



Full wwPDB EM Validation Report ⓘ

Mar 25, 2026 – 04:32 PM UTC

PDB ID : 3J31 / pdb_00003j31
EMDB ID : EMD-5584
Title : Life in the extremes: atomic structure of Sulfolobus Turreted Icosahedral Virus
Authors : Veesler, D.; Ng, T.S.; Sendamarai, A.K.; Eilers, B.J.; Lawrence, C.M.; Lok, S.M.; Young, M.J.; Johnson, J.E.; Fu, C.-Y.
Deposited on : 2013-02-18
Resolution : 4.50 Å(reported)
Based on initial models : 4IL7, 2BBD

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

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

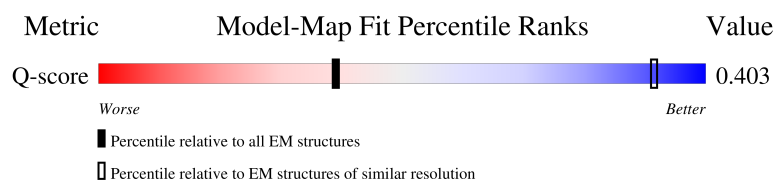
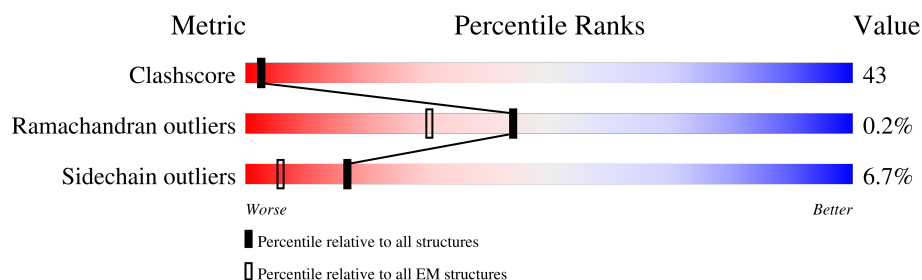
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 4.50 Å.

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



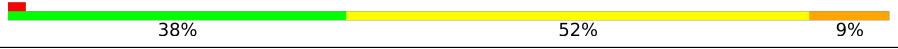
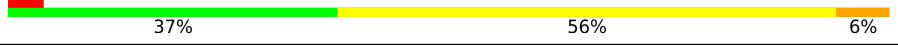
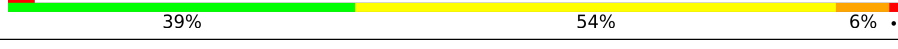
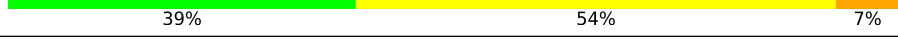
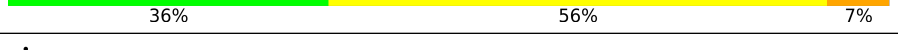
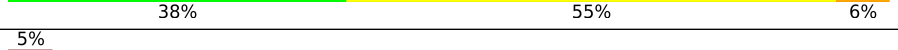
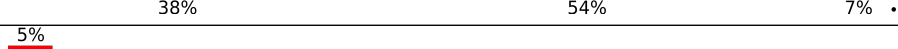
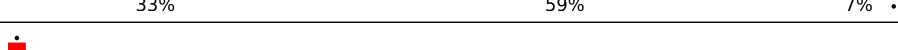
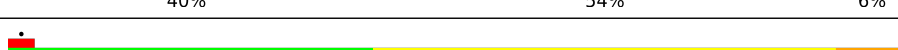
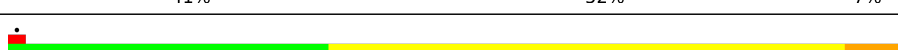
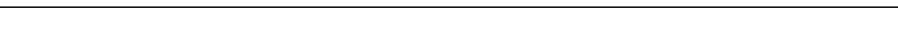
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	2937 (4.00 - 5.00)

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

Mol	Chain	Length	Quality of chain
1	Q	223	 6% 46% 38% 13% ..
2	R	15	 80% 20%
3	A	345	 6% 37% 54% 8%
3	B	345	 6% 35% 57% 7%

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Mol	Chain	Length	Quality of chain
3	C	345	
3	D	345	
3	E	345	
3	F	345	
3	G	345	
3	H	345	
3	I	345	
3	J	345	
3	K	345	
3	L	345	
3	M	345	
3	N	345	
3	O	345	
4	P	381	

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 44549 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 A223 penton base.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	Q	220	Total	C	N	O	S	0	0
			1594	1031	261	301	1		

- Molecule 2 is a protein called A55 membrane protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	R	15	Total	C	N	O	0	0
			75	45	15	15		

- Molecule 3 is a protein called Coat protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	A	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	B	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	C	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	D	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	E	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	F	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	G	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	H	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	I	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	J	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	K	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		

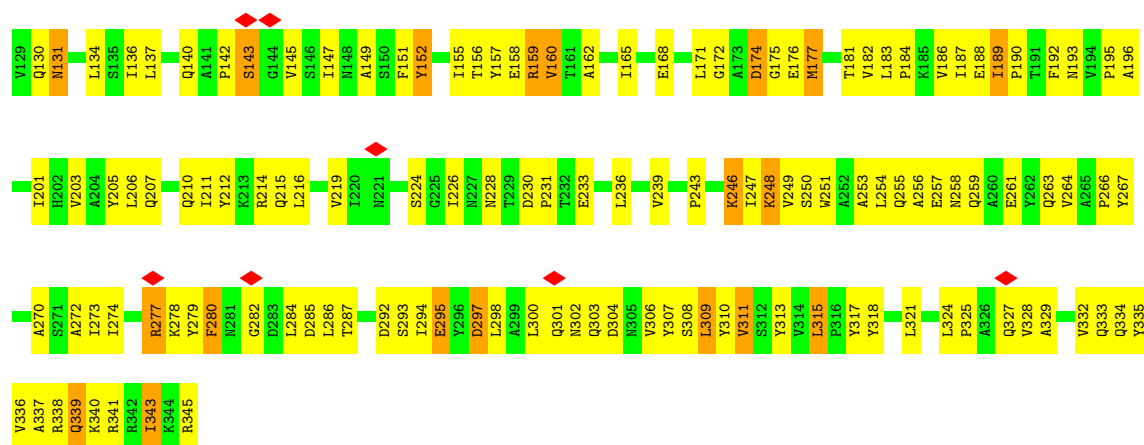
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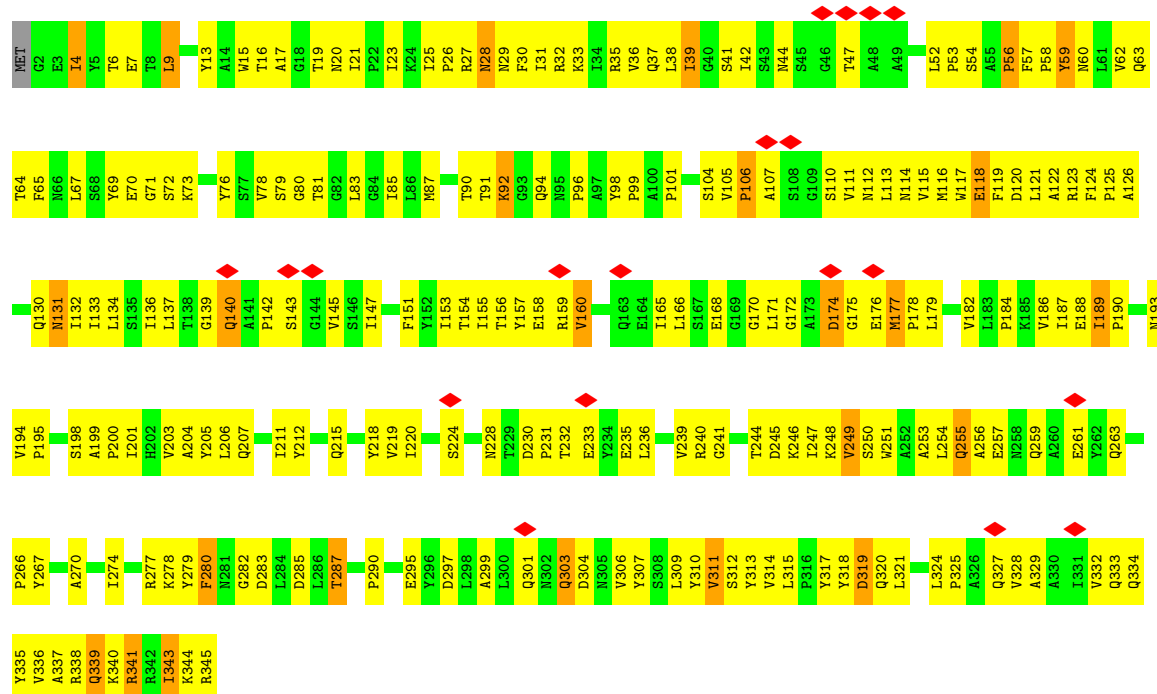
Mol	Chain	Residues	Atoms					AltConf	Trace
3	L	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	M	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	N	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		
3	O	344	Total	C	N	O	S	0	0
			2666	1712	439	511	4		

- Molecule 4 is a protein called C381 turret protein.

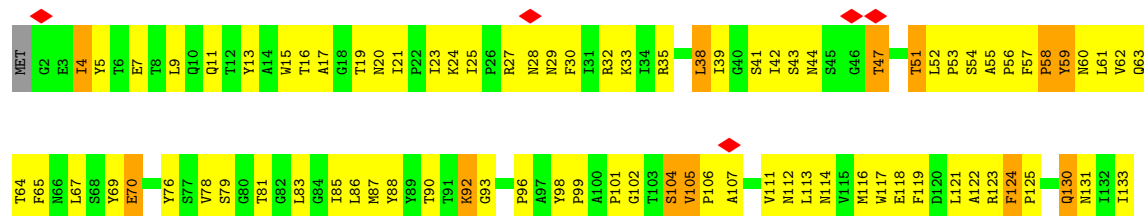
Mol	Chain	Residues	Atoms					AltConf	Trace
4	P	373	Total	C	N	O	S	0	0
			2890	1855	462	570	3		

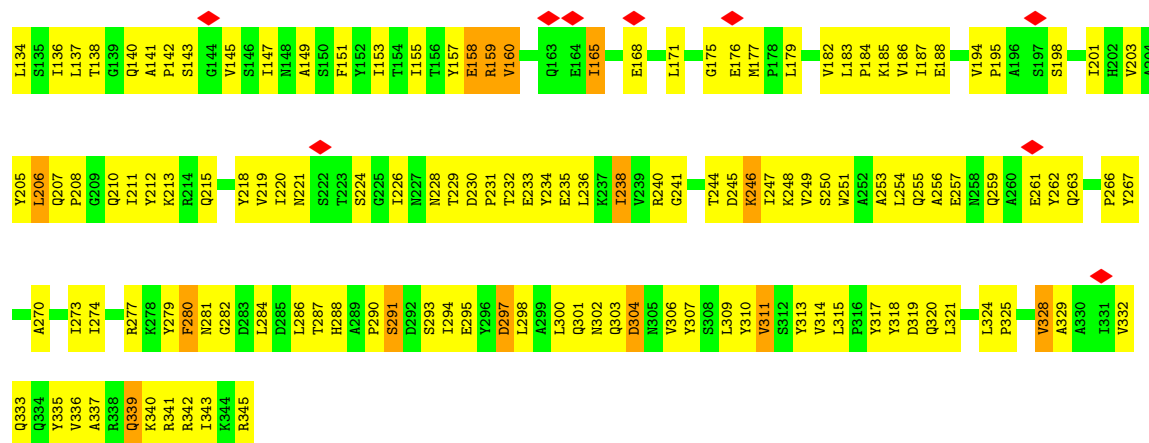


• Molecule 3: Coat protein

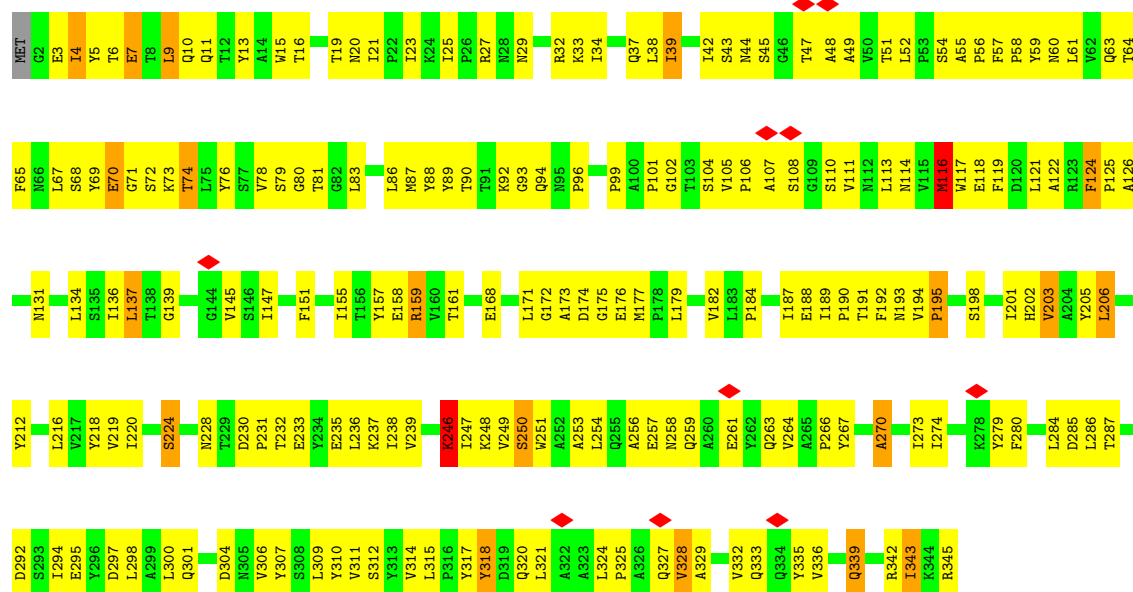


• Molecule 3: Coat protein

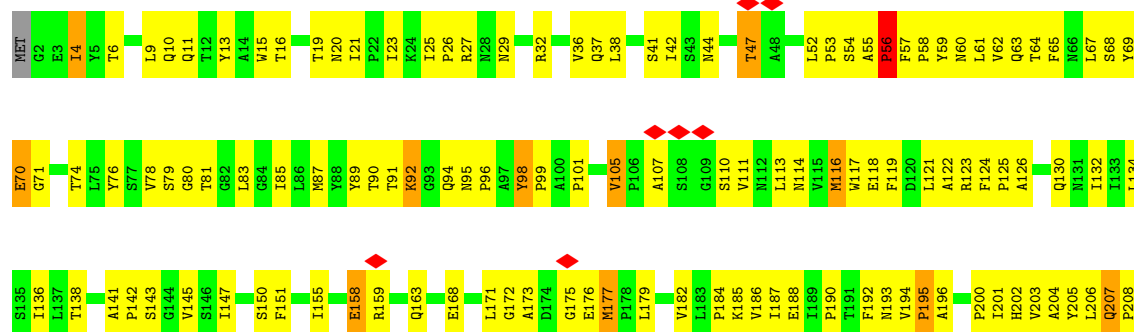




• Molecule 3: Coat protein

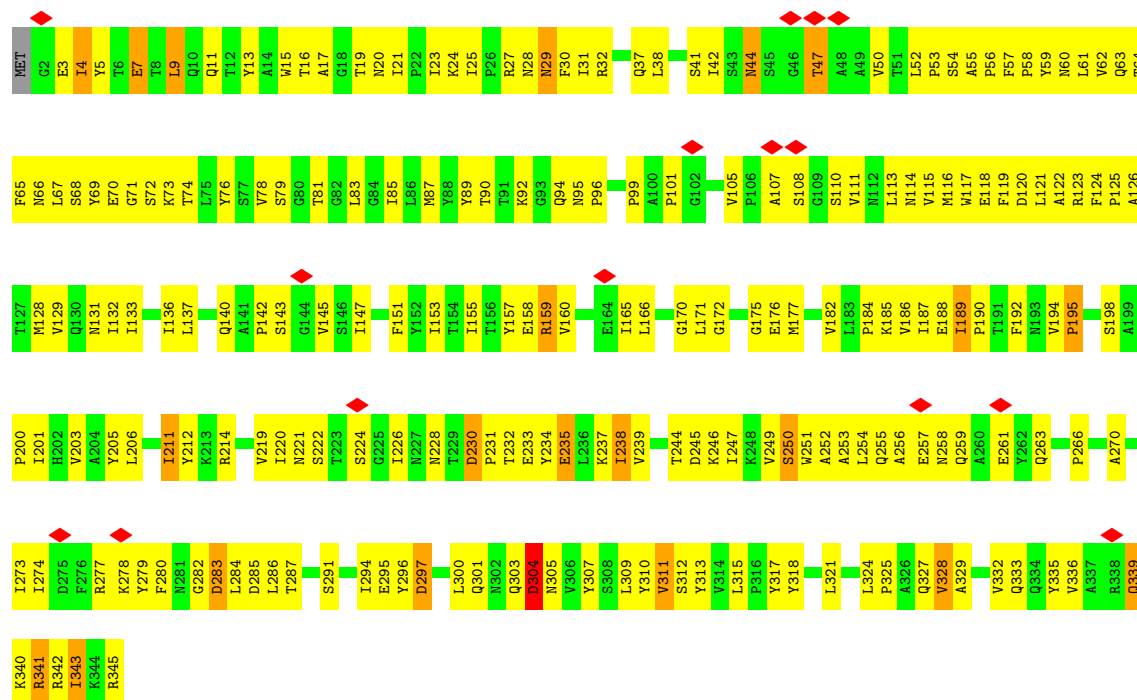


• Molecule 3: Coat protein

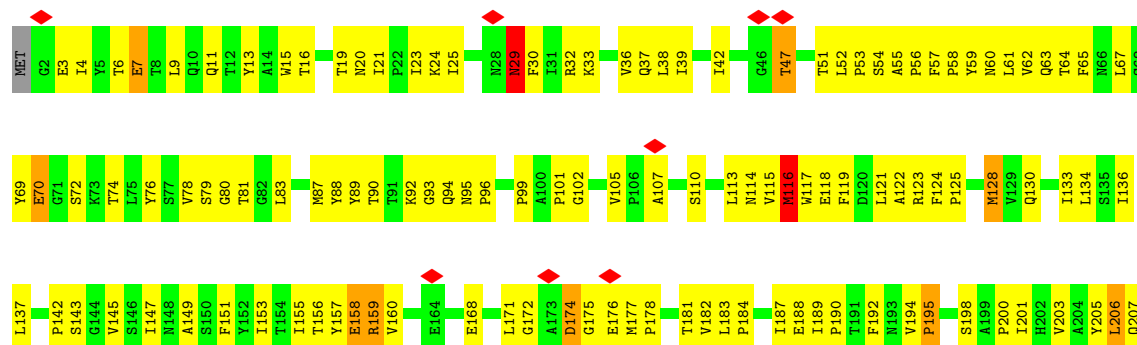




• Molecule 3: Coat protein



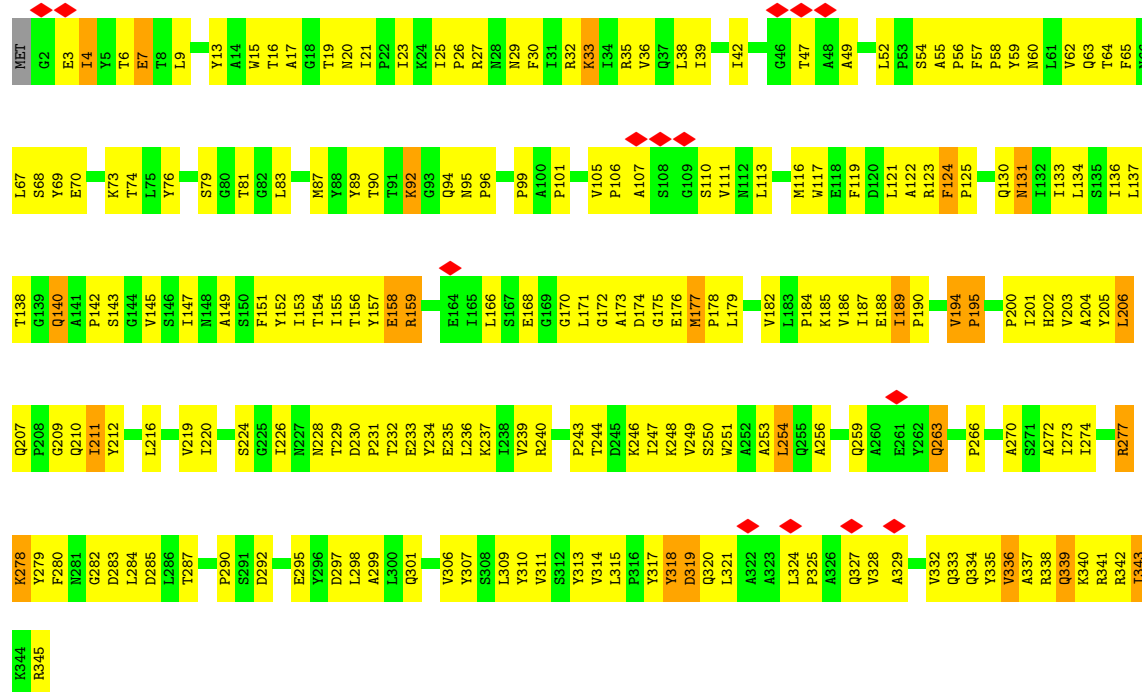
• Molecule 3: Coat protein





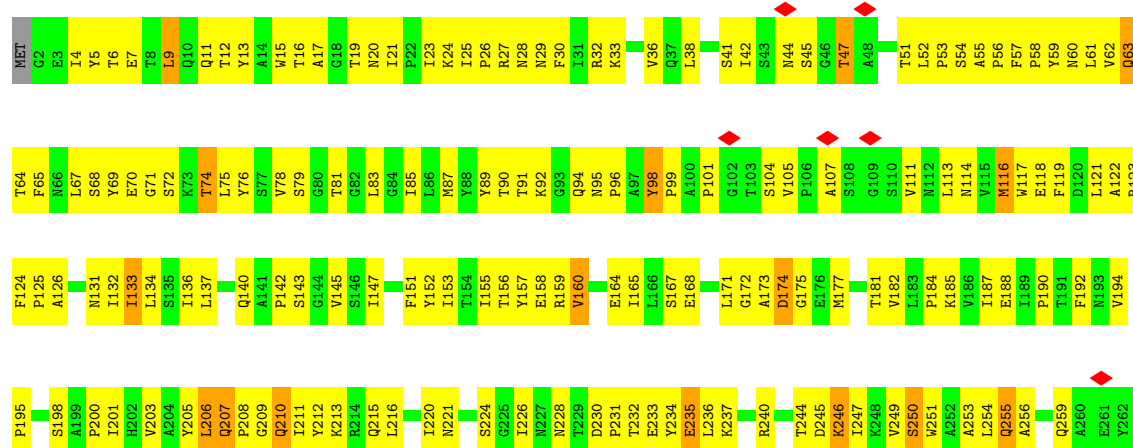
• Molecule 3: Coat protein

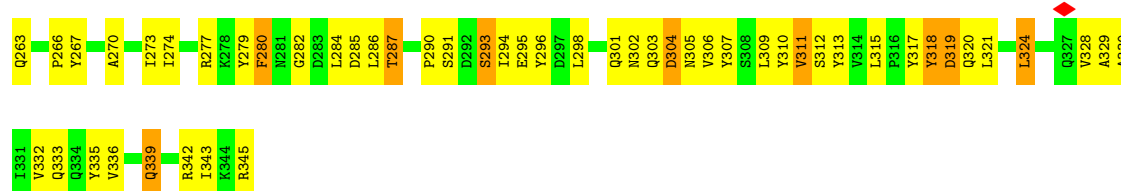
Chain H: 39% 54% 7%



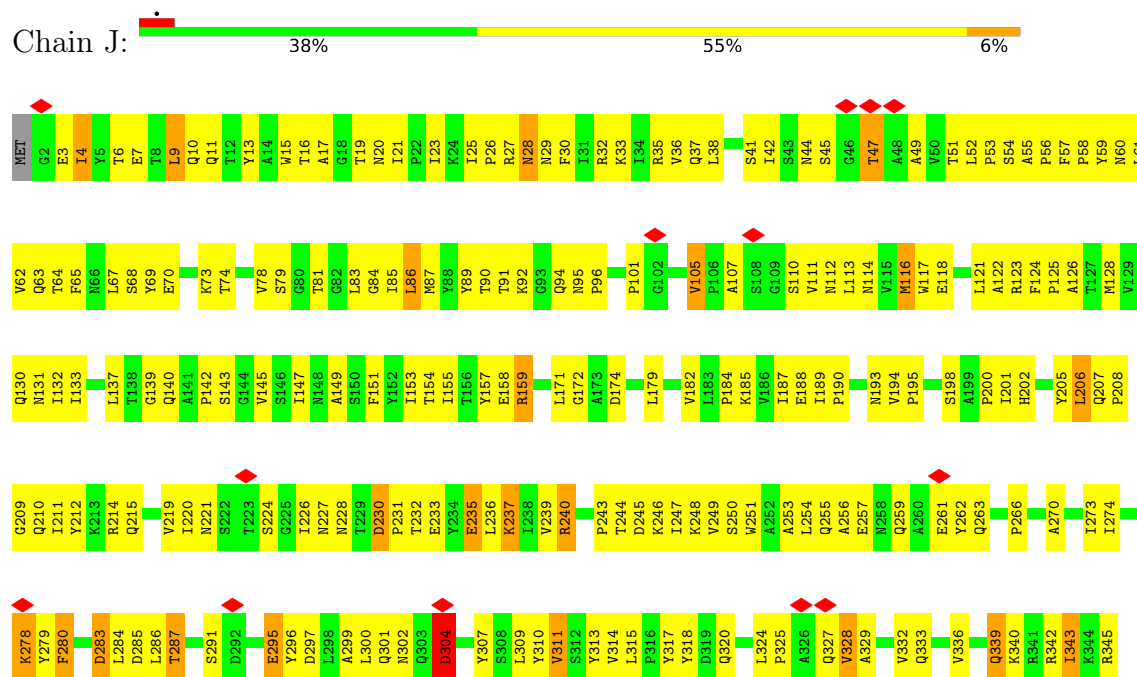
• Molecule 3: Coat protein

Chain I: 36% 56% 7%

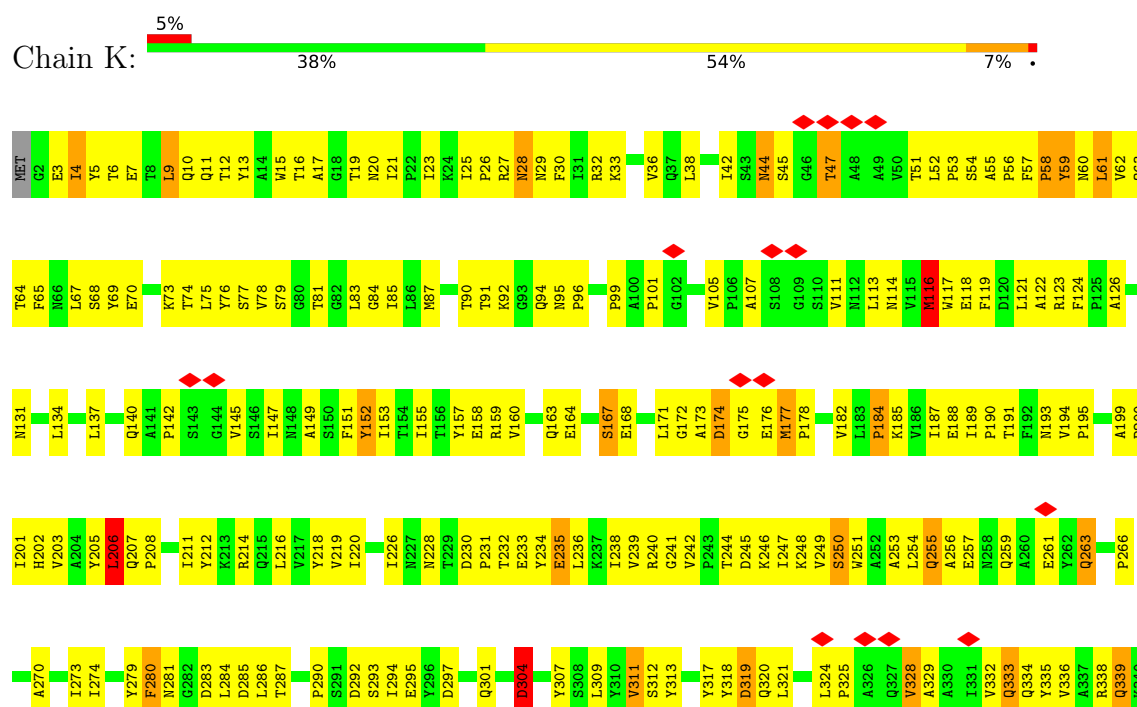


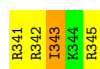


• Molecule 3: Coat protein

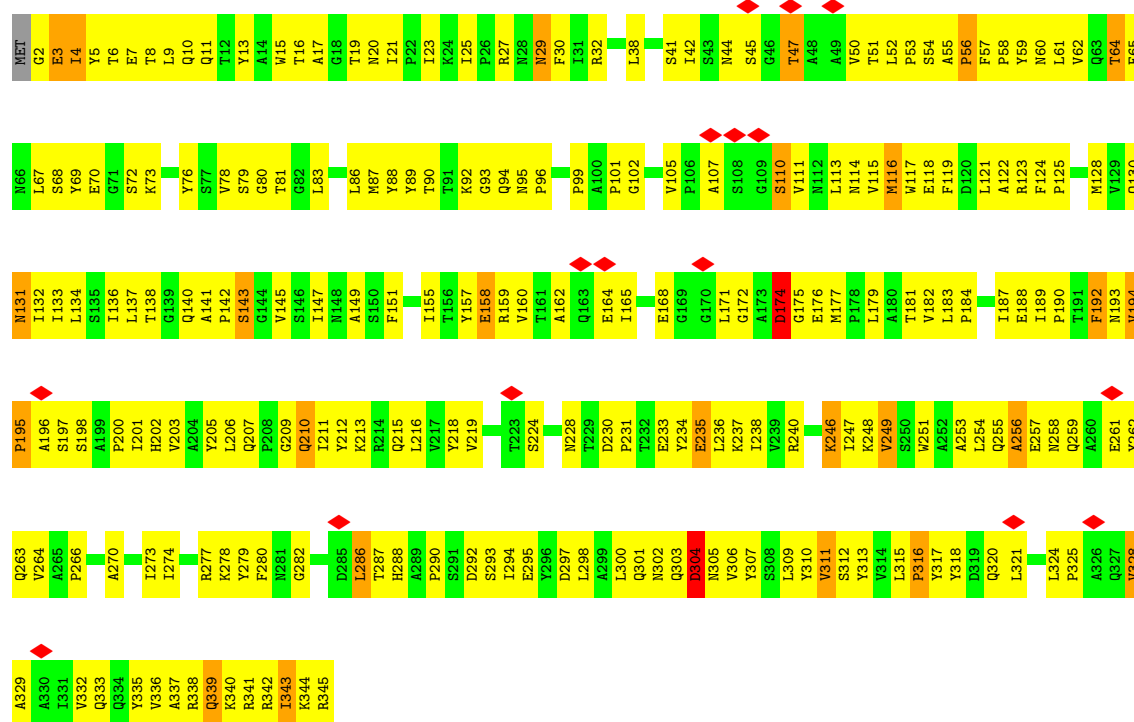


• Molecule 3: Coat protein

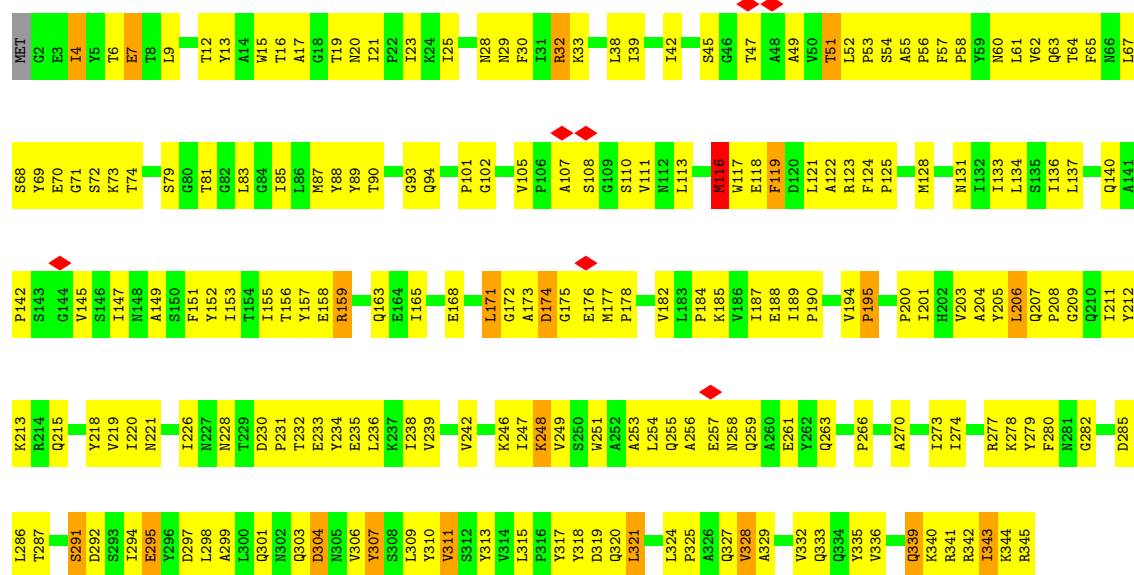




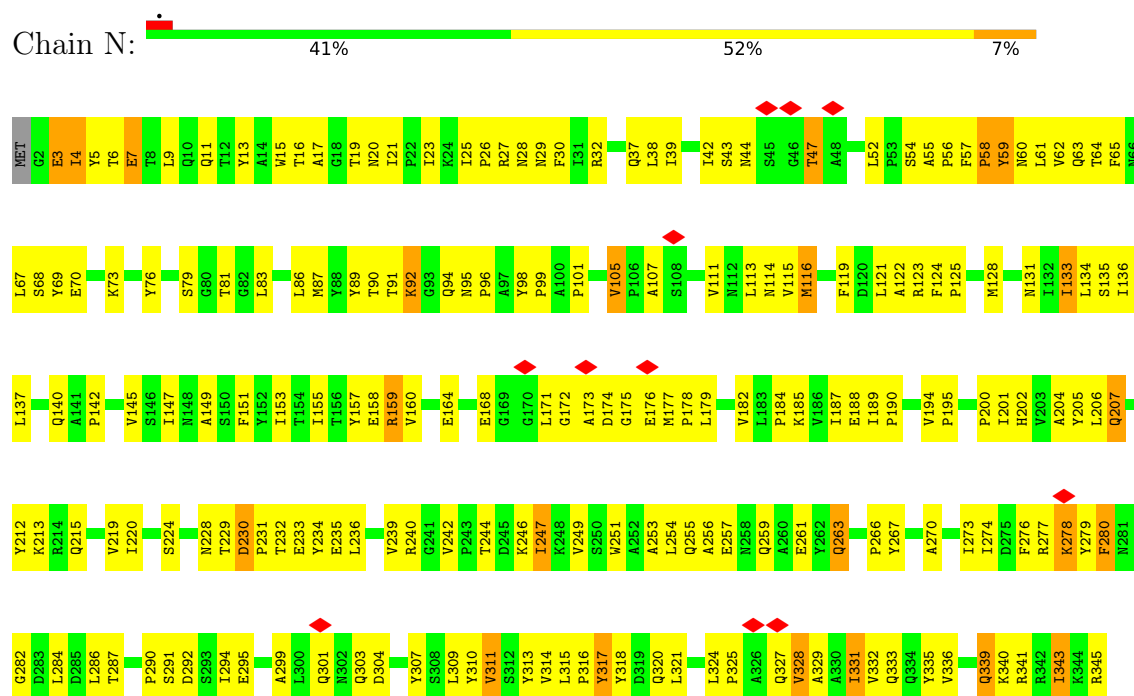
• Molecule 3: Coat protein



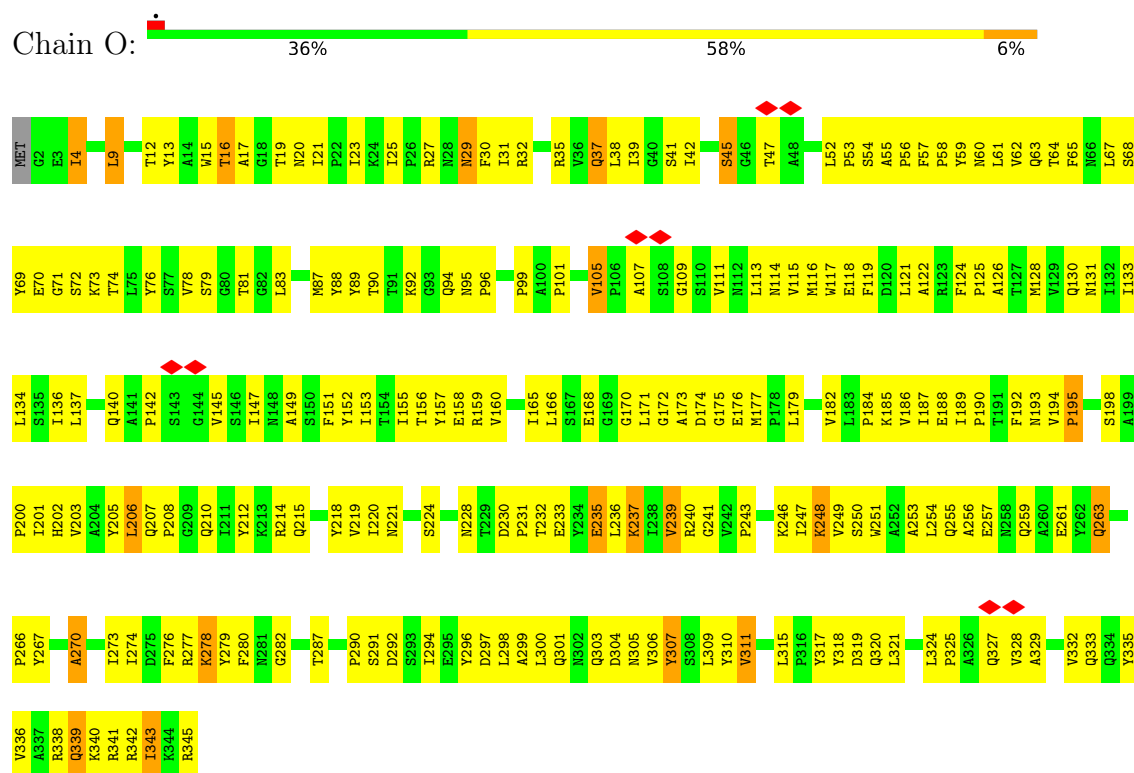
• Molecule 3: Coat protein



- Molecule 3: Coat protein

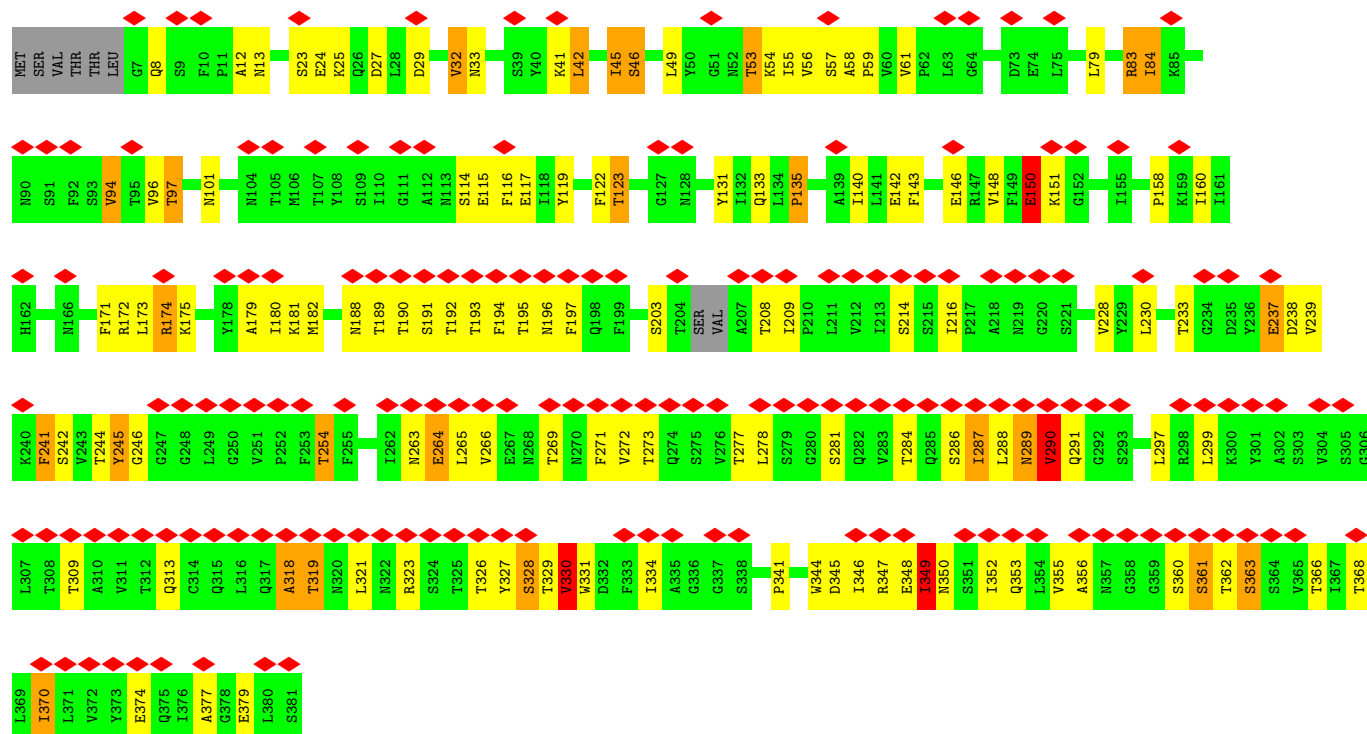


- Molecule 3: Coat protein



- Molecule 4: C381 turret protein





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, I	Depositor
Number of particles used	8903	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Each particle	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	18	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	102189	Depositor
Image detector	FEI FALCON I (4k x 4k)	Depositor
Maximum map value	0.333	Depositor
Minimum map value	-0.191	Depositor
Average map value	-0.001	Depositor
Map value standard deviation	0.014	Depositor
Recommended contour level	0.05	Depositor
Map size ($\text{\AA}$)	1402.88, 1402.8801, 1402.88	wwPDB
Map dimensions	1024, 1024, 1024	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.37, 1.3700001, 1.37	Depositor

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	Q	1.67	28/1626 (1.7%)	1.77	53/2223 (2.4%)
3	A	0.74	1/2729 (0.0%)	1.18	25/3732 (0.7%)
3	B	0.72	0/2729	1.12	13/3732 (0.3%)
3	C	0.75	1/2729 (0.0%)	1.16	21/3732 (0.6%)
3	D	0.69	1/2729 (0.0%)	1.14	18/3732 (0.5%)
3	E	0.72	1/2729 (0.0%)	1.19	31/3732 (0.8%)
3	F	0.72	1/2729 (0.0%)	1.15	19/3732 (0.5%)
3	G	0.73	2/2729 (0.1%)	1.15	19/3732 (0.5%)
3	H	0.70	0/2729	1.18	15/3732 (0.4%)
3	I	0.74	0/2729	1.20	21/3732 (0.6%)
3	J	0.71	1/2729 (0.0%)	1.17	21/3732 (0.6%)
3	K	0.78	2/2729 (0.1%)	1.22	28/3732 (0.8%)
3	L	0.80	1/2729 (0.0%)	1.18	27/3732 (0.7%)
3	M	0.72	1/2729 (0.0%)	1.13	12/3732 (0.3%)
3	N	0.73	2/2729 (0.1%)	1.15	18/3732 (0.5%)
3	O	0.72	0/2729	1.15	16/3732 (0.4%)
4	P	1.85	57/2950 (1.9%)	1.78	62/4014 (1.5%)
All	All	0.90	99/45511 (0.2%)	1.24	419/62217 (0.7%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	Q	0	1
3	A	0	1
3	C	0	1
3	I	0	1
3	K	0	1
3	M	0	1
3	N	0	1
3	O	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
All	All	0	8

All (99) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Q	198	PRO	N-CD	16.54	1.71	1.47
1	Q	186	MET	SD-CE	14.28	2.15	1.79
1	Q	212	SER	CB-OG	-13.96	1.14	1.42
4	P	238	ASP	N-CA	10.97	1.59	1.46
3	K	185	LYS	C-N	10.35	1.47	1.33
4	P	84	ILE	N-CA	9.51	1.57	1.46
1	Q	152	GLN	CB-CG	-9.31	1.24	1.52
1	Q	159	ASN	CA-C	-9.29	1.40	1.52
1	Q	204	GLN	CG-CD	-8.71	1.30	1.52
1	Q	180	THR	CA-C	-8.28	1.42	1.52
4	P	266	VAL	C-O	-8.17	1.14	1.23
3	M	32	ARG	C-N	-8.13	1.23	1.33
4	P	350	ASN	CB-CG	-8.02	1.31	1.52
1	Q	195	ASN	CA-C	-7.80	1.43	1.52
1	Q	155	THR	C-O	7.80	1.33	1.24
4	P	196	ASN	CA-C	-7.71	1.44	1.53
3	A	277	ARG	C-N	7.42	1.45	1.33
1	Q	200	ILE	CB-CG1	-7.35	1.38	1.53
4	P	374	GLU	C-O	-7.29	1.15	1.23
4	P	133	GLN	C-O	-7.17	1.15	1.23
4	P	345	ASP	C-O	-7.16	1.15	1.23
4	P	53	THR	CA-C	7.14	1.61	1.52
4	P	41	LYS	CB-CG	7.12	1.73	1.52
4	P	97	THR	C-O	-7.10	1.17	1.24
4	P	214	SER	C-O	-6.93	1.16	1.24
1	Q	186	MET	CG-SD	6.92	1.98	1.80
4	P	172	ARG	C-O	-6.91	1.15	1.24
4	P	115	GLU	C-O	-6.88	1.15	1.23
3	N	47	THR	CA-CB	6.75	1.63	1.53
4	P	97	THR	CA-CB	6.73	1.62	1.53
4	P	172	ARG	CA-C	-6.59	1.44	1.52
1	Q	153	THR	CB-OG1	-6.48	1.33	1.43
4	P	239	VAL	CA-CB	-6.47	1.46	1.54
3	F	47	THR	CA-CB	6.43	1.63	1.53
4	P	8	GLN	CA-C	6.42	1.61	1.52
4	P	264	GLU	N-CA	6.39	1.53	1.46
3	L	47	THR	CA-CB	6.37	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	P	146	GLU	CG-CD	6.37	1.68	1.52
4	P	271	PHE	C-O	-6.37	1.16	1.24
4	P	148	VAL	C-O	6.26	1.32	1.23
4	P	56	VAL	C-O	-6.20	1.16	1.23
4	P	8	GLN	N-CA	6.15	1.54	1.46
4	P	209	ILE	C-O	-6.14	1.16	1.24
1	Q	188	PHE	CA-C	-6.12	1.45	1.52
4	P	46	SER	C-O	-6.05	1.16	1.23
3	G	116	MET	SD-CE	6.03	1.94	1.79
3	N	229	THR	CA-CB	6.02	1.62	1.53
4	P	143	PHE	C-O	-6.00	1.17	1.23
3	J	47	THR	CA-CB	5.98	1.62	1.53
4	P	362	THR	CA-CB	5.97	1.62	1.54
4	P	377	ALA	CA-CB	-5.88	1.43	1.53
4	P	45	ILE	C-O	-5.86	1.18	1.24
4	P	209	ILE	CA-C	-5.85	1.46	1.52
1	Q	192	THR	CA-CB	-5.85	1.43	1.53
4	P	55	ILE	C-O	-5.83	1.17	1.24
1	Q	215	ALA	C-O	5.81	1.30	1.24
4	P	53	THR	CA-CB	5.79	1.61	1.53
1	Q	197	ILE	CA-CB	5.76	1.58	1.54
3	D	116	MET	SD-CE	5.75	1.94	1.79
4	P	179	ALA	CA-CB	-5.75	1.45	1.53
4	P	171	PHE	C-O	-5.72	1.17	1.23
4	P	83	ARG	C-N	-5.71	1.26	1.33
4	P	254	THR	N-CA	-5.71	1.39	1.46
4	P	349	ILE	N-CA	-5.69	1.39	1.46
3	C	47	THR	CA-CB	5.65	1.62	1.53
4	P	180	ILE	C-O	-5.64	1.18	1.24
4	P	244	THR	C-O	-5.60	1.17	1.24
4	P	58	ALA	C-N	5.59	1.41	1.33
4	P	27	ASP	CA-C	-5.50	1.45	1.52
1	Q	159	ASN	CG-OD1	-5.46	1.13	1.23
4	P	328	SER	CA-C	5.45	1.59	1.52
3	E	47	THR	CA-CB	5.43	1.61	1.53
4	P	239	VAL	N-CA	-5.43	1.39	1.46
4	P	181	LYS	C-O	-5.42	1.17	1.24
3	G	47	THR	CA-CB	5.42	1.61	1.53
4	P	194	PHE	C-O	5.39	1.30	1.23
1	Q	171	THR	C-O	-5.36	1.17	1.23
1	Q	155	THR	C-N	-5.34	1.27	1.33
1	Q	177	ILE	CA-C	-5.34	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	P	116	PHE	N-CA	-5.33	1.39	1.46
1	Q	215	ALA	C-N	-5.33	1.26	1.33
4	P	131	TYR	C-O	-5.33	1.17	1.23
1	Q	195	ASN	C-O	5.32	1.30	1.24
4	P	334	ILE	C-O	-5.31	1.18	1.24
1	Q	171	THR	C-N	-5.30	1.25	1.32
4	P	59	PRO	N-CD	5.29	1.55	1.47
3	K	47	THR	CA-CB	5.26	1.61	1.53
1	Q	198	PRO	C-O	5.25	1.29	1.23
1	Q	184	THR	CA-CB	-5.25	1.44	1.53
4	P	348	GLU	CA-C	-5.24	1.46	1.53
4	P	319	THR	CA-C	-5.20	1.46	1.52
1	Q	214	SER	CA-C	-5.18	1.46	1.52
4	P	318	ALA	CA-CB	-5.18	1.44	1.53
4	P	49	LEU	CA-C	5.13	1.58	1.52
4	P	286	SER	C-O	-5.10	1.17	1.24
1	Q	153	THR	N-CA	-5.08	1.39	1.45
4	P	241	PHE	CA-C	-5.07	1.46	1.52
1	Q	154	TYR	CA-C	-5.06	1.46	1.52
4	P	146	GLU	CD-OE2	5.05	1.34	1.25

All (419) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	P	328	SER	N-CA-CB	-21.50	74.13	111.55
4	P	264	GLU	N-CA-CB	-20.69	79.56	109.97
1	Q	137	THR	N-CA-C	-20.31	77.47	109.76
4	P	264	GLU	N-CA-C	20.23	140.22	110.28
4	P	327	TYR	N-CA-CB	-19.46	82.61	110.44
4	P	8	GLN	N-CA-CB	-18.11	81.07	111.31
4	P	362	THR	N-CA-C	-15.78	94.52	114.56
1	Q	27	PRO	CB-CA-C	14.75	130.11	111.23
4	P	84	ILE	N-CA-C	-14.57	87.14	108.12
4	P	238	ASP	N-CA-CB	-14.09	86.42	110.80
1	Q	136	PRO	N-CA-C	-13.93	87.51	111.32
4	P	288	LEU	N-CA-C	-12.54	89.79	109.23
1	Q	137	THR	CA-C-N	-12.15	105.95	122.72
1	Q	137	THR	C-N-CA	-12.15	105.95	122.72
3	K	184	PRO	O-C-N	-11.14	110.63	123.10
4	P	361	SER	CB-CA-C	-10.55	89.42	110.42
1	Q	35	VAL	N-CA-C	-9.98	94.10	108.48
4	P	195	THR	CA-C-N	-9.95	108.04	122.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	P	195	THR	C-N-CA	-9.95	108.04	122.67
1	Q	137	THR	CB-CA-C	9.77	125.76	109.84
4	P	83	ARG	O-C-N	-9.63	112.05	123.31
4	P	263	ASN	N-CA-C	-9.62	95.23	110.14
4	P	287	ILE	N-CA-C	9.41	119.30	110.74
1	Q	27	PRO	N-CA-C	-9.08	96.78	111.21
3	A	72	SER	N-CA-C	8.89	124.76	112.93
1	Q	195	ASN	OD1-CG-ND2	-8.73	113.87	122.60
1	Q	70	SER	N-CA-C	-8.56	98.30	108.14
4	P	350	ASN	CB-CA-C	-8.56	95.16	109.03
4	P	8	GLN	N-CA-C	8.50	120.84	108.86
4	P	83	ARG	CA-C-N	-8.45	111.25	122.99
4	P	83	ARG	C-N-CA	-8.45	111.25	122.99
1	Q	28	VAL	N-CA-CB	8.42	123.29	112.34
4	P	327	TYR	CA-C-N	-8.41	109.38	122.59
4	P	327	TYR	C-N-CA	-8.41	109.38	122.59
3	E	280	PHE	N-CA-C	-8.21	97.28	108.86
1	Q	72	ILE	CA-C-N	8.18	128.18	119.76
1	Q	72	ILE	C-N-CA	8.18	128.18	119.76
3	J	74	THR	N-CA-C	8.09	121.81	108.96
3	I	280	PHE	N-CA-C	-7.98	97.61	108.86
3	D	270	ALA	N-CA-C	7.92	121.75	112.72
4	P	84	ILE	N-CA-CB	-7.90	99.99	111.52
3	J	291	SER	N-CA-C	7.85	120.71	110.43
3	M	242	VAL	N-CA-C	-7.83	100.43	108.96
4	P	245	TYR	CB-CA-C	-7.78	97.05	109.80
3	E	283	ASP	N-CA-C	7.68	121.33	110.50
3	K	184	PRO	CA-C-N	7.61	136.08	121.54
3	K	184	PRO	C-N-CA	7.61	136.08	121.54
3	K	206	LEU	N-CA-C	-7.58	96.87	109.46
3	F	280	PHE	N-CA-C	-7.58	98.17	108.86
3	I	11	GLN	N-CA-C	7.58	120.73	109.59
3	B	280	PHE	N-CA-C	-7.57	98.18	108.86
1	Q	39	ILE	N-CA-C	-7.55	97.54	108.11
3	C	246	LYS	N-CA-C	-7.46	103.64	112.89
4	P	328	SER	N-CA-C	-7.46	97.96	109.52
3	G	311	VAL	N-CA-C	-7.41	96.33	106.85
3	I	304	ASP	N-CA-C	7.35	118.21	108.07
3	G	11	GLN	N-CA-C	7.23	120.31	109.25
3	L	3	GLU	N-CA-C	7.23	122.01	107.41
3	J	283	ASP	N-CA-C	7.22	120.67	110.50
3	G	116	MET	N-CA-C	7.18	120.36	109.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	J	280	PHE	N-CA-C	-7.18	98.73	108.86
3	I	235	GLU	N-CA-C	7.17	119.75	107.93
3	C	105	VAL	N-CA-C	-7.11	101.09	107.56
3	F	235	GLU	N-CA-C	7.10	119.65	107.93
3	C	238	ILE	N-CA-C	-7.03	97.36	107.98
1	Q	198	PRO	CA-C-O	-7.00	113.36	121.34
3	D	158	GLU	N-CA-C	-6.95	97.56	108.90
3	J	206	LEU	N-CA-C	-6.95	97.92	109.46
4	P	32	VAL	N-CA-CB	-6.92	101.97	112.15
3	D	280	PHE	N-CA-C	-6.91	99.11	108.86
1	Q	106	VAL	N-CA-C	-6.88	99.81	108.89
3	J	110	SER	N-CA-C	6.84	118.18	108.74
3	A	70	GLU	N-CA-C	-6.83	103.36	113.40
3	K	336	VAL	N-CA-C	-6.81	102.57	111.09
3	G	158	GLU	N-CA-C	-6.81	97.17	108.34
3	L	206	LEU	N-CA-C	-6.80	98.17	109.46
3	I	72	SER	N-CA-C	6.80	122.11	113.55
4	P	196	ASN	N-CA-CB	6.79	125.28	111.36
3	K	255	GLN	N-CA-C	-6.79	104.26	112.54
3	I	133	ILE	N-CA-C	6.78	118.07	107.28
3	K	311	VAL	N-CA-C	-6.70	95.40	109.34
3	C	11	GLN	N-CA-C	6.69	119.42	109.59
3	A	45	SER	N-CA-C	-6.69	104.34	113.30
3	N	206	LEU	N-CA-C	-6.63	98.41	108.96
3	F	110	SER	N-CA-C	6.63	117.89	108.74
4	P	150	GLU	CA-C-N	-6.62	108.90	121.54
4	P	150	GLU	C-N-CA	-6.62	108.90	121.54
3	I	206	LEU	N-CA-C	-6.57	98.51	108.96
3	N	11	GLN	N-CA-C	6.57	119.30	109.25
3	E	70	GLU	N-CA-C	-6.57	105.22	113.23
3	E	304	ASP	N-CA-C	6.57	117.13	108.07
4	P	290	VAL	N-CA-CB	-6.56	103.63	112.16
3	H	248	LYS	N-CA-C	-6.56	99.66	109.83
3	I	255	GLN	N-CA-C	-6.55	104.55	112.54
3	O	235	GLU	N-CA-C	6.54	118.72	107.93
3	N	189	ILE	N-CA-C	6.53	114.59	107.60
1	Q	64	LYS	N-CA-C	6.50	119.12	108.52
3	A	304	ASP	N-CA-C	6.49	117.02	108.07
3	G	280	PHE	N-CA-C	-6.49	99.72	108.86
1	Q	77	THR	CA-C-N	-6.45	117.62	122.33
1	Q	77	THR	C-N-CA	-6.45	117.62	122.33
1	Q	134	PHE	N-CA-C	6.44	118.30	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	P	58	ALA	CA-C-N	-6.42	113.17	119.78
4	P	58	ALA	C-N-CA	-6.42	113.17	119.78
3	A	206	LEU	N-CA-C	-6.40	98.78	108.96
3	L	256	ALA	N-CA-C	-6.39	104.24	111.14
3	I	246	LYS	N-CA-C	-6.39	104.74	112.54
4	P	135	PRO	N-CA-C	6.37	118.47	110.70
3	G	70	GLU	N-CA-C	-6.36	105.47	113.23
3	L	195	PRO	N-CA-C	6.36	121.31	111.21
3	I	177	MET	N-CA-C	-6.33	102.44	108.07
3	B	131	ASN	N-CA-C	6.31	118.91	111.02
4	P	330	VAL	CB-CA-C	6.30	116.83	110.65
3	J	230	ASP	CA-C-N	-6.30	112.67	119.98
3	J	230	ASP	C-N-CA	-6.30	112.67	119.98
3	E	206	LEU	N-CA-C	-6.30	99.00	109.46
3	A	311	VAL	N-CA-C	-6.29	96.26	109.34
3	A	162	ALA	N-CA-C	-6.29	103.72	111.33
3	H	131	ASN	N-CA-C	6.28	118.88	111.02
1	Q	159	ASN	CB-CG-OD1	6.28	133.36	120.80
3	O	45	SER	N-CA-C	-6.28	105.56	113.72
3	H	124	PHE	N-CA-C	6.27	117.28	109.57
3	K	280	PHE	N-CA-C	-6.27	100.02	108.86
3	I	45	SER	N-CA-C	-6.25	104.92	113.30
4	P	349	ILE	CA-CB-CG2	6.25	121.12	110.50
3	L	174	ASP	N-CA-C	-6.23	105.32	113.17
3	M	206	LEU	N-CA-C	-6.22	99.07	108.96
3	L	158	GLU	N-CA-C	-6.17	98.22	108.34
3	L	280	PHE	N-CA-C	-6.16	100.43	109.18
3	G	29	ASN	N-CA-C	-6.16	99.57	108.07
3	A	293	SER	N-CA-C	-6.15	105.72	113.72
4	P	237	GLU	CA-C-N	-6.15	113.27	122.74
4	P	237	GLU	C-N-CA	-6.15	113.27	122.74
3	I	160	VAL	N-CA-C	-6.14	101.62	109.30
3	E	302	ASN	N-CA-C	-6.14	100.85	109.69
3	E	195	PRO	N-CA-C	6.12	120.95	111.21
3	A	297	ASP	N-CA-C	6.11	119.12	110.14
1	Q	40	GLY	N-CA-C	6.10	119.57	111.03
3	C	206	LEU	N-CA-C	-6.10	99.33	109.46
3	H	239	VAL	N-CA-C	6.09	116.87	110.72
3	B	206	LEU	N-CA-C	-6.08	99.29	108.96
3	O	248	LYS	N-CA-C	-6.08	100.40	109.83
4	P	84	ILE	CB-CA-C	-6.08	101.46	110.33
3	L	110	SER	N-CA-C	6.07	118.01	108.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	246	LYS	N-CA-C	-6.07	104.78	111.82
3	H	206	LEU	N-CA-C	-6.06	99.39	109.46
3	E	336	VAL	N-CA-C	-6.05	104.44	110.62
3	L	11	GLN	N-CA-C	6.04	118.48	109.25
3	K	304	ASP	N-CA-C	6.02	116.23	108.34
3	M	255	GLN	N-CA-C	-6.02	105.20	112.54
3	G	47	THR	N-CA-C	6.01	117.83	111.28
3	E	116	MET	N-CA-C	6.00	118.53	109.23
3	C	133	ILE	N-CA-C	5.99	116.23	107.37
3	O	311	VAL	N-CA-C	-5.97	96.92	109.34
3	O	206	LEU	N-CA-C	-5.97	99.56	109.46
4	P	203	SER	N-CA-C	5.95	116.95	108.74
3	E	270	ALA	N-CA-C	5.95	119.29	112.57
3	K	235	GLU	N-CA-C	5.95	117.74	107.93
3	D	61	LEU	N-CA-C	-5.94	105.29	112.54
3	E	110	SER	N-CA-C	5.94	117.81	108.96
3	D	206	LEU	N-CA-C	-5.93	99.62	109.46
3	N	116	MET	N-CA-C	5.92	118.41	109.23
4	P	122	PHE	CA-C-N	-5.92	114.90	122.77
4	P	122	PHE	C-N-CA	-5.92	114.90	122.77
3	C	158	GLU	N-CA-C	-5.91	98.64	108.34
3	G	206	LEU	N-CA-C	-5.91	99.64	109.46
3	D	11	GLN	N-CA-C	5.91	118.28	109.59
3	J	304	ASP	N-CA-C	5.90	116.21	108.07
3	L	47	THR	N-CA-C	5.88	117.69	111.28
3	K	189	ILE	N-CA-C	5.88	113.89	107.60
3	L	162	ALA	N-CA-C	-5.87	104.23	111.33
3	C	38	LEU	N-CA-C	-5.86	98.97	108.41
3	M	116	MET	N-CA-C	5.86	118.32	109.23
3	E	321	LEU	N-CA-C	-5.86	105.02	111.82
3	G	195	PRO	N-CA-C	5.85	120.52	111.21
3	J	311	VAL	N-CA-C	-5.85	97.17	109.34
3	E	177	MET	N-CA-C	-5.85	102.96	108.22
3	B	59	TYR	N-CA-C	5.84	118.39	111.33
4	P	254	THR	CB-CA-C	5.83	120.26	109.70
3	N	270	ALA	N-CA-C	5.83	119.70	112.59
3	E	158	GLU	N-CA-C	-5.80	98.83	108.34
1	Q	125	VAL	N-CA-C	-5.80	102.46	109.01
3	M	61	LEU	N-CA-C	-5.79	105.31	112.38
4	P	189	THR	N-CA-C	-5.79	106.05	113.23
4	P	13	ASN	N-CA-C	5.77	118.51	111.82
3	D	198	SER	N-CA-C	-5.77	106.37	113.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	206	THR	CA-C-O	5.76	125.48	119.14
3	L	246	LYS	N-CA-C	-5.76	105.51	112.54
3	H	189	ILE	N-CA-C	5.76	113.76	107.60
3	H	270	ALA	N-CA-C	5.75	119.27	112.72
1	Q	70	SER	CA-C-N	-5.75	113.32	120.79
1	Q	70	SER	C-N-CA	-5.75	113.32	120.79
4	P	114	SER	N-CA-C	5.74	117.80	109.07
4	P	379	GLU	CB-CA-C	-5.74	100.94	109.90
3	C	131	ASN	N-CA-C	5.73	123.01	110.80
3	B	193	ASN	N-CA-C	5.73	119.47	111.74
1	Q	80	GLN	N-CA-C	-5.73	101.21	110.32
3	D	116	MET	N-CA-C	5.72	118.10	109.23
3	O	280	PHE	N-CA-C	-5.72	100.85	108.34
3	A	116	MET	N-CA-C	5.71	118.09	109.23
3	G	198	SER	N-CA-C	-5.71	106.44	113.41
3	A	315	LEU	CA-C-N	5.71	126.98	119.84
3	A	315	LEU	C-N-CA	5.71	126.98	119.84
3	J	105	VAL	N-CA-C	-5.71	101.90	107.55
3	C	280	PHE	N-CA-C	-5.70	100.82	108.86
3	L	8	THR	N-CA-C	-5.70	101.26	110.32
1	Q	195	ASN	O-C-N	-5.70	116.64	123.31
3	K	281	ASN	N-CA-C	-5.70	99.44	108.73
3	C	59	TYR	N-CA-C	5.69	120.76	111.37
3	L	116	MET	N-CA-C	5.69	118.05	109.23
3	G	61	LEU	N-CA-C	-5.68	105.45	112.38
3	H	336	VAL	N-CA-C	-5.68	104.98	110.72
3	L	286	LEU	N-CA-C	-5.68	103.97	112.54
4	P	214	SER	CB-CA-C	-5.67	101.03	110.68
1	Q	119	ILE	N-CA-C	-5.67	99.71	107.99
3	F	311	VAL	N-CA-C	-5.66	97.56	109.34
3	A	131	ASN	N-CA-C	5.66	122.85	110.80
3	A	248	LYS	N-CA-C	-5.65	101.08	109.83
4	P	288	LEU	CA-C-N	5.64	130.76	121.86
4	P	288	LEU	C-N-CA	5.64	130.76	121.86
3	F	29	ASN	N-CA-C	-5.63	100.30	108.07
3	I	293	SER	N-CA-C	-5.63	106.29	114.12
3	E	238	ILE	N-CA-C	-5.62	100.22	108.54
3	O	37	GLN	N-CA-C	5.62	118.26	108.76
1	Q	173	ASN	CA-C-O	5.62	127.27	120.81
3	E	194	VAL	CA-C-N	5.62	125.57	119.78
3	E	194	VAL	C-N-CA	5.62	125.57	119.78
3	G	317	TYR	N-CA-C	-5.62	104.18	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	70	GLU	N-CA-C	-5.61	106.39	113.23
3	E	311	VAL	N-CA-C	-5.60	97.69	109.34
3	J	235	GLU	N-CA-C	5.60	117.17	107.93
3	L	235	GLU	N-CA-C	5.60	117.16	107.93
3	D	195	PRO	N-CA-C	5.59	120.09	111.21
3	E	230	ASP	CA-C-N	-5.59	112.86	119.84
3	E	230	ASP	C-N-CA	-5.59	112.86	119.84
3	I	63	GLN	N-CA-C	5.59	117.81	111.11
3	H	110	SER	N-CA-C	5.58	117.28	108.96
3	K	177	MET	N-CA-C	-5.58	103.10	108.07
3	L	304	ASP	N-CA-C	5.58	115.77	108.07
3	C	39	ILE	N-CA-C	5.57	115.88	107.75
3	M	280	PHE	N-CA-C	-5.57	101.04	108.34
3	B	39	ILE	N-CA-C	5.57	116.01	107.77
3	O	194	VAL	CA-C-N	5.56	125.51	119.78
3	O	194	VAL	C-N-CA	5.56	125.51	119.78
4	P	27	ASP	N-CA-C	-5.55	105.31	111.36
3	A	66	ASN	N-CA-C	5.55	116.99	107.28
3	M	248	LYS	N-CA-C	-5.54	101.24	109.83
3	C	302	ASN	N-CA-C	-5.54	101.71	109.69
3	E	242	VAL	N-CA-C	-5.54	103.52	108.95
3	N	135	SER	N-CA-C	5.54	117.32	108.41
3	F	47	THR	N-CA-C	5.54	117.31	111.28
3	F	297	ASP	N-CA-C	5.54	118.28	110.14
3	B	189	ILE	N-CA-C	5.53	113.52	107.60
3	M	195	PRO	N-CA-C	5.51	119.89	111.34
3	B	160	VAL	N-CA-C	-5.51	102.41	109.30
3	J	248	LYS	N-CA-C	-5.51	99.07	110.80
3	A	246	LYS	N-CA-C	-5.50	105.30	112.23
3	H	177	MET	N-CA-C	-5.49	103.28	108.22
3	E	235	GLU	N-CA-C	5.49	116.98	107.93
1	Q	63	LYS	N-CA-C	-5.48	104.83	112.45
3	B	255	GLN	N-CA-C	-5.47	106.11	112.89
1	Q	169	THR	N-CA-C	-5.47	106.38	113.16
3	D	203	VAL	CB-CA-C	-5.47	105.35	111.80
3	L	131	ASN	N-CA-C	5.47	122.44	110.80
3	D	311	VAL	N-CA-C	-5.46	97.98	109.34
3	L	29	ASN	N-CA-C	-5.46	100.53	108.07
3	B	56	PRO	N-CA-C	5.46	126.29	112.10
3	H	195	PRO	N-CA-C	5.46	119.89	111.21
3	K	61	LEU	N-CA-C	-5.45	105.73	112.38
1	Q	28	VAL	N-CA-C	-5.45	97.76	107.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	N	280	PHE	N-CA-C	-5.45	101.18	108.86
3	D	246	LYS	N-CA-C	-5.44	105.90	112.54
3	H	311	VAL	N-CA-C	-5.44	98.02	109.34
3	F	198	SER	N-CA-C	-5.44	106.78	113.41
3	K	199	ALA	N-CA-C	-5.43	101.75	109.62
3	M	239	VAL	N-CA-C	5.42	118.71	111.44
1	Q	186	MET	CG-SD-CE	5.42	112.83	100.90
3	K	116	MET	N-CA-C	5.42	118.06	109.50
1	Q	49	LEU	N-CA-C	-5.42	96.80	107.69
3	F	283	ASP	N-CA-C	5.41	118.12	110.50
3	M	321	LEU	N-CA-C	-5.41	105.55	111.82
3	J	287	THR	N-CA-C	-5.40	105.39	111.28
3	A	39	ILE	N-CA-C	5.39	115.63	107.75
3	C	311	VAL	N-CA-C	-5.39	98.12	109.34
3	J	189	ILE	N-CA-C	5.39	112.89	107.55
3	I	74	THR	N-CA-C	5.39	117.53	108.96
3	O	239	VAL	N-CA-C	5.38	116.87	111.00
3	A	160	VAL	N-CA-C	-5.38	102.57	109.30
3	C	297	ASP	N-CA-C	5.38	118.05	110.14
1	Q	120	HIS	CA-C-N	-5.38	114.24	119.78
1	Q	120	HIS	C-N-CA	-5.38	114.24	119.78
3	I	324	LEU	CA-C-N	5.37	125.31	119.78
3	I	324	LEU	C-N-CA	5.37	125.31	119.78
3	F	44	ASN	N-CA-C	-5.37	99.77	108.52
3	F	195	PRO	N-CA-C	5.36	119.66	111.34
3	H	254	LEU	N-CA-C	-5.36	105.51	111.36
3	J	11	GLN	N-CA-C	5.36	116.87	109.15
3	N	230	ASP	CA-C-N	-5.36	113.14	119.84
3	N	230	ASP	C-N-CA	-5.36	113.14	119.84
3	F	66	ASN	N-CA-C	5.36	116.65	107.28
3	L	192	PHE	N-CA-C	5.35	118.13	109.40
1	Q	126	PRO	N-CA-C	5.35	119.72	111.21
3	N	3	GLU	N-CA-C	5.35	117.36	107.73
3	E	255	GLN	N-CA-C	-5.35	106.26	112.89
1	Q	5	PHE	N-CA-C	5.34	117.67	109.07
3	B	311	VAL	N-CA-C	-5.34	98.23	109.34
3	L	210	GLN	N-CA-C	5.33	116.55	108.07
3	N	235	GLU	N-CA-C	5.33	116.73	107.93
1	Q	152	GLN	CA-C-O	-5.33	115.75	121.45
3	M	311	VAL	N-CA-C	-5.33	98.25	109.34
4	P	196	ASN	N-CA-C	-5.33	99.76	109.56
3	A	177	MET	N-CA-C	-5.33	103.33	108.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	J	116	MET	N-CA-C	5.30	117.45	109.23
3	D	124	PHE	N-CA-C	5.30	116.09	109.57
4	P	238	ASP	N-CA-C	-5.29	99.82	108.76
3	K	193	ASN	N-CA-C	5.29	118.88	111.74
3	L	293	SER	N-CA-C	-5.29	107.49	114.31
3	I	210	GLN	N-CA-C	5.28	116.23	107.73
3	K	45	SER	N-CA-C	-5.28	106.86	113.72
3	G	74	THR	N-CA-C	5.28	117.33	108.73
3	J	193	ASN	N-CA-C	5.28	118.86	111.74
3	N	242	VAL	N-CA-C	-5.28	103.16	108.96
1	Q	159	ASN	CB-CG-ND2	-5.28	108.49	116.40
3	A	189	ILE	N-CA-C	5.28	113.24	107.60
3	K	131	ASN	N-CA-C	5.27	122.02	110.80
4	P	61	VAL	CA-C-N	-5.27	115.16	120.85
4	P	61	VAL	C-N-CA	-5.27	115.16	120.85
1	Q	180	THR	CA-CB-OG1	5.26	117.50	109.60
3	O	105	VAL	N-CA-C	-5.26	102.77	107.56
3	D	39	ILE	N-CA-C	5.26	115.43	107.75
3	F	230	ASP	CA-C-N	-5.26	113.88	119.98
3	F	230	ASP	C-N-CA	-5.26	113.88	119.98
3	O	270	ALA	N-CA-C	5.26	119.20	112.26
3	C	160	VAL	N-CA-C	-5.25	101.96	108.89
3	E	248	LYS	N-CA-C	-5.25	99.62	110.80
4	P	349	ILE	N-CA-CB	-5.25	102.11	111.92
3	C	104	SER	N-CA-C	5.24	118.16	109.46
3	H	194	VAL	N-CA-C	-5.24	103.24	108.96
1	Q	102	ASP	N-CA-C	5.24	116.29	109.64
3	A	193	ASN	N-CA-C	5.23	118.80	111.74
3	K	44	ASN	N-CA-C	-5.22	100.02	108.52
3	I	47	THR	N-CA-C	5.21	116.96	111.28
3	A	280	PHE	N-CA-C	-5.21	101.51	108.86
3	F	238	ILE	N-CA-C	-5.21	100.12	107.98
4	P	237	GLU	CB-CA-C	-5.21	103.21	111.17
3	J	86	LEU	N-CA-C	-5.20	105.62	111.28
3	E	297	ASP	N-CA-C	5.19	117.78	110.14
3	M	133	ILE	N-CA-C	5.19	115.05	107.37
1	Q	198	PRO	N-CD-CG	-5.19	95.42	103.20
3	G	342	ARG	N-CA-C	-5.19	105.80	111.82
3	K	283	ASP	N-CA-C	5.19	117.82	110.50
1	Q	173	ASN	O-C-N	-5.18	116.55	122.93
1	Q	221	GLU	CA-CB-CG	5.18	124.47	114.10
3	E	324	LEU	CA-C-N	5.18	125.12	119.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	324	LEU	C-N-CA	5.18	125.12	119.78
1	Q	139	ASN	N-CA-C	-5.18	98.12	107.75
3	L	56	PRO	N-CA-C	5.18	125.56	112.10
3	D	131	ASN	N-CA-C	5.18	121.83	110.80
1	Q	169	THR	N-CA-CB	5.17	118.35	110.44
1	Q	140	TYR	N-CA-C	-5.16	100.82	109.24
3	C	317	TYR	N-CA-C	-5.16	104.17	110.61
3	G	336	VAL	N-CA-C	-5.16	105.36	110.62
3	B	199	ALA	N-CA-C	-5.15	102.16	109.62
3	C	43	SER	N-CA-C	5.15	118.20	109.76
3	D	192	PHE	N-CA-C	5.14	117.87	109.59
3	F	304	ASP	N-CA-C	5.14	115.17	108.07
3	K	59	TYR	N-CA-C	5.14	119.85	111.37
4	P	194	PHE	CA-C-N	-5.14	114.18	122.24
4	P	194	PHE	C-N-CA	-5.14	114.18	122.24
3	L	64	THR	N-CA-C	5.13	116.87	109.07
3	L	198	SER	N-CA-C	-5.13	107.15	113.41
3	N	59	TYR	N-CA-C	5.13	119.84	111.37
3	J	237	LYS	N-CA-C	5.13	117.60	109.24
3	A	11	GLN	N-CA-C	5.12	117.12	109.59
3	F	50	VAL	N-CA-C	5.12	116.07	108.23
3	J	112	ASN	N-CA-C	5.12	117.31	109.07
3	K	342	ARG	N-CA-C	-5.12	105.83	111.71
1	Q	155	THR	CA-C-O	-5.11	114.81	120.38
3	I	330	ALA	N-CA-C	5.11	116.85	111.28
3	E	56	PRO	N-CA-C	5.11	125.38	112.10
3	N	105	VAL	N-CA-C	-5.11	102.92	107.56
3	N	133	ILE	N-CA-C	5.11	114.93	107.37
3	O	16	THR	N-CA-C	-5.11	101.55	109.72
3	F	189	ILE	N-CA-C	5.10	112.60	107.55
3	K	28	ASN	N-CA-C	5.10	117.62	111.40
3	O	237	LYS	N-CA-C	5.09	117.54	109.24
3	L	193	ASN	N-CA-C	5.09	118.61	111.74
4	P	281	SER	N-CA-C	5.09	116.92	109.24
3	G	270	ALA	N-CA-C	5.09	118.97	112.26
3	E	193	ASN	N-CA-C	5.08	118.60	111.74
3	C	124	PHE	N-CA-C	5.08	116.93	109.71
1	Q	113	VAL	N-CA-C	-5.08	100.46	108.23
3	K	75	LEU	N-CA-C	-5.08	106.25	112.90
4	P	195	THR	O-C-N	-5.08	116.76	122.34
3	I	311	VAL	N-CA-C	-5.07	99.38	106.53
4	P	61	VAL	CA-C-O	5.07	123.63	119.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	158	GLU	N-CA-C	-5.07	100.03	108.34
3	O	195	PRO	N-CA-C	5.07	119.27	111.21
3	B	177	MET	N-CA-C	-5.07	102.37	108.25
4	P	24	GLU	CB-CA-C	5.06	118.50	110.19
3	E	105	VAL	N-CA-C	-5.06	102.95	107.56
3	N	311	VAL	N-CA-C	-5.06	98.82	109.34
3	K	6	THR	N-CA-C	5.05	117.63	109.40
1	Q	101	TYR	N-CA-C	-5.05	102.17	109.59
3	L	311	VAL	N-CA-C	-5.05	98.84	109.34
3	G	297	ASP	N-CA-C	5.04	117.96	110.14
1	Q	206	THR	N-CA-CB	5.04	117.94	110.53
3	F	341	ARG	N-CA-C	5.04	119.14	112.89
3	A	143	SER	N-CA-C	5.03	117.50	109.96
3	N	43	SER	N-CA-C	5.03	118.01	109.76
3	N	317	TYR	N-CA-C	-5.03	104.48	110.41
4	P	264	GLU	CB-CG-CD	5.03	121.15	112.60
3	C	281	ASN	N-CA-C	-5.02	99.61	108.20
3	O	109	GLY	N-CA-C	-5.02	101.29	113.18
3	A	192	PHE	N-CA-C	5.01	117.14	109.07
3	D	239	VAL	N-CA-C	5.01	116.46	111.00
3	E	288	HIS	N-CA-C	5.01	121.13	113.61
3	K	239	VAL	N-CA-C	5.01	115.68	110.82
3	K	242	VAL	N-CA-C	-5.00	104.05	108.95

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	A	152	TYR	Sidechain
3	C	307	TYR	Sidechain
3	I	98	TYR	Sidechain
3	K	152	TYR	Sidechain
3	M	307	TYR	Sidechain
3	N	267	TYR	Sidechain
3	O	307	TYR	Sidechain
1	Q	154	TYR	Sidechain

5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen

atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	Q	1594	0	1530	148	0
2	R	75	0	18	6	0
3	A	2666	0	2661	244	0
3	B	2666	0	2661	263	0
3	C	2666	0	2661	271	0
3	D	2666	0	2661	214	0
3	E	2666	0	2661	267	0
3	F	2666	0	2661	265	0
3	G	2666	0	2661	241	0
3	H	2666	0	2661	245	0
3	I	2666	0	2661	256	0
3	J	2666	0	2661	233	0
3	K	2666	0	2661	237	0
3	L	2666	0	2661	253	0
3	M	2666	0	2661	260	0
3	N	2666	0	2661	237	0
3	O	2666	0	2661	262	0
4	P	2890	0	2865	85	0
All	All	44549	0	44328	3782	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 43.

All (3782) 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:Q:140:TYR:CE1	1:Q:157:PRO:HG3	1.42	1.53
1:Q:198:PRO:CD	1:Q:198:PRO:N	1.70	1.35
1:Q:186:MET:SD	1:Q:186:MET:CE	2.15	1.33
1:Q:140:TYR:CD1	1:Q:157:PRO:HG3	1.65	1.30
1:Q:146:PHE:HD1	1:Q:147:GLY:N	1.34	1.24
3:K:4:ILE:H	3:K:4:ILE:HD12	1.07	1.15
1:Q:140:TYR:CE1	1:Q:157:PRO:CG	2.32	1.12
3:B:259:GLN:HG3	3:C:96:PRO:HG3	1.29	1.12
3:A:87:MET:HE1	3:A:345:ARG:HB3	1.25	1.11
3:E:4:ILE:H	3:E:4:ILE:HD12	1.16	1.10
1:Q:133:ASN:ND2	1:Q:136:PRO:HG3	1.65	1.10
3:J:56:PRO:HG2	3:J:60:ASN:HD22	1.14	1.09
3:H:4:ILE:H	3:H:4:ILE:HD12	1.06	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:175:GLY:CA	4:P:42:LEU:HD12	1.81	1.08
1:Q:50:ILE:HG23	1:Q:86:ILE:HD11	1.29	1.08
3:M:4:ILE:H	3:M:4:ILE:HD12	1.07	1.08
1:Q:146:PHE:CD1	1:Q:146:PHE:C	2.30	1.06
3:I:87:MET:HE1	3:I:345:ARG:HB3	1.31	1.06
1:Q:133:ASN:HD21	1:Q:136:PRO:HG3	1.17	1.04
3:K:56:PRO:HG2	3:K:60:ASN:HD22	1.23	1.03
1:Q:175:GLY:HA2	4:P:42:LEU:CD1	1.88	1.03
3:N:4:ILE:H	3:N:4:ILE:HD12	1.22	1.03
4:P:346:ILE:HG22	4:P:349:ILE:HD12	1.41	1.03
1:Q:146:PHE:CD1	1:Q:147:GLY:N	2.26	1.02
4:P:299:LEU:HD21	4:P:352:ILE:HD11	1.40	1.02
3:C:219:VAL:HG22	3:C:306:VAL:HG22	1.41	1.01
3:H:56:PRO:HG2	3:H:60:ASN:HD22	1.24	1.01
3:G:195:PRO:HG2	3:G:201:ILE:HD12	1.38	1.01
3:A:246:LYS:HE2	3:A:246:LYS:HA	1.41	1.00
3:O:90:THR:OG1	3:O:345:ARG:HG2	1.61	1.00
3:M:87:MET:HE1	3:M:345:ARG:HB3	1.44	1.00
1:Q:48:LEU:HD22	1:Q:86:ILE:HG21	1.43	0.99
3:A:254:LEU:HD21	3:A:274:ILE:HD11	1.43	0.99
1:Q:211:THR:HG21	4:P:57:SER:HB2	1.44	0.99
3:N:56:PRO:HG2	3:N:60:ASN:HD22	1.22	0.99
3:F:56:PRO:HG2	3:F:60:ASN:HD22	1.28	0.99
1:Q:175:GLY:HA2	4:P:42:LEU:HD12	1.39	0.98
3:I:259:GLN:OE1	3:I:266:PRO:HD3	1.62	0.97
1:Q:175:GLY:C	4:P:42:LEU:HD12	1.89	0.97
1:Q:146:PHE:HD1	1:Q:146:PHE:C	1.70	0.96
3:K:56:PRO:HG2	3:K:60:ASN:ND2	1.78	0.96
3:L:195:PRO:HG2	3:L:201:ILE:HD12	1.45	0.96
3:L:90:THR:OG1	3:L:345:ARG:HG2	1.66	0.96
3:O:315:LEU:HD12	3:O:318:TYR:HD1	1.28	0.96
3:C:90:THR:OG1	3:C:345:ARG:HG2	1.66	0.95
3:G:256:ALA:CB	3:H:116:MET:HE1	1.96	0.95
3:K:87:MET:HE1	3:K:345:ARG:HB3	1.48	0.95
3:H:246:LYS:HE2	3:H:246:LYS:HA	1.46	0.95
3:D:246:LYS:HE2	3:D:246:LYS:HA	1.49	0.95
3:G:56:PRO:HG2	3:G:60:ASN:HD22	1.31	0.94
3:G:96:PRO:HG3	3:I:259:GLN:HG3	1.47	0.94
3:J:3:GLU:HB2	3:J:159:ARG:HB3	1.47	0.94
3:J:87:MET:HE1	3:J:345:ARG:HB3	1.49	0.94
3:A:3:GLU:HB2	3:A:159:ARG:HB3	1.49	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:28:ASN:ND2	3:M:70:GLU:HA	1.83	0.94
3:O:4:ILE:HD12	3:O:4:ILE:H	1.26	0.94
3:L:345:ARG:HG3	3:L:345:ARG:HH11	1.32	0.94
1:Q:140:TYR:HE2	1:Q:142:ILE:CG1	1.81	0.93
3:H:90:THR:OG1	3:H:345:ARG:HG2	1.68	0.93
3:C:130:GLN:HA	3:C:130:GLN:HE21	1.34	0.93
3:I:87:MET:CE	3:I:345:ARG:HB3	1.98	0.93
3:G:121:LEU:HA	3:G:184:PRO:HG3	1.51	0.93
1:Q:175:GLY:CA	4:P:42:LEU:CD1	2.45	0.92
3:N:90:THR:OG1	3:N:345:ARG:HG2	1.69	0.92
3:A:56:PRO:HG2	3:A:60:ASN:HD22	1.34	0.92
3:C:286:LEU:HD21	3:C:294:ILE:HD12	1.51	0.92
1:Q:140:TYR:CE2	1:Q:142:ILE:CG1	2.52	0.92
3:C:92:LYS:HD2	3:C:92:LYS:N	1.83	0.91
3:B:246:LYS:HA	3:B:246:LYS:HE2	1.53	0.91
3:N:56:PRO:HG2	3:N:60:ASN:ND2	1.86	0.91
3:H:87:MET:HE1	3:H:345:ARG:HB3	1.50	0.91
1:Q:140:TYR:CE2	1:Q:142:ILE:HG12	2.06	0.90
3:G:3:GLU:HB2	3:G:159:ARG:HB3	1.53	0.90
3:I:28:ASN:HD21	3:M:70:GLU:HA	1.34	0.90
3:A:315:LEU:HD12	3:A:318:TYR:HD1	1.34	0.90
3:D:87:MET:HE1	3:D:345:ARG:HB3	1.54	0.90
3:E:240:ARG:HH21	3:J:208:PRO:HG2	1.36	0.90
3:F:28:ASN:HD22	3:J:70:GLU:C	1.80	0.90
3:O:131:ASN:HD22	3:O:133:ILE:HD11	1.34	0.90
1:Q:39:ILE:HG22	1:Q:119:ILE:HD12	1.52	0.90
3:D:56:PRO:HG2	3:D:60:ASN:HD22	1.34	0.90
3:E:56:PRO:HG2	3:E:60:ASN:ND2	1.87	0.90
3:M:4:ILE:H	3:M:4:ILE:CD1	1.82	0.90
3:B:256:ALA:HB1	3:C:116:MET:HE1	1.53	0.90
3:K:4:ILE:H	3:K:4:ILE:CD1	1.83	0.90
1:Q:186:MET:HG3	1:Q:188:PHE:HE1	1.37	0.90
3:A:121:LEU:HA	3:A:184:PRO:HG3	1.53	0.89
3:D:87:MET:CE	3:D:345:ARG:HB3	2.02	0.89
3:K:87:MET:CE	3:K:345:ARG:HB3	2.01	0.89
3:K:90:THR:OG1	3:K:345:ARG:HG2	1.71	0.89
3:A:87:MET:CE	3:A:345:ARG:HB3	2.02	0.89
4:P:190:THR:HG22	4:P:192:THR:H	1.37	0.89
3:H:195:PRO:HG2	3:H:201:ILE:CD1	2.03	0.89
3:K:190:PRO:HB3	3:K:307:TYR:CD1	2.07	0.89
1:Q:181:ILE:CD1	1:Q:200:ILE:HD11	2.03	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:87:MET:HE1	3:N:345:ARG:HB3	1.53	0.88
3:J:131:ASN:HD22	3:J:133:ILE:HD11	1.37	0.88
1:Q:133:ASN:HD21	1:Q:136:PRO:CG	1.84	0.88
3:E:247:ILE:CG2	3:E:249:VAL:HG23	2.03	0.88
3:B:90:THR:OG1	3:B:345:ARG:HG2	1.71	0.88
3:H:87:MET:CE	3:H:345:ARG:HB3	2.02	0.88
3:O:56:PRO:HG2	3:O:60:ASN:ND2	1.88	0.88
3:A:329:ALA:O	3:A:333:GLN:HG2	1.73	0.88
3:J:56:PRO:HG2	3:J:60:ASN:ND2	1.87	0.88
1:Q:173:ASN:HB3	4:P:23:SER:O	1.73	0.88
3:B:56:PRO:HG2	3:B:60:ASN:HD22	1.37	0.88
3:G:235:GLU:OE1	3:G:248:LYS:HD3	1.74	0.88
3:O:92:LYS:N	3:O:92:LYS:HD2	1.86	0.88
3:B:54:SER:HA	3:B:101:PRO:HB3	1.56	0.87
3:L:338:ARG:HA	3:L:341:ARG:HH21	1.39	0.87
3:O:315:LEU:HD12	3:O:318:TYR:CD1	2.09	0.87
3:B:42:ILE:HG23	3:B:147:ILE:HD13	1.55	0.87
3:H:324:LEU:HG	3:H:328:VAL:HB	1.56	0.87
3:G:56:PRO:HG2	3:G:60:ASN:ND2	1.89	0.87
3:B:240:ARG:NH1	3:B:290:PRO:HG2	1.90	0.87
3:B:259:GLN:OE1	3:B:266:PRO:HD3	1.74	0.87
3:G:87:MET:CE	3:G:345:ARG:HB3	2.05	0.87
3:H:254:LEU:HD21	3:H:274:ILE:HD11	1.56	0.86
1:Q:186:MET:HG3	1:Q:188:PHE:CE1	2.10	0.86
3:H:56:PRO:HG2	3:H:60:ASN:ND2	1.90	0.86
3:I:90:THR:OG1	3:I:345:ARG:HG2	1.74	0.86
3:I:184:PRO:HB3	3:I:343:ILE:HD12	1.57	0.86
1:Q:140:TYR:CD1	1:Q:157:PRO:CG	2.56	0.86
3:G:90:THR:OG1	3:G:345:ARG:HG2	1.74	0.86
3:M:56:PRO:HG2	3:M:60:ASN:HD22	1.40	0.86
3:E:230:ASP:HA	3:E:301:GLN:HG2	1.59	0.85
3:J:247:ILE:HG12	3:J:279:TYR:CD2	2.10	0.85
3:H:4:ILE:HD12	3:H:4:ILE:N	1.90	0.85
1:Q:173:ASN:CB	4:P:23:SER:O	2.25	0.85
3:A:56:PRO:HG2	3:A:60:ASN:ND2	1.91	0.85
3:G:256:ALA:HB2	3:H:116:MET:HE1	1.55	0.85
3:D:259:GLN:OE1	3:D:266:PRO:HD3	1.77	0.85
3:E:343:ILE:O	3:E:343:ILE:HG12	1.73	0.85
3:K:42:ILE:HG23	3:K:147:ILE:HD13	1.59	0.85
3:D:189:ILE:HD12	3:D:310:TYR:HE2	1.41	0.85
3:M:42:ILE:HD11	3:M:113:LEU:HD13	1.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:87:MET:HE2	3:F:345:ARG:HB3	1.59	0.84
3:H:4:ILE:H	3:H:4:ILE:CD1	1.84	0.84
3:C:345:ARG:HH11	3:C:345:ARG:HG3	1.41	0.84
1:Q:208:LEU:HD21	1:Q:210:LEU:HD21	1.57	0.84
3:N:259:GLN:OE1	3:N:266:PRO:HD3	1.77	0.84
3:H:182:VAL:HG21	3:H:339:GLN:HB3	1.59	0.84
3:J:87:MET:CE	3:J:345:ARG:HB3	2.07	0.84
3:L:230:ASP:HA	3:L:301:GLN:HG2	1.59	0.84
3:N:92:LYS:HD2	3:N:92:LYS:N	1.92	0.84
3:F:230:ASP:HA	3:F:301:GLN:HG2	1.59	0.84
3:M:190:PRO:HB3	3:M:307:TYR:CD1	2.12	0.84
3:A:4:ILE:H	3:A:4:ILE:HD12	1.42	0.84
3:M:246:LYS:HA	3:M:246:LYS:HE2	1.59	0.83
1:Q:208:LEU:HD21	1:Q:210:LEU:CD2	2.09	0.83
3:M:19:THR:O	3:M:137:LEU:HD12	1.78	0.83
3:M:90:THR:OG1	3:M:345:ARG:HG2	1.79	0.83
3:M:159:ARG:HG2	3:M:159:ARG:HH11	1.43	0.83
1:Q:140:TYR:CE2	1:Q:142:ILE:HG13	2.13	0.83
3:J:257:GLU:O	3:J:261:GLU:HB3	1.79	0.83
3:E:56:PRO:HG2	3:E:60:ASN:HD22	1.43	0.83
3:J:90:THR:CB	3:J:345:ARG:HG2	2.09	0.82
3:K:338:ARG:HG2	3:K:338:ARG:HH11	1.43	0.82
3:J:190:PRO:HB3	3:J:307:TYR:CD1	2.14	0.82
3:M:329:ALA:O	3:M:333:GLN:HG2	1.78	0.82
3:N:87:MET:CE	3:N:345:ARG:HB3	2.10	0.82
3:B:87:MET:CE	3:B:345:ARG:HB3	2.09	0.82
3:E:240:ARG:HH21	3:J:208:PRO:CG	1.91	0.82
3:K:4:ILE:HD12	3:K:4:ILE:N	1.92	0.82
3:M:87:MET:CE	3:M:345:ARG:HB3	2.10	0.82
3:N:247:ILE:HG12	3:N:279:TYR:CD2	2.14	0.82
3:C:87:MET:CE	3:C:345:ARG:HB3	2.10	0.82
3:J:240:ARG:NH2	3:O:208:PRO:HG2	1.94	0.82
1:Q:140:TYR:C	1:Q:140:TYR:CD2	2.58	0.81
3:B:247:ILE:HG12	3:B:279:TYR:CD2	2.15	0.81
3:L:90:THR:CB	3:L:345:ARG:HG2	2.10	0.81
3:B:195:PRO:HA	3:B:303:GLN:HB2	1.60	0.81
1:Q:189:ASN:ND2	4:P:29:ASP:HB2	1.95	0.81
3:E:246:LYS:HE2	3:E:246:LYS:HA	1.62	0.81
3:F:90:THR:OG1	3:F:345:ARG:HG2	1.80	0.81
3:C:56:PRO:HG2	3:C:60:ASN:HD22	1.43	0.81
3:I:32:ARG:HD2	3:I:158:GLU:OE1	1.80	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:O:56:PRO:HG2	3:O:60:ASN:HD22	1.45	0.81
3:O:345:ARG:HH11	3:O:345:ARG:HG3	1.45	0.81
1:Q:211:THR:HG21	4:P:57:SER:CB	2.11	0.81
3:M:247:ILE:HG12	3:M:279:TYR:CD2	2.15	0.81
3:A:254:LEU:HD11	3:A:274:ILE:HG13	1.63	0.81
1:Q:22:VAL:HG22	1:Q:117:GLY:O	1.80	0.81
3:E:142:PRO:HD2	3:E:147:ILE:HD11	1.62	0.81
3:N:190:PRO:HB3	3:N:307:TYR:CD1	2.16	0.81
3:C:249:VAL:HG12	3:C:253:ALA:HB3	1.63	0.80
3:D:256:ALA:CB	3:E:116:MET:HE1	2.11	0.80
1:Q:140:TYR:HE2	1:Q:142:ILE:HG12	1.41	0.80
3:H:92:LYS:HD2	3:H:92:LYS:N	1.96	0.80
3:H:195:PRO:HG2	3:H:201:ILE:HD12	1.61	0.80
3:K:329:ALA:O	3:K:333:GLN:HG2	1.81	0.80
3:F:345:ARG:HH11	3:F:345:ARG:HG3	1.45	0.80
3:G:42:ILE:HD11	3:G:113:LEU:HD13	1.61	0.80
3:G:42:ILE:HG22	3:G:145:VAL:HB	1.62	0.80
3:A:256:ALA:CB	3:B:116:MET:HE1	2.12	0.80
3:H:343:ILE:O	3:H:343:ILE:HG12	1.81	0.80
3:E:324:LEU:HG	3:E:328:VAL:HB	1.63	0.80
3:M:68:SER:HB2	3:M:73:LYS:O	1.82	0.80
3:G:184:PRO:HB3	3:G:343:ILE:HD12	1.64	0.80
3:F:92:LYS:HD2	3:F:92:LYS:N	1.97	0.80
3:G:315:LEU:HD12	3:G:318:TYR:HD1	1.47	0.80
4:P:346:ILE:CG2	4:P:349:ILE:HD12	2.12	0.80
3:B:259:GLN:HG3	3:C:96:PRO:CG	2.10	0.79
3:L:190:PRO:HB3	3:L:307:TYR:CD1	2.17	0.79
3:O:90:THR:CB	3:O:345:ARG:HG2	2.12	0.79
3:H:247:ILE:HG12	3:H:279:TYR:CD2	2.16	0.79
3:K:246:LYS:HE2	3:K:246:LYS:HA	1.63	0.79
3:A:256:ALA:HB1	3:B:116:MET:HE1	1.62	0.79
3:B:92:LYS:N	3:B:92:LYS:HD2	1.97	0.79
3:N:9:LEU:HD21	3:N:26:PRO:HD2	1.63	0.79
3:C:87:MET:HE2	3:C:345:ARG:HB3	1.63	0.79
3:I:190:PRO:HB3	3:I:307:TYR:CD1	2.17	0.79
3:J:116:MET:HE1	3:L:256:ALA:CB	2.12	0.79
3:A:113:LEU:HD23	3:A:149:ALA:HB2	1.64	0.79
3:C:246:LYS:HE2	3:C:246:LYS:HA	1.63	0.79
3:J:254:LEU:HD21	3:J:274:ILE:HD11	1.62	0.79
3:D:32:ARG:HH21	3:D:342:ARG:HD3	1.48	0.79
3:F:4:ILE:H	3:F:4:ILE:HD12	1.46	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:246:LYS:HE2	3:I:246:LYS:HA	1.64	0.79
3:C:42:ILE:HG23	3:C:147:ILE:HD13	1.65	0.79
3:G:338:ARG:HA	3:G:341:ARG:HH21	1.48	0.79
3:K:122:ALA:HB1	3:K:339:GLN:HG3	1.65	0.79
3:I:19:THR:O	3:I:137:LEU:HD12	1.83	0.78
4:P:289:ASN:C	4:P:289:ASN:HD22	1.91	0.78
4:P:289:ASN:HD22	4:P:290:VAL:N	1.81	0.78
3:L:113:LEU:HD23	3:L:149:ALA:HB2	1.65	0.78
3:N:122:ALA:HB1	3:N:339:GLN:HG2	1.66	0.78
3:F:56:PRO:HG2	3:F:60:ASN:ND2	1.99	0.78
3:E:70:GLU:C	3:M:28:ASN:HD22	1.92	0.78
3:M:4:ILE:HD12	3:M:4:ILE:N	1.93	0.78
1:Q:106:VAL:HG11	1:Q:202:GLY:N	1.97	0.78
3:D:235:GLU:OE1	3:D:248:LYS:HD3	1.84	0.78
3:F:54:SER:HA	3:F:101:PRO:HB3	1.65	0.78
3:M:343:ILE:O	3:M:343:ILE:HG12	1.84	0.78
1:Q:140:TYR:C	1:Q:140:TYR:HD2	1.91	0.78
1:Q:211:THR:OG1	4:P:57:SER:HB3	1.83	0.78
3:L:184:PRO:HB3	3:L:343:ILE:HD12	1.64	0.78
3:A:247:ILE:HG12	3:A:279:TYR:CD2	2.19	0.78
3:B:17:ALA:HB1	3:B:140:GLN:NE2	1.99	0.78
3:K:236:LEU:HB2	3:K:247:ILE:HD12	1.66	0.78
3:F:182:VAL:HG21	3:F:339:GLN:HB3	1.66	0.78
3:L:255:GLN:NE2	3:L:266:PRO:HB3	1.98	0.78
3:O:203:VAL:HG23	3:O:297:ASP:HA	1.66	0.77
1:Q:133:ASN:ND2	1:Q:136:PRO:CG	2.43	0.77
3:E:4:ILE:H	3:E:4:ILE:CD1	1.93	0.77
3:J:259:GLN:OE1	3:J:266:PRO:HD3	1.85	0.77
3:D:216:LEU:HD23	3:D:309:LEU:HD13	1.65	0.77
3:C:230:ASP:HA	3:C:301:GLN:HG2	1.66	0.77
3:G:87:MET:HE1	3:G:345:ARG:HB3	1.67	0.77
3:I:184:PRO:CB	3:I:343:ILE:HD12	2.15	0.77
3:F:246:LYS:HE2	3:F:246:LYS:HA	1.66	0.77
3:I:17:ALA:HB1	3:I:140:GLN:HE22	1.50	0.77
3:K:33:LYS:HD2	3:K:118:GLU:OE2	1.85	0.77
3:G:124:PHE:CD1	3:G:125:PRO:HD2	2.19	0.77
3:L:121:LEU:HA	3:L:184:PRO:HG3	1.67	0.77
3:G:256:ALA:HB1	3:H:116:MET:HE1	1.67	0.76
3:I:253:ALA:O	3:I:256:ALA:HB3	1.83	0.76
3:K:333:GLN:OE1	3:K:333:GLN:HA	1.82	0.76
3:H:19:THR:O	3:H:137:LEU:HD12	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:28:ASN:ND2	3:M:70:GLU:CA	2.49	0.76
3:J:94:GLN:HG3	3:L:263:GLN:HA	1.67	0.76
3:M:315:LEU:HD12	3:M:318:TYR:HD1	1.51	0.76
3:O:195:PRO:HA	3:O:303:GLN:HG3	1.66	0.76
3:E:247:ILE:HG22	3:E:249:VAL:HG23	1.66	0.76
3:H:90:THR:CB	3:H:345:ARG:HG2	2.15	0.76
3:L:47:THR:O	3:L:107:ALA:HB1	1.85	0.76
3:N:13:TYR:OH	3:N:23:ILE:HG23	1.85	0.76
3:O:61:LEU:HD21	3:O:142:PRO:HD3	1.65	0.76
3:I:324:LEU:HD21	3:I:332:VAL:HG21	1.66	0.76
3:K:211:ILE:HD12	3:K:313:TYR:CE2	2.21	0.76
3:L:42:ILE:HG23	3:L:147:ILE:HD13	1.64	0.76
3:A:190:PRO:HB3	3:A:307:TYR:CD1	2.20	0.76
3:B:256:ALA:CB	3:C:116:MET:HE1	2.15	0.76
3:K:32:ARG:HD2	3:K:158:GLU:OE1	1.86	0.76
3:M:38:LEU:HD13	3:M:151:PHE:CE2	2.21	0.76
3:A:38:LEU:HD13	3:A:151:PHE:CE2	2.21	0.76
3:H:42:ILE:HD11	3:H:113:LEU:HD13	1.68	0.76
3:D:195:PRO:HG2	3:D:201:ILE:CD1	2.15	0.76
3:I:54:SER:HA	3:I:101:PRO:HB3	1.66	0.76
3:K:253:ALA:O	3:K:256:ALA:HB3	1.86	0.76
3:E:211:ILE:HG12	3:E:285:ASP:OD2	1.84	0.76
3:H:277:ARG:CZ	3:H:277:ARG:HB2	2.15	0.76
3:D:90:THR:OG1	3:D:345:ARG:HG2	1.86	0.75
3:E:4:ILE:HD12	3:E:4:ILE:N	1.99	0.75
3:H:247:ILE:HG22	3:H:249:VAL:HG23	1.67	0.75
3:A:17:ALA:HB1	3:A:140:GLN:NE2	2.01	0.75
3:D:64:THR:HA	3:D:79:SER:HA	1.66	0.75
3:D:233:GLU:OE1	3:D:250:SER:HA	1.87	0.75
3:E:236:LEU:HB2	3:E:247:ILE:HD12	1.68	0.75
3:F:131:ASN:HD22	3:F:133:ILE:HD11	1.52	0.75
3:G:96:PRO:CG	3:I:259:GLN:HG3	2.17	0.75
3:K:96:PRO:HG2	3:K:116:MET:HE3	1.66	0.75
3:B:15:TRP:CE3	3:B:147:ILE:HB	2.22	0.75
3:N:56:PRO:HB3	3:N:81:THR:HG23	1.66	0.75
3:G:47:THR:O	3:G:107:ALA:HB1	1.85	0.75
3:H:256:ALA:HB1	3:I:116:MET:HE1	1.68	0.75
3:N:37:GLN:NE2	3:N:39:ILE:HD11	2.01	0.75
3:N:246:LYS:HE2	3:N:246:LYS:HA	1.67	0.75
3:A:337:ALA:O	3:A:340:LYS:HG2	1.86	0.75
3:B:87:MET:HE2	3:B:345:ARG:HB3	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:287:THR:HG21	3:C:318:TYR:CD2	2.22	0.75
3:D:15:TRP:CZ3	3:D:147:ILE:HB	2.22	0.75
3:D:287:THR:HG21	3:D:318:TYR:CD2	2.20	0.75
3:H:38:LEU:HD13	3:H:151:PHE:CE2	2.22	0.75
1:Q:175:GLY:HA2	4:P:42:LEU:HD13	1.68	0.75
3:B:334:GLN:O	3:B:338:ARG:HG3	1.86	0.75
3:E:78:VAL:HG21	3:E:83:LEU:HB2	1.67	0.75
3:I:230:ASP:HA	3:I:301:GLN:HG2	1.68	0.75
3:J:90:THR:HB	3:J:345:ARG:HG2	1.67	0.75
3:J:247:ILE:HG22	3:J:249:VAL:HG23	1.67	0.75
3:M:184:PRO:HB3	3:M:343:ILE:HD12	1.68	0.75
3:A:343:ILE:O	3:A:343:ILE:HG12	1.87	0.75
3:J:25:ILE:HG23	3:J:155:ILE:CD1	2.16	0.75
3:J:90:THR:OG1	3:J:345:ARG:HG2	1.87	0.75
3:J:246:LYS:HA	3:J:246:LYS:HE2	1.66	0.75
3:L:194:VAL:HG11	3:L:203:VAL:HG22	1.69	0.75
3:O:64:THR:HA	3:O:79:SER:HA	1.67	0.75
3:N:315:LEU:HB2	3:N:318:TYR:HB2	1.67	0.75
3:O:343:ILE:O	3:O:343:ILE:HG12	1.87	0.75
4:P:101:ASN:HD21	4:P:123:THR:HG22	1.52	0.75
3:C:233:GLU:OE1	3:C:250:SER:HA	1.87	0.75
3:G:32:ARG:HB2	3:G:156:THR:HG22	1.69	0.75
3:K:259:GLN:HG3	3:L:96:PRO:HG3	1.69	0.75
3:C:9:LEU:HD11	3:C:155:ILE:HD12	1.69	0.74
3:E:259:GLN:HG3	3:F:96:PRO:CG	2.17	0.74
3:J:17:ALA:HB1	3:J:140:GLN:NE2	2.01	0.74
3:L:15:TRP:CE3	3:L:147:ILE:HB	2.21	0.74
3:N:9:LEU:HD21	3:N:26:PRO:CD	2.17	0.74
3:D:125:PRO:HG3	3:D:177:MET:HG2	1.68	0.74
3:C:56:PRO:HG2	3:C:60:ASN:ND2	2.02	0.74
3:O:200:PRO:HG2	3:O:233:GLU:HG3	1.69	0.74
3:D:49:ALA:N	3:D:107:ALA:HB2	2.01	0.74
3:C:13:TYR:OH	3:C:23:ILE:HG23	1.87	0.74
3:G:287:THR:HG21	3:G:318:TYR:CD2	2.22	0.74
3:K:9:LEU:HD21	3:K:26:PRO:HD2	1.68	0.74
3:A:19:THR:O	3:A:137:LEU:HD12	1.88	0.74
3:E:284:LEU:HD11	3:E:286:LEU:HD21	1.69	0.74
3:G:195:PRO:HG2	3:G:201:ILE:CD1	2.16	0.74
3:L:246:LYS:HE2	3:L:246:LYS:HA	1.69	0.74
3:B:171:LEU:HB3	3:B:175:GLY:HA2	1.68	0.74
3:B:287:THR:HG21	3:B:318:TYR:CD2	2.23	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:247:ILE:HG12	3:H:279:TYR:CE2	2.23	0.74
3:H:329:ALA:O	3:H:333:GLN:HG2	1.86	0.74
3:I:131:ASN:HD22	3:I:133:ILE:HD11	1.52	0.74
3:N:345:ARG:HH11	3:N:345:ARG:HG3	1.53	0.74
3:A:246:LYS:HE2	3:A:246:LYS:CA	2.16	0.74
3:E:90:THR:CB	3:E:345:ARG:HG2	2.17	0.74
3:M:211:ILE:HD12	3:M:313:TYR:CE2	2.23	0.74
3:E:90:THR:OG1	3:E:345:ARG:HG2	1.88	0.74
3:A:259:GLN:HG3	3:B:96:PRO:HG3	1.70	0.74
3:O:87:MET:CE	3:O:345:ARG:HB3	2.18	0.74
3:L:13:TYR:HB3	3:L:21:ILE:HG21	1.69	0.73
1:Q:48:LEU:HD22	1:Q:86:ILE:CG2	2.17	0.73
3:A:116:MET:HG3	3:A:117:TRP:N	2.02	0.73
3:O:78:VAL:HG21	3:O:83:LEU:HB2	1.71	0.73
3:O:89:TYR:CD2	3:O:273:ILE:HD11	2.23	0.73
3:C:236:LEU:HD11	3:C:294:ILE:HG22	1.70	0.73
3:A:90:THR:OG1	3:A:345:ARG:HG2	1.89	0.73
3:E:247:ILE:HG23	3:E:249:VAL:HG23	1.69	0.73
3:D:246:LYS:HE2	3:D:246:LYS:CA	2.18	0.73
3:F:324:LEU:HG	3:F:328:VAL:HB	1.70	0.73
3:G:54:SER:HA	3:G:101:PRO:HB3	1.71	0.73
3:G:233:GLU:OE1	3:G:250:SER:HA	1.87	0.73
3:D:44:ASN:HD22	3:D:107:ALA:HA	1.51	0.73
3:D:195:PRO:HG2	3:D:201:ILE:HD12	1.69	0.73
3:L:56:PRO:HG2	3:L:60:ASN:HD22	1.53	0.73
3:C:64:THR:HA	3:C:79:SER:HA	1.71	0.73
3:D:37:GLN:NE2	3:D:39:ILE:HD11	2.03	0.73
3:L:54:SER:HA	3:L:101:PRO:HB3	1.71	0.73
3:A:184:PRO:HB3	3:A:343:ILE:HD12	1.70	0.73
3:I:17:ALA:HB1	3:I:140:GLN:NE2	2.04	0.73
3:K:256:ALA:CB	3:L:116:MET:HE1	2.18	0.73
3:B:91:THR:O	3:B:94:GLN:HB2	1.89	0.72
3:L:238:ILE:HD11	3:L:246:LYS:HD2	1.70	0.72
3:D:54:SER:HA	3:D:101:PRO:HB3	1.70	0.72
3:I:56:PRO:HG2	3:I:60:ASN:HD22	1.55	0.72
3:N:4:ILE:H	3:N:4:ILE:CD1	1.96	0.72
3:K:345:ARG:HH11	3:K:345:ARG:HG3	1.53	0.72
3:M:90:THR:CB	3:M:345:ARG:HG2	2.18	0.72
3:I:174:ASP:OD2	3:I:317:TYR:HE2	1.71	0.72
3:K:63:GLN:HG2	3:K:64:THR:HG23	1.72	0.72
3:C:236:LEU:HD11	3:C:294:ILE:CG2	2.19	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:285:ASP:O	3:D:286:LEU:HD23	1.90	0.72
3:L:89:TYR:CD2	3:L:273:ILE:HD11	2.24	0.72
3:A:315:LEU:HD12	3:A:318:TYR:CD1	2.22	0.72
3:C:67:LEU:HB3	3:C:76:TYR:HB2	1.71	0.72
3:H:230:ASP:HA	3:H:301:GLN:HG2	1.72	0.72
3:D:121:LEU:HA	3:D:184:PRO:HG3	1.69	0.72
3:H:277:ARG:CB	3:H:277:ARG:NH1	2.53	0.72
3:K:5:TYR:HE2	3:K:7:GLU:OE2	1.72	0.72
3:M:195:PRO:HA	3:M:303:GLN:HG3	1.71	0.72
3:H:240:ARG:NH2	3:M:208:PRO:HG2	2.05	0.72
3:J:211:ILE:HD12	3:J:313:TYR:CE2	2.25	0.72
3:C:273:ILE:C	3:C:274:ILE:HD12	2.15	0.72
3:E:13:TYR:OH	3:E:23:ILE:HG23	1.90	0.72
3:L:32:ARG:HD2	3:L:158:GLU:OE1	1.90	0.71
3:N:194:VAL:HG12	3:N:201:ILE:HD11	1.72	0.71
3:O:124:PHE:CD1	3:O:125:PRO:HD2	2.26	0.71
1:Q:61:LEU:HD21	1:Q:89:PHE:HE1	1.53	0.71
3:N:230:ASP:HA	3:N:301:GLN:CG	2.20	0.71
3:J:224:SER:OG	3:J:228:ASN:HB3	1.89	0.71
3:O:190:PRO:HB3	3:O:307:TYR:CD1	2.25	0.71
3:A:324:LEU:HB3	3:A:329:ALA:HB2	1.72	0.71
3:K:3:GLU:H	3:K:159:ARG:HB3	1.56	0.71
3:A:57:PHE:O	3:A:101:PRO:HG3	1.90	0.71
3:F:238:ILE:HD11	3:F:246:LYS:HD2	1.72	0.71
3:M:116:MET:HE1	3:O:256:ALA:HB2	1.72	0.71
3:M:190:PRO:HB3	3:M:307:TYR:HD1	1.55	0.71
3:M:345:ARG:HH11	3:M:345:ARG:HG3	1.54	0.71
3:O:42:ILE:HD11	3:O:113:LEU:HD13	1.71	0.71
3:L:56:PRO:HB3	3:L:81:THR:HG23	1.73	0.71
1:Q:33:LEU:HD13	1:Q:101:TYR:HB3	1.72	0.71
1:Q:50:ILE:HA	1:Q:86:ILE:CD1	2.21	0.71
3:B:186:VAL:HG22	3:B:311:VAL:HA	1.73	0.71
3:G:236:LEU:HD11	3:G:294:ILE:CG2	2.19	0.71
3:K:338:ARG:HG2	3:K:338:ARG:NH1	2.05	0.71
3:K:67:LEU:HB2	3:K:134:LEU:HD13	1.71	0.71
3:L:343:ILE:O	3:L:343:ILE:HG12	1.89	0.71
3:N:343:ILE:O	3:N:343:ILE:HG12	1.89	0.71
3:O:200:PRO:CG	3:O:233:GLU:HG3	2.21	0.71
3:B:27:ARG:HG2	3:B:132:ILE:HD12	1.73	0.71
3:G:182:VAL:HG21	3:G:339:GLN:HB3	1.71	0.71
3:H:33:LYS:HG2	3:H:156:THR:HB	1.71	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:345:ARG:HG3	3:L:345:ARG:NH1	1.98	0.71
3:O:87:MET:HE2	3:O:345:ARG:HB3	1.71	0.71
3:G:29:ASN:OD1	3:G:159:ARG:HA	1.91	0.70
3:I:42:ILE:HG22	3:I:145:VAL:HB	1.73	0.70
3:I:211:ILE:HD12	3:I:313:TYR:CE2	2.25	0.70
3:C:44:ASN:HB2	3:C:105:VAL:CG1	2.21	0.70
3:C:345:ARG:HG3	3:C:345:ARG:NH1	2.06	0.70
3:L:19:THR:O	3:L:137:LEU:HD12	1.90	0.70
3:C:42:ILE:HG22	3:C:145:VAL:HB	1.73	0.70
3:H:277:ARG:HB2	3:H:277:ARG:NH1	2.06	0.70
3:L:247:ILE:HG23	3:L:249:VAL:HG23	1.74	0.70
3:M:15:TRP:CE3	3:M:147:ILE:HB	2.26	0.70
3:C:4:ILE:H	3:C:4:ILE:HD12	1.57	0.70
3:I:233:GLU:OE1	3:I:250:SER:HA	1.91	0.70
3:L:219:VAL:HG22	3:L:306:VAL:HG22	1.73	0.70
3:N:190:PRO:HB3	3:N:307:TYR:HD1	1.53	0.70
3:D:42:ILE:HD11	3:D:113:LEU:HD13	1.73	0.70
3:E:190:PRO:HB3	3:E:307:TYR:HD1	1.56	0.70
3:K:13:TYR:OH	3:K:23:ILE:HG23	1.92	0.70
3:L:184:PRO:CB	3:L:343:ILE:HD12	2.21	0.70
3:D:105:VAL:HG21	3:D:145:VAL:HG11	1.74	0.70
3:I:25:ILE:HG23	3:I:155:ILE:HD13	1.73	0.70
3:I:195:PRO:HG2	3:I:201:ILE:CD1	2.21	0.70
3:J:194:VAL:HG12	3:J:201:ILE:HD11	1.73	0.70
3:K:28:ASN:ND2	3:O:70:GLU:HA	2.06	0.70
3:L:195:PRO:O	3:L:201:ILE:HD11	1.92	0.70
3:C:123:ARG:HD3	3:C:342:ARG:HH12	1.57	0.70
3:F:124:PHE:CD1	3:F:125:PRO:HD2	2.27	0.70
3:C:15:TRP:CE3	3:C:147:ILE:HB	2.26	0.70
3:C:284:LEU:HD11	3:C:294:ILE:CD1	2.22	0.70
3:E:190:PRO:HB3	3:E:307:TYR:CD1	2.26	0.70
3:G:187:ILE:HG22	3:G:188:GLU:N	2.07	0.70
3:G:332:VAL:O	3:G:336:VAL:HG23	1.92	0.70
3:I:57:PHE:CD2	3:I:58:PRO:HA	2.27	0.70
3:L:87:MET:CE	3:L:345:ARG:HB3	2.22	0.70
3:F:287:THR:HG21	3:F:318:TYR:CD2	2.27	0.70
3:I:321:LEU:HD22	3:I:332:VAL:HG11	1.72	0.70
1:Q:106:VAL:HG21	1:Q:201:ALA:HB1	1.74	0.69
1:Q:181:ILE:HD11	1:Q:200:ILE:HD11	1.74	0.69
3:E:61:LEU:HD21	3:E:142:PRO:HD3	1.72	0.69
3:I:333:GLN:OE1	3:I:333:GLN:HA	1.90	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:287:THR:HG21	3:J:318:TYR:CD2	2.26	0.69
3:L:254:LEU:HD21	3:L:274:ILE:HD11	1.73	0.69
3:C:25:ILE:HG23	3:C:155:ILE:HD13	1.74	0.69
3:G:37:GLN:NE2	3:G:39:ILE:HD11	2.07	0.69
3:J:4:ILE:HD12	3:J:4:ILE:H	1.56	0.69
3:K:61:LEU:HD21	3:K:142:PRO:HD3	1.75	0.69
3:L:344:LYS:HD2	3:L:345:ARG:HH12	1.56	0.69
3:M:47:THR:O	3:M:107:ALA:HB1	1.91	0.69
3:D:256:ALA:HB1	3:E:116:MET:HE1	1.73	0.69
3:F:41:SER:HB2	3:F:111:VAL:O	1.92	0.69
3:I:52:LEU:CD1	3:I:99:PRO:HG3	2.23	0.69
3:N:287:THR:HG21	3:N:318:TYR:CD2	2.27	0.69
3:G:89:TYR:CD2	3:G:273:ILE:HD11	2.28	0.69
3:G:315:LEU:HB2	3:G:318:TYR:HB2	1.74	0.69
3:K:19:THR:O	3:K:137:LEU:HD12	1.92	0.69
3:M:15:TRP:CZ3	3:M:147:ILE:HB	2.27	0.69
3:N:62:VAL:HG13	3:N:136:ILE:HG23	1.72	0.69
3:N:105:VAL:HG21	3:N:145:VAL:HG11	1.74	0.69
3:D:13:TYR:OH	3:D:23:ILE:HG23	1.91	0.69
3:A:286:LEU:HD21	3:A:294:ILE:HD12	1.74	0.69
3:E:315:LEU:HD12	3:E:318:TYR:HD1	1.57	0.69
3:K:42:ILE:HG23	3:K:147:ILE:CD1	2.22	0.69
3:N:47:THR:O	3:N:107:ALA:HB1	1.93	0.69
3:O:184:PRO:HB3	3:O:343:ILE:HD12	1.74	0.69
3:B:315:LEU:HD12	3:B:318:TYR:HD1	1.58	0.69
3:J:116:MET:HE1	3:L:256:ALA:HB2	1.73	0.69
3:A:56:PRO:O	3:A:59:TYR:HB2	1.93	0.69
3:B:17:ALA:HB1	3:B:140:GLN:HE22	1.58	0.69
3:E:200:PRO:HG3	3:E:233:GLU:HG3	1.75	0.69
3:H:124:PHE:CD1	3:H:125:PRO:HD2	2.27	0.69
3:H:256:ALA:CB	3:I:116:MET:HE1	2.23	0.69
3:I:142:PRO:HD2	3:I:147:ILE:HD11	1.75	0.69
3:L:176:GLU:O	3:L:177:MET:HG3	1.93	0.69
3:L:235:GLU:OE2	3:L:237:LYS:HE3	1.93	0.69
3:I:87:MET:HB3	3:I:95:ASN:ND2	2.08	0.69
3:A:54:SER:HA	3:A:101:PRO:HB3	1.75	0.69
3:C:52:LEU:CD1	3:C:99:PRO:HG3	2.23	0.69
3:C:105:VAL:HG21	3:C:145:VAL:HG11	1.74	0.68
3:C:121:LEU:HA	3:C:184:PRO:HG3	1.75	0.68
3:E:87:MET:HE2	3:E:345:ARG:HB3	1.75	0.68
3:M:238:ILE:HD11	3:M:246:LYS:HD2	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:343:ILE:HG12	3:B:343:ILE:O	1.92	0.68
3:G:42:ILE:HG12	3:G:147:ILE:HD12	1.75	0.68
3:G:90:THR:CB	3:G:345:ARG:HG2	2.23	0.68
3:G:246:LYS:HE2	3:G:246:LYS:HA	1.73	0.68
3:I:63:GLN:HG2	3:I:64:THR:HG23	1.74	0.68
3:E:208:PRO:HG2	3:O:240:ARG:HH21	1.59	0.68
3:I:56:PRO:HG2	3:I:60:ASN:ND2	2.07	0.68
3:I:122:ALA:HB1	3:I:339:GLN:HG3	1.74	0.68
3:J:329:ALA:O	3:J:333:GLN:HG2	1.94	0.68
3:L:195:PRO:HG2	3:L:201:ILE:CD1	2.23	0.68
3:B:13:TYR:OH	3:B:23:ILE:HG23	1.93	0.68
3:C:90:THR:CB	3:C:345:ARG:HG2	2.22	0.68
3:E:200:PRO:CG	3:E:233:GLU:HG3	2.24	0.68
3:N:195:PRO:HA	3:N:303:GLN:HG3	1.74	0.68
3:A:25:ILE:HG23	3:A:155:ILE:HD13	1.75	0.68
3:A:332:VAL:O	3:A:336:VAL:HG23	1.93	0.68
3:B:87:MET:CE	3:B:118:GLU:HB3	2.24	0.68
3:G:87:MET:HE2	3:G:345:ARG:HB3	1.74	0.68
3:G:235:GLU:OE2	3:G:237:LYS:HE3	1.93	0.68
3:J:47:THR:O	3:J:107:ALA:HB1	1.92	0.68
3:K:230:ASP:O	3:K:232:THR:HG23	1.93	0.68
3:L:236:LEU:HD11	3:L:294:ILE:HG22	1.75	0.68
3:O:47:THR:O	3:O:107:ALA:HB1	1.94	0.68
4:P:101:ASN:ND2	4:P:123:THR:HG22	2.09	0.68
3:D:230:ASP:HA	3:D:301:GLN:HG2	1.75	0.68
3:D:15:TRP:CE3	3:D:147:ILE:HB	2.29	0.68
3:E:92:LYS:N	3:E:92:LYS:HD2	2.07	0.68
3:E:210:GLN:HG3	3:E:212:TYR:CE2	2.29	0.68
3:G:63:GLN:HG2	3:G:64:THR:HG23	1.76	0.68
3:L:42:ILE:HD11	3:L:113:LEU:HD13	1.74	0.68
3:M:254:LEU:HD21	3:M:274:ILE:HD11	1.76	0.68
3:N:65:PHE:CE1	3:N:136:ILE:HG12	2.29	0.68
3:N:230:ASP:HA	3:N:301:GLN:HG2	1.74	0.68
3:K:233:GLU:OE1	3:K:250:SER:HA	1.94	0.68
3:A:57:PHE:CD2	3:A:58:PRO:HA	2.29	0.68
3:F:87:MET:CE	3:F:345:ARG:HB3	2.23	0.68
3:I:28:ASN:HD21	3:M:70:GLU:CA	2.06	0.68
3:M:56:PRO:HG2	3:M:60:ASN:ND2	2.07	0.68
3:C:195:PRO:HA	3:C:303:GLN:HG3	1.75	0.68
3:E:195:PRO:HG2	3:E:201:ILE:HD12	1.76	0.68
3:F:32:ARG:HD2	3:F:158:GLU:OE1	1.93	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:184:PRO:CB	3:M:343:ILE:HD12	2.24	0.68
3:O:52:LEU:CD1	3:O:99:PRO:HG3	2.24	0.68
3:A:184:PRO:CB	3:A:343:ILE:HD12	2.23	0.67
3:F:345:ARG:HG3	3:F:345:ARG:NH1	2.04	0.67
3:L:68:SER:HB2	3:L:73:LYS:O	1.94	0.67
3:F:90:THR:CB	3:F:345:ARG:HG2	2.24	0.67
3:F:224:SER:OG	3:F:228:ASN:HB3	1.93	0.67
3:I:13:TYR:OH	3:I:23:ILE:HG23	1.94	0.67
3:K:28:ASN:ND2	3:O:70:GLU:C	2.52	0.67
3:O:67:LEU:HD13	3:O:134:LEU:HB2	1.75	0.67
3:E:224:SER:OG	3:E:228:ASN:HB3	1.94	0.67
3:B:190:PRO:HB3	3:B:307:TYR:CD1	2.29	0.67
3:I:47:THR:O	3:I:107:ALA:HB1	1.95	0.67
1:Q:106:VAL:HG11	1:Q:202:GLY:CA	2.24	0.67
3:B:189:ILE:HD12	3:B:310:TYR:HE2	1.60	0.67
3:C:184:PRO:HB3	3:C:343:ILE:HD12	1.77	0.67
3:F:142:PRO:HD2	3:F:147:ILE:HD11	1.76	0.67
3:M:94:GLN:HG3	3:O:263:GLN:C	2.19	0.67
3:B:160:VAL:HG12	3:B:165:ILE:HG13	1.76	0.67
3:F:184:PRO:HB3	3:F:343:ILE:HD12	1.76	0.67
3:K:230:ASP:HA	3:K:301:GLN:HG2	1.75	0.67
3:N:52:LEU:HD21	3:N:145:VAL:HG21	1.75	0.67
3:N:56:PRO:CB	3:N:81:THR:HG23	2.25	0.67
3:O:54:SER:HA	3:O:101:PRO:HB3	1.77	0.67
3:C:238:ILE:HD11	3:C:246:LYS:HD2	1.76	0.67
3:D:3:GLU:HB2	3:D:159:ARG:HB3	1.77	0.67
3:G:67:LEU:HB3	3:G:76:TYR:HB2	1.76	0.67
3:H:179:LEU:HG	3:H:321:LEU:HD21	1.77	0.67
3:N:315:LEU:HD12	3:N:318:TYR:HD1	1.60	0.67
3:O:56:PRO:O	3:O:59:TYR:HB2	1.94	0.67
3:B:230:ASP:O	3:B:232:THR:HG23	1.94	0.67
3:B:345:ARG:HH11	3:B:345:ARG:HG3	1.60	0.67
3:D:238:ILE:HD11	3:D:246:LYS:HD2	1.77	0.67
3:G:64:THR:HA	3:G:79:SER:HA	1.75	0.67
3:L:15:TRP:HB2	3:L:38:LEU:HD11	1.76	0.67
3:M:9:LEU:HD11	3:M:155:ILE:HD12	1.76	0.67
3:N:68:SER:HB2	3:N:73:LYS:O	1.95	0.67
3:A:67:LEU:HD13	3:A:134:LEU:HB2	1.76	0.67
3:B:200:PRO:CG	3:B:233:GLU:HG3	2.24	0.67
3:I:92:LYS:HD2	3:I:92:LYS:N	2.09	0.67
3:K:62:VAL:HG11	3:K:65:PHE:CZ	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:247:ILE:HG22	3:N:249:VAL:HG23	1.75	0.67
1:Q:191:GLN:HB3	4:P:25:LYS:CB	2.25	0.67
3:D:315:LEU:HD12	3:D:318:TYR:HD1	1.60	0.67
4:P:245:TYR:CD1	4:P:245:TYR:O	2.48	0.67
1:Q:189:ASN:HD22	4:P:29:ASP:HB2	1.60	0.66
3:A:42:ILE:HG22	3:A:145:VAL:HB	1.77	0.66
3:G:247:ILE:CG2	3:G:249:VAL:HG23	2.25	0.66
3:K:184:PRO:HB3	3:K:343:ILE:HD12	1.77	0.66
3:M:4:ILE:HB	3:O:278:LYS:O	1.94	0.66
3:B:92:LYS:N	3:B:92:LYS:CD	2.57	0.66
3:D:37:GLN:HE22	3:F:252:ALA:HB1	1.59	0.66
3:D:90:THR:CB	3:D:345:ARG:HG2	2.25	0.66
3:H:47:THR:O	3:H:107:ALA:HB1	1.94	0.66
3:H:64:THR:HA	3:H:79:SER:HA	1.77	0.66
4:P:190:THR:HG22	4:P:191:SER:N	2.10	0.66
1:Q:50:ILE:HG23	1:Q:86:ILE:CD1	2.16	0.66
3:A:287:THR:HG21	3:A:318:TYR:CD2	2.31	0.66
3:B:15:TRP:CZ3	3:B:147:ILE:HB	2.31	0.66
3:H:121:LEU:HA	3:H:184:PRO:HG3	1.76	0.66
3:H:176:GLU:O	3:H:177:MET:HG3	1.96	0.66
3:E:182:VAL:HG21	3:E:339:GLN:HB3	1.78	0.66
3:I:32:ARG:HB2	3:I:156:THR:HG22	1.76	0.66
3:M:17:ALA:HB1	3:M:140:GLN:NE2	2.11	0.66
3:N:230:ASP:O	3:N:232:THR:HG23	1.95	0.66
3:N:254:LEU:HD21	3:N:274:ILE:HD11	1.78	0.66
3:B:47:THR:O	3:B:107:ALA:HB1	1.96	0.66
3:F:56:PRO:HB3	3:F:81:THR:HG23	1.77	0.66
3:J:44:ASN:HD22	3:J:107:ALA:HA	1.61	0.66
3:L:15:TRP:CZ3	3:L:147:ILE:HB	2.31	0.66
3:N:259:GLN:HG3	3:O:96:PRO:HG3	1.76	0.66
3:O:68:SER:HB2	3:O:73:LYS:O	1.95	0.66
3:D:32:ARG:HH21	3:D:342:ARG:CD	2.08	0.66
3:E:253:ALA:O	3:E:256:ALA:HB3	1.96	0.66
3:M:247:ILE:HG22	3:M:249:VAL:HG23	1.76	0.66
3:N:236:LEU:HB2	3:N:247:ILE:HD12	1.77	0.66
4:P:318:ALA:HB1	4:P:349:ILE:CD1	2.25	0.66
3:B:249:VAL:HG12	3:B:253:ALA:HB3	1.76	0.66
3:C:15:TRP:HB2	3:C:38:LEU:HD11	1.77	0.66
3:C:47:THR:O	3:C:107:ALA:HB1	1.95	0.66
3:D:137:LEU:O	3:D:137:LEU:HG	1.95	0.66
3:I:249:VAL:HG12	3:I:253:ALA:HB3	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:337:ALA:O	3:B:340:LYS:HG2	1.95	0.66
3:C:274:ILE:HD12	3:C:274:ILE:N	2.11	0.66
3:I:224:SER:OG	3:I:228:ASN:HB3	1.95	0.66
3:K:9:LEU:HD21	3:K:26:PRO:CD	2.25	0.66
3:M:256:ALA:HB1	3:N:116:MET:HE1	1.78	0.66
3:O:25:ILE:HG23	3:O:155:ILE:CD1	2.26	0.66
3:O:345:ARG:HG3	3:O:345:ARG:NH1	2.07	0.66
3:C:92:LYS:HD2	3:C:92:LYS:H	1.61	0.66
3:E:32:ARG:HH21	3:E:342:ARG:HD3	1.60	0.66
3:F:3:GLU:HB2	3:F:159:ARG:HB3	1.78	0.66
3:F:42:ILE:HG22	3:F:145:VAL:HB	1.78	0.66
3:D:247:ILE:CG2	3:D:249:VAL:HG23	2.26	0.66
3:H:253:ALA:O	3:H:256:ALA:HB3	1.95	0.66
3:J:190:PRO:HB3	3:J:307:TYR:HD1	1.60	0.66
3:M:52:LEU:CD2	3:M:145:VAL:HG21	2.26	0.66
1:Q:61:LEU:HD21	1:Q:89:PHE:CE1	2.30	0.65
3:B:142:PRO:HD2	3:B:147:ILE:HD11	1.78	0.65
3:C:30:PHE:HZ	3:C:165:ILE:HD11	1.60	0.65
3:H:236:LEU:HB2	3:H:247:ILE:HD12	1.78	0.65
3:H:240:ARG:HH12	3:H:290:PRO:HB2	1.60	0.65
3:A:15:TRP:CE3	3:A:147:ILE:HB	2.31	0.65
3:B:56:PRO:HB3	3:B:81:THR:HG23	1.78	0.65
3:G:29:ASN:CG	3:G:159:ARG:HA	2.21	0.65
3:L:286:LEU:HD21	3:L:294:ILE:HD12	1.78	0.65
3:O:89:TYR:HD2	3:O:273:ILE:HD11	1.61	0.65
3:J:94:GLN:HG3	3:L:263:GLN:CA	2.27	0.65
3:K:230:ASP:HA	3:K:301:GLN:CG	2.25	0.65
3:K:319:ASP:OD2	3:K:319:ASP:N	2.28	0.65
3:N:62:VAL:CG1	3:N:136:ILE:HG23	2.26	0.65
3:E:90:THR:HB	3:E:345:ARG:HG2	1.78	0.65
3:G:230:ASP:HA	3:G:301:GLN:HG2	1.78	0.65
3:H:247:ILE:CG2	3:H:249:VAL:HG23	2.26	0.65
3:L:52:LEU:HD21	3:L:145:VAL:HG21	1.79	0.65
3:G:247:ILE:HG22	3:G:249:VAL:HG23	1.76	0.65
3:H:15:TRP:CZ3	3:H:147:ILE:HB	2.32	0.65
3:J:182:VAL:HG21	3:J:339:GLN:HB3	1.79	0.65
3:O:42:ILE:HG23	3:O:147:ILE:HD13	1.79	0.65
4:P:158:PRO:HG2	4:P:160:ILE:HD12	1.77	0.65
3:F:315:LEU:HD12	3:F:318:TYR:HD1	1.62	0.65
3:G:116:MET:HG3	3:G:117:TRP:N	2.11	0.65
3:O:247:ILE:HG12	3:O:279:TYR:CD2	2.31	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:P:289:ASN:ND2	4:P:291:GLN:H	1.95	0.65
3:I:44:ASN:HD22	3:I:107:ALA:HA	1.61	0.65
3:I:87:MET:HE1	3:I:345:ARG:CB	2.17	0.65
3:K:195:PRO:HG2	3:K:201:ILE:CD1	2.27	0.65
3:K:343:ILE:O	3:K:343:ILE:HG12	1.95	0.65
3:O:247:ILE:HG22	3:O:249:VAL:HG23	1.78	0.65
1:Q:9:LYS:HB3	2:R:10:UNK:CB	2.27	0.65
3:J:17:ALA:HB1	3:J:140:GLN:HE22	1.62	0.65
3:M:200:PRO:HG3	3:M:233:GLU:HG3	1.78	0.65
3:M:221:ASN:HB2	3:M:228:ASN:HD22	1.61	0.65
3:B:131:ASN:HD22	3:B:133:ILE:HD11	1.62	0.65
3:H:25:ILE:HG23	3:H:155:ILE:CD1	2.26	0.65
3:O:173:ALA:HB2	3:O:320:GLN:CD	2.22	0.65
3:G:184:PRO:CB	3:G:343:ILE:HD12	2.26	0.64
3:J:56:PRO:HB3	3:J:81:THR:HG23	1.79	0.64
3:K:56:PRO:O	3:K:59:TYR:HB2	1.98	0.64
3:M:259:GLN:OE1	3:M:266:PRO:HD3	1.97	0.64
3:D:159:ARG:NH1	3:D:161:THR:HG22	2.11	0.64
3:H:67:LEU:HD21	3:H:121:LEU:HD21	1.79	0.64
3:M:83:LEU:HD23	3:M:117:TRP:HB3	1.77	0.64
3:F:38:LEU:HD13	3:F:151:PHE:CE2	2.32	0.64
3:H:68:SER:HB2	3:H:73:LYS:O	1.96	0.64
3:L:54:SER:CA	3:L:101:PRO:HB3	2.27	0.64
4:P:182:MET:HE1	4:P:241:PHE:CZ	2.32	0.64
3:B:30:PHE:CD1	3:B:160:VAL:HG21	2.32	0.64
3:M:52:LEU:HD21	3:M:145:VAL:HG21	1.80	0.64
3:D:171:LEU:HB3	3:D:175:GLY:HA2	1.80	0.64
3:K:121:LEU:HA	3:K:184:PRO:HG3	1.78	0.64
3:O:230:ASP:HA	3:O:301:GLN:HG2	1.80	0.64
3:B:182:VAL:HG21	3:B:339:GLN:HB3	1.78	0.64
3:G:113:LEU:HD22	3:G:147:ILE:HG23	1.79	0.64
3:I:240:ARG:NH2	3:I:290:PRO:HB2	2.13	0.64
3:J:69:TYR:O	3:J:70:GLU:HB2	1.98	0.64
3:L:324:LEU:HD21	3:L:332:VAL:HG21	1.79	0.64
3:L:329:ALA:O	3:L:333:GLN:HG2	1.98	0.64
3:N:200:PRO:HG3	3:N:233:GLU:HG3	1.78	0.64
3:B:42:ILE:HG23	3:B:147:ILE:CD1	2.25	0.64
3:B:87:MET:HE1	3:B:345:ARG:HB3	1.79	0.64
3:C:255:GLN:NE2	3:C:266:PRO:HB3	2.13	0.64
3:E:208:PRO:HD3	3:E:291:SER:HB3	1.80	0.64
3:H:105:VAL:HG21	3:H:145:VAL:HG11	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:121:LEU:HA	3:J:184:PRO:HG3	1.80	0.64
3:M:200:PRO:CG	3:M:233:GLU:HG3	2.27	0.64
3:N:185:LYS:HG2	3:N:187:ILE:HG12	1.80	0.64
3:A:230:ASP:HA	3:A:301:GLN:HG2	1.79	0.64
3:C:293:SER:C	3:C:294:ILE:HG13	2.23	0.64
3:F:259:GLN:OE1	3:F:266:PRO:HD3	1.98	0.64
3:L:83:LEU:HD23	3:L:117:TRP:HB3	1.79	0.64
3:M:187:ILE:HG22	3:M:188:GLU:N	2.13	0.64
3:N:56:PRO:O	3:N:59:TYR:HB2	1.98	0.64
3:C:230:ASP:HA	3:C:301:GLN:CG	2.28	0.64
3:F:25:ILE:HG23	3:F:155:ILE:CD1	2.28	0.64
3:F:65:PHE:CE1	3:F:136:ILE:HG12	2.32	0.64
3:I:9:LEU:HD11	3:I:155:ILE:HD12	1.79	0.64
3:I:61:LEU:HD21	3:I:142:PRO:HD3	1.79	0.64
3:K:286:LEU:HD21	3:K:294:ILE:HD12	1.79	0.64
3:M:122:ALA:HB1	3:M:339:GLN:HG3	1.80	0.64
3:N:125:PRO:HG3	3:N:177:MET:HG2	1.79	0.64
3:N:236:LEU:HB3	3:N:247:ILE:HG13	1.79	0.64
4:P:318:ALA:HB1	4:P:349:ILE:HD13	1.78	0.64
3:A:4:ILE:HG23	3:A:32:ARG:HD3	1.79	0.64
3:G:274:ILE:HD12	3:G:274:ILE:N	2.13	0.64
3:I:195:PRO:HG2	3:I:201:ILE:HD12	1.80	0.64
3:J:37:GLN:HG2	3:J:116:MET:HE2	1.78	0.64
3:L:87:MET:HE2	3:L:345:ARG:HB3	1.79	0.64
3:M:230:ASP:HA	3:M:301:GLN:HG2	1.80	0.64
3:N:83:LEU:HD12	3:N:86:LEU:HD23	1.80	0.64
1:Q:21:TYR:CD1	1:Q:118:THR:HG22	2.32	0.63
3:B:96:PRO:HB3	3:B:114:ASN:HD21	1.63	0.63
3:F:56:PRO:CB	3:F:81:THR:HG23	2.28	0.63
3:G:224:SER:OG	3:G:228:ASN:HB3	1.98	0.63
3:K:256:ALA:HB1	3:L:116:MET:HE1	1.78	0.63
3:K:259:GLN:OE1	3:K:266:PRO:HD3	1.97	0.63
3:L:159:ARG:HH11	3:L:159:ARG:HG2	1.62	0.63
3:A:190:PRO:HB3	3:A:307:TYR:HD1	1.60	0.63
3:C:324:LEU:HG	3:C:328:VAL:HB	1.79	0.63
3:H:121:LEU:HD12	3:H:121:LEU:N	2.13	0.63
3:J:61:LEU:HD21	3:J:142:PRO:HD3	1.79	0.63
3:A:239:VAL:CG2	3:A:295:GLU:HG2	2.29	0.63
3:H:332:VAL:O	3:H:336:VAL:HG23	1.98	0.63
3:L:236:LEU:HD11	3:L:294:ILE:CG2	2.28	0.63
3:M:172:GLY:HA3	3:M:317:TYR:CE2	2.34	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:176:GLU:O	3:N:177:MET:HG3	1.98	0.63
3:O:37:GLN:NE2	3:O:39:ILE:HD11	2.12	0.63
4:P:245:TYR:O	4:P:245:TYR:CG	2.50	0.63
3:C:61:LEU:HD21	3:C:142:PRO:HD3	1.78	0.63
3:F:255:GLN:O	3:F:259:GLN:HG2	1.99	0.63
3:I:216:LEU:HD23	3:I:309:LEU:HD13	1.80	0.63
3:A:30:PHE:CD1	3:A:160:VAL:HG21	2.33	0.63
3:G:38:LEU:HD13	3:G:151:PHE:CZ	2.33	0.63
3:I:273:ILE:C	3:I:274:ILE:HD12	2.23	0.63
3:E:247:ILE:HG12	3:E:279:TYR:CD2	2.32	0.63
3:F:159:ARG:HG2	3:F:159:ARG:HH11	1.63	0.63
3:K:247:ILE:HG12	3:K:279:TYR:CD2	2.33	0.63
1:Q:146:PHE:HD1	1:Q:147:GLY:CA	2.10	0.63
3:D:321:LEU:HD22	3:D:332:VAL:HG11	1.80	0.63
3:F:190:PRO:HB3	3:F:307:TYR:CD1	2.34	0.63
3:I:182:VAL:HG21	3:I:339:GLN:HB3	1.79	0.63
3:J:78:VAL:HG21	3:J:83:LEU:HB2	1.81	0.63
3:K:38:LEU:HD13	3:K:151:PHE:CE2	2.32	0.63
3:K:255:GLN:NE2	3:K:266:PRO:HB3	2.14	0.63
3:L:182:VAL:HG22	3:L:336:VAL:HG13	1.81	0.63
3:M:221:ASN:HB2	3:M:228:ASN:ND2	2.13	0.63
3:O:184:PRO:CB	3:O:343:ILE:HD12	2.28	0.63
1:Q:50:ILE:HA	1:Q:86:ILE:HD12	1.80	0.63
3:C:159:ARG:CG	3:C:159:ARG:O	2.46	0.63
3:J:230:ASP:HA	3:J:301:GLN:CG	2.29	0.63
3:D:184:PRO:HB3	3:D:343:ILE:HD12	1.81	0.63
3:E:205:TYR:CD1	3:E:292:ASP:HA	2.34	0.63
3:H:142:PRO:HB2	3:H:145:VAL:CG2	2.29	0.63
3:M:313:TYR:CZ	3:M:340:LYS:HB2	2.34	0.63
3:A:122:ALA:HB1	3:A:339:GLN:HG3	1.80	0.62
3:K:168:GLU:HG2	3:K:335:TYR:CE1	2.34	0.62
3:L:203:VAL:HG21	3:L:298:LEU:HB2	1.80	0.62
3:M:128:MET:HE1	3:M:171:LEU:HD11	1.80	0.62
1:Q:186:MET:CG	1:Q:188:PHE:HE1	2.09	0.62
3:E:159:ARG:HH11	3:E:159:ARG:HG3	1.63	0.62
3:L:113:LEU:HD23	3:L:149:ALA:CB	2.28	0.62
3:O:57:PHE:CE2	3:O:142:PRO:HG2	2.34	0.62
3:B:122:ALA:HB1	3:B:339:GLN:HG3	1.81	0.62
3:E:195:PRO:HG2	3:E:201:ILE:CD1	2.29	0.62
3:E:208:PRO:CG	3:O:240:ARG:HH21	2.12	0.62
3:E:230:ASP:HA	3:E:301:GLN:CG	2.28	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:52:LEU:CD1	3:F:99:PRO:HG3	2.28	0.62
3:H:142:PRO:HD2	3:H:147:ILE:HD11	1.81	0.62
3:J:247:ILE:CG2	3:J:249:VAL:HG23	2.28	0.62
3:K:285:ASP:O	3:K:286:LEU:HD23	1.99	0.62
3:L:254:LEU:HD21	3:L:274:ILE:CD1	2.29	0.62
3:C:176:GLU:O	3:C:177:MET:HG3	1.99	0.62
3:E:256:ALA:CB	3:F:116:MET:HE1	2.29	0.62
3:M:228:ASN:OD1	3:M:270:ALA:HB2	1.99	0.62
3:M:258:ASN:HA	3:M:261:GLU:HB3	1.80	0.62
3:O:255:GLN:O	3:O:259:GLN:HG2	1.99	0.62
3:A:83:LEU:HD23	3:A:117:TRP:HB3	1.81	0.62
3:K:56:PRO:HB3	3:K:81:THR:HG23	1.81	0.62
3:A:195:PRO:HA	3:A:303:GLN:HG3	1.81	0.62
3:J:68:SER:HB2	3:J:73:LYS:O	2.00	0.62
3:N:340:LYS:HG3	3:N:341:ARG:N	2.14	0.62
3:O:324:LEU:HD21	3:O:332:VAL:HG21	1.82	0.62
3:B:190:PRO:HB3	3:B:307:TYR:HD1	1.64	0.62
3:C:54:SER:HA	3:C:101:PRO:HB3	1.80	0.62
3:C:236:LEU:CB	3:C:247:ILE:HD12	2.30	0.62
3:C:343:ILE:O	3:C:343:ILE:HG12	1.99	0.62
3:H:287:THR:HG21	3:H:318:TYR:CD2	2.35	0.62
3:L:190:PRO:HB3	3:L:307:TYR:HD1	1.62	0.62
3:N:38:LEU:HD13	3:N:151:PHE:CE2	2.35	0.62
3:G:329:ALA:O	3:G:333:GLN:HG2	1.98	0.62
3:I:41:SER:HB2	3:I:111:VAL:O	2.00	0.62
3:J:62:VAL:HG11	3:J:65:PHE:CZ	2.34	0.62
3:J:236:LEU:HB2	3:J:247:ILE:HD12	1.82	0.62
3:N:42:ILE:HD11	3:N:113:LEU:HD13	1.81	0.62
3:A:216:LEU:HD23	3:A:309:LEU:HD13	1.82	0.62
3:F:274:ILE:HD12	3:F:274:ILE:N	2.15	0.62
3:G:67:LEU:HD13	3:G:134:LEU:HB2	1.81	0.62
3:H:13:TYR:HB3	3:H:21:ILE:HG21	1.82	0.62
3:J:25:ILE:HG23	3:J:155:ILE:HD11	1.80	0.62
3:J:42:ILE:HD11	3:J:113:LEU:HD13	1.81	0.62
3:M:256:ALA:CB	3:N:116:MET:HE1	2.29	0.62
3:N:329:ALA:O	3:N:333:GLN:HG2	1.99	0.62
3:B:205:TYR:CD1	3:B:295:GLU:HB3	2.35	0.62
3:F:4:ILE:HG23	3:F:32:ARG:HD3	1.81	0.62
3:G:13:TYR:HB3	3:G:21:ILE:HG21	1.82	0.62
3:G:219:VAL:O	3:G:220:ILE:HD13	2.00	0.62
3:J:38:LEU:HD13	3:J:151:PHE:CZ	2.35	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:42:ILE:HG22	3:L:145:VAL:HB	1.82	0.62
3:L:131:ASN:HB3	3:L:133:ILE:HD11	1.82	0.62
3:O:13:TYR:OH	3:O:23:ILE:HG23	1.99	0.62
3:O:235:GLU:OE1	3:O:248:LYS:HD3	2.00	0.62
4:P:150:GLU:OE1	4:P:150:GLU:HA	1.99	0.62
3:A:69:TYR:O	3:A:70:GLU:HB2	1.99	0.61
3:H:54:SER:HA	3:H:101:PRO:HB3	1.82	0.61
1:Q:189:ASN:ND2	4:P:29:ASP:CB	2.63	0.61
3:F:184:PRO:CB	3:F:343:ILE:HD12	2.30	0.61
3:J:253:ALA:O	3:J:256:ALA:HB3	2.01	0.61
3:N:124:PHE:CD1	3:N:125:PRO:HD2	2.35	0.61
1:Q:44:SER:HB2	1:Q:122:LEU:HB2	1.82	0.61
3:B:194:VAL:HG12	3:B:201:ILE:HD11	1.81	0.61
3:C:17:ALA:HB1	3:C:140:GLN:NE2	2.14	0.61
3:D:47:THR:O	3:D:107:ALA:HB1	1.99	0.61
3:D:254:LEU:HD21	3:D:274:ILE:HD11	1.83	0.61
3:E:41:SER:HB2	3:E:111:VAL:O	2.00	0.61
3:E:47:THR:O	3:E:107:ALA:HB1	2.00	0.61
3:F:187:ILE:HG22	3:F:188:GLU:N	2.15	0.61
3:F:257:GLU:O	3:F:261:GLU:HB2	2.00	0.61
3:J:105:VAL:HA	3:J:111:VAL:HG13	1.83	0.61
3:M:253:ALA:O	3:M:256:ALA:HB3	2.00	0.61
3:A:94:GLN:HB3	3:C:259:GLN:HE21	1.66	0.61
3:D:44:ASN:ND2	3:D:107:ALA:HA	2.15	0.61
3:F:3:GLU:H	3:F:159:ARG:HB3	1.65	0.61
3:G:195:PRO:O	3:G:201:ILE:HD11	1.99	0.61
3:J:33:LYS:HD2	3:J:118:GLU:OE2	1.99	0.61
3:K:244:THR:HG22	3:K:245:ASP:N	2.15	0.61
3:O:32:ARG:HA	3:O:122:ALA:O	2.01	0.61
3:B:52:LEU:CD1	3:B:99:PRO:HG3	2.29	0.61
3:D:247:ILE:HG22	3:D:249:VAL:HG23	1.81	0.61
3:E:64:THR:HA	3:E:79:SER:HA	1.81	0.61
1:Q:106:VAL:O	1:Q:109:VAL:HG22	1.99	0.61
3:A:236:LEU:HB2	3:A:247:ILE:HD12	1.81	0.61
3:D:4:ILE:H	3:D:4:ILE:HD12	1.65	0.61
3:E:62:VAL:HG13	3:E:136:ILE:HG23	1.83	0.61
3:F:61:LEU:HD21	3:F:142:PRO:HD3	1.82	0.61
3:J:64:THR:HA	3:J:79:SER:HA	1.82	0.61
3:K:259:GLN:HG3	3:L:96:PRO:CG	2.31	0.61
3:K:345:ARG:HG3	3:K:345:ARG:NH1	2.16	0.61
3:N:257:GLU:O	3:N:261:GLU:CB	2.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:280:PHE:CE1	3:N:284:LEU:HD22	2.36	0.61
1:Q:25:GLU:C	1:Q:26:TYR:HD2	2.09	0.61
3:A:324:LEU:HD21	3:A:332:VAL:HG21	1.83	0.61
3:B:211:ILE:HG22	3:B:283:ASP:HB3	1.83	0.61
3:C:254:LEU:HD21	3:C:274:ILE:HD11	1.83	0.61
3:E:321:LEU:HD22	3:E:332:VAL:HG11	1.80	0.61
3:G:236:LEU:HD11	3:G:294:ILE:HG22	1.81	0.61
3:N:257:GLU:O	3:N:261:GLU:HB2	1.99	0.61
3:D:321:LEU:HD22	3:D:332:VAL:CG1	2.31	0.61
3:J:343:ILE:HG12	3:J:343:ILE:O	1.99	0.61
3:N:54:SER:HA	3:N:101:PRO:HB3	1.83	0.61
1:Q:106:VAL:HG11	1:Q:201:ALA:C	2.25	0.61
1:Q:211:THR:CG2	4:P:57:SER:HB2	2.27	0.61
3:B:13:TYR:HB3	3:B:21:ILE:HG21	1.82	0.61
3:B:230:ASP:HA	3:B:301:GLN:HG2	1.81	0.61
3:E:159:ARG:HG3	3:E:159:ARG:NH1	2.15	0.61
3:E:334:GLN:HA	3:E:334:GLN:OE1	2.00	0.61
3:I:215:GLN:HG3	3:I:310:TYR:CE1	2.36	0.61
3:L:205:TYR:CD1	3:L:292:ASP:HA	2.36	0.61
3:M:19:THR:HG22	3:M:20:ASN:N	2.16	0.61
3:M:83:LEU:CD2	3:M:117:TRP:HB3	2.30	0.61
3:N:259:GLN:HG3	3:O:96:PRO:CG	2.31	0.61
1:Q:191:GLN:HB3	4:P:25:LYS:HB2	1.83	0.61
3:D:179:LEU:HG	3:D:321:LEU:HD21	1.83	0.61
3:E:321:LEU:HD22	3:E:332:VAL:CG1	2.31	0.61
3:H:277:ARG:HA	3:H:282:GLY:O	2.00	0.61
3:I:36:VAL:HG21	3:I:134:LEU:HD21	1.82	0.61
3:K:287:THR:HG21	3:K:318:TYR:CD2	2.36	0.61
3:M:39:ILE:HD12	3:M:152:TYR:CD1	2.36	0.61
3:N:61:LEU:HD21	3:N:142:PRO:HD3	1.82	0.61
3:A:64:THR:HA	3:A:79:SER:HA	1.81	0.60
3:B:56:PRO:HG2	3:B:60:ASN:ND2	2.12	0.60
3:C:215:GLN:HG3	3:C:310:TYR:CE1	2.35	0.60
3:F:64:THR:OG1	3:F:137:LEU:HB3	2.01	0.60
3:I:116:MET:HG3	3:I:117:TRP:N	2.15	0.60
3:L:4:ILE:HA	3:L:157:TYR:O	2.01	0.60
3:A:253:ALA:O	3:A:256:ALA:HB3	2.01	0.60
3:C:182:VAL:HG21	3:C:339:GLN:HB3	1.83	0.60
3:I:190:PRO:HB3	3:I:307:TYR:HD1	1.62	0.60
3:K:172:GLY:HA3	3:K:317:TYR:CZ	2.37	0.60
3:L:52:LEU:CD2	3:L:145:VAL:HG21	2.32	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:42:ILE:HG23	3:M:147:ILE:HD13	1.84	0.60
3:M:213:LYS:HB2	3:M:311:VAL:O	2.02	0.60
3:O:63:GLN:O	3:O:79:SER:HB2	2.00	0.60
3:B:168:GLU:HG2	3:B:335:TYR:CE1	2.35	0.60
3:B:200:PRO:HG2	3:B:233:GLU:HG3	1.83	0.60
3:I:67:LEU:HD13	3:I:134:LEU:HB2	1.83	0.60
3:J:25:ILE:HG23	3:J:155:ILE:HD13	1.82	0.60
3:L:69:TYR:O	3:L:70:GLU:HB2	2.01	0.60
3:L:315:LEU:HD12	3:L:318:TYR:HD1	1.66	0.60
3:A:205:TYR:CD1	3:A:295:GLU:HB3	2.36	0.60
3:B:26:PRO:HB2	3:B:157:TYR:OH	2.02	0.60
3:B:67:LEU:HD13	3:B:134:LEU:HB2	1.83	0.60
3:H:273:ILE:C	3:H:274:ILE:HD12	2.27	0.60
3:J:315:LEU:HD12	3:J:318:TYR:HD1	1.66	0.60
3:K:202:HIS:HA	3:K:297:ASP:OD2	2.01	0.60
3:N:174:ASP:OD2	3:N:317:TYR:HE2	1.84	0.60
3:A:47:THR:O	3:A:107:ALA:HB1	2.00	0.60
3:E:74:THR:O	3:O:243:PRO:HG2	2.01	0.60
3:F:9:LEU:HD11	3:F:155:ILE:HD12	1.83	0.60
3:F:219:VAL:HG21	3:F:300:LEU:HD21	1.84	0.60
3:I:121:LEU:HA	3:I:184:PRO:HG3	1.82	0.60
3:L:176:GLU:C	3:L:177:MET:HG3	2.26	0.60
3:L:325:PRO:HB2	3:L:328:VAL:HG23	1.82	0.60
3:M:116:MET:HG3	3:M:117:TRP:N	2.15	0.60
3:M:236:LEU:HD11	3:M:294:ILE:CG2	2.31	0.60
3:M:324:LEU:HG	3:M:328:VAL:HB	1.83	0.60
1:Q:56:VAL:O	1:Q:102:ASP:HB2	2.02	0.60
1:Q:186:MET:CG	1:Q:188:PHE:CE1	2.83	0.60
3:C:337:ALA:O	3:C:340:LYS:HG2	2.02	0.60
3:H:200:PRO:HG3	3:H:233:GLU:HG3	1.83	0.60
3:I:285:ASP:O	3:I:286:LEU:HD23	2.01	0.60
3:A:53:PRO:CD	3:A:142:PRO:HB3	2.32	0.60
3:I:259:GLN:OE1	3:I:266:PRO:CD	2.44	0.60
3:I:274:ILE:HD12	3:I:274:ILE:N	2.17	0.60
3:J:142:PRO:HD2	3:J:147:ILE:HD11	1.83	0.60
3:O:173:ALA:HB2	3:O:320:GLN:NE2	2.17	0.60
1:Q:94:ILE:HG22	1:Q:96:GLU:H	1.66	0.60
3:C:38:LEU:HD13	3:C:151:PHE:CZ	2.37	0.60
3:D:87:MET:HE2	3:D:345:ARG:HB3	1.82	0.60
3:F:28:ASN:ND2	3:J:70:GLU:C	2.57	0.60
3:G:92:LYS:HB3	3:I:263:GLN:HB3	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:286:LEU:HD21	3:G:294:ILE:HD12	1.83	0.60
3:L:87:MET:CE	3:L:118:GLU:HB3	2.32	0.60
3:L:230:ASP:HA	3:L:301:GLN:CG	2.31	0.60
3:M:121:LEU:HA	3:M:184:PRO:HG3	1.84	0.60
3:O:25:ILE:HG23	3:O:155:ILE:HD13	1.84	0.60
3:E:247:ILE:HG23	3:E:249:VAL:CG2	2.31	0.60
3:G:211:ILE:HD12	3:G:313:TYR:CE2	2.37	0.60
3:G:324:LEU:HD21	3:G:332:VAL:HG21	1.83	0.60
3:J:92:LYS:N	3:J:92:LYS:HD2	2.16	0.60
3:J:124:PHE:CD1	3:J:125:PRO:HD2	2.37	0.60
3:J:195:PRO:HG2	3:J:201:ILE:CD1	2.32	0.60
3:L:29:ASN:CG	3:L:159:ARG:HA	2.27	0.60
3:L:212:TYR:HA	3:L:312:SER:OG	2.01	0.60
3:M:64:THR:HA	3:M:79:SER:HA	1.82	0.60
3:C:236:LEU:HB2	3:C:247:ILE:HD12	1.84	0.60
3:E:38:LEU:HD13	3:E:151:PHE:CZ	2.37	0.60
3:H:13:TYR:CE2	3:H:23:ILE:HG12	2.37	0.60
3:H:87:MET:HE1	3:H:345:ARG:CB	2.30	0.60
3:I:33:LYS:HD2	3:I:118:GLU:OE2	2.02	0.60
3:J:184:PRO:HB3	3:J:343:ILE:HD12	1.83	0.60
3:J:230:ASP:HA	3:J:301:GLN:HG2	1.83	0.60
3:L:324:LEU:HG	3:L:328:VAL:HB	1.84	0.60
3:M:159:ARG:HH11	3:M:159:ARG:CG	2.15	0.60
3:B:83:LEU:HD23	3:B:117:TRP:HB3	1.84	0.59
3:B:211:ILE:HG12	3:B:285:ASP:OD2	2.01	0.59
3:C:96:PRO:HG2	3:C:116:MET:HE3	1.83	0.59
3:C:247:ILE:CD1	3:C:274:ILE:HG21	2.32	0.59
3:D:187:ILE:HG22	3:D:188:GLU:N	2.17	0.59
3:G:125:PRO:HG3	3:G:177:MET:HG2	1.84	0.59
3:H:277:ARG:HB3	3:H:277:ARG:HH11	1.67	0.59
3:I:38:LEU:HD13	3:I:151:PHE:CZ	2.37	0.59
3:I:247:ILE:HG12	3:I:279:TYR:CD2	2.36	0.59
3:K:168:GLU:HG2	3:K:335:TYR:CZ	2.37	0.59
3:L:183:LEU:HD12	3:L:316:PRO:HD3	1.84	0.59
3:M:159:ARG:HG2	3:M:159:ARG:NH1	2.16	0.59
3:M:261:GLU:OE1	3:M:261:GLU:HA	2.02	0.59
3:A:113:LEU:HD23	3:A:149:ALA:CB	2.32	0.59
3:B:19:THR:O	3:B:137:LEU:HD12	2.02	0.59
3:I:67:LEU:HB3	3:I:76:TYR:HB2	1.84	0.59
3:N:57:PHE:CD2	3:N:58:PRO:HA	2.37	0.59
3:N:205:TYR:CD1	3:N:292:ASP:HA	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:212:TYR:CE2	3:N:286:LEU:HD12	2.37	0.59
3:O:13:TYR:HB3	3:O:21:ILE:HG21	1.84	0.59
3:D:57:PHE:CD2	3:D:58:PRO:HA	2.37	0.59
3:G:259:GLN:OE1	3:G:266:PRO:HD3	2.01	0.59
3:H:259:GLN:O	3:H:263:GLN:HA	2.01	0.59
3:O:159:ARG:NH1	3:O:159:ARG:HG2	2.17	0.59
3:B:182:VAL:HG22	3:B:336:VAL:HG13	1.82	0.59
3:H:230:ASP:HA	3:H:301:GLN:CG	2.33	0.59
3:I:124:PHE:CD1	3:I:125:PRO:HD2	2.37	0.59
3:K:42:ILE:HG22	3:K:145:VAL:HB	1.84	0.59
3:K:64:THR:HA	3:K:79:SER:HA	1.84	0.59
3:M:124:PHE:CD1	3:M:125:PRO:HD2	2.38	0.59
3:M:287:THR:HG21	3:M:318:TYR:CD2	2.37	0.59
3:O:195:PRO:HG2	3:O:201:ILE:HD12	1.85	0.59
4:P:188:ASN:OD1	4:P:190:THR:HB	2.03	0.59
3:B:57:PHE:O	3:B:101:PRO:HG3	2.02	0.59
3:C:184:PRO:CB	3:C:343:ILE:HD12	2.33	0.59
3:E:263:GLN:O	3:F:94:GLN:HG3	2.03	0.59
3:F:195:PRO:HA	3:F:303:GLN:HG3	1.83	0.59
3:H:67:LEU:HB3	3:H:76:TYR:HB2	1.83	0.59
3:I:113:LEU:HD22	3:I:147:ILE:HG23	1.83	0.59
3:O:274:ILE:HD12	3:O:274:ILE:N	2.18	0.59
3:A:56:PRO:HB3	3:A:81:THR:HG23	1.85	0.59
3:B:247:ILE:HG22	3:B:249:VAL:HG23	1.84	0.59
3:B:253:ALA:O	3:B:256:ALA:HB3	2.01	0.59
3:C:324:LEU:HD21	3:C:332:VAL:HG21	1.84	0.59
3:F:343:ILE:O	3:F:343:ILE:HG12	2.02	0.59
3:M:215:GLN:HG3	3:M:310:TYR:CE1	2.37	0.59
3:N:32:ARG:HD2	3:N:158:GLU:OE1	2.03	0.59
3:N:173:ALA:HB2	3:N:320:GLN:NE2	2.17	0.59
3:A:277:ARG:HA	3:A:282:GLY:O	2.03	0.59
3:D:124:PHE:CD1	3:D:125:PRO:HD2	2.38	0.59
3:D:256:ALA:HB2	3:E:116:MET:HE1	1.84	0.59
3:H:17:ALA:HB1	3:H:140:GLN:NE2	2.18	0.59
3:H:57:PHE:O	3:H:101:PRO:HG3	2.01	0.59
3:H:278:LYS:O	3:I:4:ILE:HB	2.03	0.59
3:I:315:LEU:HD12	3:I:318:TYR:HD1	1.67	0.59
3:M:119:PHE:N	3:M:119:PHE:CD1	2.70	0.59
3:N:92:LYS:HD2	3:N:92:LYS:H	1.65	0.59
3:O:88:TYR:CD2	3:O:267:TYR:HB2	2.38	0.59
3:O:210:GLN:HG3	3:O:212:TYR:CE2	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:51:THR:HG23	3:A:102:GLY:O	2.03	0.59
3:B:54:SER:CA	3:B:101:PRO:HB3	2.29	0.59
3:B:56:PRO:CB	3:B:81:THR:HG23	2.33	0.59
3:D:235:GLU:OE2	3:D:237:LYS:HE3	2.02	0.59
3:E:124:PHE:CD1	3:E:125:PRO:HD2	2.37	0.59
3:F:92:LYS:N	3:F:92:LYS:CD	2.65	0.59
3:I:343:ILE:O	3:I:343:ILE:HG12	2.02	0.59
3:L:25:ILE:HG23	3:L:155:ILE:HD13	1.83	0.59
3:L:287:THR:HG21	3:L:318:TYR:CD2	2.38	0.59
3:N:345:ARG:HG3	3:N:345:ARG:NH1	2.14	0.59
4:P:33:ASN:O	4:P:33:ASN:OD1	2.21	0.59
3:B:87:MET:HE1	3:B:118:GLU:HB3	1.85	0.59
3:H:15:TRP:CE3	3:H:147:ILE:HB	2.38	0.59
3:H:174:ASP:OD2	3:H:317:TYR:HE2	1.85	0.59
3:H:240:ARG:HH12	3:H:290:PRO:CB	2.15	0.59
3:K:247:ILE:CD1	3:K:274:ILE:HG21	2.32	0.59
3:N:321:LEU:HD22	3:N:332:VAL:HG11	1.84	0.59
3:O:9:LEU:HD11	3:O:155:ILE:HD12	1.85	0.59
3:A:15:TRP:CZ3	3:A:147:ILE:HB	2.38	0.59
3:B:319:ASP:OD2	3:B:319:ASP:N	2.36	0.59
3:E:78:VAL:CG2	3:E:83:LEU:HB2	2.33	0.59
3:E:116:MET:HG2	3:E:117:TRP:N	2.18	0.59
3:J:259:GLN:HG3	3:K:96:PRO:HG3	1.84	0.59
3:M:23:ILE:HD13	3:M:153:ILE:HD11	1.85	0.59
3:M:247:ILE:CG2	3:M:249:VAL:HG23	2.32	0.59
3:A:32:ARG:HD2	3:A:158:GLU:OE1	2.03	0.58
3:A:259:GLN:O	3:A:263:GLN:HA	2.03	0.58
3:E:184:PRO:HB3	3:E:343:ILE:HD12	1.83	0.58
3:E:236:LEU:CB	3:E:247:ILE:HD12	2.33	0.58
3:E:247:ILE:CD1	3:E:274:ILE:HG21	2.33	0.58
3:G:38:LEU:HD13	3:G:151:PHE:CE2	2.38	0.58
3:G:56:PRO:O	3:G:59:TYR:HB2	2.02	0.58
3:G:230:ASP:HA	3:G:301:GLN:CG	2.32	0.58
3:G:315:LEU:HD12	3:G:318:TYR:CD1	2.34	0.58
3:G:328:VAL:HA	3:G:331:ILE:HD12	1.84	0.58
3:J:257:GLU:O	3:J:261:GLU:CB	2.50	0.58
3:L:249:VAL:HG12	3:L:253:ALA:HB3	1.85	0.58
3:O:19:THR:HG22	3:O:20:ASN:N	2.17	0.58
3:B:119:PHE:N	3:B:119:PHE:CD1	2.71	0.58
3:B:195:PRO:HG2	3:B:201:ILE:CD1	2.32	0.58
3:B:315:LEU:HB2	3:B:318:TYR:HB2	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:90:THR:HG1	3:C:345:ARG:HG2	1.66	0.58
3:D:116:MET:HE1	3:F:256:ALA:HB2	1.85	0.58
3:G:57:PHE:O	3:G:101:PRO:HG3	2.03	0.58
3:H:182:VAL:HG21	3:H:339:GLN:CB	2.33	0.58
3:I:121:LEU:HB3	3:I:124:PHE:HB2	1.85	0.58
3:J:42:ILE:HG22	3:J:145:VAL:HB	1.84	0.58
3:L:123:ARG:HH22	3:L:168:GLU:CD	2.10	0.58
3:L:215:GLN:HE21	3:L:310:TYR:HE1	1.50	0.58
3:B:220:ILE:HG13	3:B:307:TYR:HE2	1.69	0.58
3:B:247:ILE:CD1	3:B:274:ILE:HG21	2.33	0.58
3:K:334:GLN:O	3:K:338:ARG:HG3	2.04	0.58
3:M:67:LEU:HD13	3:M:134:LEU:HB2	1.84	0.58
3:M:194:VAL:HG11	3:M:203:VAL:HG22	1.85	0.58
3:N:246:LYS:HD3	3:N:279:TYR:O	2.04	0.58
3:A:32:ARG:HB2	3:A:156:THR:HG22	1.85	0.58
3:A:113:LEU:HD22	3:A:147:ILE:HG23	1.84	0.58
3:E:13:TYR:CE2	3:E:23:ILE:HG12	2.38	0.58
3:E:29:ASN:OD1	3:E:159:ARG:HA	2.02	0.58
3:F:123:ARG:HB3	3:F:339:GLN:OE1	2.03	0.58
3:K:200:PRO:CG	3:K:233:GLU:HG3	2.33	0.58
3:A:25:ILE:HG23	3:A:155:ILE:CD1	2.33	0.58
3:B:32:ARG:HD2	3:B:158:GLU:OE1	2.03	0.58
3:C:203:VAL:HG23	3:C:297:ASP:HA	1.86	0.58
3:C:315:LEU:HD12	3:C:318:TYR:HD1	1.69	0.58
3:D:3:GLU:HB2	3:D:159:ARG:CB	2.33	0.58
3:E:32:ARG:HD2	3:E:158:GLU:HB2	1.85	0.58
3:G:240:ARG:HH12	3:G:290:PRO:HB2	1.67	0.58
3:A:29:ASN:HB2	3:A:157:TYR:HB3	1.85	0.58
3:E:87:MET:CE	3:E:345:ARG:HB3	2.34	0.58
3:F:285:ASP:O	3:F:286:LEU:HD23	2.04	0.58
3:G:134:LEU:HG	3:G:134:LEU:O	2.04	0.58
3:J:200:PRO:CG	3:J:233:GLU:HG3	2.34	0.58
3:K:113:LEU:HD23	3:K:149:ALA:HB2	1.84	0.58
3:O:257:GLU:O	3:O:261:GLU:HB3	2.03	0.58
3:A:29:ASN:OD1	3:A:159:ARG:HA	2.03	0.58
3:B:340:LYS:HG3	3:B:341:ARG:N	2.17	0.58
3:B:345:ARG:HG3	3:B:345:ARG:NH1	2.17	0.58
3:E:9:LEU:HD21	3:E:26:PRO:CD	2.33	0.58
3:G:56:PRO:CB	3:G:81:THR:HG23	2.33	0.58
3:H:249:VAL:HG22	3:I:7:GLU:HA	1.86	0.58
3:I:30:PHE:O	3:I:157:TYR:HA	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:54:SER:HA	3:M:101:PRO:HB3	1.84	0.58
3:N:113:LEU:HD23	3:N:149:ALA:HB2	1.85	0.58
3:A:4:ILE:HG13	3:A:158:GLU:HG3	1.85	0.58
3:B:184:PRO:HB3	3:B:343:ILE:HD12	1.85	0.58
3:F:189:ILE:HD12	3:F:310:TYR:HE2	1.68	0.58
3:G:56:PRO:HB3	3:G:81:THR:HG23	1.86	0.58
3:G:249:VAL:HG12	3:G:253:ALA:HB3	1.86	0.58
3:J:187:ILE:HG22	3:J:188:GLU:N	2.17	0.58
3:K:28:ASN:HD22	3:O:70:GLU:C	2.12	0.58
3:K:52:LEU:CD1	3:K:99:PRO:HG3	2.34	0.58
3:L:159:ARG:HG2	3:L:159:ARG:NH1	2.18	0.58
3:M:142:PRO:HB2	3:M:145:VAL:CG2	2.33	0.58
3:N:9:LEU:HD11	3:N:155:ILE:HD12	1.86	0.58
3:O:187:ILE:HG22	3:O:188:GLU:N	2.17	0.58
3:J:52:LEU:HD21	3:J:145:VAL:HG21	1.85	0.58
3:N:90:THR:CB	3:N:345:ARG:HG2	2.33	0.58
3:O:41:SER:HB2	3:O:111:VAL:O	2.04	0.58
1:Q:17:PHE:O	1:Q:17:PHE:CD1	2.57	0.58
1:Q:181:ILE:HD12	1:Q:200:ILE:HD11	1.83	0.58
3:C:195:PRO:O	3:C:201:ILE:HD11	2.03	0.58
3:E:9:LEU:HD11	3:E:155:ILE:HD12	1.86	0.58
3:F:121:LEU:N	3:F:121:LEU:HD12	2.18	0.58
3:F:277:ARG:HA	3:F:282:GLY:O	2.04	0.58
3:G:189:ILE:HD12	3:G:310:TYR:HE2	1.68	0.58
3:G:343:ILE:O	3:G:343:ILE:HG12	2.02	0.58
3:M:29:ASN:HB2	3:M:157:TYR:HB3	1.86	0.58
3:M:90:THR:HB	3:M:345:ARG:HG2	1.85	0.58
3:C:56:PRO:HA	3:C:267:TYR:OH	2.03	0.57
3:I:64:THR:HA	3:I:79:SER:HA	1.85	0.57
3:J:96:PRO:HG3	3:L:259:GLN:HG3	1.86	0.57
3:K:28:ASN:ND2	3:O:70:GLU:CA	2.66	0.57
3:M:33:LYS:HD2	3:M:118:GLU:OE2	2.04	0.57
3:M:190:PRO:HB3	3:M:307:TYR:CE1	2.37	0.57
3:N:309:LEU:HD23	3:N:309:LEU:C	2.28	0.57
1:Q:169:THR:O	1:Q:169:THR:HG22	2.04	0.57
3:I:81:THR:O	3:I:85:ILE:HG13	2.04	0.57
3:I:173:ALA:HB2	3:I:320:GLN:NE2	2.19	0.57
3:J:122:ALA:HB1	3:J:339:GLN:HG3	1.86	0.57
3:K:274:ILE:HD12	3:K:274:ILE:N	2.19	0.57
3:L:200:PRO:HG2	3:L:233:GLU:HG3	1.84	0.57
3:M:176:GLU:C	3:M:177:MET:HG3	2.27	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:230:ASP:O	3:M:232:THR:HG23	2.04	0.57
3:O:230:ASP:N	3:O:231:PRO:HD2	2.19	0.57
3:O:324:LEU:HG	3:O:328:VAL:HB	1.85	0.57
3:A:182:VAL:HG22	3:A:336:VAL:HG13	1.87	0.57
3:C:15:TRP:CZ3	3:C:147:ILE:HB	2.39	0.57
3:D:125:PRO:CG	3:D:177:MET:HG2	2.35	0.57
3:E:274:ILE:N	3:E:274:ILE:HD12	2.19	0.57
3:H:259:GLN:HG3	3:I:96:PRO:CG	2.34	0.57
3:J:190:PRO:HB3	3:J:307:TYR:CE1	2.39	0.57
3:K:121:LEU:HD12	3:K:121:LEU:N	2.19	0.57
3:L:332:VAL:O	3:L:336:VAL:HG23	2.04	0.57
3:N:13:TYR:CE2	3:N:23:ILE:HG12	2.38	0.57
3:E:259:GLN:HG3	3:F:96:PRO:HG3	1.86	0.57
3:H:246:LYS:HE2	3:H:246:LYS:CA	2.26	0.57
3:J:49:ALA:N	3:J:107:ALA:HB2	2.19	0.57
3:M:182:VAL:HG22	3:M:336:VAL:HG13	1.84	0.57
3:O:233:GLU:OE1	3:O:250:SER:HA	2.05	0.57
1:Q:99:VAL:HG11	1:Q:113:VAL:HG21	1.86	0.57
3:A:263:GLN:NE2	3:B:92:LYS:HG2	2.19	0.57
3:C:187:ILE:HG22	3:C:188:GLU:N	2.20	0.57
3:F:19:THR:O	3:F:137:LEU:HD12	2.04	0.57
3:F:309:LEU:HD23	3:F:309:LEU:C	2.29	0.57
3:H:324:LEU:HD21	3:H:332:VAL:HG21	1.87	0.57
3:K:174:ASP:OD2	3:K:317:TYR:HE2	1.87	0.57
3:A:121:LEU:N	3:A:121:LEU:HD12	2.19	0.57
3:E:278:LYS:O	3:F:4:ILE:HB	2.04	0.57
3:F:42:ILE:HG23	3:F:147:ILE:HD13	1.87	0.57
3:F:105:VAL:HA	3:F:111:VAL:HG13	1.84	0.57
3:G:53:PRO:CD	3:G:142:PRO:HB3	2.34	0.57
3:G:259:GLN:HB3	3:H:94:GLN:O	2.03	0.57
3:I:171:LEU:HB3	3:I:175:GLY:HA2	1.86	0.57
3:I:200:PRO:HG3	3:I:233:GLU:HB3	1.86	0.57
3:K:230:ASP:N	3:K:231:PRO:HD2	2.20	0.57
3:M:32:ARG:HD2	3:M:158:GLU:OE1	2.05	0.57
3:M:205:TYR:CD1	3:M:292:ASP:HA	2.40	0.57
3:O:29:ASN:OD1	3:O:159:ARG:HA	2.04	0.57
3:O:236:LEU:HD11	3:O:294:ILE:CG2	2.34	0.57
4:P:299:LEU:CD2	4:P:352:ILE:HD11	2.23	0.57
3:A:171:LEU:HB3	3:A:175:GLY:HA2	1.87	0.57
3:C:57:PHE:O	3:C:101:PRO:HG3	2.05	0.57
3:C:105:VAL:HA	3:C:111:VAL:HG13	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:15:TRP:CZ3	3:E:147:ILE:HB	2.39	0.57
3:N:23:ILE:HG21	3:N:153:ILE:HG13	1.86	0.57
4:P:360:SER:HB2	4:P:363:SER:H	1.68	0.57
3:A:81:THR:O	3:A:85:ILE:HG13	2.04	0.57
3:D:231:PRO:HB2	3:D:251:TRP:CD2	2.40	0.57
3:D:274:ILE:HD12	3:D:274:ILE:N	2.20	0.57
3:G:230:ASP:N	3:G:231:PRO:HD2	2.19	0.57
3:K:54:SER:HA	3:K:101:PRO:HB3	1.86	0.57
3:K:254:LEU:HD21	3:K:274:ILE:HD11	1.87	0.57
3:M:87:MET:HE1	3:M:345:ARG:CB	2.28	0.57
3:O:176:GLU:O	3:O:177:MET:HG3	2.05	0.57
3:A:87:MET:HE1	3:A:345:ARG:CB	2.18	0.57
3:B:90:THR:HG1	3:B:345:ARG:HG2	1.69	0.57
3:C:52:LEU:HD13	3:C:99:PRO:HG3	1.87	0.57
3:C:57:PHE:CE2	3:C:142:PRO:HG2	2.39	0.57
3:C:142:PRO:HB2	3:C:145:VAL:CG2	2.35	0.57
3:D:87:MET:HE1	3:D:345:ARG:CB	2.32	0.57
3:F:126:ALA:HB1	3:F:132:ILE:CD1	2.34	0.57
3:F:286:LEU:HD21	3:F:294:ILE:HD12	1.85	0.57
3:G:15:TRP:CE3	3:G:147:ILE:HB	2.39	0.57
3:G:324:LEU:CD2	3:G:332:VAL:HG21	2.35	0.57
3:H:25:ILE:HG23	3:H:155:ILE:HD11	1.87	0.57
3:K:212:TYR:HA	3:K:312:SER:OG	2.04	0.57
3:L:259:GLN:OE1	3:L:266:PRO:HD3	2.04	0.57
3:N:63:GLN:HG2	3:N:64:THR:HG23	1.87	0.57
3:O:92:LYS:N	3:O:92:LYS:CD	2.65	0.57
3:O:195:PRO:HG2	3:O:201:ILE:CD1	2.35	0.57
3:A:92:LYS:HD2	3:C:263:GLN:HE21	1.70	0.57
3:A:160:VAL:HG12	3:A:165:ILE:HG13	1.87	0.57
3:B:42:ILE:HG22	3:B:145:VAL:HB	1.87	0.57
3:B:62:VAL:HG11	3:B:65:PHE:CZ	2.40	0.57
3:B:67:LEU:HB2	3:B:134:LEU:HD13	1.87	0.57
3:E:257:GLU:O	3:E:261:GLU:CB	2.53	0.57
3:L:64:THR:HA	3:L:79:SER:HA	1.87	0.57
3:M:206:LEU:HB3	3:M:212:TYR:CZ	2.39	0.57
3:N:3:GLU:HB2	3:N:159:ARG:HB3	1.87	0.57
3:N:19:THR:O	3:N:137:LEU:HD12	2.04	0.57
3:N:121:LEU:HD12	3:N:121:LEU:N	2.19	0.57
3:N:131:ASN:HD22	3:N:133:ILE:HD11	1.70	0.57
1:Q:189:ASN:HD21	4:P:29:ASP:CB	2.18	0.56
3:B:9:LEU:HD21	3:B:26:PRO:HD2	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4:ILE:HA	3:C:157:TYR:O	2.05	0.56
3:H:9:LEU:HD21	3:H:26:PRO:HD3	1.86	0.56
3:H:173:ALA:HB2	3:H:320:GLN:CD	2.29	0.56
3:I:221:ASN:HD21	3:I:302:ASN:HD22	1.52	0.56
3:J:3:GLU:HB2	3:J:159:ARG:CB	2.27	0.56
3:K:47:THR:O	3:K:107:ALA:HB1	2.04	0.56
3:L:90:THR:HB	3:L:345:ARG:HG2	1.86	0.56
3:L:274:ILE:HD12	3:L:274:ILE:N	2.19	0.56
3:M:259:GLN:HG3	3:N:96:PRO:HG3	1.87	0.56
3:O:62:VAL:HG13	3:O:136:ILE:HG23	1.86	0.56
3:O:105:VAL:HA	3:O:111:VAL:HG13	1.87	0.56
3:A:259:GLN:OE1	3:A:266:PRO:HD3	2.05	0.56
3:B:124:PHE:CD1	3:B:125:PRO:HD2	2.41	0.56
3:E:185:LYS:NZ	3:O:241:GLY:O	2.37	0.56
3:E:247:ILE:HG12	3:E:279:TYR:CE2	2.40	0.56
3:F:246:LYS:C	3:F:247:ILE:HG13	2.30	0.56
3:G:190:PRO:HB3	3:G:307:TYR:CD1	2.40	0.56
3:H:67:LEU:HD13	3:H:134:LEU:HB2	1.87	0.56
3:I:213:LYS:HB2	3:I:311:VAL:O	2.05	0.56
3:J:246:LYS:HD3	3:J:279:TYR:O	2.05	0.56
3:J:345:ARG:HH11	3:J:345:ARG:HG3	1.70	0.56
3:L:262:TYR:CE2	3:L:273:ILE:HD12	2.39	0.56
3:N:105:VAL:HA	3:N:111:VAL:HG13	1.87	0.56
3:O:90:THR:HG1	3:O:345:ARG:HG2	1.66	0.56
3:O:113:LEU:HD22	3:O:147:ILE:HG23	1.87	0.56
3:C:333:GLN:OE1	3:C:333:GLN:HA	2.04	0.56
3:E:53:PRO:CD	3:E:142:PRO:HB3	2.35	0.56
3:E:67:LEU:HB3	3:E:76:TYR:HB2	1.86	0.56
3:G:37:GLN:HG2	3:G:116:MET:HE2	1.87	0.56
3:H:235:GLU:OE2	3:H:237:LYS:HE3	2.05	0.56
3:I:60:ASN:HB3	3:I:81:THR:OG1	2.05	0.56
3:I:221:ASN:H	3:I:228:ASN:ND2	2.02	0.56
3:J:236:LEU:HB3	3:J:247:ILE:HG13	1.87	0.56
3:M:315:LEU:HD12	3:M:318:TYR:CD1	2.36	0.56
3:N:278:LYS:O	3:O:4:ILE:HB	2.06	0.56
3:O:190:PRO:HB3	3:O:307:TYR:HD1	1.70	0.56
3:O:240:ARG:HH12	3:O:290:PRO:HB2	1.70	0.56
4:P:346:ILE:CG2	4:P:349:ILE:CD1	2.82	0.56
3:C:5:TYR:CE1	3:C:157:TYR:HB2	2.41	0.56
3:C:130:GLN:HE21	3:C:130:GLN:CA	2.08	0.56
3:C:332:VAL:O	3:C:336:VAL:HG23	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:E:171:LEU:HB3	3:E:175:GLY:HA2	1.86	0.56
3:G:273:ILE:C	3:G:274:ILE:HD12	2.30	0.56
3:M:17:ALA:HB1	3:M:140:GLN:HE22	1.69	0.56
3:M:121:LEU:HB3	3:M:124:PHE:HB2	1.87	0.56
3:N:52:LEU:CD2	3:N:145:VAL:HG21	2.35	0.56
3:B:105:VAL:HA	3:B:111:VAL:HG13	1.87	0.56
3:B:247:ILE:CG2	3:B:249:VAL:HG23	2.36	0.56
3:D:38:LEU:HD13	3:D:151:PHE:CE2	2.40	0.56
3:G:36:VAL:HG11	3:G:136:ILE:HD11	1.87	0.56
3:G:62:VAL:HG11	3:G:65:PHE:CZ	2.41	0.56
3:H:200:PRO:CG	3:H:233:GLU:HG3	2.35	0.56
3:K:255:GLN:O	3:K:259:GLN:HG2	2.05	0.56
3:M:171:LEU:HB3	3:M:175:GLY:HA2	1.87	0.56
3:M:345:ARG:HG3	3:M:345:ARG:NH1	2.16	0.56
3:N:62:VAL:HG13	3:N:136:ILE:CG2	2.35	0.56
3:A:243:PRO:HD3	3:F:185:LYS:HE3	1.88	0.56
3:C:62:VAL:HG13	3:C:136:ILE:CG2	2.35	0.56
3:J:44:ASN:ND2	3:J:107:ALA:HA	2.20	0.56
3:L:273:ILE:C	3:L:274:ILE:HD12	2.31	0.56
3:N:17:ALA:HB1	3:N:140:GLN:NE2	2.21	0.56
3:N:89:TYR:CD2	3:N:273:ILE:HD11	2.41	0.56
3:O:159:ARG:HG2	3:O:159:ARG:HH11	1.69	0.56
3:A:4:ILE:CG2	3:A:32:ARG:HD3	2.35	0.56
3:I:56:PRO:O	3:I:59:TYR:HB2	2.05	0.56
3:J:28:ASN:OD1	3:J:28:ASN:N	2.37	0.56
3:N:321:LEU:HD22	3:N:332:VAL:CG1	2.35	0.56
3:A:69:TYR:CE1	3:A:73:LYS:HB2	2.41	0.56
3:A:214:ARG:HG2	3:A:311:VAL:HB	1.87	0.56
3:E:52:LEU:CD1	3:E:99:PRO:HG3	2.36	0.56
3:F:69:TYR:O	3:F:70:GLU:HB2	2.06	0.56
3:F:233:GLU:OE1	3:F:250:SER:HA	2.05	0.56
3:F:321:LEU:CD2	3:F:332:VAL:HG11	2.36	0.56
3:G:122:ALA:HB1	3:G:339:GLN:HG3	1.85	0.56
3:G:240:ARG:HG2	3:G:240:ARG:HH11	1.71	0.56
3:H:340:LYS:HG3	3:H:341:ARG:N	2.20	0.56
3:K:190:PRO:HB3	3:K:307:TYR:HD1	1.67	0.56
3:N:182:VAL:HG13	3:N:313:TYR:CD2	2.40	0.56
3:O:215:GLN:HG3	3:O:310:TYR:CE1	2.41	0.56
3:O:340:LYS:HG3	3:O:341:ARG:N	2.18	0.56
1:Q:189:ASN:N	1:Q:189:ASN:OD1	2.39	0.56
3:A:98:TYR:CD1	3:A:98:TYR:N	2.73	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:30:PHE:O	3:B:157:TYR:HA	2.05	0.56
3:D:190:PRO:HB3	3:D:307:TYR:HD1	1.71	0.56
3:J:116:MET:HE1	3:L:256:ALA:HB1	1.88	0.56
3:N:168:GLU:HG2	3:N:335:TYR:CE1	2.41	0.56
1:Q:39:ILE:HD11	1:Q:97:ILE:HG13	1.88	0.56
3:A:63:GLN:O	3:A:79:SER:HB2	2.05	0.56
3:A:94:GLN:HB3	3:C:259:GLN:NE2	2.20	0.56
3:D:33:LYS:HD2	3:D:118:GLU:OE2	2.05	0.56
3:D:92:LYS:O	3:D:92:LYS:HG2	2.05	0.56
3:G:246:LYS:C	3:G:247:ILE:HG13	2.30	0.56
3:H:65:PHE:CE1	3:H:136:ILE:HG12	2.41	0.56
3:H:190:PRO:HB3	3:H:307:TYR:CD1	2.41	0.56
3:I:4:ILE:H	3:I:4:ILE:HD12	1.70	0.56
3:I:32:ARG:HB2	3:I:156:THR:CG2	2.36	0.56
3:J:13:TYR:HB3	3:J:21:ILE:HG21	1.88	0.56
3:L:235:GLU:HB3	3:L:297:ASP:HB2	1.88	0.56
3:L:246:LYS:O	3:L:279:TYR:HD2	1.88	0.56
3:A:32:ARG:HB2	3:A:156:THR:CG2	2.36	0.55
3:A:196:ALA:HB2	3:A:302:ASN:C	2.31	0.55
3:D:116:MET:HG3	3:D:117:TRP:N	2.20	0.55
3:G:65:PHE:CE1	3:G:136:ILE:HG12	2.41	0.55
3:I:15:TRP:CE3	3:I:147:ILE:HB	2.41	0.55
3:I:26:PRO:HB3	3:M:131:ASN:ND2	2.21	0.55
3:J:142:PRO:CD	3:J:147:ILE:HD11	2.36	0.55
3:J:231:PRO:HA	3:J:300:LEU:HD23	1.87	0.55
3:L:9:LEU:HD11	3:L:155:ILE:HD12	1.88	0.55
3:L:121:LEU:HB3	3:L:124:PHE:HB2	1.88	0.55
3:L:234:TYR:HB2	3:L:251:TRP:HZ3	1.70	0.55
3:M:19:THR:C	3:M:137:LEU:HD12	2.30	0.55
3:M:116:MET:HE1	3:O:256:ALA:CB	2.36	0.55
4:P:140:ILE:HD13	4:P:140:ILE:N	2.20	0.55
3:A:99:PRO:HD3	3:A:112:ASN:O	2.06	0.55
3:B:174:ASP:OD2	3:B:317:TYR:HE2	1.89	0.55
3:E:96:PRO:HB3	3:E:114:ASN:HD21	1.71	0.55
3:F:27:ARG:HG2	3:F:132:ILE:HD12	1.88	0.55
3:F:44:ASN:HB2	3:F:105:VAL:CG1	2.35	0.55
3:F:89:TYR:CD2	3:F:273:ILE:HD11	2.40	0.55
3:M:297:ASP:O	3:M:298:LEU:HD23	2.05	0.55
3:B:255:GLN:O	3:B:259:GLN:HG2	2.07	0.55
3:H:230:ASP:N	3:H:231:PRO:HD2	2.21	0.55
3:H:234:TYR:HE2	3:H:247:ILE:HD12	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:274:ILE:HD12	3:H:274:ILE:N	2.22	0.55
3:H:277:ARG:CZ	3:H:277:ARG:CB	2.84	0.55
3:H:277:ARG:CB	3:H:277:ARG:HH11	2.18	0.55
3:J:29:ASN:HB2	3:J:157:TYR:HB3	1.89	0.55
3:K:184:PRO:CB	3:K:343:ILE:HD12	2.36	0.55
3:N:125:PRO:CG	3:N:177:MET:HG2	2.37	0.55
3:A:340:LYS:HG3	3:A:341:ARG:N	2.21	0.55
3:C:13:TYR:HB3	3:C:21:ILE:HG21	1.88	0.55
3:E:15:TRP:HB2	3:E:38:LEU:HD11	1.87	0.55
3:E:25:ILE:HG23	3:E:155:ILE:HD13	1.88	0.55
3:E:243:PRO:HD3	3:J:185:LYS:HE3	1.88	0.55
3:F:121:LEU:HB3	3:F:124:PHE:HB2	1.88	0.55
3:F:249:VAL:HG12	3:F:253:ALA:HB3	1.88	0.55
3:G:19:THR:O	3:G:137:LEU:HD12	2.06	0.55
3:H:202:HIS:HA	3:H:297:ASP:OD2	2.05	0.55
3:H:259:GLN:HG3	3:I:96:PRO:HG3	1.87	0.55
3:H:319:ASP:OD2	3:H:319:ASP:N	2.38	0.55
3:I:52:LEU:HD12	3:I:99:PRO:HG3	1.87	0.55
3:I:235:GLU:HG3	3:I:247:ILE:O	2.06	0.55
3:J:121:LEU:HB3	3:J:124:PHE:HB2	1.89	0.55
3:N:224:SER:OG	3:N:228:ASN:HB3	2.07	0.55
3:B:15:TRP:HB2	3:B:38:LEU:HD11	1.89	0.55
3:D:315:LEU:HB2	3:D:318:TYR:HB2	1.89	0.55
3:H:38:LEU:HD13	3:H:151:PHE:CZ	2.40	0.55
3:H:240:ARG:HH21	3:M:208:PRO:HG2	1.72	0.55
3:K:321:LEU:CD2	3:K:332:VAL:HG11	2.36	0.55
3:M:32:ARG:HB2	3:M:156:THR:HG22	1.88	0.55
3:M:185:LYS:HG2	3:M:187:ILE:HG12	1.89	0.55
3:O:174:ASP:OD2	3:O:317:TYR:HE2	1.89	0.55
3:B:194:VAL:HG11	3:B:203:VAL:HG22	1.89	0.55
3:B:333:GLN:HA	3:B:333:GLN:OE1	2.07	0.55
3:C:298:LEU:CD1	3:C:306:VAL:HG11	2.36	0.55
3:D:190:PRO:HB3	3:D:307:TYR:CD1	2.41	0.55
3:D:309:LEU:HD23	3:D:309:LEU:C	2.32	0.55
3:E:15:TRP:CE3	3:E:147:ILE:HB	2.40	0.55
3:E:42:ILE:HG22	3:E:145:VAL:HB	1.89	0.55
3:I:54:SER:CA	3:I:101:PRO:HB3	2.36	0.55
3:J:332:VAL:O	3:J:336:VAL:HG23	2.06	0.55
3:K:249:VAL:HG12	3:K:253:ALA:HB3	1.88	0.55
3:O:173:ALA:HA	3:O:320:GLN:HE22	1.70	0.55
3:A:90:THR:CB	3:A:345:ARG:HG2	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:23:ILE:O	3:B:133:ILE:HG23	2.07	0.55
3:B:91:THR:CG2	3:B:345:ARG:HD3	2.36	0.55
3:E:256:ALA:HB1	3:F:116:MET:HE1	1.88	0.55
3:E:324:LEU:CD2	3:E:332:VAL:HG21	2.36	0.55
3:F:57:PHE:CD2	3:F:58:PRO:HA	2.41	0.55
3:F:332:VAL:O	3:F:336:VAL:HG23	2.07	0.55
3:H:56:PRO:HB3	3:H:81:THR:HG23	1.88	0.55
3:I:321:LEU:HD22	3:I:332:VAL:CG1	2.37	0.55
3:J:32:ARG:HD2	3:J:158:GLU:OE1	2.06	0.55
3:J:42:ILE:HG23	3:J:147:ILE:HD13	1.89	0.55
3:J:324:LEU:HD21	3:J:332:VAL:HG21	1.89	0.55
3:C:298:LEU:HD11	3:C:306:VAL:HG11	1.88	0.55
3:D:230:ASP:HA	3:D:301:GLN:CG	2.36	0.55
3:F:25:ILE:HG23	3:F:155:ILE:HD13	1.88	0.55
3:G:330:ALA:O	3:G:334:GLN:HG2	2.05	0.55
3:I:19:THR:CG2	3:I:20:ASN:N	2.70	0.55
3:K:19:THR:CG2	3:K:20:ASN:N	2.69	0.55
3:K:29:ASN:HB2	3:K:157:TYR:HB3	1.87	0.55
3:K:87:MET:HE2	3:K:345:ARG:HB3	1.89	0.55
3:K:246:LYS:O	3:K:279:TYR:HD2	1.89	0.55
3:L:67:LEU:HB3	3:L:76:TYR:HB2	1.88	0.55
3:M:63:GLN:HG2	3:M:64:THR:HG23	1.88	0.55
4:P:190:THR:HG22	4:P:192:THR:N	2.17	0.55
4:P:299:LEU:HD21	4:P:352:ILE:CD1	2.26	0.55
1:Q:42:ARG:HH11	1:Q:42:ARG:HG3	1.70	0.55
3:A:92:LYS:O	3:A:92:LYS:HG2	2.07	0.55
3:A:321:LEU:HD22	3:A:332:VAL:CG1	2.36	0.55
3:A:324:LEU:HG	3:A:328:VAL:HB	1.88	0.55
3:D:13:TYR:HB3	3:D:21:ILE:HG21	1.89	0.55
3:E:27:ARG:NH1	3:E:27:ARG:HB2	2.21	0.55
3:F:62:VAL:HG13	3:F:136:ILE:HG23	1.88	0.55
3:F:255:GLN:NE2	3:F:266:PRO:HB3	2.22	0.55
3:F:340:LYS:HG3	3:F:341:ARG:N	2.20	0.55
3:G:263:GLN:CA	3:H:94:GLN:HG3	2.37	0.55
3:H:17:ALA:HB1	3:H:140:GLN:HE22	1.72	0.55
3:I:25:ILE:HG23	3:I:155:ILE:CD1	2.35	0.55
3:L:57:PHE:O	3:L:101:PRO:HG3	2.07	0.55
3:L:88:TYR:O	3:L:93:GLY:HA2	2.07	0.55
3:L:277:ARG:HA	3:L:282:GLY:O	2.07	0.55
3:O:87:MET:HB3	3:O:95:ASN:ND2	2.22	0.55
3:A:243:PRO:HD3	3:F:185:LYS:CE	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:89:TYR:CD2	3:D:273:ILE:HD11	2.42	0.55
3:E:277:ARG:HA	3:E:282:GLY:O	2.07	0.55
3:F:57:PHE:CG	3:F:58:PRO:HA	2.41	0.55
3:G:194:VAL:HG11	3:G:203:VAL:HG22	1.89	0.55
3:I:105:VAL:HG21	3:I:145:VAL:HG11	1.89	0.55
3:I:187:ILE:HG22	3:I:188:GLU:N	2.22	0.55
3:J:29:ASN:OD1	3:J:159:ARG:HA	2.07	0.55
3:J:94:GLN:O	3:L:259:GLN:HB3	2.06	0.55
3:L:17:ALA:HB1	3:L:140:GLN:HE22	1.72	0.55
3:L:56:PRO:HG2	3:L:60:ASN:ND2	2.22	0.55
3:M:123:ARG:HH22	3:M:168:GLU:CD	2.15	0.55
3:N:29:ASN:HB2	3:N:157:TYR:HB3	1.88	0.55
3:O:230:ASP:O	3:O:232:THR:HG23	2.07	0.55
3:O:332:VAL:O	3:O:336:VAL:HG23	2.06	0.55
3:A:92:LYS:HD2	3:C:263:GLN:NE2	2.22	0.54
3:A:211:ILE:HD12	3:A:313:TYR:CE2	2.43	0.54
3:B:38:LEU:HD13	3:B:151:PHE:CE2	2.42	0.54
3:B:277:ARG:HA	3:B:282:GLY:O	2.07	0.54
3:B:338:ARG:HA	3:B:341:ARG:HH21	1.71	0.54
3:C:69:TYR:O	3:C:70:GLU:HB2	2.05	0.54
3:D:69:TYR:O	3:D:70:GLU:HB2	2.07	0.54
3:D:189:ILE:HD12	3:D:310:TYR:CE2	2.32	0.54
3:E:38:LEU:HD13	3:E:151:PHE:CE2	2.42	0.54
3:E:69:TYR:O	3:E:70:GLU:HB2	2.07	0.54
3:F:65:PHE:HE1	3:F:136:ILE:HG12	1.71	0.54
3:I:208:PRO:HD3	3:I:291:SER:HA	1.89	0.54
3:I:221:ASN:ND2	3:I:302:ASN:HD22	2.05	0.54
3:M:30:PHE:O	3:M:157:TYR:HA	2.08	0.54
1:Q:37:PHE:CD2	1:Q:115:LEU:HD22	2.42	0.54
3:A:96:PRO:HG3	3:C:259:GLN:HG3	1.88	0.54
3:A:195:PRO:HG2	3:A:201:ILE:CD1	2.37	0.54
3:C:81:THR:O	3:C:85:ILE:HG13	2.07	0.54
3:E:287:THR:HG21	3:E:318:TYR:CD2	2.43	0.54
3:K:87:MET:HE1	3:K:345:ARG:CB	2.30	0.54
3:M:68:SER:CB	3:M:74:THR:HA	2.38	0.54
3:B:121:LEU:HA	3:B:184:PRO:HG3	1.88	0.54
3:D:195:PRO:HG2	3:D:201:ILE:HD11	1.89	0.54
3:F:78:VAL:HG21	3:F:83:LEU:HB2	1.89	0.54
3:F:171:LEU:HB3	3:F:175:GLY:HA2	1.88	0.54
3:G:52:LEU:CD2	3:G:145:VAL:HG21	2.37	0.54
3:H:96:PRO:HG2	3:H:116:MET:HE3	1.87	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:200:PRO:HG3	3:J:233:GLU:HG3	1.88	0.54
3:L:41:SER:HB2	3:L:111:VAL:O	2.07	0.54
3:N:179:LEU:HD11	3:N:320:GLN:HB2	1.90	0.54
3:B:259:GLN:O	3:B:263:GLN:HA	2.07	0.54
3:C:261:GLU:HG3	3:C:262:TYR:CE2	2.42	0.54
3:D:38:LEU:HD13	3:D:151:PHE:CZ	2.43	0.54
3:E:62:VAL:HG11	3:E:65:PHE:CZ	2.41	0.54
3:E:68:SER:CB	3:E:74:THR:HA	2.38	0.54
3:E:116:MET:CG	3:E:117:TRP:N	2.70	0.54
3:G:76:TYR:CE2	3:G:119:PHE:HB3	2.42	0.54
3:G:321:LEU:HD22	3:G:332:VAL:CG1	2.37	0.54
3:I:78:VAL:HG21	3:I:83:LEU:HB2	1.88	0.54
3:I:255:GLN:O	3:I:259:GLN:HG2	2.07	0.54
3:L:17:ALA:HB1	3:L:140:GLN:NE2	2.21	0.54
3:O:171:LEU:HB3	3:O:175:GLY:HA2	1.89	0.54
1:Q:61:LEU:HD12	1:Q:61:LEU:N	2.22	0.54
3:A:231:PRO:HA	3:A:300:LEU:HD23	1.89	0.54
3:D:257:GLU:O	3:D:261:GLU:HB2	2.08	0.54
3:E:142:PRO:CD	3:E:147:ILE:HD11	2.36	0.54
3:F:64:THR:HA	3:F:79:SER:HA	1.89	0.54
3:G:32:ARG:HB2	3:G:156:THR:CG2	2.35	0.54
3:G:92:LYS:O	3:G:92:LYS:HG2	2.08	0.54
3:J:220:ILE:HD13	3:J:226:ILE:HA	1.89	0.54
3:K:52:LEU:CD2	3:K:145:VAL:HG21	2.38	0.54
3:N:42:ILE:HG22	3:N:145:VAL:HB	1.89	0.54
3:N:200:PRO:CG	3:N:233:GLU:HG3	2.38	0.54
4:P:101:ASN:ND2	4:P:123:THR:CG2	2.71	0.54
3:A:67:LEU:HB2	3:A:134:LEU:HD13	1.89	0.54
3:B:29:ASN:OD1	3:B:159:ARG:HA	2.07	0.54
3:B:92:LYS:HD2	3:B:92:LYS:H	1.73	0.54
3:E:179:LEU:HG	3:E:321:LEU:CD2	2.37	0.54
3:E:185:LYS:CE	3:O:243:PRO:HD3	2.38	0.54
3:E:324:LEU:HD21	3:E:332:VAL:HG21	1.88	0.54
3:F:176:GLU:O	3:F:177:MET:HG3	2.08	0.54
3:G:253:ALA:O	3:G:256:ALA:HB3	2.07	0.54
3:K:92:LYS:CD	3:K:92:LYS:N	2.70	0.54
3:L:4:ILE:HG23	3:L:32:ARG:HD3	1.88	0.54
3:L:44:ASN:HB2	3:L:105:VAL:CG1	2.38	0.54
3:L:187:ILE:HG22	3:L:188:GLU:N	2.22	0.54
3:N:182:VAL:HG13	3:N:313:TYR:HD2	1.72	0.54
3:A:37:GLN:NE2	3:A:39:ILE:HD11	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:71:GLY:O	3:J:10:GLN:HG2	2.08	0.54
3:B:233:GLU:OE1	3:B:250:SER:HA	2.08	0.54
3:C:56:PRO:O	3:C:59:TYR:HB2	2.07	0.54
3:C:159:ARG:O	3:C:159:ARG:HG2	2.08	0.54
3:H:205:TYR:CD1	3:H:292:ASP:HA	2.42	0.54
3:K:247:ILE:HG12	3:K:279:TYR:CE2	2.43	0.54
3:O:122:ALA:HB1	3:O:339:GLN:HG3	1.90	0.54
3:B:90:THR:CB	3:B:345:ARG:HG2	2.37	0.54
3:D:92:LYS:HB3	3:F:263:GLN:HB3	1.90	0.54
3:D:176:GLU:O	3:D:177:MET:HG3	2.08	0.54
3:D:202:HIS:HA	3:D:297:ASP:OD2	2.08	0.54
3:E:13:TYR:O	3:E:150:SER:HA	2.07	0.54
3:H:122:ALA:HB1	3:H:339:GLN:HG3	1.89	0.54
3:H:189:ILE:HD12	3:H:310:TYR:HE2	1.71	0.54
3:J:200:PRO:HG3	3:J:233:GLU:CG	2.38	0.54
3:K:42:ILE:HD11	3:K:113:LEU:HD13	1.89	0.54
1:Q:49:LEU:HD13	1:Q:59:VAL:HG11	1.90	0.54
1:Q:99:VAL:HG21	1:Q:113:VAL:HG11	1.89	0.54
3:A:128:MET:HE1	3:A:165:ILE:HD13	1.90	0.54
3:A:168:GLU:HG2	3:A:335:TYR:CE1	2.43	0.54
3:E:83:LEU:HD23	3:E:117:TRP:HB3	1.89	0.54
3:G:51:THR:HG23	3:G:102:GLY:O	2.08	0.54
3:I:19:THR:HG22	3:I:20:ASN:N	2.22	0.54
3:I:244:THR:HG22	3:I:245:ASP:N	2.23	0.54
3:J:54:SER:HA	3:J:101:PRO:HB3	1.89	0.54
3:L:192:PHE:HD1	3:L:305:ASN:OD1	1.90	0.54
3:N:172:GLY:HA3	3:N:317:TYR:CE2	2.43	0.54
3:O:78:VAL:CG2	3:O:83:LEU:HB2	2.38	0.54
3:O:205:TYR:CD1	3:O:292:ASP:HA	2.43	0.54
1:Q:173:ASN:CB	4:P:23:SER:C	2.81	0.54
3:B:41:SER:HB2	3:B:111:VAL:O	2.08	0.54
3:F:56:PRO:O	3:F:59:TYR:HB2	2.08	0.54
3:I:57:PHE:O	3:I:101:PRO:HG3	2.08	0.54
3:J:206:LEU:HB3	3:J:212:TYR:CE1	2.42	0.54
3:N:25:ILE:HG23	3:N:155:ILE:HD13	1.89	0.54
1:Q:36:PHE:CZ	3:C:24:LYS:HG3	2.43	0.53
3:C:247:ILE:HD13	3:C:274:ILE:HG21	1.89	0.53
3:E:130:GLN:OE1	3:E:130:GLN:HA	2.08	0.53
3:M:263:GLN:OE1	3:N:92:LYS:HG2	2.08	0.53
3:M:332:VAL:O	3:M:336:VAL:HG23	2.08	0.53
3:N:98:TYR:N	3:N:98:TYR:CD1	2.75	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:O:298:LEU:HD12	3:O:306:VAL:HG21	1.89	0.53
3:A:259:GLN:HG3	3:B:96:PRO:CG	2.36	0.53
3:D:259:GLN:O	3:D:263:GLN:HA	2.08	0.53
3:D:287:THR:HG21	3:D:318:TYR:CE2	2.41	0.53
3:G:4:ILE:HA	3:G:157:TYR:O	2.08	0.53
3:G:52:LEU:O	3:G:102:GLY:HA2	2.08	0.53
3:H:13:TYR:CZ	3:H:23:ILE:HG12	2.43	0.53
3:H:55:ALA:N	3:H:101:PRO:HB3	2.23	0.53
3:I:53:PRO:HG2	3:I:57:PHE:CG	2.43	0.53
3:I:92:LYS:N	3:I:92:LYS:CD	2.71	0.53
3:I:215:GLN:HG3	3:I:310:TYR:CD1	2.43	0.53
3:J:219:VAL:CG1	3:J:304:ASP:HB2	2.39	0.53
3:K:11:GLN:NE2	3:K:13:TYR:CE1	2.76	0.53
3:L:62:VAL:HG11	3:L:65:PHE:CZ	2.43	0.53
3:M:42:ILE:HG22	3:M:145:VAL:HB	1.91	0.53
3:M:62:VAL:HG11	3:M:65:PHE:CZ	2.43	0.53
3:N:280:PHE:CD1	3:N:284:LEU:HB2	2.43	0.53
3:N:324:LEU:HG	3:N:325:PRO:HD2	1.90	0.53
3:C:52:LEU:HD13	3:C:99:PRO:CG	2.38	0.53
3:C:284:LEU:HD11	3:C:294:ILE:HD13	1.91	0.53
3:E:70:GLU:HG3	3:E:130:GLN:HB2	1.89	0.53
3:H:9:LEU:HD11	3:H:155:ILE:HD12	1.90	0.53
3:M:194:VAL:HG21	3:M:203:VAL:HG13	1.89	0.53
3:N:277:ARG:HA	3:N:282:GLY:O	2.08	0.53
1:Q:211:THR:CB	4:P:57:SER:HB3	2.38	0.53
3:E:85:ILE:HD11	3:E:226:ILE:CD1	2.38	0.53
3:E:126:ALA:HB1	3:E:132:ILE:HD11	1.90	0.53
3:H:173:ALA:HB2	3:H:320:GLN:NE2	2.23	0.53
3:K:259:GLN:O	3:K:263:GLN:HA	2.08	0.53
3:N:324:LEU:HG	3:N:328:VAL:HB	1.90	0.53
3:A:285:ASP:O	3:A:286:LEU:HD23	2.08	0.53
3:C:116:MET:CG	3:C:117:TRP:N	2.71	0.53
3:D:34:ILE:O	3:D:119:PHE:HD1	1.90	0.53
3:D:333:GLN:OE1	3:D:333:GLN:HA	2.07	0.53
3:E:13:TYR:CZ	3:E:23:ILE:HG12	2.44	0.53
3:G:116:MET:HE1	3:I:256:ALA:CB	2.38	0.53
3:G:174:ASP:OD2	3:G:317:TYR:HE2	1.91	0.53
3:G:324:LEU:HG	3:G:328:VAL:HB	1.90	0.53
3:L:13:TYR:CE2	3:L:23:ILE:HG12	2.44	0.53
1:Q:29:SER:HB2	1:Q:110:SER:CB	2.39	0.53
1:Q:106:VAL:CG1	1:Q:202:GLY:CA	2.86	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:175:GLY:N	4:P:42:LEU:CD1	2.71	0.53
3:C:221:ASN:H	3:C:228:ASN:ND2	2.06	0.53
3:E:85:ILE:HD11	3:E:226:ILE:HD11	1.91	0.53
3:E:196:ALA:HB2	3:E:302:ASN:C	2.34	0.53
3:H:9:LEU:HD21	3:H:26:PRO:CD	2.38	0.53
3:L:246:LYS:C	3:L:247:ILE:HG13	2.34	0.53
3:L:340:LYS:HG3	3:L:341:ARG:N	2.22	0.53
3:M:230:ASP:N	3:M:231:PRO:HD2	2.24	0.53
3:M:236:LEU:HB3	3:M:247:ILE:HG13	1.91	0.53
3:N:121:LEU:HB3	3:N:124:PHE:HB2	1.91	0.53
3:A:230:ASP:HA	3:A:301:GLN:CG	2.38	0.53
3:C:113:LEU:HD23	3:C:149:ALA:HB2	1.90	0.53
3:E:285:ASP:O	3:E:286:LEU:HD23	2.09	0.53
3:F:113:LEU:HD22	3:F:147:ILE:HG23	1.89	0.53
3:F:247:ILE:HG12	3:F:279:TYR:CD2	2.43	0.53
3:I:205:TYR:CD1	3:I:295:GLU:HB3	2.44	0.53
3:J:13:TYR:OH	3:J:23:ILE:HG23	2.09	0.53
3:K:95:ASN:OD1	3:K:96:PRO:HD2	2.09	0.53
3:N:277:ARG:HG3	3:N:278:LYS:HG2	1.91	0.53
3:A:239:VAL:HG23	3:A:295:GLU:HG2	1.90	0.53
3:B:172:GLY:HA3	3:B:317:TYR:CE2	2.44	0.53
3:E:11:GLN:H	3:I:133:ILE:HD13	1.74	0.53
3:E:203:VAL:O	3:E:204:ALA:HB2	2.09	0.53
3:E:259:GLN:HG3	3:F:96:PRO:HG2	1.91	0.53
3:F:3:GLU:HB2	3:F:159:ARG:CB	2.39	0.53
3:F:257:GLU:O	3:F:261:GLU:CB	2.57	0.53
3:K:171:LEU:HB3	3:K:175:GLY:HA2	1.90	0.53
3:O:87:MET:HE1	3:O:345:ARG:HB3	1.90	0.53
4:P:117:GLU:HG3	4:P:119:TYR:CE2	2.44	0.53
4:P:245:TYR:O	4:P:246:GLY:C	2.52	0.53
3:A:172:GLY:HA3	3:A:317:TYR:CE2	2.44	0.53
3:A:216:LEU:HD12	3:A:272:ALA:O	2.08	0.53
3:A:248:LYS:HB3	3:B:7:GLU:CB	2.39	0.53
3:A:334:GLN:OE1	3:A:334:GLN:HA	2.07	0.53
3:B:121:LEU:HB3	3:B:124:PHE:HB2	1.90	0.53
3:C:121:LEU:HB3	3:C:124:PHE:HB2	1.91	0.53
3:C:205:TYR:CD1	3:C:295:GLU:HB3	2.44	0.53
3:F:13:TYR:HB3	3:F:21:ILE:HG21	1.90	0.53
3:F:17:ALA:HB1	3:F:140:GLN:NE2	2.23	0.53
3:F:219:VAL:HG21	3:F:300:LEU:CD2	2.38	0.53
3:K:254:LEU:HD21	3:K:274:ILE:HG13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:200:PRO:HG3	3:M:233:GLU:CG	2.38	0.53
3:M:333:GLN:HA	3:M:333:GLN:OE1	2.09	0.53
3:N:121:LEU:HA	3:N:184:PRO:HG3	1.90	0.53
3:A:41:SER:HB2	3:A:111:VAL:O	2.09	0.53
3:A:57:PHE:CE2	3:A:142:PRO:HG2	2.44	0.53
3:A:321:LEU:HD22	3:A:332:VAL:HG11	1.91	0.53
3:B:28:ASN:ND2	3:F:70:GLU:C	2.67	0.53
3:B:212:TYR:HA	3:B:312:SER:OG	2.08	0.53
3:F:273:ILE:C	3:F:274:ILE:HD12	2.34	0.53
3:I:44:ASN:ND2	3:I:107:ALA:HA	2.22	0.53
3:K:30:PHE:CD1	3:K:160:VAL:HG21	2.44	0.53
3:K:218:TYR:HA	3:K:270:ALA:O	2.09	0.53
3:L:55:ALA:N	3:L:101:PRO:HB3	2.24	0.53
3:N:64:THR:HA	3:N:79:SER:HA	1.90	0.53
3:N:256:ALA:CB	3:O:116:MET:HE1	2.39	0.53
1:Q:45:PHE:HE1	1:Q:89:PHE:CD2	2.27	0.52
3:B:52:LEU:CD2	3:B:145:VAL:HG21	2.39	0.52
3:C:309:LEU:HD23	3:C:310:TYR:N	2.23	0.52
3:C:329:ALA:O	3:C:333:GLN:HG2	2.09	0.52
3:D:343:ILE:O	3:D:343:ILE:HG12	2.09	0.52
3:G:87:MET:HB3	3:G:95:ASN:ND2	2.24	0.52
3:G:257:GLU:O	3:G:261:GLU:CB	2.57	0.52
3:I:212:TYR:HA	3:I:312:SER:OG	2.08	0.52
3:J:23:ILE:HD13	3:J:153:ILE:HD11	1.91	0.52
3:J:57:PHE:CD2	3:J:58:PRO:HA	2.44	0.52
3:J:69:TYR:OH	3:J:73:LYS:HD2	2.09	0.52
3:K:247:ILE:HD13	3:K:274:ILE:HG21	1.91	0.52
3:K:320:GLN:O	3:K:324:LEU:HB2	2.09	0.52
3:L:195:PRO:HA	3:L:303:GLN:HG3	1.90	0.52
3:M:13:TYR:OH	3:M:23:ILE:HG23	2.09	0.52
3:C:30:PHE:CZ	3:C:165:ILE:HD11	2.43	0.52
3:D:54:SER:CA	3:D:101:PRO:HB3	2.37	0.52
3:D:219:VAL:HG12	3:D:220:ILE:N	2.24	0.52
3:G:230:ASP:O	3:G:232:THR:HG23	2.10	0.52
3:I:259:GLN:O	3:I:263:GLN:HA	2.10	0.52
3:L:38:LEU:HD13	3:L:151:PHE:CZ	2.44	0.52
3:M:220:ILE:O	3:M:304:ASP:HB3	2.09	0.52
3:O:69:TYR:O	3:O:70:GLU:HB2	2.09	0.52
3:O:202:HIS:HA	3:O:297:ASP:OD2	2.08	0.52
3:B:195:PRO:HG2	3:B:201:ILE:HD12	1.91	0.52
3:D:42:ILE:HG22	3:D:145:VAL:HB	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:206:LEU:HD12	3:D:294:ILE:HB	1.91	0.52
3:D:298:LEU:HD12	3:D:306:VAL:HG21	1.91	0.52
3:D:321:LEU:CD2	3:D:332:VAL:HG11	2.38	0.52
3:J:278:LYS:O	3:K:4:ILE:HB	2.09	0.52
3:K:19:THR:HG22	3:K:20:ASN:N	2.24	0.52
3:K:68:SER:HB2	3:K:73:LYS:O	2.09	0.52
3:N:42:ILE:HG23	3:N:147:ILE:HD13	1.90	0.52
3:N:233:GLU:HB3	3:N:299:ALA:CB	2.39	0.52
3:A:5:TYR:CE1	3:A:157:TYR:HB2	2.44	0.52
3:A:113:LEU:CD2	3:A:147:ILE:HG23	2.38	0.52
3:B:56:PRO:O	3:B:59:TYR:HB2	2.09	0.52
3:C:4:ILE:HG23	3:C:32:ARG:HD3	1.92	0.52
3:E:25:ILE:HG23	3:E:155:ILE:CD1	2.40	0.52
3:E:36:VAL:O	3:E:116:MET:HG3	2.08	0.52
3:F:38:LEU:O	3:F:114:ASN:HA	2.10	0.52
3:G:95:ASN:OD1	3:G:96:PRO:HD2	2.10	0.52
3:H:32:ARG:HD2	3:H:158:GLU:HB2	1.91	0.52
3:H:187:ILE:HG22	3:H:188:GLU:N	2.25	0.52
3:L:211:ILE:HD12	3:L:313:TYR:CE2	2.45	0.52
3:L:337:ALA:O	3:L:340:LYS:HG2	2.09	0.52
3:O:13:TYR:CZ	3:O:23:ILE:HG12	2.44	0.52
4:P:289:ASN:C	4:P:289:ASN:ND2	2.60	0.52
3:B:57:PHE:CE2	3:B:142:PRO:HG2	2.44	0.52
3:B:96:PRO:HB3	3:B:114:ASN:ND2	2.24	0.52
3:B:187:ILE:HG22	3:B:188:GLU:N	2.25	0.52
3:D:13:TYR:CZ	3:D:23:ILE:HG12	2.44	0.52
3:D:29:ASN:OD1	3:D:159:ARG:HA	2.09	0.52
3:E:32:ARG:HH21	3:E:342:ARG:CD	2.22	0.52
3:E:121:LEU:HD12	3:E:121:LEU:N	2.25	0.52
3:F:52:LEU:HD12	3:F:99:PRO:HG3	1.91	0.52
3:H:19:THR:CG2	3:H:20:ASN:N	2.73	0.52
3:K:67:LEU:HB3	3:K:76:TYR:HB2	1.91	0.52
3:L:13:TYR:CZ	3:L:23:ILE:HG12	2.44	0.52
3:L:105:VAL:HA	3:L:111:VAL:HG13	1.90	0.52
3:O:190:PRO:HB3	3:O:307:TYR:CE1	2.45	0.52
1:Q:19:VAL:HG23	1:Q:120:HIS:HB3	1.92	0.52
3:A:239:VAL:HG21	3:A:295:GLU:HG2	1.92	0.52
3:B:37:GLN:HG2	3:B:116:MET:HE2	1.92	0.52
3:B:38:LEU:O	3:B:114:ASN:HA	2.10	0.52
3:E:142:PRO:HB2	3:E:145:VAL:CG2	2.40	0.52
3:E:244:THR:OG1	3:J:73:LYS:HE2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:54:SER:CA	3:F:101:PRO:HB3	2.38	0.52
3:G:42:ILE:HG23	3:G:147:ILE:HD13	1.92	0.52
3:H:125:PRO:HG3	3:H:177:MET:HG2	1.91	0.52
3:H:337:ALA:O	3:H:341:ARG:HG2	2.10	0.52
3:I:194:VAL:HG11	3:I:203:VAL:HG22	1.91	0.52
3:J:89:TYR:CD2	3:J:273:ILE:HD11	2.44	0.52
3:M:247:ILE:CD1	3:M:274:ILE:HG21	2.40	0.52
3:N:13:TYR:CZ	3:N:23:ILE:HG12	2.44	0.52
3:O:105:VAL:HG21	3:O:145:VAL:HG11	1.91	0.52
3:A:236:LEU:CB	3:A:247:ILE:HD12	2.40	0.52
3:B:309:LEU:HD23	3:B:310:TYR:N	2.25	0.52
3:C:293:SER:O	3:C:294:ILE:HG13	2.09	0.52
3:C:309:LEU:HD23	3:C:309:LEU:C	2.35	0.52
3:F:38:LEU:HD13	3:F:151:PHE:CZ	2.45	0.52
3:I:38:LEU:O	3:I:114:ASN:HA	2.09	0.52
3:I:345:ARG:HG3	3:I:345:ARG:HH11	1.74	0.52
3:J:123:ARG:HD2	3:J:158:GLU:OE2	2.09	0.52
3:K:91:THR:HG23	3:K:345:ARG:HD3	1.92	0.52
3:N:87:MET:HE1	3:N:345:ARG:CB	2.33	0.52
3:A:246:LYS:HG3	3:A:280:PHE:CZ	2.44	0.52
3:A:257:GLU:O	3:A:261:GLU:CB	2.57	0.52
3:B:57:PHE:CD2	3:B:58:PRO:HA	2.45	0.52
3:E:32:ARG:HA	3:E:122:ALA:O	2.09	0.52
3:E:92:LYS:N	3:E:92:LYS:CD	2.73	0.52
3:F:54:SER:O	3:F:55:ALA:C	2.52	0.52
3:F:321:LEU:CD2	3:F:332:VAL:CG1	2.88	0.52
3:G:187:ILE:CG2	3:G:188:GLU:N	2.72	0.52
3:M:341:ARG:O	3:M:344:LYS:HE3	2.09	0.52
3:O:287:THR:HG21	3:O:318:TYR:CD2	2.44	0.52
3:C:30:PHE:CD1	3:C:160:VAL:HG21	2.45	0.52
3:E:122:ALA:HB1	3:E:339:GLN:HG3	1.92	0.52
3:E:192:PHE:HE2	3:O:201:ILE:HG21	1.75	0.52
3:F:68:SER:HB2	3:F:73:LYS:O	2.09	0.52
3:G:176:GLU:O	3:G:177:MET:HG3	2.10	0.52
3:L:190:PRO:CB	3:L:307:TYR:CD1	2.91	0.52
3:L:213:LYS:HB2	3:L:311:VAL:O	2.09	0.52
3:M:25:ILE:HG23	3:M:155:ILE:HD13	1.91	0.52
1:Q:140:TYR:CD2	1:Q:142:ILE:HG13	2.45	0.52
3:A:123:ARG:HH22	3:A:168:GLU:CD	2.17	0.52
3:B:332:VAL:O	3:B:336:VAL:HG23	2.10	0.52
3:C:215:GLN:HG3	3:C:310:TYR:CD1	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:224:SER:OG	3:C:228:ASN:HB3	2.09	0.52
3:E:240:ARG:HD3	3:J:209:GLY:HA3	1.92	0.52
3:G:15:TRP:CZ3	3:G:147:ILE:HB	2.45	0.52
3:G:105:VAL:HG13	3:G:110:SER:HA	1.92	0.52
3:H:105:VAL:HA	3:H:111:VAL:HG13	1.92	0.52
3:I:12:THR:HG21	3:I:152:TYR:CE2	2.45	0.52
3:I:26:PRO:HB3	3:M:131:ASN:HD21	1.75	0.52
3:J:208:PRO:HA	3:J:286:LEU:HB2	1.92	0.52
3:L:105:VAL:HG21	3:L:145:VAL:HG11	1.92	0.52
3:N:25:ILE:HG23	3:N:155:ILE:CD1	2.40	0.52
3:O:240:ARG:NH1	3:O:290:PRO:HB2	2.24	0.52
3:A:257:GLU:O	3:A:261:GLU:HB2	2.10	0.51
3:C:122:ALA:HB1	3:C:339:GLN:HG2	1.90	0.51
3:D:134:LEU:O	3:D:134:LEU:HG	2.08	0.51
3:H:211:ILE:HG12	3:H:285:ASP:OD2	2.09	0.51
3:I:56:PRO:CB	3:I:81:THR:HG23	2.40	0.51
3:J:19:THR:HG22	3:J:20:ASN:N	2.25	0.51
3:J:87:MET:HB3	3:J:95:ASN:ND2	2.24	0.51
3:J:92:LYS:HG3	3:J:262:TYR:O	2.09	0.51
3:K:13:TYR:HB3	3:K:21:ILE:HG21	1.91	0.51
3:K:244:THR:CG2	3:K:245:ASP:N	2.73	0.51
3:O:9:LEU:HD21	3:O:155:ILE:HD11	1.93	0.51
3:A:55:ALA:N	3:A:101:PRO:HB3	2.26	0.51
3:B:62:VAL:O	3:B:80:GLY:HA3	2.10	0.51
3:B:69:TYR:O	3:B:70:GLU:HB2	2.09	0.51
3:D:43:SER:HA	3:D:110:SER:HB2	1.91	0.51
3:F:238:ILE:HD11	3:F:246:LYS:CD	2.37	0.51
3:G:62:VAL:HG13	3:G:136:ILE:HG23	1.92	0.51
3:H:62:VAL:HG13	3:H:136:ILE:HG23	1.92	0.51
3:I:165:ILE:HA	3:I:168:GLU:OE1	2.09	0.51
3:I:246:LYS:O	3:I:279:TYR:HD2	1.93	0.51
3:M:174:ASP:OD2	3:M:317:TYR:HE2	1.93	0.51
3:M:238:ILE:HD11	3:M:246:LYS:CD	2.39	0.51
3:N:240:ARG:HH12	3:N:290:PRO:CB	2.24	0.51
3:O:23:ILE:HG21	3:O:153:ILE:HG13	1.92	0.51
3:O:90:THR:HB	3:O:345:ARG:HG2	1.91	0.51
3:A:256:ALA:HB2	3:B:116:MET:HE1	1.88	0.51
3:B:52:LEU:HD13	3:B:99:PRO:HG3	1.91	0.51
3:B:64:THR:HA	3:B:79:SER:HA	1.93	0.51
3:C:277:ARG:HA	3:C:282:GLY:O	2.11	0.51
3:E:179:LEU:HG	3:E:321:LEU:HD21	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:91:THR:O	3:J:94:GLN:HB2	2.10	0.51
3:K:321:LEU:HD22	3:K:332:VAL:HG11	1.92	0.51
3:L:105:VAL:HG13	3:L:110:SER:HA	1.93	0.51
3:M:194:VAL:HG12	3:M:201:ILE:HD11	1.91	0.51
3:N:57:PHE:O	3:N:101:PRO:HG3	2.10	0.51
3:O:19:THR:O	3:O:137:LEU:HD12	2.10	0.51
3:O:192:PHE:HD1	3:O:305:ASN:OD1	1.93	0.51
3:O:203:VAL:HB	3:O:296:TYR:O	2.10	0.51
3:A:298:LEU:CD1	3:A:306:VAL:HG11	2.40	0.51
3:B:28:ASN:OD1	3:B:28:ASN:N	2.41	0.51
3:C:56:PRO:CB	3:C:81:THR:HG23	2.39	0.51
3:C:130:GLN:HA	3:C:130:GLN:NE2	2.15	0.51
3:D:19:THR:CG2	3:D:20:ASN:N	2.73	0.51
3:D:27:ARG:HD2	3:D:126:ALA:O	2.10	0.51
3:D:93:GLY:HA3	3:D:264:VAL:HG21	1.93	0.51
3:G:176:GLU:C	3:G:177:MET:HG3	2.35	0.51
3:I:56:PRO:HB3	3:I:81:THR:HG23	1.91	0.51
3:K:254:LEU:HD21	3:K:274:ILE:CD1	2.41	0.51
3:L:288:HIS:CD2	3:L:318:TYR:HE2	2.29	0.51
3:O:273:ILE:C	3:O:274:ILE:HD12	2.35	0.51
1:Q:61:LEU:N	1:Q:61:LEU:CD1	2.73	0.51
3:C:244:THR:HG22	3:C:245:ASP:N	2.25	0.51
3:C:286:LEU:HD21	3:C:294:ILE:CD1	2.34	0.51
3:D:286:LEU:HD21	3:D:294:ILE:HD12	1.92	0.51
3:I:5:TYR:HE2	3:I:7:GLU:OE2	1.94	0.51
3:J:42:ILE:HG21	3:J:52:LEU:HD21	1.93	0.51
3:J:90:THR:HB	3:J:345:ARG:CG	2.37	0.51
3:L:4:ILE:HA	3:L:158:GLU:HA	1.93	0.51
3:M:176:GLU:O	3:M:177:MET:HG3	2.10	0.51
3:M:219:VAL:HG12	3:M:220:ILE:N	2.25	0.51
3:N:240:ARG:HH12	3:N:290:PRO:HB2	1.76	0.51
3:O:55:ALA:N	3:O:101:PRO:HB3	2.25	0.51
3:A:230:ASP:N	3:A:231:PRO:HD2	2.26	0.51
3:D:76:TYR:CE2	3:D:119:PHE:HB3	2.46	0.51
3:E:247:ILE:HD13	3:E:274:ILE:HG21	1.91	0.51
3:H:13:TYR:OH	3:H:23:ILE:HG23	2.09	0.51
3:I:61:LEU:CD2	3:I:142:PRO:HD3	2.40	0.51
3:I:332:VAL:O	3:I:336:VAL:HG23	2.10	0.51
3:J:345:ARG:HG3	3:J:345:ARG:NH1	2.24	0.51
3:K:54:SER:O	3:K:55:ALA:C	2.54	0.51
3:K:105:VAL:HA	3:K:111:VAL:HG13	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:182:VAL:HG21	3:K:339:GLN:HB3	1.91	0.51
3:K:254:LEU:HD21	3:K:274:ILE:CG1	2.41	0.51
3:L:55:ALA:H	3:L:101:PRO:HB3	1.76	0.51
3:L:345:ARG:NH1	3:L:345:ARG:CG	2.72	0.51
3:M:69:TYR:O	3:M:70:GLU:HB2	2.10	0.51
3:M:246:LYS:HE2	3:M:246:LYS:CA	2.33	0.51
3:O:338:ARG:O	3:O:341:ARG:HG2	2.09	0.51
3:C:231:PRO:HB2	3:C:251:TRP:CD2	2.46	0.51
3:F:126:ALA:HA	3:F:129:VAL:HG22	1.92	0.51
3:F:329:ALA:O	3:F:333:GLN:HG2	2.11	0.51
3:I:55:ALA:N	3:I:101:PRO:HB3	2.26	0.51
3:J:35:ARG:HB2	3:J:154:THR:HB	1.93	0.51
3:K:164:GLU:HA	3:K:167:SER:OG	2.11	0.51
3:L:58:PRO:HB2	3:L:115:VAL:HG21	1.93	0.51
1:Q:23:ASP:HA	1:Q:115:LEU:O	2.10	0.51
1:Q:181:ILE:HG23	1:Q:181:ILE:O	2.10	0.51
3:A:38:LEU:HD13	3:A:151:PHE:CZ	2.46	0.51
3:B:123:ARG:HB3	3:B:339:GLN:OE1	2.11	0.51
3:B:324:LEU:HD21	3:B:332:VAL:HG21	1.93	0.51
3:C:98:TYR:N	3:C:98:TYR:CD1	2.78	0.51
3:C:142:PRO:HB2	3:C:145:VAL:HG22	1.92	0.51
3:C:171:LEU:HB3	3:C:175:GLY:HA2	1.91	0.51
3:C:238:ILE:HG13	3:C:246:LYS:HG2	1.92	0.51
3:C:240:ARG:HG2	3:C:241:GLY:N	2.25	0.51
3:F:30:PHE:CD2	3:F:125:PRO:HA	2.46	0.51
3:F:230:ASP:HA	3:F:301:GLN:CG	2.36	0.51
3:H:35:ARG:HB2	3:H:154:THR:HB	1.93	0.51
3:H:90:THR:HB	3:H:345:ARG:HG2	1.90	0.51
3:H:205:TYR:HA	3:H:295:GLU:HA	1.91	0.51
3:H:263:GLN:O	3:I:94:GLN:HG3	2.11	0.51
3:I:113:LEU:CD2	3:I:147:ILE:HG23	2.41	0.51
3:I:172:GLY:HA3	3:I:317:TYR:CE2	2.46	0.51
3:I:247:ILE:HG12	3:I:279:TYR:CE2	2.45	0.51
3:J:61:LEU:HD22	3:J:147:ILE:HG13	1.91	0.51
3:J:211:ILE:HD12	3:J:313:TYR:CZ	2.45	0.51
3:K:68:SER:HB3	3:K:74:THR:HA	1.93	0.51
3:L:86:LEU:HD12	3:L:86:LEU:O	2.11	0.51
3:N:65:PHE:HE1	3:N:136:ILE:HG12	1.75	0.51
3:B:189:ILE:HD12	3:B:310:TYR:CE2	2.44	0.51
3:C:56:PRO:HD3	3:C:226:ILE:CG2	2.41	0.51
3:D:4:ILE:HG23	3:D:32:ARG:HD3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:273:ILE:C	3:D:274:ILE:HD12	2.35	0.51
3:F:230:ASP:O	3:F:232:THR:HG23	2.10	0.51
3:F:235:GLU:HB3	3:F:297:ASP:HB2	1.93	0.51
3:H:280:PHE:CE1	3:H:284:LEU:HD22	2.46	0.51
3:K:263:GLN:HB3	3:L:92:LYS:HB3	1.93	0.51
3:N:65:PHE:CD1	3:N:136:ILE:HG12	2.46	0.51
3:N:240:ARG:NH1	3:N:290:PRO:HB2	2.26	0.51
3:N:309:LEU:HD23	3:N:310:TYR:N	2.26	0.51
3:O:42:ILE:HG22	3:O:145:VAL:HB	1.93	0.51
3:O:52:LEU:CD1	3:O:99:PRO:CG	2.89	0.51
1:Q:60:LEU:HD23	1:Q:60:LEU:N	2.25	0.51
1:Q:173:ASN:HB3	4:P:23:SER:C	2.35	0.51
3:E:57:PHE:CE2	3:E:142:PRO:HG2	2.46	0.51
3:E:176:GLU:O	3:E:177:MET:HG3	2.11	0.51
3:E:187:ILE:HG22	3:E:188:GLU:N	2.26	0.51
3:E:195:PRO:HA	3:E:303:GLN:HG3	1.93	0.51
3:E:208:PRO:CD	3:E:291:SER:HB3	2.41	0.51
3:G:94:GLN:O	3:I:259:GLN:NE2	2.44	0.51
3:H:334:GLN:O	3:H:338:ARG:HG3	2.11	0.51
3:I:56:PRO:HA	3:I:267:TYR:OH	2.11	0.51
3:J:206:LEU:HB3	3:J:212:TYR:CZ	2.45	0.51
3:K:200:PRO:HG3	3:K:233:GLU:HG3	1.92	0.51
3:L:200:PRO:CG	3:L:233:GLU:HG3	2.41	0.51
3:M:218:TYR:HA	3:M:270:ALA:O	2.11	0.51
3:N:5:TYR:HE2	3:N:7:GLU:OE2	1.94	0.51
3:O:224:SER:OG	3:O:228:ASN:HB3	2.10	0.51
3:D:184:PRO:CB	3:D:343:ILE:HD12	2.40	0.50
3:E:63:GLN:HG2	3:E:64:THR:HG23	1.93	0.50
3:F:23:ILE:HG21	3:F:153:ILE:HG13	1.91	0.50
3:F:53:PRO:CD	3:F:142:PRO:HB3	2.41	0.50
3:G:168:GLU:HG2	3:G:335:TYR:CE1	2.46	0.50
3:G:325:PRO:C	3:G:327:GLN:H	2.19	0.50
3:I:90:THR:CB	3:I:345:ARG:HG2	2.42	0.50
3:K:190:PRO:HB3	3:K:307:TYR:CE1	2.46	0.50
3:K:284:LEU:HD11	3:K:294:ILE:CD1	2.40	0.50
3:M:70:GLU:C	3:M:72:SER:H	2.17	0.50
3:N:15:TRP:CZ3	3:N:147:ILE:HB	2.46	0.50
3:N:213:LYS:HB2	3:N:311:VAL:O	2.11	0.50
3:N:321:LEU:CD2	3:N:332:VAL:HG11	2.40	0.50
3:B:35:ARG:HB2	3:B:154:THR:HB	1.93	0.50
3:B:248:LYS:HG3	3:B:248:LYS:O	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:257:GLU:O	3:B:261:GLU:CB	2.59	0.50
3:C:298:LEU:HD12	3:C:306:VAL:HG21	1.92	0.50
3:F:203:VAL:HG23	3:F:297:ASP:HA	1.93	0.50
3:F:309:LEU:HD23	3:F:310:TYR:N	2.27	0.50
3:I:235:GLU:OE2	3:I:237:LYS:HE3	2.11	0.50
3:K:273:ILE:C	3:K:274:ILE:HD12	2.36	0.50
3:N:27:ARG:NH1	3:N:27:ARG:HB2	2.26	0.50
3:N:253:ALA:O	3:N:256:ALA:HB3	2.11	0.50
1:Q:146:PHE:CD1	1:Q:147:GLY:CA	2.91	0.50
3:A:116:MET:HE1	3:C:256:ALA:HB2	1.93	0.50
3:A:130:GLN:OE1	3:A:130:GLN:HA	2.10	0.50
3:A:203:VAL:HG23	3:A:297:ASP:HA	1.93	0.50
3:D:236:LEU:HD11	3:D:294:ILE:HG22	1.92	0.50
3:F:205:TYR:CD1	3:F:295:GLU:HB3	2.45	0.50
3:G:263:GLN:HA	3:H:94:GLN:HG3	1.93	0.50
3:H:57:PHE:CD2	3:H:58:PRO:HA	2.46	0.50
3:J:87:MET:HE1	3:J:345:ARG:CB	2.32	0.50
3:L:236:LEU:HD12	3:L:295:GLU:O	2.10	0.50
3:M:247:ILE:HD13	3:M:274:ILE:HG21	1.92	0.50
3:N:37:GLN:HB3	3:N:39:ILE:HG13	1.94	0.50
3:O:56:PRO:CB	3:O:81:THR:HG23	2.41	0.50
3:C:62:VAL:HG11	3:C:65:PHE:CZ	2.47	0.50
3:C:92:LYS:N	3:C:92:LYS:CD	2.64	0.50
3:D:90:THR:HB	3:D:345:ARG:HG2	1.94	0.50
3:D:324:LEU:HG	3:D:328:VAL:HB	1.93	0.50
3:I:9:LEU:HD21	3:I:155:ILE:HD11	1.92	0.50
3:I:62:VAL:HG13	3:I:136:ILE:HG23	1.94	0.50
3:O:214:ARG:HG2	3:O:311:VAL:HB	1.92	0.50
3:O:230:ASP:HA	3:O:301:GLN:CG	2.41	0.50
1:Q:9:LYS:CB	2:R:10:UNK:CB	2.89	0.50
1:Q:191:GLN:HB3	4:P:25:LYS:HB3	1.92	0.50
3:C:27:ARG:NH1	3:C:27:ARG:HB2	2.27	0.50
3:C:67:LEU:HD13	3:C:134:LEU:HB2	1.94	0.50
3:D:56:PRO:HB3	3:D:81:THR:HG23	1.92	0.50
3:D:173:ALA:HB2	3:D:320:GLN:OE1	2.10	0.50
3:D:309:LEU:HD23	3:D:310:TYR:N	2.27	0.50
3:G:87:MET:HE1	3:G:345:ARG:CB	2.39	0.50
3:G:192:PHE:HD1	3:G:305:ASN:OD1	1.95	0.50
3:M:68:SER:HB2	3:M:74:THR:HA	1.94	0.50
3:N:57:PHE:CG	3:N:58:PRO:HA	2.47	0.50
3:C:321:LEU:HD22	3:C:332:VAL:CG1	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:65:PHE:CE1	3:D:136:ILE:HG12	2.47	0.50
3:E:184:PRO:CB	3:E:343:ILE:HD12	2.41	0.50
3:E:321:LEU:HD13	3:E:336:VAL:HG21	1.94	0.50
3:H:62:VAL:HG11	3:H:65:PHE:CZ	2.46	0.50
3:I:42:ILE:HD11	3:I:113:LEU:HD13	1.93	0.50
3:J:27:ARG:HB3	3:J:126:ALA:O	2.12	0.50
3:L:42:ILE:HG23	3:L:147:ILE:CD1	2.37	0.50
3:L:70:GLU:N	3:L:130:GLN:O	2.44	0.50
3:M:57:PHE:O	3:M:101:PRO:HG3	2.12	0.50
3:N:215:GLN:HG3	3:N:310:TYR:CD1	2.47	0.50
3:N:249:VAL:HG12	3:N:253:ALA:HB3	1.93	0.50
3:O:57:PHE:CD2	3:O:58:PRO:HA	2.46	0.50
3:O:257:GLU:O	3:O:261:GLU:CB	2.60	0.50
3:B:23:ILE:HD11	3:B:136:ILE:HD12	1.93	0.50
3:D:121:LEU:N	3:D:121:LEU:HD12	2.26	0.50
3:E:56:PRO:CB	3:E:81:THR:HG23	2.42	0.50
3:E:105:VAL:HG21	3:E:145:VAL:HG11	1.94	0.50
3:E:240:ARG:HD3	3:E:241:GLY:H	1.77	0.50
3:E:257:GLU:O	3:E:261:GLU:HB2	2.12	0.50
3:H:253:ALA:HA	3:H:256:ALA:HB2	1.93	0.50
3:I:236:LEU:HB2	3:I:247:ILE:HD12	1.94	0.50
3:J:56:PRO:CB	3:J:81:THR:HG23	2.41	0.50
3:K:30:PHE:O	3:K:157:TYR:HA	2.12	0.50
3:K:187:ILE:HG22	3:K:188:GLU:N	2.27	0.50
3:K:219:VAL:HG12	3:K:220:ILE:N	2.26	0.50
3:L:3:GLU:HB2	3:L:159:ARG:HB3	1.94	0.50
3:L:216:LEU:HD23	3:L:309:LEU:HD13	1.94	0.50
3:N:173:ALA:HB2	3:N:320:GLN:CD	2.37	0.50
3:N:236:LEU:CB	3:N:247:ILE:HD12	2.41	0.50
3:O:70:GLU:C	3:O:72:SER:H	2.19	0.50
1:Q:106:VAL:CG1	1:Q:202:GLY:HA3	2.42	0.50
1:Q:175:GLY:O	4:P:42:LEU:HD12	2.10	0.50
3:B:26:PRO:HG3	3:F:131:ASN:HD21	1.77	0.50
3:B:246:LYS:HG3	3:B:280:PHE:CE2	2.47	0.50
3:C:64:THR:OG1	3:C:137:LEU:HB3	2.12	0.50
3:C:246:LYS:HE2	3:C:246:LYS:CA	2.39	0.50
3:E:325:PRO:HB2	3:E:328:VAL:HG23	1.94	0.50
3:G:113:LEU:CD2	3:G:147:ILE:HG23	2.42	0.50
3:I:26:PRO:CG	3:M:131:ASN:HD21	2.25	0.50
3:K:176:GLU:O	3:K:177:MET:HG3	2.11	0.50
3:M:25:ILE:HG23	3:M:155:ILE:CD1	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:96:PRO:HB3	3:N:114:ASN:ND2	2.26	0.50
1:Q:11:LYS:HA	2:R:8:UNK:HA	1.94	0.50
3:A:44:ASN:ND2	3:A:107:ALA:HA	2.26	0.50
3:A:92:LYS:HD3	3:C:263:GLN:HB3	1.94	0.50
3:A:280:PHE:CE2	3:A:284:LEU:HD13	2.47	0.50
3:A:321:LEU:CD2	3:A:332:VAL:HG11	2.41	0.50
3:B:220:ILE:HG13	3:B:307:TYR:CE2	2.47	0.50
3:C:63:GLN:O	3:C:79:SER:HB2	2.12	0.50
3:C:195:PRO:HG2	3:C:201:ILE:CD1	2.41	0.50
3:D:249:VAL:HG12	3:D:253:ALA:HB3	1.93	0.50
3:E:126:ALA:CB	3:E:132:ILE:HD11	2.41	0.50
3:E:182:VAL:HG21	3:E:339:GLN:CB	2.42	0.50
3:E:273:ILE:C	3:E:274:ILE:HD12	2.37	0.50
3:G:42:ILE:HG12	3:G:147:ILE:CD1	2.42	0.50
3:H:19:THR:HG22	3:H:20:ASN:N	2.27	0.50
3:I:345:ARG:HG3	3:I:345:ARG:NH1	2.27	0.50
3:L:50:VAL:HG11	3:L:143:SER:O	2.12	0.50
3:L:230:ASP:N	3:L:231:PRO:HD2	2.27	0.50
3:N:314:VAL:HG12	3:N:315:LEU:N	2.25	0.50
3:O:12:THR:HG21	3:O:152:TYR:CE2	2.47	0.50
4:P:173:LEU:O	4:P:237:GLU:HG2	2.12	0.50
3:A:67:LEU:CD1	3:A:134:LEU:HB2	2.42	0.49
3:A:122:ALA:HB1	3:A:339:GLN:CG	2.42	0.49
3:B:36:VAL:HG21	3:B:134:LEU:HD21	1.93	0.49
3:B:57:PHE:CG	3:B:58:PRO:HA	2.47	0.49
3:B:69:TYR:CE1	3:B:73:LYS:HB2	2.47	0.49
3:B:228:ASN:OD1	3:B:270:ALA:HB2	2.12	0.49
3:C:62:VAL:HG13	3:C:136:ILE:HG23	1.92	0.49
3:C:179:LEU:HD11	3:C:320:GLN:HB2	1.94	0.49
3:F:128:MET:HE1	3:F:171:LEU:HD11	1.94	0.49
3:H:277:ARG:NH1	3:H:277:ARG:HB3	2.24	0.49
3:I:205:TYR:HA	3:I:295:GLU:HA	1.94	0.49
3:I:321:LEU:CD2	3:I:332:VAL:HG11	2.41	0.49
3:K:13:TYR:CZ	3:K:23:ILE:HG12	2.47	0.49
3:M:19:THR:CG2	3:M:20:ASN:N	2.75	0.49
3:M:236:LEU:HB2	3:M:247:ILE:HD12	1.93	0.49
3:O:19:THR:CG2	3:O:20:ASN:N	2.75	0.49
3:O:25:ILE:CG2	3:O:155:ILE:HD13	2.42	0.49
3:O:27:ARG:HB3	3:O:126:ALA:O	2.12	0.49
3:A:263:GLN:HB3	3:B:94:GLN:HG3	1.93	0.49
3:B:301:GLN:OE1	3:B:301:GLN:HA	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:33:LYS:HE3	3:C:35:ARG:NH2	2.27	0.49
3:D:332:VAL:O	3:D:336:VAL:HG23	2.12	0.49
3:E:279:TYR:N	3:E:279:TYR:CD1	2.80	0.49
3:F:83:LEU:HD23	3:F:117:TRP:HB3	1.94	0.49
3:F:231:PRO:HB2	3:F:251:TRP:CD2	2.47	0.49
3:I:38:LEU:HD13	3:I:151:PHE:CE2	2.47	0.49
3:I:319:ASP:OD2	3:I:319:ASP:N	2.45	0.49
3:J:81:THR:O	3:J:85:ILE:HG13	2.12	0.49
3:J:315:LEU:HB2	3:J:318:TYR:HB2	1.94	0.49
3:L:13:TYR:OH	3:L:23:ILE:HG23	2.12	0.49
3:M:189:ILE:HD12	3:M:310:TYR:HE2	1.76	0.49
3:N:69:TYR:O	3:N:70:GLU:HB2	2.11	0.49
3:O:67:LEU:CD1	3:O:134:LEU:HB2	2.40	0.49
3:A:254:LEU:HD21	3:A:274:ILE:CD1	2.31	0.49
3:B:98:TYR:O	3:B:113:LEU:HD12	2.12	0.49
3:B:104:SER:O	3:B:106:PRO:HD3	2.12	0.49
3:C:230:ASP:N	3:C:231:PRO:HD2	2.27	0.49
3:C:297:ASP:O	3:C:298:LEU:HD23	2.13	0.49
3:D:116:MET:HG3	3:D:117:TRP:H	1.77	0.49
3:E:37:GLN:CD	3:E:116:MET:HE2	2.38	0.49
3:F:47:THR:O	3:F:107:ALA:HB1	2.12	0.49
3:G:38:LEU:O	3:G:114:ASN:HA	2.12	0.49
3:G:128:MET:SD	3:G:178:PRO:HD3	2.52	0.49
3:G:236:LEU:HD12	3:G:295:GLU:O	2.12	0.49
3:K:81:THR:O	3:K:85:ILE:HG13	2.12	0.49
3:L:27:ARG:HG2	3:L:132:ILE:HD12	1.94	0.49
3:L:87:MET:HE1	3:L:345:ARG:HB3	1.94	0.49
3:N:95:ASN:OD1	3:N:96:PRO:HD2	2.13	0.49
3:O:32:ARG:HD2	3:O:158:GLU:OE1	2.12	0.49
3:O:253:ALA:O	3:O:256:ALA:HB3	2.12	0.49
3:B:44:ASN:HB2	3:B:105:VAL:CG1	2.43	0.49
3:D:5:TYR:CE1	3:D:157:TYR:HB2	2.48	0.49
3:G:54:SER:CA	3:G:101:PRO:HB3	2.40	0.49
3:G:255:GLN:NE2	3:G:266:PRO:HB3	2.27	0.49
3:H:29:ASN:OD1	3:H:159:ARG:HA	2.12	0.49
3:H:76:TYR:CE1	3:H:186:VAL:HB	2.48	0.49
3:I:52:LEU:HB3	3:I:57:PHE:CE1	2.48	0.49
3:I:96:PRO:HG2	3:I:116:MET:HE3	1.94	0.49
3:I:247:ILE:CG2	3:I:249:VAL:HG23	2.42	0.49
3:J:113:LEU:HD23	3:J:149:ALA:HB2	1.94	0.49
3:K:240:ARG:HG3	3:K:241:GLY:N	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:171:LEU:HB3	3:L:175:GLY:HA2	1.94	0.49
3:N:13:TYR:HB3	3:N:21:ILE:HG21	1.94	0.49
3:N:200:PRO:HG3	3:N:233:GLU:CG	2.42	0.49
4:P:318:ALA:CB	4:P:349:ILE:CD1	2.90	0.49
3:A:56:PRO:CB	3:A:81:THR:HG23	2.42	0.49
3:B:54:SER:HA	3:B:101:PRO:CB	2.36	0.49
3:C:78:VAL:HG21	3:C:83:LEU:HB2	1.94	0.49
3:C:219:VAL:CG1	3:C:304:ASP:HB2	2.43	0.49
3:D:202:HIS:HD2	3:I:207:GLN:HB3	1.78	0.49
3:E:92:LYS:HD2	3:E:92:LYS:H	1.75	0.49
3:F:19:THR:HG22	3:F:20:ASN:N	2.28	0.49
3:F:211:ILE:HD12	3:F:313:TYR:CE2	2.47	0.49
3:G:340:LYS:HG3	3:G:341:ARG:N	2.26	0.49
3:H:254:LEU:HD11	3:H:274:ILE:HG13	1.93	0.49
3:J:259:GLN:NE2	3:K:94:GLN:O	2.46	0.49
3:L:183:LEU:HD11	3:L:316:PRO:HG3	1.93	0.49
3:M:116:MET:HG3	3:M:117:TRP:H	1.77	0.49
3:N:231:PRO:HB2	3:N:251:TRP:CE2	2.47	0.49
3:A:3:GLU:HB2	3:A:159:ARG:CB	2.32	0.49
3:A:17:ALA:HB1	3:A:140:GLN:HE22	1.76	0.49
3:C:340:LYS:HG3	3:C:341:ARG:N	2.26	0.49
3:D:19:THR:HG22	3:D:20:ASN:N	2.28	0.49
3:F:32:ARG:HH21	3:F:342:ARG:HD3	1.76	0.49
3:F:63:GLN:HG2	3:F:64:THR:HG23	1.94	0.49
3:F:247:ILE:CD1	3:F:274:ILE:HG21	2.42	0.49
3:G:159:ARG:CG	3:G:159:ARG:HH11	2.25	0.49
3:K:247:ILE:CG2	3:K:249:VAL:HG23	2.43	0.49
3:L:56:PRO:CB	3:L:81:THR:HG23	2.41	0.49
3:O:56:PRO:HB3	3:O:81:THR:HG23	1.95	0.49
3:O:121:LEU:N	3:O:121:LEU:HD12	2.28	0.49
4:P:331:TRP:CH2	4:P:341:PRO:HD3	2.47	0.49
3:A:345:ARG:HG3	3:A:345:ARG:NH1	2.27	0.49
3:B:32:ARG:HA	3:B:122:ALA:O	2.12	0.49
3:C:44:ASN:HB2	3:C:105:VAL:HG12	1.94	0.49
3:C:121:LEU:HD12	3:C:121:LEU:N	2.28	0.49
3:D:119:PHE:CD1	3:D:119:PHE:N	2.81	0.49
3:D:182:VAL:HG22	3:D:336:VAL:HG13	1.94	0.49
3:E:53:PRO:HD2	3:E:142:PRO:HB3	1.93	0.49
3:E:76:TYR:CD1	3:E:186:VAL:HB	2.48	0.49
3:J:230:ASP:O	3:J:232:THR:HG23	2.13	0.49
3:K:55:ALA:N	3:K:101:PRO:HB3	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:247:ILE:CG2	3:L:249:VAL:HG23	2.40	0.49
3:M:159:ARG:CG	3:M:159:ARG:NH1	2.71	0.49
3:M:195:PRO:HG2	3:M:201:ILE:CD1	2.42	0.49
3:N:6:THR:HG22	3:N:7:GLU:N	2.27	0.49
3:O:182:VAL:HG22	3:O:336:VAL:HG13	1.95	0.49
3:O:255:GLN:NE2	3:O:266:PRO:HB3	2.27	0.49
1:Q:25:GLU:CB	1:Q:114:LYS:HG2	2.43	0.49
3:A:105:VAL:HG21	3:A:145:VAL:HG11	1.94	0.49
3:C:78:VAL:CG2	3:C:83:LEU:HB2	2.43	0.49
3:C:257:GLU:O	3:C:261:GLU:CB	2.60	0.49
3:D:105:VAL:O	3:D:106:PRO:C	2.56	0.49
3:G:116:MET:CG	3:G:117:TRP:N	2.76	0.49
3:G:248:LYS:HG3	3:G:248:LYS:O	2.12	0.49
3:J:235:GLU:O	3:J:296:TYR:HA	2.13	0.49
3:K:17:ALA:HB1	3:K:140:GLN:NE2	2.27	0.49
3:O:76:TYR:CE1	3:O:186:VAL:HB	2.47	0.49
3:O:218:TYR:HA	3:O:270:ALA:O	2.11	0.49
3:A:187:ILE:HG22	3:A:188:GLU:N	2.28	0.49
3:B:240:ARG:HD3	3:B:241:GLY:H	1.77	0.49
3:C:226:ILE:HG12	3:C:226:ILE:O	2.12	0.49
3:D:94:GLN:HG3	3:F:263:GLN:C	2.38	0.49
3:E:176:GLU:C	3:E:177:MET:HG3	2.37	0.49
3:F:87:MET:CE	3:F:118:GLU:HB3	2.43	0.49
3:F:211:ILE:HG12	3:F:285:ASP:OD2	2.12	0.49
3:H:174:ASP:OD2	3:H:317:TYR:CE2	2.66	0.49
3:H:176:GLU:C	3:H:177:MET:HG3	2.38	0.49
3:I:168:GLU:HB3	3:I:335:TYR:CD1	2.48	0.49
3:J:19:THR:O	3:J:137:LEU:HD12	2.12	0.49
3:J:233:GLU:HB3	3:J:299:ALA:CB	2.43	0.49
3:L:19:THR:CG2	3:L:20:ASN:N	2.76	0.49
3:M:56:PRO:CB	3:M:81:THR:HG23	2.43	0.49
3:M:68:SER:HB2	3:M:73:LYS:C	2.37	0.49
3:M:172:GLY:HA3	3:M:317:TYR:CZ	2.48	0.49
3:O:54:SER:CA	3:O:101:PRO:HB3	2.42	0.49
3:O:219:VAL:HG12	3:O:220:ILE:N	2.27	0.49
3:O:298:LEU:CD1	3:O:306:VAL:HG11	2.43	0.49
3:A:125:PRO:CG	3:A:177:MET:HG2	2.43	0.49
3:B:240:ARG:HH12	3:B:290:PRO:HG2	1.70	0.49
3:C:13:TYR:CZ	3:C:23:ILE:HG23	2.48	0.49
3:C:56:PRO:HB3	3:C:81:THR:HG23	1.95	0.49
3:C:236:LEU:HB3	3:C:247:ILE:HD12	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:339:GLN:O	3:H:342:ARG:HB2	2.13	0.49
3:I:27:ARG:HB3	3:I:126:ALA:O	2.12	0.49
3:K:219:VAL:CG1	3:K:304:ASP:HB2	2.43	0.49
3:K:324:LEU:HD21	3:K:332:VAL:HG21	1.94	0.49
3:L:51:THR:HG23	3:L:102:GLY:O	2.12	0.49
3:L:219:VAL:CG1	3:L:304:ASP:HB2	2.42	0.49
3:L:228:ASN:OD1	3:L:270:ALA:HB2	2.12	0.49
3:L:231:PRO:HA	3:L:300:LEU:HD23	1.95	0.49
3:M:32:ARG:HH21	3:M:342:ARG:CD	2.26	0.49
3:M:57:PHE:CG	3:M:58:PRO:HA	2.47	0.49
3:O:62:VAL:HG11	3:O:65:PHE:CZ	2.47	0.49
3:O:87:MET:CE	3:O:118:GLU:HB3	2.42	0.49
3:O:124:PHE:HD1	3:O:125:PRO:HD2	1.75	0.49
3:C:248:LYS:O	3:C:248:LYS:HG3	2.12	0.48
3:D:67:LEU:HD13	3:D:134:LEU:HB2	1.95	0.48
3:E:207:GLN:OE1	3:O:239:VAL:HG13	2.13	0.48
3:F:321:LEU:HD22	3:F:332:VAL:HG12	1.94	0.48
3:G:65:PHE:HE1	3:G:136:ILE:HG12	1.77	0.48
3:H:76:TYR:CD1	3:H:186:VAL:HB	2.48	0.48
3:H:171:LEU:HB3	3:H:175:GLY:HA2	1.94	0.48
3:I:230:ASP:N	3:I:231:PRO:HD2	2.28	0.48
3:A:345:ARG:HG3	3:A:345:ARG:HH11	1.79	0.48
3:B:236:LEU:HB3	3:B:247:ILE:HG13	1.93	0.48
3:C:246:LYS:O	3:C:279:TYR:HD2	1.96	0.48
3:D:83:LEU:HD12	3:D:86:LEU:HD23	1.95	0.48
3:K:172:GLY:HA3	3:K:317:TYR:CE2	2.48	0.48
3:K:176:GLU:C	3:K:177:MET:HG3	2.38	0.48
3:K:194:VAL:HG11	3:K:203:VAL:HG22	1.93	0.48
3:L:93:GLY:HA3	3:L:264:VAL:HG21	1.94	0.48
3:M:105:VAL:HA	3:M:111:VAL:HG13	1.95	0.48
3:N:321:LEU:HD13	3:N:336:VAL:HG21	1.95	0.48
3:B:31:ILE:CG2	3:B:121:LEU:HD22	2.44	0.48
3:B:81:THR:O	3:B:85:ILE:HG13	2.13	0.48
3:C:124:PHE:CD1	3:C:125:PRO:HD2	2.48	0.48
3:C:238:ILE:HD11	3:C:246:LYS:CD	2.42	0.48
3:F:25:ILE:HG23	3:F:155:ILE:HD11	1.96	0.48
3:G:37:GLN:O	3:G:151:PHE:HA	2.13	0.48
3:J:206:LEU:HD22	3:J:310:TYR:CE1	2.48	0.48
3:J:215:GLN:HG3	3:J:310:TYR:CE1	2.48	0.48
3:J:230:ASP:N	3:J:231:PRO:HD2	2.28	0.48
3:K:69:TYR:O	3:K:70:GLU:HB2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:92:LYS:O	3:L:92:LYS:HG2	2.13	0.48
3:L:315:LEU:HB2	3:L:318:TYR:HB2	1.95	0.48
3:M:89:TYR:CD2	3:M:273:ILE:HD11	2.48	0.48
3:N:76:TYR:CE2	3:N:119:PHE:HB3	2.47	0.48
3:O:42:ILE:HG23	3:O:147:ILE:CD1	2.42	0.48
3:O:52:LEU:HB3	3:O:57:PHE:CE1	2.48	0.48
4:P:190:THR:CG2	4:P:191:SER:N	2.77	0.48
1:Q:13:GLU:CD	2:R:6:UNK:CB	2.86	0.48
1:Q:29:SER:HB2	1:Q:110:SER:HB3	1.94	0.48
3:A:120:ASP:OD2	3:A:345:ARG:HB2	2.14	0.48
3:B:160:VAL:CG1	3:B:165:ILE:HG13	2.43	0.48
3:B:259:GLN:OE1	3:B:266:PRO:CD	2.56	0.48
3:B:324:LEU:HG	3:B:328:VAL:HB	1.95	0.48
3:C:44:ASN:HB2	3:C:105:VAL:HG11	1.93	0.48
3:C:87:MET:CE	3:C:118:GLU:HB3	2.43	0.48
3:C:228:ASN:OD1	3:C:270:ALA:HB2	2.13	0.48
3:E:126:ALA:HB1	3:E:132:ILE:CD1	2.43	0.48
3:F:190:PRO:HB3	3:F:307:TYR:HD1	1.76	0.48
3:G:9:LEU:HD11	3:G:155:ILE:HD12	1.96	0.48
3:H:32:ARG:HH21	3:H:342:ARG:CD	2.26	0.48
3:H:68:SER:HB3	3:H:74:THR:HA	1.95	0.48
3:H:142:PRO:CD	3:H:147:ILE:HD11	2.41	0.48
3:K:55:ALA:H	3:K:101:PRO:HB3	1.78	0.48
3:K:191:THR:HG21	3:K:194:VAL:HG22	1.94	0.48
3:L:89:TYR:CG	3:L:273:ILE:HD11	2.48	0.48
3:M:49:ALA:N	3:M:107:ALA:HB2	2.27	0.48
3:N:113:LEU:HD23	3:N:149:ALA:CB	2.42	0.48
3:O:212:TYR:HB3	3:O:276:PHE:CD2	2.49	0.48
3:B:240:ARG:NH1	3:B:290:PRO:CG	2.70	0.48
3:C:176:GLU:C	3:C:177:MET:HG3	2.37	0.48
3:D:96:PRO:HB3	3:D:114:ASN:ND2	2.29	0.48
3:D:224:SER:OG	3:D:228:ASN:HB3	2.13	0.48
3:F:123:ARG:HB2	3:F:342:ARG:NH1	2.28	0.48
3:F:195:PRO:HG2	3:F:201:ILE:CD1	2.43	0.48
3:G:123:ARG:HH22	3:G:168:GLU:CD	2.20	0.48
3:H:56:PRO:CB	3:H:81:THR:HG23	2.43	0.48
3:H:142:PRO:HB2	3:H:145:VAL:HG22	1.96	0.48
3:J:52:LEU:CD2	3:J:145:VAL:HG21	2.43	0.48
3:K:96:PRO:HG2	3:K:116:MET:CE	2.41	0.48
3:N:215:GLN:HG3	3:N:310:TYR:CE1	2.48	0.48
3:O:57:PHE:O	3:O:101:PRO:HG3	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:O:121:LEU:HA	3:O:184:PRO:HG3	1.95	0.48
4:P:289:ASN:HD22	4:P:291:GLN:H	1.61	0.48
1:Q:19:VAL:HG13	1:Q:19:VAL:O	2.14	0.48
3:B:25:ILE:HG23	3:B:155:ILE:CD1	2.44	0.48
3:B:63:GLN:HB3	3:B:137:LEU:O	2.14	0.48
3:C:51:THR:HG23	3:C:102:GLY:O	2.14	0.48
3:C:53:PRO:CD	3:C:142:PRO:HB3	2.44	0.48
3:C:324:LEU:HB3	3:C:329:ALA:HB2	1.95	0.48
3:D:105:VAL:HA	3:D:111:VAL:HG13	1.96	0.48
3:E:340:LYS:HG3	3:E:341:ARG:N	2.29	0.48
3:G:238:ILE:HD11	3:G:246:LYS:HD2	1.94	0.48
3:G:325:PRO:C	3:G:327:GLN:N	2.72	0.48
3:H:123:ARG:HD3	3:H:342:ARG:HH12	1.78	0.48
3:I:63:GLN:HB3	3:I:137:LEU:O	2.14	0.48
3:I:68:SER:HB3	3:I:74:THR:HA	1.95	0.48
3:I:244:THR:CG2	3:I:245:ASP:N	2.76	0.48
3:K:212:TYR:CE2	3:K:286:LEU:HD12	2.49	0.48
3:K:247:ILE:HG23	3:K:249:VAL:HG23	1.96	0.48
3:N:184:PRO:CB	3:N:343:ILE:HD12	2.42	0.48
3:O:4:ILE:H	3:O:4:ILE:CD1	2.03	0.48
1:Q:33:LEU:CD1	1:Q:101:TYR:HD2	2.26	0.48
3:A:93:GLY:HA3	3:A:264:VAL:HG21	1.96	0.48
3:C:319:ASP:OD2	3:C:319:ASP:N	2.44	0.48
3:E:56:PRO:HB3	3:E:81:THR:HG23	1.96	0.48
3:G:116:MET:HG3	3:G:117:TRP:H	1.78	0.48
3:G:171:LEU:HB3	3:G:175:GLY:HA2	1.96	0.48
3:G:200:PRO:HG2	3:G:233:GLU:HG3	1.95	0.48
3:H:200:PRO:HG3	3:H:233:GLU:CG	2.44	0.48
3:K:293:SER:C	3:K:294:ILE:HG13	2.38	0.48
3:M:85:ILE:HD11	3:M:226:ILE:CD1	2.43	0.48
3:M:182:VAL:HG21	3:M:339:GLN:HB3	1.95	0.48
3:N:179:LEU:HG	3:N:321:LEU:HD21	1.96	0.48
3:A:325:PRO:C	3:A:327:GLN:N	2.69	0.48
3:C:195:PRO:HG2	3:C:201:ILE:HD12	1.95	0.48
3:D:13:TYR:CE2	3:D:23:ILE:HG12	2.48	0.48
3:D:37:GLN:HG2	3:D:116:MET:HE2	1.95	0.48
3:D:63:GLN:O	3:D:79:SER:HB2	2.14	0.48
3:E:9:LEU:HD21	3:E:26:PRO:HD3	1.95	0.48
3:E:32:ARG:HD2	3:E:158:GLU:OE1	2.13	0.48
3:E:54:SER:HA	3:E:101:PRO:HB3	1.96	0.48
3:E:235:GLU:HB3	3:E:297:ASP:HB2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:234:TYR:HB2	3:F:251:TRP:CZ3	2.49	0.48
3:G:263:GLN:C	3:H:94:GLN:HG3	2.39	0.48
3:H:42:ILE:HB	3:H:111:VAL:HG22	1.96	0.48
3:J:63:GLN:HB3	3:J:137:LEU:O	2.14	0.48
3:K:235:GLU:HB3	3:K:297:ASP:HB2	1.95	0.48
3:M:30:PHE:HZ	3:M:165:ILE:HD11	1.79	0.48
3:O:259:GLN:O	3:O:263:GLN:HA	2.14	0.48
1:Q:140:TYR:CE1	1:Q:157:PRO:CB	2.94	0.48
3:B:85:ILE:HG12	3:B:267:TYR:CE2	2.49	0.48
3:B:166:LEU:HA	3:B:170:GLY:HA2	1.96	0.48
3:E:185:LYS:HE3	3:O:243:PRO:HD3	1.94	0.48
3:F:172:GLY:HA3	3:F:317:TYR:CE2	2.49	0.48
3:F:211:ILE:HG22	3:F:283:ASP:HB3	1.96	0.48
3:H:113:LEU:HD22	3:H:147:ILE:HG23	1.95	0.48
3:H:168:GLU:HG2	3:H:335:TYR:CE1	2.49	0.48
3:H:232:THR:C	3:H:251:TRP:HB2	2.38	0.48
3:I:9:LEU:N	3:I:9:LEU:CD1	2.77	0.48
3:I:65:PHE:CE1	3:I:136:ILE:HG12	2.49	0.48
3:K:113:LEU:HD22	3:K:147:ILE:HG23	1.95	0.48
3:L:174:ASP:CG	3:L:176:GLU:HG2	2.38	0.48
3:N:280:PHE:CZ	3:N:284:LEU:HD13	2.48	0.48
3:O:89:TYR:CD2	3:O:273:ILE:CD1	2.94	0.48
1:Q:173:ASN:HB2	4:P:23:SER:O	2.10	0.48
3:A:181:THR:HG22	3:A:183:LEU:HG	1.96	0.48
3:C:62:VAL:CG1	3:C:136:ILE:HG23	2.44	0.48
3:C:208:PRO:HD3	3:C:291:SER:HA	1.95	0.48
3:D:56:PRO:HG2	3:D:60:ASN:ND2	2.16	0.48
3:D:263:GLN:C	3:E:94:GLN:HG3	2.39	0.48
3:E:4:ILE:HG23	3:E:32:ARG:HD3	1.95	0.48
3:E:207:GLN:H	3:E:207:GLN:HG3	1.46	0.48
3:E:233:GLU:OE1	3:E:250:SER:HA	2.13	0.48
3:F:37:GLN:HA	3:F:115:VAL:O	2.14	0.48
3:F:120:ASP:C	3:F:121:LEU:HD12	2.39	0.48
3:G:57:PHE:CD2	3:G:58:PRO:HA	2.49	0.48
3:G:123:ARG:HB3	3:G:339:GLN:OE1	2.13	0.48
3:H:3:GLU:HB2	3:H:159:ARG:HB3	1.95	0.48
3:H:194:VAL:HG11	3:H:203:VAL:HG22	1.96	0.48
3:I:195:PRO:O	3:I:201:ILE:HD11	2.14	0.48
3:J:233:GLU:HB3	3:J:299:ALA:HB3	1.96	0.48
3:J:255:GLN:O	3:J:259:GLN:HG2	2.13	0.48
3:M:321:LEU:CD2	3:M:332:VAL:HG11	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:4:ILE:HG23	3:N:32:ARG:HD3	1.95	0.48
3:N:171:LEU:HB3	3:N:175:GLY:HA2	1.95	0.48
3:O:32:ARG:HH21	3:O:342:ARG:CD	2.27	0.48
3:O:277:ARG:HG3	3:O:278:LYS:HG2	1.95	0.48
3:B:230:ASP:HA	3:B:301:GLN:CG	2.44	0.47
3:C:119:PHE:N	3:C:119:PHE:CD1	2.81	0.47
3:C:230:ASP:O	3:C:232:THR:HG23	2.14	0.47
3:C:249:VAL:CG1	3:C:253:ALA:HB3	2.39	0.47
3:D:70:GLU:C	3:D:72:SER:H	2.22	0.47
3:D:230:ASP:O	3:D:232:THR:HG23	2.13	0.47
3:E:293:SER:O	3:E:294:ILE:HG13	2.15	0.47
3:E:315:LEU:HD12	3:E:318:TYR:CD1	2.43	0.47
3:F:67:LEU:HB3	3:F:76:TYR:HB2	1.96	0.47
3:F:321:LEU:HD23	3:F:332:VAL:HG11	1.96	0.47
3:H:321:LEU:HD22	3:H:332:VAL:CG1	2.44	0.47
3:J:329:ALA:O	3:J:333:GLN:CG	2.62	0.47
3:K:96:PRO:HB3	3:K:114:ASN:ND2	2.29	0.47
3:M:163:GLN:OE1	3:M:163:GLN:HA	2.13	0.47
3:O:63:GLN:HG2	3:O:64:THR:HG23	1.96	0.47
3:O:329:ALA:O	3:O:333:GLN:HG2	2.13	0.47
1:Q:42:ARG:HH11	1:Q:42:ARG:CG	2.26	0.47
1:Q:211:THR:CG2	4:P:57:SER:CB	2.87	0.47
3:A:13:TYR:OH	3:A:23:ILE:HG23	2.13	0.47
3:A:215:GLN:HG3	3:A:310:TYR:CE1	2.50	0.47
3:B:6:THR:HG22	3:B:7:GLU:N	2.28	0.47
3:D:205:TYR:CG	3:D:292:ASP:OD2	2.68	0.47
3:E:98:TYR:N	3:E:98:TYR:CD1	2.82	0.47
3:E:105:VAL:HA	3:E:111:VAL:HG13	1.96	0.47
3:E:173:ALA:HB2	3:E:320:GLN:CD	2.39	0.47
3:H:87:MET:HB3	3:H:95:ASN:ND2	2.29	0.47
3:J:32:ARG:HD2	3:J:158:GLU:HB2	1.97	0.47
3:J:92:LYS:N	3:J:92:LYS:CD	2.77	0.47
3:J:184:PRO:CB	3:J:343:ILE:HD12	2.44	0.47
3:K:90:THR:CB	3:K:345:ARG:HG2	2.43	0.47
3:K:92:LYS:N	3:K:92:LYS:HD2	2.29	0.47
3:K:121:LEU:HB3	3:K:124:PHE:HB2	1.95	0.47
3:L:32:ARG:HA	3:L:122:ALA:O	2.14	0.47
3:L:95:ASN:OD1	3:L:96:PRO:HD2	2.14	0.47
3:N:255:GLN:O	3:N:259:GLN:HG2	2.15	0.47
3:O:32:ARG:HD2	3:O:158:GLU:HB2	1.96	0.47
4:P:360:SER:O	4:P:361:SER:CB	2.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:39:ILE:HG21	1:Q:45:PHE:HB2	1.96	0.47
1:Q:173:ASN:HB2	4:P:23:SER:C	2.39	0.47
3:A:247:ILE:HG12	3:A:279:TYR:HD2	1.78	0.47
3:B:62:VAL:HG13	3:B:136:ILE:HG23	1.96	0.47
3:B:244:THR:HG22	3:B:245:ASP:N	2.29	0.47
3:C:42:ILE:HG23	3:C:147:ILE:CD1	2.41	0.47
3:D:212:TYR:HA	3:D:312:SER:OG	2.14	0.47
3:E:55:ALA:N	3:E:101:PRO:HB3	2.29	0.47
3:E:233:GLU:HB3	3:E:299:ALA:CB	2.44	0.47
3:E:233:GLU:HB3	3:E:299:ALA:HB3	1.96	0.47
3:E:345:ARG:HG3	3:E:345:ARG:NH1	2.29	0.47
3:F:57:PHE:O	3:F:101:PRO:HG3	2.14	0.47
3:G:234:TYR:HB2	3:G:251:TRP:HZ3	1.80	0.47
3:G:287:THR:HG21	3:G:318:TYR:CE2	2.49	0.47
3:G:345:ARG:HH11	3:G:345:ARG:HG3	1.79	0.47
3:J:15:TRP:CE3	3:J:147:ILE:HB	2.49	0.47
3:J:56:PRO:O	3:J:59:TYR:HB2	2.14	0.47
3:J:243:PRO:HG2	3:O:74:THR:O	2.14	0.47
3:K:280:PHE:CZ	3:K:284:LEU:HD13	2.50	0.47
3:M:29:ASN:OD1	3:M:159:ARG:HA	2.13	0.47
3:N:230:ASP:O	3:N:231:PRO:C	2.54	0.47
3:A:92:LYS:HB3	3:C:263:GLN:HB3	1.96	0.47
3:C:57:PHE:CD2	3:C:58:PRO:HA	2.50	0.47
3:D:179:LEU:HG	3:D:321:LEU:CD2	2.44	0.47
3:D:329:ALA:O	3:D:333:GLN:HG2	2.13	0.47
3:E:68:SER:HB2	3:E:74:THR:HA	1.95	0.47
3:E:76:TYR:CE1	3:E:186:VAL:HB	2.49	0.47
3:F:13:TYR:CE2	3:F:23:ILE:HG12	2.49	0.47
3:F:321:LEU:HD22	3:F:332:VAL:CG1	2.44	0.47
3:I:185:LYS:O	3:I:185:LYS:HG2	2.14	0.47
3:O:168:GLU:HG2	3:O:335:TYR:CZ	2.48	0.47
4:P:117:GLU:HG3	4:P:119:TYR:HE2	1.79	0.47
4:P:330:VAL:HG13	4:P:344:TRP:HZ2	1.79	0.47
3:A:70:GLU:C	3:A:72:SER:H	2.23	0.47
3:B:53:PRO:CD	3:B:142:PRO:HB3	2.44	0.47
3:C:15:TRP:CH2	3:C:141:ALA:HB2	2.49	0.47
3:D:285:ASP:C	3:D:286:LEU:HD23	2.39	0.47
3:F:200:PRO:CG	3:F:233:GLU:HG3	2.45	0.47
3:G:30:PHE:O	3:G:157:TYR:HA	2.15	0.47
3:J:15:TRP:HB2	3:J:38:LEU:HD11	1.97	0.47
3:J:30:PHE:O	3:J:157:TYR:HA	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:12:THR:HG21	3:K:152:TYR:CE2	2.49	0.47
3:K:200:PRO:HG2	3:K:233:GLU:HG3	1.97	0.47
3:L:69:TYR:HA	3:L:131:ASN:O	2.14	0.47
3:L:235:GLU:OE1	3:L:248:LYS:HD3	2.14	0.47
3:N:67:LEU:HD21	3:N:121:LEU:HD21	1.95	0.47
3:O:235:GLU:OE2	3:O:237:LYS:HE3	2.14	0.47
3:O:259:GLN:OE1	3:O:266:PRO:HG3	2.14	0.47
3:O:309:LEU:HD23	3:O:310:TYR:N	2.29	0.47
3:B:19:THR:CG2	3:B:20:ASN:N	2.78	0.47
3:B:329:ALA:O	3:B:333:GLN:HG2	2.15	0.47
3:C:83:LEU:HD12	3:C:86:LEU:HD23	1.97	0.47
3:C:113:LEU:HD22	3:C:147:ILE:HG23	1.97	0.47
3:C:168:GLU:HG2	3:C:335:TYR:CE1	2.50	0.47
3:C:203:VAL:HG21	3:C:298:LEU:HG	1.96	0.47
3:D:121:LEU:HB3	3:D:124:PHE:HB2	1.95	0.47
3:E:55:ALA:H	3:E:101:PRO:HB3	1.78	0.47
3:G:122:ALA:HB1	3:G:339:GLN:CG	2.45	0.47
3:I:119:PHE:N	3:I:119:PHE:CD1	2.83	0.47
3:I:203:VAL:HB	3:I:296:TYR:O	2.14	0.47
3:K:57:PHE:CG	3:K:58:PRO:HA	2.49	0.47
3:K:142:PRO:HB2	3:K:145:VAL:CG2	2.44	0.47
3:L:32:ARG:HD2	3:L:158:GLU:HB2	1.95	0.47
3:L:200:PRO:HG3	3:L:233:GLU:HB3	1.96	0.47
1:Q:86:ILE:O	1:Q:131:ILE:HA	2.13	0.47
3:A:70:GLU:HG3	3:A:130:GLN:HB2	1.97	0.47
3:A:233:GLU:OE1	3:A:250:SER:HA	2.14	0.47
3:B:200:PRO:HG3	3:B:233:GLU:HG3	1.94	0.47
3:B:247:ILE:HD13	3:B:274:ILE:HG21	1.96	0.47
3:B:274:ILE:N	3:B:274:ILE:HD12	2.30	0.47
3:E:62:VAL:CG1	3:E:136:ILE:HG23	2.45	0.47
3:E:211:ILE:HG22	3:E:283:ASP:HB3	1.95	0.47
3:E:345:ARG:HG3	3:E:345:ARG:HH11	1.80	0.47
3:F:81:THR:O	3:F:85:ILE:HG13	2.14	0.47
3:F:92:LYS:HD2	3:F:92:LYS:H	1.76	0.47
3:G:287:THR:HG22	3:G:288:HIS:CD2	2.49	0.47
3:G:345:ARG:HG3	3:G:345:ARG:NH1	2.30	0.47
3:H:233:GLU:HB3	3:H:299:ALA:CB	2.45	0.47
3:H:315:LEU:HD13	3:H:321:LEU:HD12	1.97	0.47
3:I:89:TYR:CD2	3:I:273:ILE:HD11	2.50	0.47
3:I:230:ASP:O	3:I:232:THR:HG23	2.15	0.47
3:L:5:TYR:CE1	3:L:157:TYR:HB2	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:32:ARG:HB2	3:M:156:THR:CG2	2.44	0.47
3:M:254:LEU:HD11	3:M:274:ILE:HG13	1.96	0.47
3:M:309:LEU:HD23	3:M:309:LEU:C	2.40	0.47
3:M:325:PRO:C	3:M:327:GLN:N	2.72	0.47
3:N:15:TRP:CE3	3:N:147:ILE:HB	2.49	0.47
3:N:29:ASN:OD1	3:N:159:ARG:HA	2.15	0.47
3:N:54:SER:CA	3:N:101:PRO:HB3	2.45	0.47
3:B:219:VAL:CG1	3:B:304:ASP:HB2	2.44	0.47
3:C:182:VAL:HG13	3:C:313:TYR:CD2	2.50	0.47
3:D:15:TRP:HB2	3:D:38:LEU:HD11	1.97	0.47
3:D:187:ILE:CG2	3:D:188:GLU:N	2.78	0.47
3:D:205:TYR:OH	3:I:208:PRO:HG2	2.15	0.47
3:F:52:LEU:CD2	3:F:145:VAL:HG21	2.45	0.47
3:F:121:LEU:HA	3:F:184:PRO:HG3	1.97	0.47
3:F:190:PRO:HB3	3:F:307:TYR:CE1	2.50	0.47
3:F:247:ILE:HG12	3:F:279:TYR:CE2	2.50	0.47
3:I:13:TYR:CZ	3:I:23:ILE:HG12	2.50	0.47
3:I:247:ILE:HG23	3:I:249:VAL:HG23	1.96	0.47
3:J:142:PRO:HB2	3:J:145:VAL:CG2	2.45	0.47
3:K:69:TYR:CE1	3:K:73:LYS:HB2	2.49	0.47
3:K:238:ILE:HD11	3:K:246:LYS:HD2	1.97	0.47
3:L:218:TYR:HA	3:L:270:ALA:O	2.15	0.47
3:L:224:SER:OG	3:L:228:ASN:HB3	2.14	0.47
3:M:208:PRO:HA	3:M:286:LEU:HB2	1.97	0.47
3:M:277:ARG:HA	3:M:282:GLY:O	2.15	0.47
3:O:121:LEU:HB3	3:O:124:PHE:HB2	1.97	0.47
3:A:28:ASN:OD1	3:A:28:ASN:N	2.48	0.47
3:A:174:ASP:OD2	3:A:317:TYR:HE2	1.97	0.47
3:C:52:LEU:CD1	3:C:99:PRO:CG	2.93	0.47
3:C:234:TYR:HB2	3:C:251:TRP:HZ3	1.79	0.47
3:D:247:ILE:HG12	3:D:279:TYR:CD2	2.50	0.47
3:G:70:GLU:HG3	3:G:130:GLN:HB2	1.97	0.47
3:H:216:LEU:HD12	3:H:272:ALA:O	2.15	0.47
3:I:6:THR:HG22	3:I:7:GLU:N	2.30	0.47
3:I:28:ASN:HB2	3:I:157:TYR:CE2	2.50	0.47
3:J:202:HIS:HA	3:J:297:ASP:OD2	2.15	0.47
3:J:232:THR:C	3:J:251:TRP:HB2	2.40	0.47
3:M:56:PRO:HB3	3:M:81:THR:HG23	1.97	0.47
3:M:230:ASP:HA	3:M:301:GLN:CG	2.44	0.47
3:N:123:ARG:HB3	3:N:339:GLN:OE1	2.15	0.47
3:A:205:TYR:HA	3:A:295:GLU:HA	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:233:GLU:HB3	3:B:299:ALA:HB3	1.97	0.47
3:C:70:GLU:HG3	3:C:130:GLN:HB2	1.97	0.47
3:D:37:GLN:CD	3:D:39:ILE:HD11	2.40	0.47
3:E:52:LEU:CD2	3:E:145:VAL:HG21	2.44	0.47
3:F:247:ILE:CG2	3:F:249:VAL:HG23	2.44	0.47
3:G:19:THR:CG2	3:G:20:ASN:N	2.78	0.47
3:G:55:ALA:N	3:G:101:PRO:HB3	2.29	0.47
3:G:205:TYR:CD1	3:G:292:ASP:HA	2.50	0.47
3:I:29:ASN:HB2	3:I:157:TYR:HB3	1.96	0.47
3:I:287:THR:HG21	3:I:318:TYR:CD2	2.50	0.47
3:J:247:ILE:HG12	3:J:279:TYR:HD2	1.71	0.47
3:J:324:LEU:HG	3:J:328:VAL:HB	1.97	0.47
3:K:96:PRO:HB3	3:K:114:ASN:HD21	1.80	0.47
3:K:205:TYR:HA	3:K:295:GLU:HA	1.97	0.47
3:L:247:ILE:CD1	3:L:274:ILE:HG21	2.45	0.47
3:M:53:PRO:CD	3:M:142:PRO:HB3	2.45	0.47
3:O:53:PRO:HG2	3:O:57:PHE:CG	2.50	0.47
3:A:9:LEU:HD11	3:A:155:ILE:HD12	1.97	0.46
3:A:62:VAL:HG13	3:A:136:ILE:HG23	1.97	0.46
3:A:76:TYR:CE1	3:A:186:VAL:HB	2.50	0.46
3:A:137:LEU:O	3:A:137:LEU:HG	2.15	0.46
3:A:210:GLN:HG3	3:A:212:TYR:CE2	2.49	0.46
3:C:9:LEU:HD22	3:C:153:ILE:HB	1.96	0.46
3:C:182:VAL:HG22	3:C:336:VAL:HG13	1.97	0.46
3:G:42:ILE:CG2	3:G:145:VAL:HB	2.39	0.46
3:G:94:GLN:HG3	3:I:263:GLN:C	2.40	0.46
3:G:220:ILE:O	3:G:304:ASP:HB3	2.15	0.46
3:J:230:ASP:O	3:J:231:PRO:C	2.55	0.46
3:J:230:ASP:OD1	3:J:302:ASN:ND2	2.48	0.46
3:J:247:ILE:HG12	3:J:279:TYR:CE2	2.50	0.46
3:K:57:PHE:CE2	3:K:142:PRO:HG2	2.50	0.46
3:K:105:VAL:HG21	3:K:145:VAL:HG11	1.96	0.46
3:L:38:LEU:HD13	3:L:151:PHE:CE2	2.50	0.46
3:L:190:PRO:HB3	3:L:307:TYR:CE1	2.50	0.46
3:L:190:PRO:CB	3:L:307:TYR:CE1	2.98	0.46
3:L:203:VAL:CG2	3:L:298:LEU:HB2	2.45	0.46
3:N:256:ALA:HB1	3:O:116:MET:HE1	1.97	0.46
3:O:30:PHE:O	3:O:157:TYR:HA	2.15	0.46
3:O:38:LEU:HD12	3:O:38:LEU:HA	1.69	0.46
3:O:185:LYS:HG2	3:O:185:LYS:O	2.13	0.46
1:Q:161:TYR:CE1	1:Q:198:PRO:HG3	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:182:VAL:HG21	3:A:339:GLN:HB3	1.96	0.46
3:B:4:ILE:HG23	3:B:32:ARG:HD3	1.98	0.46
3:B:120:ASP:HB3	3:B:343:ILE:HA	1.96	0.46
3:C:142:PRO:HD2	3:C:147:ILE:HD11	1.96	0.46
3:C:210:GLN:HA	3:C:314:VAL:HG22	1.98	0.46
3:D:9:LEU:HD21	3:D:155:ILE:HD11	1.97	0.46
3:D:159:ARG:C	3:D:159:ARG:HD3	2.39	0.46
3:D:345:ARG:NH1	3:D:345:ARG:HG3	2.30	0.46
3:E:9:LEU:HD21	3:E:26:PRO:HD2	1.97	0.46
3:E:19:THR:CG2	3:E:20:ASN:N	2.78	0.46
3:E:42:ILE:HD11	3:E:113:LEU:HD13	1.97	0.46
3:F:159:ARG:HH11	3:F:159:ARG:CG	2.28	0.46
3:F:324:LEU:HD12	3:F:325:PRO:HD3	1.96	0.46
3:G:159:ARG:CG	3:G:159:ARG:NH1	2.78	0.46
3:G:190:PRO:HB3	3:G:307:TYR:CE1	2.50	0.46
3:G:206:LEU:HB3	3:G:212:TYR:CZ	2.50	0.46
3:G:284:LEU:HD11	3:G:286:LEU:HD21	1.97	0.46
3:H:67:LEU:CD1	3:H:134:LEU:HB2	2.45	0.46
3:I:62:VAL:HG11	3:I:65:PHE:CZ	2.50	0.46
3:I:240:ARG:NH2	3:I:290:PRO:CB	2.78	0.46
3:J:41:SER:HB2	3:J:111:VAL:O	2.15	0.46
3:J:47:THR:C	3:J:107:ALA:HB1	2.40	0.46
3:J:259:GLN:O	3:J:263:GLN:HA	2.15	0.46
3:K:205:TYR:CD1	3:K:292:ASP:HA	2.50	0.46
3:N:4:ILE:HA	3:N:157:TYR:O	2.15	0.46
3:N:247:ILE:HG23	3:N:279:TYR:HE2	1.80	0.46
3:O:240:ARG:HH12	3:O:290:PRO:CB	2.27	0.46
1:Q:81:LEU:HD21	1:Q:87:LEU:HB2	1.97	0.46
3:B:218:TYR:HA	3:B:270:ALA:O	2.16	0.46
3:B:247:ILE:HG12	3:B:279:TYR:CE2	2.50	0.46
3:C:235:GLU:OE1	3:C:248:LYS:HD3	2.14	0.46
3:C:240:ARG:HD3	3:C:290:PRO:HD2	1.98	0.46
3:E:113:LEU:CD2	3:E:147:ILE:HG23	2.46	0.46
3:E:121:LEU:HA	3:E:184:PRO:HG3	1.97	0.46
3:F:31:ILE:HG23	3:F:155:ILE:HG23	1.96	0.46
3:F:126:ALA:HB1	3:F:132:ILE:HD11	1.97	0.46
3:G:226:ILE:O	3:G:226:ILE:HG12	2.14	0.46
3:H:56:PRO:O	3:H:59:TYR:HB2	2.15	0.46
3:H:259:GLN:OE1	3:H:266:PRO:HD3	2.16	0.46
3:J:37:GLN:CG	3:J:116:MET:HE2	2.43	0.46
3:K:13:TYR:CE2	3:K:23:ILE:HG12	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:53:PRO:CD	3:K:142:PRO:HB3	2.45	0.46
3:L:278:LYS:HB2	3:L:279:TYR:CD1	2.50	0.46
3:M:12:THR:HG21	3:M:152:TYR:CE2	2.51	0.46
3:M:173:ALA:HB2	3:M:320:GLN:CD	2.40	0.46
3:M:205:TYR:HA	3:M:295:GLU:HA	1.96	0.46
3:N:159:ARG:HH11	3:N:159:ARG:CG	2.28	0.46
3:N:246:LYS:HE2	3:N:246:LYS:CA	2.40	0.46
3:O:4:ILE:HA	3:O:157:TYR:O	2.15	0.46
3:A:19:THR:CG2	3:A:20:ASN:N	2.79	0.46
3:A:42:ILE:HD11	3:A:113:LEU:HD13	1.97	0.46
3:B:142:PRO:CD	3:B:147:ILE:HD11	2.46	0.46
3:B:246:LYS:O	3:B:279:TYR:HD2	1.99	0.46
3:C:246:LYS:C	3:C:247:ILE:HG13	2.40	0.46
3:D:116:MET:CG	3:D:117:TRP:N	2.79	0.46
3:D:284:LEU:HD11	3:D:294:ILE:CD1	2.45	0.46
3:E:216:LEU:HB3	3:E:309:LEU:HB3	1.97	0.46
3:E:315:LEU:HB2	3:E:318:TYR:HB2	1.97	0.46
3:F:19:THR:CG2	3:F:20:ASN:N	2.79	0.46
3:F:60:ASN:HB3	3:F:81:THR:OG1	2.15	0.46
3:F:185:LYS:O	3:F:185:LYS:HG2	2.16	0.46
3:F:324:LEU:HD21	3:F:332:VAL:HG21	1.97	0.46
3:G:54:SER:O	3:G:55:ALA:C	2.59	0.46
3:H:36:VAL:HG13	3:H:153:ILE:CD1	2.45	0.46
3:K:15:TRP:CZ3	3:K:147:ILE:HB	2.50	0.46
3:K:163:GLN:OE1	3:K:163:GLN:HA	2.15	0.46
3:M:315:LEU:HB2	3:M:318:TYR:HB2	1.96	0.46
3:O:277:ARG:HA	3:O:282:GLY:O	2.16	0.46
3:A:19:THR:HG22	3:A:20:ASN:N	2.30	0.46
3:B:182:VAL:HG13	3:B:313:TYR:CD2	2.50	0.46
3:C:123:ARG:HB2	3:C:342:ARG:NH1	2.30	0.46
3:C:210:GLN:HG3	3:C:212:TYR:CE2	2.51	0.46
3:F:231:PRO:HB2	3:F:251:TRP:CE2	2.51	0.46
3:G:321:LEU:CD2	3:G:332:VAL:HG11	2.46	0.46
3:H:52:LEU:CD1	3:H:99:PRO:HG3	2.45	0.46
3:H:243:PRO:HD3	3:M:185:LYS:HD2	1.96	0.46
3:I:240:ARG:HH22	3:I:290:PRO:CB	2.29	0.46
3:I:298:LEU:CD1	3:I:306:VAL:HG11	2.45	0.46
3:J:172:GLY:HA3	3:J:317:TYR:CE2	2.50	0.46
3:K:15:TRP:HE3	3:K:15:TRP:O	1.99	0.46
3:L:6:THR:HG22	3:L:7:GLU:N	2.30	0.46
3:L:38:LEU:HG	3:L:113:LEU:HD21	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:182:VAL:CG1	3:N:313:TYR:CD2	2.99	0.46
3:O:298:LEU:HD11	3:O:306:VAL:HG11	1.98	0.46
3:A:11:GLN:NE2	3:A:13:TYR:CE1	2.83	0.46
3:A:105:VAL:HA	3:A:111:VAL:HG13	1.97	0.46
3:F:247:ILE:HG23	3:F:249:VAL:HG23	1.97	0.46
3:G:275:ASP:HB3	3:G:278:LYS:HG2	1.96	0.46
3:G:321:LEU:HD22	3:G:332:VAL:HG11	1.96	0.46
3:H:123:ARG:HB3	3:H:339:GLN:OE1	2.15	0.46
3:I:123:ARG:HD2	3:I:160:VAL:CG2	2.46	0.46
3:K:27:ARG:HB3	3:K:126:ALA:O	2.16	0.46
3:K:76:TYR:CD1	3:K:119:PHE:HD2	2.33	0.46
3:K:91:THR:CG2	3:K:345:ARG:HD3	2.46	0.46
3:L:240:ARG:NH1	3:L:290:PRO:HB2	2.30	0.46
3:L:247:ILE:HG12	3:L:279:TYR:CE2	2.50	0.46
3:L:279:TYR:CD1	3:L:279:TYR:N	2.83	0.46
3:M:38:LEU:HD13	3:M:151:PHE:CZ	2.50	0.46
3:N:67:LEU:HB2	3:N:134:LEU:HD13	1.98	0.46
3:N:184:PRO:HB3	3:N:343:ILE:HD12	1.97	0.46
3:N:236:LEU:HB3	3:N:247:ILE:CG1	2.45	0.46
3:N:263:GLN:O	3:O:94:GLN:HG3	2.16	0.46
1:Q:22:VAL:O	1:Q:116:LYS:HA	2.16	0.46
3:A:142:PRO:HD2	3:A:147:ILE:HD11	1.98	0.46
3:B:63:GLN:HB2	3:B:139:GLY:HA2	1.97	0.46
3:E:38:LEU:HD12	3:E:38:LEU:HA	1.82	0.46
3:F:119:PHE:CD1	3:F:119:PHE:N	2.84	0.46
3:F:244:THR:HG22	3:F:245:ASP:N	2.30	0.46
3:H:206:LEU:HB3	3:H:212:TYR:CZ	2.50	0.46
3:J:187:ILE:CG2	3:J:188:GLU:N	2.79	0.46
3:L:19:THR:C	3:L:137:LEU:HD12	2.41	0.46
3:N:30:PHE:O	3:N:157:TYR:HA	2.15	0.46
3:N:128:MET:HE1	3:N:171:LEU:HD11	1.98	0.46
3:N:236:LEU:HD11	3:N:294:ILE:CG2	2.46	0.46
3:A:67:LEU:HD21	3:A:121:LEU:HD21	1.97	0.46
3:B:211:ILE:HD12	3:B:313:TYR:CE2	2.50	0.46
3:C:87:MET:HE1	3:C:345:ARG:HB3	1.95	0.46
3:C:116:MET:HG2	3:C:117:TRP:N	2.31	0.46
3:C:124:PHE:CE1	3:C:183:LEU:CD2	2.99	0.46
3:D:122:ALA:HB1	3:D:339:GLN:HG3	1.98	0.46
3:D:325:PRO:C	3:D:327:GLN:N	2.73	0.46
3:F:4:ILE:H	3:F:4:ILE:CD1	2.16	0.46
3:F:231:PRO:O	3:F:251:TRP:CG	2.69	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:G:231:PRO:HB2	3:G:251:TRP:CD2	2.51	0.46
3:J:54:SER:O	3:J:55:ALA:C	2.57	0.46
3:K:15:TRP:HB2	3:K:38:LEU:HD11	1.97	0.46
3:L:128:MET:CE	3:L:171:LEU:HD21	2.45	0.46
3:M:51:THR:HG23	3:M:102:GLY:O	2.15	0.46
3:M:254:LEU:HD21	3:M:274:ILE:CD1	2.44	0.46
3:N:23:ILE:HD13	3:N:153:ILE:HD11	1.98	0.46
3:A:55:ALA:HB1	3:A:267:TYR:OH	2.15	0.46
3:D:6:THR:HG22	3:D:7:GLU:N	2.31	0.46
3:E:42:ILE:HG23	3:E:147:ILE:HD13	1.96	0.46
3:E:57:PHE:CD2	3:E:58:PRO:HA	2.51	0.46
3:E:240:ARG:HD3	3:E:241:GLY:N	2.31	0.46
3:F:17:ALA:HB1	3:F:140:GLN:HE22	1.80	0.46
3:F:29:ASN:H	3:F:157:TYR:HD2	1.64	0.46
3:F:235:GLU:OE2	3:F:237:LYS:HE3	2.15	0.46
3:H:36:VAL:HG22	3:H:153:ILE:HD12	1.97	0.46
3:H:314:VAL:HG12	3:H:315:LEU:N	2.30	0.46
3:L:113:LEU:HD22	3:L:147:ILE:HG23	1.98	0.46
3:L:248:LYS:HG3	3:L:248:LYS:O	2.16	0.46
1:Q:21:TYR:CD1	1:Q:118:THR:CG2	2.98	0.46
3:B:25:ILE:HG23	3:B:155:ILE:HD13	1.96	0.46
3:B:121:LEU:HD12	3:B:121:LEU:N	2.31	0.46
3:D:59:TYR:HB3	3:D:80:GLY:O	2.15	0.46
3:D:63:GLN:HB2	3:D:139:GLY:HA2	1.96	0.46
3:E:261:GLU:HG3	3:E:262:TYR:CD2	2.51	0.46
3:F:259:GLN:OE1	3:F:266:PRO:CD	2.63	0.46
3:K:256:ALA:HB1	3:L:116:MET:CE	2.46	0.46
3:M:65:PHE:CE1	3:M:136:ILE:HG12	2.51	0.46
3:M:340:LYS:HG3	3:M:341:ARG:N	2.30	0.46
3:N:236:LEU:HD22	3:N:276:PHE:HE1	1.81	0.46
3:N:247:ILE:HG23	3:N:279:TYR:CE2	2.51	0.46
3:N:324:LEU:CD2	3:N:332:VAL:HG21	2.45	0.46
3:O:92:LYS:HD2	3:O:92:LYS:H	1.72	0.46
3:B:142:PRO:HB2	3:B:145:VAL:CG2	2.46	0.45
3:B:182:VAL:CG1	3:B:313:TYR:CD2	2.99	0.45
3:C:30:PHE:N	3:C:30:PHE:CD2	2.83	0.45
3:D:321:LEU:HD13	3:D:336:VAL:HG21	1.98	0.45
3:E:62:VAL:O	3:E:80:GLY:HA3	2.15	0.45
3:F:62:VAL:CG1	3:F:136:ILE:HG23	2.46	0.45
3:F:187:ILE:CG2	3:F:188:GLU:N	2.79	0.45
3:F:228:ASN:OD1	3:F:270:ALA:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:339:GLN:HE21	3:F:339:GLN:HB2	1.49	0.45
3:G:116:MET:HE1	3:I:256:ALA:HB1	1.98	0.45
3:G:159:ARG:HH11	3:G:159:ARG:HG2	1.81	0.45
3:H:113:LEU:HD23	3:H:149:ALA:HB2	1.98	0.45
3:K:191:THR:CG2	3:K:194:VAL:HG22	2.46	0.45
3:L:15:TRP:HH2	3:L:141:ALA:HB2	1.81	0.45
3:M:122:ALA:HB1	3:M:339:GLN:CG	2.46	0.45
3:M:195:PRO:HA	3:M:303:GLN:CG	2.44	0.45
3:N:160:VAL:HG13	3:N:164:GLU:OE2	2.16	0.45
3:N:187:ILE:HG22	3:N:188:GLU:N	2.31	0.45
3:O:13:TYR:CE2	3:O:23:ILE:HG12	2.50	0.45
3:O:15:TRP:CE3	3:O:147:ILE:HB	2.51	0.45
3:B:70:GLU:HB3	3:J:28:ASN:HD21	1.81	0.45
3:B:131:ASN:ND2	3:B:133:ILE:HD11	2.28	0.45
3:B:194:VAL:HG21	3:B:203:VAL:HG13	1.98	0.45
3:B:230:ASP:N	3:B:231:PRO:HD2	2.31	0.45
3:C:274:ILE:N	3:C:274:ILE:CD1	2.78	0.45
3:D:230:ASP:N	3:D:231:PRO:HD2	2.30	0.45
3:E:6:THR:HG23	3:E:155:ILE:O	2.15	0.45
3:E:213:LYS:HB2	3:E:311:VAL:O	2.17	0.45
3:G:200:PRO:HG3	3:G:233:GLU:HB3	1.97	0.45
3:J:42:ILE:CD1	3:J:57:PHE:HZ	2.29	0.45
3:J:324:LEU:CD2	3:J:332:VAL:HG21	2.46	0.45
3:M:42:ILE:HG23	3:M:147:ILE:CD1	2.45	0.45
3:N:113:LEU:HD22	3:N:147:ILE:HG23	1.98	0.45
3:N:325:PRO:C	3:N:327:GLN:N	2.74	0.45
4:P:174:ARG:O	4:P:175:LYS:C	2.58	0.45
1:Q:63:LYS:HB2	1:Q:75:GLU:O	2.15	0.45
3:B:27:ARG:HB3	3:B:126:ALA:O	2.16	0.45
3:C:15:TRP:NE1	3:C:138:THR:HB	2.31	0.45
3:D:56:PRO:CB	3:D:81:THR:HG23	2.46	0.45
3:H:190:PRO:HB3	3:H:307:TYR:CE1	2.51	0.45
3:J:25:ILE:CG2	3:J:155:ILE:HD13	2.47	0.45
3:L:53:PRO:HD2	3:L:142:PRO:HB3	1.98	0.45
3:L:235:GLU:OE1	3:L:248:LYS:CD	2.64	0.45
3:M:208:PRO:HD3	3:M:291:SER:HA	1.98	0.45
3:M:329:ALA:O	3:M:333:GLN:CG	2.57	0.45
3:O:62:VAL:CG1	3:O:136:ILE:HG23	2.46	0.45
3:O:96:PRO:HG2	3:O:116:MET:HE3	1.98	0.45
3:O:319:ASP:OD2	3:O:319:ASP:N	2.49	0.45
3:A:70:GLU:N	3:A:130:GLN:O	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:218:TYR:HA	3:C:270:ALA:O	2.16	0.45
3:C:314:VAL:HG12	3:C:315:LEU:N	2.30	0.45
3:E:15:TRP:CE3	3:E:15:TRP:O	2.69	0.45
3:E:200:PRO:HG3	3:E:233:GLU:CG	2.44	0.45
3:F:234:TYR:HB2	3:F:251:TRP:HZ3	1.80	0.45
3:G:36:VAL:HG11	3:G:136:ILE:CD1	2.47	0.45
3:H:92:LYS:N	3:H:92:LYS:CD	2.72	0.45
3:H:168:GLU:HG2	3:H:335:TYR:CZ	2.51	0.45
3:H:184:PRO:HB3	3:H:343:ILE:HD12	1.98	0.45
3:I:15:TRP:CZ3	3:I:147:ILE:HB	2.52	0.45
3:I:280:PHE:CE1	3:I:284:LEU:HD22	2.52	0.45
3:K:15:TRP:O	3:K:15:TRP:CE3	2.70	0.45
3:K:256:ALA:HB2	3:L:116:MET:HE1	1.97	0.45
3:M:173:ALA:HA	3:M:320:GLN:HE22	1.81	0.45
3:N:4:ILE:HD12	3:N:4:ILE:N	2.07	0.45
3:O:134:LEU:O	3:O:134:LEU:HG	2.15	0.45
3:O:247:ILE:CG2	3:O:249:VAL:HG23	2.45	0.45
1:Q:36:PHE:HZ	3:C:24:LYS:HG3	1.81	0.45
3:A:176:GLU:O	3:A:177:MET:HG3	2.16	0.45
3:A:211:ILE:HG12	3:A:285:ASP:OD2	2.16	0.45
3:B:171:LEU:HA	3:B:178:PRO:HA	1.98	0.45
3:E:37:GLN:O	3:E:151:PHE:HA	2.16	0.45
3:F:192:PHE:HD1	3:F:305:ASN:OD1	1.99	0.45
3:G:4:ILE:HG13	3:G:158:GLU:HG3	1.99	0.45
3:G:317:TYR:O	3:G:319:ASP:N	2.49	0.45
3:H:179:LEU:HG	3:H:321:LEU:CD2	2.46	0.45
3:H:315:LEU:HD12	3:H:318:TYR:HD1	1.81	0.45
3:I:27:ARG:NH1	3:I:27:ARG:HB2	2.32	0.45
3:I:192:PHE:HD1	3:I:305:ASN:OD1	2.00	0.45
3:I:209:GLY:O	3:I:210:GLN:HB3	2.17	0.45
3:J:210:GLN:HG3	3:J:212:TYR:CE2	2.51	0.45
3:K:231:PRO:HG3	3:K:270:ALA:HA	1.98	0.45
3:M:32:ARG:HA	3:M:122:ALA:O	2.17	0.45
3:M:90:THR:HB	3:M:345:ARG:CG	2.47	0.45
3:N:202:HIS:CE1	3:N:204:ALA:CA	3.00	0.45
3:N:219:VAL:HG12	3:N:220:ILE:N	2.31	0.45
3:N:246:LYS:O	3:N:279:TYR:HD2	2.00	0.45
3:O:119:PHE:CD1	3:O:119:PHE:N	2.84	0.45
3:B:190:PRO:HB3	3:B:307:TYR:CE1	2.52	0.45
3:C:160:VAL:CG1	3:C:165:ILE:HG13	2.46	0.45
3:C:186:VAL:HG22	3:C:311:VAL:HA	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:298:LEU:CD1	3:D:306:VAL:HG11	2.47	0.45
3:D:324:LEU:HD12	3:D:324:LEU:HA	1.77	0.45
3:E:276:PHE:O	3:E:280:PHE:HD1	1.99	0.45
3:F:325:PRO:C	3:F:327:GLN:N	2.74	0.45
3:H:231:PRO:HB2	3:H:251:TRP:CD2	2.52	0.45
3:I:28:ASN:ND2	3:M:70:GLU:C	2.74	0.45
3:I:185:LYS:HG2	3:I:187:ILE:HG12	1.99	0.45
3:I:277:ARG:HA	3:I:282:GLY:O	2.17	0.45
3:J:157:TYR:N	3:J:157:TYR:CD1	2.84	0.45
3:L:182:VAL:HG21	3:L:339:GLN:HB3	1.97	0.45
3:M:52:LEU:O	3:M:102:GLY:HA2	2.16	0.45
3:N:32:ARG:HD2	3:N:158:GLU:HB2	1.97	0.45
3:N:37:GLN:O	3:N:151:PHE:HA	2.17	0.45
3:N:233:GLU:HB3	3:N:299:ALA:HB3	1.99	0.45
3:A:12:THR:HG21	3:A:152:TYR:CE2	2.52	0.45
3:A:116:MET:CE	3:C:256:ALA:HB2	2.46	0.45
3:A:226:ILE:O	3:A:226:ILE:HG12	2.16	0.45
3:A:247:ILE:CG2	3:A:249:VAL:HG23	2.47	0.45
3:A:325:PRO:C	3:A:327:GLN:H	2.25	0.45
3:D:25:ILE:HG23	3:D:155:ILE:HD13	1.97	0.45
3:D:54:SER:O	3:D:55:ALA:C	2.59	0.45
3:D:96:PRO:HB3	3:D:114:ASN:HD21	1.82	0.45
3:D:203:VAL:HG23	3:D:297:ASP:HA	1.99	0.45
3:F:182:VAL:HG22	3:F:336:VAL:HG13	1.98	0.45
3:F:220:ILE:O	3:F:304:ASP:HB3	2.17	0.45
3:G:256:ALA:HB1	3:H:116:MET:CE	2.42	0.45
3:H:30:PHE:O	3:H:157:TYR:HA	2.17	0.45
3:H:325:PRO:C	3:H:327:GLN:N	2.75	0.45
3:I:309:LEU:HD23	3:I:310:TYR:N	2.32	0.45
3:I:329:ALA:O	3:I:333:GLN:HG2	2.16	0.45
3:J:9:LEU:HD21	3:J:26:PRO:HD2	1.99	0.45
3:K:238:ILE:HD11	3:K:246:LYS:CG	2.47	0.45
3:L:197:SER:HB2	3:L:201:ILE:HD13	1.98	0.45
3:M:187:ILE:CG2	3:M:188:GLU:N	2.78	0.45
3:O:32:ARG:HH21	3:O:342:ARG:HD3	1.81	0.45
3:O:125:PRO:HG3	3:O:177:MET:HG2	1.99	0.45
3:O:325:PRO:C	3:O:327:GLN:N	2.75	0.45
3:A:42:ILE:HG23	3:A:147:ILE:HD13	1.98	0.45
3:A:324:LEU:CD2	3:A:332:VAL:HG21	2.47	0.45
3:B:70:GLU:N	3:B:130:GLN:O	2.50	0.45
3:B:105:VAL:HG13	3:B:110:SER:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:219:VAL:HG22	3:B:306:VAL:HG22	1.99	0.45
3:B:257:GLU:O	3:B:261:GLU:HB2	2.17	0.45
3:D:205:TYR:CD1	3:D:292:ASP:HA	2.52	0.45
3:D:205:TYR:CD1	3:D:295:GLU:HB3	2.52	0.45
3:E:70:GLU:C	3:M:28:ASN:ND2	2.67	0.45
3:E:203:VAL:HB	3:E:296:TYR:O	2.17	0.45
3:F:176:GLU:C	3:F:177:MET:HG3	2.42	0.45
3:F:235:GLU:O	3:F:296:TYR:HA	2.17	0.45
3:G:259:GLN:O	3:G:263:GLN:HA	2.17	0.45
3:I:116:MET:CG	3:I:117:TRP:N	2.80	0.45
3:I:240:ARG:HH12	3:I:290:PRO:HG2	1.82	0.45
3:K:4:ILE:HA	3:K:157:TYR:O	2.16	0.45
3:L:30:PHE:O	3:L:157:TYR:HA	2.17	0.45
3:N:67:LEU:HD13	3:N:134:LEU:HB2	1.99	0.45
3:N:339:GLN:HE21	3:N:339:GLN:HB2	1.64	0.45
3:O:64:THR:OG1	3:O:137:LEU:HB3	2.17	0.45
3:O:246:LYS:HE2	3:O:246:LYS:HA	1.99	0.45
3:A:36:VAL:HG21	3:A:134:LEU:HD21	1.98	0.45
3:A:44:ASN:HD22	3:A:107:ALA:HA	1.82	0.45
3:D:29:ASN:CG	3:D:159:ARG:HA	2.42	0.45
3:E:29:ASN:CG	3:E:159:ARG:HA	2.41	0.45
3:E:214:ARG:HE	3:E:214:ARG:HB3	1.57	0.45
3:E:259:GLN:O	3:E:263:GLN:HA	2.17	0.45
3:F:121:LEU:N	3:F:121:LEU:CD1	2.80	0.45
3:G:32:ARG:HH21	3:G:342:ARG:HD3	1.81	0.45
3:G:181:THR:HG22	3:G:183:LEU:HG	1.99	0.45
3:H:49:ALA:N	3:H:107:ALA:HB2	2.32	0.45
3:I:343:ILE:O	3:I:343:ILE:HG23	2.17	0.45
3:J:221:ASN:HB2	3:J:228:ASN:ND2	2.32	0.45
3:J:236:LEU:CB	3:J:247:ILE:HD12	2.46	0.45
3:K:84:GLY:O	3:K:87:MET:HB2	2.16	0.45
3:L:53:PRO:CD	3:L:142:PRO:HB3	2.47	0.45
3:L:196:ALA:HB2	3:L:302:ASN:C	2.41	0.45
3:L:234:TYR:HB2	3:L:251:TRP:CZ3	2.49	0.45
3:M:121:LEU:HD12	3:M:121:LEU:N	2.32	0.45
3:M:324:LEU:HD12	3:M:325:PRO:HD3	1.99	0.45
3:O:37:GLN:O	3:O:151:PHE:HA	2.17	0.45
3:O:176:GLU:C	3:O:177:MET:HG3	2.41	0.45
1:Q:106:VAL:CG2	1:Q:201:ALA:HB1	2.45	0.45
3:B:63:GLN:HB2	3:B:139:GLY:CA	2.47	0.45
3:B:87:MET:SD	3:B:118:GLU:HB3	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:254:LEU:HD12	3:D:254:LEU:HA	1.87	0.45
3:E:123:ARG:HD2	3:E:158:GLU:OE2	2.17	0.45
3:E:216:LEU:HD23	3:E:309:LEU:HD13	1.98	0.45
3:F:67:LEU:HD21	3:F:121:LEU:HD21	1.99	0.45
3:F:237:LYS:HG2	3:F:245:ASP:OD2	2.17	0.45
3:G:19:THR:HG22	3:G:20:ASN:N	2.32	0.45
3:G:116:MET:HE1	3:I:256:ALA:HB2	1.99	0.45
3:G:230:ASP:O	3:G:231:PRO:C	2.56	0.45
3:H:56:PRO:HD3	3:H:226:ILE:CG2	2.47	0.45
3:H:68:SER:CB	3:H:74:THR:HA	2.47	0.45
3:J:200:PRO:HG2	3:J:233:GLU:HG3	1.98	0.45
3:K:113:LEU:HD23	3:K:149:ALA:CB	2.46	0.45
3:M:259:GLN:O	3:M:263:GLN:HA	2.17	0.45
4:P:245:TYR:CD1	4:P:245:TYR:C	2.91	0.45
1:Q:133:ASN:CG	1:Q:136:PRO:HG3	2.37	0.44
3:B:344:LYS:HD2	3:B:345:ARG:HH12	1.82	0.44
3:E:168:GLU:HG2	3:E:335:TYR:CZ	2.52	0.44
3:F:68:SER:CB	3:F:74:THR:HA	2.47	0.44
3:F:76:TYR:CE1	3:F:186:VAL:HB	2.52	0.44
3:F:122:ALA:HB1	3:F:339:GLN:HG3	1.99	0.44
3:G:4:ILE:HD12	3:G:4:ILE:H	1.82	0.44
3:G:177:MET:HE3	3:G:317:TYR:OH	2.17	0.44
3:G:257:GLU:O	3:G:261:GLU:HB3	2.17	0.44
3:I:13:TYR:HB3	3:I:21:ILE:HG21	1.98	0.44
3:I:236:LEU:H	3:I:247:ILE:HB	1.82	0.44
3:J:63:GLN:HB2	3:J:139:GLY:HA2	1.99	0.44
3:K:341:ARG:HE	3:K:341:ARG:HB2	1.52	0.44
3:L:30:PHE:CD1	3:L:160:VAL:HG21	2.52	0.44
3:L:247:ILE:HG12	3:L:279:TYR:CD2	2.52	0.44
3:L:258:ASN:HA	3:L:261:GLU:HB3	1.98	0.44
3:L:321:LEU:HD22	3:L:332:VAL:CG1	2.47	0.44
3:N:96:PRO:HB3	3:N:114:ASN:HD21	1.81	0.44
3:O:166:LEU:HA	3:O:170:GLY:HA2	1.98	0.44
3:O:231:PRO:HA	3:O:300:LEU:HD23	1.99	0.44
3:O:231:PRO:HB2	3:O:251:TRP:CD2	2.52	0.44
3:C:44:ASN:HD22	3:C:107:ALA:HA	1.82	0.44
3:C:56:PRO:HD3	3:C:226:ILE:HG22	1.99	0.44
3:E:113:LEU:HD22	3:E:147:ILE:HG23	1.99	0.44
3:E:257:GLU:O	3:E:261:GLU:HB3	2.17	0.44
3:G:38:LEU:HD12	3:G:38:LEU:HA	1.77	0.44
3:G:214:ARG:HE	3:G:214:ARG:HB3	1.62	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:62:VAL:HG13	3:H:136:ILE:CG2	2.47	0.44
3:H:224:SER:OG	3:H:228:ASN:HB3	2.16	0.44
3:I:173:ALA:HB2	3:I:320:GLN:CD	2.41	0.44
3:J:205:TYR:CD1	3:J:295:GLU:HB3	2.52	0.44
3:J:325:PRO:C	3:J:327:GLN:N	2.74	0.44
3:K:44:ASN:ND2	3:K:107:ALA:HA	2.32	0.44
3:N:182:VAL:HG22	3:N:336:VAL:HG13	2.00	0.44
3:B:19:THR:HG22	3:B:20:ASN:N	2.33	0.44
3:B:42:ILE:HD11	3:B:113:LEU:HD13	2.00	0.44
3:B:233:GLU:HB3	3:B:299:ALA:CB	2.47	0.44
3:C:25:ILE:CG2	3:C:155:ILE:HD13	2.44	0.44
3:C:30:PHE:N	3:C:30:PHE:HD2	2.16	0.44
3:C:187:ILE:CG2	3:C:188:GLU:N	2.79	0.44
3:C:259:GLN:OE1	3:C:266:PRO:HD3	2.16	0.44
3:C:324:LEU:HD12	3:C:325:PRO:CD	2.47	0.44
3:E:200:PRO:HG2	3:E:233:GLU:HG3	1.97	0.44
3:E:327:GLN:H	3:E:327:GLN:HG3	1.58	0.44
3:G:314:VAL:HG12	3:G:315:LEU:N	2.32	0.44
3:H:219:VAL:HG12	3:H:220:ILE:N	2.31	0.44
3:J:255:GLN:NE2	3:J:266:PRO:HB3	2.33	0.44
3:J:280:PHE:CE1	3:J:284:LEU:HB2	2.53	0.44
3:K:324:LEU:HG	3:K:328:VAL:HB	1.98	0.44
3:N:259:GLN:OE1	3:N:266:PRO:CD	2.56	0.44
3:A:33:LYS:HB2	3:A:118:GLU:OE2	2.17	0.44
3:A:54:SER:CA	3:A:101:PRO:HB3	2.45	0.44
3:A:246:LYS:C	3:A:247:ILE:HG13	2.42	0.44
3:E:57:PHE:CG	3:E:58:PRO:HA	2.52	0.44
3:F:116:MET:HG2	3:F:117:TRP:N	2.32	0.44
3:F:142:PRO:CD	3:F:147:ILE:HD11	2.47	0.44
3:J:83:LEU:HD12	3:J:86:LEU:HD23	1.99	0.44
3:J:224:SER:HB2	3:J:227:ASN:O	2.17	0.44
3:L:15:TRP:CH2	3:L:141:ALA:HB2	2.52	0.44
3:L:179:LEU:HD11	3:L:320:GLN:HB2	1.99	0.44
3:M:65:PHE:CD1	3:M:136:ILE:HG12	2.52	0.44
3:O:25:ILE:HG23	3:O:155:ILE:HD11	1.97	0.44
3:O:56:PRO:HA	3:O:267:TYR:OH	2.18	0.44
3:O:57:PHE:CG	3:O:58:PRO:HA	2.53	0.44
4:P:12:ALA:HA	4:P:33:ASN:O	2.18	0.44
1:Q:140:TYR:CD2	1:Q:141:LEU:N	2.85	0.44
3:A:57:PHE:CG	3:A:58:PRO:HA	2.51	0.44
3:B:287:THR:HG21	3:B:318:TYR:CE2	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:325:PRO:C	3:B:327:GLN:N	2.75	0.44
3:C:15:TRP:HH2	3:C:141:ALA:HB2	1.83	0.44
3:E:65:PHE:CE1	3:E:136:ILE:HG12	2.53	0.44
3:E:246:LYS:HE2	3:E:246:LYS:CA	2.38	0.44
3:F:4:ILE:HA	3:F:158:GLU:HA	2.00	0.44
3:F:177:MET:HE3	3:F:317:TYR:OH	2.18	0.44
3:G:57:PHE:CG	3:G:58:PRO:HA	2.53	0.44
3:G:62:VAL:O	3:G:80:GLY:HA3	2.18	0.44
3:G:192:PHE:HA	3:G:305:ASN:OD1	2.18	0.44
3:H:231:PRO:HB2	3:H:251:TRP:CE2	2.53	0.44
3:J:131:ASN:ND2	3:J:133:ILE:HD11	2.19	0.44
3:L:52:LEU:O	3:L:102:GLY:HA2	2.18	0.44
3:M:249:VAL:HG12	3:M:253:ALA:HB3	1.99	0.44
1:Q:56:VAL:HG22	1:Q:82:SER:HA	2.00	0.44
3:C:25:ILE:HG23	3:C:155:ILE:CD1	2.43	0.44
3:F:87:MET:HB3	3:F:95:ASN:ND2	2.33	0.44
3:F:206:LEU:HB3	3:F:212:TYR:CE1	2.53	0.44
3:H:52:LEU:CD2	3:H:145:VAL:HG21	2.48	0.44
3:H:185:LYS:O	3:H:185:LYS:HG2	2.18	0.44
3:J:233:GLU:OE1	3:J:250:SER:HA	2.17	0.44
3:J:240:ARG:NH2	3:O:208:PRO:CG	2.73	0.44
3:O:32:ARG:HB2	3:O:156:THR:HG22	2.00	0.44
3:O:200:PRO:HG3	3:O:233:GLU:HB3	1.99	0.44
3:F:30:PHE:CD1	3:F:160:VAL:HG21	2.53	0.44
3:G:3:GLU:CB	3:G:159:ARG:HB3	2.37	0.44
3:G:246:LYS:HE2	3:G:246:LYS:CA	2.45	0.44
3:I:54:SER:O	3:I:55:ALA:C	2.60	0.44
3:I:124:PHE:HD1	3:I:125:PRO:HD2	1.83	0.44
3:K:226:ILE:O	3:K:226:ILE:HG12	2.18	0.44
3:K:240:ARG:NH2	3:K:290:PRO:HB2	2.32	0.44
3:M:83:LEU:HD23	3:M:117:TRP:CD1	2.52	0.44
3:N:202:HIS:HE1	3:N:204:ALA:CA	2.31	0.44
4:P:264:GLU:O	4:P:264:GLU:CG	2.57	0.44
1:Q:29:SER:OG	1:Q:30:SER:N	2.51	0.44
3:A:226:ILE:HD13	3:A:267:TYR:HE2	1.83	0.44
3:B:256:ALA:HB1	3:C:116:MET:CE	2.36	0.44
3:C:41:SER:HB2	3:C:111:VAL:O	2.17	0.44
3:C:122:ALA:HB1	3:C:339:GLN:CG	2.47	0.44
3:C:254:LEU:HD11	3:C:274:ILE:HG13	1.99	0.44
3:D:57:PHE:O	3:D:101:PRO:HG3	2.18	0.44
3:F:116:MET:CG	3:F:117:TRP:N	2.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:253:ALA:O	3:F:256:ALA:HB3	2.17	0.44
3:F:325:PRO:C	3:F:327:GLN:H	2.25	0.44
3:G:52:LEU:CD1	3:G:99:PRO:HG3	2.48	0.44
3:G:121:LEU:N	3:G:121:LEU:HD12	2.32	0.44
3:G:254:LEU:HD12	3:G:254:LEU:HA	1.85	0.44
3:H:211:ILE:HG22	3:H:283:ASP:HB3	2.00	0.44
3:H:321:LEU:HD22	3:H:332:VAL:HG11	2.00	0.44
3:I:57:PHE:CE2	3:I:142:PRO:HG2	2.53	0.44
3:I:62:VAL:CG1	3:I:136:ILE:HG23	2.47	0.44
3:I:200:PRO:HG2	3:I:233:GLU:HG3	2.00	0.44
3:I:221:ASN:HD21	3:I:302:ASN:ND2	2.15	0.44
3:I:298:LEU:HD12	3:I:306:VAL:HG11	1.99	0.44
3:J:83:LEU:HD23	3:J:117:TRP:HB3	1.99	0.44
3:J:285:ASP:O	3:J:286:LEU:HD23	2.17	0.44
3:J:309:LEU:C	3:J:309:LEU:HD23	2.42	0.44
3:K:259:GLN:OE1	3:K:266:PRO:CD	2.66	0.44
3:L:78:VAL:HG21	3:L:83:LEU:HB2	1.98	0.44
3:L:124:PHE:CD1	3:L:125:PRO:HD2	2.53	0.44
3:L:181:THR:HG22	3:L:183:LEU:HG	1.99	0.44
3:L:235:GLU:HG3	3:L:247:ILE:O	2.18	0.44
3:M:208:PRO:HB2	3:M:286:LEU:O	2.18	0.44
3:N:219:VAL:CG1	3:N:304:ASP:HB2	2.48	0.44
3:N:328:VAL:HA	3:N:331:ILE:HD12	1.99	0.44
3:O:236:LEU:HB2	3:O:247:ILE:HD12	1.99	0.44
3:A:61:LEU:HD21	3:A:142:PRO:HD3	2.00	0.44
3:A:125:PRO:HG3	3:A:177:MET:HB3	1.99	0.44
3:E:261:GLU:HG3	3:E:262:TYR:CE2	2.52	0.44
3:F:254:LEU:HD12	3:F:254:LEU:HA	1.74	0.44
3:G:3:GLU:HB2	3:G:159:ARG:CB	2.36	0.44
3:G:275:ASP:HB3	3:G:277:ARG:HG2	1.99	0.44
3:I:42:ILE:HG22	3:I:145:VAL:CB	2.44	0.44
3:I:69:TYR:O	3:I:70:GLU:HB2	2.17	0.44
3:I:220:ILE:HG13	3:I:307:TYR:CE2	2.53	0.44
3:L:179:LEU:HG	3:L:321:LEU:HD21	2.00	0.44
3:L:211:ILE:O	3:L:312:SER:HB3	2.18	0.44
3:L:238:ILE:HD11	3:L:246:LYS:CD	2.43	0.44
3:M:233:GLU:HB3	3:M:299:ALA:HB3	2.00	0.44
3:N:231:PRO:HB2	3:N:251:TRP:CD2	2.53	0.44
3:N:247:ILE:HG12	3:N:279:TYR:CE2	2.51	0.44
3:N:247:ILE:CG2	3:N:249:VAL:HG23	2.45	0.44
4:P:313:GLN:O	4:P:356:ALA:HA	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:33:LEU:CD1	1:Q:101:TYR:HB3	2.44	0.43
3:A:94:GLN:HG3	3:C:263:GLN:C	2.43	0.43
3:A:116:MET:CE	3:C:256:ALA:CB	2.96	0.43
3:B:13:TYR:CZ	3:B:23:ILE:HG12	2.52	0.43
3:B:236:LEU:HB2	3:B:247:ILE:HD12	2.00	0.43
3:B:254:LEU:HD21	3:B:274:ILE:HD11	1.99	0.43
3:C:19:THR:CG2	3:C:20:ASN:N	2.80	0.43
3:D:9:LEU:CD2	3:D:155:ILE:HD11	2.48	0.43
3:E:188:GLU:OE1	3:E:307:TYR:HB3	2.18	0.43
3:E:210:GLN:HG3	3:E:212:TYR:HE2	1.80	0.43
3:E:254:LEU:HD21	3:E:274:ILE:HD11	1.99	0.43
3:F:105:VAL:HG21	3:F:145:VAL:HG11	2.00	0.43
3:F:113:LEU:CD2	3:F:147:ILE:HG23	2.48	0.43
3:F:246:LYS:O	3:F:279:TYR:HD2	2.00	0.43
3:G:52:LEU:HD21	3:G:145:VAL:HG21	1.99	0.43
3:G:90:THR:HB	3:G:345:ARG:HG2	1.98	0.43
3:G:189:ILE:CD1	3:G:310:TYR:HE2	2.30	0.43
3:H:15:TRP:CE3	3:H:15:TRP:O	2.71	0.43
3:H:29:ASN:HB2	3:H:157:TYR:HB3	1.99	0.43
3:H:42:ILE:HD13	3:H:57:PHE:HZ	1.82	0.43
3:H:134:LEU:HG	3:H:134:LEU:O	2.17	0.43
3:J:6:THR:HG22	3:J:7:GLU:N	2.32	0.43
3:L:168:GLU:HG2	3:L:335:TYR:CZ	2.53	0.43
3:N:179:LEU:HG	3:N:321:LEU:CD2	2.48	0.43
3:O:206:LEU:HB3	3:O:212:TYR:CZ	2.53	0.43
1:Q:11:LYS:CB	2:R:8:UNK:CB	2.96	0.43
1:Q:13:GLU:OE2	2:R:6:UNK:CB	2.66	0.43
3:A:69:TYR:HA	3:A:131:ASN:O	2.18	0.43
3:A:190:PRO:HB3	3:A:307:TYR:CE1	2.53	0.43
3:A:309:LEU:HD23	3:A:309:LEU:C	2.43	0.43
3:B:69:TYR:CZ	3:B:73:LYS:HB2	2.53	0.43
3:B:278:LYS:O	3:C:4:ILE:HB	2.18	0.43
3:C:54:SER:O	3:C:55:ALA:C	2.60	0.43
3:C:104:SER:O	3:C:106:PRO:HD3	2.18	0.43
3:C:219:VAL:HG11	3:C:304:ASP:OD2	2.18	0.43
3:C:234:TYR:HB2	3:C:251:TRP:CZ3	2.53	0.43
3:D:52:LEU:HD13	3:D:57:PHE:CE1	2.53	0.43
3:D:206:LEU:HB3	3:D:212:TYR:CZ	2.53	0.43
3:E:95:ASN:OD1	3:E:96:PRO:HD2	2.17	0.43
3:H:186:VAL:CG1	3:H:309:LEU:HD21	2.48	0.43
3:I:42:ILE:HG23	3:I:147:ILE:HD13	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:J:123:ARG:HD3	3:J:342:ARG:HH12	1.82	0.43
3:K:116:MET:HE2	3:K:116:MET:HB2	1.82	0.43
3:L:96:PRO:HG2	3:L:116:MET:HE3	2.00	0.43
3:M:190:PRO:CB	3:M:307:TYR:CE1	3.01	0.43
3:M:309:LEU:HD23	3:M:310:TYR:N	2.34	0.43
3:M:340:LYS:CG	3:M:341:ARG:N	2.81	0.43
3:O:90:THR:HB	3:O:345:ARG:CG	2.49	0.43
3:O:173:ALA:N	3:O:320:GLN:OE1	2.51	0.43
3:B:37:GLN:NE2	3:B:39:ILE:HD11	2.33	0.43
3:B:67:LEU:HB3	3:B:76:TYR:HB2	2.00	0.43
3:C:219:VAL:HG12	3:C:220:ILE:N	2.32	0.43
3:D:57:PHE:CG	3:D:58:PRO:HA	2.52	0.43
3:F:309:LEU:C	3:F:309:LEU:CD2	2.91	0.43
3:G:285:ASP:O	3:G:286:LEU:HD23	2.18	0.43
3:H:194:VAL:HG21	3:H:306:VAL:CG2	2.48	0.43
3:H:325:PRO:C	3:H:327:GLN:H	2.25	0.43
3:J:123:ARG:HB3	3:J:339:GLN:OE1	2.18	0.43
3:K:23:ILE:HD13	3:K:153:ILE:HG13	1.99	0.43
3:K:52:LEU:CD1	3:K:99:PRO:CG	2.96	0.43
3:K:214:ARG:HG2	3:K:311:VAL:HB	1.99	0.43
3:L:298:LEU:CD1	3:L:306:VAL:HG11	2.49	0.43
3:M:47:THR:C	3:M:107:ALA:HB1	2.42	0.43
3:M:185:LYS:HG2	3:M:185:LYS:O	2.17	0.43
3:N:52:LEU:HD12	3:N:99:PRO:HG3	1.99	0.43
3:O:37:GLN:CD	3:O:39:ILE:HD11	2.43	0.43
3:O:187:ILE:HG22	3:O:188:GLU:H	1.82	0.43
4:P:318:ALA:CB	4:P:349:ILE:HD11	2.48	0.43
3:A:38:LEU:O	3:A:114:ASN:HA	2.19	0.43
3:A:94:GLN:O	3:C:259:GLN:NE2	2.51	0.43
3:B:113:LEU:HD22	3:B:147:ILE:HG23	2.01	0.43
3:B:254:LEU:HD12	3:B:254:LEU:HA	1.88	0.43
3:B:314:VAL:HG12	3:B:315:LEU:N	2.33	0.43
3:D:4:ILE:HA	3:D:157:TYR:O	2.19	0.43
3:D:92:LYS:HG3	3:D:263:GLN:O	2.17	0.43
3:D:193:ASN:O	3:D:195:PRO:HD3	2.18	0.43
3:E:87:MET:CE	3:E:118:GLU:HB3	2.48	0.43
3:E:293:SER:C	3:E:294:ILE:HG13	2.43	0.43
3:F:28:ASN:HD22	3:J:70:GLU:CA	2.30	0.43
3:F:32:ARG:HD2	3:F:158:GLU:HB2	2.01	0.43
3:F:160:VAL:HG12	3:F:165:ILE:HG13	2.00	0.43
3:F:335:TYR:O	3:F:339:GLN:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:231:PRO:O	3:I:251:TRP:CG	2.71	0.43
3:K:257:GLU:O	3:K:261:GLU:CB	2.67	0.43
3:L:67:LEU:HD13	3:L:134:LEU:HB2	2.01	0.43
3:L:131:ASN:HD22	3:L:133:ILE:HD11	1.84	0.43
3:L:344:LYS:HB2	3:L:345:ARG:NH1	2.33	0.43
3:O:189:ILE:HD12	3:O:310:TYR:HE2	1.83	0.43
3:O:233:GLU:HB3	3:O:299:ALA:CB	2.48	0.43
3:O:324:LEU:CD2	3:O:332:VAL:HG21	2.46	0.43
3:A:279:TYR:N	3:A:279:TYR:CD1	2.86	0.43
3:A:315:LEU:HB2	3:A:318:TYR:HB2	2.00	0.43
3:C:19:THR:HG22	3:C:20:ASN:N	2.32	0.43
3:C:130:GLN:CA	3:C:130:GLN:NE2	2.80	0.43
3:C:254:LEU:HD12	3:C:254:LEU:HA	1.85	0.43
3:D:191:THR:CG2	3:D:194:VAL:HG22	2.49	0.43
3:E:15:TRP:NE1	3:E:138:THR:HB	2.34	0.43
3:E:59:TYR:HB3	3:E:80:GLY:O	2.17	0.43
3:G:33:LYS:HD2	3:G:118:GLU:OE2	2.19	0.43
3:H:125:PRO:CG	3:H:177:MET:HG2	2.49	0.43
3:I:53:PRO:CD	3:I:142:PRO:HB3	2.48	0.43
3:I:228:ASN:OD1	3:I:270:ALA:HB2	2.18	0.43
3:I:231:PRO:HB2	3:I:251:TRP:CD2	2.54	0.43
3:K:36:VAL:HG13	3:K:153:ILE:CD1	2.47	0.43
3:K:64:THR:OG1	3:K:137:LEU:HB3	2.18	0.43
3:L:73:LYS:HA	3:L:73:LYS:HD3	1.88	0.43
3:L:160:VAL:CG1	3:L:165:ILE:HG13	2.49	0.43
3:M:116:MET:CG	3:M:117:TRP:N	2.80	0.43
3:M:246:LYS:O	3:M:279:TYR:HD2	2.01	0.43
3:A:4:ILE:HG21	3:A:32:ARG:HH11	1.84	0.43
3:B:176:GLU:C	3:B:177:MET:HG3	2.43	0.43
3:C:67:LEU:HB2	3:C:134:LEU:HD13	2.01	0.43
3:E:13:TYR:HB3	3:E:21:ILE:HG21	1.99	0.43
3:E:89:TYR:CD2	3:E:273:ILE:HD11	2.54	0.43
3:E:212:TYR:N	3:E:212:TYR:CD2	2.87	0.43
3:E:230:ASP:N	3:E:231:PRO:HD2	2.34	0.43
3:F:200:PRO:HG2	3:F:233:GLU:HG3	2.01	0.43
3:G:76:TYR:CD1	3:G:119:PHE:HD2	2.37	0.43
3:G:113:LEU:HD23	3:G:149:ALA:HB2	2.00	0.43
3:G:115:VAL:HG12	3:G:116:MET:N	2.34	0.43
3:G:238:ILE:HD11	3:G:246:LYS:CD	2.49	0.43
3:H:171:LEU:HA	3:H:178:PRO:HA	2.01	0.43
3:H:243:PRO:HD3	3:M:185:LYS:CE	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:212:TYR:CE2	3:I:286:LEU:HD12	2.53	0.43
3:M:221:ASN:H	3:M:228:ASN:ND2	2.16	0.43
3:M:231:PRO:HG3	3:M:270:ALA:HA	2.01	0.43
3:N:92:LYS:N	3:N:92:LYS:CD	2.71	0.43
3:N:207:GLN:H	3:N:207:GLN:HG3	1.55	0.43
4:P:23:SER:HA	4:P:57:SER:O	2.18	0.43
4:P:160:ILE:O	4:P:160:ILE:HG22	2.17	0.43
3:A:88:TYR:CD2	3:A:267:TYR:HB2	2.53	0.43
3:C:160:VAL:HG12	3:C:165:ILE:HG13	2.00	0.43
3:D:88:TYR:O	3:D:93:GLY:HA2	2.19	0.43
3:D:219:VAL:HG21	3:D:300:LEU:CD2	2.49	0.43
3:F:90:THR:HB	3:F:345:ARG:HG2	2.01	0.43
3:F:200:PRO:HG3	3:F:233:GLU:HB3	2.01	0.43
3:F:340:LYS:O	3:F:343:ILE:CG2	2.67	0.43
3:G:23:ILE:HD13	3:G:153:ILE:HD11	2.01	0.43
3:G:69:TYR:O	3:G:70:GLU:HB2	2.17	0.43
3:G:246:LYS:C	3:G:247:ILE:CG1	2.91	0.43
3:J:185:LYS:HG2	3:J:185:LYS:O	2.17	0.43
3:K:116:MET:HG3	3:K:117:TRP:N	2.33	0.43
3:K:248:LYS:HB3	3:L:7:GLU:HB2	1.98	0.43
3:L:119:PHE:CD1	3:L:119:PHE:N	2.86	0.43
3:L:182:VAL:CG2	3:L:336:VAL:HG13	2.47	0.43
3:M:23:ILE:HG21	3:M:153:ILE:HG13	2.00	0.43
3:M:142:PRO:HB2	3:M:145:VAL:HG22	1.99	0.43
3:M:212:TYR:CE2	3:M:286:LEU:HD12	2.54	0.43
1:Q:53:GLY:HA3	1:Q:111:SER:OG	2.19	0.43
3:B:179:LEU:HD11	3:B:320:GLN:HB2	2.01	0.43
3:C:85:ILE:HD11	3:C:226:ILE:CD1	2.49	0.43
3:D:218:TYR:HA	3:D:270:ALA:O	2.18	0.43
3:D:236:LEU:HD11	3:D:294:ILE:CG2	2.48	0.43
3:D:345:ARG:HG3	3:D:345:ARG:HH11	1.82	0.43
3:E:240:ARG:NH2	3:J:208:PRO:CG	2.72	0.43
3:F:185:LYS:N	3:F:312:SER:O	2.41	0.43
3:F:221:ASN:HB2	3:F:228:ASN:ND2	2.34	0.43
3:G:58:PRO:HB2	3:G:115:VAL:HG21	2.01	0.43
3:G:335:TYR:O	3:G:339:GLN:HB2	2.19	0.43
3:H:243:PRO:HD3	3:M:185:LYS:CD	2.49	0.43
3:I:28:ASN:HD21	3:M:70:GLU:C	2.27	0.43
3:I:69:TYR:N	3:I:69:TYR:CD1	2.86	0.43
3:I:123:ARG:HD3	3:I:342:ARG:HH12	1.84	0.43
3:J:219:VAL:HG12	3:J:220:ILE:N	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:128:MET:HE1	3:L:171:LEU:HD21	2.00	0.43
3:M:200:PRO:HG2	3:M:233:GLU:HG3	1.99	0.43
3:N:257:GLU:O	3:N:261:GLU:HB3	2.18	0.43
1:Q:26:TYR:N	1:Q:26:TYR:CD2	2.87	0.43
1:Q:42:ARG:CZ	1:Q:42:ARG:HB2	2.49	0.43
3:A:37:GLN:O	3:A:151:PHE:HA	2.19	0.43
3:D:107:ALA:O	3:D:108:SER:HB2	2.19	0.43
3:G:248:LYS:O	3:H:7:GLU:HA	2.19	0.43
3:I:62:VAL:HG13	3:I:136:ILE:CG2	2.49	0.43
3:I:192:PHE:CD1	3:I:305:ASN:OD1	2.72	0.43
3:J:105:VAL:HG21	3:J:145:VAL:HG11	2.01	0.43
3:K:216:LEU:HD23	3:K:309:LEU:HD13	2.01	0.43
3:K:257:GLU:O	3:K:261:GLU:HB2	2.19	0.43
3:L:87:MET:HE1	3:L:345:ARG:CB	2.49	0.43
3:O:76:TYR:CD1	3:O:186:VAL:HB	2.54	0.43
3:A:38:LEU:HD12	3:A:38:LEU:HA	1.76	0.43
3:A:63:GLN:HG2	3:A:64:THR:HG23	2.01	0.43
3:A:105:VAL:O	3:A:106:PRO:C	2.62	0.43
3:A:124:PHE:HD1	3:A:183:LEU:CD2	2.32	0.43
3:B:168:GLU:HG2	3:B:335:TYR:CD1	2.54	0.43
3:B:244:THR:CG2	3:B:245:ASP:N	2.82	0.43
3:C:29:ASN:OD1	3:C:159:ARG:HA	2.19	0.43
3:C:33:LYS:HE3	3:C:35:ARG:HH21	1.84	0.43
3:D:172:GLY:HA3	3:D:317:TYR:CE2	2.54	0.43
3:D:343:ILE:O	3:D:343:ILE:HG23	2.19	0.43
3:F:284:LEU:HD11	3:F:294:ILE:CD1	2.49	0.43
3:H:89:TYR:CD2	3:H:273:ILE:HD11	2.54	0.43
3:I:293:SER:C	3:I:294:ILE:HG13	2.44	0.43
3:J:53:PRO:CD	3:J:142:PRO:HB3	2.49	0.43
3:J:214:ARG:HG2	3:J:311:VAL:HB	2.01	0.43
3:K:171:LEU:HA	3:K:178:PRO:HA	2.01	0.43
3:L:2:GLY:HA3	3:L:159:ARG:O	2.19	0.43
3:N:54:SER:O	3:N:55:ALA:C	2.62	0.43
3:N:314:VAL:CG1	3:N:315:LEU:N	2.82	0.43
3:O:212:TYR:HB3	3:O:276:PHE:CE2	2.53	0.43
3:O:254:LEU:HD21	3:O:274:ILE:HD11	2.00	0.43
4:P:46:SER:HA	4:P:54:LYS:O	2.19	0.43
3:A:119:PHE:O	3:A:121:LEU:HD12	2.18	0.42
3:A:228:ASN:OD1	3:A:270:ALA:HB2	2.18	0.42
3:E:168:GLU:HG2	3:E:335:TYR:CE1	2.54	0.42
3:E:248:LYS:HG3	3:E:248:LYS:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:15:TRP:HB2	3:F:38:LEU:HD11	2.00	0.42
3:H:42:ILE:HB	3:H:111:VAL:CG2	2.49	0.42
3:H:63:GLN:HG2	3:H:64:THR:HG23	2.00	0.42
3:H:209:GLY:O	3:H:210:GLN:HB3	2.19	0.42
3:H:233:GLU:HB3	3:H:299:ALA:HB3	2.00	0.42
3:I:234:TYR:HE2	3:I:247:ILE:HD12	1.84	0.42
3:J:38:LEU:O	3:J:114:ASN:HA	2.19	0.42
3:J:57:PHE:CG	3:J:58:PRO:HA	2.54	0.42
3:N:159:ARG:HH11	3:N:159:ARG:HG2	1.84	0.42
4:P:289:ASN:HD21	4:P:291:GLN:HB3	1.83	0.42
4:P:370:ILE:HD12	4:P:370:ILE:HG21	1.81	0.42
1:Q:53:GLY:HA3	1:Q:111:SER:HA	2.00	0.42
3:E:98:TYR:HB3	3:E:99:PRO:HA	2.01	0.42
3:E:332:VAL:O	3:E:336:VAL:HG23	2.19	0.42
3:F:57:PHE:CE2	3:F:142:PRO:HG2	2.54	0.42
3:F:68:SER:HB3	3:F:74:THR:HA	2.00	0.42
3:H:105:VAL:O	3:H:106:PRO:C	2.62	0.42
3:I:26:PRO:CB	3:M:131:ASN:HD21	2.32	0.42
3:J:19:THR:CG2	3:J:20:ASN:N	2.82	0.42
3:K:90:THR:HG1	3:K:345:ARG:HG2	1.81	0.42
3:K:236:LEU:H	3:K:247:ILE:HB	1.84	0.42
3:K:325:PRO:O	3:K:329:ALA:N	2.37	0.42
3:N:254:LEU:HD11	3:N:274:ILE:HG13	2.00	0.42
3:O:193:ASN:O	3:O:195:PRO:HD3	2.19	0.42
3:O:325:PRO:HB2	3:O:328:VAL:HG23	2.00	0.42
1:Q:29:SER:HB2	1:Q:110:SER:HB2	2.01	0.42
3:A:65:PHE:CD1	3:A:136:ILE:HG12	2.54	0.42
3:A:157:TYR:CD1	3:A:157:TYR:N	2.87	0.42
3:C:55:ALA:N	3:C:101:PRO:HB3	2.33	0.42
3:C:315:LEU:HD12	3:C:318:TYR:CD1	2.52	0.42
3:D:116:MET:HE2	3:D:116:MET:HB2	1.73	0.42
3:D:254:LEU:HD21	3:D:274:ILE:CD1	2.48	0.42
3:F:166:LEU:HA	3:F:170:GLY:HA2	2.00	0.42
3:H:25:ILE:CG2	3:H:155:ILE:HD13	2.48	0.42
3:H:42:ILE:HG22	3:H:145:VAL:HB	2.02	0.42
3:J:274:ILE:N	3:J:274:ILE:HD12	2.34	0.42
3:L:61:LEU:HD23	3:L:61:LEU:HA	1.88	0.42
3:L:179:LEU:HG	3:L:321:LEU:CD2	2.50	0.42
3:N:257:GLU:HB2	3:O:35:ARG:HH12	1.83	0.42
3:O:30:PHE:CD1	3:O:160:VAL:HG21	2.54	0.42
3:A:116:MET:HE2	3:A:116:MET:HB2	1.62	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:9:LEU:HD21	3:B:26:PRO:CD	2.50	0.42
3:D:52:LEU:CD1	3:D:99:PRO:HG3	2.48	0.42
3:E:44:ASN:HB2	3:E:105:VAL:CG1	2.49	0.42
3:E:172:GLY:HA3	3:E:317:TYR:CZ	2.54	0.42
3:E:232:THR:HA	3:E:251:TRP:HB2	2.00	0.42
3:F:313:TYR:CE2	3:F:315:LEU:HD21	2.55	0.42
3:G:30:PHE:CD1	3:G:160:VAL:HG21	2.53	0.42
3:H:121:LEU:N	3:H:121:LEU:CD1	2.81	0.42
3:J:224:SER:HB2	3:J:227:ASN:C	2.45	0.42
3:L:19:THR:HG22	3:L:20:ASN:N	2.35	0.42
3:O:182:VAL:CG2	3:O:336:VAL:HG13	2.49	0.42
3:O:200:PRO:CG	3:O:233:GLU:CG	2.96	0.42
3:O:254:LEU:HD12	3:O:254:LEU:HA	1.85	0.42
4:P:94:VAL:HG13	4:P:135:PRO:HG3	2.01	0.42
1:Q:94:ILE:HG22	1:Q:95:ALA:N	2.34	0.42
1:Q:140:TYR:CZ	1:Q:157:PRO:HD3	2.54	0.42
1:Q:208:LEU:HD21	1:Q:210:LEU:CG	2.49	0.42
3:A:258:ASN:HA	3:A:261:GLU:HB3	2.01	0.42
3:B:29:ASN:CG	3:B:159:ARG:HA	2.45	0.42
3:E:202:HIS:CE1	3:E:204:ALA:CA	3.03	0.42
3:G:257:GLU:O	3:G:261:GLU:HB2	2.19	0.42
3:H:62:VAL:HA	3:H:138:THR:HA	2.02	0.42
3:J:67:LEU:HD11	3:J:132:ILE:CG2	2.49	0.42
3:K:121:LEU:N	3:K:121:LEU:CD1	2.82	0.42
3:K:231:PRO:HB2	3:K:251:TRP:CD2	2.55	0.42
3:L:257:GLU:O	3:L:261:GLU:CB	2.68	0.42
3:M:94:GLN:HG3	3:O:263:GLN:O	2.18	0.42
3:M:168:GLU:HG2	3:M:335:TYR:CZ	2.53	0.42
3:M:219:VAL:HG22	3:M:306:VAL:HG22	2.00	0.42
1:Q:37:PHE:HD2	1:Q:115:LEU:HD22	1.85	0.42
3:A:56:PRO:HA	3:A:267:TYR:OH	2.19	0.42
3:A:124:PHE:CD1	3:A:183:LEU:HD22	2.54	0.42
3:A:338:ARG:HA	3:A:341:ARG:HH21	1.85	0.42
3:B:205:TYR:HA	3:B:295:GLU:HA	2.01	0.42
3:B:246:LYS:HE2	3:B:246:LYS:CA	2.34	0.42
3:C:32:ARG:HD2	3:C:158:GLU:OE1	2.19	0.42
3:C:83:LEU:HD12	3:C:83:LEU:HA	1.83	0.42
3:E:19:THR:HG22	3:E:20:ASN:N	2.34	0.42
3:E:121:LEU:HB3	3:E:124:PHE:HB2	2.01	0.42
3:E:236:LEU:H	3:E:247:ILE:HB	1.84	0.42
3:I:230:ASP:HA	3:I:301:GLN:CG	2.46	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:309:LEU:HD23	3:I:309:LEU:C	2.44	0.42
3:J:44:ASN:HB2	3:J:105:VAL:CG1	2.49	0.42
3:J:130:GLN:HA	3:J:130:GLN:OE1	2.20	0.42
3:J:237:LYS:HG2	3:J:245:ASP:OD2	2.19	0.42
3:K:25:ILE:HG23	3:K:155:ILE:HD13	2.01	0.42
3:L:209:GLY:O	3:L:210:GLN:HB3	2.18	0.42
3:M:263:GLN:CA	3:N:94:GLN:HG3	2.50	0.42
3:N:233:GLU:HB3	3:N:299:ALA:HB2	2.01	0.42
3:O:221:ASN:HB2	3:O:228:ASN:ND2	2.34	0.42
4:P:84:ILE:HA	4:P:142:GLU:O	2.20	0.42
3:C:52:LEU:HD21	3:C:145:VAL:HG21	2.00	0.42
3:D:68:SER:HB2	3:D:73:LYS:O	2.20	0.42
3:E:56:PRO:O	3:E:59:TYR:HB2	2.20	0.42
3:E:70:GLU:CG	3:E:130:GLN:HB2	2.50	0.42
3:E:96:PRO:HB3	3:E:114:ASN:ND2	2.34	0.42
3:E:195:PRO:O	3:E:201:ILE:HD11	2.18	0.42
3:E:219:VAL:HG12	3:E:220:ILE:N	2.34	0.42
3:F:52:LEU:HD21	3:F:145:VAL:HG21	2.02	0.42
3:F:62:VAL:HG11	3:F:65:PHE:CZ	2.55	0.42
3:G:13:TYR:CE2	3:G:23:ILE:HG12	2.55	0.42
3:H:172:GLY:HA3	3:H:317:TYR:CE2	2.55	0.42
3:I:192:PHE:HA	3:I:305:ASN:OD1	2.20	0.42
3:J:325:PRO:C	3:J:327:GLN:H	2.26	0.42
3:K:263:GLN:C	3:L:94:GLN:HG3	2.45	0.42
3:M:187:ILE:HG22	3:M:188:GLU:H	1.82	0.42
3:M:203:VAL:O	3:M:204:ALA:HB2	2.19	0.42
3:N:38:LEU:HA	3:N:38:LEU:HD12	1.77	0.42
3:O:186:VAL:HG13	3:O:309:LEU:HD21	2.02	0.42
3:B:224:SER:OG	3:B:228:ASN:HB3	2.19	0.42
3:C:57:PHE:CE2	3:C:142:PRO:CG	3.03	0.42
3:C:213:LYS:NZ	3:C:340:LYS:O	2.47	0.42
3:E:98:TYR:HA	3:E:99:PRO:C	2.45	0.42
3:F:24:LYS:HB3	3:F:24:LYS:HE2	1.91	0.42
3:F:85:ILE:HD11	3:F:226:ILE:CD1	2.50	0.42
3:F:258:ASN:HA	3:F:261:GLU:HB3	2.01	0.42
3:G:6:THR:HG22	3:G:7:GLU:N	2.34	0.42
3:I:15:TRP:HB2	3:I:38:LEU:HD11	2.00	0.42
3:I:200:PRO:CG	3:I:233:GLU:HG3	2.49	0.42
3:J:200:PRO:CG	3:J:233:GLU:CG	2.95	0.42
3:J:280:PHE:CD1	3:J:284:LEU:HB2	2.54	0.42
3:J:314:VAL:HG12	3:J:315:LEU:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:4:ILE:HG13	3:L:158:GLU:HG3	2.01	0.42
3:M:15:TRP:HB2	3:M:38:LEU:HD11	2.01	0.42
3:M:285:ASP:O	3:M:286:LEU:HD23	2.19	0.42
3:N:9:LEU:CD1	3:N:155:ILE:HD12	2.49	0.42
3:O:115:VAL:HG12	3:O:116:MET:N	2.34	0.42
3:O:172:GLY:HA3	3:O:317:TYR:CE2	2.54	0.42
3:B:29:ASN:HB2	3:B:157:TYR:HB3	2.01	0.42
3:C:287:THR:HG22	3:C:288:HIS:CD2	2.55	0.42
3:D:76:TYR:CD1	3:D:119:PHE:HD2	2.38	0.42
3:E:67:LEU:HD13	3:E:134:LEU:HB2	2.00	0.42
3:F:70:GLU:C	3:F:72:SER:H	2.27	0.42
3:G:13:TYR:CZ	3:G:23:ILE:HG12	2.55	0.42
3:I:126:ALA:HB1	3:I:132:ILE:HD11	2.02	0.42
3:J:259:GLN:HG3	3:K:96:PRO:CG	2.48	0.42
3:K:62:VAL:HG11	3:K:65:PHE:CE2	2.54	0.42
3:K:78:VAL:HG21	3:K:83:LEU:HB2	2.01	0.42
3:L:4:ILE:CG2	3:L:32:ARG:HD3	2.49	0.42
3:L:62:VAL:HG13	3:L:136:ILE:HG23	2.02	0.42
3:M:6:THR:HG22	3:M:7:GLU:N	2.35	0.42
3:M:319:ASP:OD2	3:M:319:ASP:N	2.49	0.42
3:O:17:ALA:HB1	3:O:140:GLN:NE2	2.35	0.42
1:Q:5:PHE:O	1:Q:5:PHE:CD1	2.72	0.42
1:Q:42:ARG:HH12	3:C:130:GLN:CG	2.32	0.42
1:Q:131:ILE:HB	1:Q:134:PHE:CZ	2.55	0.42
3:A:280:PHE:O	3:B:4:ILE:CD1	2.68	0.42
3:B:23:ILE:HD13	3:B:153:ILE:HD11	2.02	0.42
3:B:184:PRO:CB	3:B:343:ILE:HD12	2.48	0.42
3:D:309:LEU:C	3:D:309:LEU:CD2	2.93	0.42
3:E:119:PHE:CD1	3:E:119:PHE:N	2.88	0.42
3:F:205:TYR:HA	3:F:295:GLU:HA	2.02	0.42
3:F:232:THR:HG21	3:F:301:GLN:OE1	2.20	0.42
3:G:247:ILE:CD1	3:G:274:ILE:HG21	2.50	0.42
3:H:6:THR:HG22	3:H:7:GLU:N	2.35	0.42
3:I:324:LEU:CD2	3:I:332:VAL:HG21	2.45	0.42
3:K:4:ILE:CD1	3:K:4:ILE:N	2.63	0.42
3:K:228:ASN:OD1	3:K:270:ALA:HB2	2.20	0.42
3:L:123:ARG:HD3	3:L:342:ARG:HH12	1.85	0.42
3:M:42:ILE:HG12	3:M:147:ILE:HD12	2.01	0.42
3:M:232:THR:C	3:M:251:TRP:HB2	2.45	0.42
3:M:257:GLU:O	3:M:261:GLU:HB2	2.19	0.42
3:M:325:PRO:C	3:M:327:GLN:H	2.26	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:28:ASN:OD1	3:N:28:ASN:N	2.52	0.42
3:N:230:ASP:N	3:N:231:PRO:HD2	2.35	0.42
1:Q:45:PHE:HE1	1:Q:89:PHE:HD2	1.66	0.41
3:A:125:PRO:HG2	3:A:177:MET:HG2	2.02	0.41
3:A:189:ILE:HD12	3:A:310:TYR:HE2	1.85	0.41
3:A:205:TYR:CE1	3:A:292:ASP:HB3	2.55	0.41
3:F:157:TYR:CD1	3:F:157:TYR:N	2.88	0.41
3:G:324:LEU:HD12	3:G:325:PRO:CD	2.49	0.41
3:G:337:ALA:O	3:G:340:LYS:HG2	2.19	0.41
3:H:116:MET:HG2	3:H:117:TRP:N	2.35	0.41
3:I:121:LEU:HD23	3:I:124:PHE:CD2	2.55	0.41
3:J:13:TYR:CZ	3:J:23:ILE:HG12	2.55	0.41
3:J:121:LEU:HD12	3:J:121:LEU:N	2.35	0.41
3:J:211:ILE:HG22	3:J:283:ASP:HB3	2.02	0.41
3:J:243:PRO:CG	3:O:74:THR:O	2.68	0.41
3:K:15:TRP:CE3	3:K:147:ILE:HB	2.55	0.41
3:K:57:PHE:CD2	3:K:58:PRO:HA	2.55	0.41
3:L:172:GLY:HA3	3:L:317:TYR:CE2	2.54	0.41
3:M:13:TYR:HB3	3:M:21:ILE:HG21	2.01	0.41
3:M:55:ALA:N	3:M:101:PRO:HB3	2.34	0.41
3:M:107:ALA:O	3:M:108:SER:HB2	2.20	0.41
3:N:123:ARG:HH22	3:N:168:GLU:CD	2.27	0.41
3:O:27:ARG:HD2	3:O:126:ALA:O	2.20	0.41
3:O:54:SER:O	3:O:55:ALA:C	2.63	0.41
3:O:249:VAL:HG12	3:O:253:ALA:HB3	2.02	0.41
3:A:4:ILE:H	3:A:4:ILE:CD1	2.10	0.41
3:A:92:LYS:CD	3:C:263:GLN:HE21	2.31	0.41
3:B:52:LEU:HD21	3:B:145:VAL:HG11	2.02	0.41
3:B:321:LEU:CD2	3:B:332:VAL:HG11	2.50	0.41
3:D:230:ASP:O	3:D:231:PRO:C	2.61	0.41
3:F:4:ILE:CG2	3:F:32:ARG:HD3	2.48	0.41
3:H:90:THR:HB	3:H:345:ARG:CG	2.50	0.41
3:I:274:ILE:N	3:I:274:ILE:CD1	2.83	0.41
3:J:182:VAL:CG2	3:J:339:GLN:HB3	2.49	0.41
3:K:63:GLN:O	3:K:79:SER:HB2	2.21	0.41
3:K:230:ASP:O	3:K:231:PRO:C	2.63	0.41
3:M:7:GLU:HB2	3:O:248:LYS:HB3	2.02	0.41
3:M:128:MET:SD	3:M:178:PRO:HD3	2.61	0.41
3:M:219:VAL:CG1	3:M:220:ILE:N	2.83	0.41
3:N:159:ARG:CG	3:N:159:ARG:NH1	2.83	0.41
3:O:315:LEU:HB2	3:O:318:TYR:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:89:TYR:CD2	3:A:273:ILE:HD11	2.55	0.41
3:A:251:TRP:O	3:A:255:GLN:HG3	2.20	0.41
3:C:226:ILE:HD13	3:C:267:TYR:HE2	1.84	0.41
3:C:324:LEU:HD12	3:C:325:PRO:HD3	2.03	0.41
3:D:182:VAL:HG21	3:D:339:GLN:HB3	2.03	0.41
3:D:259:GLN:HB3	3:E:94:GLN:O	2.20	0.41
3:D:329:ALA:O	3:D:333:GLN:HB2	2.20	0.41
3:E:61:LEU:HD23	3:E:61:LEU:HA	1.83	0.41
3:E:62:VAL:HG13	3:E:136:ILE:CG2	2.47	0.41
3:F:259:GLN:O	3:F:263:GLN:HA	2.20	0.41
3:G:24:LYS:HD3	3:G:133:ILE:HG12	2.01	0.41
3:G:25:ILE:HG23	3:G:155:ILE:HD13	2.01	0.41
3:H:240:ARG:HH12	3:H:290:PRO:CG	2.33	0.41
3:I:9:LEU:HD22	3:I:153:ILE:HB	2.02	0.41
3:I:232:THR:C	3:I:251:TRP:HB2	2.45	0.41
3:J:89:TYR:CB	3:J:273:ILE:HD11	2.50	0.41
3:J:128:MET:HE1	3:J:171:LEU:HD11	2.02	0.41
3:J:309:LEU:HD23	3:J:310:TYR:N	2.35	0.41
3:K:17:ALA:HB1	3:K:140:GLN:HE22	1.85	0.41
3:K:28:ASN:HD22	3:O:70:GLU:CA	2.33	0.41
3:K:85:ILE:HD11	3:K:226:ILE:CD1	2.50	0.41
3:O:214:ARG:HE	3:O:214:ARG:HB3	1.70	0.41
4:P:197:PHE:CG	4:P:216:ILE:HD12	2.56	0.41
3:A:76:TYR:CG	3:A:119:PHE:HD2	2.39	0.41
3:A:88:TYR:O	3:A:93:GLY:HA2	2.20	0.41
3:A:176:GLU:C	3:A:177:MET:HG3	2.45	0.41
3:A:243:PRO:O	3:F:73:LYS:HA	2.21	0.41
3:B:65:PHE:HB2	3:B:78:VAL:HG23	2.03	0.41
3:C:4:ILE:H	3:C:4:ILE:CD1	2.25	0.41
3:D:105:VAL:CG1	3:D:110:SER:HA	2.51	0.41
3:E:91:THR:O	3:E:94:GLN:HB2	2.20	0.41
3:E:182:VAL:HG13	3:E:313:TYR:CD2	2.55	0.41
3:E:314:VAL:HG12	3:E:315:LEU:N	2.34	0.41
3:H:27:ARG:NH1	3:H:27:ARG:HB2	2.36	0.41
3:H:32:ARG:HD2	3:H:158:GLU:OE1	2.21	0.41
3:H:121:LEU:HB3	3:H:124:PHE:HB2	2.02	0.41
3:H:240:ARG:HH12	3:H:290:PRO:HG2	1.85	0.41
3:H:246:LYS:HD3	3:H:279:TYR:O	2.20	0.41
3:I:29:ASN:OD1	3:I:159:ARG:HA	2.19	0.41
3:J:324:LEU:HD12	3:J:324:LEU:HA	1.95	0.41
3:L:62:VAL:HA	3:L:138:THR:HA	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:134:LEU:O	3:L:134:LEU:HG	2.20	0.41
3:L:254:LEU:HD21	3:L:274:ILE:CG1	2.50	0.41
3:M:88:TYR:O	3:M:93:GLY:HA2	2.20	0.41
3:M:236:LEU:CB	3:M:247:ILE:HD12	2.51	0.41
3:O:233:GLU:HB3	3:O:299:ALA:HB2	2.02	0.41
4:P:117:GLU:CD	4:P:119:TYR:OH	2.63	0.41
3:A:36:VAL:HG11	3:A:136:ILE:HD11	2.02	0.41
3:B:235:GLU:HB3	3:B:297:ASP:HB2	2.03	0.41
3:B:321:LEU:HD22	3:B:332:VAL:CG1	2.50	0.41
3:D:191:THR:HG22	3:D:194:VAL:HG22	2.03	0.41
3:D:256:ALA:C	3:D:258:ASN:N	2.78	0.41
3:E:52:LEU:HD13	3:E:99:PRO:HG3	2.02	0.41
3:E:141:ALA:O	3:E:142:PRO:C	2.60	0.41
3:E:163:GLN:H	3:E:163:GLN:HG3	1.65	0.41
3:F:28:ASN:OD1	3:F:28:ASN:N	2.53	0.41
3:G:52:LEU:HD13	3:G:99:PRO:HG3	2.02	0.41
3:G:341:ARG:HE	3:G:341:ARG:HB2	1.68	0.41
3:I:26:PRO:HG3	3:M:131:ASN:HD21	1.84	0.41
3:J:17:ALA:CB	3:J:140:GLN:HE22	2.32	0.41
3:L:2:GLY:N	3:L:164:GLU:OE2	2.54	0.41
3:L:54:SER:HA	3:L:101:PRO:CB	2.46	0.41
3:L:190:PRO:HB2	3:L:307:TYR:CE1	2.56	0.41
3:M:200:PRO:CG	3:M:233:GLU:CG	2.96	0.41
3:O:128:MET:HE1	3:O:171:LEU:HD11	2.02	0.41
3:A:160:VAL:CG1	3:A:165:ILE:HG13	2.50	0.41
3:B:32:ARG:HB2	3:B:156:THR:CG2	2.50	0.41
3:C:124:PHE:HE1	3:C:183:LEU:CD2	2.32	0.41
3:C:244:THR:CG2	3:C:245:ASP:N	2.84	0.41
3:C:261:GLU:CG	3:C:262:TYR:CE2	3.03	0.41
3:D:78:VAL:HG21	3:D:83:LEU:HB2	2.03	0.41
3:F:29:ASN:HB2	3:F:157:TYR:HB3	2.01	0.41
3:F:38:LEU:HD12	3:F:38:LEU:HA	1.87	0.41
3:F:42:ILE:HG23	3:F:147:ILE:CD1	2.50	0.41
3:F:159:ARG:HG2	3:F:159:ARG:NH1	2.33	0.41
3:F:189:ILE:HA	3:F:190:PRO:HD2	1.96	0.41
3:F:274:ILE:N	3:F:274:ILE:CD1	2.83	0.41
3:G:321:LEU:HD22	3:G:332:VAL:HG12	2.03	0.41
3:H:54:SER:CA	3:H:101:PRO:HB3	2.48	0.41
3:H:131:ASN:OD1	3:H:133:ILE:HD11	2.20	0.41
3:H:232:THR:CA	3:H:251:TRP:HB2	2.50	0.41
3:H:297:ASP:O	3:H:298:LEU:HD23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:I:44:ASN:HB2	3:I:105:VAL:CG1	2.50	0.41
3:I:210:GLN:HG3	3:I:212:TYR:CE2	2.55	0.41
3:J:15:TRP:CE3	3:J:15:TRP:O	2.74	0.41
3:J:84:GLY:O	3:J:87:MET:HB2	2.21	0.41
3:J:205:TYR:HA	3:J:295:GLU:HA	2.02	0.41
3:K:61:LEU:CD2	3:K:142:PRO:HD3	2.48	0.41
3:L:187:ILE:CG2	3:L:188:GLU:N	2.83	0.41
3:M:234:TYR:CD2	3:M:235:GLU:N	2.88	0.41
3:N:19:THR:CG2	3:N:20:ASN:N	2.82	0.41
3:N:83:LEU:CD1	3:N:86:LEU:HD23	2.50	0.41
3:O:113:LEU:CD2	3:O:147:ILE:HG23	2.49	0.41
3:O:202:HIS:NE2	3:O:205:TYR:CE2	2.88	0.41
1:Q:168:ASN:HD22	1:Q:168:ASN:HA	1.73	0.41
3:A:263:GLN:CA	3:B:94:GLN:HG3	2.51	0.41
3:B:33:LYS:HB2	3:B:118:GLU:OE2	2.20	0.41
3:B:62:VAL:HG11	3:B:65:PHE:CE2	2.55	0.41
3:B:91:THR:HG23	3:B:345:ARG:HD3	2.03	0.41
3:C:113:LEU:CD2	3:C:147:ILE:HG23	2.50	0.41
3:C:246:LYS:HG3	3:C:280:PHE:CZ	2.56	0.41
3:D:13:TYR:CB	3:D:21:ILE:HG21	2.50	0.41
3:D:51:THR:HG23	3:D:102:GLY:O	2.20	0.41
3:E:10:GLN:HG2	3:I:71:GLY:HA2	2.02	0.41
3:F:234:TYR:CD2	3:F:234:TYR:C	2.98	0.41
3:H:166:LEU:HA	3:H:170:GLY:HA2	2.02	0.41
3:H:182:VAL:HG13	3:H:313:TYR:CD2	2.55	0.41
3:I:137:LEU:O	3:I:137:LEU:HG	2.19	0.41
3:L:38:LEU:O	3:L:114:ASN:HA	2.20	0.41
3:L:70:GLU:C	3:L:72:SER:H	2.29	0.41
3:M:220:ILE:HD13	3:M:226:ILE:HA	2.02	0.41
3:M:233:GLU:HB3	3:M:299:ALA:CB	2.50	0.41
3:M:234:TYR:CD2	3:M:234:TYR:C	2.99	0.41
3:O:38:LEU:O	3:O:114:ASN:HA	2.21	0.41
3:O:235:GLU:O	3:O:296:TYR:HA	2.21	0.41
1:Q:42:ARG:HH12	3:C:130:GLN:HG2	1.84	0.41
3:C:38:LEU:O	3:C:114:ASN:HA	2.20	0.41
3:E:25:ILE:O	3:E:26:PRO:C	2.63	0.41
3:F:5:TYR:HE2	3:F:7:GLU:OE2	2.04	0.41
3:F:126:ALA:CB	3:F:132:ILE:CD1	2.99	0.41
3:G:70:GLU:C	3:G:72:SER:H	2.28	0.41
3:G:216:LEU:HD23	3:G:309:LEU:HD13	2.02	0.41
3:G:231:PRO:HG3	3:G:270:ALA:HA	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:69:TYR:CD2	3:H:70:GLU:OE2	2.74	0.41
3:H:116:MET:CG	3:H:117:TRP:N	2.83	0.41
3:H:130:GLN:OE1	3:H:130:GLN:HA	2.20	0.41
3:H:233:GLU:OE1	3:H:250:SER:HA	2.21	0.41
3:I:91:THR:O	3:I:94:GLN:HB2	2.20	0.41
3:I:126:ALA:CB	3:I:132:ILE:HD11	2.51	0.41
3:J:32:ARG:HH21	3:J:342:ARG:CD	2.34	0.41
3:J:37:GLN:CD	3:J:116:MET:HE2	2.46	0.41
3:J:313:TYR:CZ	3:J:340:LYS:HB2	2.56	0.41
3:O:235:GLU:HB3	3:O:297:ASP:HB2	2.03	0.41
4:P:287:ILE:HD12	4:P:353:GLN:HA	2.02	0.41
1:Q:42:ARG:HB2	1:Q:42:ARG:NH1	2.36	0.41
1:Q:89:PHE:HB3	1:Q:92:VAL:HG23	2.03	0.41
1:Q:161:TYR:HE1	1:Q:198:PRO:HG3	1.86	0.41
3:A:6:THR:HG22	3:A:7:GLU:N	2.36	0.41
3:A:255:GLN:O	3:A:259:GLN:HG2	2.20	0.41
3:B:203:VAL:O	3:B:204:ALA:HB2	2.21	0.41
3:B:246:LYS:HD3	3:B:279:TYR:O	2.21	0.41
3:C:76:TYR:CE1	3:C:186:VAL:HB	2.55	0.41
3:C:205:TYR:CE1	3:C:295:GLU:HB3	2.56	0.41
3:D:37:GLN:HG2	3:D:116:MET:CE	2.51	0.41
3:D:42:ILE:HB	3:D:111:VAL:HG22	2.03	0.41
3:E:203:VAL:HG23	3:E:297:ASP:HA	2.03	0.41
3:F:214:ARG:HG2	3:F:311:VAL:HB	2.03	0.41
3:G:116:MET:HE2	3:G:116:MET:HB2	1.70	0.41
3:G:168:GLU:HG2	3:G:335:TYR:CZ	2.56	0.41
3:H:87:MET:HE2	3:H:345:ARG:HB3	1.95	0.41
3:H:179:LEU:HD11	3:H:320:GLN:HB2	2.03	0.41
3:H:182:VAL:CG1	3:H:313:TYR:CD2	3.04	0.41
3:H:202:HIS:CE1	3:H:204:ALA:HA	2.56	0.41
3:I:57:PHE:CG	3:I:58:PRO:HA	2.55	0.41
3:I:160:VAL:HA	3:I:164:GLU:OE2	2.21	0.41
3:I:173:ALA:HA	3:I:320:GLN:HE22	1.86	0.41
3:J:195:PRO:HG2	3:J:201:ILE:HD13	2.03	0.41
3:K:36:VAL:HG13	3:K:153:ILE:HD13	2.02	0.41
3:K:116:MET:CG	3:K:117:TRP:N	2.83	0.41
3:K:195:PRO:HG2	3:K:201:ILE:HD12	2.00	0.41
3:K:205:TYR:CD1	3:K:295:GLU:HB3	2.56	0.41
3:K:234:TYR:HB2	3:K:251:TRP:CZ3	2.54	0.41
3:L:19:THR:O	3:L:137:LEU:HA	2.20	0.41
3:L:57:PHE:CG	3:L:58:PRO:HA	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:59:TYR:HB3	3:L:80:GLY:O	2.20	0.41
3:L:202:HIS:ND1	3:L:295:GLU:OE1	2.54	0.41
3:M:116:MET:HE2	3:M:116:MET:HB2	1.70	0.41
3:M:230:ASP:O	3:M:231:PRO:C	2.63	0.41
3:M:286:LEU:HD21	3:M:294:ILE:HD12	2.03	0.41
3:N:76:TYR:CD1	3:N:119:PHE:HD2	2.39	0.41
3:N:91:THR:CG2	3:N:345:ARG:HD3	2.50	0.41
3:N:157:TYR:CD1	3:N:157:TYR:N	2.88	0.41
3:O:20:ASN:HB2	3:O:137:LEU:HD13	2.02	0.41
3:O:31:ILE:HG13	3:O:126:ALA:HB2	2.02	0.41
3:O:39:ILE:C	3:O:149:ALA:HB1	2.46	0.41
3:O:42:ILE:HB	3:O:111:VAL:CG2	2.51	0.41
4:P:174:ARG:H	4:P:174:ARG:HG3	1.58	0.41
3:A:215:GLN:HG3	3:A:310:TYR:CD1	2.56	0.41
3:A:219:VAL:HG21	3:A:300:LEU:HD21	2.03	0.41
3:A:248:LYS:HB3	3:B:7:GLU:HB3	2.03	0.41
3:B:231:PRO:HB2	3:B:251:TRP:CD2	2.56	0.41
3:C:88:TYR:CD1	3:C:93:GLY:HA2	2.56	0.41
3:C:206:LEU:HG	3:C:294:ILE:O	2.21	0.41
3:D:83:LEU:HD12	3:D:83:LEU:HA	1.96	0.41
3:D:194:VAL:HG11	3:D:203:VAL:HG22	2.03	0.41
3:F:31:ILE:HG23	3:F:155:ILE:CG2	2.51	0.41
3:F:44:ASN:HD22	3:F:108:SER:H	1.69	0.41
3:F:230:ASP:O	3:F:231:PRO:C	2.63	0.41
3:F:313:TYR:HE2	3:F:315:LEU:HD21	1.86	0.41
3:G:67:LEU:CD1	3:G:134:LEU:HB2	2.50	0.41
3:G:70:GLU:N	3:G:130:GLN:O	2.53	0.41
3:G:88:TYR:O	3:G:93:GLY:HA2	2.21	0.41
3:G:274:ILE:N	3:G:274:ILE:CD1	2.81	0.41
3:H:16:THR:O	3:H:138:THR:OG1	2.25	0.41
3:H:62:VAL:CG1	3:H:136:ILE:HG23	2.51	0.41
3:J:228:ASN:OD1	3:J:270:ALA:HB2	2.21	0.41
3:K:253:ALA:C	3:K:256:ALA:HB3	2.46	0.41
3:L:125:PRO:HG3	3:L:177:MET:HG2	2.03	0.41
3:O:116:MET:HG2	3:O:117:TRP:N	2.36	0.41
3:O:179:LEU:HG	3:O:321:LEU:CD2	2.51	0.41
1:Q:136:PRO:O	1:Q:137:THR:C	2.60	0.40
3:A:69:TYR:CZ	3:A:73:LYS:HB2	2.56	0.40
3:B:257:GLU:O	3:B:261:GLU:HB3	2.21	0.40
3:B:309:LEU:HD23	3:B:309:LEU:C	2.45	0.40
3:B:341:ARG:HE	3:B:341:ARG:HB2	1.24	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:194:VAL:HB	3:C:300:LEU:CD1	2.51	0.40
3:C:211:ILE:HD12	3:C:313:TYR:CE2	2.56	0.40
3:F:30:PHE:HZ	3:F:165:ILE:HD11	1.86	0.40
3:H:57:PHE:CG	3:H:58:PRO:HA	2.56	0.40
3:I:4:ILE:HA	3:I:158:GLU:HA	2.03	0.40
3:I:254:LEU:HD12	3:I:254:LEU:HA	1.76	0.40
3:J:36:VAL:HG12	3:J:151:PHE:HD2	1.86	0.40
3:K:44:ASN:HD22	3:K:107:ALA:HA	1.85	0.40
3:K:173:ALA:HB2	3:K:320:GLN:CD	2.46	0.40
3:L:247:ILE:HD13	3:L:274:ILE:CG2	2.51	0.40
3:M:54:SER:O	3:M:55:ALA:C	2.64	0.40
3:M:236:LEU:HB3	3:M:247:ILE:CG1	2.51	0.40
3:N:58:PRO:HB2	3:N:115:VAL:HG21	2.02	0.40
3:N:91:THR:O	3:N:94:GLN:HB2	2.21	0.40
3:N:309:LEU:C	3:N:309:LEU:CD2	2.93	0.40
3:O:70:GLU:N	3:O:130:GLN:O	2.53	0.40
3:O:160:VAL:HG12	3:O:165:ILE:HG13	2.01	0.40
3:A:9:LEU:N	3:A:9:LEU:CD1	2.84	0.40
3:B:32:ARG:HB2	3:B:156:THR:HG22	2.01	0.40
3:B:115:VAL:HG12	3:B:116:MET:H	1.87	0.40
3:B:236:LEU:H	3:B:247:ILE:HB	1.86	0.40
3:C:17:ALA:HB1	3:C:140:GLN:HE22	1.86	0.40
3:C:321:LEU:HD22	3:C:332:VAL:HG11	2.04	0.40
3:D:88:TYR:CD2	3:D:267:TYR:HB2	2.56	0.40
3:D:248:LYS:O	3:D:248:LYS:HG3	2.21	0.40
3:D:314:VAL:HG12	3:D:315:LEU:N	2.36	0.40
3:F:15:TRP:O	3:F:15:TRP:HE3	2.03	0.40
3:F:28:ASN:H	3:F:157:TYR:HE2	1.69	0.40
3:F:126:ALA:CB	3:F:132:ILE:HD11	2.51	0.40
3:G:203:VAL:HB	3:G:296:TYR:O	2.21	0.40
3:H:235:GLU:HB3	3:H:297:ASP:HB2	2.03	0.40
3:H:240:ARG:HD3	3:M:209:GLY:HA3	2.03	0.40
3:I:123:ARG:HB3	3:I:339:GLN:OE1	2.21	0.40
3:I:181:THR:HG22	3:I:182:VAL:N	2.36	0.40
3:I:221:ASN:HB2	3:I:228:ASN:ND2	2.35	0.40
3:I:246:LYS:C	3:I:247:ILE:HG13	2.46	0.40
3:J:179:LEU:HD11	3:J:320:GLN:HB2	2.04	0.40
3:K:206:LEU:HB3	3:K:212:TYR:CZ	2.56	0.40
3:K:234:TYR:CD2	3:K:234:TYR:C	3.00	0.40
3:M:248:LYS:HG3	3:M:248:LYS:O	2.21	0.40
3:M:324:LEU:HD12	3:M:325:PRO:CD	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:55:ALA:N	3:N:101:PRO:HB3	2.36	0.40
3:N:113:LEU:CD2	3:N:147:ILE:HG23	2.51	0.40
3:N:122:ALA:HB1	3:N:339:GLN:CG	2.43	0.40
3:N:341:ARG:HE	3:N:341:ARG:HB3	1.67	0.40
3:O:159:ARG:HH11	3:O:159:ARG:CG	2.34	0.40
1:Q:189:ASN:ND2	4:P:29:ASP:CA	2.84	0.40
3:B:69:TYR:CE2	3:B:73:LYS:HD2	2.56	0.40
3:B:244:THR:HG21	3:B:246:LYS:HE3	2.04	0.40
3:C:15:TRP:CB	3:C:38:LEU:HD11	2.49	0.40
3:C:87:MET:HE1	3:C:118:GLU:HB3	2.02	0.40
3:D:48:ALA:C	3:D:107:ALA:HB2	2.45	0.40
3:D:68:SER:CB	3:D:74:THR:HA	2.51	0.40
3:D:246:LYS:C	3:D:247:ILE:HG13	2.46	0.40
3:E:253:ALA:HA	3:E:256:ALA:HB2	2.04	0.40
3:F:61:LEU:HD23	3:F:61:LEU:HA	1.90	0.40
3:F:159:ARG:CG	3:F:159:ARG:NH1	2.82	0.40
3:F:239:VAL:HG23	3:F:295:GLU:HG2	2.03	0.40
3:F:249:VAL:CG1	3:F:253:ALA:HB3	2.50	0.40
3:G:78:VAL:HG21	3:G:83:LEU:HB2	2.03	0.40
3:G:157:TYR:CD1	3:G:157:TYR:N	2.90	0.40
3:H:69:TYR:O	3:H:70:GLU:HB2	2.20	0.40
3:H:83:LEU:HD22	3:H:119:PHE:CE2	2.57	0.40
3:J:236:LEU:HB3	3:J:247:ILE:CG1	2.51	0.40
3:K:38:LEU:HD12	3:K:38:LEU:HA	1.77	0.40
3:K:123:ARG:HB3	3:K:339:GLN:OE1	2.21	0.40
3:L:324:LEU:CD2	3:L:332:VAL:HG21	2.48	0.40
3:M:63:GLN:O	3:M:79:SER:HB2	2.21	0.40
3:M:69:TYR:HA	3:M:131:ASN:O	2.22	0.40
3:M:113:LEU:HD22	3:M:147:ILE:HG23	2.03	0.40
3:N:20:ASN:HA	3:N:137:LEU:HA	2.03	0.40
3:N:29:ASN:H	3:N:157:TYR:HD2	1.68	0.40
3:N:52:LEU:HD23	3:N:52:LEU:HA	1.81	0.40
3:N:89:TYR:HD2	3:N:273:ILE:HD11	1.83	0.40
3:N:287:THR:HG21	3:N:318:TYR:CE2	2.57	0.40
3:O:27:ARG:HB2	3:O:27:ARG:NH1	2.37	0.40
3:O:173:ALA:CA	3:O:320:GLN:HE22	2.34	0.40
4:P:297:LEU:HB2	4:P:349:ILE:HG22	2.01	0.40
1:Q:191:GLN:HG2	4:P:25:LYS:HD3	2.03	0.40
3:B:4:ILE:HA	3:B:157:TYR:O	2.21	0.40
3:B:29:ASN:H	3:B:157:TYR:HD2	1.68	0.40
3:B:215:GLN:HG3	3:B:310:TYR:CE1	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:168:GLU:HG2	3:D:335:TYR:CE1	2.57	0.40
3:E:15:TRP:O	3:E:15:TRP:HE3	2.04	0.40
3:F:25:ILE:CG2	3:F:155:ILE:HD13	2.51	0.40
3:F:230:ASP:N	3:F:231:PRO:HD2	2.36	0.40
3:H:152:TYR:N	3:H:152:TYR:CD1	2.90	0.40
3:I:56:PRO:HD3	3:I:226:ILE:CG2	2.51	0.40
3:I:69:TYR:CE1	3:I:75:LEU:HD21	2.56	0.40
3:I:98:TYR:HD1	3:I:114:ASN:HD22	1.68	0.40
3:I:195:PRO:HA	3:I:303:GLN:HG3	2.02	0.40
3:K:200:PRO:HG3	3:K:233:GLU:HB3	2.02	0.40
3:L:257:GLU:O	3:L:261:GLU:HB2	2.21	0.40
3:M:105:VAL:HG13	3:M:110:SER:HA	2.02	0.40
3:M:113:LEU:HD23	3:M:149:ALA:HB2	2.03	0.40
3:N:44:ASN:HD22	3:N:107:ALA:HA	1.86	0.40
3:O:200:PRO:HG3	3:O:233:GLU:HG3	2.00	0.40
4:P:349:ILE:HD13	4:P:349:ILE:HG21	1.65	0.40
3:A:215:GLN:NE2	3:A:308:SER:OG	2.55	0.40
3:B:72:SER:O	3:L:248:LYS:NZ	2.55	0.40
3:C:324:LEU:CD2	3:C:332:VAL:HG21	2.50	0.40
3:D:174:ASP:OD2	3:D:317:TYR:HE2	2.03	0.40
3:D:325:PRO:C	3:D:327:GLN:H	2.30	0.40
3:E:25:ILE:CG2	3:E:155:ILE:HD13	2.52	0.40
3:E:71:GLY:N	3:M:28:ASN:ND2	2.69	0.40
3:E:340:LYS:CG	3:E:341:ARG:N	2.84	0.40
3:F:315:LEU:HD12	3:F:318:TYR:CD1	2.51	0.40
3:G:172:GLY:HA3	3:G:317:TYR:CE2	2.57	0.40
3:H:38:LEU:HD12	3:H:38:LEU:HA	1.90	0.40
3:H:39:ILE:C	3:H:149:ALA:HB1	2.46	0.40
3:I:280:PHE:CE2	3:I:284:LEU:HD13	2.56	0.40
3:J:235:GLU:HB3	3:J:297:ASP:HB2	2.03	0.40
3:K:96:PRO:CG	3:K:116:MET:HE3	2.45	0.40
3:K:284:LEU:HD11	3:K:294:ILE:HD13	2.03	0.40
3:L:52:LEU:CD1	3:L:99:PRO:HG3	2.51	0.40
3:L:324:LEU:HD12	3:L:325:PRO:HD3	2.04	0.40
3:N:171:LEU:HA	3:N:178:PRO:HA	2.03	0.40
3:N:234:TYR:HE2	3:N:247:ILE:HD12	1.86	0.40
3:O:186:VAL:HG22	3:O:311:VAL:HA	2.03	0.40
3:O:231:PRO:HG3	3:O:270:ALA:HA	2.03	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	Q	218/223 (98%)	209 (96%)	9 (4%)	0	100	100
3	A	342/345 (99%)	302 (88%)	40 (12%)	0	100	100
3	B	342/345 (99%)	305 (89%)	37 (11%)	0	100	100
3	C	342/345 (99%)	303 (89%)	39 (11%)	0	100	100
3	D	342/345 (99%)	304 (89%)	36 (10%)	2 (1%)	21	58
3	E	342/345 (99%)	304 (89%)	36 (10%)	2 (1%)	21	58
3	F	342/345 (99%)	297 (87%)	44 (13%)	1 (0%)	36	71
3	G	342/345 (99%)	300 (88%)	40 (12%)	2 (1%)	21	58
3	H	342/345 (99%)	302 (88%)	39 (11%)	1 (0%)	36	71
3	I	342/345 (99%)	305 (89%)	36 (10%)	1 (0%)	36	71
3	J	342/345 (99%)	299 (87%)	43 (13%)	0	100	100
3	K	342/345 (99%)	305 (89%)	36 (10%)	1 (0%)	36	71
3	L	342/345 (99%)	307 (90%)	34 (10%)	1 (0%)	36	71
3	M	342/345 (99%)	298 (87%)	43 (13%)	1 (0%)	36	71
3	N	342/345 (99%)	304 (89%)	37 (11%)	1 (0%)	36	71
3	O	342/345 (99%)	301 (88%)	40 (12%)	1 (0%)	36	71
4	P	369/381 (97%)	349 (95%)	20 (5%)	0	100	100
All	All	5717/5779 (99%)	5094 (89%)	609 (11%)	14 (0%)	44	77

All (14) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	F	71	GLY
3	G	318	TYR
3	H	318	TYR
3	E	318	TYR
3	I	318	TYR

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Mol	Chain	Res	Type
3	D	318	TYR
3	N	316	PRO
3	G	316	PRO
3	L	316	PRO
3	E	316	PRO
3	D	71	GLY
3	K	208	PRO
3	M	71	GLY
3	O	71	GLY

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Q	163/198 (82%)	145 (89%)	18 (11%)	6	21
3	A	289/290 (100%)	271 (94%)	18 (6%)	16	38
3	B	289/290 (100%)	268 (93%)	21 (7%)	13	34
3	C	289/290 (100%)	268 (93%)	21 (7%)	13	34
3	D	289/290 (100%)	271 (94%)	18 (6%)	16	38
3	E	289/290 (100%)	273 (94%)	16 (6%)	19	42
3	F	289/290 (100%)	272 (94%)	17 (6%)	18	40
3	G	289/290 (100%)	275 (95%)	14 (5%)	23	45
3	H	289/290 (100%)	272 (94%)	17 (6%)	18	40
3	I	289/290 (100%)	271 (94%)	18 (6%)	16	38
3	J	289/290 (100%)	269 (93%)	20 (7%)	14	36
3	K	289/290 (100%)	269 (93%)	20 (7%)	14	36
3	L	289/290 (100%)	275 (95%)	14 (5%)	23	45
3	M	289/290 (100%)	271 (94%)	18 (6%)	16	38
3	N	289/290 (100%)	271 (94%)	18 (6%)	16	38
3	O	289/290 (100%)	276 (96%)	13 (4%)	24	46
4	P	326/334 (98%)	282 (86%)	44 (14%)	4	16

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	4824/4882 (99%)	4499 (93%)	325 (7%)	17 37

All (325) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	Q	13	GLU
1	Q	28	VAL
1	Q	39	ILE
1	Q	42	ARG
1	Q	60	LEU
1	Q	61	LEU
1	Q	65	SER
1	Q	92	VAL
1	Q	102	ASP
1	Q	104	SER
1	Q	106	VAL
1	Q	125	VAL
1	Q	129	ILE
1	Q	140	TYR
1	Q	141	LEU
1	Q	146	PHE
1	Q	181	ILE
1	Q	189	ASN
3	A	4	ILE
3	A	7	GLU
3	A	16	THR
3	A	28	ASN
3	A	45	SER
3	A	98	TYR
3	A	116	MET
3	A	118	GLU
3	A	143	SER
3	A	159	ARG
3	A	174	ASP
3	A	207	GLN
3	A	224	SER
3	A	278	LYS
3	A	295	GLU
3	A	309	LEU
3	A	339	GLN
3	A	343	ILE
3	B	4	ILE

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Mol	Chain	Res	Type
3	B	9	LEU
3	B	16	THR
3	B	28	ASN
3	B	92	LYS
3	B	106	PRO
3	B	112	ASN
3	B	118	GLU
3	B	140	GLN
3	B	143	SER
3	B	174	ASP
3	B	198	SER
3	B	207	GLN
3	B	239	VAL
3	B	249	VAL
3	B	287	THR
3	B	303	GLN
3	B	319	ASP
3	B	339	GLN
3	B	341	ARG
3	B	343	ILE
3	C	4	ILE
3	C	7	GLU
3	C	16	THR
3	C	28	ASN
3	C	51	THR
3	C	58	PRO
3	C	70	GLU
3	C	92	LYS
3	C	112	ASN
3	C	130	GLN
3	C	143	SER
3	C	159	ARG
3	C	165	ILE
3	C	185	LYS
3	C	198	SER
3	C	207	GLN
3	C	229	THR
3	C	291	SER
3	C	304	ASP
3	C	328	VAL
3	C	339	GLN
3	D	4	ILE

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Mol	Chain	Res	Type
3	D	7	GLU
3	D	9	LEU
3	D	10	GLN
3	D	16	THR
3	D	45	SER
3	D	74	THR
3	D	104	SER
3	D	116	MET
3	D	137	LEU
3	D	159	ARG
3	D	224	SER
3	D	246	LYS
3	D	250	SER
3	D	304	ASP
3	D	328	VAL
3	D	339	GLN
3	D	343	ILE
3	E	4	ILE
3	E	16	THR
3	E	56	PRO
3	E	92	LYS
3	E	98	TYR
3	E	143	SER
3	E	207	GLN
3	E	211	ILE
3	E	249	VAL
3	E	278	LYS
3	E	291	SER
3	E	304	ASP
3	E	328	VAL
3	E	331	ILE
3	E	339	GLN
3	E	343	ILE
3	F	4	ILE
3	F	7	GLU
3	F	9	LEU
3	F	11	GLN
3	F	16	THR
3	F	143	SER
3	F	159	ARG
3	F	194	VAL
3	F	211	ILE

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Mol	Chain	Res	Type
3	F	222	SER
3	F	250	SER
3	F	278	LYS
3	F	291	SER
3	F	304	ASP
3	F	328	VAL
3	F	339	GLN
3	F	343	ILE
3	G	7	GLU
3	G	16	THR
3	G	29	ASN
3	G	116	MET
3	G	128	MET
3	G	143	SER
3	G	159	ARG
3	G	174	ASP
3	G	207	GLN
3	G	249	VAL
3	G	275	ASP
3	G	304	ASP
3	G	328	VAL
3	G	339	GLN
3	H	4	ILE
3	H	7	GLU
3	H	33	LYS
3	H	92	LYS
3	H	140	GLN
3	H	143	SER
3	H	159	ARG
3	H	207	GLN
3	H	211	ILE
3	H	229	THR
3	H	244	THR
3	H	263	GLN
3	H	277	ARG
3	H	278	LYS
3	H	319	ASP
3	H	339	GLN
3	H	343	ILE
3	I	9	LEU
3	I	16	THR
3	I	24	LYS

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Mol	Chain	Res	Type
3	I	51	THR
3	I	104	SER
3	I	116	MET
3	I	143	SER
3	I	167	SER
3	I	174	ASP
3	I	198	SER
3	I	206	LEU
3	I	207	GLN
3	I	250	SER
3	I	287	THR
3	I	304	ASP
3	I	319	ASP
3	I	328	VAL
3	I	339	GLN
3	J	4	ILE
3	J	9	LEU
3	J	16	THR
3	J	28	ASN
3	J	45	SER
3	J	51	THR
3	J	143	SER
3	J	159	ARG
3	J	174	ASP
3	J	198	SER
3	J	207	GLN
3	J	239	VAL
3	J	240	ARG
3	J	244	THR
3	J	278	LYS
3	J	295	GLU
3	J	304	ASP
3	J	328	VAL
3	J	339	GLN
3	J	343	ILE
3	K	4	ILE
3	K	9	LEU
3	K	10	GLN
3	K	16	THR
3	K	51	THR
3	K	58	PRO
3	K	77	SER

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Mol	Chain	Res	Type
3	K	116	MET
3	K	167	SER
3	K	174	ASP
3	K	206	LEU
3	K	207	GLN
3	K	250	SER
3	K	263	GLN
3	K	304	ASP
3	K	319	ASP
3	K	328	VAL
3	K	333	GLN
3	K	339	GLN
3	K	343	ILE
3	L	4	ILE
3	L	10	GLN
3	L	16	THR
3	L	45	SER
3	L	143	SER
3	L	174	ASP
3	L	189	ILE
3	L	194	VAL
3	L	207	GLN
3	L	249	VAL
3	L	304	ASP
3	L	328	VAL
3	L	339	GLN
3	L	343	ILE
3	M	4	ILE
3	M	7	GLU
3	M	16	THR
3	M	45	SER
3	M	51	THR
3	M	116	MET
3	M	119	PHE
3	M	159	ARG
3	M	171	LEU
3	M	174	ASP
3	M	207	GLN
3	M	278	LYS
3	M	291	SER
3	M	295	GLU
3	M	304	ASP

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Mol	Chain	Res	Type
3	M	328	VAL
3	M	339	GLN
3	M	343	ILE
3	N	4	ILE
3	N	7	GLU
3	N	16	THR
3	N	58	PRO
3	N	92	LYS
3	N	159	ARG
3	N	207	GLN
3	N	239	VAL
3	N	244	THR
3	N	247	ILE
3	N	263	GLN
3	N	278	LYS
3	N	291	SER
3	N	295	GLU
3	N	328	VAL
3	N	331	ILE
3	N	339	GLN
3	N	343	ILE
3	O	4	ILE
3	O	9	LEU
3	O	16	THR
3	O	29	ASN
3	O	45	SER
3	O	198	SER
3	O	207	GLN
3	O	263	GLN
3	O	278	LYS
3	O	291	SER
3	O	304	ASP
3	O	339	GLN
3	O	343	ILE
4	P	32	VAL
4	P	42	LEU
4	P	45	ILE
4	P	53	THR
4	P	79	LEU
4	P	83	ARG
4	P	94	VAL
4	P	96	VAL

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Mol	Chain	Res	Type
4	P	97	THR
4	P	123	THR
4	P	150	GLU
4	P	151	LYS
4	P	174	ARG
4	P	193	THR
4	P	208	THR
4	P	228	VAL
4	P	230	LEU
4	P	233	THR
4	P	242	SER
4	P	254	THR
4	P	265	LEU
4	P	269	THR
4	P	272	VAL
4	P	273	THR
4	P	277	THR
4	P	278	LEU
4	P	284	THR
4	P	289	ASN
4	P	290	VAL
4	P	309	THR
4	P	319	THR
4	P	321	LEU
4	P	323	ARG
4	P	326	THR
4	P	328	SER
4	P	329	THR
4	P	330	VAL
4	P	347	ARG
4	P	349	ILE
4	P	355	VAL
4	P	363	SER
4	P	366	THR
4	P	368	THR
4	P	370	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (150) such sidechains are listed below:

Mol	Chain	Res	Type
1	Q	128	GLN
1	Q	133	ASN

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Mol	Chain	Res	Type
1	Q	168	ASN
1	Q	189	ASN
3	A	11	GLN
3	A	20	ASN
3	A	37	GLN
3	A	60	ASN
3	A	66	ASN
3	A	94	GLN
3	A	95	ASN
3	A	140	GLN
3	A	148	ASN
3	A	193	ASN
3	A	215	GLN
3	A	263	GLN
3	A	288	HIS
3	B	10	GLN
3	B	60	ASN
3	B	63	GLN
3	B	131	ASN
3	B	140	GLN
3	B	263	GLN
3	B	288	HIS
3	B	303	GLN
3	C	44	ASN
3	C	60	ASN
3	C	130	GLN
3	C	140	GLN
3	C	148	ASN
3	C	193	ASN
3	C	228	ASN
3	C	255	GLN
3	C	263	GLN
3	C	288	HIS
3	D	10	GLN
3	D	11	GLN
3	D	37	GLN
3	D	44	ASN
3	D	60	ASN
3	D	63	GLN
3	D	131	ASN
3	D	202	HIS
3	D	263	GLN

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Mol	Chain	Res	Type
3	D	288	HIS
3	E	37	GLN
3	E	60	ASN
3	E	94	GLN
3	E	114	ASN
3	E	131	ASN
3	E	140	GLN
3	E	202	HIS
3	E	227	ASN
3	E	327	GLN
3	F	10	GLN
3	F	11	GLN
3	F	28	ASN
3	F	60	ASN
3	F	94	GLN
3	F	114	ASN
3	F	131	ASN
3	F	140	GLN
3	F	228	ASN
3	F	288	HIS
3	F	302	ASN
3	F	339	GLN
3	G	44	ASN
3	G	63	GLN
3	G	94	GLN
3	G	114	ASN
3	G	288	HIS
3	H	44	ASN
3	H	60	ASN
3	H	94	GLN
3	H	140	GLN
3	H	202	HIS
3	H	228	ASN
3	I	11	GLN
3	I	20	ASN
3	I	28	ASN
3	I	37	GLN
3	I	44	ASN
3	I	60	ASN
3	I	114	ASN
3	I	131	ASN
3	I	140	GLN

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Mol	Chain	Res	Type
3	I	148	ASN
3	I	215	GLN
3	I	228	ASN
3	I	255	GLN
3	I	302	ASN
3	J	11	GLN
3	J	20	ASN
3	J	37	GLN
3	J	44	ASN
3	J	60	ASN
3	J	114	ASN
3	J	131	ASN
3	J	140	GLN
3	J	210	GLN
3	J	228	ASN
3	J	255	GLN
3	J	303	GLN
3	K	10	GLN
3	K	11	GLN
3	K	20	ASN
3	K	28	ASN
3	K	37	GLN
3	K	44	ASN
3	K	60	ASN
3	K	131	ASN
3	K	140	GLN
3	K	263	GLN
3	K	339	GLN
3	L	10	GLN
3	L	11	GLN
3	L	60	ASN
3	L	94	GLN
3	L	131	ASN
3	L	140	GLN
3	M	28	ASN
3	M	60	ASN
3	M	94	GLN
3	M	131	ASN
3	M	140	GLN
3	M	207	GLN
3	M	228	ASN
3	M	288	HIS

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Mol	Chain	Res	Type
3	N	20	ASN
3	N	37	GLN
3	N	44	ASN
3	N	60	ASN
3	N	131	ASN
3	N	140	GLN
3	N	202	HIS
3	N	263	GLN
3	O	37	GLN
3	O	44	ASN
3	O	60	ASN
3	O	114	ASN
3	O	131	ASN
3	O	140	GLN
3	O	193	ASN
3	O	227	ASN
3	O	288	HIS
4	P	219	ASN
4	P	268	ASN
4	P	285	GLN
4	P	289	ASN
4	P	375	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

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.

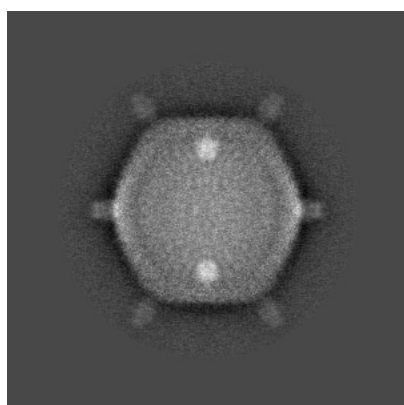
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5584. These allow visual inspection of the internal detail of the map and identification of artifacts.

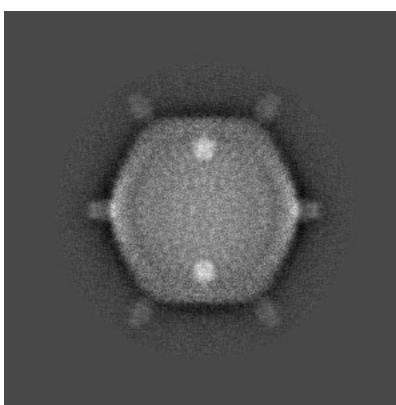
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

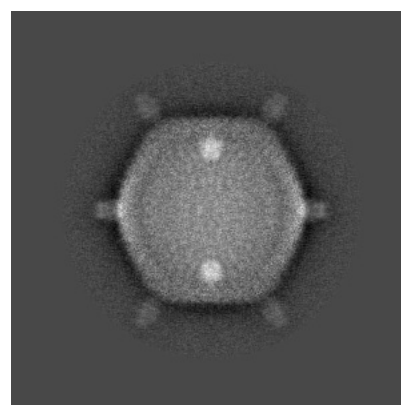
6.1.1 Primary map



X



Y

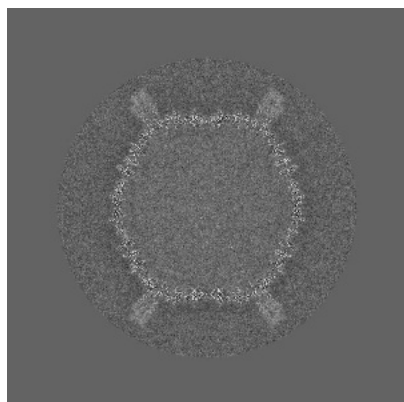


Z

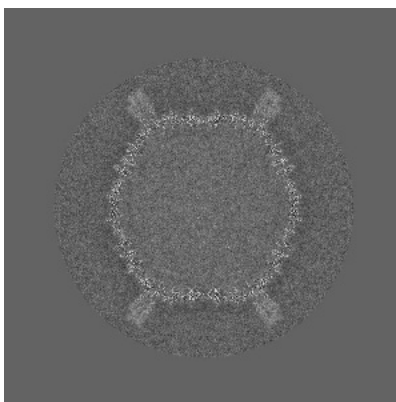
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

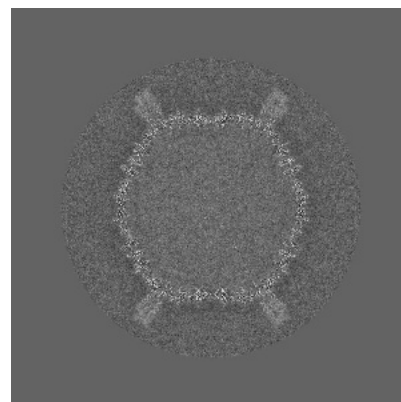
6.2.1 Primary map



X Index: 512



Y Index: 512

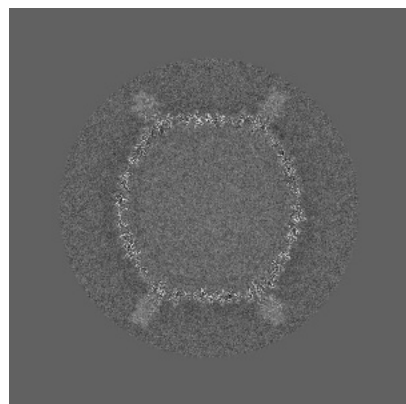


Z Index: 512

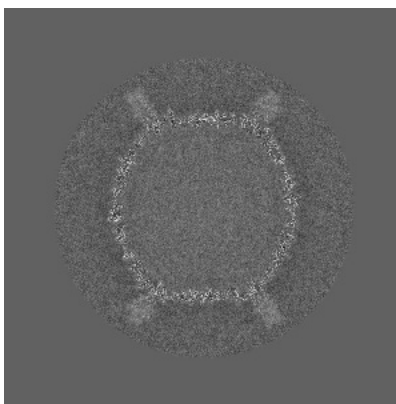
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

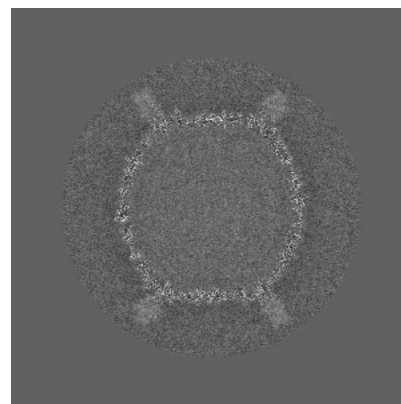
6.3.1 Primary map



X Index: 505



Y Index: 519

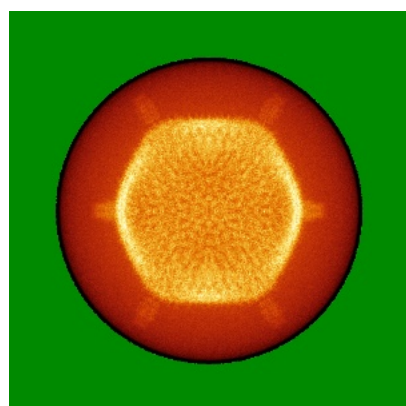


Z Index: 519

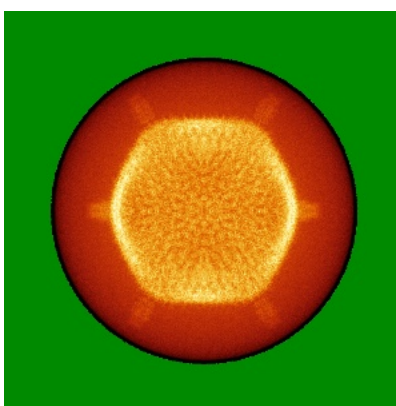
The images above show the largest variance slices of the map in three orthogonal directions.

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

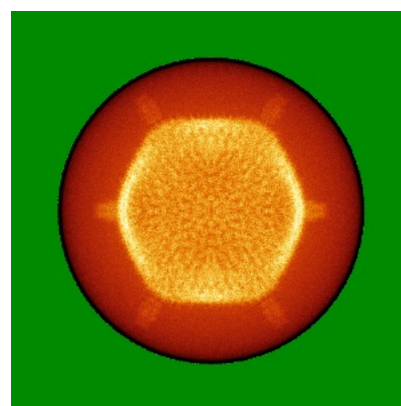
6.4.1 Primary map



X



Y

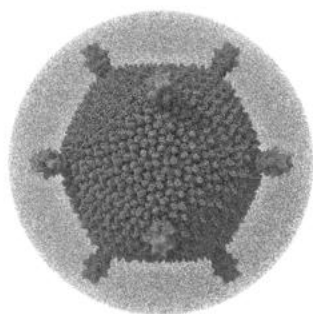


Z

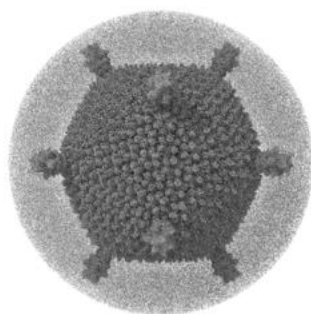
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

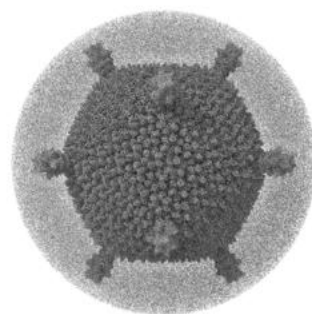
6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.05. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

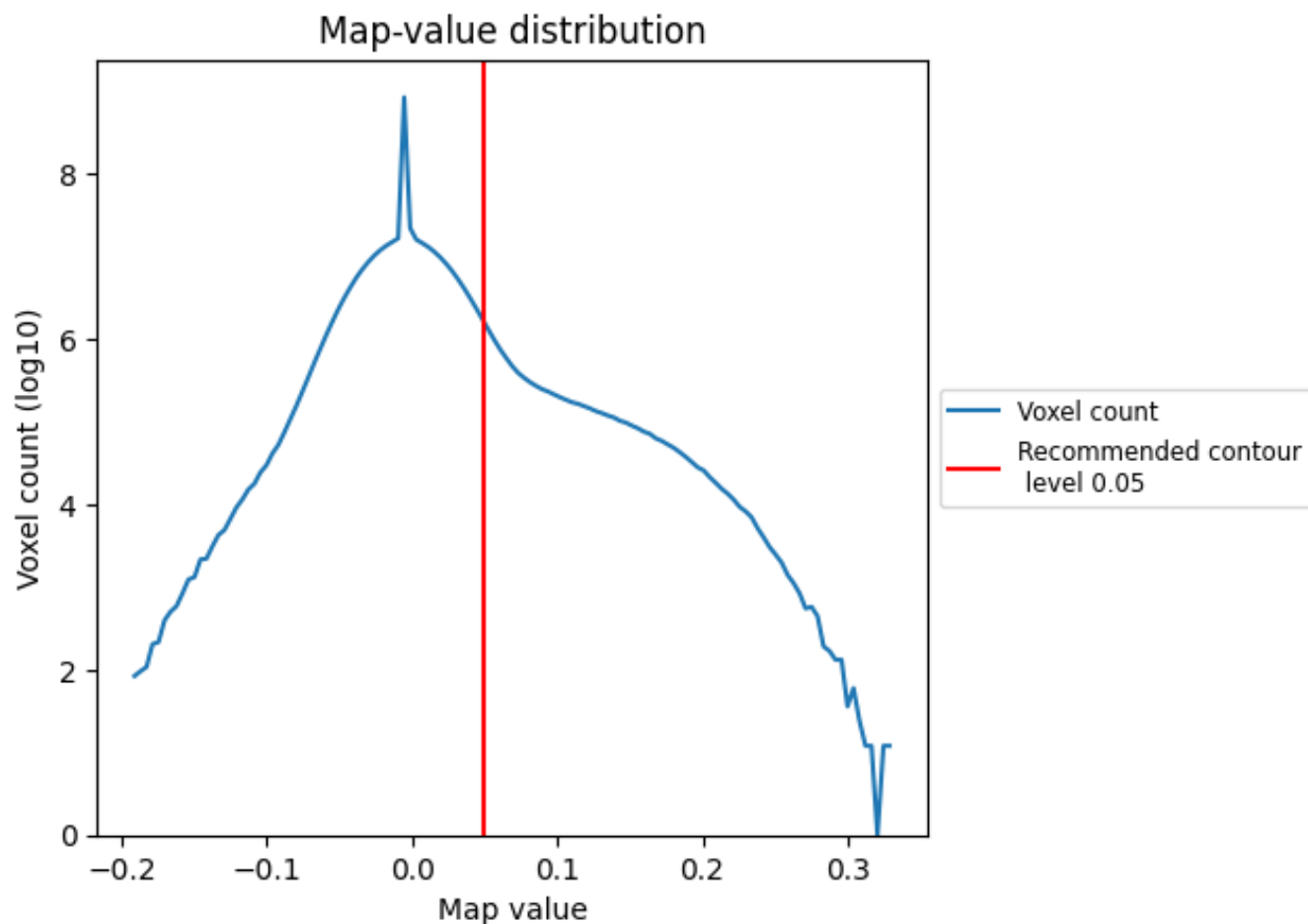
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

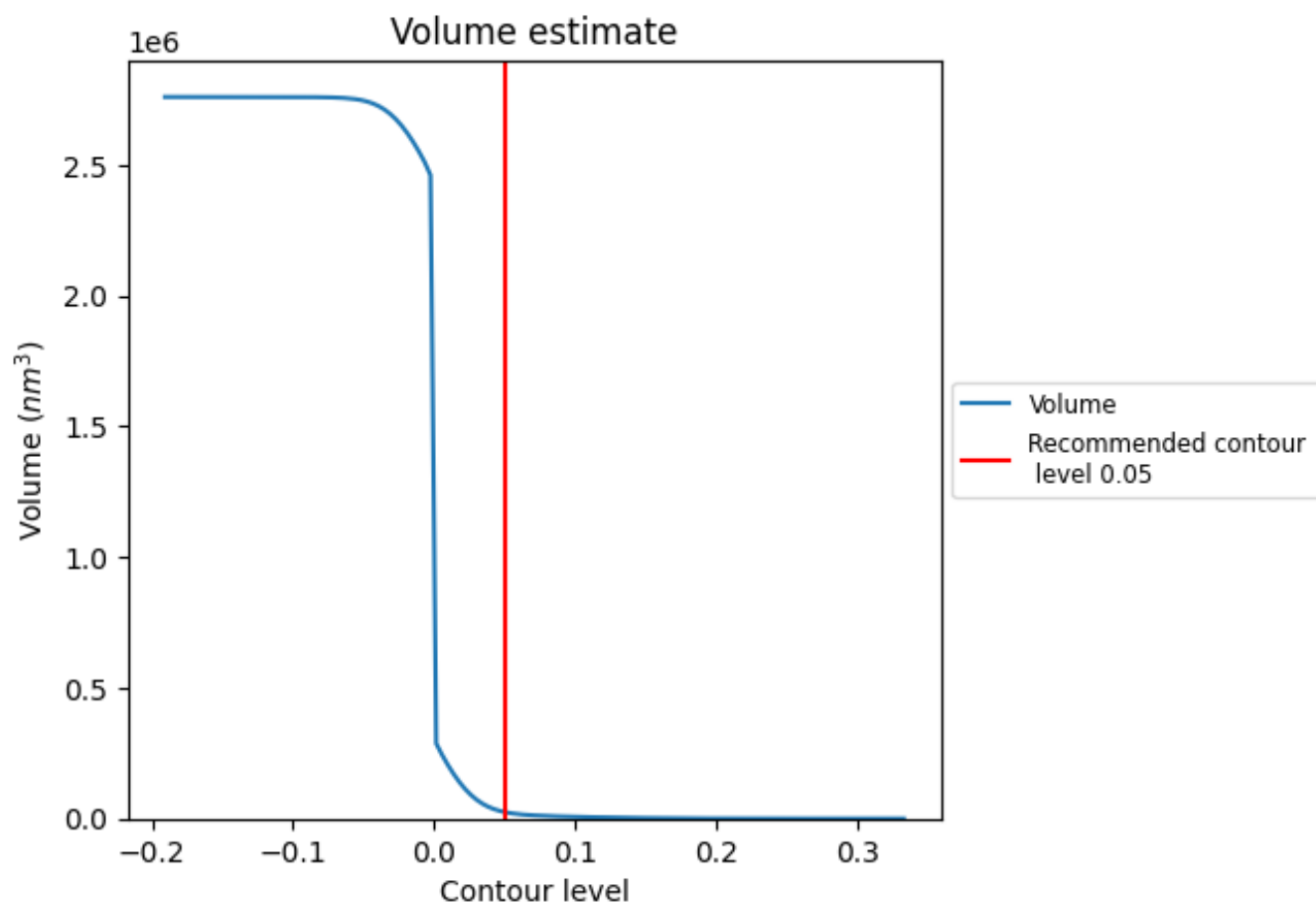
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

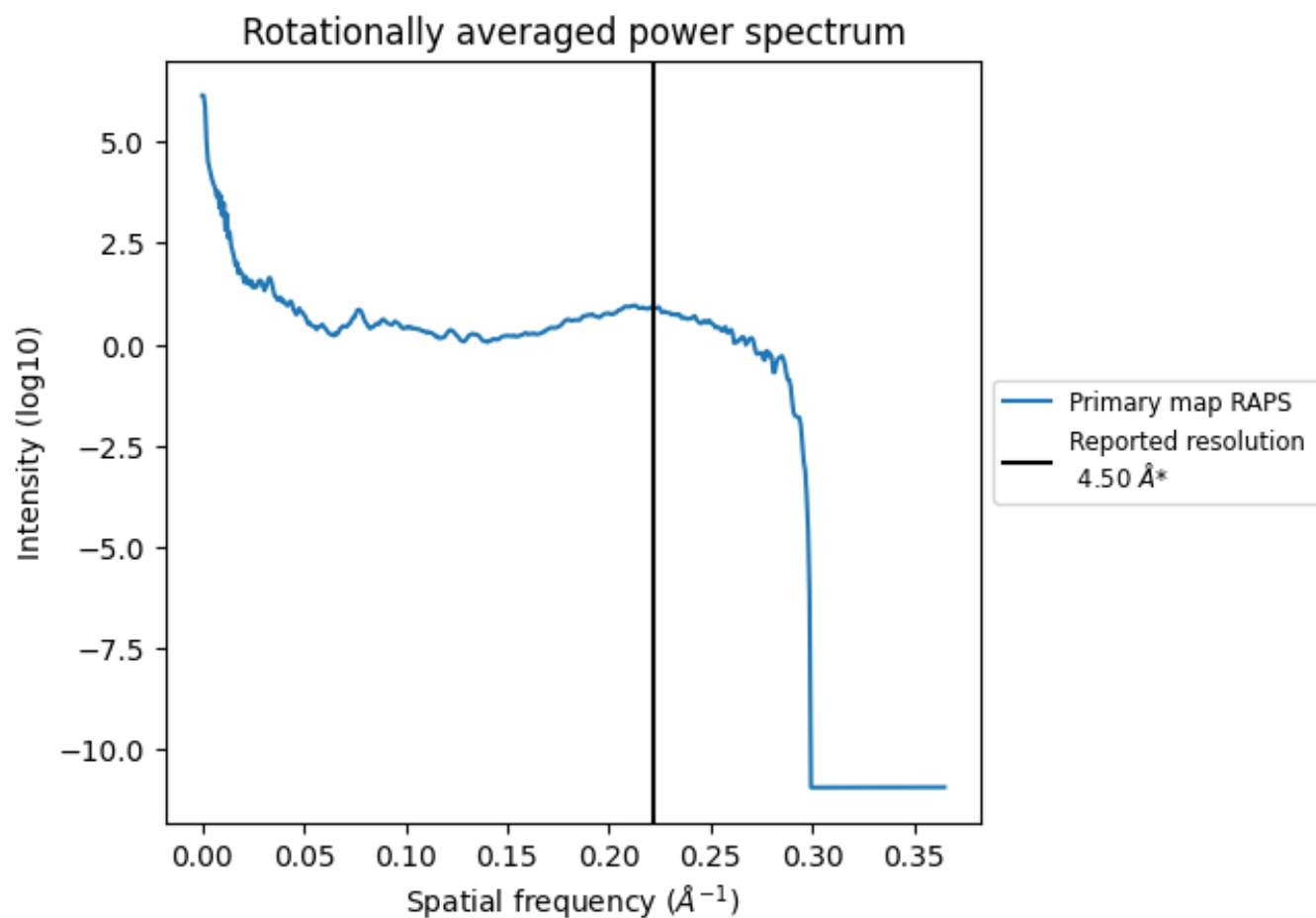
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 25053 nm³; this corresponds to an approximate mass of 22631 kDa.

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

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.222 $\text{\AA}^{-1}$

8 Fourier-Shell correlation

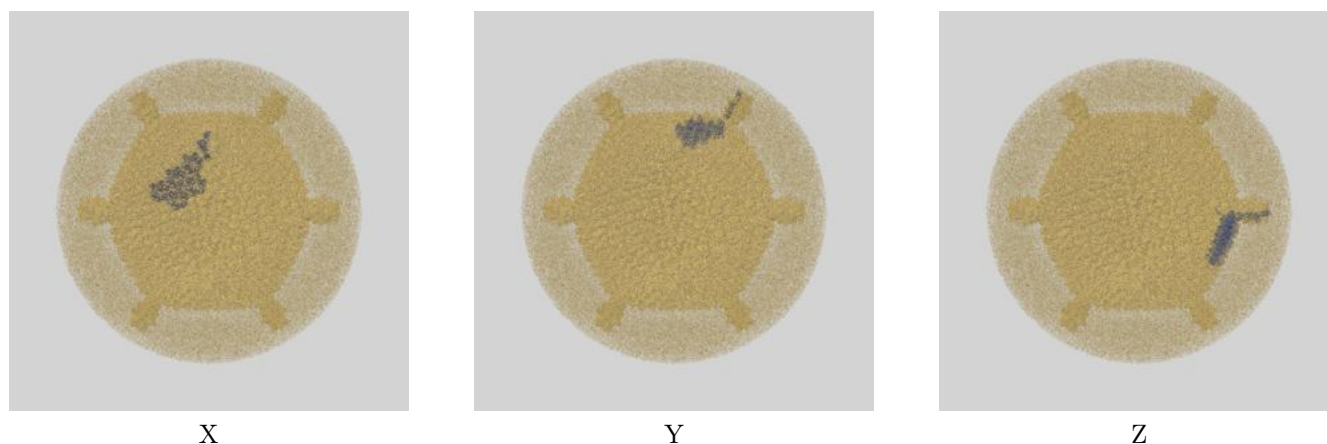
This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

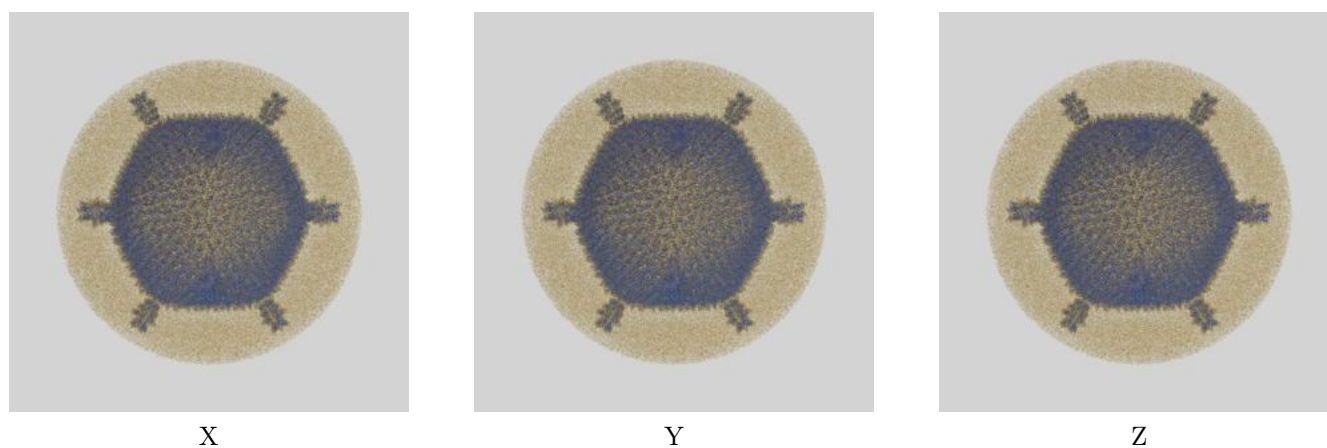
This section contains information regarding the fit between EMDB map EMD-5584 and PDB model 3J31. Per-residue inclusion information can be found in section 3 on page 6.

9.1 Map-model overlays

9.1.1 Map-model overlay [i](#)

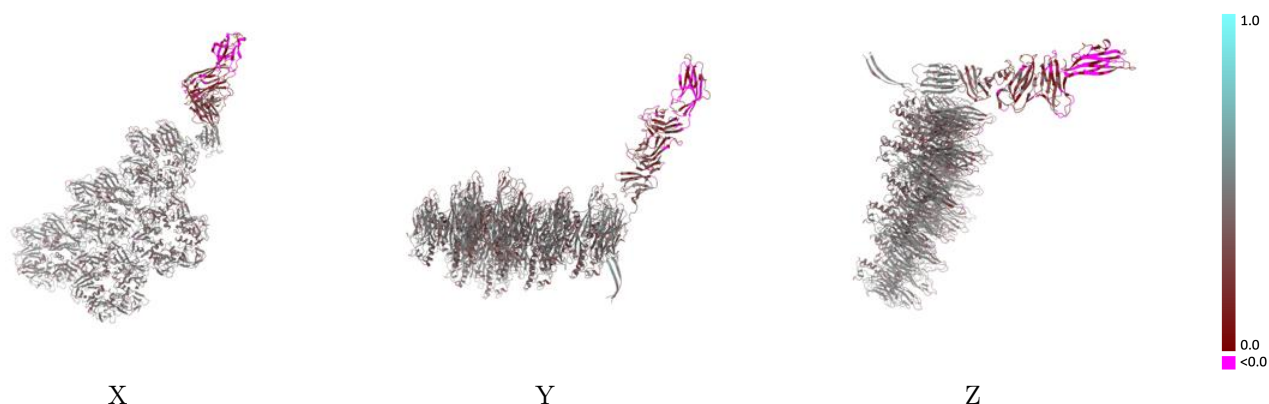


9.1.2 Map-model assembly overlay [i](#)



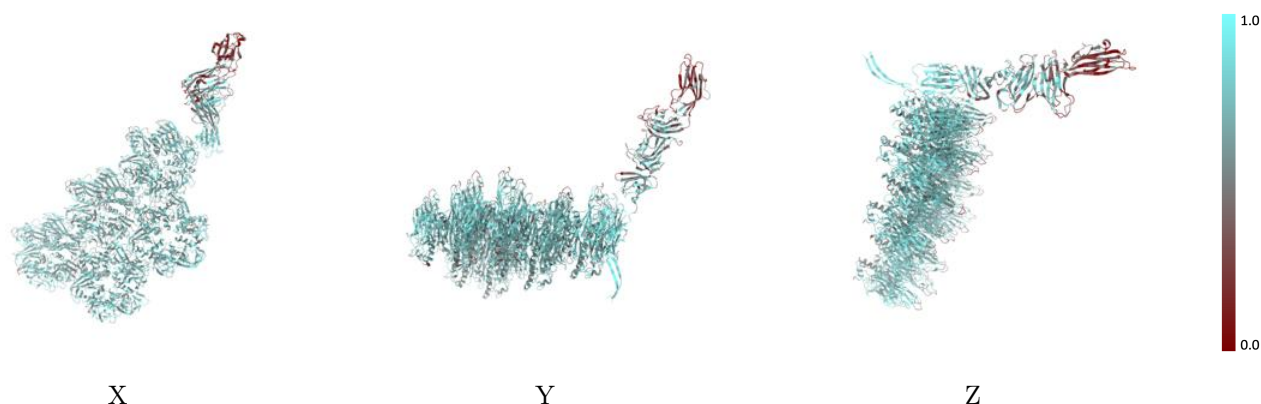
The images above show the 3D surface view of the map at the recommended contour level 0.05 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



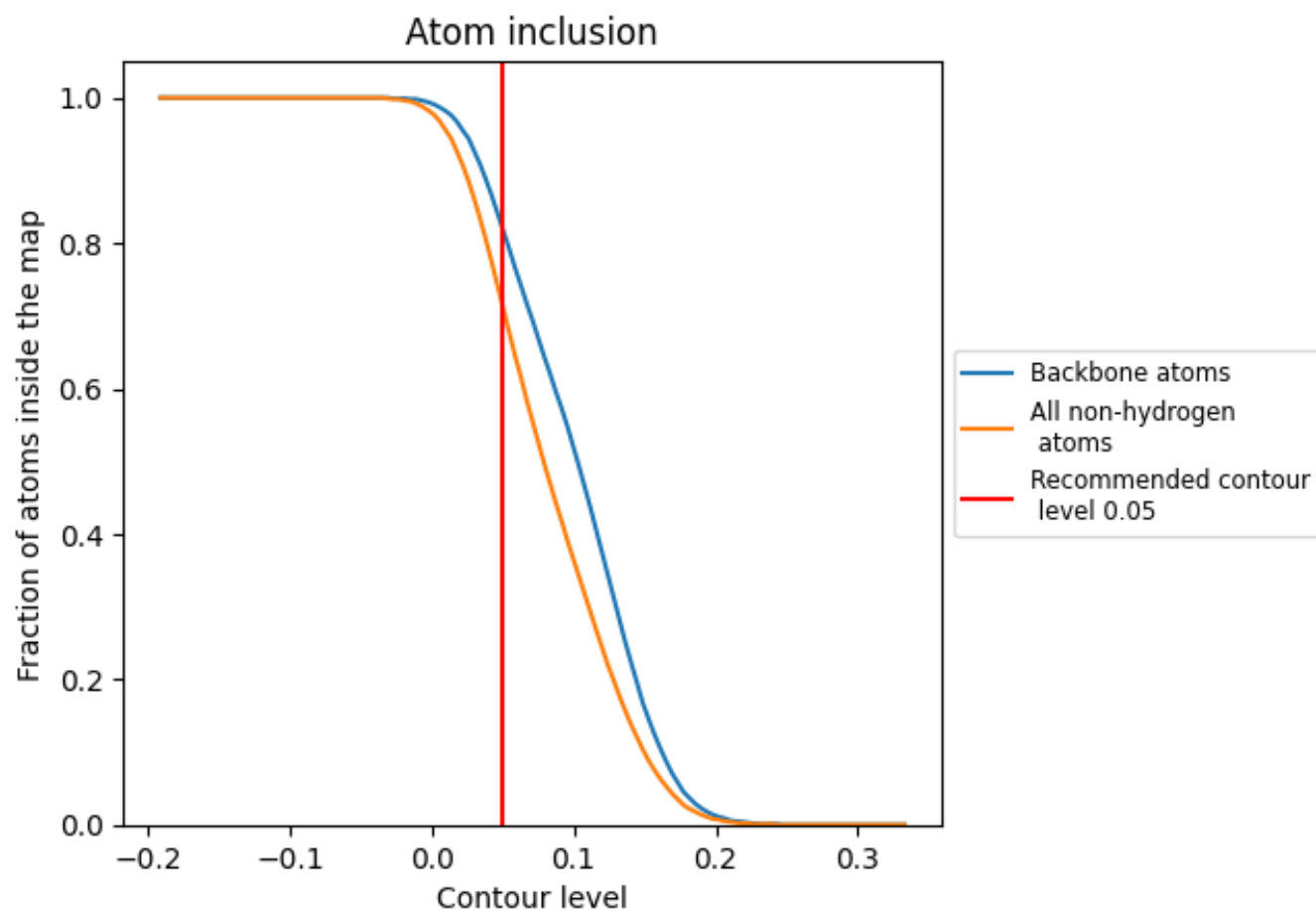
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.05).

9.4 Atom inclusion [i](#)



At the recommended contour level, 82% of all backbone atoms, 71% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.05) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7130	 0.4030
A	 0.7300	 0.4220
B	 0.7260	 0.4140
C	 0.7260	 0.4100
D	 0.7450	 0.4360
E	 0.7360	 0.4270
F	 0.7270	 0.4190
G	 0.7490	 0.4300
H	 0.7270	 0.4170
I	 0.7490	 0.4330
J	 0.7270	 0.4230
K	 0.7290	 0.4250
L	 0.7060	 0.4010
M	 0.7320	 0.4230
N	 0.7430	 0.4280
O	 0.7430	 0.4300
P	 0.4360	 0.1300
Q	 0.7080	 0.4010
R	 0.8670	 0.4870

