



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 04:34 PM UTC

PDB ID : 4CHV / pdb_00004chv
EMDB ID : EMD-2526
Title : The electron crystallography structure of the cAMP-bound potassium channel MloK1
Authors : Kowal, J.; Chami, M.; Baumgartner, P.; Arheit, M.; Chiu, P.L.; Rangl, M.; Scheuring, S.; Schroeder, G.F.; Nimigean, C.M.; Stahlberg, H.
Deposited on : 2013-12-04
Resolution : 7.00 Å(reported)

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.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

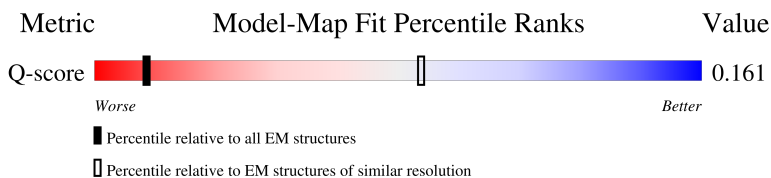
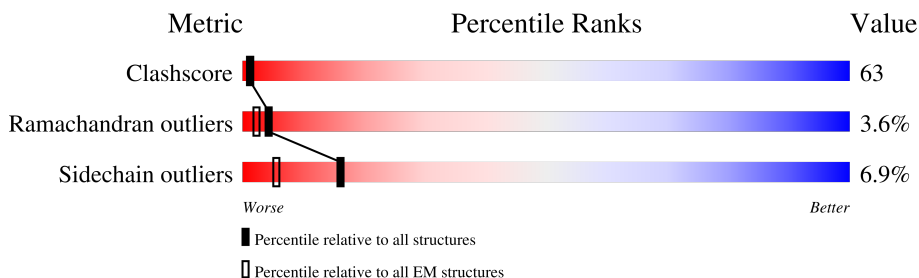
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON CRYSTALLOGRAPHY

The reported resolution of this entry is 7.00 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	483 (6.50 - 7.50)

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	A	361	
1	B	361	
1	C	361	
1	D	361	

2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 10342 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 CYCLIC NUCLEOTIDE-GATED POTASSIUM CHANNEL MLL3241.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	344	Total	C	N	O	S	0	1
			2585	1684	444	447	10		
1	B	344	Total	C	N	O	S	0	1
			2585	1684	444	447	10		
1	C	344	Total	C	N	O	S	0	1
			2585	1684	444	447	10		
1	D	344	Total	C	N	O	S	0	1
			2585	1684	444	447	10		

There are 24 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	356	HIS	-	expression tag	UNP Q98GN8
A	357	HIS	-	expression tag	UNP Q98GN8
A	358	HIS	-	expression tag	UNP Q98GN8
A	359	HIS	-	expression tag	UNP Q98GN8
A	360	HIS	-	expression tag	UNP Q98GN8
A	361	HIS	-	expression tag	UNP Q98GN8
B	356	HIS	-	expression tag	UNP Q98GN8
B	357	HIS	-	expression tag	UNP Q98GN8
B	358	HIS	-	expression tag	UNP Q98GN8
B	359	HIS	-	expression tag	UNP Q98GN8
B	360	HIS	-	expression tag	UNP Q98GN8
B	361	HIS	-	expression tag	UNP Q98GN8
C	356	HIS	-	expression tag	UNP Q98GN8
C	357	HIS	-	expression tag	UNP Q98GN8
C	358	HIS	-	expression tag	UNP Q98GN8
C	359	HIS	-	expression tag	UNP Q98GN8
C	360	HIS	-	expression tag	UNP Q98GN8
C	361	HIS	-	expression tag	UNP Q98GN8
D	356	HIS	-	expression tag	UNP Q98GN8
D	357	HIS	-	expression tag	UNP Q98GN8
D	358	HIS	-	expression tag	UNP Q98GN8

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Chain	Residue	Modelled	Actual	Comment	Reference
D	359	HIS	-	expression tag	UNP Q98GN8
D	360	HIS	-	expression tag	UNP Q98GN8
D	361	HIS	-	expression tag	UNP Q98GN8

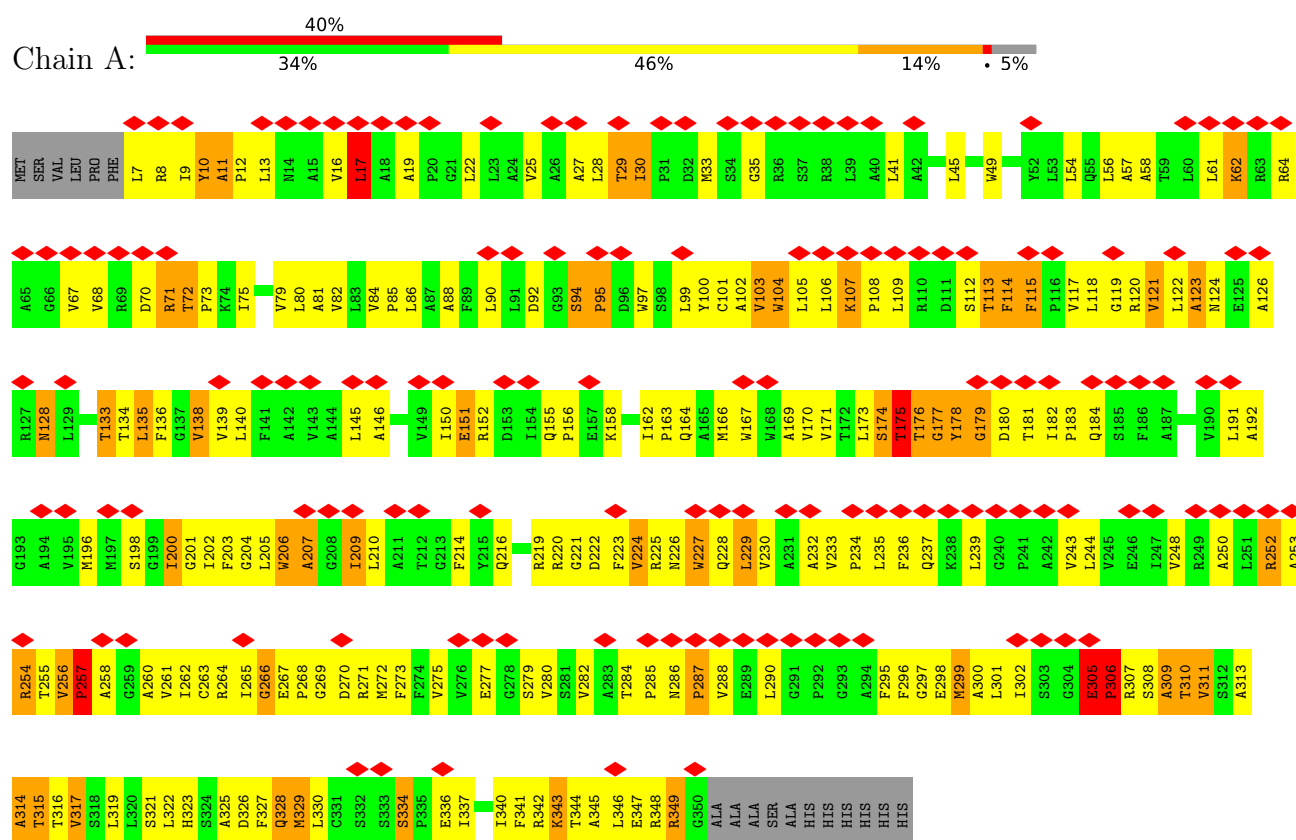
- Molecule 2 is POTASSIUM ION (CCD ID: K) (formula: K).

Mol	Chain	Residues	Atoms	AltConf
2	A	1	Total K 1 1	0
2	B	1	Total K 1 1	0

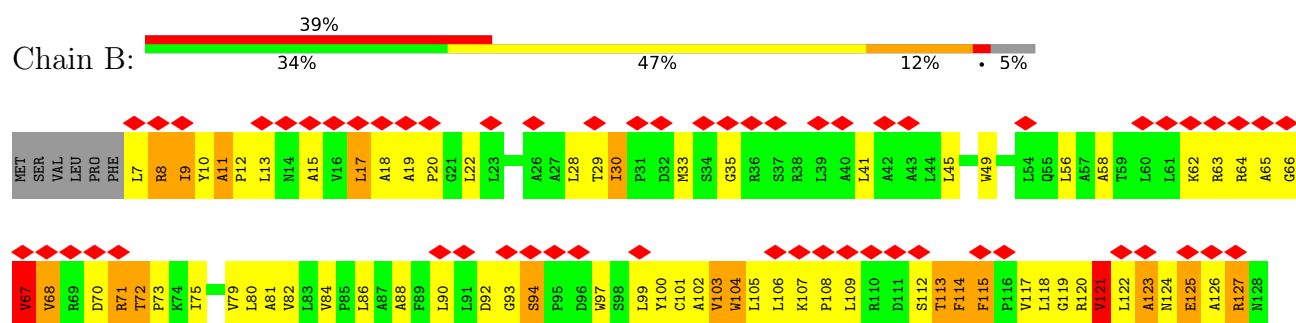
3 Residue-property plots

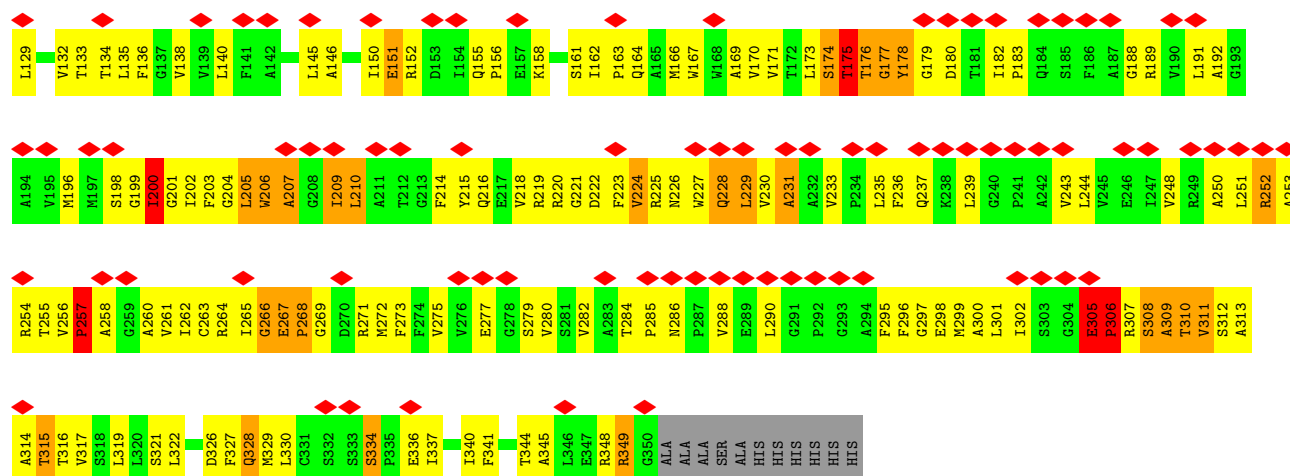
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

• Molecule 1: CYCLIC NUCLEOTIDE-GATED POTASSIUM CHANNEL MLL3241

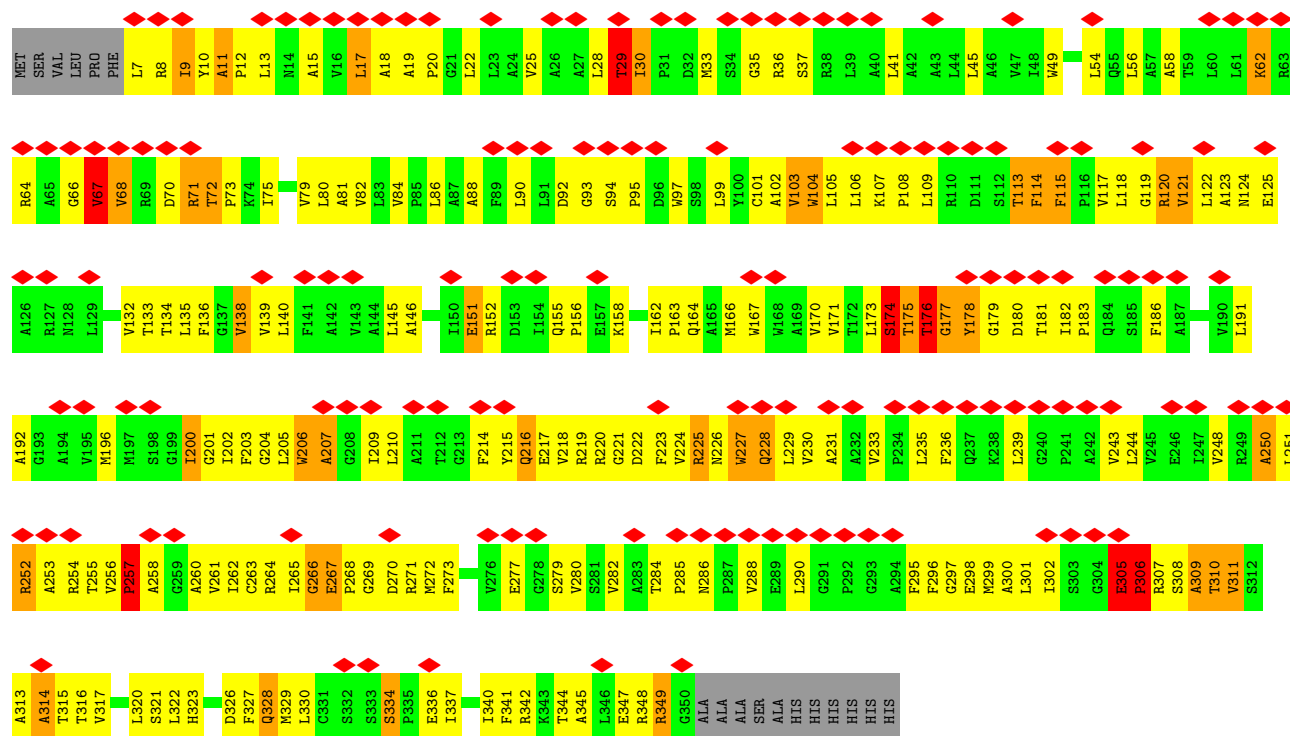


• Molecule 1: CYCLIC NUCLEOTIDE-GATED POTASSIUM CHANNEL MLL3241

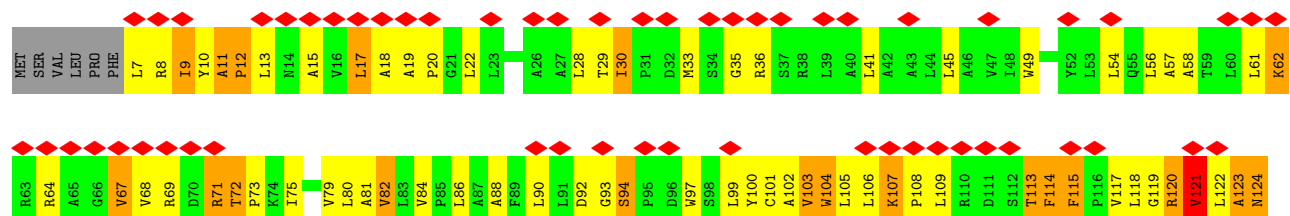




• Molecule 1: CYCLIC NUCLEOTIDE-GATED POTASSIUM CHANNEL MLL3241



• Molecule 1: CYCLIC NUCLEOTIDE-GATED POTASSIUM CHANNEL MLL3241





4 Experimental information

Property	Value	Source
EM reconstruction method	CRYSTALLOGRAPHY	Depositor
Imposed symmetry	2D CRYSTAL, a =Not provided Å, b =Not provided Å, c =Not provided Å, γ =Not provided°, space group=Not provided	Depositor
Number of images used	Not provided	
Resolution determination method	OTHER	Depositor
CTF correction method	Not provided	
Microscope	FEI/PHILIPS CM200FEG	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	5	Depositor
Minimum defocus (nm)	655	Depositor
Maximum defocus (nm)	3077	Depositor
Magnification	50000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	4.769	Depositor
Minimum map value	-1.141	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2.3	Depositor
Map size (Å)	105.3, 105.3, 105.3	wwPDB
Map dimensions	108, 108, 108	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.975, 0.975, 0.975	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	1.09	14/2642 (0.5%)	1.46	48/3607 (1.3%)
1	B	1.10	18/2642 (0.7%)	1.48	41/3607 (1.1%)
1	C	1.10	13/2642 (0.5%)	1.45	43/3607 (1.2%)
1	D	1.10	17/2642 (0.6%)	1.48	47/3607 (1.3%)
All	All	1.10	62/10568 (0.6%)	1.47	179/14428 (1.2%)

All (62) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	178	TYR	C-O	11.69	1.37	1.24
1	D	178	TYR	C-O	11.55	1.37	1.24
1	B	178	TYR	C-O	11.52	1.37	1.24
1	A	178	TYR	C-O	11.44	1.37	1.24
1	B	253	ALA	C-O	10.10	1.36	1.23
1	D	253	ALA	C-O	10.09	1.36	1.23
1	C	253	ALA	C-O	9.83	1.35	1.23
1	B	180	ASP	N-CA	9.67	1.58	1.46
1	A	180	ASP	N-CA	9.46	1.57	1.46
1	D	180	ASP	N-CA	8.75	1.57	1.46
1	C	180	ASP	N-CA	8.72	1.57	1.46
1	A	309	ALA	CA-C	-7.78	1.43	1.52
1	C	309	ALA	CA-C	-7.77	1.43	1.52
1	B	178	TYR	CA-C	7.65	1.62	1.52
1	D	309	ALA	CA-C	-7.55	1.43	1.52
1	C	178	TYR	CA-C	7.32	1.62	1.52
1	A	178	TYR	CA-C	7.25	1.62	1.52
1	D	178	TYR	CA-C	7.21	1.62	1.52
1	A	11	ALA	CA-CB	-7.04	1.44	1.53
1	D	310	THR	N-CA	-6.94	1.37	1.46
1	B	309	ALA	CA-C	-6.92	1.44	1.52
1	A	310	THR	N-CA	-6.86	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	310	THR	N-CA	-6.67	1.37	1.46
1	B	310	THR	N-CA	-6.15	1.38	1.46
1	B	268	PRO	N-CA	-6.05	1.40	1.47
1	D	349	ARG	C-N	-5.90	1.25	1.33
1	B	176	THR	CA-C	5.88	1.60	1.52
1	B	349	ARG	C-N	-5.86	1.25	1.33
1	A	349	ARG	C-N	-5.82	1.25	1.33
1	C	175	THR	N-CA	5.80	1.53	1.46
1	D	175	THR	N-CA	5.80	1.53	1.46
1	C	349	ARG	C-N	-5.80	1.25	1.33
1	A	206	TRP	C-N	-5.76	1.26	1.33
1	C	206	TRP	C-N	-5.76	1.26	1.33
1	B	104	TRP	C-N	-5.74	1.26	1.33
1	C	121	VAL	CA-CB	-5.74	1.47	1.54
1	A	94	SER	N-CA	-5.71	1.42	1.46
1	A	256	VAL	CA-C	5.70	1.58	1.52
1	A	11	ALA	CA-C	-5.61	1.45	1.52
1	B	311	VAL	CA-C	-5.61	1.45	1.52
1	D	176	THR	CA-C	5.56	1.59	1.52
1	C	104	TRP	C-N	-5.42	1.26	1.33
1	C	311	VAL	CA-C	-5.39	1.45	1.52
1	B	253	ALA	CA-C	5.30	1.58	1.52
1	C	216	GLN	CA-CB	-5.29	1.44	1.53
1	D	311	VAL	CA-C	-5.29	1.46	1.52
1	D	253	ALA	CA-C	5.19	1.58	1.52
1	B	309	ALA	N-CA	-5.18	1.39	1.45
1	A	258	ALA	N-CA	-5.18	1.39	1.46
1	D	36	ARG	N-CA	-5.18	1.40	1.46
1	D	104	TRP	C-N	-5.16	1.26	1.33
1	A	179	GLY	C-N	-5.13	1.27	1.33
1	B	258	ALA	N-CA	-5.09	1.40	1.46
1	D	12	PRO	N-CA	-5.08	1.40	1.47
1	B	206	TRP	C-N	-5.07	1.27	1.33
1	D	179	GLY	C-N	-5.07	1.26	1.33
1	D	206	TRP	C-N	-5.07	1.27	1.33
1	D	268	PRO	N-CA	-5.07	1.41	1.47
1	B	175	THR	N-CA	5.04	1.52	1.46
1	B	308	SER	C-N	-5.04	1.27	1.33
1	B	178	TYR	N-CA	5.02	1.52	1.46
1	A	104	TRP	C-N	-5.01	1.27	1.33

All (179) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	30	ILE	N-CA-C	9.45	118.86	107.61
1	D	209	ILE	N-CA-C	9.38	119.42	110.42
1	B	209	ILE	N-CA-C	8.72	118.79	110.42
1	D	305	GLU	CA-C-N	8.55	130.53	119.84
1	D	305	GLU	C-N-CA	8.55	130.53	119.84
1	B	115	PHE	N-CA-C	8.37	124.13	113.25
1	C	17	LEU	N-CA-C	8.34	123.55	113.12
1	A	305	GLU	CA-C-N	8.33	130.26	119.84
1	A	305	GLU	C-N-CA	8.33	130.26	119.84
1	A	122	LEU	N-CA-C	-8.25	102.28	111.28
1	D	115	PHE	N-CA-C	8.25	123.97	113.25
1	B	176	THR	N-CA-C	8.15	120.25	111.36
1	B	252	ARG	N-CA-CB	-8.14	96.56	111.13
1	D	121	VAL	CB-CA-C	-8.11	101.39	112.02
1	A	209	ILE	N-CA-C	8.00	118.10	110.42
1	D	17	LEU	N-CA-C	7.91	123.44	112.04
1	B	257	PRO	N-CA-CB	-7.82	95.03	103.25
1	C	121	VAL	N-CA-C	7.82	118.62	110.72
1	A	176	THR	N-CA-C	7.76	119.82	111.36
1	C	122	LEU	N-CA-C	-7.75	102.83	111.28
1	A	115	PHE	N-CA-C	7.72	122.97	112.55
1	B	122	LEU	N-CA-C	-7.71	102.88	111.28
1	C	209	ILE	N-CA-C	7.68	117.80	110.42
1	D	176	THR	N-CA-C	7.64	119.69	111.36
1	C	115	PHE	N-CA-C	7.60	123.13	113.25
1	D	252	ARG	N-CA-CB	-7.58	97.56	111.13
1	D	126	ALA	CA-C-N	-7.58	110.12	120.28
1	D	126	ALA	C-N-CA	-7.58	110.12	120.28
1	D	257	PRO	N-CA-CB	-7.55	95.32	103.25
1	A	257	PRO	CB-CA-C	-7.54	99.13	111.56
1	B	305	GLU	CA-C-N	7.49	129.20	119.84
1	B	305	GLU	C-N-CA	7.49	129.20	119.84
1	A	207	ALA	N-CA-C	7.44	119.39	111.28
1	B	151	GLU	N-CA-C	7.39	121.60	112.59
1	D	207	ALA	N-CA-C	7.26	119.19	111.28
1	C	305	GLU	CA-C-N	7.25	128.90	119.84
1	C	305	GLU	C-N-CA	7.25	128.90	119.84
1	A	151	GLU	N-CA-C	7.24	121.42	112.59
1	A	252	ARG	N-CA-CB	-7.19	97.99	111.00
1	B	207	ALA	N-CA-C	7.19	119.11	111.28
1	C	151	GLU	N-CA-C	7.16	121.32	112.59
1	B	174	SER	N-CA-C	7.13	119.13	111.36
1	D	174	SER	N-CA-C	7.04	119.03	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	17	LEU	N-CA-C	6.98	122.09	112.04
1	B	90	LEU	N-CA-C	6.98	118.67	111.14
1	A	126	ALA	CA-C-N	-6.91	111.02	120.28
1	A	126	ALA	C-N-CA	-6.91	111.02	120.28
1	A	174	SER	N-CA-C	6.88	118.86	111.36
1	D	151	GLU	N-CA-C	6.86	120.96	112.59
1	C	178	TYR	N-CA-C	6.74	118.62	111.28
1	D	71	ARG	N-CA-C	6.72	119.54	108.99
1	C	71	ARG	N-CA-C	6.66	119.28	108.76
1	B	200	ILE	O-C-N	6.66	128.33	121.87
1	C	252	ARG	N-CA-CB	-6.66	99.15	111.53
1	C	207	ALA	N-CA-C	6.64	118.60	111.36
1	A	90	LEU	N-CA-C	6.60	118.35	111.03
1	B	310	THR	N-CA-C	-6.59	99.90	109.59
1	A	10	TYR	N-CA-C	6.58	123.27	114.12
1	B	266	GLY	N-CA-C	-6.53	105.76	114.25
1	C	90	LEU	N-CA-C	6.47	118.21	111.03
1	D	121	VAL	N-CA-C	6.43	116.57	110.53
1	B	175	THR	CA-C-N	6.39	129.37	120.29
1	B	175	THR	C-N-CA	6.39	129.37	120.29
1	A	121	VAL	N-CA-C	6.38	117.16	110.72
1	D	94	SER	N-CA-C	6.36	118.86	110.08
1	D	69	ARG	N-CA-C	6.36	119.37	109.52
1	A	71	ARG	N-CA-C	6.31	118.90	108.99
1	A	35	GLY	N-CA-C	6.30	120.28	112.73
1	D	175	THR	CA-C-N	6.29	129.23	120.29
1	D	175	THR	C-N-CA	6.29	129.23	120.29
1	C	253	ALA	N-CA-C	6.29	118.86	108.99
1	C	310	THR	N-CA-C	-6.28	100.36	109.59
1	A	310	THR	N-CA-C	-6.28	100.36	109.59
1	D	310	THR	N-CA-C	-6.24	100.17	109.15
1	C	176	THR	N-CA-C	6.20	119.32	111.69
1	D	90	LEU	N-CA-C	6.18	117.89	111.03
1	A	178	TYR	N-CA-C	6.17	118.00	111.28
1	D	306	PRO	N-CA-C	6.15	125.14	112.47
1	A	306	PRO	N-CA-C	6.14	125.13	112.47
1	A	237	GLN	N-CA-C	6.14	118.77	111.71
1	A	152	ARG	N-CA-C	6.12	117.62	111.07
1	B	126	ALA	CA-C-N	-6.12	112.08	120.28
1	B	126	ALA	C-N-CA	-6.12	112.08	120.28
1	D	18	ALA	N-CA-C	6.10	118.01	111.36
1	A	128	ASN	N-CA-C	6.10	118.84	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	122	LEU	N-CA-C	-6.07	104.66	111.28
1	C	306	PRO	N-CA-C	6.06	124.95	112.47
1	B	93	GLY	N-CA-C	-6.06	105.26	115.62
1	B	237	GLN	N-CA-C	6.04	118.66	111.71
1	D	35	GLY	N-CA-C	6.04	123.69	112.77
1	A	17	LEU	N-CA-C	6.02	121.55	113.72
1	B	306	PRO	N-CA-C	6.02	124.87	112.47
1	D	114	PHE	N-CA-C	6.02	123.62	110.80
1	B	35	GLY	N-CA-C	6.02	119.95	112.73
1	C	253	ALA	CA-C-O	6.01	127.72	120.99
1	C	302	ILE	N-CA-C	-6.00	104.66	110.42
1	B	152	ARG	N-CA-C	5.99	117.47	111.07
1	D	200	ILE	O-C-N	5.97	127.76	121.91
1	B	123	ALA	N-CA-C	5.97	117.79	111.28
1	C	114	PHE	N-CA-C	5.97	123.51	110.80
1	C	311	VAL	N-CA-C	-5.94	99.18	107.80
1	B	71	ARG	N-CA-C	5.93	118.30	108.99
1	A	94	SER	CA-C-N	5.92	127.24	119.84
1	A	94	SER	C-N-CA	5.92	127.24	119.84
1	A	175	THR	CA-C-N	5.90	128.67	120.29
1	A	175	THR	C-N-CA	5.90	128.67	120.29
1	D	253	ALA	N-CA-C	5.90	118.37	109.23
1	B	114	PHE	N-CA-C	5.89	123.35	110.80
1	D	123	ALA	N-CA-C	5.88	117.36	111.07
1	B	253	ALA	CA-C-O	5.87	127.87	121.06
1	C	156	PRO	N-CA-C	-5.86	105.75	113.65
1	B	156	PRO	N-CA-C	-5.84	105.77	113.65
1	B	121	VAL	N-CA-C	5.82	116.60	110.72
1	C	257	PRO	N-CA-CB	-5.79	97.17	103.25
1	A	227	TRP	N-CA-C	-5.77	104.22	112.13
1	A	123	ALA	N-CA-C	5.76	117.23	111.07
1	C	174	SER	N-CA-C	5.76	118.77	111.69
1	C	93	GLY	N-CA-C	-5.75	105.78	115.62
1	A	302	ILE	N-CA-C	-5.73	104.92	110.42
1	C	68	VAL	N-CA-C	5.73	121.26	109.34
1	D	93	GLY	N-CA-C	-5.72	105.84	115.62
1	D	237	GLN	N-CA-C	5.72	118.28	111.71
1	B	253	ALA	N-CA-C	5.71	118.08	109.23
1	D	210	LEU	N-CA-CB	5.67	119.07	110.28
1	A	114	PHE	N-CA-C	5.65	122.84	110.80
1	C	29	THR	CA-C-N	-5.64	118.42	123.33
1	C	29	THR	C-N-CA	-5.64	118.42	123.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	156	PRO	N-CA-C	-5.60	106.09	113.65
1	B	18	ALA	N-CA-C	5.59	117.45	111.36
1	C	200	ILE	O-C-N	5.59	127.29	121.87
1	A	62	LYS	N-CA-C	5.52	118.24	109.24
1	A	200	ILE	O-C-N	5.52	127.32	121.91
1	B	178	TYR	N-CA-C	5.51	117.29	111.28
1	D	156	PRO	N-CA-C	-5.50	106.22	113.65
1	A	135	LEU	N-CA-C	-5.50	105.28	111.28
1	A	317	VAL	N-CA-C	5.50	116.04	108.12
1	D	253	ALA	CA-C-O	5.49	127.43	121.06
1	D	266	GLY	N-CA-C	-5.48	107.13	114.25
1	A	256	VAL	CA-C-N	5.47	126.67	119.84
1	A	256	VAL	C-N-CA	5.47	126.67	119.84
1	C	37	SER	N-CA-C	5.43	117.28	111.36
1	D	301	LEU	N-CA-C	5.43	117.28	111.36
1	C	152	ARG	N-CA-C	5.41	116.86	111.07
1	D	178	TYR	N-CA-C	5.40	117.17	111.28
1	C	266	GLY	N-CA-C	-5.40	108.66	115.08
1	C	8	ARG	N-CA-C	5.33	117.77	108.76
1	B	94	SER	N-CA-C	5.33	117.44	110.08
1	B	126	ALA	N-CA-C	-5.33	105.47	111.28
1	C	18	ALA	N-CA-C	5.32	117.16	111.36
1	A	206	TRP	N-CA-C	-5.28	105.52	111.28
1	B	311	VAL	N-CA-C	-5.27	100.16	107.80
1	D	124	ASN	CA-CB-CG	-5.26	107.34	112.60
1	C	250	ALA	N-CA-C	5.23	117.06	111.36
1	A	266	GLY	N-CA-C	-5.23	107.45	114.25
1	B	302	ILE	N-CA-C	-5.23	105.40	110.42
1	A	138	VAL	CB-CA-C	-5.22	105.09	112.14
1	D	306	PRO	CA-N-CD	-5.22	104.69	112.00
1	A	314	ALA	N-CA-C	-5.21	105.61	111.28
1	D	216	GLN	CB-CA-C	-5.20	102.17	110.79
1	D	82	VAL	N-CA-C	5.19	115.97	110.72
1	B	8	ARG	N-CA-C	5.19	117.36	108.90
1	C	186	PHE	N-CA-C	5.19	116.62	111.07
1	C	36	ARG	N-CA-C	5.19	116.93	111.28
1	D	8	ARG	N-CA-C	5.18	117.35	108.90
1	A	8	ARG	N-CA-C	5.16	117.06	108.02
1	A	311	VAL	N-CA-C	-5.16	100.32	107.80
1	A	299	MET	N-CA-C	-5.16	106.82	113.01
1	C	314	ALA	N-CA-C	-5.14	105.67	111.28
1	B	121	VAL	CB-CA-C	-5.09	105.20	112.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	62	LYS	N-CA-C	5.09	117.19	108.90
1	D	62	LYS	N-CA-C	5.08	117.52	109.24
1	D	206	TRP	N-CA-C	-5.08	105.75	111.28
1	A	200	ILE	CB-CA-C	-5.08	105.47	111.97
1	D	152	ARG	N-CA-C	5.07	116.50	111.07
1	C	175	THR	CA-C-N	5.06	129.23	120.58
1	C	175	THR	C-N-CA	5.06	129.23	120.58
1	B	127	ARG	N-CA-CB	5.04	117.53	110.12
1	C	120	ARG	CB-CA-C	5.04	119.42	110.85
1	D	314	ALA	N-CA-C	-5.01	105.82	111.28

There are no chirality outliers.

There are no planarity outliers.

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	A	2585	0	2694	377	0
1	B	2585	0	2694	361	0
1	C	2585	0	2694	422	0
1	D	2585	0	2694	415	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
All	All	10342	0	10776	1329	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 63.

All (1329) 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:D:226:ASN:CB	1:D:248:VAL:HG22	1.43	1.49
1:B:230:VAL:HG13	1:B:236:PHE:CD2	1.49	1.46
1:D:226:ASN:CG	1:D:248:VAL:HG13	1.09	1.45
1:C:229:LEU:CD1	1:C:251:LEU:HD13	1.53	1.36

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:226:ASN:ND2	1:D:248:VAL:CB	1.84	1.36
1:A:7:LEU:HD13	1:A:262:ILE:O	1.20	1.31
1:D:7:LEU:CD1	1:D:262:ILE:O	1.84	1.24
1:C:227:TRP:O	1:C:231:ALA:HB3	1.22	1.24
1:C:229:LEU:CD1	1:C:251:LEU:CD1	2.20	1.19
1:B:7:LEU:HD12	1:B:262:ILE:O	1.41	1.19
1:D:218:VAL:O	1:D:222:ASP:CG	1.87	1.18
1:C:7:LEU:HD12	1:C:262:ILE:O	1.44	1.15
1:C:229:LEU:HB2	1:C:320:LEU:CD1	1.75	1.15
1:A:7:LEU:CD1	1:A:262:ILE:O	1.94	1.14
1:C:229:LEU:CB	1:C:320:LEU:CD1	2.25	1.14
1:B:7:LEU:CD1	1:B:262:ILE:O	1.97	1.13
1:C:7:LEU:CD1	1:C:262:ILE:O	1.96	1.12
1:C:229:LEU:HD22	1:C:251:LEU:HB3	1.29	1.11
1:C:229:LEU:CB	1:C:320:LEU:HD13	1.80	1.10
1:C:229:LEU:HD13	1:C:251:LEU:HD13	1.24	1.10
1:B:201:GLY:HA2	1:C:210:LEU:HD11	1.33	1.09
1:D:220:ARG:O	1:D:223:PHE:CE1	2.05	1.08
1:D:226:ASN:CG	1:D:248:VAL:CG1	1.85	1.08
1:C:229:LEU:HB2	1:C:320:LEU:HD13	1.09	1.08
1:D:225:ARG:O	1:D:229:LEU:HD23	1.51	1.08
1:D:7:LEU:HD13	1:D:262:ILE:O	1.53	1.07
1:D:226:ASN:CB	1:D:248:VAL:CG2	2.32	1.07
1:D:7:LEU:HD12	1:D:262:ILE:O	1.50	1.07
1:A:173:LEU:HD12	1:A:202:ILE:HD13	1.38	1.06
1:D:226:ASN:O	1:D:230:VAL:HG23	1.54	1.05
1:C:229:LEU:CD2	1:C:251:LEU:HD13	1.86	1.05
1:D:226:ASN:CG	1:D:248:VAL:CB	2.21	1.04
1:C:229:LEU:CD2	1:C:251:LEU:HB3	1.87	1.04
1:B:230:VAL:CG1	1:B:236:PHE:CD2	2.41	1.03
1:D:218:VAL:O	1:D:222:ASP:OD1	1.77	1.03
1:D:218:VAL:O	1:D:222:ASP:OD2	1.78	1.02
1:B:56:LEU:HD22	1:B:82:VAL:HG21	1.42	1.01
1:D:173:LEU:HD12	1:D:202:ILE:HD13	1.38	1.01
1:D:230:VAL:HG13	1:D:236:PHE:HB3	1.40	1.00
1:C:229:LEU:HD11	1:C:251:LEU:CD1	1.90	0.98
1:C:229:LEU:HD13	1:C:251:LEU:CD1	1.89	0.98
1:A:225:ARG:O	1:A:229:LEU:HB2	1.63	0.97
1:C:227:TRP:O	1:C:231:ALA:CB	2.10	0.97
1:C:230:VAL:HA	1:C:236:PHE:CD2	2.00	0.97
1:C:229:LEU:CD2	1:C:251:LEU:CB	2.42	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:226:ASN:HB3	1:D:248:VAL:HG22	1.00	0.96
1:C:229:LEU:HD22	1:C:251:LEU:CB	1.95	0.95
1:D:56:LEU:HD22	1:D:82:VAL:HG21	1.48	0.95
1:C:229:LEU:CB	1:C:320:LEU:HD11	1.95	0.95
1:D:226:ASN:OD1	1:D:248:VAL:HA	1.67	0.94
1:B:173:LEU:HD12	1:B:202:ILE:HD13	1.49	0.94
1:B:230:VAL:HG13	1:B:236:PHE:HD2	1.31	0.93
1:C:229:LEU:CG	1:C:251:LEU:HD13	1.97	0.93
1:C:229:LEU:HA	1:C:320:LEU:HD11	1.49	0.92
1:A:117:VAL:HG11	1:A:220:ARG:HG3	1.51	0.92
1:A:268:PRO:HD2	1:D:73:PRO:CD	1.98	0.92
1:D:219:ARG:HA	1:D:222:ASP:OD2	1.68	0.92
1:C:56:LEU:HD22	1:C:82:VAL:HG21	1.51	0.91
1:D:226:ASN:HB3	1:D:248:VAL:CG2	1.95	0.91
1:C:229:LEU:HD12	1:C:230:VAL:N	1.84	0.91
1:B:117:VAL:HG11	1:B:220:ARG:HG3	1.53	0.90
1:C:73:PRO:CG	1:D:268:PRO:HD2	2.00	0.90
1:C:117:VAL:HG11	1:C:220:ARG:HG3	1.50	0.90
1:C:225:ARG:HH11	1:C:225:ARG:CG	1.84	0.90
1:D:226:ASN:CG	1:D:248:VAL:CA	2.44	0.90
1:C:222:ASP:O	1:C:226:ASN:ND2	2.05	0.90
1:C:230:VAL:HG13	1:C:236:PHE:HB3	1.50	0.90
1:A:11:ALA:HB2	1:A:256:VAL:C	1.97	0.90
1:C:229:LEU:CD2	1:C:251:LEU:CD1	2.49	0.90
1:A:73:PRO:CD	1:B:268:PRO:HD2	2.01	0.90
1:D:226:ASN:CG	1:D:248:VAL:HG22	1.97	0.89
1:D:226:ASN:HD22	1:D:248:VAL:HG11	0.73	0.89
1:A:56:LEU:HD22	1:A:82:VAL:HG21	1.54	0.89
1:D:263:CYS:SG	1:D:311:VAL:HB	2.12	0.89
1:B:235:LEU:HD11	1:B:330:LEU:HD11	1.53	0.89
1:D:284:THR:HG21	1:D:348:ARG:O	1.73	0.89
1:C:229:LEU:CA	1:C:320:LEU:HD11	2.03	0.88
1:B:73:PRO:CD	1:C:268:PRO:HD2	2.04	0.88
1:A:73:PRO:CG	1:B:268:PRO:HD2	2.04	0.87
1:D:226:ASN:CG	1:D:248:VAL:CG2	2.47	0.87
1:C:73:PRO:CD	1:D:268:PRO:HD2	2.04	0.87
1:A:284:THR:HG21	1:A:348:ARG:O	1.75	0.87
1:B:284:THR:HG21	1:B:348:ARG:O	1.74	0.86
1:B:81:ALA:HA	1:B:103:VAL:HG11	1.57	0.86
1:C:284:THR:HG21	1:C:348:ARG:O	1.74	0.86
1:D:7:LEU:HD13	1:D:262:ILE:C	2.02	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:73:PRO:CG	1:C:268:PRO:HD2	2.07	0.85
1:D:223:PHE:O	1:D:227:TRP:HD1	1.60	0.84
1:B:204:GLY:HA3	1:C:210:LEU:HD13	1.59	0.84
1:B:124:ASN:CB	1:C:252:ARG:HB3	2.07	0.84
1:D:113:THR:HG21	1:D:221:GLY:N	1.92	0.84
1:D:223:PHE:O	1:D:227:TRP:CD1	2.30	0.84
1:D:230:VAL:HG13	1:D:236:PHE:CB	2.08	0.84
1:A:117:VAL:HG12	1:A:216:GLN:HE21	1.42	0.84
1:D:235:LEU:HD11	1:D:330:LEU:HD11	1.58	0.83
1:B:269:GLY:H	1:B:306:PRO:HA	1.43	0.83
1:C:81:ALA:HA	1:C:103:VAL:HG11	1.58	0.83
1:A:233:VAL:HG12	1:A:235:LEU:HB3	1.58	0.83
1:D:226:ASN:CG	1:D:248:VAL:HA	2.02	0.83
1:A:235:LEU:HD11	1:A:330:LEU:HD11	1.61	0.82
1:A:11:ALA:HB2	1:A:257:PRO:N	1.94	0.82
1:D:230:VAL:HA	1:D:236:PHE:HB2	1.59	0.82
1:C:269:GLY:H	1:C:306:PRO:HA	1.42	0.82
1:C:230:VAL:HA	1:C:236:PHE:HD2	1.45	0.82
1:A:226:ASN:CB	1:A:248:VAL:HG13	2.11	0.81
1:B:201:GLY:CA	1:C:210:LEU:HD11	2.10	0.81
1:B:226:ASN:CB	1:B:248:VAL:HG13	2.11	0.81
1:A:200:ILE:HD13	1:B:206:TRP:CE3	2.15	0.81
1:D:226:ASN:HD21	1:D:248:VAL:HG12	0.64	0.80
1:D:233:VAL:HG12	1:D:235:LEU:HB3	1.62	0.80
1:D:221:GLY:HA3	1:D:225:ARG:NH2	1.96	0.80
1:D:226:ASN:ND2	1:D:248:VAL:CG1	0.65	0.80
1:A:140:LEU:HD21	1:A:166:MET:HG3	1.62	0.80
1:B:263:CYS:SG	1:B:307:ARG:HD2	2.22	0.80
1:D:81:ALA:HA	1:D:103:VAL:HG11	1.64	0.80
1:D:226:ASN:ND2	1:D:248:VAL:HG11	1.28	0.80
1:A:256:VAL:HG21	1:A:262:ILE:HG12	1.64	0.79
1:A:138:VAL:HG22	1:B:105:LEU:HD13	1.64	0.79
1:A:269:GLY:H	1:A:306:PRO:HA	1.45	0.79
1:C:121:VAL:HG21	1:C:216:GLN:CD	2.07	0.79
1:A:81:ALA:HA	1:A:103:VAL:HG11	1.64	0.79
1:C:140:LEU:HD21	1:C:166:MET:HG3	1.64	0.79
1:A:10:TYR:H	1:A:257:PRO:HG3	1.48	0.79
1:C:7:LEU:HD13	1:C:262:ILE:O	1.81	0.79
1:C:124:ASN:CB	1:D:252:ARG:HB3	2.13	0.79
1:D:269:GLY:H	1:D:306:PRO:HA	1.47	0.79
1:D:220:ARG:O	1:D:223:PHE:HE1	1.64	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:221:GLY:O	1:D:224:VAL:HG12	1.83	0.78
1:B:233:VAL:HG12	1:B:235:LEU:HB3	1.64	0.78
1:C:229:LEU:HD22	1:C:251:LEU:HD13	1.64	0.78
1:A:257:PRO:HD2	1:A:260:ALA:CB	2.13	0.78
1:C:226:ASN:OD1	1:C:248:VAL:CG2	2.32	0.78
1:C:73:PRO:HD2	1:D:268:PRO:CD	2.14	0.78
1:B:120:ARG:HG2	1:C:271:ARG:NE	1.99	0.77
1:A:73:PRO:HD2	1:B:268:PRO:CD	2.15	0.77
1:A:11:ALA:HB3	1:A:255:THR:O	1.83	0.77
1:A:268:PRO:HD2	1:D:73:PRO:CG	2.14	0.77
1:A:268:PRO:CD	1:D:73:PRO:HD2	2.15	0.77
1:D:117:VAL:HG11	1:D:220:ARG:HG3	1.66	0.77
1:B:9:ILE:HD12	1:B:260:ALA:HA	1.66	0.77
1:C:263:CYS:SG	1:C:307:ARG:HD2	2.25	0.77
1:C:229:LEU:HB3	1:C:320:LEU:CD1	2.15	0.76
1:C:233:VAL:HG12	1:C:235:LEU:HB3	1.65	0.76
1:A:226:ASN:HB3	1:A:248:VAL:HG13	1.65	0.76
1:D:226:ASN:O	1:D:230:VAL:CG2	2.33	0.76
1:C:73:PRO:HD2	1:D:268:PRO:HD2	1.67	0.76
1:A:223:PHE:O	1:A:227:TRP:HB2	1.86	0.76
1:A:158:LYS:HD3	1:A:181:THR:HG22	1.66	0.76
1:D:225:ARG:O	1:D:229:LEU:CD2	2.32	0.76
1:A:105:LEU:HD13	1:D:138:VAL:HG22	1.67	0.76
1:C:225:ARG:HH11	1:C:225:ARG:HG3	1.50	0.76
1:C:81:ALA:HA	1:C:103:VAL:CG1	2.15	0.76
1:A:271:ARG:NE	1:D:120:ARG:HG2	2.01	0.75
1:D:194:ALA:O	1:D:197:MET:HG3	1.87	0.75
1:D:220:ARG:O	1:D:223:PHE:CD1	2.39	0.75
1:D:223:PHE:HA	1:D:248:VAL:HG11	1.69	0.75
1:C:11:ALA:HB3	1:C:12:PRO:HD3	1.68	0.75
1:A:124:ASN:CB	1:B:252:ARG:HB3	2.16	0.75
1:B:73:PRO:HD2	1:C:268:PRO:CD	2.17	0.75
1:A:11:ALA:HA	1:A:257:PRO:HB3	1.69	0.75
1:B:226:ASN:HB3	1:B:248:VAL:HG13	1.66	0.75
1:D:9:ILE:HD12	1:D:260:ALA:HA	1.69	0.75
1:D:219:ARG:CA	1:D:222:ASP:OD2	2.34	0.75
1:C:134:THR:O	1:C:138:VAL:HG13	1.87	0.75
1:C:196:MET:HE1	1:D:173:LEU:HD23	1.67	0.74
1:D:226:ASN:HB2	1:D:248:VAL:HG22	1.62	0.74
1:A:225:ARG:O	1:A:229:LEU:CB	2.35	0.74
1:B:11:ALA:HB3	1:B:12:PRO:HD3	1.67	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:124:ASN:HB2	1:C:252:ARG:NH1	2.03	0.74
1:A:73:PRO:HD2	1:B:268:PRO:HD2	1.68	0.74
1:A:120:ARG:HG2	1:B:271:ARG:NE	2.03	0.73
1:D:226:ASN:OD1	1:D:248:VAL:CA	2.33	0.73
1:A:11:ALA:N	1:A:257:PRO:HB3	2.03	0.73
1:C:225:ARG:HG3	1:C:225:ARG:NH1	2.01	0.73
1:A:176:THR:HA	1:D:175:THR:O	1.86	0.73
1:A:225:ARG:O	1:A:229:LEU:HG	1.86	0.73
1:A:124:ASN:CG	1:B:252:ARG:HB3	2.13	0.73
1:C:200:ILE:HG23	1:D:206:TRP:HA	1.69	0.73
1:D:150:ILE:HD13	1:D:188:GLY:HA2	1.71	0.73
1:D:226:ASN:ND2	1:D:248:VAL:CG2	2.52	0.73
1:A:11:ALA:HB1	1:A:255:THR:HG22	1.69	0.73
1:A:173:LEU:CD1	1:A:202:ILE:HD13	2.18	0.73
1:A:200:ILE:HG23	1:B:206:TRP:HA	1.71	0.73
1:B:299:MET:SD	1:B:349:ARG:HD2	2.28	0.73
1:D:267:GLU:O	1:D:307:ARG:HG2	1.88	0.73
1:A:263:CYS:SG	1:A:307:ARG:HD2	2.29	0.72
1:D:11:ALA:HB3	1:D:12:PRO:HD3	1.70	0.72
1:A:252:ARG:HB3	1:D:124:ASN:CG	2.14	0.72
1:A:252:ARG:HB3	1:D:124:ASN:CB	2.19	0.72
1:C:138:VAL:HB	1:D:105:LEU:HD13	1.69	0.72
1:D:11:ALA:CB	1:D:256:VAL:HA	2.20	0.72
1:B:200:ILE:HD13	1:C:206:TRP:HA	1.72	0.72
1:B:257:PRO:HA	1:B:316:THR:HA	1.70	0.72
1:C:11:ALA:CB	1:C:256:VAL:HA	2.19	0.72
1:A:11:ALA:C	1:A:13:LEU:H	1.97	0.72
1:C:202:ILE:HA	1:C:205:LEU:HD13	1.71	0.71
1:C:220:ARG:O	1:C:223:PHE:CD2	2.43	0.71
1:D:257:PRO:HA	1:D:316:THR:HA	1.70	0.71
1:C:113:THR:HG21	1:C:221:GLY:N	2.05	0.71
1:C:235:LEU:HD11	1:C:330:LEU:HD11	1.72	0.71
1:D:140:LEU:HD21	1:D:166:MET:HG3	1.70	0.71
1:B:205:LEU:HD13	1:C:210:LEU:CD2	2.19	0.71
1:C:299:MET:SD	1:C:349:ARG:HD2	2.31	0.71
1:B:138:VAL:HG22	1:C:105:LEU:HD13	1.71	0.71
1:C:315:THR:O	1:C:317:VAL:HG23	1.91	0.71
1:C:229:LEU:HD21	1:C:251:LEU:CB	2.20	0.71
1:B:11:ALA:CB	1:B:256:VAL:HA	2.21	0.71
1:D:88:ALA:HB1	1:D:97:TRP:HB2	1.73	0.71
1:D:280:VAL:HG22	1:D:290:LEU:HB2	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:11:ALA:CA	1:A:257:PRO:HB3	2.21	0.71
1:A:297:GLY:O	1:A:300:ALA:HB3	1.91	0.71
1:B:200:ILE:HG12	1:C:206:TRP:CE3	2.26	0.70
1:C:124:ASN:HB3	1:D:252:ARG:HB3	1.73	0.70
1:A:121:VAL:HA	1:B:252:ARG:HH22	1.54	0.70
1:A:133:THR:O	1:A:136:PHE:HB3	1.90	0.70
1:A:252:ARG:HH12	1:D:121:VAL:HA	1.55	0.70
1:C:9:ILE:HD12	1:C:260:ALA:HA	1.73	0.70
1:D:257:PRO:HD2	1:D:260:ALA:HB3	1.73	0.70
1:A:11:ALA:HB3	1:A:255:THR:C	2.17	0.70
1:B:7:LEU:HD13	1:B:262:ILE:O	1.88	0.70
1:A:49:TRP:HZ2	1:A:86:LEU:HD13	1.57	0.69
1:D:315:THR:O	1:D:317:VAL:HG23	1.91	0.69
1:C:269:GLY:N	1:C:306:PRO:HA	2.06	0.69
1:C:297:GLY:O	1:C:300:ALA:HB3	1.92	0.69
1:C:229:LEU:HD21	1:C:251:LEU:CD1	2.22	0.69
1:A:284:THR:HB	1:A:285:PRO:HD2	1.75	0.69
1:B:256:VAL:HG21	1:B:262:ILE:HG12	1.74	0.69
1:B:257:PRO:HD2	1:B:260:ALA:HB3	1.75	0.69
1:C:133:THR:O	1:C:136:PHE:HB3	1.92	0.69
1:B:73:PRO:HD2	1:C:268:PRO:HD2	1.72	0.69
1:C:138:VAL:HG12	1:D:105:LEU:HD22	1.75	0.69
1:C:261:VAL:HG13	1:C:310:THR:HG23	1.74	0.69
1:A:202:ILE:HA	1:A:205:LEU:HD13	1.74	0.69
1:B:308:SER:OG	1:B:349:ARG:HG3	1.92	0.69
1:C:280:VAL:HG22	1:C:290:LEU:HB2	1.75	0.69
1:A:257:PRO:HD2	1:A:260:ALA:HB2	1.74	0.69
1:B:151:GLU:OE1	1:B:183:PRO:HA	1.92	0.69
1:B:284:THR:HB	1:B:285:PRO:HD2	1.75	0.69
1:C:103:VAL:HG13	1:C:106:LEU:HD12	1.74	0.69
1:B:315:THR:O	1:B:317:VAL:HG23	1.92	0.69
1:C:81:ALA:HB1	1:C:107:LYS:HE2	1.75	0.69
1:C:204:GLY:HA3	1:D:210:LEU:HB2	1.74	0.69
1:D:126:ALA:O	1:D:130:ILE:HG12	1.93	0.69
1:A:221:GLY:HA3	1:A:225:ARG:NH2	2.08	0.69
1:B:124:ASN:HB3	1:C:252:ARG:HB3	1.75	0.69
1:B:264:ARG:HB2	1:B:267:GLU:HB2	1.73	0.69
1:A:10:TYR:N	1:A:257:PRO:HG3	2.07	0.68
1:C:226:ASN:OD1	1:C:248:VAL:HG22	1.94	0.68
1:B:121:VAL:HA	1:C:252:ARG:HH12	1.59	0.68
1:B:125:GLU:HA	1:B:125:GLU:OE1	1.92	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:334:SER:HB2	1:C:337:ILE:HD12	1.74	0.68
1:D:221:GLY:HA3	1:D:225:ARG:HH21	1.57	0.68
1:C:257:PRO:HD2	1:C:260:ALA:HB3	1.75	0.68
1:B:133:THR:O	1:B:136:PHE:HB3	1.94	0.68
1:D:88:ALA:O	1:D:92:ASP:HB3	1.93	0.68
1:A:206:TRP:HA	1:D:200:ILE:HG23	1.76	0.68
1:A:257:PRO:O	1:A:313:ALA:HB3	1.93	0.68
1:B:221:GLY:HA3	1:B:225:ARG:NH2	2.08	0.68
1:D:133:THR:O	1:D:136:PHE:HB3	1.94	0.68
1:D:229:LEU:HD23	1:D:229:LEU:N	2.09	0.68
1:D:299:MET:SD	1:D:349:ARG:HD2	2.34	0.68
1:C:196:MET:CE	1:D:173:LEU:HD23	2.24	0.68
1:B:244:LEU:O	1:B:248:VAL:HG23	1.94	0.68
1:C:229:LEU:HD11	1:C:251:LEU:HD12	1.76	0.68
1:A:299:MET:SD	1:A:349:ARG:HD2	2.32	0.67
1:C:235:LEU:HD11	1:C:337:ILE:HD13	1.75	0.67
1:C:300:ALA:HA	1:C:305:GLU:O	1.93	0.67
1:C:244:LEU:O	1:C:248:VAL:HG23	1.94	0.67
1:D:229:LEU:HD23	1:D:229:LEU:H	1.59	0.67
1:B:300:ALA:HA	1:B:305:GLU:O	1.95	0.67
1:C:227:TRP:HA	1:C:231:ALA:HB2	1.74	0.67
1:D:105:LEU:O	1:D:108:PRO:HD2	1.94	0.67
1:D:244:LEU:O	1:D:248:VAL:HG23	1.95	0.67
1:D:264:ARG:HB2	1:D:267:GLU:CG	2.25	0.67
1:D:81:ALA:HA	1:D:103:VAL:CG1	2.24	0.67
1:A:252:ARG:CZ	1:D:124:ASN:HD22	2.07	0.67
1:A:268:PRO:HD2	1:D:73:PRO:HD2	1.71	0.67
1:A:280:VAL:HG22	1:A:290:LEU:HB2	1.75	0.67
1:B:299:MET:HB3	1:B:345:ALA:HB1	1.77	0.67
1:D:284:THR:HB	1:D:285:PRO:HD2	1.76	0.67
1:D:344:THR:O	1:D:348:ARG:HG2	1.94	0.67
1:A:244:LEU:O	1:A:248:VAL:HG23	1.94	0.67
1:C:121:VAL:HA	1:D:252:ARG:HH12	1.59	0.67
1:C:284:THR:HB	1:C:285:PRO:HD2	1.76	0.67
1:B:136:PHE:CZ	1:B:173:LEU:HD21	2.30	0.67
1:C:179:GLY:HA3	1:D:178:TYR:O	1.94	0.67
1:B:127:ARG:NH2	1:C:254:ARG:HA	2.10	0.66
1:B:280:VAL:HG22	1:B:290:LEU:HB2	1.76	0.66
1:A:134:THR:O	1:A:138:VAL:HG23	1.95	0.66
1:B:10:TYR:C	1:B:257:PRO:HG3	2.20	0.66
1:B:261:VAL:HG13	1:B:310:THR:HG23	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:10:TYR:C	1:D:257:PRO:HG3	2.20	0.66
1:B:204:GLY:C	1:C:210:LEU:HD22	2.21	0.66
1:C:264:ARG:HB2	1:C:267:GLU:CG	2.25	0.66
1:D:199:GLY:HA2	1:D:202:ILE:HD12	1.78	0.66
1:A:123:ALA:HA	1:B:254:ARG:NH2	2.10	0.66
1:A:225:ARG:O	1:A:229:LEU:CG	2.44	0.66
1:B:297:GLY:O	1:B:300:ALA:HB3	1.95	0.66
1:B:344:THR:O	1:B:348:ARG:HG2	1.96	0.66
1:C:73:PRO:HD3	1:D:267:GLU:HA	1.78	0.66
1:B:12:PRO:HB2	1:B:15:ALA:HB3	1.77	0.66
1:C:121:VAL:HG21	1:C:216:GLN:NE2	2.09	0.66
1:B:264:ARG:HB2	1:B:267:GLU:CG	2.26	0.66
1:B:151:GLU:CD	1:B:183:PRO:HA	2.21	0.66
1:C:12:PRO:HB2	1:C:15:ALA:HB3	1.78	0.66
1:C:226:ASN:OD1	1:C:248:VAL:HG21	1.96	0.66
1:C:229:LEU:HD21	1:C:251:LEU:HB2	1.78	0.66
1:C:257:PRO:HA	1:C:316:THR:HA	1.78	0.66
1:D:121:VAL:HG13	1:D:216:GLN:NE2	2.10	0.66
1:A:223:PHE:HA	1:A:227:TRP:HD1	1.61	0.65
1:A:344:THR:O	1:A:348:ARG:HG2	1.96	0.65
1:B:88:ALA:HB1	1:B:97:TRP:HB2	1.77	0.65
1:A:151:GLU:OE2	1:A:183:PRO:HA	1.96	0.65
1:A:252:ARG:HB3	1:D:124:ASN:ND2	2.12	0.65
1:D:300:ALA:HA	1:D:305:GLU:O	1.96	0.65
1:C:256:VAL:HG21	1:C:262:ILE:HG12	1.77	0.65
1:D:219:ARG:HD2	1:D:220:ARG:NH1	2.10	0.65
1:A:308:SER:OG	1:A:349:ARG:HG3	1.97	0.65
1:B:284:THR:HB	1:B:285:PRO:CD	2.27	0.65
1:C:256:VAL:HG22	1:C:257:PRO:HD2	1.76	0.65
1:D:229:LEU:CD2	1:D:229:LEU:N	2.59	0.65
1:C:7:LEU:HD13	1:C:262:ILE:C	2.21	0.65
1:A:81:ALA:CB	1:A:107:LYS:HE2	2.27	0.65
1:A:121:VAL:HA	1:B:252:ARG:HH12	1.61	0.65
1:A:269:GLY:N	1:A:306:PRO:HA	2.11	0.65
1:B:202:ILE:HA	1:B:205:LEU:HD22	1.78	0.65
1:D:269:GLY:N	1:D:306:PRO:HA	2.11	0.65
1:A:11:ALA:H	1:A:257:PRO:HD3	1.62	0.65
1:A:179:GLY:HA3	1:B:178:TYR:O	1.96	0.65
1:C:135:LEU:O	1:C:138:VAL:HG22	1.97	0.65
1:C:224:VAL:O	1:C:228:GLN:HG2	1.97	0.65
1:C:229:LEU:CD1	1:C:230:VAL:HG22	2.27	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:284:THR:HB	1:C:285:PRO:CD	2.27	0.65
1:C:12:PRO:HB2	1:C:15:ALA:CB	2.26	0.64
1:C:123:ALA:HA	1:D:254:ARG:NH2	2.12	0.64
1:D:235:LEU:HD11	1:D:337:ILE:HD13	1.77	0.64
1:A:124:ASN:HB3	1:B:252:ARG:HB3	1.77	0.64
1:A:299:MET:SD	1:A:349:ARG:HB2	2.37	0.64
1:B:81:ALA:HA	1:B:103:VAL:CG1	2.28	0.64
1:C:296:PHE:HB3	1:C:348:ARG:NH1	2.12	0.64
1:D:173:LEU:HD12	1:D:202:ILE:CD1	2.23	0.64
1:D:222:ASP:O	1:D:226:ASN:ND2	2.30	0.64
1:D:284:THR:HB	1:D:285:PRO:CD	2.28	0.64
1:B:196:MET:HE1	1:C:173:LEU:HD23	1.80	0.64
1:C:229:LEU:HD11	1:C:230:VAL:HG22	1.80	0.64
1:D:264:ARG:HB2	1:D:267:GLU:HB2	1.77	0.64
1:B:223:PHE:HA	1:B:227:TRP:HB2	1.79	0.64
1:D:299:MET:SD	1:D:349:ARG:HB2	2.38	0.64
1:C:229:LEU:HD22	1:C:251:LEU:CD1	2.23	0.64
1:A:81:ALA:HA	1:A:103:VAL:CG1	2.27	0.64
1:C:9:ILE:HD12	1:C:261:VAL:H	1.62	0.64
1:B:269:GLY:N	1:B:306:PRO:HA	2.12	0.64
1:B:88:ALA:O	1:B:92:ASP:HB3	1.98	0.63
1:C:72:THR:HB	1:D:266:GLY:O	1.98	0.63
1:D:103:VAL:HG13	1:D:106:LEU:HD12	1.78	0.63
1:D:308:SER:OG	1:D:349:ARG:HG3	1.98	0.63
1:A:210:LEU:HD12	1:D:205:LEU:N	2.12	0.63
1:A:334:SER:CB	1:A:337:ILE:HD12	2.28	0.63
1:B:322:LEU:HD11	1:B:326:ASP:HB3	1.80	0.63
1:A:173:LEU:HD23	1:D:196:MET:CE	2.28	0.63
1:B:239:LEU:HD22	1:B:243:VAL:HG11	1.79	0.63
1:C:151:GLU:OE2	1:C:183:PRO:HA	1.98	0.63
1:D:256:VAL:HG21	1:D:262:ILE:HG12	1.81	0.63
1:B:299:MET:SD	1:B:349:ARG:HB2	2.39	0.63
1:D:296:PHE:HB3	1:D:348:ARG:NH1	2.14	0.63
1:B:175:THR:O	1:C:176:THR:HA	1.97	0.63
1:C:229:LEU:HD22	1:C:251:LEU:CG	2.28	0.63
1:A:11:ALA:C	1:A:13:LEU:N	2.56	0.63
1:A:296:PHE:HB3	1:A:348:ARG:NH1	2.14	0.63
1:B:49:TRP:HZ2	1:B:86:LEU:HD13	1.63	0.63
1:B:230:VAL:HG13	1:B:236:PHE:CG	2.26	0.63
1:C:138:VAL:CB	1:D:105:LEU:HD13	2.28	0.63
1:C:344:THR:O	1:C:348:ARG:HG2	1.99	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:297:GLY:O	1:D:300:ALA:HB3	1.99	0.63
1:A:204:GLY:HA3	1:B:210:LEU:HB2	1.80	0.62
1:A:322:LEU:HD11	1:A:326:ASP:HB3	1.81	0.62
1:D:151:GLU:OE1	1:D:183:PRO:HA	1.99	0.62
1:D:250:ALA:O	1:D:252:ARG:HD3	1.99	0.62
1:C:124:ASN:CG	1:D:252:ARG:HB3	2.24	0.62
1:C:299:MET:SD	1:C:349:ARG:HB2	2.39	0.62
1:B:199:GLY:HA2	1:B:202:ILE:HD12	1.82	0.62
1:C:239:LEU:HD22	1:C:243:VAL:HG11	1.81	0.62
1:C:308:SER:OG	1:C:349:ARG:HG3	1.99	0.62
1:A:10:TYR:CA	1:A:257:PRO:HG3	2.29	0.62
1:B:264:ARG:HB2	1:B:267:GLU:CB	2.29	0.62
1:C:151:GLU:CD	1:C:183:PRO:HA	2.24	0.62
1:D:261:VAL:HG13	1:D:310:THR:HG23	1.81	0.62
1:B:230:VAL:HG22	1:B:251:LEU:HD13	1.80	0.62
1:C:22:LEU:HD23	1:C:104:TRP:HB3	1.80	0.62
1:D:201:GLY:O	1:D:205:LEU:HD12	2.00	0.62
1:A:223:PHE:HA	1:A:227:TRP:CD1	2.34	0.62
1:B:11:ALA:HB1	1:B:255:THR:O	1.99	0.62
1:B:233:VAL:HB	1:B:236:PHE:CD2	2.35	0.62
1:D:11:ALA:N	1:D:257:PRO:HG3	2.15	0.62
1:D:11:ALA:HB1	1:D:255:THR:O	1.99	0.62
1:B:12:PRO:HB2	1:B:15:ALA:CB	2.30	0.62
1:B:296:PHE:HB3	1:B:348:ARG:NH1	2.15	0.62
1:B:105:LEU:O	1:B:108:PRO:HD2	2.00	0.62
1:B:235:LEU:HD11	1:B:337:ILE:HD13	1.81	0.62
1:A:73:PRO:HG3	1:B:268:PRO:HD2	1.79	0.62
1:B:123:ALA:HA	1:C:254:ARG:NH2	2.15	0.62
1:C:264:ARG:HB2	1:C:267:GLU:HB2	1.80	0.62
1:D:22:LEU:HD23	1:D:104:TRP:HB3	1.81	0.62
1:A:73:PRO:HD3	1:B:267:GLU:HA	1.81	0.61
1:A:210:LEU:HD11	1:D:205:LEU:HD12	1.81	0.61
1:B:11:ALA:N	1:B:257:PRO:HG3	2.15	0.61
1:C:220:ARG:O	1:C:223:PHE:HD2	1.83	0.61
1:D:12:PRO:HB2	1:D:15:ALA:HB3	1.81	0.61
1:A:49:TRP:CZ2	1:A:86:LEU:HD13	2.34	0.61
1:A:300:ALA:HA	1:A:305:GLU:O	2.00	0.61
1:C:73:PRO:HG3	1:D:268:PRO:HD2	1.79	0.61
1:D:114:PHE:CE2	1:D:118:LEU:HD22	2.35	0.61
1:B:140:LEU:HD21	1:B:166:MET:HG2	1.81	0.61
1:C:10:TYR:HB3	1:C:13:LEU:HD23	1.80	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:135:LEU:O	1:D:138:VAL:HB	2.01	0.61
1:A:151:GLU:CD	1:A:183:PRO:HA	2.26	0.61
1:A:167:TRP:HZ3	1:D:192:ALA:HB3	1.65	0.61
1:B:134:THR:O	1:B:138:VAL:HG23	1.99	0.61
1:B:219:ARG:HD2	1:B:220:ARG:NH1	2.15	0.61
1:A:105:LEU:HB3	1:D:138:VAL:HG22	1.82	0.61
1:A:201:GLY:O	1:A:205:LEU:HD12	2.00	0.61
1:A:216:GLN:O	1:A:220:ARG:HG2	2.00	0.61
1:B:121:VAL:HA	1:C:252:ARG:NH1	2.14	0.61
1:B:216:GLN:O	1:B:220:ARG:HG2	1.99	0.61
1:A:298:GLU:H	1:A:298:GLU:CD	2.08	0.61
1:D:151:GLU:CD	1:D:183:PRO:HA	2.26	0.61
1:D:233:VAL:HB	1:D:236:PHE:CD2	2.36	0.61
1:B:151:GLU:OE2	1:B:183:PRO:HA	2.01	0.61
1:B:226:ASN:HB2	1:B:248:VAL:HG13	1.81	0.61
1:C:121:VAL:HA	1:D:252:ARG:HH22	1.65	0.61
1:D:9:ILE:HD12	1:D:261:VAL:H	1.66	0.61
1:A:88:ALA:O	1:A:92:ASP:HB3	2.01	0.61
1:D:299:MET:HB3	1:D:345:ALA:HB1	1.82	0.61
1:A:280:VAL:HA	1:A:314:ALA:H	1.65	0.61
1:B:7:LEU:HD13	1:B:262:ILE:C	2.24	0.61
1:B:92:ASP:OD2	1:B:94:SER:HB3	2.01	0.61
1:B:280:VAL:HA	1:B:314:ALA:H	1.65	0.61
1:C:299:MET:HG3	1:C:349:ARG:NH1	2.15	0.61
1:A:22:LEU:HD23	1:A:104:TRP:HB3	1.83	0.61
1:A:28:LEU:N	1:A:41:LEU:HD21	2.16	0.61
1:A:250:ALA:O	1:A:252:ARG:HD3	2.01	0.61
1:B:334:SER:HB2	1:B:337:ILE:HD12	1.83	0.61
1:D:114:PHE:O	1:D:117:VAL:HB	2.01	0.61
1:D:322:LEU:HD11	1:D:326:ASP:HB3	1.81	0.61
1:A:9:ILE:HB	1:A:260:ALA:HB2	1.82	0.60
1:A:230:VAL:HG13	1:A:236:PHE:CG	2.35	0.60
1:B:67:VAL:O	1:B:68:VAL:HG22	2.01	0.60
1:B:121:VAL:HG13	1:B:216:GLN:NE2	2.15	0.60
1:A:124:ASN:ND2	1:B:252:ARG:HB3	2.15	0.60
1:A:257:PRO:HD2	1:A:260:ALA:HB3	1.82	0.60
1:C:124:ASN:HB2	1:D:252:ARG:NH1	2.14	0.60
1:D:218:VAL:C	1:D:222:ASP:OD2	2.43	0.60
1:A:271:ARG:HH12	1:A:323:HIS:CE1	2.18	0.60
1:C:28:LEU:N	1:C:41:LEU:HD21	2.17	0.60
1:A:113:THR:HG21	1:A:221:GLY:N	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:252:ARG:HB3	1:D:124:ASN:HB3	1.82	0.60
1:D:223:PHE:HA	1:D:248:VAL:CG1	2.31	0.60
1:C:151:GLU:OE1	1:C:183:PRO:HA	2.00	0.60
1:C:284:THR:HG23	1:C:309:ALA:HB2	1.83	0.60
1:A:170:VAL:HA	1:D:196:MET:HE1	1.83	0.60
1:A:226:ASN:HB2	1:A:248:VAL:HG13	1.82	0.60
1:B:73:PRO:HG3	1:C:268:PRO:HD2	1.81	0.60
1:C:73:PRO:HD2	1:D:268:PRO:HD3	1.83	0.60
1:C:334:SER:CB	1:C:337:ILE:HD12	2.31	0.60
1:D:114:PHE:CZ	1:D:118:LEU:HD13	2.36	0.60
1:C:121:VAL:HG11	1:C:216:GLN:HE22	1.66	0.60
1:C:219:ARG:HD2	1:C:220:ARG:NH1	2.17	0.60
1:B:92:ASP:CG	1:B:94:SER:HB3	2.27	0.60
1:C:71:ARG:HH11	1:C:75:ILE:HD11	1.67	0.60
1:C:299:MET:HB3	1:C:345:ALA:HB1	1.84	0.60
1:D:92:ASP:CG	1:D:94:SER:HB3	2.27	0.60
1:B:22:LEU:HD23	1:B:104:TRP:HB3	1.82	0.59
1:B:113:THR:HG21	1:B:221:GLY:N	2.17	0.59
1:B:250:ALA:O	1:B:252:ARG:HD3	2.01	0.59
1:D:12:PRO:HB2	1:D:15:ALA:CB	2.32	0.59
1:D:230:VAL:HA	1:D:236:PHE:CB	2.30	0.59
1:D:10:TYR:HB3	1:D:13:LEU:HD23	1.85	0.59
1:D:28:LEU:N	1:D:41:LEU:HD21	2.17	0.59
1:A:72:THR:HB	1:B:266:GLY:O	2.01	0.59
1:A:268:PRO:HA	1:A:306:PRO:HA	1.83	0.59
1:A:284:THR:HB	1:A:285:PRO:CD	2.31	0.59
1:C:192:ALA:HB3	1:D:167:TRP:HZ3	1.68	0.59
1:D:113:THR:HG21	1:D:221:GLY:CA	2.32	0.59
1:D:263:CYS:HB3	1:D:307:ARG:HE	1.68	0.59
1:A:210:LEU:HD13	1:A:214:PHE:CE2	2.37	0.59
1:B:228:GLN:O	1:B:231:ALA:HB3	2.02	0.59
1:C:120:ARG:C	1:D:252:ARG:HH22	2.11	0.59
1:D:151:GLU:OE2	1:D:183:PRO:HA	2.02	0.59
1:A:282:VAL:HG13	1:A:309:ALA:HB3	1.85	0.59
1:B:135:LEU:O	1:B:138:VAL:HB	2.02	0.59
1:C:49:TRP:HZ2	1:C:86:LEU:HD13	1.67	0.59
1:C:233:VAL:HB	1:C:236:PHE:CD2	2.38	0.59
1:C:280:VAL:HA	1:C:314:ALA:H	1.67	0.59
1:A:268:PRO:HD2	1:D:73:PRO:HG3	1.85	0.59
1:C:10:TYR:C	1:C:257:PRO:HG3	2.28	0.59
1:C:177:GLY:HA3	1:D:176:THR:CG2	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:92:ASP:CG	1:C:94:SER:HB3	2.28	0.59
1:D:11:ALA:HB3	1:D:12:PRO:CD	2.33	0.59
1:A:100:TYR:O	1:A:103:VAL:HG23	2.03	0.59
1:A:203:PHE:HZ	1:B:203:PHE:CE2	2.21	0.59
1:C:11:ALA:HB1	1:C:255:THR:O	2.03	0.59
1:D:280:VAL:HA	1:D:314:ALA:H	1.68	0.59
1:B:73:PRO:CD	1:C:268:PRO:CD	2.77	0.58
1:B:114:PHE:CE2	1:B:118:LEU:HD22	2.38	0.58
1:C:228:GLN:NE2	1:C:228:GLN:HA	2.18	0.58
1:D:71:ARG:HG3	1:D:75:ILE:HD11	1.85	0.58
1:C:322:LEU:HD11	1:C:326:ASP:HB3	1.84	0.58
1:B:103:VAL:HG13	1:B:106:LEU:HD12	1.85	0.58
1:B:223:PHE:O	1:B:227:TRP:HB2	2.03	0.58
1:D:134:THR:O	1:D:138:VAL:HG23	2.04	0.58
1:A:9:ILE:HB	1:A:260:ALA:CB	2.34	0.58
1:A:173:LEU:HD23	1:D:196:MET:HE1	1.85	0.58
1:A:239:LEU:HD22	1:A:243:VAL:HG11	1.85	0.58
1:B:58:ALA:O	1:B:62:LYS:HB3	2.03	0.58
1:D:334:SER:HB2	1:D:337:ILE:HD12	1.84	0.58
1:C:11:ALA:HB3	1:C:12:PRO:CD	2.32	0.58
1:C:136:PHE:HA	1:C:139:VAL:HG22	1.85	0.58
1:C:205:LEU:N	1:D:210:LEU:HD12	2.19	0.58
1:A:235:LEU:CD1	1:A:337:ILE:HD13	2.34	0.58
1:B:73:PRO:HD3	1:C:267:GLU:HA	1.84	0.58
1:B:192:ALA:HB3	1:C:167:TRP:HZ3	1.68	0.58
1:C:257:PRO:HD2	1:C:260:ALA:CB	2.33	0.58
1:A:235:LEU:HD11	1:A:337:ILE:HD13	1.85	0.58
1:B:299:MET:HG3	1:B:349:ARG:HH11	1.68	0.58
1:C:221:GLY:O	1:C:224:VAL:CG1	2.52	0.58
1:D:121:VAL:HG13	1:D:216:GLN:CD	2.29	0.58
1:B:230:VAL:HG13	1:B:236:PHE:CE2	2.28	0.58
1:C:11:ALA:N	1:C:257:PRO:HG3	2.19	0.58
1:A:200:ILE:HG22	1:B:209:ILE:HB	1.86	0.58
1:B:105:LEU:C	1:B:108:PRO:HD2	2.29	0.58
1:B:334:SER:CB	1:B:337:ILE:HD12	2.34	0.58
1:D:256:VAL:HG22	1:D:257:PRO:HD2	1.84	0.58
1:A:315:THR:O	1:A:317:VAL:HG23	2.04	0.57
1:B:200:ILE:HG23	1:C:206:TRP:HA	1.85	0.57
1:B:299:MET:SD	1:B:345:ALA:HB1	2.44	0.57
1:B:10:TYR:HB3	1:B:13:LEU:HD23	1.86	0.57
1:B:256:VAL:HG22	1:B:257:PRO:HD2	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:286:ASN:O	1:B:288:VAL:HG23	2.04	0.57
1:C:221:GLY:O	1:C:224:VAL:HG13	2.04	0.57
1:D:198:SER:O	1:D:202:ILE:HG13	2.05	0.57
1:D:264:ARG:HB2	1:D:267:GLU:CB	2.34	0.57
1:D:334:SER:CB	1:D:337:ILE:HD12	2.34	0.57
1:A:299:MET:HG3	1:A:349:ARG:NH1	2.18	0.57
1:A:121:VAL:HB	1:A:216:GLN:NE2	2.18	0.57
1:A:145:LEU:HD12	1:B:99:LEU:HD22	1.85	0.57
1:C:226:ASN:HA	1:C:230:VAL:HG23	1.86	0.57
1:B:81:ALA:CB	1:B:107:LYS:HE2	2.34	0.57
1:B:100:TYR:O	1:B:103:VAL:HG23	2.04	0.57
1:C:173:LEU:CD1	1:C:202:ILE:HG21	2.34	0.57
1:C:229:LEU:O	1:C:233:VAL:HG23	2.03	0.57
1:B:11:ALA:CB	1:B:12:PRO:HD3	2.35	0.57
1:D:286:ASN:O	1:D:288:VAL:HG23	2.03	0.57
1:A:298:GLU:HG2	1:A:345:ALA:HB2	1.87	0.57
1:B:205:LEU:N	1:C:210:LEU:HD22	2.19	0.57
1:C:121:VAL:CG1	1:C:216:GLN:HE22	2.18	0.57
1:C:124:ASN:ND2	1:D:252:ARG:HB3	2.20	0.57
1:D:49:TRP:HZ2	1:D:86:LEU:HD13	1.68	0.57
1:A:138:VAL:HG22	1:B:105:LEU:HD22	1.87	0.57
1:B:73:PRO:HD2	1:C:268:PRO:HD3	1.86	0.57
1:D:299:MET:HG3	1:D:349:ARG:NH1	2.19	0.57
1:A:103:VAL:HG13	1:A:106:LEU:HD12	1.87	0.56
1:A:267:GLU:HA	1:D:73:PRO:HD3	1.86	0.56
1:C:229:LEU:CD1	1:C:230:VAL:CG2	2.84	0.56
1:A:105:LEU:HB3	1:D:138:VAL:CG2	2.34	0.56
1:A:177:GLY:HA3	1:B:176:THR:CG2	2.36	0.56
1:A:334:SER:HB2	1:A:337:ILE:HD12	1.86	0.56
1:B:28:LEU:N	1:B:41:LEU:HD21	2.19	0.56
1:B:169:ALA:O	1:B:173:LEU:HB2	2.04	0.56
1:B:299:MET:HG3	1:B:349:ARG:NH1	2.20	0.56
1:D:105:LEU:C	1:D:108:PRO:HD2	2.30	0.56
1:D:235:LEU:HD21	1:D:330:LEU:HD21	1.87	0.56
1:B:67:VAL:O	1:B:68:VAL:HG13	2.06	0.56
1:C:225:ARG:HH11	1:C:225:ARG:HG2	1.66	0.56
1:A:256:VAL:HG13	1:A:313:ALA:HB2	1.88	0.56
1:B:9:ILE:HB	1:B:260:ALA:HB2	1.87	0.56
1:C:202:ILE:HA	1:C:205:LEU:CD1	2.36	0.56
1:D:92:ASP:OD2	1:D:94:SER:HB3	2.06	0.56
1:A:192:ALA:HB3	1:B:167:TRP:HZ3	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:295:PHE:CE2	1:A:341:PHE:HA	2.41	0.56
1:B:9:ILE:HD12	1:B:261:VAL:H	1.71	0.56
1:B:81:ALA:HB1	1:B:107:LYS:HE2	1.87	0.56
1:C:250:ALA:O	1:C:252:ARG:HD3	2.05	0.56
1:A:109:LEU:HD22	1:A:115:PHE:CE1	2.41	0.56
1:A:299:MET:HB3	1:A:345:ALA:HB1	1.88	0.56
1:C:230:VAL:HG13	1:C:236:PHE:CB	2.30	0.56
1:D:11:ALA:CB	1:D:12:PRO:HD3	2.35	0.56
1:A:9:ILE:HG13	1:A:260:ALA:HA	1.87	0.56
1:A:219:ARG:HD2	1:A:220:ARG:NH1	2.21	0.56
1:C:265:ILE:HB	1:C:310:THR:OG1	2.06	0.56
1:B:11:ALA:HB3	1:B:12:PRO:CD	2.34	0.55
1:B:173:LEU:HD12	1:B:202:ILE:CD1	2.31	0.55
1:C:299:MET:SD	1:C:345:ALA:HB1	2.46	0.55
1:D:219:ARG:HD2	1:D:220:ARG:HH12	1.70	0.55
1:A:9:ILE:HG22	1:A:10:TYR:HD2	1.71	0.55
1:A:230:VAL:CG1	1:A:236:PHE:HB3	2.37	0.55
1:D:257:PRO:HD2	1:D:260:ALA:CB	2.35	0.55
1:D:268:PRO:HA	1:D:306:PRO:HA	1.88	0.55
1:D:58:ALA:O	1:D:62:LYS:HB3	2.05	0.55
1:A:7:LEU:HD22	1:A:262:ILE:O	2.06	0.55
1:A:177:GLY:HA3	1:B:176:THR:HG23	1.88	0.55
1:B:230:VAL:CG1	1:B:236:PHE:CG	2.88	0.55
1:B:282:VAL:HG13	1:B:309:ALA:HB3	1.89	0.55
1:C:114:PHE:CE2	1:C:118:LEU:HD22	2.41	0.55
1:A:120:ARG:O	1:A:123:ALA:HB3	2.07	0.55
1:A:121:VAL:HA	1:B:252:ARG:NH2	2.20	0.55
1:D:181:THR:O	1:D:182:ILE:HG13	2.06	0.55
1:B:202:ILE:HA	1:B:205:LEU:CD2	2.36	0.55
1:C:10:TYR:H	1:C:257:PRO:HG3	1.71	0.55
1:C:264:ARG:HB2	1:C:267:GLU:CB	2.36	0.55
1:D:299:MET:SD	1:D:345:ALA:HB1	2.46	0.55
1:A:120:ARG:C	1:B:252:ARG:HH22	2.15	0.55
1:A:264:ARG:HB2	1:A:267:GLU:CB	2.36	0.55
1:C:277:GLU:O	1:C:317:VAL:HA	2.06	0.55
1:D:222:ASP:O	1:D:248:VAL:HG13	2.07	0.55
1:A:73:PRO:HD2	1:B:268:PRO:HD3	1.86	0.55
1:A:233:VAL:HB	1:A:236:PHE:CD2	2.42	0.55
1:A:252:ARG:HH22	1:D:120:ARG:C	2.15	0.55
1:B:49:TRP:CZ2	1:B:86:LEU:HD13	2.42	0.55
1:B:235:LEU:CD1	1:B:337:ILE:HD13	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:25:VAL:O	1:C:29:THR:HG23	2.07	0.55
1:D:222:ASP:O	1:D:226:ASN:CG	2.50	0.55
1:A:138:VAL:HG22	1:B:105:LEU:CD1	2.36	0.55
1:A:322:LEU:HD21	1:A:327:PHE:HA	1.89	0.55
1:A:114:PHE:CE2	1:A:118:LEU:HD22	2.42	0.55
1:A:299:MET:HG3	1:A:349:ARG:HH11	1.72	0.55
1:B:224:VAL:HG13	1:B:225:ARG:H	1.72	0.55
1:C:210:LEU:HD23	1:C:214:PHE:HE2	1.72	0.55
1:A:25:VAL:O	1:A:29:THR:HG23	2.07	0.54
1:A:203:PHE:HA	1:A:206:TRP:CD1	2.41	0.54
1:B:209:ILE:HG22	1:B:210:LEU:HD23	1.89	0.54
1:B:230:VAL:CG2	1:B:251:LEU:HD13	2.37	0.54
1:C:138:VAL:HG11	1:D:105:LEU:HB3	1.89	0.54
1:A:200:ILE:HD13	1:B:206:TRP:CD2	2.42	0.54
1:A:299:MET:CG	1:A:345:ALA:HB1	2.37	0.54
1:C:121:VAL:HA	1:D:252:ARG:NH1	2.21	0.54
1:D:229:LEU:HB3	1:D:236:PHE:CE2	2.42	0.54
1:C:121:VAL:HG11	1:C:216:GLN:NE2	2.22	0.54
1:C:177:GLY:HA3	1:D:176:THR:HG23	1.90	0.54
1:C:282:VAL:HG13	1:C:309:ALA:HB3	1.88	0.54
1:C:295:PHE:CE2	1:C:341:PHE:HA	2.43	0.54
1:A:204:GLY:O	1:A:207:ALA:HB3	2.08	0.54
1:D:299:MET:CG	1:D:345:ALA:HB1	2.37	0.54
1:A:7:LEU:CD2	1:A:262:ILE:O	2.55	0.54
1:A:88:ALA:HB1	1:A:97:TRP:HB2	1.88	0.54
1:A:210:LEU:HD13	1:A:214:PHE:HE2	1.70	0.54
1:A:257:PRO:HA	1:A:316:THR:HA	1.88	0.54
1:B:257:PRO:HD2	1:B:260:ALA:CB	2.37	0.54
1:C:105:LEU:C	1:C:108:PRO:HD2	2.32	0.54
1:C:173:LEU:CD1	1:C:202:ILE:HG13	2.37	0.54
1:A:11:ALA:N	1:A:257:PRO:CB	2.71	0.54
1:A:11:ALA:CB	1:A:256:VAL:C	2.78	0.54
1:A:17:LEU:O	1:A:17:LEU:HG	2.06	0.54
1:B:22:LEU:CD2	1:B:104:TRP:HB3	2.38	0.54
1:C:224:VAL:O	1:C:228:GLN:CG	2.55	0.54
1:C:273:PHE:HB2	1:C:296:PHE:CZ	2.43	0.54
1:C:286:ASN:O	1:C:288:VAL:HG23	2.08	0.54
1:A:124:ASN:HD22	1:B:252:ARG:CZ	2.20	0.54
1:A:200:ILE:HG21	1:B:209:ILE:HD13	1.90	0.54
1:B:196:MET:CE	1:C:173:LEU:HD23	2.37	0.54
1:D:22:LEU:CD2	1:D:104:TRP:HB3	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:VAL:CG2	1:B:105:LEU:HB3	2.38	0.54
1:A:268:PRO:HD3	1:D:73:PRO:HD2	1.88	0.54
1:C:58:ALA:O	1:C:62:LYS:HB3	2.07	0.54
1:D:30:ILE:HG21	1:D:33:MET:HE3	1.90	0.54
1:D:223:PHE:HA	1:D:226:ASN:HD22	1.71	0.54
1:B:222:ASP:HA	1:B:226:ASN:HB2	1.90	0.54
1:B:277:GLU:O	1:B:317:VAL:HA	2.07	0.54
1:A:252:ARG:NH1	1:D:124:ASN:HB2	2.23	0.53
1:B:11:ALA:HB2	1:B:256:VAL:HA	1.91	0.53
1:B:263:CYS:HB3	1:B:307:ARG:HB3	1.90	0.53
1:C:10:TYR:N	1:C:257:PRO:HG3	2.23	0.53
1:A:203:PHE:CZ	1:D:203:PHE:HZ	2.26	0.53
1:A:224:VAL:HG13	1:A:225:ARG:H	1.72	0.53
1:B:174:SER:HA	1:B:206:TRP:CZ2	2.44	0.53
1:C:92:ASP:OD2	1:C:94:SER:HB3	2.07	0.53
1:A:99:LEU:HD22	1:D:145:LEU:HD12	1.89	0.53
1:A:264:ARG:HB2	1:A:267:GLU:HB2	1.89	0.53
1:B:205:LEU:HD13	1:C:210:LEU:HD21	1.90	0.53
1:C:262:ILE:HB	1:C:311:VAL:O	2.08	0.53
1:A:94:SER:HB3	1:A:95:PRO:HD2	1.91	0.53
1:B:284:THR:HG23	1:B:309:ALA:HB2	1.89	0.53
1:D:223:PHE:HA	1:D:226:ASN:ND2	2.22	0.53
1:D:269:GLY:HA3	1:D:307:ARG:HD2	1.91	0.53
1:A:118:LEU:HA	1:A:216:GLN:HE22	1.74	0.53
1:B:9:ILE:CD1	1:B:260:ALA:HA	2.38	0.53
1:B:71:ARG:HG3	1:B:75:ILE:HD11	1.90	0.53
1:C:200:ILE:HG21	1:D:209:ILE:HD13	1.91	0.53
1:C:223:PHE:CD1	1:C:224:VAL:N	2.77	0.53
1:C:114:PHE:O	1:C:117:VAL:HB	2.09	0.53
1:C:201:GLY:O	1:C:205:LEU:HD12	2.08	0.53
1:C:299:MET:CG	1:C:345:ALA:HB1	2.38	0.53
1:A:308:SER:CB	1:A:349:ARG:HG3	2.39	0.53
1:B:127:ARG:HH22	1:C:254:ARG:HA	1.74	0.53
1:C:11:ALA:HB1	1:C:256:VAL:HA	1.91	0.53
1:D:81:ALA:CB	1:D:107:LYS:HE2	2.39	0.53
1:D:235:LEU:CD1	1:D:337:ILE:HD13	2.39	0.53
1:A:146:ALA:O	1:A:150:ILE:HD12	2.10	0.52
1:A:235:LEU:HD21	1:A:330:LEU:HD21	1.90	0.52
1:A:174:SER:HA	1:A:206:TRP:CZ2	2.45	0.52
1:D:9:ILE:HB	1:D:260:ALA:HA	1.89	0.52
1:D:9:ILE:HB	1:D:260:ALA:HB2	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:119:GLY:O	1:A:123:ALA:HB2	2.09	0.52
1:B:138:VAL:HG22	1:C:105:LEU:HD22	1.91	0.52
1:C:73:PRO:CD	1:D:267:GLU:HA	2.39	0.52
1:D:210:LEU:HD13	1:D:214:PHE:CE2	2.44	0.52
1:B:201:GLY:O	1:C:210:LEU:HD21	2.08	0.52
1:C:11:ALA:CB	1:C:12:PRO:HD3	2.37	0.52
1:C:22:LEU:CD2	1:C:104:TRP:HB3	2.39	0.52
1:D:9:ILE:HB	1:D:260:ALA:CB	2.39	0.52
1:D:10:TYR:N	1:D:257:PRO:HG3	2.24	0.52
1:A:222:ASP:HA	1:A:226:ASN:HB2	1.92	0.52
1:B:273:PHE:HB2	1:B:296:PHE:CZ	2.44	0.52
1:B:308:SER:CB	1:B:349:ARG:HG3	2.39	0.52
1:C:256:VAL:HG22	1:C:257:PRO:CD	2.40	0.52
1:D:203:PHE:HA	1:D:206:TRP:CD1	2.45	0.52
1:B:120:ARG:C	1:C:252:ARG:HH22	2.17	0.52
1:B:204:GLY:HA3	1:C:210:LEU:CD1	2.34	0.52
1:C:88:ALA:O	1:C:92:ASP:HB3	2.08	0.52
1:C:173:LEU:HG	1:C:202:ILE:HG21	1.90	0.52
1:A:280:VAL:CG2	1:A:290:LEU:HB2	2.40	0.52
1:D:81:ALA:HB1	1:D:107:LYS:HE2	1.91	0.52
1:D:202:ILE:HA	1:D:205:LEU:HD13	1.92	0.52
1:D:299:MET:HG3	1:D:349:ARG:HH11	1.73	0.52
1:A:175:THR:O	1:B:176:THR:HA	2.07	0.52
1:C:229:LEU:HD12	1:C:229:LEU:C	2.33	0.52
1:A:299:MET:SD	1:A:345:ALA:HB1	2.49	0.52
1:C:11:ALA:HB2	1:C:256:VAL:HA	1.92	0.52
1:C:322:LEU:HD21	1:C:327:PHE:HA	1.90	0.52
1:A:232:ALA:O	1:A:234:PRO:HD3	2.10	0.52
1:D:117:VAL:HG12	1:D:216:GLN:OE1	2.10	0.52
1:A:266:GLY:O	1:D:72:THR:HB	2.10	0.51
1:C:158:LYS:O	1:C:164:GLN:HB3	2.10	0.51
1:C:226:ASN:O	1:C:230:VAL:HB	2.09	0.51
1:D:11:ALA:HB2	1:D:256:VAL:HA	1.89	0.51
1:D:114:PHE:HD2	1:D:115:PHE:CD1	2.28	0.51
1:D:295:PHE:HZ	1:D:340:ILE:HG22	1.74	0.51
1:C:113:THR:HG21	1:C:221:GLY:CA	2.41	0.51
1:C:196:MET:O	1:D:206:TRP:HZ3	1.93	0.51
1:B:171:VAL:CG1	1:B:177:GLY:HA2	2.40	0.51
1:C:210:LEU:HD23	1:C:214:PHE:CE2	2.44	0.51
1:D:279:SER:N	1:D:317:VAL:HG22	2.24	0.51
1:C:200:ILE:HG23	1:D:206:TRP:CA	2.37	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:10:TYR:H	1:D:257:PRO:HG3	1.75	0.51
1:D:119:GLY:O	1:D:123:ALA:HB2	2.10	0.51
1:A:11:ALA:N	1:A:257:PRO:CG	2.73	0.51
1:A:196:MET:SD	1:B:170:VAL:HG13	2.51	0.51
1:A:253:ALA:O	1:A:254:ARG:CG	2.59	0.51
1:A:198:SER:O	1:A:202:ILE:HG13	2.11	0.51
1:A:256:VAL:HG22	1:A:260:ALA:HB3	1.93	0.51
1:D:109:LEU:HD22	1:D:115:PHE:CD1	2.46	0.51
1:A:22:LEU:CD2	1:A:104:TRP:HB3	2.40	0.51
1:A:121:VAL:HA	1:B:252:ARG:NH1	2.25	0.51
1:A:136:PHE:HA	1:A:139:VAL:HG22	1.93	0.51
1:A:146:ALA:HB1	1:A:191:LEU:HD21	1.91	0.51
1:C:88:ALA:HB1	1:C:97:TRP:HB2	1.93	0.51
1:D:9:ILE:CD1	1:D:260:ALA:HA	2.39	0.51
1:A:30:ILE:HG21	1:A:33:MET:HE3	1.93	0.51
1:A:58:ALA:O	1:A:62:LYS:HB3	2.11	0.51
1:A:257:PRO:CD	1:A:260:ALA:HB2	2.41	0.51
1:A:272:MET:HE2	1:A:295:PHE:HB2	1.92	0.51
1:B:124:ASN:ND2	1:C:252:ARG:HB3	2.26	0.51
1:D:216:GLN:HE21	1:D:220:ARG:HH21	1.59	0.51
1:D:226:ASN:HD21	1:D:248:VAL:CG1	0.78	0.51
1:D:308:SER:CB	1:D:349:ARG:HG3	2.41	0.51
1:A:11:ALA:H	1:A:257:PRO:CD	2.23	0.51
1:A:175:THR:CG2	1:D:175:THR:HB	2.41	0.51
1:A:210:LEU:HD12	1:D:204:GLY:C	2.35	0.51
1:C:9:ILE:HB	1:C:260:ALA:HA	1.93	0.51
1:C:279:SER:N	1:C:317:VAL:HG22	2.25	0.51
1:D:57:ALA:O	1:D:61:LEU:HB2	2.11	0.51
1:D:203:PHE:HA	1:D:206:TRP:HD1	1.76	0.51
1:D:226:ASN:OD1	1:D:248:VAL:O	2.29	0.51
1:A:136:PHE:O	1:A:139:VAL:HG22	2.11	0.50
1:B:279:SER:N	1:B:317:VAL:HG22	2.26	0.50
1:B:280:VAL:CG2	1:B:290:LEU:HB2	2.40	0.50
1:C:121:VAL:HA	1:D:252:ARG:NH2	2.26	0.50
1:C:181:THR:O	1:C:182:ILE:HG13	2.10	0.50
1:D:299:MET:HB3	1:D:345:ALA:CB	2.41	0.50
1:B:256:VAL:HG22	1:B:257:PRO:CD	2.41	0.50
1:C:219:ARG:HD2	1:C:220:ARG:HH12	1.76	0.50
1:C:230:VAL:CG1	1:C:236:PHE:HB3	2.33	0.50
1:C:263:CYS:HB3	1:C:307:ARG:HB3	1.93	0.50
1:C:264:ARG:HB2	1:C:267:GLU:HG3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:299:MET:HG3	1:C:349:ARG:HH11	1.75	0.50
1:B:109:LEU:HD22	1:B:115:PHE:CD1	2.45	0.50
1:B:219:ARG:HD2	1:B:220:ARG:HH12	1.74	0.50
1:C:257:PRO:O	1:C:313:ALA:HB3	2.12	0.50
1:D:171:VAL:CG1	1:D:177:GLY:HA2	2.42	0.50
1:A:225:ARG:HA	1:A:229:LEU:HG	1.93	0.50
1:C:196:MET:SD	1:D:170:VAL:HG13	2.51	0.50
1:D:272:MET:O	1:D:321:SER:HA	2.10	0.50
1:A:170:VAL:HA	1:D:196:MET:CE	2.41	0.50
1:B:179:GLY:HA3	1:C:178:TYR:O	2.12	0.50
1:D:280:VAL:CG2	1:D:290:LEU:HB2	2.41	0.50
1:D:10:TYR:CA	1:D:257:PRO:HG3	2.41	0.50
1:D:109:LEU:HD22	1:D:115:PHE:CE1	2.47	0.50
1:A:120:ARG:HG2	1:B:271:ARG:CD	2.41	0.50
1:B:113:THR:HG21	1:B:220:ARG:C	2.36	0.50
1:B:138:VAL:HG22	1:C:105:LEU:HB3	1.94	0.50
1:C:221:GLY:HA3	1:C:225:ARG:NH2	2.26	0.50
1:A:201:GLY:O	1:B:210:LEU:HG	2.12	0.50
1:B:119:GLY:O	1:B:123:ALA:HB2	2.11	0.50
1:D:118:LEU:HA	1:D:121:VAL:CG2	2.42	0.50
1:D:264:ARG:HB2	1:D:267:GLU:HG3	1.92	0.50
1:A:253:ALA:O	1:A:254:ARG:HG3	2.12	0.50
1:A:273:PHE:HB2	1:A:296:PHE:CZ	2.47	0.50
1:B:11:ALA:HB1	1:B:256:VAL:HA	1.93	0.50
1:B:257:PRO:O	1:B:313:ALA:HB3	2.12	0.50
1:C:173:LEU:HD11	1:C:202:ILE:HG13	1.94	0.50
1:D:322:LEU:HD21	1:D:327:PHE:HA	1.94	0.50
1:A:270:ASP:C	1:A:301:LEU:HD21	2.37	0.49
1:B:263:CYS:HB3	1:B:307:ARG:CG	2.41	0.49
1:C:298:GLU:H	1:C:298:GLU:CD	2.21	0.49
1:D:226:ASN:HB2	1:D:248:VAL:CG2	2.29	0.49
1:A:57:ALA:O	1:A:61:LEU:HB2	2.12	0.49
1:A:223:PHE:HA	1:A:227:TRP:HB2	1.93	0.49
1:A:253:ALA:O	1:A:254:ARG:CB	2.59	0.49
1:A:328:GLN:HE21	1:A:328:GLN:HA	1.77	0.49
1:B:80:LEU:O	1:B:84:VAL:HG23	2.11	0.49
1:D:328:GLN:HE21	1:D:328:GLN:HA	1.77	0.49
1:A:84:VAL:HB	1:A:85:PRO:HD3	1.94	0.49
1:A:262:ILE:HB	1:A:311:VAL:O	2.12	0.49
1:B:11:ALA:HA	1:B:257:PRO:HB3	1.94	0.49
1:B:299:MET:HB3	1:B:345:ALA:CB	2.40	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:200:ILE:HG22	1:D:209:ILE:HB	1.94	0.49
1:C:229:LEU:HD13	1:C:236:PHE:CE2	2.48	0.49
1:A:105:LEU:CD1	1:D:138:VAL:HG22	2.39	0.49
1:A:135:LEU:O	1:A:139:VAL:HG13	2.11	0.49
1:B:138:VAL:CG2	1:C:105:LEU:HB3	2.42	0.49
1:C:11:ALA:HA	1:C:257:PRO:N	2.28	0.49
1:D:273:PHE:HB2	1:D:296:PHE:CZ	2.47	0.49
1:B:9:ILE:HB	1:B:260:ALA:CB	2.42	0.49
1:B:282:VAL:HG12	1:B:284:THR:OG1	2.12	0.49
1:C:80:LEU:O	1:C:84:VAL:HG23	2.11	0.49
1:A:158:LYS:O	1:A:164:GLN:HB3	2.12	0.49
1:C:70:ASP:OD2	1:D:305:GLU:HB2	2.13	0.49
1:D:49:TRP:CZ2	1:D:86:LEU:HD13	2.47	0.49
1:B:135:LEU:HD13	1:C:109:LEU:HD21	1.95	0.49
1:B:251:LEU:C	1:B:252:ARG:HG3	2.38	0.49
1:A:296:PHE:HA	1:A:298:GLU:OE1	2.13	0.49
1:C:263:CYS:HB3	1:C:307:ARG:CG	2.43	0.49
1:B:198:SER:O	1:B:202:ILE:HG13	2.12	0.49
1:C:268:PRO:HA	1:C:306:PRO:HA	1.94	0.49
1:D:11:ALA:HB1	1:D:256:VAL:HA	1.93	0.49
1:A:73:PRO:HD3	1:B:267:GLU:HG2	1.95	0.49
1:A:105:LEU:C	1:A:108:PRO:HD2	2.37	0.49
1:A:124:ASN:HD22	1:B:252:ARG:NE	2.11	0.49
1:B:196:MET:SD	1:C:170:VAL:HG13	2.53	0.49
1:D:17:LEU:O	1:D:20:PRO:HD2	2.13	0.49
1:D:284:THR:HG23	1:D:309:ALA:HB2	1.95	0.49
1:A:182:ILE:HG23	1:A:183:PRO:HD2	1.95	0.48
1:B:299:MET:CG	1:B:345:ALA:HB1	2.43	0.48
1:D:229:LEU:HB3	1:D:236:PHE:HE2	1.78	0.48
1:D:256:VAL:HG22	1:D:257:PRO:CD	2.42	0.48
1:D:295:PHE:CE2	1:D:341:PHE:HA	2.48	0.48
1:A:10:TYR:HB3	1:A:13:LEU:CD2	2.43	0.48
1:A:272:MET:O	1:A:321:SER:HA	2.12	0.48
1:B:162:ILE:N	1:B:163:PRO:HD2	2.28	0.48
1:B:204:GLY:HA3	1:C:210:LEU:HB2	1.95	0.48
1:C:49:TRP:CZ2	1:C:86:LEU:HD13	2.46	0.48
1:C:162:ILE:N	1:C:163:PRO:HD2	2.29	0.48
1:C:171:VAL:CG1	1:C:177:GLY:HA2	2.42	0.48
1:D:204:GLY:O	1:D:207:ALA:HB3	2.12	0.48
1:A:135:LEU:HD13	1:B:109:LEU:HD21	1.95	0.48
1:B:45:LEU:HD22	1:B:104:TRP:CZ3	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:124:ASN:CG	1:C:252:ARG:HB3	2.37	0.48
1:B:204:GLY:O	1:B:207:ALA:HB3	2.14	0.48
1:B:262:ILE:N	1:B:311:VAL:O	2.46	0.48
1:B:290:LEU:HD22	1:B:348:ARG:NH2	2.28	0.48
1:C:229:LEU:HD12	1:C:230:VAL:CG2	2.43	0.48
1:D:174:SER:HA	1:D:206:TRP:CZ2	2.48	0.48
1:D:235:LEU:HD21	1:D:330:LEU:CD2	2.43	0.48
1:D:299:MET:CB	1:D:345:ALA:HB1	2.43	0.48
1:B:171:VAL:HG12	1:B:177:GLY:HA2	1.94	0.48
1:C:109:LEU:HD22	1:C:115:PHE:CE1	2.49	0.48
1:C:124:ASN:HB2	1:D:252:ARG:CZ	2.44	0.48
1:C:299:MET:HB3	1:C:345:ALA:CB	2.43	0.48
1:B:30:ILE:HG21	1:B:33:MET:HE3	1.94	0.48
1:B:150:ILE:HD13	1:B:188:GLY:HA2	1.95	0.48
1:C:70:ASP:OD1	1:D:306:PRO:HG2	2.14	0.48
1:C:119:GLY:O	1:C:123:ALA:HB2	2.14	0.48
1:A:124:ASN:HB3	1:B:252:ARG:CB	2.43	0.48
1:B:30:ILE:CG2	1:B:33:MET:HE3	2.43	0.48
1:B:109:LEU:HD22	1:B:115:PHE:CE1	2.49	0.48
1:B:322:LEU:HD21	1:B:327:PHE:HA	1.95	0.48
1:C:205:LEU:HD12	1:D:210:LEU:HD11	1.94	0.48
1:C:225:ARG:O	1:C:229:LEU:HG	2.14	0.48
1:C:344:THR:O	1:C:347:GLU:HB2	2.13	0.48
1:A:112:SER:HA	1:D:128:ASN:ND2	2.29	0.48
1:A:117:VAL:HG12	1:A:216:GLN:NE2	2.22	0.48
1:A:210:LEU:HB2	1:D:204:GLY:HA3	1.96	0.48
1:A:284:THR:HG23	1:A:309:ALA:HB2	1.96	0.48
1:B:72:THR:HB	1:C:266:GLY:O	2.12	0.48
1:B:328:GLN:HE21	1:B:328:GLN:HA	1.78	0.48
1:C:81:ALA:CB	1:C:107:LYS:HE2	2.42	0.48
1:C:124:ASN:HD22	1:D:252:ARG:CZ	2.26	0.48
1:C:210:LEU:N	1:C:210:LEU:HD12	2.29	0.48
1:D:100:TYR:O	1:D:103:VAL:HG23	2.12	0.48
1:D:272:MET:HE2	1:D:295:PHE:HB2	1.96	0.48
1:A:203:PHE:HA	1:A:206:TRP:HD1	1.78	0.48
1:C:73:PRO:HD3	1:D:267:GLU:HG2	1.96	0.48
1:D:80:LEU:O	1:D:84:VAL:HG23	2.14	0.48
1:D:299:MET:CG	1:D:349:ARG:HH11	2.26	0.48
1:C:72:THR:HB	1:D:266:GLY:C	2.39	0.48
1:A:128:ASN:ND2	1:B:112:SER:HA	2.29	0.48
1:A:295:PHE:O	1:A:348:ARG:NH1	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:264:ARG:HB2	1:B:267:GLU:HG3	1.95	0.48
1:B:298:GLU:CD	1:B:298:GLU:H	2.22	0.48
1:C:17:LEU:O	1:C:20:PRO:HD2	2.14	0.48
1:C:171:VAL:HG12	1:C:177:GLY:HA2	1.95	0.48
1:C:272:MET:HE2	1:C:295:PHE:HB2	1.96	0.48
1:D:239:LEU:HD22	1:D:243:VAL:HG11	1.95	0.48
1:D:295:PHE:O	1:D:348:ARG:NH1	2.46	0.48
1:A:105:LEU:HD13	1:D:138:VAL:HA	1.96	0.47
1:C:45:LEU:HD22	1:C:104:TRP:CZ3	2.49	0.47
1:C:224:VAL:O	1:C:228:GLN:OE1	2.32	0.47
1:D:232:ALA:HB1	1:D:276:VAL:HG13	1.96	0.47
1:A:124:ASN:HB2	1:B:252:ARG:NH1	2.30	0.47
1:A:136:PHE:CZ	1:A:173:LEU:HD21	2.49	0.47
1:A:263:CYS:HB3	1:A:307:ARG:CG	2.44	0.47
1:A:290:LEU:HD22	1:A:348:ARG:NH2	2.29	0.47
1:B:202:ILE:HG22	1:B:206:TRP:HE1	1.79	0.47
1:C:280:VAL:CG2	1:C:290:LEU:HB2	2.42	0.47
1:D:30:ILE:CG2	1:D:33:MET:HE3	2.43	0.47
1:A:173:LEU:HD12	1:A:202:ILE:HG21	1.95	0.47
1:A:299:MET:CG	1:A:349:ARG:HH11	2.27	0.47
1:B:296:PHE:HB3	1:B:348:ARG:HH11	1.76	0.47
1:C:114:PHE:HB2	1:C:217:GLU:CD	2.39	0.47
1:D:171:VAL:HG12	1:D:177:GLY:HA2	1.96	0.47
1:A:45:LEU:HD22	1:A:104:TRP:CZ3	2.49	0.47
1:A:171:VAL:HG12	1:A:177:GLY:HA2	1.97	0.47
1:A:261:VAL:HG13	1:A:310:THR:HG23	1.96	0.47
1:A:279:SER:N	1:A:317:VAL:HG22	2.29	0.47
1:C:298:GLU:HG2	1:C:345:ALA:HB2	1.97	0.47
1:C:299:MET:CG	1:C:349:ARG:HH11	2.27	0.47
1:D:216:GLN:HG3	1:D:220:ARG:CZ	2.45	0.47
1:D:336:GLU:O	1:D:340:ILE:HG13	2.14	0.47
1:A:10:TYR:O	1:A:13:LEU:HG	2.14	0.47
1:A:277:GLU:O	1:A:317:VAL:HA	2.13	0.47
1:C:216:GLN:O	1:C:220:ARG:HG2	2.14	0.47
1:D:257:PRO:O	1:D:313:ALA:HB3	2.15	0.47
1:A:30:ILE:HB	1:A:33:MET:HG3	1.97	0.47
1:A:71:ARG:HG3	1:A:75:ILE:HD11	1.97	0.47
1:A:205:LEU:HD12	1:B:210:LEU:HD11	1.96	0.47
1:B:264:ARG:HD2	1:B:267:GLU:CD	2.40	0.47
1:C:252:ARG:HH21	1:C:271:ARG:NH1	2.12	0.47
1:C:328:GLN:HE21	1:C:328:GLN:HA	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:216:GLN:HE21	1:D:220:ARG:NH2	2.12	0.47
1:D:282:VAL:HG13	1:D:309:ALA:HB3	1.95	0.47
1:A:11:ALA:CB	1:A:255:THR:C	2.86	0.47
1:A:94:SER:CB	1:A:95:PRO:HD2	2.45	0.47
1:A:150:ILE:HG22	1:A:151:GLU:HG3	1.96	0.47
1:A:235:LEU:HD21	1:A:330:LEU:CD2	2.44	0.47
1:A:296:PHE:HB3	1:A:348:ARG:HH11	1.78	0.47
1:B:10:TYR:HB3	1:B:13:LEU:CD2	2.45	0.47
1:B:10:TYR:N	1:B:257:PRO:HG3	2.30	0.47
1:B:73:PRO:HD3	1:C:267:GLU:HG2	1.97	0.47
1:B:145:LEU:HD12	1:C:99:LEU:HD22	1.97	0.47
1:B:272:MET:HE2	1:B:295:PHE:HB2	1.96	0.47
1:B:295:PHE:CE2	1:B:341:PHE:HA	2.49	0.47
1:B:336:GLU:O	1:B:340:ILE:HG13	2.15	0.47
1:C:203:PHE:HZ	1:D:203:PHE:CZ	2.33	0.47
1:D:216:GLN:O	1:D:220:ARG:HG2	2.15	0.47
1:D:256:VAL:CG1	1:D:317:VAL:HB	2.45	0.47
1:D:272:MET:CE	1:D:295:PHE:HB2	2.44	0.47
1:D:296:PHE:HB3	1:D:348:ARG:HH11	1.80	0.47
1:A:162:ILE:N	1:A:163:PRO:HD2	2.29	0.47
1:A:206:TRP:CA	1:D:200:ILE:HG23	2.42	0.47
1:B:225:ARG:O	1:B:229:LEU:CB	2.62	0.47
1:B:295:PHE:O	1:B:348:ARG:NH1	2.48	0.47
1:C:58:ALA:O	1:C:62:LYS:CB	2.61	0.47
1:C:229:LEU:HD11	1:C:230:VAL:CG2	2.43	0.47
1:C:229:LEU:HB3	1:C:320:LEU:HD11	1.81	0.47
1:D:114:PHE:HB2	1:D:217:GLU:CD	2.39	0.47
1:C:255:THR:HA	1:C:317:VAL:O	2.15	0.47
1:D:262:ILE:HB	1:D:311:VAL:O	2.15	0.47
1:A:171:VAL:CG1	1:A:177:GLY:HA2	2.45	0.47
1:B:9:ILE:HG22	1:B:10:TYR:N	2.29	0.47
1:B:10:TYR:CA	1:B:257:PRO:HG3	2.45	0.47
1:B:264:ARG:CB	1:B:267:GLU:HB2	2.44	0.47
1:B:272:MET:CE	1:B:295:PHE:HB2	2.45	0.47
1:C:229:LEU:CA	1:C:320:LEU:CD1	2.76	0.47
1:A:169:ALA:O	1:A:173:LEU:HB2	2.15	0.46
1:A:230:VAL:CG1	1:A:236:PHE:CB	2.92	0.46
1:C:109:LEU:HD22	1:C:115:PHE:CD1	2.49	0.46
1:D:158:LYS:O	1:D:164:GLN:HB3	2.15	0.46
1:A:101:CYS:HB3	1:A:104:TRP:CZ3	2.50	0.46
1:A:226:ASN:O	1:A:230:VAL:CG2	2.63	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:138:VAL:HG22	1:C:105:LEU:CD1	2.43	0.46
1:B:155:GLN:HB3	1:B:158:LYS:HB2	1.96	0.46
1:A:252:ARG:CB	1:D:124:ASN:HB3	2.44	0.46
1:B:125:GLU:HG3	1:B:129:LEU:HD12	1.97	0.46
1:C:135:LEU:HD13	1:D:109:LEU:HD21	1.97	0.46
1:C:163:PRO:HA	1:C:166:MET:HB3	1.97	0.46
1:D:10:TYR:HB3	1:D:13:LEU:CD2	2.45	0.46
1:D:290:LEU:HD22	1:D:348:ARG:NH2	2.30	0.46
1:B:125:GLU:HB3	1:B:129:LEU:CD1	2.46	0.46
1:C:277:GLU:O	1:C:317:VAL:HG13	2.16	0.46
1:C:290:LEU:HD22	1:C:348:ARG:NH2	2.31	0.46
1:D:75:ILE:O	1:D:79:VAL:HG23	2.15	0.46
1:D:251:LEU:C	1:D:252:ARG:HG3	2.41	0.46
1:D:263:CYS:HB2	1:D:307:ARG:HB3	1.98	0.46
1:D:298:GLU:CD	1:D:298:GLU:H	2.24	0.46
1:D:224:VAL:HG13	1:D:225:ARG:N	2.31	0.46
1:D:269:GLY:HA3	1:D:307:ARG:CD	2.46	0.46
1:D:271:ARG:HD3	1:D:321:SER:HB2	1.97	0.46
1:A:170:VAL:O	1:D:196:MET:HE3	2.16	0.46
1:B:10:TYR:H	1:B:257:PRO:HG3	1.81	0.46
1:B:158:LYS:O	1:B:164:GLN:HB3	2.15	0.46
1:B:203:PHE:HZ	1:C:203:PHE:CZ	2.33	0.46
1:B:299:MET:CB	1:B:345:ALA:HB1	2.44	0.46
1:C:177:GLY:HA3	1:D:176:THR:HG22	1.97	0.46
1:C:227:TRP:N	1:C:227:TRP:CE3	2.84	0.46
1:A:19:ALA:O	1:A:22:LEU:HB2	2.16	0.46
1:A:178:TYR:O	1:D:179:GLY:HA3	2.16	0.46
1:B:263:CYS:HB3	1:B:307:ARG:CB	2.46	0.46
1:C:124:ASN:HB3	1:D:252:ARG:CB	2.45	0.46
1:C:174:SER:HA	1:C:206:TRP:CZ2	2.51	0.46
1:D:256:VAL:HG22	1:D:260:ALA:HB3	1.97	0.46
1:D:262:ILE:H	1:D:312:SER:HA	1.81	0.46
1:B:138:VAL:HA	1:C:105:LEU:HD13	1.97	0.46
1:C:227:TRP:CE3	1:C:227:TRP:CA	2.99	0.46
1:D:277:GLU:O	1:D:317:VAL:HA	2.16	0.46
1:C:9:ILE:CD1	1:C:260:ALA:HA	2.44	0.46
1:C:75:ILE:O	1:C:79:VAL:HG23	2.16	0.46
1:C:229:LEU:CD2	1:C:251:LEU:CG	2.90	0.46
1:C:272:MET:O	1:C:321:SER:HA	2.15	0.46
1:C:295:PHE:O	1:C:348:ARG:NH1	2.46	0.46
1:A:206:TRP:CE3	1:D:200:ILE:CG1	2.99	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:299:MET:CG	1:B:349:ARG:HH11	2.29	0.46
1:C:66:GLY:O	1:C:67:VAL:HG13	2.15	0.46
1:C:222:ASP:C	1:C:226:ASN:ND2	2.73	0.46
1:D:121:VAL:HG22	1:D:216:GLN:OE1	2.16	0.46
1:A:81:ALA:HB1	1:A:107:LYS:HE2	1.97	0.45
1:A:151:GLU:OE2	1:A:184:GLN:N	2.50	0.45
1:B:225:ARG:O	1:B:229:LEU:HB2	2.16	0.45
1:A:9:ILE:CG1	1:A:260:ALA:HA	2.46	0.45
1:A:175:THR:HG22	1:D:175:THR:HB	1.99	0.45
1:A:286:ASN:O	1:A:288:VAL:HG23	2.16	0.45
1:C:229:LEU:HD21	1:C:251:LEU:HD12	1.98	0.45
1:D:11:ALA:HA	1:D:257:PRO:HB3	1.99	0.45
1:D:252:ARG:HH21	1:D:271:ARG:NH1	2.14	0.45
1:A:272:MET:CE	1:A:295:PHE:HB2	2.46	0.45
1:B:182:ILE:HG23	1:B:183:PRO:HD2	1.98	0.45
1:C:9:ILE:HB	1:C:260:ALA:CB	2.46	0.45
1:C:201:GLY:O	1:D:210:LEU:HG	2.16	0.45
1:A:70:ASP:OD2	1:B:305:GLU:HB2	2.17	0.45
1:A:135:LEU:O	1:A:138:VAL:HB	2.16	0.45
1:C:256:VAL:HG22	1:C:260:ALA:HB3	1.98	0.45
1:D:11:ALA:CB	1:D:12:PRO:CD	2.94	0.45
1:D:162:ILE:N	1:D:163:PRO:HD2	2.30	0.45
1:D:255:THR:HA	1:D:317:VAL:O	2.16	0.45
1:D:282:VAL:HG12	1:D:284:THR:OG1	2.16	0.45
1:A:263:CYS:HB3	1:A:307:ARG:HB3	1.98	0.45
1:B:17:LEU:O	1:B:20:PRO:HD2	2.16	0.45
1:B:256:VAL:HG22	1:B:260:ALA:HB3	1.97	0.45
1:C:299:MET:CB	1:C:345:ALA:HB1	2.45	0.45
1:A:299:MET:CB	1:A:345:ALA:HB1	2.47	0.45
1:B:62:LYS:HG2	1:B:64:ARG:H	1.81	0.45
1:C:9:ILE:HB	1:C:260:ALA:HB2	1.98	0.45
1:C:94:SER:OG	1:C:95:PRO:HD2	2.16	0.45
1:D:117:VAL:CG1	1:D:220:ARG:HG3	2.40	0.45
1:A:75:ILE:O	1:A:79:VAL:HG23	2.16	0.45
1:A:103:VAL:CG1	1:A:106:LEU:HD12	2.47	0.45
1:C:308:SER:CB	1:C:349:ARG:HG3	2.46	0.45
1:D:136:PHE:CZ	1:D:173:LEU:HD21	2.50	0.45
1:D:169:ALA:O	1:D:173:LEU:HB2	2.16	0.45
1:A:7:LEU:CG	1:A:262:ILE:O	2.60	0.45
1:A:121:VAL:CA	1:B:252:ARG:HH22	2.25	0.45
1:A:299:MET:HB3	1:A:345:ALA:CB	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:342:ARG:C	1:A:342:ARG:HD2	2.42	0.45
1:B:209:ILE:N	1:B:209:ILE:HD12	2.32	0.45
1:C:10:TYR:C	1:C:257:PRO:HB3	2.42	0.45
1:C:305:GLU:HB2	1:C:306:PRO:HD2	1.99	0.45
1:C:336:GLU:O	1:C:340:ILE:HG13	2.16	0.45
1:C:196:MET:HE1	1:D:173:LEU:HB3	1.99	0.45
1:C:282:VAL:HG12	1:C:284:THR:OG1	2.16	0.45
1:A:179:GLY:HA2	1:B:178:TYR:HB3	1.99	0.45
1:A:220:ARG:O	1:A:223:PHE:CD2	2.70	0.45
1:B:70:ASP:OD1	1:C:306:PRO:HG2	2.16	0.45
1:C:121:VAL:HG21	1:C:216:GLN:OE1	2.16	0.45
1:D:9:ILE:HG22	1:D:10:TYR:N	2.32	0.45
1:D:275:VAL:HG22	1:D:319:LEU:CD2	2.47	0.45
1:A:138:VAL:HG21	1:B:105:LEU:HB3	1.99	0.44
1:A:206:TRP:CE3	1:D:200:ILE:HG12	2.53	0.44
1:A:209:ILE:HB	1:D:200:ILE:HG22	1.97	0.44
1:A:254:ARG:NH2	1:D:123:ALA:HA	2.32	0.44
1:A:7:LEU:HD13	1:A:262:ILE:C	2.22	0.44
1:A:12:PRO:O	1:A:16:VAL:HG23	2.17	0.44
1:A:226:ASN:O	1:A:230:VAL:HG23	2.17	0.44
1:B:58:ALA:O	1:B:62:LYS:CB	2.65	0.44
1:A:155:GLN:HB3	1:A:158:LYS:HB2	1.98	0.44
1:A:200:ILE:HG23	1:B:206:TRP:CA	2.45	0.44
1:C:10:TYR:CA	1:C:257:PRO:HG3	2.47	0.44
1:C:145:LEU:HD12	1:D:99:LEU:HD22	2.00	0.44
1:C:271:ARG:HH12	1:C:323:HIS:CE1	2.35	0.44
1:D:209:ILE:N	1:D:209:ILE:HD12	2.32	0.44
1:A:286:ASN:O	1:A:287:PRO:C	2.60	0.44
1:B:264:ARG:O	1:B:267:GLU:HB2	2.17	0.44
1:C:30:ILE:O	1:C:33:MET:HB2	2.17	0.44
1:C:120:ARG:HD2	1:D:271:ARG:HD2	2.00	0.44
1:C:155:GLN:HB3	1:C:158:LYS:HB2	1.99	0.44
1:D:119:GLY:O	1:D:123:ALA:CB	2.66	0.44
1:D:224:VAL:CG1	1:D:225:ARG:N	2.81	0.44
1:D:233:VAL:HG12	1:D:235:LEU:CB	2.41	0.44
1:A:9:ILE:HG22	1:A:10:TYR:CD2	2.50	0.44
1:B:19:ALA:HB3	1:B:20:PRO:HD3	2.00	0.44
1:B:101:CYS:HB3	1:B:104:TRP:CZ3	2.53	0.44
1:B:268:PRO:HA	1:B:306:PRO:HA	1.99	0.44
1:C:263:CYS:O	1:C:310:THR:HA	2.18	0.44
1:D:19:ALA:O	1:D:22:LEU:HB2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:22:LEU:HD13	1:D:108:PRO:HG3	2.00	0.44
1:B:119:GLY:O	1:B:123:ALA:CB	2.65	0.44
1:B:161:SER:HB2	1:B:163:PRO:HD2	2.00	0.44
1:D:296:PHE:HA	1:D:298:GLU:OE1	2.17	0.44
1:B:120:ARG:HG2	1:C:271:ARG:CZ	2.47	0.44
1:B:301:LEU:HD12	1:B:327:PHE:CD1	2.52	0.44
1:C:9:ILE:HD12	1:C:261:VAL:N	2.30	0.44
1:C:182:ILE:HD11	1:D:178:TYR:CG	2.52	0.44
1:C:228:GLN:N	1:C:228:GLN:CD	2.75	0.44
1:C:296:PHE:HB3	1:C:348:ARG:HH11	1.79	0.44
1:B:296:PHE:HA	1:B:298:GLU:OE1	2.18	0.44
1:C:263:CYS:HB3	1:C:307:ARG:CB	2.48	0.44
1:A:9:ILE:CB	1:A:260:ALA:HA	2.48	0.44
1:A:54:LEU:C	1:A:54:LEU:HD13	2.43	0.44
1:A:176:THR:HA	1:D:175:THR:C	2.39	0.44
1:A:205:LEU:N	1:B:210:LEU:HD12	2.33	0.44
1:A:230:VAL:HG13	1:A:236:PHE:CD2	2.51	0.44
1:A:271:ARG:HG3	1:A:307:ARG:HH22	1.83	0.44
1:B:103:VAL:CG1	1:B:106:LEU:HD12	2.47	0.44
1:B:275:VAL:HG22	1:B:319:LEU:CD2	2.48	0.44
1:C:173:LEU:CG	1:C:202:ILE:HG21	2.48	0.44
1:A:336:GLU:O	1:A:340:ILE:HG13	2.18	0.43
1:B:255:THR:HA	1:B:317:VAL:O	2.18	0.43
1:C:229:LEU:HD12	1:C:230:VAL:HG22	1.98	0.43
1:D:308:SER:HB2	1:D:349:ARG:NH1	2.33	0.43
1:A:73:PRO:CD	1:B:267:GLU:HA	2.47	0.43
1:C:54:LEU:HD13	1:C:54:LEU:C	2.43	0.43
1:D:130:ILE:O	1:D:134:THR:HG23	2.19	0.43
1:D:300:ALA:O	1:D:304:GLY:N	2.50	0.43
1:A:151:GLU:OE1	1:A:183:PRO:HA	2.18	0.43
1:A:174:SER:O	1:A:175:THR:HB	2.17	0.43
1:A:230:VAL:HG13	1:A:236:PHE:CB	2.47	0.43
1:B:114:PHE:CE1	1:B:118:LEU:HD13	2.53	0.43
1:B:220:ARG:NH2	1:C:323:HIS:CE1	2.86	0.43
1:C:132:VAL:HG12	1:C:205:LEU:HD23	2.00	0.43
1:C:296:PHE:HA	1:C:298:GLU:OE1	2.18	0.43
1:D:9:ILE:HB	1:D:260:ALA:CA	2.49	0.43
1:D:298:GLU:HG2	1:D:345:ALA:HB2	2.00	0.43
1:A:120:ARG:HG2	1:B:271:ARG:HD2	1.99	0.43
1:A:233:VAL:HG12	1:A:235:LEU:CB	2.37	0.43
1:C:138:VAL:CG1	1:D:105:LEU:HB3	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:45:LEU:HD22	1:D:104:TRP:CZ3	2.52	0.43
1:A:67:VAL:HG23	1:A:68:VAL:H	1.84	0.43
1:A:121:VAL:HB	1:A:216:GLN:CD	2.44	0.43
1:B:298:GLU:HG2	1:B:345:ALA:HB2	2.01	0.43
1:C:11:ALA:CB	1:C:12:PRO:CD	2.95	0.43
1:C:72:THR:CB	1:D:266:GLY:C	2.92	0.43
1:D:229:LEU:O	1:D:233:VAL:N	2.37	0.43
1:A:105:LEU:HD22	1:D:138:VAL:HG22	1.99	0.43
1:A:308:SER:HB2	1:A:349:ARG:NH1	2.33	0.43
1:C:221:GLY:O	1:C:224:VAL:HG12	2.19	0.43
1:D:146:ALA:HB1	1:D:191:LEU:HD21	1.99	0.43
1:D:229:LEU:HD11	1:D:320:LEU:HD22	1.21	0.43
1:A:72:THR:CB	1:B:266:GLY:O	2.66	0.43
1:A:92:ASP:OD1	1:A:94:SER:O	2.37	0.43
1:C:11:ALA:N	1:C:257:PRO:CG	2.81	0.43
1:C:215:TYR:O	1:C:218:VAL:HG22	2.18	0.43
1:B:19:ALA:O	1:B:22:LEU:HB2	2.18	0.43
1:A:80:LEU:O	1:A:84:VAL:HG23	2.18	0.43
1:A:334:SER:HB3	1:A:337:ILE:HD12	2.00	0.43
1:C:11:ALA:HA	1:C:257:PRO:CD	2.49	0.43
1:D:223:PHE:CG	1:D:224:VAL:N	2.86	0.43
1:D:54:LEU:C	1:D:54:LEU:HD13	2.44	0.43
1:B:72:THR:HB	1:B:73:PRO:CD	2.49	0.42
1:B:272:MET:O	1:B:321:SER:HA	2.18	0.42
1:B:305:GLU:HB2	1:B:306:PRO:HD2	2.00	0.42
1:C:9:ILE:HG22	1:C:10:TYR:N	2.34	0.42
1:C:30:ILE:HB	1:C:33:MET:HE3	2.01	0.42
1:C:229:LEU:HD12	1:C:230:VAL:CA	2.47	0.42
1:C:334:SER:HB3	1:C:337:ILE:CG1	2.49	0.42
1:D:295:PHE:CZ	1:D:340:ILE:HG22	2.54	0.42
1:A:49:TRP:HZ2	1:A:86:LEU:CD1	2.30	0.42
1:A:262:ILE:HD12	1:A:311:VAL:HG12	2.00	0.42
1:B:196:MET:O	1:C:206:TRP:HZ3	2.00	0.42
1:C:101:CYS:HB3	1:C:104:TRP:CZ3	2.54	0.42
1:C:223:PHE:CG	1:C:224:VAL:N	2.86	0.42
1:D:256:VAL:CG2	1:D:260:ALA:HB3	2.49	0.42
1:B:11:ALA:N	1:B:257:PRO:CG	2.82	0.42
1:B:121:VAL:CG1	1:B:216:GLN:NE2	2.82	0.42
1:C:229:LEU:CD2	1:C:251:LEU:HB2	2.34	0.42
1:A:252:ARG:NH2	1:D:120:ARG:HB3	2.34	0.42
1:B:49:TRP:HZ2	1:B:86:LEU:CD1	2.30	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:221:GLY:HA2	1:C:224:VAL:HG12	2.00	0.42
1:C:280:VAL:CG2	1:C:290:LEU:HD12	2.49	0.42
1:D:264:ARG:O	1:D:267:GLU:HB2	2.20	0.42
1:A:105:LEU:CG	1:D:138:VAL:HG22	2.49	0.42
1:A:107:LYS:N	1:A:108:PRO:HD2	2.34	0.42
1:A:124:ASN:HB2	1:B:252:ARG:CZ	2.50	0.42
1:A:301:LEU:HD12	1:A:327:PHE:CD1	2.54	0.42
1:B:114:PHE:O	1:B:117:VAL:HB	2.20	0.42
1:B:114:PHE:O	1:B:118:LEU:N	2.49	0.42
1:C:49:TRP:HZ2	1:C:86:LEU:CD1	2.31	0.42
1:C:73:PRO:HG3	1:D:267:GLU:HG2	2.02	0.42
1:C:179:GLY:HA2	1:D:178:TYR:HB3	2.01	0.42
1:C:229:LEU:HD13	1:C:251:LEU:HD11	1.88	0.42
1:A:323:HIS:CE1	1:D:220:ARG:NH2	2.88	0.42
1:B:8:ARG:HG3	1:B:254:ARG:HH12	1.83	0.42
1:B:132:VAL:O	1:B:135:LEU:HB3	2.20	0.42
1:B:189:ARG:HA	1:C:167:TRP:CZ3	2.54	0.42
1:B:210:LEU:HD13	1:B:214:PHE:CE2	2.54	0.42
1:B:223:PHE:HA	1:B:227:TRP:CD1	2.54	0.42
1:B:267:GLU:O	1:B:307:ARG:HG2	2.20	0.42
1:C:62:LYS:HG2	1:C:64:ARG:H	1.84	0.42
1:D:11:ALA:N	1:D:257:PRO:CG	2.80	0.42
1:D:344:THR:O	1:D:347:GLU:HB2	2.20	0.42
1:A:109:LEU:HD21	1:D:135:LEU:HD13	2.02	0.42
1:B:66:GLY:C	1:B:67:VAL:HG22	2.44	0.42
1:B:265:ILE:HB	1:B:310:THR:OG1	2.19	0.42
1:C:73:PRO:CG	1:D:267:GLU:HG2	2.50	0.42
1:C:272:MET:CE	1:C:295:PHE:HB2	2.49	0.42
1:A:70:ASP:CG	1:B:306:PRO:HD2	2.45	0.42
1:A:138:VAL:HG22	1:B:105:LEU:CG	2.50	0.42
1:A:163:PRO:HA	1:A:166:MET:HB3	2.02	0.42
1:A:343:LYS:O	1:A:346:LEU:HB2	2.20	0.42
1:B:295:PHE:CE2	1:B:341:PHE:CD1	3.07	0.42
1:C:262:ILE:N	1:C:311:VAL:O	2.52	0.42
1:D:7:LEU:CD1	1:D:263:CYS:HA	2.50	0.42
1:A:113:THR:HG21	1:A:221:GLY:CA	2.50	0.42
1:A:239:LEU:HD13	1:A:243:VAL:HG12	2.01	0.42
1:B:125:GLU:HB3	1:B:129:LEU:HD13	2.00	0.42
1:C:121:VAL:HG22	1:D:252:ARG:CZ	2.49	0.42
1:C:202:ILE:HG22	1:C:206:TRP:HE1	1.84	0.42
1:B:230:VAL:CG2	1:B:251:LEU:CD1	2.98	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:262:ILE:HB	1:B:311:VAL:O	2.20	0.42
1:D:262:ILE:N	1:D:311:VAL:O	2.53	0.42
1:A:271:ARG:CD	1:D:120:ARG:HG2	2.50	0.41
1:A:344:THR:O	1:A:347:GLU:HB2	2.20	0.41
1:B:220:ARG:O	1:B:223:PHE:CD2	2.72	0.41
1:C:151:GLU:OE2	1:C:183:PRO:CA	2.68	0.41
1:C:229:LEU:CD1	1:C:236:PHE:CE2	3.03	0.41
1:A:105:LEU:CB	1:D:138:VAL:HG22	2.49	0.41
1:C:72:THR:CB	1:D:266:GLY:O	2.65	0.41
1:C:204:GLY:O	1:C:207:ALA:HB3	2.21	0.41
1:A:120:ARG:HG2	1:B:271:ARG:CZ	2.48	0.41
1:A:275:VAL:HG22	1:A:319:LEU:CD2	2.51	0.41
1:C:11:ALA:HB2	1:C:257:PRO:HD3	2.01	0.41
1:C:229:LEU:CD1	1:C:230:VAL:N	2.69	0.41
1:D:163:PRO:HA	1:D:166:MET:HB3	2.03	0.41
1:A:72:THR:HB	1:B:266:GLY:C	2.45	0.41
1:B:277:GLU:O	1:B:317:VAL:HG13	2.20	0.41
1:C:200:ILE:HG13	1:D:206:TRP:CE3	2.55	0.41
1:C:225:ARG:CG	1:C:225:ARG:NH1	2.51	0.41
1:C:227:TRP:HA	1:C:227:TRP:CE3	2.56	0.41
1:D:62:LYS:HG2	1:D:64:ARG:H	1.85	0.41
1:D:101:CYS:HB3	1:D:104:TRP:CZ3	2.56	0.41
1:A:28:LEU:O	1:A:30:ILE:N	2.46	0.41
1:A:73:PRO:CD	1:B:268:PRO:CD	2.76	0.41
1:A:325:ALA:O	1:A:329:MET:SD	2.79	0.41
1:B:146:ALA:HB1	1:B:191:LEU:HD21	2.03	0.41
1:A:280:VAL:CG2	1:A:290:LEU:HD12	2.50	0.41
1:B:233:VAL:HG12	1:B:235:LEU:CB	2.41	0.41
1:B:262:ILE:H	1:B:312:SER:HA	1.85	0.41
1:C:139:VAL:HG21	1:C:202:ILE:HD11	2.02	0.41
1:C:256:VAL:HG21	1:C:262:ILE:CG1	2.49	0.41
1:C:257:PRO:HB2	1:C:258:ALA:H	1.68	0.41
1:C:270:ASP:C	1:C:301:LEU:HD21	2.46	0.41
1:A:72:THR:CB	1:B:266:GLY:C	2.93	0.41
1:A:109:LEU:HD22	1:A:115:PHE:CD1	2.55	0.41
1:A:223:PHE:C	1:A:227:TRP:HB2	2.43	0.41
1:B:11:ALA:CB	1:B:12:PRO:CD	2.96	0.41
1:B:123:ALA:O	1:C:254:ARG:NE	2.53	0.41
1:C:267:GLU:O	1:C:307:ARG:HG2	2.20	0.41
1:D:67:VAL:HG22	1:D:67:VAL:O	2.21	0.41
1:D:169:ALA:O	1:D:173:LEU:CB	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:62:LYS:HG2	1:A:64:ARG:H	1.84	0.41
1:A:67:VAL:HG23	1:A:68:VAL:N	2.35	0.41
1:B:7:LEU:CD1	1:B:262:ILE:C	2.77	0.41
1:C:70:ASP:OD1	1:D:306:PRO:CG	2.69	0.41
1:A:279:SER:O	1:A:314:ALA:HB3	2.20	0.41
1:A:295:PHE:CE2	1:A:341:PHE:CD1	3.09	0.41
1:B:11:ALA:C	1:B:255:THR:O	2.63	0.41
1:B:177:GLY:O	1:C:178:TYR:HA	2.21	0.41
1:B:280:VAL:CG2	1:B:290:LEU:HD12	2.51	0.41
1:B:295:PHE:HZ	1:B:340:ILE:HG22	1.85	0.41
1:C:19:ALA:O	1:C:22:LEU:HB2	2.21	0.41
1:C:146:ALA:HB1	1:C:191:LEU:HD21	2.02	0.41
1:C:200:ILE:CG1	1:D:206:TRP:CE3	3.03	0.41
1:C:295:PHE:CE2	1:C:341:PHE:CD1	3.09	0.41
1:D:11:ALA:HA	1:D:257:PRO:N	2.35	0.41
1:D:263:CYS:CB	1:D:307:ARG:HG3	2.51	0.41
1:D:277:GLU:O	1:D:317:VAL:HG13	2.20	0.41
1:D:280:VAL:CG2	1:D:290:LEU:HD12	2.51	0.41
1:A:121:VAL:N	1:B:252:ARG:HH22	2.19	0.41
1:A:267:GLU:O	1:A:307:ARG:HG2	2.21	0.41
1:B:306:PRO:C	1:B:349:ARG:HH22	2.29	0.41
1:A:176:THR:CG2	1:D:177:GLY:HA3	2.52	0.40
1:A:279:SER:O	1:A:317:VAL:HG21	2.21	0.40
1:A:284:THR:CB	1:A:285:PRO:CD	2.97	0.40
1:B:230:VAL:CG1	1:B:236:PHE:HD2	2.11	0.40
1:B:279:SER:O	1:B:314:ALA:HB3	2.20	0.40
1:C:200:ILE:HG23	1:D:206:TRP:O	2.21	0.40
1:C:264:ARG:O	1:C:267:GLU:HB2	2.20	0.40
1:C:290:LEU:HD21	1:C:348:ARG:CZ	2.51	0.40
1:D:125:GLU:OE1	1:D:125:GLU:HA	2.19	0.40
1:D:226:ASN:HD22	1:D:248:VAL:CG1	0.96	0.40
1:D:265:ILE:HB	1:D:310:THR:OG1	2.21	0.40
1:D:295:PHE:CE2	1:D:341:PHE:CD1	3.09	0.40
1:A:263:CYS:HB3	1:A:307:ARG:CB	2.51	0.40
1:A:290:LEU:HD21	1:A:348:ARG:NE	2.36	0.40
1:B:75:ILE:O	1:B:79:VAL:HG23	2.20	0.40
1:C:342:ARG:O	1:C:345:ALA:HB3	2.21	0.40
1:A:88:ALA:HB2	1:A:100:TYR:CB	2.52	0.40
1:A:181:THR:O	1:A:182:ILE:HG13	2.22	0.40
1:B:204:GLY:CA	1:C:210:LEU:HD22	2.51	0.40
1:B:215:TYR:O	1:B:218:VAL:HG22	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:10:TYR:C	1:D:257:PRO:HB3	2.46	0.40
1:D:341:PHE:O	1:D:345:ALA:HB2	2.21	0.40
1:A:10:TYR:HB3	1:A:13:LEU:HD21	2.04	0.40
1:A:11:ALA:O	1:A:13:LEU:N	2.45	0.40
1:A:27:ALA:C	1:A:41:LEU:HD21	2.46	0.40
1:A:265:ILE:HB	1:A:310:THR:OG1	2.21	0.40
1:D:11:ALA:C	1:D:255:THR:O	2.65	0.40
1:A:210:LEU:CD1	1:D:205:LEU:HD12	2.48	0.40
1:B:204:GLY:HA3	1:C:210:LEU:CG	2.52	0.40
1:C:120:ARG:HD2	1:D:271:ARG:CD	2.50	0.40
1:C:121:VAL:HG11	1:C:216:GLN:CD	2.46	0.40
1:C:220:ARG:NH2	1:D:323:HIS:CE1	2.90	0.40
1:D:257:PRO:HB2	1:D:258:ALA:H	1.62	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	342/361 (95%)	320 (94%)	11 (3%)	11 (3%)	3	21
1	B	342/361 (95%)	320 (94%)	8 (2%)	14 (4%)	2	18
1	C	342/361 (95%)	323 (94%)	6 (2%)	13 (4%)	2	19
1	D	342/361 (95%)	322 (94%)	9 (3%)	11 (3%)	3	21
All	All	1368/1444 (95%)	1285 (94%)	34 (2%)	49 (4%)	4	20

All (49) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	29	THR
1	A	72	THR

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Mol	Chain	Res	Type
1	A	95	PRO
1	A	175	THR
1	A	254	ARG
1	A	306	PRO
1	B	67	VAL
1	B	68	VAL
1	B	72	THR
1	B	175	THR
1	B	257	PRO
1	B	306	PRO
1	C	29	THR
1	C	67	VAL
1	C	68	VAL
1	C	175	THR
1	C	257	PRO
1	C	306	PRO
1	D	67	VAL
1	D	72	THR
1	D	175	THR
1	D	257	PRO
1	D	306	PRO
1	A	102	ALA
1	A	103	VAL
1	A	177	GLY
1	B	29	THR
1	B	102	ALA
1	B	103	VAL
1	B	177	GLY
1	B	231	ALA
1	C	35	GLY
1	C	72	THR
1	C	102	ALA
1	C	103	VAL
1	C	177	GLY
1	D	11	ALA
1	D	29	THR
1	D	102	ALA
1	D	103	VAL
1	D	177	GLY
1	A	257	PRO
1	A	287	PRO
1	B	11	ALA

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Mol	Chain	Res	Type
1	B	65	ALA
1	C	11	ALA
1	B	9	ILE
1	C	9	ILE
1	D	9	ILE

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	A	266/279 (95%)	249 (94%)	17 (6%)	16	37
1	B	266/279 (95%)	247 (93%)	19 (7%)	13	35
1	C	266/279 (95%)	251 (94%)	15 (6%)	19	40
1	D	266/279 (95%)	244 (92%)	22 (8%)	10	30
All	All	1064/1116 (95%)	991 (93%)	73 (7%)	16	36

All (73) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	17	LEU
1	A	30	ILE
1	A	107	LYS
1	A	113	THR
1	A	133	THR
1	A	175	THR
1	A	224	VAL
1	A	228	GLN
1	A	229	LEU
1	A	257	PRO
1	A	305	GLU
1	A	306	PRO
1	A	315	THR
1	A	328	GLN
1	A	329	MET
1	A	334	SER

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Mol	Chain	Res	Type
1	A	343	LYS
1	B	30	ILE
1	B	63	ARG
1	B	67	VAL
1	B	113	THR
1	B	121	VAL
1	B	125	GLU
1	B	200	ILE
1	B	205	LEU
1	B	210	LEU
1	B	224	VAL
1	B	228	GLN
1	B	229	LEU
1	B	257	PRO
1	B	267	GLU
1	B	305	GLU
1	B	315	THR
1	B	328	GLN
1	B	329	MET
1	B	334	SER
1	C	67	VAL
1	C	113	THR
1	C	125	GLU
1	C	138	VAL
1	C	174	SER
1	C	176	THR
1	C	225	ARG
1	C	227	TRP
1	C	228	GLN
1	C	257	PRO
1	C	267	GLU
1	C	305	GLU
1	C	328	GLN
1	C	329	MET
1	C	334	SER
1	D	30	ILE
1	D	68	VAL
1	D	107	LYS
1	D	113	THR
1	D	120	ARG
1	D	121	VAL
1	D	125	GLU

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Mol	Chain	Res	Type
1	D	133	THR
1	D	182	ILE
1	D	197	MET
1	D	222	ASP
1	D	228	GLN
1	D	229	LEU
1	D	230	VAL
1	D	257	PRO
1	D	263	CYS
1	D	267	GLU
1	D	305	GLU
1	D	306	PRO
1	D	315	THR
1	D	328	GLN
1	D	334	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (20) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	55	GLN
1	A	124	ASN
1	A	216	GLN
1	A	323	HIS
1	A	328	GLN
1	B	55	GLN
1	B	124	ASN
1	B	216	GLN
1	B	323	HIS
1	B	328	GLN
1	C	124	ASN
1	C	128	ASN
1	C	228	GLN
1	C	323	HIS
1	C	328	GLN
1	D	124	ASN
1	D	226	ASN
1	D	228	GLN
1	D	323	HIS
1	D	328	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](#)

Of 2 ligands modelled in this entry, 2 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

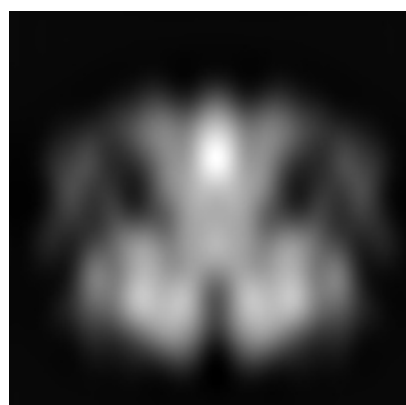
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2526. These allow visual inspection of the internal detail of the map and identification of artifacts.

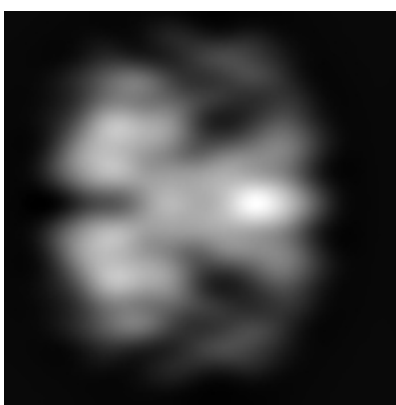
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

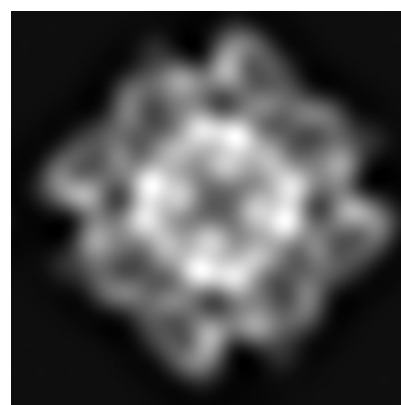
6.1.1 Primary map



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: 54



Y Index: 54



Z Index: 54

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

6.3 Largest variance slices [i](#)

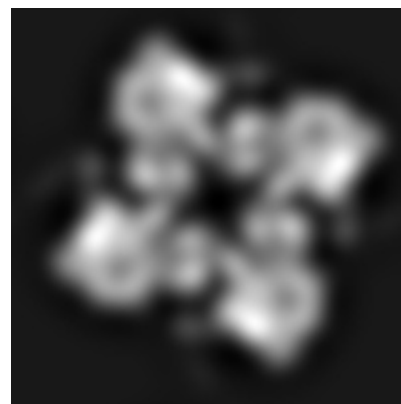
6.3.1 Primary map



X Index: 62



Y Index: 61

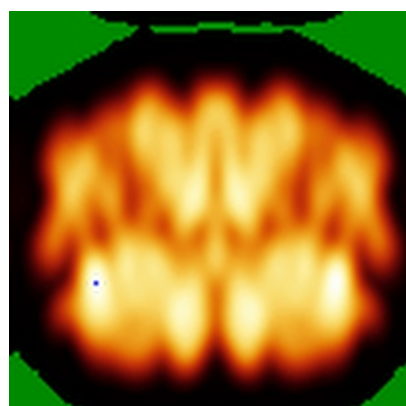


Z Index: 30

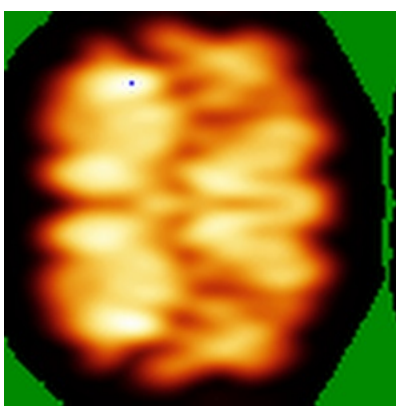
The images above show the largest variance slices of the map in three orthogonal directions.

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

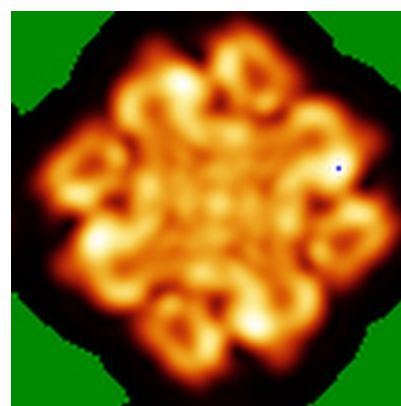
6.4.1 Primary map



X



Y

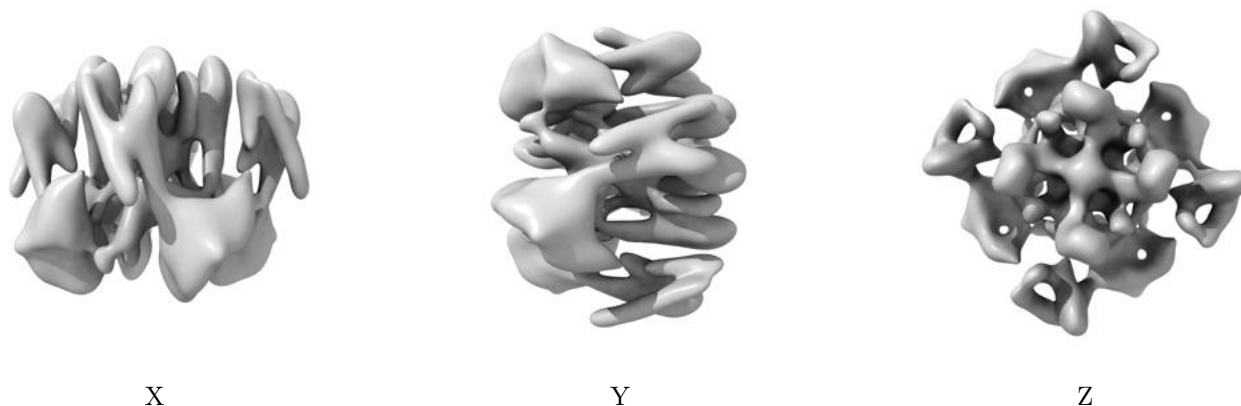


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 2.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

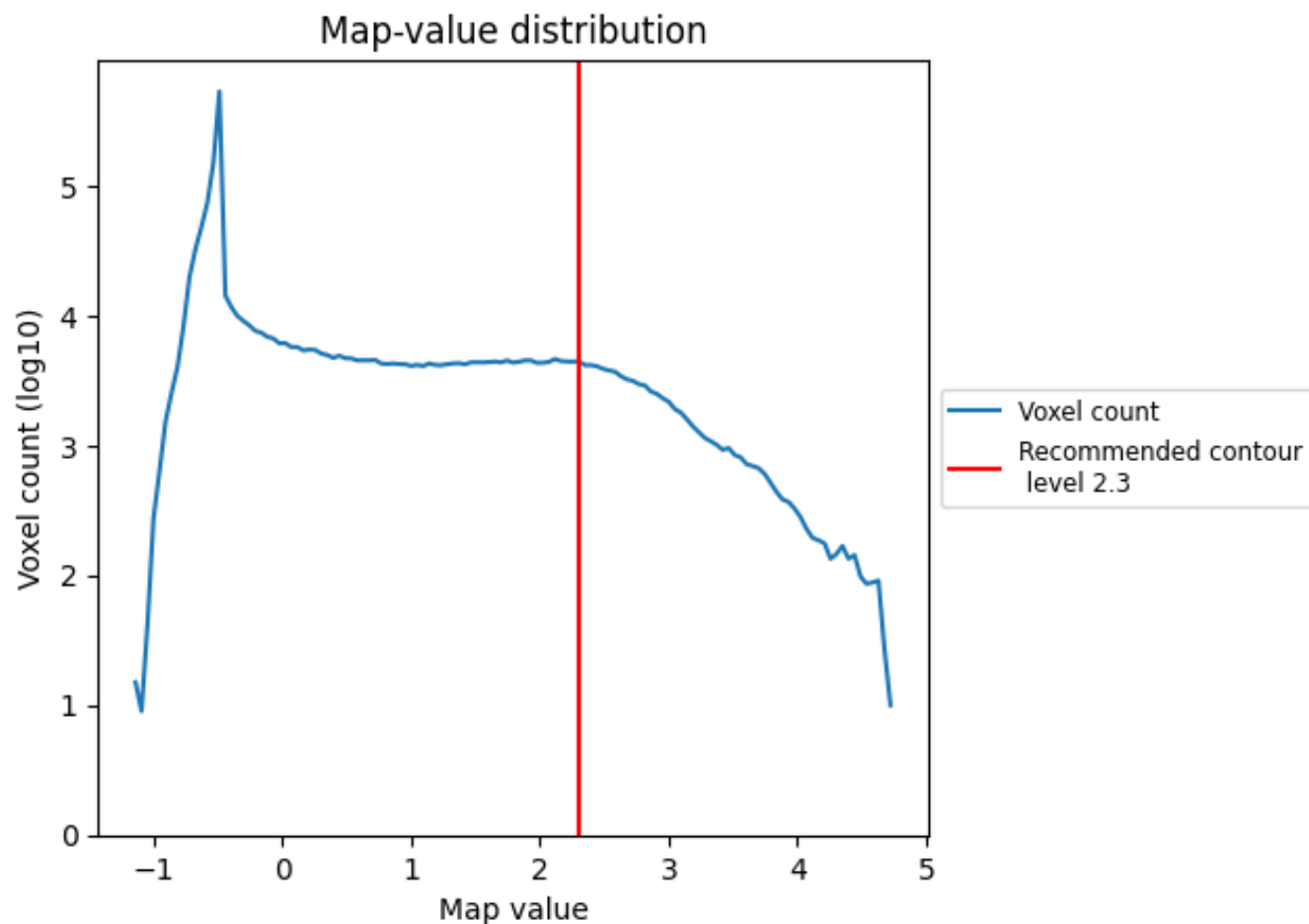
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

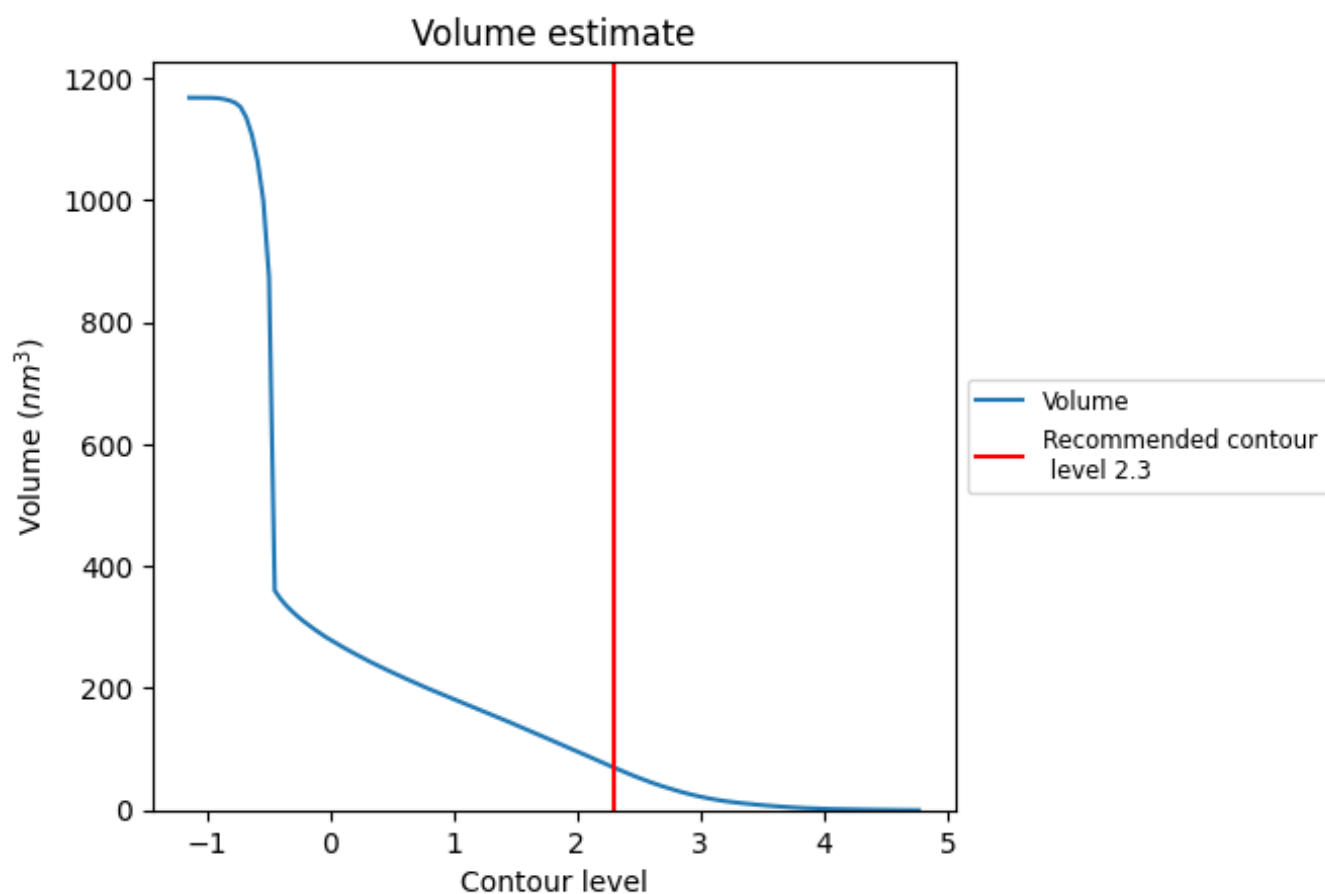
This section contains the results of statistical analysis of the map.

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.

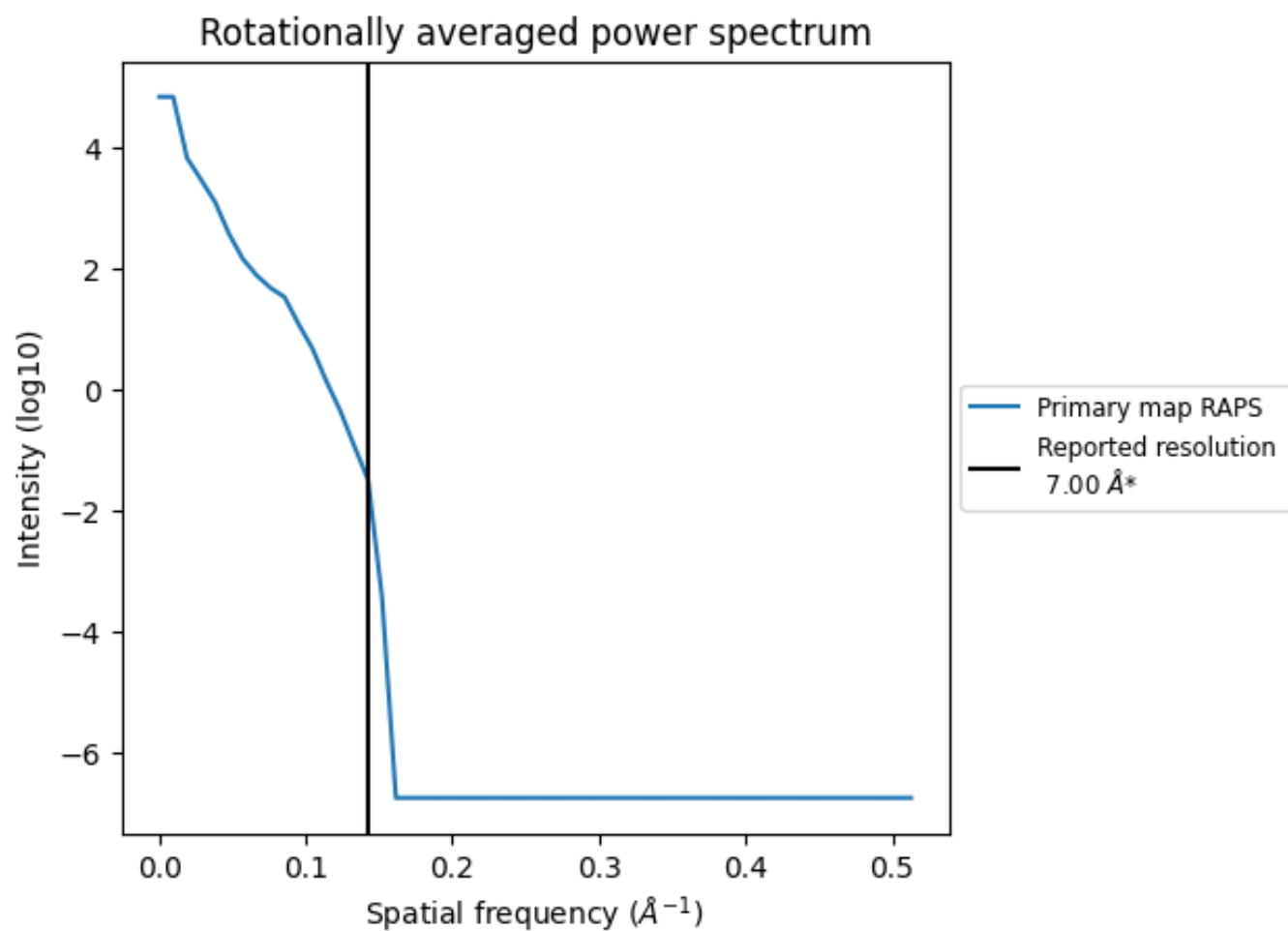
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 70 nm³; this corresponds to an approximate mass of 63 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 0.143 Å⁻¹

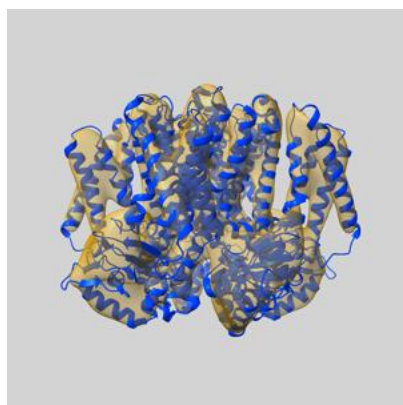
8 Fourier-Shell correlation

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

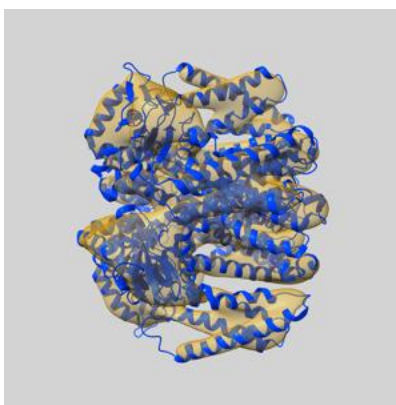
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-2526 and PDB model 4CHV. Per-residue inclusion information can be found in [section 3](#) on [page 5](#).

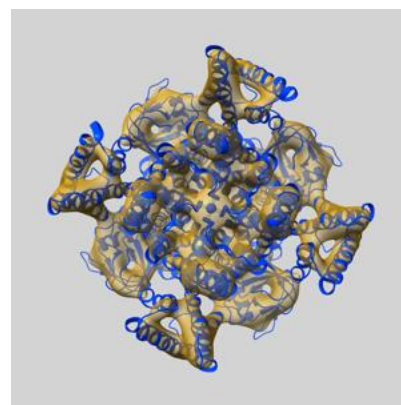
9.1 Map-model overlay [i](#)



X



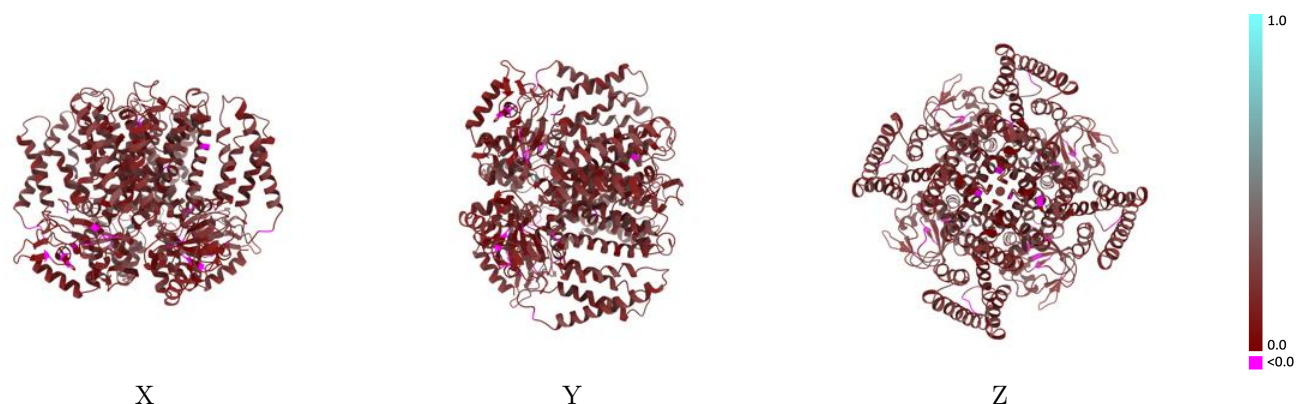
Y



Z

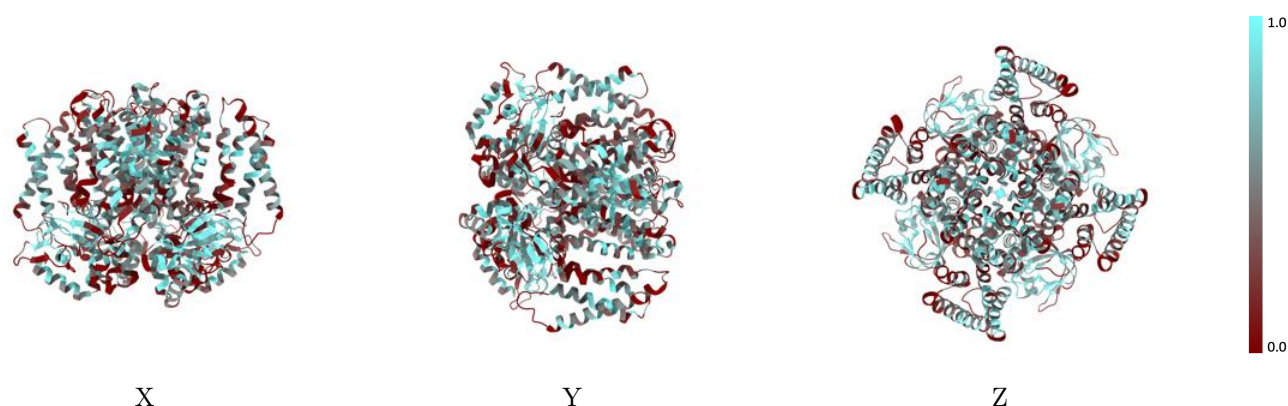
The images above show the 3D surface view of the map at the recommended contour level 2.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



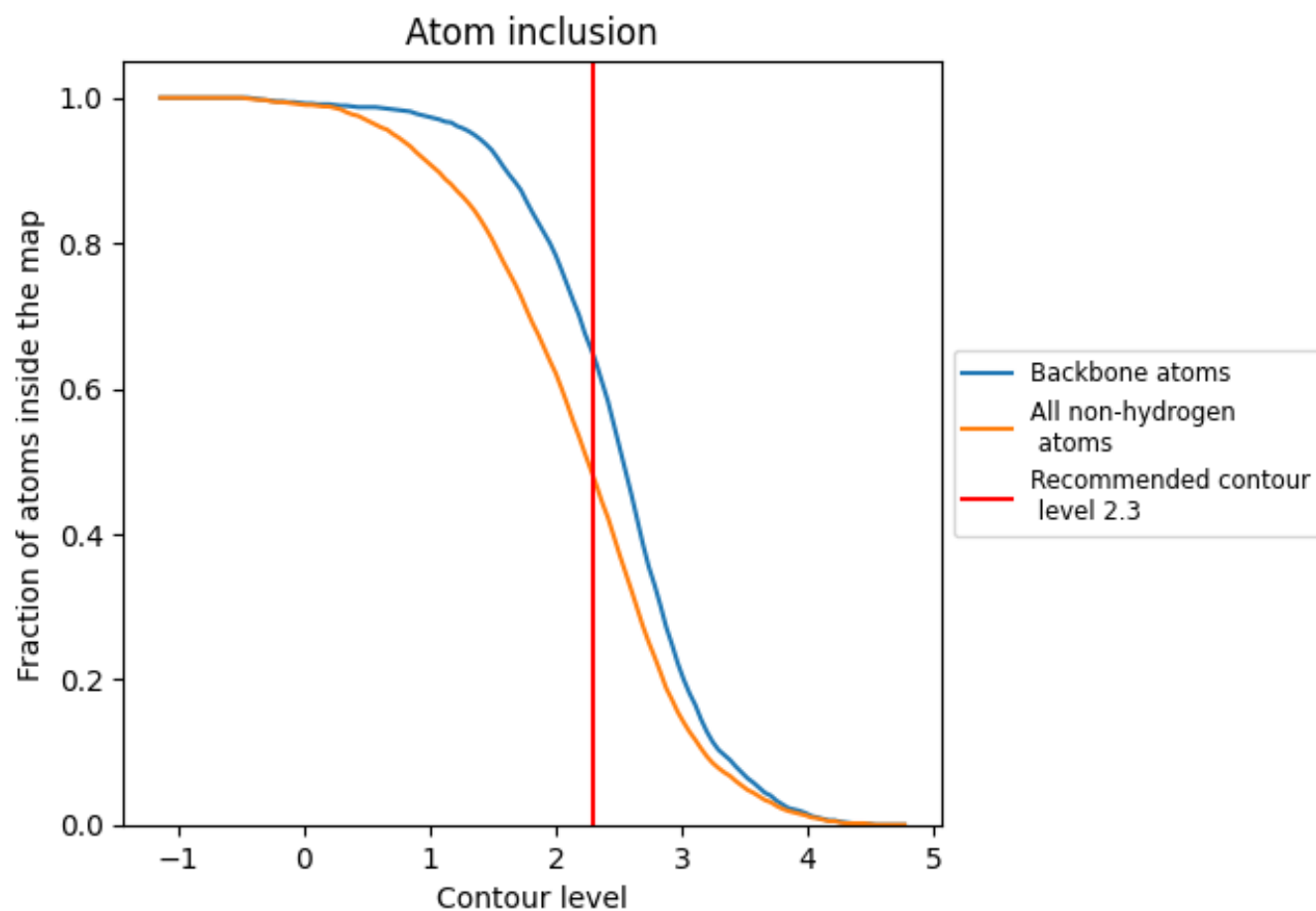
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (2.3).

9.4 Atom inclusion [i](#)



At the recommended contour level, 64% of all backbone atoms, 48% 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 (2.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.4780	0.1610
A	0.4740	0.1600
B	0.4820	0.1600
C	0.4790	0.1600
D	0.4790	0.1630

