



Full wwPDB EM Validation Report ⓘ

Sep 27, 2023 – 06:48 PM EDT

PDB ID : 8GK0
EMDB ID : EMD-40177
Title : Multi-drug efflux pump RE-CmeB bound with Erythromycin
Authors : Zhang, Z.
Deposited on : 2023-03-16
Resolution : 3.44 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.dev50
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.35.1

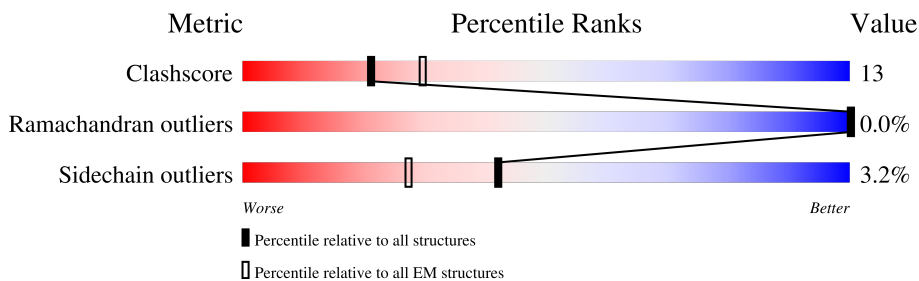
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.44 Å.

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



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

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	1039	 70% 29% ..
1	B	1039	 66% 31% ..
1	C	1039	 70% 28% ..

2 Entry composition i

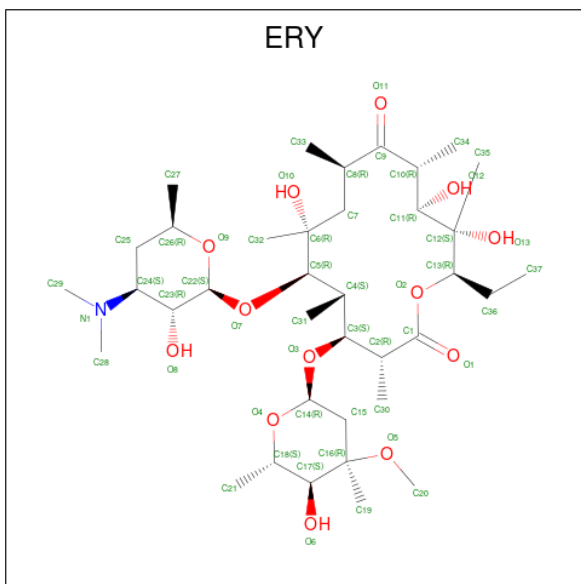
There are 2 unique types of molecules in this entry. The entry contains 23949 atoms, of which 67 are hydrogens and 0 are deuteriums.

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 Efflux pump membrane transporter.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	B	1025	Total 7877	C 5110	N 1269	O 1470	S 28	0	0
1	A	1032	Total 7975	C 5173	N 1286	O 1488	S 28	0	0
1	C	1032	Total 7979	C 5174	N 1288	O 1489	S 28	0	0

- Molecule 2 is ERYTHROMYCIN A (three-letter code: ERY) (formula: $C_{37}H_{67}NO_{13}$) (labeled as "Ligand of Interest" by depositor).

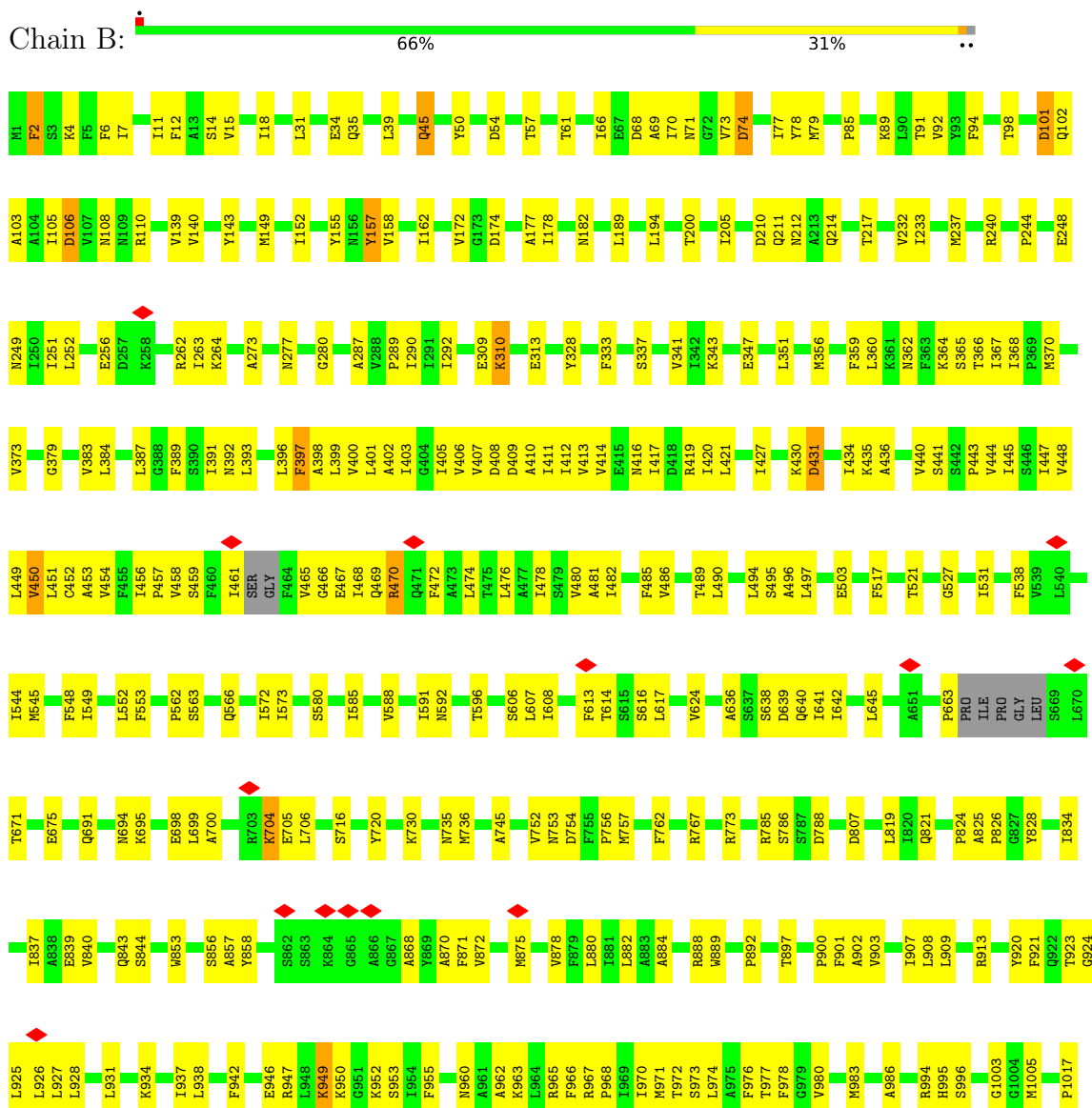


Mol	Chain	Residues	Atoms					AltConf
			Total	C	H	N	O	
2	C	1	Total 118	C 37	H 67	N 1	O 13	0

3 Residue-property plots

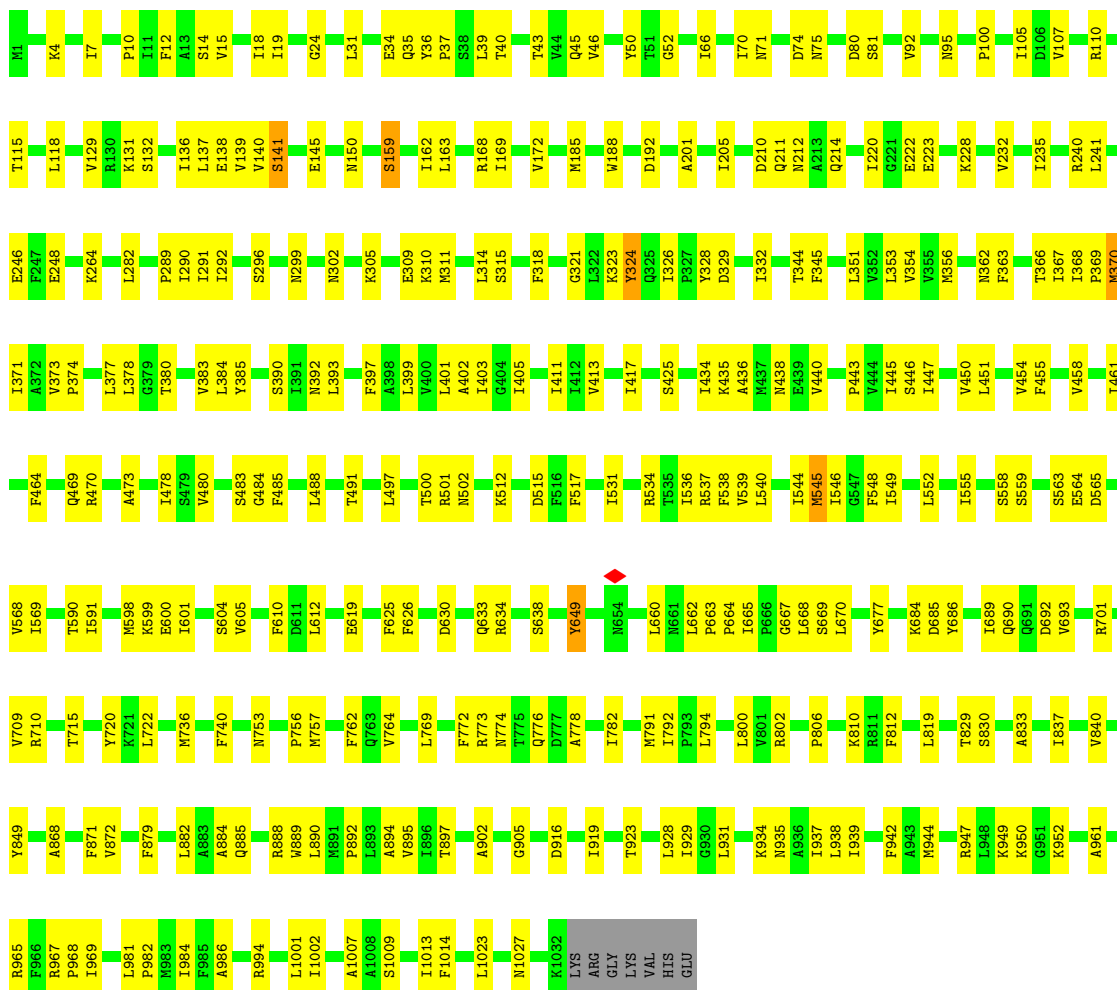
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

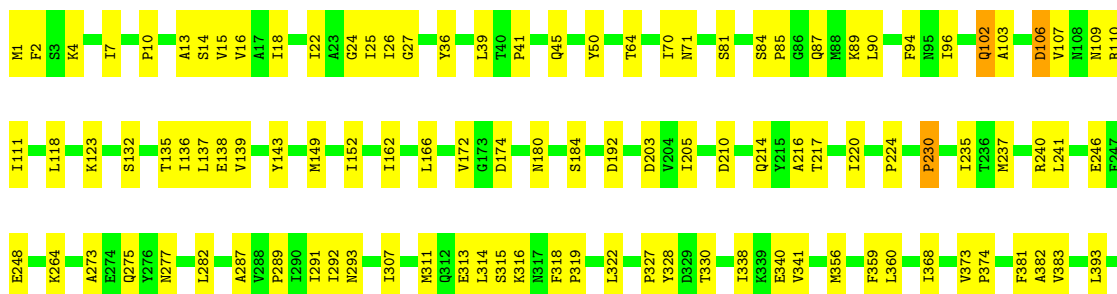




• Molecule 1: Efflux pump membrane transporter



• Molecule 1: Efflux pump membrane transporter



F997	A496	A396	L399	V400	L401	A402	I403	V407	D408	D409	A410	I411	I412	V413	I417	L421	V429	K430	D431	A432	A433	I434	R435	A436	V440	P443	I447	V448	L449	V450	L451	C452	I456	P457	V458	S459	I468	Q469	R470	Q471	T475	L476	A477	I478	S479	W480	A487	S495
A497	F498	L499	Y508	F524	V528	I531	F538	L552	I555	L560	V561	V568	I569	M570	S571	I572	S580	R583	T584	I585	E586	E587	I591	I601	V605	S606	L607	I608	G609	F610	D611	L612	F613	T614	S615	E619	V624	F625	F626	I627	L628	K629						
D630	W631	E635	A636	S637	Q640	I641	I642	F646	Y649	D652	R653	Y658	F659	L660	M661	L662	I665	L668	E675	M676	Y677	A678	Q679	M680	K681	K684	D685	Y686	D687	A688	Q691	D692	V693	M696	L697	A700	R710	F717	P718	M729	K730	Y731						
M736	Q737	N741	T742	I743	S744	A745	V752	N753	D754	F755	P756	M757	L758	N761	T775	Q776	D777	A778	L779	R785	L794	D807	D808	V809	K810	R811	P816	L819	D835	I837	V840	S844	D847	A852	W853	V861	S862	S863	K864	G865	I881	L882						
A883	A884	Q885	Y886	E887	L890	M891	P892	L893	I896	T897	A898	V899	P900	G905	S906	I907	L908	L909	L926	L927	L928	K934	I937	I940	E941	L948	S953	I954	F955	E956	I959	A962	R965	I969	I970	M971	F976	L981	I984	F985	A986	G990						
S993	R994	H995	S996	L997	L1001	G1004	M1005	I1006	A1007	A1012	I1013	V1016	L1023	E1024	M1025	F1026	W1029	K1032	LYS	ARG	GLY	LYS	VAL	HIS	GLU																							

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	17038	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	36.5	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	1500	Depositor
Magnification	81000	Depositor
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.823	Depositor
Minimum map value	-0.331	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.027	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	376.64, 376.64, 376.64	wwPDB
Map dimensions	352, 352, 352	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.07, 1.07, 1.07	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: ERY

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.27	0/8129	0.47	0/11043
1	B	0.27	0/8025	0.49	0/10903
1	C	0.27	0/8133	0.47	0/11047
All	All	0.27	0/24287	0.48	0/32993

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	7975	0	8150	194	0
1	B	7877	0	8023	233	0
1	C	7979	0	8156	239	0
2	C	51	67	67	10	0
All	All	23882	67	24396	637	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 13.

All (637) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:401:LEU:HG	1:B:927:LEU:HD13	1.51	0.92
1:C:928:LEU:HD21	1:C:1004:GLY:HA3	1.52	0.90
1:C:572:ILE:HG13	1:C:613:PHE:CE2	2.10	0.87
1:A:902:ALA:HB1	1:A:928:LEU:HD12	1.58	0.84
1:B:639:ASP:HA	1:B:642:ILE:HD12	1.63	0.81
1:C:172:VAL:HG13	1:C:292:ILE:HG23	1.62	0.81
1:C:560:LEU:HD21	1:C:668:LEU:HD11	1.61	0.80
1:C:665:ILE:HG12	1:C:668:LEU:HD22	1.63	0.80
1:C:572:ILE:HG13	1:C:613:PHE:HE2	1.46	0.79
1:A:214:GLN:HG3	1:A:240:ARG:HG3	1.66	0.77
1:A:455:PHE:HB3	1:A:473:ALA:HB1	1.66	0.77
1:A:353:LEU:HA	1:A:370:MET:HE1	1.68	0.76
1:C:757:MET:HG2	1:C:758:LEU:HD22	1.67	0.75
1:C:585:ILE:HG12	1:C:608:ILE:HD13	1.66	0.75
1:B:430:LYS:HD3	1:B:496:ALA:HB1	1.68	0.74
1:B:983:MET:HG3	1:B:994:ARG:HG2	1.70	0.74
1:B:517:PHE:HZ	1:B:967:ARG:HA	1.53	0.73
1:B:15:VAL:HG11	1:C:884:ALA:HB2	1.70	0.73
1:A:884:ALA:HB2	1:C:15:VAL:HG21	1.70	0.72
1:C:45:GLN:HG3	1:C:89:LYS:HE3	1.71	0.72
1:A:24:GLY:HA3	1:A:378:LEU:HB3	1.72	0.71
1:A:137:LEU:HG	1:A:138:GLU:HG2	1.71	0.71
1:C:591:ILE:HD12	1:C:649:TYR:CE2	2.25	0.71
1:B:467:GLU:OE1	1:B:467:GLU:N	2.21	0.71
1:A:434:ILE:O	1:A:438:ASN:ND2	2.24	0.70
1:A:405:ILE:HD11	1:A:931:LEU:HD21	1.72	0.70
1:A:969:ILE:HG21	1:A:1013:ILE:HG21	1.73	0.70
1:B:973:SER:HA	1:B:976:PHE:CE1	2.27	0.70
1:B:233:ILE:HD12	1:C:718:PRO:HB2	1.73	0.70
1:C:407:VAL:O	1:C:411:ILE:HG12	1.91	0.70
1:B:459:SER:HA	1:B:469:GLN:HE22	1.57	0.70
1:C:449:LEU:HB3	1:C:881:ILE:HD13	1.73	0.70
1:B:102:GLN:NE2	1:B:106:ASP:OD1	2.26	0.69
1:C:642:ILE:HD11	1:C:661:ASN:OD1	1.91	0.69
1:B:362:ASN:HD21	1:B:503:GLU:HB3	1.57	0.69
1:C:613:PHE:HZ	1:C:660:LEU:HD11	1.56	0.69
1:C:568:VAL:HG23	1:C:662:LEU:CD1	2.23	0.69
1:B:973:SER:HA	1:B:976:PHE:CZ	2.28	0.68
1:B:212:ASN:O	1:B:753:ASN:ND2	2.27	0.68
1:B:552:LEU:HD13	1:B:908:LEU:HA	1.75	0.68
1:C:443:PRO:O	1:C:447:ILE:HD12	1.94	0.68
1:C:570:MET:SD	1:C:612:LEU:HD23	2.34	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:446:SER:OG	1:A:885:GLN:NE2	2.27	0.68
1:B:451:LEU:O	1:B:454:VAL:HG12	1.94	0.67
1:A:413:VAL:O	1:A:417:ILE:HD12	1.94	0.67
1:A:402:ALA:HA	1:A:405:ILE:HB	1.77	0.67
1:B:407:VAL:O	1:B:411:ILE:HG13	1.95	0.66
1:A:71:ASN:O	1:A:110:ARG:NH2	2.28	0.66
1:C:677:TYR:HB2	1:C:852:ALA:HB3	1.78	0.66
1:B:699:LEU:HD23	1:B:844:SER:HB2	1.77	0.66
1:C:612:LEU:HD22	1:C:625:PHE:HZ	1.58	0.66
1:C:139:VAL:O	1:C:327:PRO:HD2	1.96	0.65
1:B:412:ILE:HG23	1:B:965:ARG:HH22	1.61	0.65
1:B:108:ASN:HD22	1:C:109:ASN:HB3	1.61	0.65
1:B:573:ILE:HD11	1:B:591:ILE:HD13	1.79	0.64
1:B:671:THR:HB	1:B:856:SER:HB2	1.78	0.64
1:C:811:ARG:HH21	1:C:816:PRO:HD3	1.63	0.64
1:A:633:GLN:N	1:A:633:GLN:OE1	2.29	0.64
1:C:612:LEU:HG	2:C:1101:ERY:C26	2.28	0.64
1:C:443:PRO:HG3	1:C:941:GLU:HG3	1.80	0.64
1:C:591:ILE:HD12	1:C:649:TYR:HE2	1.63	0.64
1:B:942:PHE:HD2	1:B:965:ARG:HD3	1.62	0.63
1:C:665:ILE:HD11	1:C:668:LEU:HD13	1.79	0.63
1:C:976:PHE:HB3	1:C:1005:MET:HE3	1.81	0.63
1:B:907:ILE:HG12	1:B:921:PHE:HZ	1.63	0.63
1:A:660:LEU:HD21	1:A:710:ARG:HH22	1.63	0.63
1:B:467:GLU:HA	1:B:470:ARG:HB3	1.81	0.63
1:A:677:TYR:HE2	1:A:810:LYS:HD3	1.64	0.63
1:C:447:ILE:HG12	1:C:934:LYS:HG3	1.81	0.63
1:A:950:LYS:HB2	1:A:952:LYS:HG2	1.81	0.62
1:A:568:VAL:HG13	1:A:662:LEU:HD21	1.80	0.62
1:C:205:ILE:HD11	1:C:745:ALA:HB2	1.79	0.62
1:C:340:GLU:HG2	1:C:994:ARG:HH12	1.63	0.62
1:A:458:VAL:HA	1:A:461:ILE:HD12	1.82	0.62
1:C:610:PHE:CE2	1:C:612:LEU:HA	2.35	0.62
1:A:248:GLU:HB3	1:A:264:LYS:HB2	1.80	0.62
1:A:136:ILE:HG23	1:A:291:ILE:HG23	1.82	0.62
1:C:241:LEU:HD22	1:C:246:GLU:HB3	1.82	0.62
1:B:373:VAL:HG22	1:B:406:VAL:HG13	1.82	0.62
1:A:192:ASP:N	1:A:192:ASP:OD1	2.33	0.62
1:A:162:ILE:HD12	1:A:314:LEU:HD13	1.81	0.61
1:A:684:LYS:NZ	1:A:692:ASP:OD2	2.32	0.61
1:B:938:LEU:HD13	1:B:965:ARG:HH21	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:383:VAL:HG11	1:B:478:ILE:HG21	1.82	0.61
1:C:471:GLN:O	1:C:475:THR:HG23	2.00	0.61
1:B:466:GLY:HA2	1:B:469:GLN:HE21	1.65	0.61
1:B:466:GLY:O	1:B:470:ARG:N	2.32	0.61
1:A:4:LYS:HA	1:A:7:ILE:HG22	1.83	0.61
1:C:174:ASP:HB3	1:C:293:ASN:HB2	1.82	0.61
1:C:458:VAL:HG21	1:C:926:LEU:HD11	1.82	0.61
1:C:693:VAL:O	1:C:697:LEU:HD22	2.00	0.60
1:A:299:ASN:ND2	1:A:302:ASN:OD1	2.33	0.60
1:A:619:GLU:OE1	1:A:619:GLU:N	2.31	0.60
1:C:568:VAL:HG23	1:C:662:LEU:HD13	1.84	0.60
1:C:612:LEU:HG	2:C:1101:ERY:H26	1.83	0.60
1:C:686:TYR:CZ	1:C:809:VAL:HG13	2.35	0.60
1:C:139:VAL:HG22	1:C:291:ILE:CD1	2.31	0.60
1:C:610:PHE:CZ	1:C:612:LEU:HA	2.37	0.60
1:B:14:SER:O	1:B:18:ILE:HD12	2.01	0.60
1:C:528:VAL:HA	1:C:531:ILE:HG12	1.83	0.60
1:B:410:ALA:O	1:B:414:VAL:HG12	2.02	0.60
1:C:413:VAL:O	1:C:417:ILE:HG12	2.00	0.60
1:C:572:ILE:HG21	1:C:613:PHE:CE2	2.37	0.60
1:B:200:THR:HG21	1:B:785:ARG:H	1.67	0.59
1:B:699:LEU:HG	1:B:840:VAL:HG23	1.83	0.59
1:A:305:LYS:O	1:A:309:GLU:HG3	2.00	0.59
1:C:292:ILE:N	1:C:292:ILE:HD12	2.16	0.59
1:C:572:ILE:HB	1:C:658:TYR:HB2	1.84	0.59
1:B:694:ASN:O	1:B:698:GLU:HG3	2.03	0.59
1:A:40:THR:OG1	1:A:667:GLY:HA3	2.03	0.59
1:C:659:PHE:C	1:C:660:LEU:HD23	2.22	0.59
1:C:71:ASN:O	1:C:110:ARG:NH2	2.35	0.59
1:B:450:VAL:HG23	1:B:878:VAL:HG22	1.84	0.59
1:B:531:ILE:HG12	1:B:538:PHE:CE2	2.38	0.59
1:C:81:SER:HB2	1:C:90:LEU:HG	1.83	0.59
1:C:528:VAL:HG13	1:C:959:ILE:HD12	1.85	0.59
1:B:448:VAL:HG13	1:B:480:VAL:HG13	1.84	0.58
1:C:289:PRO:HG2	1:C:607:LEU:HD21	1.85	0.58
1:C:328:TYR:CZ	1:C:330:THR:HG22	2.37	0.58
1:B:942:PHE:CD2	1:B:965:ARG:HD3	2.39	0.58
1:B:413:VAL:O	1:B:417:ILE:HG13	2.03	0.58
1:B:447:ILE:HG21	1:B:934:LYS:HE2	1.86	0.58
1:C:652:ASP:OD1	1:C:653:ARG:N	2.37	0.58
1:A:685:ASP:OD1	1:A:686:TYR:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:252:LEU:HD21	1:B:263:ILE:HG12	1.86	0.58
1:B:960:ASN:HD22	1:B:963:LYS:HE3	1.69	0.58
1:B:962:ALA:HB2	1:B:1017:PRO:HG3	1.85	0.57
1:A:692:ASP:OD2	1:A:849:TYR:OH	2.20	0.57
1:B:11:ILE:HD13	1:C:887:GLU:HG3	1.86	0.57
1:B:251:ILE:HB	1:C:730:LYS:HG3	1.87	0.57
1:C:162:ILE:HD11	1:C:318:PHE:HE1	1.69	0.57
1:C:752:VAL:HG23	1:C:753:ASN:N	2.19	0.57
1:B:367:ILE:HA	1:B:370:MET:HB3	1.86	0.57
1:A:188:TRP:HB3	1:A:769:LEU:HB2	1.85	0.57
1:C:291:ILE:C	1:C:292:ILE:HD12	2.24	0.57
1:A:986:ALA:HB1	1:A:994:ARG:HH21	1.69	0.57
1:B:474:LEU:O	1:B:478:ILE:HG13	2.05	0.57
1:A:397:PHE:O	1:A:401:LEU:HG	2.04	0.57
1:B:309:GLU:O	1:B:313:GLU:HG2	2.05	0.56
1:B:6:PHE:HD2	1:B:489:THR:HB	1.70	0.56
1:B:73:VAL:HG22	1:B:110:ARG:HD3	1.87	0.56
1:B:205:ILE:HD11	1:B:745:ALA:HB2	1.87	0.56
2:C:1101:ERY:H193	2:C:1101:ERY:H213	1.87	0.56
1:B:71:ASN:OD1	1:A:168:ARG:NH1	2.38	0.56
1:A:220:ILE:HG13	1:A:235:ILE:HD11	1.86	0.56
1:A:938:LEU:HB3	1:A:969:ILE:HD11	1.87	0.56
1:C:700:ALA:HB2	1:C:840:VAL:HG11	1.88	0.56
1:B:105:ILE:HG21	1:A:105:ILE:HD11	1.88	0.56
1:B:636:ALA:HB1	1:B:640:GLN:HE21	1.71	0.56
1:A:443:PRO:O	1:A:447:ILE:HG13	2.05	0.56
1:B:158:VAL:HG11	1:B:290:ILE:HD11	1.88	0.56
1:C:383:VAL:HG12	1:C:478:ILE:HD13	1.87	0.56
1:C:646:PHE:CD1	1:C:659:PHE:HD2	2.24	0.56
1:B:31:LEU:HD13	1:B:391:ILE:HG23	1.86	0.55
1:A:540:LEU:O	1:A:544:ILE:HG12	2.07	0.55
1:B:521:THR:HG23	1:B:966:PHE:CD2	2.41	0.55
1:B:143:TYR:HB3	1:B:287:ALA:HB2	1.89	0.55
1:A:451:LEU:HD13	1:A:480:VAL:HG21	1.88	0.55
1:C:779:LEU:HD22	1:C:794:LEU:HD23	1.88	0.55
1:B:45:GLN:OE1	1:B:89:LYS:NZ	2.37	0.55
1:B:1019:PHE:O	1:B:1023:LEU:HD23	2.06	0.55
1:C:421:LEU:HD11	1:C:429:VAL:HG12	1.89	0.55
1:C:451:LEU:HD12	1:C:480:VAL:HG21	1.88	0.55
1:A:469:GLN:HG3	1:A:923:THR:HG22	1.87	0.55
1:C:665:ILE:HG13	1:C:668:LEU:HB2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:100:PRO:HB2	1:A:131:LYS:HD2	1.89	0.55
1:C:10:PRO:HB3	1:C:497:LEU:HD11	1.89	0.55
1:B:66:ILE:O	1:B:70:ILE:HG12	2.07	0.54
1:B:976:PHE:HD1	1:B:1005:MET:SD	2.29	0.54
1:C:45:GLN:CG	1:C:89:LYS:HE3	2.36	0.54
1:B:482:ILE:HD12	1:B:482:ILE:H	1.73	0.54
1:B:902:ALA:HB1	1:B:928:LEU:HB3	1.90	0.54
1:A:52:GLY:HA2	1:C:217:THR:HG22	1.89	0.54
1:B:980:VAL:HG21	1:B:1005:MET:HE1	1.89	0.54
1:A:383:VAL:HG11	1:A:478:ILE:HG12	1.89	0.54
1:C:14:SER:O	1:C:18:ILE:HG13	2.07	0.54
1:B:606:SER:HB3	1:B:624:VAL:HG13	1.88	0.54
1:B:966:PHE:O	1:B:970:ILE:HG12	2.08	0.54
1:A:145:GLU:OE1	1:A:323:LYS:NZ	2.41	0.54
1:B:445:ILE:O	1:B:449:LEU:HG	2.06	0.54
1:B:720:TYR:HB2	1:A:235:ILE:HD13	1.88	0.54
1:B:819:LEU:HD21	1:B:821:GLN:HE21	1.73	0.54
1:A:344:THR:HG23	1:A:982:PRO:HB2	1.89	0.54
1:C:135:THR:HG22	1:C:136:ILE:N	2.23	0.54
1:C:986:ALA:O	1:C:995:HIS:NE2	2.41	0.54
1:B:94:PHE:HB3	1:B:98:THR:HG21	1.89	0.54
1:B:946:GLU:HB3	1:B:952:LYS:HZ2	1.71	0.54
1:A:565:ASP:OD2	1:A:634:ARG:NH2	2.40	0.54
1:B:396:LEU:HD23	1:B:399:LEU:HD12	1.89	0.54
1:C:139:VAL:HG22	1:C:291:ILE:HD13	1.89	0.54
1:A:942:PHE:HD2	1:A:961:ALA:HA	1.72	0.53
1:B:490:LEU:HG	1:B:494:LEU:HD11	1.90	0.53
1:B:825:ALA:HB1	1:B:826:PRO:HD2	1.91	0.53
1:A:435:LYS:HA	1:A:438:ASN:HD21	1.73	0.53
1:C:166:LEU:HD21	1:C:311:MET:HE1	1.90	0.53
1:C:341:VAL:HG23	1:C:400:VAL:HG23	1.89	0.53
1:C:476:LEU:O	1:C:480:VAL:HG12	2.07	0.53
1:C:755:PHE:HE2	1:C:757:MET:HE2	1.73	0.53
1:B:248:GLU:HB2	1:B:264:LYS:HB3	1.90	0.53
1:C:665:ILE:CG1	1:C:668:LEU:HD22	2.38	0.53
1:B:54:ASP:OD1	1:B:54:ASP:N	2.39	0.53
1:A:34:GLU:O	1:A:392:ASN:HA	2.09	0.53
1:C:572:ILE:HG21	1:C:613:PHE:CD2	2.43	0.53
1:C:630:ASP:OD1	1:C:631:TRP:N	2.42	0.53
1:B:706:LEU:HA	1:B:824:PRO:O	2.09	0.53
1:C:417:ILE:HD12	1:C:433:ALA:HA	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:472:PHE:CZ	1:B:923:THR:HB	2.44	0.53
1:C:84:SER:OG	1:C:87:GLN:HG3	2.09	0.53
1:B:189:LEU:HB3	1:B:194:LEU:HD11	1.90	0.53
1:B:416:ASN:O	1:B:420:ILE:HG12	2.09	0.53
1:A:722:LEU:HB2	1:C:237:MET:HB2	1.90	0.53
1:C:368:ILE:HD13	1:C:495:SER:HA	1.91	0.53
1:A:458:VAL:HG21	1:A:469:GLN:HB3	1.90	0.53
1:B:675:GLU:OE1	1:B:675:GLU:N	2.41	0.53
1:C:41:PRO:HB3	1:C:96:ILE:HG12	1.91	0.53
1:A:345:PHE:CD1	1:A:403:ILE:HD11	2.44	0.52
1:A:185:MET:HB3	1:A:764:VAL:HG22	1.91	0.52
1:C:292:ILE:HG21	1:C:307:ILE:HD11	1.91	0.52
1:A:590:THR:HG22	1:A:649:TYR:OH	2.10	0.52
1:A:919:ILE:O	1:A:923:THR:HG23	2.09	0.52
1:C:755:PHE:CE2	1:C:757:MET:HE2	2.44	0.52
1:A:450:VAL:O	1:A:454:VAL:HG23	2.10	0.52
1:B:478:ILE:O	1:B:482:ILE:HD12	2.09	0.52
1:B:924:GLY:O	1:B:928:LEU:HG	2.10	0.52
1:C:1:MET:SD	1:C:2:PHE:N	2.83	0.52
1:C:403:ILE:O	1:C:407:VAL:HG22	2.10	0.52
1:B:77:ILE:HD11	1:B:858:TYR:CZ	2.44	0.52
1:B:430:LYS:O	1:B:434:ILE:HG12	2.10	0.52
1:B:705:GLU:O	1:B:825:ALA:HB2	2.10	0.52
1:B:903:VAL:O	1:B:907:ILE:HG13	2.09	0.52
1:A:888:ARG:HE	1:A:889:TRP:H	1.57	0.52
1:C:637:SER:N	1:C:640:GLN:OE1	2.43	0.51
1:B:973:SER:O	1:B:977:THR:HG23	2.11	0.51
1:C:969:ILE:HG13	1:C:1013:ILE:HD11	1.92	0.51
1:A:534:ARG:HB3	1:A:537:ARG:HE	1.75	0.51
1:C:39:LEU:HD22	1:C:468:ILE:HG13	1.93	0.51
1:B:39:LEU:HD11	1:B:467:GLU:OE2	2.10	0.51
1:B:613:PHE:CD1	1:B:614:THR:HG23	2.46	0.51
1:B:837:ILE:HA	1:B:840:VAL:HG12	1.92	0.51
1:C:413:VAL:HG21	1:C:487:ALA:HB1	1.92	0.51
1:C:192:ASP:N	1:C:192:ASP:OD1	2.41	0.51
1:B:440:VAL:O	1:B:444:VAL:HG13	2.11	0.51
1:B:461:ILE:HD11	1:B:870:ALA:HB3	1.92	0.51
1:B:486:VAL:HG13	1:B:490:LEU:HB3	1.92	0.51
1:C:408:ASP:O	1:C:412:ILE:HG13	2.11	0.51
1:C:431:ASP:HA	1:C:434:ILE:HG22	1.93	0.51
1:A:201:ALA:O	1:A:205:ILE:HD12	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:326:ILE:O	1:A:326:ILE:HG13	2.11	0.51
1:A:356:MET:HG2	1:A:411:ILE:HD11	1.92	0.51
1:A:536:ILE:HG13	1:A:537:ARG:N	2.25	0.51
1:C:162:ILE:HD12	1:C:314:LEU:HD13	1.93	0.51
1:C:313:GLU:OE1	1:C:316:LYS:NZ	2.30	0.51
1:C:684:LYS:NZ	1:C:692:ASP:OD2	2.42	0.51
1:B:454:VAL:O	1:B:926:LEU:HD11	2.11	0.51
1:C:469:GLN:OE1	1:C:469:GLN:HA	2.11	0.51
1:A:612:LEU:HB3	1:A:670:LEU:HD21	1.92	0.51
1:C:568:VAL:O	1:C:569:ILE:HD13	2.11	0.51
1:A:373:VAL:O	1:A:377:LEU:HD23	2.10	0.50
1:C:675:GLU:OE2	1:C:675:GLU:N	2.43	0.50
1:C:752:VAL:HG23	1:C:753:ASN:H	1.76	0.50
1:B:440:VAL:C	1:B:443:PRO:HD2	2.31	0.50
1:B:527:GLY:O	1:B:531:ILE:HG13	2.11	0.50
1:B:616:SER:OG	1:B:617:LEU:N	2.43	0.50
1:B:834:ILE:HA	1:B:837:ILE:HG22	1.93	0.50
1:B:45:GLN:NE2	1:B:91:THR:OG1	2.44	0.50
1:B:700:ALA:O	1:B:706:LEU:HD11	2.12	0.50
1:A:241:LEU:HD22	1:A:246:GLU:HB3	1.92	0.50
1:A:895:VAL:HG21	1:A:937:ILE:HD13	1.93	0.50
1:C:289:PRO:HG2	1:C:607:LEU:CD2	2.41	0.50
1:C:571:SER:HB2	1:C:626:PHE:HE2	1.75	0.50
1:B:450:VAL:HG11	1:B:937:ILE:CD1	2.42	0.50
1:C:319:PRO:HD2	1:C:322:LEU:HD12	1.94	0.50
1:C:665:ILE:CG1	1:C:668:LEU:HB2	2.41	0.50
1:C:64:THR:HG23	1:C:811:ARG:HH12	1.75	0.50
1:B:773:ARG:NH1	1:A:222:GLU:O	2.43	0.50
1:A:115:THR:HA	1:A:118:LEU:HD23	1.94	0.50
1:B:77:ILE:HG13	1:B:78:TYR:CD2	2.47	0.50
1:C:136:ILE:HD13	1:C:291:ILE:HD12	1.93	0.50
1:C:568:VAL:HG23	1:C:662:LEU:HD11	1.93	0.50
1:B:232:VAL:HG23	1:C:580:SER:HA	1.94	0.49
1:A:598:MET:HB2	1:A:601:ILE:HD12	1.93	0.49
1:A:600:GLU:N	1:A:600:GLU:OE2	2.45	0.49
1:C:340:GLU:CG	1:C:994:ARG:HH12	2.25	0.49
1:C:571:SER:HB3	1:C:624:VAL:O	2.12	0.49
1:B:1018:LEU:O	1:B:1022:LEU:HG	2.12	0.49
1:B:4:LYS:O	1:B:7:ILE:HG22	2.12	0.49
1:B:736:MET:HG3	1:A:211:GLN:HA	1.93	0.49
1:A:740:PHE:HD2	1:C:216:ALA:HB2	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:6:PHE:CD2	1:B:489:THR:HB	2.47	0.49
1:B:403:ILE:O	1:B:407:VAL:HG13	2.12	0.49
1:B:613:PHE:HD1	1:B:614:THR:HG23	1.77	0.49
1:A:720:TYR:HB3	1:A:800:LEU:HD11	1.95	0.49
1:A:938:LEU:HD23	1:A:969:ILE:HD13	1.94	0.49
1:C:436:ALA:O	1:C:440:VAL:HG22	2.11	0.49
1:A:446:SER:HB2	1:A:937:ILE:HG21	1.94	0.49
1:B:853:TRP:HD1	1:B:857:ALA:HB1	1.78	0.49
1:C:458:VAL:HG13	1:C:469:GLN:HB3	1.94	0.49
1:A:145:GLU:N	1:A:321:GLY:O	2.43	0.49
1:A:315:SER:HA	1:A:318:PHE:CG	2.48	0.49
1:A:662:LEU:H	1:A:662:LEU:HD22	1.78	0.49
1:B:249:ASN:HA	1:B:262:ARG:HD3	1.95	0.49
1:B:641:ILE:O	1:B:645:LEU:HG	2.13	0.49
1:B:752:VAL:HG23	1:B:753:ASN:H	1.78	0.49
1:A:773:ARG:CZ	1:C:230:PRO:HD2	2.43	0.49
1:C:560:LEU:HG	1:C:561:VAL:HG23	1.95	0.49
1:B:638:SER:O	1:B:642:ILE:HG13	2.12	0.49
1:A:172:VAL:HG13	1:A:292:ILE:HG23	1.93	0.49
1:A:401:LEU:HD22	1:A:1001:LEU:HD12	1.94	0.49
1:B:402:ALA:O	1:B:405:ILE:HG22	2.12	0.48
1:B:716:SER:O	1:B:716:SER:OG	2.31	0.48
1:C:976:PHE:HB3	1:C:1005:MET:CE	2.43	0.48
1:B:786:SER:OG	1:B:788:ASP:OD1	2.24	0.48
1:B:880:LEU:HD23	1:A:19:ILE:HG13	1.94	0.48
1:C:447:ILE:HG21	1:C:934:LYS:HE2	1.95	0.48
1:C:614:THR:O	1:C:615:SER:C	2.51	0.48
1:C:282:LEU:HD12	1:C:605:VAL:HG22	1.95	0.48
1:C:524:PHE:CZ	1:C:962:ALA:HB1	2.48	0.48
1:C:685:ASP:OD1	1:C:686:TYR:N	2.46	0.48
2:C:1101:ERY:H11	2:C:1101:ERY:C7	2.43	0.48
1:B:108:ASN:ND2	1:C:109:ASN:HB3	2.27	0.48
1:B:172:VAL:HG13	1:B:292:ILE:HG23	1.96	0.48
1:B:178:ILE:HG13	1:B:607:LEU:HD22	1.96	0.48
1:B:465:VAL:HA	1:B:468:ILE:HD11	1.95	0.48
1:C:70:ILE:HD11	1:C:107:VAL:HG13	1.96	0.48
1:C:107:VAL:O	1:C:111:ILE:HG13	2.14	0.48
1:A:736:MET:HB2	1:C:210:ASP:OD1	2.14	0.48
1:C:106:ASP:O	1:C:110:ARG:HG2	2.14	0.48
1:C:397:PHE:HD2	1:C:997:LEU:HD13	1.78	0.48
1:A:938:LEU:HD12	1:A:965:ARG:NH1	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:882:LEU:HB2	1:B:892:PRO:HB3	1.94	0.48
1:A:833:ALA:O	1:A:837:ILE:HG22	2.14	0.48
1:A:905:GLY:HA3	1:A:1007:ALA:HB2	1.95	0.48
1:B:459:SER:HB2	1:B:470:ARG:HD3	1.96	0.48
1:A:545:MET:O	1:A:549:ILE:HG13	2.14	0.48
1:C:137:LEU:HB3	1:C:292:ILE:O	2.14	0.48
1:C:409:ASP:HA	1:C:412:ILE:HD12	1.95	0.48
1:C:587:GLU:O	1:C:591:ILE:HG12	2.13	0.48
1:B:139:VAL:HG23	1:B:328:TYR:HD2	1.79	0.47
1:A:531:ILE:HD13	1:A:538:PHE:CE2	2.49	0.47
1:A:981:LEU:HA	1:A:1002:ILE:HD11	1.96	0.47
1:C:203:ASP:OD2	1:C:785:ARG:NH2	2.48	0.47
1:B:907:ILE:HG12	1:B:921:PHE:CZ	2.48	0.47
1:A:591:ILE:HA	1:A:649:TYR:HE2	1.79	0.47
1:A:630:ASP:O	1:A:634:ARG:HG2	2.14	0.47
1:C:775:THR:HG22	1:C:777:ASP:H	1.79	0.47
1:B:74:ASP:N	1:B:74:ASP:OD1	2.48	0.47
1:A:701:ARG:NH1	1:A:709:VAL:O	2.47	0.47
1:A:715:THR:HG22	1:A:806:PRO:HB3	1.97	0.47
1:C:892:PRO:O	1:C:896:ILE:HG12	2.14	0.47
1:B:868:ALA:HB1	1:B:871:PHE:HB2	1.96	0.47
1:C:613:PHE:CZ	1:C:660:LEU:HD11	2.45	0.47
1:B:152:ILE:HG12	1:B:273:ALA:HB2	1.95	0.47
1:B:888:ARG:HH11	1:B:889:TRP:H	1.62	0.47
1:A:80:ASP:HB3	1:A:812:PHE:HD1	1.78	0.47
1:C:328:TYR:OH	1:C:330:THR:HG22	2.15	0.47
1:C:338:ILE:O	1:C:341:VAL:HG12	2.15	0.47
1:C:531:ILE:HG22	1:C:538:PHE:CZ	2.49	0.47
1:B:35:GLN:O	1:B:393:LEU:HG	2.14	0.47
1:B:396:LEU:O	1:B:400:VAL:HG12	2.14	0.47
1:B:411:ILE:HD12	1:B:972:THR:HG22	1.95	0.47
1:C:717:PHE:CD2	1:C:807:ASP:HB2	2.50	0.47
1:B:256:GLU:N	1:B:256:GLU:OE2	2.47	0.47
1:B:408:ASP:O	1:B:412:ILE:HG12	2.15	0.47
1:A:43:THR:OG1	1:A:132:SER:O	2.33	0.47
1:A:484:GLY:O	1:A:488:LEU:HG	2.15	0.47
1:A:569:ILE:N	1:A:626:PHE:O	2.44	0.47
1:C:24:GLY:HA2	1:C:382:ALA:HB2	1.97	0.47
1:C:90:LEU:C	1:C:90:LEU:HD23	2.35	0.47
1:C:569:ILE:HD11	1:C:628:LEU:HD11	1.97	0.47
1:C:899:VAL:HG22	1:C:900:PRO:HD3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:364:LYS:O	1:B:368:ILE:HG13	2.15	0.47
1:C:583:ARG:O	1:C:587:GLU:HG2	2.15	0.47
1:B:359:PHE:HE2	1:B:974:LEU:HD13	1.78	0.47
1:B:379:GLY:O	1:B:383:VAL:HG12	2.15	0.47
1:B:986:ALA:O	1:B:995:HIS:NE2	2.47	0.47
1:A:37:PRO:O	1:A:39:LEU:HG	2.14	0.47
1:A:436:ALA:O	1:A:440:VAL:HG22	2.15	0.47
1:C:552:LEU:HA	1:C:555:ILE:HG22	1.97	0.47
1:B:839:GLU:O	1:B:843:GLN:HG2	2.15	0.46
1:B:968:PRO:HA	1:B:971:MET:HE2	1.97	0.46
1:C:570:MET:HG2	1:C:572:ILE:HD11	1.96	0.46
1:A:46:VAL:HG22	1:A:129:VAL:HG22	1.95	0.46
1:A:935:ASN:O	1:A:939:ILE:HG22	2.15	0.46
1:C:572:ILE:CG1	1:C:613:PHE:HE2	2.24	0.46
1:C:658:TYR:HD1	1:C:660:LEU:HD21	1.80	0.46
1:C:897:THR:O	1:C:900:PRO:HD2	2.15	0.46
1:A:31:LEU:HD22	1:A:390:SER:HA	1.97	0.46
1:B:140:VAL:O	1:B:290:ILE:N	2.39	0.46
1:B:368:ILE:HD13	1:B:495:SER:HA	1.98	0.46
1:C:45:GLN:HE21	1:C:89:LYS:HE3	1.79	0.46
1:B:360:LEU:HD21	1:B:365:SER:HB2	1.98	0.46
1:A:563:SER:HA	1:A:664:PRO:HG3	1.97	0.46
1:A:665:ILE:HG21	1:A:668:LEU:HD13	1.97	0.46
1:A:871:PHE:CE2	1:A:929:ILE:HD11	2.51	0.46
1:B:12:PHE:O	1:B:15:VAL:HG12	2.16	0.46
1:B:977:THR:HG22	1:B:1005:MET:SD	2.55	0.46
1:A:66:ILE:O	1:A:70:ILE:HG12	2.15	0.46
1:B:588:VAL:HA	1:B:591:ILE:HG22	1.98	0.46
1:C:152:ILE:HG12	1:C:273:ALA:HB2	1.97	0.46
1:B:417:ILE:O	1:B:421:LEU:HG	2.16	0.46
1:B:909:LEU:HD23	1:B:1003:GLY:N	2.30	0.46
1:C:45:GLN:HE21	1:C:89:LYS:CE	2.28	0.46
1:C:890:LEU:HB3	1:C:1023:LEU:HD12	1.97	0.46
1:B:157:TYR:O	1:B:157:TYR:HD1	1.98	0.46
1:B:458:VAL:O	1:B:469:GLN:NE2	2.49	0.46
1:B:545:MET:O	1:B:549:ILE:HG13	2.16	0.46
1:A:4:LYS:HB3	1:A:4:LYS:HE2	1.70	0.46
1:A:35:GLN:O	1:A:393:LEU:HB2	2.16	0.46
1:C:601:ILE:HG21	1:C:626:PHE:HB3	1.98	0.46
1:B:405:ILE:HD12	1:B:405:ILE:HA	1.82	0.45
1:A:568:VAL:HG13	1:A:662:LEU:CD2	2.43	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:809:VAL:HG12	1:C:810:LYS:N	2.30	0.45
1:B:968:PRO:O	1:B:972:THR:HG23	2.16	0.45
1:A:559:SER:HB3	1:A:829:THR:HB	1.98	0.45
1:A:677:TYR:CZ	1:A:819:LEU:HD13	2.51	0.45
1:A:894:ALA:HB2	1:A:1023:LEU:HD12	1.98	0.45
1:C:166:LEU:HD21	1:C:311:MET:CE	2.46	0.45
1:C:612:LEU:HD21	2:C:1101:ERY:O10	2.16	0.45
1:B:452:CYS:O	1:B:456:ILE:HG22	2.15	0.45
1:A:70:ILE:HG21	1:A:92:VAL:HG21	1.97	0.45
1:A:140:VAL:HB	1:A:290:ILE:HB	1.98	0.45
1:A:150:ASN:OD1	1:A:150:ASN:N	2.47	0.45
1:A:981:LEU:O	1:A:984:ILE:HG22	2.17	0.45
1:B:695:LYS:HA	1:B:698:GLU:OE1	2.17	0.45
1:A:188:TRP:CZ2	1:C:224:PRO:HG2	2.52	0.45
1:A:380:THR:O	1:A:384:LEU:HG	2.17	0.45
1:A:610:PHE:HE2	1:A:612:LEU:HD23	1.82	0.45
1:A:690:GLN:HA	1:A:693:VAL:HG22	1.98	0.45
1:C:356:MET:O	1:C:360:LEU:HB2	2.16	0.45
1:C:393:LEU:O	1:C:397:PHE:HD1	1.98	0.45
1:B:214:GLN:HG2	1:B:237:MET:SD	2.57	0.45
1:B:572:ILE:O	1:B:572:ILE:HG13	2.17	0.45
1:A:720:TYR:HE1	1:A:802:ARG:HG2	1.81	0.45
1:C:954:ILE:HD13	1:C:1024:GLU:HB3	1.98	0.45
1:A:470:ARG:NH1	1:A:470:ARG:HB2	2.32	0.45
1:A:837:ILE:HA	1:A:840:VAL:HG12	1.99	0.45
1:C:136:ILE:HD12	2:C:1101:ERY:C33	2.47	0.45
1:B:211:GLN:NE2	1:C:730:LYS:HE3	2.32	0.45
1:B:566:GLN:NE2	1:B:663:PRO:HD3	2.31	0.45
1:B:977:THR:HA	1:B:1005:MET:SD	2.57	0.45
1:A:70:ILE:HD12	1:A:107:VAL:HG13	1.98	0.45
1:C:143:TYR:HB3	1:C:287:ALA:HB2	1.97	0.45
1:C:417:ILE:HD13	1:C:436:ALA:HB3	1.99	0.45
1:C:905:GLY:HA3	1:C:1007:ALA:HB2	1.99	0.45
1:A:351:LEU:O	1:A:354:VAL:HG12	2.17	0.45
1:A:599:LYS:HA	1:A:599:LYS:HD3	1.73	0.45
1:C:22:ILE:O	1:C:25:ILE:HG22	2.17	0.45
1:C:882:LEU:HB2	1:C:892:PRO:HB3	1.99	0.45
1:B:351:LEU:HD23	1:B:978:PHE:HB3	1.99	0.44
1:A:80:ASP:HB3	1:A:812:PHE:CD1	2.52	0.44
1:C:4:LYS:O	1:C:7:ILE:HG22	2.17	0.44
1:C:994:ARG:HD2	1:C:994:ARG:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:443:PRO:O	1:B:447:ILE:HG13	2.17	0.44
1:A:377:LEU:HD13	1:A:399:LEU:HD22	1.99	0.44
1:B:903:VAL:HG22	1:B:925:LEU:HD11	1.99	0.44
1:A:782:ILE:HB	1:A:794:LEU:HD23	1.98	0.44
1:C:7:ILE:HD11	1:C:496:ALA:HB2	1.98	0.44
1:B:472:PHE:CZ	1:B:476:LEU:HD11	2.51	0.44
1:A:536:ILE:O	1:A:539:VAL:HG12	2.17	0.44
1:A:879:PHE:CD1	1:A:892:PRO:HB2	2.52	0.44
1:C:676:MET:HG2	1:C:853:TRP:CZ3	2.52	0.44
1:B:456:ILE:CG2	1:B:457:PRO:HD3	2.48	0.44
1:A:35:GLN:HG2	1:A:36:TYR:CD2	2.53	0.44
1:A:512:LYS:HD2	1:A:512:LYS:HA	1.85	0.44
1:A:689:ILE:O	1:A:693:VAL:HG13	2.18	0.44
1:B:101:ASP:HB3	1:C:102:GLN:NE2	2.32	0.44
1:B:544:ILE:O	1:B:548:PHE:HD1	2.01	0.44
1:A:31:LEU:HD21	1:A:385:TYR:HA	2.00	0.44
1:C:240:ARG:HD3	1:C:756:PRO:HD3	1.99	0.44
1:C:729:MET:SD	1:C:736:MET:HG3	2.58	0.44
1:B:155:TYR:CE2	1:B:177:ALA:HB3	2.52	0.44
1:B:427:ILE:HD12	1:B:435:LYS:NZ	2.32	0.44
1:B:337:SER:O	1:B:341:VAL:HG23	2.17	0.44
1:A:500:THR:OG1	1:A:502:ASN:O	2.36	0.44
1:A:949:LYS:HE3	1:A:950:LYS:HD3	1.98	0.44
1:C:248:GLU:HB3	1:C:264:LYS:HB3	2.00	0.44
1:C:981:LEU:O	1:C:984:ILE:HG22	2.18	0.44
1:C:1029:TRP:CD1	1:C:1029:TRP:C	2.91	0.44
1:B:232:VAL:HG21	1:C:619:GLU:OE2	2.18	0.43
1:B:730:LYS:HA	1:B:730:LYS:HD3	1.73	0.43
1:A:604:SER:O	1:A:604:SER:OG	2.33	0.43
1:A:791:MET:O	1:A:792:ILE:HD13	2.18	0.43
1:C:118:LEU:O	1:C:123:LYS:NZ	2.48	0.43
1:A:368:ILE:HB	1:A:369:PRO:HD3	1.99	0.43
1:A:141:SER:OG	1:A:282:LEU:HD22	2.19	0.43
1:A:311:MET:HE2	1:A:324:TYR:CD2	2.53	0.43
1:C:340:GLU:OE1	1:C:340:GLU:HA	2.17	0.43
1:B:767:ARG:HH22	1:A:222:GLU:HB3	1.82	0.43
1:B:903:VAL:HA	1:B:925:LEU:HD11	1.99	0.43
1:A:967:ARG:HB3	1:A:968:PRO:HD3	2.00	0.43
1:C:26:ILE:HG13	1:C:27:GLY:N	2.32	0.43
1:C:677:TYR:CZ	1:C:819:LEU:HD12	2.54	0.43
1:B:158:VAL:HG22	1:B:162:ILE:HD12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:180:ASN:ND2	1:C:275:GLN:OE1	2.50	0.43
1:B:341:VAL:HG11	1:B:396:LEU:HB3	1.99	0.43
1:A:139:VAL:HG23	1:A:328:TYR:HD2	1.82	0.43
1:A:564:GLU:OE1	1:A:564:GLU:HA	2.19	0.43
1:A:663:PRO:HG3	1:A:669:SER:O	2.19	0.43
1:C:36:TYR:CE1	1:C:393:LEU:HD12	2.54	0.43
1:C:612:LEU:HB3	2:C:1101:ERY:H271	2.01	0.43
1:C:458:VAL:CG1	1:C:469:GLN:HB3	2.49	0.43
1:A:50:TYR:OH	1:C:214:GLN:NE2	2.52	0.43
1:A:413:VAL:HG11	1:A:491:THR:HG23	2.01	0.43
1:A:774:ASN:H	1:C:220:ILE:HG12	1.84	0.43
1:A:916:ASP:OD1	1:A:916:ASP:N	2.44	0.43
1:B:94:PHE:CZ	1:B:103:ALA:HB1	2.54	0.43
1:B:178:ILE:HB	1:B:289:PRO:HD2	2.01	0.43
1:B:459:SER:CA	1:B:469:GLN:HE22	2.29	0.43
1:A:605:VAL:HG12	1:A:625:PHE:HB2	2.01	0.43
1:A:829:THR:HG21	1:A:916:ASP:HB3	2.01	0.43
1:C:315:SER:HA	1:C:318:PHE:CG	2.54	0.43
1:C:381:PHE:CE1	1:C:399:LEU:HD11	2.53	0.43
1:C:891:MET:HE2	1:C:940:ILE:HG23	2.01	0.43
1:B:872:VAL:HA	1:B:875:MET:HG2	2.01	0.43
1:B:57:THR:O	1:B:61:THR:OG1	2.28	0.42
1:B:691:GLN:O	1:B:695:LYS:HG3	2.19	0.42
1:B:853:TRP:CD1	1:B:857:ALA:HB1	2.54	0.42
1:C:84:SER:HB2	1:C:85:PRO:HD2	2.00	0.42
1:C:688:ALA:HA	1:C:691:GLN:OE1	2.19	0.42
1:C:737:GLN:HE22	1:C:741:ASN:HD21	1.67	0.42
1:B:359:PHE:CE2	1:B:974:LEU:HD13	2.55	0.42
1:B:453:ALA:O	1:B:457:PRO:HG2	2.20	0.42
1:A:677:TYR:CE2	1:A:810:LYS:HD3	2.49	0.42
1:C:965:ARG:O	1:C:969:ILE:HG12	2.20	0.42
1:A:517:PHE:HE2	1:A:967:ARG:HG3	1.84	0.42
1:C:70:ILE:HD13	1:C:110:ARG:HB2	2.02	0.42
1:C:136:ILE:HD12	2:C:1101:ERY:H331	2.02	0.42
1:C:909:LEU:HD12	1:C:909:LEU:HA	1.89	0.42
1:B:735:ASN:HB3	1:A:210:ASP:OD2	2.19	0.42
1:B:884:ALA:HB2	1:A:15:VAL:HG11	2.01	0.42
1:A:75:ASN:HA	1:A:95:ASN:HD22	1.85	0.42
1:A:169:ILE:HD13	1:A:169:ILE:HA	1.90	0.42
1:A:969:ILE:HD13	1:A:969:ILE:HA	1.78	0.42
1:A:223:GLU:OE2	1:A:228:LYS:NZ	2.51	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:329:ASP:O	1:A:332:ILE:HG22	2.19	0.42
1:A:757:MET:HB3	1:A:762:PHE:HD2	1.85	0.42
1:C:612:LEU:O	2:C:1101:ERY:H211	2.20	0.42
1:C:891:MET:N	1:C:892:PRO:HD2	2.34	0.42
1:A:894:ALA:HA	1:A:897:THR:HG22	2.01	0.42
1:B:931:LEU:O	1:B:934:LYS:HG2	2.20	0.42
1:A:39:LEU:HB3	1:A:464:PHE:CE1	2.55	0.42
1:A:159:SER:HA	1:A:163:LEU:HD12	2.01	0.42
1:C:13:ALA:O	1:C:16:VAL:HG12	2.20	0.42
1:C:138:GLU:OE2	1:C:307:ILE:HD12	2.20	0.42
1:A:14:SER:O	1:A:18:ILE:HG12	2.19	0.42
1:B:34:GLU:O	1:B:392:ASN:HA	2.19	0.42
1:B:497:LEU:HD12	1:B:497:LEU:HA	1.84	0.42
1:A:882:LEU:HD22	1:A:937:ILE:HD11	2.02	0.42
1:B:356:MET:SD	1:B:366:THR:HG23	2.60	0.41
1:B:436:ALA:O	1:B:440:VAL:HG22	2.20	0.41
1:B:949:LYS:HD2	1:B:950:LYS:HB2	2.01	0.41
1:A:241:LEU:HB3	1:A:246:GLU:HB3	2.02	0.41
1:C:585:ILE:HG12	1:C:608:ILE:HG21	2.01	0.41
1:B:157:TYR:CD1	1:B:157:TYR:C	2.94	0.41
1:B:351:LEU:HD12	1:B:351:LEU:HA	1.86	0.41
1:B:447:ILE:O	1:B:451:LEU:HD23	2.20	0.41
1:A:10:PRO:HG2	1:A:497:LEU:HD13	2.01	0.41
1:A:552:LEU:HA	1:A:555:ILE:HG22	2.02	0.41
1:A:720:TYR:HB2	1:C:235:ILE:HG12	2.01	0.41
1:B:240:ARG:HB3	1:B:756:PRO:HD3	2.03	0.41
1:B:562:PRO:HD2	1:B:920:TYR:HE2	1.85	0.41
1:C:214:GLN:NE2	1:C:214:GLN:HA	2.35	0.41
1:C:440:VAL:HA	1:C:443:PRO:HG2	2.02	0.41
1:C:456:ILE:HD13	1:C:456:ILE:HA	1.88	0.41
1:B:79:MET:HB2	1:B:92:VAL:HG22	2.02	0.41
1:B:85:PRO:HD3	1:B:807:ASP:O	2.21	0.41
1:B:396:LEU:HD23	1:B:396:LEU:HA	1.96	0.41
1:B:416:ASN:HA	1:B:419:ARG:HG2	2.02	0.41
1:B:478:ILE:O	1:B:481:ALA:N	2.52	0.41
1:A:546:ILE:HD13	1:A:549:ILE:HD12	2.03	0.41
1:A:942:PHE:CD2	1:A:961:ALA:HA	2.54	0.41
1:C:495:SER:O	1:C:499:LEU:HB2	2.21	0.41
1:C:752:VAL:CG2	1:C:753:ASN:N	2.82	0.41
1:B:217:THR:HG22	1:C:743:ILE:HG21	2.02	0.41
1:B:417:ILE:HG13	1:B:417:ILE:H	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:580:SER:HB3	1:A:232:VAL:HG23	2.03	0.41
1:C:412:ILE:HG23	1:C:965:ARG:HH12	1.84	0.41
1:C:568:VAL:CG2	1:C:662:LEU:HD22	2.50	0.41
1:C:679:GLN:OE1	1:C:852:ALA:HB2	2.20	0.41
1:C:730:LYS:HD3	1:C:730:LYS:HA	1.80	0.41
1:A:367:ILE:HD12	1:A:367:ILE:HA	1.83	0.41
1:A:485:PHE:CD1	1:A:485:PHE:C	2.94	0.41
1:C:106:ASP:OD1	1:C:106:ASP:N	2.54	0.41
1:C:990:GLY:O	1:C:993:SER:OG	2.30	0.41
1:B:2:PHE:CD1	1:B:2:PHE:C	2.93	0.41
1:B:343:LYS:O	1:B:347:GLU:HG3	2.19	0.41
1:B:409:ASP:N	1:B:409:ASP:OD1	2.53	0.41
1:B:968:PRO:HA	1:B:971:MET:CE	2.50	0.41
1:C:615:SER:H	2:C:1101:ERY:H212	1.84	0.41
1:B:155:TYR:HE2	1:B:177:ALA:HB3	1.84	0.41
1:B:310:LYS:HD3	1:B:310:LYS:HA	1.91	0.41
1:B:825:ALA:HB1	1:B:828:TYR:HD1	1.86	0.41
1:B:897:THR:O	1:B:900:PRO:HD2	2.20	0.41
1:A:445:ILE:HD11	1:A:488:LEU:HD11	2.01	0.41
1:C:328:TYR:CE2	1:C:330:THR:HG22	2.56	0.41
1:C:926:LEU:HA	1:C:926:LEU:HD23	1.85	0.41
1:B:244:PRO:O	1:B:248:GLU:HG2	2.21	0.41
1:A:240:ARG:HB3	1:A:756:PRO:HD3	2.03	0.41
1:C:373:VAL:HB	1:C:374:PRO:HD3	2.03	0.41
1:C:606:SER:CB	1:C:624:VAL:HG22	2.51	0.41
1:C:837:ILE:HD12	1:C:837:ILE:HA	1.83	0.41
1:C:886:TYR:OH	1:C:937:ILE:HA	2.21	0.41
1:C:94:PHE:CE2	1:C:103:ALA:HB1	2.56	0.41
1:B:280:GLY:HA3	1:B:289:PRO:HD3	2.03	0.40
1:B:362:ASN:O	1:B:366:THR:OG1	2.33	0.40
1:B:398:ALA:HB2	1:B:472:PHE:CD1	2.55	0.40
1:B:592:ASN:O	1:B:596:THR:HG23	2.21	0.40
1:A:362:ASN:O	1:A:366:THR:OG1	2.27	0.40
1:A:374:PRO:O	1:A:378:LEU:HD23	2.21	0.40
1:A:469:GLN:CG	1:A:923:THR:HG22	2.51	0.40
1:B:68:ASP:OD1	1:B:69:ALA:N	2.54	0.40
1:B:403:ILE:O	1:B:406:VAL:HG12	2.21	0.40
1:B:757:MET:HB3	1:B:762:PHE:HD2	1.86	0.40
1:A:45:GLN:HE21	1:A:45:GLN:HB2	1.61	0.40
1:A:310:LYS:HA	1:A:310:LYS:HD2	1.84	0.40
1:A:371:ILE:O	1:A:374:PRO:HD2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:868:ALA:O	1:A:872:VAL:HG12	2.21	0.40
1:C:572:ILE:HG21	1:C:613:PHE:HE2	1.82	0.40
1:C:953:SER:HB2	1:C:956:GLU:HG2	2.03	0.40
1:B:431:ASP:O	1:B:434:ILE:HB	2.20	0.40
1:A:890:LEU:HD23	1:A:1023:LEU:HD22	2.03	0.40
1:B:397:PHE:O	1:B:401:LEU:HB2	2.22	0.40
1:B:472:PHE:CE1	1:B:923:THR:HB	2.55	0.40
1:B:704:LYS:HG3	1:B:705:GLU:CD	2.42	0.40
1:A:212:ASN:O	1:A:753:ASN:ND2	2.54	0.40
1:A:772:PHE:HD1	1:A:778:ALA:HB1	1.87	0.40
1:C:359:PHE:CD2	1:C:971:MET:HG2	2.56	0.40
1:C:568:VAL:CG2	1:C:662:LEU:CD2	3.00	0.40
1:C:662:LEU:N	1:C:662:LEU:HD12	2.36	0.40
1:C:927:LEU:HD22	1:C:1001:LEU:HD11	2.03	0.40
1:B:384:LEU:HD13	1:B:389:PHE:HB2	2.02	0.40
1:B:585:ILE:HG12	1:B:608:ILE:HG21	2.02	0.40
1:A:425:SER:HA	1:A:501:ARG:NH1	2.36	0.40
1:C:401:LEU:HG	1:C:927:LEU:HD13	2.02	0.40
1:C:696:MET:HG3	1:C:844:SER:HB2	2.04	0.40
1:C:853:TRP:CD1	1:C:861:VAL:HG21	2.56	0.40
1:C:1012:ALA:O	1:C:1016:VAL:HG23	2.22	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	1030/1039 (99%)	1016 (99%)	14 (1%)	0	100	100
1	B	1019/1039 (98%)	996 (98%)	23 (2%)	0	100	100
1	C	1030/1039 (99%)	1008 (98%)	21 (2%)	1 (0%)	51	83
All	All	3079/3117 (99%)	3020 (98%)	58 (2%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	C	230	PRO

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	875/883 (99%)	850 (97%)	25 (3%)	42 71
1	B	859/883 (97%)	826 (96%)	33 (4%)	33 64
1	C	876/883 (99%)	851 (97%)	25 (3%)	42 71
All	All	2610/2649 (98%)	2527 (97%)	83 (3%)	42 69

All (83) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	2	PHE
1	B	45	GLN
1	B	50	TYR
1	B	74	ASP
1	B	101	ASP
1	B	106	ASP
1	B	149	MET
1	B	157	TYR
1	B	174	ASP
1	B	182	ASN
1	B	210	ASP
1	B	277	ASN
1	B	310	LYS
1	B	333	PHE
1	B	387	LEU
1	B	397	PHE
1	B	431	ASP
1	B	441	SER
1	B	450	VAL
1	B	470	ARG

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Mol	Chain	Res	Type
1	B	485	PHE
1	B	553	PHE
1	B	563	SER
1	B	704	LYS
1	B	754	ASP
1	B	901	PHE
1	B	913	ARG
1	B	947	ARG
1	B	949	LYS
1	B	953	SER
1	B	955	PHE
1	B	996	SER
1	B	1025	ASN
1	A	12	PHE
1	A	74	ASP
1	A	81	SER
1	A	141	SER
1	A	159	SER
1	A	289	PRO
1	A	296	SER
1	A	324	TYR
1	A	363	PHE
1	A	370	MET
1	A	483	SER
1	A	515	ASP
1	A	545	MET
1	A	548	PHE
1	A	558	SER
1	A	638	SER
1	A	649	TYR
1	A	776	GLN
1	A	830	SER
1	A	934	LYS
1	A	944	MET
1	A	947	ARG
1	A	1009	SER
1	A	1014	PHE
1	A	1027	ASN
1	C	50	TYR
1	C	102	GLN
1	C	106	ASP
1	C	132	SER

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Mol	Chain	Res	Type
1	C	149	MET
1	C	184	SER
1	C	277	ASN
1	C	452	CYS
1	C	459	SER
1	C	508	TYR
1	C	635	GLU
1	C	646	PHE
1	C	660	LEU
1	C	681	LYS
1	C	710	ARG
1	C	731	TYR
1	C	757	MET
1	C	761	ASN
1	C	835	ASP
1	C	893	LEU
1	C	906	SER
1	C	908	LEU
1	C	948	LEU
1	C	1026	PHE
1	C	1029	TRP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (10) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	362	ASN
1	B	469	GLN
1	B	640	GLN
1	A	438	ASN
1	A	594	ASN
1	C	45	GLN
1	C	180	ASN
1	C	214	GLN
1	C	275	GLN
1	C	741	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	ERY	C	1101	-	53,53,53	0.91	1 (1%)	82,82,82	1.47	14 (17%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	ERY	C	1101	-	-	16/72/107/107	0/3/3/3

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	1101	ERY	O2-C1	5.01	1.46	1.34

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	1101	ERY	C22-O7-C5	-4.25	108.87	116.25
2	C	1101	ERY	O2-C1-C2	3.60	119.46	111.56
2	C	1101	ERY	C27-C26-C25	-3.10	108.53	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	1101	ERY	O7-C5-C6	3.05	110.15	106.39
2	C	1101	ERY	O5-C16-C17	3.02	108.28	103.81
2	C	1101	ERY	O5-C16-C15	-2.98	108.19	112.96
2	C	1101	ERY	C34-C10-C11	-2.85	110.84	114.38
2	C	1101	ERY	C7-C8-C9	-2.43	109.14	113.32
2	C	1101	ERY	C15-C16-C17	2.40	111.97	107.67
2	C	1101	ERY	C16-C17-C18	2.36	114.76	111.14
2	C	1101	ERY	O5-C16-C19	-2.35	107.00	110.92
2	C	1101	ERY	C6-C5-C4	-2.29	110.81	114.05
2	C	1101	ERY	O2-C1-O1	-2.28	119.69	123.94
2	C	1101	ERY	C13-O2-C1	-2.25	114.18	118.18

There are no chirality outliers.

All (16) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	C	1101	ERY	C17-C16-O5-C20
2	C	1101	ERY	C2-C1-O2-C13
2	C	1101	ERY	O3-C3-C4-C31
2	C	1101	ERY	C2-C3-C4-C31
2	C	1101	ERY	O3-C3-C4-C5
2	C	1101	ERY	C2-C3-C4-C5
2	C	1101	ERY	O1-C1-O2-C13
2	C	1101	ERY	C3-C4-C5-O7
2	C	1101	ERY	C32-C6-C7-C8
2	C	1101	ERY	O10-C6-C7-C8
2	C	1101	ERY	C6-C7-C8-C33
2	C	1101	ERY	C11-C10-C9-C8
2	C	1101	ERY	C6-C7-C8-C9
2	C	1101	ERY	C11-C10-C9-O11
2	C	1101	ERY	C3-C4-C5-C6
2	C	1101	ERY	C34-C10-C9-C8

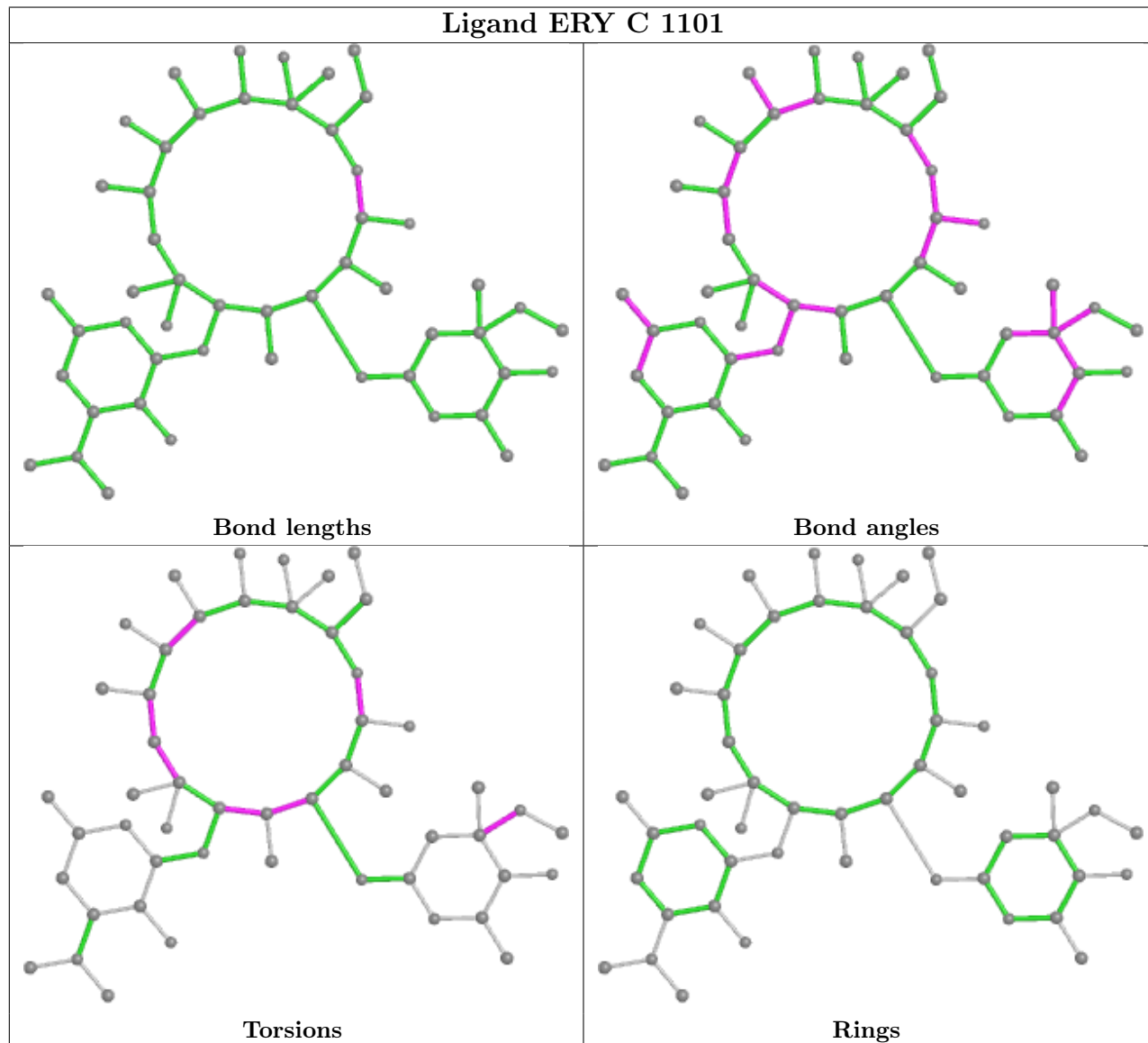
There are no ring outliers.

1 monomer is involved in 10 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	C	1101	ERY	10	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In

addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

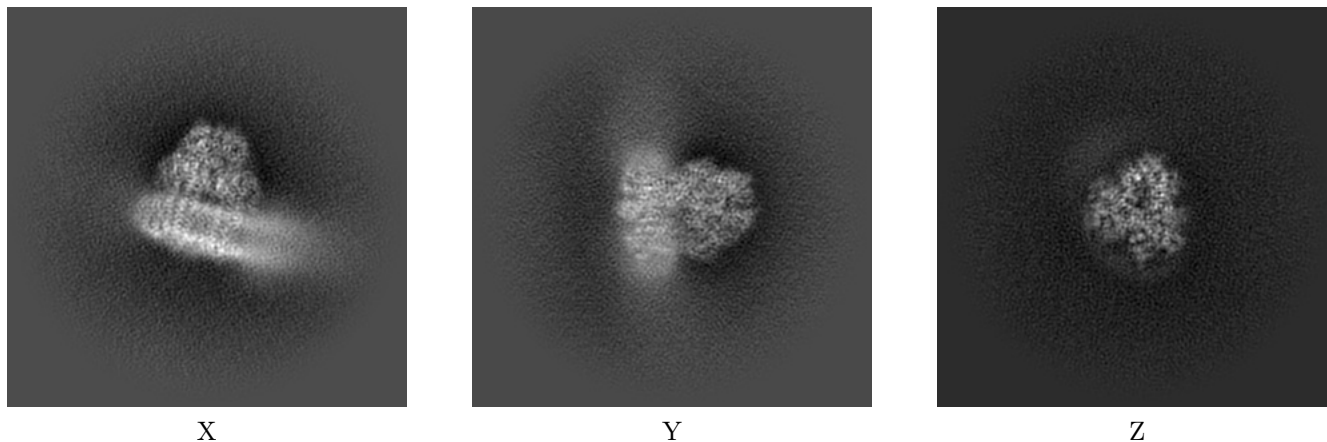
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-40177. These allow visual inspection of the internal detail of the map and identification of artifacts.

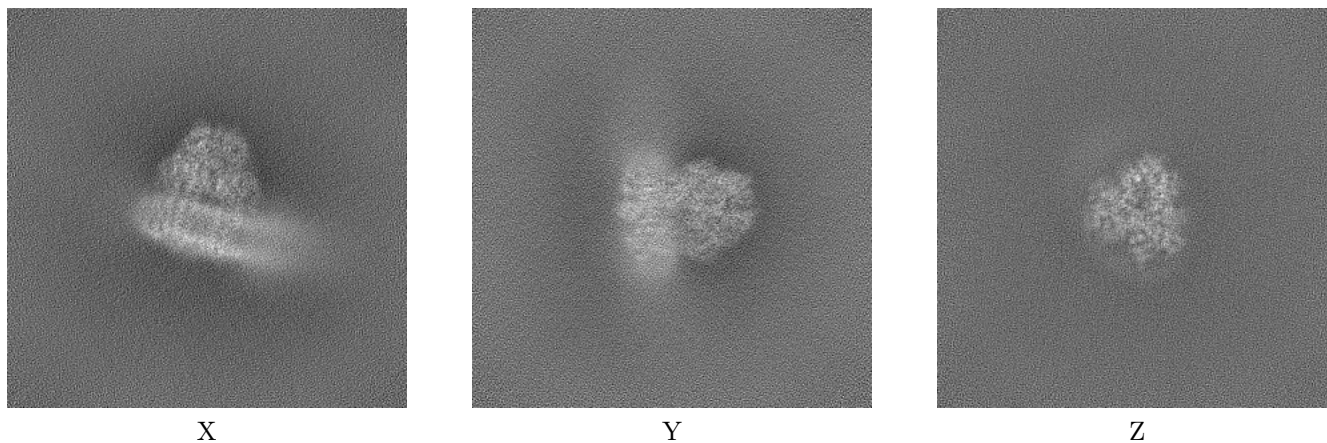
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



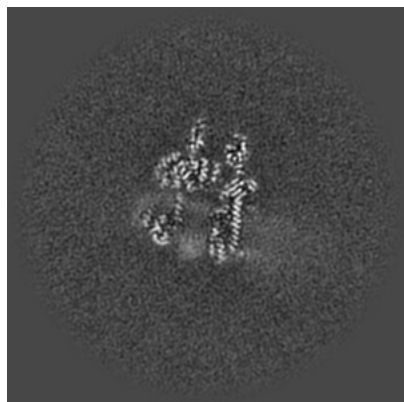
6.1.2 Raw map



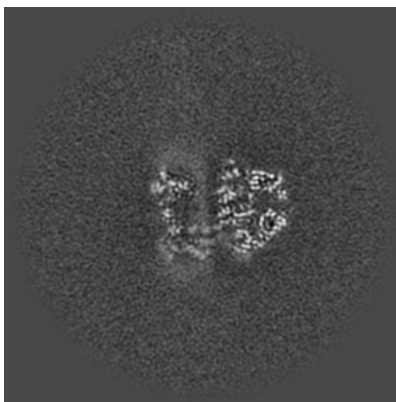
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

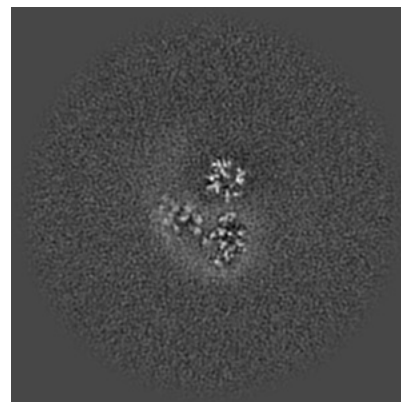
6.2.1 Primary map



X Index: 176

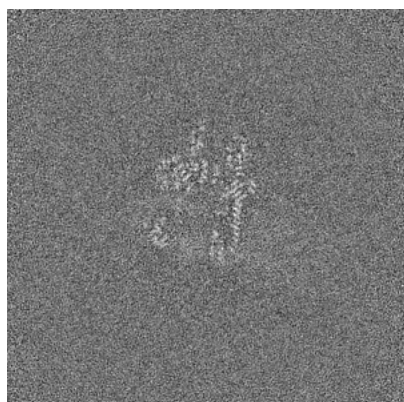


Y Index: 176

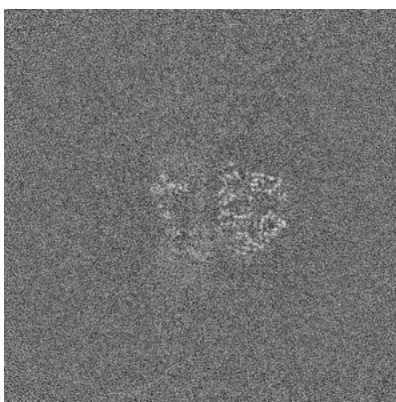


Z Index: 176

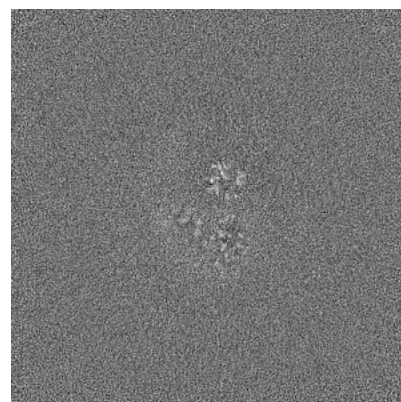
6.2.2 Raw map



X Index: 176



Y Index: 176

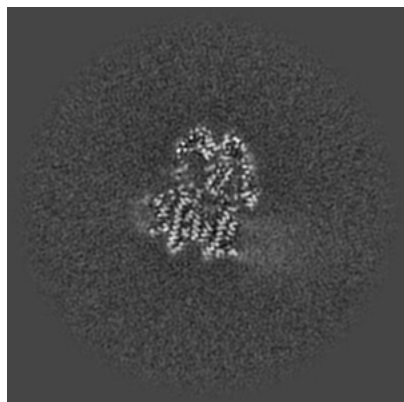


Z Index: 176

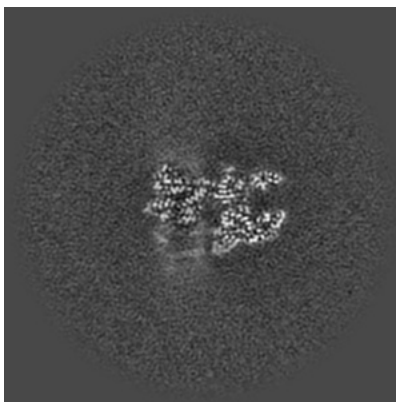
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

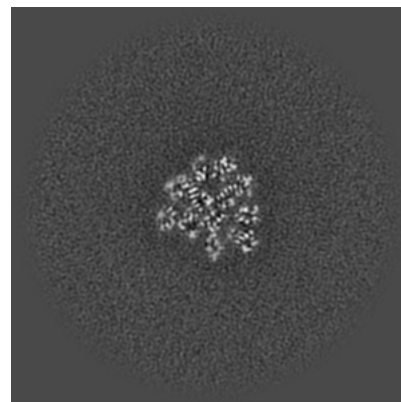
6.3.1 Primary map



X Index: 192

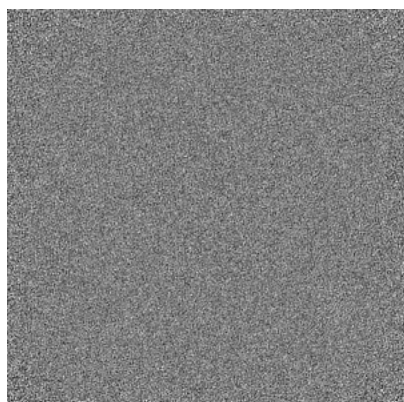


Y Index: 186

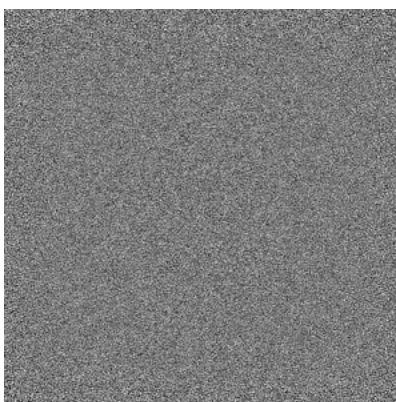


Z Index: 201

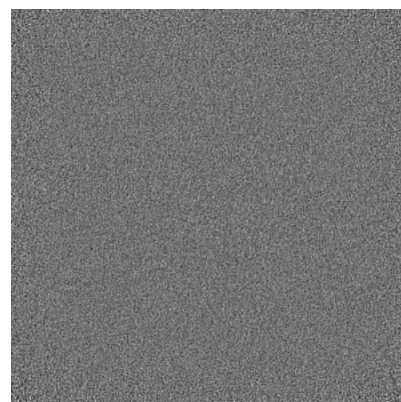
6.3.2 Raw map



X Index: 0



Y Index: 0

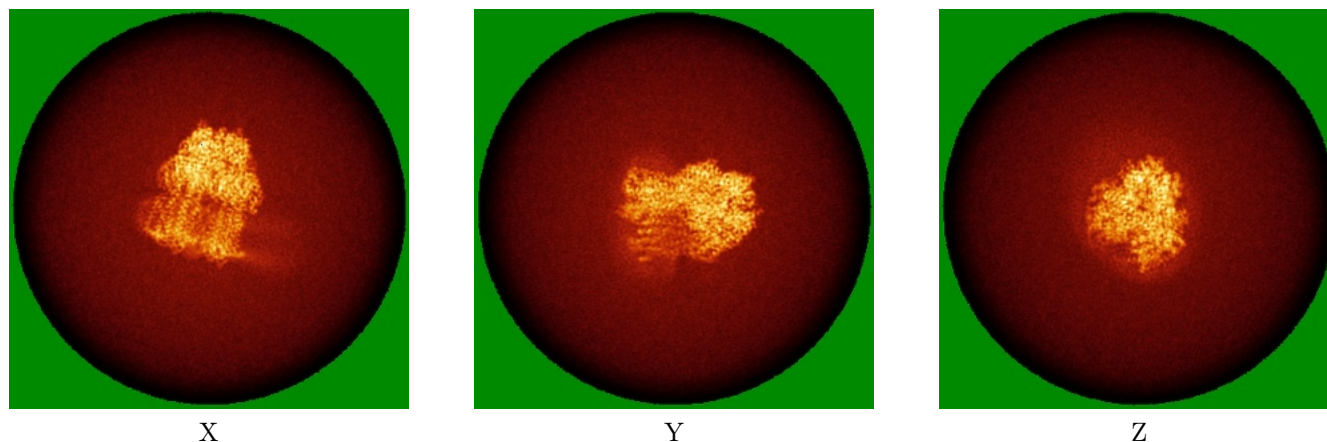


Z Index: 0

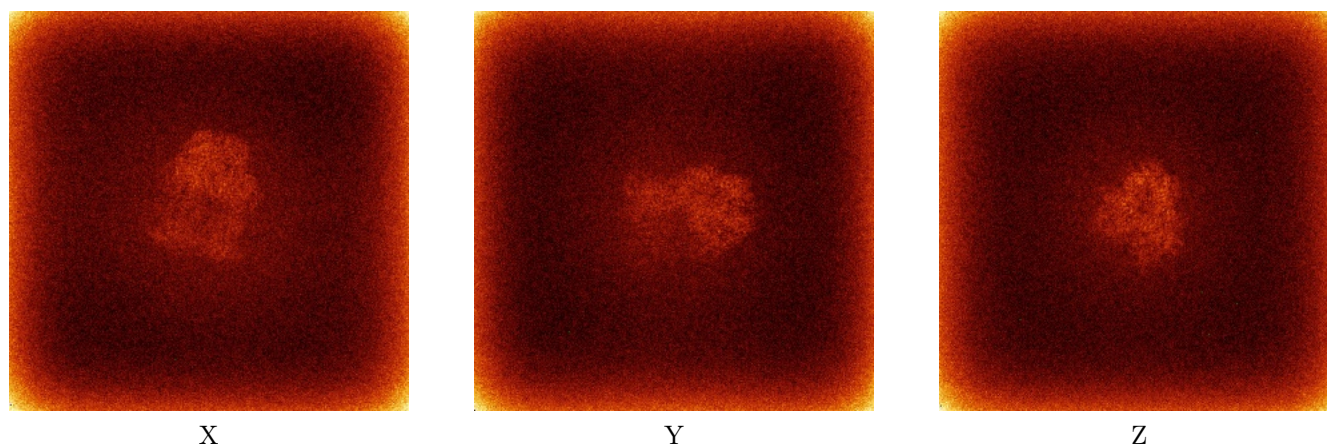
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map



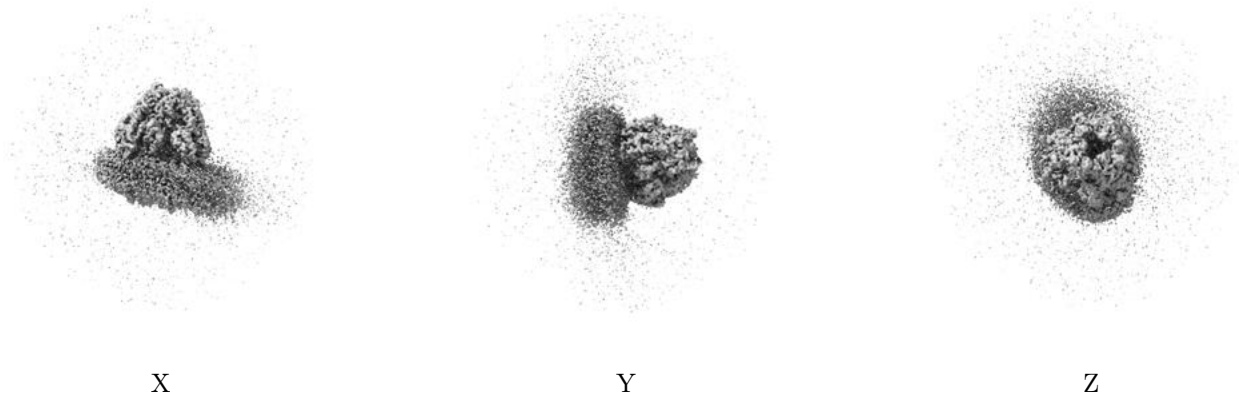
6.4.2 Raw map



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

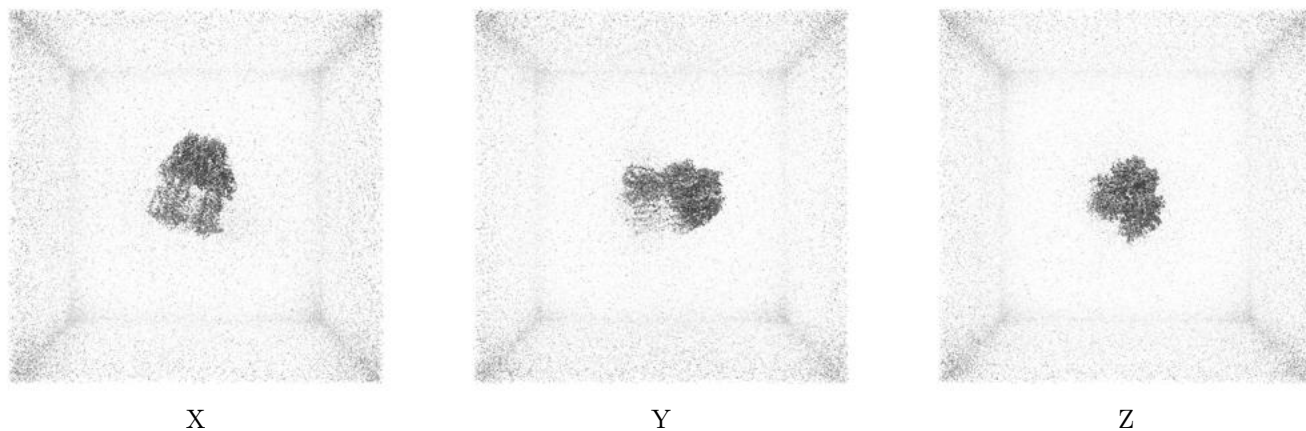
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

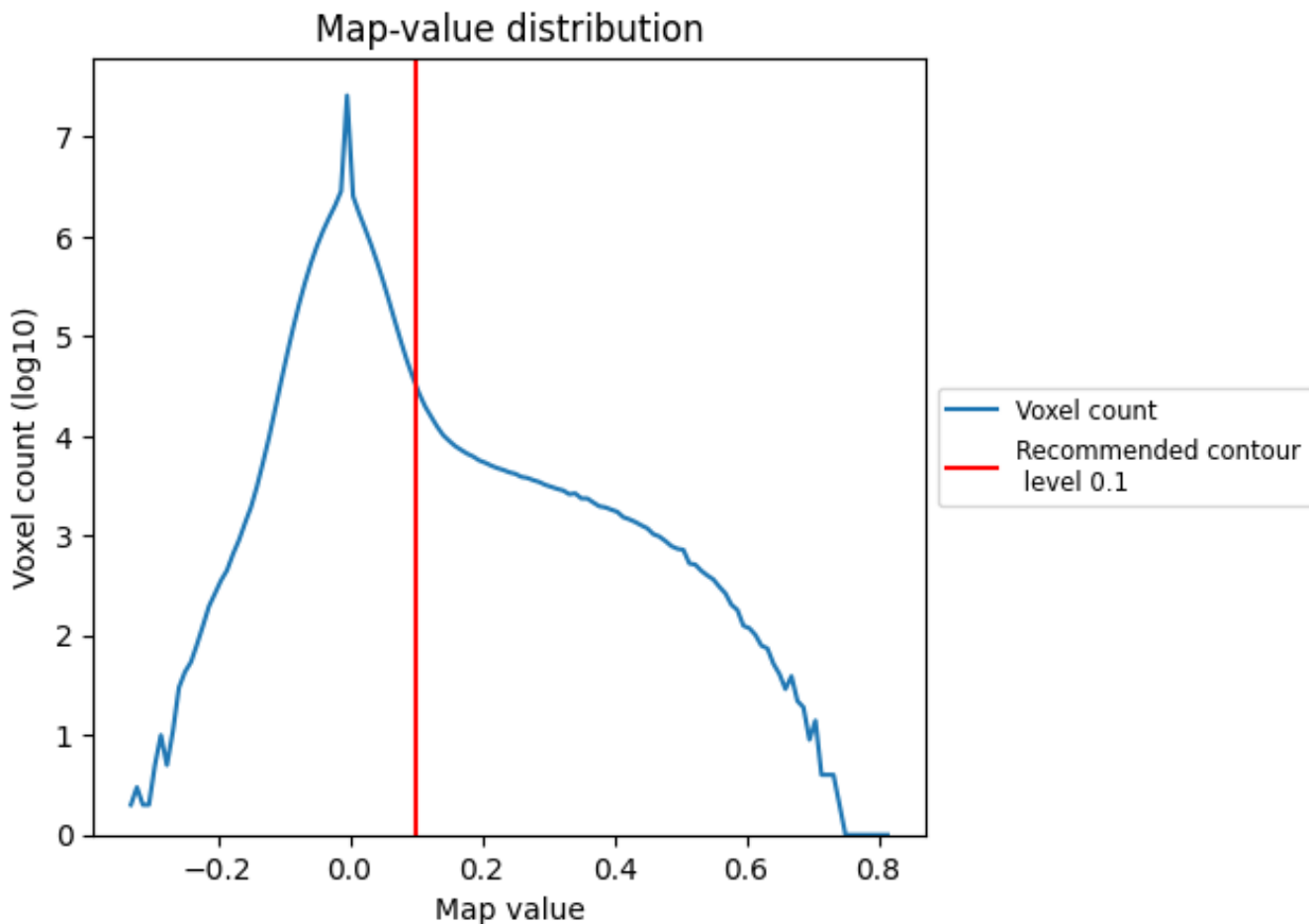
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

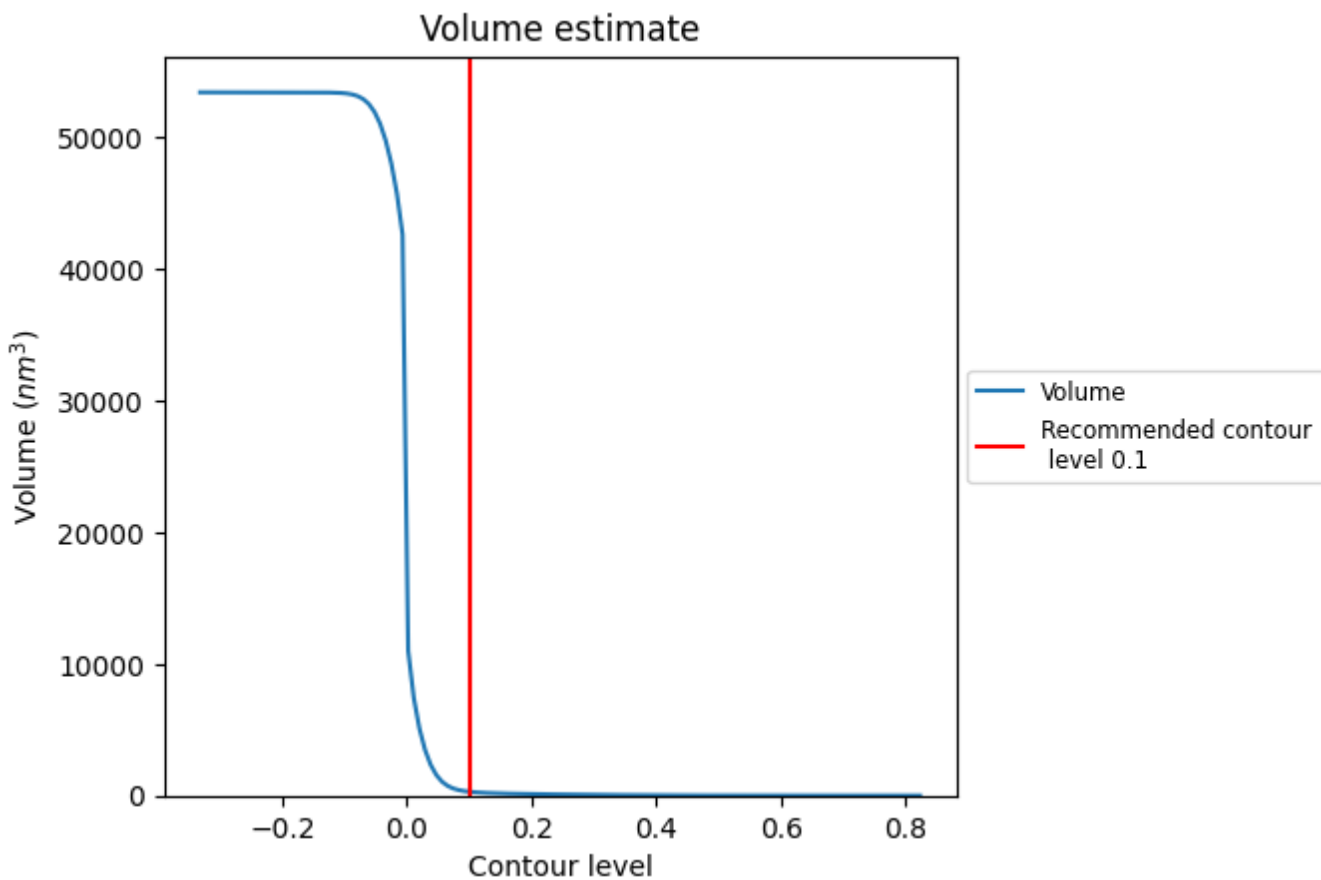
This section contains the results of statistical analysis of the map.

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.

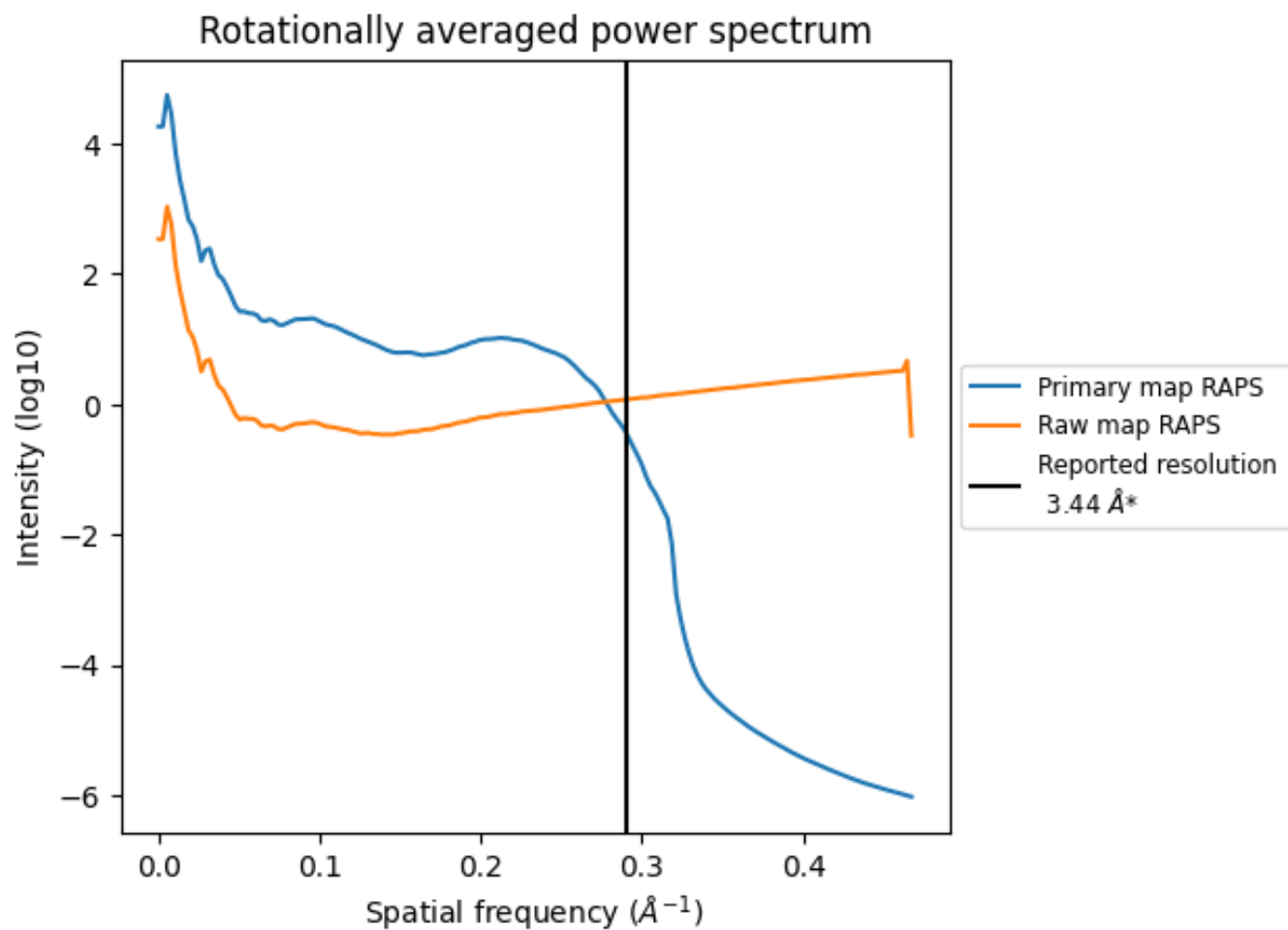
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 291 nm³; this corresponds to an approximate mass of 263 kDa.

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

7.3 Rotationally averaged power spectrum i

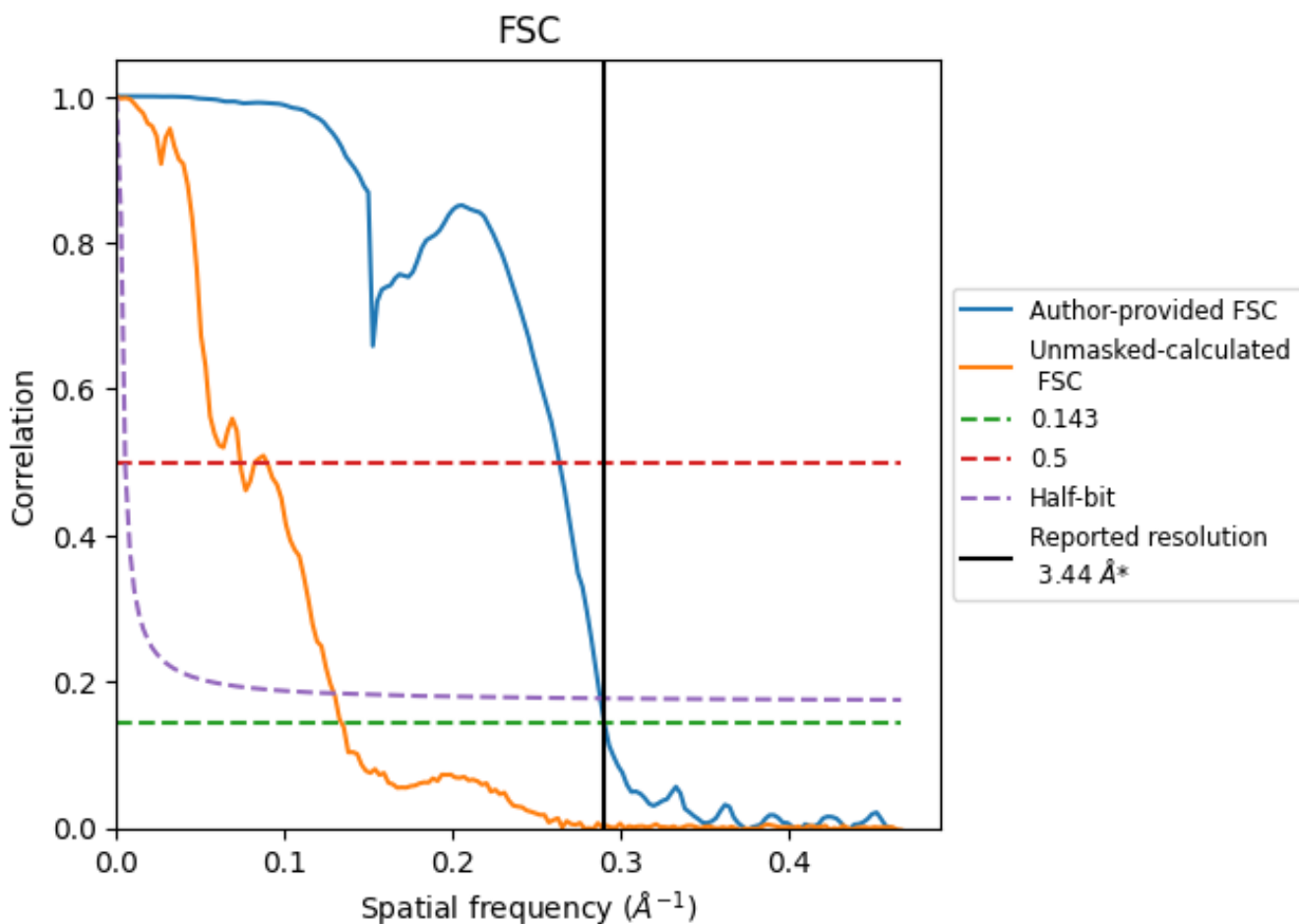


*Reported resolution corresponds to spatial frequency of 0.291 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.291 Å⁻¹

8.2 Resolution estimates [i](#)

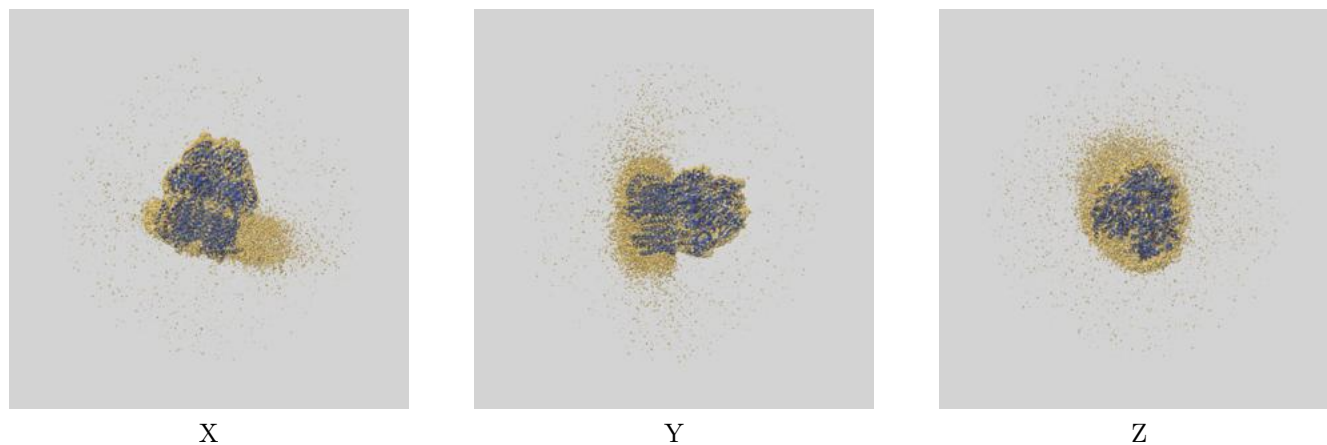
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.44	-	-
Author-provided FSC curve	3.44	3.79	3.47
Unmasked-calculated*	7.46	13.55	7.72

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 7.46 differs from the reported value 3.44 by more than 10 %

9 Map-model fit [i](#)

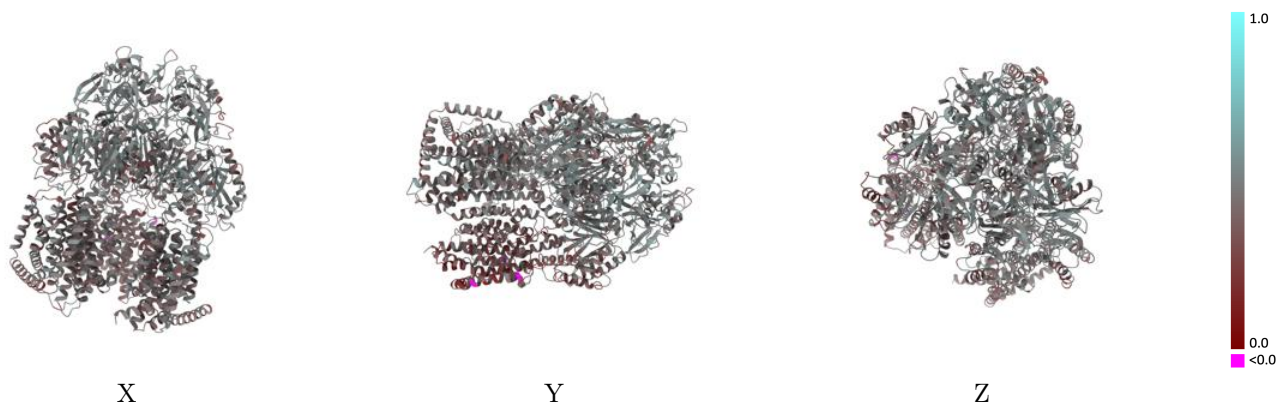
This section contains information regarding the fit between EMDB map EMD-40177 and PDB model 8GK0. Per-residue inclusion information can be found in section 3 on page 4.

9.1 Map-model overlay [i](#)



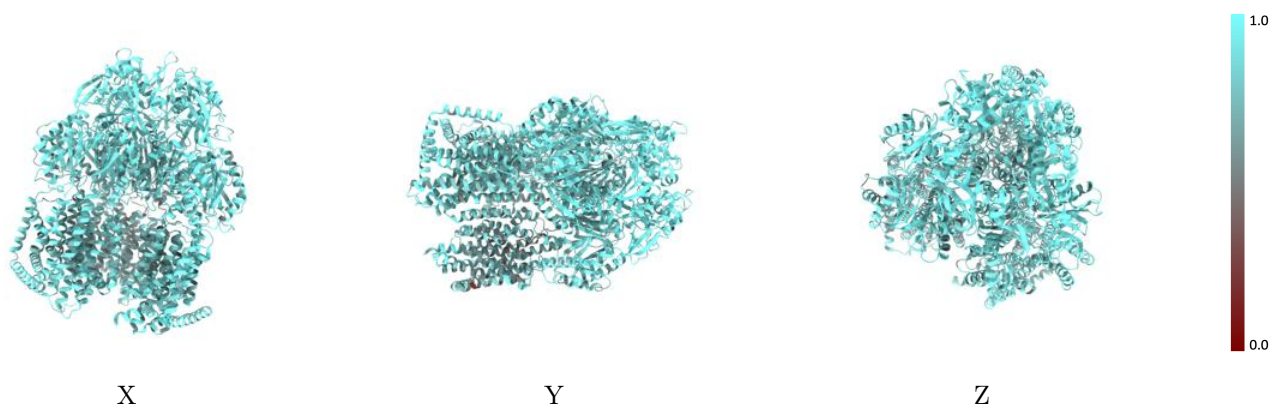
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



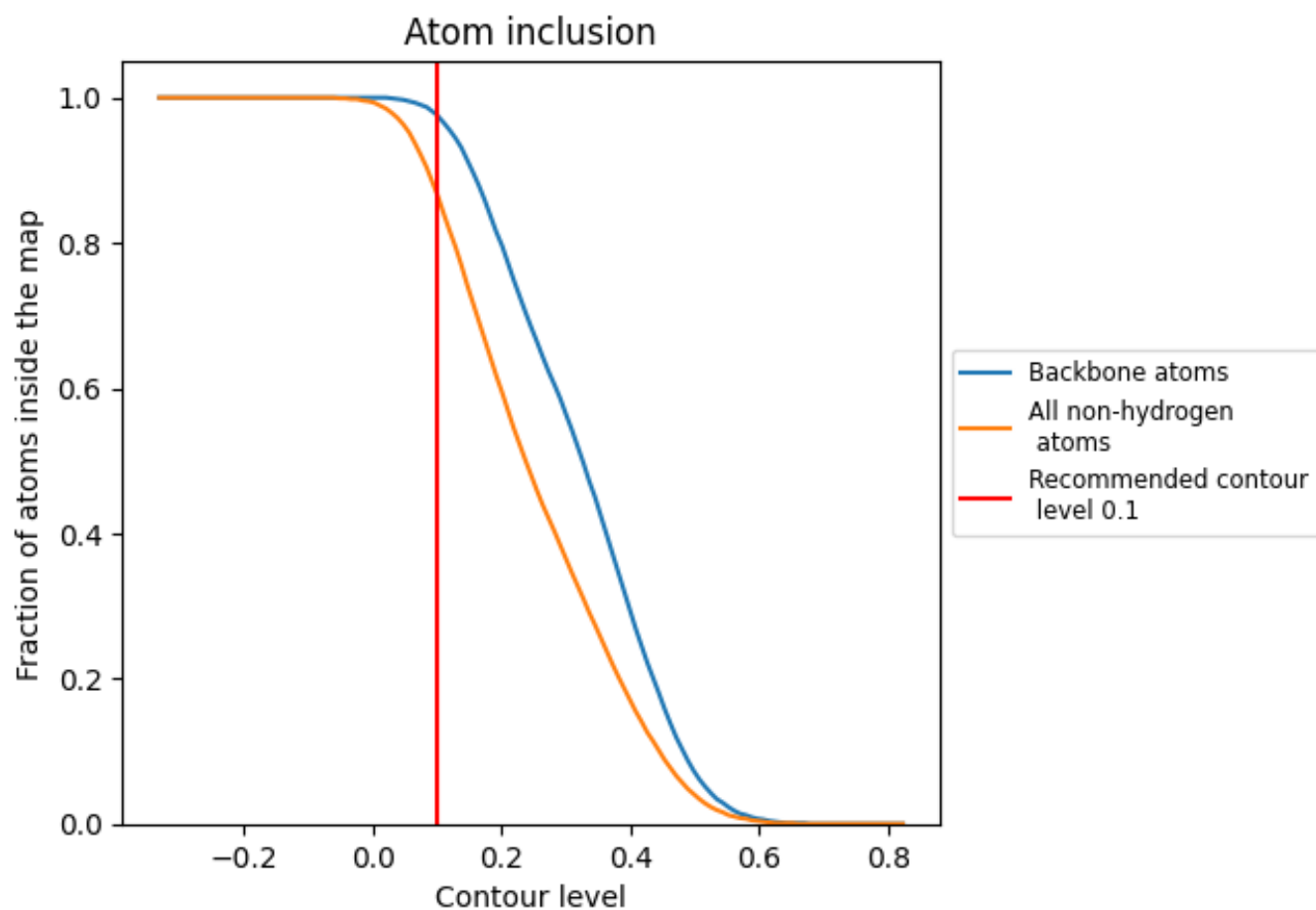
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.1).







9.4 Atom inclusion [i](#)



At the recommended contour level, 98% of all backbone atoms, 87% 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 (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8670	 0.4410
A	 0.8850	 0.4650
B	 0.8370	 0.4050
C	 0.8790	 0.4520

