



Full wwPDB EM Validation Report ⓘ

Jan 12, 2026 – 01:57 PM JST

PDB ID : 9UY9 / pdb_00009uy9
EMDB ID : EMD-64607
Title : Macacine gammaherpesvirus 4 glycoprotein B in complex with Fab5
Authors : Cheng, B.Z.; Liu, Z.
Deposited on : 2025-05-15
Resolution : 3.50 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.dev129
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.47

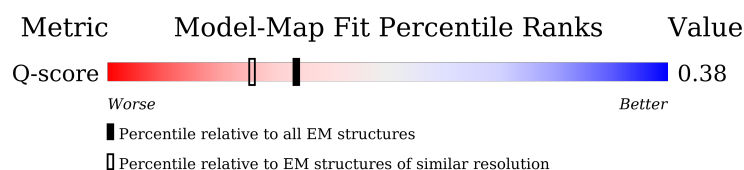
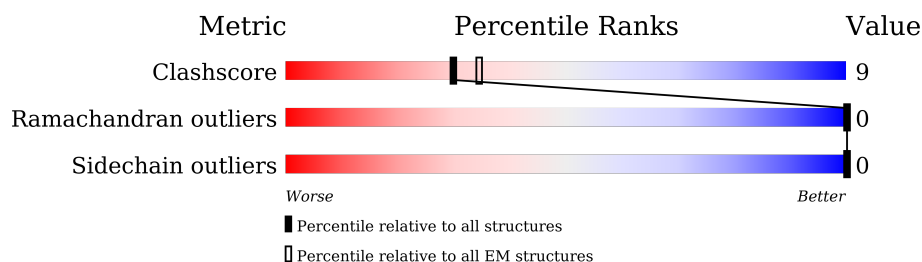
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.50 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	13950 (3.00 - 4.00)

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

Mol	Chain	Length	Quality of chain
1	A	694	
1	B	694	
1	C	694	
2	H	224	

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Mol	Chain	Length	Quality of chain
2	I	224	40% 12% 48%
2	J	224	40% 12% 48%
3	L	213	34% 14% 52%
3	M	213	38% 11% 52%
3	N	213	38% 11% 52%

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 16151 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 Macacine gammaherpesvirus 4 glycoprotein B.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	551	Total	C	N	O	S	0	0
			3819	2382	676	747	14		
1	B	551	Total	C	N	O	S	0	0
			3825	2382	678	751	14		
1	C	551	Total	C	N	O	S	0	0
			3809	2377	677	742	13		

- Molecule 2 is a protein called Fab5 H chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	H	116	Total	C	N	O	S	0	0
			859	546	140	172	1		
2	I	116	Total	C	N	O	S	0	0
			859	546	140	172	1		
2	J	116	Total	C	N	O	S	0	0
			859	546	140	172	1		

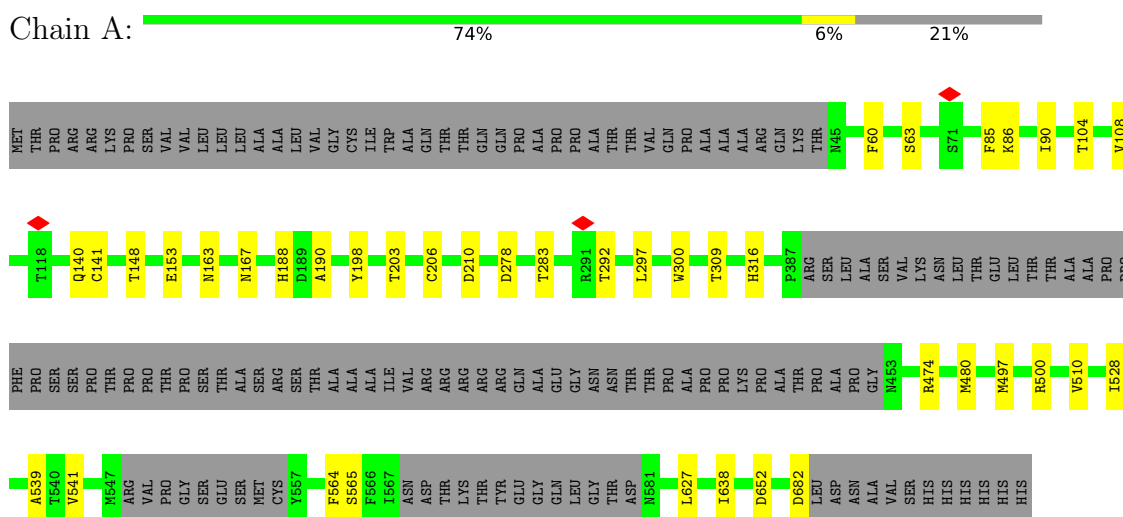
- Molecule 3 is a protein called Fab5 L chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	L	103	Total	C	N	O	S	0	0
			707	446	117	141	3		
3	M	103	Total	C	N	O	S	0	0
			707	446	117	141	3		
3	N	103	Total	C	N	O	S	0	0
			707	446	117	141	3		

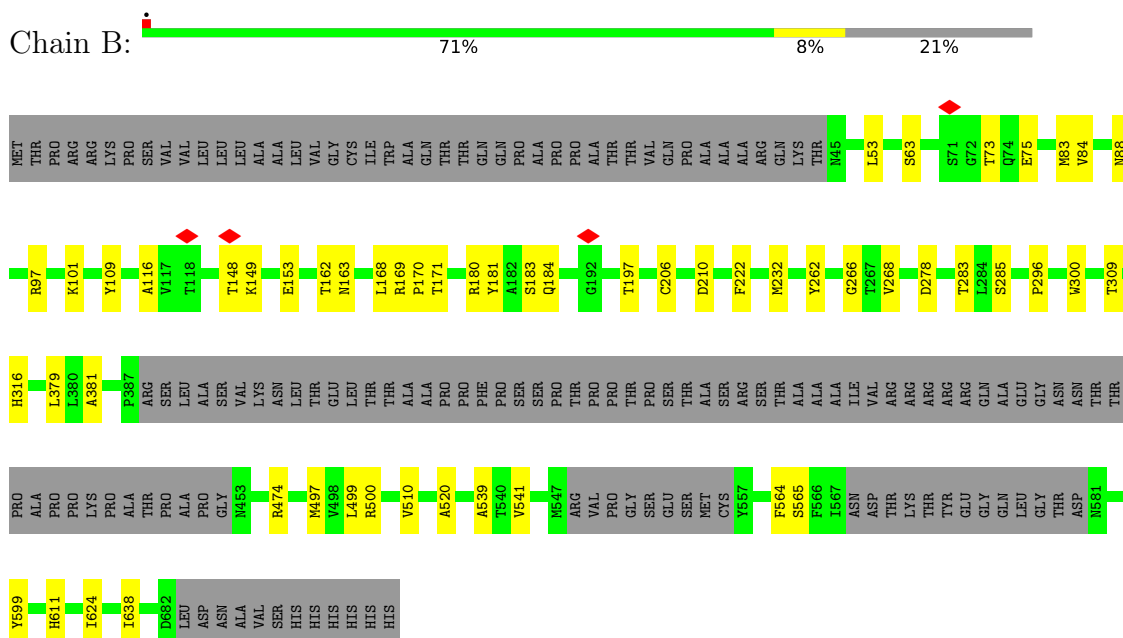
3 Residue-property plots

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: Macacine gammaherpesvirus 4 glycoprotein B



- Molecule 1: Macacine gammaherpesvirus 4 glycoprotein B



Chain C:

71% 8% 21%

Met Thr Pro Arg Arg Lys Pro Ser Val Val Leu Leu Ala Ala Val Gly Cys Ile Trp Ala Ala Glu Thr Thr Glu Pro Pro Ala Ala Pro Pro Ala Thr Val Glu Thr Ala Arg Arg Lys Thr Met

T118 I138 Y139 Q140 T148 E153 N167 L168 S183 Q184 T185 Q186 V187 H188 D189 A190 P191 G192 R193 A196 T197 T200 R201 T202 T203 D210 N216 S217 P218 Y236 R264 R285 G286 N270 D278 T283 L284 S285 L297 W300 T309

H316 K354 I369 L379 P387 R397 L404 L405 L406 L407 L408 L409 L410 L411 L412 L413 L414 L415 L416 L417 L418 L419 L420 L421 L422 L423 L424 L425 L426 L427 L428 L429 L430 L431 L432 L433 L434 L435 L436 L437 L438 L439 L440 L441 L442 L443 L444 L445 L446 L447 L448 L449 L450 L451 L452 L453 L454 L455 L456 L457 L458 L459 L460 L461 L462 L463 L464 L465 L466 L467 L468 L469 L470 L471 L472 L473 L474 L475 L476 L477 L478 L479 L480 L481 L482 L483 L484 L485 L486 L487 L488 L489 L490 L491 L492 L493 L494 L495 L496 L497 L498 L499 L500 L501 L502 L503 L504 L505 L506 L507 L508 L509 L510 L511 L512 L513 L514 L515 L516 L517 L518 L519 L520 L521 L522 L523 L524 L525 L526 L527 L528 L529 L530 L531 L532 L533 L534 L535 L536 L537 L538 L539 L540 L541 L542 L543 L544 L545 L546 L547 L548 L549 L550 L551 L552 L553 L554 L555 L556 L557 L558 L559 L560 L561 L562 L563 L564 L565 L566 L567 L568 L569 L570 L571 L572 L573 L574 L575 L576 L577 L578 L579 L580 L581 L582 L583 L584 L585 L586 L587 L588 L589 L590 L591 L592 L593 L594 L595 L596 L597 L598 L599 L600 L601 L602 L603 L604 L605 L606 L607 L608 L609 L610 L611 L612 L613 L614 L615 L616 L617 L618 L619 L620 L621 L622 L623 L624 L625 L626 L627 L628 L629 L630 L631 L632 L633 L634 L635 L636 L637 L638 L639 L640 L641 L642 L643 L644 L645 L646 L647 L648 L649 L650 L651 L652 L653 L654 L655 L656 L657 L658 L659 L660 L661 L662 L663 L664 L665 L666 L667 L668 L669 L670 L671 L672 L673 L674 L675 L676 L677 L678 L679 L680 L681 L682 L683 L684 L685 L686 L687 L688 L689 L690 L691 L692 L693 L694 L695 L696 L697 L698 L699 L700 L701 L702 L703 L704 L705 L706 L707 L708 L709 L710 L711 L712 L713 L714 L715 L716 L717 L718 L719 L720 L721 L722 L723 L724 L725 L726 L727 L728 L729 L730 L731 L732 L733 L734 L735 L736 L737 L738 L739 L740 L741 L742 L743 L744 L745 L746 L747 L748 L749 L750 L751 L752 L753 L754 L755 L756 L757 L758 L759 L760 L761 L762 L763 L764 L765 L766 L767 L768 L769 L770 L771 L772 L773 L774 L775 L776 L777 L778 L779 L780 L781 L782 L783 L784 L785 L786 L787 L788 L789 L790 L791 L792 L793 L794 L795 L796 L797 L798 L799 L800 L801 L802 L803 L804 L805 L806 L807 L808 L809 L810 L811 L812 L813 L814 L815 L816 L817 L818 L819 L820 L821 L822 L823 L824 L825 L826 L827 L828 L829 L830 L831 L832 L833 L834 L835 L836 L837 L838 L839 L840 L841 L842 L843 L844 L845 L846 L847 L848 L849 L850 L851 L852 L853 L854 L855 L856 L857 L858 L859 L860 L861 L862 L863 L864 L865 L866 L867 L868 L869 L870 L871 L872 L873 L874 L875 L876 L877 L878 L879 L880 L881 L882 L883 L884 L885 L886 L887 L888 L889 L890 L891 L892 L893 L894 L895 L896 L897 L898 L899 L900 L901 L902 L903 L904 L905 L906 L907 L908 L909 L910 L911 L912 L913 L914 L915 L916 L917 L918 L919 L920 L921 L922 L923 L924 L925 L926 L927 L928 L929 L930 L931 L932 L933 L934 L935 L936 L937 L938 L939 L940 L941 L942 L943 L944 L945 L946 L947 L948 L949 L950 L951 L952 L953 L954 L955 L956 L957 L958 L959 L960 L961 L962 L963 L964 L965 L966 L967 L968 L969 L970 L971 L972 L973 L974 L975 L976 L977 L978 L979 L980 L981 L982 L983 L984 L985 L986 L987 L988 L989 L990 L991 L992 L993 L994 L995 L996 L997 L998 L999 L1000 L1001 L1002 L1003 L1004 L1005 L1006 L1007 L1008 L1009 L1010 L1011 L1012 L1013 L1014 L1015 L1016 L1017 L1018 L1019 L1020 L1021 L1022 L1023 L1024 L1025 L1026 L1027 L1028 L1029 L1030 L1031 L1032 L1033 L1034 L1035 L1036 L1037 L1038 L1039 L1040 L1041 L1042 L1043 L1044 L1045 L1046 L1047 L1048 L1049 L1050 L1051 L1052 L1053 L1054 L1055 L1056 L1057 L1058 L1059 L1060 L1061 L1062 L1063 L1064 L1065 L1066 L1067 L1068 L1069 L1070 L1071 L1072 L1073 L1074 L1075 L1076 L1077 L1078 L1079 L1080 L1081 L1082 L1083 L1084 L1085 L1086 L1087 L1088 L1089 L1090 L1091 L1092 L1093 L1094 L1095 L1096 L1097 L1098 L1099 L1100 L1101 L1102 L1103 L1104 L1105 L1106 L1107 L1108 L1109 L1110 L1111 L1112 L1113 L1114 L1115 L1116 L1117 L1118 L1119 L1120 L1121 L1122 L1123 L1124 L1125 L1126 L1127 L1128 L1129 L1130 L1131 L1132 L1133 L1134 L1135 L1136 L1137 L1138 L1139 L1140 L1141 L1142 L1143 L1144 L1145 L1146 L1147 L1148 L1149 L1150 L1151 L1152 L1153 L1154 L1155 L1156 L1157 L1158 L1159 L1160 L1161 L1162 L1163 L1164 L1165 L1166 L1167 L1168 L1169 L1170 L1171 L1172 L1173 L1174 L1175 L1176 L1177 L1178 L1179 L1180 L1181 L1182 L1183 L1184 L1185 L1186 L1187 L1188 L1189 L1190 L1191 L1192 L1193 L1194 L1195 L1196 L1197 L1198 L1199 L1200 L1201 L1202 L1203 L1204 L1205 L1206 L1207 L1208 L1209 L1210 L1211 L1212 L1213 L1214 L1215 L1216 L1217 L1218 L1219 L1220 L1221 L1222 L1223 L1224 L1225 L1226 L1227 L1228 L1229 L1230 L1231 L1232 L1233 L1234 L1235 L1236 L1237 L1238 L1239 L1240 L1241 L1242 L1243 L1244 L1245 L1246 L1247 L1248 L1249 L1250 L1251 L1252 L1253 L1254 L1255 L1256 L1257 L1258 L1259 L1260 L1261 L1262

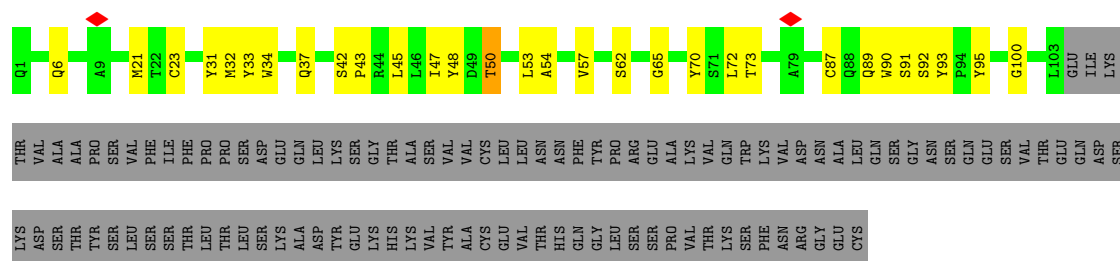
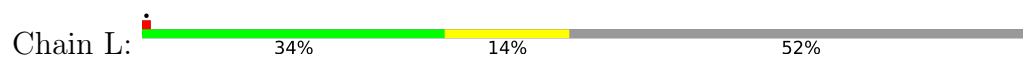
Chain H:

Chain I:
 40% 12% 48%

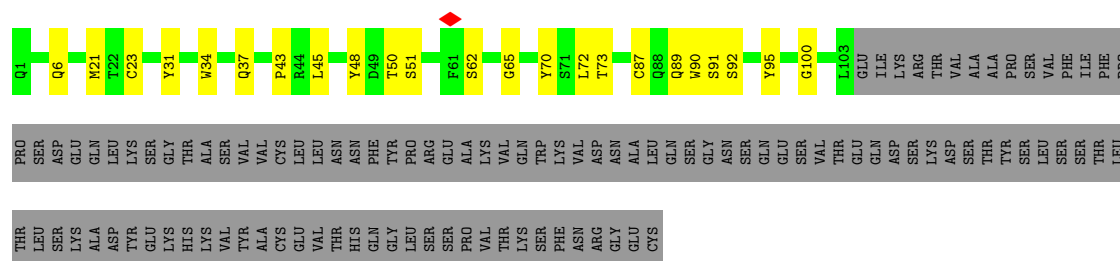
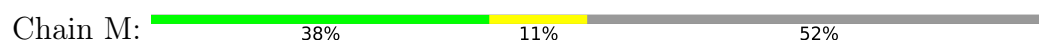
Position	Top Row (Grey)	Bottom Row (Grey)
1	GLN	ALA
2	V2	PRO
3	Q3	SER
4	L4	SER
5	Q5	SER
6	K23	GLY
7	K23	THR
8	W33	THR
9	W33	GLN
10	W33	GLY
11	K36	THR
12	K37	ILE
13	K38	CYS
14	K38	ASN
15	T58	VAL
16	T58	VAL
17	N59	LYS
18	Y60	HIS
19	Y60	LYS
20	A68	PRO
21	T69	SER
22	L70	ASN
23	L70	ASP
24	L70	THR
25	L81	THR
26	L82	LYS
27	P86	VAL
28	T87	THR
29	T87	VAL
30	D90	GLY
31	D90	SER
32	D90	TRP
33	Y93	ASN
34	Y94	ASN
35	Y95	SER
36	C96	GLY
37	C96	ALA
38	C96	ALA
39	R102	LEU
40	Y103	THR
41	D104	SER
42	S105	GLY
43	D106	VAL
44	Y107	VAL
45	W108	HIS
46	W108	THR
47	W108	PHE
48	G111	PRO
49	T112	ALA
50	T113	VAL
51	T113	LEU
52	S117	GLN
53	S117	SER
54	S117	SER
55	ALA	GLY
56	ALA	LEU
57	SER	TYR
58	ALA	THR
59	SER	SER
60	SER	SER
61	LYS	LEU
62	LYS	SER
63	PRO	SER
64	PRO	VAL
65	GLY	VAL
66	PRO	THR
67	PRO	VAL

Chain J: 40% 12% 48%

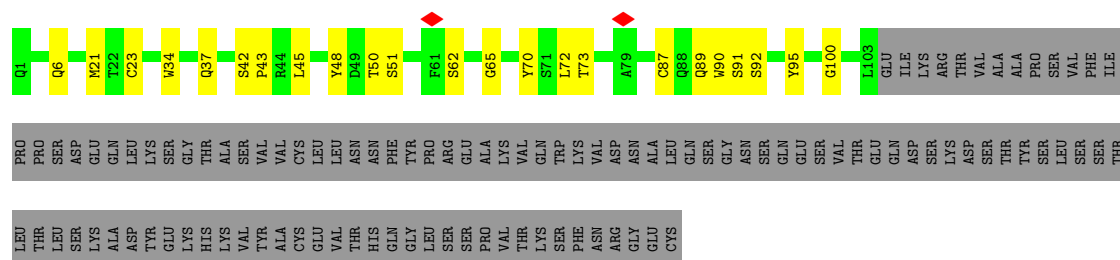
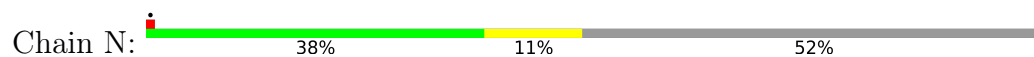
- Molecule 3: Fab5 L chain



- Molecule 3: Fab5 L chain



- Molecule 3: Fab5 L chain



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	91810	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	130000	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.156	Depositor
Minimum map value	-0.064	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.0232	Depositor
Map size (Å)	424.96, 424.96, 424.96	wwPDB
Map dimensions	640, 640, 640	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.664, 0.664, 0.664	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.08	0/3890	0.24	0/5322
1	B	0.10	0/3895	0.26	0/5326
1	C	0.10	0/3880	0.27	0/5307
2	H	0.14	0/884	0.39	0/1211
2	I	0.14	0/884	0.39	0/1211
2	J	0.14	0/884	0.39	0/1211
3	L	0.22	0/726	0.53	1/996 (0.1%)
3	M	0.14	0/726	0.41	0/996
3	N	0.14	0/726	0.41	0/996
All	All	0.12	0/16495	0.31	1/22576 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed($^{\circ}$)	Ideal($^{\circ}$)
3	L	50	THR	N-CA-C	-7.67	102.90	112.72

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	3819	0	3158	29	0
1	B	3825	0	3160	50	0
1	C	3809	0	3125	50	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	H	859	0	743	27	0
2	I	859	0	743	29	0
2	J	859	0	743	27	0
3	L	707	0	609	46	0
3	M	707	0	609	26	0
3	N	707	0	609	24	0
All	All	16151	0	13499	260	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 9.

All (260) 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:171:THR:HG22	1:B:180:ARG:O	1.12	1.25
2:I:103:TYR:CE1	3:M:48:TYR:CE2	2.27	1.22
2:J:103:TYR:CE1	3:N:48:TYR:CE2	2.27	1.22
1:B:171:THR:CG2	1:B:180:ARG:O	1.87	1.20
1:C:167:ASN:OD1	2:H:55:ASP:OD1	1.66	1.12
1:B:168:LEU:HD23	1:B:183:SER:CB	1.81	1.11
2:J:106:ASP:OD2	3:N:45:LEU:HD12	1.52	1.09
2:I:106:ASP:OD2	3:M:45:LEU:HD12	1.52	1.06
2:H:106:ASP:OD2	3:L:45:LEU:HD12	1.52	1.06
2:J:103:TYR:CE1	3:N:48:TYR:HE2	1.71	1.03
1:B:168:LEU:HD23	1:B:183:SER:HB2	1.42	1.01
2:I:103:TYR:CE1	3:M:48:TYR:HE2	1.71	0.99
1:C:167:ASN:CG	2:H:54:SER:OG	2.11	0.93
1:A:141:CYS:CB	1:A:206:CYS:SG	2.57	0.92
3:L:34:TRP:CD1	3:L:47:ILE:HD13	2.10	0.85
1:B:168:LEU:HA	1:B:183:SER:HA	1.58	0.83
2:I:103:TYR:CD1	3:M:48:TYR:CE2	2.66	0.83
2:J:103:TYR:CD1	3:N:48:TYR:CE2	2.66	0.83
1:B:168:LEU:CD2	1:B:183:SER:CB	2.58	0.82
2:J:103:TYR:HE1	3:N:48:TYR:CE2	1.99	0.78
1:A:141:CYS:HB2	1:A:206:CYS:SG	2.25	0.73
1:C:167:ASN:CB	2:H:54:SER:OG	2.37	0.73
1:B:624:ILE:HA	1:C:61:ARG:HD3	1.71	0.72
1:C:167:ASN:OD1	2:H:54:SER:OG	2.06	0.71
2:I:103:TYR:HE1	3:M:48:TYR:CE2	1.99	0.71
1:C:138:ILE:HG22	1:C:140:GLN:HG3	1.73	0.71
1:C:85:PHE:HB3	1:C:297:LEU:HD12	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:103:TYR:HE1	3:N:48:TYR:CD2	2.11	0.69
1:B:168:LEU:CD2	1:B:183:SER:HB3	2.22	0.68
2:I:103:TYR:HE1	3:M:48:TYR:CD2	2.11	0.68
1:B:268:VAL:HG21	3:M:31:TYR:HD2	1.59	0.67
1:A:85:PHE:HB3	1:A:297:LEU:HD12	1.76	0.67
2:J:103:TYR:CE1	3:N:48:TYR:CD2	2.83	0.67
2:H:103:TYR:HA	3:L:48:TYR:CZ	2.30	0.65
1:C:167:ASN:HB2	2:H:54:SER:OG	1.97	0.64
2:I:103:TYR:CE1	3:M:48:TYR:CD2	2.83	0.64
3:M:50:THR:OG1	3:M:51:SER:N	2.30	0.64
2:H:103:TYR:HA	3:L:48:TYR:OH	1.98	0.63
2:I:93:VAL:HG22	2:I:113:THR:HA	1.80	0.63
2:J:93:VAL:HG22	2:J:113:THR:HA	1.80	0.63
3:N:6:GLN:OE1	3:N:100:GLY:N	2.32	0.63
1:C:188:HIS:NE2	1:C:201:ARG:HA	2.14	0.63
3:L:6:GLN:OE1	3:L:100:GLY:N	2.32	0.62
3:M:89:GLN:HE22	3:M:92:SER:HB2	1.65	0.62
2:H:93:VAL:HG22	2:H:113:THR:HA	1.80	0.62
3:L:89:GLN:HE22	3:L:92:SER:HB2	1.65	0.62
3:N:89:GLN:HE22	3:N:92:SER:HB2	1.65	0.62
1:B:268:VAL:HG21	3:M:31:TYR:CD2	2.34	0.62
1:B:168:LEU:HD23	1:B:183:SER:CA	2.30	0.61
3:N:50:THR:OG1	3:N:51:SER:N	2.30	0.61
3:L:31:TYR:CD1	3:L:50:THR:OG1	2.53	0.60
2:H:36:TRP:HD1	2:H:96:CYS:HA	1.67	0.60
1:C:110:ASN:HA	1:C:196:ALA:CA	2.32	0.59
3:L:33:TYR:CA	3:L:47:ILE:HD11	2.33	0.59
3:L:33:TYR:C	3:L:47:ILE:HD11	2.28	0.59
3:L:34:TRP:H	3:L:47:ILE:HG12	1.68	0.59
3:M:6:GLN:OE1	3:M:100:GLY:N	2.32	0.58
2:I:36:TRP:HD1	2:I:96:CYS:HA	1.67	0.58
3:L:34:TRP:HD1	3:L:47:ILE:HG21	1.66	0.58
2:J:36:TRP:HD1	2:J:96:CYS:HA	1.67	0.58
3:L:31:TYR:HD1	3:L:50:THR:OG1	1.87	0.57
3:L:53:LEU:HD23	3:L:54:ALA:O	2.04	0.57
3:L:34:TRP:HD1	3:L:47:ILE:CG2	2.18	0.57
2:I:104:ASP:N	3:M:48:TYR:OH	2.38	0.56
1:C:148:THR:HA	1:C:153:GLU:HG3	1.88	0.56
1:C:264:ASN:CB	3:L:93:TYR:OH	2.53	0.56
1:B:170:PRO:HD3	1:B:262:TYR:CE2	2.41	0.56
1:B:109:TYR:OH	1:B:116:ALA:O	2.23	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:104:ASP:N	3:N:48:TYR:OH	2.38	0.55
1:B:278:ASP:HA	1:B:283:THR:HG22	1.88	0.55
3:M:23:CYS:SG	3:M:87:CYS:HB3	2.47	0.55
3:L:54:ALA:O	3:L:57:VAL:HG12	2.07	0.55
1:C:266:GLY:HA3	3:L:93:TYR:HE2	1.71	0.55
1:B:162:THR:HG22	1:B:163:ASN:H	1.72	0.54
3:N:23:CYS:SG	3:N:87:CYS:CB	2.96	0.54
3:L:34:TRP:N	3:L:47:ILE:HG12	2.23	0.54
3:L:47:ILE:O	3:L:47:ILE:HG13	2.07	0.54
1:C:266:GLY:HA3	3:L:93:TYR:CE2	2.42	0.54
3:M:23:CYS:SG	3:M:87:CYS:CB	2.96	0.54
3:N:23:CYS:SG	3:N:87:CYS:HB3	2.47	0.54
3:N:65:GLY:HA3	3:N:70:TYR:HA	1.90	0.54
3:L:23:CYS:SG	3:L:87:CYS:CB	2.96	0.54
3:L:23:CYS:SG	3:L:87:CYS:HB3	2.47	0.54
3:L:65:GLY:HA3	3:L:70:TYR:HA	1.90	0.54
1:B:268:VAL:CG2	3:M:31:TYR:CD2	2.91	0.53
3:L:32:MET:H	3:L:50:THR:HA	1.72	0.53
1:A:108:VAL:HG12	1:A:198:TYR:H	1.73	0.53
1:A:148:THR:HA	1:A:153:GLU:HG3	1.91	0.53
2:H:81:MET:HE3	2:H:82:LEU:N	2.24	0.53
2:J:4:LEU:HD23	2:J:107:TYR:HD2	1.74	0.52
3:M:65:GLY:HA3	3:M:70:TYR:HA	1.90	0.52
1:C:210:ASP:OD1	1:C:210:ASP:N	2.41	0.52
2:I:4:LEU:HD23	2:I:107:TYR:HD2	1.74	0.52
2:I:81:MET:HE3	2:I:82:LEU:N	2.24	0.52
2:J:81:MET:HE3	2:J:82:LEU:N	2.24	0.52
2:H:4:LEU:HD23	2:H:107:TYR:HD2	1.74	0.52
2:J:87:THR:OG1	2:J:90:ASP:OD1	2.28	0.52
2:I:95:TYR:HD1	2:I:111:GLY:HA3	1.75	0.52
1:A:309:THR:HB	1:A:316:HIS:HB2	1.91	0.51
2:I:60:TYR:OH	2:I:68:ALA:O	2.21	0.51
1:C:186:GLN:O	1:C:187:VAL:C	2.53	0.51
2:H:87:THR:OG1	2:H:90:ASP:OD1	2.28	0.51
1:A:627:LEU:HD22	1:B:500:ARG:HH22	1.75	0.51
1:B:210:ASP:OD1	1:B:210:ASP:N	2.43	0.51
1:B:541:VAL:HG22	1:B:564:PHE:H	1.76	0.51
1:B:624:ILE:HA	1:C:61:ARG:HH11	1.76	0.51
1:A:474:ARG:HA	1:C:638:ILE:HD11	1.92	0.50
1:B:109:TYR:HA	1:B:197:THR:HG22	1.93	0.50
2:I:87:THR:OG1	2:I:90:ASP:OD1	2.28	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:95:TYR:HD1	2:J:111:GLY:HA3	1.75	0.50
1:C:309:THR:HB	1:C:316:HIS:HB2	1.93	0.50
1:C:168:LEU:HD13	1:C:183:SER:HA	1.94	0.50
1:A:210:ASP:OD1	1:A:210:ASP:N	2.44	0.50
2:H:5:GLN:OE1	2:H:5:GLN:N	2.45	0.50
2:H:95:TYR:HD1	2:H:111:GLY:HA3	1.75	0.50
1:A:140:GLN:HG2	1:A:167:ASN:HA	1.94	0.49
2:J:60:TYR:OH	2:J:68:ALA:O	2.21	0.49
2:I:5:GLN:N	2:I:5:GLN:OE1	2.45	0.49
2:J:5:GLN:N	2:J:5:GLN:OE1	2.45	0.49
3:N:62:SER:OG	3:N:73:THR:OG1	2.31	0.49
3:N:91:SER:OG	3:N:92:SER:N	2.46	0.49
1:C:168:LEU:HA	1:C:183:SER:HA	1.94	0.49
3:L:91:SER:OG	3:L:92:SER:N	2.46	0.49
1:A:541:VAL:HG22	1:A:564:PHE:H	1.78	0.49
1:A:63:SER:H	1:A:500:ARG:HH21	1.61	0.48
3:L:62:SER:OG	3:L:73:THR:OG1	2.31	0.48
1:A:638:ILE:HD11	1:B:474:ARG:HA	1.96	0.48
3:M:91:SER:OG	3:M:92:SER:N	2.46	0.48
3:M:92:SER:O	3:M:95:TYR:N	2.42	0.48
1:C:110:ASN:HA	1:C:196:ALA:HA	1.94	0.48
3:M:62:SER:OG	3:M:73:THR:OG1	2.31	0.48
1:B:309:THR:HB	1:B:316:HIS:HB2	1.95	0.48
3:L:31:TYR:HD1	3:L:50:THR:HG1	1.56	0.48
1:B:148:THR:HA	1:B:153:GLU:HG3	1.96	0.48
3:M:34:TRP:CZ3	3:M:87:CYS:HB3	2.49	0.48
1:A:682:ASP:HB2	1:B:149:LYS:HD2	1.95	0.48
3:L:53:LEU:HD23	3:L:54:ALA:N	2.29	0.48
2:H:60:TYR:OH	2:H:68:ALA:O	2.21	0.47
1:B:168:LEU:HA	1:B:183:SER:CA	2.37	0.47
1:C:541:VAL:HG22	1:C:564:PHE:H	1.79	0.47
1:B:539:ALA:HB3	1:B:565:SER:HA	1.96	0.47
3:L:34:TRP:CZ3	3:L:87:CYS:HB3	2.49	0.47
3:L:33:TYR:HA	3:L:47:ILE:HD11	1.95	0.47
1:B:148:THR:HG22	1:B:148:THR:O	2.14	0.47
2:I:4:LEU:HD13	2:I:23:LYS:O	2.15	0.47
2:J:4:LEU:HD13	2:J:23:LYS:O	2.15	0.47
3:L:33:TYR:HA	3:L:47:ILE:CD1	2.45	0.47
3:L:34:TRP:H	3:L:47:ILE:CG1	2.27	0.47
3:L:33:TYR:HA	3:L:47:ILE:HG13	1.97	0.47
2:H:4:LEU:HD13	2:H:23:LYS:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:69:THR:OG1	2:J:82:LEU:O	2.31	0.46
3:N:34:TRP:CZ3	3:N:87:CYS:HB3	2.49	0.46
1:A:497:MET:HE1	1:C:510:VAL:HG12	1.97	0.46
2:I:58:THR:O	2:I:58:THR:OG1	2.33	0.46
3:M:21:MET:O	3:M:72:LEU:N	2.47	0.46
1:B:84:VAL:HG23	1:B:300:TRP:HB3	1.98	0.46
1:A:141:CYS:SG	1:A:206:CYS:CB	3.04	0.46
1:A:480:MET:HE3	1:A:480:MET:HB2	1.84	0.46
1:B:168:LEU:HD23	1:B:183:SER:HA	1.97	0.46
2:I:69:THR:OG1	2:I:82:LEU:O	2.31	0.46
1:A:292:THR:O	1:A:292:THR:OG1	2.34	0.45
1:B:638:ILE:HD11	1:C:474:ARG:HA	1.97	0.45
2:I:81:MET:HE3	2:I:82:LEU:H	1.81	0.45
2:H:102:ARG:HD3	2:H:103:TYR:H	1.82	0.45
3:L:33:TYR:HE2	3:L:48:TYR:O	1.99	0.45
1:B:379:LEU:HD23	1:B:379:LEU:HA	1.87	0.45
2:I:70:LEU:H	2:I:70:LEU:HD23	1.82	0.45
2:H:70:LEU:HD23	2:H:70:LEU:H	1.82	0.45
1:C:86:LYS:HD3	1:C:300:TRP:HD1	1.82	0.45
2:H:69:THR:OG1	2:H:82:LEU:O	2.31	0.45
3:N:23:CYS:CB	3:N:87:CYS:SG	3.06	0.44
2:H:81:MET:HE3	2:H:82:LEU:H	1.81	0.44
1:B:168:LEU:C	1:B:169:ARG:HG3	2.43	0.44
2:J:81:MET:HE3	2:J:82:LEU:H	1.81	0.44
3:L:21:MET:O	3:L:72:LEU:N	2.47	0.44
1:A:539:ALA:HB3	1:A:565:SER:HA	1.99	0.44
1:B:170:PRO:HA	1:B:181:TYR:CD2	2.53	0.44
2:J:102:ARG:HD3	2:J:103:TYR:H	1.82	0.44
3:L:48:TYR:O	3:L:48:TYR:CG	2.70	0.44
1:B:599:TYR:H	1:B:611:HIS:HA	1.82	0.44
2:J:70:LEU:HD23	2:J:70:LEU:H	1.82	0.44
1:C:108:VAL:HG11	1:C:193:ARG:HA	2.00	0.44
2:I:102:ARG:HD3	2:I:103:TYR:H	1.82	0.44
3:L:23:CYS:CB	3:L:87:CYS:SG	3.05	0.44
3:N:21:MET:O	3:N:72:LEU:N	2.47	0.44
1:A:510:VAL:HG12	1:B:497:MET:HE1	1.99	0.44
1:B:73:THR:HG22	1:B:75:GLU:H	1.82	0.44
1:A:278:ASP:HA	1:A:283:THR:HG22	2.00	0.44
1:B:266:GLY:HA2	2:I:33:TRP:HH2	1.84	0.43
2:I:38:LYS:HA	2:I:94:TYR:HD1	1.83	0.43
1:C:110:ASN:CB	1:C:196:ALA:HA	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:38:LYS:HA	2:H:94:TYR:HD1	1.83	0.43
3:M:23:CYS:CB	3:M:87:CYS:SG	3.06	0.43
1:B:266:GLY:HA2	2:I:33:TRP:CH2	2.54	0.43
1:A:90:ILE:HD13	1:A:90:ILE:HA	1.89	0.43
1:B:170:PRO:HA	1:B:181:TYR:HD2	1.84	0.43
2:H:102:ARG:HD3	2:H:103:TYR:N	2.34	0.43
2:J:38:LYS:HA	2:J:94:TYR:HD1	1.83	0.43
2:I:82:LEU:HD12	2:I:82:LEU:HA	1.85	0.43
3:M:37:GLN:HA	3:M:43:PRO:HA	2.01	0.43
2:I:90:ASP:OD1	2:I:90:ASP:N	2.46	0.43
3:N:90:TRP:HA	3:N:95:TYR:HE1	1.84	0.43
1:C:110:ASN:HA	1:C:196:ALA:N	2.33	0.43
3:L:34:TRP:N	3:L:47:ILE:CG1	2.81	0.43
1:A:163:ASN:OD1	1:A:163:ASN:N	2.49	0.42
1:A:60:PHE:N	1:A:528:ILE:O	2.51	0.42
1:B:88:ASN:N	1:B:296:PRO:O	2.47	0.42
1:B:499:LEU:HD12	1:B:499:LEU:HA	1.85	0.42
2:I:102:ARG:HD3	2:I:103:TYR:N	2.34	0.42
1:B:510:VAL:HG12	1:C:497:MET:HE1	2.01	0.42
3:L:90:TRP:HA	3:L:95:TYR:HE1	1.84	0.42
3:N:37:GLN:HA	3:N:43:PRO:HA	2.01	0.42
1:C:270:ASN:OD1	1:C:270:ASN:N	2.51	0.42
3:L:37:GLN:HA	3:L:43:PRO:HA	2.01	0.42
3:M:90:TRP:HA	3:M:95:TYR:HE1	1.84	0.42
1:A:86:LYS:HD3	1:A:300:TRP:CD1	2.55	0.42
1:A:188:HIS:NE2	1:A:190:ALA:HB3	2.34	0.42
1:B:53:LEU:HA	1:B:520:ALA:HB1	2.01	0.42
1:B:83:MET:HB2	1:B:381:ALA:HB3	2.01	0.42
1:C:97:ARG:O	1:C:285:SER:OG	2.31	0.42
1:C:104:THR:O	1:C:203:THR:N	2.52	0.42
3:L:34:TRP:CD1	3:L:47:ILE:HG21	2.51	0.42
3:L:45:LEU:HD21	3:L:48:TYR:HA	2.02	0.42
1:C:183:SER:OG	1:C:184:GLN:N	2.52	0.42
1:C:379:LEU:HD23	1:C:379:LEU:HA	1.88	0.42
2:I:108:TRP:CD1	3:M:43:PRO:O	2.73	0.42
3:L:34:TRP:CD1	3:L:47:ILE:CD1	2.93	0.42
2:J:102:ARG:HD3	2:J:103:TYR:N	2.34	0.42
2:J:108:TRP:CD1	3:N:43:PRO:O	2.73	0.42
1:B:183:SER:OG	1:B:184:GLN:N	2.53	0.41
1:A:480:MET:SD	1:C:481:LEU:HD21	2.59	0.41
1:A:652:ASP:OD1	1:A:652:ASP:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:101:LYS:HE2	1:B:206:CYS:SG	2.59	0.41
1:C:200:THR:O	1:C:200:THR:OG1	2.36	0.41
1:A:104:THR:O	1:A:203:THR:N	2.53	0.41
1:B:63:SER:H	1:B:500:ARG:HH21	1.66	0.41
1:C:369:ILE:H	1:C:369:ILE:HG12	1.66	0.41
1:C:627:LEU:HD12	1:C:627:LEU:HA	1.88	0.41
1:C:354:LYS:HD3	1:C:354:LYS:HA	1.94	0.41
1:C:511:MET:HG3	1:C:528:ILE:HG21	2.02	0.41
2:H:108:TRP:CD1	3:L:43:PRO:O	2.73	0.41
3:N:92:SER:O	3:N:95:TYR:N	2.42	0.41
2:H:82:LEU:HD12	2:H:82:LEU:HA	1.85	0.41
2:J:108:TRP:HB3	3:N:42:SER:HB2	2.03	0.41
1:C:86:LYS:HD3	1:C:300:TRP:CD1	2.56	0.41
1:C:188:HIS:CE1	1:C:190:ALA:HB3	2.56	0.41
1:C:216:ASN:HB3	1:C:218:PRO:HD2	2.02	0.41
1:C:652:ASP:OD1	1:C:652:ASP:N	2.53	0.41
2:H:108:TRP:HB3	3:L:42:SER:HB2	2.03	0.41
2:J:36:TRP:CD1	2:J:96:CYS:HA	2.52	0.41
3:L:92:SER:O	3:L:95:TYR:N	2.42	0.41
1:B:97:ARG:O	1:B:285:SER:OG	2.30	0.41
1:C:108:VAL:O	1:C:197:THR:HA	2.20	0.41
1:C:278:ASP:HA	1:C:283:THR:HG22	2.02	0.40
1:C:539:ALA:HB3	1:C:565:SER:HA	2.03	0.40
2:H:58:THR:O	2:H:58:THR:OG1	2.33	0.40
2:J:58:THR:O	2:J:58:THR:OG1	2.33	0.40
1:B:222:PHE:HE1	1:B:232:MET:HG2	1.86	0.40
1:C:599:TYR:HB3	1:C:601:PHE:CZ	2.56	0.40
1:C:455:LEU:HD23	1:C:455:LEU:HA	1.88	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	543/694 (78%)	518 (95%)	25 (5%)	0	100	100
1	B	543/694 (78%)	507 (93%)	36 (7%)	0	100	100
1	C	543/694 (78%)	502 (92%)	41 (8%)	0	100	100
2	H	114/224 (51%)	110 (96%)	4 (4%)	0	100	100
2	I	114/224 (51%)	110 (96%)	4 (4%)	0	100	100
2	J	114/224 (51%)	110 (96%)	4 (4%)	0	100	100
3	L	101/213 (47%)	93 (92%)	8 (8%)	0	100	100
3	M	101/213 (47%)	91 (90%)	10 (10%)	0	100	100
3	N	101/213 (47%)	91 (90%)	10 (10%)	0	100	100
All	All	2274/3393 (67%)	2132 (94%)	142 (6%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	323/608 (53%)	323 (100%)	0	100	100
1	B	324/608 (53%)	324 (100%)	0	100	100
1	C	316/608 (52%)	316 (100%)	0	100	100
2	H	82/193 (42%)	82 (100%)	0	100	100
2	I	82/193 (42%)	82 (100%)	0	100	100
2	J	82/193 (42%)	82 (100%)	0	100	100
3	L	64/186 (34%)	64 (100%)	0	100	100
3	M	64/186 (34%)	64 (100%)	0	100	100
3	N	64/186 (34%)	64 (100%)	0	100	100
All	All	1401/2961 (47%)	1401 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (17)

such sidechains are listed below:

Mol	Chain	Res	Type
1	A	121	HIS
1	A	220	ASN
1	A	228	GLN
1	A	256	ASN
1	A	316	HIS
1	B	142	HIS
1	B	163	ASN
1	B	256	ASN
1	B	496	ASN
1	C	121	HIS
1	C	140	GLN
1	C	316	HIS
3	L	89	GLN
3	M	52	ASN
3	M	89	GLN
3	N	52	ASN
3	N	89	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

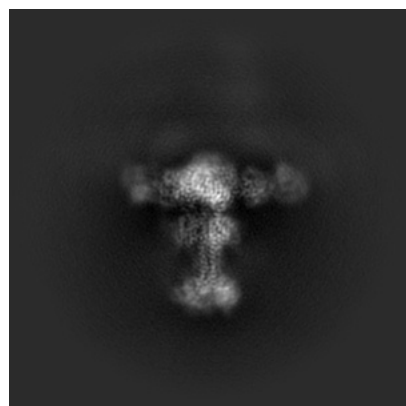
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-64607. These allow visual inspection of the internal detail of the map and identification of artifacts.

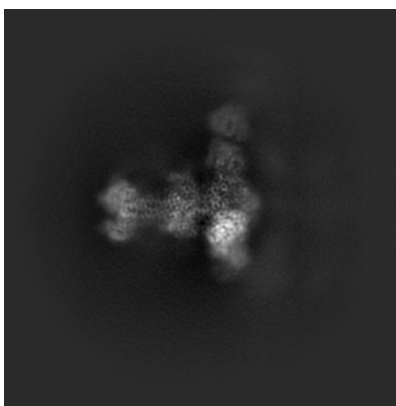
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

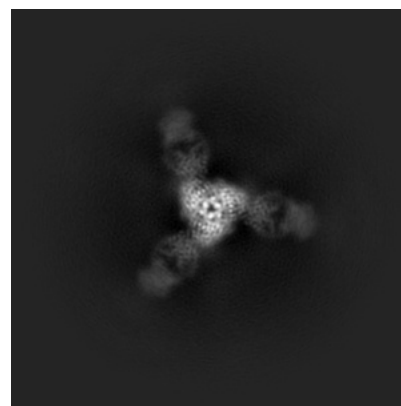
6.1.1 Primary map



X

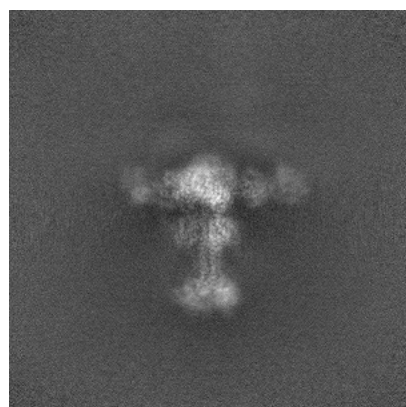


Y

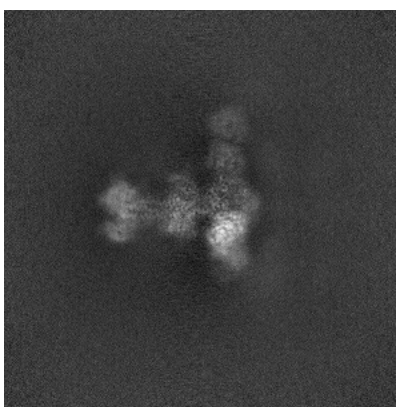


Z

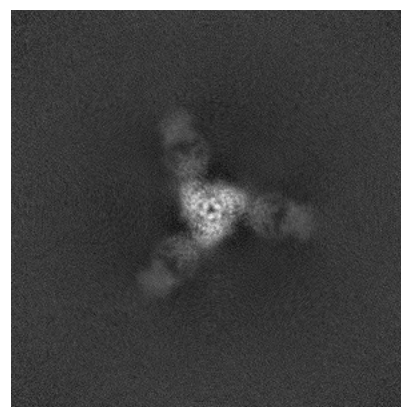
6.1.2 Raw map



X



Y

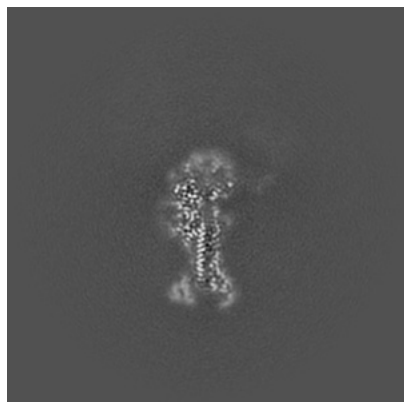


Z

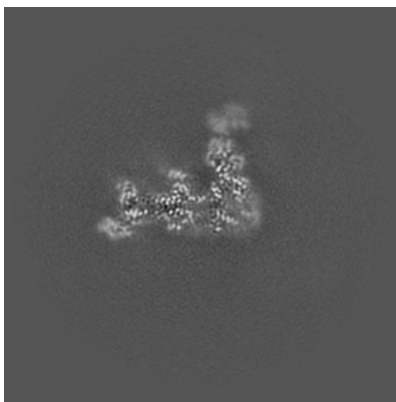
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

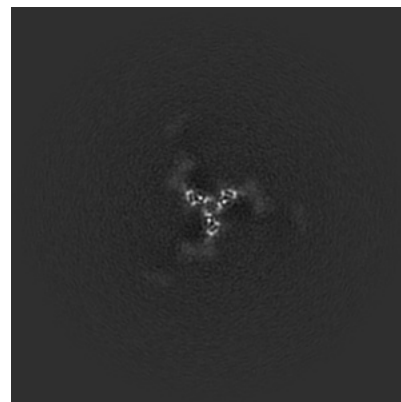
6.2.1 Primary map



X Index: 320



Y Index: 320



Z Index: 320

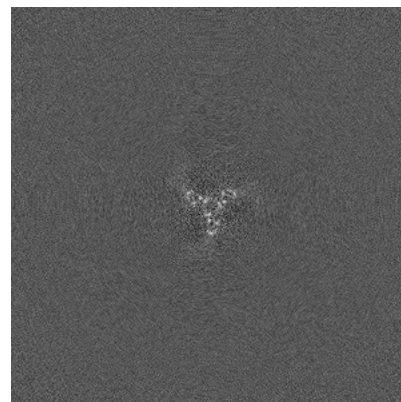
6.2.2 Raw map



X Index: 320



Y Index: 320

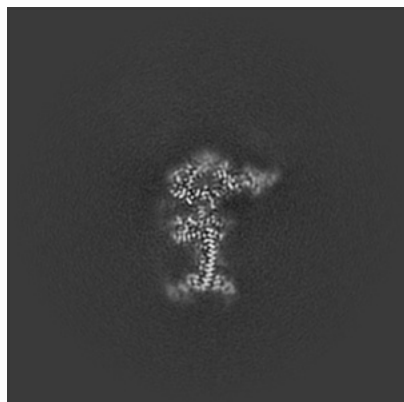


Z Index: 320

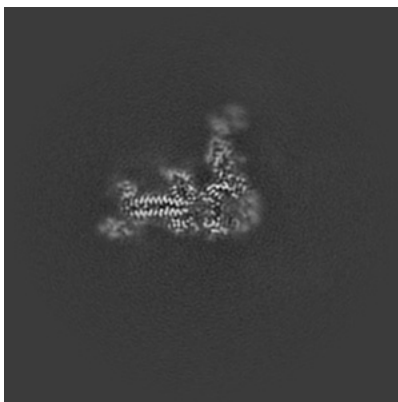
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

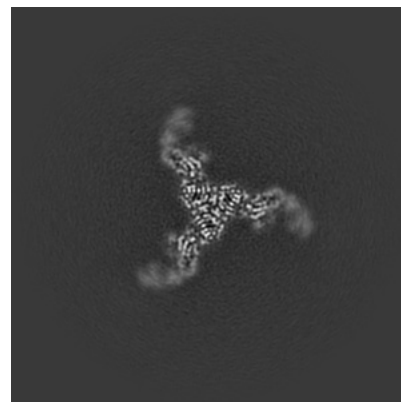
6.3.1 Primary map



X Index: 310

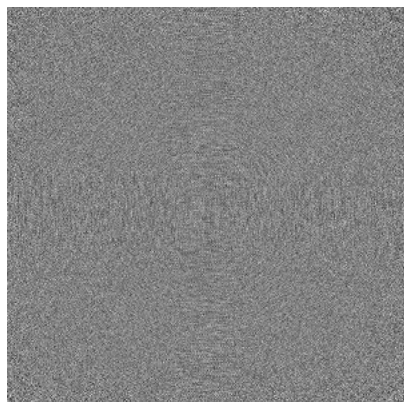


Y Index: 325

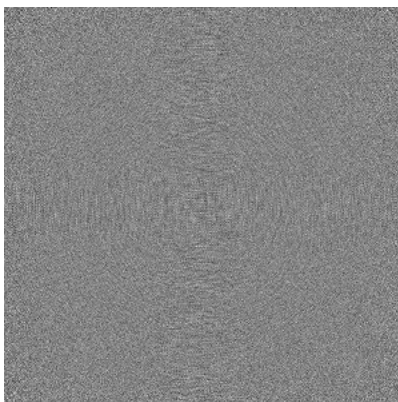


Z Index: 343

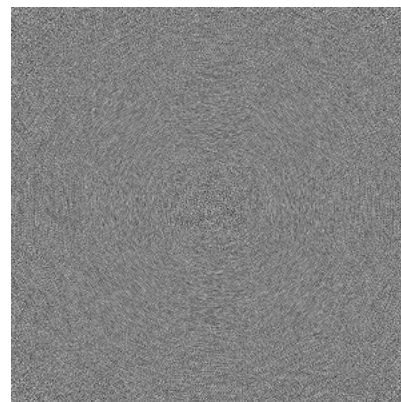
6.3.2 Raw map



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](#)

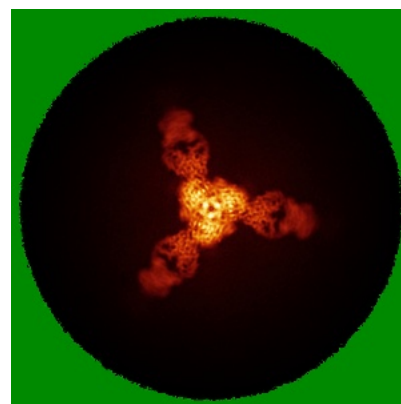
6.4.1 Primary map



X

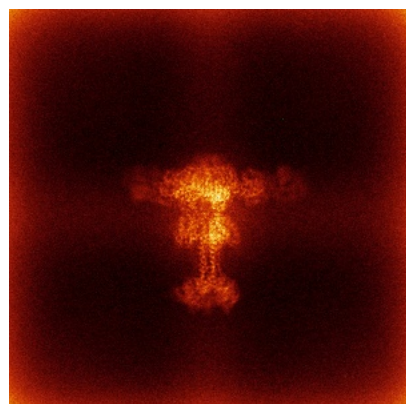


Y

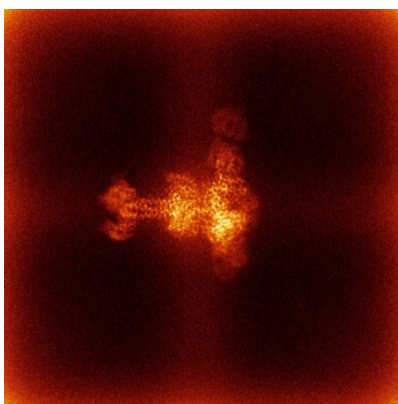


Z

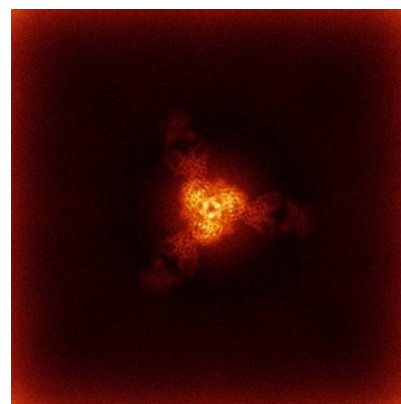
6.4.2 Raw map



X



Y

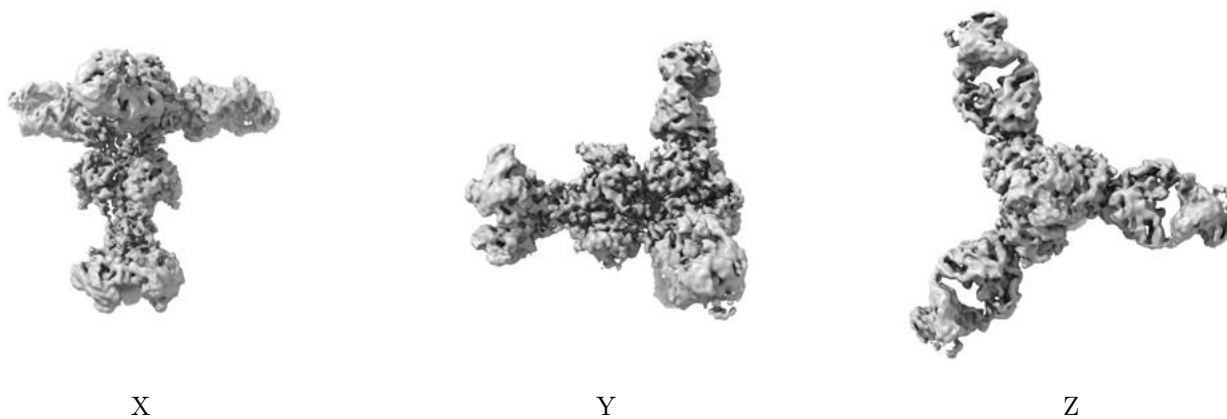


Z

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.

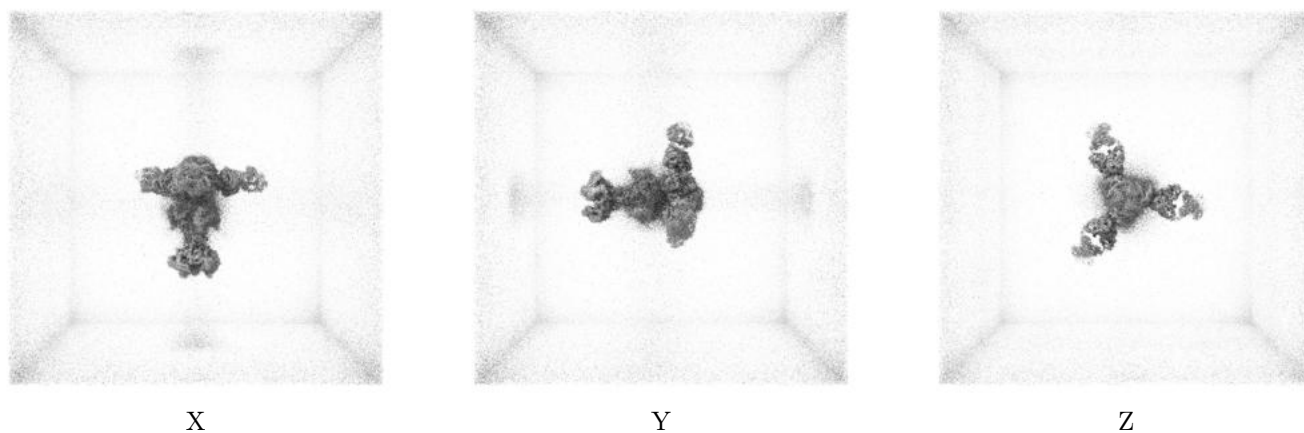
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.0232. 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.

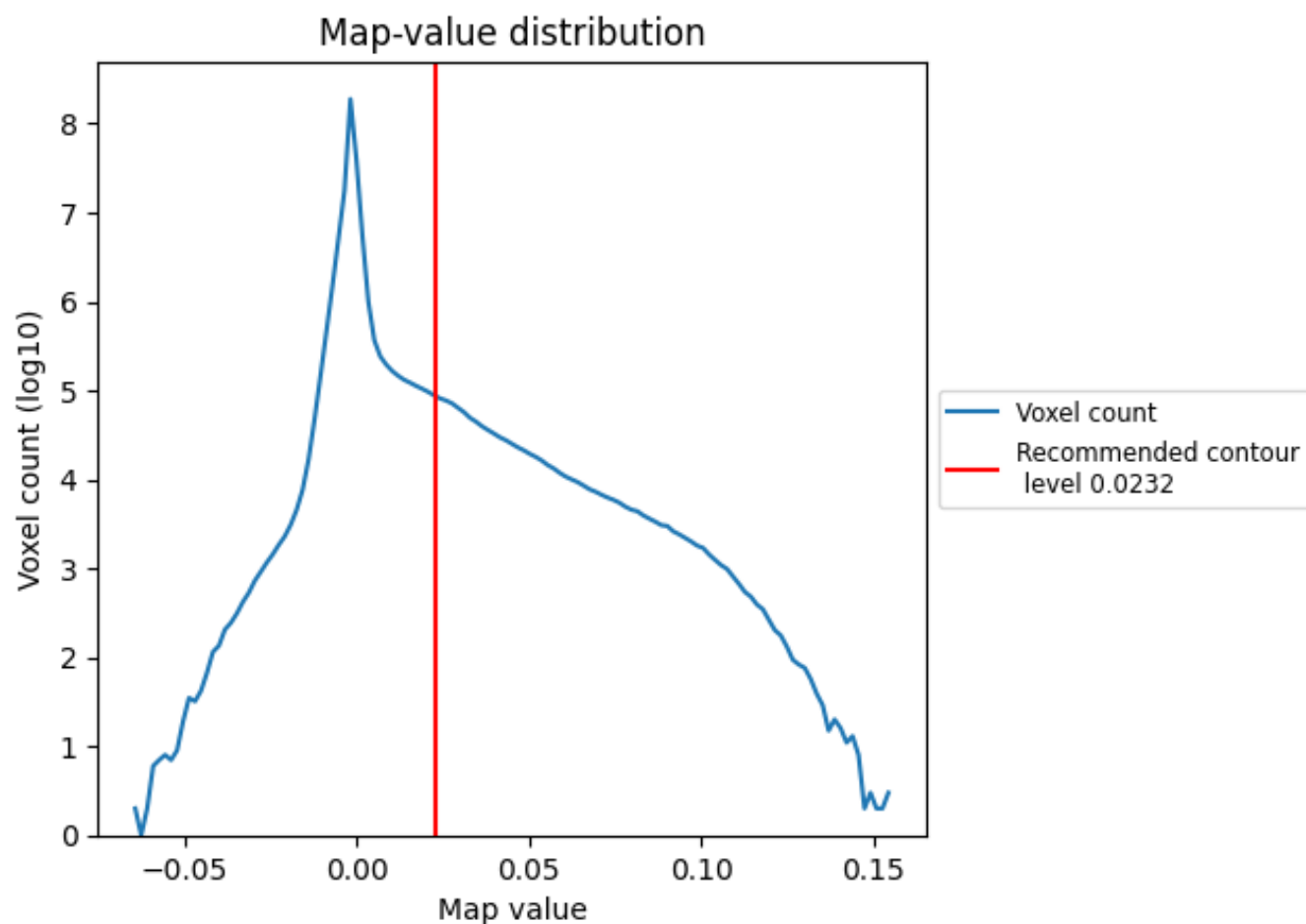
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

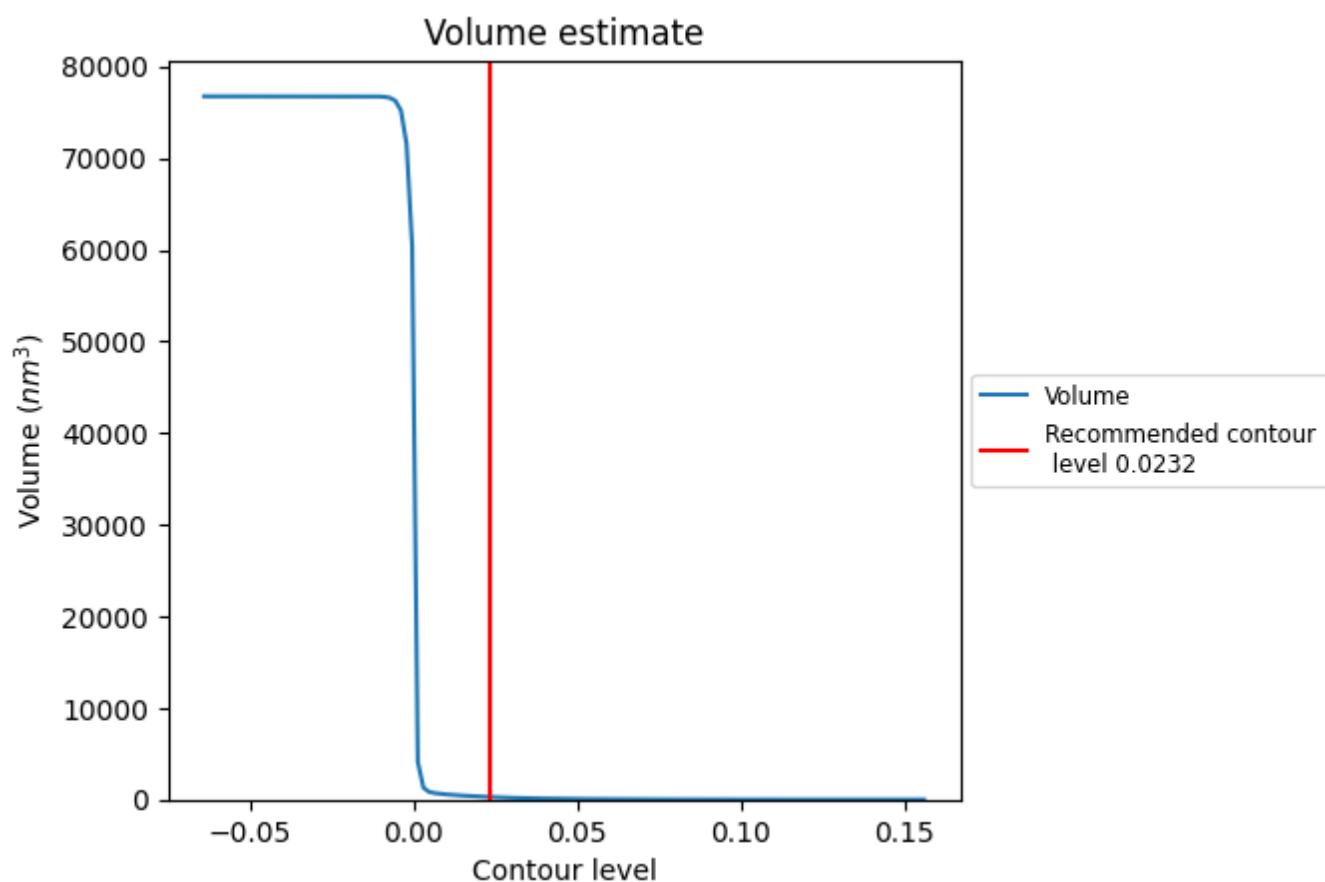
This section contains the results of statistical analysis of the map.

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.

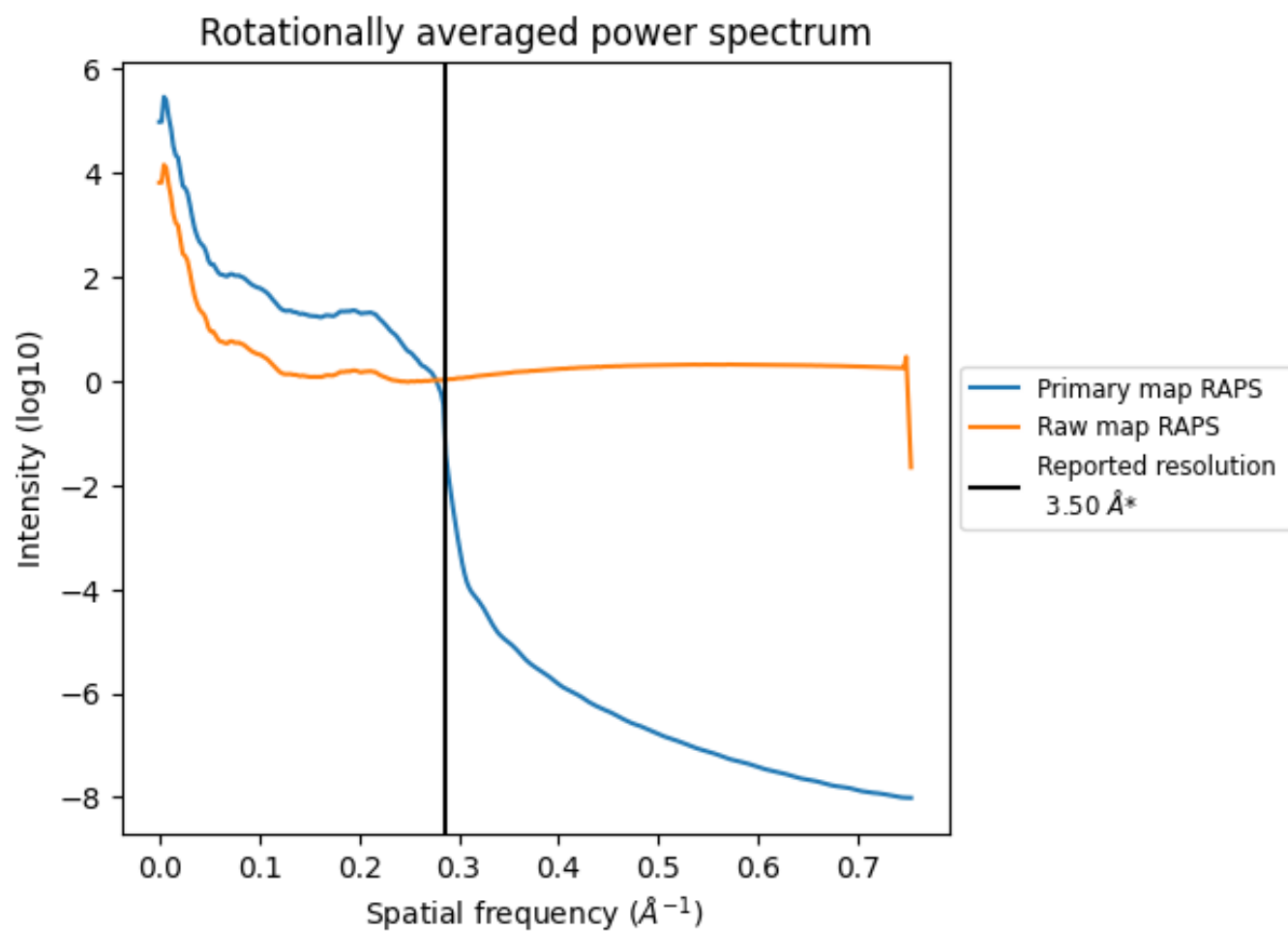
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 281 nm³; this corresponds to an approximate mass of 254 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](#)

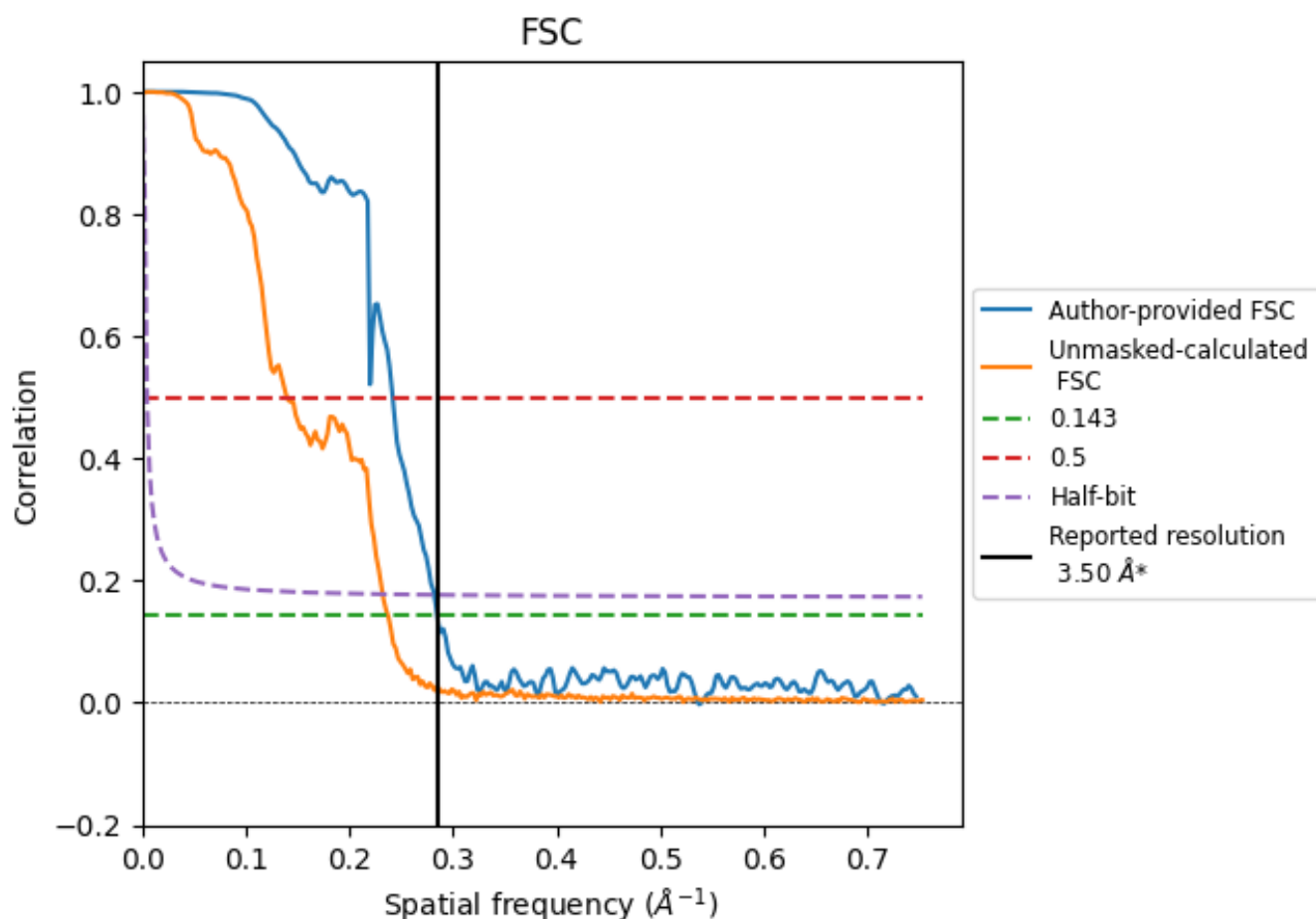


*Reported resolution corresponds to spatial frequency of 0.286 $\text{\AA}^{-1}$

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 $0.286 \text{ \AA}^{-1}$

8.2 Resolution estimates [i](#)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.50	-	-
Author-provided FSC curve	3.51	4.14	3.55
Unmasked-calculated*	4.22	7.15	4.31

*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 4.22 differs from the reported value 3.5 by more than 10 %

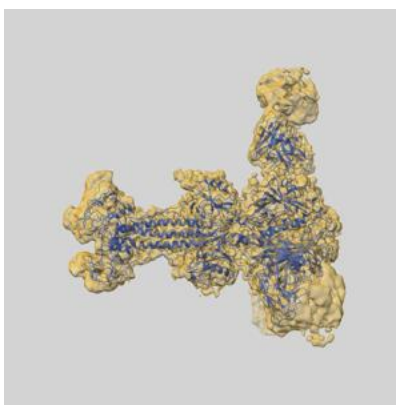
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-64607 and PDB model 9UY9. Per-residue inclusion information can be found in section [3](#) on page [5](#).

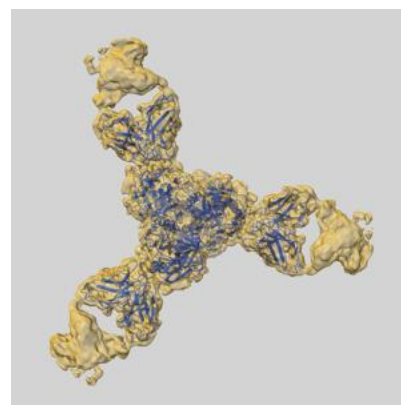
9.1 Map-model overlay [i](#)



X



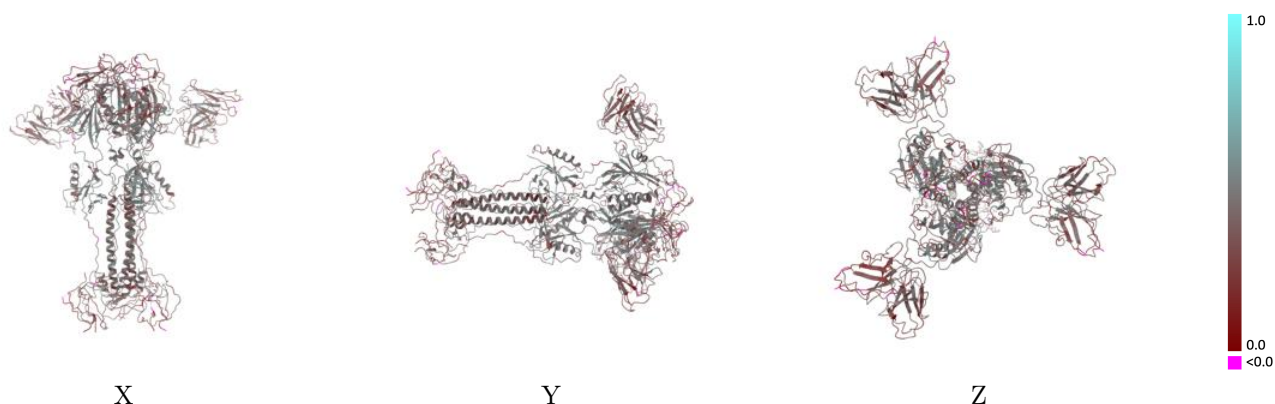
Y



Z

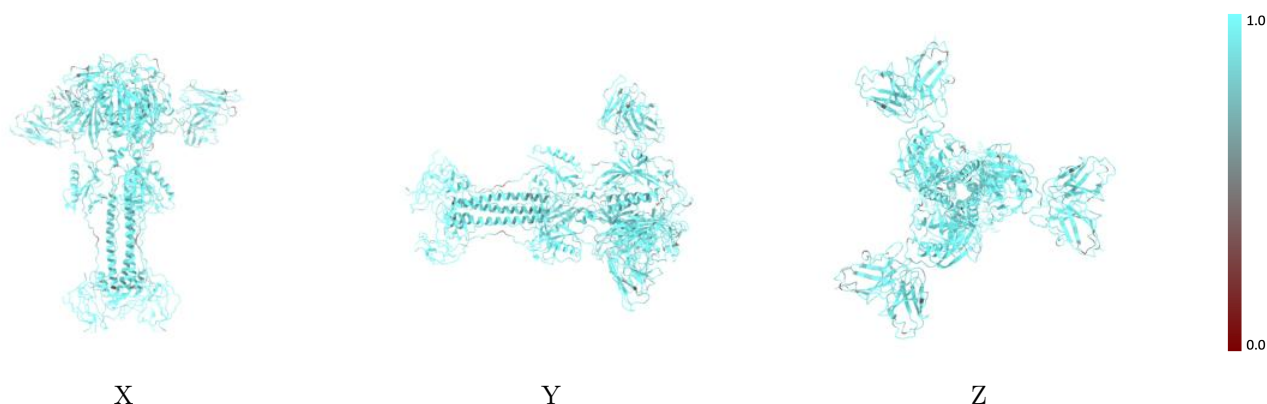
The images above show the 3D surface view of the map at the recommended contour level 0.0232 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



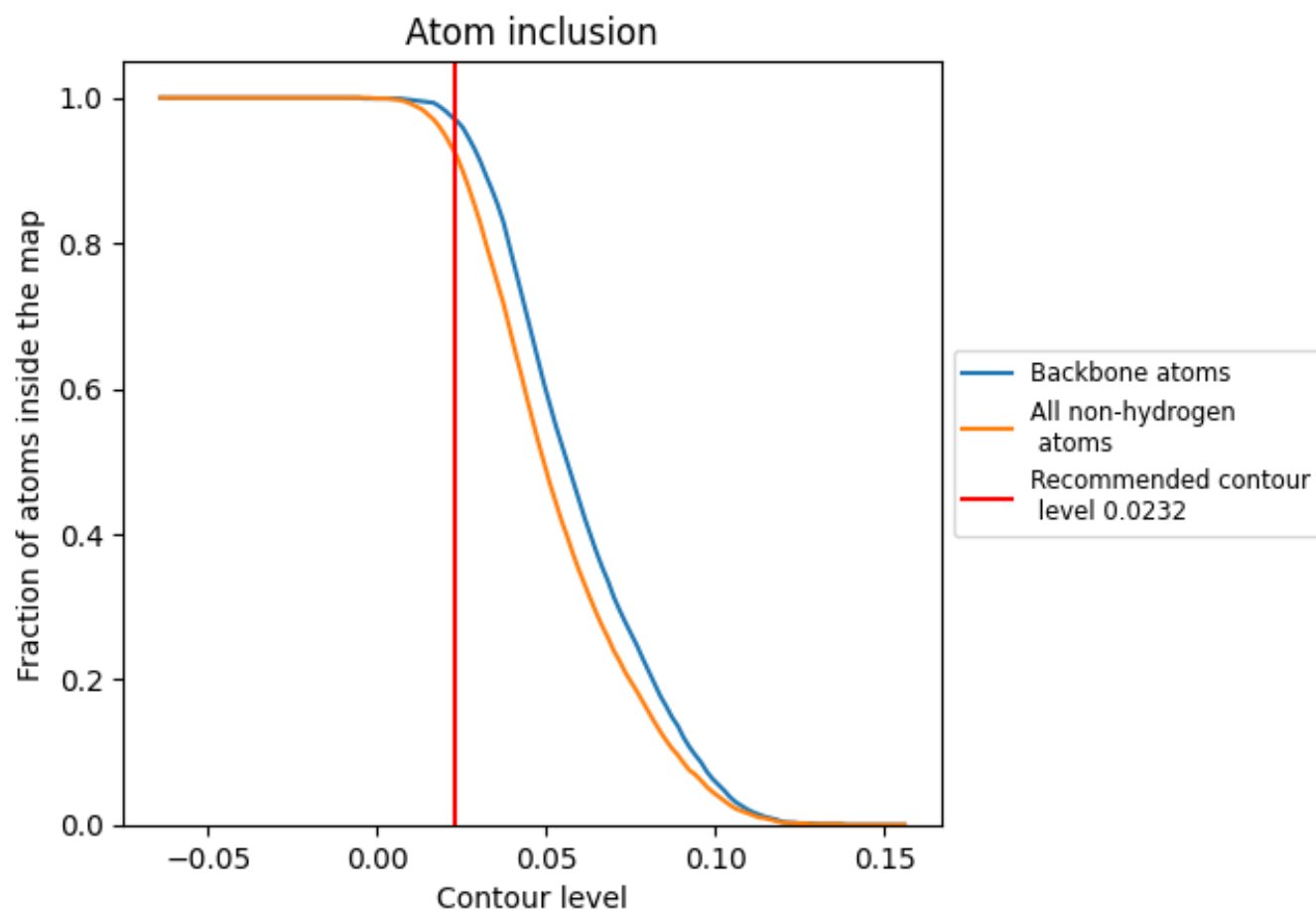
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.0232).

9.4 Atom inclusion [i](#)



At the recommended contour level, 97% 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 (0.0232) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9230	0.3800
A	0.9380	0.3990
B	0.9360	0.3950
C	0.9450	0.4050
H	0.8350	0.2800
I	0.8890	0.3390
J	0.8870	0.3370
L	0.8920	0.3440
M	0.8990	0.3570
N	0.8930	0.3550

1.0

0.0

<0.0