



wwPDB EM Validation Summary Report ⓘ

Nov 2, 2022 – 08:03 AM EDT

PDB ID : 5TB3
EMDB ID : EMD-8394
Title : Structure of rabbit RyR1 (EGTA-only dataset, class 3)
Authors : Clarke, O.B.; des Georges, A.; Zalk, R.; Marks, A.R.; Hendrickson, W.A.;
Frank, J.
Deposited on : 2016-09-11
Resolution : 4.70 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

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.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

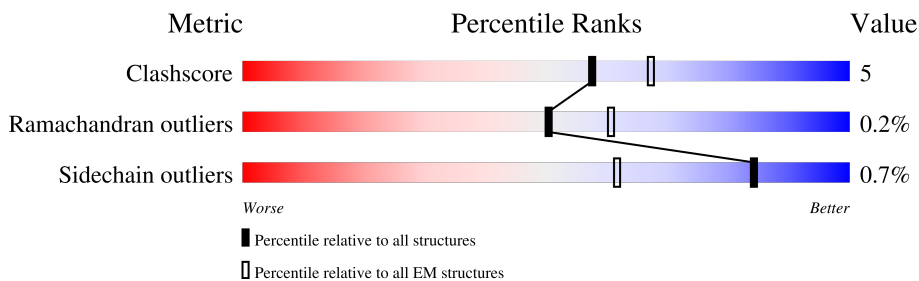
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 4.70 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	108	<p>80% (Poor fit), 81% (0 outliers), 18% (1 outlier), 1% (2 outliers), 0% (3+ outliers)</p>
1	F	108	<p>80% (Poor fit), 81% (0 outliers), 18% (1 outlier), 1% (2 outliers), 0% (3+ outliers)</p>
1	H	108	<p>80% (Poor fit), 81% (0 outliers), 18% (1 outlier), 1% (2 outliers), 0% (3+ outliers)</p>
1	J	108	<p>80% (Poor fit), 81% (0 outliers), 18% (1 outlier), 1% (2 outliers), 0% (3+ outliers)</p>
2	B	4416	<p>66% (Poor fit), 84% (0 outliers), 11% (1 outlier), 5% (2 outliers), 0% (3+ outliers)</p>
2	E	4416	<p>67% (Poor fit), 84% (0 outliers), 11% (1 outlier), 5% (2 outliers), 0% (3+ outliers)</p>
2	G	4416	<p>66% (Poor fit), 84% (0 outliers), 11% (1 outlier), 5% (2 outliers), 0% (3+ outliers)</p>
2	I	4416	<p>67% (Poor fit), 84% (0 outliers), 11% (1 outlier), 5% (2 outliers), 0% (3+ outliers)</p>

2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 121312 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 Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	F	107	818	516	144	154	4	0	0
1	A	107	818	516	144	154	4	0	0
1	H	107	818	516	144	154	4	0	0
1	J	107	818	516	144	154	4	0	0

- Molecule 2 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	4196	29509	18692	5230	5430	157	0	0
2	E	4196	29509	18692	5230	5430	157	0	0
2	I	4196	29509	18692	5230	5430	157	0	0
2	G	4196	29509	18692	5230	5430	157	0	0

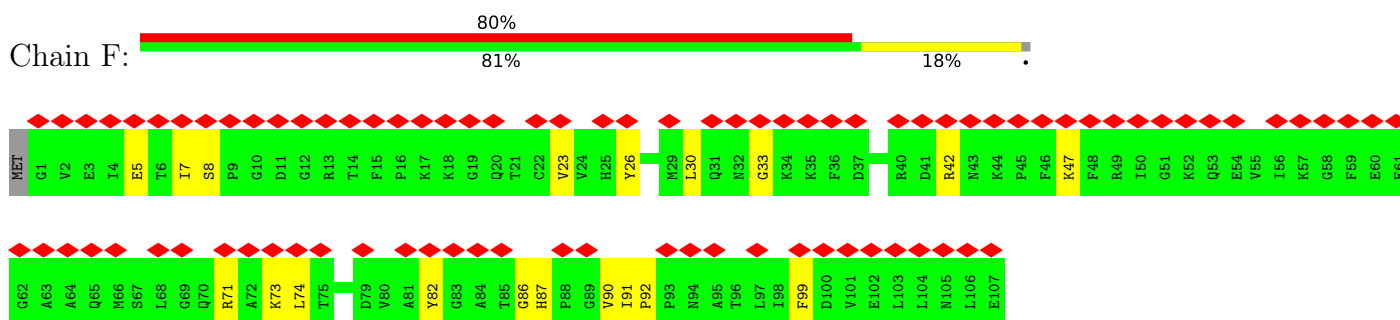
- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
3	B	1	Total	Zn	0
			1	1	
3	E	1	Total	Zn	0
			1	1	
3	I	1	Total	Zn	0
			1	1	
3	G	1	Total	Zn	0
			1	1	

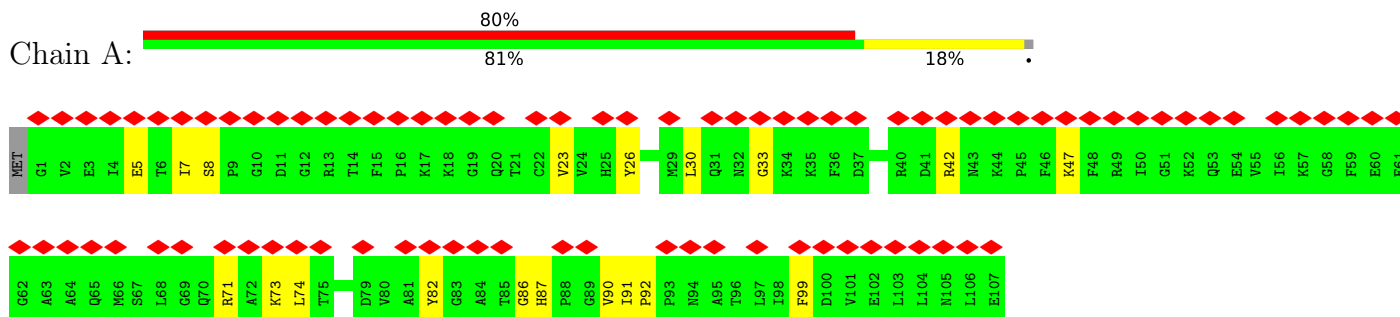
3 Residue-property plots [i](#)

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.

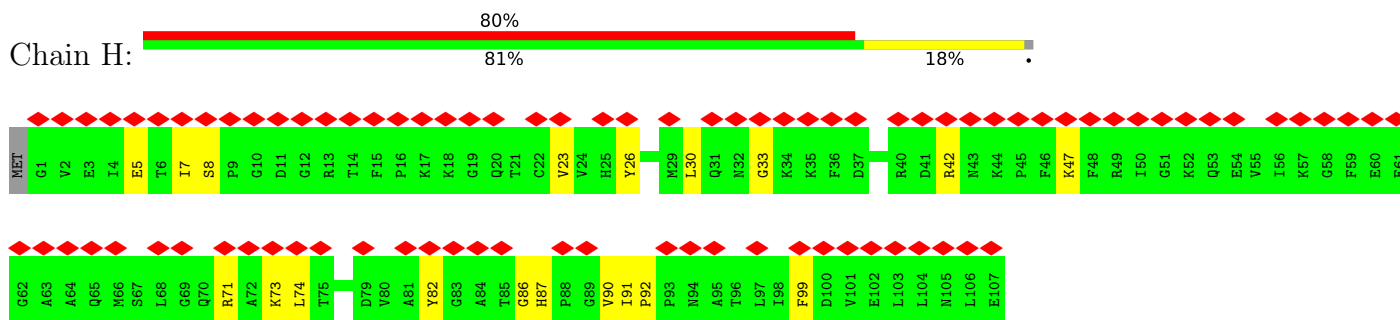
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



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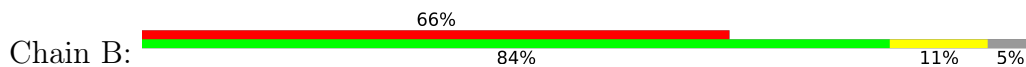


- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

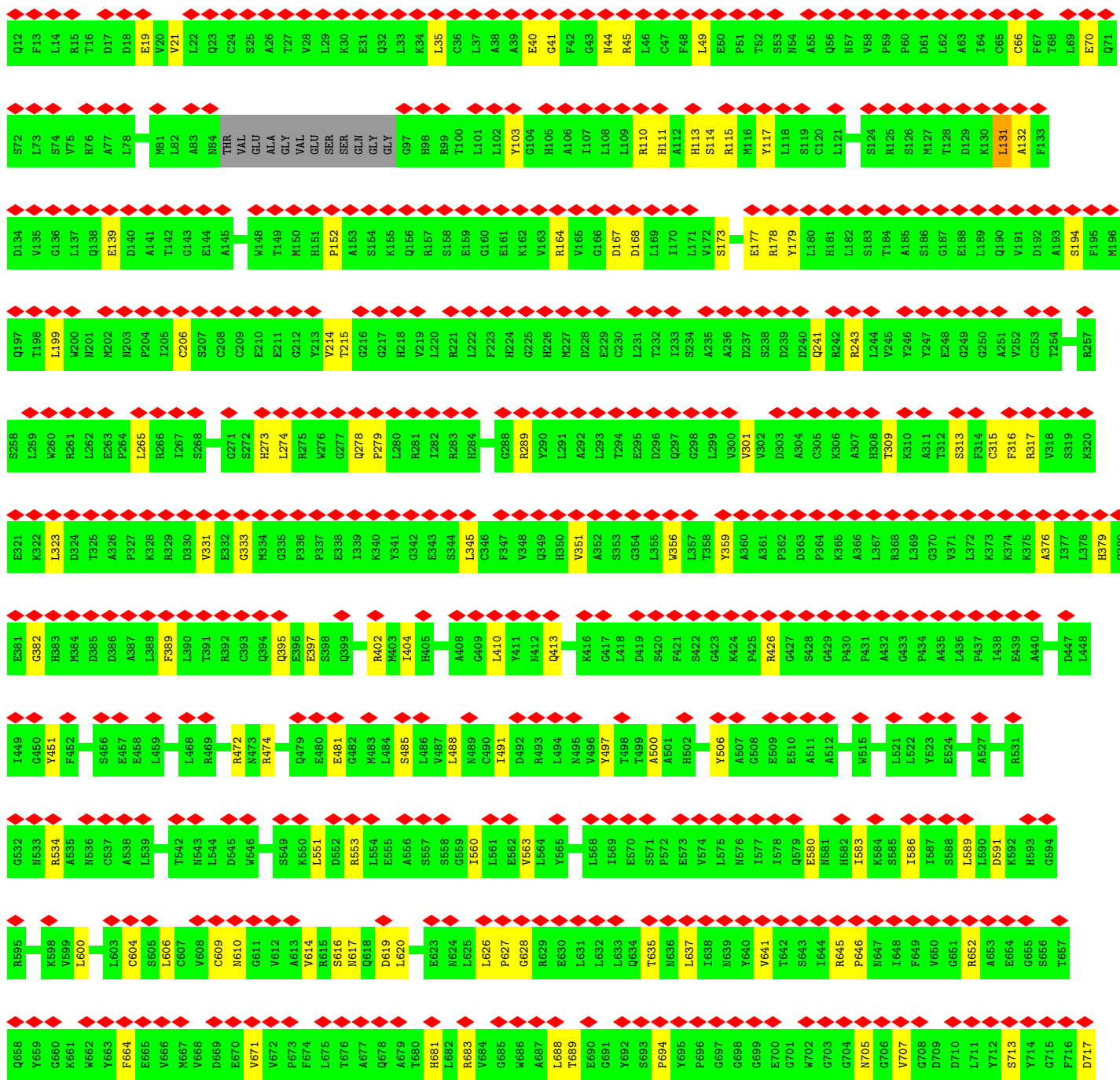




• Molecule 2: Ryanodine receptor 1



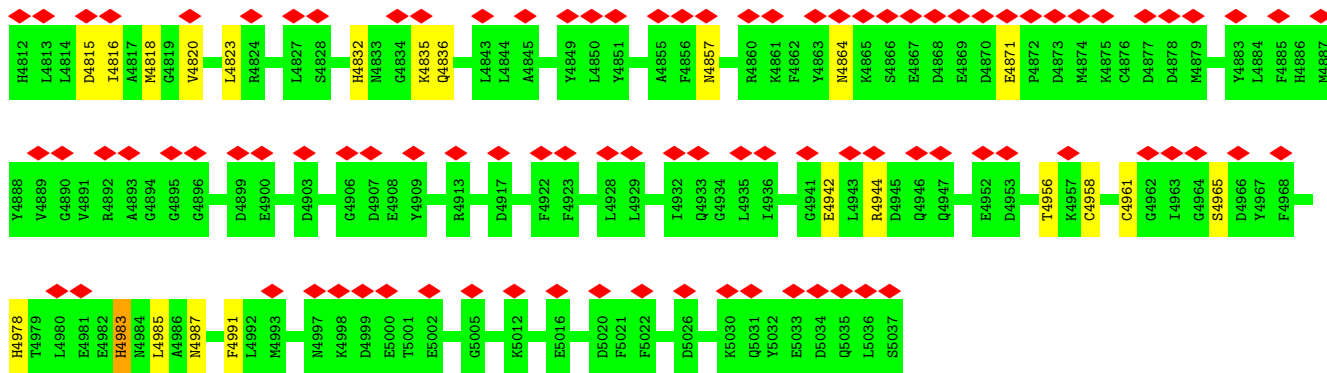
Chain B:



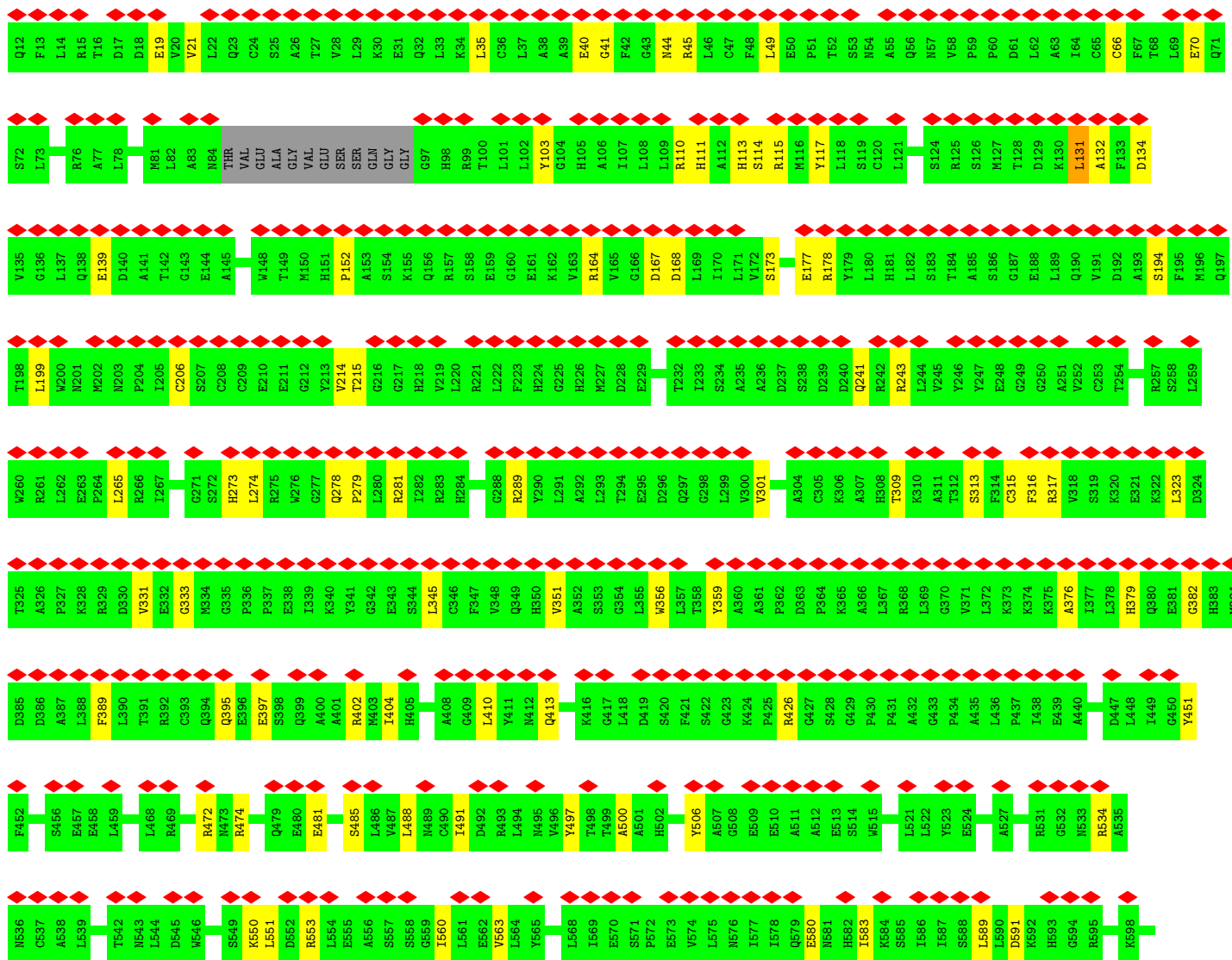
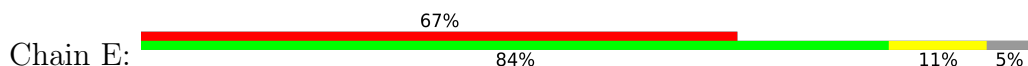
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S1576	A1577	A1578	M1579	F1580	L1581	S1582	E1583	R1584	K1585	M1586	P1587	A1588	P1589	Q1590	C1591	P1592	R1593	L1594	L1595	E1596	V1597	Q1598	M1599	M1600	M1601	P1602	V1603	S1606	R1607	M1608	H1611	F1612	L1613	Q1614	V1615	G1616	T1617	A1618	A1619	A1620	E1622	R1623	L1624	G1625	W1626	A1627	V1628	Q1629	C1630	Q1631	D1632	P1633	T1635	M1636	M1637						
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G1218	L1219	Q1220	E1221	G1222	F1223	E1224	A1227	L1228	Q1231	R1232	T1235	T1236	W1237	F1238	S1239	K1240	S1241	F1245	E1246	E1251	H1254	Y1255	E1256	V1257	A1258	R1259	M1260	D1261	G1262	T1263	V1264	D1265	T1266	P1267	P1268	C1269	L1270	R1271	L1272	A1273	H1274	R1275	X1276	X1277	X1278	X1279	X1280	X1281	X1282	X1285	X1286	X1287									
D1154	L1155	T1156	E1157	M1158	T1159	I1160	L1161	F1162	T1163	L1164	V1168	L1169	M1170	S1171	D1172	S1173	G1174	S1175	E1176	T1177	F1179	R1180	E1181	I1182	E1183	I1184	G1185	D1186	F1187	F1188	L1189	P1190	V1191	C1192	S1193	L1194	G1195	V1199	G1200	H1201	L1202	M1203	L1204	G1205	Q1206	D1207	V1208	S1209	S1210	L1211	R1212	F1213	F1214	A1215	I1216	C1217					
E1093	A1094	V1095	T1096	T1097	E1099	M1100	R1101	V1102	G1103	W1104	A1105	R1106	P1107	E1108	R1110	P1111	V1113	E1114	G1115	A1117	D1118	E1119	L1120	A1121	G1122	V1123	F1124	N1125	G1126	H1127	R1128	G1129	Q1130	R1131	W1132	H1133	L1134	G1135	S1136	F1139	G1140	R1141	P1142	W1143	S1144	S1145	G1146	D1147	V1148	Y1149	G1150	C1151	M1152	I1153							
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G841	P842	S843	R844	C845	L846	S847	H848	T849	D850	F851	V852	P853	C854	P855	V856	D857	THR	VAL	GLN	I861	V862	L863	P864	P865	H866	L867	E868	R869	I870	R871	E872	K873	L874	A875	A876	N877	I878	H879	E880	L881	W882	A883	L884	T885	R886	I887	E888	Q889	G890	W891	T892	Y893	G894	P895	V896	R897	D898	D899	N900		
G718	L719	H720	L721	G724	H725	V726	A727	R728	P729	L730	V731	S732	P733	Q734	Q735	H736	L737	L738	A739	P740	E741	S745	C747	L748	D749	S751	V752	P753	S754	V755	S756	F757	R758	V759	N760	G761	C762	P763	V764	Q765	Q766	V767	F768	E769	A770	F771	N772	L773	D774	G775	L776	F777	F778	P779	V780						
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X3146	X3147	X3148	X3149	X3150	X3151	X3152	X3153	X3154	X3155	X3156	X3157	X3158	X3159	X3160	X3161	X3162	X3163	X3170	X3171	X3172	X3173	X3174	X3175	X3176	X3177	X3178	X3179	X3180	X3181	X3182	X3183	X3184	X3185	X3186	X3187	X3188	X3189	X3190	X3191	X3192	X3193	X3194	X3195	X3196	X3197	X3198	X3199	X3200	X3201	X3202	X3203	X3204	X3205	X3206	X3207	X3208	X3209	X3210	X3211						
X3212	X3213	X3214	X3215	X3216	X3217	X3218	X3219	X3220	X3221	X3222	X3223	X3224	X3225	X3226	X3227	X3228	X3229	X3230	X3231	X3232	X3233	X3234	X3235	X3236	X3237	X3242	X3243	X3244	X3245	X3246	X3247	X3248	X3249	X3250	X3251	X3252	X3253	X3254	X3255	X3256	X3257	X3258	X3259	X3260	X3261	X3262	X3263	X3264	X3265	X3266	X3267	X3268	X3269	X3270	X3271	X3272	X3273	X3274	X3275	X3276	X3277	X3278	X3279	X3280	X3281
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G4742	M4743	D4744	L4745	A4746	L4748	E4749	I4750	T4751	A4752	H4753	F4754	E4755	R4756	K4757	I4758	T4759	P4760	Q4761	P4762	G4763	L4764	L4765	D4766	V4767	L4768	M4769	S4770	I4771	D4772	V4773	K4774	Y4775	F4780	G4781	V4782	L4783	F4784	T4785	D4786	F4789	L4790	Y4791	W4794	L4800	L4801	C4802	M4805	M4806	F4807	F4808	P4809	A4810	A4811					



• Molecule 2: Ryanodine receptor 1

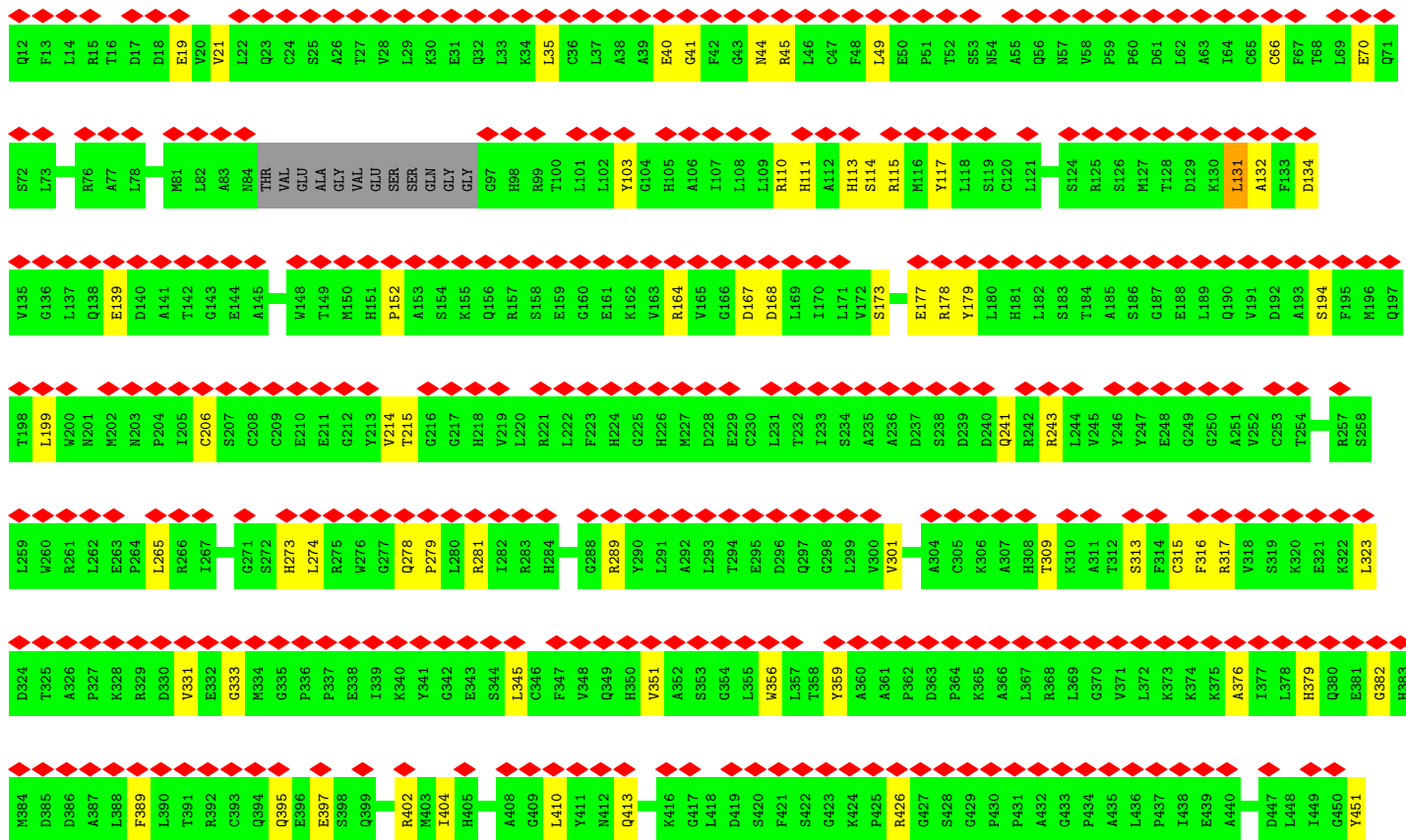
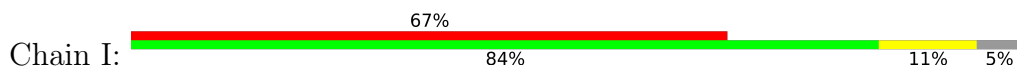


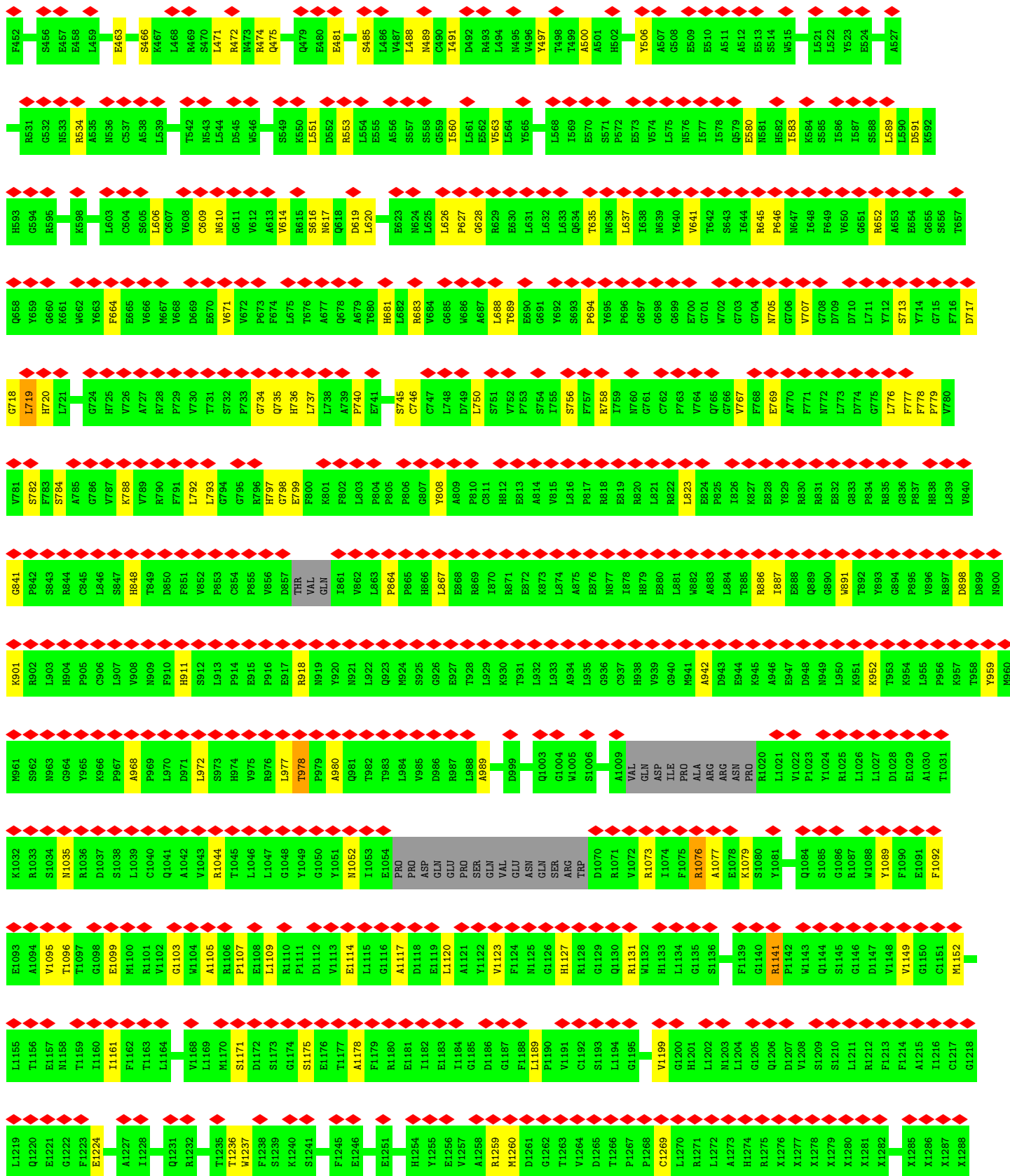
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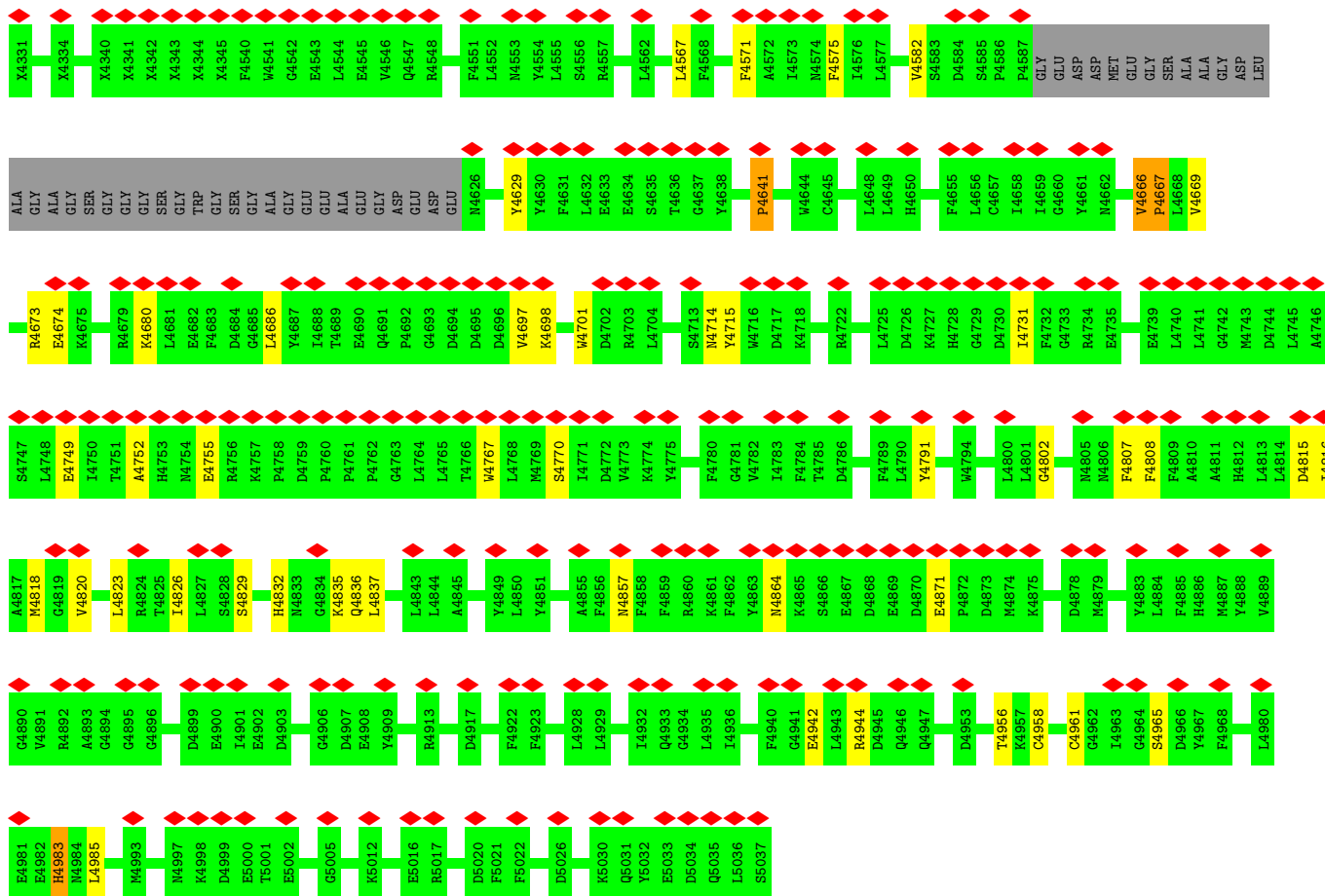
• Molecule 2: Ryanodine receptor 1



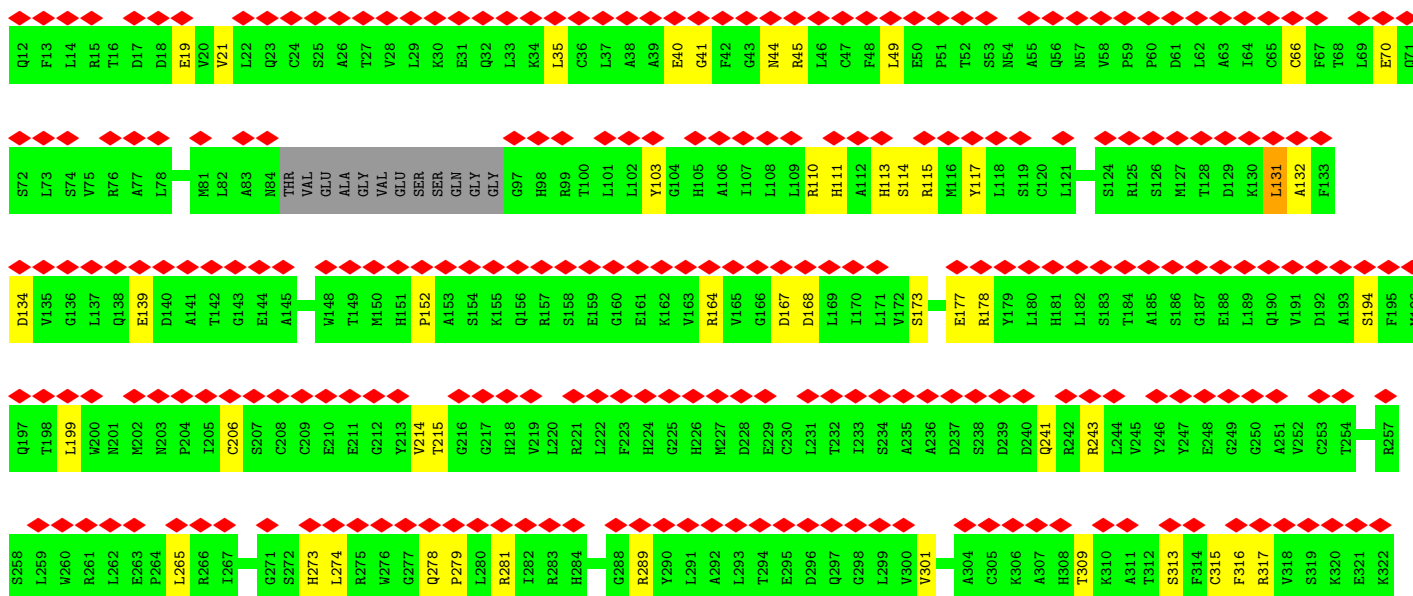
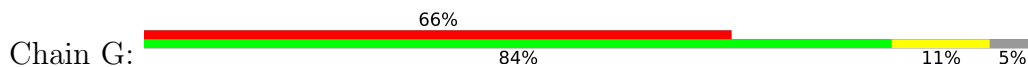


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X4105	X4106	X4107	X4108	X4109	X4110	X4111	X4112	X4113	X4114	X4115	X4116	X4117	X4118	X4119	X4120	X4121	X4122	X4123	X4124	X4125	X4126	X4127	X4128	X4129	X4130	X4131	X4132	X4133	X4134	X4137	X4138	X4139	X4140	X4141	X4142	X4147	X4152	X4153	X4156	X4159	X4160	X4161	X4164	X4165	X4166	X4167	X4168	X4169	X4172	X4173	X4174	X4175							
X4176	X4180	X4184	X4185	X4186	X4187	X4188	X4189	X4190	X4191	X4192	X4196	X4197	X4198	X4199	X4200	X4201	X4202	X4203	X4204	X4205	X4206	X4207	X4208	X4209	X4210	X4211	X4212	X4215	X4219	X4223	X4224	X4225	X4226	X4227	X4228	X4229	X4233	X4239	X4250	X4251	X4252	X4253	X4320	X4321	X4322	X4323	X4324	X4325	X4330										



• Molecule 2: Ryanodine receptor 1



L323	D324	T325	A326	P327	K328	R329	D330	V331	E332	G333	M334	G335	P336	P337	E338	I339	K340	Y341	G342	E343	S344	L345	C346	F347	V348	Q349	H350	V351	A352	S353	G354	L355	W356	L357	T358	Y359	A360	A361	P362	D363	P364	K365	A366	L367	R368	L369	G370	V371	L372	K373	K374	K375	A376	I377	H378	L379	Q380	E381	G382
H383	M384	D385	D386	A387	L388	F389	L390	T391	R392	C393	Q394	Q395	P396	E397	S398	Q399	R400	M403	I404	H405	A408	G409	L410	M412	Q413	K416	G417	L418	D419	S420	F421	A501	H502	Y506	A507	G508	E509	E510	A511	A512	E513	S514	A432	G433	P434	A435	L436	Y523	E524	A527	D447	L448	I449	G450					
Y451	F452	S456	E457	E458	L459	E463	S466	K467	L468	R469	R472	M473	R474	Q479	E480	E481	S485	L486	V487	L488	M489	G490	I491	D492	R493	L494	M495	V496	Y497	T498	T499	A500	H502	Y506	A507	G508	E509	E510	A511	A512	E513	S514	W515	L521	L522	Y523	E524	A527											
R531	G532	N533	R534	A535	N536	C537	A538	L539	T542	N543	L544	D545	W546	S549	K550	L551	D552	R553	L554	E555	A556	S557	S558	G559	L560	L561	E562	V563	L564	Y565	L568	I569	E570	S571	P572	E573	V574	L575	G576	N576	I577	I578	Q579	E580	M581	H582	I583	K584	S585	I586	I587	S588	L589	D591	K592	H593			
G594	R595	K598	G600	V599	L600	L603	C604	S605	L606	C607	V608	C609	N610	G611	V612	A613	R615	S616	Q618	D619	L620	E623	N624	L625	L626	P627	G628	R629	E630	L631	L632	L633	Q634	T635	M636	L637	I638	N639	Y640	V641	T642	S643	S644	R645	P646	N647	I648	F649	V650	G651	R652	A653	E654	G655	S656				
T657	Q658	Y659	G660	K661	W662	V663	F664	E665	V666	M667	V668	D669	E670	V671	V672	P673	F674	T675	Q676	A677	Q678	A679	T680	H681	L682	R683	V684	G685	W686	A687	L688	T689	E690	G691	Y692	S693	P694	V695	P696	G697	G698	G699	E700	G701	W702	G703	G704	W705	G706	W707	G708	D709	L710	L711	Y712	S713	G714	Y715	F716
D717	G718	L719	H720	L721	G724	H725	V726	A727	R728	F729	V730	T731	S732	F733	G734	Q735	H736	L737	L738	A739	P740	E741	S745	C746	C747	L748	D749	L750	S751	V752	F753	S754	L755	S756	F757	V758	L759	W760	G761	G762	C763	V764	G765	G766	V767	F768	E769	A770	F771	W772	L773	D774	G775	L776	F777	F778	P779		
V780	V781	S782	F783	S784	A785	G786	V787	K788	V789	R790	F791	L792	L793	G794	G795	R796	H797	G798	E799	F800	K801	F802	L803	P804	R805	P806	G807	Y808	A809	H812	E813	A814	W815	L816	P817	R818	E819	R820	L821	R822	L823	E824	P825	L826	K827	E828	Y829	R830	R831	E832	G833	P834	R835	G836	P837	H838	L839	W840	
G841	P842	S843	R844	C845	L846	S847	H848	T849	D850	F851	W852	P853	C854	V855	D857	THR	VAL	GLN	I861	W862	L863	P864	P865	H866	L867	E868	R869	I870	R871	E872	R873	L874	A875	E876	R877	I878	H879	E880	L881	W882	A883	L884	T885	R886	I887	E888	Q889	C890	W891	T892	Y893	C894	P895	W896	R897	D898	D899	N900	
K901	R902	L903	H904	P905	C906	L907	V908	N909	F910	H911	S912	L913	E915	P916	E917	N918	N919	Y920	N921	L922	Q923	N924	S925	E927	T928	L929	K930	T931	L932	L933	A934	L935	Q936	C937	H938	Y939	G940	M941	D943	E944	F945	A946	E947	D948	N949	L950	K951	K952	T953	K954	L955	P956	K957	T958	N959	M960			
M961	S962	N963	G964	Y965	K966	P967	A968	P969	L970	D971	L972	S973	H974	V975	R976	L977	T978	P979	A980	Q981	T982	T983	L984	V985	R986	L987	L988	A989	D999	Q1003	G1004	W1005	W1006	Y1007	S1008	A1009	VAL	GLN	ASP	ILE	PRD	ALA	ARG	ARG	ASN	ASN	PRD	R1020	L1021	P1022	P1023	Y1024	R1025	L1026	L1027	D1028	E1029	A1030	
T1031	K1032	R1033	S1034	M1035	R1036	D1037	S1038	L1039	C1040	Q1041	A1042	V1043	R1044	T1045	L1046	L1047	G1048	Y1049	G1050	Y1051	M1052	T1053	L1054	PRD	PRD	ASP	GLN	GLU	PRD	SER	GLN	VAL	GLU	ASN	GLN	SER	ARG	TRP	D1070	R1071	V1072	R1073	I1074	F1075	R1076	A1077	E1078	K1079	S1080	Y1081	Q1084	S1085	G1086	Y1089	F1090	E1091	F1092	M1152	
E1093	A1094	V1095	T1096	T1097	G1098	E1099	M1100	R1101	V1102	G1103	W1104	A1105	R1106	E1107	E1108	L1109	P1110	P1111	D1112	V1113	E1114	G1116	A1117	D1118	E1119	L1120	A1121	Y1122	V1123	F1124	M1125	G1126	H1127	R1128	S1006	Q1129	Q1130	R1131	W1132	H1133	L1134	G1135	S1136	F1139	G1140	R1141	P1142	W1143	Q1144	S1145	G1146	D1147	V1148	V1149	G1150	C1151	M1152		

L2201	L2202	L2203	L2204	L2205	L2206	L2207	L2208	L2209	L2210	L2211	L2212	L2213	L2214	L2215	L2216	L2217	L2218	L2219	L2220	L2221	L2222	L2223	L2224	L2225	L2226	L2227	L2228	L2229	L2230	L2231	L2232	L2233	L2234	L2235	L2236	L2237	L2238	L2239	L2240	L2241	L2242	L2243	L2244	L2245	L2246	L2247	L2248	L2249	L2250	L2251	L2252	L2253	L2254	L2255	L2256	L2257	L2258	L2259	L2260	L2261	L2262	L2263	L2264	L2265	L2266	L2267	L2268	L2269	L2270	L2271	L2272	L2273	L2274																																																																																																										
V2275	A2276	A2277	A2278	V2279	V2280	I2281	G2282	D2283	G2284	N2285	L2286	L2287	L2288	L2289	L2290	O2291	Q2292	Q2293	D2294	L2295	E2296	S2300	I2301	L2302	A2303	G2304	G2305	G2306	L2307	Q2308	Q2309	C2310	P2311	M2312	L2313	L2314	A2315	K2316	G2317	Y2318	L2319	D2320	I2321	P2325	C2326	G2327	G2328	E2329	R2330	Y2331	L2332	D2333	L2334	F2335	P2336	R2337	F2338	F2339	P2340																																																																																																																								
V2341	N2342	G2343	E2344	S2345	V2346	E2347	E2348	N2349	A2350	R2355	L2356	L2357	I2358	R2359	K2360	P2361	E2362	C2363	F2364	G2365	P2366	A2367	L2368	R2369	G2370	E2371	G2372	Q2373	S2374	G2375	P2376	L2377	M2378	A2379	I2380	E2381	E2382	A2383	I2384	R2385	L2386	S2387	E2388	D2389	P2390	A2391	R2392	L2393	D2394	L2395	G2396	L2397	L2398	L2399	L2400	L2401	L2402	L2403	L2404	L2405	L2406	L2407	L2408	L2409	L2410	L2411	L2412	L2413	L2414	L2415	L2416	L2417	L2418	L2419	L2420	A2421	I2422	H2423	S2424	F2425	Y2426	A2427	I2430	D2431	L2432	L2433	L2434	G2435	R2436	A2437	P2438	E2439	H2440	H2441	L2442	A2445	G2446	K2447	G2448	E2449	A2450	L2451	L2452	L2453	R2454	A2455	L2456	L2457	R2458	S2459	L2460	L2461	P2462	L2463	D2464	A2465	D2466	L2467	L2468	L2469	L2470	L2471	L2472	L2473	L2474	L2475	L2476	L2477	L2478	L2479	L2480	L2481	L2482	L2483	L2484	L2485	L2486	L2487	L2488	L2489	L2490	X2493	X2494	X2495	X2496	X2497	X2498	X2499	X2500	X2501	X2502	X2506	X2511	X2512	X2513	X2514	X2517	X2518	X2519	X2520	X2521	X2522	X2523	X2524	X2525	X2526	X2527	X2528	X2529	X2530	X2531	X2532	X2533	X2534	X2535	X2536	X2537	X2538	X2539
X2540	X2541	X2542	X2543	X2544	X2550	X2551	X2552	X2553	X2554	X2555	X2556	X2557	X2558	X2561	X2562	X2563	X2564	X2565	X2566	X2567	X2568	X2569	X2570	X2571	X2572	X2575	X2576	X2577	X2578	X2579	X2580	X2581	X2582	X2583	X2584	X2585	X2586	X2587	X2588	X2589	X2590	X2591	X2592	X2593	X2594	X2595	X2596	X2597	X2598	X2599	X2600	X2601	X2602	X2603	X2604	X2605	X2606	X2607	X2608	X2609	X2610	X2611	X2612	X2613	X2614	X2615	X2616	X2617	X2618	X2619	X2620	X2621	X2622	X2623	X2624	X2625	X2626	X2627	X2628	X2629	X2630	X2631	X2632	X2633	X2634	X2635	X2636	X2637	X2638	X2639	X2640	X2641	X2645	X2646	X2647	X2648	X2649	X2650	X2651	X2652	X2653	X2654	X2655	X2656	X2657	X2660	X2661	X2662	X2663	X2664	X2665	X2666	X2667	X2668	X2669																																																																
X2670	X2671	X2672	X2673	X2674	X2675	X2676	X2677	X2678	X2679	X2680	X2681	X2682	X2683	X2684	X2685	X2686	X2687	X2688	X2689	X2690	X2691	X2692	X2693	X2694	X2695	X2696	X2697	X2698	X2699	X2700	X2701	X2702	X2703	X2704	X2705	X2706	X2707	X2708	X2709	X2710	X2711	X2712	X2713	X2714	X2715	X2716	X2717	X2718	X2719	X2720	X2721	X2722	X2723	X2724	X2725	X2726	X2727	X2728	X2729	X2730	X2731	X2732	X2733	X2734	X2735	X2736	X2737	X2738	X2739	X2740	X2741	X2742	X2743	X2744	X2745	X2746	X2747	X2748	X2749	X2750	X2751	X2752	X2753	X2754	X2755	X2756	X2757	X2758	X2759																																																																																										
E2760	Y2761	T2762	H2763	E2764	K2765	W2766	A2767	D2768	F2769	K2770	L2771	Q2772	N2773	M2774	W2775	S2776	L2777	G2778	E2779	N2780	V2781	D2782	E2783	E2784	L2785	K2786	T2787	H2788	P2789	M2790	L2791	R2792	Y2793	Y2794	K2795	T2796	T2797	S2798	E2799	K2800	D2801	K2802	E2803	I2804	W2805	R2806	W2807	P2808	E2809	K2810	E2811	S2812	L2813	K2814	A2815	M2816	L2817	A2818	M2819																																																																																																																								
E2820	W2821	T2822	L2823	E2824	K2825	A2826	R2827	E2828	G2829	E2830	GLU	ARG	THR	GLU	LYS	LYS	LYS	THR	ARG	LYS	ILE	SER	GLN	THR	ALA	GLN	THR	TYR	ASP	PRO	ARG	GLU	GLY	Y2855	P2856	P2857	Q2858	P2859	R2860	D2861	L2862	S2863	G2864	V2865	T2866	L2867	S2868	R2869	E2870	L2871	Q2872	A2873	M2874	A2875	E2876	Q2877	L2878	A2879																																																																																																																									
E2880	N2881	Y2882	H2883	M2884	T2885	W2886	G2887	R2888	L2889	K2890	K2891	Q2892	E2893	L2894	E2895	A2896	G2897	G2898	G2899	G2900	N2901	H2902	P2903	L2904	L2905	V2906	P2907	Y2908	D2909	T2910	L2911	T2912	A2913	K2914	E2915	K2916	A2917	R2918	D2919	R2920	K2921	K2922	A2923	Q2924	E2925	L2926	L2927	K2928	F2929	L2930	Q2931	M2932	N2933	L2934	G2935	Y2936	V2937	A2938	T2939																																																																																																																								
X2942	X2943	X2944	X2945	X2946	X2947	X2948	X2949	X2950	X2951	X2952	X2953	X2954	X2955	X2956	X2957	X2958	X2959	X2960	X2961	X2962	X2963	X2964	X2965	X2966	X2967	X2968	X2969	X2970	X2971	X2972	X2973	X2974	X2975	X2976	X2977	X2978	X2979	X2980	X2981	X2982	X2983	X2984	X2985	X2986	X2987	X2988	X2989	X2990	X2991	X2992	X2993	X2994	X2995	X2996	X2997	X2998	X2999	X3000	X3001	X3002	X3003	X3004	X3005	X3006	X3007	X3008	X3009	X3010	X3011	X3012	X3013	X3014	X3015	X3016	X3017	X3018	X3019																																																																																																						
X3020	X3021	X3022	X3023	X3024	X3025	X3026	X3027	X3028	X3029	X3030	X3031	X3032	X3033	X3034	X3035	X3036	X3037	X3038	X3039	X3040	X3041	X3042	X3043	X3044	X3045	X3046	X3047	X3048	X3049	X3050	X3053	X3054	X3055	X3056	X3057	X3058	X3059	X3060	X3061	X3062	X3063	X3064	X3065	X3066	X3067	X3068	X3069	X3070	X3071	X3072	X3073	X3074	X3075	X3076	X3077	X3078	X3079	X3080	X3081	X3082	X3083	X3084	X3085	X3086	X3087	X3088	X3089	X3090	X3091	X3092	X3093	X3094	X3095	X3096	X3097	X3098	X3099	X3100	X3101	X3102	X3103	X3104	X3105	X3106	X3107	X3108	X3109	X3110	X3111	X3112	X3113	X3114	X3115	X3116	X3117	X3118	X3119	X3120	X3121	X3122	X3123	X3124	X3125	X3126	X3127	X3128	X3129	X3130	X3131	X3132	X3133	X3134	X3135	X3136	X3137	X3138	X3139	X3140	X3141	X3142	X3143	X3144	X3145	X3146	X3147	X3148	X3149	X3150																																																			

E4050	E4051	M4054	M4057	L4058	L4059	K4060	F4061	F4062	D4063	M4064	F4065	L4066	K4067	L4068	K4069	D4070	L4071	V4072	G4073	S4074	E4075	A4076	F4077	Q4078	D4079	V4080	V4081	T4082	D4083	E4011	P4084	R4085	G4086	L4087	S4088	K4090	D4092	F4093	Q4094	K4095	A4096	M4097	D4098	G4033	M4034	K4101	Q4102	F4103	T4104	G4105	F4106	E4107	L4108	Q4109	F4110	L4111							
E3967	Y3968	I3969	Q3970	G3971	Q3978	R3984	L3985	V3986	V3990	F3991	F3992	L3993	H3994	V3995	F3996	A3997	H3998	M3999	M4000	M4001	K4002	L4003	A4004	Q4005	D4006	S4007	S4008	Q4009	I4010	E4011	L4012	L4013	K4014	E4015	L4016	L4017	D4018	L4019	Q4020	K4021	D4022	L4028	E4032	G4033	M4034	G4038	M4039	I4040	A4041	L4046	M4047												
N3896	N3897	D3898	F3899	Q3900	N3901	V3902	L3903	R3904	T3905	Q3906	T3910	T3911	T3912	L3913	G3918	D3921	R3925	L3926	Q3927	E3928	N3929	L3930	S3931	D3932	F3933	V3934	M3935	Y3936	Y3937	S3938	G3939	I3940	D3941	V3942	E3944	Q3946	G3947	K3948	R3949	N3950	K3953	A3954	M3955	K3959	Q3960	F3962	N3963	S3964	L3965	T3966													
D3822	E3825	V3826	G3827	Q3830	Q3833	A3834	L3842	D3843	A3846	R3849	Q3850	N3851	A3853	E3854	G3855	L3856	G3857	N3858	V3859	Q3760	Q3761	N3860	E3861	D3862	Q3765	Q3766	Q3767	T3864	V3865	T3866	V3865	R3768	V3865	L3770	H3771	T3772	R3773	E3777	M3778	V3779	L3780	K3787	S3795	K3799	S3803	F3880	T3881	Q3882	D3883	R3886	Q3889	L3890	L3891	C3892	E3893								
E3737	G3738	G3739	E3740	N3741	GLU	ALA	GLU	GLU	E3747	E3748	V3749	E3750	V3751	S3752	F3753	E3754	E3755	K3756	E3757	M3758	E3759	K3760	Q3761	N3860	L3763	L3764	Y3765	Q3766	Q3767	L3703	H3704	F3705	S3706	R3707	T3711	E3712	K3713	S3714	K3715	L3716	D3717	E3718	D3719	Y3720	L3721	Y3722	Y3725	M3729	A3730	E3655	K3731	S3732	C3733	H3734	L3735	E3736							
L3664	T3664	E3665	D3666	H3667	S3668	F3669	E3670	D3671	R3672	K3673	L3674	D3675	D3676	K3679	A3680	E3681	E3682	Q3683	E3684	E3685	E3686	E3687	E3688	E3689	V3690	E3691	E3692	K3693	L3703	H3704	F3705	S3706	R3707	T3711	E3712	K3713	S3714	K3715	L3716	D3717	E3718	D3719	Y3720	L3721	Y3722	Y3725	M3729	A3730	E3655	K3731	S3732	C3733	H3734	L3735	E3736								
X3577	X3578	X3579	X3580	X3581	X3582	X3583	X3584	X3585	X3586	X3587	X3588	X3589	X3590	X3591	X3592	X3593	X3594	X3595	X3596	X3597	X3598	X3599	X3600	X3601	X3602	X3605	X3606	X3607	X3608	X3609	X3610	X3611	X3612	X3613	X3614	P3640	X3652	X3653	X3654	X3655	X3656	X3657	N3643	P3644	P3645	T3646	H3647	R3648	A3649	C3650	N3651	M3652	F3653	L3654	E3655	X3656	X3657	Y3657	A3659	X3570	X3574	X3575	X3576
X3515	X3516	X3517	X3518	X3519	X3520	X3521	X3522	X3523	X3524	X3525	X3526	X3527	X3528	X3529	X3530	X3531	X3532	X3533	X3534	X3535	X3536	X3537	X3538	X3539	X3540	X3541	X3542	X3543	X3544	X3545	X3546	X3547	X3548	X3549	X3550	X3551	X3552	X3553	X3554	X3555	X3556	X3557	X3558	X3559	X3560	X3561	X3562	X3563	X3564	X3565	X3566	X3567	X3568	X3569	X3570	X3574	X3575	X3576					
X3408	X3409	X3410	X3411	X3412	X3413	X3414	X3415	X3416	X3417	X3418	X3419	X3420	X3421	X3422	X3423	X3427	X3428	X3429	X3430	X3431	X3432	X3433	X3434	X3435	X3436	X3437	X3438	X3439	X3440	X3441	X3442	X3443	X3446	X3447	X3448	X3449	X3450	X3451	X3452	X3453	X3454	X3455	X3456	X3457	X3458	X3459	X3460	X3464	X3465	X3466	X3467	X3468	X3511	X3512	X3513	X3514							
X3348	X3349	X3350	X3351	X3352	X3353	X3354	X3355	X3356	X3357	X3358	X3359	X3360	X3361	X3362	X3363	X3364	X3365	X3366	X3367	X3368	X3369	X3370	X3371	X3372	X3373	X3374	X3375	X3376	X3377	X3378	X3379	X3380	X3381	X3382	X3383	X3384	X3385	X3386	X3387	X3388	X3389	X3390	X3391	X3392	X3393	X3394	X3395	X3396	X3397	X3398	X3399	X3400	X3401	X3402	X3403	X3404	X3405	X3406					
X3287	X3288	X3289	X3290	X3291	X3292	X3293	X3294	X3295	X3296	X3297	X3298	X3299	X3300	X3301	X3302	X3303	X3304	X3305	X3306	X3307	X3308	X3309	X3310	X3311	X3312	X3313	X3314	X3315	X3316	X3317	X3318	X3319	X3320	X3323	X3324	X3325	X3326	X3327	X3328	X3329	X3330	X3331	X3332	X3333	X3334	X3335	X3336	X3337	X3338	X3339	X3340	X3341	X3342	X3343	X3344	X3345	X3346						
X3217	X3218	X3219	X3220	X3221	X3222	X3223	X3224	X3225	X3226	X3227	X3228	X3229	X3230	X3231	X3232	X3233	X3234	X3235	X3236	X3241	X3242	X3243	X3244	X3245	X3246	X3247	X3248	X3249	X3250	X3251	X3252	X3253	X3254	X3261	X3262	X3263	X3264	X3265	X3266	X3267	X3268	X3269	X3270	X3271	X3272	X3273	X3274	X3275	X3276	X3277	X3278	X3279	X3280	X3281	X3282	X3283	X3284	X3285					
X3151	X3152	X3153	X3154	X3155	X3156	X3157	X3158	X3159	X3160	X3161	X3162	X3163	X3170	X3171	X3172	X3173	X3174	X3175	X3176	X3177	X3178	X3179	X3180	X3181	X3182	X3183	X3184	X3185	X3186	X3187	X3188	X3189	X3190	X3191	X3192	X3193	X3194	X3195	X3196	X3197	X3198	X3199	X3200	X3201	X3202	X3203	X3204	X3205	X3206	X3207	X3208	X3209	X3210	X3211	X3212	X3213	X3214	X3215					

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	55564	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	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	0.060	Depositor
Minimum map value	-0.030	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.025	Depositor
Map size (Å)	502.0, 502.0, 502.0	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.255, 1.255, 1.255	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:
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	0/834	0.53	0/1123
1	F	0.32	0/834	0.53	0/1123
1	H	0.32	0/834	0.53	0/1123
1	J	0.32	0/834	0.53	0/1123
2	B	0.30	0/25438	0.54	8/34548 (0.0%)
2	E	0.30	0/25438	0.54	8/34548 (0.0%)
2	G	0.30	0/25438	0.54	8/34548 (0.0%)
2	I	0.30	0/25438	0.54	8/34548 (0.0%)
All	All	0.30	0/105088	0.54	32/142684 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	F	0	1
1	H	0	1
1	J	0	1
2	B	0	13
2	E	0	13
2	G	0	13
2	I	0	13
All	All	0	56

There are no bond length outliers.

The worst 5 of 32 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed($^{\circ}$)	Ideal($^{\circ}$)
2	E	131	LEU	CA-CB-CG	7.74	133.11	115.30
2	B	131	LEU	CA-CB-CG	7.73	133.09	115.30
2	I	131	LEU	CA-CB-CG	7.73	133.08	115.30
2	G	131	LEU	CA-CB-CG	7.73	133.08	115.30
2	E	1600	LEU	CA-CB-CG	7.38	132.27	115.30

There are no chirality outliers.

5 of 56 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	8	SER	Peptide
2	B	139	GLU	Peptide
1	F	8	SER	Peptide
1	H	8	SER	Peptide
1	J	8	SER	Peptide

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	818	0	824	11	0
1	F	818	0	824	11	0
1	H	818	0	824	11	0
1	J	818	0	824	11	0
2	B	29509	0	24752	277	0
2	E	29509	0	24753	269	0
2	G	29509	0	24753	269	0
2	I	29509	0	24753	276	0
3	B	1	0	0	0	0
3	E	1	0	0	0	0
3	G	1	0	0	0	0
3	I	1	0	0	0	0
All	All	121312	0	102307	1111	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 5.

The worst 5 of 1111 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)
2:B:4983:HIS:CD2	2:B:4983:HIS:H	2.10	0.70
2:E:4983:HIS:CD2	2:E:4983:HIS:H	2.10	0.70
2:G:4983:HIS:CD2	2:G:4983:HIS:H	2.10	0.69
2:I:4983:HIS:H	2:I:4983:HIS:CD2	2.10	0.67
2:I:788:LYS:HG2	2:I:1630:CYS:H	1.61	0.65

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	105/108 (97%)	95 (90%)	10 (10%)	0	100	100
1	F	105/108 (97%)	95 (90%)	10 (10%)	0	100	100
1	H	105/108 (97%)	95 (90%)	10 (10%)	0	100	100
1	J	105/108 (97%)	95 (90%)	10 (10%)	0	100	100
2	B	3237/4416 (73%)	2887 (89%)	344 (11%)	6 (0%)	47	81
2	E	3237/4416 (73%)	2887 (89%)	344 (11%)	6 (0%)	47	81
2	G	3237/4416 (73%)	2887 (89%)	344 (11%)	6 (0%)	47	81
2	I	3237/4416 (73%)	2890 (89%)	341 (10%)	6 (0%)	47	81
All	All	13368/18096 (74%)	11931 (89%)	1413 (11%)	24 (0%)	50	81

5 of 24 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	1708	ARG
2	E	1708	ARG
2	I	1708	ARG
2	G	1708	ARG
2	B	1932	PRO

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	88/89 (99%)	88 (100%)	0	100	100
1	F	88/89 (99%)	88 (100%)	0	100	100
1	H	88/89 (99%)	88 (100%)	0	100	100
1	J	88/89 (99%)	88 (100%)	0	100	100
2	B	2493/3022 (82%)	2475 (99%)	18 (1%)	84	90
2	E	2493/3022 (82%)	2475 (99%)	18 (1%)	84	90
2	G	2493/3022 (82%)	2475 (99%)	18 (1%)	84	90
2	I	2493/3022 (82%)	2475 (99%)	18 (1%)	84	90
All	All	10324/12444 (83%)	10252 (99%)	72 (1%)	84	90

5 of 72 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	G	719	LEU
2	G	4983	HIS
2	G	1076	ARG
2	G	3787	LYS
2	E	1141	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 126 such sidechains are listed below:

Mol	Chain	Res	Type
2	E	3960	GLN
2	G	1775	HIS
2	I	479	GLN
2	G	1719	HIS
2	G	3950	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

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](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
2	B	14
2	E	14
2	I	14
2	G	14

The worst 5 of 56 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B	4345:UNK	C	4540:PHE	N	73.38
1	E	4345:UNK	C	4540:PHE	N	73.38
1	I	4345:UNK	C	4540:PHE	N	73.38
1	G	4345:UNK	C	4540:PHE	N	73.38

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B	3613:UNK	C	3639:THR	N	48.21

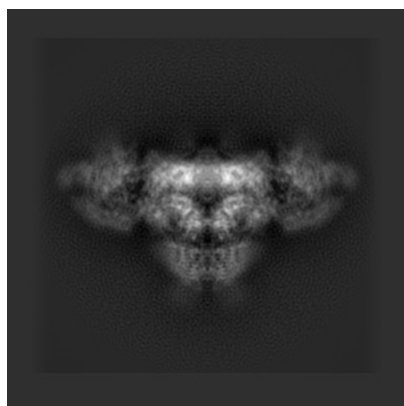
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-8394. These allow visual inspection of the internal detail of the map and identification of artifacts.

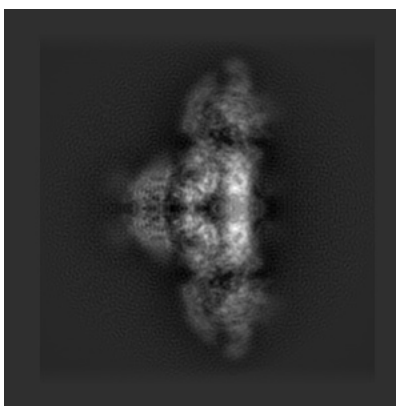
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

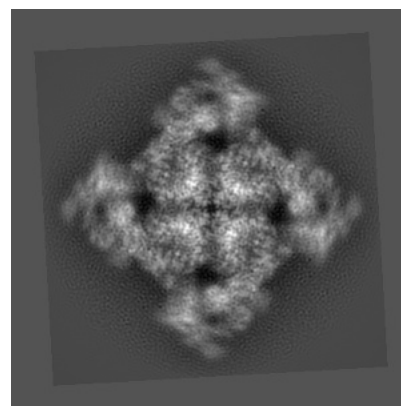
6.1.1 Primary map



X

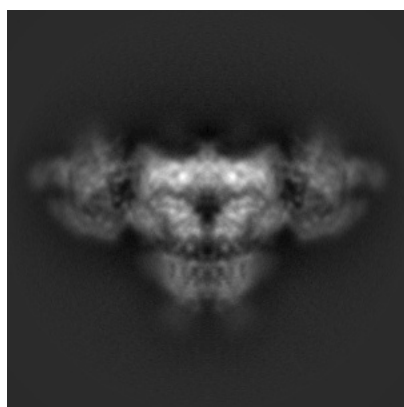


Y

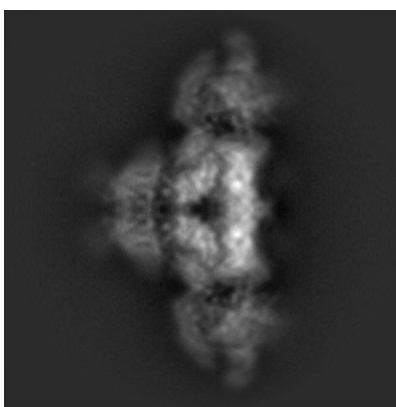


Z

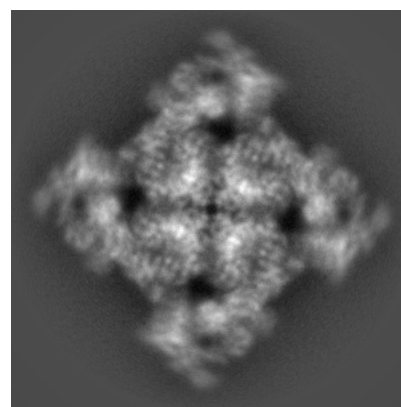
6.1.2 Raw map



X



Y

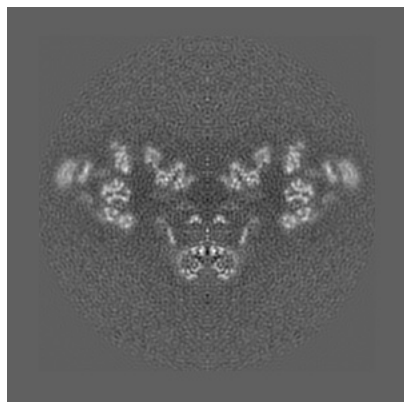


Z

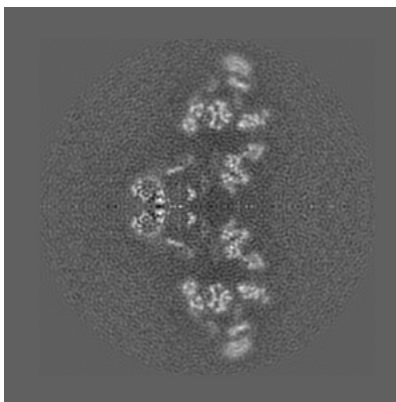
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

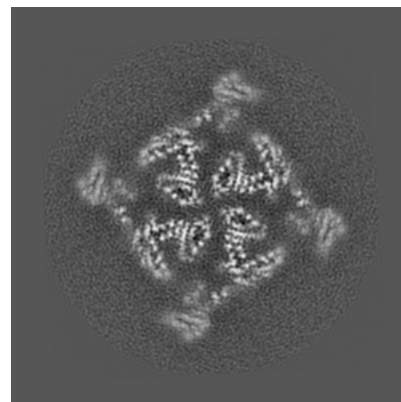
6.2.1 Primary map



X Index: 200

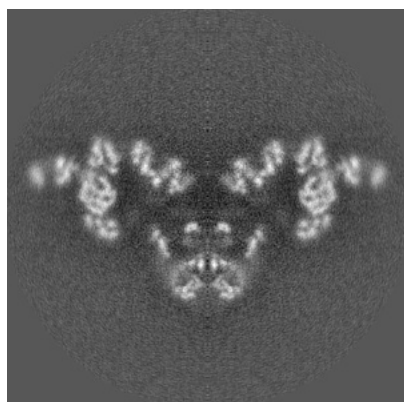


Y Index: 200

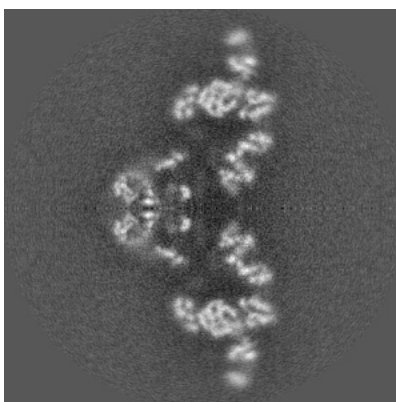


Z Index: 200

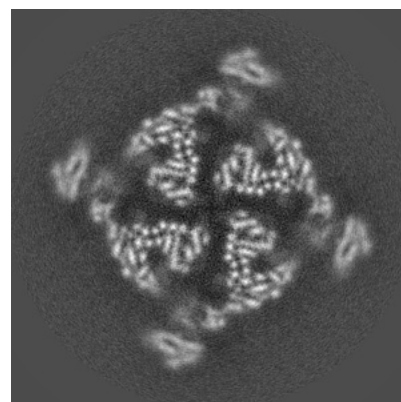
6.2.2 Raw map



X Index: 168



Y Index: 168

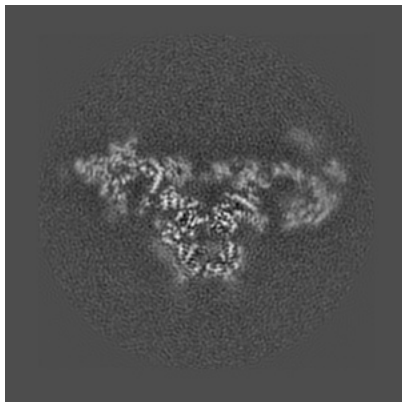


Z Index: 168

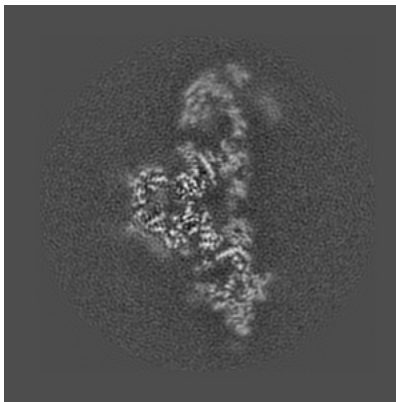
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

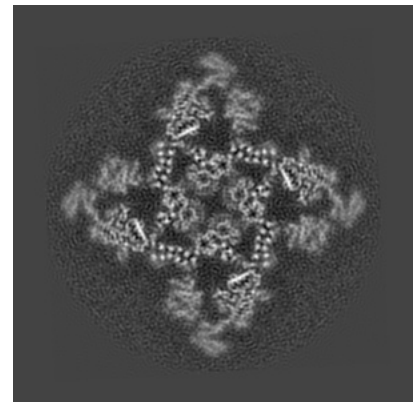
6.3.1 Primary map



X Index: 217

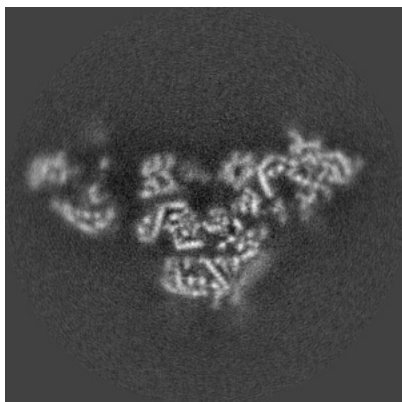


Y Index: 183

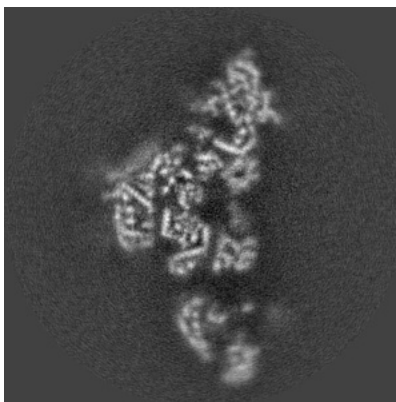


Z Index: 227

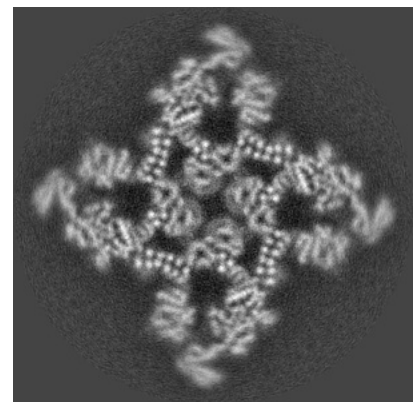
6.3.2 Raw map



X Index: 154



Y Index: 182

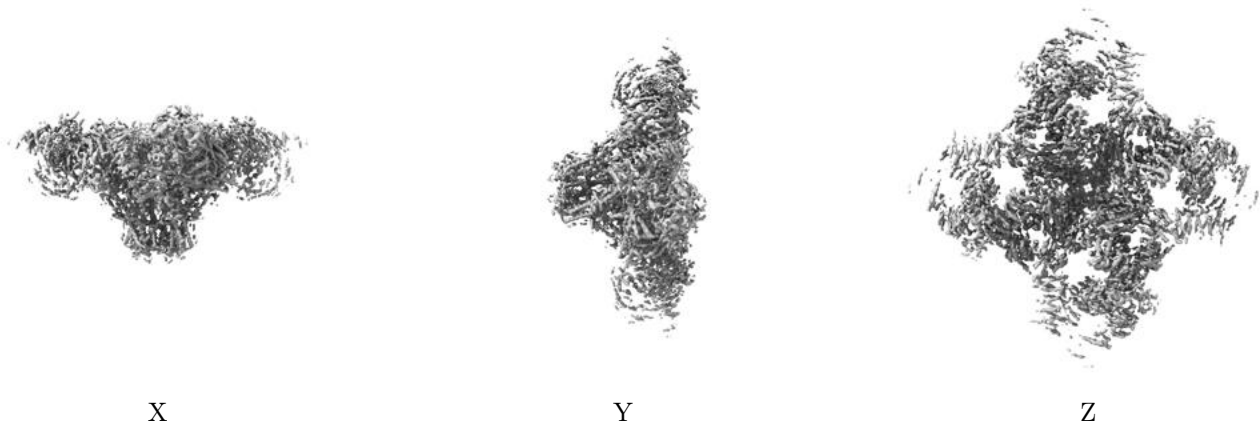


Z Index: 193

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

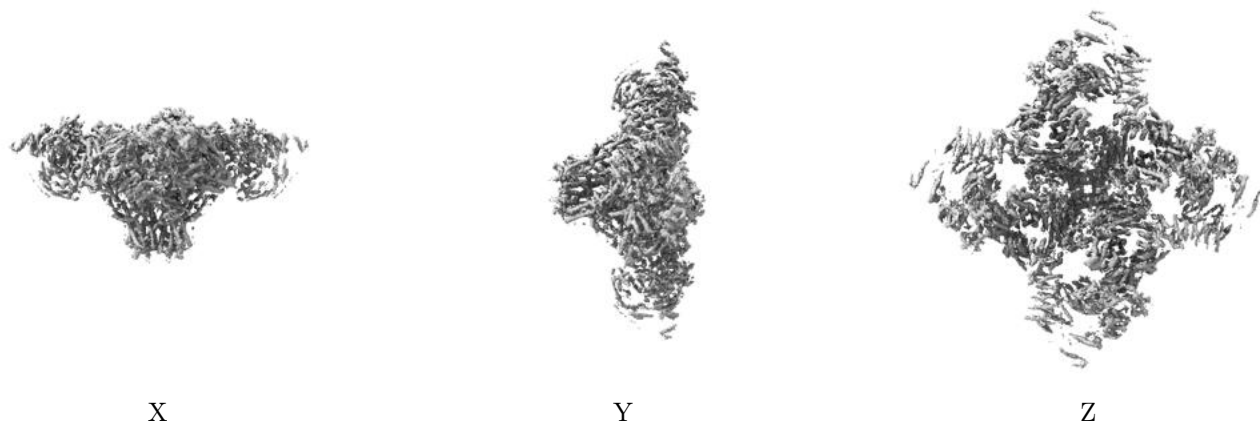
6.4 Orthogonal surface views [i](#)

6.4.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.025. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.4.2 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.

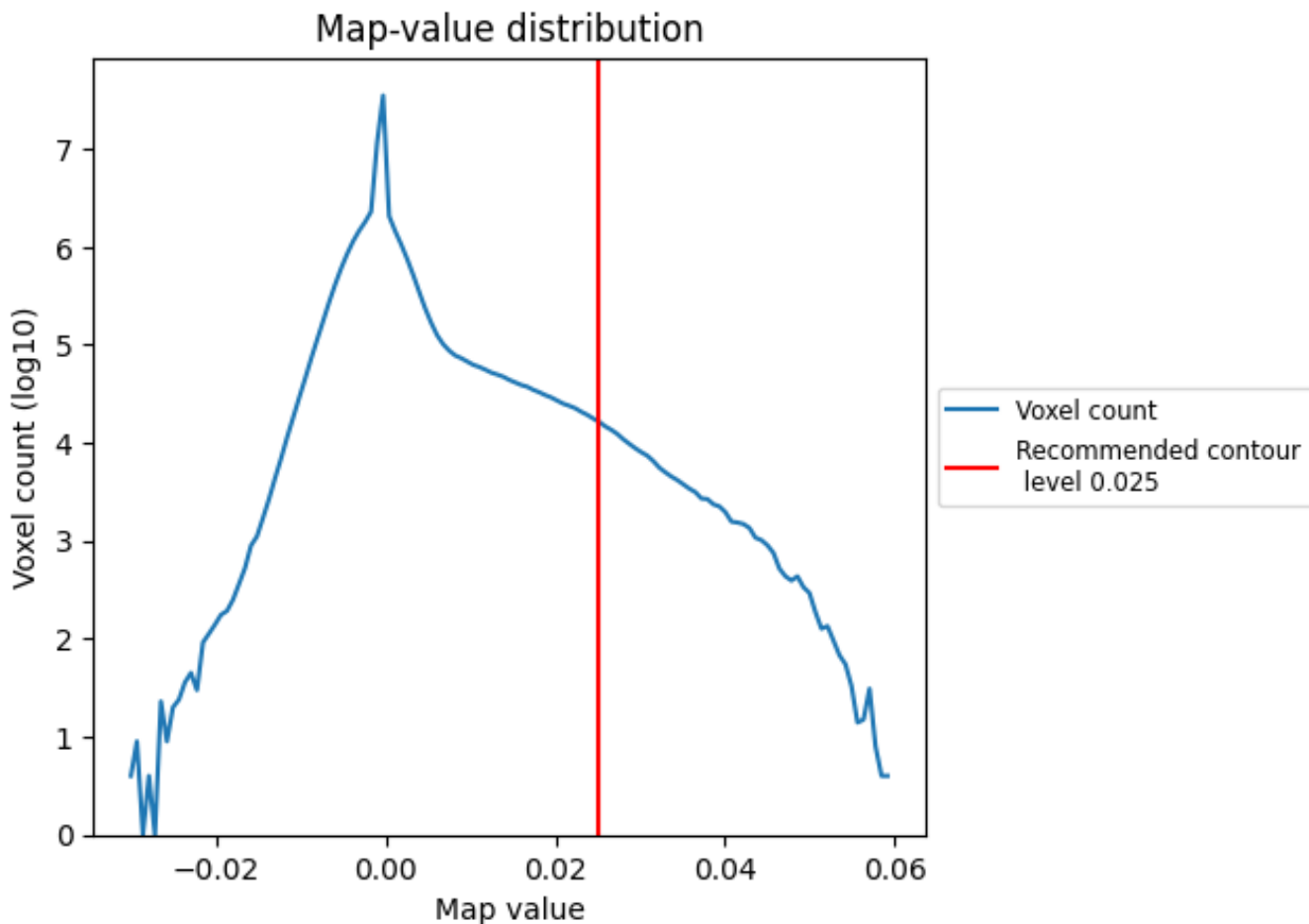
6.5 Mask visualisation [i](#)

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

7 Map analysis [i](#)

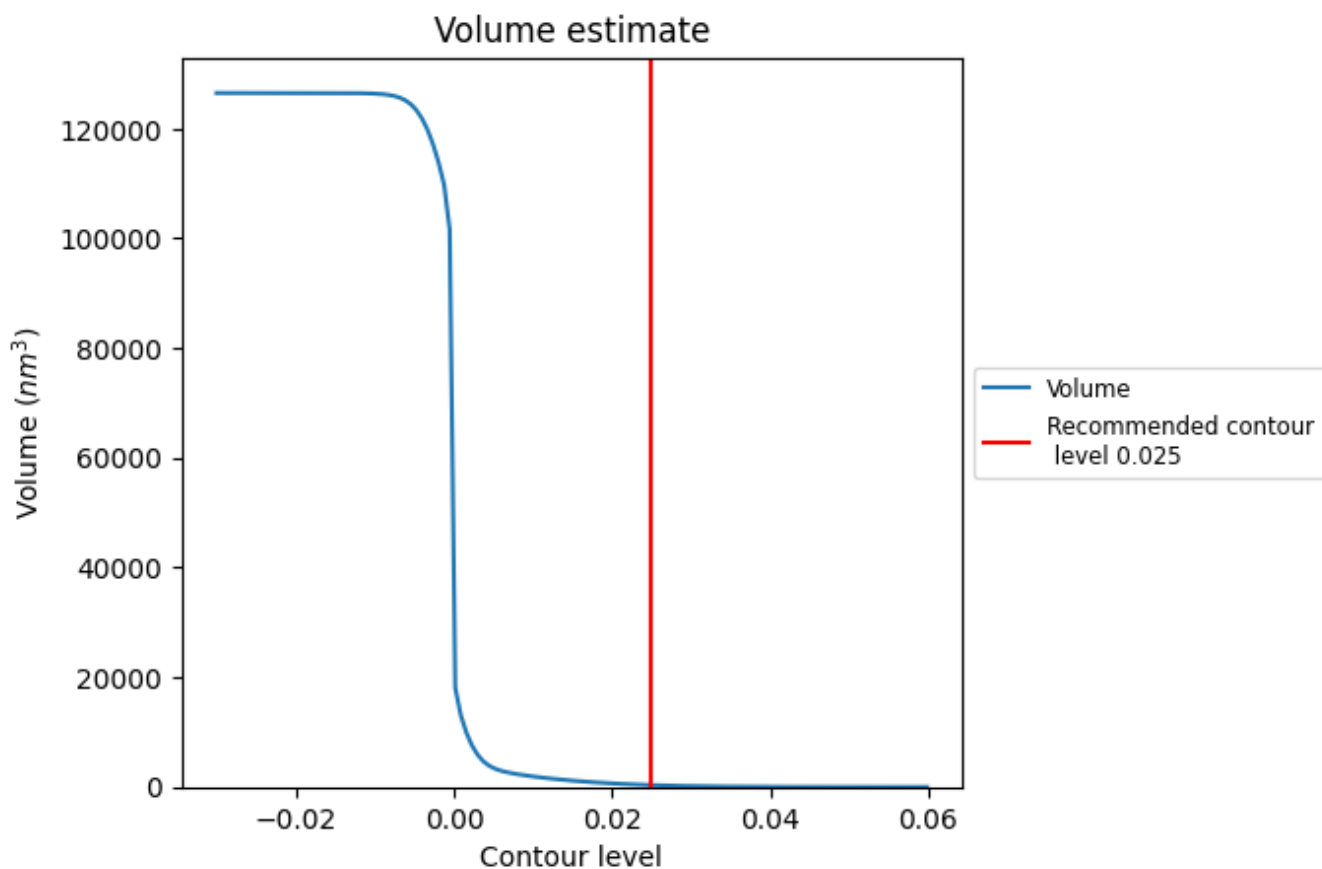
This section contains the results of statistical analysis of the map.

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.

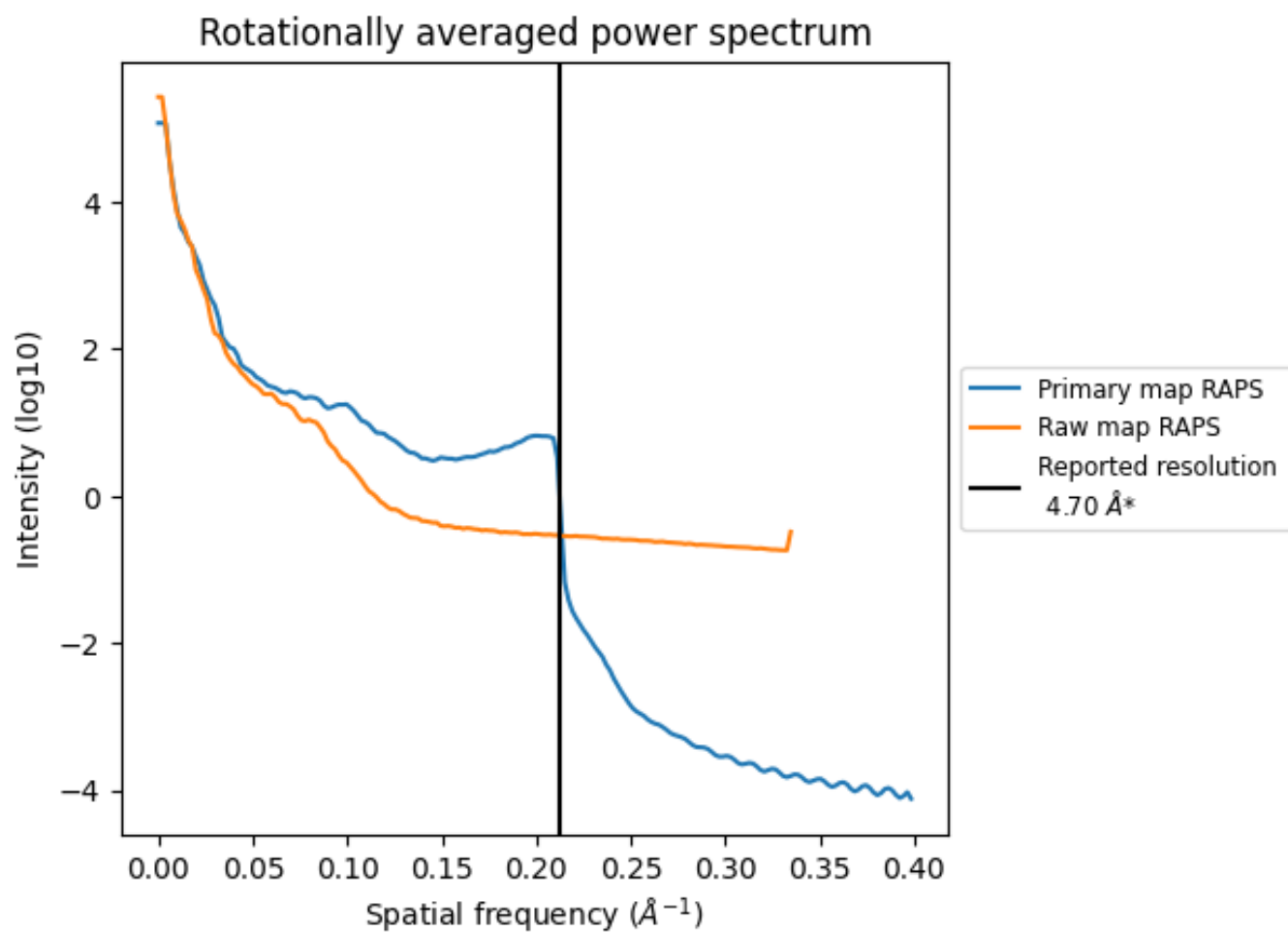
7.2 Volume estimate [\(i\)](#)



The volume at the recommended contour level is 330 nm³; this corresponds to an approximate mass of 299 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

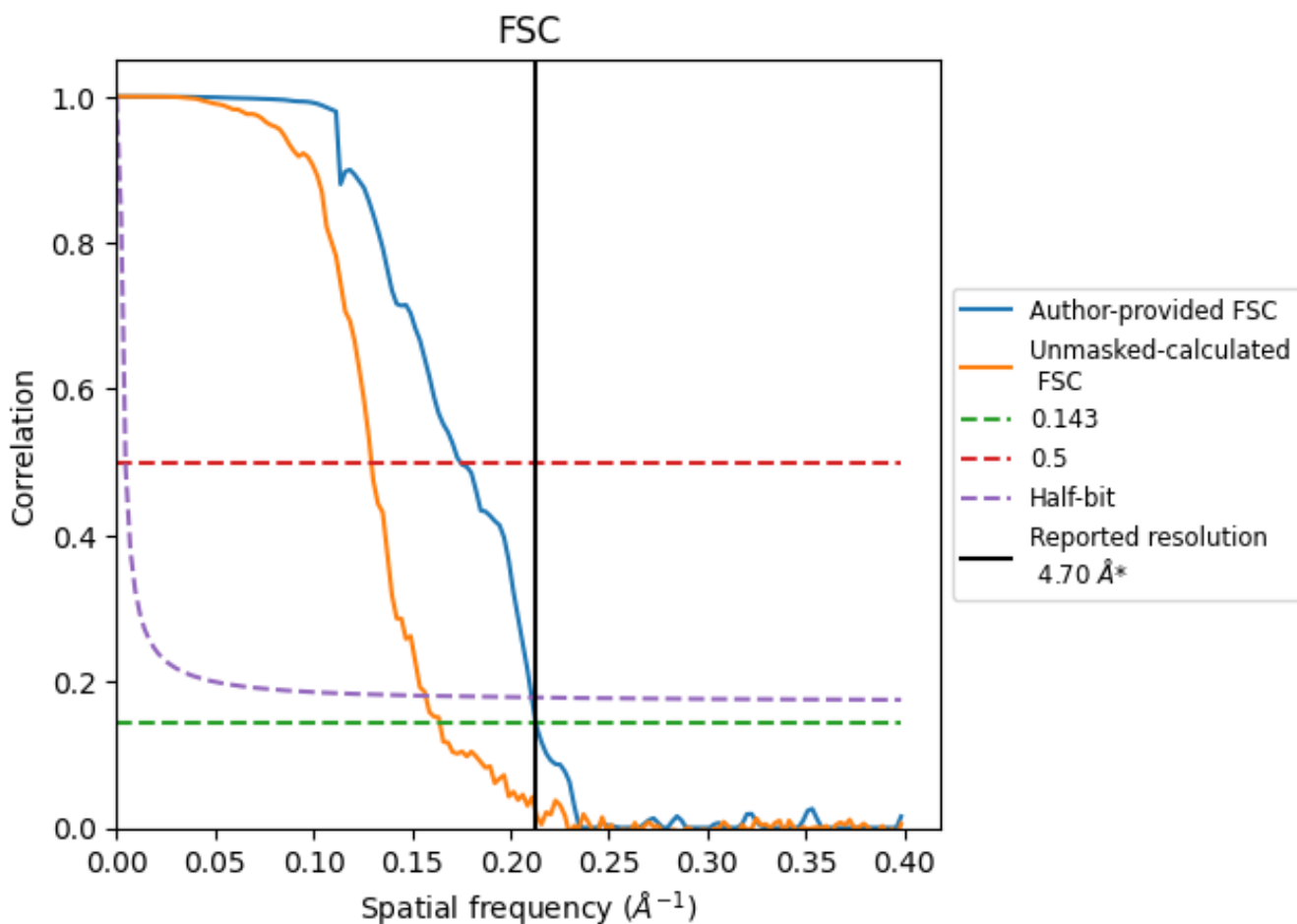


*Reported resolution corresponds to spatial frequency of 0.213 Å⁻¹

8 Fourier-Shell correlation [i](#)

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

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.213 Å⁻¹

8.2 Resolution estimates

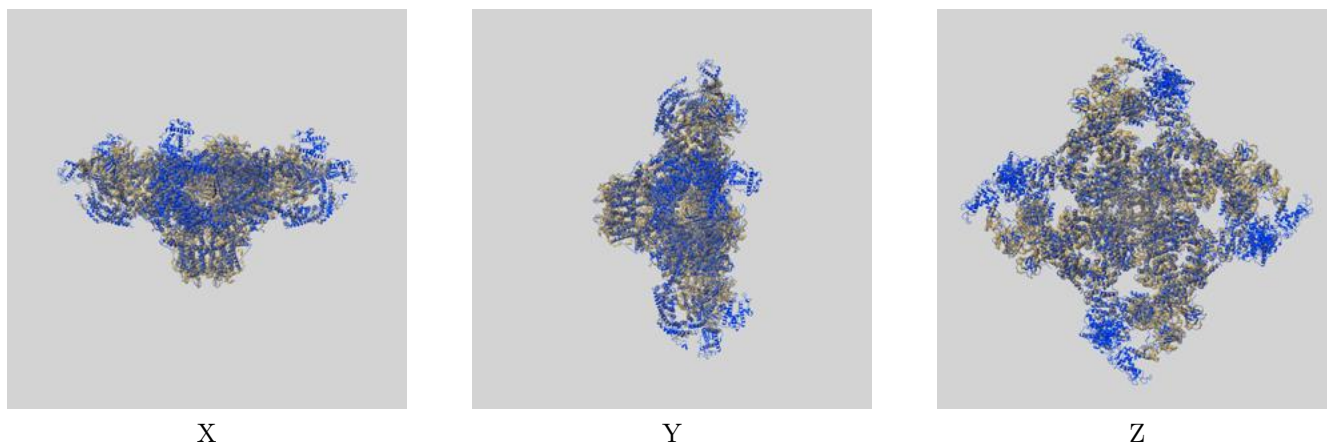
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	4.70	-	-
Author-provided FSC curve	4.69	5.73	4.74
Unmasked-calculated*	6.09	7.73	6.37

*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 6.09 differs from the reported value 4.7 by more than 10 %

9 Map-model fit [i](#)

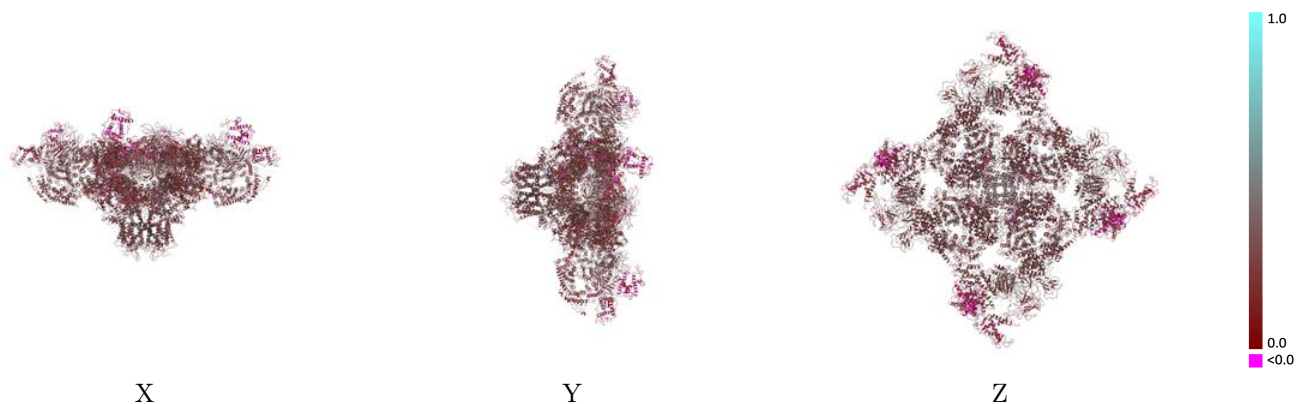
This section contains information regarding the fit between EMDB map EMD-8394 and PDB model 5TB3. Per-residue inclusion information can be found in section 3 on page 4.

9.1 Map-model overlay [i](#)



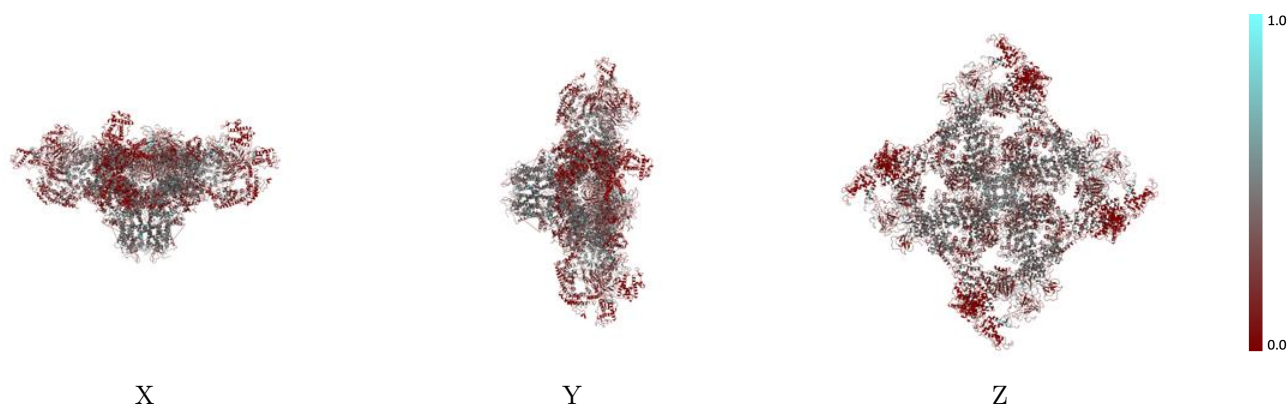
The images above show the 3D surface view of the map at the recommended contour level 0.025 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



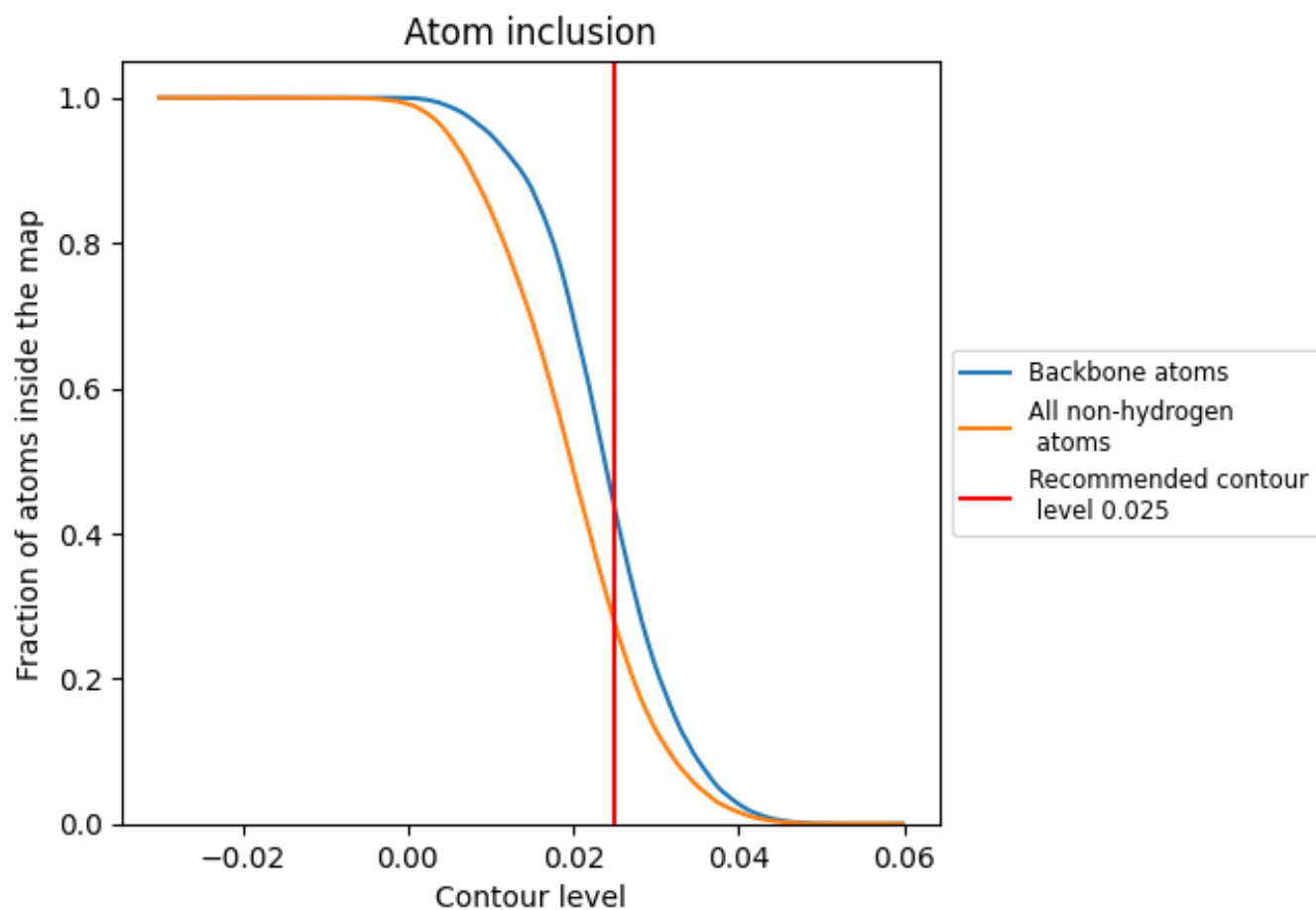
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.025).



















9.4 Atom inclusion [i](#)



At the recommended contour level, 44% of all backbone atoms, 28% 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 (0.025) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.2764	 0.2630
A	 0.2395	 0.2880
B	 0.2777	 0.2620
E	 0.2772	 0.2620
F	 0.2382	 0.2900
G	 0.2774	 0.2620
H	 0.2395	 0.2920
I	 0.2774	 0.2620
J	 0.2395	 0.2900

