Full wwPDB EM Validation Report ⓘ

Mar 20, 2024 – 09:50 AM JST

PDB ID	:	6LZ1
EMDB ID	:	EMD-30021
Title	:	Structure of S.pombe alpha-mannosidase Ams1
Authors	:	Zhang, J.; Ye, K.
Deposited on	:	2020-02-17
Resolution	:	3.20 Å(reported)
Based on initial model	:	6LZ1

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

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

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

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

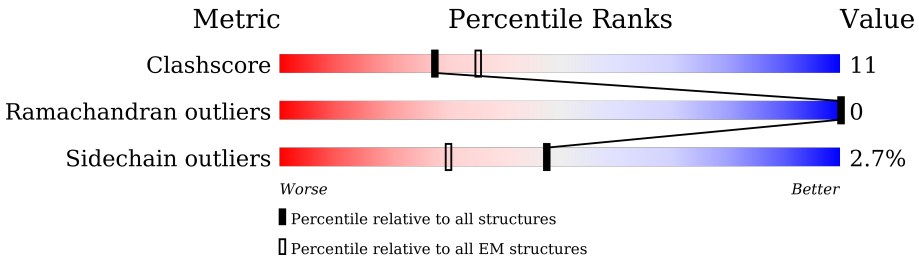
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.20 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	1133	70% 24% • 5%
1	B	1133	70% 24% • 5%
1	C	1133	70% 24% • 5%
1	D	1133	70% 24% • 5%

2 Entry composition (i)

There are 2 unique types of molecules in this entry. The entry contains 34492 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 Ams1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1076	Total	C	N	O	S	0	0
			8622	5505	1452	1624	41		
1	B	1076	Total	C	N	O	S	0	0
			8622	5505	1452	1624	41		
1	C	1076	Total	C	N	O	S	0	0
			8622	5505	1452	1624	41		
1	D	1076	Total	C	N	O	S	0	0
			8622	5505	1452	1624	41		

There are 224 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1078	GLY	-	expression tag	UNP Q9UT61
A	1079	SER	-	expression tag	UNP Q9UT61
A	1080	MET	-	expression tag	UNP Q9UT61
A	1081	SER	-	expression tag	UNP Q9UT61
A	1082	LYS	-	expression tag	UNP Q9UT61
A	1083	GLY	-	expression tag	UNP Q9UT61
A	1084	LYS	-	expression tag	UNP Q9UT61
A	1085	VAL	-	expression tag	UNP Q9UT61
A	1086	VAL	-	expression tag	UNP Q9UT61
A	1087	ASP	-	expression tag	UNP Q9UT61
A	1088	ILE	-	expression tag	UNP Q9UT61
A	1089	MET	-	expression tag	UNP Q9UT61
A	1090	ASP	-	expression tag	UNP Q9UT61
A	1091	TYR	-	expression tag	UNP Q9UT61
A	1092	LYS	-	expression tag	UNP Q9UT61
A	1093	ASP	-	expression tag	UNP Q9UT61
A	1094	ASP	-	expression tag	UNP Q9UT61
A	1095	ASP	-	expression tag	UNP Q9UT61
A	1096	ASP	-	expression tag	UNP Q9UT61
A	1097	LYS	-	expression tag	UNP Q9UT61
A	1098	PRO	-	expression tag	UNP Q9UT61
A	1099	MET	-	expression tag	UNP Q9UT61

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Chain	Residue	Modelled	Actual	Comment	Reference
A	1100	ASP	-	expression tag	UNP Q9UT61
A	1101	TYR	-	expression tag	UNP Q9UT61
A	1102	LYS	-	expression tag	UNP Q9UT61
A	1103	ASP	-	expression tag	UNP Q9UT61
A	1104	ASP	-	expression tag	UNP Q9UT61
A	1105	ASP	-	expression tag	UNP Q9UT61
A	1106	ASP	-	expression tag	UNP Q9UT61
A	1107	LYS	-	expression tag	UNP Q9UT61
A	1108	HIS	-	expression tag	UNP Q9UT61
A	1109	HIS	-	expression tag	UNP Q9UT61
A	1110	HIS	-	expression tag	UNP Q9UT61
A	1111	HIS	-	expression tag	UNP Q9UT61
A	1112	HIS	-	expression tag	UNP Q9UT61
A	1113	HIS	-	expression tag	UNP Q9UT61
A	1114	ASP	-	expression tag	UNP Q9UT61
A	1115	GLU	-	expression tag	UNP Q9UT61
A	1116	LEU	-	expression tag	UNP Q9UT61
A	1117	TYR	-	expression tag	UNP Q9UT61
A	1118	LYS	-	expression tag	UNP Q9UT61
A	1119	ARG	-	expression tag	UNP Q9UT61
A	1120	SER	-	expression tag	UNP Q9UT61
A	1121	GLY	-	expression tag	UNP Q9UT61
A	1122	ALA	-	expression tag	UNP Q9UT61
A	1123	PRO	-	expression tag	UNP Q9UT61
A	1124	LEU	-	expression tag	UNP Q9UT61
A	1125	LEU	-	expression tag	UNP Q9UT61
A	1126	ASN	-	expression tag	UNP Q9UT61
A	1127	LYS	-	expression tag	UNP Q9UT61
A	1128	ARG	-	expression tag	UNP Q9UT61
A	1129	ILE	-	expression tag	UNP Q9UT61
A	1130	SER	-	expression tag	UNP Q9UT61
A	1131	TYR	-	expression tag	UNP Q9UT61
A	1132	ASP	-	expression tag	UNP Q9UT61
A	1133	LEU	-	expression tag	UNP Q9UT61
B	1078	GLY	-	expression tag	UNP Q9UT61
B	1079	SER	-	expression tag	UNP Q9UT61
B	1080	MET	-	expression tag	UNP Q9UT61
B	1081	SER	-	expression tag	UNP Q9UT61
B	1082	LYS	-	expression tag	UNP Q9UT61
B	1083	GLY	-	expression tag	UNP Q9UT61
B	1084	LYS	-	expression tag	UNP Q9UT61
B	1085	VAL	-	expression tag	UNP Q9UT61

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1086	VAL	-	expression tag	UNP Q9UT61
B	1087	ASP	-	expression tag	UNP Q9UT61
B	1088	ILE	-	expression tag	UNP Q9UT61
B	1089	MET	-	expression tag	UNP Q9UT61
B	1090	ASP	-	expression tag	UNP Q9UT61
B	1091	TYR	-	expression tag	UNP Q9UT61
B	1092	LYS	-	expression tag	UNP Q9UT61
B	1093	ASP	-	expression tag	UNP Q9UT61
B	1094	ASP	-	expression tag	UNP Q9UT61
B	1095	ASP	-	expression tag	UNP Q9UT61
B	1096	ASP	-	expression tag	UNP Q9UT61
B	1097	LYS	-	expression tag	UNP Q9UT61
B	1098	PRO	-	expression tag	UNP Q9UT61
B	1099	MET	-	expression tag	UNP Q9UT61
B	1100	ASP	-	expression tag	UNP Q9UT61
B	1101	TYR	-	expression tag	UNP Q9UT61
B	1102	LYS	-	expression tag	UNP Q9UT61
B	1103	ASP	-	expression tag	UNP Q9UT61
B	1104	ASP	-	expression tag	UNP Q9UT61
B	1105	ASP	-	expression tag	UNP Q9UT61
B	1106	ASP	-	expression tag	UNP Q9UT61
B	1107	LYS	-	expression tag	UNP Q9UT61
B	1108	HIS	-	expression tag	UNP Q9UT61
B	1109	HIS	-	expression tag	UNP Q9UT61
B	1110	HIS	-	expression tag	UNP Q9UT61
B	1111	HIS	-	expression tag	UNP Q9UT61
B	1112	HIS	-	expression tag	UNP Q9UT61
B	1113	HIS	-	expression tag	UNP Q9UT61
B	1114	ASP	-	expression tag	UNP Q9UT61
B	1115	GLU	-	expression tag	UNP Q9UT61
B	1116	LEU	-	expression tag	UNP Q9UT61
B	1117	TYR	-	expression tag	UNP Q9UT61
B	1118	LYS	-	expression tag	UNP Q9UT61
B	1119	ARG	-	expression tag	UNP Q9UT61
B	1120	SER	-	expression tag	UNP Q9UT61
B	1121	GLY	-	expression tag	UNP Q9UT61
B	1122	ALA	-	expression tag	UNP Q9UT61
B	1123	PRO	-	expression tag	UNP Q9UT61
B	1124	LEU	-	expression tag	UNP Q9UT61
B	1125	LEU	-	expression tag	UNP Q9UT61
B	1126	ASN	-	expression tag	UNP Q9UT61
B	1127	LYS	-	expression tag	UNP Q9UT61

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1128	ARG	-	expression tag	UNP Q9UT61
B	1129	ILE	-	expression tag	UNP Q9UT61
B	1130	SER	-	expression tag	UNP Q9UT61
B	1131	TYR	-	expression tag	UNP Q9UT61
B	1132	ASP	-	expression tag	UNP Q9UT61
B	1133	LEU	-	expression tag	UNP Q9UT61
C	1078	GLY	-	expression tag	UNP Q9UT61
C	1079	SER	-	expression tag	UNP Q9UT61
C	1080	MET	-	expression tag	UNP Q9UT61
C	1081	SER	-	expression tag	UNP Q9UT61
C	1082	LYS	-	expression tag	UNP Q9UT61
C	1083	GLY	-	expression tag	UNP Q9UT61
C	1084	LYS	-	expression tag	UNP Q9UT61
C	1085	VAL	-	expression tag	UNP Q9UT61
C	1086	VAL	-	expression tag	UNP Q9UT61
C	1087	ASP	-	expression tag	UNP Q9UT61
C	1088	ILE	-	expression tag	UNP Q9UT61
C	1089	MET	-	expression tag	UNP Q9UT61
C	1090	ASP	-	expression tag	UNP Q9UT61
C	1091	TYR	-	expression tag	UNP Q9UT61
C	1092	LYS	-	expression tag	UNP Q9UT61
C	1093	ASP	-	expression tag	UNP Q9UT61
C	1094	ASP	-	expression tag	UNP Q9UT61
C	1095	ASP	-	expression tag	UNP Q9UT61
C	1096	ASP	-	expression tag	UNP Q9UT61
C	1097	LYS	-	expression tag	UNP Q9UT61
C	1098	PRO	-	expression tag	UNP Q9UT61
C	1099	MET	-	expression tag	UNP Q9UT61
C	1100	ASP	-	expression tag	UNP Q9UT61
C	1101	TYR	-	expression tag	UNP Q9UT61
C	1102	LYS	-	expression tag	UNP Q9UT61
C	1103	ASP	-	expression tag	UNP Q9UT61
C	1104	ASP	-	expression tag	UNP Q9UT61
C	1105	ASP	-	expression tag	UNP Q9UT61
C	1106	ASP	-	expression tag	UNP Q9UT61
C	1107	LYS	-	expression tag	UNP Q9UT61
C	1108	HIS	-	expression tag	UNP Q9UT61
C	1109	HIS	-	expression tag	UNP Q9UT61
C	1110	HIS	-	expression tag	UNP Q9UT61
C	1111	HIS	-	expression tag	UNP Q9UT61
C	1112	HIS	-	expression tag	UNP Q9UT61
C	1113	HIS	-	expression tag	UNP Q9UT61

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1114	ASP	-	expression tag	UNP Q9UT61
C	1115	GLU	-	expression tag	UNP Q9UT61
C	1116	LEU	-	expression tag	UNP Q9UT61
C	1117	TYR	-	expression tag	UNP Q9UT61
C	1118	LYS	-	expression tag	UNP Q9UT61
C	1119	ARG	-	expression tag	UNP Q9UT61
C	1120	SER	-	expression tag	UNP Q9UT61
C	1121	GLY	-	expression tag	UNP Q9UT61
C	1122	ALA	-	expression tag	UNP Q9UT61
C	1123	PRO	-	expression tag	UNP Q9UT61
C	1124	LEU	-	expression tag	UNP Q9UT61
C	1125	LEU	-	expression tag	UNP Q9UT61
C	1126	ASN	-	expression tag	UNP Q9UT61
C	1127	LYS	-	expression tag	UNP Q9UT61
C	1128	ARG	-	expression tag	UNP Q9UT61
C	1129	ILE	-	expression tag	UNP Q9UT61
C	1130	SER	-	expression tag	UNP Q9UT61
C	1131	TYR	-	expression tag	UNP Q9UT61
C	1132	ASP	-	expression tag	UNP Q9UT61
C	1133	LEU	-	expression tag	UNP Q9UT61
D	1078	GLY	-	expression tag	UNP Q9UT61
D	1079	SER	-	expression tag	UNP Q9UT61
D	1080	MET	-	expression tag	UNP Q9UT61
D	1081	SER	-	expression tag	UNP Q9UT61
D	1082	LYS	-	expression tag	UNP Q9UT61
D	1083	GLY	-	expression tag	UNP Q9UT61
D	1084	LYS	-	expression tag	UNP Q9UT61
D	1085	VAL	-	expression tag	UNP Q9UT61
D	1086	VAL	-	expression tag	UNP Q9UT61
D	1087	ASP	-	expression tag	UNP Q9UT61
D	1088	ILE	-	expression tag	UNP Q9UT61
D	1089	MET	-	expression tag	UNP Q9UT61
D	1090	ASP	-	expression tag	UNP Q9UT61
D	1091	TYR	-	expression tag	UNP Q9UT61
D	1092	LYS	-	expression tag	UNP Q9UT61
D	1093	ASP	-	expression tag	UNP Q9UT61
D	1094	ASP	-	expression tag	UNP Q9UT61
D	1095	ASP	-	expression tag	UNP Q9UT61
D	1096	ASP	-	expression tag	UNP Q9UT61
D	1097	LYS	-	expression tag	UNP Q9UT61
D	1098	PRO	-	expression tag	UNP Q9UT61
D	1099	MET	-	expression tag	UNP Q9UT61

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Chain	Residue	Modelled	Actual	Comment	Reference
D	1100	ASP	-	expression tag	UNP Q9UT61
D	1101	TYR	-	expression tag	UNP Q9UT61
D	1102	LYS	-	expression tag	UNP Q9UT61
D	1103	ASP	-	expression tag	UNP Q9UT61
D	1104	ASP	-	expression tag	UNP Q9UT61
D	1105	ASP	-	expression tag	UNP Q9UT61
D	1106	ASP	-	expression tag	UNP Q9UT61
D	1107	LYS	-	expression tag	UNP Q9UT61
D	1108	HIS	-	expression tag	UNP Q9UT61
D	1109	HIS	-	expression tag	UNP Q9UT61
D	1110	HIS	-	expression tag	UNP Q9UT61
D	1111	HIS	-	expression tag	UNP Q9UT61
D	1112	HIS	-	expression tag	UNP Q9UT61
D	1113	HIS	-	expression tag	UNP Q9UT61
D	1114	ASP	-	expression tag	UNP Q9UT61
D	1115	GLU	-	expression tag	UNP Q9UT61
D	1116	LEU	-	expression tag	UNP Q9UT61
D	1117	TYR	-	expression tag	UNP Q9UT61
D	1118	LYS	-	expression tag	UNP Q9UT61
D	1119	ARG	-	expression tag	UNP Q9UT61
D	1120	SER	-	expression tag	UNP Q9UT61
D	1121	GLY	-	expression tag	UNP Q9UT61
D	1122	ALA	-	expression tag	UNP Q9UT61
D	1123	PRO	-	expression tag	UNP Q9UT61
D	1124	LEU	-	expression tag	UNP Q9UT61
D	1125	LEU	-	expression tag	UNP Q9UT61
D	1126	ASN	-	expression tag	UNP Q9UT61
D	1127	LYS	-	expression tag	UNP Q9UT61
D	1128	ARG	-	expression tag	UNP Q9UT61
D	1129	ILE	-	expression tag	UNP Q9UT61
D	1130	SER	-	expression tag	UNP Q9UT61
D	1131	TYR	-	expression tag	UNP Q9UT61
D	1132	ASP	-	expression tag	UNP Q9UT61
D	1133	LEU	-	expression tag	UNP Q9UT61

- Molecule 2 is ZINC ION (three-letter code: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

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

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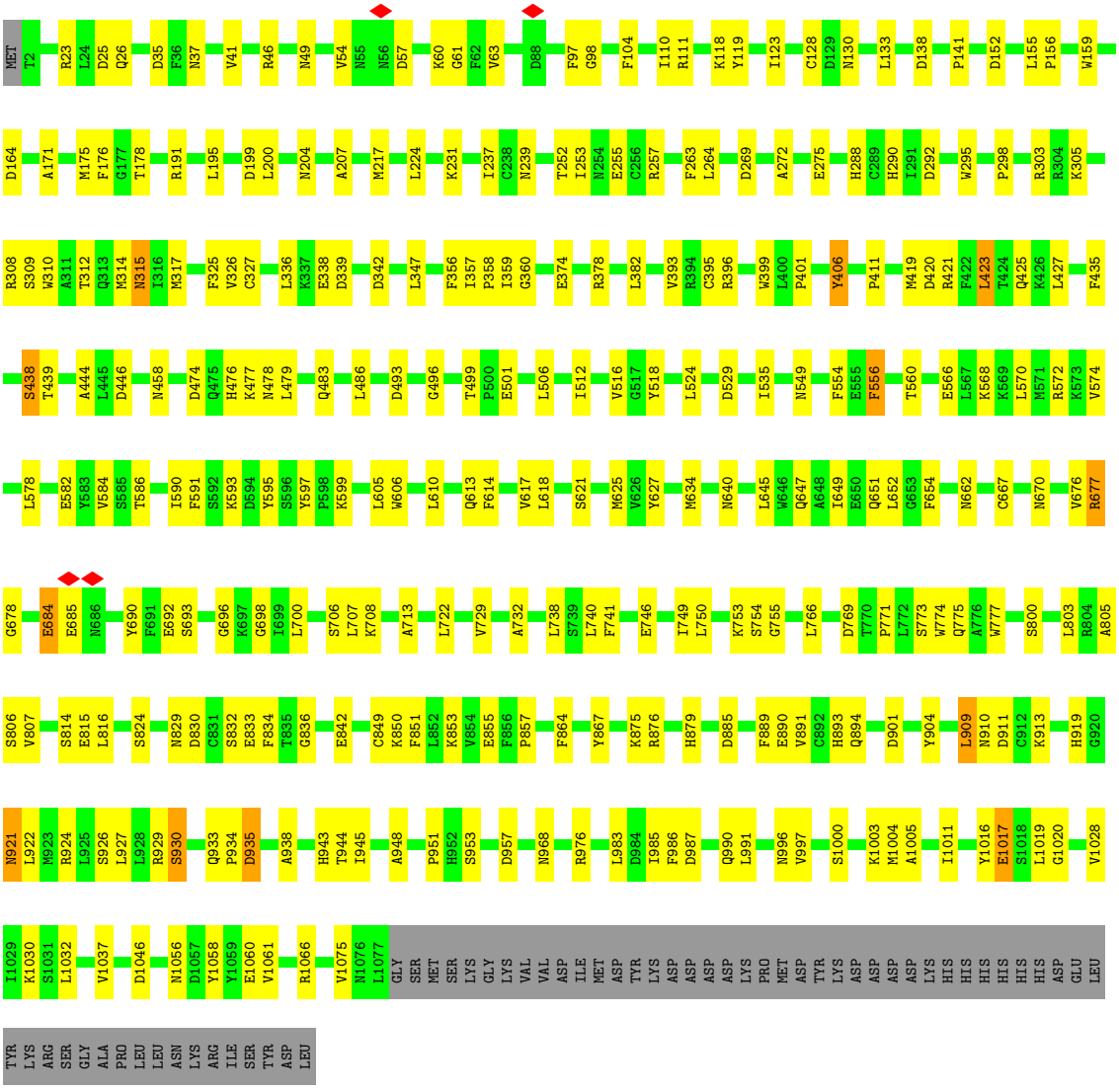
Mol	Chain	Residues	Atoms	AltConf
2	C	1	Total Zn 1 1	0
2	D	1	Total Zn 1 1	0

3 Residue-property plots (i)

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

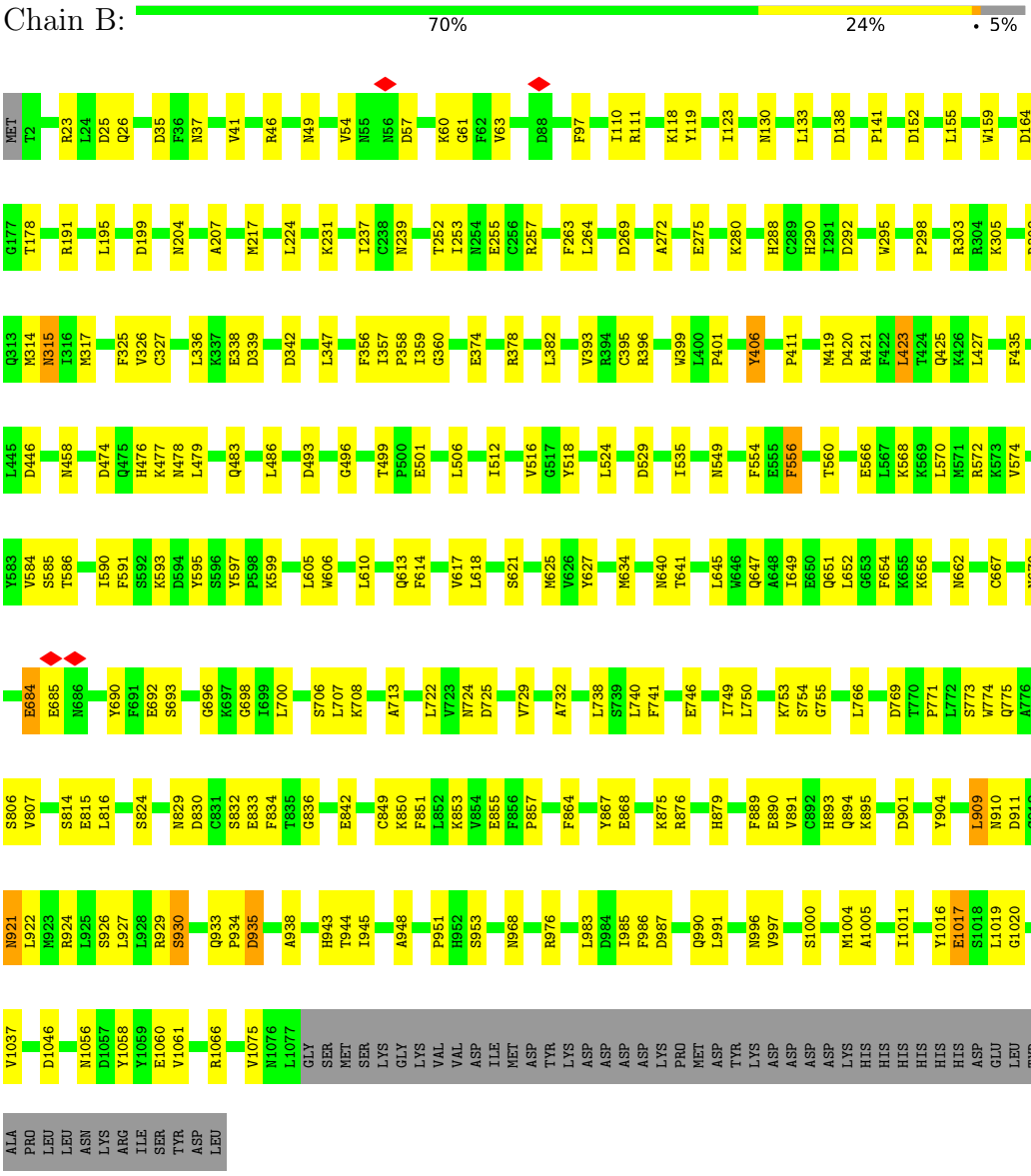
- Molecule 1: Ams1

Chain A:



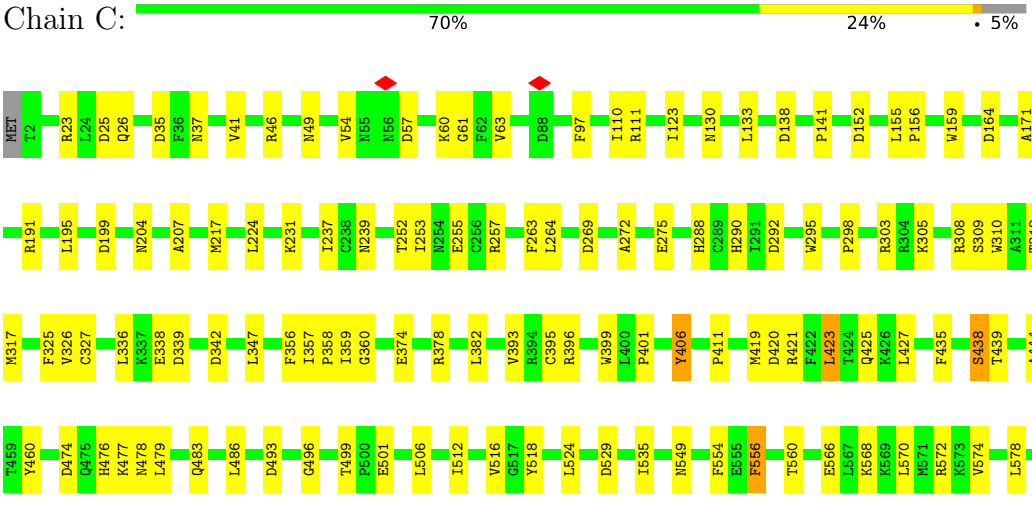
- Molecule 1: Ams1

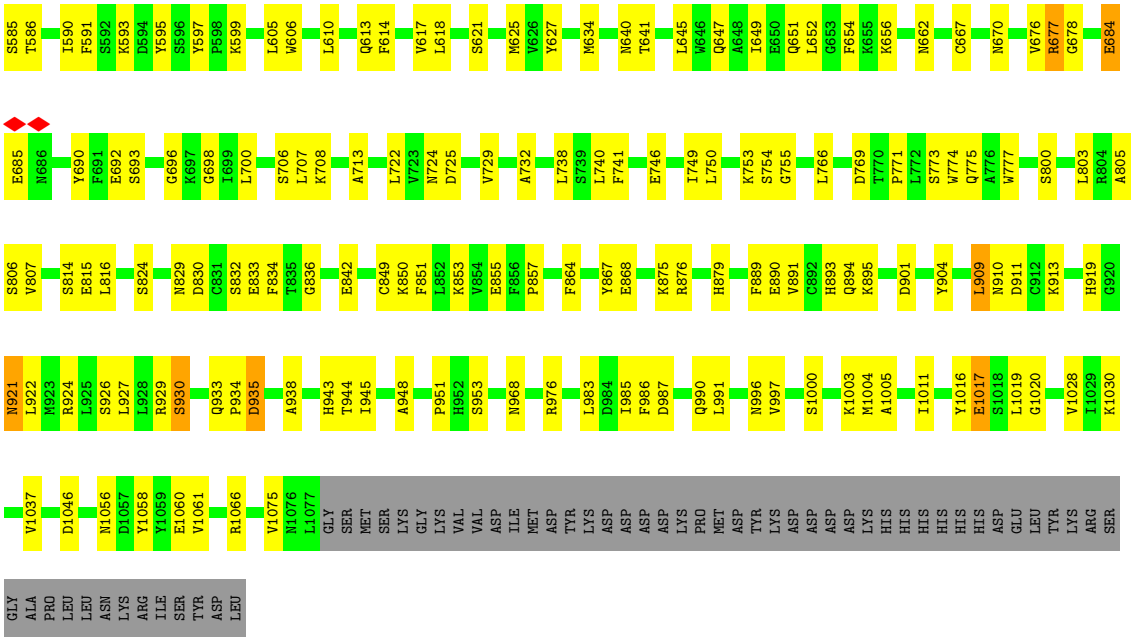
Chain B:



• Molecule 1: Ams1

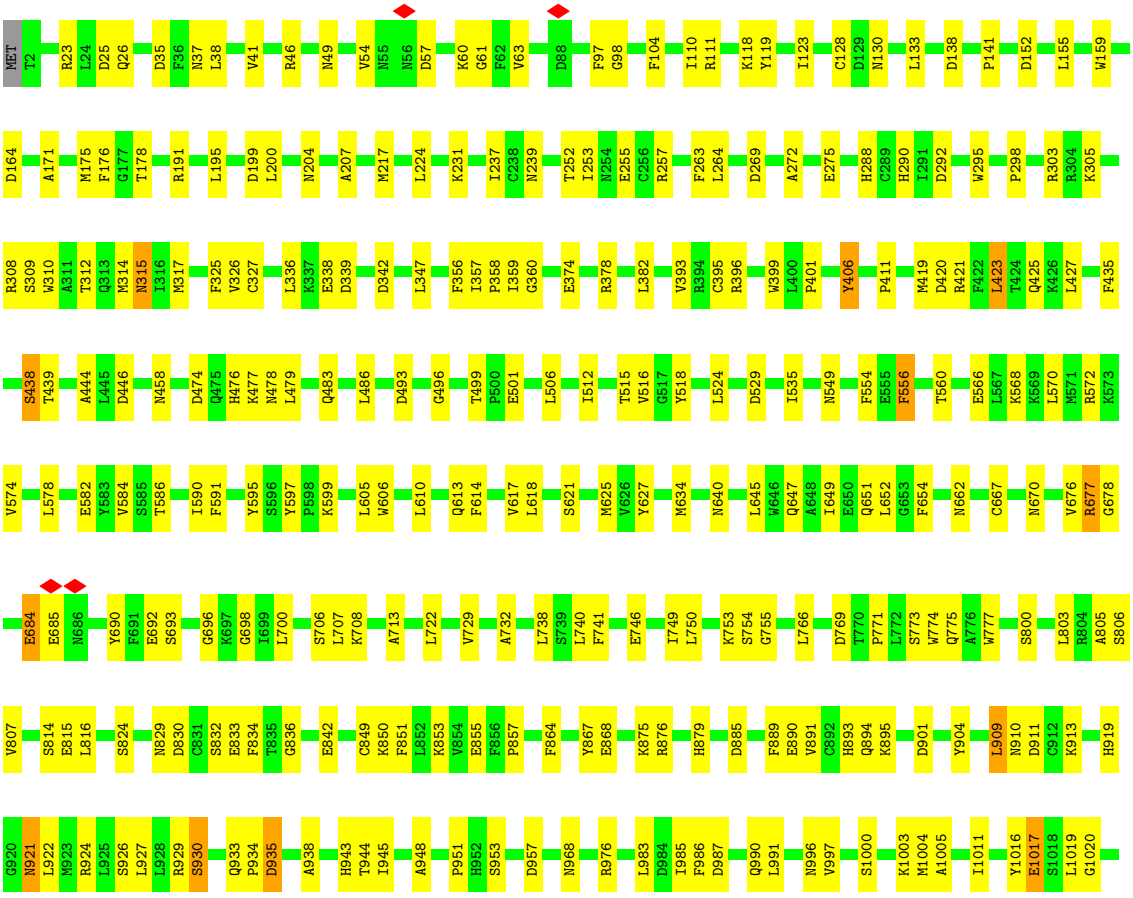
Chain C:

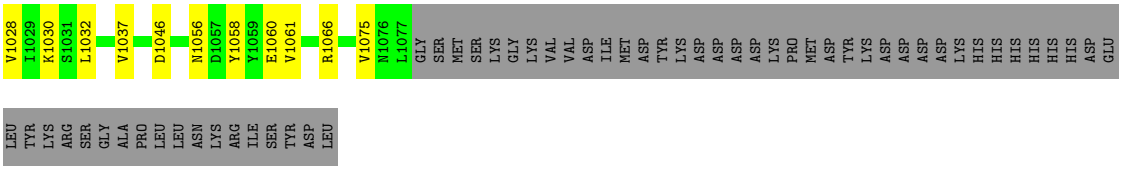




• Molecule 1: Ams1

Chain D:




V1028 I1029 K1030 S1031 L1032 V1037 D1046 N1056 D1057 Y1058 Y1059 E1060 V1061 R1066 V1075 N1076 L1077 GLY SER MET SER LYS GLY LYS VAL VAL ASP ILE MET ASP TYR LYS ASP ASP ASP ASP LYS PRO MET ASP TYR LYS ASP ASP ASP LYS HIS HIS HIS HIS HIS HIS ASP GLU
LEU TYR LYS ARG SER GLY ALA PRO LEU LEU ASN LYS ARG ILE SER TYR ASP LEU

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, D2	Depositor
Number of particles used	75460	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 ($e^-/Å^2$)	60	Depositor
Minimum defocus (nm)	400	Depositor
Maximum defocus (nm)	1000	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.249	Depositor
Minimum map value	-0.124	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.011	Depositor
Recommended contour level	0.03	Depositor
Map size (Å)	249.59999, 249.59999, 249.59999	wwPDB
Map dimensions	240, 240, 240	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.04, 1.04, 1.04	Depositor

5 Model quality

5.1 Standard geometry

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

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	0.32	0/8844	0.46	0/12005
1	B	0.32	0/8844	0.46	0/12005
1	C	0.32	0/8844	0.46	0/12005
1	D	0.32	0/8844	0.46	0/12005
All	All	0.32	0/35376	0.46	0/48020

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

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	8622	0	8378	186	0
1	B	8622	0	8378	179	0
1	C	8622	0	8378	181	0
1	D	8622	0	8378	186	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
2	C	1	0	0	0	0
2	D	1	0	0	0	0
All	All	34492	0	33512	727	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 11.

All (727) 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:A:677:ARG:HB2	1:A:833:GLU:HG2	1.25	1.15
1:D:677:ARG:HB2	1:D:833:GLU:HG2	1.25	1.15
1:A:677:ARG:HG3	1:A:832:SER:OG	1.45	1.15
1:D:677:ARG:HG3	1:D:832:SER:OG	1.45	1.15
1:B:677:ARG:HG3	1:B:832:SER:OG	1.45	1.14
1:C:677:ARG:HG3	1:C:832:SER:OG	1.45	1.13
1:B:677:ARG:HB2	1:B:833:GLU:HG2	1.25	1.11
1:C:677:ARG:HB2	1:C:833:GLU:HG2	1.25	1.11
1:A:677:ARG:HB2	1:A:833:GLU:CG	1.93	0.97
1:D:677:ARG:HB2	1:D:833:GLU:CG	1.93	0.97
1:C:677:ARG:HB2	1:C:833:GLU:CG	1.93	0.96
1:B:677:ARG:HB2	1:B:833:GLU:CG	1.93	0.96
1:D:677:ARG:HG3	1:D:832:SER:HG	1.35	0.86
1:C:904:TYR:CD1	1:C:953:SER:HA	2.21	0.76
1:B:904:TYR:CD1	1:B:953:SER:HA	2.21	0.76
1:A:722:LEU:HD21	1:A:807:VAL:HG13	1.69	0.75
1:D:722:LEU:HD21	1:D:807:VAL:HG13	1.69	0.75
1:A:904:TYR:CD1	1:A:953:SER:HA	2.21	0.75
1:D:904:TYR:CD1	1:D:953:SER:HA	2.21	0.75
1:B:667:CYS:SG	1:B:976:ARG:NH1	2.60	0.75
1:B:722:LEU:HD21	1:B:807:VAL:HG13	1.69	0.75
1:C:667:CYS:SG	1:C:976:ARG:NH1	2.60	0.75
1:C:722:LEU:HD21	1:C:807:VAL:HG13	1.69	0.75
1:A:667:CYS:SG	1:A:976:ARG:NH1	2.60	0.74
1:D:667:CYS:SG	1:D:976:ARG:NH1	2.60	0.74
1:B:677:ARG:HG3	1:B:832:SER:HG	1.52	0.74
1:C:677:ARG:HG3	1:C:832:SER:HG	1.52	0.73
1:A:677:ARG:HG3	1:A:832:SER:HG	1.53	0.73
1:A:677:ARG:CG	1:A:832:SER:OG	2.32	0.73
1:D:677:ARG:CG	1:D:832:SER:OG	2.32	0.72
1:B:123:ILE:HD12	1:B:152:ASP:HB3	1.72	0.72
1:C:123:ILE:HD12	1:C:152:ASP:HB3	1.72	0.72
1:A:123:ILE:HD12	1:A:152:ASP:HB3	1.72	0.69
1:D:123:ILE:HD12	1:D:152:ASP:HB3	1.72	0.69
1:B:677:ARG:CG	1:B:832:SER:OG	2.32	0.69
1:C:677:ARG:CG	1:C:832:SER:OG	2.32	0.69
1:D:310:TRP:O	1:D:314:MET:HG2	1.93	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:310:TRP:O	1:A:314:MET:HG2	1.93	0.68
1:A:775:GLN:NE2	1:A:849:CYS:SG	2.67	0.68
1:B:775:GLN:NE2	1:B:849:CYS:SG	2.67	0.68
1:C:775:GLN:NE2	1:C:849:CYS:SG	2.67	0.68
1:D:775:GLN:NE2	1:D:849:CYS:SG	2.67	0.68
1:A:57:ASP:HB3	1:A:60:LYS:HG3	1.76	0.68
1:B:57:ASP:HB3	1:B:60:LYS:HG3	1.76	0.68
1:C:57:ASP:HB3	1:C:60:LYS:HG3	1.76	0.68
1:D:57:ASP:HB3	1:D:60:LYS:HG3	1.76	0.68
1:B:310:TRP:O	1:B:314:MET:HG2	1.93	0.68
1:C:310:TRP:O	1:C:314:MET:HG2	1.93	0.68
1:D:26:GLN:O	1:D:37:ASN:ND2	2.27	0.67
1:A:26:GLN:O	1:A:37:ASN:ND2	2.27	0.67
1:C:26:GLN:O	1:C:37:ASN:ND2	2.27	0.67
1:B:26:GLN:O	1:B:37:ASN:ND2	2.27	0.67
1:A:855:GLU:OE1	1:A:924:ARG:NH1	2.28	0.67
1:D:855:GLU:OE1	1:D:924:ARG:NH1	2.28	0.67
1:B:237:ILE:HD12	1:B:263:PHE:HB2	1.76	0.66
1:C:855:GLU:OE1	1:C:924:ARG:NH1	2.28	0.66
1:D:713:ALA:HB2	1:D:805:ALA:HB1	1.76	0.66
1:A:713:ALA:HB2	1:A:805:ALA:HB1	1.76	0.66
1:B:855:GLU:OE1	1:B:924:ARG:NH1	2.28	0.66
1:C:237:ILE:HD12	1:C:263:PHE:HB2	1.76	0.66
1:A:775:GLN:O	1:A:929:ARG:NH2	2.28	0.66
1:C:927:LEU:HD22	1:C:945:ILE:HG21	1.78	0.66
1:D:775:GLN:O	1:D:929:ARG:NH2	2.28	0.66
1:B:927:LEU:HD22	1:B:945:ILE:HG21	1.78	0.66
1:C:713:ALA:HB2	1:C:805:ALA:HB1	1.76	0.66
1:A:927:LEU:HD22	1:A:945:ILE:HG21	1.78	0.66
1:B:713:ALA:HB2	1:B:805:ALA:HB1	1.76	0.66
1:C:775:GLN:O	1:C:929:ARG:NH2	2.28	0.66
1:B:775:GLN:O	1:B:929:ARG:NH2	2.28	0.66
1:D:927:LEU:HD22	1:D:945:ILE:HG21	1.78	0.66
1:D:237:ILE:HD12	1:D:263:PHE:HB2	1.76	0.65
1:A:237:ILE:HD12	1:A:263:PHE:HB2	1.76	0.65
1:A:677:ARG:NH1	1:A:830:ASP:OD2	2.28	0.65
1:D:677:ARG:NH1	1:D:830:ASP:OD2	2.28	0.65
1:B:309:SER:HB2	1:B:496:GLY:HA2	1.78	0.65
1:B:476:HIS:HB3	1:B:479:LEU:HG	1.79	0.65
1:C:476:HIS:HB3	1:C:479:LEU:HG	1.79	0.65
1:A:476:HIS:HB3	1:A:479:LEU:HG	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:309:SER:HB2	1:C:496:GLY:HA2	1.78	0.65
1:D:476:HIS:HB3	1:D:479:LEU:HG	1.79	0.65
1:B:303:ARG:NH1	1:B:339:ASP:OD1	2.31	0.64
1:C:303:ARG:NH1	1:C:339:ASP:OD1	2.31	0.64
1:A:303:ARG:NH1	1:A:339:ASP:OD1	2.31	0.63
1:D:303:ARG:NH1	1:D:339:ASP:OD1	2.31	0.63
1:D:309:SER:HB2	1:D:496:GLY:HA2	1.78	0.63
1:A:309:SER:HB2	1:A:496:GLY:HA2	1.78	0.63
1:C:677:ARG:NH1	1:C:830:ASP:OD2	2.28	0.63
1:B:677:ARG:NH1	1:B:830:ASP:OD2	2.28	0.63
1:A:769:ASP:OD2	1:A:929:ARG:NH1	2.32	0.62
1:C:909:LEU:HD12	1:C:948:ALA:HB3	1.81	0.62
1:D:769:ASP:OD2	1:D:929:ARG:NH1	2.32	0.62
1:B:909:LEU:HD12	1:B:948:ALA:HB3	1.81	0.62
1:C:570:LEU:HD23	1:C:634:MET:HB3	1.81	0.62
1:A:732:ALA:HB2	1:A:738:LEU:HG	1.82	0.62
1:A:876:ARG:HG2	1:A:891:VAL:HG11	1.81	0.62
1:B:570:LEU:HD23	1:B:634:MET:HB3	1.81	0.62
1:B:876:ARG:HG2	1:B:891:VAL:HG11	1.81	0.62
1:D:570:LEU:HD23	1:D:634:MET:HB3	1.81	0.62
1:A:570:LEU:HD23	1:A:634:MET:HB3	1.81	0.62
1:C:769:ASP:OD2	1:C:929:ARG:NH1	2.32	0.62
1:C:876:ARG:HG2	1:C:891:VAL:HG11	1.81	0.62
1:D:732:ALA:HB2	1:D:738:LEU:HG	1.82	0.62
1:D:876:ARG:HG2	1:D:891:VAL:HG11	1.81	0.62
1:B:769:ASP:OD2	1:B:929:ARG:NH1	2.32	0.62
1:C:732:ALA:HB2	1:C:738:LEU:HG	1.82	0.62
1:B:732:ALA:HB2	1:B:738:LEU:HG	1.82	0.62
1:A:867:TYR:HE2	1:A:876:ARG:HB2	1.65	0.62
1:D:867:TYR:HE2	1:D:876:ARG:HB2	1.65	0.61
1:C:867:TYR:HE2	1:C:876:ARG:HB2	1.65	0.61
1:B:729:VAL:HG22	1:B:740:LEU:HD13	1.82	0.61
1:B:867:TYR:HE2	1:B:876:ARG:HB2	1.65	0.61
1:D:909:LEU:HD12	1:D:948:ALA:HB3	1.81	0.61
1:A:909:LEU:HD12	1:A:948:ALA:HB3	1.81	0.61
1:C:729:VAL:HG22	1:C:740:LEU:HD13	1.82	0.61
1:A:729:VAL:HG22	1:A:740:LEU:HD13	1.82	0.60
1:D:729:VAL:HG22	1:D:740:LEU:HD13	1.82	0.60
1:C:814:SER:OG	1:C:815:GLU:N	2.35	0.60
1:A:568:LYS:NZ	1:A:618:LEU:O	2.35	0.60
1:B:176:PHE:HE1	1:B:493:ASP:HB2	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:814:SER:OG	1:B:815:GLU:N	2.35	0.60
1:C:176:PHE:HE1	1:C:493:ASP:HB2	1.67	0.60
1:D:479:LEU:O	1:D:483:GLN:NE2	2.35	0.60
1:D:568:LYS:NZ	1:D:618:LEU:O	2.35	0.60
1:A:479:LEU:O	1:A:483:GLN:NE2	2.35	0.60
1:B:568:LYS:NZ	1:B:618:LEU:O	2.35	0.60
1:C:568:LYS:NZ	1:C:618:LEU:O	2.35	0.60
1:D:425:GLN:NE2	1:D:458:ASN:O	2.31	0.60
1:B:479:LEU:O	1:B:483:GLN:NE2	2.35	0.59
1:C:479:LEU:O	1:C:483:GLN:NE2	2.35	0.59
1:A:425:GLN:NE2	1:A:458:ASN:O	2.31	0.59
1:B:327:CYS:HG	1:B:356:PHE:HE2	1.50	0.59
1:B:904:TYR:HD1	1:B:953:SER:HA	1.67	0.59
1:B:1017:GLU:OE1	1:B:1019:LEU:N	2.36	0.59
1:C:904:TYR:HD1	1:C:953:SER:HA	1.67	0.59
1:C:1017:GLU:OE1	1:C:1019:LEU:N	2.36	0.59
1:D:446:ASP:OD2	1:D:1066:ARG:NH2	2.35	0.59
1:A:446:ASP:OD2	1:A:1066:ARG:NH2	2.35	0.59
1:D:814:SER:OG	1:D:815:GLU:N	2.35	0.59
1:A:176:PHE:HE1	1:A:493:ASP:HB2	1.67	0.59
1:A:814:SER:OG	1:A:815:GLU:N	2.35	0.59
1:D:327:CYS:HG	1:D:356:PHE:HE2	1.48	0.59
1:D:176:PHE:HE1	1:D:493:ASP:HB2	1.67	0.58
1:D:904:TYR:HD1	1:D:953:SER:HA	1.67	0.58
1:A:904:TYR:HD1	1:A:953:SER:HA	1.67	0.58
1:B:930:SER:O	1:B:930:SER:OG	2.21	0.58
1:B:901:ASP:OD2	1:B:904:TYR:O	2.21	0.58
1:C:578:LEU:O	1:C:582:GLU:HG2	2.04	0.58
1:C:930:SER:O	1:C:930:SER:OG	2.21	0.58
1:C:1037:VAL:HG21	1:C:1061:VAL:HG21	1.86	0.58
1:A:290:HIS:NE2	1:A:292:ASP:OD1	2.37	0.58
1:B:578:LEU:O	1:B:582:GLU:HG2	2.04	0.58
1:B:1037:VAL:HG21	1:B:1061:VAL:HG21	1.86	0.58
1:C:901:ASP:OD2	1:C:904:TYR:O	2.21	0.58
1:D:290:HIS:NE2	1:D:292:ASP:OD1	2.37	0.58
1:A:1017:GLU:OE1	1:A:1019:LEU:N	2.36	0.58
1:B:290:HIS:NE2	1:B:292:ASP:OD1	2.37	0.58
1:C:290:HIS:NE2	1:C:292:ASP:OD1	2.37	0.58
1:D:1017:GLU:OE1	1:D:1019:LEU:N	2.36	0.58
1:C:327:CYS:HG	1:C:356:PHE:HE2	1.52	0.58
1:A:904:TYR:OH	1:A:951:PRO:HB2	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:613:GLN:HG2	1:D:618:LEU:HD22	1.86	0.58
1:D:904:TYR:OH	1:D:951:PRO:HB2	2.04	0.58
1:A:613:GLN:HG2	1:A:618:LEU:HD22	1.86	0.58
1:A:1037:VAL:HG21	1:A:1061:VAL:HG21	1.86	0.57
1:D:1037:VAL:HG21	1:D:1061:VAL:HG21	1.86	0.57
1:C:446:ASP:OD2	1:C:1066:ARG:NH2	2.35	0.57
1:D:901:ASP:OD2	1:D:904:TYR:O	2.21	0.57
1:A:901:ASP:OD2	1:A:904:TYR:O	2.21	0.57
1:B:446:ASP:OD2	1:B:1066:ARG:NH2	2.35	0.57
1:B:904:TYR:OH	1:B:951:PRO:HB2	2.04	0.57
1:C:904:TYR:OH	1:C:951:PRO:HB2	2.04	0.57
1:C:406:TYR:HE2	1:C:427:LEU:HG	1.69	0.57
1:B:406:TYR:HE2	1:B:427:LEU:HG	1.69	0.57
1:A:578:LEU:O	1:A:582:GLU:HG2	2.04	0.57
1:D:578:LEU:O	1:D:582:GLU:HG2	2.04	0.57
1:B:295:TRP:HE1	1:B:777:TRP:HZ2	1.53	0.57
1:D:358:PRO:HG2	1:D:393:VAL:HG21	1.86	0.57
1:A:358:PRO:HG2	1:A:393:VAL:HG21	1.86	0.57
1:A:406:TYR:HE2	1:A:427:LEU:HG	1.69	0.57
1:C:295:TRP:HE1	1:C:777:TRP:HZ2	1.53	0.57
1:C:605:LEU:HD21	1:C:640:ASN:HB2	1.87	0.57
1:D:406:TYR:HE2	1:D:427:LEU:HG	1.69	0.57
1:B:605:LEU:HD21	1:B:640:ASN:HB2	1.87	0.56
1:B:1017:GLU:CD	1:B:1020:GLY:H	2.08	0.56
1:C:425:GLN:NE2	1:C:458:ASN:O	2.31	0.56
1:C:1017:GLU:CD	1:C:1020:GLY:H	2.08	0.56
1:C:133:LEU:HD11	1:C:141:PRO:HB3	1.87	0.56
1:A:295:TRP:HE1	1:A:777:TRP:HZ2	1.53	0.56
1:B:133:LEU:HD11	1:B:141:PRO:HB3	1.87	0.56
1:D:295:TRP:HE1	1:D:777:TRP:HZ2	1.53	0.56
1:B:425:GLN:NE2	1:B:458:ASN:O	2.31	0.56
1:C:358:PRO:HG2	1:C:393:VAL:HG21	1.86	0.56
1:B:358:PRO:HG2	1:B:393:VAL:HG21	1.86	0.56
1:C:396:ARG:NH2	1:C:420:ASP:OD2	2.36	0.56
1:C:613:GLN:HG2	1:C:618:LEU:HD22	1.86	0.56
1:A:698:GLY:HA3	1:A:986:PHE:HB2	1.88	0.56
1:B:396:ARG:NH2	1:B:420:ASP:OD2	2.36	0.56
1:B:621:SER:HB2	1:B:777:TRP:CE2	2.41	0.56
1:C:621:SER:HB2	1:C:777:TRP:CE2	2.41	0.56
1:C:693:SER:HB2	1:C:700:LEU:HA	1.87	0.56
1:A:621:SER:HB2	1:A:777:TRP:CE2	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:613:GLN:HG2	1:B:618:LEU:HD22	1.86	0.56
1:D:698:GLY:HA3	1:D:986:PHE:HB2	1.88	0.56
1:B:693:SER:HB2	1:B:700:LEU:HA	1.87	0.55
1:D:621:SER:HB2	1:D:777:TRP:CE2	2.41	0.55
1:A:1017:GLU:CD	1:A:1020:GLY:H	2.08	0.55
1:D:911:ASP:OD1	1:D:911:ASP:N	2.39	0.55
1:A:605:LEU:HD21	1:A:640:ASN:HB2	1.87	0.55
1:A:911:ASP:OD1	1:A:911:ASP:N	2.39	0.55
1:D:1017:GLU:CD	1:D:1020:GLY:H	2.08	0.55
1:D:605:LEU:HD21	1:D:640:ASN:HB2	1.87	0.55
1:D:693:SER:HB2	1:D:700:LEU:HA	1.87	0.55
1:D:133:LEU:HD11	1:D:141:PRO:HB3	1.87	0.55
1:A:133:LEU:HD11	1:A:141:PRO:HB3	1.87	0.55
1:C:670:ASN:HD21	1:C:676:VAL:HG23	1.72	0.55
1:A:693:SER:HB2	1:A:700:LEU:HA	1.87	0.55
1:B:670:ASN:HD21	1:B:676:VAL:HG23	1.72	0.55
1:B:698:GLY:HA3	1:B:986:PHE:HB2	1.88	0.54
1:C:911:ASP:N	1:C:911:ASP:OD1	2.39	0.54
1:A:773:SER:HG	1:A:774:TRP:HD1	1.55	0.54
1:C:698:GLY:HA3	1:C:986:PHE:HB2	1.88	0.54
1:B:911:ASP:OD1	1:B:911:ASP:N	2.39	0.54
1:D:1030:LYS:HA	1:D:1058:TYR:HB3	1.90	0.54
1:A:1030:LYS:HA	1:A:1058:TYR:HB3	1.90	0.54
1:D:670:ASN:HD21	1:D:676:VAL:HG23	1.72	0.54
1:A:175:MET:O	1:A:305:LYS:NZ	2.41	0.54
1:D:175:MET:O	1:D:305:LYS:NZ	2.41	0.54
1:A:670:ASN:HD21	1:A:676:VAL:HG23	1.72	0.54
1:B:773:SER:HG	1:B:774:TRP:HD1	1.55	0.54
1:B:1030:LYS:HA	1:B:1058:TYR:HB3	1.90	0.54
1:C:325:PHE:O	1:C:357:ILE:N	2.40	0.54
1:C:773:SER:HG	1:C:774:TRP:HD1	1.55	0.54
1:C:879:HIS:HB2	1:D:549:ASN:HB2	1.90	0.54
1:C:1030:LYS:HA	1:C:1058:TYR:HB3	1.90	0.54
1:A:325:PHE:O	1:A:357:ILE:N	2.40	0.53
1:A:549:ASN:HB2	1:B:879:HIS:HB2	1.90	0.53
1:B:325:PHE:O	1:B:357:ILE:N	2.40	0.53
1:D:325:PHE:O	1:D:357:ILE:N	2.40	0.53
1:B:23:ARG:NH1	1:B:239:ASN:OD1	2.42	0.53
1:B:175:MET:O	1:B:305:LYS:NZ	2.41	0.53
1:C:23:ARG:NH1	1:C:239:ASN:OD1	2.42	0.53
1:C:175:MET:O	1:C:305:LYS:NZ	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:595:TYR:HB2	1:B:651:GLN:HE21	1.73	0.53
1:D:855:GLU:HB3	1:D:922:LEU:HD11	1.90	0.53
1:A:855:GLU:HB3	1:A:922:LEU:HD11	1.90	0.53
1:C:595:TYR:HB2	1:C:651:GLN:HE21	1.73	0.53
1:C:983:LEU:HG	1:C:985:ILE:HG23	1.91	0.53
1:D:595:TYR:HB2	1:D:651:GLN:HE21	1.73	0.53
1:A:983:LEU:HG	1:A:985:ILE:HG23	1.91	0.53
1:B:983:LEU:HG	1:B:985:ILE:HG23	1.91	0.53
1:C:549:ASN:HB2	1:D:879:HIS:HB2	1.90	0.53
1:D:662:ASN:OD1	1:D:662:ASN:N	2.38	0.53
1:D:983:LEU:HG	1:D:985:ILE:HG23	1.91	0.53
1:A:595:TYR:HB2	1:A:651:GLN:HE21	1.73	0.53
1:A:879:HIS:HB2	1:B:549:ASN:HB2	1.90	0.53
1:A:662:ASN:OD1	1:A:662:ASN:N	2.38	0.53
1:C:855:GLU:HB3	1:C:922:LEU:HD11	1.90	0.53
1:A:23:ARG:NH1	1:A:239:ASN:OD1	2.42	0.52
1:B:855:GLU:HB3	1:B:922:LEU:HD11	1.90	0.52
1:D:23:ARG:NH1	1:D:239:ASN:OD1	2.42	0.52
1:A:396:ARG:NH2	1:A:420:ASP:OD2	2.36	0.52
1:D:396:ARG:NH2	1:D:420:ASP:OD2	2.36	0.52
1:A:327:CYS:HG	1:A:356:PHE:HE2	1.56	0.52
1:B:506:LEU:HD23	1:B:524:LEU:HD22	1.92	0.52
1:C:506:LEU:HD23	1:C:524:LEU:HD22	1.92	0.52
1:A:506:LEU:HD23	1:A:524:LEU:HD22	1.92	0.51
1:D:506:LEU:HD23	1:D:524:LEU:HD22	1.92	0.51
1:A:155:LEU:HD22	1:A:159:TRP:HE1	1.76	0.51
1:D:155:LEU:HD22	1:D:159:TRP:HE1	1.76	0.51
1:B:590:ILE:HD11	1:B:1011:ILE:HG12	1.91	0.51
1:B:652:LEU:HD22	1:B:985:ILE:HD11	1.91	0.51
1:C:652:LEU:HD22	1:C:985:ILE:HD11	1.91	0.51
1:D:652:LEU:HD22	1:D:985:ILE:HD11	1.91	0.51
1:A:652:LEU:HD22	1:A:985:ILE:HD11	1.91	0.51
1:C:590:ILE:HD11	1:C:1011:ILE:HG12	1.91	0.51
1:A:590:ILE:HD11	1:A:1011:ILE:HG12	1.91	0.51
1:D:590:ILE:HD11	1:D:1011:ILE:HG12	1.91	0.51
1:D:773:SER:HG	1:D:774:TRP:HD1	1.59	0.51
1:B:326:VAL:HG12	1:B:357:ILE:HB	1.93	0.50
1:C:326:VAL:HG12	1:C:357:ILE:HB	1.93	0.50
1:C:1037:VAL:HG22	1:C:1075:VAL:HG22	1.93	0.50
1:B:1037:VAL:HG22	1:B:1075:VAL:HG22	1.93	0.50
1:B:224:LEU:HB2	1:B:231:LYS:HB2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:224:LEU:HB2	1:C:231:LYS:HB2	1.93	0.50
1:C:662:ASN:OD1	1:C:662:ASN:N	2.38	0.50
1:D:853:LYS:HG2	1:D:926:SER:HA	1.93	0.50
1:A:399:TRP:CD1	1:A:401:PRO:HD3	2.47	0.50
1:D:399:TRP:CD1	1:D:401:PRO:HD3	2.47	0.50
1:A:312:THR:HA	1:A:315:ASN:HD22	1.77	0.50
1:A:774:TRP:HB3	1:A:777:TRP:CE3	2.47	0.50
1:A:853:LYS:HG2	1:A:926:SER:HA	1.93	0.50
1:B:662:ASN:OD1	1:B:662:ASN:N	2.38	0.50
1:B:933:GLN:HB3	1:B:934:PRO:HD3	1.94	0.50
1:D:312:THR:HA	1:D:315:ASN:HD22	1.77	0.50
1:D:774:TRP:HB3	1:D:777:TRP:CE3	2.47	0.50
1:B:264:LEU:HD23	1:B:512:ILE:HG13	1.94	0.50
1:C:933:GLN:HB3	1:C:934:PRO:HD3	1.94	0.50
1:D:1037:VAL:HG22	1:D:1075:VAL:HG22	1.93	0.50
1:A:930:SER:O	1:A:930:SER:OG	2.21	0.49
1:B:399:TRP:CD1	1:B:401:PRO:HD3	2.47	0.49
1:C:264:LEU:HD23	1:C:512:ILE:HG13	1.94	0.49
1:A:1037:VAL:HG22	1:A:1075:VAL:HG22	1.93	0.49
1:C:303:ARG:NH2	1:C:338:GLU:OE1	2.44	0.49
1:C:399:TRP:CD1	1:C:401:PRO:HD3	2.47	0.49
1:C:774:TRP:HB3	1:C:777:TRP:CE3	2.47	0.49
1:D:264:LEU:HD23	1:D:512:ILE:HG13	1.94	0.49
1:A:252:THR:HA	1:A:255:GLU:HG2	1.95	0.49
1:A:264:LEU:HD23	1:A:512:ILE:HG13	1.94	0.49
1:B:204:ASN:HB3	1:B:207:ALA:HB3	1.95	0.49
1:B:303:ARG:NH2	1:B:338:GLU:OE1	2.44	0.49
1:B:516:VAL:HG23	1:B:516:VAL:O	2.13	0.49
1:B:774:TRP:HB3	1:B:777:TRP:CE3	2.47	0.49
1:C:204:ASN:HB3	1:C:207:ALA:HB3	1.95	0.49
1:D:252:THR:HA	1:D:255:GLU:HG2	1.95	0.49
1:A:159:TRP:HB2	1:A:164:ASP:HB2	1.95	0.49
1:C:516:VAL:HG23	1:C:516:VAL:O	2.13	0.49
1:D:159:TRP:HB2	1:D:164:ASP:HB2	1.95	0.49
1:B:252:THR:HA	1:B:255:GLU:HG2	1.95	0.49
1:B:288:HIS:CE1	1:B:290:HIS:HB2	2.48	0.49
1:C:288:HIS:CE1	1:C:290:HIS:HB2	2.48	0.49
1:A:849:CYS:H	1:A:930:SER:HG	1.61	0.49
1:A:933:GLN:HB3	1:A:934:PRO:HD3	1.94	0.49
1:C:252:THR:HA	1:C:255:GLU:HG2	1.95	0.49
1:D:46:ARG:HD3	1:D:199:ASP:OD1	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:933:GLN:HB3	1:D:934:PRO:HD3	1.94	0.49
1:A:46:ARG:HD3	1:A:199:ASP:OD1	2.12	0.49
1:A:204:ASN:HB3	1:A:207:ALA:HB3	1.95	0.49
1:A:867:TYR:CE2	1:A:876:ARG:HB2	2.47	0.49
1:B:155:LEU:HD22	1:B:159:TRP:HE1	1.76	0.49
1:D:204:ASN:HB3	1:D:207:ALA:HB3	1.95	0.49
1:D:326:VAL:HG12	1:D:357:ILE:HB	1.93	0.49
1:A:326:VAL:HG12	1:A:357:ILE:HB	1.93	0.49
1:A:516:VAL:O	1:A:516:VAL:HG23	2.13	0.49
1:D:867:TYR:CE2	1:D:876:ARG:HB2	2.47	0.49
1:A:708:LYS:H	1:A:829:ASN:ND2	2.11	0.49
1:C:155:LEU:HD22	1:C:159:TRP:HE1	1.76	0.49
1:C:708:LYS:H	1:C:829:ASN:ND2	2.11	0.49
1:D:516:VAL:HG23	1:D:516:VAL:O	2.13	0.49
1:B:312:THR:HA	1:B:315:ASN:HD22	1.77	0.48
1:B:708:LYS:H	1:B:829:ASN:ND2	2.11	0.48
1:B:867:TYR:CE2	1:B:876:ARG:HB2	2.47	0.48
1:C:853:LYS:HG2	1:C:926:SER:HA	1.93	0.48
1:D:708:LYS:H	1:D:829:ASN:ND2	2.11	0.48
1:B:853:LYS:HG2	1:B:926:SER:HA	1.93	0.48
1:C:867:TYR:CE2	1:C:876:ARG:HB2	2.47	0.48
1:A:224:LEU:HB2	1:A:231:LYS:HB2	1.93	0.48
1:C:312:THR:HA	1:C:315:ASN:HD22	1.77	0.48
1:A:766:LEU:HD22	1:A:850:LYS:HB3	1.95	0.48
1:D:766:LEU:HD22	1:D:850:LYS:HB3	1.95	0.48
1:B:310:TRP:HE3	1:B:336:LEU:HD22	1.79	0.48
1:C:310:TRP:HE3	1:C:336:LEU:HD22	1.79	0.48
1:A:288:HIS:CE1	1:A:290:HIS:HB2	2.48	0.48
1:B:378:ARG:NH2	1:B:582:GLU:OE2	2.47	0.48
1:B:766:LEU:HD22	1:B:850:LYS:HB3	1.95	0.48
1:D:224:LEU:HB2	1:D:231:LYS:HB2	1.93	0.48
1:D:288:HIS:CE1	1:D:290:HIS:HB2	2.48	0.48
1:B:159:TRP:HB2	1:B:164:ASP:HB2	1.95	0.48
1:C:46:ARG:HD3	1:C:199:ASP:OD1	2.12	0.48
1:C:159:TRP:HB2	1:C:164:ASP:HB2	1.95	0.48
1:C:378:ARG:NH2	1:C:582:GLU:OE2	2.47	0.48
1:B:46:ARG:HD3	1:B:199:ASP:OD1	2.12	0.48
1:B:842:GLU:OE1	1:B:944:THR:HG23	2.14	0.48
1:C:766:LEU:HD22	1:C:850:LYS:HB3	1.95	0.48
1:C:842:GLU:OE1	1:C:944:THR:HG23	2.14	0.48
1:C:1028:VAL:HG22	1:C:1060:GLU:HG2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1028:VAL:HG22	1:B:1060:GLU:HG2	1.95	0.48
1:A:774:TRP:HE3	1:A:777:TRP:CD2	2.32	0.48
1:D:774:TRP:HE3	1:D:777:TRP:CD2	2.32	0.48
1:B:774:TRP:HE3	1:B:777:TRP:CD2	2.32	0.47
1:C:774:TRP:HE3	1:C:777:TRP:CD2	2.32	0.47
1:A:61:GLY:HA2	1:A:111:ARG:O	2.14	0.47
1:A:317:MET:HE1	1:A:356:PHE:HD1	1.79	0.47
1:D:61:GLY:HA2	1:D:111:ARG:O	2.14	0.47
1:A:378:ARG:NH2	1:A:582:GLU:OE2	2.47	0.47
1:A:690:TYR:CE2	1:A:692:GLU:HB3	2.49	0.47
1:B:41:VAL:HG21	1:B:253:ILE:HD11	1.96	0.47
1:D:310:TRP:HE3	1:D:336:LEU:HD22	1.79	0.47
1:D:690:TYR:CE2	1:D:692:GLU:HB3	2.49	0.47
1:D:842:GLU:OE1	1:D:944:THR:HG23	2.14	0.47
1:D:1028:VAL:HG22	1:D:1060:GLU:HG2	1.95	0.47
1:A:310:TRP:HE3	1:A:336:LEU:HD22	1.79	0.47
1:A:842:GLU:OE1	1:A:944:THR:HG23	2.14	0.47
1:C:41:VAL:HG21	1:C:253:ILE:HD11	1.96	0.47
1:D:317:MET:HE1	1:D:356:PHE:HD1	1.79	0.47
1:D:953:SER:O	1:D:953:SER:OG	2.30	0.47
1:A:1028:VAL:HG22	1:A:1060:GLU:HG2	1.95	0.47
1:D:378:ARG:NH2	1:D:582:GLU:OE2	2.47	0.47
1:A:423:LEU:HD11	1:A:486:LEU:HD22	1.96	0.47
1:A:438:SER:N	1:A:478:ASN:OD1	2.40	0.47
1:A:953:SER:O	1:A:953:SER:OG	2.30	0.47
1:B:61:GLY:HA2	1:B:111:ARG:O	2.14	0.47
1:C:690:TYR:CE2	1:C:692:GLU:HB3	2.49	0.47
1:D:423:LEU:HD11	1:D:486:LEU:HD22	1.96	0.47
1:D:693:SER:OG	1:D:696:GLY:O	2.30	0.47
1:A:586:THR:HG23	1:A:1004:MET:HG2	1.97	0.47
1:A:693:SER:OG	1:A:696:GLY:O	2.30	0.47
1:B:690:TYR:CE2	1:B:692:GLU:HB3	2.49	0.47
1:C:61:GLY:HA2	1:C:111:ARG:O	2.14	0.47
1:D:586:THR:HG23	1:D:1004:MET:HG2	1.97	0.47
1:A:61:GLY:CA	1:A:111:ARG:O	2.63	0.47
1:B:439:THR:HG21	1:B:535:ILE:HD13	1.97	0.47
1:D:298:PRO:HG3	1:D:625:MET:HE3	1.97	0.47
1:A:298:PRO:HG3	1:A:625:MET:HE3	1.97	0.47
1:C:439:THR:HG21	1:C:535:ILE:HD13	1.97	0.47
1:C:753:LYS:HB3	1:C:753:LYS:HE2	1.76	0.47
1:D:61:GLY:CA	1:D:111:ARG:O	2.63	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:584:VAL:HG21	1:A:645:LEU:HG	1.98	0.46
1:A:815:GLU:HG2	1:A:816:LEU:HG	1.97	0.46
1:D:584:VAL:HG21	1:D:645:LEU:HG	1.98	0.46
1:A:382:LEU:HD22	1:A:610:LEU:HD12	1.98	0.46
1:C:586:THR:HG23	1:C:1004:MET:HG2	1.97	0.46
1:D:815:GLU:HG2	1:D:816:LEU:HG	1.97	0.46
1:A:374:GLU:O	1:A:378:ARG:HG2	2.15	0.46
1:D:382:LEU:HD22	1:D:610:LEU:HD12	1.98	0.46
1:D:427:LEU:HD23	1:D:427:LEU:HA	1.80	0.46
1:B:586:THR:HG23	1:B:1004:MET:HG2	1.97	0.46
1:D:374:GLU:O	1:D:378:ARG:HG2	2.15	0.46
1:B:582:GLU:O	1:B:586:THR:OG1	2.29	0.46
1:A:41:VAL:HG21	1:A:253:ILE:HD11	1.96	0.46
1:A:800:SER:O	1:A:800:SER:OG	2.33	0.46
1:B:754:SER:OG	1:B:755:GLY:N	2.49	0.46
1:B:849:CYS:N	1:B:930:SER:OG	2.48	0.46
1:C:61:GLY:CA	1:C:111:ARG:O	2.63	0.46
1:C:298:PRO:HG3	1:C:625:MET:HE3	1.97	0.46
1:C:754:SER:OG	1:C:755:GLY:N	2.49	0.46
1:A:706:SER:OG	1:A:707:LEU:N	2.49	0.46
1:B:61:GLY:CA	1:B:111:ARG:O	2.63	0.46
1:B:298:PRO:HG3	1:B:625:MET:HE3	1.97	0.46
1:D:41:VAL:HG21	1:D:253:ILE:HD11	1.96	0.46
1:D:706:SER:OG	1:D:707:LEU:N	2.49	0.46
1:A:303:ARG:NH2	1:A:338:GLU:OE1	2.44	0.46
1:A:439:THR:HG21	1:A:535:ILE:HD13	1.97	0.46
1:C:849:CYS:N	1:C:930:SER:OG	2.48	0.46
1:D:303:ARG:NH2	1:D:338:GLU:OE1	2.44	0.46
1:D:439:THR:HG21	1:D:535:ILE:HD13	1.97	0.46
1:D:800:SER:O	1:D:800:SER:OG	2.33	0.46
1:A:411:PRO:HB2	1:A:444:ALA:HB2	1.98	0.46
1:A:754:SER:OG	1:A:755:GLY:N	2.49	0.46
1:D:63:VAL:HG22	1:D:110:ILE:HG22	1.98	0.46
1:D:754:SER:OG	1:D:755:GLY:N	2.49	0.46
1:A:63:VAL:HG22	1:A:110:ILE:HG22	1.98	0.46
1:A:427:LEU:HD23	1:A:427:LEU:HA	1.80	0.46
1:A:849:CYS:N	1:A:930:SER:OG	2.48	0.46
1:A:913:LYS:HA	1:A:913:LYS:HD3	1.76	0.46
1:D:411:PRO:HB2	1:D:444:ALA:HB2	1.98	0.46
1:B:584:VAL:HG21	1:B:645:LEU:HG	1.98	0.45
1:C:584:VAL:HG21	1:C:645:LEU:HG	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:ASP:N	1:A:138:ASP:OD1	2.50	0.45
1:C:423:LEU:HD11	1:C:486:LEU:HD22	1.96	0.45
1:D:138:ASP:OD1	1:D:138:ASP:N	2.50	0.45
1:D:849:CYS:N	1:D:930:SER:OG	2.48	0.45
1:B:63:VAL:HG22	1:B:110:ILE:HG22	1.98	0.45
1:C:63:VAL:HG22	1:C:110:ILE:HG22	1.98	0.45
1:B:280:LYS:NZ	1:D:515:THR:O	2.29	0.45
1:B:423:LEU:HD11	1:B:486:LEU:HD22	1.96	0.45
1:C:800:SER:O	1:C:800:SER:OG	2.33	0.45
1:D:913:LYS:HA	1:D:913:LYS:HD3	1.76	0.45
1:B:815:GLU:HG2	1:B:816:LEU:HG	1.97	0.45
1:C:374:GLU:O	1:C:378:ARG:HG2	2.15	0.45
1:D:98:GLY:H	1:D:104:PHE:HZ	1.65	0.45
1:D:910:ASN:O	1:D:968:ASN:ND2	2.47	0.45
1:A:98:GLY:H	1:A:104:PHE:HZ	1.65	0.45
1:B:374:GLU:O	1:B:378:ARG:HG2	2.15	0.45
1:B:382:LEU:HD22	1:B:610:LEU:HD12	1.98	0.45
1:C:382:LEU:HD22	1:C:610:LEU:HD12	1.98	0.45
1:C:706:SER:OG	1:C:707:LEU:N	2.49	0.45
1:C:815:GLU:HG2	1:C:816:LEU:HG	1.97	0.45
1:A:910:ASN:O	1:A:968:ASN:ND2	2.47	0.45
1:B:314:MET:HE1	1:B:347:LEU:HD13	1.98	0.45
1:B:706:SER:OG	1:B:707:LEU:N	2.49	0.45
1:A:1056:ASN:OD1	1:A:1056:ASN:N	2.50	0.45
1:C:272:ALA:HA	1:C:275:GLU:HG2	1.99	0.45
1:D:360:GLY:HA2	1:D:399:TRP:H	1.81	0.45
1:A:272:ALA:HA	1:A:275:GLU:HG2	1.99	0.45
1:B:272:ALA:HA	1:B:275:GLU:HG2	1.99	0.45
1:B:438:SER:N	1:B:478:ASN:OD1	2.40	0.45
1:C:438:SER:N	1:C:478:ASN:OD1	2.40	0.45
1:D:438:SER:N	1:D:478:ASN:OD1	2.40	0.45
1:D:1056:ASN:OD1	1:D:1056:ASN:N	2.50	0.45
1:A:360:GLY:HA2	1:A:399:TRP:H	1.81	0.45
1:B:411:PRO:HB2	1:B:444:ALA:HB2	1.98	0.45
1:C:411:PRO:HB2	1:C:444:ALA:HB2	1.98	0.45
1:C:991:LEU:HD21	1:C:997:VAL:HG12	1.99	0.45
1:D:272:ALA:HA	1:D:275:GLU:HG2	1.99	0.45
1:A:310:TRP:CE3	1:A:336:LEU:HD22	2.52	0.44
1:A:834:PHE:CE2	1:A:836:GLY:HA2	2.52	0.44
1:B:991:LEU:HD21	1:B:997:VAL:HG12	1.99	0.44
1:C:310:TRP:CE3	1:C:336:LEU:HD22	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:314:MET:HE1	1:C:347:LEU:HD13	1.99	0.44
1:D:310:TRP:CE3	1:D:336:LEU:HD22	2.52	0.44
1:D:834:PHE:CE2	1:D:836:GLY:HA2	2.52	0.44
1:A:991:LEU:HD21	1:A:997:VAL:HG12	1.99	0.44
1:B:310:TRP:CE3	1:B:336:LEU:HD22	2.52	0.44
1:A:435:PHE:O	1:A:477:LYS:HD3	2.18	0.44
1:B:138:ASP:OD1	1:B:138:ASP:N	2.50	0.44
1:B:360:GLY:HA2	1:B:399:TRP:H	1.81	0.44
1:D:991:LEU:HD21	1:D:997:VAL:HG12	1.99	0.44
1:B:217:MET:HE2	1:B:263:PHE:HB3	1.99	0.44
1:C:138:ASP:N	1:C:138:ASP:OD1	2.50	0.44
1:C:155:LEU:HA	1:C:156:PRO:HD3	1.89	0.44
1:C:360:GLY:HA2	1:C:399:TRP:H	1.81	0.44
1:D:435:PHE:O	1:D:477:LYS:HD3	2.18	0.44
1:C:217:MET:HE2	1:C:263:PHE:HB3	1.99	0.44
1:A:54:VAL:HG11	1:A:60:LYS:HD3	2.00	0.44
1:A:359:ILE:HG12	1:A:360:GLY:H	1.82	0.44
1:B:435:PHE:O	1:B:477:LYS:HD3	2.18	0.44
1:B:572:ARG:NH2	1:B:894:GLN:O	2.51	0.44
1:C:572:ARG:NH2	1:C:894:GLN:O	2.51	0.44
1:D:54:VAL:HG11	1:D:60:LYS:HD3	2.00	0.44
1:D:314:MET:HE1	1:D:347:LEU:HD13	1.99	0.44
1:D:499:THR:OG1	1:D:501:GLU:HG3	2.18	0.44
1:A:97:PHE:HE2	1:A:195:LEU:HB2	1.83	0.44
1:A:499:THR:OG1	1:A:501:GLU:HG3	2.18	0.44
1:A:572:ARG:NH2	1:A:894:GLN:O	2.51	0.44
1:B:359:ILE:HG12	1:B:360:GLY:H	1.82	0.44
1:B:1056:ASN:OD1	1:B:1056:ASN:N	2.50	0.44
1:C:54:VAL:HG11	1:C:60:LYS:HD3	2.00	0.44
1:C:359:ILE:HG12	1:C:360:GLY:H	1.82	0.44
1:C:435:PHE:O	1:C:477:LYS:HD3	2.18	0.44
1:C:460:TYR:OH	1:C:493:ASP:OD1	2.29	0.44
1:D:97:PHE:HE2	1:D:195:LEU:HB2	1.83	0.44
1:D:359:ILE:HG12	1:D:360:GLY:H	1.82	0.44
1:D:506:LEU:HD12	1:D:506:LEU:HA	1.87	0.44
1:B:54:VAL:HG11	1:B:60:LYS:HD3	2.00	0.44
1:B:97:PHE:HE2	1:B:195:LEU:HB2	1.83	0.44
1:C:97:PHE:HE2	1:C:195:LEU:HB2	1.83	0.44
1:C:1056:ASN:OD1	1:C:1056:ASN:N	2.50	0.44
1:D:257:ARG:NH2	1:D:269:ASP:OD1	2.37	0.44
1:D:572:ARG:NH2	1:D:894:GLN:O	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:506:LEU:HD12	1:A:506:LEU:HA	1.87	0.44
1:C:834:PHE:CE2	1:C:836:GLY:HA2	2.52	0.44
1:C:693:SER:OG	1:C:696:GLY:O	2.30	0.43
1:A:178:THR:HA	1:A:191:ARG:HH21	1.83	0.43
1:A:257:ARG:NH2	1:A:269:ASP:OD1	2.37	0.43
1:B:834:PHE:CE2	1:B:836:GLY:HA2	2.52	0.43
1:A:314:MET:HE1	1:A:347:LEU:HD13	2.00	0.43
1:C:499:THR:OG1	1:C:501:GLU:HG3	2.18	0.43
1:D:178:THR:HA	1:D:191:ARG:HH21	1.83	0.43
1:B:499:THR:OG1	1:B:501:GLU:HG3	2.18	0.43
1:B:693:SER:OG	1:B:696:GLY:O	2.30	0.43
1:B:312:THR:HA	1:B:315:ASN:ND2	2.33	0.43
1:C:312:THR:HA	1:C:315:ASN:ND2	2.33	0.43
1:A:621:SER:N	1:A:627:TYR:OH	2.52	0.43
1:D:621:SER:N	1:D:627:TYR:OH	2.52	0.43
1:D:312:THR:HA	1:D:315:ASN:ND2	2.33	0.43
1:A:312:THR:HA	1:A:315:ASN:ND2	2.33	0.43
1:A:1000:SER:HB2	1:A:1016:TYR:CE1	2.54	0.43
1:B:359:ILE:HD13	1:B:399:TRP:CE3	2.54	0.43
1:B:1000:SER:HB2	1:B:1016:TYR:CE1	2.54	0.43
1:C:359:ILE:HD13	1:C:399:TRP:CE3	2.54	0.43
1:C:1000:SER:HB2	1:C:1016:TYR:CE1	2.54	0.43
1:D:1000:SER:HB2	1:D:1016:TYR:CE1	2.54	0.43
1:A:775:GLN:HB3	1:A:933:GLN:HB2	2.00	0.42
1:B:257:ARG:NH2	1:B:269:ASP:OD1	2.37	0.42
1:B:421:ARG:NH1	1:B:529:ASP:OD1	2.52	0.42
1:C:257:ARG:NH2	1:C:269:ASP:OD1	2.37	0.42
1:C:621:SER:N	1:C:627:TYR:OH	2.52	0.42
1:A:606:TRP:O	1:A:610:LEU:HG	2.20	0.42
1:B:621:SER:N	1:B:627:TYR:OH	2.52	0.42
1:C:421:ARG:NH1	1:C:529:ASP:OD1	2.52	0.42
1:D:775:GLN:HB3	1:D:933:GLN:HB2	2.00	0.42
1:A:359:ILE:HD13	1:A:399:TRP:CE3	2.54	0.42
1:C:614:PHE:HB3	1:C:617:VAL:HG23	2.02	0.42
1:C:775:GLN:HB3	1:C:933:GLN:HB2	2.00	0.42
1:C:910:ASN:O	1:C:968:ASN:ND2	2.47	0.42
1:D:606:TRP:O	1:D:610:LEU:HG	2.20	0.42
1:A:599:LYS:NZ	1:A:1005:ALA:O	2.53	0.42
1:A:741:PHE:CZ	1:A:746:GLU:HG3	2.54	0.42
1:B:614:PHE:HB3	1:B:617:VAL:HG23	2.02	0.42
1:D:359:ILE:HD13	1:D:399:TRP:CE3	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:599:LYS:NZ	1:D:1005:ALA:O	2.53	0.42
1:D:741:PHE:CZ	1:D:746:GLU:HG3	2.54	0.42
1:A:566:GLU:OE1	1:A:943:HIS:ND1	2.44	0.42
1:B:566:GLU:OE1	1:B:943:HIS:ND1	2.44	0.42
1:B:775:GLN:HB3	1:B:933:GLN:HB2	2.00	0.42
1:C:582:GLU:O	1:C:586:THR:OG1	2.29	0.42
1:D:217:MET:HE2	1:D:263:PHE:HB3	2.01	0.42
1:A:217:MET:HE2	1:A:263:PHE:HB3	2.01	0.42
1:D:614:PHE:HB3	1:D:617:VAL:HG23	2.02	0.42
1:A:614:PHE:HB3	1:A:617:VAL:HG23	2.02	0.42
1:B:741:PHE:CZ	1:B:746:GLU:HG3	2.54	0.42
1:B:910:ASN:O	1:B:968:ASN:ND2	2.47	0.42
1:C:593:LYS:HD3	1:C:593:LYS:HA	1.84	0.42
1:D:421:ARG:NH1	1:D:529:ASP:OD1	2.52	0.42
1:A:591:PHE:CD2	1:A:985:ILE:HD12	2.55	0.42
1:B:178:THR:HA	1:B:191:ARG:HH21	1.83	0.42
1:B:581:ALA:O	1:B:585:SER:OG	2.32	0.42
1:C:427:LEU:HA	1:C:427:LEU:HD23	1.80	0.42
1:C:566:GLU:OE1	1:C:943:HIS:ND1	2.44	0.42
1:C:741:PHE:CZ	1:C:746:GLU:HG3	2.54	0.42
1:C:913:LYS:HD3	1:C:913:LYS:HA	1.76	0.42
1:D:591:PHE:CD2	1:D:985:ILE:HD12	2.55	0.42
1:A:327:CYS:SG	1:A:356:PHE:HE2	2.42	0.42
1:A:421:ARG:NH1	1:A:529:ASP:OD1	2.52	0.42
1:B:606:TRP:O	1:B:610:LEU:HG	2.20	0.42
1:C:581:ALA:O	1:C:585:SER:OG	2.32	0.42
1:C:606:TRP:O	1:C:610:LEU:HG	2.20	0.42
1:C:857:PRO:HA	1:C:921:ASN:O	2.20	0.42
1:D:566:GLU:OE1	1:D:943:HIS:ND1	2.44	0.42
1:A:128:CYS:O	1:A:130:ASN:N	2.52	0.42
1:A:395:CYS:O	1:A:419:MET:HG2	2.20	0.42
1:B:857:PRO:HA	1:B:921:ASN:O	2.20	0.42
1:B:864:PHE:CE2	1:B:875:LYS:HD3	2.55	0.42
1:C:178:THR:HA	1:C:191:ARG:HH21	1.83	0.42
1:C:864:PHE:CE2	1:C:875:LYS:HD3	2.55	0.42
1:D:574:VAL:HG21	1:D:634:MET:SD	2.60	0.42
1:D:582:GLU:O	1:D:586:THR:OG1	2.29	0.42
1:D:753:LYS:HB3	1:D:753:LYS:HE2	1.76	0.42
1:A:574:VAL:HG21	1:A:634:MET:SD	2.60	0.41
1:B:224:LEU:HD22	1:B:518:TYR:CE2	2.55	0.41
1:B:317:MET:HE1	1:B:356:PHE:HD1	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:599:LYS:NZ	1:B:1005:ALA:O	2.53	0.41
1:B:987:ASP:HB3	1:B:990:GLN:NE2	2.35	0.41
1:C:224:LEU:HD22	1:C:518:TYR:CE2	2.55	0.41
1:C:597:TYR:CE2	1:C:1004:MET:HB2	2.55	0.41
1:C:684:GLU:HG2	1:C:685:GLU:HG2	2.02	0.41
1:D:128:CYS:O	1:D:130:ASN:N	2.52	0.41
1:D:327:CYS:SG	1:D:356:PHE:HE2	2.42	0.41
1:D:395:CYS:O	1:D:419:MET:HG2	2.20	0.41
1:A:224:LEU:HD22	1:A:518:TYR:CE2	2.55	0.41
1:A:597:TYR:CE2	1:A:1004:MET:HB2	2.55	0.41
1:A:987:ASP:HB3	1:A:990:GLN:NE2	2.35	0.41
1:B:597:TYR:CE2	1:B:1004:MET:HB2	2.55	0.41
1:B:684:GLU:HG2	1:B:685:GLU:HG2	2.02	0.41
1:C:599:LYS:NZ	1:C:1005:ALA:O	2.53	0.41
1:C:987:ASP:HB3	1:C:990:GLN:NE2	2.35	0.41
1:D:597:TYR:CE2	1:D:1004:MET:HB2	2.55	0.41
1:D:987:ASP:HB3	1:D:990:GLN:NE2	2.35	0.41
1:A:864:PHE:CE2	1:A:875:LYS:HD3	2.55	0.41
1:B:554:PHE:CZ	1:B:556:PHE:HB3	2.55	0.41
1:B:593:LYS:HD3	1:B:593:LYS:HA	1.84	0.41
1:C:554:PHE:CZ	1:C:556:PHE:HB3	2.55	0.41
1:D:200:LEU:HD12	1:D:200:LEU:HA	1.94	0.41
1:D:224:LEU:HD22	1:D:518:TYR:CE2	2.55	0.41
1:A:678:GLY:HA3	1:A:690:TYR:CE1	2.55	0.41
1:B:913:LYS:HD3	1:B:913:LYS:HA	1.76	0.41
1:D:864:PHE:CE2	1:D:875:LYS:HD3	2.55	0.41
1:A:326:VAL:HA	1:A:357:ILE:O	2.21	0.41
1:A:595:TYR:HE1	1:A:647:GLN:HE21	1.69	0.41
1:A:935:ASP:OD2	1:A:938:ALA:HA	2.21	0.41
1:B:395:CYS:O	1:B:419:MET:HG2	2.20	0.41
1:B:427:LEU:HD23	1:B:427:LEU:HA	1.80	0.41
1:B:595:TYR:HE1	1:B:647:GLN:HE21	1.69	0.41
1:C:649:ILE:HG23	1:C:654:PHE:HB2	2.03	0.41
1:C:935:ASP:OD2	1:C:938:ALA:HA	2.21	0.41
1:D:595:TYR:HE1	1:D:647:GLN:HE21	1.69	0.41
1:D:678:GLY:HA3	1:D:690:TYR:CE1	2.55	0.41
1:D:684:GLU:HG2	1:D:685:GLU:HG2	2.02	0.41
1:D:935:ASP:OD2	1:D:938:ALA:HA	2.21	0.41
1:A:200:LEU:HD12	1:A:200:LEU:HA	1.94	0.41
1:A:749:ILE:O	1:A:750:LEU:HD23	2.21	0.41
1:A:753:LYS:HB3	1:A:753:LYS:HE2	1.76	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1032:LEU:HD23	1:A:1032:LEU:HA	1.95	0.41
1:B:591:PHE:CD2	1:B:985:ILE:HD12	2.55	0.41
1:B:649:ILE:HG23	1:B:654:PHE:HB2	2.03	0.41
1:B:935:ASP:OD2	1:B:938:ALA:HA	2.21	0.41
1:C:395:CYS:O	1:C:419:MET:HG2	2.20	0.41
1:C:595:TYR:HE1	1:C:647:GLN:HE21	1.69	0.41
1:D:326:VAL:HA	1:D:357:ILE:O	2.21	0.41
1:D:1032:LEU:HD23	1:D:1032:LEU:HA	1.95	0.41
1:A:155:LEU:HA	1:A:156:PRO:HD3	1.89	0.41
1:A:684:GLU:HG2	1:A:685:GLU:HG2	2.02	0.41
1:B:753:LYS:HB3	1:B:753:LYS:HE2	1.76	0.41
1:C:591:PHE:CD2	1:C:985:ILE:HD12	2.55	0.41
1:D:401:PRO:HA	1:D:425:GLN:H	1.86	0.41
1:D:749:ILE:O	1:D:750:LEU:HD23	2.21	0.41
1:D:889:PHE:HA	1:D:919:HIS:CE1	2.56	0.41
1:A:401:PRO:HA	1:A:425:GLN:H	1.86	0.41
1:A:857:PRO:HA	1:A:921:ASN:O	2.20	0.41
1:A:889:PHE:HA	1:A:919:HIS:CE1	2.56	0.41
1:B:574:VAL:HG21	1:B:634:MET:SD	2.60	0.41
1:B:724:ASN:OD1	1:B:725:ASP:N	2.47	0.41
1:C:771:PRO:HG2	1:C:775:GLN:HA	2.03	0.41
1:A:554:PHE:CZ	1:A:556:PHE:HB3	2.55	0.41
1:A:1003:LYS:HB3	1:A:1003:LYS:HE3	1.93	0.41
1:B:130:ASN:HB2	1:B:171:ALA:O	2.21	0.41
1:B:327:CYS:SG	1:B:356:PHE:HE2	2.42	0.41
1:B:401:PRO:HA	1:B:425:GLN:H	1.86	0.41
1:B:771:PRO:HG2	1:B:775:GLN:HA	2.03	0.41
1:C:130:ASN:HB2	1:C:171:ALA:O	2.21	0.41
1:C:401:PRO:HA	1:C:425:GLN:H	1.86	0.41
1:C:574:VAL:HG21	1:C:634:MET:SD	2.60	0.41
1:C:656:LYS:HE3	1:C:656:LYS:HB3	1.91	0.41
1:D:130:ASN:HB2	1:D:171:ALA:O	2.21	0.41
1:D:554:PHE:CZ	1:D:556:PHE:HB3	2.55	0.41
1:D:857:PRO:HA	1:D:921:ASN:O	2.20	0.41
1:A:593:LYS:HD3	1:A:593:LYS:HA	1.84	0.41
1:A:957:ASP:OD1	1:A:957:ASP:N	2.52	0.41
1:B:678:GLY:HA3	1:B:690:TYR:CE1	2.55	0.41
1:C:327:CYS:SG	1:C:356:PHE:HE2	2.42	0.41
1:C:678:GLY:HA3	1:C:690:TYR:CE1	2.55	0.41
1:C:724:ASN:OD1	1:C:725:ASP:N	2.47	0.41
1:A:130:ASN:HB2	1:A:171:ALA:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:707:LEU:HD11	1:A:803:LEU:HD23	2.04	0.40
1:B:707:LEU:HD11	1:B:803:LEU:HD23	2.04	0.40
1:C:317:MET:HE1	1:C:356:PHE:HD1	1.86	0.40
1:C:326:VAL:HA	1:C:357:ILE:O	2.21	0.40
1:C:707:LEU:HD11	1:C:803:LEU:HD23	2.04	0.40
1:C:749:ILE:O	1:C:750:LEU:HD23	2.21	0.40
1:C:889:PHE:HA	1:C:919:HIS:CE1	2.56	0.40
1:D:38:LEU:HD12	1:D:38:LEU:HA	1.91	0.40
1:D:707:LEU:HD11	1:D:803:LEU:HD23	2.04	0.40
1:D:771:PRO:HG2	1:D:775:GLN:HA	2.03	0.40
1:D:1003:LYS:HB3	1:D:1003:LYS:HE3	1.93	0.40
1:A:771:PRO:HG2	1:A:775:GLN:HA	2.03	0.40
1:B:326:VAL:HA	1:B:357:ILE:O	2.21	0.40
1:B:656:LYS:HE3	1:B:656:LYS:HB3	1.91	0.40
1:B:749:ILE:O	1:B:750:LEU:HD23	2.21	0.40
1:D:314:MET:HA	1:D:317:MET:HE2	2.03	0.40
1:D:957:ASP:OD1	1:D:957:ASP:N	2.52	0.40
1:A:879:HIS:NE2	1:A:885:ASP:OD2	2.53	0.40
1:B:889:PHE:HA	1:B:919:HIS:CE1	2.56	0.40
1:D:879:HIS:NE2	1:D:885:ASP:OD2	2.53	0.40
1:A:314:MET:HA	1:A:317:MET:HE2	2.03	0.40
1:A:378:ARG:NH2	1:A:1003:LYS:HD3	2.37	0.40
1:A:649:ILE:HG23	1:A:654:PHE:HB2	2.03	0.40
1:B:868:GLU:OE1	1:B:895:LYS:HB2	2.21	0.40
1:C:868:GLU:OE1	1:C:895:LYS:HB2	2.21	0.40
1:D:118:LYS:HE2	1:D:119:TYR:CZ	2.56	0.40
1:D:378:ARG:NH2	1:D:1003:LYS:HD3	2.37	0.40
1:D:649:ILE:HG23	1:D:654:PHE:HB2	2.03	0.40
1:A:118:LYS:HE2	1:A:119:TYR:CZ	2.56	0.40
1:B:118:LYS:HE2	1:B:119:TYR:CZ	2.56	0.40
1:B:578:LEU:HG	1:B:641:THR:HG21	2.04	0.40
1:C:578:LEU:HG	1:C:641:THR:HG21	2.04	0.40
1:C:1003:LYS:HE3	1:C:1003:LYS:HB3	1.93	0.40
1:D:868:GLU:OE1	1:D:895:LYS:HB2	2.21	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	1074/1133 (95%)	991 (92%)	83 (8%)	0	100	100
1	B	1074/1133 (95%)	991 (92%)	83 (8%)	0	100	100
1	C	1074/1133 (95%)	991 (92%)	83 (8%)	0	100	100
1	D	1074/1133 (95%)	991 (92%)	83 (8%)	0	100	100
All	All	4296/4532 (95%)	3964 (92%)	332 (8%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	951/1005 (95%)	925 (97%)	26 (3%)	44	75
1	B	951/1005 (95%)	925 (97%)	26 (3%)	44	75
1	C	951/1005 (95%)	925 (97%)	26 (3%)	44	75
1	D	951/1005 (95%)	925 (97%)	26 (3%)	44	75
All	All	3804/4020 (95%)	3700 (97%)	104 (3%)	48	75

All (104) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	25	ASP
1	A	35	ASP

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Mol	Chain	Res	Type
1	A	49	ASN
1	A	308	ARG
1	A	315	ASN
1	A	342	ASP
1	A	406	TYR
1	A	423	LEU
1	A	438	SER
1	A	474	ASP
1	A	556	PHE
1	A	560	THR
1	A	677	ARG
1	A	684	GLU
1	A	806	SER
1	A	824	SER
1	A	851	PHE
1	A	890	GLU
1	A	893	HIS
1	A	909	LEU
1	A	921	ASN
1	A	930	SER
1	A	935	ASP
1	A	996	ASN
1	A	1017	GLU
1	A	1046	ASP
1	B	25	ASP
1	B	35	ASP
1	B	49	ASN
1	B	308	ARG
1	B	315	ASN
1	B	342	ASP
1	B	406	TYR
1	B	423	LEU
1	B	438	SER
1	B	474	ASP
1	B	556	PHE
1	B	560	THR
1	B	677	ARG
1	B	684	GLU
1	B	806	SER
1	B	824	SER
1	B	851	PHE
1	B	890	GLU

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Mol	Chain	Res	Type
1	B	893	HIS
1	B	909	LEU
1	B	921	ASN
1	B	930	SER
1	B	935	ASP
1	B	996	ASN
1	B	1017	GLU
1	B	1046	ASP
1	C	25	ASP
1	C	35	ASP
1	C	49	ASN
1	C	308	ARG
1	C	315	ASN
1	C	342	ASP
1	C	406	TYR
1	C	423	LEU
1	C	438	SER
1	C	474	ASP
1	C	556	PHE
1	C	560	THR
1	C	677	ARG
1	C	684	GLU
1	C	806	SER
1	C	824	SER
1	C	851	PHE
1	C	890	GLU
1	C	893	HIS
1	C	909	LEU
1	C	921	ASN
1	C	930	SER
1	C	935	ASP
1	C	996	ASN
1	C	1017	GLU
1	C	1046	ASP
1	D	25	ASP
1	D	35	ASP
1	D	49	ASN
1	D	308	ARG
1	D	315	ASN
1	D	342	ASP
1	D	406	TYR
1	D	423	LEU

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Mol	Chain	Res	Type
1	D	438	SER
1	D	474	ASP
1	D	556	PHE
1	D	560	THR
1	D	677	ARG
1	D	684	GLU
1	D	806	SER
1	D	824	SER
1	D	851	PHE
1	D	890	GLU
1	D	893	HIS
1	D	909	LEU
1	D	921	ASN
1	D	930	SER
1	D	935	ASP
1	D	996	ASN
1	D	1017	GLU
1	D	1046	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (74) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	37	ASN
1	A	266	ASN
1	A	288	HIS
1	A	369	ASN
1	A	412	GLN
1	A	453	HIS
1	A	458	ASN
1	A	475	GLN
1	A	540	ASN
1	A	651	GLN
1	A	675	ASN
1	A	709	HIS
1	A	775	GLN
1	A	829	ASN
1	A	894	GLN
1	A	919	HIS
1	A	1001	HIS
1	A	1076	ASN
1	B	37	ASN
1	B	137	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	266	ASN
1	B	288	HIS
1	B	369	ASN
1	B	412	GLN
1	B	453	HIS
1	B	458	ASN
1	B	475	GLN
1	B	540	ASN
1	B	651	GLN
1	B	675	ASN
1	B	709	HIS
1	B	775	GLN
1	B	829	ASN
1	B	894	GLN
1	B	919	HIS
1	B	1001	HIS
1	B	1076	ASN
1	C	37	ASN
1	C	137	GLN
1	C	266	ASN
1	C	288	HIS
1	C	369	ASN
1	C	412	GLN
1	C	453	HIS
1	C	458	ASN
1	C	475	GLN
1	C	540	ASN
1	C	651	GLN
1	C	675	ASN
1	C	709	HIS
1	C	775	GLN
1	C	829	ASN
1	C	894	GLN
1	C	919	HIS
1	C	1001	HIS
1	C	1076	ASN
1	D	37	ASN
1	D	266	ASN
1	D	288	HIS
1	D	369	ASN
1	D	412	GLN
1	D	453	HIS

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Mol	Chain	Res	Type
1	D	458	ASN
1	D	475	GLN
1	D	540	ASN
1	D	651	GLN
1	D	675	ASN
1	D	709	HIS
1	D	775	GLN
1	D	829	ASN
1	D	894	GLN
1	D	919	HIS
1	D	1001	HIS
1	D	1076	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

Of 4 ligands modelled in this entry, 4 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.

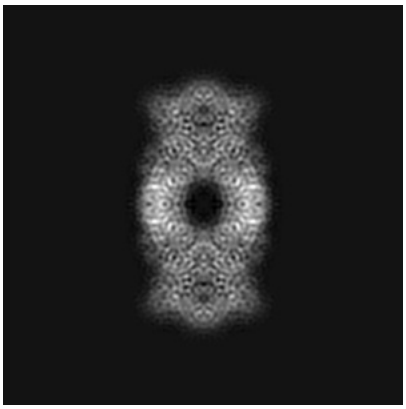
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-30021. These allow visual inspection of the internal detail of the map and identification of artifacts.

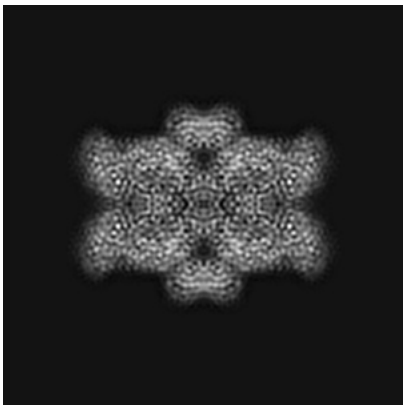
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

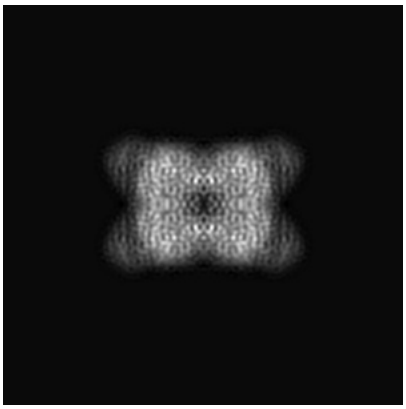
6.1.1 Primary map



X

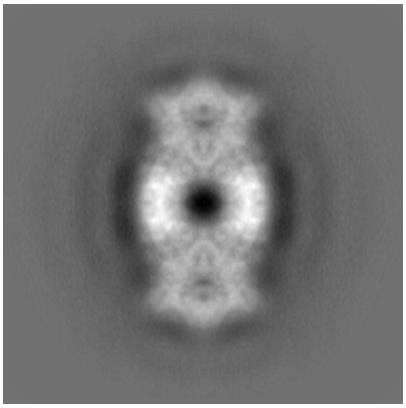


Y

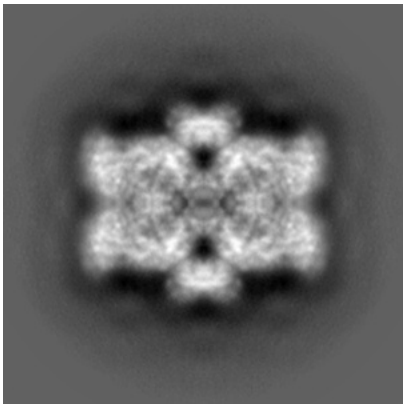


Z

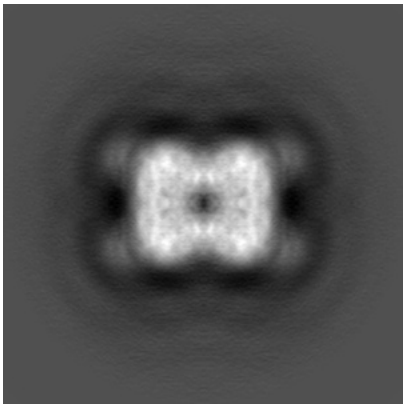
6.1.2 Raw map



X



Y

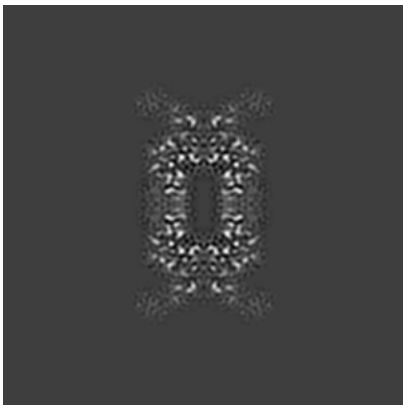


Z

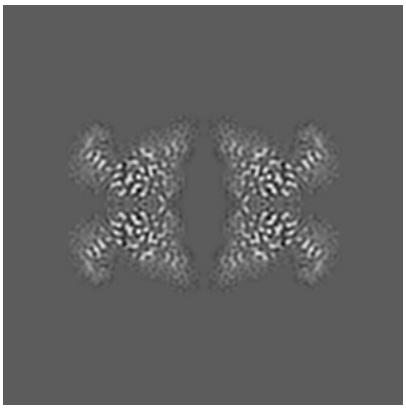
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map



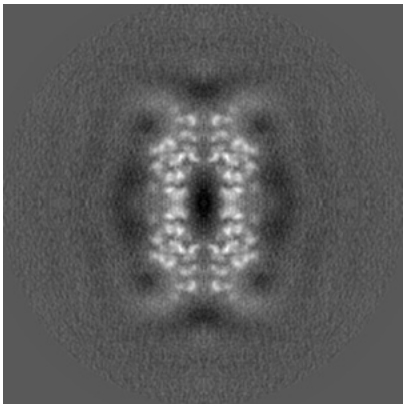
X Index: 120



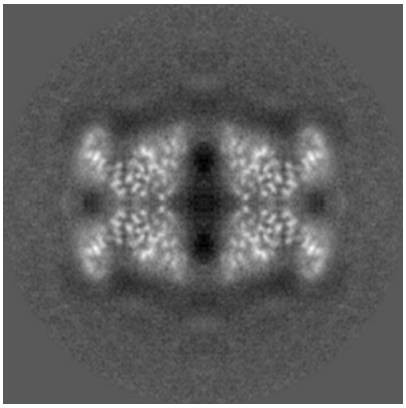
Y Index: 120

Z Index: 120

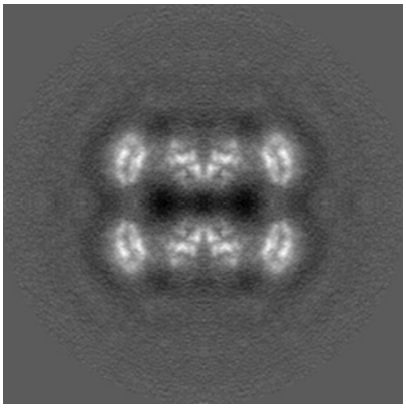
6.2.2 Raw map



X Index: 120



Y Index: 120



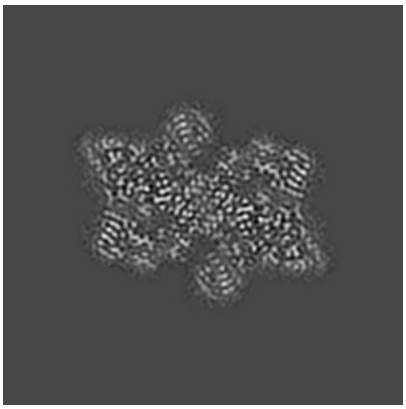
Z Index: 120

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

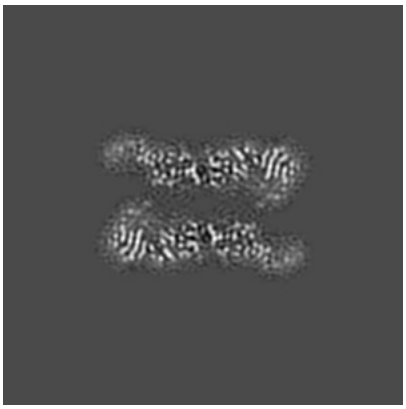
6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 98

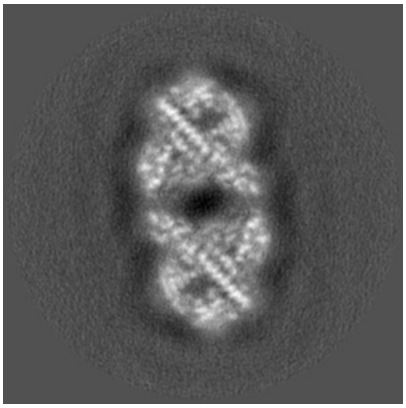


Y Index: 103

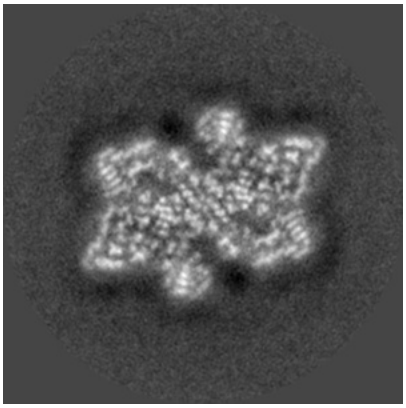


Z Index: 131

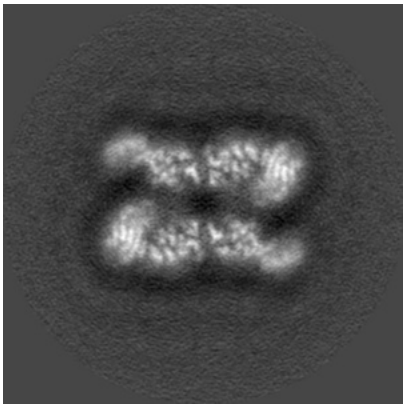
6.3.2 Raw map



X Index: 91



Y Index: 137

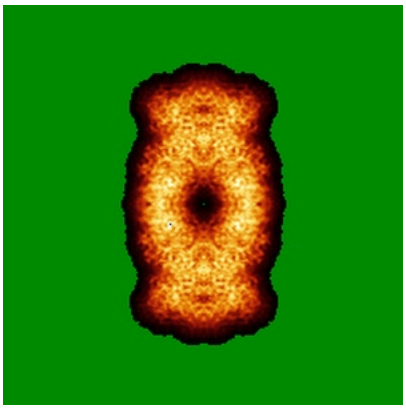


Z Index: 131

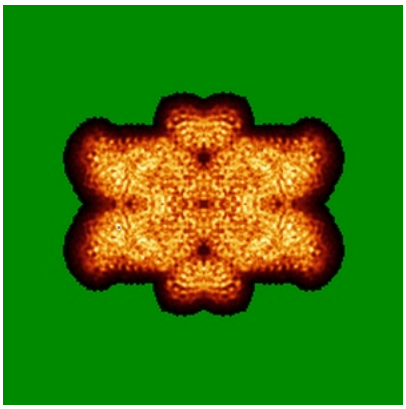
The images above show the largest variance slices of the map in three orthogonal directions.

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

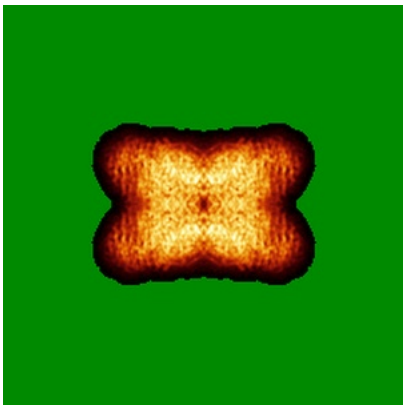
6.4.1 Primary map



X

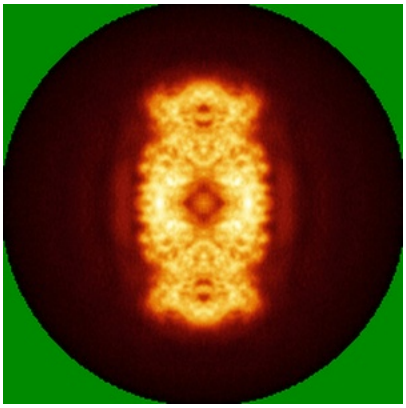


Y

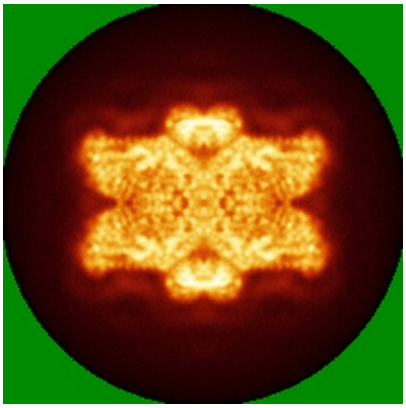


Z

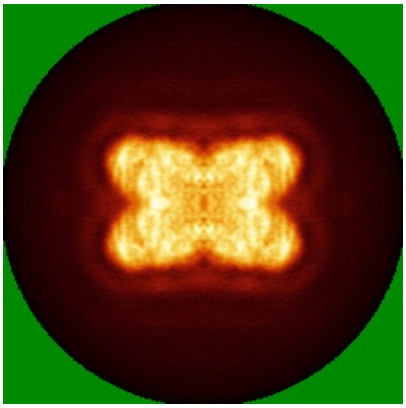
6.4.2 Raw map



X



Y

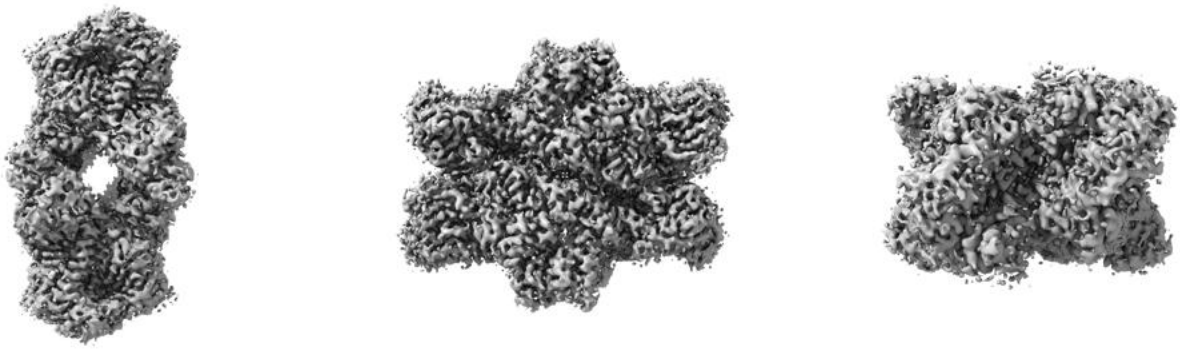


Z

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

6.5 Orthogonal surface views (i)

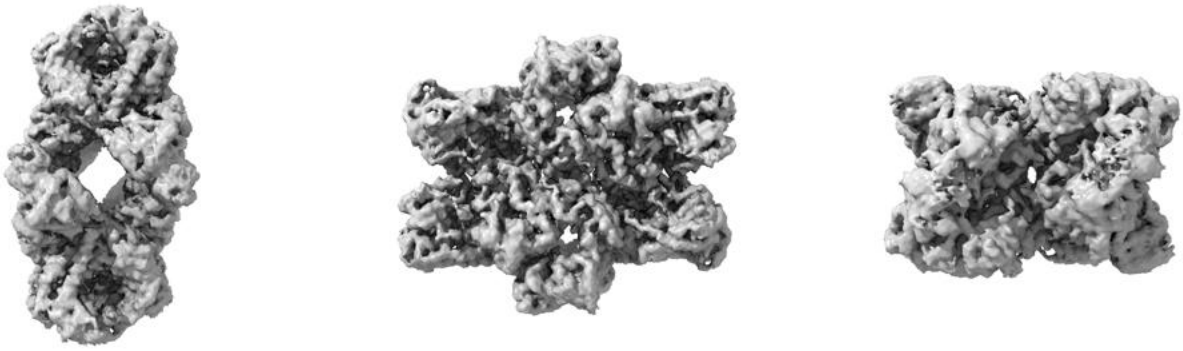
6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.03. 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



X Y Z

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.

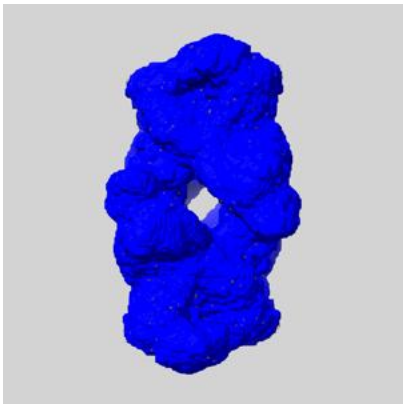
6.6 Mask visualisation (i)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

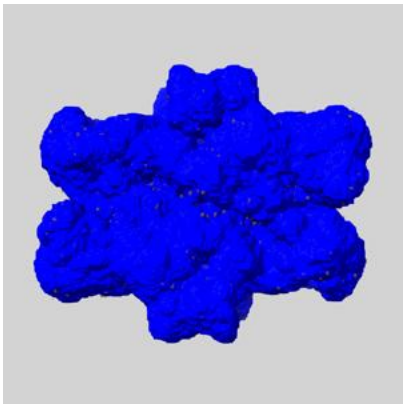
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

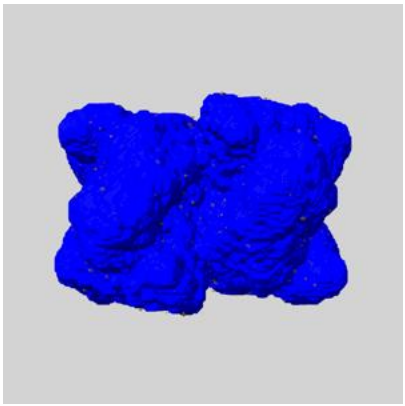
6.6.1 emd_30021_msk_1.map (i)



X



Y

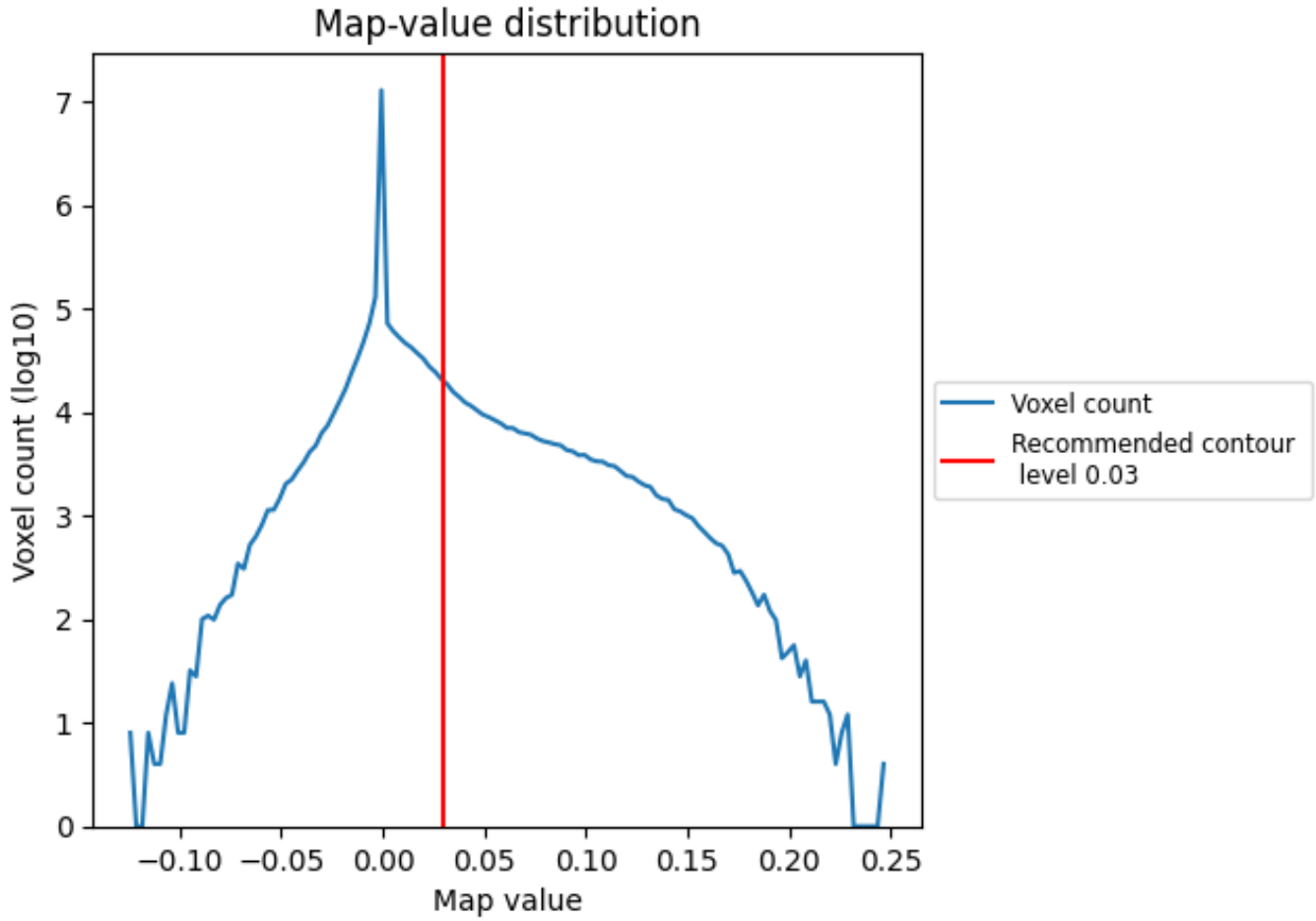


Z

7 Map analysis

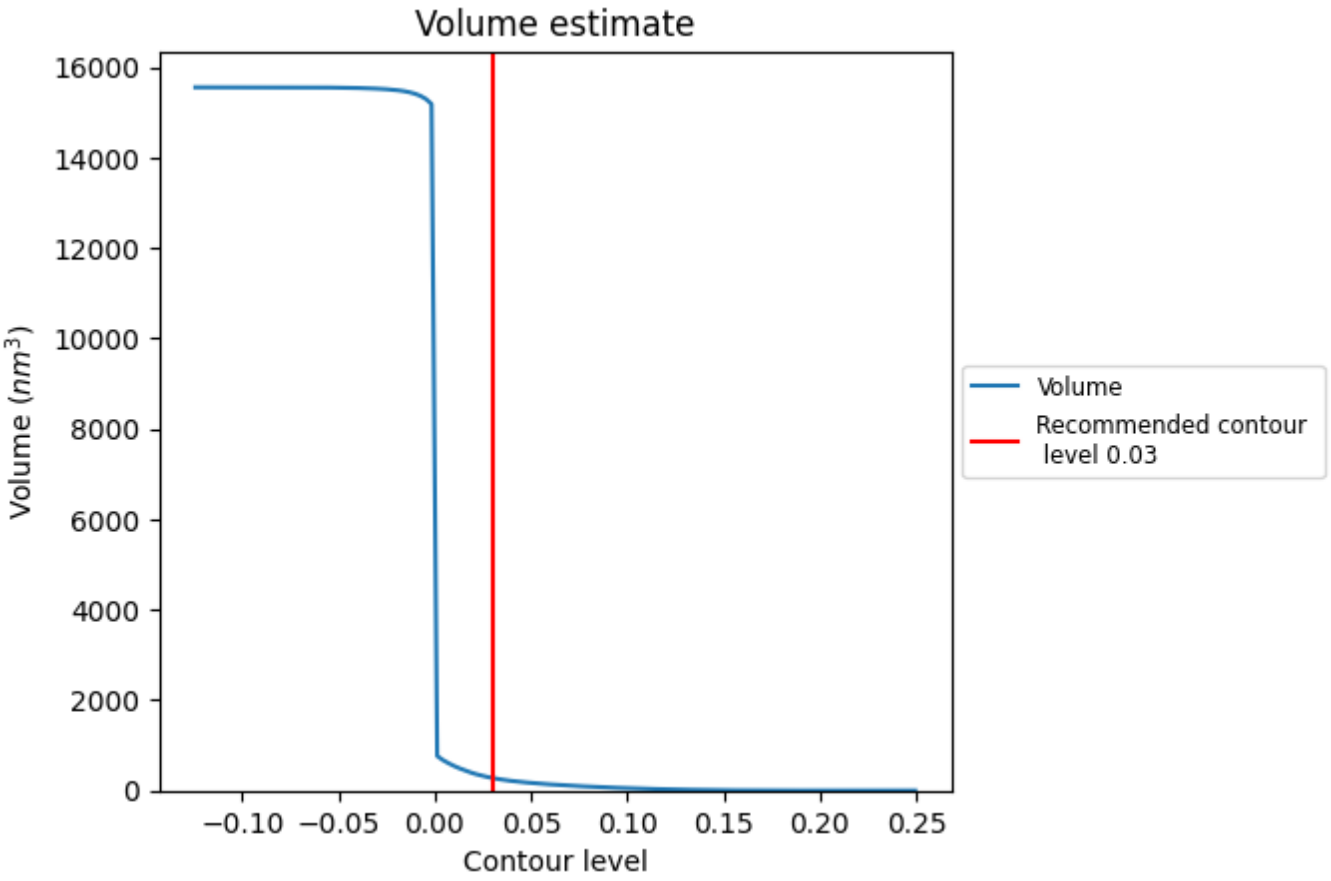
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

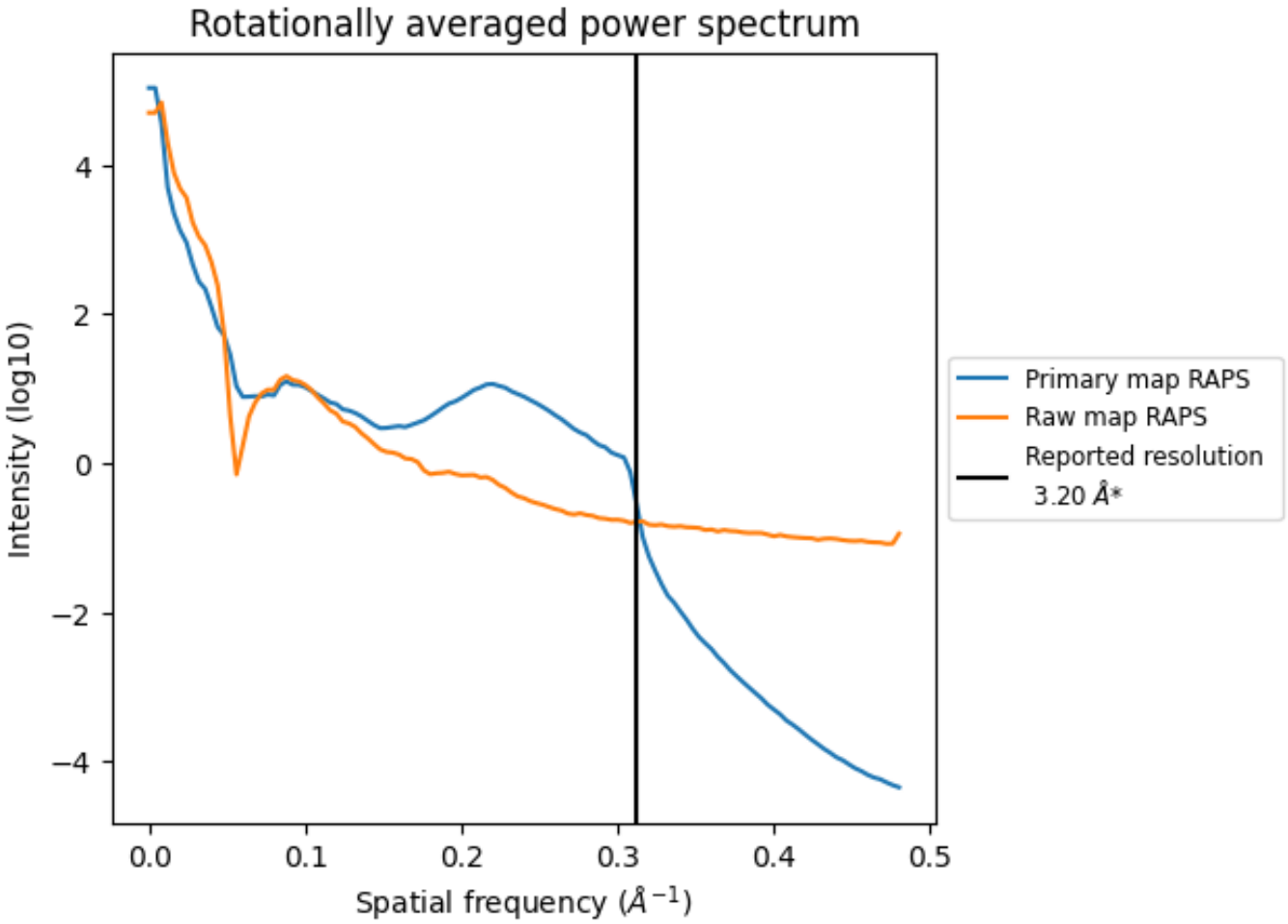
7.2 Volume estimate



The volume at the recommended contour level is 278 nm^3; this corresponds to an approximate mass of 251 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)

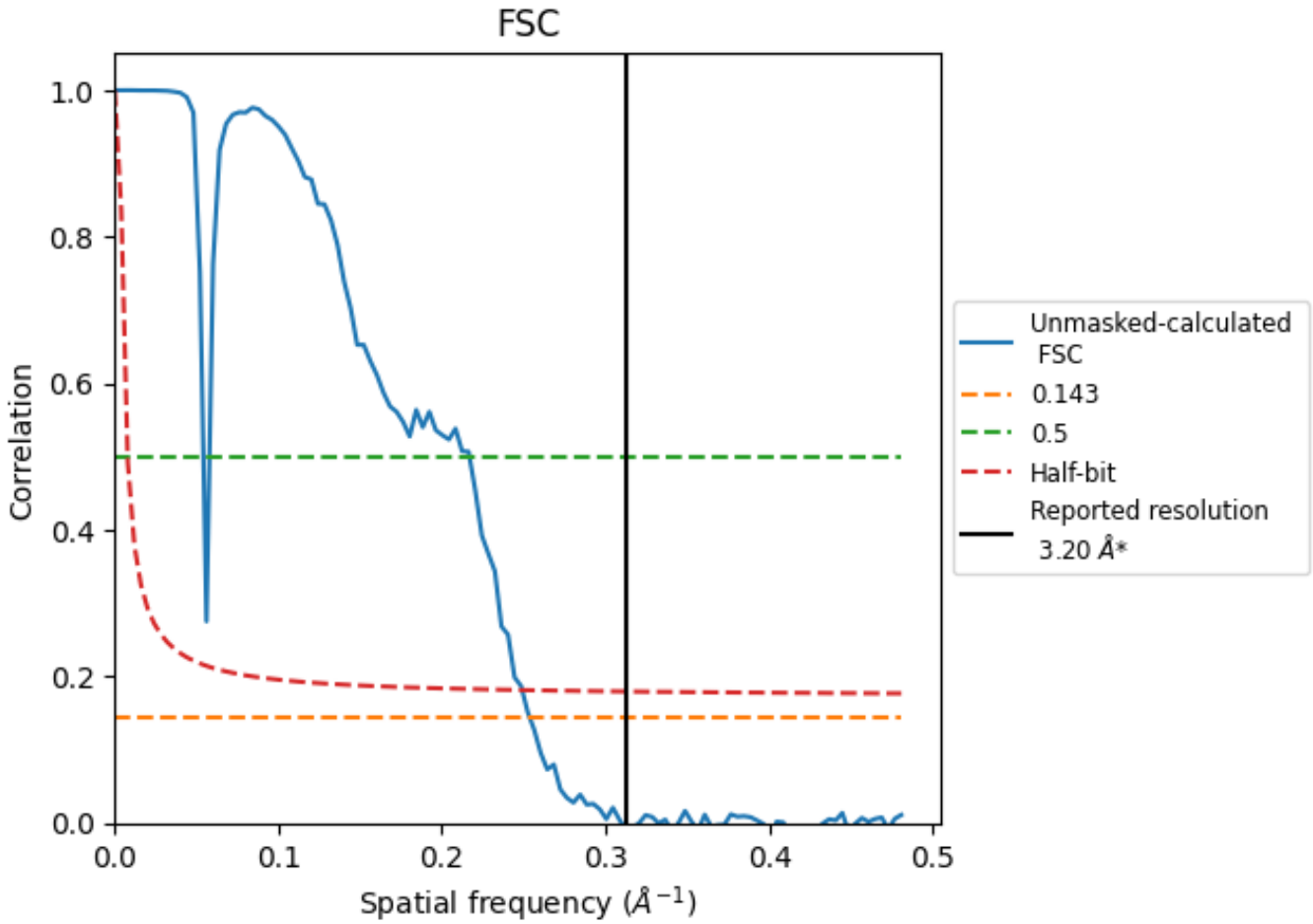


*Reported resolution corresponds to spatial frequency of 0.312 $Å^{-1}$

8 Fourier-Shell correlation

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



*Reported resolution corresponds to spatial frequency of 0.312 Å^{-1}

8.2 Resolution estimates (i)

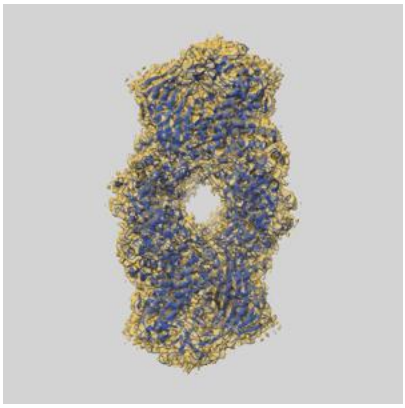
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.20	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.94	18.45	4.02

*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 3.94 differs from the reported value 3.2 by more than 10 %

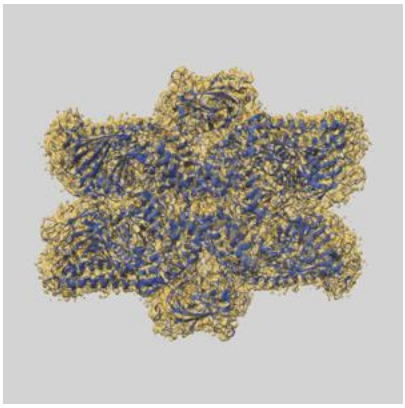
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-30021 and PDB model 6LZ1. Per-residue inclusion information can be found in section 3 on page 10.

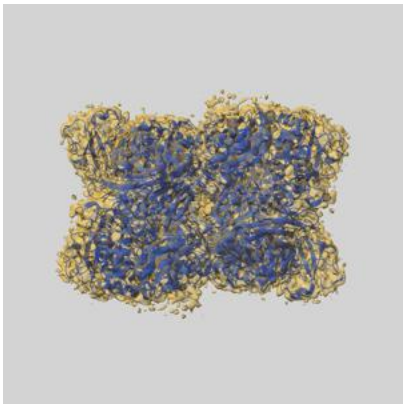
9.1 Map-model overlay



X



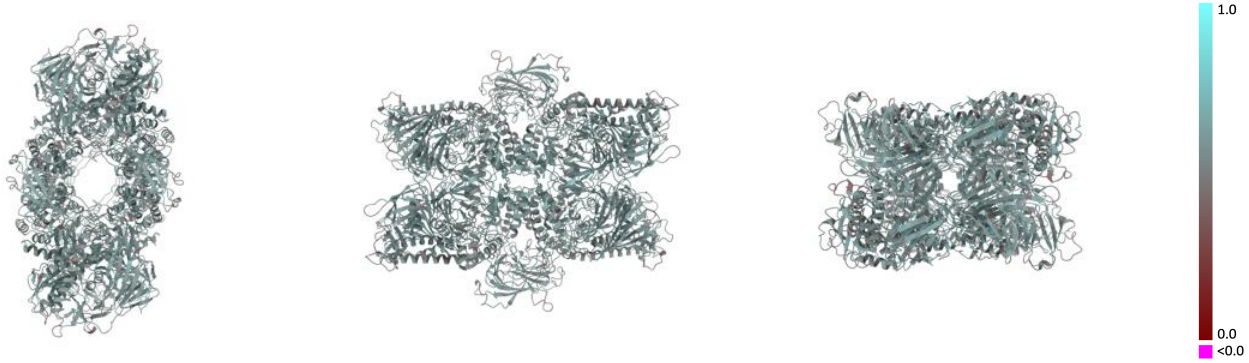
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

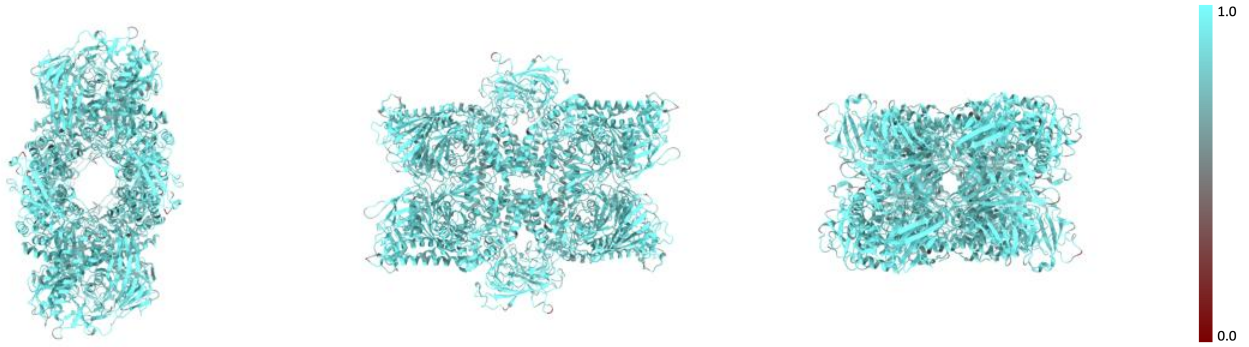
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

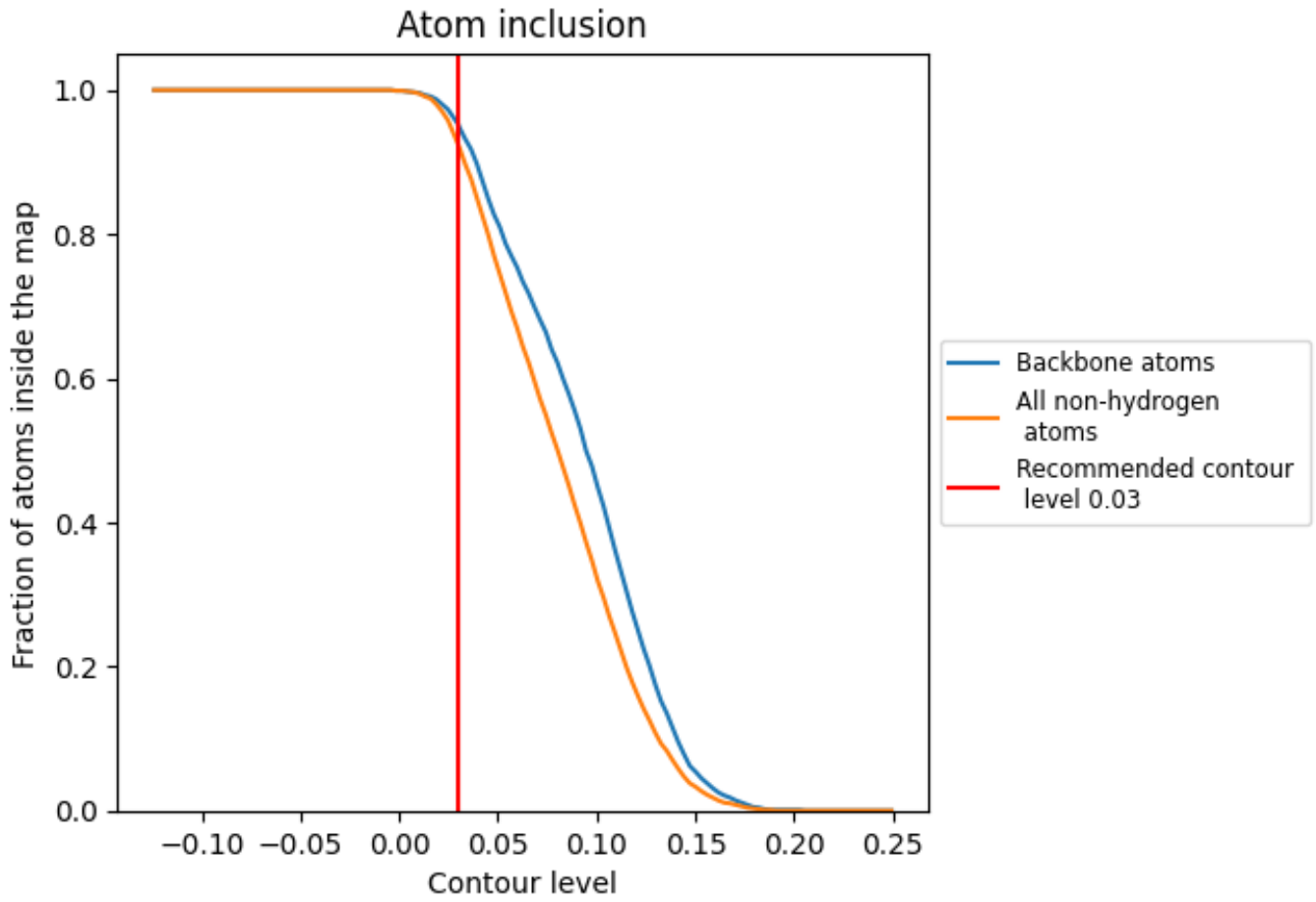
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.03).

9.4 Atom inclusion (i)



At the recommended contour level, 95% of all backbone atoms, 92% 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 (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9240	0.5560
A	0.9240	0.5560
B	0.9240	0.5560
C	0.9240	0.5560
D	0.9240	0.5560