



## wwPDB EM Validation Summary Report ⓘ

Sep 28, 2024 – 02:59 PM EDT

PDB ID : 8GF9  
EMDB ID : EMD-29982  
Title : Cryo-EM structure of human TRPV1 in cNW11 nanodisc and POPC:POPE:POPG lipids  
Authors : Neuberger, A.; Nadezhdin, K.D.; Sobolevsky, A.I.  
Deposited on : 2023-03-07  
Resolution : 2.58 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.dev113  
Mogul : 2022.3.0, CSD as543be (2022)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.39

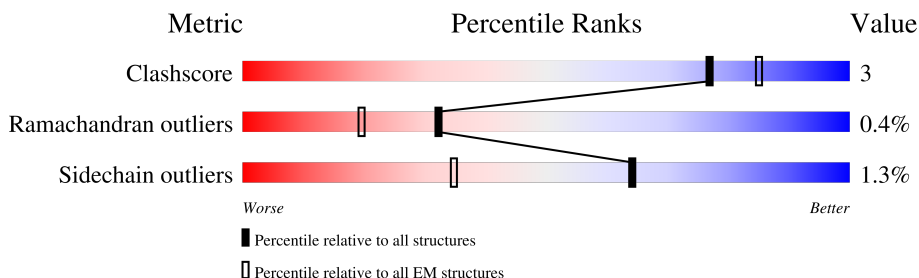
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 2.58 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	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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	1102	<div> <div>10%</div> <div>42%</div> <div>5%</div> <div>53%</div> </div>
1	B	1102	<div> <div>10%</div> <div>42%</div> <div>5%</div> <div>53%</div> </div>
1	C	1102	<div> <div>10%</div> <div>42%</div> <div>5%</div> <div>53%</div> </div>
1	D	1102	<div> <div>10%</div> <div>42%</div> <div>5%</div> <div>53%</div> </div>

## 2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 39170 atoms, of which 20144 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 Transient receptor potential cation channel subfamily V member 1.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	A	523	Total	C	H	N	O	S	0	0
			8512	2781	4267	681	755	28		
1	B	523	Total	C	H	N	O	S	0	0
			8512	2781	4267	681	755	28		
1	C	523	Total	C	H	N	O	S	0	0
			8512	2781	4267	681	755	28		
1	D	523	Total	C	H	N	O	S	0	0
			8512	2781	4267	681	755	28		

There are 1056 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-1	MET	-	initiating methionine	UNP Q8NER1
A	0	THR	-	expression tag	UNP Q8NER1
A	1	SER	-	expression tag	UNP Q8NER1
A	840	LEU	-	expression tag	UNP Q8NER1
A	841	VAL	-	expression tag	UNP Q8NER1
A	842	PRO	-	expression tag	UNP Q8NER1
A	843	ARG	-	expression tag	UNP Q8NER1
A	844	GLY	-	expression tag	UNP Q8NER1
A	845	SER	-	expression tag	UNP Q8NER1
A	846	ALA	-	expression tag	UNP Q8NER1
A	847	ALA	-	expression tag	UNP Q8NER1
A	848	ALA	-	expression tag	UNP Q8NER1
A	849	ALA	-	expression tag	UNP Q8NER1
A	850	VAL	-	expression tag	UNP Q8NER1
A	851	SER	-	expression tag	UNP Q8NER1
A	852	LYS	-	expression tag	UNP Q8NER1
A	853	GLY	-	expression tag	UNP Q8NER1
A	854	GLU	-	expression tag	UNP Q8NER1
A	855	GLU	-	expression tag	UNP Q8NER1
A	856	LEU	-	expression tag	UNP Q8NER1
A	857	PHE	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	858	THR	-	expression tag	UNP Q8NER1
A	859	GLY	-	expression tag	UNP Q8NER1
A	860	VAL	-	expression tag	UNP Q8NER1
A	861	VAL	-	expression tag	UNP Q8NER1
A	862	PRO	-	expression tag	UNP Q8NER1
A	863	ILE	-	expression tag	UNP Q8NER1
A	864	LEU	-	expression tag	UNP Q8NER1
A	865	VAL	-	expression tag	UNP Q8NER1
A	866	GLU	-	expression tag	UNP Q8NER1
A	867	LEU	-	expression tag	UNP Q8NER1
A	868	ASP	-	expression tag	UNP Q8NER1
A	869	GLY	-	expression tag	UNP Q8NER1
A	870	ASP	-	expression tag	UNP Q8NER1
A	871	VAL	-	expression tag	UNP Q8NER1
A	872	ASN	-	expression tag	UNP Q8NER1
A	873	GLY	-	expression tag	UNP Q8NER1
A	874	HIS	-	expression tag	UNP Q8NER1
A	875	LYS	-	expression tag	UNP Q8NER1
A	876	PHE	-	expression tag	UNP Q8NER1
A	877	SER	-	expression tag	UNP Q8NER1
A	878	VAL	-	expression tag	UNP Q8NER1
A	879	SER	-	expression tag	UNP Q8NER1
A	880	GLY	-	expression tag	UNP Q8NER1
A	881	GLU	-	expression tag	UNP Q8NER1
A	882	GLY	-	expression tag	UNP Q8NER1
A	883	GLU	-	expression tag	UNP Q8NER1
A	884	GLY	-	expression tag	UNP Q8NER1
A	885	ASP	-	expression tag	UNP Q8NER1
A	886	ALA	-	expression tag	UNP Q8NER1
A	887	THR	-	expression tag	UNP Q8NER1
A	888	TYR	-	expression tag	UNP Q8NER1
A	889	GLY	-	expression tag	UNP Q8NER1
A	890	LYS	-	expression tag	UNP Q8NER1
A	891	LEU	-	expression tag	UNP Q8NER1
A	892	THR	-	expression tag	UNP Q8NER1
A	893	LEU	-	expression tag	UNP Q8NER1
A	894	LYS	-	expression tag	UNP Q8NER1
A	895	PHE	-	expression tag	UNP Q8NER1
A	896	ILE	-	expression tag	UNP Q8NER1
A	897	CYS	-	expression tag	UNP Q8NER1
A	898	THR	-	expression tag	UNP Q8NER1
A	899	THR	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	900	GLY	-	expression tag	UNP Q8NER1
A	901	LYS	-	expression tag	UNP Q8NER1
A	902	LEU	-	expression tag	UNP Q8NER1
A	903	PRO	-	expression tag	UNP Q8NER1
A	904	VAL	-	expression tag	UNP Q8NER1
A	905	PRO	-	expression tag	UNP Q8NER1
A	906	TRP	-	expression tag	UNP Q8NER1
A	907	PRO	-	expression tag	UNP Q8NER1
A	908	THR	-	expression tag	UNP Q8NER1
A	909	LEU	-	expression tag	UNP Q8NER1
A	910	VAL	-	expression tag	UNP Q8NER1
A	911	THR	-	expression tag	UNP Q8NER1
A	912	THR	-	expression tag	UNP Q8NER1
A	913	LEU	-	expression tag	UNP Q8NER1
A	914	THR	-	expression tag	UNP Q8NER1
A	915	TYR	-	expression tag	UNP Q8NER1
A	916	GLY	-	expression tag	UNP Q8NER1
A	917	VAL	-	expression tag	UNP Q8NER1
A	918	GLN	-	expression tag	UNP Q8NER1
A	919	CYS	-	expression tag	UNP Q8NER1
A	920	PHE	-	expression tag	UNP Q8NER1
A	921	SER	-	expression tag	UNP Q8NER1
A	922	ARG	-	expression tag	UNP Q8NER1
A	923	TYR	-	expression tag	UNP Q8NER1
A	924	PRO	-	expression tag	UNP Q8NER1
A	925	ASP	-	expression tag	UNP Q8NER1
A	926	HIS	-	expression tag	UNP Q8NER1
A	927	MET	-	expression tag	UNP Q8NER1
A	928	LYS	-	expression tag	UNP Q8NER1
A	929	GLN	-	expression tag	UNP Q8NER1
A	930	HIS	-	expression tag	UNP Q8NER1
A	931	ASP	-	expression tag	UNP Q8NER1
A	932	PHE	-	expression tag	UNP Q8NER1
A	933	PHE	-	expression tag	UNP Q8NER1
A	934	LYS	-	expression tag	UNP Q8NER1
A	935	SER	-	expression tag	UNP Q8NER1
A	936	ALA	-	expression tag	UNP Q8NER1
A	937	MET	-	expression tag	UNP Q8NER1
A	938	PRO	-	expression tag	UNP Q8NER1
A	939	GLU	-	expression tag	UNP Q8NER1
A	940	GLY	-	expression tag	UNP Q8NER1
A	941	TYR	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	942	VAL	-	expression tag	UNP Q8NER1
A	943	GLN	-	expression tag	UNP Q8NER1
A	944	GLU	-	expression tag	UNP Q8NER1
A	945	ARG	-	expression tag	UNP Q8NER1
A	946	THR	-	expression tag	UNP Q8NER1
A	947	ILE	-	expression tag	UNP Q8NER1
A	948	PHE	-	expression tag	UNP Q8NER1
A	949	PHE	-	expression tag	UNP Q8NER1
A	950	LYS	-	expression tag	UNP Q8NER1
A	951	ASP	-	expression tag	UNP Q8NER1
A	952	ASP	-	expression tag	UNP Q8NER1
A	953	GLY	-	expression tag	UNP Q8NER1
A	954	ASN	-	expression tag	UNP Q8NER1
A	955	TYR	-	expression tag	UNP Q8NER1
A	956	LYS	-	expression tag	UNP Q8NER1
A	957	THR	-	expression tag	UNP Q8NER1
A	958	ARG	-	expression tag	UNP Q8NER1
A	959	ALA	-	expression tag	UNP Q8NER1
A	960	GLU	-	expression tag	UNP Q8NER1
A	961	VAL	-	expression tag	UNP Q8NER1
A	962	LYS	-	expression tag	UNP Q8NER1
A	963	PHE	-	expression tag	UNP Q8NER1
A	964	GLU	-	expression tag	UNP Q8NER1
A	965	GLY	-	expression tag	UNP Q8NER1
A	966	ASP	-	expression tag	UNP Q8NER1
A	967	THR	-	expression tag	UNP Q8NER1
A	968	LEU	-	expression tag	UNP Q8NER1
A	969	VAL	-	expression tag	UNP Q8NER1
A	970	ASN	-	expression tag	UNP Q8NER1
A	971	ARG	-	expression tag	UNP Q8NER1
A	972	ILE	-	expression tag	UNP Q8NER1
A	973	GLU	-	expression tag	UNP Q8NER1
A	974	LEU	-	expression tag	UNP Q8NER1
A	975	LYS	-	expression tag	UNP Q8NER1
A	976	GLY	-	expression tag	UNP Q8NER1
A	977	ILE	-	expression tag	UNP Q8NER1
A	978	ASP	-	expression tag	UNP Q8NER1
A	979	PHE	-	expression tag	UNP Q8NER1
A	980	LYS	-	expression tag	UNP Q8NER1
A	981	GLU	-	expression tag	UNP Q8NER1
A	982	ASP	-	expression tag	UNP Q8NER1
A	983	GLY	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	984	ASN	-	expression tag	UNP Q8NER1
A	985	ILE	-	expression tag	UNP Q8NER1
A	986	LEU	-	expression tag	UNP Q8NER1
A	987	GLY	-	expression tag	UNP Q8NER1
A	988	HIS	-	expression tag	UNP Q8NER1
A	989	LYS	-	expression tag	UNP Q8NER1
A	990	LEU	-	expression tag	UNP Q8NER1
A	991	GLU	-	expression tag	UNP Q8NER1
A	992	TYR	-	expression tag	UNP Q8NER1
A	993	ASN	-	expression tag	UNP Q8NER1
A	994	TYR	-	expression tag	UNP Q8NER1
A	995	ASN	-	expression tag	UNP Q8NER1
A	996	SER	-	expression tag	UNP Q8NER1
A	997	HIS	-	expression tag	UNP Q8NER1
A	998	ASN	-	expression tag	UNP Q8NER1
A	999	VAL	-	expression tag	UNP Q8NER1
A	1000	TYR	-	expression tag	UNP Q8NER1
A	1001	ILE	-	expression tag	UNP Q8NER1
A	1002	MET	-	expression tag	UNP Q8NER1
A	1003	ALA	-	expression tag	UNP Q8NER1
A	1004	ASP	-	expression tag	UNP Q8NER1
A	1005	LYS	-	expression tag	UNP Q8NER1
A	1006	GLN	-	expression tag	UNP Q8NER1
A	1007	LYS	-	expression tag	UNP Q8NER1
A	1008	ASN	-	expression tag	UNP Q8NER1
A	1009	GLY	-	expression tag	UNP Q8NER1
A	1010	ILE	-	expression tag	UNP Q8NER1
A	1011	LYS	-	expression tag	UNP Q8NER1
A	1012	VAL	-	expression tag	UNP Q8NER1
A	1013	ASN	-	expression tag	UNP Q8NER1
A	1014	PHE	-	expression tag	UNP Q8NER1
A	1015	LYS	-	expression tag	UNP Q8NER1
A	1016	ILE	-	expression tag	UNP Q8NER1
A	1017	ARG	-	expression tag	UNP Q8NER1
A	1018	HIS	-	expression tag	UNP Q8NER1
A	1019	ASN	-	expression tag	UNP Q8NER1
A	1020	ILE	-	expression tag	UNP Q8NER1
A	1021	GLU	-	expression tag	UNP Q8NER1
A	1022	ASP	-	expression tag	UNP Q8NER1
A	1023	GLY	-	expression tag	UNP Q8NER1
A	1024	SER	-	expression tag	UNP Q8NER1
A	1025	VAL	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	1026	GLN	-	expression tag	UNP Q8NER1
A	1027	LEU	-	expression tag	UNP Q8NER1
A	1028	ALA	-	expression tag	UNP Q8NER1
A	1029	ASP	-	expression tag	UNP Q8NER1
A	1030	HIS	-	expression tag	UNP Q8NER1
A	1031	TYR	-	expression tag	UNP Q8NER1
A	1032	GLN	-	expression tag	UNP Q8NER1
A	1033	GLN	-	expression tag	UNP Q8NER1
A	1034	ASN	-	expression tag	UNP Q8NER1
A	1035	THR	-	expression tag	UNP Q8NER1
A	1036	PRO	-	expression tag	UNP Q8NER1
A	1037	ILE	-	expression tag	UNP Q8NER1
A	1038	GLY	-	expression tag	UNP Q8NER1
A	1039	ASP	-	expression tag	UNP Q8NER1
A	1040	GLY	-	expression tag	UNP Q8NER1
A	1041	PRO	-	expression tag	UNP Q8NER1
A	1042	VAL	-	expression tag	UNP Q8NER1
A	1043	LEU	-	expression tag	UNP Q8NER1
A	1044	LEU	-	expression tag	UNP Q8NER1
A	1045	PRO	-	expression tag	UNP Q8NER1
A	1046	ASP	-	expression tag	UNP Q8NER1
A	1047	ASN	-	expression tag	UNP Q8NER1
A	1048	HIS	-	expression tag	UNP Q8NER1
A	1049	TYR	-	expression tag	UNP Q8NER1
A	1050	LEU	-	expression tag	UNP Q8NER1
A	1051	SER	-	expression tag	UNP Q8NER1
A	1052	THR	-	expression tag	UNP Q8NER1
A	1053	GLN	-	expression tag	UNP Q8NER1
A	1054	SER	-	expression tag	UNP Q8NER1
A	1055	LYS	-	expression tag	UNP Q8NER1
A	1056	LEU	-	expression tag	UNP Q8NER1
A	1057	SER	-	expression tag	UNP Q8NER1
A	1058	LYS	-	expression tag	UNP Q8NER1
A	1059	ASP	-	expression tag	UNP Q8NER1
A	1060	PRO	-	expression tag	UNP Q8NER1
A	1061	ASN	-	expression tag	UNP Q8NER1
A	1062	GLU	-	expression tag	UNP Q8NER1
A	1063	LYS	-	expression tag	UNP Q8NER1
A	1064	ARG	-	expression tag	UNP Q8NER1
A	1065	ASP	-	expression tag	UNP Q8NER1
A	1066	HIS	-	expression tag	UNP Q8NER1
A	1067	MET	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	1068	VAL	-	expression tag	UNP Q8NER1
A	1069	LEU	-	expression tag	UNP Q8NER1
A	1070	LEU	-	expression tag	UNP Q8NER1
A	1071	GLU	-	expression tag	UNP Q8NER1
A	1072	PHE	-	expression tag	UNP Q8NER1
A	1073	VAL	-	expression tag	UNP Q8NER1
A	1074	THR	-	expression tag	UNP Q8NER1
A	1075	ALA	-	expression tag	UNP Q8NER1
A	1076	ALA	-	expression tag	UNP Q8NER1
A	1077	GLY	-	expression tag	UNP Q8NER1
A	1078	ILE	-	expression tag	UNP Q8NER1
A	1079	THR	-	expression tag	UNP Q8NER1
A	1080	LEU	-	expression tag	UNP Q8NER1
A	1081	GLY	-	expression tag	UNP Q8NER1
A	1082	MET	-	expression tag	UNP Q8NER1
A	1083	ASP	-	expression tag	UNP Q8NER1
A	1084	GLU	-	expression tag	UNP Q8NER1
A	1085	LEU	-	expression tag	UNP Q8NER1
A	1086	TYR	-	expression tag	UNP Q8NER1
A	1087	LYS	-	expression tag	UNP Q8NER1
A	1088	SER	-	expression tag	UNP Q8NER1
A	1089	GLY	-	expression tag	UNP Q8NER1
A	1090	LEU	-	expression tag	UNP Q8NER1
A	1091	ARG	-	expression tag	UNP Q8NER1
A	1092	SER	-	expression tag	UNP Q8NER1
A	1093	TRP	-	expression tag	UNP Q8NER1
A	1094	SER	-	expression tag	UNP Q8NER1
A	1095	HIS	-	expression tag	UNP Q8NER1
A	1096	PRO	-	expression tag	UNP Q8NER1
A	1097	GLN	-	expression tag	UNP Q8NER1
A	1098	PHE	-	expression tag	UNP Q8NER1
A	1099	GLU	-	expression tag	UNP Q8NER1
A	1100	LYS	-	expression tag	UNP Q8NER1
B	-1	MET	-	initiating methionine	UNP Q8NER1
B	0	THR	-	expression tag	UNP Q8NER1
B	1	SER	-	expression tag	UNP Q8NER1
B	840	LEU	-	expression tag	UNP Q8NER1
B	841	VAL	-	expression tag	UNP Q8NER1
B	842	PRO	-	expression tag	UNP Q8NER1
B	843	ARG	-	expression tag	UNP Q8NER1
B	844	GLY	-	expression tag	UNP Q8NER1
B	845	SER	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	846	ALA	-	expression tag	UNP Q8NER1
B	847	ALA	-	expression tag	UNP Q8NER1
B	848	ALA	-	expression tag	UNP Q8NER1
B	849	ALA	-	expression tag	UNP Q8NER1
B	850	VAL	-	expression tag	UNP Q8NER1
B	851	SER	-	expression tag	UNP Q8NER1
B	852	LYS	-	expression tag	UNP Q8NER1
B	853	GLY	-	expression tag	UNP Q8NER1
B	854	GLU	-	expression tag	UNP Q8NER1
B	855	GLU	-	expression tag	UNP Q8NER1
B	856	LEU	-	expression tag	UNP Q8NER1
B	857	PHE	-	expression tag	UNP Q8NER1
B	858	THR	-	expression tag	UNP Q8NER1
B	859	GLY	-	expression tag	UNP Q8NER1
B	860	VAL	-	expression tag	UNP Q8NER1
B	861	VAL	-	expression tag	UNP Q8NER1
B	862	PRO	-	expression tag	UNP Q8NER1
B	863	ILE	-	expression tag	UNP Q8NER1
B	864	LEU	-	expression tag	UNP Q8NER1
B	865	VAL	-	expression tag	UNP Q8NER1
B	866	GLU	-	expression tag	UNP Q8NER1
B	867	LEU	-	expression tag	UNP Q8NER1
B	868	ASP	-	expression tag	UNP Q8NER1
B	869	GLY	-	expression tag	UNP Q8NER1
B	870	ASP	-	expression tag	UNP Q8NER1
B	871	VAL	-	expression tag	UNP Q8NER1
B	872	ASN	-	expression tag	UNP Q8NER1
B	873	GLY	-	expression tag	UNP Q8NER1
B	874	HIS	-	expression tag	UNP Q8NER1
B	875	LYS	-	expression tag	UNP Q8NER1
B	876	PHE	-	expression tag	UNP Q8NER1
B	877	SER	-	expression tag	UNP Q8NER1
B	878	VAL	-	expression tag	UNP Q8NER1
B	879	SER	-	expression tag	UNP Q8NER1
B	880	GLY	-	expression tag	UNP Q8NER1
B	881	GLU	-	expression tag	UNP Q8NER1
B	882	GLY	-	expression tag	UNP Q8NER1
B	883	GLU	-	expression tag	UNP Q8NER1
B	884	GLY	-	expression tag	UNP Q8NER1
B	885	ASP	-	expression tag	UNP Q8NER1
B	886	ALA	-	expression tag	UNP Q8NER1
B	887	THR	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	888	TYR	-	expression tag	UNP Q8NER1
B	889	GLY	-	expression tag	UNP Q8NER1
B	890	LYS	-	expression tag	UNP Q8NER1
B	891	LEU	-	expression tag	UNP Q8NER1
B	892	THR	-	expression tag	UNP Q8NER1
B	893	LEU	-	expression tag	UNP Q8NER1
B	894	LYS	-	expression tag	UNP Q8NER1
B	895	PHE	-	expression tag	UNP Q8NER1
B	896	ILE	-	expression tag	UNP Q8NER1
B	897	CYS	-	expression tag	UNP Q8NER1
B	898	THR	-	expression tag	UNP Q8NER1
B	899	THR	-	expression tag	UNP Q8NER1
B	900	GLY	-	expression tag	UNP Q8NER1
B	901	LYS	-	expression tag	UNP Q8NER1
B	902	LEU	-	expression tag	UNP Q8NER1
B	903	PRO	-	expression tag	UNP Q8NER1
B	904	VAL	-	expression tag	UNP Q8NER1
B	905	PRO	-	expression tag	UNP Q8NER1
B	906	TRP	-	expression tag	UNP Q8NER1
B	907	PRO	-	expression tag	UNP Q8NER1
B	908	THR	-	expression tag	UNP Q8NER1
B	909	LEU	-	expression tag	UNP Q8NER1
B	910	VAL	-	expression tag	UNP Q8NER1
B	911	THR	-	expression tag	UNP Q8NER1
B	912	THR	-	expression tag	UNP Q8NER1
B	913	LEU	-	expression tag	UNP Q8NER1
B	914	THR	-	expression tag	UNP Q8NER1
B	915	TYR	-	expression tag	UNP Q8NER1
B	916	GLY	-	expression tag	UNP Q8NER1
B	917	VAL	-	expression tag	UNP Q8NER1
B	918	GLN	-	expression tag	UNP Q8NER1
B	919	CYS	-	expression tag	UNP Q8NER1
B	920	PHE	-	expression tag	UNP Q8NER1
B	921	SER	-	expression tag	UNP Q8NER1
B	922	ARG	-	expression tag	UNP Q8NER1
B	923	TYR	-	expression tag	UNP Q8NER1
B	924	PRO	-	expression tag	UNP Q8NER1
B	925	ASP	-	expression tag	UNP Q8NER1
B	926	HIS	-	expression tag	UNP Q8NER1
B	927	MET	-	expression tag	UNP Q8NER1
B	928	LYS	-	expression tag	UNP Q8NER1
B	929	GLN	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	930	HIS	-	expression tag	UNP Q8NER1
B	931	ASP	-	expression tag	UNP Q8NER1
B	932	PHE	-	expression tag	UNP Q8NER1
B	933	PHE	-	expression tag	UNP Q8NER1
B	934	LYS	-	expression tag	UNP Q8NER1
B	935	SER	-	expression tag	UNP Q8NER1
B	936	ALA	-	expression tag	UNP Q8NER1
B	937	MET	-	expression tag	UNP Q8NER1
B	938	PRO	-	expression tag	UNP Q8NER1
B	939	GLU	-	expression tag	UNP Q8NER1
B	940	GLY	-	expression tag	UNP Q8NER1
B	941	TYR	-	expression tag	UNP Q8NER1
B	942	VAL	-	expression tag	UNP Q8NER1
B	943	GLN	-	expression tag	UNP Q8NER1
B	944	GLU	-	expression tag	UNP Q8NER1
B	945	ARG	-	expression tag	UNP Q8NER1
B	946	THR	-	expression tag	UNP Q8NER1
B	947	ILE	-	expression tag	UNP Q8NER1
B	948	PHE	-	expression tag	UNP Q8NER1
B	949	PHE	-	expression tag	UNP Q8NER1
B	950	LYS	-	expression tag	UNP Q8NER1
B	951	ASP	-	expression tag	UNP Q8NER1
B	952	ASP	-	expression tag	UNP Q8NER1
B	953	GLY	-	expression tag	UNP Q8NER1
B	954	ASN	-	expression tag	UNP Q8NER1
B	955	TYR	-	expression tag	UNP Q8NER1
B	956	LYS	-	expression tag	UNP Q8NER1
B	957	THR	-	expression tag	UNP Q8NER1
B	958	ARG	-	expression tag	UNP Q8NER1
B	959	ALA	-	expression tag	UNP Q8NER1
B	960	GLU	-	expression tag	UNP Q8NER1
B	961	VAL	-	expression tag	UNP Q8NER1
B	962	LYS	-	expression tag	UNP Q8NER1
B	963	PHE	-	expression tag	UNP Q8NER1
B	964	GLU	-	expression tag	UNP Q8NER1
B	965	GLY	-	expression tag	UNP Q8NER1
B	966	ASP	-	expression tag	UNP Q8NER1
B	967	THR	-	expression tag	UNP Q8NER1
B	968	LEU	-	expression tag	UNP Q8NER1
B	969	VAL	-	expression tag	UNP Q8NER1
B	970	ASN	-	expression tag	UNP Q8NER1
B	971	ARG	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	972	ILE	-	expression tag	UNP Q8NER1
B	973	GLU	-	expression tag	UNP Q8NER1
B	974	LEU	-	expression tag	UNP Q8NER1
B	975	LYS	-	expression tag	UNP Q8NER1
B	976	GLY	-	expression tag	UNP Q8NER1
B	977	ILE	-	expression tag	UNP Q8NER1
B	978	ASP	-	expression tag	UNP Q8NER1
B	979	PHE	-	expression tag	UNP Q8NER1
B	980	LYS	-	expression tag	UNP Q8NER1
B	981	GLU	-	expression tag	UNP Q8NER1
B	982	ASP	-	expression tag	UNP Q8NER1
B	983	GLY	-	expression tag	UNP Q8NER1
B	984	ASN	-	expression tag	UNP Q8NER1
B	985	ILE	-	expression tag	UNP Q8NER1
B	986	LEU	-	expression tag	UNP Q8NER1
B	987	GLY	-	expression tag	UNP Q8NER1
B	988	HIS	-	expression tag	UNP Q8NER1
B	989	LYS	-	expression tag	UNP Q8NER1
B	990	LEU	-	expression tag	UNP Q8NER1
B	991	GLU	-	expression tag	UNP Q8NER1
B	992	TYR	-	expression tag	UNP Q8NER1
B	993	ASN	-	expression tag	UNP Q8NER1
B	994	TYR	-	expression tag	UNP Q8NER1
B	995	ASN	-	expression tag	UNP Q8NER1
B	996	SER	-	expression tag	UNP Q8NER1
B	997	HIS	-	expression tag	UNP Q8NER1
B	998	ASN	-	expression tag	UNP Q8NER1
B	999	VAL	-	expression tag	UNP Q8NER1
B	1000	TYR	-	expression tag	UNP Q8NER1
B	1001	ILE	-	expression tag	UNP Q8NER1
B	1002	MET	-	expression tag	UNP Q8NER1
B	1003	ALA	-	expression tag	UNP Q8NER1
B	1004	ASP	-	expression tag	UNP Q8NER1
B	1005	LYS	-	expression tag	UNP Q8NER1
B	1006	GLN	-	expression tag	UNP Q8NER1
B	1007	LYS	-	expression tag	UNP Q8NER1
B	1008	ASN	-	expression tag	UNP Q8NER1
B	1009	GLY	-	expression tag	UNP Q8NER1
B	1010	ILE	-	expression tag	UNP Q8NER1
B	1011	LYS	-	expression tag	UNP Q8NER1
B	1012	VAL	-	expression tag	UNP Q8NER1
B	1013	ASN	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1014	PHE	-	expression tag	UNP Q8NER1
B	1015	LYS	-	expression tag	UNP Q8NER1
B	1016	ILE	-	expression tag	UNP Q8NER1
B	1017	ARG	-	expression tag	UNP Q8NER1
B	1018	HIS	-	expression tag	UNP Q8NER1
B	1019	ASN	-	expression tag	UNP Q8NER1
B	1020	ILE	-	expression tag	UNP Q8NER1
B	1021	GLU	-	expression tag	UNP Q8NER1
B	1022	ASP	-	expression tag	UNP Q8NER1
B	1023	GLY	-	expression tag	UNP Q8NER1
B	1024	SER	-	expression tag	UNP Q8NER1
B	1025	VAL	-	expression tag	UNP Q8NER1
B	1026	GLN	-	expression tag	UNP Q8NER1
B	1027	LEU	-	expression tag	UNP Q8NER1
B	1028	ALA	-	expression tag	UNP Q8NER1
B	1029	ASP	-	expression tag	UNP Q8NER1
B	1030	HIS	-	expression tag	UNP Q8NER1
B	1031	TYR	-	expression tag	UNP Q8NER1
B	1032	GLN	-	expression tag	UNP Q8NER1
B	1033	GLN	-	expression tag	UNP Q8NER1
B	1034	ASN	-	expression tag	UNP Q8NER1
B	1035	THR	-	expression tag	UNP Q8NER1
B	1036	PRO	-	expression tag	UNP Q8NER1
B	1037	ILE	-	expression tag	UNP Q8NER1
B	1038	GLY	-	expression tag	UNP Q8NER1
B	1039	ASP	-	expression tag	UNP Q8NER1
B	1040	GLY	-	expression tag	UNP Q8NER1
B	1041	PRO	-	expression tag	UNP Q8NER1
B	1042	VAL	-	expression tag	UNP Q8NER1
B	1043	LEU	-	expression tag	UNP Q8NER1
B	1044	LEU	-	expression tag	UNP Q8NER1
B	1045	PRO	-	expression tag	UNP Q8NER1
B	1046	ASP	-	expression tag	UNP Q8NER1
B	1047	ASN	-	expression tag	UNP Q8NER1
B	1048	HIS	-	expression tag	UNP Q8NER1
B	1049	TYR	-	expression tag	UNP Q8NER1
B	1050	LEU	-	expression tag	UNP Q8NER1
B	1051	SER	-	expression tag	UNP Q8NER1
B	1052	THR	-	expression tag	UNP Q8NER1
B	1053	GLN	-	expression tag	UNP Q8NER1
B	1054	SER	-	expression tag	UNP Q8NER1
B	1055	LYS	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1056	LEU	-	expression tag	UNP Q8NER1
B	1057	SER	-	expression tag	UNP Q8NER1
B	1058	LYS	-	expression tag	UNP Q8NER1
B	1059	ASP	-	expression tag	UNP Q8NER1
B	1060	PRO	-	expression tag	UNP Q8NER1
B	1061	ASN	-	expression tag	UNP Q8NER1
B	1062	GLU	-	expression tag	UNP Q8NER1
B	1063	LYS	-	expression tag	UNP Q8NER1
B	1064	ARG	-	expression tag	UNP Q8NER1
B	1065	ASP	-	expression tag	UNP Q8NER1
B	1066	HIS	-	expression tag	UNP Q8NER1
B	1067	MET	-	expression tag	UNP Q8NER1
B	1068	VAL	-	expression tag	UNP Q8NER1
B	1069	LEU	-	expression tag	UNP Q8NER1
B	1070	LEU	-	expression tag	UNP Q8NER1
B	1071	GLU	-	expression tag	UNP Q8NER1
B	1072	PHE	-	expression tag	UNP Q8NER1
B	1073	VAL	-	expression tag	UNP Q8NER1
B	1074	THR	-	expression tag	UNP Q8NER1
B	1075	ALA	-	expression tag	UNP Q8NER1
B	1076	ALA	-	expression tag	UNP Q8NER1
B	1077	GLY	-	expression tag	UNP Q8NER1
B	1078	ILE	-	expression tag	UNP Q8NER1
B	1079	THR	-	expression tag	UNP Q8NER1
B	1080	LEU	-	expression tag	UNP Q8NER1
B	1081	GLY	-	expression tag	UNP Q8NER1
B	1082	MET	-	expression tag	UNP Q8NER1
B	1083	ASP	-	expression tag	UNP Q8NER1
B	1084	GLU	-	expression tag	UNP Q8NER1
B	1085	LEU	-	expression tag	UNP Q8NER1
B	1086	TYR	-	expression tag	UNP Q8NER1
B	1087	LYS	-	expression tag	UNP Q8NER1
B	1088	SER	-	expression tag	UNP Q8NER1
B	1089	GLY	-	expression tag	UNP Q8NER1
B	1090	LEU	-	expression tag	UNP Q8NER1
B	1091	ARG	-	expression tag	UNP Q8NER1
B	1092	SER	-	expression tag	UNP Q8NER1
B	1093	TRP	-	expression tag	UNP Q8NER1
B	1094	SER	-	expression tag	UNP Q8NER1
B	1095	HIS	-	expression tag	UNP Q8NER1
B	1096	PRO	-	expression tag	UNP Q8NER1
B	1097	GLN	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1098	PHE	-	expression tag	UNP Q8NER1
B	1099	GLU	-	expression tag	UNP Q8NER1
B	1100	LYS	-	expression tag	UNP Q8NER1
C	-1	MET	-	initiating methionine	UNP Q8NER1
C	0	THR	-	expression tag	UNP Q8NER1
C	1	SER	-	expression tag	UNP Q8NER1
C	840	LEU	-	expression tag	UNP Q8NER1
C	841	VAL	-	expression tag	UNP Q8NER1
C	842	PRO	-	expression tag	UNP Q8NER1
C	843	ARG	-	expression tag	UNP Q8NER1
C	844	GLY	-	expression tag	UNP Q8NER1
C	845	SER	-	expression tag	UNP Q8NER1
C	846	ALA	-	expression tag	UNP Q8NER1
C	847	ALA	-	expression tag	UNP Q8NER1
C	848	ALA	-	expression tag	UNP Q8NER1
C	849	ALA	-	expression tag	UNP Q8NER1
C	850	VAL	-	expression tag	UNP Q8NER1
C	851	SER	-	expression tag	UNP Q8NER1
C	852	LYS	-	expression tag	UNP Q8NER1
C	853	GLY	-	expression tag	UNP Q8NER1
C	854	GLU	-	expression tag	UNP Q8NER1
C	855	GLU	-	expression tag	UNP Q8NER1
C	856	LEU	-	expression tag	UNP Q8NER1
C	857	PHE	-	expression tag	UNP Q8NER1
C	858	THR	-	expression tag	UNP Q8NER1
C	859	GLY	-	expression tag	UNP Q8NER1
C	860	VAL	-	expression tag	UNP Q8NER1
C	861	VAL	-	expression tag	UNP Q8NER1
C	862	PRO	-	expression tag	UNP Q8NER1
C	863	ILE	-	expression tag	UNP Q8NER1
C	864	LEU	-	expression tag	UNP Q8NER1
C	865	VAL	-	expression tag	UNP Q8NER1
C	866	GLU	-	expression tag	UNP Q8NER1
C	867	LEU	-	expression tag	UNP Q8NER1
C	868	ASP	-	expression tag	UNP Q8NER1
C	869	GLY	-	expression tag	UNP Q8NER1
C	870	ASP	-	expression tag	UNP Q8NER1
C	871	VAL	-	expression tag	UNP Q8NER1
C	872	ASN	-	expression tag	UNP Q8NER1
C	873	GLY	-	expression tag	UNP Q8NER1
C	874	HIS	-	expression tag	UNP Q8NER1
C	875	LYS	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	876	PHE	-	expression tag	UNP Q8NER1
C	877	SER	-	expression tag	UNP Q8NER1
C	878	VAL	-	expression tag	UNP Q8NER1
C	879	SER	-	expression tag	UNP Q8NER1
C	880	GLY	-	expression tag	UNP Q8NER1
C	881	GLU	-	expression tag	UNP Q8NER1
C	882	GLY	-	expression tag	UNP Q8NER1
C	883	GLU	-	expression tag	UNP Q8NER1
C	884	GLY	-	expression tag	UNP Q8NER1
C	885	ASP	-	expression tag	UNP Q8NER1
C	886	ALA	-	expression tag	UNP Q8NER1
C	887	THR	-	expression tag	UNP Q8NER1
C	888	TYR	-	expression tag	UNP Q8NER1
C	889	GLY	-	expression tag	UNP Q8NER1
C	890	LYS	-	expression tag	UNP Q8NER1
C	891	LEU	-	expression tag	UNP Q8NER1
C	892	THR	-	expression tag	UNP Q8NER1
C	893	LEU	-	expression tag	UNP Q8NER1
C	894	LYS	-	expression tag	UNP Q8NER1
C	895	PHE	-	expression tag	UNP Q8NER1
C	896	ILE	-	expression tag	UNP Q8NER1
C	897	CYS	-	expression tag	UNP Q8NER1
C	898	THR	-	expression tag	UNP Q8NER1
C	899	THR	-	expression tag	UNP Q8NER1
C	900	GLY	-	expression tag	UNP Q8NER1
C	901	LYS	-	expression tag	UNP Q8NER1
C	902	LEU	-	expression tag	UNP Q8NER1
C	903	PRO	-	expression tag	UNP Q8NER1
C	904	VAL	-	expression tag	UNP Q8NER1
C	905	PRO	-	expression tag	UNP Q8NER1
C	906	TRP	-	expression tag	UNP Q8NER1
C	907	PRO	-	expression tag	UNP Q8NER1
C	908	THR	-	expression tag	UNP Q8NER1
C	909	LEU	-	expression tag	UNP Q8NER1
C	910	VAL	-	expression tag	UNP Q8NER1
C	911	THR	-	expression tag	UNP Q8NER1
C	912	THR	-	expression tag	UNP Q8NER1
C	913	LEU	-	expression tag	UNP Q8NER1
C	914	THR	-	expression tag	UNP Q8NER1
C	915	TYR	-	expression tag	UNP Q8NER1
C	916	GLY	-	expression tag	UNP Q8NER1
C	917	VAL	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	918	GLN	-	expression tag	UNP Q8NER1
C	919	CYS	-	expression tag	UNP Q8NER1
C	920	PHE	-	expression tag	UNP Q8NER1
C	921	SER	-	expression tag	UNP Q8NER1
C	922	ARG	-	expression tag	UNP Q8NER1
C	923	TYR	-	expression tag	UNP Q8NER1
C	924	PRO	-	expression tag	UNP Q8NER1
C	925	ASP	-	expression tag	UNP Q8NER1
C	926	HIS	-	expression tag	UNP Q8NER1
C	927	MET	-	expression tag	UNP Q8NER1
C	928	LYS	-	expression tag	UNP Q8NER1
C	929	GLN	-	expression tag	UNP Q8NER1
C	930	HIS	-	expression tag	UNP Q8NER1
C	931	ASP	-	expression tag	UNP Q8NER1
C	932	PHE	-	expression tag	UNP Q8NER1
C	933	PHE	-	expression tag	UNP Q8NER1
C	934	LYS	-	expression tag	UNP Q8NER1
C	935	SER	-	expression tag	UNP Q8NER1
C	936	ALA	-	expression tag	UNP Q8NER1
C	937	MET	-	expression tag	UNP Q8NER1
C	938	PRO	-	expression tag	UNP Q8NER1
C	939	GLU	-	expression tag	UNP Q8NER1
C	940	GLY	-	expression tag	UNP Q8NER1
C	941	TYR	-	expression tag	UNP Q8NER1
C	942	VAL	-	expression tag	UNP Q8NER1
C	943	GLN	-	expression tag	UNP Q8NER1
C	944	GLU	-	expression tag	UNP Q8NER1
C	945	ARG	-	expression tag	UNP Q8NER1
C	946	THR	-	expression tag	UNP Q8NER1
C	947	ILE	-	expression tag	UNP Q8NER1
C	948	PHE	-	expression tag	UNP Q8NER1
C	949	PHE	-	expression tag	UNP Q8NER1
C	950	LYS	-	expression tag	UNP Q8NER1
C	951	ASP	-	expression tag	UNP Q8NER1
C	952	ASP	-	expression tag	UNP Q8NER1
C	953	GLY	-	expression tag	UNP Q8NER1
C	954	ASN	-	expression tag	UNP Q8NER1
C	955	TYR	-	expression tag	UNP Q8NER1
C	956	LYS	-	expression tag	UNP Q8NER1
C	957	THR	-	expression tag	UNP Q8NER1
C	958	ARG	-	expression tag	UNP Q8NER1
C	959	ALA	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	960	GLU	-	expression tag	UNP Q8NER1
C	961	VAL	-	expression tag	UNP Q8NER1
C	962	LYS	-	expression tag	UNP Q8NER1
C	963	PHE	-	expression tag	UNP Q8NER1
C	964	GLU	-	expression tag	UNP Q8NER1
C	965	GLY	-	expression tag	UNP Q8NER1
C	966	ASP	-	expression tag	UNP Q8NER1
C	967	THR	-	expression tag	UNP Q8NER1
C	968	LEU	-	expression tag	UNP Q8NER1
C	969	VAL	-	expression tag	UNP Q8NER1
C	970	ASN	-	expression tag	UNP Q8NER1
C	971	ARG	-	expression tag	UNP Q8NER1
C	972	ILE	-	expression tag	UNP Q8NER1
C	973	GLU	-	expression tag	UNP Q8NER1
C	974	LEU	-	expression tag	UNP Q8NER1
C	975	LYS	-	expression tag	UNP Q8NER1
C	976	GLY	-	expression tag	UNP Q8NER1
C	977	ILE	-	expression tag	UNP Q8NER1
C	978	ASP	-	expression tag	UNP Q8NER1
C	979	PHE	-	expression tag	UNP Q8NER1
C	980	LYS	-	expression tag	UNP Q8NER1
C	981	GLU	-	expression tag	UNP Q8NER1
C	982	ASP	-	expression tag	UNP Q8NER1
C	983	GLY	-	expression tag	UNP Q8NER1
C	984	ASN	-	expression tag	UNP Q8NER1
C	985	ILE	-	expression tag	UNP Q8NER1
C	986	LEU	-	expression tag	UNP Q8NER1
C	987	GLY	-	expression tag	UNP Q8NER1
C	988	HIS	-	expression tag	UNP Q8NER1
C	989	LYS	-	expression tag	UNP Q8NER1
C	990	LEU	-	expression tag	UNP Q8NER1
C	991	GLU	-	expression tag	UNP Q8NER1
C	992	TYR	-	expression tag	UNP Q8NER1
C	993	ASN	-	expression tag	UNP Q8NER1
C	994	TYR	-	expression tag	UNP Q8NER1
C	995	ASN	-	expression tag	UNP Q8NER1
C	996	SER	-	expression tag	UNP Q8NER1
C	997	HIS	-	expression tag	UNP Q8NER1
C	998	ASN	-	expression tag	UNP Q8NER1
C	999	VAL	-	expression tag	UNP Q8NER1
C	1000	TYR	-	expression tag	UNP Q8NER1
C	1001	ILE	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1002	MET	-	expression tag	UNP Q8NER1
C	1003	ALA	-	expression tag	UNP Q8NER1
C	1004	ASP	-	expression tag	UNP Q8NER1
C	1005	LYS	-	expression tag	UNP Q8NER1
C	1006	GLN	-	expression tag	UNP Q8NER1
C	1007	LYS	-	expression tag	UNP Q8NER1
C	1008	ASN	-	expression tag	UNP Q8NER1
C	1009	GLY	-	expression tag	UNP Q8NER1
C	1010	ILE	-	expression tag	UNP Q8NER1
C	1011	LYS	-	expression tag	UNP Q8NER1
C	1012	VAL	-	expression tag	UNP Q8NER1
C	1013	ASN	-	expression tag	UNP Q8NER1
C	1014	PHE	-	expression tag	UNP Q8NER1
C	1015	LYS	-	expression tag	UNP Q8NER1
C	1016	ILE	-	expression tag	UNP Q8NER1
C	1017	ARG	-	expression tag	UNP Q8NER1
C	1018	HIS	-	expression tag	UNP Q8NER1
C	1019	ASN	-	expression tag	UNP Q8NER1
C	1020	ILE	-	expression tag	UNP Q8NER1
C	1021	GLU	-	expression tag	UNP Q8NER1
C	1022	ASP	-	expression tag	UNP Q8NER1
C	1023	GLY	-	expression tag	UNP Q8NER1
C	1024	SER	-	expression tag	UNP Q8NER1
C	1025	VAL	-	expression tag	UNP Q8NER1
C	1026	GLN	-	expression tag	UNP Q8NER1
C	1027	LEU	-	expression tag	UNP Q8NER1
C	1028	ALA	-	expression tag	UNP Q8NER1
C	1029	ASP	-	expression tag	UNP Q8NER1
C	1030	HIS	-	expression tag	UNP Q8NER1
C	1031	TYR	-	expression tag	UNP Q8NER1
C	1032	GLN	-	expression tag	UNP Q8NER1
C	1033	GLN	-	expression tag	UNP Q8NER1
C	1034	ASN	-	expression tag	UNP Q8NER1
C	1035	THR	-	expression tag	UNP Q8NER1
C	1036	PRO	-	expression tag	UNP Q8NER1
C	1037	ILE	-	expression tag	UNP Q8NER1
C	1038	GLY	-	expression tag	UNP Q8NER1
C	1039	ASP	-	expression tag	UNP Q8NER1
C	1040	GLY	-	expression tag	UNP Q8NER1
C	1041	PRO	-	expression tag	UNP Q8NER1
C	1042	VAL	-	expression tag	UNP Q8NER1
C	1043	LEU	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1044	LEU	-	expression tag	UNP Q8NER1
C	1045	PRO	-	expression tag	UNP Q8NER1
C	1046	ASP	-	expression tag	UNP Q8NER1
C	1047	ASN	-	expression tag	UNP Q8NER1
C	1048	HIS	-	expression tag	UNP Q8NER1
C	1049	TYR	-	expression tag	UNP Q8NER1
C	1050	LEU	-	expression tag	UNP Q8NER1
C	1051	SER	-	expression tag	UNP Q8NER1
C	1052	THR	-	expression tag	UNP Q8NER1
C	1053	GLN	-	expression tag	UNP Q8NER1
C	1054	SER	-	expression tag	UNP Q8NER1
C	1055	LYS	-	expression tag	UNP Q8NER1
C	1056	LEU	-	expression tag	UNP Q8NER1
C	1057	SER	-	expression tag	UNP Q8NER1
C	1058	LYS	-	expression tag	UNP Q8NER1
C	1059	ASP	-	expression tag	UNP Q8NER1
C	1060	PRO	-	expression tag	UNP Q8NER1
C	1061	ASN	-	expression tag	UNP Q8NER1
C	1062	GLU	-	expression tag	UNP Q8NER1
C	1063	LYS	-	expression tag	UNP Q8NER1
C	1064	ARG	-	expression tag	UNP Q8NER1
C	1065	ASP	-	expression tag	UNP Q8NER1
C	1066	HIS	-	expression tag	UNP Q8NER1
C	1067	MET	-	expression tag	UNP Q8NER1
C	1068	VAL	-	expression tag	UNP Q8NER1
C	1069	LEU	-	expression tag	UNP Q8NER1
C	1070	LEU	-	expression tag	UNP Q8NER1
C	1071	GLU	-	expression tag	UNP Q8NER1
C	1072	PHE	-	expression tag	UNP Q8NER1
C	1073	VAL	-	expression tag	UNP Q8NER1
C	1074	THR	-	expression tag	UNP Q8NER1
C	1075	ALA	-	expression tag	UNP Q8NER1
C	1076	ALA	-	expression tag	UNP Q8NER1
C	1077	GLY	-	expression tag	UNP Q8NER1
C	1078	ILE	-	expression tag	UNP Q8NER1
C	1079	THR	-	expression tag	UNP Q8NER1
C	1080	LEU	-	expression tag	UNP Q8NER1
C	1081	GLY	-	expression tag	UNP Q8NER1
C	1082	MET	-	expression tag	UNP Q8NER1
C	1083	ASP	-	expression tag	UNP Q8NER1
C	1084	GLU	-	expression tag	UNP Q8NER1
C	1085	LEU	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1086	TYR	-	expression tag	UNP Q8NER1
C	1087	LYS	-	expression tag	UNP Q8NER1
C	1088	SER	-	expression tag	UNP Q8NER1
C	1089	GLY	-	expression tag	UNP Q8NER1
C	1090	LEU	-	expression tag	UNP Q8NER1
C	1091	ARG	-	expression tag	UNP Q8NER1
C	1092	SER	-	expression tag	UNP Q8NER1
C	1093	TRP	-	expression tag	UNP Q8NER1
C	1094	SER	-	expression tag	UNP Q8NER1
C	1095	HIS	-	expression tag	UNP Q8NER1
C	1096	PRO	-	expression tag	UNP Q8NER1
C	1097	GLN	-	expression tag	UNP Q8NER1
C	1098	PHE	-	expression tag	UNP Q8NER1
C	1099	GLU	-	expression tag	UNP Q8NER1
C	1100	LYS	-	expression tag	UNP Q8NER1
D	-1	MET	-	initiating methionine	UNP Q8NER1
D	0	THR	-	expression tag	UNP Q8NER1
D	1	SER	-	expression tag	UNP Q8NER1
D	840	LEU	-	expression tag	UNP Q8NER1
D	841	VAL	-	expression tag	UNP Q8NER1
D	842	PRO	-	expression tag	UNP Q8NER1
D	843	ARG	-	expression tag	UNP Q8NER1
D	844	GLY	-	expression tag	UNP Q8NER1
D	845	SER	-	expression tag	UNP Q8NER1
D	846	ALA	-	expression tag	UNP Q8NER1
D	847	ALA	-	expression tag	UNP Q8NER1
D	848	ALA	-	expression tag	UNP Q8NER1
D	849	ALA	-	expression tag	UNP Q8NER1
D	850	VAL	-	expression tag	UNP Q8NER1
D	851	SER	-	expression tag	UNP Q8NER1
D	852	LYS	-	expression tag	UNP Q8NER1
D	853	GLY	-	expression tag	UNP Q8NER1
D	854	GLU	-	expression tag	UNP Q8NER1
D	855	GLU	-	expression tag	UNP Q8NER1
D	856	LEU	-	expression tag	UNP Q8NER1
D	857	PHE	-	expression tag	UNP Q8NER1
D	858	THR	-	expression tag	UNP Q8NER1
D	859	GLY	-	expression tag	UNP Q8NER1
D	860	VAL	-	expression tag	UNP Q8NER1
D	861	VAL	-	expression tag	UNP Q8NER1
D	862	PRO	-	expression tag	UNP Q8NER1
D	863	ILE	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	864	LEU	-	expression tag	UNP Q8NER1
D	865	VAL	-	expression tag	UNP Q8NER1
D	866	GLU	-	expression tag	UNP Q8NER1
D	867	LEU	-	expression tag	UNP Q8NER1
D	868	ASP	-	expression tag	UNP Q8NER1
D	869	GLY	-	expression tag	UNP Q8NER1
D	870	ASP	-	expression tag	UNP Q8NER1
D	871	VAL	-	expression tag	UNP Q8NER1
D	872	ASN	-	expression tag	UNP Q8NER1
D	873	GLY	-	expression tag	UNP Q8NER1
D	874	HIS	-	expression tag	UNP Q8NER1
D	875	LYS	-	expression tag	UNP Q8NER1
D	876	PHE	-	expression tag	UNP Q8NER1
D	877	SER	-	expression tag	UNP Q8NER1
D	878	VAL	-	expression tag	UNP Q8NER1
D	879	SER	-	expression tag	UNP Q8NER1
D	880	GLY	-	expression tag	UNP Q8NER1
D	881	GLU	-	expression tag	UNP Q8NER1
D	882	GLY	-	expression tag	UNP Q8NER1
D	883	GLU	-	expression tag	UNP Q8NER1
D	884	GLY	-	expression tag	UNP Q8NER1
D	885	ASP	-	expression tag	UNP Q8NER1
D	886	ALA	-	expression tag	UNP Q8NER1
D	887	THR	-	expression tag	UNP Q8NER1
D	888	TYR	-	expression tag	UNP Q8NER1
D	889	GLY	-	expression tag	UNP Q8NER1
D	890	LYS	-	expression tag	UNP Q8NER1
D	891	LEU	-	expression tag	UNP Q8NER1
D	892	THR	-	expression tag	UNP Q8NER1
D	893	LEU	-	expression tag	UNP Q8NER1
D	894	LYS	-	expression tag	UNP Q8NER1
D	895	PHE	-	expression tag	UNP Q8NER1
D	896	ILE	-	expression tag	UNP Q8NER1
D	897	CYS	-	expression tag	UNP Q8NER1
D	898	THR	-	expression tag	UNP Q8NER1
D	899	THR	-	expression tag	UNP Q8NER1
D	900	GLY	-	expression tag	UNP Q8NER1
D	901	LYS	-	expression tag	UNP Q8NER1
D	902	LEU	-	expression tag	UNP Q8NER1
D	903	PRO	-	expression tag	UNP Q8NER1
D	904	VAL	-	expression tag	UNP Q8NER1
D	905	PRO	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	906	TRP	-	expression tag	UNP Q8NER1
D	907	PRO	-	expression tag	UNP Q8NER1
D	908	THR	-	expression tag	UNP Q8NER1
D	909	LEU	-	expression tag	UNP Q8NER1
D	910	VAL	-	expression tag	UNP Q8NER1
D	911	THR	-	expression tag	UNP Q8NER1
D	912	THR	-	expression tag	UNP Q8NER1
D	913	LEU	-	expression tag	UNP Q8NER1
D	914	THR	-	expression tag	UNP Q8NER1
D	915	TYR	-	expression tag	UNP Q8NER1
D	916	GLY	-	expression tag	UNP Q8NER1
D	917	VAL	-	expression tag	UNP Q8NER1
D	918	GLN	-	expression tag	UNP Q8NER1
D	919	CYS	-	expression tag	UNP Q8NER1
D	920	PHE	-	expression tag	UNP Q8NER1
D	921	SER	-	expression tag	UNP Q8NER1
D	922	ARG	-	expression tag	UNP Q8NER1
D	923	TYR	-	expression tag	UNP Q8NER1
D	924	PRO	-	expression tag	UNP Q8NER1
D	925	ASP	-	expression tag	UNP Q8NER1
D	926	HIS	-	expression tag	UNP Q8NER1
D	927	MET	-	expression tag	UNP Q8NER1
D	928	LYS	-	expression tag	UNP Q8NER1
D	929	GLN	-	expression tag	UNP Q8NER1
D	930	HIS	-	expression tag	UNP Q8NER1
D	931	ASP	-	expression tag	UNP Q8NER1
D	932	PHE	-	expression tag	UNP Q8NER1
D	933	PHE	-	expression tag	UNP Q8NER1
D	934	LYS	-	expression tag	UNP Q8NER1
D	935	SER	-	expression tag	UNP Q8NER1
D	936	ALA	-	expression tag	UNP Q8NER1
D	937	MET	-	expression tag	UNP Q8NER1
D	938	PRO	-	expression tag	UNP Q8NER1
D	939	GLU	-	expression tag	UNP Q8NER1
D	940	GLY	-	expression tag	UNP Q8NER1
D	941	TYR	-	expression tag	UNP Q8NER1
D	942	VAL	-	expression tag	UNP Q8NER1
D	943	GLN	-	expression tag	UNP Q8NER1
D	944	GLU	-	expression tag	UNP Q8NER1
D	945	ARG	-	expression tag	UNP Q8NER1
D	946	THR	-	expression tag	UNP Q8NER1
D	947	ILE	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	948	PHE	-	expression tag	UNP Q8NER1
D	949	PHE	-	expression tag	UNP Q8NER1
D	950	LYS	-	expression tag	UNP Q8NER1
D	951	ASP	-	expression tag	UNP Q8NER1
D	952	ASP	-	expression tag	UNP Q8NER1
D	953	GLY	-	expression tag	UNP Q8NER1
D	954	ASN	-	expression tag	UNP Q8NER1
D	955	TYR	-	expression tag	UNP Q8NER1
D	956	LYS	-	expression tag	UNP Q8NER1
D	957	THR	-	expression tag	UNP Q8NER1
D	958	ARG	-	expression tag	UNP Q8NER1
D	959	ALA	-	expression tag	UNP Q8NER1
D	960	GLU	-	expression tag	UNP Q8NER1
D	961	VAL	-	expression tag	UNP Q8NER1
D	962	LYS	-	expression tag	UNP Q8NER1
D	963	PHE	-	expression tag	UNP Q8NER1
D	964	GLU	-	expression tag	UNP Q8NER1
D	965	GLY	-	expression tag	UNP Q8NER1
D	966	ASP	-	expression tag	UNP Q8NER1
D	967	THR	-	expression tag	UNP Q8NER1
D	968	LEU	-	expression tag	UNP Q8NER1
D	969	VAL	-	expression tag	UNP Q8NER1
D	970	ASN	-	expression tag	UNP Q8NER1
D	971	ARG	-	expression tag	UNP Q8NER1
D	972	ILE	-	expression tag	UNP Q8NER1
D	973	GLU	-	expression tag	UNP Q8NER1
D	974	LEU	-	expression tag	UNP Q8NER1
D	975	LYS	-	expression tag	UNP Q8NER1
D	976	GLY	-	expression tag	UNP Q8NER1
D	977	ILE	-	expression tag	UNP Q8NER1
D	978	ASP	-	expression tag	UNP Q8NER1
D	979	PHE	-	expression tag	UNP Q8NER1
D	980	LYS	-	expression tag	UNP Q8NER1
D	981	GLU	-	expression tag	UNP Q8NER1
D	982	ASP	-	expression tag	UNP Q8NER1
D	983	GLY	-	expression tag	UNP Q8NER1
D	984	ASN	-	expression tag	UNP Q8NER1
D	985	ILE	-	expression tag	UNP Q8NER1
D	986	LEU	-	expression tag	UNP Q8NER1
D	987	GLY	-	expression tag	UNP Q8NER1
D	988	HIS	-	expression tag	UNP Q8NER1
D	989	LYS	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	990	LEU	-	expression tag	UNP Q8NER1
D	991	GLU	-	expression tag	UNP Q8NER1
D	992	TYR	-	expression tag	UNP Q8NER1
D	993	ASN	-	expression tag	UNP Q8NER1
D	994	TYR	-	expression tag	UNP Q8NER1
D	995	ASN	-	expression tag	UNP Q8NER1
D	996	SER	-	expression tag	UNP Q8NER1
D	997	HIS	-	expression tag	UNP Q8NER1
D	998	ASN	-	expression tag	UNP Q8NER1
D	999	VAL	-	expression tag	UNP Q8NER1
D	1000	TYR	-	expression tag	UNP Q8NER1
D	1001	ILE	-	expression tag	UNP Q8NER1
D	1002	MET	-	expression tag	UNP Q8NER1
D	1003	ALA	-	expression tag	UNP Q8NER1
D	1004	ASP	-	expression tag	UNP Q8NER1
D	1005	LYS	-	expression tag	UNP Q8NER1
D	1006	GLN	-	expression tag	UNP Q8NER1
D	1007	LYS	-	expression tag	UNP Q8NER1
D	1008	ASN	-	expression tag	UNP Q8NER1
D	1009	GLY	-	expression tag	UNP Q8NER1
D	1010	ILE	-	expression tag	UNP Q8NER1
D	1011	LYS	-	expression tag	UNP Q8NER1
D	1012	VAL	-	expression tag	UNP Q8NER1
D	1013	ASN	-	expression tag	UNP Q8NER1
D	1014	PHE	-	expression tag	UNP Q8NER1
D	1015	LYS	-	expression tag	UNP Q8NER1
D	1016	ILE	-	expression tag	UNP Q8NER1
D	1017	ARG	-	expression tag	UNP Q8NER1
D	1018	HIS	-	expression tag	UNP Q8NER1
D	1019	ASN	-	expression tag	UNP Q8NER1
D	1020	ILE	-	expression tag	UNP Q8NER1
D	1021	GLU	-	expression tag	UNP Q8NER1
D	1022	ASP	-	expression tag	UNP Q8NER1
D	1023	GLY	-	expression tag	UNP Q8NER1
D	1024	SER	-	expression tag	UNP Q8NER1
D	1025	VAL	-	expression tag	UNP Q8NER1
D	1026	GLN	-	expression tag	UNP Q8NER1
D	1027	LEU	-	expression tag	UNP Q8NER1
D	1028	ALA	-	expression tag	UNP Q8NER1
D	1029	ASP	-	expression tag	UNP Q8NER1
D	1030	HIS	-	expression tag	UNP Q8NER1
D	1031	TYR	-	expression tag	UNP Q8NER1

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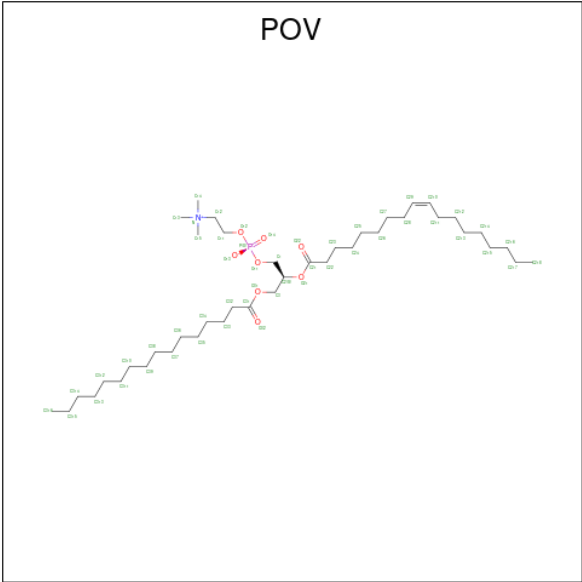
Chain	Residue	Modelled	Actual	Comment	Reference
D	1032	GLN	-	expression tag	UNP Q8NER1
D	1033	GLN	-	expression tag	UNP Q8NER1
D	1034	ASN	-	expression tag	UNP Q8NER1
D	1035	THR	-	expression tag	UNP Q8NER1
D	1036	PRO	-	expression tag	UNP Q8NER1
D	1037	ILE	-	expression tag	UNP Q8NER1
D	1038	GLY	-	expression tag	UNP Q8NER1
D	1039	ASP	-	expression tag	UNP Q8NER1
D	1040	GLY	-	expression tag	UNP Q8NER1
D	1041	PRO	-	expression tag	UNP Q8NER1
D	1042	VAL	-	expression tag	UNP Q8NER1
D	1043	LEU	-	expression tag	UNP Q8NER1
D	1044	LEU	-	expression tag	UNP Q8NER1
D	1045	PRO	-	expression tag	UNP Q8NER1
D	1046	ASP	-	expression tag	UNP Q8NER1
D	1047	ASN	-	expression tag	UNP Q8NER1
D	1048	HIS	-	expression tag	UNP Q8NER1
D	1049	TYR	-	expression tag	UNP Q8NER1
D	1050	LEU	-	expression tag	UNP Q8NER1
D	1051	SER	-	expression tag	UNP Q8NER1
D	1052	THR	-	expression tag	UNP Q8NER1
D	1053	GLN	-	expression tag	UNP Q8NER1
D	1054	SER	-	expression tag	UNP Q8NER1
D	1055	LYS	-	expression tag	UNP Q8NER1
D	1056	LEU	-	expression tag	UNP Q8NER1
D	1057	SER	-	expression tag	UNP Q8NER1
D	1058	LYS	-	expression tag	UNP Q8NER1
D	1059	ASP	-	expression tag	UNP Q8NER1
D	1060	PRO	-	expression tag	UNP Q8NER1
D	1061	ASN	-	expression tag	UNP Q8NER1
D	1062	GLU	-	expression tag	UNP Q8NER1
D	1063	LYS	-	expression tag	UNP Q8NER1
D	1064	ARG	-	expression tag	UNP Q8NER1
D	1065	ASP	-	expression tag	UNP Q8NER1
D	1066	HIS	-	expression tag	UNP Q8NER1
D	1067	MET	-	expression tag	UNP Q8NER1
D	1068	VAL	-	expression tag	UNP Q8NER1
D	1069	LEU	-	expression tag	UNP Q8NER1
D	1070	LEU	-	expression tag	UNP Q8NER1
D	1071	GLU	-	expression tag	UNP Q8NER1
D	1072	PHE	-	expression tag	UNP Q8NER1
D	1073	VAL	-	expression tag	UNP Q8NER1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	1074	THR	-	expression tag	UNP Q8NER1
D	1075	ALA	-	expression tag	UNP Q8NER1
D	1076	ALA	-	expression tag	UNP Q8NER1
D	1077	GLY	-	expression tag	UNP Q8NER1
D	1078	ILE	-	expression tag	UNP Q8NER1
D	1079	THR	-	expression tag	UNP Q8NER1
D	1080	LEU	-	expression tag	UNP Q8NER1
D	1081	GLY	-	expression tag	UNP Q8NER1
D	1082	MET	-	expression tag	UNP Q8NER1
D	1083	ASP	-	expression tag	UNP Q8NER1
D	1084	GLU	-	expression tag	UNP Q8NER1
D	1085	LEU	-	expression tag	UNP Q8NER1
D	1086	TYR	-	expression tag	UNP Q8NER1
D	1087	LYS	-	expression tag	UNP Q8NER1
D	1088	SER	-	expression tag	UNP Q8NER1
D	1089	GLY	-	expression tag	UNP Q8NER1
D	1090	LEU	-	expression tag	UNP Q8NER1
D	1091	ARG	-	expression tag	UNP Q8NER1
D	1092	SER	-	expression tag	UNP Q8NER1
D	1093	TRP	-	expression tag	UNP Q8NER1
D	1094	SER	-	expression tag	UNP Q8NER1
D	1095	HIS	-	expression tag	UNP Q8NER1
D	1096	PRO	-	expression tag	UNP Q8NER1
D	1097	GLN	-	expression tag	UNP Q8NER1
D	1098	PHE	-	expression tag	UNP Q8NER1
D	1099	GLU	-	expression tag	UNP Q8NER1
D	1100	LYS	-	expression tag	UNP Q8NER1

- Molecule 2 is (2S)-3-(hexadecanoyloxy)-2-[(9Z)-octadec-9-enoyloxy]propyl 2-(trimethylammonio)ethyl phosphate (three-letter code: POV) (formula: C<sub>42</sub>H<sub>82</sub>NO<sub>8</sub>P).



Mol	Chain	Residues	Atoms						AltConf
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total    C    H 40       13    27						0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	A	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total    C    H 40       13    27						0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0

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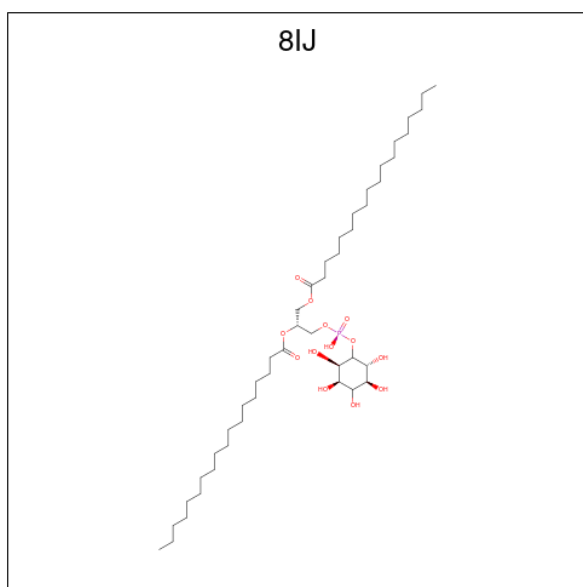
Mol	Chain	Residues	Atoms						AltConf
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	B	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total C H 40 13 27						0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	C	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total C H 40 13 27						0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0
2	D	1	Total 134	C 42	H 82	N 1	O 8	P 1	0

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Mol	Chain	Residues	Atoms					AltConf	
2	D	1	Total	C	H	N	O	P	0
			134	42	82	1	8	1	

- Molecule 3 is (2R)-3-{[(R)-hydroxy{[(1S,2R,3R,4S,5S,6R)-2,3,4,5,6-pentahydroxycyclohexyl]oxy}phosphoryl]oxy}propane-1,2-diyl dioctadecanoate (three-letter code: 8IJ) (formula:  $C_{45}H_{87}O_{13}P$ ).



Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total	C	H	O	P	0
			145	45	86	13	1	
3	B	1	Total	C	H	O	P	0
			145	45	86	13	1	
3	C	1	Total	C	H	O	P	0
			145	45	86	13	1	
3	D	1	Total	C	H	O	P	0
			145	45	86	13	1	

- Molecule 4 is SODIUM ION (three-letter code: NA) (formula: Na).

Mol	Chain	Residues	Atoms		AltConf
4	A	2	Total	Na	0
			2	2	

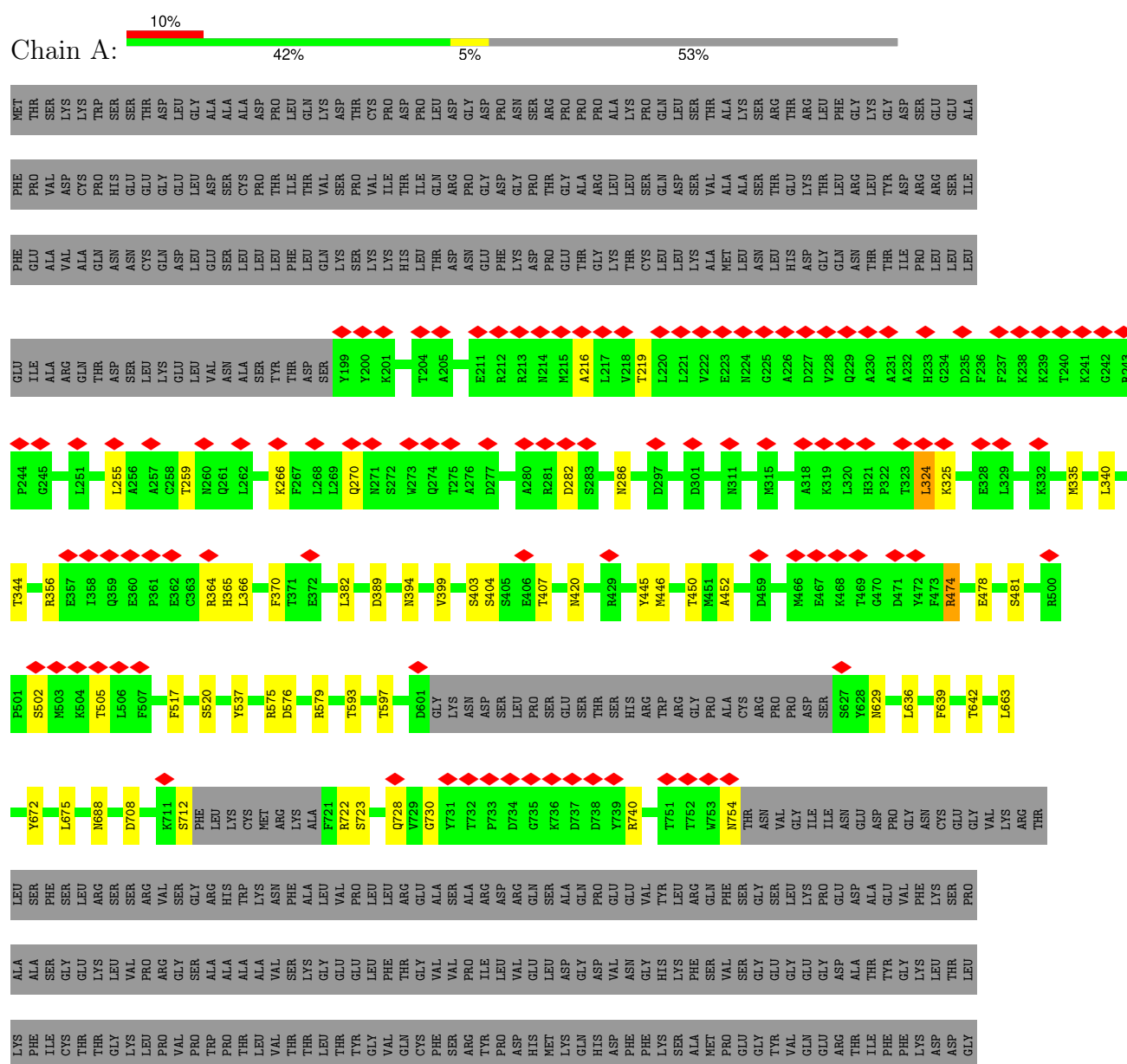
- Molecule 5 is water.

Mol	Chain	Residues	Atoms		AltConf
5	A	23	Total 23	O 23	0
5	B	23	Total 23	O 23	0
5	C	23	Total 23	O 23	0
5	D	23	Total 23	O 23	0

### 3 Residue-property plots

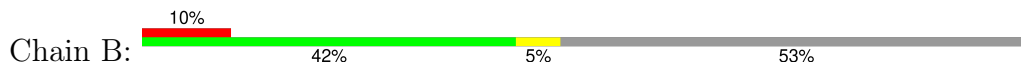
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

- Molecule 1: Transient receptor potential cation channel subfamily V member 1



THR  
ALA  
ALA  
GLY  
ILE  
THR  
LEU  
GLY  
MET  
ASP  
GLU  
LEU  
TYR  
LYS  
SER  
GLY  
LEU  
ARG  
SER  
TRP  
SER  
HIS  
PRO  
GLN  
PHE  
GLU  
LYS

- Molecule 1: Transient receptor potential cation channel subfamily V member 1



PHE	PRO	VAL	ASP	CYS	PRO	HIS	GLU	GLY	GLY	GLU	LEU	ASP	CYS	PRO	THR	THR	ILE	THR	VAL	VAL	PRO	PRO	SER	GLY	GLY	ASP	GLY	GLY	PRO	THR	THR	GLY	ALA	ARG	LEU	LEU	SER	SER	ASP	SER	VAL	ALA	ALA	ALA	SER	SER	THR	THR	GLU	LYS	THR	THR	LEU	LEU	ARG	LEU	TYR	ASP	ASP	ARG	ARG	SER	SER	THR	ILE
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PHE GLU ALA VAL ALA GLN ASN ASN GLN GLY GLN ASP LEU LEU GLU SER LEU LEU PHE LEU GLN LYS LYS HIS LEU THR THR ASP ASP ASP PRO GLU THR GLY LYS THR CYS LEU LEU LYS ALA MET LEU LEU ASN LEU HIS ASP GLY GLN ASN THR THR THR LEU LEU

GLU	ILE	ALA	ARG	GLN	THR	ASP	SER	LEU	LYS	GLU	LEU	VAL	ASN	ALA	SER	TYR	THR	ASP	SER	Y199	Y200	K201	T204	A205	E211	R212	R213	R214	N215	A216	L217	V218	T219	L220	L221	V222	E223	N224	G225	A226	D227	V228	Q229	A230	A231	A232	H233	G234	D235	F236	F237	K238	K239	T240	K241	G242	E243
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P244 G245 L251 L255 A256 A257 C258 T259 N260 Q261 L262 K266 F267 L268 L269 Q270 N271 S272 N273 Q274 T275 A276 D277 A280 D281 D282 S283 N286 D297 D301 N311 M315 A318 K319 L320 H321 P322 T323 L324 K325 E328 L329 K332 M335 R356 E357

Q358	Q359	E360	Q361	E362	Q363	R364	H365	L366	F370	T371	E372	L382	D389	R394	V399	S403	S404	S405	E406	T407	N420	R429	M446	T450	K451	A452	D459	M466	E467	K468	T469	C470	D471	F472	F473	R474	E478	R500	P501	S502	M503	S504	T505	L506	P507
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Amino Acid	Count (approx.)
F517	10
S520	10
L521	10
F522	10
T526	10
Y537	10
R575	10
D576	10
R579	10
F580	10
M581	10
L588	10
S592	10
D601	10
LYS	10
ASN	10
ASP	10
SER	10
LEU	10
PRO	10
SER	10
GLU	10
SER	10
THR	10
HIS	10
SER	10
ARG	10
TRP	10
ARG	10
GLY	10
PRO	10
ALA	10
CYS	10
ARG	10
PRO	10
PRO	10
ASP	10
ASP	10
SER	10
S627	10
Y628	10
N629	10
L636	10
F639	10
T642	10
L663	10

[illegible]

SER	LEU	ARG	SER	SER	ARG	VAL	SER	GLY	ARG	HIS	TRP	LYS	ASN	PHE	LEU	VAL	PRO	LEU	LEU	ARG	GLU	ALA	SER	ALA	ARG	ASP	ARG	GLN	SER	GLN	ALA	ALA	PRO	GLU	GLU	VAL	TYR	LEU	LEU	GLN	ARG	PHE	SER	GLY	SER	SER	LEU	LEU	LYS	PRO	GLU	ASP	ALA	ALA	GLU	VAL	PHE	LYS	SER	PRO	ALA	ALA	SER
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GLY  
GLU  
LEU  
VAL  
PRO  
ARG  
GLY  
SER  
ALA  
ALA  
ALA  
VAL  
SER  
LYS  
GLY  
GLU  
GLU  
LEU  
LEU  
THR  
GLY  
GLY  
VAL  
VAL  
ASP  
GLY  
ASP  
VAL  
ASN  
GLY  
GLY  
HIS  
LYS  
LYS  
PHE  
SER  
VAL  
VAL  
SER  
GLY  
GLU  
GLY  
GLY  
ASP  
ALA  
ALA  
THR  
TYR  
GLY  
GLY  
LEU  
LEU  
LEU  
LYS  
LYS  
PHE  
THR

CYS	THR	THR	THR	GLY	LYS	LEU	PRO	VAL	TRP	PRO	THR	PRO	THR	LEU	VAL	THR	THR	LEU	THR	TYR	GLY	VAL	GLN	CYS	PHE	SER	ARG	TYR	PRO	ASP	HIS	HIS	MET	LYS	GLN	HIS	HIS	ASP	PHE	PHE	LYS	SER	ALA	MET	PRO	GLU	GLY	TYR	VAL	GLN	GLU	ARG	THR	ILE	PHE	PHE	LYS	ASP	ASP	GLY	ASN	GLN	TYR	YS
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THR	ARG	ALA	GLU	VAL	LYS	PHE	GLU	GLY	ASP	THR	LEU	VAL	ASN	ARG	GLU	LEU	LYS	GLY	ILE	ASP	PHE	LYS	GLU	ASP	GLY	ILE	LEU	GLY	HIS	LYS	LEU	GLU	TYR	ASN	TYR	ASN	SER	HIS	ASN	VAL	TYR	ILE	MET	MET	LYS	LYS	ASN	ASN	PHE	PHE	LYS	ILE	THR
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ARG	HIS	ASN	ASN	ILE	GLU	ASP	GLY	SER	GLN	VAL	LEU	ALA	ASP	HIS	TYR	GLN	GLN	ASN	THR	ASN	PRO	PRO	ILE	GLY	ASP	GLY	GLY	PRO	VAL	LEU	LEU	LEU	LEU	SER	THR	GLN	SER	SER	LYS	LYS	ASP	PRO	PRO	ASN	ASN	GLU	GLU	LYS	ARG	ASP	HIS	MET	VAL	VAL	LEU	LEU	GLU	PHE	VAL	THR	VAL	ALA	ALA
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## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	778428	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	60	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	1.295	Depositor
Minimum map value	-0.738	Depositor
Average map value	0.008	Depositor
Map value standard deviation	0.045	Depositor
Recommended contour level	0.156	Depositor
Map size ( $\text{\AA}$ )	200.96, 200.96, 200.96	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles ( $^\circ$ )	90.0, 90.0, 90.0	wwPDB
Pixel spacing ( $\text{\AA}$ )	0.785, 0.785, 0.785	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: NA, POV, 8IJ

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	0.53	0/4346	0.65	3/5882 (0.1%)
1	B	0.53	0/4346	0.65	3/5882 (0.1%)
1	C	0.53	0/4346	0.65	3/5882 (0.1%)
1	D	0.53	0/4346	0.65	3/5882 (0.1%)
All	All	0.53	0/17384	0.65	12/23528 (0.1%)

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	B	0	1
1	C	0	1
1	D	0	1
All	All	0	4

There are no bond length outliers.

The worst 5 of 12 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	663	LEU	CA-CB-CG	6.02	129.14	115.30
1	D	663	LEU	CA-CB-CG	6.01	129.13	115.30
1	A	663	LEU	CA-CB-CG	6.01	129.12	115.30
1	C	663	LEU	CA-CB-CG	6.01	129.12	115.30
1	A	675	LEU	CA-CB-CG	5.96	129.00	115.30

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	324	LEU	Peptide
1	B	324	LEU	Peptide
1	C	324	LEU	Peptide
1	D	324	LEU	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	4245	4267	4264	27	0
1	B	4245	4267	4264	26	0
1	C	4245	4267	4264	26	0
1	D	4245	4267	4264	28	0
2	A	429	683	681	0	0
2	B	429	683	681	1	0
2	C	429	683	681	1	0
2	D	429	683	681	1	0
3	A	59	86	0	0	0
3	B	59	86	0	0	0
3	C	59	86	0	0	0
3	D	59	86	0	0	0
4	A	2	0	0	0	0
5	A	23	0	0	3	0
5	B	23	0	0	3	0
5	C	23	0	0	3	0
5	D	23	0	0	3	0
All	All	19026	20144	19780	107	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 3.

The worst 5 of 107 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:365:HIS:O	1:B:740:ARG:NH1	2.15	0.80
1:D:365:HIS:O	1:D:740:ARG:NH1	2.15	0.80
1:A:365:HIS:O	1:A:740:ARG:NH1	2.15	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:365:HIS:O	1:C:740:ARG:NH1	2.15	0.78
1:C:399:VAL:O	1:C:403:SER:OG	2.03	0.77

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	517/1102 (47%)	474 (92%)	41 (8%)	2 (0%)	30	50
1	B	517/1102 (47%)	474 (92%)	41 (8%)	2 (0%)	30	50
1	C	517/1102 (47%)	474 (92%)	41 (8%)	2 (0%)	30	50
1	D	517/1102 (47%)	474 (92%)	41 (8%)	2 (0%)	30	50
All	All	2068/4408 (47%)	1896 (92%)	164 (8%)	8 (0%)	32	50

5 of 8 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	325	LYS
1	B	325	LYS
1	C	325	LYS
1	D	325	LYS
1	A	324	LEU

### 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	460/963 (48%)	454 (99%)	6 (1%)	65	83
1	B	460/963 (48%)	454 (99%)	6 (1%)	65	83
1	C	460/963 (48%)	454 (99%)	6 (1%)	65	83
1	D	460/963 (48%)	454 (99%)	6 (1%)	65	83
All	All	1840/3852 (48%)	1816 (99%)	24 (1%)	64	83

5 of 24 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	C	474	ARG
1	C	754	ASN
1	C	688	ASN
1	D	364	ARG
1	B	364	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 16 such sidechains are listed below:

Mol	Chain	Res	Type
1	D	411	HIS
1	D	394	ASN
1	C	298	ASN
1	D	298	ASN
1	B	754	ASN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

## 5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

## 5.6 Ligand geometry

Of 42 ligands modelled in this entry, 2 are monoatomic - leaving 40 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
2	POV	A	1209	-	51,51,51	0.34	0	57,59,59	0.50	1 (1%)
2	POV	B	1208	-	51,51,51	0.30	0	57,59,59	0.42	0
2	POV	A	1204	-	12,12,51	0.15	0	11,11,59	0.21	0
2	POV	D	1202	-	51,51,51	0.34	0	57,59,59	0.53	1 (1%)
2	POV	D	1209	-	51,51,51	0.30	0	57,59,59	0.42	0
2	POV	C	1204	-	51,51,51	0.35	0	57,59,59	0.48	1 (1%)
2	POV	D	1203	-	51,51,51	0.35	0	57,59,59	0.43	0
3	8IJ	B	1203	-	59,59,59	0.33	0	68,71,71	0.38	0
2	POV	A	1210	-	51,51,51	0.35	0	57,59,59	0.53	1 (1%)
2	POV	C	1202	-	51,51,51	0.36	0	57,59,59	0.43	0
2	POV	C	1205	-	12,12,51	0.15	0	11,11,59	0.21	0
2	POV	C	1209	-	51,51,51	0.34	0	57,59,59	0.43	0
2	POV	B	1205	-	12,12,51	0.15	0	11,11,59	0.21	0
2	POV	D	1201	-	51,51,51	0.34	0	57,59,59	0.50	1 (1%)
2	POV	D	1207	-	51,51,51	0.30	0	57,59,59	0.43	0
2	POV	D	1210	-	51,51,51	0.34	0	57,59,59	0.43	0
3	8IJ	D	1204	-	59,59,59	0.33	0	68,71,71	0.38	0
2	POV	A	1203	-	51,51,51	0.35	0	57,59,59	0.48	1 (1%)
2	POV	D	1205	-	51,51,51	0.35	0	57,59,59	0.48	1 (1%)
3	8IJ	C	1203	-	59,59,59	0.32	0	68,71,71	0.37	0
2	POV	B	1210	-	51,51,51	0.34	0	57,59,59	0.50	1 (1%)
2	POV	D	1208	-	51,51,51	0.33	0	57,59,59	0.42	0
3	8IJ	A	1202	-	59,59,59	0.32	0	68,71,71	0.37	0
2	POV	B	1202	-	51,51,51	0.36	0	57,59,59	0.43	0
2	POV	B	1209	-	51,51,51	0.34	0	57,59,59	0.43	0
2	POV	A	1207	-	51,51,51	0.30	0	57,59,59	0.41	0
2	POV	C	1206	-	51,51,51	0.30	0	57,59,59	0.43	0
2	POV	C	1201	-	51,51,51	0.35	0	57,59,59	0.53	1 (1%)
2	POV	C	1207	-	51,51,51	0.33	0	57,59,59	0.42	0
2	POV	C	1208	-	51,51,51	0.30	0	57,59,59	0.42	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
2	POV	B	1204	-	51,51,51	0.34	0	57,59,59	0.48	1 (1%)
2	POV	C	1210	-	51,51,51	0.34	0	57,59,59	0.50	1 (1%)
2	POV	A	1206	-	51,51,51	0.33	0	57,59,59	0.42	0
2	POV	A	1201	-	51,51,51	0.35	0	57,59,59	0.43	0
2	POV	A	1208	-	51,51,51	0.34	0	57,59,59	0.43	0
2	POV	D	1206	-	12,12,51	0.15	0	11,11,59	0.21	0
2	POV	B	1207	-	51,51,51	0.33	0	57,59,59	0.42	0
2	POV	A	1205	-	51,51,51	0.30	0	57,59,59	0.43	0
2	POV	B	1206	-	51,51,51	0.30	0	57,59,59	0.44	0
2	POV	B	1201	-	51,51,51	0.35	0	57,59,59	0.53	1 (1%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	POV	A	1209	-	-	21/55/55/55	-
2	POV	B	1208	-	-	17/55/55/55	-
2	POV	A	1204	-	-	5/10/10/55	-
2	POV	D	1202	-	-	25/55/55/55	-
2	POV	D	1209	-	-	17/55/55/55	-
2	POV	C	1204	-	-	18/55/55/55	-
2	POV	D	1203	-	-	15/55/55/55	-
3	8IJ	B	1203	-	-	18/54/78/78	0/1/1/1
2	POV	A	1210	-	-	25/55/55/55	-
2	POV	C	1202	-	-	16/55/55/55	-
2	POV	C	1205	-	-	5/10/10/55	-
2	POV	C	1209	-	-	17/55/55/55	-
2	POV	B	1205	-	-	5/10/10/55	-
2	POV	D	1201	-	-	21/55/55/55	-
2	POV	D	1207	-	-	28/55/55/55	-
2	POV	D	1210	-	-	17/55/55/55	-
3	8IJ	D	1204	-	-	18/54/78/78	0/1/1/1
2	POV	A	1203	-	-	18/55/55/55	-
2	POV	D	1205	-	-	18/55/55/55	-
3	8IJ	C	1203	-	-	18/54/78/78	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	POV	B	1210	-	-	21/55/55/55	-
2	POV	D	1208	-	-	21/55/55/55	-
3	8IJ	A	1202	-	-	18/54/78/78	0/1/1/1
2	POV	B	1202	-	-	17/55/55/55	-
2	POV	B	1209	-	-	17/55/55/55	-
2	POV	A	1207	-	-	17/55/55/55	-
2	POV	C	1206	-	-	28/55/55/55	-
2	POV	C	1201	-	-	25/55/55/55	-
2	POV	C	1207	-	-	21/55/55/55	-
2	POV	C	1208	-	-	18/55/55/55	-
2	POV	B	1204	-	-	18/55/55/55	-
2	POV	C	1210	-	-	21/55/55/55	-
2	POV	A	1206	-	-	21/55/55/55	-
2	POV	A	1201	-	-	17/55/55/55	-
2	POV	A	1208	-	-	17/55/55/55	-
2	POV	D	1206	-	-	5/10/10/55	-
2	POV	B	1207	-	-	21/55/55/55	-
2	POV	A	1205	-	-	28/55/55/55	-
2	POV	B	1206	-	-	28/55/55/55	-
2	POV	B	1201	-	-	25/55/55/55	-

There are no bond length outliers.

The worst 5 of 12 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	1202	POV	C3-O31-C31	2.19	125.11	117.12
2	B	1201	POV	C3-O31-C31	2.18	125.10	117.12
2	C	1201	POV	C3-O31-C31	2.18	125.09	117.12
2	A	1210	POV	C3-O31-C31	2.18	125.08	117.12
2	A	1203	POV	C3-O31-C31	2.15	124.98	117.12

There are no chirality outliers.

5 of 746 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	1201	POV	C1-O11-P-O13
2	A	1201	POV	C11-O12-P-O14

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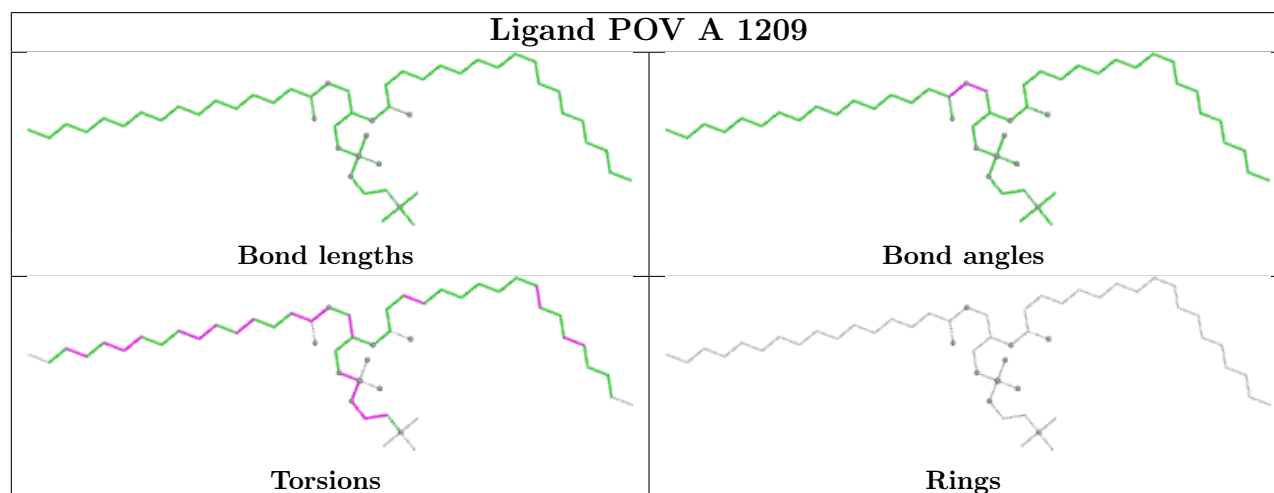
Mol	Chain	Res	Type	Atoms
2	A	1201	POV	C32-C31-O31-C3
2	A	1201	POV	O32-C31-O31-C3
2	A	1203	POV	C11-O12-P-O13

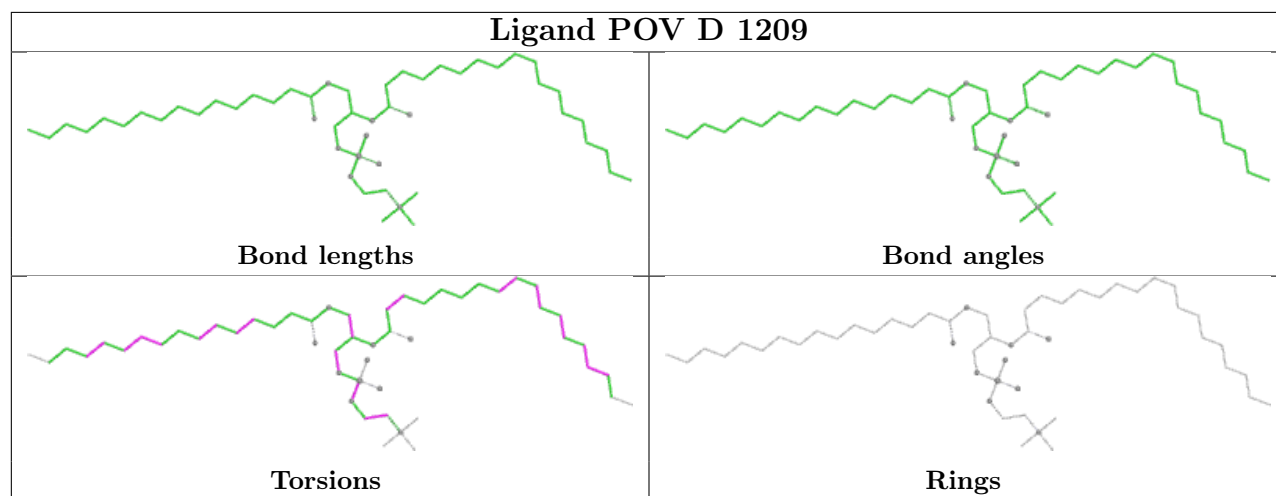
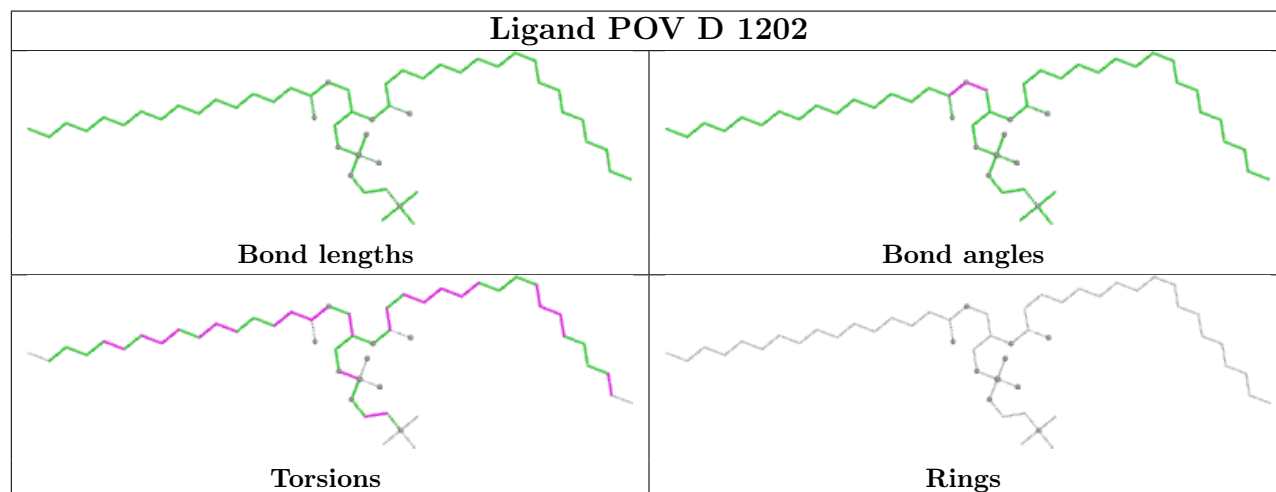
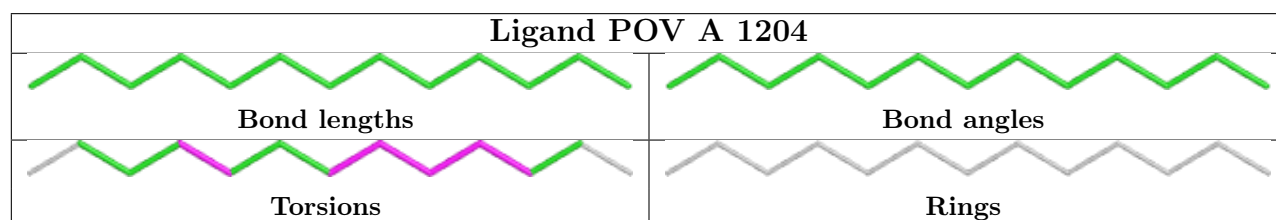
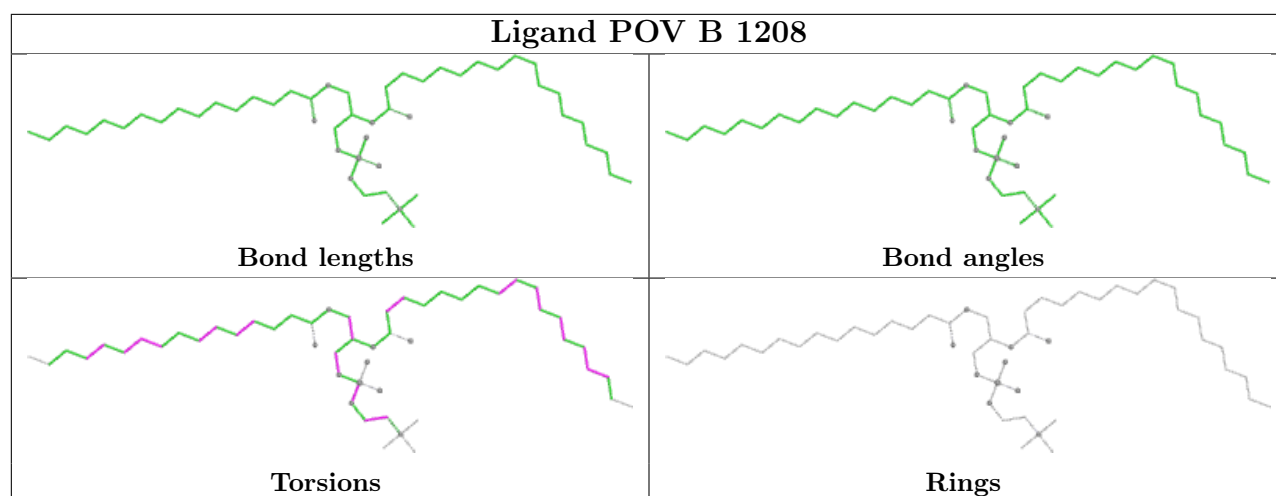
There are no ring outliers.

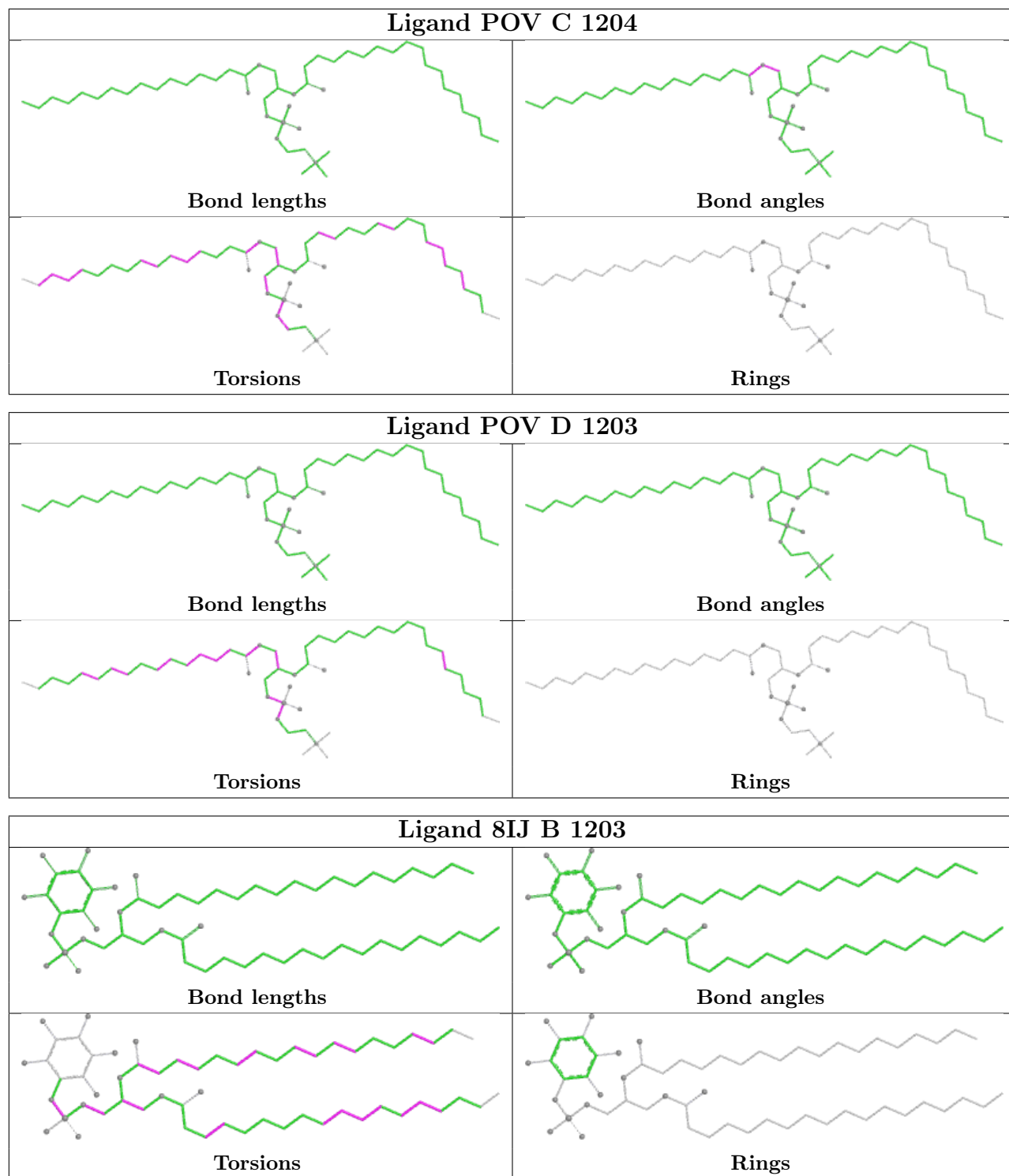
3 monomers are involved in 3 short contacts:

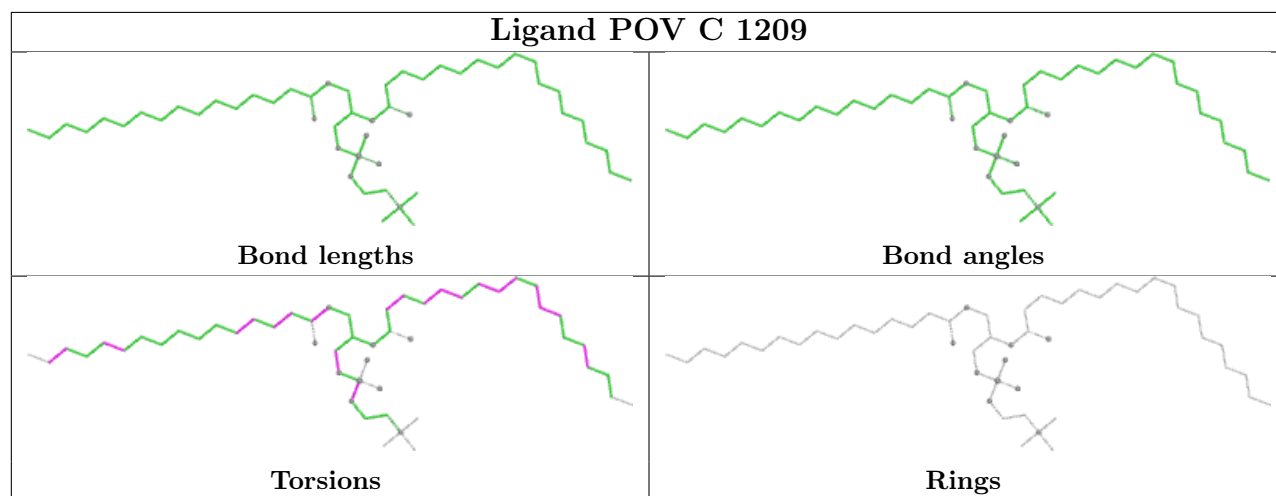
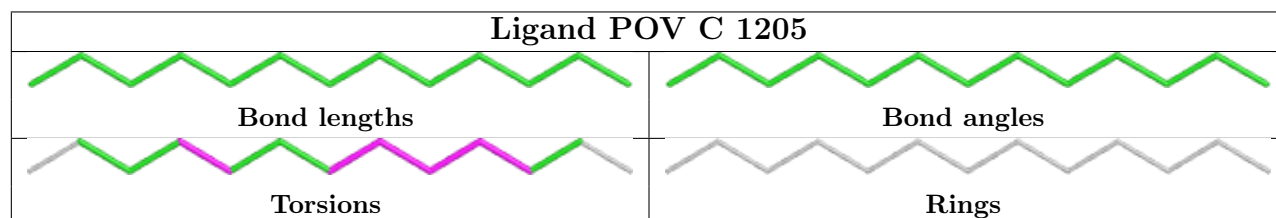
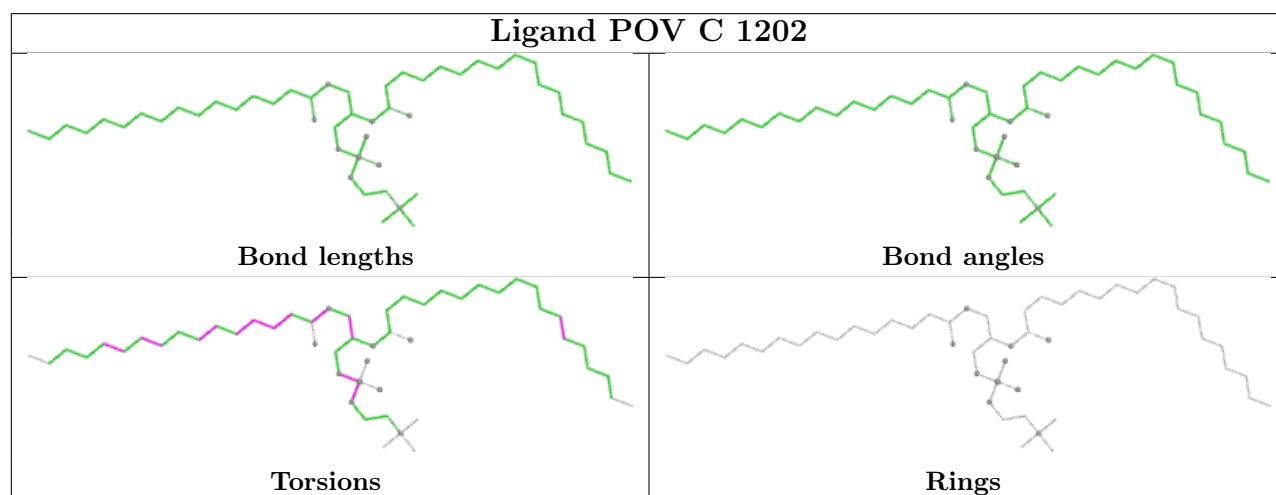
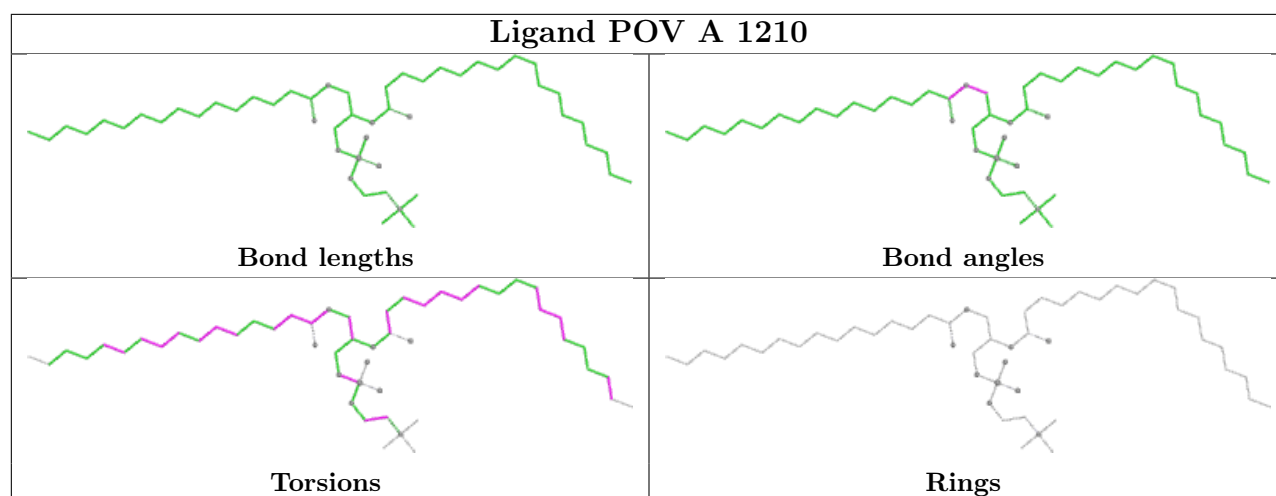
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	D	1203	POV	1	0
2	C	1202	POV	1	0
2	B	1202	POV	1	0

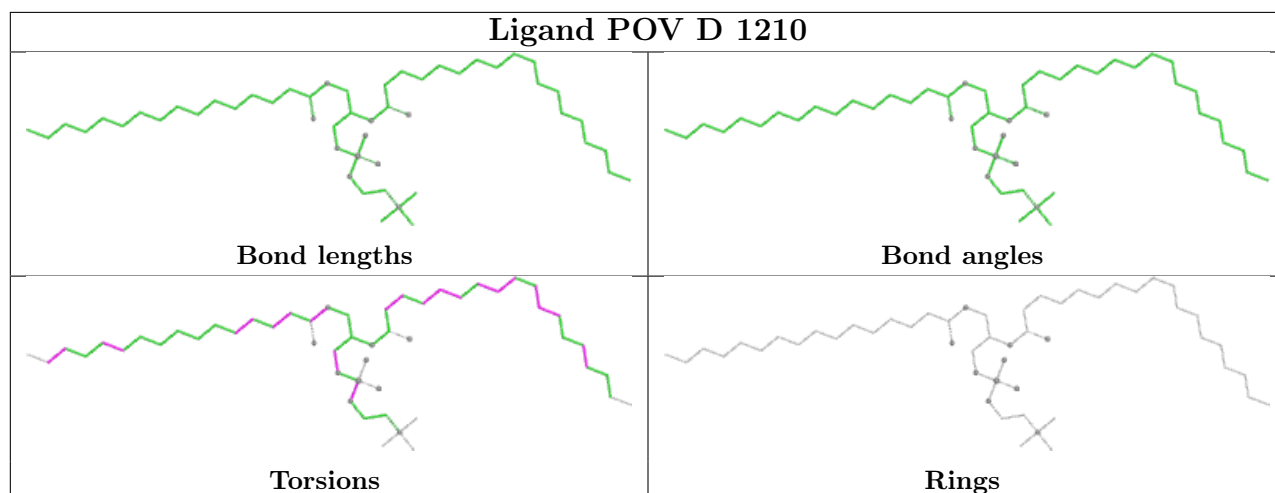
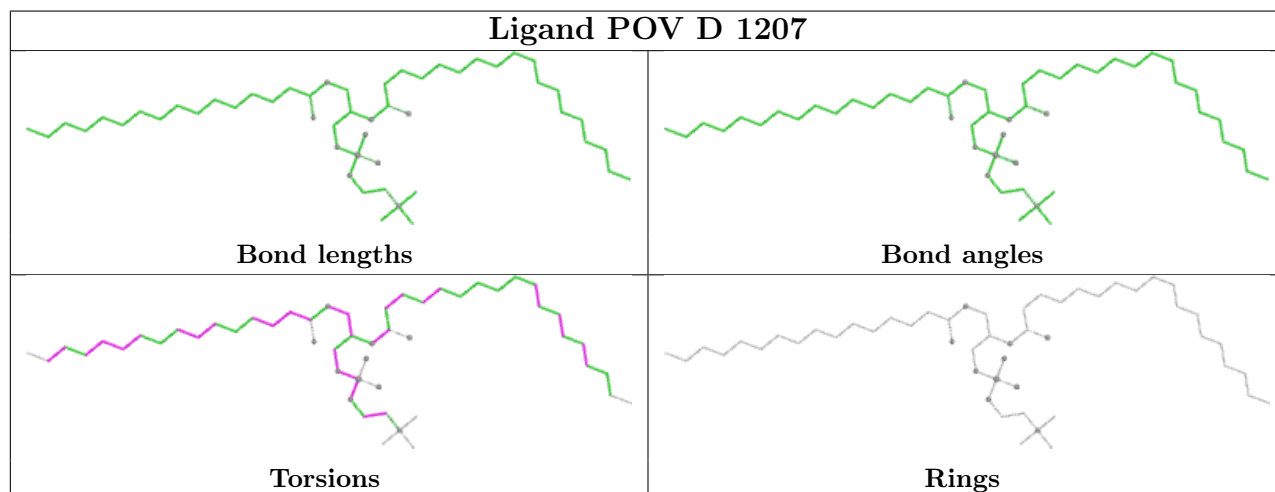
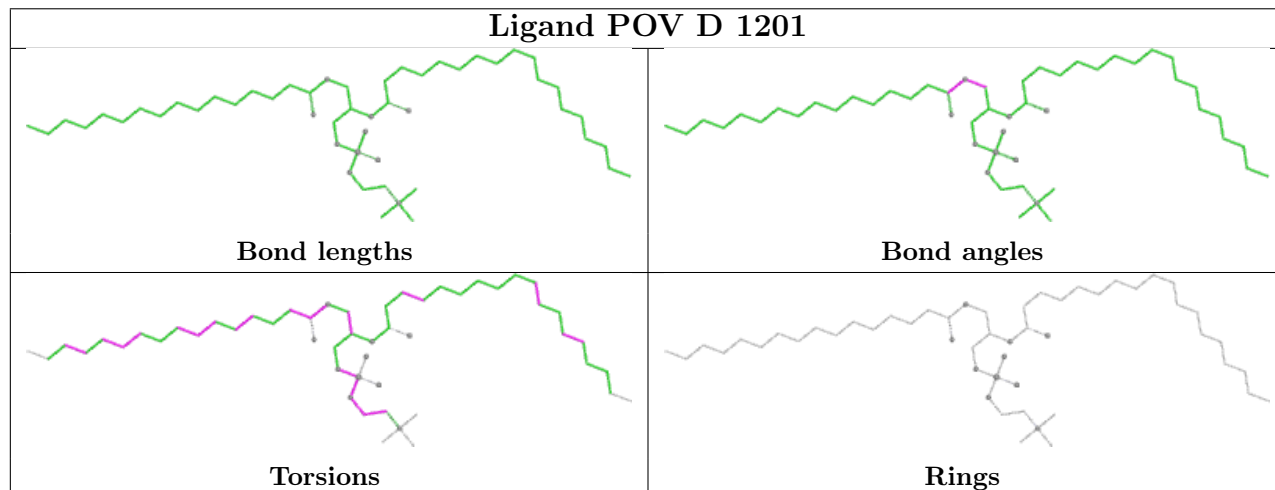
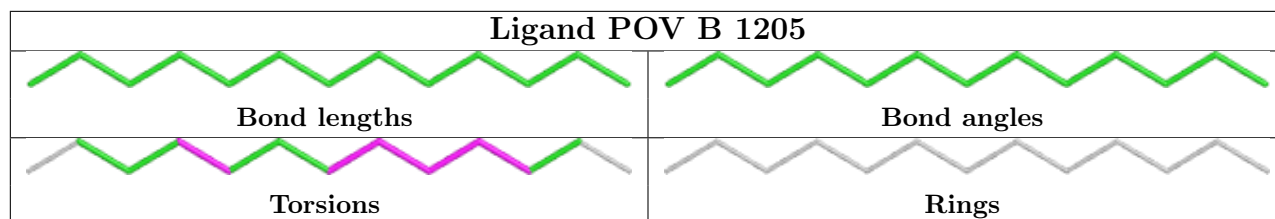
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

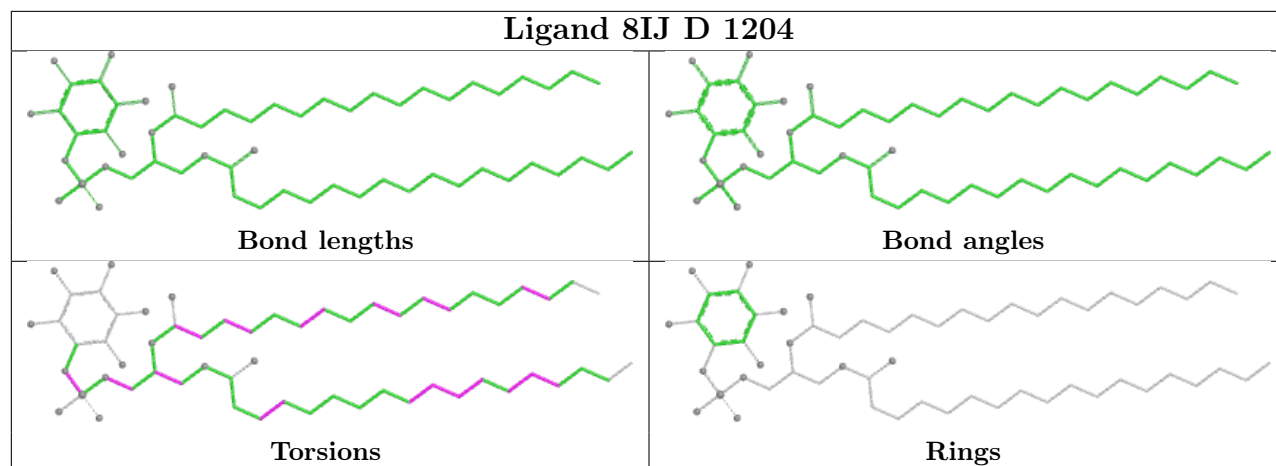
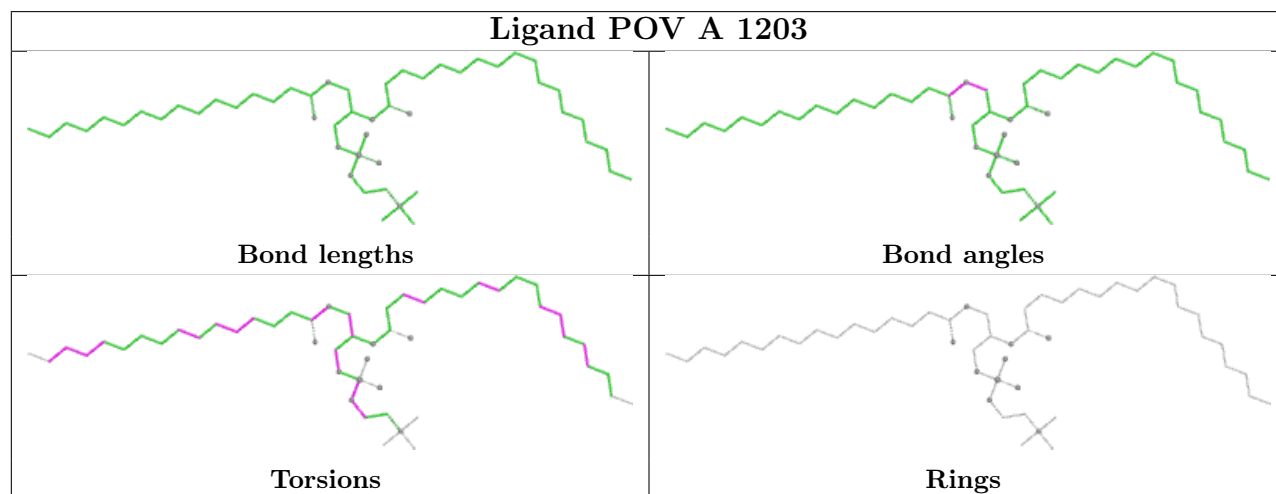
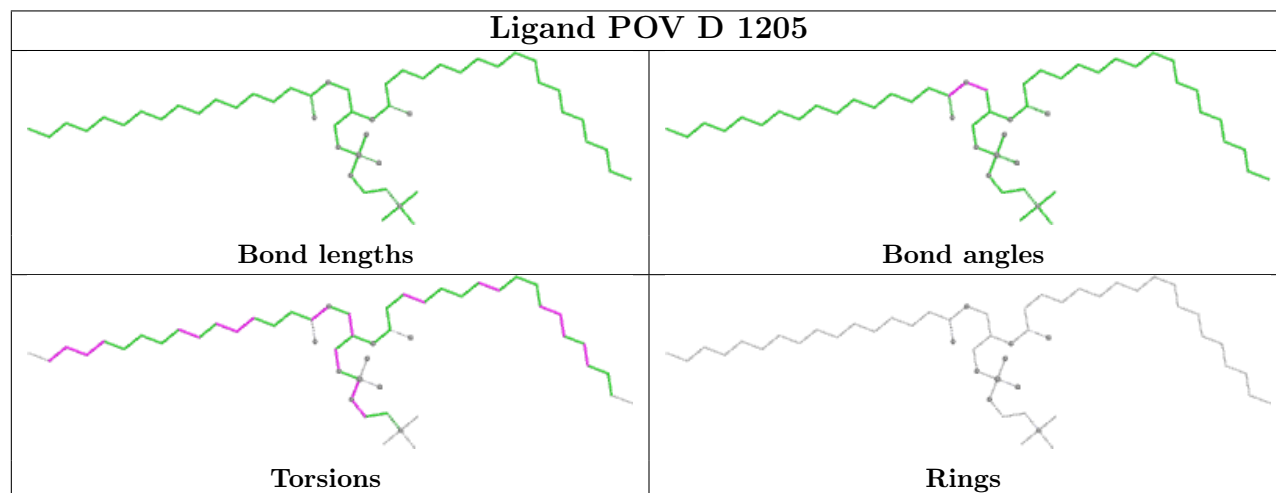




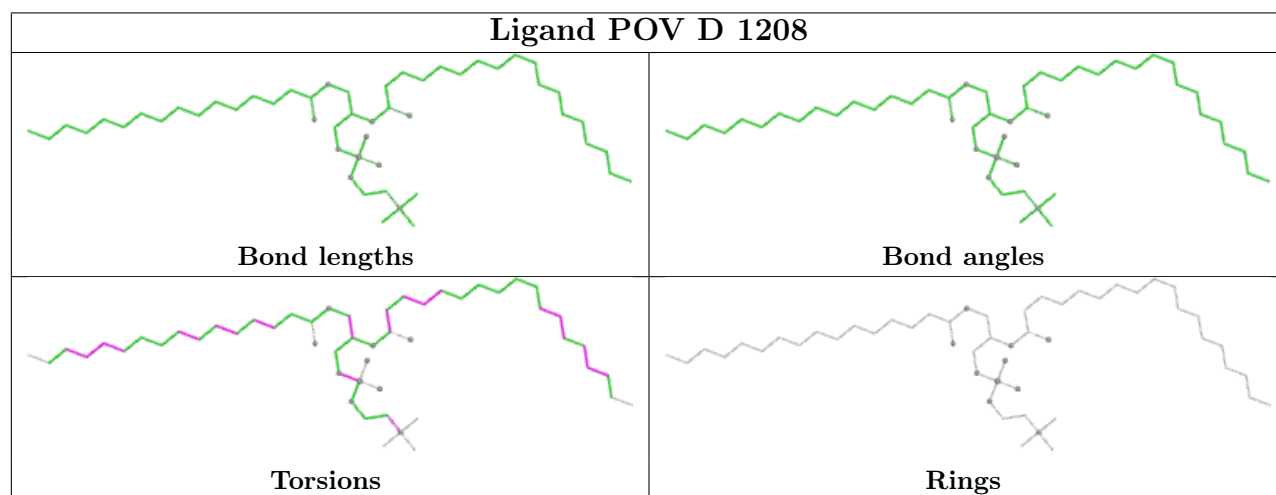
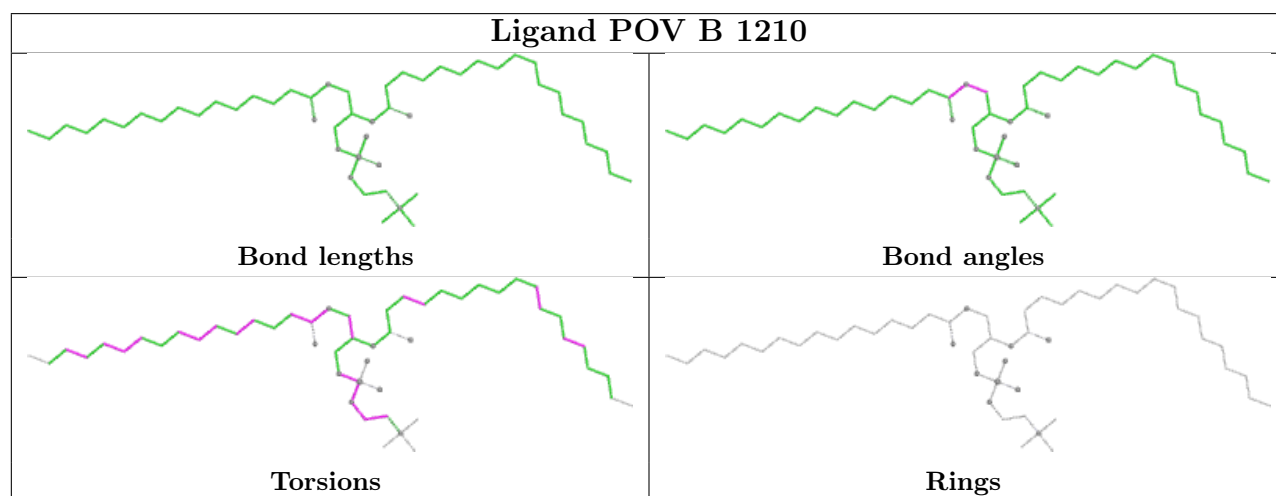
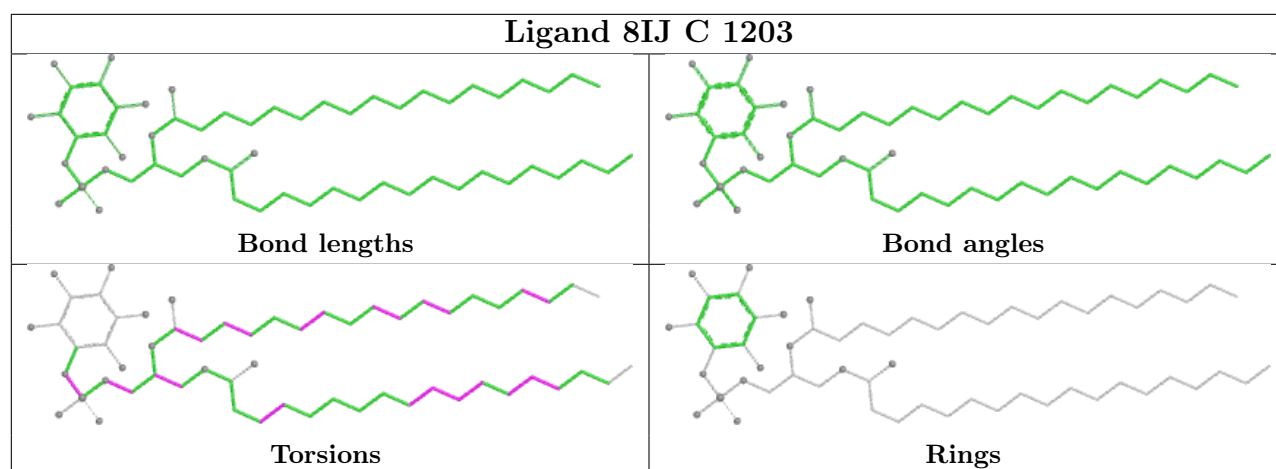


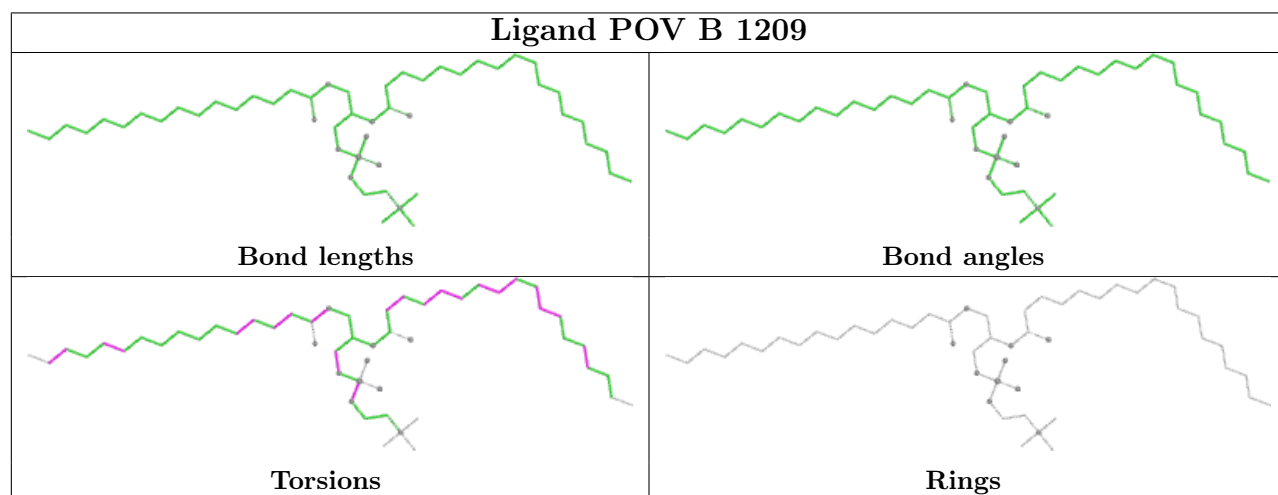
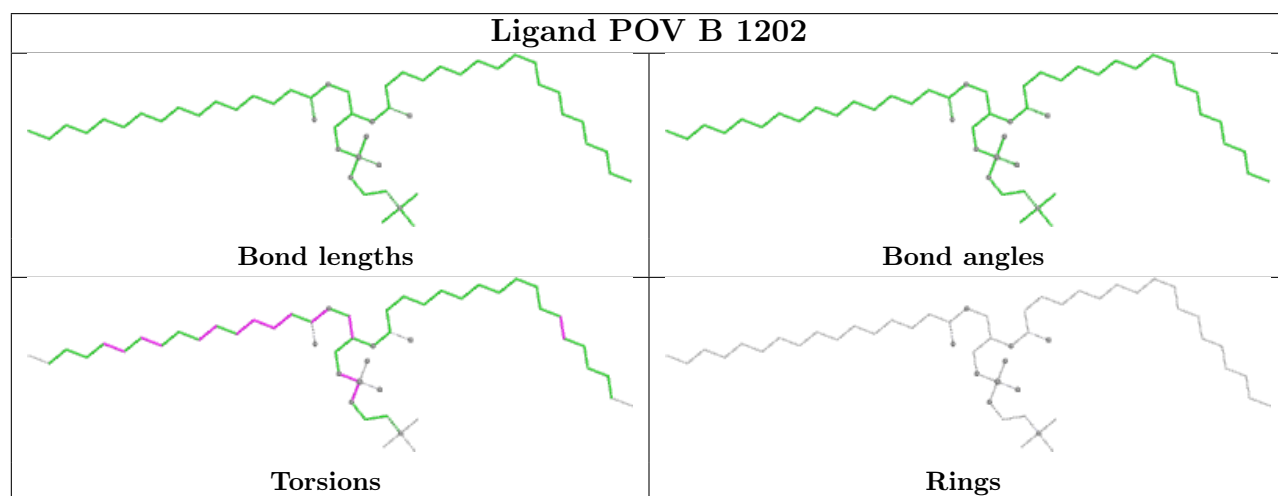
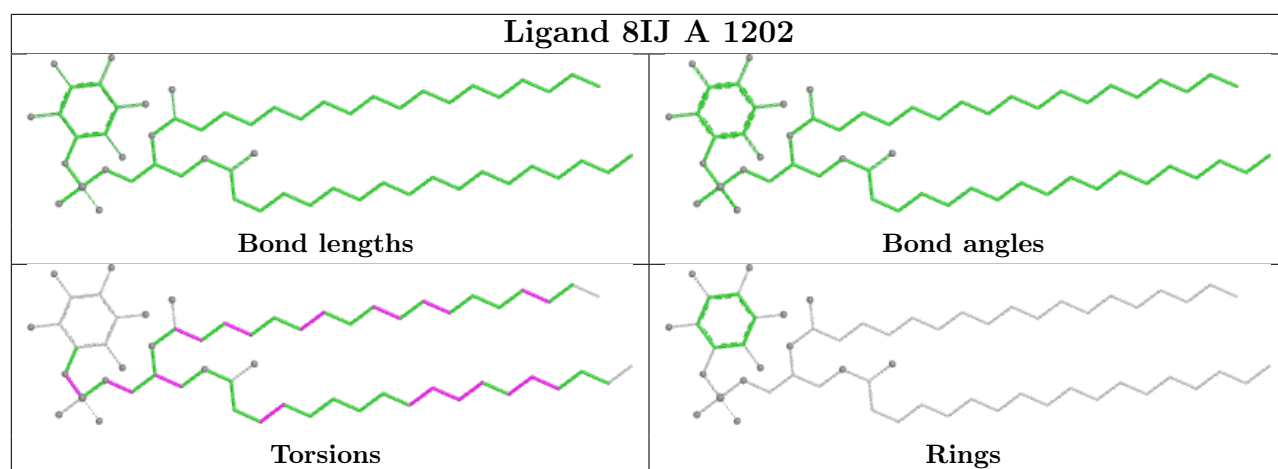


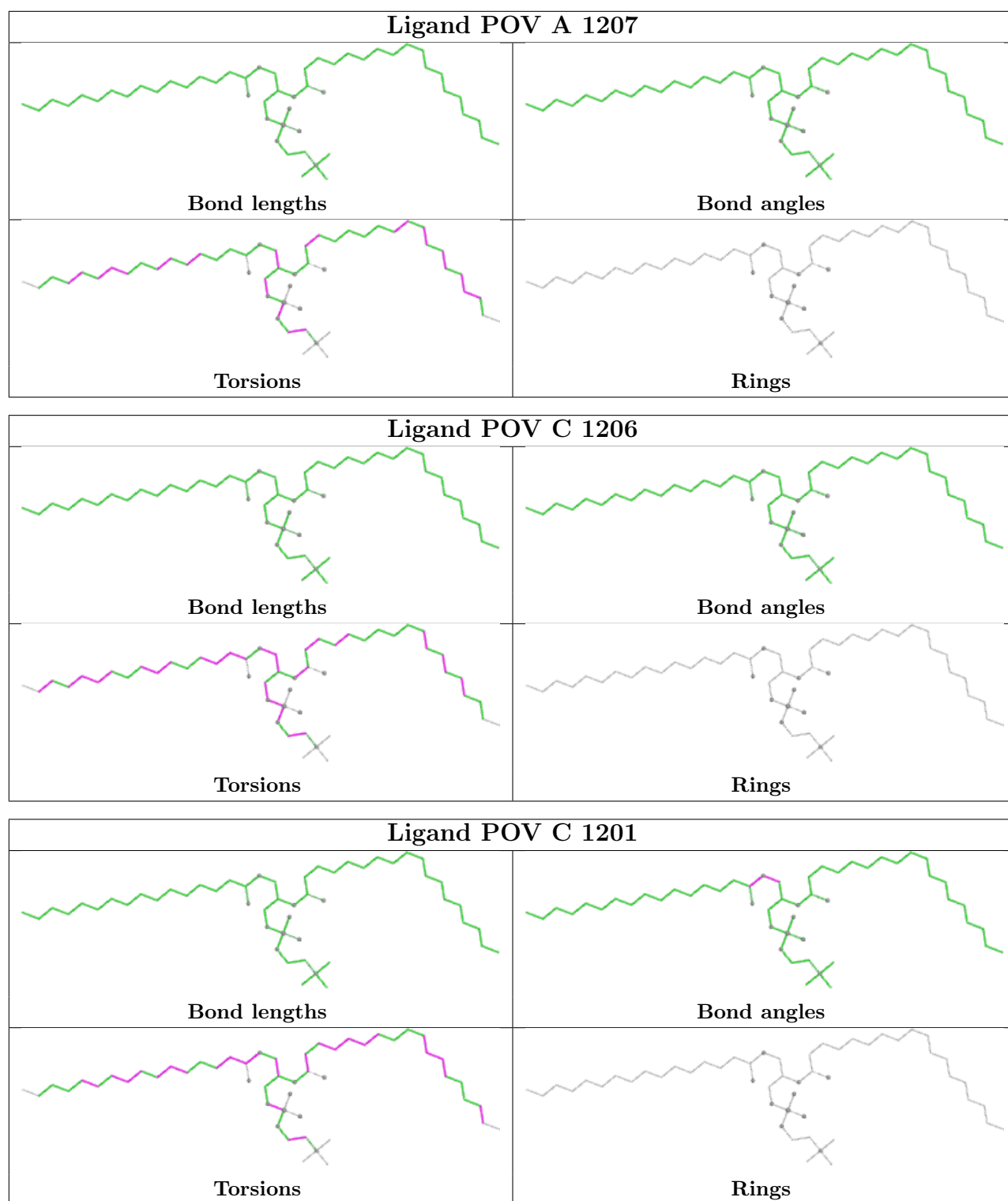


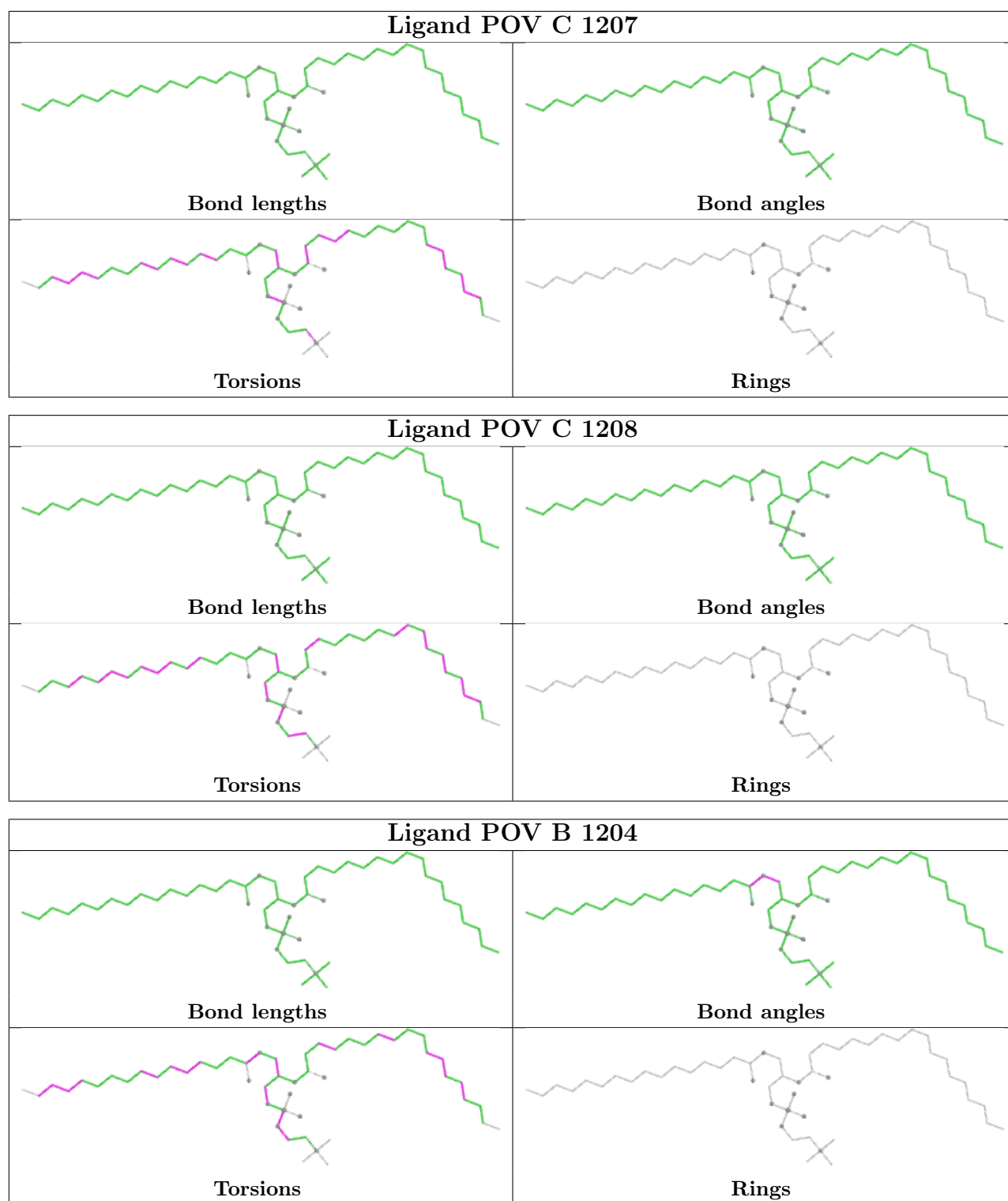
**Ligand 8IJ D 1204****Ligand POV A 1203****Ligand POV D 1205**

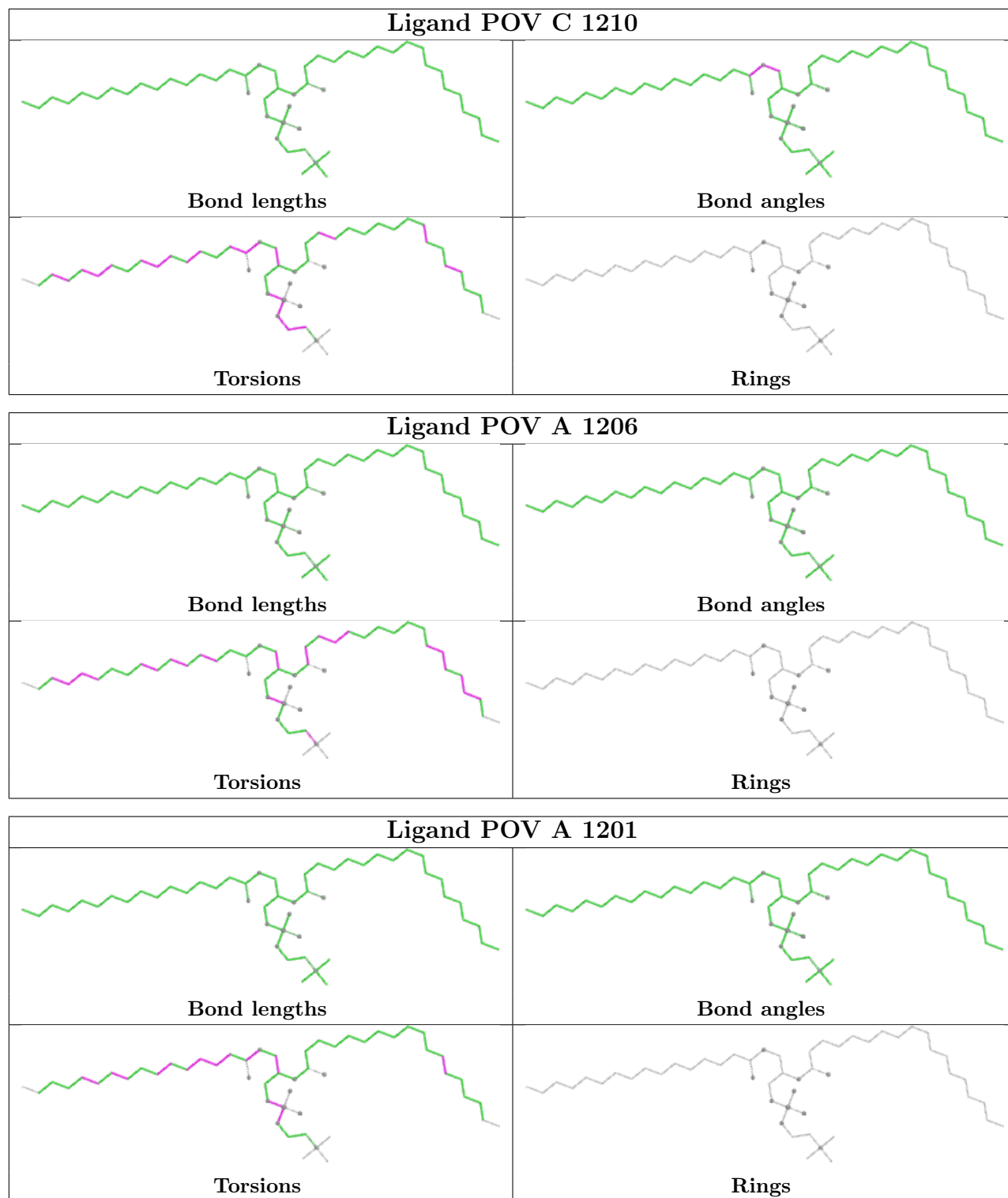


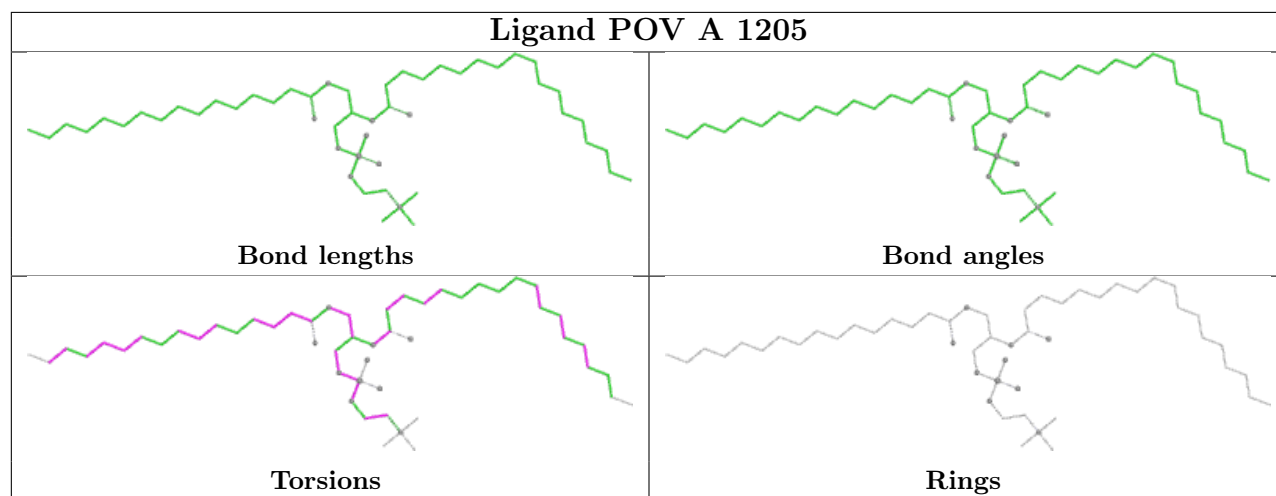
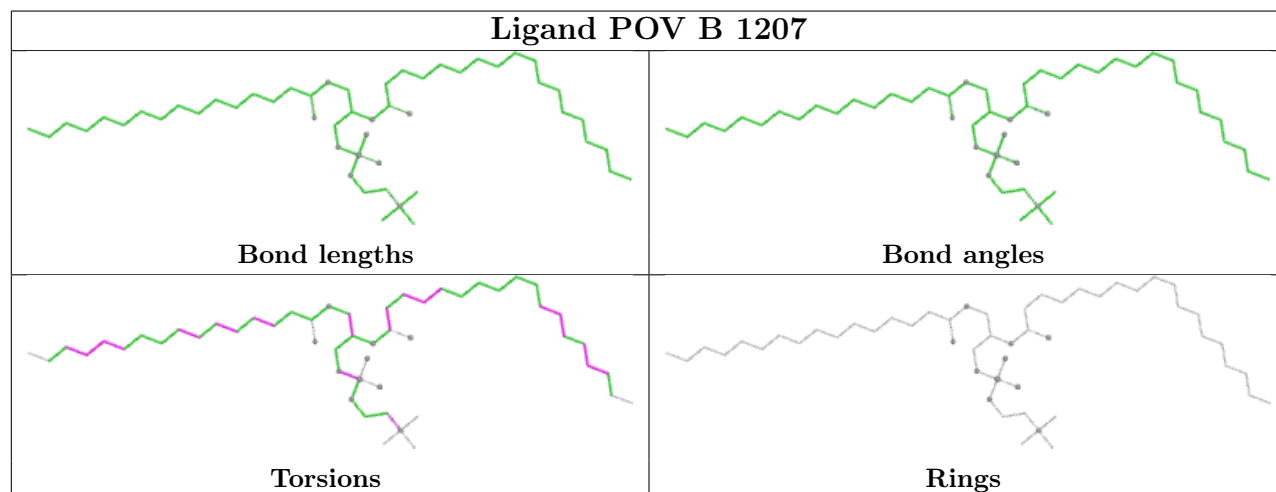
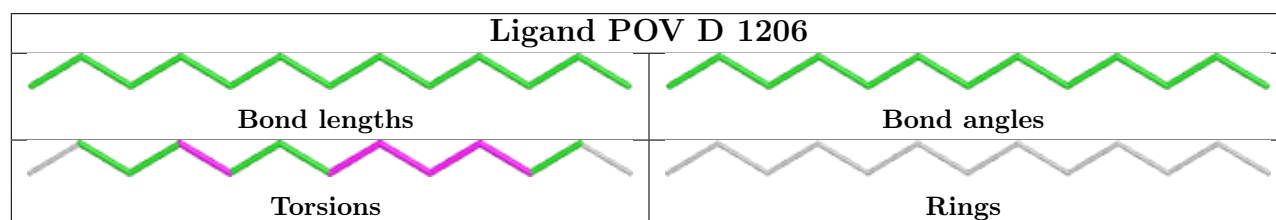
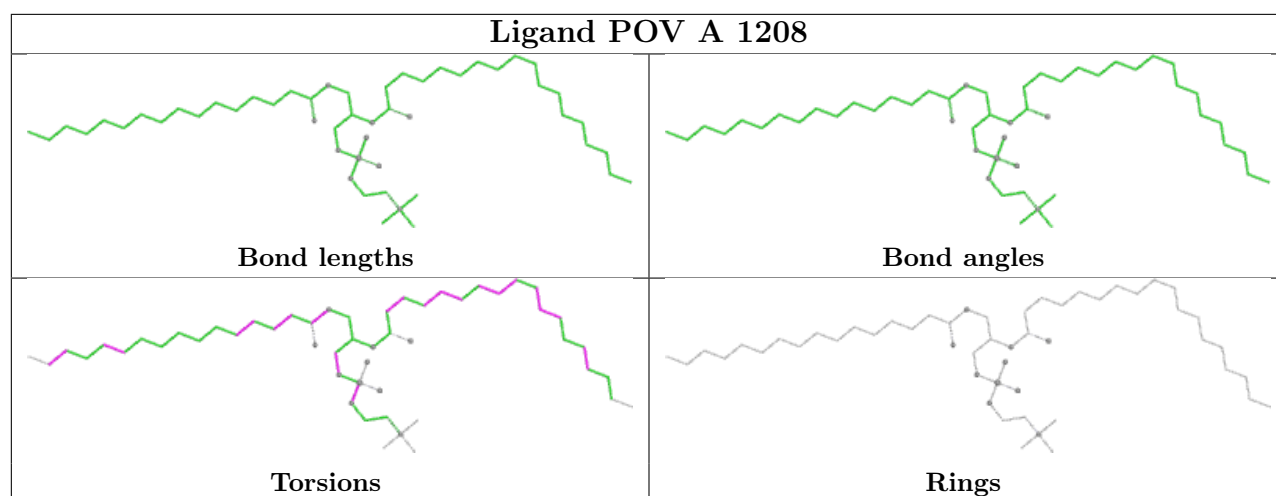


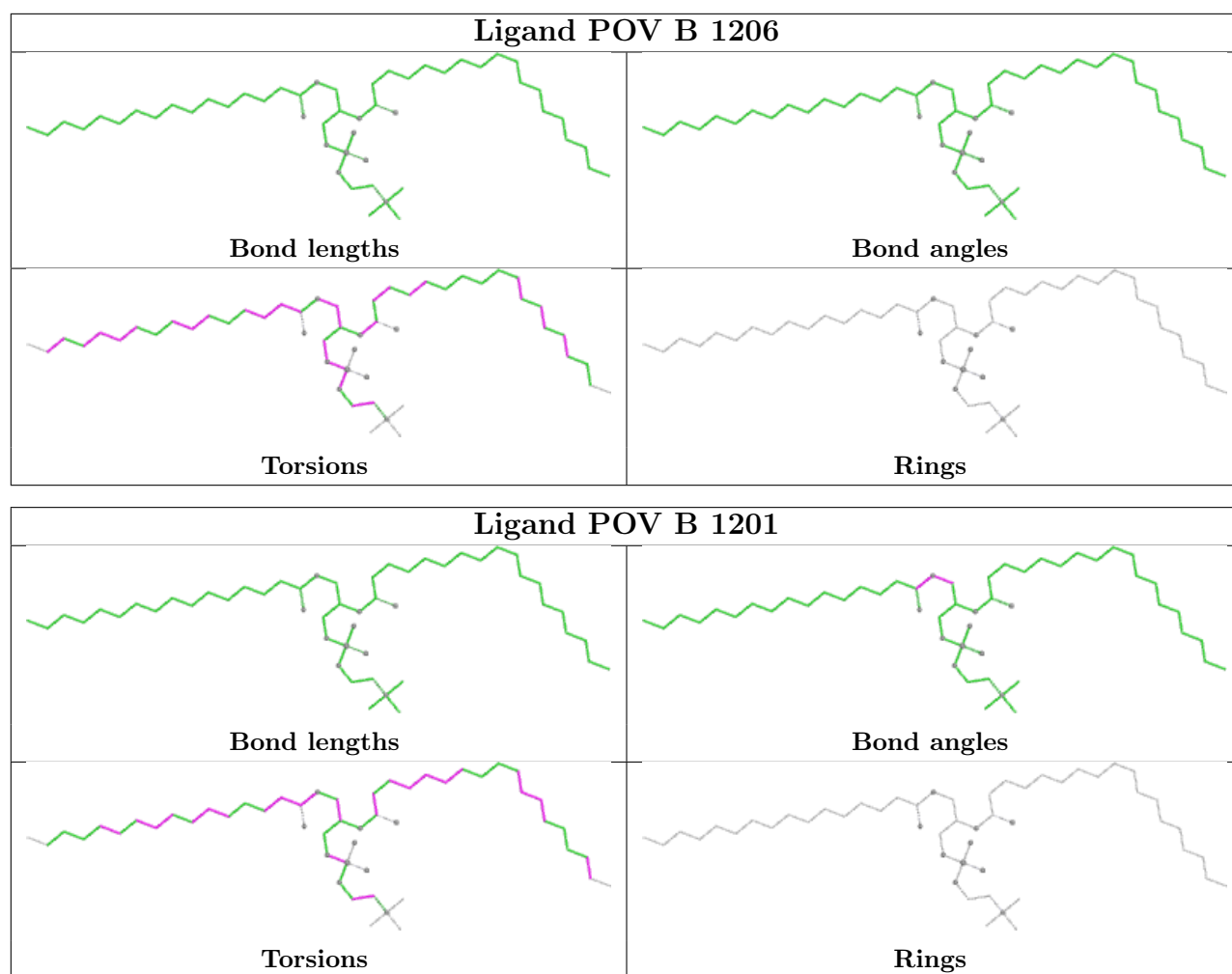












## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.



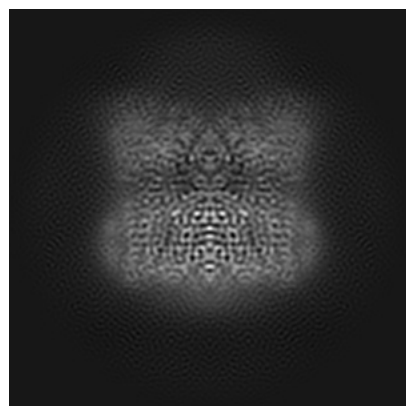
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-29982. These allow visual inspection of the internal detail of the map and identification of artifacts.

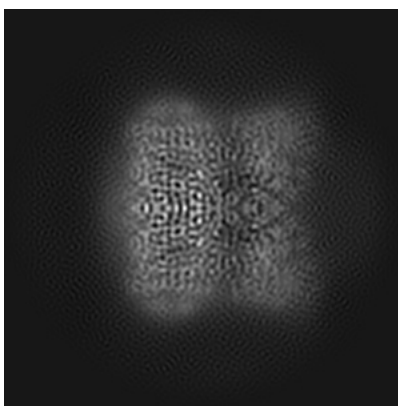
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

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

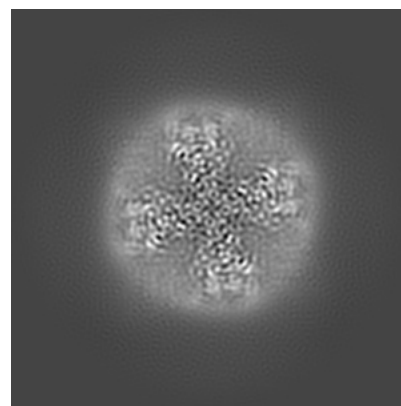
#### 6.1.1 Primary map



X

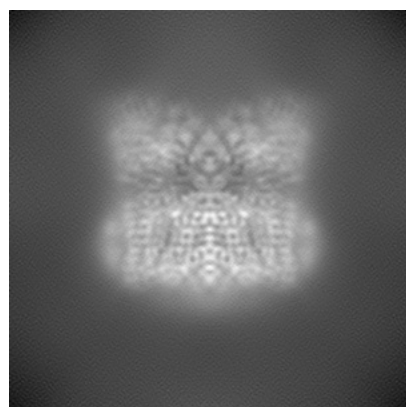


Y

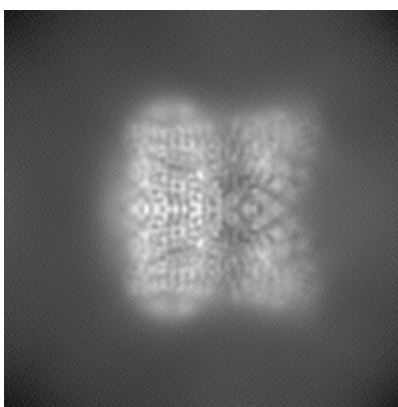


Z

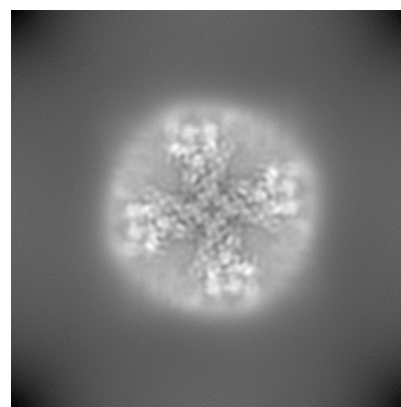
#### 6.1.2 Raw map



X



Y

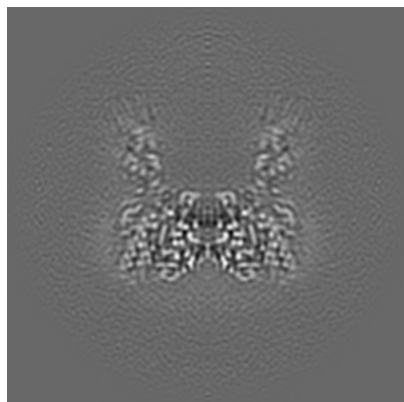


Z

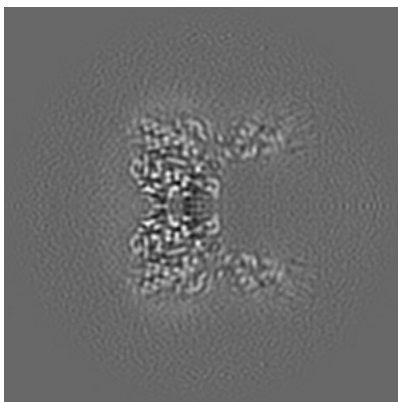
The images above show the map projected in three orthogonal directions.

## 6.2 Central slices [i](#)

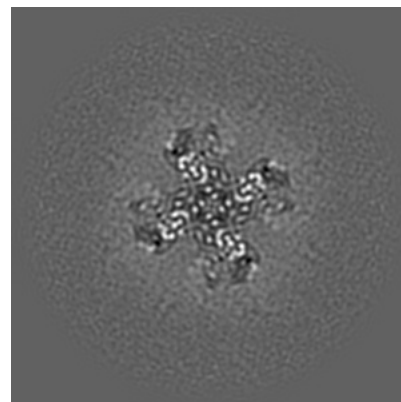
### 6.2.1 Primary map



X Index: 128

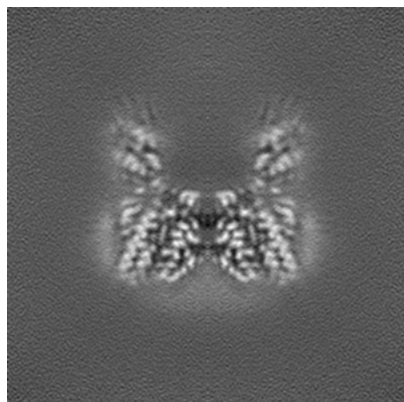


Y Index: 128

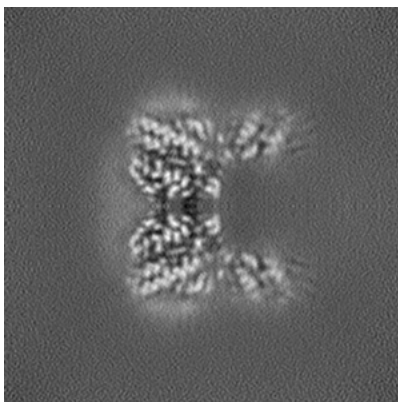


Z Index: 128

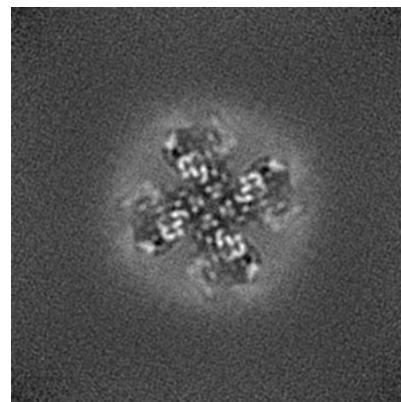
### 6.2.2 Raw map



X Index: 128



Y Index: 128

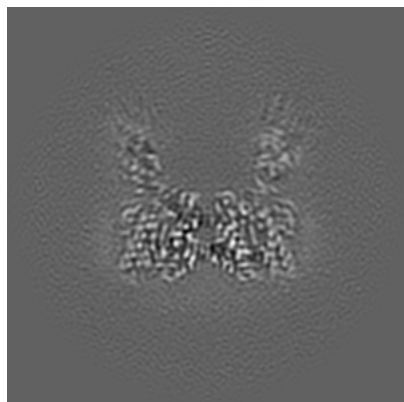


Z Index: 128

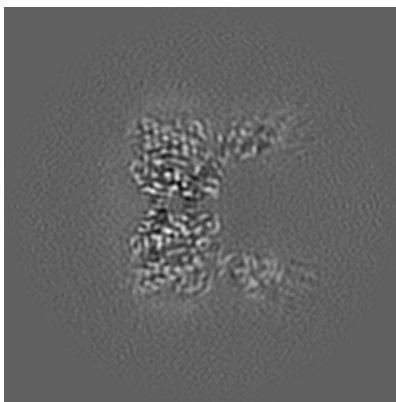
The images above show central slices of the map in three orthogonal directions.

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

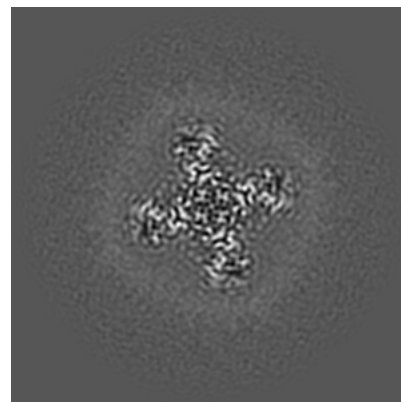
### 6.3.1 Primary map



X Index: 129

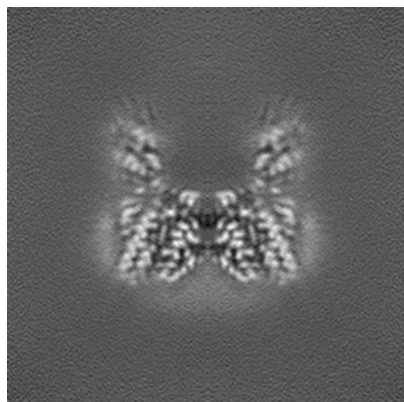


Y Index: 129

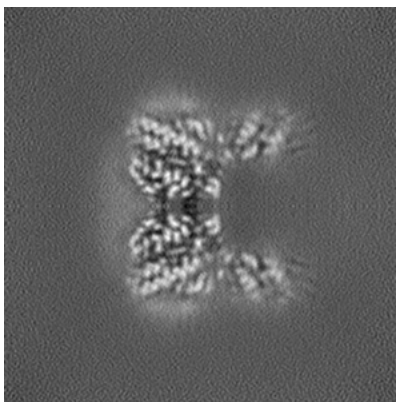


Z Index: 103

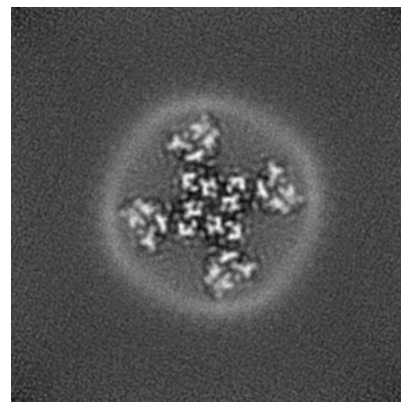
### 6.3.2 Raw map



X Index: 128



Y Index: 128

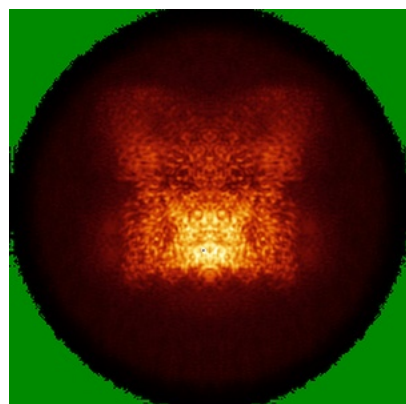


Z Index: 114

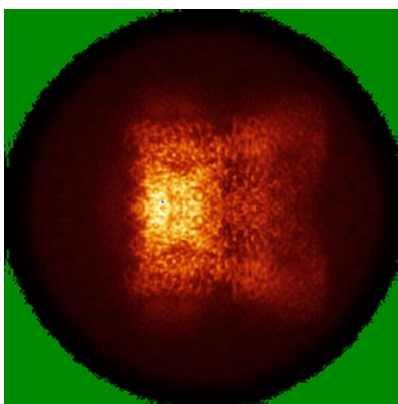
The images above show the largest variance slices of the map in three orthogonal directions.

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

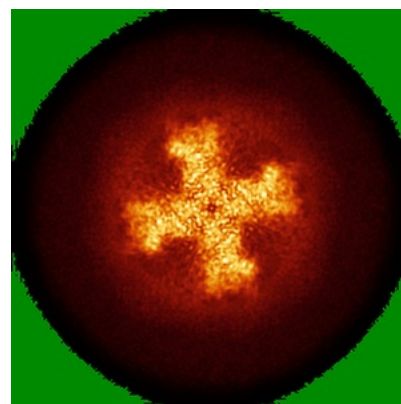
### 6.4.1 Primary map



X

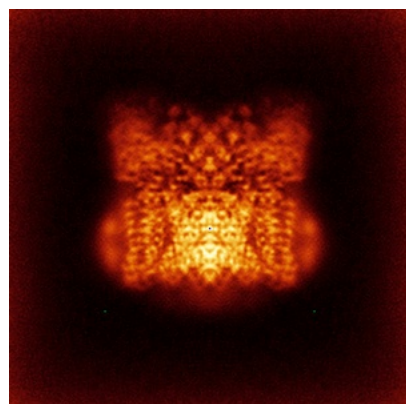


Y

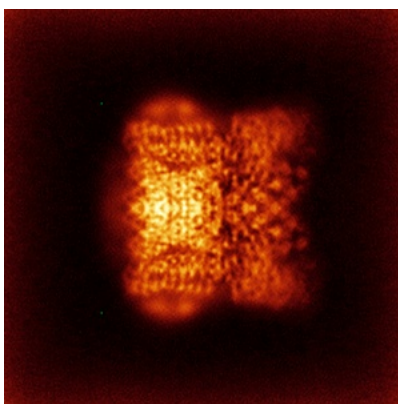


Z

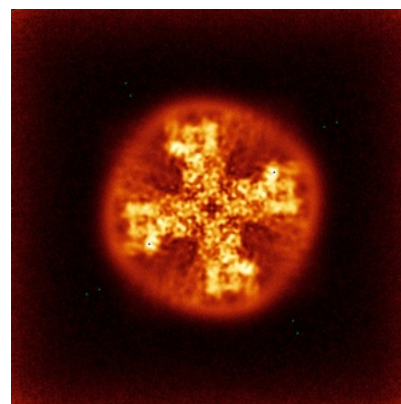
### 6.4.2 Raw map



X



Y



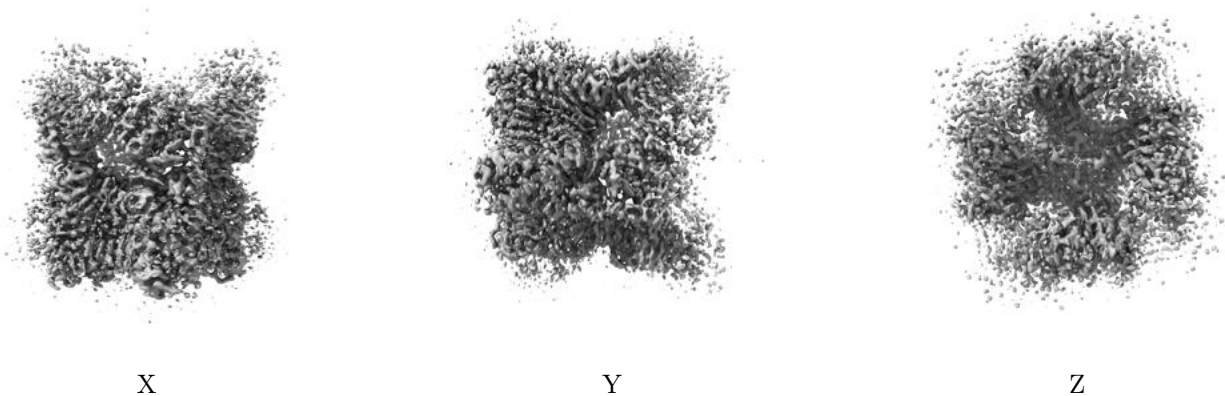
Z

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



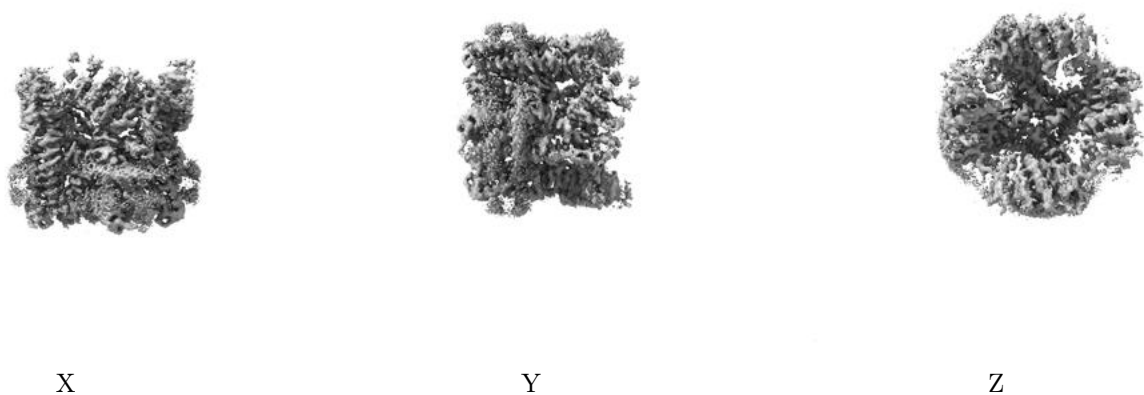
## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.156. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

### 6.5.2 Raw map



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

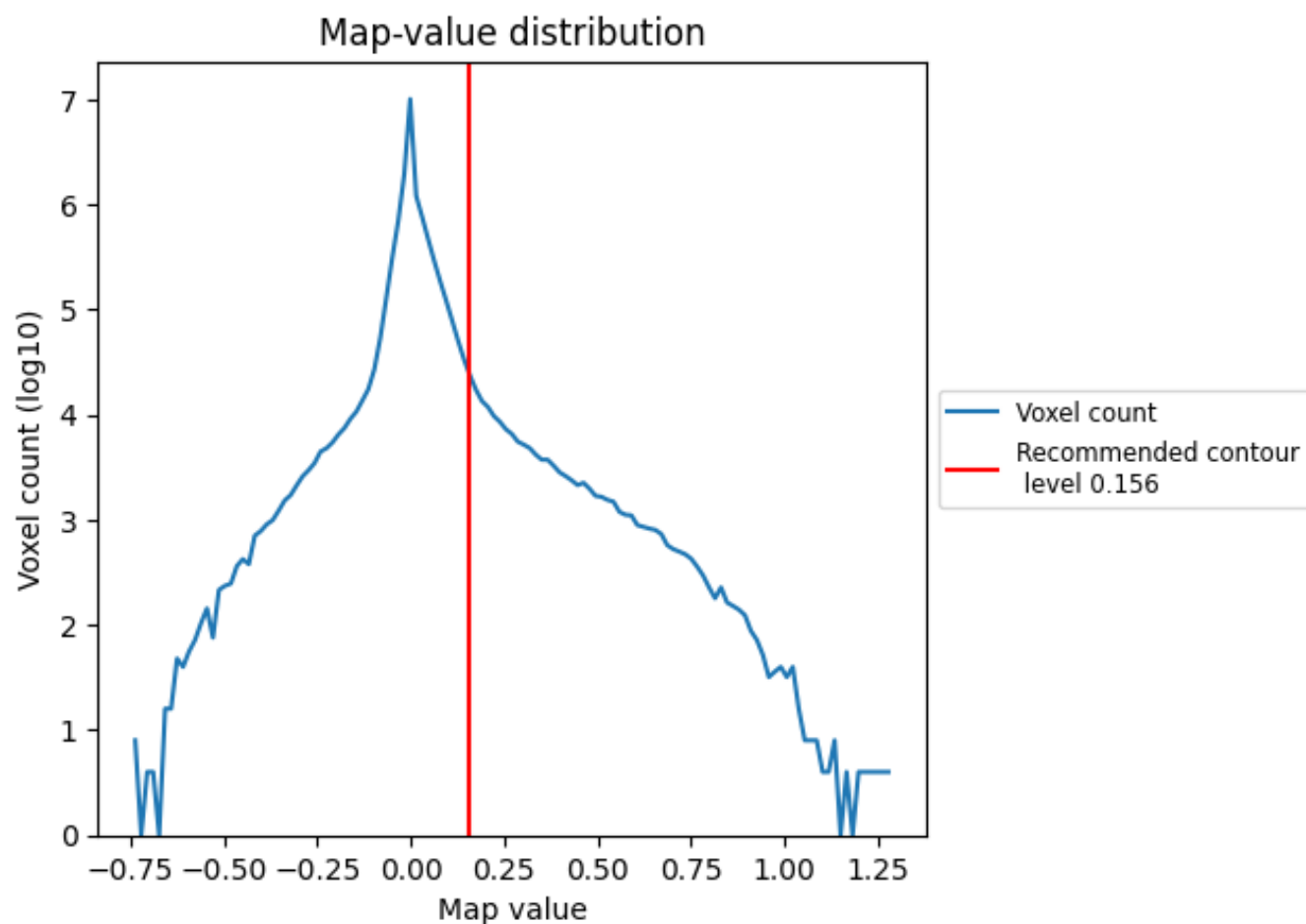
## 6.6 Mask visualisation [i](#)

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

## 7 Map analysis [i](#)

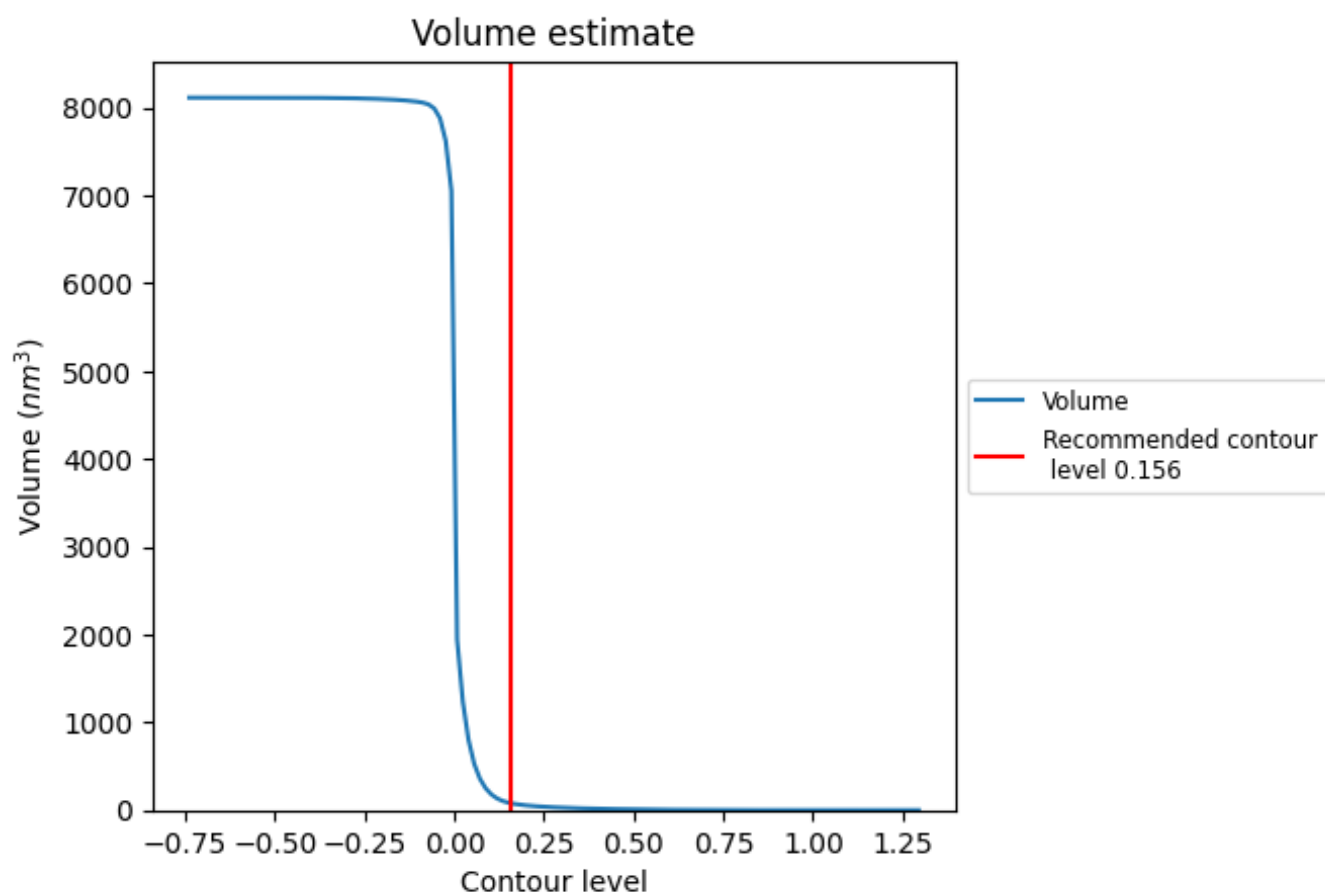
This section contains the results of statistical analysis of the map.

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



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

## 7.2 Volume estimate [i](#)

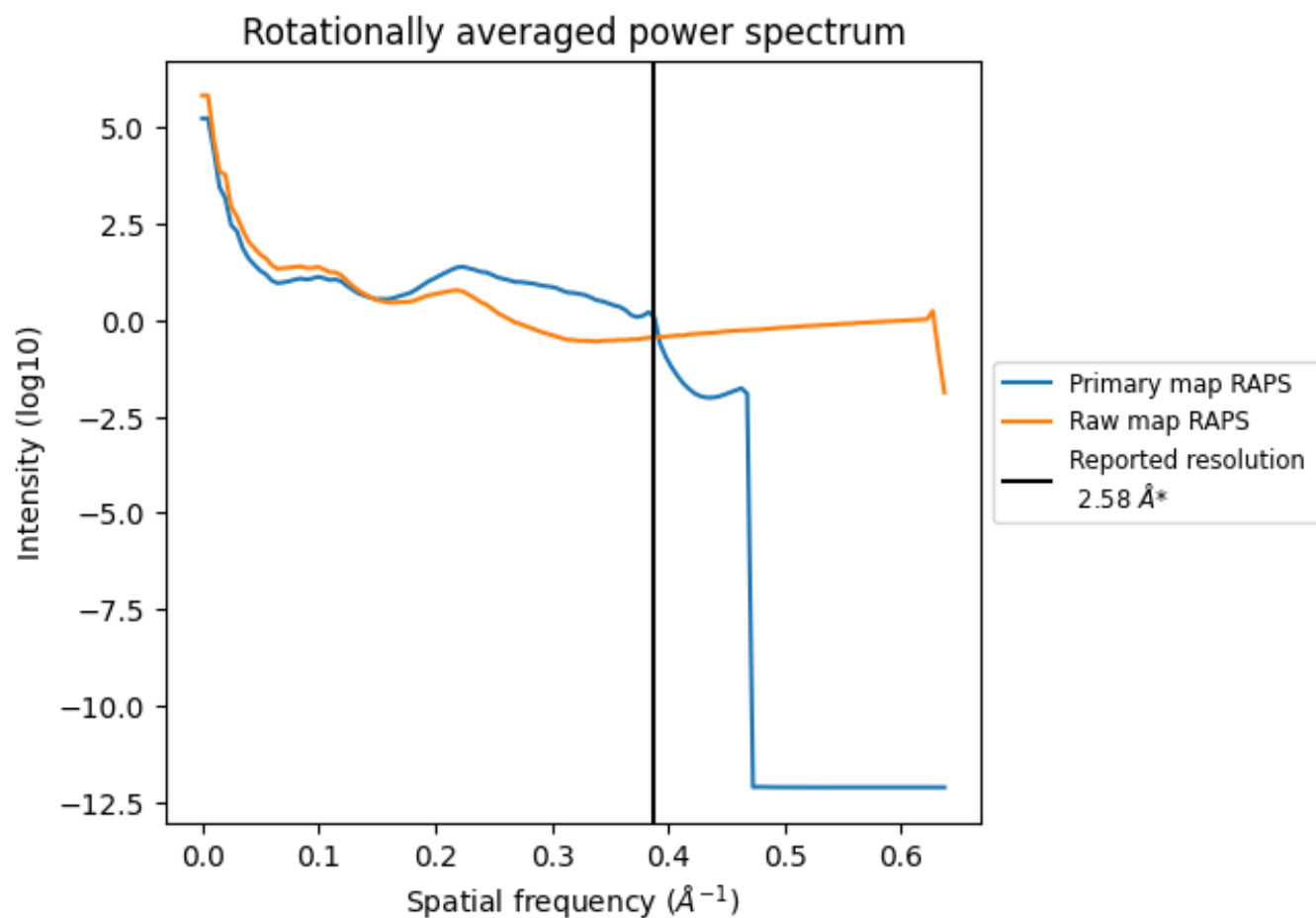


The volume at the recommended contour level is 81 nm<sup>3</sup>; this corresponds to an approximate mass of 73 kDa.

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 ⓘ

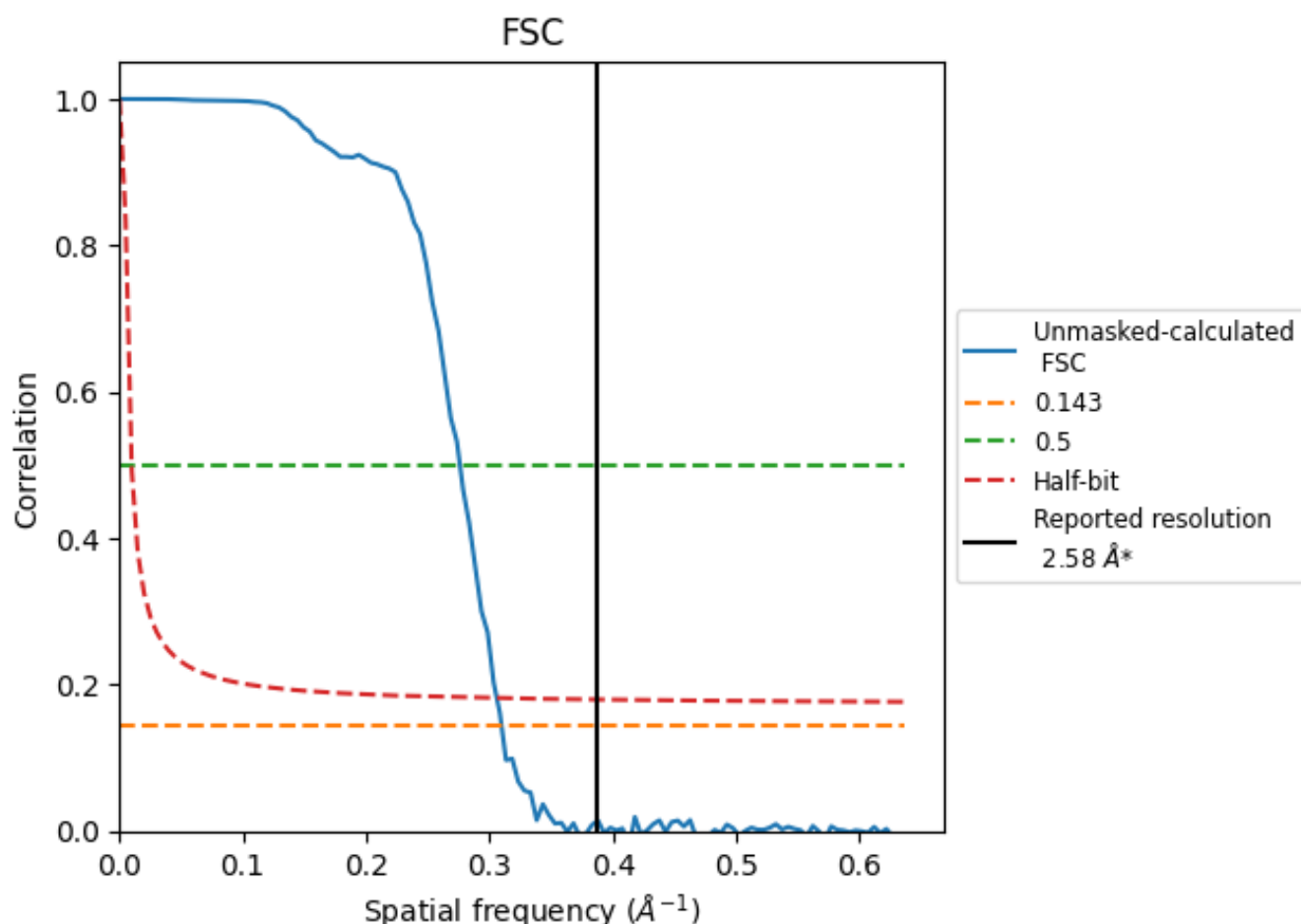


\*Reported resolution corresponds to spatial frequency of 0.388 Å<sup>-1</sup>

## 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 0.388 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

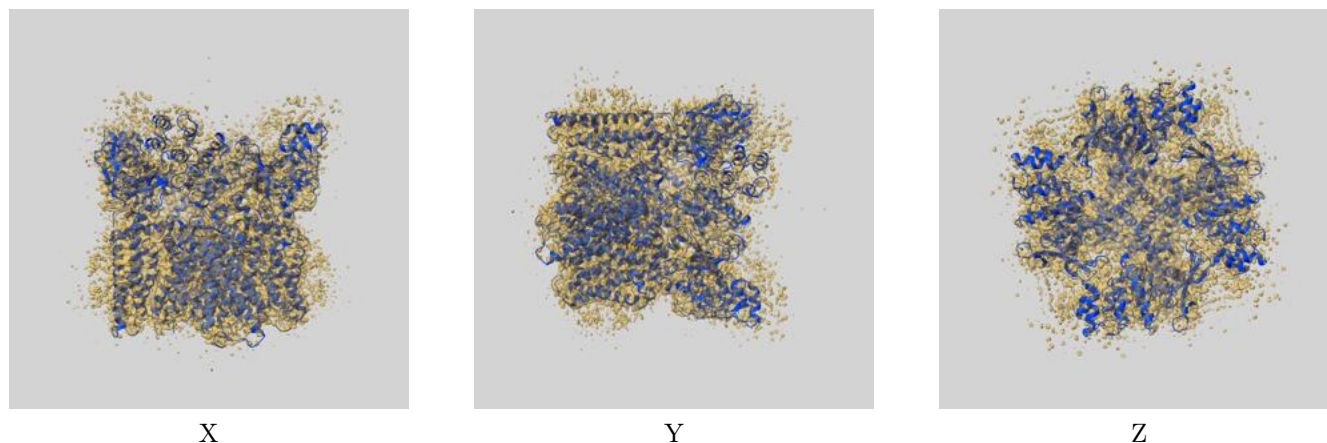
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.58	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.23	3.62	3.27

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.23 differs from the reported value 2.58 by more than 10 %

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

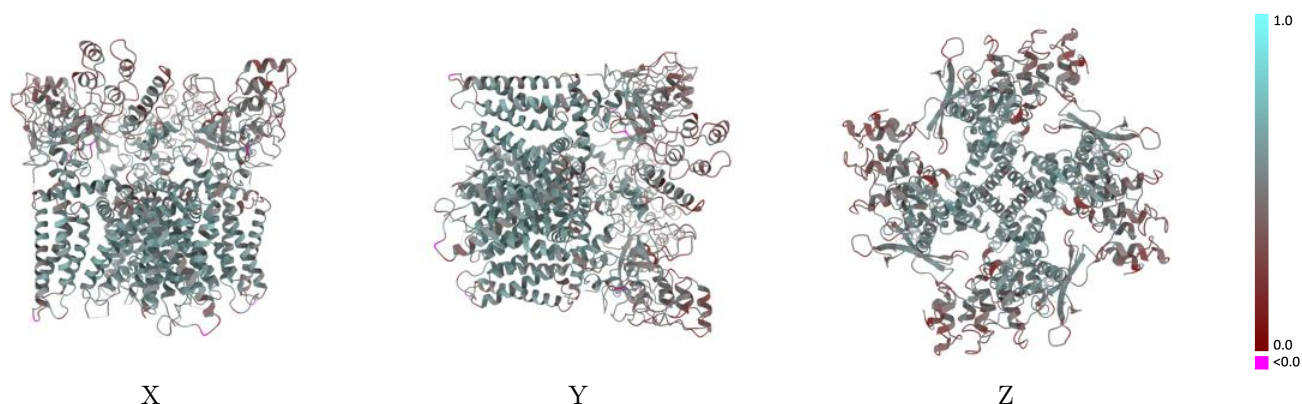
This section contains information regarding the fit between EMDB map EMD-29982 and PDB model 8GF9. Per-residue inclusion information can be found in section [3](#) on page [33](#).

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



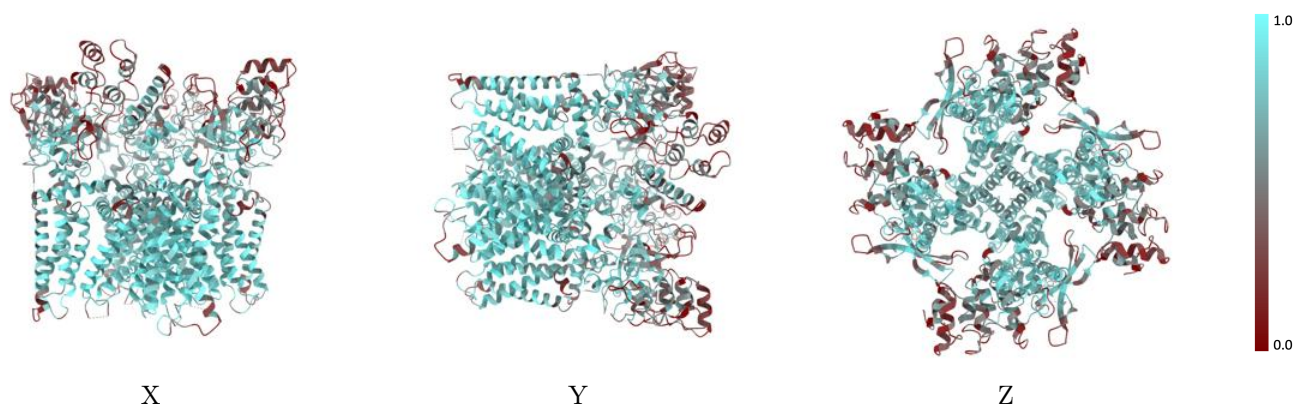
The images above show the 3D surface view of the map at the recommended contour level 0.156 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



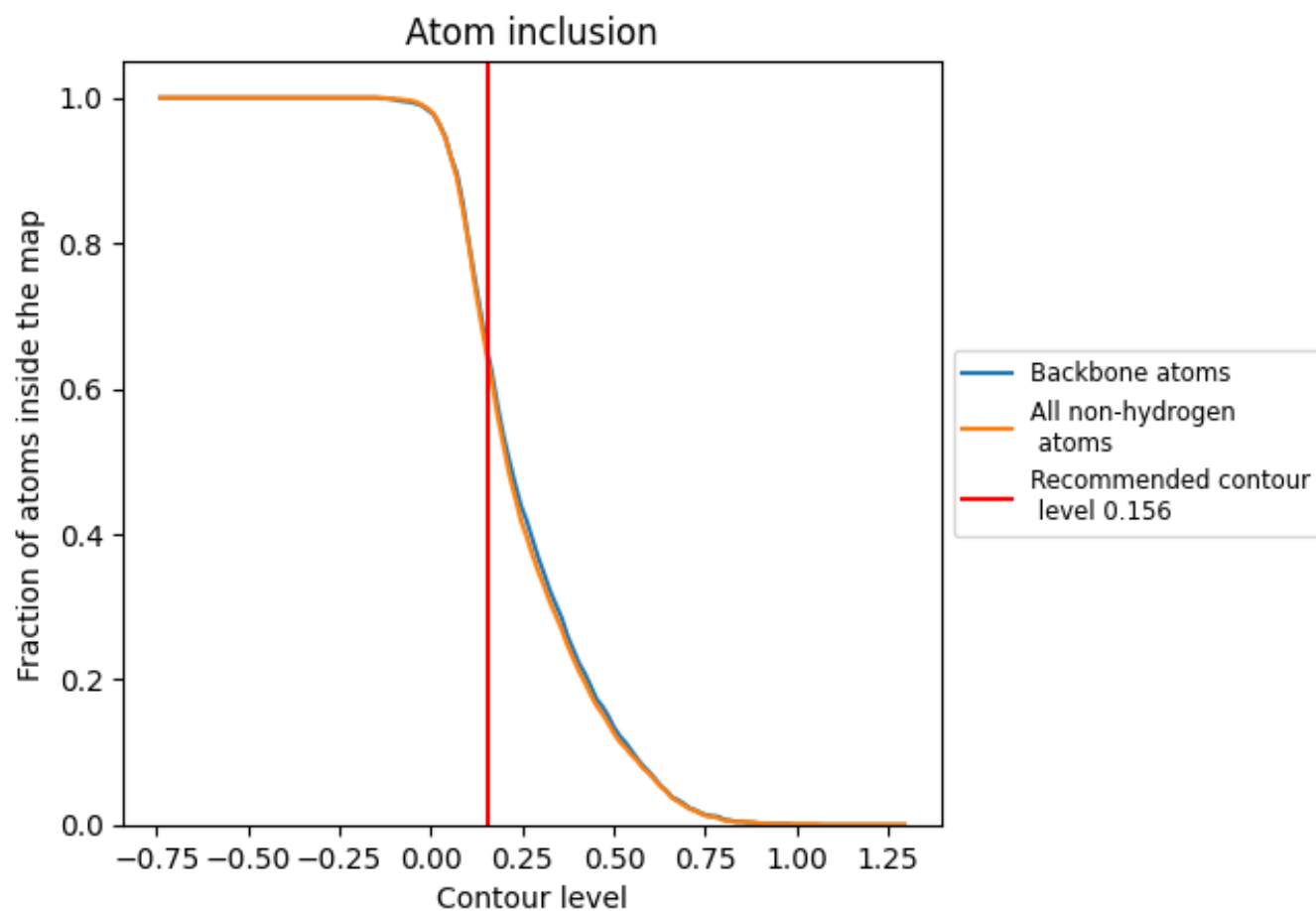
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.156).

## 9.4 Atom inclusion [i](#)



At the recommended contour level, 65% of all backbone atoms, 64% 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 (0.156) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	<div></div> 0.6400	<div></div> 0.5010
A	<div></div> 0.6420	<div></div> 0.5020
B	<div></div> 0.6410	<div></div> 0.5020
C	<div></div> 0.6420	<div></div> 0.5020
D	<div></div> 0.6420	<div></div> 0.5010

