



## wwPDB EM Validation Summary Report ⓘ

Mar 6, 2026 – 11:30 AM UTC

PDB ID : 6DDD / pdb\_00006ddd  
EMDB ID : EMD-7867  
Title : Structure of the 50S ribosomal subunit from Methicillin Resistant Staphylococcus aureus in complex with the oxazolidinone antibiotic LZD-5  
Authors : Belousoff, M.J.; Venugopal, H.; Bamert, R.S.; Lithgow, T.  
Deposited on : 2018-05-10  
Resolution : 3.10 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto: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>.

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

EMDB validation analysis : 0.0.1.dev132  
Mogul : 2022.3.0, CSD as543be (2022)  
MolProbity : 4-5-2 with Phenix2.0  
Buster-report : wwPDB partial adaption of 1.1.7 (2018)  
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)  
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.49

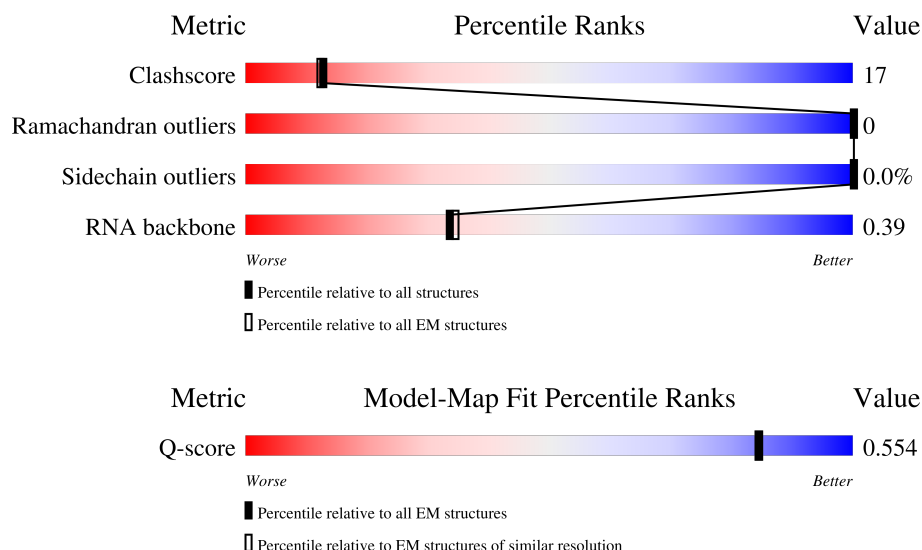
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.10 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
RNA backbone	8273	3508	-
Q-score	-	25397	14724 ( 2.60 - 3.60 )

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  $\geq 3$ , 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	116	<div> <div>9%</div> <div>54%</div> <div>43%</div> </div>
2	B	276	<div> <div>8%</div> <div>63%</div> <div>36%</div> </div>
3	C	118	<div> <div>62%</div> <div>36%</div> </div>

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Mol	Chain	Length	Quality of chain
4	D	102	
5	E	116	
6	F	91	
7	G	105	
8	H	217	
9	I	85	
10	J	62	
11	K	69	
12	L	217	
13	M	59	
14	N	57	
15	O	49	
16	P	50	
17	Q	65	
18	R	37	
19	S	207	
20	V	145	
21	W	122	
22	X	146	
23	Y	144	
24	Z	122	
25	a	119	
26	1	2923	
27	2	115	

## 2 Entry composition [i](#)

There are 28 unique types of molecules in this entry. The entry contains 79136 atoms, of which 18 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 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	A	113	Total	C	N	O	0	0
			915	576	184	155		

- Molecule 2 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	274	Total	C	N	O	S	0	0
			2094	1303	415	371	5		

- Molecule 3 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	116	Total	C	N	O	S	0	0
			943	593	189	157	4		

- Molecule 4 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	100	Total	C	N	O	S	0	0
			785	499	139	146	1		

- Molecule 5 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	111	Total	C	N	O	S	0	0
			853	532	163	155	3		

- Molecule 6 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	87	Total	C	N	O	S	0	0
			711	449	128	130	4		

- Molecule 7 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	95	Total	C	N	O	S	0	0
			730	460	134	135	1		

- Molecule 8 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	93	Total	C	N	O	S	0	0
			727	465	129	132	1		

- Molecule 9 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	I	77	Total	C	N	O	0	0
			592	364	115	113		

- Molecule 10 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	J	59	Total	C	N	O	S	0	0
			463	287	99	76	1		

- Molecule 11 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	K	57	Total	C	N	O	0	0
			472	290	89	93		

- Molecule 12 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	215	Total	C	N	O	S	0	0
			1628	1018	299	306	5		

- Molecule 13 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	M	56	Total	C	N	O	0	0
			432	269	82	81		

- Molecule 14 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	N	50	Total	C	N	O	S	0	0
			397	241	83	68	5		

- Molecule 15 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	O	46	Total	C	N	O	S	0	0
			382	228	78	72	4		

- Molecule 16 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	P	44	Total	C	N	O	S	0	0
			372	228	90	53	1		

- Molecule 17 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	Q	64	Total	C	N	O	S	0	0
			521	324	113	82	2		

- Molecule 18 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	R	37	Total	C	N	O	S	0	0
			296	186	60	45	5		

- Molecule 19 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	S	171	Total	C	N	O	S	0	0
			1318	829	248	239	2		

- Molecule 20 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	V	143	Total	C	N	O	S	0	0
			1138	710	209	217	2		

- Molecule 21 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	W	112	Total	C	N	O	S	0	0
			850	526	163	158	3		

- Molecule 22 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	X	125	Total	C	N	O		0	0
			938	580	188	170			

- Molecule 23 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	Y	136	Total	C	N	O	S	0	0
			1089	698	206	181	4		

- Molecule 24 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Z	114	Total	C	N	O	S	0	0
			902	556	175	170	1		

- Molecule 25 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	a	73	Total	C	N	O		0	0
			583	361	119	103			

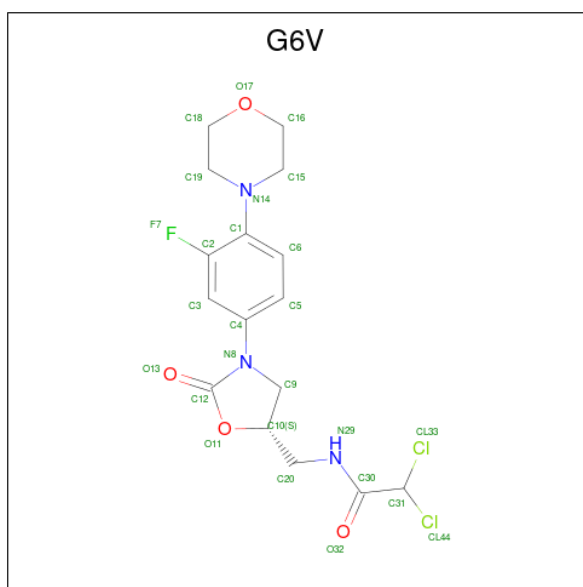
- Molecule 26 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	1	2646	Total	C	N	O	P	0	0
			56747	25338	10405	18361	2643		

- Molecule 27 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	2	104	Total	C	N	O	P	0	0
			2214	990	395	725	104		

- Molecule 28 is 2,2-dichloro-N-({(5S)-3-[3-fluoro-4-(morpholin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl)methyl}acetamide (CCD ID: G6V) (formula: C<sub>16</sub>H<sub>18</sub>Cl<sub>2</sub>FN<sub>3</sub>O<sub>4</sub>).



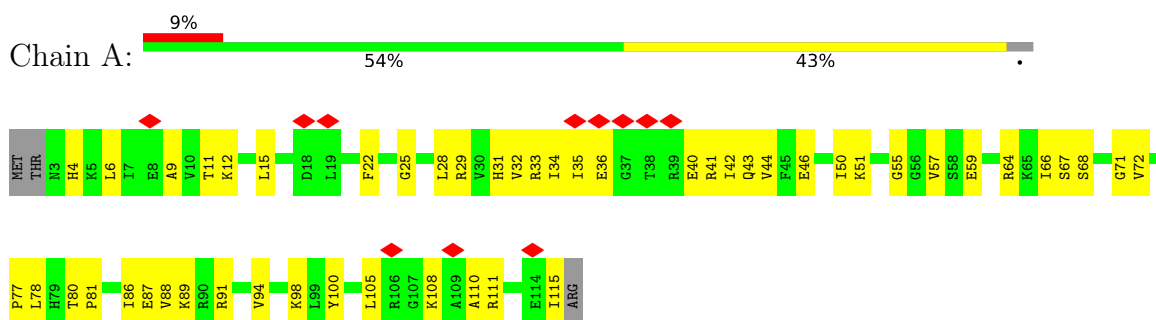
Mol	Chain	Residues	Atoms							AltConf
			Total	C	Cl	F	H	N	O	
28	1	1	44	16	2	1	18	3	4	0



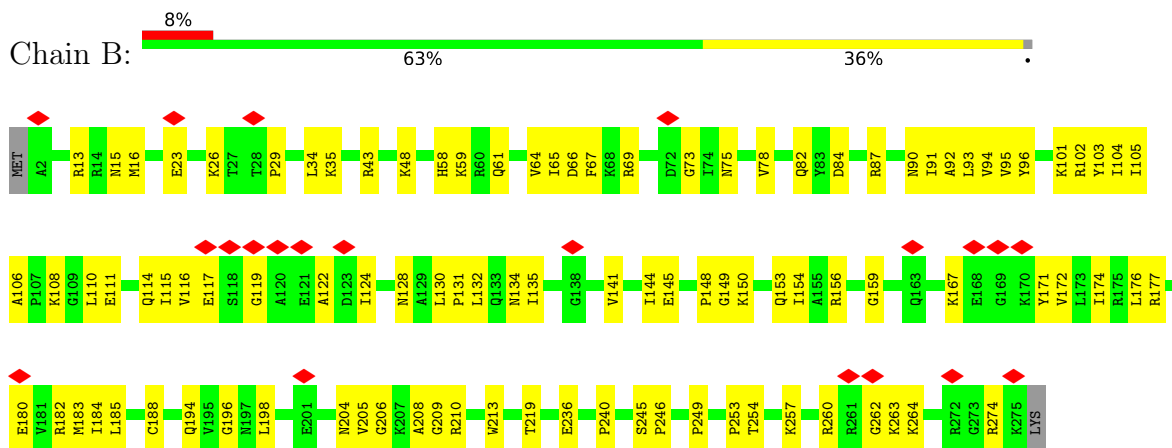
### 3 Residue-property plots [i](#)

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.

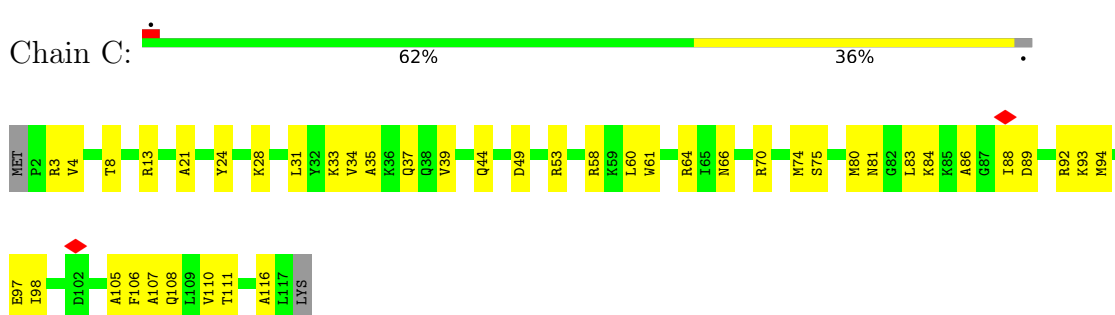
- Molecule 1: 50S ribosomal protein L19



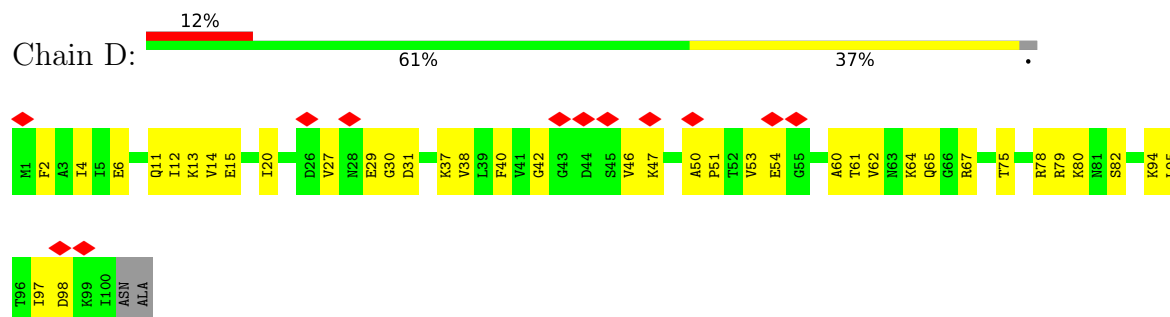
- Molecule 2: 50S ribosomal protein L2



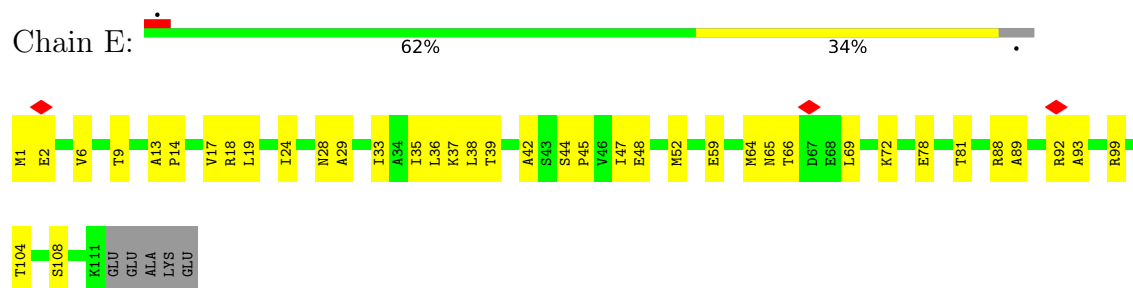
- Molecule 3: 50S ribosomal protein L20



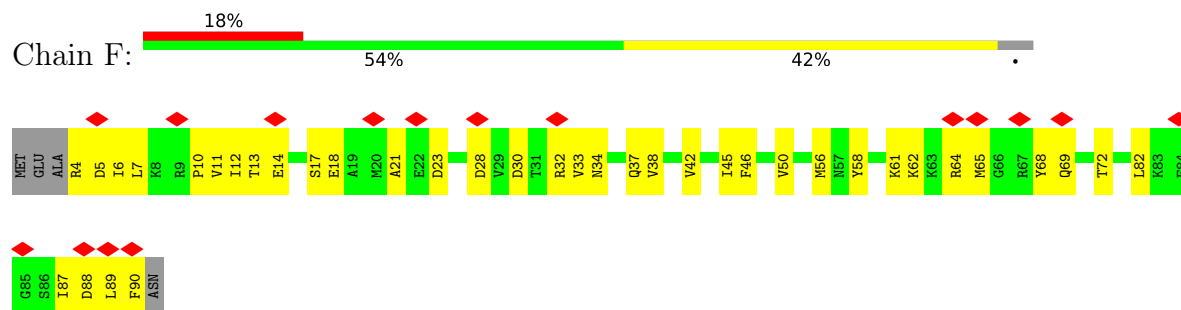
- Molecule 4: 50S ribosomal protein L21



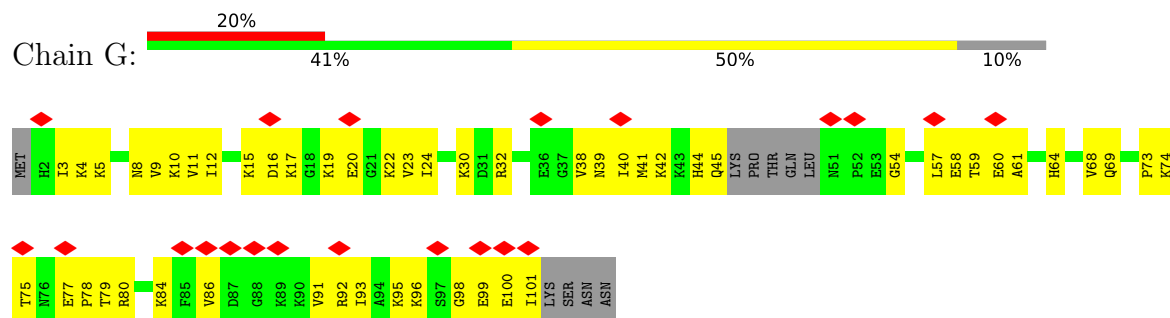
- Molecule 5: 50S ribosomal protein L22



- Molecule 6: 50S ribosomal protein L23

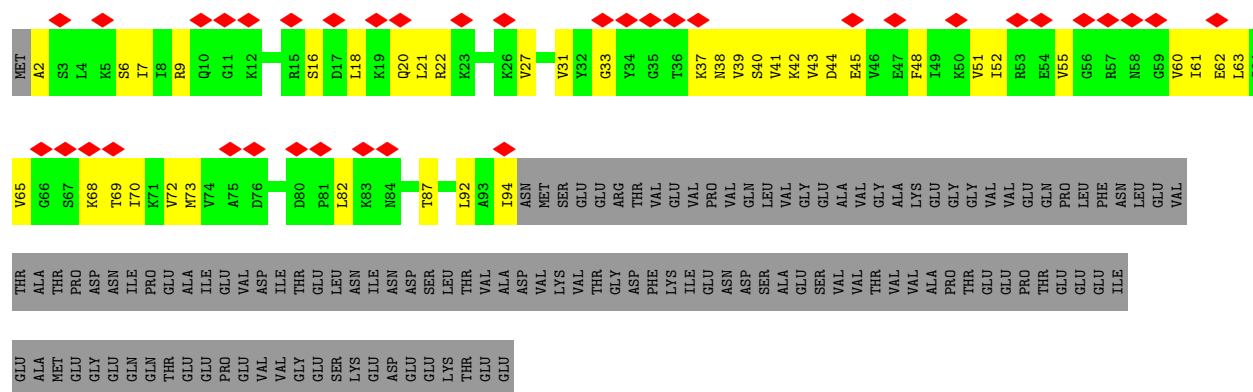


- Molecule 7: 50S ribosomal protein L24

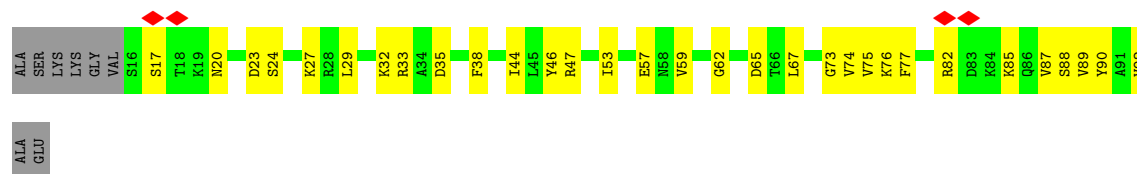


- Molecule 8: 50S ribosomal protein L25

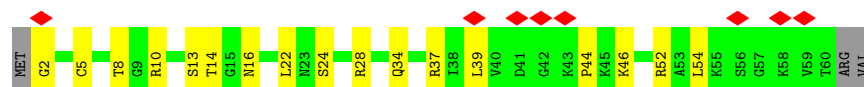




• Molecule 9: 50S ribosomal protein L27



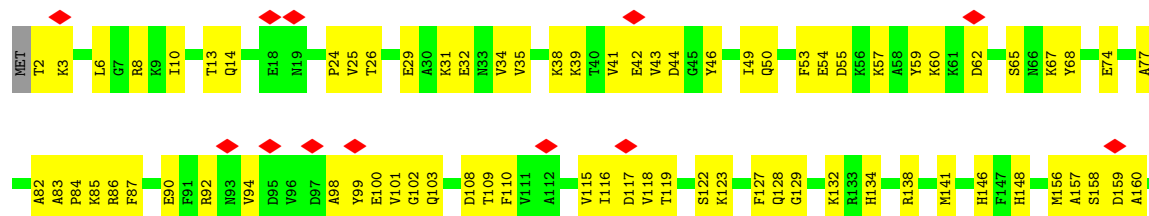
• Molecule 10: 50S ribosomal protein L28

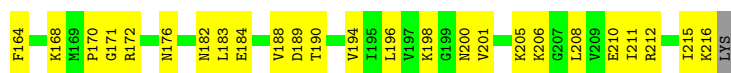


• Molecule 11: 50S ribosomal protein L29



• Molecule 12: 50S ribosomal protein L3





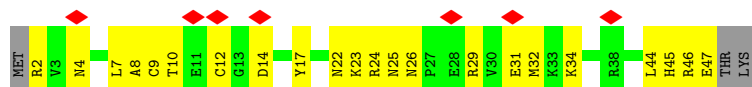
- Molecule 13: 50S ribosomal protein L30



- Molecule 14: 50S ribosomal protein L32



- Molecule 15: 50S ribosomal protein L33



- Molecule 16: 50S ribosomal protein L34



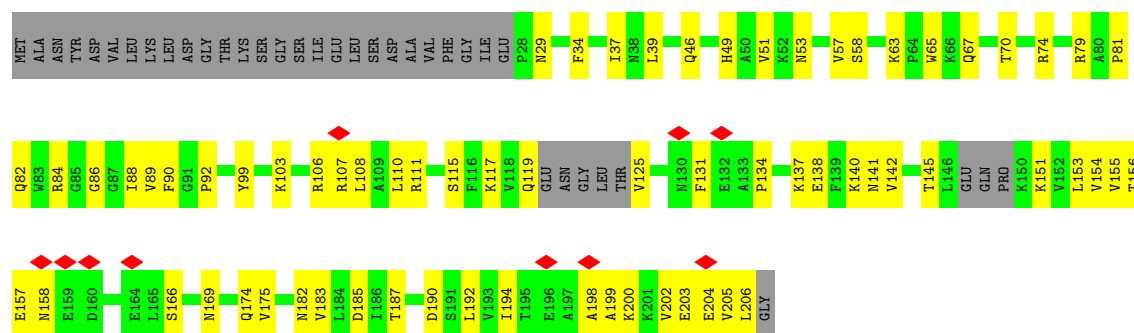
- Molecule 17: 50S ribosomal protein L35



- Molecule 18: 50S ribosomal protein L36



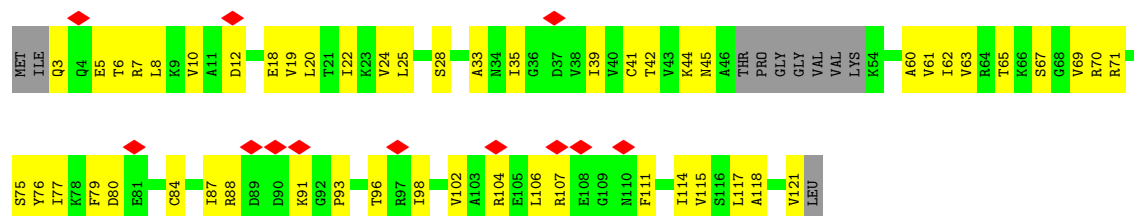
- Molecule 19: 50S ribosomal protein L4



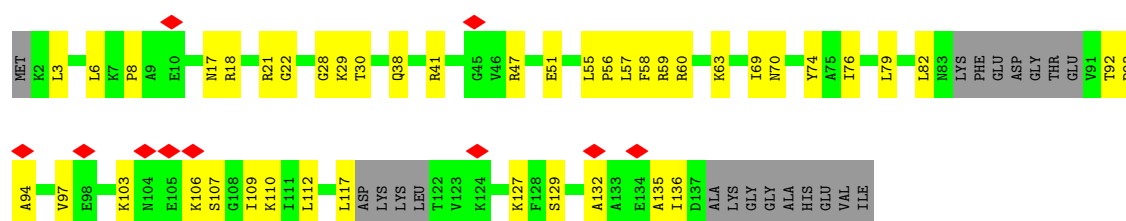
• Molecule 20: 50S ribosomal protein L13



• Molecule 21: 50S ribosomal protein L14

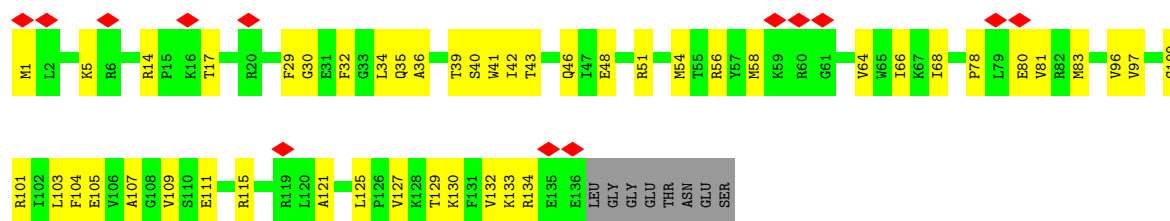


• Molecule 22: 50S ribosomal protein L15

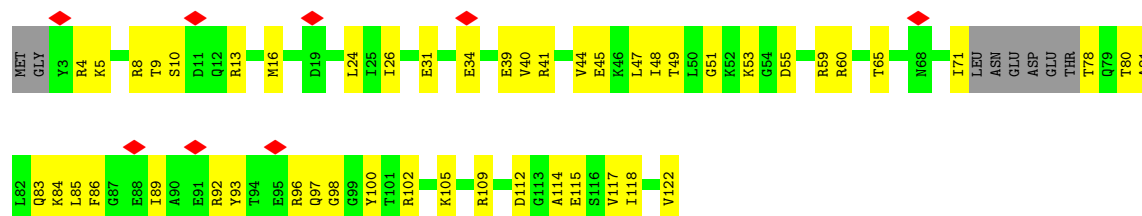


• Molecule 23: 50S ribosomal protein L16

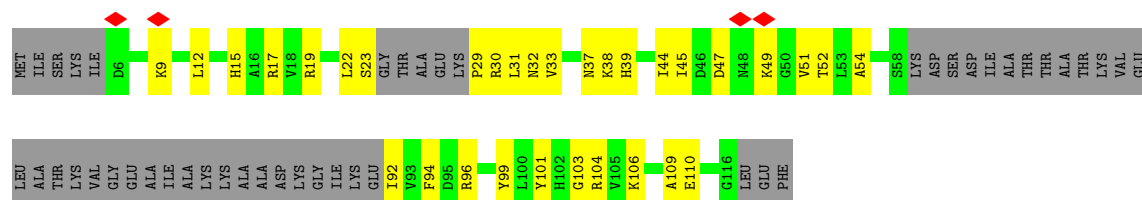




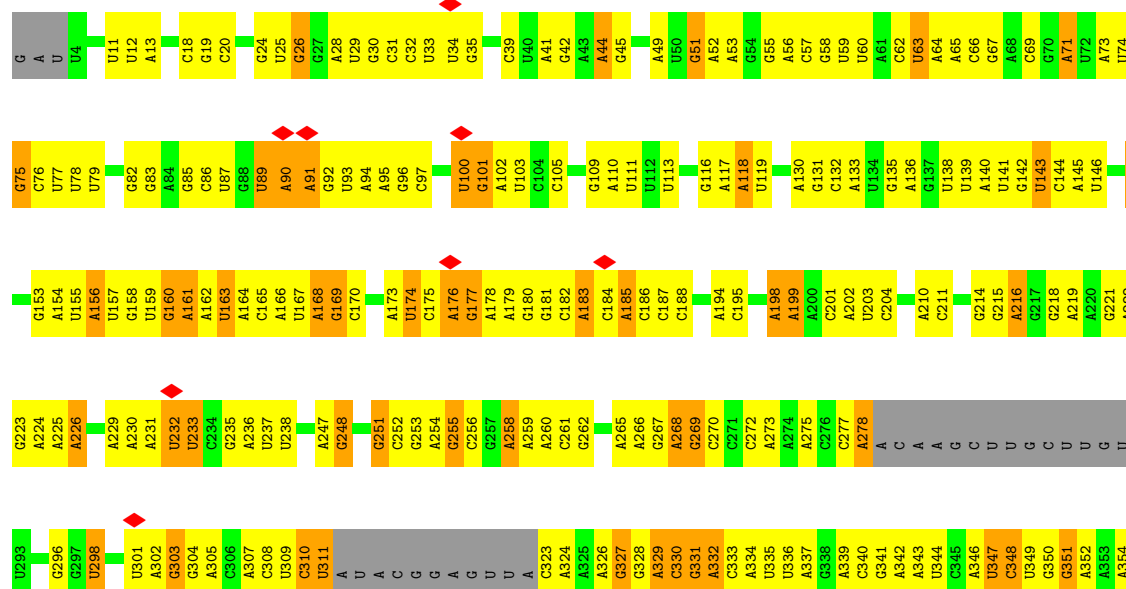
• Molecule 24: 50S ribosomal protein L17



• Molecule 25: 50S ribosomal protein L18



• Molecule 26: 23S rRNA

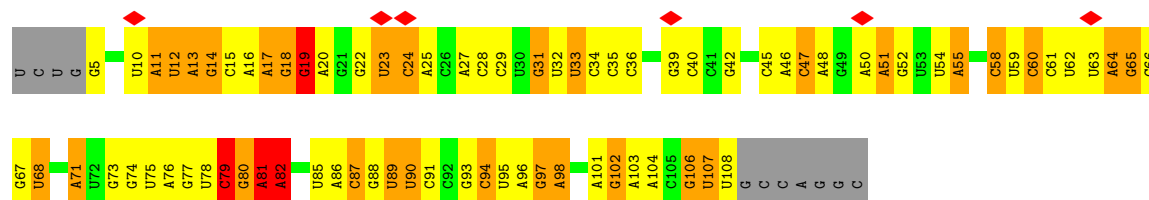
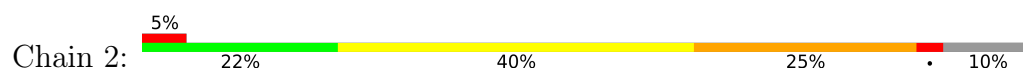


A1312	G1236	C	C1026	U	G876	U786	A713	G640	U569	U494	C421	G355
G1313	U1237	G	A1027	A	G877	U787	C717	A641	U570	A500	G422	A356
A1314	U1238	A	G1028	C	U878	A788	C718	U642	G575	C502	A423	A359
C1315	G1029	C	U1029	C	U879	C789	C719	C643	U576	A503	G428	A360
G1316	U1157	G	A1032	A	U884	U790	A720	C644	A577	C504	C429	U361
U1319	C1160	G	G1033	A	C885	U792	A721	A645	U578	G505	A430	C362
G1320	A1161	G	A1034	U947	A886	G793	A722	A646	G579	U506	C431	A363
A1321	C1162	A	G1035	U948	A887	A794	G727	G647	C580	A507	G432	A364
G1322	U1163	U	A1036	C949	U888	A795	A727	U649	A583	C508	U433	G366
A1323	C1038	G	C1038	A955	U889	A796	A730	U650	G587	G509	A434	A367
G1324	G1039	U	G1039	A956	G890	A797	C732	G653	C588	A512	A435	A368
U1325	A1040	U	A1040	A960	U891	G798	U731	C654	U589	G513	A436	G369
C1326	G1041	G	G1041	A961	A894	U799	U733	A655	U590	G514	A437	
G1327	C1042	G	C1042	A962	U895	G800	C736	A656	U591	G515	U438	A372
U1328	U1174	C	U1043	A963	U896	A801	G745	U657	G592	A516	C440	A373
G1329	G1175	U	A1044	A964	U897	G802	U738	A658	A592	A517	C441	U374
A1330	U1176	U	G1045	A965	U898	G803	U739	A659	U593	A518	G442	
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U1337	C1178	G	U1047	A967	G900	G805	C743	U661	U597	A520	G446	U380
A1338	U1179	A	U1048	A968	U901	G806	A744	G662	G598	A521	A447	G381
U1339	C1180	G	C1049	A969	G902	A809	G745	G663	U600	A522	A448	U382
G1340	G1182	C	A1053	A970	U903	A810	U746	G664	G601	A523		A383
A1341	G1183	A	A1054	A971	G904	C811	G747	G665	G604	A524		G384
C1342	C1184	G	A1055	A972	U905	U812	U748	G666	U605	A525		A388
U1347	U1185	C	G1056	A973	A906	G813	U749	G667	G606	A526		A389
G1348	A1186	U	A1057	A974	G907	A814	G750	G668	U607	A527		A390
U1349	U1187	A	U1058	A975	U908	G815	A751	G669	C607	A528		A391
A1350	C1188	G	U1059	A976	A909	G816	G752	G670	U608	A529		U392
C1351	G1189	C	U1060	A977	G910	A819	G753	G671	U609	A530		U393
G1352	U1190	U	A1063	A978	C911	G820	U754	G672	U610	A531		U394
A1353	C1191	A	U1064	A979	U912	A821	A755	G673	G613	A532		U395
G1354	G1192	G	A1065	A980	G913	G822	G756	G674	U614	A533		U396
U1355	U1193	C	A1066	A981	U914	A823	G757	G675	A615	A534		C398
A1284	C1194	A	U1067	A982	G915	U824	U758	G676	G616	A535		U399
G1287	G1207	A	G1068	A983	U916	A825	U759	G677	A617	A536		U400
U1288	U1208	G	A1069	A984	U917	G826	U760	G678	U618	A537		U401
A1289	C1209	U	U1070	A985	G918	A827	A	G679	U619	A538		C402
G1290	U1210	G	A1071	A986	U919	U828	C	G680	A620	A539		U403
U1291	G1211	U	U1072	A987	A920	U835	U761	G681	G621	A540		U404
A1292	U1212	C	A1073	A988	C921	G836	U762	G682	A622	A541		G405
U1293	C1213	G	G1074	A989	G	U837	G763	G683	U623	A542		A406
G1294	U1214	U	G1075	A990	A	A849	A764	G684	G624	A543		G407
C1295	U1215	A	A1076	A991	G	G850	G765	G685	C625	A544		U408
U1296	U1216	G	U1077	A992	G	C851	U766	G686	G626	A545		G409
G1297	G1217	U	G1078	A993	U1004	U852	G767	G687		A546		
U1298	U1218	A	U1079	A994	G1005	U853	U768	G688		A547		
G1299	G1219	G	G1080	A995	C	U854	G769	G689		A548		
U1302	U1220	C	C1081	A996	C	C857	G770	U690		A549		
A1306	C1221	U	G1082	A997	C	U858	A771	A691		A550		
G1307	U1222	C	U1083	A998	U1010	C859	G772	A692		A551		
C1308	U1223	A	C1084	A999	U1011	U860	G773	A693		A552		
U1309	G1224	U	G1085	A1000	U1012	C862	A774	U694		A553		
A1310	U1225	C	C	A1001	U1013	G870	G775	U695		A554		
C1311	G1226	C	C	A1002	U1014	U871	A776	U696		A555		
U1312	U1227	U	C	A1003	G1015	U872	A777	U697		A556		
G1313	G1228	A	C	A1004	G1016	U873	A778	U698		A557		
A1314	U1229	G	A	A1005	G1017	U874	A779	U699		A558		
C1315	G1230	C	A	A1006	G1018	U875	A780	G701		A559		
U1316	U1231	U	A	A1007	G1019	U876	A781	U702		A560		
G1317	G1232	G	A	A1008	G1020	U877	A782	A703		A561		
A1318	U1233	C	A	A1009	G1021	U878	C783	U704		A562		
C1319	G1234	U	A	A1010	G1022	U879	C784	U705		A563		
U1320	U1235	C	A	A1011	G1023	U880	C785	U706		A564		
G1321	G1236	G	A	A1012	G1024	U881		U707		A565		
A1322	U1237	C	A	A1013	G1025	U882		U708		A566		
U1323	G1238	U	A	A1014	G1026	U883		U709		A567		
G1324	U1239	C	A	A1015	G1027	U884				A568		
A1325	U1240	G	A	A1016	G1028	U885				A569		
C1326	G1241	U	A	A1017	G1029	U886				A570		
U1327	U1242	C	A	A1018	G1030	U887				A571		
G1328	U1243	G	A	A1019	G1031	U888				A572		
A1329	C1244	U	A	A1020	G1032	U889				A573		
U1330	G1245	C	A	A1021	G1033	U890				A574		
G1331	U1246	G	A	A1022	G1034	U891				A575		
A1332	C1247	U	A	A1023	G1035	U892				A576		
U1333	G1248	C	A	A1024	G1036	U893				A577		
C1334	U1249	G	A	A1025	G1037	U894				A578		
A1335	G1250	U	A	A1026	G1038	U895				A579		
U1336	C1251	C	A	A1027	G1039	U896				A580		
G1337	U1252	G	A	A1028	G1040	U897				A581		
A1338	G1253	U	A	A1029	G1041	U898				A582		
U1339	C1254	C	A	A1030	G1042	U899				A583		
G1340	U1255	G	A	A1031	G1043	U900				A584		
A1341	G1256	U	A	A1032	G1044	U901				A585		
C1342	U1257	C	A	A1033	G1045	U902				A586		
U1343	A1258	G	A	A1034	G1046	U903				A587		
G1344	C1259	U	A	A1035	G1047	U904				A588		
A1345	U1260	C	A	A1036	G1048	U905				A589		
U1346	G1261	G	A	A1037	G1049	U906				A590		
C1347	U1262	U	A	A1038	G1050	U907				A591		
G1348	G1263	C	A	A1039	G1051	U908				A592		
A1349	U1264	G	A	A1040	G1052	U909				A593		
U1350	C1265	U	A	A1041	G1053	U910				A594		
C1351	G1266	C	A	A1042	G1054	U911				A595		
A1352	U1267	G	A	A1043	G1055	U912				A596		
G1353	C1268	U	A	A1044	G1056	U913				A597		
U1354	U1269	C	A	A1045	G1057	U914				A598		
A1355	G1270	G	A	A1046	G1058	U915				A599		
C1356	U1271	U	A	A1047	G1059	U916				A600		
G1357	C1272	C	A	A1048	G1060	U917				A601		
A1358	U1273	G	A	A1049	G1061	U918				A602		
U1359	G1274	U	A	A1050	G1062	U919				A603		
C1360	U1275	C	A	A1051	G1063	U920				A604		
G1361	A1276	G	A	A1052	G1064	U921				A605		
U1362	C1277	U	A	A1053	G1065	U922				A606		
A1363	U1278	C	A	A1054	G1066	U923				A607		
G1364	G1279	G	A	A1055	G1067	U924				A608		
U1365	U1280	U	A	A1056	G1068	U925				A609		
C1366	C1281	C	A	A1057	G1069	U926				A610		
G1367	U1282	G	A	A1058	G1070	U927				A611		
A1368	G1283	U	A	A1059	G1071	U928				A612		
U1369	U1284	C	A	A1060	G1072	U929				A613		
C1370	C1285	G	A	A1061	G1073	U930				A614		
G1371	U1286	U	A	A1062	G1074	U931				A615		
A1372	G1287	C	A	A1063	G1075	U932				A616		
U1373	U1288	G	A	A1064	G1076	U933				A617		
C1374	C1289	U	A	A1065	G1077	U934				A618		
G1375	U1290	C	A	A1066	G1078	U935				A619		
A1376	G1291	G	A	A1067	G1079	U936				A620		
U1377	U1292	U	A	A1068	G1080	U937				A621		
C1378	C1293	C	A	A1069	G1081	U938				A622		
G1379	U1294	G	A	A1070	G1082	U939				A623		
A1380	G1295	U	A	A1071	G1083	U940				A624		
U1381	C1296	C	A	A1072	G1084	U941				A625		
C1382	U1297	G	A	A1073	G1085	U942				A626		
G1383	G1298	U	A	A1074	G1086	U943				A627		
U1384	U1299	C	A	A1075	G1087	U944				A		

C2324	A2252	G	C2052	C1969	U1843	C1766	U1603	C1471	U1389
A2325	C2253	G	U2053	U1970	G1844	G1767	C1604	C1472	A1390
G2326	A2254	C	G2054	A1908	U1945	G1770	A1605	U1477	A1391
A2327	C2255	C	U2055	G1975	A1846	C1770	C1606	U1478	U1394
U2328	C2256	C	G2056	U1976	U1847	G1771	A1607	G1479	G1395
U2329	C2257	C	A2057	G1977	A1848	G1772	C1608	G1480	U1396
G2330	A2260	G	G2058	U1978	U1851	A1773	U1609	G1481	G1397
G2331	G2261	C	G2059	A1911	G1851	G1774	G1613	U1482	U1398
U	G2262	U	U2060	U1912	U1854	G1775	A1614	A1489	A1402
U	G2263	U	U2061	U1913	G1855	G1776	G1615	C1490	A1403
G	G2264	G	G2062	G1915	U1856	G1777	A1616	C1491	A1404
G	G2265	U	C2063	G1918	C1857	G1778	G1617	G1492	G1405
A	G2266	A	U2064	G1919	U1858	G1779	A1618	U1493	U1409
A	C2267	A	U2065	C1920	G1859	G1780	A1619	C1495	A1410
A	A2268	C	U2066	C1921	C1859	G1783	G1620	G1496	G1411
A	U2269	G	G2067	C1922	G1862	U1788	U1625	A1497	A1415
U2339	U2270	G	C2071	U1925	C1864	U1789	A1626	U1498	U1416
C2340	G2273	A	G2072	G1926	G1865	G1790	G1627	U1499	G1423
A2341	A2274	A	G2073	A1927	G1866	G1791	U1628	G1500	G1425
U2342	G2277	C	U2079	C1928	G1867	C1792	C1629	G1501	G1426
U2343	A2282	G	G2080	A1929	U1868	C1793	A1630	A1502	U1427
A2344	G2283	U	A2081	G1930	G1869	C1794	G1631	U1503	C1424
A2345	U2284	C	G2082	G1931	C1870	U1799	A1632	U1504	G1425
U2346	G2285	G	G2083	A1932	U1871	A1721	U1633	G1505	U1427
G2347	U2286	A	U2084	G1933	G1872	A1722	A1634	G1509	G1429
G2348	G2287	U	A2085	C1934	U1873	U1723	A1635	U1510	U1430
A2349	U2288	C	G2086	G1935	A1874	U1724	U1636	C1511	U1431
G2350	C2289	U	U2087	C2001	A1875	G1725	G1637	U1512	A1432
U2351	U2290	U	G2088	G2007	G1876	A1726	U1638	G1513	U1433
G2352	U2291	G	A2089	U2008	G1877	U1732	C1648	C1514	U1434
U2353	C2292	U	G2090	A2009	U1878	A1733	G1649	A1517	G1445
U2354	U2293	A	C2091	U2010	U1879	A1734	U1518	U1446	U1446
A2355	G2294	G	U2092	C1941	A1880	C1735	U1519	U1447	U1447
G2356	U2295	C	U2093	U1942	A1881	U1740	U1520	U1448	U1448
A2357	C2296	A	G2094	A1943	G1882	A1741	A1521	U1449	U1449
U2358	U2297	U	U2095	U1944	A1883	G1742	G1522	U1450	U1451
G2359	A2298	C	U2096	U1945	G1884	A1743	G1523	C1452	G1453
A2360	U2299	G	U2097	A1946	U1885	U1744	U	U1454	U
U2361	C2299	U	G2098	C1947	G1886	G1747	C	U	U
A2362	U2300	U	U2100	U1948	U1887	U1750	U1588	U	U
A2363	A2301	A	U2101	U1949	U1888	U1753	U1589	A	A
U2364	U2302	C	U2102	U1950	G1889	C1754	C1590	U1459	U1459
G2365	G2303	G	U2103	C1951	U1890	U1755	U1594	U1460	U1460
U2366	C2304	U	G2104	U1952	U1891	U1756	C1595	C1461	C1461
U2367	U2305	C	A2105	U1953	U1892	U1757	G1596	G1462	G1462
G2368	G2306	G	C2106	A1954	G1893	U1828	U1597	U1463	U1463
C2369	U2307	U	U2107	U1955	G1894	A1829	G1677	U1464	U1464
U2370	G2308	C	G2108	G1956	C1895	U1830	U1680	G1465	G1465
C2371	C2309	U	U2109	U1957	U1896	A1671	U1681	A	A
U2372	U2310	U	A2110	U1958	U1897	U1674	U1692	U1601	G1469
U2373	U2311	C	U2111	U1959	C1898	U1675	U1693	U1602	G1470
U2374	G2312	A	U2112	G1960	U1899	G1676	U1694	U1603	
A2313	A2313	U	C2110	U1963	C1901	U1762	U1695	U1604	
A2314	U2314	U	U2111	A1964	G1902	U1763	U1696	U1605	
A2315	G2315	C	U2112	U1965	U1903	A1764	U1697	U1606	
G2316	U2316	U	A2040	A1966	G1904	A1765	U1698	U1607	
G2317	U2317	G	U2041	U1967	U1905		U1699	U1608	
U2318	U2318	U	A2042	C1968	G1906		U1699	U1609	
U2319	U2319	U	U2043	U1969	U1907		U1699	U1610	
A2385	C2320	C	A2121	U1970	U1908		U1699	U1611	
U2386	U2321	G	U2122	U1971	U1909		U1699	U1612	
A2387	G2322	U	A2123	U1972	U1910		U1699	U1613	
A2388	U2323	G	U2124	U1973	U1911		U1699	U1614	
G2389	U2324	A	U2125	U1974	U1912		U1699	U1615	
U2390	G2325	C	C	U1975	U1913		U1699	U1616	
U2391	U2326	G		U1976	U1914		U1699	U1617	
				U1977	U1915		U1699	U1618	
				U1978	U1916		U1699	U1619	
				U1979	U1917		U1699	U1620	
				U1980	U1918		U1699	U1621	
				U1981	U1919		U1699	U1622	
				U1982	U1920		U1699	U1623	
				U1983	U1921		U1699	U1624	
				U1984	U1922		U1699	U1625	
				U1985	U1923		U1699	U1626	
				U1986	U1924		U1699	U1627	
				U1987	U1925		U1699	U1628	
				U1988	U1926		U1699	U1629	
				U1989	U1927		U1699	U1630	
				U1990	U1928		U1699	U1631	
				U1991	U1929		U1699	U1632	
				U1992	U1930		U1699	U1633	
				U1993	U1931		U1699	U1634	
				U1994	U1932		U1699	U1635	
				U1995	U1933		U1699	U1636	
				U1996	U1934		U1699	U1637	
				U1997	U1935		U1699	U1638	
				U1998	U1936		U1699	U1639	
				U1999	U1937		U1699	U1640	
				U2000	U1938		U1699	U1641	
				U2001	U1939		U1699	U1642	
				U2002	U1940		U1699	U1643	
				U2003	U1941		U1699	U1644	
				U2004	U1942		U1699	U1645	
				U2005	U1943		U1699	U1646	
				U2006	U1944		U1699	U1647	
				U2007	U1945		U1699	U1648	
				U2008	U1946		U1699	U1649	
				U2009	U1947		U1699	U1650	
				U2010	U1948		U1699	U1651	
				U2011	U1949		U1699	U1652	
				U2012	U1950		U1699	U1653	
				U2013	U1951		U1699	U1654	
				U2014	U1952		U1699	U1655	
				U2015	U1953		U1699	U1656	
				U2016	U1954		U1699	U1657	
				U2017	U1955		U1699	U1658	
				U2018	U1956		U1699	U1659	
				U2019	U1957		U1699	U1660	
				U2020	U1958		U1699	U1661	
				U2021	U1959		U1699	U1662	
				U2022	U1960		U1699	U1663	
				U2023	U1961		U1699	U1664	
				U2024	U1962		U1699	U1665	
				U2025	U1963		U1699	U1666	
				U2026	U1964		U1699	U1667	
				U2027	U1965		U1699	U1668	
				U2028	U1966		U1699	U1669	
				U2029	U1967		U1699	U1670	
				U2030	U1968		U1699	U1671	
				U2031	U1969		U1699	U1672	
				U2032	U1970		U1699	U1673	
				U2033	U1971		U1699	U1674	
				U2034	U1972		U1699	U1675	
				U2035	U1973		U1699	U1676	
				U2036	U1974		U1699	U1677	
				U2037	U1975		U1699	U1678	
				U2038	U1976		U1699	U1679	
				U2039	U1977		U1699	U1680	
				U2040	U1978		U1699	U1681	
				U2041	U1979		U1699	U1682	
				U2042	U1980		U1699	U1683	
				U2043	U1981		U1699	U1684	
				U2044	U1982		U1699	U1685	
				U2045	U1983		U1699	U1686	
				U2046	U1984		U1699	U1687	
				U2047	U1985		U1699	U1688	
				U2048	U1986		U1699	U1689	
				U2049	U1987		U1699	U1690	
				U2050	U1988		U1699	U1691	
				U2051	U1989		U1699	U1692	
				U2052	U1990		U1699	U1693	
				U2053	U1991		U1699	U1694	
				U2054	U1992		U1699	U1695	
				U2055	U1993		U1699	U1696	
				U2056	U1994		U1699	U1697	
				U2057	U1995		U1699	U1698	
				U2058	U1996		U1699	U1699	
				U2059	U1997		U1699	U1700	
				U2060	U1998		U1699	U1701	
				U2061	U1999		U1699	U1702	
				U2062	U2000		U1699	U1703	
				U2063	U2001		U1699	U1704	
				U2064	U2002		U1699	U1705	
				U2065	U2003		U1699	U1706	
				U2066	U2004		U1699	U1707	
				U2067	U2005		U1699	U1708	
				U2068	U2006		U1699		



- Molecule 27: 5S rRNA



## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	49223	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	35	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.229	Depositor
Minimum map value	-0.118	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.03	Depositor
Map size (Å)	385.83997, 385.83997, 385.83997	wwPDB
Map dimensions	364, 364, 364	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.06, 1.06, 1.06	Depositor

## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: G6V

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	0.37	0/927	0.53	0/1239
2	B	0.40	0/2129	0.53	0/2858
3	C	0.45	0/955	0.64	0/1265
4	D	0.36	0/795	0.55	0/1062
5	E	0.36	0/861	0.51	0/1159
6	F	0.37	0/719	0.70	1/959 (0.1%)
7	G	0.29	0/737	0.46	0/983
8	H	0.27	0/735	0.51	0/986
9	I	0.41	0/598	0.53	0/794
10	J	0.42	0/469	0.54	0/625
11	K	0.38	0/473	0.59	0/631
12	L	0.41	0/1652	0.58	0/2216
13	M	0.48	1/434 (0.2%)	0.83	5/585 (0.9%)
14	N	0.40	0/404	0.59	0/537
15	O	0.33	0/385	0.58	0/513
16	P	0.48	0/376	0.57	0/491
17	Q	0.44	0/526	0.52	0/690
18	R	0.34	0/299	0.56	0/393
19	S	0.37	0/1336	0.52	0/1799
20	V	0.40	0/1160	0.49	0/1563
21	W	0.35	0/855	0.46	0/1145
22	X	0.38	0/948	0.53	0/1262
23	Y	0.38	0/1113	0.52	0/1493
24	Z	0.37	0/905	0.53	0/1207
25	a	0.29	0/589	0.50	0/785
26	1	0.43	0/63551	0.41	9/99100 (0.0%)
27	2	0.33	1/2475 (0.0%)	0.83	22/3854 (0.6%)
All	All	0.41	2/86406 (0.0%)	0.46	37/130194 (0.0%)

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	M	20	ARG	C-O	-5.32	1.17	1.24
27	2	68	U	C1'-N1	5.07	1.56	1.48

The worst 5 of 37 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1	1931	G	C1'-C2'-O2'	-15.14	85.68	108.40
27	2	20	A	C4'-C3'-O3'	9.26	126.89	113.00
27	2	81	A	C1'-C2'-O2'	-9.18	94.63	108.40
27	2	80	G	C1'-C2'-O2'	-8.80	95.20	108.40
27	2	19	G	C1'-C2'-O2'	-8.77	95.24	108.40

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	915	0	987	55	0
2	B	2094	0	2205	99	0
3	C	943	0	1014	46	0
4	D	785	0	825	39	0
5	E	853	0	914	36	0
6	F	711	0	750	39	0
7	G	730	0	781	56	0
8	H	727	0	777	42	0
9	I	592	0	602	25	0
10	J	463	0	501	13	0
11	K	472	0	493	23	0
12	L	1628	0	1667	99	0
13	M	432	0	472	15	0
14	N	397	0	407	16	0
15	O	382	0	382	22	0
16	P	372	0	420	18	0
17	Q	521	0	586	32	0
18	R	296	0	340	13	0
19	S	1318	0	1377	67	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
20	V	1138	0	1130	43	0
21	W	850	0	895	46	0
22	X	938	0	977	40	0
23	Y	1089	0	1155	43	0
24	Z	902	0	958	42	0
25	a	583	0	598	29	0
26	1	56747	0	28540	1278	0
27	2	2214	0	1120	56	0
28	1	26	18	0	1	0
All	All	79118	18	50873	2107	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 17.

The worst 5 of 2107 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)
21:W:3:GLN:N	21:W:6:THR:HG1	1.37	1.20
26:1:1489:A:N6	26:1:1509:G:H21	1.45	1.15
26:1:1489:A:H62	26:1:1509:G:N2	1.44	1.14
26:1:275:A:H62	26:1:296:G:N2	1.52	1.06
24:Z:31:GLU:HG2	24:Z:118:ILE:HG12	1.45	0.99

There are no symmetry-related clashes.

## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	111/116 (96%)	95 (86%)	16 (14%)	0	100	100
2	B	272/276 (99%)	236 (87%)	36 (13%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	C	114/118 (97%)	108 (95%)	6 (5%)	0	100	100
4	D	98/102 (96%)	87 (89%)	11 (11%)	0	100	100
5	E	109/116 (94%)	100 (92%)	9 (8%)	0	100	100
6	F	85/91 (93%)	72 (85%)	13 (15%)	0	100	100
7	G	91/105 (87%)	78 (86%)	13 (14%)	0	100	100
8	H	91/217 (42%)	82 (90%)	9 (10%)	0	100	100
9	I	75/85 (88%)	64 (85%)	11 (15%)	0	100	100
10	J	57/62 (92%)	47 (82%)	10 (18%)	0	100	100
11	K	55/69 (80%)	50 (91%)	5 (9%)	0	100	100
12	L	213/217 (98%)	189 (89%)	24 (11%)	0	100	100
13	M	54/59 (92%)	47 (87%)	7 (13%)	0	100	100
14	N	48/57 (84%)	43 (90%)	5 (10%)	0	100	100
15	O	44/49 (90%)	41 (93%)	3 (7%)	0	100	100
16	P	42/50 (84%)	39 (93%)	3 (7%)	0	100	100
17	Q	62/65 (95%)	57 (92%)	5 (8%)	0	100	100
18	R	35/37 (95%)	30 (86%)	5 (14%)	0	100	100
19	S	165/207 (80%)	146 (88%)	19 (12%)	0	100	100
20	V	141/145 (97%)	127 (90%)	14 (10%)	0	100	100
21	W	108/122 (88%)	99 (92%)	9 (8%)	0	100	100
22	X	119/146 (82%)	108 (91%)	11 (9%)	0	100	100
23	Y	134/144 (93%)	127 (95%)	7 (5%)	0	100	100
24	Z	110/122 (90%)	101 (92%)	9 (8%)	0	100	100
25	a	67/119 (56%)	61 (91%)	6 (9%)	0	100	100
All	All	2500/2896 (86%)	2234 (89%)	266 (11%)	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	99/102 (97%)	99 (100%)	0	100	100
2	B	221/223 (99%)	221 (100%)	0	100	100
3	C	96/98 (98%)	96 (100%)	0	100	100
4	D	85/86 (99%)	85 (100%)	0	100	100
5	E	90/94 (96%)	90 (100%)	0	100	100
6	F	79/82 (96%)	79 (100%)	0	100	100
7	G	80/90 (89%)	80 (100%)	0	100	100
8	H	81/190 (43%)	81 (100%)	0	100	100
9	I	61/66 (92%)	61 (100%)	0	100	100
10	J	49/52 (94%)	49 (100%)	0	100	100
11	K	52/62 (84%)	52 (100%)	0	100	100
12	L	173/175 (99%)	173 (100%)	0	100	100
13	M	50/53 (94%)	49 (98%)	1 (2%)	48	72
14	N	45/50 (90%)	45 (100%)	0	100	100
15	O	44/47 (94%)	44 (100%)	0	100	100
16	P	39/45 (87%)	39 (100%)	0	100	100
17	Q	55/56 (98%)	55 (100%)	0	100	100
18	R	35/35 (100%)	35 (100%)	0	100	100
19	S	141/170 (83%)	141 (100%)	0	100	100
20	V	122/123 (99%)	122 (100%)	0	100	100
21	W	92/100 (92%)	92 (100%)	0	100	100
22	X	96/112 (86%)	96 (100%)	0	100	100
23	Y	113/119 (95%)	113 (100%)	0	100	100
24	Z	95/102 (93%)	95 (100%)	0	100	100
25	a	60/95 (63%)	60 (100%)	0	100	100
All	All	2153/2427 (89%)	2152 (100%)	1 (0%)	100	100

All (1) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
13	M	18	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 40 such sidechains are listed below:

Mol	Chain	Res	Type
18	R	36	GLN
20	V	59	ASN
19	S	29	ASN
19	S	169	ASN
23	Y	46	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
26	1	2634/2923 (90%)	628 (23%)	20 (0%)
27	2	103/115 (89%)	44 (42%)	3 (2%)
All	All	2737/3038 (90%)	672 (24%)	23 (0%)

5 of 672 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
26	1	13	A
26	1	26	G
26	1	34	U
26	1	35	G
26	1	44	A

5 of 23 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
26	1	1926	A
26	1	1988	C
26	1	1953	U
26	1	2827	A
26	1	433	U

## 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

1 ligand is modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
28	G6V	1	3001	-	28,28,28	2.11	8 (28%)	39,39,39	2.63	15 (38%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	G6V	1	3001	-	-	4/17/37/37	0/3/3/3

The worst 5 of 8 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	1	3001	G6V	C20-C10	6.26	1.60	1.51
28	1	3001	G6V	C30-N29	3.76	1.42	1.33
28	1	3001	G6V	O11-C12	3.37	1.40	1.35
28	1	3001	G6V	C12-N8	2.80	1.39	1.36
28	1	3001	G6V	C6-C5	2.79	1.43	1.38

The worst 5 of 15 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	1	3001	G6V	C9-N8-C12	-9.70	104.00	111.17
28	1	3001	G6V	C10-C9-N8	4.89	106.47	101.85
28	1	3001	G6V	C4-N8-C12	4.64	130.85	125.98
28	1	3001	G6V	C19-N14-C1	3.97	125.61	116.19
28	1	3001	G6V	C31-C30-N29	3.94	123.19	114.77

There are no chirality outliers.

All (4) torsion outliers are listed below:

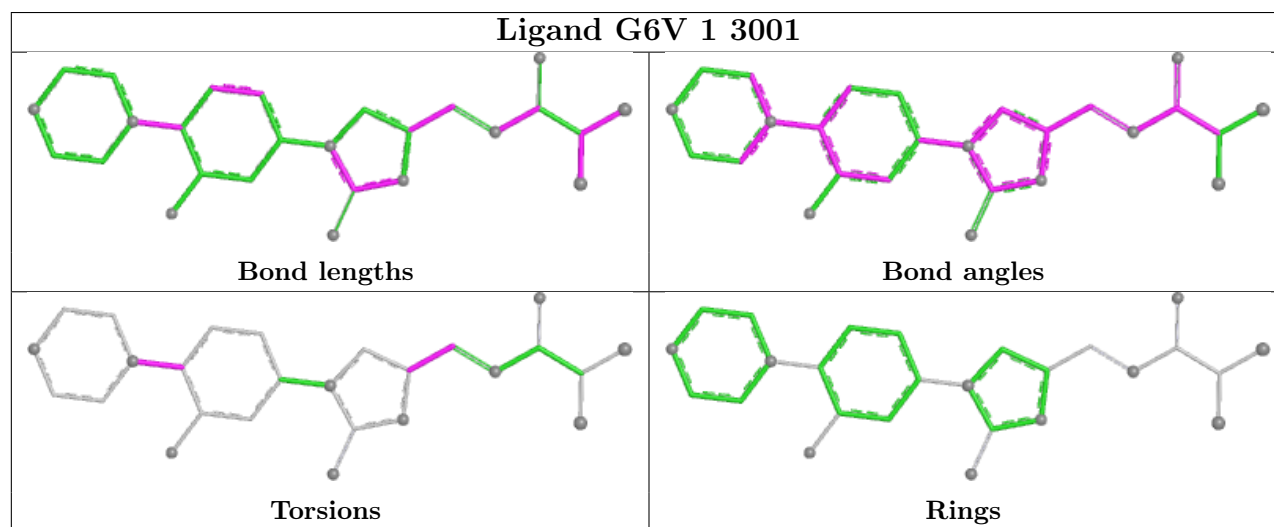
Mol	Chain	Res	Type	Atoms
28	1	3001	G6V	C9-C10-C20-N29
28	1	3001	G6V	C2-C1-N14-C19
28	1	3001	G6V	C6-C1-N14-C19
28	1	3001	G6V	O11-C10-C20-N29

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	1	3001	G6V	1	0

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



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

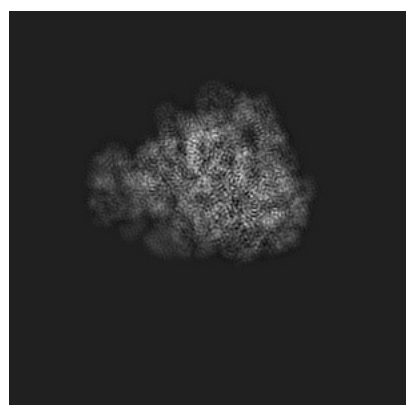
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-7867. These allow visual inspection of the internal detail of the map and identification of artifacts.

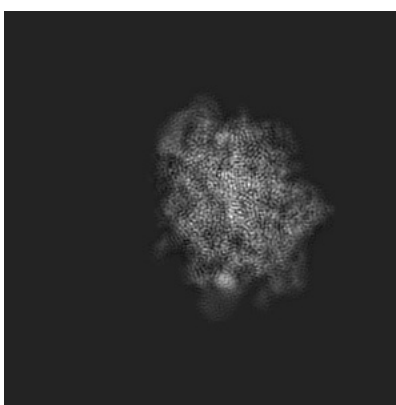
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

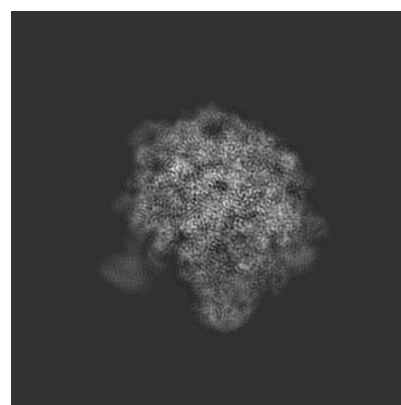
#### 6.1.1 Primary map



X



Y

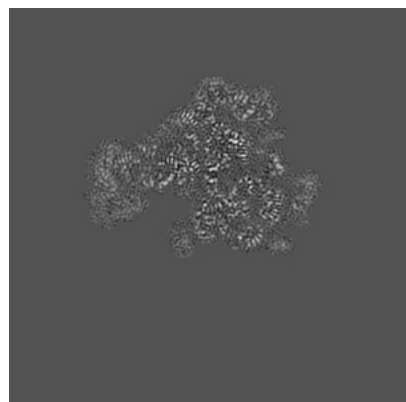


Z

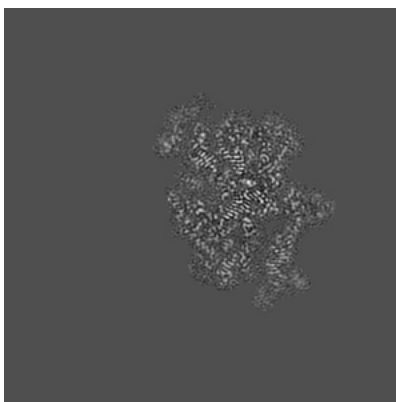
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

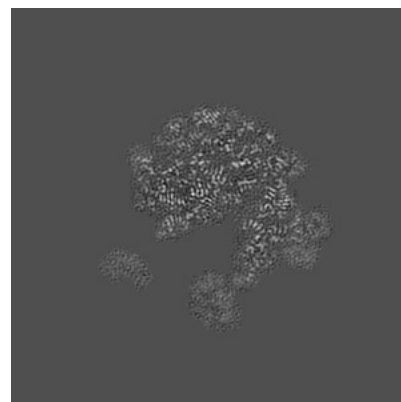
#### 6.2.1 Primary map



X Index: 182



Y Index: 182

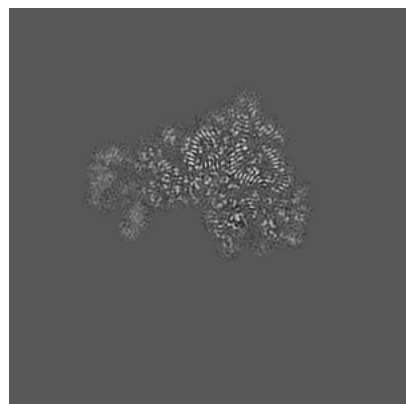


Z Index: 182

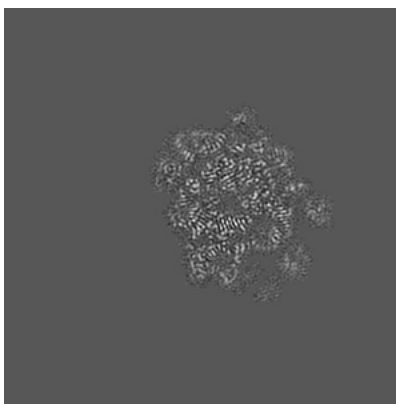
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

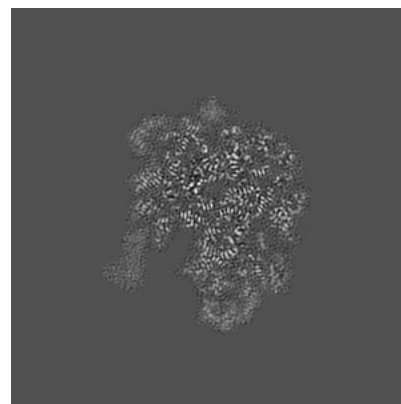
### 6.3.1 Primary map



X Index: 204



Y Index: 199

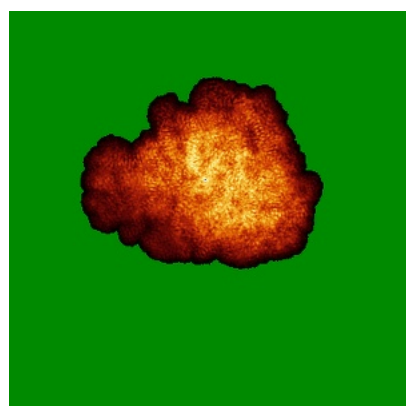


Z Index: 206

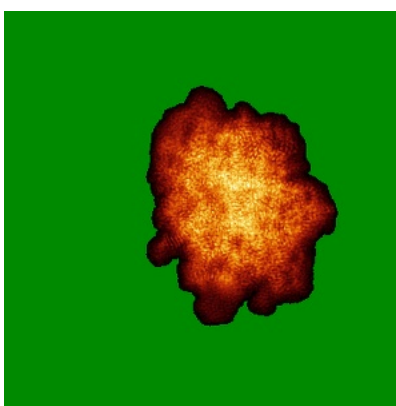
The images above show the largest variance slices of the map in three orthogonal directions.

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

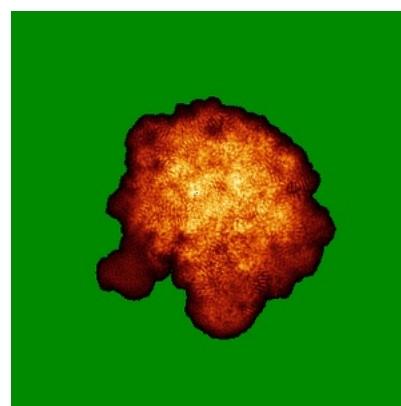
### 6.4.1 Primary map



X



Y

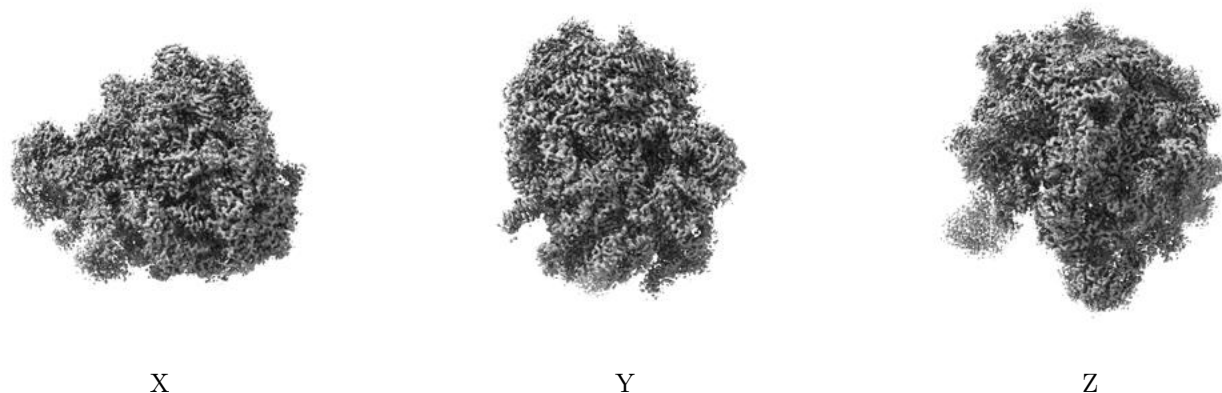


Z

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

## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

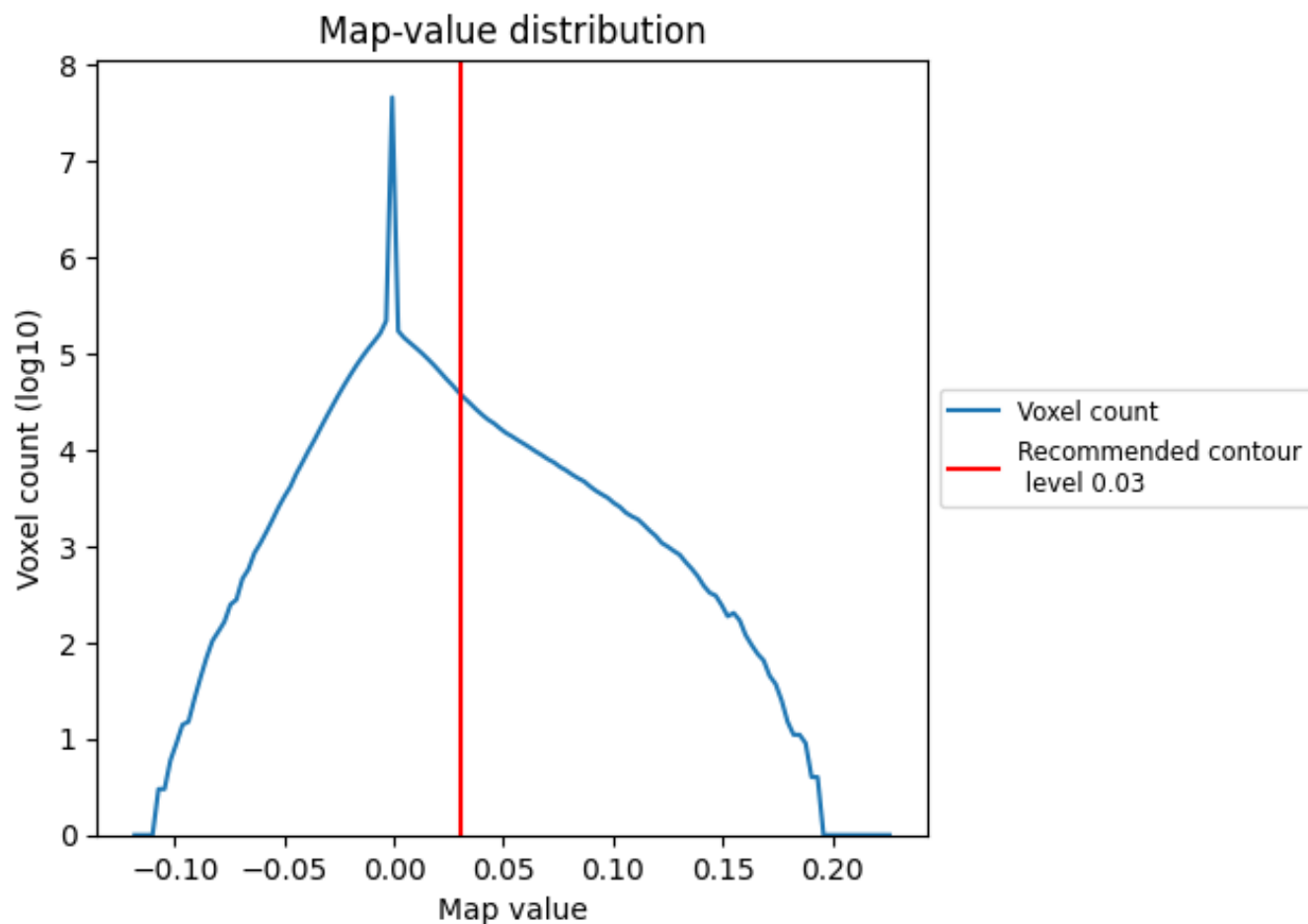
## 6.6 Mask visualisation [i](#)

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

## 7 Map analysis [i](#)

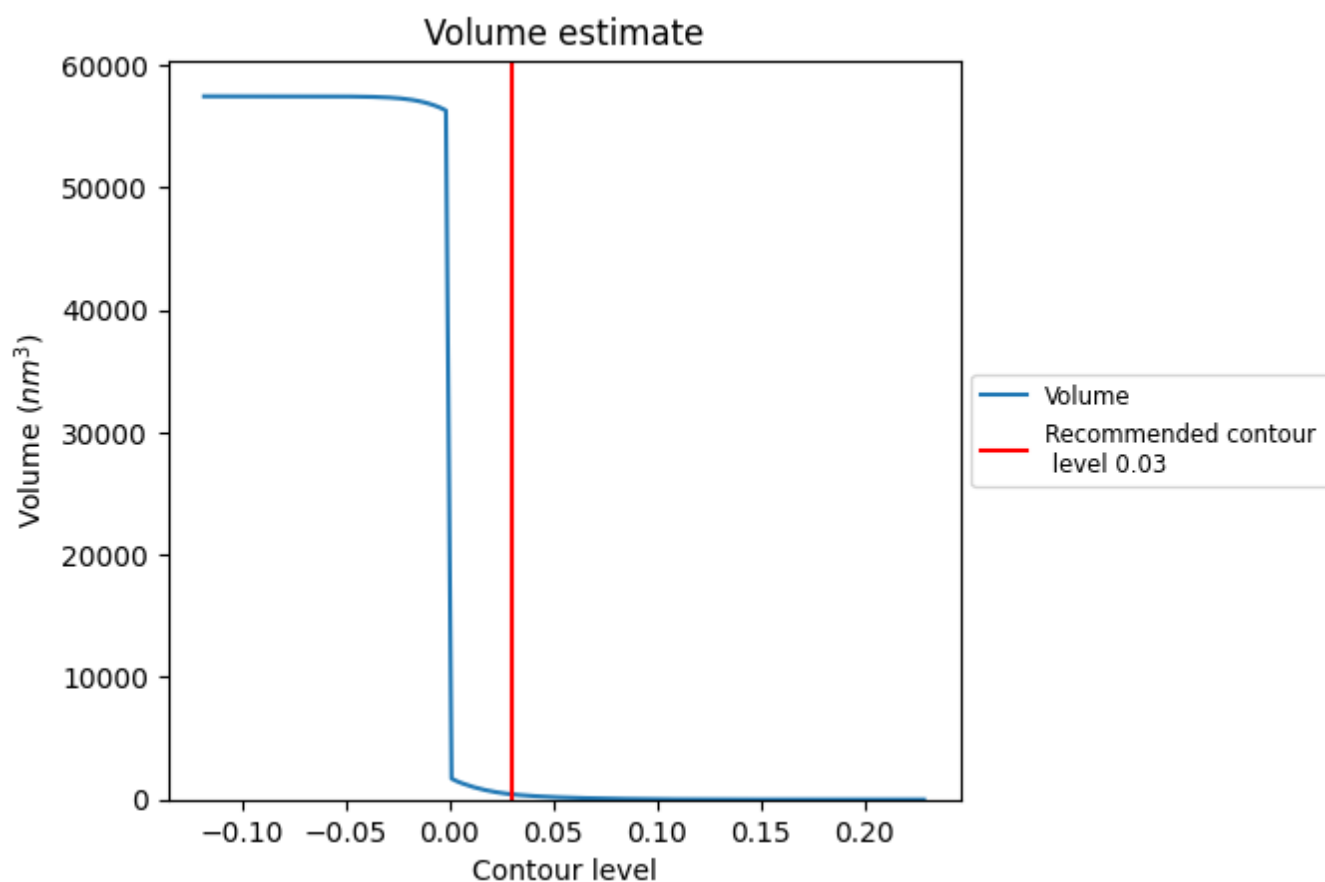
This section contains the results of statistical analysis of the map.

### 7.1 Map-value distribution [i](#)



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

## 7.2 Volume estimate [i](#)

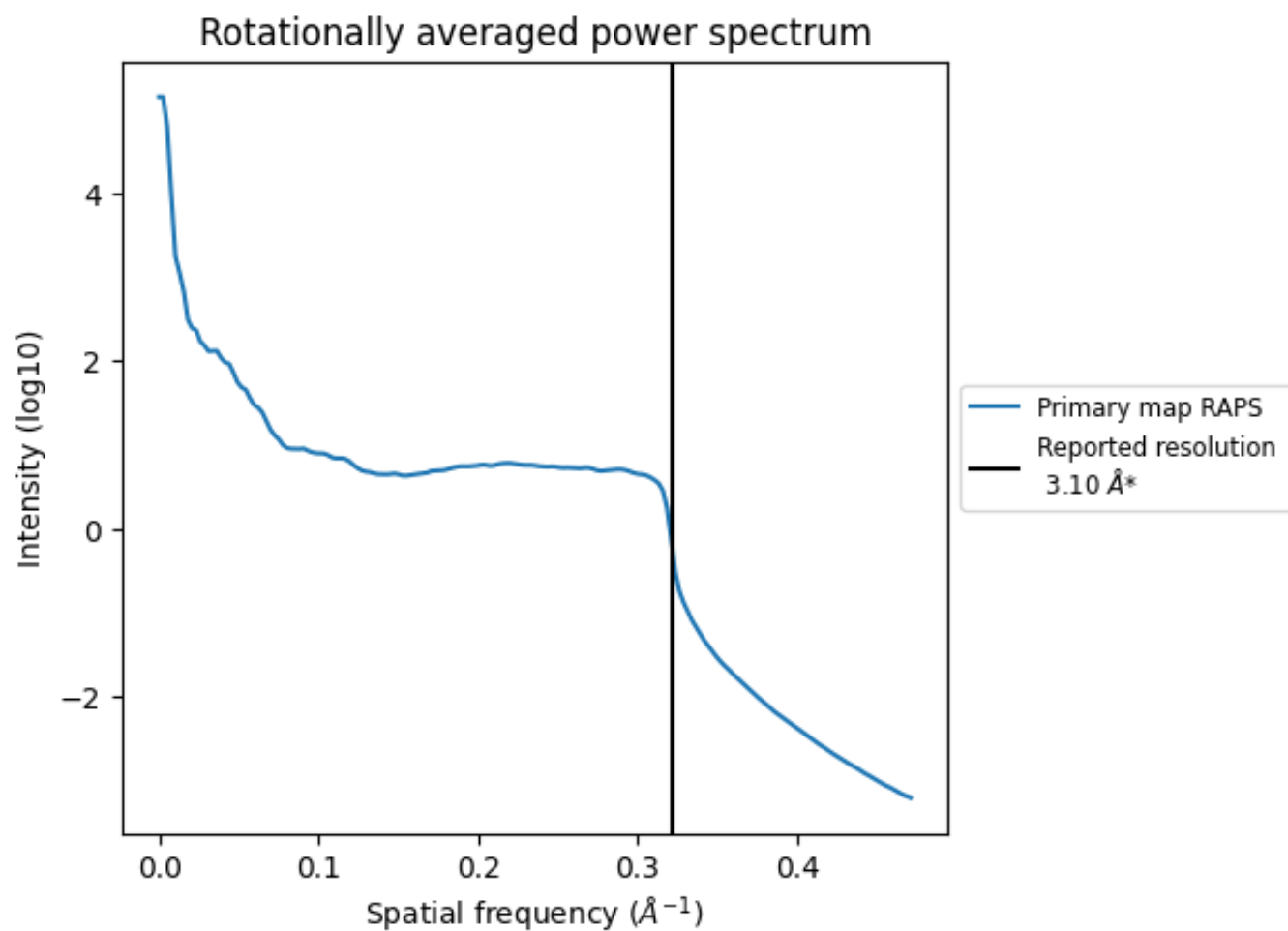


The volume at the recommended contour level is 434 nm<sup>3</sup>; this corresponds to an approximate mass of 392 kDa.

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



### 7.3 Rotationally averaged power spectrum ⓘ



\*Reported resolution corresponds to spatial frequency of 0.323 Å<sup>-1</sup>

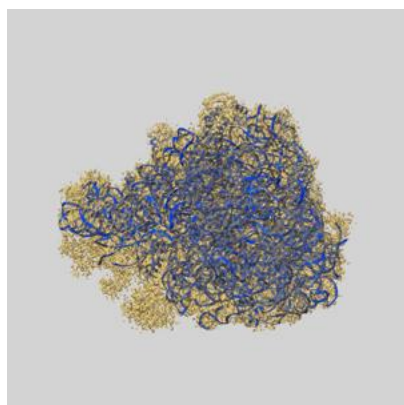
## 8 Fourier-Shell correlation

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

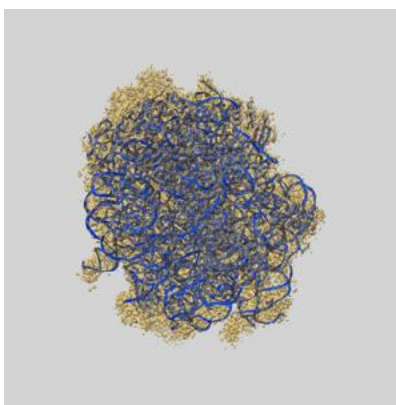
## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-7867 and PDB model 6DDD. Per-residue inclusion information can be found in [section 3](#) on [page 9](#).

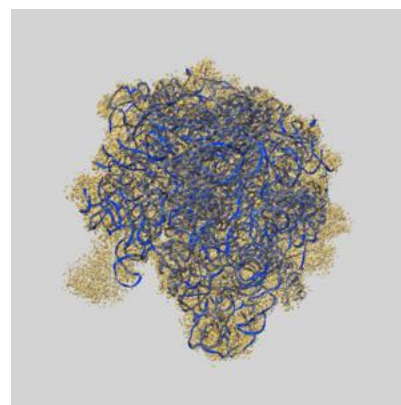
### 9.1 Map-model overlay [i](#)



X



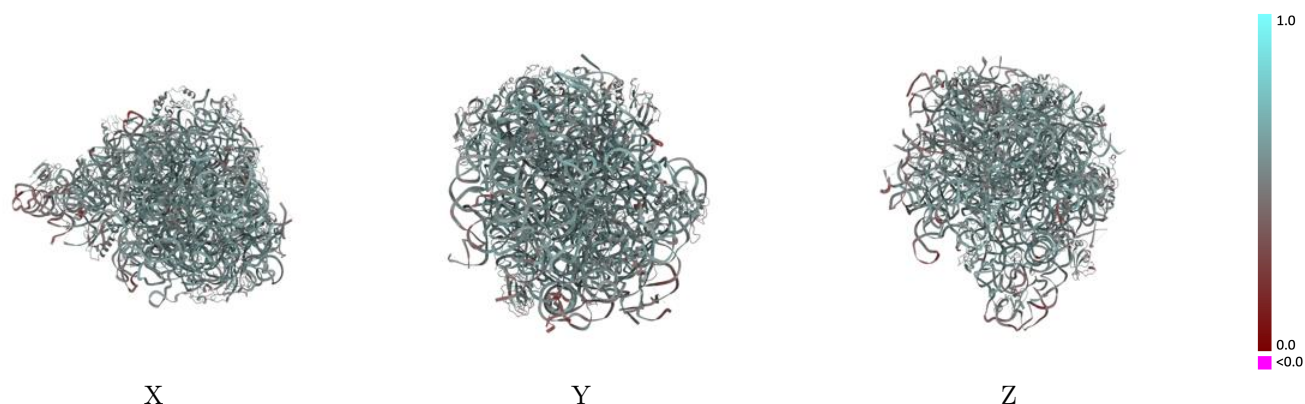
Y



Z

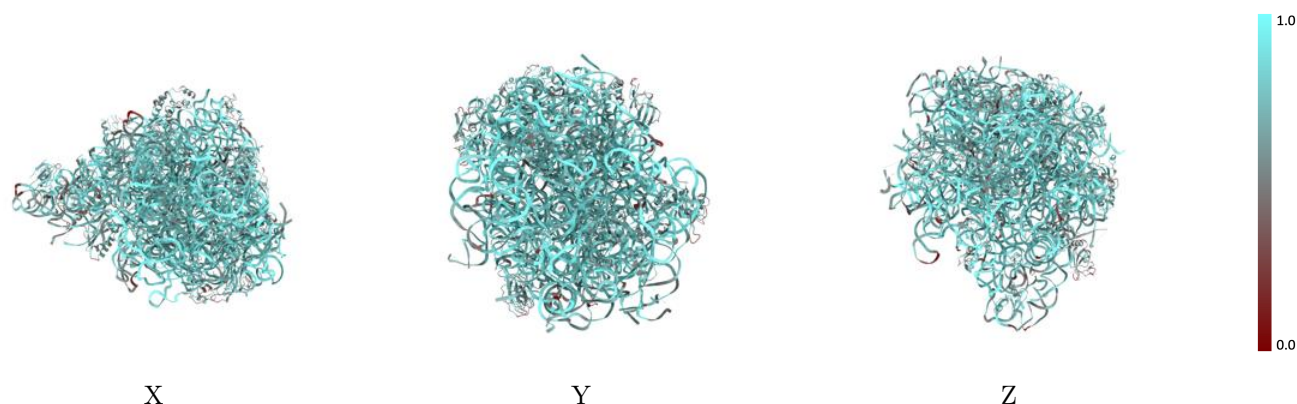
The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



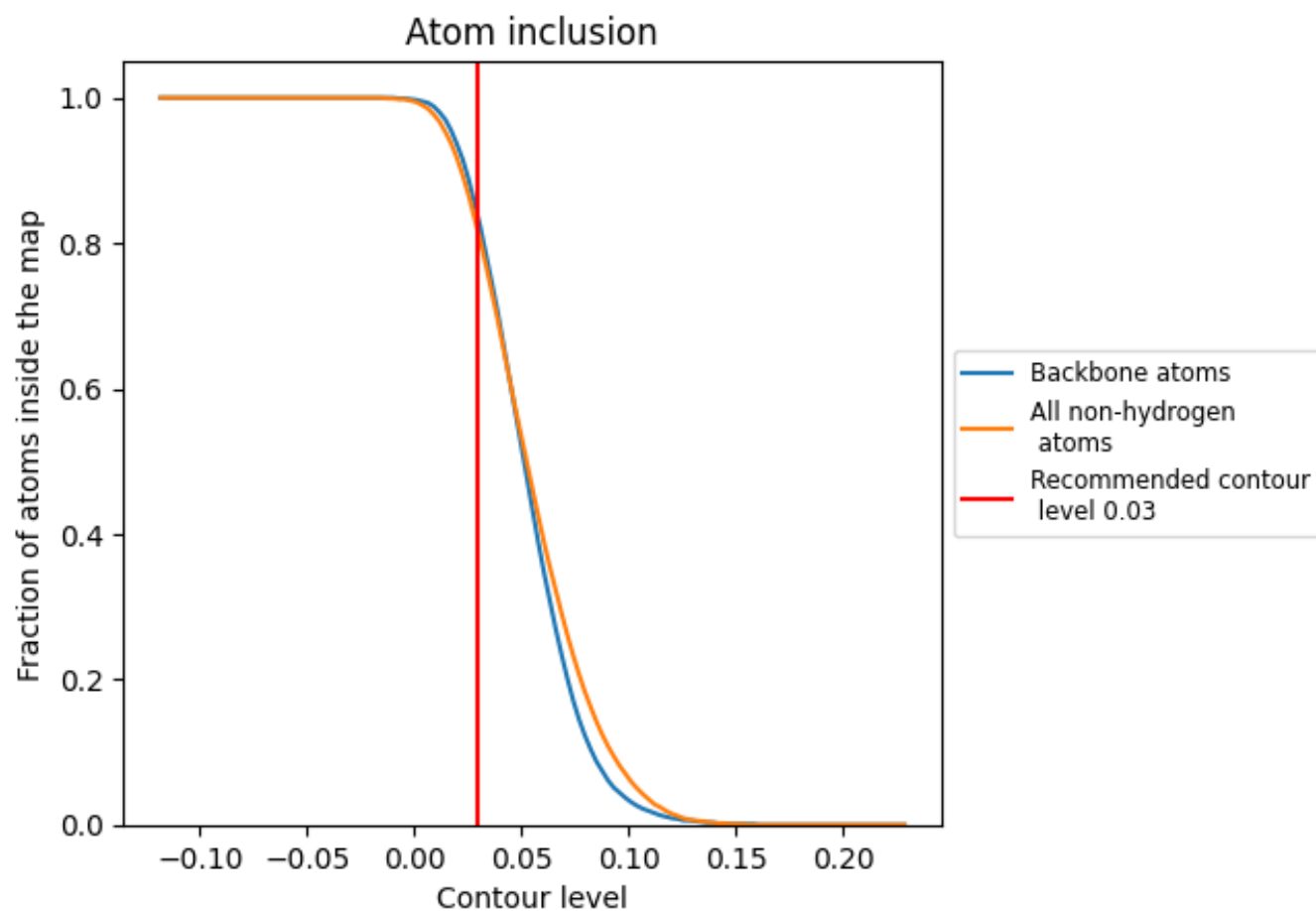
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.03).

























































## 9.4 Atom inclusion [i](#)



At the recommended contour level, 83% of all backbone atoms, 81% 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	 0.8140	 0.5540
1	 0.8570	 0.5650
2	 0.7130	 0.4680
A	 0.6560	 0.5120
B	 0.7100	 0.5480
C	 0.7630	 0.5550
D	 0.6870	 0.5120
E	 0.7470	 0.5460
F	 0.6540	 0.5160
G	 0.5780	 0.4820
H	 0.4800	 0.4690
I	 0.7210	 0.5460
J	 0.6420	 0.5230
K	 0.6860	 0.4900
L	 0.7580	 0.5490
M	 0.6980	 0.5380
N	 0.7940	 0.5580
O	 0.6400	 0.5170
P	 0.8010	 0.6000
Q	 0.7790	 0.5820
R	 0.6760	 0.5370
S	 0.7100	 0.5400
V	 0.7500	 0.5430
W	 0.6660	 0.5280
X	 0.7220	 0.5440
Y	 0.7070	 0.5450
Z	 0.7260	 0.5470
a	 0.6650	 0.4990

