.42
1:G:661:LEU:HD22	1:G:661:LEU:HA	1.75	0.42
1:H:592:ILE:CD1	1:H:606:ILE:HD13	2.49	0.42
1:I:469:ASP:HA	1:I:475:VAL:HG11	2.01	0.42
1:I:516:SER:HB2	1:I:617:GLU:OE1	2.18	0.42
1:A:347:THR:C	1:A:349:VAL:N	2.73	0.42
1:A:492:TYR:CE1	1:A:606:ILE:HB	2.54	0.42
1:C:454:ILE:HG23	1:C:455:PHE:N	2.34	0.42
1:D:388:GLN:O	1:D:392:ILE:HG22	2.19	0.42
1:D:400:ASN:HD22	1:E:662:GLU:HG2	1.02	0.42
1:D:495:PRO:O	1:D:496:GLU:C	2.57	0.42
1:E:593:GLY:HA3	1:E:603:TYR:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:414:LEU:HD23	1:F:414:LEU:HA	1.70	0.42
1:G:492:TYR:CE1	1:G:606:ILE:HB	2.54	0.42
1:H:448:TYR:C	1:H:453:GLU:HG3	2.39	0.42
1:I:448:TYR:CZ	1:I:642:PHE:HB2	2.55	0.42
1:I:521:ARG:HE	1:I:521:ARG:HB2	1.71	0.42
1:J:494:THR:HG22	1:J:499:ILE:HG22	2.01	0.42
1:J:495:PRO:O	1:J:496:GLU:C	2.57	0.42
1:J:607:ALA:O	1:J:609:ILE:N	2.52	0.42
1:A:593:GLY:HA3	1:A:603:TYR:O	2.19	0.42
1:D:545:ARG:CZ	1:D:597:TYR:HB3	2.50	0.42
1:F:495:PRO:O	1:F:496:GLU:C	2.57	0.42
1:F:607:ALA:O	1:F:609:ILE:N	2.52	0.42
1:F:623:LEU:HD12	1:F:623:LEU:HA	1.86	0.42
1:G:448:TYR:CZ	1:G:642:PHE:HB2	2.55	0.42
1:I:387:VAL:CB	1:I:390:GLU:CD	2.88	0.42
1:K:349:VAL:C	1:K:351:GLU:N	2.71	0.42
1:L:465:LEU:HD21	1:L:480:ALA:CB	2.49	0.42
1:L:545:ARG:CZ	1:L:597:TYR:HB3	2.50	0.42
1:B:365:ASP:CG	1:B:367:THR:CG2	2.88	0.42
1:B:542:SER:HB2	1:B:595:ILE:CD1	2.49	0.42
1:B:607:ALA:O	1:B:609:ILE:N	2.52	0.42
1:D:648:PRO:CD	1:D:649:GLN:H	2.32	0.42
1:E:556:GLY:CA	1:E:589:TYR:HD1	2.32	0.42
1:G:346:ASP:OD1	1:G:362:THR:CB	2.67	0.42
1:I:556:GLY:CA	1:I:589:TYR:CD1	3.01	0.42
1:I:661:LEU:HA	1:I:661:LEU:HD22	1.75	0.42
1:J:447:TYR:HB2	1:J:467:TYR:CD1	2.54	0.42
1:J:542:SER:HB2	1:J:595:ILE:CD1	2.50	0.42
1:K:361:GLN:HA	1:K:361:GLN:HE21	1.84	0.42
1:K:386:THR:C	1:K:388:GLN:N	2.67	0.42
1:C:388:GLN:C	1:C:389:ARG:CG	2.88	0.42
1:D:461:LYS:O	1:D:461:LYS:HG2	2.18	0.42
1:E:448:TYR:HA	1:E:452:VAL:HB	2.02	0.42
1:E:448:TYR:CZ	1:E:642:PHE:HB2	2.55	0.42
1:F:422:VAL:HG11	1:F:475:VAL:HG13	2.01	0.42
1:G:386:THR:C	1:G:388:GLN:N	2.67	0.42
1:G:387:VAL:CB	1:G:390:GLU:CD	2.88	0.42
1:I:647:ARG:N	1:I:648:PRO:HD3	2.34	0.42
1:J:405:THR:HB	1:J:406:PRO:HD3	1.43	0.42
1:K:387:VAL:CB	1:K:390:GLU:CD	2.88	0.42
1:A:458:SER:HB2	1:A:632:ILE:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:595:ILE:HG23	1:A:602:ILE:HG23	2.02	0.42
1:B:388:GLN:O	1:B:392:ILE:HG22	2.19	0.42
1:B:648:PRO:CD	1:B:649:GLN:H	2.32	0.42
1:C:346:ASP:OD1	1:C:362:THR:CB	2.67	0.42
1:C:502:ASN:ND2	1:C:635:ARG:CB	2.59	0.42
1:E:346:ASP:OD1	1:E:362:THR:CB	2.67	0.42
1:E:647:ARG:N	1:E:648:PRO:HD3	2.34	0.42
1:F:545:ARG:CZ	1:F:597:TYR:HB3	2.50	0.42
1:F:572:TYR:HB2	1:F:591:VAL:CG2	2.49	0.42
1:G:349:VAL:C	1:G:351:GLU:N	2.71	0.42
1:G:377:LYS:HA	1:G:378:PRO:HD3	1.84	0.42
1:H:408:ILE:O	1:H:408:ILE:CG1	2.64	0.42
1:H:545:ARG:CZ	1:H:597:TYR:HB3	2.50	0.42
1:K:346:ASP:OD1	1:K:362:THR:CB	2.67	0.42
1:K:454:ILE:HG23	1:K:455:PHE:N	2.34	0.42
1:K:458:SER:HB2	1:K:632:ILE:O	2.19	0.42
1:K:492:TYR:CE1	1:K:606:ILE:HB	2.54	0.42
1:L:345:TYR:C	1:L:345:TYR:HD1	2.18	0.42
1:L:448:TYR:CZ	1:L:642:PHE:HB2	2.55	0.42
1:A:346:ASP:OD1	1:A:362:THR:CB	2.67	0.42
1:A:651:LEU:HD23	1:A:651:LEU:C	2.40	0.42
1:B:346:ASP:OD1	1:B:346:ASP:N	2.47	0.42
1:B:658:ILE:HD12	1:B:658:ILE:HA	1.67	0.42
1:C:424:TYR:O	1:C:658:ILE:HB	2.20	0.42
1:D:358:GLN:HE21	1:D:377:LYS:HZ2	1.67	0.42
1:E:387:VAL:CB	1:E:390:GLU:CD	2.88	0.42
1:E:557:PRO:HD3	1:E:580:LEU:HD11	2.01	0.42
1:E:660:GLN:HG3	1:E:661:LEU:H	1.77	0.42
1:G:556:GLY:CA	1:G:589:TYR:HD1	2.32	0.42
1:H:495:PRO:O	1:H:496:GLU:C	2.57	0.42
1:I:440:ILE:CG1	1:I:441:ILE:N	2.79	0.42
1:J:653:ILE:HG22	1:J:655:LEU:CD1	2.49	0.42
1:K:465:LEU:HD23	1:K:465:LEU:HA	1.84	0.42
1:L:422:VAL:HG11	1:L:475:VAL:HG13	2.01	0.42
1:A:340:VAL:O	1:A:341:THR:CB	2.63	0.41
1:A:424:TYR:O	1:A:658:ILE:HB	2.20	0.41
1:A:557:PRO:HD3	1:A:580:LEU:HD11	2.01	0.41
1:A:660:GLN:HG3	1:A:661:LEU:H	1.77	0.41
1:B:375:ALA:HA	1:B:409:ILE:O	2.19	0.41
1:B:448:TYR:CZ	1:B:642:PHE:HB2	2.55	0.41
1:B:545:ARG:CZ	1:B:597:TYR:HB3	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:557:PRO:HD3	1:C:580:LEU:HD11	2.01	0.41
1:D:494:THR:HG22	1:D:499:ILE:HG22	2.01	0.41
1:F:448:TYR:CZ	1:F:642:PHE:HB2	2.55	0.41
1:I:525:ASN:OD1	1:I:526:PRO:N	2.53	0.41
1:J:545:ARG:CZ	1:J:597:TYR:HB3	2.50	0.41
1:K:408:ILE:H	1:K:408:ILE:CD1	2.30	0.41
1:K:448:TYR:CZ	1:K:642:PHE:HB2	2.55	0.41
1:A:387:VAL:CG2	1:A:390:GLU:OE1	2.55	0.41
1:A:387:VAL:CB	1:A:390:GLU:CD	2.88	0.41
1:C:448:TYR:HA	1:C:452:VAL:HB	2.02	0.41
1:C:556:GLY:CA	1:C:589:TYR:HD1	2.32	0.41
1:D:653:ILE:HG22	1:D:655:LEU:CD1	2.49	0.41
1:F:353:PHE:CZ	1:F:395:TYR:CD2	3.05	0.41
1:F:494:THR:HG22	1:F:499:ILE:HG22	2.01	0.41
1:F:642:PHE:CZ	1:F:644:ASN:HB2	2.55	0.41
1:G:525:ASN:OD1	1:G:526:PRO:N	2.53	0.41
1:G:651:LEU:HD23	1:G:651:LEU:C	2.40	0.41
1:I:465:LEU:HD23	1:I:465:LEU:HA	1.84	0.41
1:I:493:LYS:HE3	1:I:493:LYS:HB2	1.91	0.41
1:J:496:GLU:N	1:J:496:GLU:OE1	2.30	0.41
1:L:401:LEU:HD12	1:L:401:LEU:HA	1.63	0.41
1:A:550:ILE:HG12	1:A:596:ASN:HA	2.02	0.41
1:B:495:PRO:O	1:B:496:GLU:C	2.57	0.41
1:C:361:GLN:HA	1:C:361:GLN:HE21	1.84	0.41
1:C:595:ILE:HG23	1:C:602:ILE:HG23	2.02	0.41
1:E:377:LYS:HA	1:E:378:PRO:HD3	1.84	0.41
1:E:525:ASN:OD1	1:E:526:PRO:N	2.53	0.41
1:G:361:GLN:HG2	1:G:455:PHE:CB	2.50	0.41
1:G:502:ASN:ND2	1:G:635:ARG:CB	2.59	0.41
1:G:557:PRO:HD3	1:G:580:LEU:HD11	2.01	0.41
1:H:494:THR:HG22	1:H:499:ILE:HG22	2.01	0.41
1:H:642:PHE:CZ	1:H:644:ASN:HB2	2.55	0.41
1:I:401:LEU:HD21	1:I:402:ALA:HB2	1.96	0.41
1:I:458:SER:HB2	1:I:632:ILE:O	2.19	0.41
1:I:550:ILE:HG12	1:I:596:ASN:HA	2.02	0.41
1:I:556:GLY:CA	1:I:589:TYR:HD1	2.32	0.41
1:K:502:ASN:ND2	1:K:635:ARG:CB	2.59	0.41
1:A:382:LEU:CD1	1:A:647:ARG:HH21	2.33	0.41
1:C:384:LEU:HD23	1:C:384:LEU:HA	1.85	0.41
1:C:448:TYR:CZ	1:C:642:PHE:HB2	2.55	0.41
1:E:454:ILE:HG23	1:E:455:PHE:N	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:448:TYR:HA	1:G:452:VAL:HB	2.02	0.41
1:G:458:SER:HB2	1:G:632:ILE:O	2.19	0.41
1:G:556:GLY:CA	1:G:589:TYR:CD1	3.01	0.41
1:H:365:ASP:O	1:H:366:SER:C	2.54	0.41
1:H:447:TYR:HB2	1:H:467:TYR:CD1	2.54	0.41
1:I:349:VAL:C	1:I:351:GLU:N	2.71	0.41
1:I:387:VAL:CG2	1:I:390:GLU:OE1	2.55	0.41
1:I:651:LEU:HD23	1:I:651:LEU:C	2.40	0.41
1:K:525:ASN:OD1	1:K:526:PRO:N	2.53	0.41
1:A:453:GLU:O	1:A:454:ILE:HG13	2.21	0.41
1:C:382:LEU:CD1	1:C:647:ARG:HH21	2.33	0.41
1:C:464:MET:CG	1:C:465:LEU:N	2.82	0.41
1:D:542:SER:HB2	1:D:595:ILE:CD1	2.50	0.41
1:E:453:GLU:O	1:E:454:ILE:HG13	2.21	0.41
1:E:651:LEU:HD23	1:E:651:LEU:C	2.40	0.41
1:G:647:ARG:N	1:G:648:PRO:HD3	2.34	0.41
1:G:656:GLU:HA	1:G:657:PRO:HD3	1.82	0.41
1:H:476:ILE:CG2	1:H:476:ILE:O	2.60	0.41
1:J:422:VAL:HG11	1:J:475:VAL:HG13	2.01	0.41
1:K:550:ILE:HG12	1:K:596:ASN:HA	2.02	0.41
1:K:556:GLY:CA	1:K:589:TYR:HD1	2.32	0.41
1:K:595:ILE:HG23	1:K:602:ILE:HG23	2.02	0.41
1:L:365:ASP:O	1:L:366:SER:C	2.54	0.41
1:L:642:PHE:CZ	1:L:644:ASN:HB2	2.55	0.41
1:A:448:TYR:CZ	1:A:642:PHE:HB2	2.55	0.41
1:B:396:LEU:HD13	1:B:405:THR:OG1	2.21	0.41
1:B:642:PHE:CZ	1:B:644:ASN:HB2	2.55	0.41
1:C:651:LEU:HD23	1:C:651:LEU:C	2.40	0.41
1:G:526:PRO:O	1:G:527:ASP:C	2.59	0.41
1:G:595:ILE:HG23	1:G:602:ILE:HG23	2.02	0.41
1:H:375:ALA:HA	1:H:409:ILE:CD1	2.51	0.41
1:H:396:LEU:HD13	1:H:405:THR:OG1	2.21	0.41
1:H:448:TYR:CZ	1:H:642:PHE:HB2	2.55	0.41
1:J:448:TYR:CZ	1:J:642:PHE:HB2	2.55	0.41
1:L:367:THR:CG2	1:L:368:LYS:N	2.44	0.41
1:L:402:ALA:O	1:L:403:PRO:C	2.59	0.41
1:L:447:TYR:HB2	1:L:467:TYR:CD1	2.54	0.41
1:A:361:GLN:HG2	1:A:455:PHE:CB	2.50	0.41
1:A:647:ARG:N	1:A:648:PRO:HD3	2.34	0.41
1:B:408:ILE:O	1:B:408:ILE:CG1	2.64	0.41
1:B:455:PHE:O	1:B:456:ASN:CB	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:647:ARG:HD3	1:B:649:GLN:CG	2.51	0.41
1:C:377:LYS:HA	1:C:378:PRO:HD3	1.84	0.41
1:C:521:ARG:HE	1:C:521:ARG:HB2	1.71	0.41
1:E:361:GLN:HG2	1:E:455:PHE:CB	2.50	0.41
1:H:358:GLN:HE21	1:H:377:LYS:NZ	2.19	0.41
1:I:424:TYR:O	1:I:658:ILE:HB	2.20	0.41
1:I:424:TYR:HB2	1:I:475:VAL:H	1.85	0.41
1:I:595:ILE:HG23	1:I:602:ILE:HG23	2.02	0.41
1:J:642:PHE:CZ	1:J:644:ASN:HB2	2.55	0.41
1:K:361:GLN:HG2	1:K:455:PHE:CB	2.50	0.41
1:K:382:LEU:CD1	1:K:647:ARG:HH21	2.33	0.41
1:K:424:TYR:HB2	1:K:475:VAL:H	1.85	0.41
1:K:651:LEU:HD23	1:K:651:LEU:C	2.40	0.41
1:L:375:ALA:HA	1:L:409:ILE:CD1	2.51	0.41
1:L:455:PHE:O	1:L:456:ASN:CB	2.69	0.41
1:L:663:HIS:HE1	1:L:665:HIS:O	2.04	0.41
1:B:375:ALA:HA	1:B:409:ILE:CD1	2.51	0.41
1:B:663:HIS:HE1	1:B:665:HIS:O	2.04	0.41
1:C:341:THR:O	1:C:341:THR:OG1	2.33	0.41
1:C:361:GLN:HG2	1:C:455:PHE:CB	2.50	0.41
1:E:523:VAL:HG12	1:E:534:VAL:HG22	2.03	0.41
1:E:582:ASN:C	1:E:585:GLY:H	2.21	0.41
1:F:542:SER:HB2	1:F:595:ILE:CD1	2.50	0.41
1:G:453:GLU:O	1:G:454:ILE:HG13	2.21	0.41
1:G:595:ILE:CG2	1:G:602:ILE:HG12	2.51	0.41
1:I:526:PRO:O	1:I:527:ASP:C	2.59	0.41
1:K:448:TYR:HA	1:K:452:VAL:HB	2.02	0.41
1:A:414:LEU:HD23	1:A:414:LEU:HA	1.91	0.41
1:A:448:TYR:HA	1:A:452:VAL:HB	2.02	0.41
1:A:523:VAL:HG22	1:A:524:VAL:H	1.86	0.41
1:B:448:TYR:CD2	1:B:642:PHE:HB2	2.56	0.41
1:C:420:LEU:HG	1:C:422:VAL:HG23	2.03	0.41
1:C:523:VAL:HG12	1:C:534:VAL:HG22	2.03	0.41
1:D:396:LEU:HD13	1:D:405:THR:OG1	2.21	0.41
1:D:448:TYR:CZ	1:D:642:PHE:HB2	2.55	0.41
1:D:455:PHE:O	1:D:456:ASN:CB	2.69	0.41
1:D:492:TYR:OH	1:D:611:LEU:O	2.34	0.41
1:D:546:ASP:CG	1:D:547:SER:O	2.59	0.41
1:D:642:PHE:CZ	1:D:644:ASN:HB2	2.55	0.41
1:E:353:PHE:O	1:E:355:SER:HB3	2.21	0.41
1:E:523:VAL:HG22	1:E:524:VAL:H	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:358:GLN:HE21	1:F:377:LYS:NZ	2.19	0.41
1:G:361:GLN:HA	1:G:361:GLN:HE21	1.84	0.41
1:G:382:LEU:CD1	1:G:647:ARG:HH21	2.33	0.41
1:G:523:VAL:HG12	1:G:534:VAL:HG22	2.03	0.41
1:H:448:TYR:CD2	1:H:642:PHE:HB2	2.56	0.41
1:H:546:ASP:CG	1:H:547:SER:O	2.59	0.41
1:J:455:PHE:O	1:J:456:ASN:CB	2.69	0.41
1:J:546:ASP:CG	1:J:547:SER:O	2.59	0.41
1:K:660:GLN:HG3	1:K:661:LEU:H	1.77	0.41
1:L:495:PRO:O	1:L:496:GLU:C	2.57	0.41
1:L:651:LEU:HD23	1:L:651:LEU:HA	1.83	0.41
1:A:454:ILE:HG23	1:A:455:PHE:N	2.34	0.41
1:B:353:PHE:CZ	1:B:395:TYR:CD2	3.05	0.41
1:C:353:PHE:O	1:C:355:SER:HB3	2.21	0.41
1:C:647:ARG:CG	1:C:650:TYR:CD1	3.04	0.41
1:D:385:THR:HG23	1:D:387:VAL:HG13	2.03	0.41
1:E:424:TYR:O	1:E:658:ILE:HB	2.20	0.41
1:H:410:SER:HA	1:H:411:PRO:HD3	1.81	0.41
1:H:599:ALA:O	1:H:600:ASP:C	2.59	0.41
1:J:541:VAL:HG12	1:J:542:SER:H	1.86	0.41
1:K:523:VAL:HG12	1:K:534:VAL:HG22	2.03	0.41
1:L:396:LEU:HD13	1:L:405:THR:OG1	2.21	0.41
1:L:410:SER:HA	1:L:411:PRO:HD3	1.81	0.41
1:A:582:ASN:C	1:A:584:ASP:N	2.74	0.40
1:B:365:ASP:O	1:B:366:SER:C	2.54	0.40
1:C:525:ASN:OD1	1:C:526:PRO:N	2.53	0.40
1:C:526:PRO:O	1:C:527:ASP:C	2.59	0.40
1:D:476:ILE:CG2	1:D:476:ILE:O	2.60	0.40
1:D:663:HIS:HE1	1:D:665:HIS:O	2.04	0.40
1:E:582:ASN:C	1:E:584:ASP:N	2.74	0.40
1:F:358:GLN:HE21	1:F:377:LYS:HZ2	1.69	0.40
1:F:396:LEU:HD13	1:F:405:THR:OG1	2.21	0.40
1:F:402:ALA:O	1:F:403:PRO:C	2.59	0.40
1:H:455:PHE:O	1:H:456:ASN:CB	2.69	0.40
1:H:658:ILE:HD12	1:H:658:ILE:HA	1.67	0.40
1:I:347:THR:C	1:I:349:VAL:N	2.73	0.40
1:I:420:LEU:HG	1:I:422:VAL:HG23	2.03	0.40
1:J:599:ALA:O	1:J:600:ASP:C	2.59	0.40
1:J:664:HIS:CD2	1:J:664:HIS:C	2.90	0.40
1:K:424:TYR:O	1:K:658:ILE:HB	2.20	0.40
1:K:523:VAL:HG22	1:K:524:VAL:H	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:556:GLY:HA2	1:L:557:PRO:HD3	1.90	0.40
1:A:355:SER:OG	1:A:356:ILE:N	2.55	0.40
1:A:623:LEU:HD12	1:A:623:LEU:HA	1.79	0.40
1:B:533:ASP:O	1:B:535:LEU:HG	2.22	0.40
1:B:557:PRO:CG	1:B:580:LEU:HD11	2.37	0.40
1:C:347:THR:C	1:C:349:VAL:N	2.73	0.40
1:D:358:GLN:HE21	1:D:377:LYS:NZ	2.19	0.40
1:D:372:ALA:O	1:D:406:PRO:HA	2.21	0.40
1:F:372:ALA:O	1:F:406:PRO:HA	2.21	0.40
1:F:546:ASP:CG	1:F:547:SER:O	2.59	0.40
1:G:550:ILE:HG12	1:G:596:ASN:HA	2.02	0.40
1:H:647:ARG:HD3	1:H:649:GLN:CG	2.51	0.40
1:I:453:GLU:O	1:I:454:ILE:HG13	2.21	0.40
1:J:375:ALA:HA	1:J:409:ILE:CD1	2.51	0.40
1:J:448:TYR:CD2	1:J:642:PHE:HB2	2.56	0.40
1:K:353:PHE:O	1:K:355:SER:HB3	2.21	0.40
1:K:420:LEU:HG	1:K:422:VAL:HG23	2.03	0.40
1:K:453:GLU:O	1:K:454:ILE:HG13	2.21	0.40
1:K:483:GLN:HG2	1:K:626:ASP:HB3	2.04	0.40
1:K:629:ASP:N	1:K:629:ASP:OD1	2.55	0.40
1:L:385:THR:HG23	1:L:387:VAL:HG13	2.04	0.40
1:L:405:THR:OG1	1:L:406:PRO:CD	2.66	0.40
1:L:599:ALA:O	1:L:600:ASP:C	2.59	0.40
1:L:623:LEU:HA	1:L:623:LEU:HD12	1.86	0.40
1:A:424:TYR:HB2	1:A:475:VAL:H	1.85	0.40
1:A:595:ILE:CG2	1:A:602:ILE:HG12	2.51	0.40
1:B:372:ALA:O	1:B:406:PRO:HA	2.21	0.40
1:B:422:VAL:HG11	1:B:475:VAL:HG13	2.01	0.40
1:C:626:ASP:HA	1:C:627:PRO:HD3	1.65	0.40
1:C:629:ASP:N	1:C:629:ASP:OD1	2.55	0.40
1:D:375:ALA:HA	1:D:409:ILE:CD1	2.51	0.40
1:D:448:TYR:CD2	1:D:642:PHE:HB2	2.56	0.40
1:D:647:ARG:HD3	1:D:649:GLN:CG	2.51	0.40
1:E:550:ILE:HG12	1:E:596:ASN:HA	2.02	0.40
1:E:647:ARG:CG	1:E:650:TYR:CD1	3.04	0.40
1:F:385:THR:HG23	1:F:387:VAL:HG13	2.04	0.40
1:F:448:TYR:CD2	1:F:642:PHE:HB2	2.56	0.40
1:F:663:HIS:HE1	1:F:665:HIS:O	2.04	0.40
1:G:424:TYR:O	1:G:658:ILE:HB	2.20	0.40
1:G:465:LEU:HA	1:G:465:LEU:HD23	1.84	0.40
1:G:582:ASN:C	1:G:584:ASP:N	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:629:ASP:OD1	1:I:629:ASP:N	2.55	0.40
1:J:358:GLN:HE21	1:J:377:LYS:NZ	2.19	0.40
1:J:396:LEU:HD13	1:J:405:THR:OG1	2.21	0.40
1:K:582:ASN:C	1:K:584:ASP:N	2.74	0.40
1:L:448:TYR:CD2	1:L:642:PHE:HB2	2.56	0.40
1:L:648:PRO:CD	1:L:649:GLN:H	2.32	0.40
1:L:659:SER:HB3	1:L:660:GLN:H	1.78	0.40
1:A:523:VAL:HG12	1:A:534:VAL:HG22	2.03	0.40
1:A:525:ASN:OD1	1:A:526:PRO:N	2.53	0.40
1:A:556:GLY:CA	1:A:589:TYR:HD1	2.32	0.40
1:B:486:ARG:HH22	1:B:638:SER:HB3	1.86	0.40
1:B:599:ALA:O	1:B:600:ASP:C	2.59	0.40
1:C:340:VAL:O	1:C:341:THR:CG2	2.64	0.40
1:D:441:ILE:HD11	1:D:644:ASN:CG	2.42	0.40
1:D:533:ASP:O	1:D:535:LEU:HG	2.22	0.40
1:F:356:ILE:O	1:F:379:LYS:N	2.48	0.40
1:F:441:ILE:HD11	1:F:644:ASN:CG	2.42	0.40
1:G:340:VAL:O	1:G:341:THR:CG2	2.64	0.40
1:H:402:ALA:O	1:H:403:PRO:C	2.59	0.40
1:H:414:LEU:HD23	1:H:414:LEU:HA	1.70	0.40
1:H:486:ARG:HH22	1:H:638:SER:HB3	1.86	0.40
1:H:663:HIS:HE1	1:H:665:HIS:O	2.04	0.40
1:I:453:GLU:HG2	1:I:641:VAL:HA	2.04	0.40
1:I:523:VAL:HG22	1:I:524:VAL:H	1.86	0.40
1:K:347:THR:C	1:K:349:VAL:N	2.73	0.40
1:K:387:VAL:CG2	1:K:390:GLU:OE1	2.55	0.40
1:B:441:ILE:HD11	1:B:644:ASN:CG	2.42	0.40
1:C:424:TYR:HB2	1:C:475:VAL:H	1.85	0.40
1:C:523:VAL:HG22	1:C:524:VAL:H	1.86	0.40
1:C:595:ILE:CG2	1:C:602:ILE:HG12	2.51	0.40
1:C:658:ILE:HD13	1:C:658:ILE:HA	1.52	0.40
1:E:595:ILE:HG23	1:E:602:ILE:HG23	2.02	0.40
1:F:375:ALA:HA	1:F:409:ILE:CD1	2.51	0.40
1:F:455:PHE:O	1:F:456:ASN:CB	2.69	0.40
1:F:599:ALA:O	1:F:600:ASP:C	2.59	0.40
1:G:424:TYR:HB2	1:G:475:VAL:H	1.85	0.40
1:G:464:MET:CG	1:G:465:LEU:N	2.82	0.40
1:H:465:LEU:HD21	1:H:480:ALA:CB	2.49	0.40
1:I:464:MET:CG	1:I:465:LEU:N	2.82	0.40
1:J:465:LEU:HD21	1:J:480:ALA:CB	2.49	0.40
1:J:658:ILE:HD12	1:J:658:ILE:HA	1.67	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:355:SER:OG	1:K:356:ILE:N	2.55	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	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	B	322/335 (96%)	261 (81%)	42 (13%)	19 (6%)	1	17
1	C	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	D	322/335 (96%)	262 (81%)	41 (13%)	19 (6%)	1	17
1	E	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	F	322/335 (96%)	262 (81%)	41 (13%)	19 (6%)	1	17
1	G	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	H	322/335 (96%)	262 (81%)	41 (13%)	19 (6%)	1	17
1	I	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	J	322/335 (96%)	261 (81%)	42 (13%)	19 (6%)	1	17
1	K	324/335 (97%)	260 (80%)	47 (14%)	17 (5%)	2	19
1	L	322/335 (96%)	261 (81%)	42 (13%)	19 (6%)	1	17
All	All	3876/4020 (96%)	3129 (81%)	531 (14%)	216 (6%)	3	19

All (216) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	348	PHE
1	A	354	GLY
1	A	389	ARG

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Mol	Chain	Res	Type
1	A	390	GLU
1	A	526	PRO
1	A	576	ASP
1	A	635	ARG
1	A	662	GLU
1	B	368	LYS
1	B	406	PRO
1	B	556	GLY
1	B	568	ASN
1	B	593	GLY
1	B	660	GLN
1	B	661	LEU
1	B	662	GLU
1	C	348	PHE
1	C	354	GLY
1	C	389	ARG
1	C	390	GLU
1	C	526	PRO
1	C	576	ASP
1	C	635	ARG
1	C	662	GLU
1	D	368	LYS
1	D	406	PRO
1	D	556	GLY
1	D	568	ASN
1	D	593	GLY
1	D	660	GLN
1	D	661	LEU
1	D	662	GLU
1	E	348	PHE
1	E	354	GLY
1	E	389	ARG
1	E	390	GLU
1	E	526	PRO
1	E	576	ASP
1	E	635	ARG
1	E	662	GLU
1	F	368	LYS
1	F	406	PRO
1	F	556	GLY
1	F	568	ASN
1	F	593	GLY

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Mol	Chain	Res	Type
1	F	660	GLN
1	F	661	LEU
1	F	662	GLU
1	G	348	PHE
1	G	354	GLY
1	G	389	ARG
1	G	390	GLU
1	G	526	PRO
1	G	576	ASP
1	G	635	ARG
1	G	662	GLU
1	H	368	LYS
1	H	406	PRO
1	H	556	GLY
1	H	568	ASN
1	H	593	GLY
1	H	660	GLN
1	H	661	LEU
1	H	662	GLU
1	I	348	PHE
1	I	354	GLY
1	I	389	ARG
1	I	390	GLU
1	I	526	PRO
1	I	576	ASP
1	I	635	ARG
1	I	662	GLU
1	J	368	LYS
1	J	406	PRO
1	J	556	GLY
1	J	568	ASN
1	J	593	GLY
1	J	660	GLN
1	J	661	LEU
1	J	662	GLU
1	K	348	PHE
1	K	354	GLY
1	K	389	ARG
1	K	390	GLU
1	K	526	PRO
1	K	576	ASP
1	K	635	ARG

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Mol	Chain	Res	Type
1	K	662	GLU
1	L	368	LYS
1	L	406	PRO
1	L	556	GLY
1	L	568	ASN
1	L	593	GLY
1	L	660	GLN
1	L	661	LEU
1	L	662	GLU
1	A	402	ALA
1	A	474	SER
1	A	490	ASN
1	A	664	HIS
1	B	367	THR
1	B	560	SER
1	B	600	ASP
1	C	402	ALA
1	C	474	SER
1	C	490	ASN
1	C	664	HIS
1	D	367	THR
1	D	560	SER
1	D	600	ASP
1	E	402	ALA
1	E	474	SER
1	E	490	ASN
1	E	664	HIS
1	F	367	THR
1	F	560	SER
1	F	600	ASP
1	G	402	ALA
1	G	474	SER
1	G	490	ASN
1	G	664	HIS
1	H	367	THR
1	H	560	SER
1	H	600	ASP
1	I	402	ALA
1	I	474	SER
1	I	490	ASN
1	I	664	HIS
1	J	367	THR

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Mol	Chain	Res	Type
1	J	560	SER
1	J	600	ASP
1	K	402	ALA
1	K	474	SER
1	K	490	ASN
1	K	664	HIS
1	L	367	THR
1	L	560	SER
1	L	600	ASP
1	A	341	THR
1	A	587	ASP
1	A	651	LEU
1	B	348	PHE
1	B	574	GLY
1	B	608	LYS
1	B	663	HIS
1	C	341	THR
1	C	587	ASP
1	C	651	LEU
1	D	348	PHE
1	D	574	GLY
1	D	608	LYS
1	D	663	HIS
1	E	341	THR
1	E	587	ASP
1	E	651	LEU
1	F	348	PHE
1	F	574	GLY
1	F	608	LYS
1	F	663	HIS
1	G	341	THR
1	G	587	ASP
1	G	651	LEU
1	H	348	PHE
1	H	574	GLY
1	H	608	LYS
1	H	663	HIS
1	I	341	THR
1	I	587	ASP
1	I	651	LEU
1	J	348	PHE
1	J	574	GLY

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Mol	Chain	Res	Type
1	J	608	LYS
1	J	663	HIS
1	K	341	THR
1	K	587	ASP
1	K	651	LEU
1	L	348	PHE
1	L	574	GLY
1	L	608	LYS
1	L	663	HIS
1	B	349	VAL
1	B	625	SER
1	D	349	VAL
1	D	625	SER
1	F	349	VAL
1	F	625	SER
1	H	349	VAL
1	H	625	SER
1	J	349	VAL
1	J	625	SER
1	L	349	VAL
1	L	625	SER
1	B	496	GLU
1	D	496	GLU
1	J	496	GLU
1	L	496	GLU
1	A	475	VAL
1	C	475	VAL
1	E	475	VAL
1	F	496	GLU
1	G	475	VAL
1	H	496	GLU
1	I	475	VAL
1	K	475	VAL
1	B	524	VAL
1	D	524	VAL
1	F	524	VAL
1	H	524	VAL
1	J	524	VAL
1	L	524	VAL
1	A	392	ILE
1	C	392	ILE
1	E	392	ILE

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Mol	Chain	Res	Type
1	G	392	ILE
1	I	392	ILE
1	K	392	ILE

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	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	B	293/304 (96%)	234 (80%)	59 (20%)	1	7
1	C	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	D	293/304 (96%)	234 (80%)	59 (20%)	1	7
1	E	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	F	293/304 (96%)	234 (80%)	59 (20%)	1	7
1	G	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	H	293/304 (96%)	234 (80%)	59 (20%)	1	7
1	I	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	J	293/304 (96%)	234 (80%)	59 (20%)	1	7
1	K	295/304 (97%)	239 (81%)	56 (19%)	1	8
1	L	293/304 (96%)	234 (80%)	59 (20%)	1	7
All	All	3528/3648 (97%)	2838 (80%)	690 (20%)	4	8

All (690) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	340	VAL
1	A	341	THR
1	A	343	THR
1	A	345	TYR
1	A	348	PHE
1	A	355	SER
1	A	356	ILE

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Mol	Chain	Res	Type
1	A	360	VAL
1	A	361	GLN
1	A	364	THR
1	A	374	ILE
1	A	388	GLN
1	A	391	ASP
1	A	398	ASP
1	A	401	LEU
1	A	405	THR
1	A	414	LEU
1	A	416	ILE
1	A	423	THR
1	A	427	ASN
1	A	429	LEU
1	A	441	ILE
1	A	446	ARG
1	A	464	MET
1	A	466	THR
1	A	474	SER
1	A	486	ARG
1	A	489	GLN
1	A	496	GLU
1	A	499	ILE
1	A	500	LYS
1	A	522	LYS
1	A	528	THR
1	A	532	GLU
1	A	533	ASP
1	A	536	TYR
1	A	538	VAL
1	A	547	SER
1	A	580	LEU
1	A	587	ASP
1	A	595	ILE
1	A	596	ASN
1	A	619	GLN
1	A	622	GLU
1	A	626	ASP
1	A	628	THR
1	A	629	ASP
1	A	634	THR
1	A	635	ARG

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Mol	Chain	Res	Type
1	A	649	GLN
1	A	652	THR
1	A	658	ILE
1	A	659	SER
1	A	660	GLN
1	A	662	GLU
1	A	663	HIS
1	B	344	ASP
1	B	346	ASP
1	B	357	ILE
1	B	360	VAL
1	B	361	GLN
1	B	364	THR
1	B	366	SER
1	B	367	THR
1	B	374	ILE
1	B	379	LYS
1	B	380	SER
1	B	386	THR
1	B	404	ILE
1	B	407	SER
1	B	408	ILE
1	B	409	ILE
1	B	414	LEU
1	B	417	LYS
1	B	419	ASN
1	B	423	THR
1	B	427	ASN
1	B	429	LEU
1	B	436	LEU
1	B	446	ARG
1	B	457	SER
1	B	462	SER
1	B	464	MET
1	B	466	THR
1	B	474	SER
1	B	481	THR
1	B	486	ARG
1	B	493	LYS
1	B	496	GLU
1	B	499	ILE
1	B	522	LYS

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Mol	Chain	Res	Type
1	B	527	ASP
1	B	535	LEU
1	B	540	ILE
1	B	547	SER
1	B	548	LYS
1	B	566	ASN
1	B	567	GLU
1	B	575	ASN
1	B	580	LEU
1	B	595	ILE
1	B	596	ASN
1	B	601	VAL
1	B	612	THR
1	B	613	SER
1	B	614	GLU
1	B	632	ILE
1	B	648	PRO
1	B	649	GLN
1	B	651	LEU
1	B	652	THR
1	B	658	ILE
1	B	659	SER
1	B	661	LEU
1	B	664	HIS
1	C	340	VAL
1	C	341	THR
1	C	343	THR
1	C	345	TYR
1	C	348	PHE
1	C	355	SER
1	C	356	ILE
1	C	360	VAL
1	C	361	GLN
1	C	364	THR
1	C	374	ILE
1	C	388	GLN
1	C	391	ASP
1	C	398	ASP
1	C	401	LEU
1	C	405	THR
1	C	414	LEU
1	C	416	ILE

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Mol	Chain	Res	Type
1	C	423	THR
1	C	427	ASN
1	C	429	LEU
1	C	441	ILE
1	C	446	ARG
1	C	464	MET
1	C	466	THR
1	C	474	SER
1	C	486	ARG
1	C	489	GLN
1	C	496	GLU
1	C	499	ILE
1	C	500	LYS
1	C	522	LYS
1	C	528	THR
1	C	532	GLU
1	C	533	ASP
1	C	536	TYR
1	C	538	VAL
1	C	547	SER
1	C	580	LEU
1	C	587	ASP
1	C	595	ILE
1	C	596	ASN
1	C	619	GLN
1	C	622	GLU
1	C	626	ASP
1	C	628	THR
1	C	629	ASP
1	C	634	THR
1	C	635	ARG
1	C	649	GLN
1	C	652	THR
1	C	658	ILE
1	C	659	SER
1	C	660	GLN
1	C	662	GLU
1	C	663	HIS
1	D	344	ASP
1	D	346	ASP
1	D	357	ILE
1	D	360	VAL

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Mol	Chain	Res	Type
1	D	361	GLN
1	D	364	THR
1	D	366	SER
1	D	367	THR
1	D	374	ILE
1	D	379	LYS
1	D	380	SER
1	D	386	THR
1	D	404	ILE
1	D	407	SER
1	D	408	ILE
1	D	409	ILE
1	D	414	LEU
1	D	417	LYS
1	D	419	ASN
1	D	423	THR
1	D	427	ASN
1	D	429	LEU
1	D	436	LEU
1	D	446	ARG
1	D	457	SER
1	D	462	SER
1	D	464	MET
1	D	466	THR
1	D	474	SER
1	D	481	THR
1	D	486	ARG
1	D	493	LYS
1	D	496	GLU
1	D	499	ILE
1	D	522	LYS
1	D	527	ASP
1	D	535	LEU
1	D	540	ILE
1	D	547	SER
1	D	548	LYS
1	D	566	ASN
1	D	567	GLU
1	D	575	ASN
1	D	580	LEU
1	D	595	ILE
1	D	596	ASN

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Mol	Chain	Res	Type
1	D	601	VAL
1	D	612	THR
1	D	613	SER
1	D	614	GLU
1	D	632	ILE
1	D	648	PRO
1	D	649	GLN
1	D	651	LEU
1	D	652	THR
1	D	658	ILE
1	D	659	SER
1	D	661	LEU
1	D	664	HIS
1	E	340	VAL
1	E	341	THR
1	E	343	THR
1	E	345	TYR
1	E	348	PHE
1	E	355	SER
1	E	356	ILE
1	E	360	VAL
1	E	361	GLN
1	E	364	THR
1	E	374	ILE
1	E	388	GLN
1	E	391	ASP
1	E	398	ASP
1	E	401	LEU
1	E	405	THR
1	E	414	LEU
1	E	416	ILE
1	E	423	THR
1	E	427	ASN
1	E	429	LEU
1	E	441	ILE
1	E	446	ARG
1	E	464	MET
1	E	466	THR
1	E	474	SER
1	E	486	ARG
1	E	489	GLN
1	E	496	GLU

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Mol	Chain	Res	Type
1	E	499	ILE
1	E	500	LYS
1	E	522	LYS
1	E	528	THR
1	E	532	GLU
1	E	533	ASP
1	E	536	TYR
1	E	538	VAL
1	E	547	SER
1	E	580	LEU
1	E	587	ASP
1	E	595	ILE
1	E	596	ASN
1	E	619	GLN
1	E	622	GLU
1	E	626	ASP
1	E	628	THR
1	E	629	ASP
1	E	634	THR
1	E	635	ARG
1	E	649	GLN
1	E	652	THR
1	E	658	ILE
1	E	659	SER
1	E	660	GLN
1	E	662	GLU
1	E	663	HIS
1	F	344	ASP
1	F	346	ASP
1	F	357	ILE
1	F	360	VAL
1	F	361	GLN
1	F	364	THR
1	F	366	SER
1	F	367	THR
1	F	374	ILE
1	F	379	LYS
1	F	380	SER
1	F	386	THR
1	F	404	ILE
1	F	407	SER
1	F	408	ILE

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Mol	Chain	Res	Type
1	F	409	ILE
1	F	414	LEU
1	F	417	LYS
1	F	419	ASN
1	F	423	THR
1	F	427	ASN
1	F	429	LEU
1	F	436	LEU
1	F	446	ARG
1	F	457	SER
1	F	462	SER
1	F	464	MET
1	F	466	THR
1	F	474	SER
1	F	481	THR
1	F	486	ARG
1	F	493	LYS
1	F	496	GLU
1	F	499	ILE
1	F	522	LYS
1	F	527	ASP
1	F	535	LEU
1	F	540	ILE
1	F	547	SER
1	F	548	LYS
1	F	566	ASN
1	F	567	GLU
1	F	575	ASN
1	F	580	LEU
1	F	595	ILE
1	F	596	ASN
1	F	601	VAL
1	F	612	THR
1	F	613	SER
1	F	614	GLU
1	F	632	ILE
1	F	648	PRO
1	F	649	GLN
1	F	651	LEU
1	F	652	THR
1	F	658	ILE
1	F	659	SER

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Mol	Chain	Res	Type
1	F	661	LEU
1	F	664	HIS
1	G	340	VAL
1	G	341	THR
1	G	343	THR
1	G	345	TYR
1	G	348	PHE
1	G	355	SER
1	G	356	ILE
1	G	360	VAL
1	G	361	GLN
1	G	364	THR
1	G	374	ILE
1	G	388	GLN
1	G	391	ASP
1	G	398	ASP
1	G	401	LEU
1	G	405	THR
1	G	414	LEU
1	G	416	ILE
1	G	423	THR
1	G	427	ASN
1	G	429	LEU
1	G	441	ILE
1	G	446	ARG
1	G	464	MET
1	G	466	THR
1	G	474	SER
1	G	486	ARG
1	G	489	GLN
1	G	496	GLU
1	G	499	ILE
1	G	500	LYS
1	G	522	LYS
1	G	528	THR
1	G	532	GLU
1	G	533	ASP
1	G	536	TYR
1	G	538	VAL
1	G	547	SER
1	G	580	LEU
1	G	587	ASP

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Mol	Chain	Res	Type
1	G	595	ILE
1	G	596	ASN
1	G	619	GLN
1	G	622	GLU
1	G	626	ASP
1	G	628	THR
1	G	629	ASP
1	G	634	THR
1	G	635	ARG
1	G	649	GLN
1	G	652	THR
1	G	658	ILE
1	G	659	SER
1	G	660	GLN
1	G	662	GLU
1	G	663	HIS
1	H	344	ASP
1	H	346	ASP
1	H	357	ILE
1	H	360	VAL
1	H	361	GLN
1	H	364	THR
1	H	366	SER
1	H	367	THR
1	H	374	ILE
1	H	379	LYS
1	H	380	SER
1	H	386	THR
1	H	404	ILE
1	H	407	SER
1	H	408	ILE
1	H	409	ILE
1	H	414	LEU
1	H	417	LYS
1	H	419	ASN
1	H	423	THR
1	H	427	ASN
1	H	429	LEU
1	H	436	LEU
1	H	446	ARG
1	H	457	SER
1	H	462	SER

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Mol	Chain	Res	Type
1	H	464	MET
1	H	466	THR
1	H	474	SER
1	H	481	THR
1	H	486	ARG
1	H	493	LYS
1	H	496	GLU
1	H	499	ILE
1	H	522	LYS
1	H	527	ASP
1	H	535	LEU
1	H	540	ILE
1	H	547	SER
1	H	548	LYS
1	H	566	ASN
1	H	567	GLU
1	H	575	ASN
1	H	580	LEU
1	H	595	ILE
1	H	596	ASN
1	H	601	VAL
1	H	612	THR
1	H	613	SER
1	H	614	GLU
1	H	632	ILE
1	H	648	PRO
1	H	649	GLN
1	H	651	LEU
1	H	652	THR
1	H	658	ILE
1	H	659	SER
1	H	661	LEU
1	H	664	HIS
1	I	340	VAL
1	I	341	THR
1	I	343	THR
1	I	345	TYR
1	I	348	PHE
1	I	355	SER
1	I	356	ILE
1	I	360	VAL
1	I	361	GLN

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Mol	Chain	Res	Type
1	I	364	THR
1	I	374	ILE
1	I	388	GLN
1	I	391	ASP
1	I	398	ASP
1	I	401	LEU
1	I	405	THR
1	I	414	LEU
1	I	416	ILE
1	I	423	THR
1	I	427	ASN
1	I	429	LEU
1	I	441	ILE
1	I	446	ARG
1	I	464	MET
1	I	466	THR
1	I	474	SER
1	I	486	ARG
1	I	489	GLN
1	I	496	GLU
1	I	499	ILE
1	I	500	LYS
1	I	522	LYS
1	I	528	THR
1	I	532	GLU
1	I	533	ASP
1	I	536	TYR
1	I	538	VAL
1	I	547	SER
1	I	580	LEU
1	I	587	ASP
1	I	595	ILE
1	I	596	ASN
1	I	619	GLN
1	I	622	GLU
1	I	626	ASP
1	I	628	THR
1	I	629	ASP
1	I	634	THR
1	I	635	ARG
1	I	649	GLN
1	I	652	THR

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Mol	Chain	Res	Type
1	I	658	ILE
1	I	659	SER
1	I	660	GLN
1	I	662	GLU
1	I	663	HIS
1	J	344	ASP
1	J	346	ASP
1	J	357	ILE
1	J	360	VAL
1	J	361	GLN
1	J	364	THR
1	J	366	SER
1	J	367	THR
1	J	374	ILE
1	J	379	LYS
1	J	380	SER
1	J	386	THR
1	J	404	ILE
1	J	407	SER
1	J	408	ILE
1	J	409	ILE
1	J	414	LEU
1	J	417	LYS
1	J	419	ASN
1	J	423	THR
1	J	427	ASN
1	J	429	LEU
1	J	436	LEU
1	J	446	ARG
1	J	457	SER
1	J	462	SER
1	J	464	MET
1	J	466	THR
1	J	474	SER
1	J	481	THR
1	J	486	ARG
1	J	493	LYS
1	J	496	GLU
1	J	499	ILE
1	J	522	LYS
1	J	527	ASP
1	J	535	LEU

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Mol	Chain	Res	Type
1	J	540	ILE
1	J	547	SER
1	J	548	LYS
1	J	566	ASN
1	J	567	GLU
1	J	575	ASN
1	J	580	LEU
1	J	595	ILE
1	J	596	ASN
1	J	601	VAL
1	J	612	THR
1	J	613	SER
1	J	614	GLU
1	J	632	ILE
1	J	648	PRO
1	J	649	GLN
1	J	651	LEU
1	J	652	THR
1	J	658	ILE
1	J	659	SER
1	J	661	LEU
1	J	664	HIS
1	K	340	VAL
1	K	341	THR
1	K	343	THR
1	K	345	TYR
1	K	348	PHE
1	K	355	SER
1	K	356	ILE
1	K	360	VAL
1	K	361	GLN
1	K	364	THR
1	K	374	ILE
1	K	388	GLN
1	K	391	ASP
1	K	398	ASP
1	K	401	LEU
1	K	405	THR
1	K	414	LEU
1	K	416	ILE
1	K	423	THR
1	K	427	ASN

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Mol	Chain	Res	Type
1	K	429	LEU
1	K	441	ILE
1	K	446	ARG
1	K	464	MET
1	K	466	THR
1	K	474	SER
1	K	486	ARG
1	K	489	GLN
1	K	496	GLU
1	K	499	ILE
1	K	500	LYS
1	K	522	LYS
1	K	528	THR
1	K	532	GLU
1	K	533	ASP
1	K	536	TYR
1	K	538	VAL
1	K	547	SER
1	K	580	LEU
1	K	587	ASP
1	K	595	ILE
1	K	596	ASN
1	K	619	GLN
1	K	622	GLU
1	K	626	ASP
1	K	628	THR
1	K	629	ASP
1	K	634	THR
1	K	635	ARG
1	K	649	GLN
1	K	652	THR
1	K	658	ILE
1	K	659	SER
1	K	660	GLN
1	K	662	GLU
1	K	663	HIS
1	L	344	ASP
1	L	346	ASP
1	L	357	ILE
1	L	360	VAL
1	L	361	GLN
1	L	364	THR

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Mol	Chain	Res	Type
1	L	366	SER
1	L	367	THR
1	L	374	ILE
1	L	379	LYS
1	L	380	SER
1	L	386	THR
1	L	404	ILE
1	L	407	SER
1	L	408	ILE
1	L	409	ILE
1	L	414	LEU
1	L	417	LYS
1	L	419	ASN
1	L	423	THR
1	L	427	ASN
1	L	429	LEU
1	L	436	LEU
1	L	446	ARG
1	L	457	SER
1	L	462	SER
1	L	464	MET
1	L	466	THR
1	L	474	SER
1	L	481	THR
1	L	486	ARG
1	L	493	LYS
1	L	496	GLU
1	L	499	ILE
1	L	522	LYS
1	L	527	ASP
1	L	535	LEU
1	L	540	ILE
1	L	547	SER
1	L	548	LYS
1	L	566	ASN
1	L	567	GLU
1	L	575	ASN
1	L	580	LEU
1	L	595	ILE
1	L	596	ASN
1	L	601	VAL
1	L	612	THR

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Mol	Chain	Res	Type
1	L	613	SER
1	L	614	GLU
1	L	632	ILE
1	L	648	PRO
1	L	649	GLN
1	L	651	LEU
1	L	652	THR
1	L	658	ILE
1	L	659	SER
1	L	661	LEU
1	L	664	HIS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (133) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	361	GLN
1	A	427	ASN
1	A	473	HIS
1	A	504	GLN
1	A	596	ASN
1	A	610	ASN
1	A	619	GLN
1	B	358	GLN
1	B	394	ASN
1	B	412	ASN
1	B	427	ASN
1	B	456	ASN
1	B	490	ASN
1	B	503	ASN
1	B	504	GLN
1	B	570	GLN
1	B	575	ASN
1	B	578	ASN
1	B	582	ASN
1	B	596	ASN
1	B	644	ASN
1	B	663	HIS
1	C	361	GLN
1	C	427	ASN
1	C	473	HIS
1	C	504	GLN
1	C	596	ASN

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Mol	Chain	Res	Type
1	C	610	ASN
1	C	619	GLN
1	D	358	GLN
1	D	394	ASN
1	D	400	ASN
1	D	412	ASN
1	D	427	ASN
1	D	456	ASN
1	D	490	ASN
1	D	503	ASN
1	D	570	GLN
1	D	575	ASN
1	D	578	ASN
1	D	582	ASN
1	D	596	ASN
1	D	644	ASN
1	D	663	HIS
1	E	361	GLN
1	E	427	ASN
1	E	473	HIS
1	E	504	GLN
1	E	596	ASN
1	E	610	ASN
1	E	619	GLN
1	E	663	HIS
1	F	358	GLN
1	F	394	ASN
1	F	412	ASN
1	F	427	ASN
1	F	456	ASN
1	F	490	ASN
1	F	503	ASN
1	F	504	GLN
1	F	570	GLN
1	F	575	ASN
1	F	578	ASN
1	F	582	ASN
1	F	596	ASN
1	F	644	ASN
1	F	663	HIS
1	G	361	GLN
1	G	427	ASN

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Mol	Chain	Res	Type
1	G	473	HIS
1	G	504	GLN
1	G	596	ASN
1	G	610	ASN
1	G	619	GLN
1	H	358	GLN
1	H	394	ASN
1	H	412	ASN
1	H	427	ASN
1	H	456	ASN
1	H	490	ASN
1	H	503	ASN
1	H	570	GLN
1	H	575	ASN
1	H	578	ASN
1	H	582	ASN
1	H	596	ASN
1	H	644	ASN
1	H	663	HIS
1	I	361	GLN
1	I	427	ASN
1	I	473	HIS
1	I	504	GLN
1	I	596	ASN
1	I	610	ASN
1	I	619	GLN
1	J	358	GLN
1	J	394	ASN
1	J	412	ASN
1	J	427	ASN
1	J	456	ASN
1	J	490	ASN
1	J	503	ASN
1	J	504	GLN
1	J	570	GLN
1	J	575	ASN
1	J	578	ASN
1	J	582	ASN
1	J	596	ASN
1	J	644	ASN
1	J	663	HIS
1	K	361	GLN

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Mol	Chain	Res	Type
1	K	427	ASN
1	K	473	HIS
1	K	502	ASN
1	K	504	GLN
1	K	596	ASN
1	K	610	ASN
1	K	619	GLN
1	L	358	GLN
1	L	394	ASN
1	L	412	ASN
1	L	427	ASN
1	L	456	ASN
1	L	490	ASN
1	L	503	ASN
1	L	504	GLN
1	L	570	GLN
1	L	575	ASN
1	L	578	ASN
1	L	582	ASN
1	L	596	ASN
1	L	644	ASN
1	L	663	HIS

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

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.

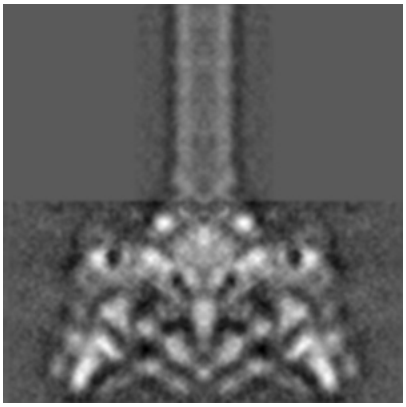
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-1048. These allow visual inspection of the internal detail of the map and identification of artifacts.

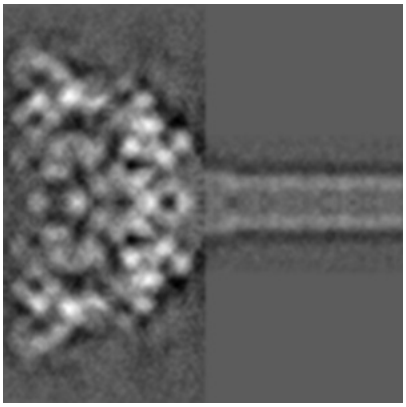
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

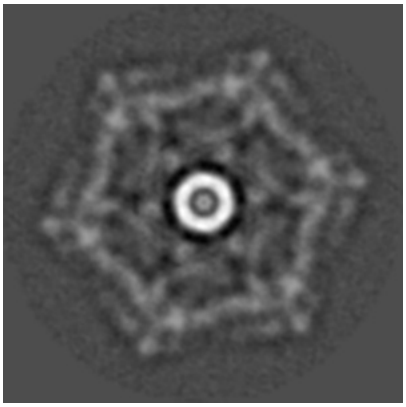
6.1.1 Primary map



X



Y

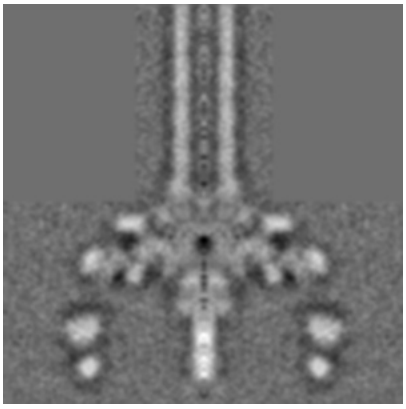


Z

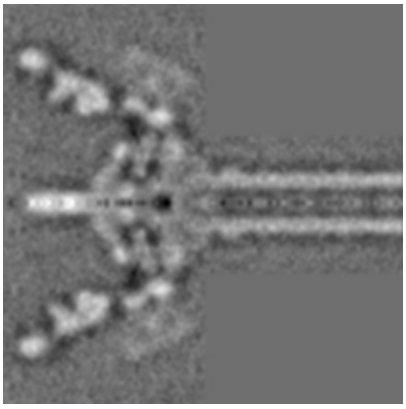
The images above show the map projected in three orthogonal directions.

6.2 Central slices

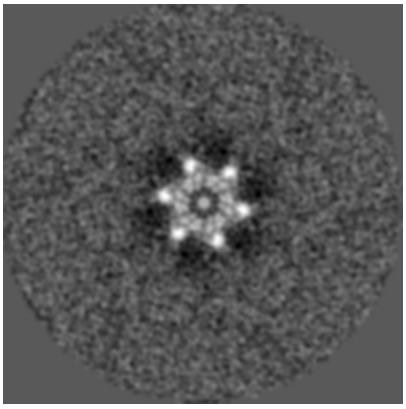
6.2.1 Primary map



X Index: 98



Y Index: 98

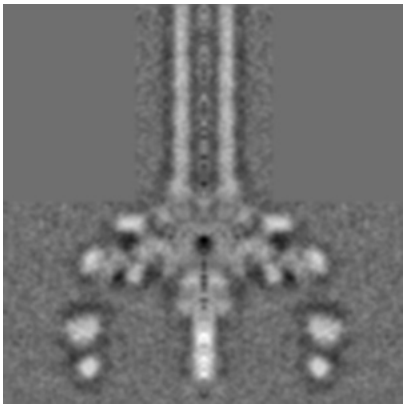


Z Index: 98

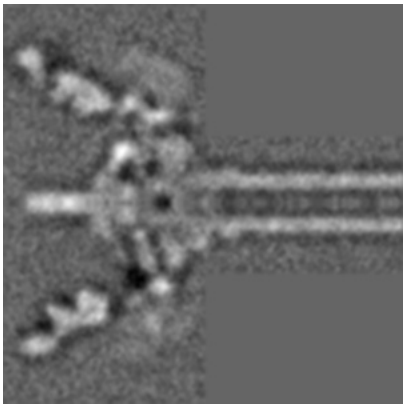
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

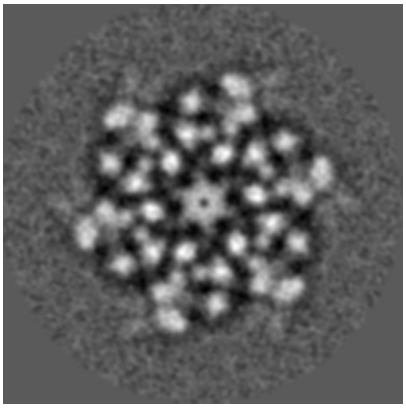
6.3.1 Primary map



X Index: 98



Y Index: 100

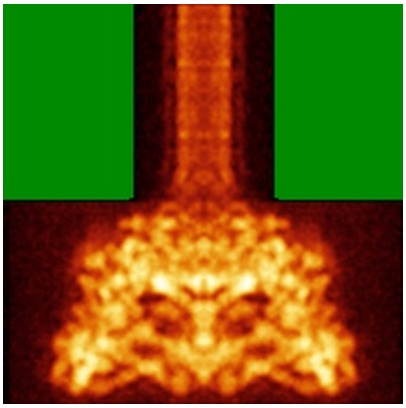


Z Index: 60

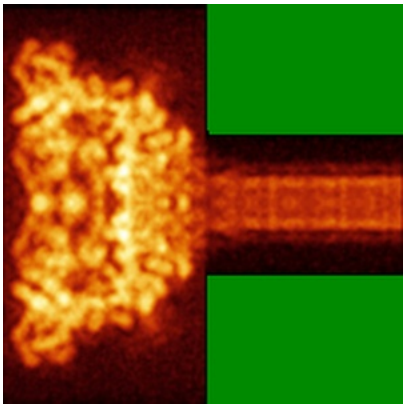
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

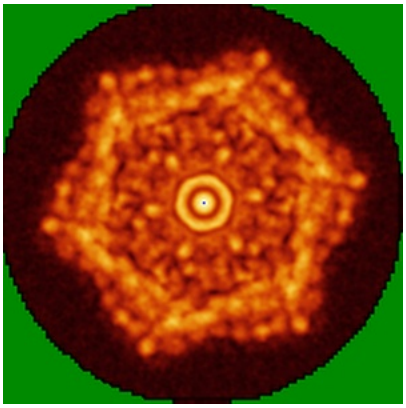
6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 1.45. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

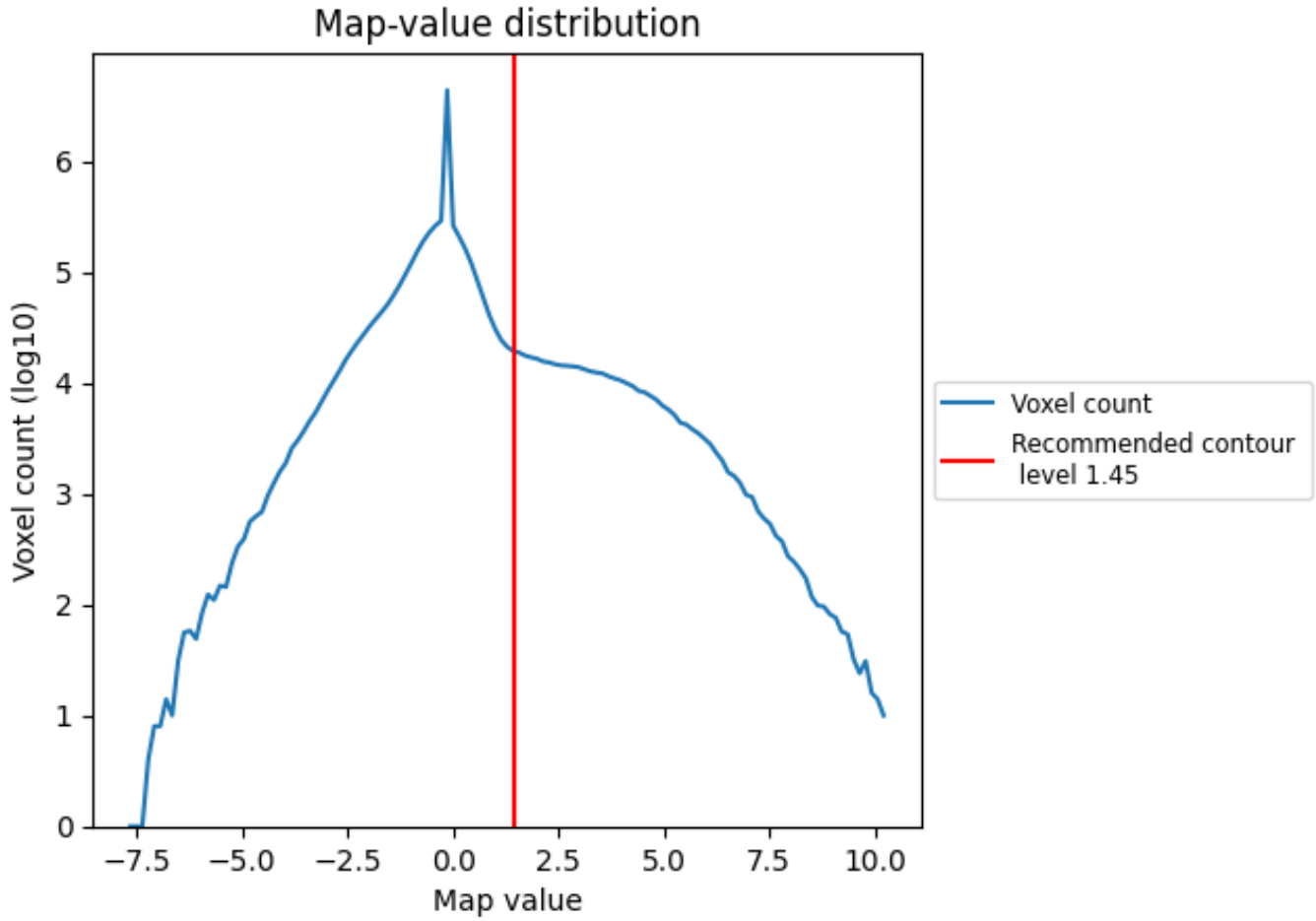
6.6 Mask visualisation (i)

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

7 Map analysis

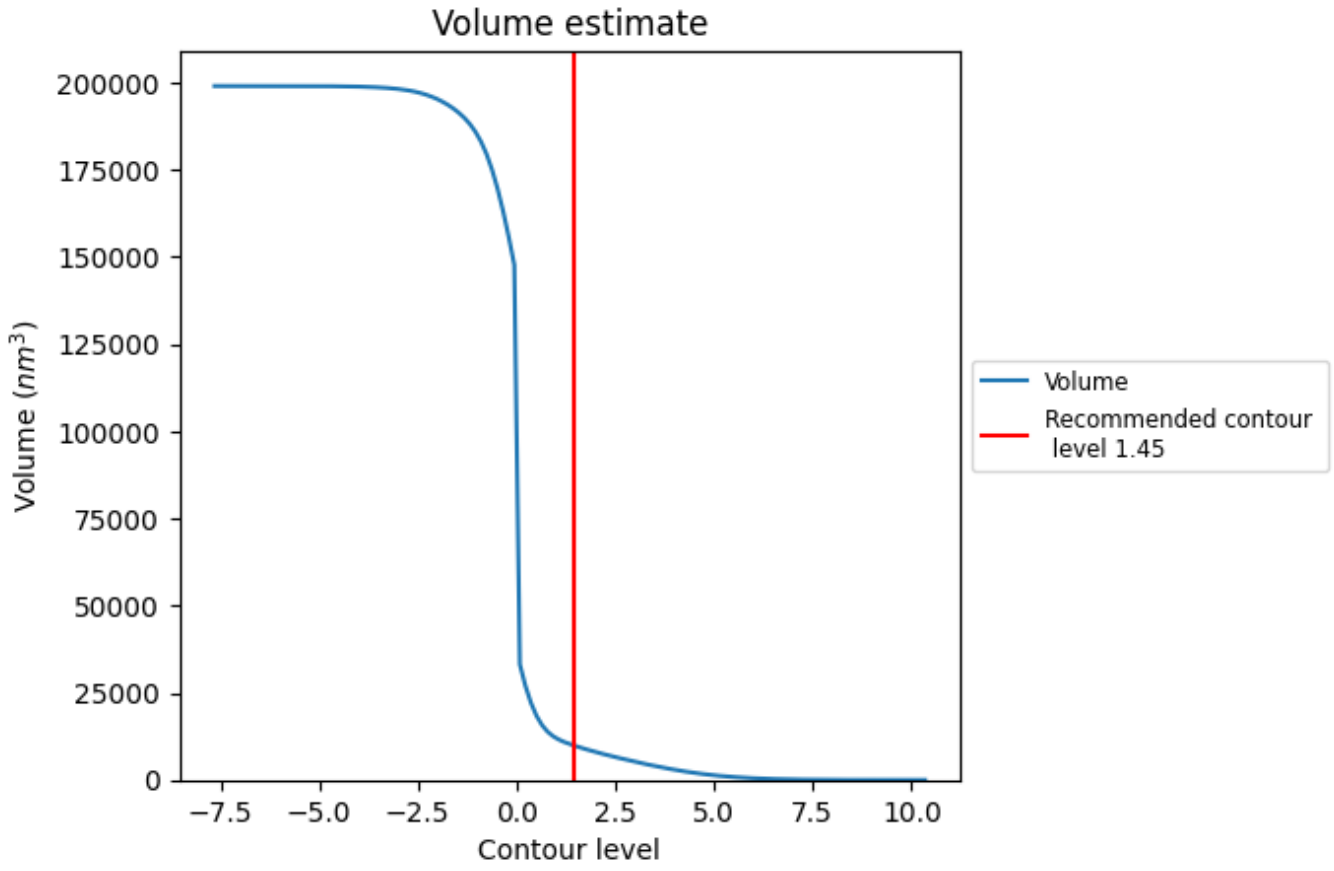
This section contains the results of statistical analysis of the map.

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.

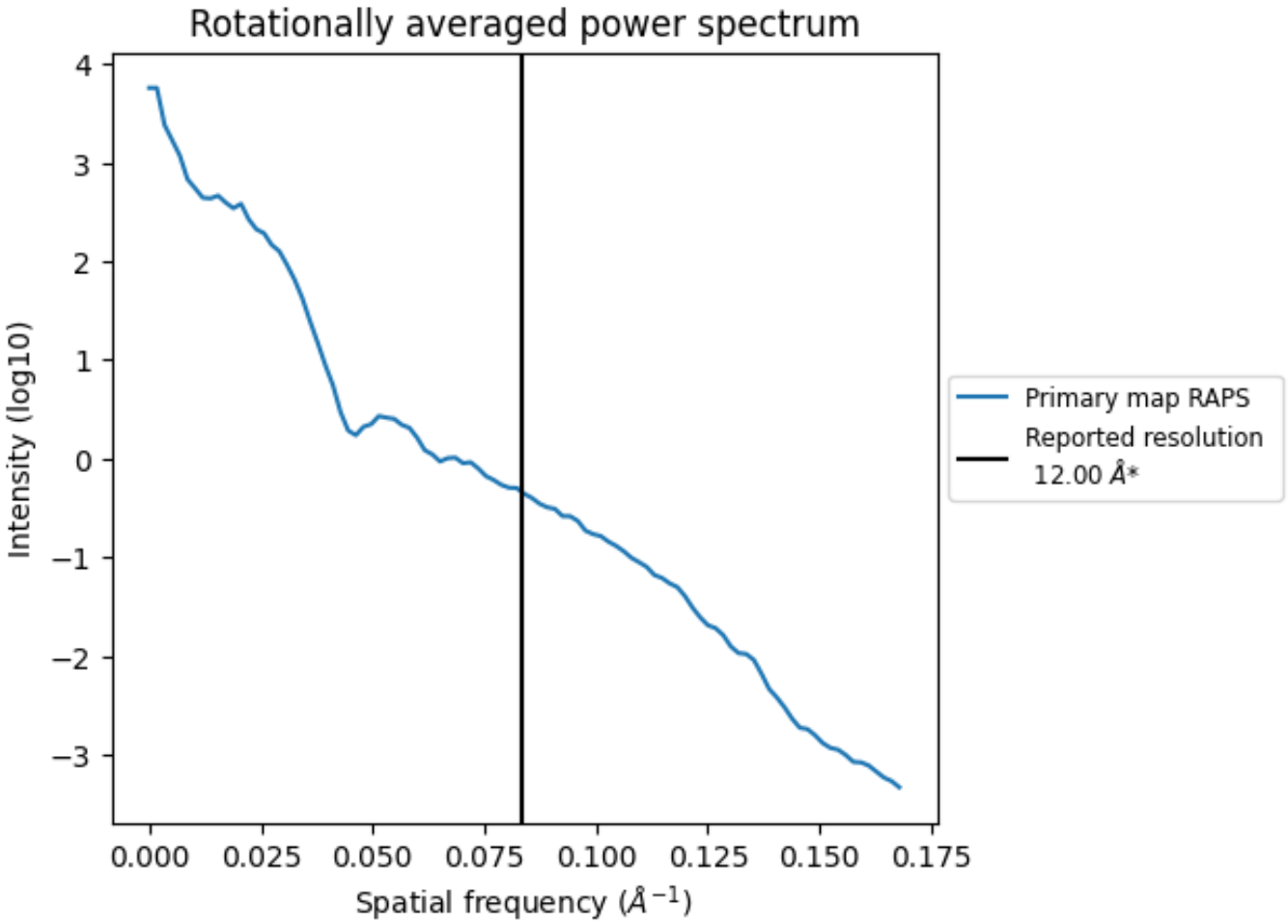
7.2 Volume estimate



The volume at the recommended contour level is 9896 nm^3; this corresponds to an approximate mass of 8939 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 0.083 Å^{-1}

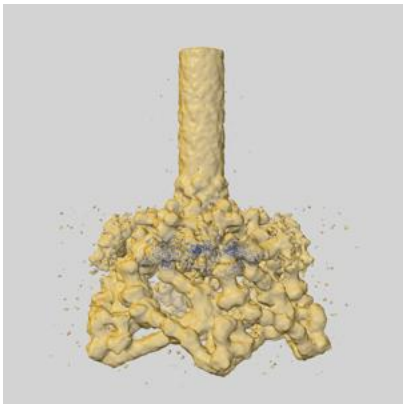
8 Fourier-Shell correlation

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

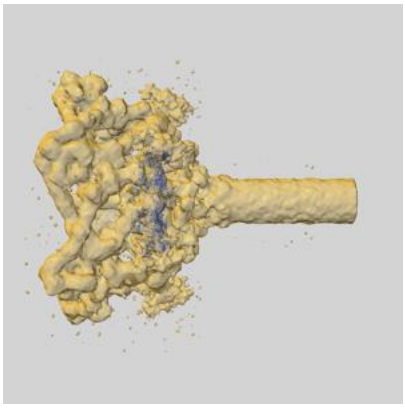
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-1048 and PDB model 3H3W. Per-residue inclusion information can be found in section 3 on page 8.

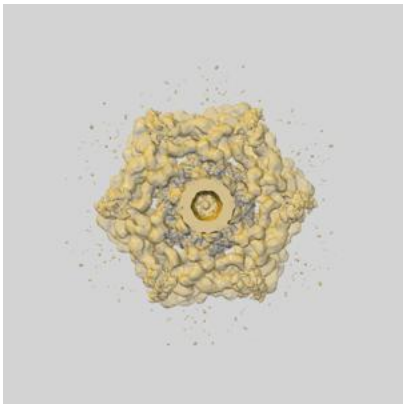
9.1 Map-model overlay



X



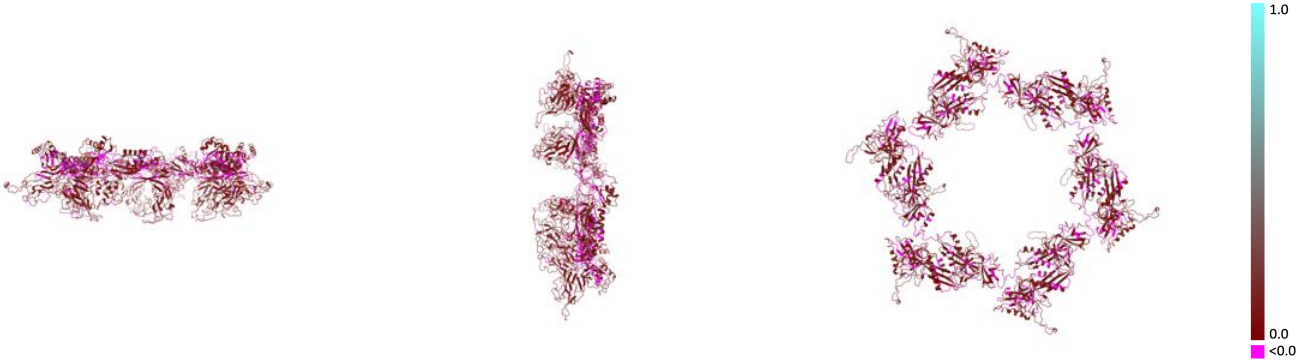
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 1.45 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.

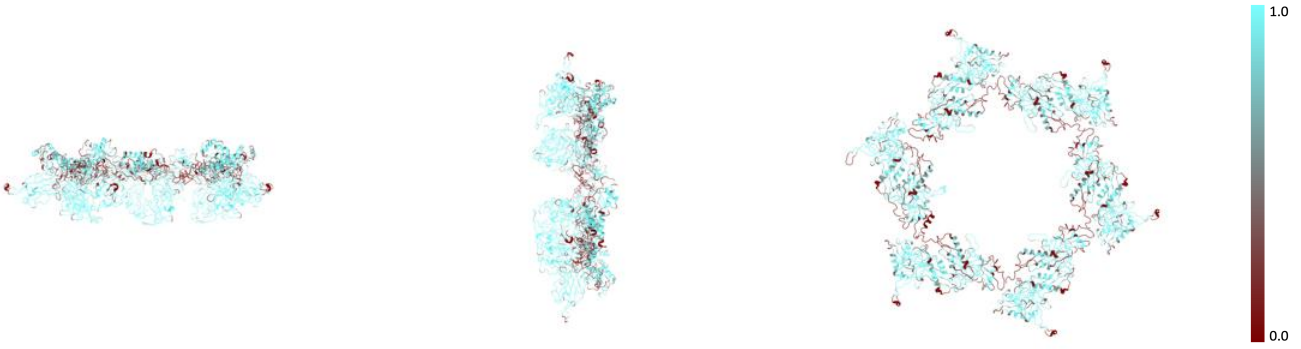
9.2 Q-score mapped to coordinate model



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.

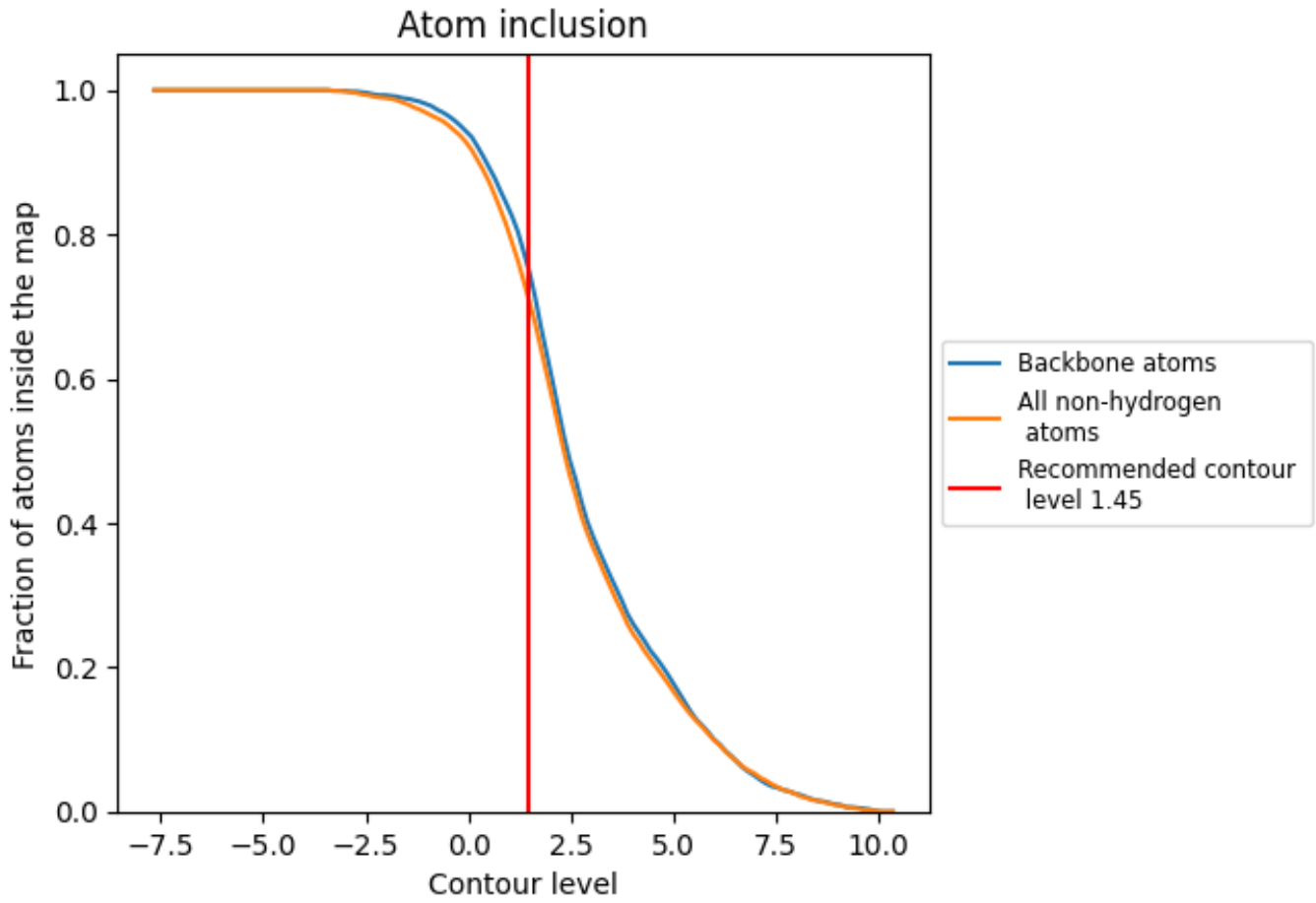
9.3 Atom inclusion mapped to coordinate model



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 (1.45).

9.4 Atom inclusion (i)



At the recommended contour level, 76% of all backbone atoms, 72% 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 (1.45) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7150	0.0680
A	0.6560	0.0630
B	0.7730	0.0750
C	0.7700	0.0760
D	0.6550	0.0630
E	0.6540	0.0630
F	0.7800	0.0730
G	0.6550	0.0600
H	0.7730	0.0740
I	0.6540	0.0630
J	0.7740	0.0720
K	0.6540	0.0640
L	0.7800	0.0750