



Full wwPDB EM Validation Report ⓘ

Mar 20, 2026 – 07:12 AM UTC

PDB ID : 7ZJG / pdb_00007zjg
EMDB ID : EMD-14747
Title : Probenecid
Authors : Zhang, L.; Gourdon, P.; Zygmunt, P.M.
Deposited on : 2022-04-11
Resolution : 3.49 Å(reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

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

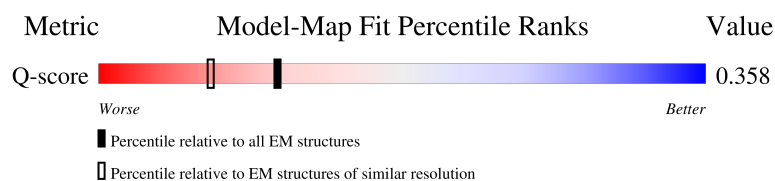
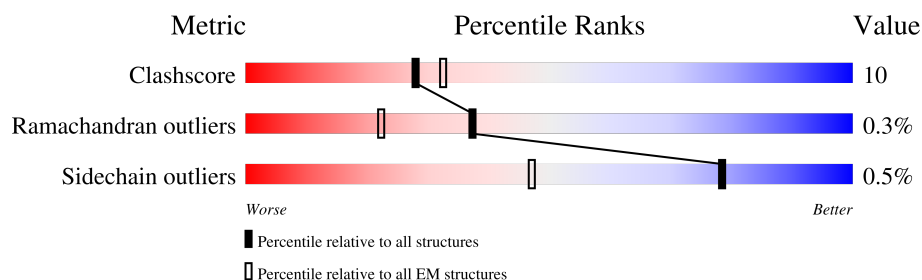
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.49 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	13600 (2.99 - 3.99)

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	1026	18% 45% 13% 42%
1	B	1026	18% 45% 14% 42%
1	C	1026	18% 45% 14% 42%
1	D	1026	18% 45% 13% 42%

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 19532 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 Transient receptor potential cation channel subfamily V member 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	599	Total	C	N	O	S	0	0
			4883	3202	814	839	28		
1	B	599	Total	C	N	O	S	0	0
			4883	3202	814	839	28		
1	C	599	Total	C	N	O	S	0	0
			4883	3202	814	839	28		
1	D	599	Total	C	N	O	S	0	0
			4883	3202	814	839	28		

There are 1072 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	571	SER	ASN	conflict	UNP A0A0G2JSH6
A	572	SER	ASN	conflict	UNP A0A0G2JSH6
A	713	ALA	VAL	conflict	UNP A0A0G2JSH6
A	762	ALA	-	expression tag	UNP A0A0G2JSH6
A	763	ALA	-	expression tag	UNP A0A0G2JSH6
A	764	ALA	-	expression tag	UNP A0A0G2JSH6
A	765	GLY	-	expression tag	UNP A0A0G2JSH6
A	766	LEU	-	expression tag	UNP A0A0G2JSH6
A	767	VAL	-	expression tag	UNP A0A0G2JSH6
A	768	PRO	-	expression tag	UNP A0A0G2JSH6
A	769	ARG	-	expression tag	UNP A0A0G2JSH6
A	770	GLY	-	expression tag	UNP A0A0G2JSH6
A	771	SER	-	expression tag	UNP A0A0G2JSH6
A	772	VAL	-	expression tag	UNP A0A0G2JSH6
A	773	ALA	-	expression tag	UNP A0A0G2JSH6
A	774	ALA	-	expression tag	UNP A0A0G2JSH6
A	775	ALA	-	expression tag	UNP A0A0G2JSH6
A	776	VAL	-	expression tag	UNP A0A0G2JSH6
A	777	SER	-	expression tag	UNP A0A0G2JSH6
A	778	LYS	-	expression tag	UNP A0A0G2JSH6
A	779	GLY	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	780	GLU	-	expression tag	UNP A0A0G2JSH6
A	781	GLU	-	expression tag	UNP A0A0G2JSH6
A	782	LEU	-	expression tag	UNP A0A0G2JSH6
A	783	PHE	-	expression tag	UNP A0A0G2JSH6
A	784	THR	-	expression tag	UNP A0A0G2JSH6
A	785	GLY	-	expression tag	UNP A0A0G2JSH6
A	786	VAL	-	expression tag	UNP A0A0G2JSH6
A	787	VAL	-	expression tag	UNP A0A0G2JSH6
A	788	PRO	-	expression tag	UNP A0A0G2JSH6
A	789	ILE	-	expression tag	UNP A0A0G2JSH6
A	790	LEU	-	expression tag	UNP A0A0G2JSH6
A	791	VAL	-	expression tag	UNP A0A0G2JSH6
A	792	GLU	-	expression tag	UNP A0A0G2JSH6
A	793	LEU	-	expression tag	UNP A0A0G2JSH6
A	794	ASP	-	expression tag	UNP A0A0G2JSH6
A	795	GLY	-	expression tag	UNP A0A0G2JSH6
A	796	ASP	-	expression tag	UNP A0A0G2JSH6
A	797	VAL	-	expression tag	UNP A0A0G2JSH6
A	798	ASN	-	expression tag	UNP A0A0G2JSH6
A	799	GLY	-	expression tag	UNP A0A0G2JSH6
A	800	HIS	-	expression tag	UNP A0A0G2JSH6
A	801	LYS	-	expression tag	UNP A0A0G2JSH6
A	802	PHE	-	expression tag	UNP A0A0G2JSH6
A	803	SER	-	expression tag	UNP A0A0G2JSH6
A	804	VAL	-	expression tag	UNP A0A0G2JSH6
A	805	SER	-	expression tag	UNP A0A0G2JSH6
A	806	GLY	-	expression tag	UNP A0A0G2JSH6
A	807	GLU	-	expression tag	UNP A0A0G2JSH6
A	808	GLY	-	expression tag	UNP A0A0G2JSH6
A	809	GLU	-	expression tag	UNP A0A0G2JSH6
A	810	GLY	-	expression tag	UNP A0A0G2JSH6
A	811	ASP	-	expression tag	UNP A0A0G2JSH6
A	812	ALA	-	expression tag	UNP A0A0G2JSH6
A	813	THR	-	expression tag	UNP A0A0G2JSH6
A	814	TYR	-	expression tag	UNP A0A0G2JSH6
A	815	GLY	-	expression tag	UNP A0A0G2JSH6
A	816	LYS	-	expression tag	UNP A0A0G2JSH6
A	817	LEU	-	expression tag	UNP A0A0G2JSH6
A	818	THR	-	expression tag	UNP A0A0G2JSH6
A	819	LEU	-	expression tag	UNP A0A0G2JSH6
A	820	LYS	-	expression tag	UNP A0A0G2JSH6
A	821	PHE	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	822	ILE	-	expression tag	UNP A0A0G2JSH6
A	823	CYS	-	expression tag	UNP A0A0G2JSH6
A	824	THR	-	expression tag	UNP A0A0G2JSH6
A	825	THR	-	expression tag	UNP A0A0G2JSH6
A	826	GLY	-	expression tag	UNP A0A0G2JSH6
A	827	LYS	-	expression tag	UNP A0A0G2JSH6
A	828	LEU	-	expression tag	UNP A0A0G2JSH6
A	829	PRO	-	expression tag	UNP A0A0G2JSH6
A	830	VAL	-	expression tag	UNP A0A0G2JSH6
A	831	PRO	-	expression tag	UNP A0A0G2JSH6
A	832	TRP	-	expression tag	UNP A0A0G2JSH6
A	833	PRO	-	expression tag	UNP A0A0G2JSH6
A	834	THR	-	expression tag	UNP A0A0G2JSH6
A	835	LEU	-	expression tag	UNP A0A0G2JSH6
A	836	VAL	-	expression tag	UNP A0A0G2JSH6
A	837	THR	-	expression tag	UNP A0A0G2JSH6
A	838	THR	-	expression tag	UNP A0A0G2JSH6
A	839	LEU	-	expression tag	UNP A0A0G2JSH6
A	840	THR	-	expression tag	UNP A0A0G2JSH6
A	841	TYR	-	expression tag	UNP A0A0G2JSH6
A	842	GLY	-	expression tag	UNP A0A0G2JSH6
A	843	VAL	-	expression tag	UNP A0A0G2JSH6
A	844	GLN	-	expression tag	UNP A0A0G2JSH6
A	845	CYS	-	expression tag	UNP A0A0G2JSH6
A	846	PHE	-	expression tag	UNP A0A0G2JSH6
A	847	SER	-	expression tag	UNP A0A0G2JSH6
A	848	ARG	-	expression tag	UNP A0A0G2JSH6
A	849	TYR	-	expression tag	UNP A0A0G2JSH6
A	850	PRO	-	expression tag	UNP A0A0G2JSH6
A	851	ASP	-	expression tag	UNP A0A0G2JSH6
A	852	HIS	-	expression tag	UNP A0A0G2JSH6
A	853	MET	-	expression tag	UNP A0A0G2JSH6
A	854	LYS	-	expression tag	UNP A0A0G2JSH6
A	855	GLN	-	expression tag	UNP A0A0G2JSH6
A	856	HIS	-	expression tag	UNP A0A0G2JSH6
A	857	ASP	-	expression tag	UNP A0A0G2JSH6
A	858	PHE	-	expression tag	UNP A0A0G2JSH6
A	859	PHE	-	expression tag	UNP A0A0G2JSH6
A	860	LYS	-	expression tag	UNP A0A0G2JSH6
A	861	SER	-	expression tag	UNP A0A0G2JSH6
A	862	ALA	-	expression tag	UNP A0A0G2JSH6
A	863	MET	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	864	PRO	-	expression tag	UNP A0A0G2JSH6
A	865	GLU	-	expression tag	UNP A0A0G2JSH6
A	866	GLY	-	expression tag	UNP A0A0G2JSH6
A	867	TYR	-	expression tag	UNP A0A0G2JSH6
A	868	VAL	-	expression tag	UNP A0A0G2JSH6
A	869	GLN	-	expression tag	UNP A0A0G2JSH6
A	870	GLU	-	expression tag	UNP A0A0G2JSH6
A	871	ARG	-	expression tag	UNP A0A0G2JSH6
A	872	THR	-	expression tag	UNP A0A0G2JSH6
A	873	ILE	-	expression tag	UNP A0A0G2JSH6
A	874	PHE	-	expression tag	UNP A0A0G2JSH6
A	875	PHE	-	expression tag	UNP A0A0G2JSH6
A	876	LYS	-	expression tag	UNP A0A0G2JSH6
A	877	ASP	-	expression tag	UNP A0A0G2JSH6
A	878	ASP	-	expression tag	UNP A0A0G2JSH6
A	879	GLY	-	expression tag	UNP A0A0G2JSH6
A	880	ASN	-	expression tag	UNP A0A0G2JSH6
A	881	TYR	-	expression tag	UNP A0A0G2JSH6
A	882	LYS	-	expression tag	UNP A0A0G2JSH6
A	883	THR	-	expression tag	UNP A0A0G2JSH6
A	884	ARG	-	expression tag	UNP A0A0G2JSH6
A	885	ALA	-	expression tag	UNP A0A0G2JSH6
A	886	GLU	-	expression tag	UNP A0A0G2JSH6
A	887	VAL	-	expression tag	UNP A0A0G2JSH6
A	888	LYS	-	expression tag	UNP A0A0G2JSH6
A	889	PHE	-	expression tag	UNP A0A0G2JSH6
A	890	GLU	-	expression tag	UNP A0A0G2JSH6
A	891	GLY	-	expression tag	UNP A0A0G2JSH6
A	892	ASP	-	expression tag	UNP A0A0G2JSH6
A	893	THR	-	expression tag	UNP A0A0G2JSH6
A	894	LEU	-	expression tag	UNP A0A0G2JSH6
A	895	VAL	-	expression tag	UNP A0A0G2JSH6
A	896	ASN	-	expression tag	UNP A0A0G2JSH6
A	897	ARG	-	expression tag	UNP A0A0G2JSH6
A	898	ILE	-	expression tag	UNP A0A0G2JSH6
A	899	GLU	-	expression tag	UNP A0A0G2JSH6
A	900	LEU	-	expression tag	UNP A0A0G2JSH6
A	901	LYS	-	expression tag	UNP A0A0G2JSH6
A	902	GLY	-	expression tag	UNP A0A0G2JSH6
A	903	ILE	-	expression tag	UNP A0A0G2JSH6
A	904	ASP	-	expression tag	UNP A0A0G2JSH6
A	905	PHE	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	906	LYS	-	expression tag	UNP A0A0G2JSH6
A	907	GLU	-	expression tag	UNP A0A0G2JSH6
A	908	ASP	-	expression tag	UNP A0A0G2JSH6
A	909	GLY	-	expression tag	UNP A0A0G2JSH6
A	910	ASN	-	expression tag	UNP A0A0G2JSH6
A	911	ILE	-	expression tag	UNP A0A0G2JSH6
A	912	LEU	-	expression tag	UNP A0A0G2JSH6
A	913	GLY	-	expression tag	UNP A0A0G2JSH6
A	914	HIS	-	expression tag	UNP A0A0G2JSH6
A	915	LYS	-	expression tag	UNP A0A0G2JSH6
A	916	LEU	-	expression tag	UNP A0A0G2JSH6
A	917	GLU	-	expression tag	UNP A0A0G2JSH6
A	918	TYR	-	expression tag	UNP A0A0G2JSH6
A	919	ASN	-	expression tag	UNP A0A0G2JSH6
A	920	TYR	-	expression tag	UNP A0A0G2JSH6
A	921	ASN	-	expression tag	UNP A0A0G2JSH6
A	922	SER	-	expression tag	UNP A0A0G2JSH6
A	923	HIS	-	expression tag	UNP A0A0G2JSH6
A	924	ASN	-	expression tag	UNP A0A0G2JSH6
A	925	VAL	-	expression tag	UNP A0A0G2JSH6
A	926	TYR	-	expression tag	UNP A0A0G2JSH6
A	927	ILE	-	expression tag	UNP A0A0G2JSH6
A	928	MET	-	expression tag	UNP A0A0G2JSH6
A	929	ALA	-	expression tag	UNP A0A0G2JSH6
A	930	ASP	-	expression tag	UNP A0A0G2JSH6
A	931	LYS	-	expression tag	UNP A0A0G2JSH6
A	932	GLN	-	expression tag	UNP A0A0G2JSH6
A	933	LYS	-	expression tag	UNP A0A0G2JSH6
A	934	ASN	-	expression tag	UNP A0A0G2JSH6
A	935	GLY	-	expression tag	UNP A0A0G2JSH6
A	936	ILE	-	expression tag	UNP A0A0G2JSH6
A	937	LYS	-	expression tag	UNP A0A0G2JSH6
A	938	VAL	-	expression tag	UNP A0A0G2JSH6
A	939	ASN	-	expression tag	UNP A0A0G2JSH6
A	940	PHE	-	expression tag	UNP A0A0G2JSH6
A	941	LYS	-	expression tag	UNP A0A0G2JSH6
A	942	ILE	-	expression tag	UNP A0A0G2JSH6
A	943	ARG	-	expression tag	UNP A0A0G2JSH6
A	944	HIS	-	expression tag	UNP A0A0G2JSH6
A	945	ASN	-	expression tag	UNP A0A0G2JSH6
A	946	ILE	-	expression tag	UNP A0A0G2JSH6
A	947	GLU	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	948	ASP	-	expression tag	UNP A0A0G2JSH6
A	949	GLY	-	expression tag	UNP A0A0G2JSH6
A	950	SER	-	expression tag	UNP A0A0G2JSH6
A	951	VAL	-	expression tag	UNP A0A0G2JSH6
A	952	GLN	-	expression tag	UNP A0A0G2JSH6
A	953	LEU	-	expression tag	UNP A0A0G2JSH6
A	954	ALA	-	expression tag	UNP A0A0G2JSH6
A	955	ASP	-	expression tag	UNP A0A0G2JSH6
A	956	HIS	-	expression tag	UNP A0A0G2JSH6
A	957	TYR	-	expression tag	UNP A0A0G2JSH6
A	958	GLN	-	expression tag	UNP A0A0G2JSH6
A	959	GLN	-	expression tag	UNP A0A0G2JSH6
A	960	ASN	-	expression tag	UNP A0A0G2JSH6
A	961	THR	-	expression tag	UNP A0A0G2JSH6
A	962	PRO	-	expression tag	UNP A0A0G2JSH6
A	963	ILE	-	expression tag	UNP A0A0G2JSH6
A	964	GLY	-	expression tag	UNP A0A0G2JSH6
A	965	ASP	-	expression tag	UNP A0A0G2JSH6
A	966	GLY	-	expression tag	UNP A0A0G2JSH6
A	967	PRO	-	expression tag	UNP A0A0G2JSH6
A	968	VAL	-	expression tag	UNP A0A0G2JSH6
A	969	LEU	-	expression tag	UNP A0A0G2JSH6
A	970	LEU	-	expression tag	UNP A0A0G2JSH6
A	971	PRO	-	expression tag	UNP A0A0G2JSH6
A	972	ASP	-	expression tag	UNP A0A0G2JSH6
A	973	ASN	-	expression tag	UNP A0A0G2JSH6
A	974	HIS	-	expression tag	UNP A0A0G2JSH6
A	975	TYR	-	expression tag	UNP A0A0G2JSH6
A	976	LEU	-	expression tag	UNP A0A0G2JSH6
A	977	SER	-	expression tag	UNP A0A0G2JSH6
A	978	THR	-	expression tag	UNP A0A0G2JSH6
A	979	GLN	-	expression tag	UNP A0A0G2JSH6
A	980	SER	-	expression tag	UNP A0A0G2JSH6
A	981	LYS	-	expression tag	UNP A0A0G2JSH6
A	982	LEU	-	expression tag	UNP A0A0G2JSH6
A	983	SER	-	expression tag	UNP A0A0G2JSH6
A	984	LYS	-	expression tag	UNP A0A0G2JSH6
A	985	ASP	-	expression tag	UNP A0A0G2JSH6
A	986	PRO	-	expression tag	UNP A0A0G2JSH6
A	987	ASN	-	expression tag	UNP A0A0G2JSH6
A	988	GLU	-	expression tag	UNP A0A0G2JSH6
A	989	LYS	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	990	ARG	-	expression tag	UNP A0A0G2JSH6
A	991	ASP	-	expression tag	UNP A0A0G2JSH6
A	992	HIS	-	expression tag	UNP A0A0G2JSH6
A	993	MET	-	expression tag	UNP A0A0G2JSH6
A	994	VAL	-	expression tag	UNP A0A0G2JSH6
A	995	LEU	-	expression tag	UNP A0A0G2JSH6
A	996	LEU	-	expression tag	UNP A0A0G2JSH6
A	997	GLU	-	expression tag	UNP A0A0G2JSH6
A	998	PHE	-	expression tag	UNP A0A0G2JSH6
A	999	VAL	-	expression tag	UNP A0A0G2JSH6
A	1000	THR	-	expression tag	UNP A0A0G2JSH6
A	1001	ALA	-	expression tag	UNP A0A0G2JSH6
A	1002	ALA	-	expression tag	UNP A0A0G2JSH6
A	1003	GLY	-	expression tag	UNP A0A0G2JSH6
A	1004	ILE	-	expression tag	UNP A0A0G2JSH6
A	1005	THR	-	expression tag	UNP A0A0G2JSH6
A	1006	LEU	-	expression tag	UNP A0A0G2JSH6
A	1007	GLY	-	expression tag	UNP A0A0G2JSH6
A	1008	MET	-	expression tag	UNP A0A0G2JSH6
A	1009	ASP	-	expression tag	UNP A0A0G2JSH6
A	1010	GLU	-	expression tag	UNP A0A0G2JSH6
A	1011	LEU	-	expression tag	UNP A0A0G2JSH6
A	1012	TYR	-	expression tag	UNP A0A0G2JSH6
A	1013	LYS	-	expression tag	UNP A0A0G2JSH6
A	1014	SER	-	expression tag	UNP A0A0G2JSH6
A	1015	GLY	-	expression tag	UNP A0A0G2JSH6
A	1016	LEU	-	expression tag	UNP A0A0G2JSH6
A	1017	ARG	-	expression tag	UNP A0A0G2JSH6
A	1018	SER	-	expression tag	UNP A0A0G2JSH6
A	1019	HIS	-	expression tag	UNP A0A0G2JSH6
A	1020	HIS	-	expression tag	UNP A0A0G2JSH6
A	1021	HIS	-	expression tag	UNP A0A0G2JSH6
A	1022	HIS	-	expression tag	UNP A0A0G2JSH6
A	1023	HIS	-	expression tag	UNP A0A0G2JSH6
A	1024	HIS	-	expression tag	UNP A0A0G2JSH6
A	1025	HIS	-	expression tag	UNP A0A0G2JSH6
A	1026	HIS	-	expression tag	UNP A0A0G2JSH6
B	571	SER	ASN	conflict	UNP A0A0G2JSH6
B	572	SER	ASN	conflict	UNP A0A0G2JSH6
B	713	ALA	VAL	conflict	UNP A0A0G2JSH6
B	762	ALA	-	expression tag	UNP A0A0G2JSH6
B	763	ALA	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	764	ALA	-	expression tag	UNP A0A0G2JSH6
B	765	GLY	-	expression tag	UNP A0A0G2JSH6
B	766	LEU	-	expression tag	UNP A0A0G2JSH6
B	767	VAL	-	expression tag	UNP A0A0G2JSH6
B	768	PRO	-	expression tag	UNP A0A0G2JSH6
B	769	ARG	-	expression tag	UNP A0A0G2JSH6
B	770	GLY	-	expression tag	UNP A0A0G2JSH6
B	771	SER	-	expression tag	UNP A0A0G2JSH6
B	772	VAL	-	expression tag	UNP A0A0G2JSH6
B	773	ALA	-	expression tag	UNP A0A0G2JSH6
B	774	ALA	-	expression tag	UNP A0A0G2JSH6
B	775	ALA	-	expression tag	UNP A0A0G2JSH6
B	776	VAL	-	expression tag	UNP A0A0G2JSH6
B	777	SER	-	expression tag	UNP A0A0G2JSH6
B	778	LYS	-	expression tag	UNP A0A0G2JSH6
B	779	GLY	-	expression tag	UNP A0A0G2JSH6
B	780	GLU	-	expression tag	UNP A0A0G2JSH6
B	781	GLU	-	expression tag	UNP A0A0G2JSH6
B	782	LEU	-	expression tag	UNP A0A0G2JSH6
B	783	PHE	-	expression tag	UNP A0A0G2JSH6
B	784	THR	-	expression tag	UNP A0A0G2JSH6
B	785	GLY	-	expression tag	UNP A0A0G2JSH6
B	786	VAL	-	expression tag	UNP A0A0G2JSH6
B	787	VAL	-	expression tag	UNP A0A0G2JSH6
B	788	PRO	-	expression tag	UNP A0A0G2JSH6
B	789	ILE	-	expression tag	UNP A0A0G2JSH6
B	790	LEU	-	expression tag	UNP A0A0G2JSH6
B	791	VAL	-	expression tag	UNP A0A0G2JSH6
B	792	GLU	-	expression tag	UNP A0A0G2JSH6
B	793	LEU	-	expression tag	UNP A0A0G2JSH6
B	794	ASP	-	expression tag	UNP A0A0G2JSH6
B	795	GLY	-	expression tag	UNP A0A0G2JSH6
B	796	ASP	-	expression tag	UNP A0A0G2JSH6
B	797	VAL	-	expression tag	UNP A0A0G2JSH6
B	798	ASN	-	expression tag	UNP A0A0G2JSH6
B	799	GLY	-	expression tag	UNP A0A0G2JSH6
B	800	HIS	-	expression tag	UNP A0A0G2JSH6
B	801	LYS	-	expression tag	UNP A0A0G2JSH6
B	802	PHE	-	expression tag	UNP A0A0G2JSH6
B	803	SER	-	expression tag	UNP A0A0G2JSH6
B	804	VAL	-	expression tag	UNP A0A0G2JSH6
B	805	SER	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	806	GLY	-	expression tag	UNP A0A0G2JSH6
B	807	GLU	-	expression tag	UNP A0A0G2JSH6
B	808	GLY	-	expression tag	UNP A0A0G2JSH6
B	809	GLU	-	expression tag	UNP A0A0G2JSH6
B	810	GLY	-	expression tag	UNP A0A0G2JSH6
B	811	ASP	-	expression tag	UNP A0A0G2JSH6
B	812	ALA	-	expression tag	UNP A0A0G2JSH6
B	813	THR	-	expression tag	UNP A0A0G2JSH6
B	814	TYR	-	expression tag	UNP A0A0G2JSH6
B	815	GLY	-	expression tag	UNP A0A0G2JSH6
B	816	LYS	-	expression tag	UNP A0A0G2JSH6
B	817	LEU	-	expression tag	UNP A0A0G2JSH6
B	818	THR	-	expression tag	UNP A0A0G2JSH6
B	819	LEU	-	expression tag	UNP A0A0G2JSH6
B	820	LYS	-	expression tag	UNP A0A0G2JSH6
B	821	PHE	-	expression tag	UNP A0A0G2JSH6
B	822	ILE	-	expression tag	UNP A0A0G2JSH6
B	823	CYS	-	expression tag	UNP A0A0G2JSH6
B	824	THR	-	expression tag	UNP A0A0G2JSH6
B	825	THR	-	expression tag	UNP A0A0G2JSH6
B	826	GLY	-	expression tag	UNP A0A0G2JSH6
B	827	LYS	-	expression tag	UNP A0A0G2JSH6
B	828	LEU	-	expression tag	UNP A0A0G2JSH6
B	829	PRO	-	expression tag	UNP A0A0G2JSH6
B	830	VAL	-	expression tag	UNP A0A0G2JSH6
B	831	PRO	-	expression tag	UNP A0A0G2JSH6
B	832	TRP	-	expression tag	UNP A0A0G2JSH6
B	833	PRO	-	expression tag	UNP A0A0G2JSH6
B	834	THR	-	expression tag	UNP A0A0G2JSH6
B	835	LEU	-	expression tag	UNP A0A0G2JSH6
B	836	VAL	-	expression tag	UNP A0A0G2JSH6
B	837	THR	-	expression tag	UNP A0A0G2JSH6
B	838	THR	-	expression tag	UNP A0A0G2JSH6
B	839	LEU	-	expression tag	UNP A0A0G2JSH6
B	840	THR	-	expression tag	UNP A0A0G2JSH6
B	841	TYR	-	expression tag	UNP A0A0G2JSH6
B	842	GLY	-	expression tag	UNP A0A0G2JSH6
B	843	VAL	-	expression tag	UNP A0A0G2JSH6
B	844	GLN	-	expression tag	UNP A0A0G2JSH6
B	845	CYS	-	expression tag	UNP A0A0G2JSH6
B	846	PHE	-	expression tag	UNP A0A0G2JSH6
B	847	SER	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	848	ARG	-	expression tag	UNP A0A0G2JSH6
B	849	TYR	-	expression tag	UNP A0A0G2JSH6
B	850	PRO	-	expression tag	UNP A0A0G2JSH6
B	851	ASP	-	expression tag	UNP A0A0G2JSH6
B	852	HIS	-	expression tag	UNP A0A0G2JSH6
B	853	MET	-	expression tag	UNP A0A0G2JSH6
B	854	LYS	-	expression tag	UNP A0A0G2JSH6
B	855	GLN	-	expression tag	UNP A0A0G2JSH6
B	856	HIS	-	expression tag	UNP A0A0G2JSH6
B	857	ASP	-	expression tag	UNP A0A0G2JSH6
B	858	PHE	-	expression tag	UNP A0A0G2JSH6
B	859	PHE	-	expression tag	UNP A0A0G2JSH6
B	860	LYS	-	expression tag	UNP A0A0G2JSH6
B	861	SER	-	expression tag	UNP A0A0G2JSH6
B	862	ALA	-	expression tag	UNP A0A0G2JSH6
B	863	MET	-	expression tag	UNP A0A0G2JSH6
B	864	PRO	-	expression tag	UNP A0A0G2JSH6
B	865	GLU	-	expression tag	UNP A0A0G2JSH6
B	866	GLY	-	expression tag	UNP A0A0G2JSH6
B	867	TYR	-	expression tag	UNP A0A0G2JSH6
B	868	VAL	-	expression tag	UNP A0A0G2JSH6
B	869	GLN	-	expression tag	UNP A0A0G2JSH6
B	870	GLU	-	expression tag	UNP A0A0G2JSH6
B	871	ARG	-	expression tag	UNP A0A0G2JSH6
B	872	THR	-	expression tag	UNP A0A0G2JSH6
B	873	ILE	-	expression tag	UNP A0A0G2JSH6
B	874	PHE	-	expression tag	UNP A0A0G2JSH6
B	875	PHE	-	expression tag	UNP A0A0G2JSH6
B	876	LYS	-	expression tag	UNP A0A0G2JSH6
B	877	ASP	-	expression tag	UNP A0A0G2JSH6
B	878	ASP	-	expression tag	UNP A0A0G2JSH6
B	879	GLY	-	expression tag	UNP A0A0G2JSH6
B	880	ASN	-	expression tag	UNP A0A0G2JSH6
B	881	TYR	-	expression tag	UNP A0A0G2JSH6
B	882	LYS	-	expression tag	UNP A0A0G2JSH6
B	883	THR	-	expression tag	UNP A0A0G2JSH6
B	884	ARG	-	expression tag	UNP A0A0G2JSH6
B	885	ALA	-	expression tag	UNP A0A0G2JSH6
B	886	GLU	-	expression tag	UNP A0A0G2JSH6
B	887	VAL	-	expression tag	UNP A0A0G2JSH6
B	888	LYS	-	expression tag	UNP A0A0G2JSH6
B	889	PHE	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	890	GLU	-	expression tag	UNP A0A0G2JSH6
B	891	GLY	-	expression tag	UNP A0A0G2JSH6
B	892	ASP	-	expression tag	UNP A0A0G2JSH6
B	893	THR	-	expression tag	UNP A0A0G2JSH6
B	894	LEU	-	expression tag	UNP A0A0G2JSH6
B	895	VAL	-	expression tag	UNP A0A0G2JSH6
B	896	ASN	-	expression tag	UNP A0A0G2JSH6
B	897	ARG	-	expression tag	UNP A0A0G2JSH6
B	898	ILE	-	expression tag	UNP A0A0G2JSH6
B	899	GLU	-	expression tag	UNP A0A0G2JSH6
B	900	LEU	-	expression tag	UNP A0A0G2JSH6
B	901	LYS	-	expression tag	UNP A0A0G2JSH6
B	902	GLY	-	expression tag	UNP A0A0G2JSH6
B	903	ILE	-	expression tag	UNP A0A0G2JSH6
B	904	ASP	-	expression tag	UNP A0A0G2JSH6
B	905	PHE	-	expression tag	UNP A0A0G2JSH6
B	906	LYS	-	expression tag	UNP A0A0G2JSH6
B	907	GLU	-	expression tag	UNP A0A0G2JSH6
B	908	ASP	-	expression tag	UNP A0A0G2JSH6
B	909	GLY	-	expression tag	UNP A0A0G2JSH6
B	910	ASN	-	expression tag	UNP A0A0G2JSH6
B	911	ILE	-	expression tag	UNP A0A0G2JSH6
B	912	LEU	-	expression tag	UNP A0A0G2JSH6
B	913	GLY	-	expression tag	UNP A0A0G2JSH6
B	914	HIS	-	expression tag	UNP A0A0G2JSH6
B	915	LYS	-	expression tag	UNP A0A0G2JSH6
B	916	LEU	-	expression tag	UNP A0A0G2JSH6
B	917	GLU	-	expression tag	UNP A0A0G2JSH6
B	918	TYR	-	expression tag	UNP A0A0G2JSH6
B	919	ASN	-	expression tag	UNP A0A0G2JSH6
B	920	TYR	-	expression tag	UNP A0A0G2JSH6
B	921	ASN	-	expression tag	UNP A0A0G2JSH6
B	922	SER	-	expression tag	UNP A0A0G2JSH6
B	923	HIS	-	expression tag	UNP A0A0G2JSH6
B	924	ASN	-	expression tag	UNP A0A0G2JSH6
B	925	VAL	-	expression tag	UNP A0A0G2JSH6
B	926	TYR	-	expression tag	UNP A0A0G2JSH6
B	927	ILE	-	expression tag	UNP A0A0G2JSH6
B	928	MET	-	expression tag	UNP A0A0G2JSH6
B	929	ALA	-	expression tag	UNP A0A0G2JSH6
B	930	ASP	-	expression tag	UNP A0A0G2JSH6
B	931	LYS	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	932	GLN	-	expression tag	UNP A0A0G2JSH6
B	933	LYS	-	expression tag	UNP A0A0G2JSH6
B	934	ASN	-	expression tag	UNP A0A0G2JSH6
B	935	GLY	-	expression tag	UNP A0A0G2JSH6
B	936	ILE	-	expression tag	UNP A0A0G2JSH6
B	937	LYS	-	expression tag	UNP A0A0G2JSH6
B	938	VAL	-	expression tag	UNP A0A0G2JSH6
B	939	ASN	-	expression tag	UNP A0A0G2JSH6
B	940	PHE	-	expression tag	UNP A0A0G2JSH6
B	941	LYS	-	expression tag	UNP A0A0G2JSH6
B	942	ILE	-	expression tag	UNP A0A0G2JSH6
B	943	ARG	-	expression tag	UNP A0A0G2JSH6
B	944	HIS	-	expression tag	UNP A0A0G2JSH6
B	945	ASN	-	expression tag	UNP A0A0G2JSH6
B	946	ILE	-	expression tag	UNP A0A0G2JSH6
B	947	GLU	-	expression tag	UNP A0A0G2JSH6
B	948	ASP	-	expression tag	UNP A0A0G2JSH6
B	949	GLY	-	expression tag	UNP A0A0G2JSH6
B	950	SER	-	expression tag	UNP A0A0G2JSH6
B	951	VAL	-	expression tag	UNP A0A0G2JSH6
B	952	GLN	-	expression tag	UNP A0A0G2JSH6
B	953	LEU	-	expression tag	UNP A0A0G2JSH6
B	954	ALA	-	expression tag	UNP A0A0G2JSH6
B	955	ASP	-	expression tag	UNP A0A0G2JSH6
B	956	HIS	-	expression tag	UNP A0A0G2JSH6
B	957	TYR	-	expression tag	UNP A0A0G2JSH6
B	958	GLN	-	expression tag	UNP A0A0G2JSH6
B	959	GLN	-	expression tag	UNP A0A0G2JSH6
B	960	ASN	-	expression tag	UNP A0A0G2JSH6
B	961	THR	-	expression tag	UNP A0A0G2JSH6
B	962	PRO	-	expression tag	UNP A0A0G2JSH6
B	963	ILE	-	expression tag	UNP A0A0G2JSH6
B	964	GLY	-	expression tag	UNP A0A0G2JSH6
B	965	ASP	-	expression tag	UNP A0A0G2JSH6
B	966	GLY	-	expression tag	UNP A0A0G2JSH6
B	967	PRO	-	expression tag	UNP A0A0G2JSH6
B	968	VAL	-	expression tag	UNP A0A0G2JSH6
B	969	LEU	-	expression tag	UNP A0A0G2JSH6
B	970	LEU	-	expression tag	UNP A0A0G2JSH6
B	971	PRO	-	expression tag	UNP A0A0G2JSH6
B	972	ASP	-	expression tag	UNP A0A0G2JSH6
B	973	ASN	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	974	HIS	-	expression tag	UNP A0A0G2JSH6
B	975	TYR	-	expression tag	UNP A0A0G2JSH6
B	976	LEU	-	expression tag	UNP A0A0G2JSH6
B	977	SER	-	expression tag	UNP A0A0G2JSH6
B	978	THR	-	expression tag	UNP A0A0G2JSH6
B	979	GLN	-	expression tag	UNP A0A0G2JSH6
B	980	SER	-	expression tag	UNP A0A0G2JSH6
B	981	LYS	-	expression tag	UNP A0A0G2JSH6
B	982	LEU	-	expression tag	UNP A0A0G2JSH6
B	983	SER	-	expression tag	UNP A0A0G2JSH6
B	984	LYS	-	expression tag	UNP A0A0G2JSH6
B	985	ASP	-	expression tag	UNP A0A0G2JSH6
B	986	PRO	-	expression tag	UNP A0A0G2JSH6
B	987	ASN	-	expression tag	UNP A0A0G2JSH6
B	988	GLU	-	expression tag	UNP A0A0G2JSH6
B	989	LYS	-	expression tag	UNP A0A0G2JSH6
B	990	ARG	-	expression tag	UNP A0A0G2JSH6
B	991	ASP	-	expression tag	UNP A0A0G2JSH6
B	992	HIS	-	expression tag	UNP A0A0G2JSH6
B	993	MET	-	expression tag	UNP A0A0G2JSH6
B	994	VAL	-	expression tag	UNP A0A0G2JSH6
B	995	LEU	-	expression tag	UNP A0A0G2JSH6
B	996	LEU	-	expression tag	UNP A0A0G2JSH6
B	997	GLU	-	expression tag	UNP A0A0G2JSH6
B	998	PHE	-	expression tag	UNP A0A0G2JSH6
B	999	VAL	-	expression tag	UNP A0A0G2JSH6
B	1000	THR	-	expression tag	UNP A0A0G2JSH6
B	1001	ALA	-	expression tag	UNP A0A0G2JSH6
B	1002	ALA	-	expression tag	UNP A0A0G2JSH6
B	1003	GLY	-	expression tag	UNP A0A0G2JSH6
B	1004	ILE	-	expression tag	UNP A0A0G2JSH6
B	1005	THR	-	expression tag	UNP A0A0G2JSH6
B	1006	LEU	-	expression tag	UNP A0A0G2JSH6
B	1007	GLY	-	expression tag	UNP A0A0G2JSH6
B	1008	MET	-	expression tag	UNP A0A0G2JSH6
B	1009	ASP	-	expression tag	UNP A0A0G2JSH6
B	1010	GLU	-	expression tag	UNP A0A0G2JSH6
B	1011	LEU	-	expression tag	UNP A0A0G2JSH6
B	1012	TYR	-	expression tag	UNP A0A0G2JSH6
B	1013	LYS	-	expression tag	UNP A0A0G2JSH6
B	1014	SER	-	expression tag	UNP A0A0G2JSH6
B	1015	GLY	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
B	1016	LEU	-	expression tag	UNP A0A0G2JSH6
B	1017	ARG	-	expression tag	UNP A0A0G2JSH6
B	1018	SER	-	expression tag	UNP A0A0G2JSH6
B	1019	HIS	-	expression tag	UNP A0A0G2JSH6
B	1020	HIS	-	expression tag	UNP A0A0G2JSH6
B	1021	HIS	-	expression tag	UNP A0A0G2JSH6
B	1022	HIS	-	expression tag	UNP A0A0G2JSH6
B	1023	HIS	-	expression tag	UNP A0A0G2JSH6
B	1024	HIS	-	expression tag	UNP A0A0G2JSH6
B	1025	HIS	-	expression tag	UNP A0A0G2JSH6
B	1026	HIS	-	expression tag	UNP A0A0G2JSH6
C	571	SER	ASN	conflict	UNP A0A0G2JSH6
C	572	SER	ASN	conflict	UNP A0A0G2JSH6
C	713	ALA	VAL	conflict	UNP A0A0G2JSH6
C	762	ALA	-	expression tag	UNP A0A0G2JSH6
C	763	ALA	-	expression tag	UNP A0A0G2JSH6
C	764	ALA	-	expression tag	UNP A0A0G2JSH6
C	765	GLY	-	expression tag	UNP A0A0G2JSH6
C	766	LEU	-	expression tag	UNP A0A0G2JSH6
C	767	VAL	-	expression tag	UNP A0A0G2JSH6
C	768	PRO	-	expression tag	UNP A0A0G2JSH6
C	769	ARG	-	expression tag	UNP A0A0G2JSH6
C	770	GLY	-	expression tag	UNP A0A0G2JSH6
C	771	SER	-	expression tag	UNP A0A0G2JSH6
C	772	VAL	-	expression tag	UNP A0A0G2JSH6
C	773	ALA	-	expression tag	UNP A0A0G2JSH6
C	774	ALA	-	expression tag	UNP A0A0G2JSH6
C	775	ALA	-	expression tag	UNP A0A0G2JSH6
C	776	VAL	-	expression tag	UNP A0A0G2JSH6
C	777	SER	-	expression tag	UNP A0A0G2JSH6
C	778	LYS	-	expression tag	UNP A0A0G2JSH6
C	779	GLY	-	expression tag	UNP A0A0G2JSH6
C	780	GLU	-	expression tag	UNP A0A0G2JSH6
C	781	GLU	-	expression tag	UNP A0A0G2JSH6
C	782	LEU	-	expression tag	UNP A0A0G2JSH6
C	783	PHE	-	expression tag	UNP A0A0G2JSH6
C	784	THR	-	expression tag	UNP A0A0G2JSH6
C	785	GLY	-	expression tag	UNP A0A0G2JSH6
C	786	VAL	-	expression tag	UNP A0A0G2JSH6
C	787	VAL	-	expression tag	UNP A0A0G2JSH6
C	788	PRO	-	expression tag	UNP A0A0G2JSH6
C	789	ILE	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	790	LEU	-	expression tag	UNP A0A0G2JSH6
C	791	VAL	-	expression tag	UNP A0A0G2JSH6
C	792	GLU	-	expression tag	UNP A0A0G2JSH6
C	793	LEU	-	expression tag	UNP A0A0G2JSH6
C	794	ASP	-	expression tag	UNP A0A0G2JSH6
C	795	GLY	-	expression tag	UNP A0A0G2JSH6
C	796	ASP	-	expression tag	UNP A0A0G2JSH6
C	797	VAL	-	expression tag	UNP A0A0G2JSH6
C	798	ASN	-	expression tag	UNP A0A0G2JSH6
C	799	GLY	-	expression tag	UNP A0A0G2JSH6
C	800	HIS	-	expression tag	UNP A0A0G2JSH6
C	801	LYS	-	expression tag	UNP A0A0G2JSH6
C	802	PHE	-	expression tag	UNP A0A0G2JSH6
C	803	SER	-	expression tag	UNP A0A0G2JSH6
C	804	VAL	-	expression tag	UNP A0A0G2JSH6
C	805	SER	-	expression tag	UNP A0A0G2JSH6
C	806	GLY	-	expression tag	UNP A0A0G2JSH6
C	807	GLU	-	expression tag	UNP A0A0G2JSH6
C	808	GLY	-	expression tag	UNP A0A0G2JSH6
C	809	GLU	-	expression tag	UNP A0A0G2JSH6
C	810	GLY	-	expression tag	UNP A0A0G2JSH6
C	811	ASP	-	expression tag	UNP A0A0G2JSH6
C	812	ALA	-	expression tag	UNP A0A0G2JSH6
C	813	THR	-	expression tag	UNP A0A0G2JSH6
C	814	TYR	-	expression tag	UNP A0A0G2JSH6
C	815	GLY	-	expression tag	UNP A0A0G2JSH6
C	816	LYS	-	expression tag	UNP A0A0G2JSH6
C	817	LEU	-	expression tag	UNP A0A0G2JSH6
C	818	THR	-	expression tag	UNP A0A0G2JSH6
C	819	LEU	-	expression tag	UNP A0A0G2JSH6
C	820	LYS	-	expression tag	UNP A0A0G2JSH6
C	821	PHE	-	expression tag	UNP A0A0G2JSH6
C	822	ILE	-	expression tag	UNP A0A0G2JSH6
C	823	CYS	-	expression tag	UNP A0A0G2JSH6
C	824	THR	-	expression tag	UNP A0A0G2JSH6
C	825	THR	-	expression tag	UNP A0A0G2JSH6
C	826	GLY	-	expression tag	UNP A0A0G2JSH6
C	827	LYS	-	expression tag	UNP A0A0G2JSH6
C	828	LEU	-	expression tag	UNP A0A0G2JSH6
C	829	PRO	-	expression tag	UNP A0A0G2JSH6
C	830	VAL	-	expression tag	UNP A0A0G2JSH6
C	831	PRO	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	832	TRP	-	expression tag	UNP A0A0G2JSH6
C	833	PRO	-	expression tag	UNP A0A0G2JSH6
C	834	THR	-	expression tag	UNP A0A0G2JSH6
C	835	LEU	-	expression tag	UNP A0A0G2JSH6
C	836	VAL	-	expression tag	UNP A0A0G2JSH6
C	837	THR	-	expression tag	UNP A0A0G2JSH6
C	838	THR	-	expression tag	UNP A0A0G2JSH6
C	839	LEU	-	expression tag	UNP A0A0G2JSH6
C	840	THR	-	expression tag	UNP A0A0G2JSH6
C	841	TYR	-	expression tag	UNP A0A0G2JSH6
C	842	GLY	-	expression tag	UNP A0A0G2JSH6
C	843	VAL	-	expression tag	UNP A0A0G2JSH6
C	844	GLN	-	expression tag	UNP A0A0G2JSH6
C	845	CYS	-	expression tag	UNP A0A0G2JSH6
C	846	PHE	-	expression tag	UNP A0A0G2JSH6
C	847	SER	-	expression tag	UNP A0A0G2JSH6
C	848	ARG	-	expression tag	UNP A0A0G2JSH6
C	849	TYR	-	expression tag	UNP A0A0G2JSH6
C	850	PRO	-	expression tag	UNP A0A0G2JSH6
C	851	ASP	-	expression tag	UNP A0A0G2JSH6
C	852	HIS	-	expression tag	UNP A0A0G2JSH6
C	853	MET	-	expression tag	UNP A0A0G2JSH6
C	854	LYS	-	expression tag	UNP A0A0G2JSH6
C	855	GLN	-	expression tag	UNP A0A0G2JSH6
C	856	HIS	-	expression tag	UNP A0A0G2JSH6
C	857	ASP	-	expression tag	UNP A0A0G2JSH6
C	858	PHE	-	expression tag	UNP A0A0G2JSH6
C	859	PHE	-	expression tag	UNP A0A0G2JSH6
C	860	LYS	-	expression tag	UNP A0A0G2JSH6
C	861	SER	-	expression tag	UNP A0A0G2JSH6
C	862	ALA	-	expression tag	UNP A0A0G2JSH6
C	863	MET	-	expression tag	UNP A0A0G2JSH6
C	864	PRO	-	expression tag	UNP A0A0G2JSH6
C	865	GLU	-	expression tag	UNP A0A0G2JSH6
C	866	GLY	-	expression tag	UNP A0A0G2JSH6
C	867	TYR	-	expression tag	UNP A0A0G2JSH6
C	868	VAL	-	expression tag	UNP A0A0G2JSH6
C	869	GLN	-	expression tag	UNP A0A0G2JSH6
C	870	GLU	-	expression tag	UNP A0A0G2JSH6
C	871	ARG	-	expression tag	UNP A0A0G2JSH6
C	872	THR	-	expression tag	UNP A0A0G2JSH6
C	873	ILE	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	874	PHE	-	expression tag	UNP A0A0G2JSH6
C	875	PHE	-	expression tag	UNP A0A0G2JSH6
C	876	LYS	-	expression tag	UNP A0A0G2JSH6
C	877	ASP	-	expression tag	UNP A0A0G2JSH6
C	878	ASP	-	expression tag	UNP A0A0G2JSH6
C	879	GLY	-	expression tag	UNP A0A0G2JSH6
C	880	ASN	-	expression tag	UNP A0A0G2JSH6
C	881	TYR	-	expression tag	UNP A0A0G2JSH6
C	882	LYS	-	expression tag	UNP A0A0G2JSH6
C	883	THR	-	expression tag	UNP A0A0G2JSH6
C	884	ARG	-	expression tag	UNP A0A0G2JSH6
C	885	ALA	-	expression tag	UNP A0A0G2JSH6
C	886	GLU	-	expression tag	UNP A0A0G2JSH6
C	887	VAL	-	expression tag	UNP A0A0G2JSH6
C	888	LYS	-	expression tag	UNP A0A0G2JSH6
C	889	PHE	-	expression tag	UNP A0A0G2JSH6
C	890	GLU	-	expression tag	UNP A0A0G2JSH6
C	891	GLY	-	expression tag	UNP A0A0G2JSH6
C	892	ASP	-	expression tag	UNP A0A0G2JSH6
C	893	THR	-	expression tag	UNP A0A0G2JSH6
C	894	LEU	-	expression tag	UNP A0A0G2JSH6
C	895	VAL	-	expression tag	UNP A0A0G2JSH6
C	896	ASN	-	expression tag	UNP A0A0G2JSH6
C	897	ARG	-	expression tag	UNP A0A0G2JSH6
C	898	ILE	-	expression tag	UNP A0A0G2JSH6
C	899	GLU	-	expression tag	UNP A0A0G2JSH6
C	900	LEU	-	expression tag	UNP A0A0G2JSH6
C	901	LYS	-	expression tag	UNP A0A0G2JSH6
C	902	GLY	-	expression tag	UNP A0A0G2JSH6
C	903	ILE	-	expression tag	UNP A0A0G2JSH6
C	904	ASP	-	expression tag	UNP A0A0G2JSH6
C	905	PHE	-	expression tag	UNP A0A0G2JSH6
C	906	LYS	-	expression tag	UNP A0A0G2JSH6
C	907	GLU	-	expression tag	UNP A0A0G2JSH6
C	908	ASP	-	expression tag	UNP A0A0G2JSH6
C	909	GLY	-	expression tag	UNP A0A0G2JSH6
C	910	ASN	-	expression tag	UNP A0A0G2JSH6
C	911	ILE	-	expression tag	UNP A0A0G2JSH6
C	912	LEU	-	expression tag	UNP A0A0G2JSH6
C	913	GLY	-	expression tag	UNP A0A0G2JSH6
C	914	HIS	-	expression tag	UNP A0A0G2JSH6
C	915	LYS	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	916	LEU	-	expression tag	UNP A0A0G2JSH6
C	917	GLU	-	expression tag	UNP A0A0G2JSH6
C	918	TYR	-	expression tag	UNP A0A0G2JSH6
C	919	ASN	-	expression tag	UNP A0A0G2JSH6
C	920	TYR	-	expression tag	UNP A0A0G2JSH6
C	921	ASN	-	expression tag	UNP A0A0G2JSH6
C	922	SER	-	expression tag	UNP A0A0G2JSH6
C	923	HIS	-	expression tag	UNP A0A0G2JSH6
C	924	ASN	-	expression tag	UNP A0A0G2JSH6
C	925	VAL	-	expression tag	UNP A0A0G2JSH6
C	926	TYR	-	expression tag	UNP A0A0G2JSH6
C	927	ILE	-	expression tag	UNP A0A0G2JSH6
C	928	MET	-	expression tag	UNP A0A0G2JSH6
C	929	ALA	-	expression tag	UNP A0A0G2JSH6
C	930	ASP	-	expression tag	UNP A0A0G2JSH6
C	931	LYS	-	expression tag	UNP A0A0G2JSH6
C	932	GLN	-	expression tag	UNP A0A0G2JSH6
C	933	LYS	-	expression tag	UNP A0A0G2JSH6
C	934	ASN	-	expression tag	UNP A0A0G2JSH6
C	935	GLY	-	expression tag	UNP A0A0G2JSH6
C	936	ILE	-	expression tag	UNP A0A0G2JSH6
C	937	LYS	-	expression tag	UNP A0A0G2JSH6
C	938	VAL	-	expression tag	UNP A0A0G2JSH6
C	939	ASN	-	expression tag	UNP A0A0G2JSH6
C	940	PHE	-	expression tag	UNP A0A0G2JSH6
C	941	LYS	-	expression tag	UNP A0A0G2JSH6
C	942	ILE	-	expression tag	UNP A0A0G2JSH6
C	943	ARG	-	expression tag	UNP A0A0G2JSH6
C	944	HIS	-	expression tag	UNP A0A0G2JSH6
C	945	ASN	-	expression tag	UNP A0A0G2JSH6
C	946	ILE	-	expression tag	UNP A0A0G2JSH6
C	947	GLU	-	expression tag	UNP A0A0G2JSH6
C	948	ASP	-	expression tag	UNP A0A0G2JSH6
C	949	GLY	-	expression tag	UNP A0A0G2JSH6
C	950	SER	-	expression tag	UNP A0A0G2JSH6
C	951	VAL	-	expression tag	UNP A0A0G2JSH6
C	952	GLN	-	expression tag	UNP A0A0G2JSH6
C	953	LEU	-	expression tag	UNP A0A0G2JSH6
C	954	ALA	-	expression tag	UNP A0A0G2JSH6
C	955	ASP	-	expression tag	UNP A0A0G2JSH6
C	956	HIS	-	expression tag	UNP A0A0G2JSH6
C	957	TYR	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	958	GLN	-	expression tag	UNP A0A0G2JSH6
C	959	GLN	-	expression tag	UNP A0A0G2JSH6
C	960	ASN	-	expression tag	UNP A0A0G2JSH6
C	961	THR	-	expression tag	UNP A0A0G2JSH6
C	962	PRO	-	expression tag	UNP A0A0G2JSH6
C	963	ILE	-	expression tag	UNP A0A0G2JSH6
C	964	GLY	-	expression tag	UNP A0A0G2JSH6
C	965	ASP	-	expression tag	UNP A0A0G2JSH6
C	966	GLY	-	expression tag	UNP A0A0G2JSH6
C	967	PRO	-	expression tag	UNP A0A0G2JSH6
C	968	VAL	-	expression tag	UNP A0A0G2JSH6
C	969	LEU	-	expression tag	UNP A0A0G2JSH6
C	970	LEU	-	expression tag	UNP A0A0G2JSH6
C	971	PRO	-	expression tag	UNP A0A0G2JSH6
C	972	ASP	-	expression tag	UNP A0A0G2JSH6
C	973	ASN	-	expression tag	UNP A0A0G2JSH6
C	974	HIS	-	expression tag	UNP A0A0G2JSH6
C	975	TYR	-	expression tag	UNP A0A0G2JSH6
C	976	LEU	-	expression tag	UNP A0A0G2JSH6
C	977	SER	-	expression tag	UNP A0A0G2JSH6
C	978	THR	-	expression tag	UNP A0A0G2JSH6
C	979	GLN	-	expression tag	UNP A0A0G2JSH6
C	980	SER	-	expression tag	UNP A0A0G2JSH6
C	981	LYS	-	expression tag	UNP A0A0G2JSH6
C	982	LEU	-	expression tag	UNP A0A0G2JSH6
C	983	SER	-	expression tag	UNP A0A0G2JSH6
C	984	LYS	-	expression tag	UNP A0A0G2JSH6
C	985	ASP	-	expression tag	UNP A0A0G2JSH6
C	986	PRO	-	expression tag	UNP A0A0G2JSH6
C	987	ASN	-	expression tag	UNP A0A0G2JSH6
C	988	GLU	-	expression tag	UNP A0A0G2JSH6
C	989	LYS	-	expression tag	UNP A0A0G2JSH6
C	990	ARG	-	expression tag	UNP A0A0G2JSH6
C	991	ASP	-	expression tag	UNP A0A0G2JSH6
C	992	HIS	-	expression tag	UNP A0A0G2JSH6
C	993	MET	-	expression tag	UNP A0A0G2JSH6
C	994	VAL	-	expression tag	UNP A0A0G2JSH6
C	995	LEU	-	expression tag	UNP A0A0G2JSH6
C	996	LEU	-	expression tag	UNP A0A0G2JSH6
C	997	GLU	-	expression tag	UNP A0A0G2JSH6
C	998	PHE	-	expression tag	UNP A0A0G2JSH6
C	999	VAL	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1000	THR	-	expression tag	UNP A0A0G2JSH6
C	1001	ALA	-	expression tag	UNP A0A0G2JSH6
C	1002	ALA	-	expression tag	UNP A0A0G2JSH6
C	1003	GLY	-	expression tag	UNP A0A0G2JSH6
C	1004	ILE	-	expression tag	UNP A0A0G2JSH6
C	1005	THR	-	expression tag	UNP A0A0G2JSH6
C	1006	LEU	-	expression tag	UNP A0A0G2JSH6
C	1007	GLY	-	expression tag	UNP A0A0G2JSH6
C	1008	MET	-	expression tag	UNP A0A0G2JSH6
C	1009	ASP	-	expression tag	UNP A0A0G2JSH6
C	1010	GLU	-	expression tag	UNP A0A0G2JSH6
C	1011	LEU	-	expression tag	UNP A0A0G2JSH6
C	1012	TYR	-	expression tag	UNP A0A0G2JSH6
C	1013	LYS	-	expression tag	UNP A0A0G2JSH6
C	1014	SER	-	expression tag	UNP A0A0G2JSH6
C	1015	GLY	-	expression tag	UNP A0A0G2JSH6
C	1016	LEU	-	expression tag	UNP A0A0G2JSH6
C	1017	ARG	-	expression tag	UNP A0A0G2JSH6
C	1018	SER	-	expression tag	UNP A0A0G2JSH6
C	1019	HIS	-	expression tag	UNP A0A0G2JSH6
C	1020	HIS	-	expression tag	UNP A0A0G2JSH6
C	1021	HIS	-	expression tag	UNP A0A0G2JSH6
C	1022	HIS	-	expression tag	UNP A0A0G2JSH6
C	1023	HIS	-	expression tag	UNP A0A0G2JSH6
C	1024	HIS	-	expression tag	UNP A0A0G2JSH6
C	1025	HIS	-	expression tag	UNP A0A0G2JSH6
C	1026	HIS	-	expression tag	UNP A0A0G2JSH6
D	571	SER	ASN	conflict	UNP A0A0G2JSH6
D	572	SER	ASN	conflict	UNP A0A0G2JSH6
D	713	ALA	VAL	conflict	UNP A0A0G2JSH6
D	762	ALA	-	expression tag	UNP A0A0G2JSH6
D	763	ALA	-	expression tag	UNP A0A0G2JSH6
D	764	ALA	-	expression tag	UNP A0A0G2JSH6
D	765	GLY	-	expression tag	UNP A0A0G2JSH6
D	766	LEU	-	expression tag	UNP A0A0G2JSH6
D	767	VAL	-	expression tag	UNP A0A0G2JSH6
D	768	PRO	-	expression tag	UNP A0A0G2JSH6
D	769	ARG	-	expression tag	UNP A0A0G2JSH6
D	770	GLY	-	expression tag	UNP A0A0G2JSH6
D	771	SER	-	expression tag	UNP A0A0G2JSH6
D	772	VAL	-	expression tag	UNP A0A0G2JSH6
D	773	ALA	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	774	ALA	-	expression tag	UNP A0A0G2JSH6
D	775	ALA	-	expression tag	UNP A0A0G2JSH6
D	776	VAL	-	expression tag	UNP A0A0G2JSH6
D	777	SER	-	expression tag	UNP A0A0G2JSH6
D	778	LYS	-	expression tag	UNP A0A0G2JSH6
D	779	GLY	-	expression tag	UNP A0A0G2JSH6
D	780	GLU	-	expression tag	UNP A0A0G2JSH6
D	781	GLU	-	expression tag	UNP A0A0G2JSH6
D	782	LEU	-	expression tag	UNP A0A0G2JSH6
D	783	PHE	-	expression tag	UNP A0A0G2JSH6
D	784	THR	-	expression tag	UNP A0A0G2JSH6
D	785	GLY	-	expression tag	UNP A0A0G2JSH6
D	786	VAL	-	expression tag	UNP A0A0G2JSH6
D	787	VAL	-	expression tag	UNP A0A0G2JSH6
D	788	PRO	-	expression tag	UNP A0A0G2JSH6
D	789	ILE	-	expression tag	UNP A0A0G2JSH6
D	790	LEU	-	expression tag	UNP A0A0G2JSH6
D	791	VAL	-	expression tag	UNP A0A0G2JSH6
D	792	GLU	-	expression tag	UNP A0A0G2JSH6
D	793	LEU	-	expression tag	UNP A0A0G2JSH6
D	794	ASP	-	expression tag	UNP A0A0G2JSH6
D	795	GLY	-	expression tag	UNP A0A0G2JSH6
D	796	ASP	-	expression tag	UNP A0A0G2JSH6
D	797	VAL	-	expression tag	UNP A0A0G2JSH6
D	798	ASN	-	expression tag	UNP A0A0G2JSH6
D	799	GLY	-	expression tag	UNP A0A0G2JSH6
D	800	HIS	-	expression tag	UNP A0A0G2JSH6
D	801	LYS	-	expression tag	UNP A0A0G2JSH6
D	802	PHE	-	expression tag	UNP A0A0G2JSH6
D	803	SER	-	expression tag	UNP A0A0G2JSH6
D	804	VAL	-	expression tag	UNP A0A0G2JSH6
D	805	SER	-	expression tag	UNP A0A0G2JSH6
D	806	GLY	-	expression tag	UNP A0A0G2JSH6
D	807	GLU	-	expression tag	UNP A0A0G2JSH6
D	808	GLY	-	expression tag	UNP A0A0G2JSH6
D	809	GLU	-	expression tag	UNP A0A0G2JSH6
D	810	GLY	-	expression tag	UNP A0A0G2JSH6
D	811	ASP	-	expression tag	UNP A0A0G2JSH6
D	812	ALA	-	expression tag	UNP A0A0G2JSH6
D	813	THR	-	expression tag	UNP A0A0G2JSH6
D	814	TYR	-	expression tag	UNP A0A0G2JSH6
D	815	GLY	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	816	LYS	-	expression tag	UNP A0A0G2JSH6
D	817	LEU	-	expression tag	UNP A0A0G2JSH6
D	818	THR	-	expression tag	UNP A0A0G2JSH6
D	819	LEU	-	expression tag	UNP A0A0G2JSH6
D	820	LYS	-	expression tag	UNP A0A0G2JSH6
D	821	PHE	-	expression tag	UNP A0A0G2JSH6
D	822	ILE	-	expression tag	UNP A0A0G2JSH6
D	823	CYS	-	expression tag	UNP A0A0G2JSH6
D	824	THR	-	expression tag	UNP A0A0G2JSH6
D	825	THR	-	expression tag	UNP A0A0G2JSH6
D	826	GLY	-	expression tag	UNP A0A0G2JSH6
D	827	LYS	-	expression tag	UNP A0A0G2JSH6
D	828	LEU	-	expression tag	UNP A0A0G2JSH6
D	829	PRO	-	expression tag	UNP A0A0G2JSH6
D	830	VAL	-	expression tag	UNP A0A0G2JSH6
D	831	PRO	-	expression tag	UNP A0A0G2JSH6
D	832	TRP	-	expression tag	UNP A0A0G2JSH6
D	833	PRO	-	expression tag	UNP A0A0G2JSH6
D	834	THR	-	expression tag	UNP A0A0G2JSH6
D	835	LEU	-	expression tag	UNP A0A0G2JSH6
D	836	VAL	-	expression tag	UNP A0A0G2JSH6
D	837	THR	-	expression tag	UNP A0A0G2JSH6
D	838	THR	-	expression tag	UNP A0A0G2JSH6
D	839	LEU	-	expression tag	UNP A0A0G2JSH6
D	840	THR	-	expression tag	UNP A0A0G2JSH6
D	841	TYR	-	expression tag	UNP A0A0G2JSH6
D	842	GLY	-	expression tag	UNP A0A0G2JSH6
D	843	VAL	-	expression tag	UNP A0A0G2JSH6
D	844	GLN	-	expression tag	UNP A0A0G2JSH6
D	845	CYS	-	expression tag	UNP A0A0G2JSH6
D	846	PHE	-	expression tag	UNP A0A0G2JSH6
D	847	SER	-	expression tag	UNP A0A0G2JSH6
D	848	ARG	-	expression tag	UNP A0A0G2JSH6
D	849	TYR	-	expression tag	UNP A0A0G2JSH6
D	850	PRO	-	expression tag	UNP A0A0G2JSH6
D	851	ASP	-	expression tag	UNP A0A0G2JSH6
D	852	HIS	-	expression tag	UNP A0A0G2JSH6
D	853	MET	-	expression tag	UNP A0A0G2JSH6
D	854	LYS	-	expression tag	UNP A0A0G2JSH6
D	855	GLN	-	expression tag	UNP A0A0G2JSH6
D	856	HIS	-	expression tag	UNP A0A0G2JSH6
D	857	ASP	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	858	PHE	-	expression tag	UNP A0A0G2JSH6
D	859	PHE	-	expression tag	UNP A0A0G2JSH6
D	860	LYS	-	expression tag	UNP A0A0G2JSH6
D	861	SER	-	expression tag	UNP A0A0G2JSH6
D	862	ALA	-	expression tag	UNP A0A0G2JSH6
D	863	MET	-	expression tag	UNP A0A0G2JSH6
D	864	PRO	-	expression tag	UNP A0A0G2JSH6
D	865	GLU	-	expression tag	UNP A0A0G2JSH6
D	866	GLY	-	expression tag	UNP A0A0G2JSH6
D	867	TYR	-	expression tag	UNP A0A0G2JSH6
D	868	VAL	-	expression tag	UNP A0A0G2JSH6
D	869	GLN	-	expression tag	UNP A0A0G2JSH6
D	870	GLU	-	expression tag	UNP A0A0G2JSH6
D	871	ARG	-	expression tag	UNP A0A0G2JSH6
D	872	THR	-	expression tag	UNP A0A0G2JSH6
D	873	ILE	-	expression tag	UNP A0A0G2JSH6
D	874	PHE	-	expression tag	UNP A0A0G2JSH6
D	875	PHE	-	expression tag	UNP A0A0G2JSH6
D	876	LYS	-	expression tag	UNP A0A0G2JSH6
D	877	ASP	-	expression tag	UNP A0A0G2JSH6
D	878	ASP	-	expression tag	UNP A0A0G2JSH6
D	879	GLY	-	expression tag	UNP A0A0G2JSH6
D	880	ASN	-	expression tag	UNP A0A0G2JSH6
D	881	TYR	-	expression tag	UNP A0A0G2JSH6
D	882	LYS	-	expression tag	UNP A0A0G2JSH6
D	883	THR	-	expression tag	UNP A0A0G2JSH6
D	884	ARG	-	expression tag	UNP A0A0G2JSH6
D	885	ALA	-	expression tag	UNP A0A0G2JSH6
D	886	GLU	-	expression tag	UNP A0A0G2JSH6
D	887	VAL	-	expression tag	UNP A0A0G2JSH6
D	888	LYS	-	expression tag	UNP A0A0G2JSH6
D	889	PHE	-	expression tag	UNP A0A0G2JSH6
D	890	GLU	-	expression tag	UNP A0A0G2JSH6
D	891	GLY	-	expression tag	UNP A0A0G2JSH6
D	892	ASP	-	expression tag	UNP A0A0G2JSH6
D	893	THR	-	expression tag	UNP A0A0G2JSH6
D	894	LEU	-	expression tag	UNP A0A0G2JSH6
D	895	VAL	-	expression tag	UNP A0A0G2JSH6
D	896	ASN	-	expression tag	UNP A0A0G2JSH6
D	897	ARG	-	expression tag	UNP A0A0G2JSH6
D	898	ILE	-	expression tag	UNP A0A0G2JSH6
D	899	GLU	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	900	LEU	-	expression tag	UNP A0A0G2JSH6
D	901	LYS	-	expression tag	UNP A0A0G2JSH6
D	902	GLY	-	expression tag	UNP A0A0G2JSH6
D	903	ILE	-	expression tag	UNP A0A0G2JSH6
D	904	ASP	-	expression tag	UNP A0A0G2JSH6
D	905	PHE	-	expression tag	UNP A0A0G2JSH6
D	906	LYS	-	expression tag	UNP A0A0G2JSH6
D	907	GLU	-	expression tag	UNP A0A0G2JSH6
D	908	ASP	-	expression tag	UNP A0A0G2JSH6
D	909	GLY	-	expression tag	UNP A0A0G2JSH6
D	910	ASN	-	expression tag	UNP A0A0G2JSH6
D	911	ILE	-	expression tag	UNP A0A0G2JSH6
D	912	LEU	-	expression tag	UNP A0A0G2JSH6
D	913	GLY	-	expression tag	UNP A0A0G2JSH6
D	914	HIS	-	expression tag	UNP A0A0G2JSH6
D	915	LYS	-	expression tag	UNP A0A0G2JSH6
D	916	LEU	-	expression tag	UNP A0A0G2JSH6
D	917	GLU	-	expression tag	UNP A0A0G2JSH6
D	918	TYR	-	expression tag	UNP A0A0G2JSH6
D	919	ASN	-	expression tag	UNP A0A0G2JSH6
D	920	TYR	-	expression tag	UNP A0A0G2JSH6
D	921	ASN	-	expression tag	UNP A0A0G2JSH6
D	922	SER	-	expression tag	UNP A0A0G2JSH6
D	923	HIS	-	expression tag	UNP A0A0G2JSH6
D	924	ASN	-	expression tag	UNP A0A0G2JSH6
D	925	VAL	-	expression tag	UNP A0A0G2JSH6
D	926	TYR	-	expression tag	UNP A0A0G2JSH6
D	927	ILE	-	expression tag	UNP A0A0G2JSH6
D	928	MET	-	expression tag	UNP A0A0G2JSH6
D	929	ALA	-	expression tag	UNP A0A0G2JSH6
D	930	ASP	-	expression tag	UNP A0A0G2JSH6
D	931	LYS	-	expression tag	UNP A0A0G2JSH6
D	932	GLN	-	expression tag	UNP A0A0G2JSH6
D	933	LYS	-	expression tag	UNP A0A0G2JSH6
D	934	ASN	-	expression tag	UNP A0A0G2JSH6
D	935	GLY	-	expression tag	UNP A0A0G2JSH6
D	936	ILE	-	expression tag	UNP A0A0G2JSH6
D	937	LYS	-	expression tag	UNP A0A0G2JSH6
D	938	VAL	-	expression tag	UNP A0A0G2JSH6
D	939	ASN	-	expression tag	UNP A0A0G2JSH6
D	940	PHE	-	expression tag	UNP A0A0G2JSH6
D	941	LYS	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	942	ILE	-	expression tag	UNP A0A0G2JSH6
D	943	ARG	-	expression tag	UNP A0A0G2JSH6
D	944	HIS	-	expression tag	UNP A0A0G2JSH6
D	945	ASN	-	expression tag	UNP A0A0G2JSH6
D	946	ILE	-	expression tag	UNP A0A0G2JSH6
D	947	GLU	-	expression tag	UNP A0A0G2JSH6
D	948	ASP	-	expression tag	UNP A0A0G2JSH6
D	949	GLY	-	expression tag	UNP A0A0G2JSH6
D	950	SER	-	expression tag	UNP A0A0G2JSH6
D	951	VAL	-	expression tag	UNP A0A0G2JSH6
D	952	GLN	-	expression tag	UNP A0A0G2JSH6
D	953	LEU	-	expression tag	UNP A0A0G2JSH6
D	954	ALA	-	expression tag	UNP A0A0G2JSH6
D	955	ASP	-	expression tag	UNP A0A0G2JSH6
D	956	HIS	-	expression tag	UNP A0A0G2JSH6
D	957	TYR	-	expression tag	UNP A0A0G2JSH6
D	958	GLN	-	expression tag	UNP A0A0G2JSH6
D	959	GLN	-	expression tag	UNP A0A0G2JSH6
D	960	ASN	-	expression tag	UNP A0A0G2JSH6
D	961	THR	-	expression tag	UNP A0A0G2JSH6
D	962	PRO	-	expression tag	UNP A0A0G2JSH6
D	963	ILE	-	expression tag	UNP A0A0G2JSH6
D	964	GLY	-	expression tag	UNP A0A0G2JSH6
D	965	ASP	-	expression tag	UNP A0A0G2JSH6
D	966	GLY	-	expression tag	UNP A0A0G2JSH6
D	967	PRO	-	expression tag	UNP A0A0G2JSH6
D	968	VAL	-	expression tag	UNP A0A0G2JSH6
D	969	LEU	-	expression tag	UNP A0A0G2JSH6
D	970	LEU	-	expression tag	UNP A0A0G2JSH6
D	971	PRO	-	expression tag	UNP A0A0G2JSH6
D	972	ASP	-	expression tag	UNP A0A0G2JSH6
D	973	ASN	-	expression tag	UNP A0A0G2JSH6
D	974	HIS	-	expression tag	UNP A0A0G2JSH6
D	975	TYR	-	expression tag	UNP A0A0G2JSH6
D	976	LEU	-	expression tag	UNP A0A0G2JSH6
D	977	SER	-	expression tag	UNP A0A0G2JSH6
D	978	THR	-	expression tag	UNP A0A0G2JSH6
D	979	GLN	-	expression tag	UNP A0A0G2JSH6
D	980	SER	-	expression tag	UNP A0A0G2JSH6
D	981	LYS	-	expression tag	UNP A0A0G2JSH6
D	982	LEU	-	expression tag	UNP A0A0G2JSH6
D	983	SER	-	expression tag	UNP A0A0G2JSH6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	984	LYS	-	expression tag	UNP A0A0G2JSH6
D	985	ASP	-	expression tag	UNP A0A0G2JSH6
D	986	PRO	-	expression tag	UNP A0A0G2JSH6
D	987	ASN	-	expression tag	UNP A0A0G2JSH6
D	988	GLU	-	expression tag	UNP A0A0G2JSH6
D	989	LYS	-	expression tag	UNP A0A0G2JSH6
D	990	ARG	-	expression tag	UNP A0A0G2JSH6
D	991	ASP	-	expression tag	UNP A0A0G2JSH6
D	992	HIS	-	expression tag	UNP A0A0G2JSH6
D	993	MET	-	expression tag	UNP A0A0G2JSH6
D	994	VAL	-	expression tag	UNP A0A0G2JSH6
D	995	LEU	-	expression tag	UNP A0A0G2JSH6
D	996	LEU	-	expression tag	UNP A0A0G2JSH6
D	997	GLU	-	expression tag	UNP A0A0G2JSH6
D	998	PHE	-	expression tag	UNP A0A0G2JSH6
D	999	VAL	-	expression tag	UNP A0A0G2JSH6
D	1000	THR	-	expression tag	UNP A0A0G2JSH6
D	1001	ALA	-	expression tag	UNP A0A0G2JSH6
D	1002	ALA	-	expression tag	UNP A0A0G2JSH6
D	1003	GLY	-	expression tag	UNP A0A0G2JSH6
D	1004	ILE	-	expression tag	UNP A0A0G2JSH6
D	1005	THR	-	expression tag	UNP A0A0G2JSH6
D	1006	LEU	-	expression tag	UNP A0A0G2JSH6
D	1007	GLY	-	expression tag	UNP A0A0G2JSH6
D	1008	MET	-	expression tag	UNP A0A0G2JSH6
D	1009	ASP	-	expression tag	UNP A0A0G2JSH6
D	1010	GLU	-	expression tag	UNP A0A0G2JSH6
D	1011	LEU	-	expression tag	UNP A0A0G2JSH6
D	1012	TYR	-	expression tag	UNP A0A0G2JSH6
D	1013	LYS	-	expression tag	UNP A0A0G2JSH6
D	1014	SER	-	expression tag	UNP A0A0G2JSH6
D	1015	GLY	-	expression tag	UNP A0A0G2JSH6
D	1016	LEU	-	expression tag	UNP A0A0G2JSH6
D	1017	ARG	-	expression tag	UNP A0A0G2JSH6
D	1018	SER	-	expression tag	UNP A0A0G2JSH6
D	1019	HIS	-	expression tag	UNP A0A0G2JSH6
D	1020	HIS	-	expression tag	UNP A0A0G2JSH6
D	1021	HIS	-	expression tag	UNP A0A0G2JSH6
D	1022	HIS	-	expression tag	UNP A0A0G2JSH6
D	1023	HIS	-	expression tag	UNP A0A0G2JSH6
D	1024	HIS	-	expression tag	UNP A0A0G2JSH6
D	1025	HIS	-	expression tag	UNP A0A0G2JSH6

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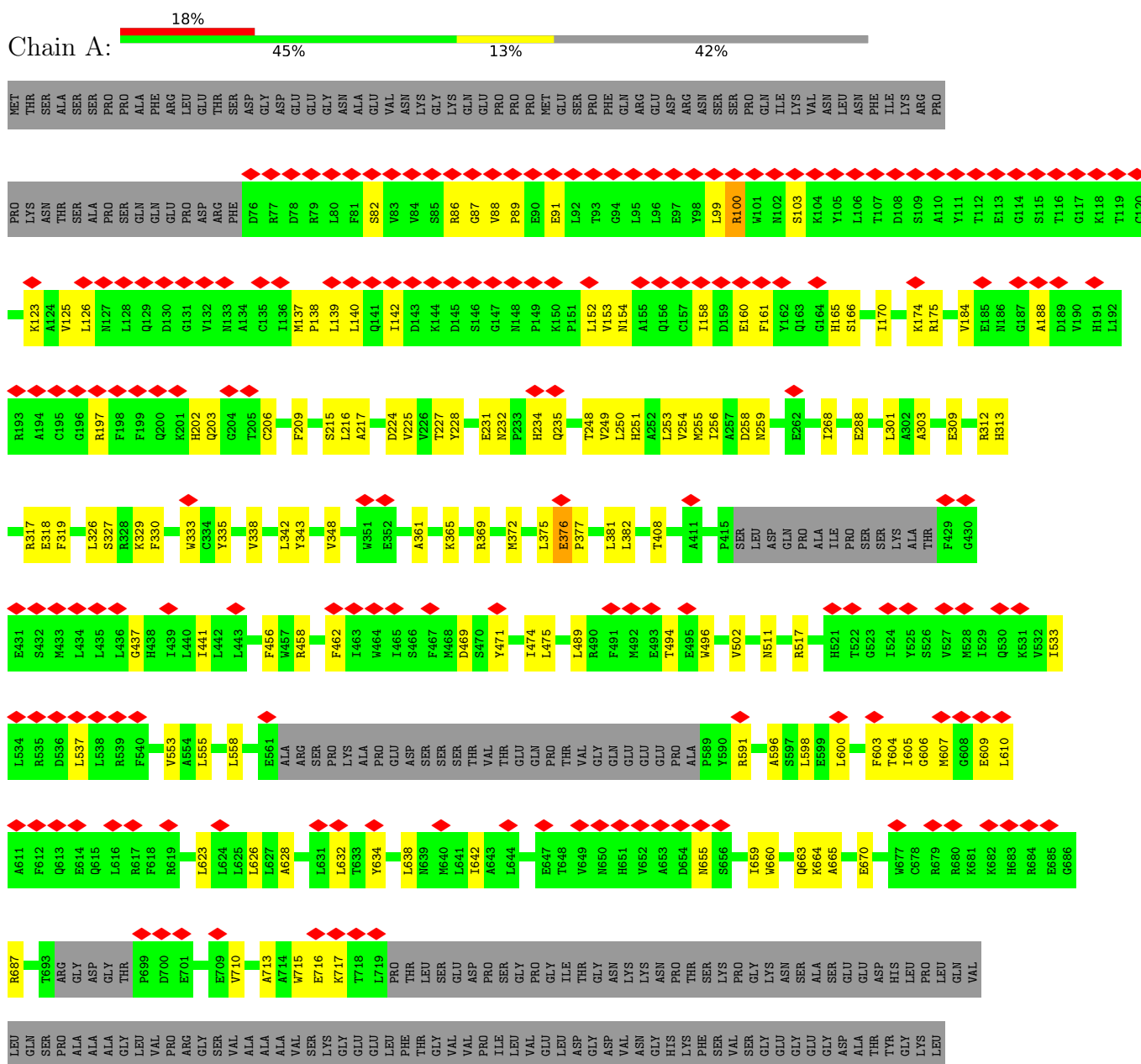
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Chain	Residue	Modelled	Actual	Comment	Reference
D	1026	HIS	-	expression tag	UNP A0A0G2JSH6

3 Residue-property plots

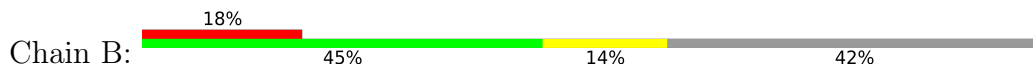
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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 2



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

- Molecule 1: Transient receptor potential cation channel subfamily V member 2



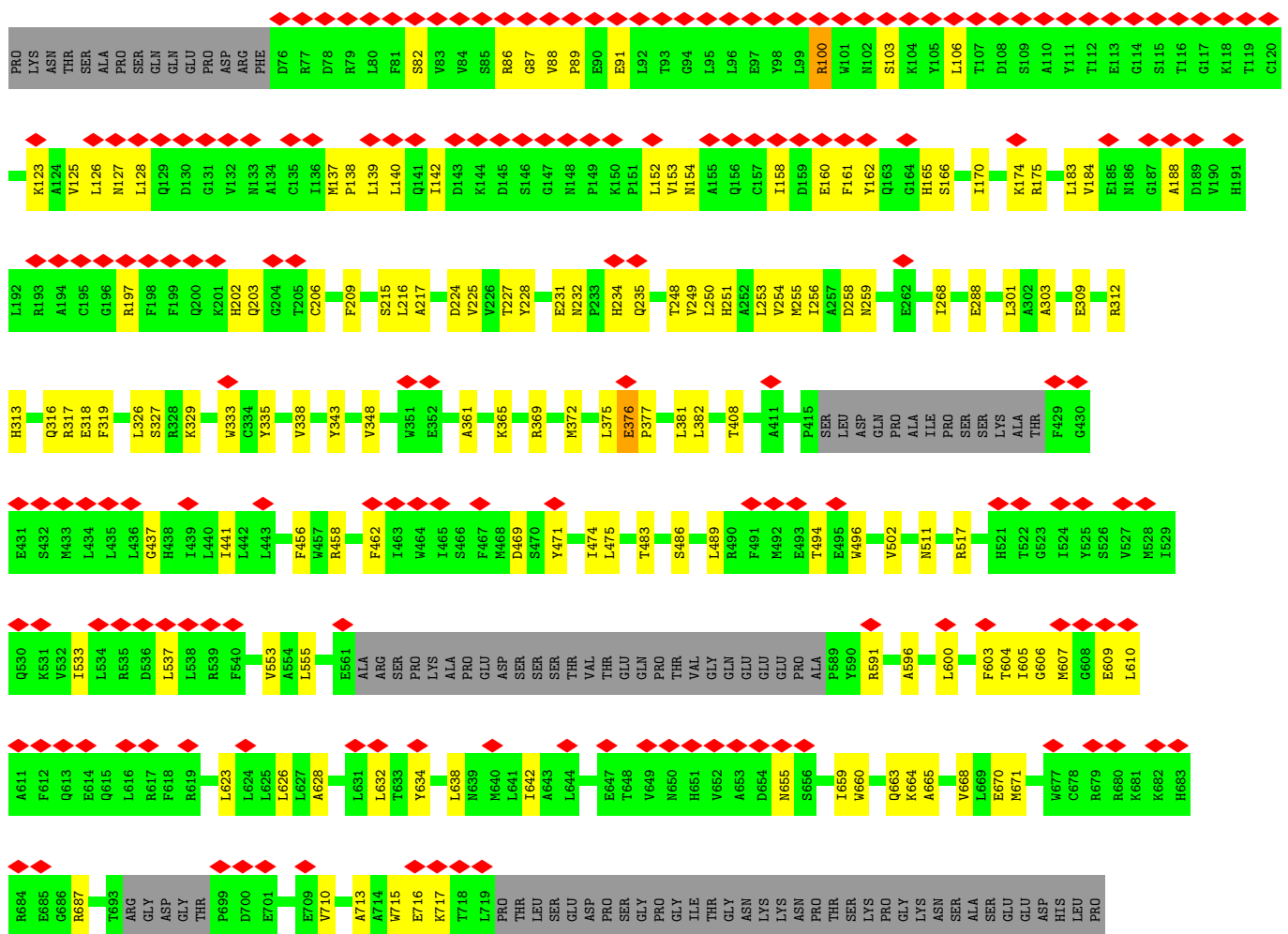
GLY	ASP	GLU	R679	F603	Y526	THR	E509	V190	GLY	PRO
ASP	R680	ASP	R680	T604	S526	F429	R312	H191	GLY	LYS
ALA	HIS	LEU	T603	G604	V527	G430	H313	L192	ASN	ASN
THR	K681	LEU	I605	G606	M528	E431	E317	R193	THR	THR
TYR	K682	PRO	G607	G608	I529	S432	E318	A194	ALA	ALA
GLY	H683	LEU	G609	G609	Q530	M433	R328	C195	PRO	PRO
LYS	R684	GLN	G684	G685	K531	M433	L326	G196	SER	SER
LEU	R685	VAL	G685	G686	E609	L435	S327	Q129	GLN	GLN
THR	G686	GLN	R687	L610	I532	L436	R328	D130	GLU	GLU
LYS	THR	SER	THR	A611	I533	L437	K329	G131	PRO	PRO
PHE	ARG	PRO	ARG	F612	R535	G437	F330	F199	ASP	ASP
ILE	ALA	ALA	THR	Q613	D536	H438	W333	Q200	ARG	ARG
CYS	ALA	ALA	GLY	E614	L537	L440	G334	N133	PHE	PHE
THR	ALA	GLY	ASP	Q614	L537	L440	V335	C135	D76	D76
GLY	THR	GLY	GLY	Q615	L538	I441	V338	N137	ASP	ASP
VAL	THR	VAL	THR	L616	R539	L442	Y343	P138	R77	R77
PRO	PRO	PRO	PRO	R617	F540	L443	V338	R79	R80	R80
LEU	D700	ARG	D701	F618	F540	L443	L342	L139	L80	L80
GLY	E701	GLY	E701	R619	V553	F456	Y348	L140	F81	F81
PRO	PRO	SER	SER	R619	A554	W457	Y343	Q141	S82	S82
TRP	VAL	VAL	VAL	R619	L555	R458	V348	L140	ALA	ALA
PRO	ALA	ALA	E709	L624	L558	F462	V348	S215	V83	V83
THR	V710	THR	V710	L626	L558	I463	V348	L216	V84	V84
LEU	ALA	ALA	A713	L627	E561	I463	V348	A217	S85	S85
VAL	VAL	VAL	THR	A628	ALA	I464	V348	D224	GLY	GLY
THR	THR	SER	THR	W714	ARG	I465	V348	V225	LYS	LYS
LYS	W715	GLY	W715	L631	ARG	I465	V348	V226	GLN	GLN
LEU	E716	GLY	E716	L632	SER	F467	V348	T227	GLU	GLU
THR	W717	GLU	W717	L632	PRO	W467	V348	T228	V88	V88
TYR	K717	GLU	K717	T833	LYS	W468	V348	N148	P89	P89
GLY	T718	LEU	T718	Y634	ALA	D469	V348	E231	E90	E90
VAL	W719	VAL	W719	GLY	PRO	S470	V348	N232	PRO	PRO
GLN	THR	THR	THR	L638	GLU	Y471	V348	K150	MET	MET
CYS	THR	GLY	THR	M639	ASP	I474	V348	P151	GLU	GLU
PHE	LEU	VAL	LEU	N639	LEU	L475	V348	H234	THR	THR
VAL	VAL	VAL	VAL	M640	SER	L475	V348	V153	PRO	PRO
SER	SER	VAL	SER	L641	SER	L475	V348	G94	PHE	PHE
ARG	GLU	PRO	GLU	I642	SER	L475	V348	N154	GLN	GLN
TYR	ILE	ASP	ASP	L643	THR	T483	V348	A155	ARG	ARG
PRO	LEU	PRO	PRO	L644	VAL	T483	V348	Q156	GLU	GLU
ASP	VAL	VAL	VAL	L644	THR	S486	V348	C157	ASP	ASP
HIS	GLU	GLY	GLY	E647	GLU	L489	V348	H251	ARG	ARG
GLY	ASP	GLY	GLY	T648	GLN	R490	V348	A252	ASN	ASN
GLN	GLY	ILE	GLY	V649	THR	F491	V348	D159	SER	SER
HIS	THR	THR	THR	N650	THR	M492	V348	E160	PRO	PRO
ASP	VAL	VAL	VAL	N650	VAL	M492	V348	F161	GLN	GLN
PHE	PHE	ASN	ASN	H651	GLY	E493	V348	Y162	ILE	ILE
PHE	THR	GLY	THR	V652	GLN	T494	V348	Q163	LYS	LYS
LYS	LYS	LYS	LYS	V652	GLU	E495	V348	G164	VAL	VAL
LYS	LYS	LYS	LYS	V652	GLU	E495	V348	H165	ASN	ASN
ASN	ASN	ASN	ASN	V652	GLU	W496	V348	S166	LEU	LEU
ALA	PHE	PRO	PRO	D654	GLU	W496	V348	E262	ASN	ASN
MET	MET	THR	THR	R655	PRO	V502	V348	I170	LEU	LEU
PRO	PRO	VAL	SER	S655	ALA	V502	V348	A171	ASN	ASN
PRO	PRO	VAL	SER	S656	P589	V590	V348	I172	PHE	PHE
GLU	GLY	SER	GLY	Y590	THR	L507	V348	E288	ILE	ILE
GLY	GLY	GLY	GLY	R591	VAL	L507	V348	E289	ARG	ARG
TYR	GLY	GLY	GLY	R591	THR	N511	V348	L301	LYS	LYS
VAL	VAL	GLY	LYS	R591	VAL	R517	V348	A302	PRO	PRO
GLN	ASN	ASN	ASN	A596	VAL	R517	V348	L183	GLU	GLU
SER	SER	SER	SER	S597	THR	H521	V348	V184	ASN	ASN
ALA	ALA	ALA	ALA	L598	THR	T522	V348	E185	GLY	GLY
SER	SER	SER	SER	A665	THR	G523	V348	N186	THR	THR
SER	SER	SER	SER	E599	THR	G523	V348	G187	GLY	GLY
GLU	GLU	GLU	GLU	L600	THR	I524	V348	A188	GLY	GLY
				E670	THR		V348	D189	GLY	GLY
				W677	THR		V348	E113	GLY	GLY
				C678	THR		V348	G114	GLY	GLY
							V348	T116	GLY	GLY
							V348	G117	GLY	GLY
							V348	K118	GLY	GLY
							V348	T119	GLY	GLY
							V348	C120	GLY	GLY

ARG	ASP	HIS	MET	VAL	LEU	LEU	GLU	PHE	VAL	THR	ALA	ALA	ALA	GLY	ILE	THR	LEU	GLY	MET	ASP	GLU	LEU	TYR	LYS	SER	GLY	LEU	ARG	SER	HIS	HIS	HIS	HIS	HIS	HIS	HIS
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- Molecule 1: Transient receptor potential cation channel subfamily V member 2



MET	THR	SER	ALA	SER	PRO	PRO	ALA	ALA	ARG	LEU	GLU	THR	SER	ASP	GLY	ASP	GLU	GLU	GLY	ASN	GLU	VAL	ASN	LYS	GLY	LYS	GLN	GLU	PRO	PRO	PRO	MET	GLU	SER	PRO	PHE	GLN	GLN	ARG	GLU	ASP	ARG	ASN	SER	SER	PRO	PRO	GLN	ILE	LYS	VAL	ASN	ASN	LEU	ASN	PHE	LYS	ILE	LYS	ARG	PRO
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[illegible]

GLY
LYS
LEU
THR
LEU
LYS
PHE
ILE
CYS
THR
THR
GLY
LYS
LEU
PRO
VAL
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TRP
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LEU
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TYR
GLY
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CYS
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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	182000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	57	Depositor
Minimum defocus (nm)	700	Depositor
Maximum defocus (nm)	2700	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	1.602	Depositor
Minimum map value	-0.859	Depositor
Average map value	-0.001	Depositor
Map value standard deviation	0.043	Depositor
Recommended contour level	0.3	Depositor
Map size (Å)	295.2, 295.2, 295.2	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.82000005, 0.82000005, 0.82000005	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.15	0/5006	0.35	0/6788
1	B	0.15	0/5006	0.35	0/6788
1	C	0.15	0/5006	0.35	0/6788
1	D	0.15	0/5006	0.35	0/6788
All	All	0.15	0/20024	0.35	0/27152

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [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	4883	0	4945	98	0
1	B	4883	0	4945	99	0
1	C	4883	0	4945	102	0
1	D	4883	0	4945	97	0
All	All	19532	0	19780	378	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 10.

All (378) 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:C:607:MET:HE1	1:D:606:GLY:HA3	1.51	0.92
1:B:607:MET:HE1	1:C:606:GLY:HA3	1.58	0.85
1:A:607:MET:HE1	1:B:606:GLY:HA3	1.57	0.84
1:A:606:GLY:HA3	1:D:607:MET:HE1	1.62	0.81
1:A:609:GLU:HG2	1:A:610:LEU:H	1.56	0.71
1:D:609:GLU:HG2	1:D:610:LEU:H	1.56	0.70
1:C:609:GLU:HG2	1:C:610:LEU:H	1.56	0.69
1:B:609:GLU:HG2	1:B:610:LEU:H	1.56	0.69
1:A:553:VAL:HG11	1:B:408:THR:HG23	1.78	0.65
1:C:458:ARG:NH2	1:C:670:GLU:OE1	2.31	0.64
1:B:458:ARG:NH2	1:B:670:GLU:OE1	2.31	0.63
1:D:458:ARG:NH2	1:D:670:GLU:OE1	2.31	0.63
1:A:317:ARG:NH1	1:A:326:LEU:O	2.32	0.63
1:B:317:ARG:NH1	1:B:326:LEU:O	2.32	0.63
1:A:458:ARG:NH2	1:A:670:GLU:OE1	2.31	0.62
1:C:317:ARG:NH1	1:C:326:LEU:O	2.32	0.62
1:A:408:THR:HG23	1:D:553:VAL:HG11	1.81	0.62
1:D:317:ARG:NH1	1:D:326:LEU:O	2.31	0.62
1:B:553:VAL:HG11	1:C:408:THR:HG23	1.80	0.61
1:D:86:ARG:NH1	1:D:87:GLY:O	2.34	0.61
1:D:603:PHE:HA	1:D:607:MET:HA	1.82	0.61
1:A:603:PHE:HA	1:A:607:MET:HA	1.82	0.61
1:C:86:ARG:NH1	1:C:87:GLY:O	2.34	0.61
1:D:456:PHE:HZ	1:D:474:ILE:HG22	1.66	0.61
1:C:456:PHE:HZ	1:C:474:ILE:HG22	1.66	0.61
1:B:86:ARG:NH1	1:B:87:GLY:O	2.34	0.61
1:C:224:ASP:OD1	1:C:225:VAL:N	2.35	0.60
1:C:603:PHE:HA	1:C:607:MET:HA	1.82	0.60
1:A:86:ARG:NH1	1:A:87:GLY:O	2.34	0.60
1:B:456:PHE:HZ	1:B:474:ILE:HG22	1.66	0.60
1:B:603:PHE:HA	1:B:607:MET:HA	1.82	0.60
1:C:348:VAL:HG23	1:C:687:ARG:HE	1.67	0.60
1:C:555:LEU:HD11	1:C:626:LEU:HD21	1.83	0.60
1:A:203:GLN:HB3	1:A:206:CYS:HB3	1.83	0.60
1:A:224:ASP:OD1	1:A:225:VAL:N	2.34	0.60
1:D:86:ARG:HH12	1:D:91:GLU:HG3	1.66	0.60
1:D:365:LYS:NZ	1:D:469:ASP:OD2	2.34	0.60
1:D:203:GLN:HB3	1:D:206:CYS:HB3	1.83	0.60
1:D:348:VAL:HG23	1:D:687:ARG:HE	1.67	0.60
1:B:348:VAL:HG23	1:B:687:ARG:HE	1.67	0.60
1:D:224:ASP:OD1	1:D:225:VAL:N	2.35	0.60
1:A:456:PHE:HZ	1:A:474:ILE:HG22	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:555:LEU:HD11	1:A:626:LEU:HD21	1.83	0.60
1:B:86:ARG:HH12	1:B:91:GLU:HG3	1.66	0.60
1:B:224:ASP:OD1	1:B:225:VAL:N	2.35	0.60
1:B:203:GLN:HB3	1:B:206:CYS:HB3	1.83	0.59
1:A:86:ARG:HH12	1:A:91:GLU:HG3	1.66	0.59
1:D:555:LEU:HD11	1:D:626:LEU:HD21	1.83	0.59
1:A:365:LYS:NZ	1:A:469:ASP:OD2	2.34	0.59
1:B:555:LEU:HD11	1:B:626:LEU:HD21	1.83	0.59
1:C:203:GLN:HB3	1:C:206:CYS:HB3	1.83	0.59
1:C:86:ARG:HH12	1:C:91:GLU:HG3	1.67	0.59
1:A:348:VAL:HG23	1:A:687:ARG:HE	1.67	0.59
1:C:365:LYS:NZ	1:C:469:ASP:OD2	2.34	0.59
1:B:365:LYS:NZ	1:B:469:ASP:OD2	2.34	0.59
1:C:553:VAL:HG11	1:D:408:THR:HG23	1.85	0.59
1:D:489:LEU:HD12	1:D:494:THR:HG21	1.85	0.59
1:D:82:SER:OG	1:D:123:LYS:NZ	2.37	0.58
1:B:82:SER:OG	1:B:123:LYS:NZ	2.37	0.58
1:B:489:LEU:HD12	1:B:494:THR:HG21	1.85	0.58
1:C:489:LEU:HD12	1:C:494:THR:HG21	1.85	0.58
1:A:489:LEU:HD12	1:A:494:THR:HG21	1.85	0.57
1:A:82:SER:OG	1:A:123:LYS:NZ	2.37	0.57
1:C:82:SER:OG	1:C:123:LYS:NZ	2.37	0.57
1:B:475:LEU:HB3	1:B:511:ASN:HD21	1.70	0.56
1:A:475:LEU:HB3	1:A:511:ASN:HD21	1.71	0.56
1:A:234:HIS:ND1	1:A:235:GLN:HG3	2.21	0.56
1:B:234:HIS:ND1	1:B:235:GLN:HG3	2.21	0.56
1:D:471:TYR:O	1:D:474:ILE:HG12	2.06	0.56
1:A:471:TYR:O	1:A:474:ILE:HG12	2.06	0.56
1:D:234:HIS:ND1	1:D:235:GLN:HG3	2.21	0.56
1:D:255:MET:HE3	1:D:301:LEU:HD21	1.88	0.56
1:A:255:MET:HE3	1:A:301:LEU:HD21	1.88	0.56
1:C:228:TYR:O	1:C:232:ASN:ND2	2.39	0.56
1:C:234:HIS:ND1	1:C:235:GLN:HG3	2.21	0.56
1:A:248:THR:HG22	1:A:251:HIS:ND1	2.21	0.56
1:C:248:THR:HG22	1:C:251:HIS:ND1	2.21	0.56
1:D:475:LEU:HB3	1:D:511:ASN:HD21	1.71	0.56
1:B:153:VAL:O	1:B:166:SER:OG	2.24	0.55
1:C:153:VAL:O	1:C:166:SER:OG	2.24	0.55
1:C:475:LEU:HB3	1:C:511:ASN:HD21	1.70	0.55
1:B:228:TYR:O	1:B:232:ASN:ND2	2.40	0.55
1:B:471:TYR:O	1:B:474:ILE:HG12	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:471:TYR:O	1:C:474:ILE:HG12	2.06	0.55
1:D:248:THR:HG22	1:D:251:HIS:ND1	2.21	0.55
1:A:715:TRP:HE3	1:D:175:ARG:HH21	1.55	0.55
1:B:248:THR:HG22	1:B:251:HIS:ND1	2.21	0.55
1:C:309:GLU:OE1	1:C:312:ARG:NH2	2.40	0.55
1:B:255:MET:HE3	1:B:301:LEU:HD21	1.88	0.55
1:B:309:GLU:OE1	1:B:312:ARG:NH2	2.40	0.55
1:D:153:VAL:O	1:D:166:SER:OG	2.24	0.55
1:D:604:THR:HG23	1:D:605:ILE:HG23	1.89	0.55
1:A:153:VAL:O	1:A:166:SER:OG	2.24	0.55
1:A:309:GLU:OE1	1:A:312:ARG:NH2	2.40	0.55
1:C:255:MET:HE3	1:C:301:LEU:HD21	1.88	0.55
1:A:228:TYR:O	1:A:232:ASN:ND2	2.39	0.55
1:A:604:THR:HG23	1:A:605:ILE:HG23	1.89	0.55
1:B:234:HIS:HD1	1:B:235:GLN:HG3	1.72	0.55
1:C:303:ALA:HA	1:C:372:MET:HE1	1.90	0.54
1:D:228:TYR:O	1:D:232:ASN:ND2	2.40	0.54
1:B:604:THR:HG23	1:B:605:ILE:HG23	1.89	0.54
1:C:604:THR:HG23	1:C:605:ILE:HG23	1.89	0.54
1:D:234:HIS:HD1	1:D:235:GLN:HG3	1.72	0.54
1:B:303:ALA:HA	1:B:372:MET:HE1	1.89	0.54
1:B:634:TYR:O	1:B:638:LEU:HG	2.08	0.54
1:D:634:TYR:O	1:D:638:LEU:HG	2.08	0.54
1:A:494:THR:HG23	1:A:496:TRP:H	1.72	0.54
1:A:634:TYR:O	1:A:638:LEU:HG	2.08	0.54
1:D:309:GLU:OE1	1:D:312:ARG:NH2	2.40	0.54
1:C:606:GLY:O	1:C:607:MET:HG2	2.08	0.54
1:A:234:HIS:HD1	1:A:235:GLN:HG3	1.72	0.53
1:B:606:GLY:O	1:B:607:MET:HG2	2.08	0.53
1:C:234:HIS:HD1	1:C:235:GLN:HG3	1.72	0.53
1:D:303:ALA:HA	1:D:372:MET:HE1	1.89	0.53
1:B:494:THR:HG23	1:B:496:TRP:H	1.72	0.53
1:C:634:TYR:O	1:C:638:LEU:HG	2.08	0.53
1:C:716:GLU:HG3	1:C:717:LYS:HD2	1.91	0.53
1:D:606:GLY:O	1:D:607:MET:HG2	2.08	0.53
1:B:716:GLU:HG3	1:B:717:LYS:HD2	1.91	0.53
1:A:88:VAL:N	1:A:89:PRO:HD2	2.24	0.53
1:C:175:ARG:HH21	1:D:715:TRP:HE3	1.57	0.53
1:A:606:GLY:O	1:A:607:MET:HG2	2.08	0.53
1:B:88:VAL:N	1:B:89:PRO:HD2	2.24	0.53
1:D:494:THR:HG23	1:D:496:TRP:H	1.72	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:494:THR:HG23	1:C:496:TRP:H	1.72	0.53
1:A:303:ALA:HA	1:A:372:MET:HE1	1.89	0.53
1:A:716:GLU:HG3	1:A:717:LYS:HD2	1.91	0.53
1:D:716:GLU:HG3	1:D:717:LYS:HD2	1.91	0.53
1:B:175:ARG:HH21	1:C:715:TRP:HE3	1.57	0.52
1:C:88:VAL:N	1:C:89:PRO:HD2	2.24	0.52
1:D:88:VAL:N	1:D:89:PRO:HD2	2.24	0.52
1:D:125:VAL:HG23	1:D:126:LEU:HD12	1.92	0.51
1:C:125:VAL:HG23	1:C:126:LEU:HD12	1.92	0.51
1:D:659:ILE:O	1:D:663:GLN:HG2	2.11	0.51
1:C:660:TRP:CE2	1:C:664:LYS:HD2	2.46	0.51
1:A:660:TRP:CE2	1:A:664:LYS:HD2	2.46	0.51
1:B:160:GLU:N	1:B:160:GLU:OE1	2.44	0.51
1:A:659:ILE:O	1:A:663:GLN:HG2	2.11	0.51
1:D:217:ALA:HB1	1:D:225:VAL:HG13	1.93	0.51
1:A:160:GLU:OE1	1:A:160:GLU:N	2.44	0.50
1:C:160:GLU:N	1:C:160:GLU:OE1	2.44	0.50
1:D:227:THR:O	1:D:231:GLU:HG2	2.11	0.50
1:C:338:VAL:HB	1:C:710:VAL:HG22	1.94	0.50
1:D:660:TRP:CE2	1:D:664:LYS:HD2	2.46	0.50
1:B:217:ALA:HB1	1:B:225:VAL:HG13	1.93	0.50
1:D:248:THR:HG23	1:D:250:LEU:H	1.77	0.50
1:D:338:VAL:HB	1:D:710:VAL:HG22	1.94	0.50
1:A:125:VAL:HG23	1:A:126:LEU:HD12	1.92	0.50
1:A:713:ALA:HA	1:A:716:GLU:HG2	1.94	0.50
1:B:125:VAL:HG23	1:B:126:LEU:HD12	1.92	0.50
1:C:161:PHE:O	1:C:203:GLN:NE2	2.45	0.50
1:C:227:THR:O	1:C:231:GLU:HG2	2.12	0.50
1:A:161:PHE:O	1:A:203:GLN:NE2	2.45	0.50
1:A:227:THR:O	1:A:231:GLU:HG2	2.12	0.50
1:A:248:THR:HG23	1:A:250:LEU:H	1.77	0.50
1:B:248:THR:HG23	1:B:250:LEU:H	1.77	0.50
1:C:217:ALA:HB1	1:C:225:VAL:HG13	1.93	0.50
1:B:161:PHE:O	1:B:203:GLN:NE2	2.45	0.50
1:B:659:ILE:O	1:B:663:GLN:HG2	2.11	0.50
1:B:660:TRP:CE2	1:B:664:LYS:HD2	2.46	0.50
1:C:659:ILE:O	1:C:663:GLN:HG2	2.11	0.49
1:D:160:GLU:N	1:D:160:GLU:OE1	2.44	0.49
1:B:713:ALA:HA	1:B:716:GLU:HG2	1.94	0.49
1:D:161:PHE:O	1:D:203:GLN:NE2	2.45	0.49
1:B:227:THR:O	1:B:231:GLU:HG2	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:175:ARG:HH21	1:B:715:TRP:HE3	1.61	0.49
1:A:137:MET:HG2	1:A:139:LEU:HD22	1.94	0.49
1:B:137:MET:HG2	1:B:139:LEU:HD22	1.94	0.49
1:B:338:VAL:HB	1:B:710:VAL:HG22	1.93	0.49
1:C:483:THR:O	1:C:486:SER:OG	2.25	0.49
1:D:713:ALA:HA	1:D:716:GLU:HG2	1.94	0.49
1:A:338:VAL:HB	1:A:710:VAL:HG22	1.94	0.49
1:C:137:MET:HG2	1:C:139:LEU:HD22	1.94	0.49
1:A:217:ALA:HB1	1:A:225:VAL:HG13	1.93	0.49
1:B:483:THR:O	1:B:486:SER:OG	2.25	0.49
1:D:137:MET:HG2	1:D:139:LEU:HD22	1.94	0.49
1:C:713:ALA:HA	1:C:716:GLU:HG2	1.94	0.48
1:C:248:THR:HG23	1:C:250:LEU:H	1.77	0.48
1:D:329:LYS:HE2	1:D:343:TYR:HE1	1.78	0.48
1:B:258:ASP:OD1	1:B:259:ASN:N	2.46	0.48
1:C:258:ASP:OD1	1:C:259:ASN:N	2.46	0.48
1:D:258:ASP:OD1	1:D:259:ASN:N	2.46	0.48
1:B:381:LEU:HD21	1:B:687:ARG:HH22	1.79	0.48
1:A:258:ASP:OD1	1:A:259:ASN:N	2.46	0.48
1:B:329:LYS:HE2	1:B:343:TYR:HE1	1.78	0.48
1:A:329:LYS:HE2	1:A:343:TYR:HE1	1.78	0.48
1:D:381:LEU:HD21	1:D:687:ARG:HH22	1.79	0.47
1:A:687:ARG:N	1:A:687:ARG:HD3	2.30	0.47
1:B:687:ARG:HD3	1:B:687:ARG:N	2.30	0.47
1:C:329:LYS:HE2	1:C:343:TYR:HE1	1.78	0.47
1:C:623:LEU:HD11	1:D:598:LEU:HD13	1.96	0.47
1:A:381:LEU:HD21	1:A:687:ARG:HH22	1.79	0.47
1:A:591:ARG:HA	1:A:591:ARG:NE	2.30	0.47
1:C:591:ARG:HA	1:C:591:ARG:NE	2.30	0.47
1:D:174:LYS:HB2	1:D:174:LYS:HE3	1.69	0.46
1:B:312:ARG:HD3	1:B:375:LEU:HD22	1.98	0.46
1:B:591:ARG:HA	1:B:591:ARG:NE	2.30	0.46
1:A:558:LEU:HD22	1:B:502:VAL:HG21	1.97	0.46
1:C:174:LYS:HB2	1:C:174:LYS:HE3	1.69	0.46
1:C:312:ARG:HD3	1:C:375:LEU:HD22	1.98	0.46
1:C:381:LEU:HD21	1:C:687:ARG:HH22	1.79	0.46
1:C:687:ARG:HD3	1:C:687:ARG:N	2.30	0.46
1:C:343:TYR:OH	1:C:376:GLU:OE1	2.27	0.46
1:C:462:PHE:HZ	1:C:469:ASP:HB2	1.80	0.46
1:D:591:ARG:HA	1:D:591:ARG:NE	2.30	0.46
1:A:462:PHE:HZ	1:A:469:ASP:HB2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:687:ARG:HD3	1:D:687:ARG:N	2.30	0.46
1:B:197:ARG:HA	1:B:202:HIS:HA	1.98	0.46
1:C:197:ARG:HA	1:C:202:HIS:HA	1.98	0.46
1:D:382:LEU:HD13	1:D:665:ALA:HB2	1.98	0.46
1:C:100:ARG:HD2	1:C:100:ARG:HA	1.80	0.46
1:C:250:LEU:O	1:C:254:VAL:HG23	2.16	0.46
1:B:600:LEU:HD13	1:B:603:PHE:CD2	2.51	0.45
1:D:250:LEU:O	1:D:254:VAL:HG23	2.16	0.45
1:A:250:LEU:O	1:A:254:VAL:HG23	2.16	0.45
1:A:382:LEU:HD13	1:A:665:ALA:HB2	1.98	0.45
1:D:312:ARG:HD3	1:D:375:LEU:HD22	1.98	0.45
1:A:312:ARG:HD3	1:A:375:LEU:HD22	1.98	0.45
1:A:600:LEU:HD13	1:A:603:PHE:CD2	2.51	0.45
1:B:250:LEU:O	1:B:254:VAL:HG23	2.16	0.45
1:B:558:LEU:HD22	1:C:502:VAL:HG21	1.98	0.45
1:C:600:LEU:HD13	1:C:603:PHE:CD2	2.51	0.45
1:A:197:ARG:HA	1:A:202:HIS:HA	1.98	0.45
1:A:288:GLU:OE2	1:A:317:ARG:NH2	2.50	0.45
1:D:197:ARG:HA	1:D:202:HIS:HA	1.98	0.45
1:D:376:GLU:HB2	1:D:377:PRO:HD3	1.98	0.45
1:A:456:PHE:CZ	1:A:474:ILE:HG22	2.49	0.45
1:C:288:GLU:OE2	1:C:317:ARG:NH2	2.50	0.45
1:B:100:ARG:HA	1:B:100:ARG:HD2	1.76	0.45
1:C:100:ARG:HD3	1:C:106:LEU:HD11	1.99	0.45
1:B:382:LEU:HD13	1:B:665:ALA:HB2	1.98	0.44
1:B:462:PHE:HZ	1:B:469:ASP:HB2	1.80	0.44
1:C:382:LEU:HD13	1:C:665:ALA:HB2	1.98	0.44
1:D:600:LEU:HD13	1:D:603:PHE:CD2	2.51	0.44
1:A:376:GLU:HB2	1:A:377:PRO:HD3	1.98	0.44
1:D:100:ARG:HD2	1:D:100:ARG:HA	1.80	0.44
1:D:288:GLU:OE2	1:D:317:ARG:NH2	2.50	0.44
1:A:253:LEU:HA	1:A:256:ILE:HG12	1.99	0.44
1:B:288:GLU:OE2	1:B:317:ARG:NH2	2.50	0.44
1:D:462:PHE:HZ	1:D:469:ASP:HB2	1.81	0.44
1:B:253:LEU:HA	1:B:256:ILE:HG12	1.99	0.44
1:C:376:GLU:HB2	1:C:377:PRO:HD3	1.98	0.44
1:D:456:PHE:CZ	1:D:474:ILE:HG22	2.49	0.44
1:A:555:LEU:HD23	1:A:555:LEU:HA	1.84	0.44
1:A:174:LYS:HB2	1:A:174:LYS:HE3	1.69	0.44
1:B:376:GLU:HB2	1:B:377:PRO:HD3	1.98	0.44
1:D:343:TYR:OH	1:D:376:GLU:OE1	2.27	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:655:ASN:O	1:D:659:ILE:HG12	2.18	0.43
1:A:138:PRO:O	1:A:142:ILE:HG12	2.18	0.43
1:C:138:PRO:O	1:C:142:ILE:HG12	2.18	0.43
1:C:687:ARG:HD3	1:C:687:ARG:H	1.83	0.43
1:A:361:ALA:O	1:A:369:ARG:NH1	2.51	0.43
1:B:456:PHE:CZ	1:B:474:ILE:HG22	2.49	0.43
1:D:138:PRO:O	1:D:142:ILE:HG12	2.18	0.43
1:D:687:ARG:HD3	1:D:687:ARG:H	1.83	0.43
1:B:437:GLY:O	1:B:441:ILE:HG12	2.19	0.43
1:C:253:LEU:HA	1:C:256:ILE:HG12	1.99	0.43
1:A:687:ARG:HD3	1:A:687:ARG:H	1.83	0.43
1:C:655:ASN:O	1:C:659:ILE:HG12	2.18	0.43
1:A:437:GLY:O	1:A:441:ILE:HG12	2.19	0.43
1:A:655:ASN:O	1:A:659:ILE:HG12	2.18	0.43
1:B:361:ALA:O	1:B:369:ARG:NH1	2.52	0.43
1:D:361:ALA:O	1:D:369:ARG:NH1	2.52	0.43
1:B:268:ILE:HG13	1:B:313:HIS:CD2	2.54	0.43
1:C:333:TRP:HE1	1:C:335:TYR:HB2	1.83	0.43
1:A:333:TRP:HE1	1:A:335:TYR:HB2	1.83	0.43
1:B:138:PRO:O	1:B:142:ILE:HG12	2.18	0.43
1:B:533:ILE:HG23	1:B:537:LEU:HD23	2.01	0.43
1:B:655:ASN:O	1:B:659:ILE:HG12	2.18	0.43
1:C:437:GLY:O	1:C:441:ILE:HG12	2.19	0.43
1:D:253:LEU:HA	1:D:256:ILE:HG12	1.99	0.43
1:C:660:TRP:CZ2	1:C:664:LYS:HD2	2.55	0.42
1:B:333:TRP:HE1	1:B:335:TYR:HB2	1.83	0.42
1:C:628:ALA:O	1:C:632:LEU:HD23	2.20	0.42
1:D:596:ALA:O	1:D:600:LEU:HD23	2.19	0.42
1:B:660:TRP:CZ2	1:B:664:LYS:HD2	2.55	0.42
1:C:361:ALA:O	1:C:369:ARG:NH1	2.52	0.42
1:A:660:TRP:CZ2	1:A:664:LYS:HD2	2.54	0.42
1:C:209:PHE:CG	1:C:216:LEU:HD13	2.54	0.42
1:D:100:ARG:HB3	1:D:103:SER:O	2.19	0.42
1:D:437:GLY:O	1:D:441:ILE:HG12	2.19	0.42
1:D:555:LEU:HD23	1:D:555:LEU:HA	1.84	0.42
1:A:100:ARG:HD2	1:A:100:ARG:HA	1.76	0.42
1:A:268:ILE:HG13	1:A:313:HIS:CD2	2.54	0.42
1:B:596:ALA:O	1:B:600:LEU:HD23	2.19	0.42
1:D:660:TRP:CZ2	1:D:664:LYS:HD2	2.54	0.42
1:A:165:HIS:CE1	1:A:170:ILE:HB	2.55	0.42
1:C:100:ARG:HB3	1:C:103:SER:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:268:ILE:HG13	1:D:313:HIS:CD2	2.54	0.42
1:A:596:ALA:O	1:A:600:LEU:HD23	2.19	0.42
1:B:555:LEU:HD23	1:B:555:LEU:HA	1.84	0.42
1:D:165:HIS:CE1	1:D:170:ILE:HB	2.55	0.42
1:D:333:TRP:HE1	1:D:335:TYR:HB2	1.83	0.42
1:A:209:PHE:CG	1:A:216:LEU:HD13	2.55	0.42
1:A:533:ILE:HG23	1:A:537:LEU:HD23	2.01	0.42
1:A:628:ALA:O	1:A:632:LEU:HD23	2.20	0.42
1:D:209:PHE:CG	1:D:216:LEU:HD13	2.54	0.42
1:A:140:LEU:HD23	1:A:140:LEU:H	1.85	0.42
1:B:687:ARG:HD3	1:B:687:ARG:H	1.83	0.42
1:C:268:ILE:HG13	1:C:313:HIS:CD2	2.54	0.42
1:C:596:ALA:O	1:C:600:LEU:HD23	2.19	0.42
1:D:533:ILE:HG23	1:D:537:LEU:HD23	2.01	0.42
1:A:152:LEU:HG	1:A:154:ASN:HB2	2.02	0.42
1:B:100:ARG:HB3	1:B:103:SER:O	2.20	0.42
1:B:209:PHE:CG	1:B:216:LEU:HD13	2.54	0.42
1:B:628:ALA:O	1:B:632:LEU:HD23	2.20	0.42
1:C:165:HIS:CE1	1:C:170:ILE:HB	2.55	0.42
1:D:628:ALA:O	1:D:632:LEU:HD23	2.20	0.42
1:A:184:VAL:HA	1:A:188:ALA:HB2	2.02	0.41
1:B:318:GLU:HA	1:B:327:SER:OG	2.20	0.41
1:C:140:LEU:H	1:C:140:LEU:HD23	1.85	0.41
1:C:456:PHE:CZ	1:C:474:ILE:HG22	2.49	0.41
1:D:507:LEU:HD12	1:D:507:LEU:HA	1.91	0.41
1:A:184:VAL:HB	1:A:234:HIS:NE2	2.35	0.41
1:A:348:VAL:HA	1:A:687:ARG:HH21	1.85	0.41
1:B:348:VAL:HA	1:B:687:ARG:HH21	1.85	0.41
1:B:555:LEU:HD12	1:B:600:LEU:HD21	2.02	0.41
1:C:533:ILE:HG23	1:C:537:LEU:HD23	2.01	0.41
1:D:555:LEU:HD12	1:D:600:LEU:HD21	2.02	0.41
1:A:555:LEU:HD12	1:A:600:LEU:HD21	2.02	0.41
1:B:329:LYS:HE2	1:B:343:TYR:CE1	2.55	0.41
1:C:152:LEU:HG	1:C:154:ASN:HB2	2.02	0.41
1:D:184:VAL:HB	1:D:234:HIS:NE2	2.35	0.41
1:D:184:VAL:HA	1:D:188:ALA:HB2	2.03	0.41
1:A:343:TYR:OH	1:A:376:GLU:OE1	2.27	0.41
1:B:140:LEU:HD23	1:B:140:LEU:H	1.85	0.41
1:B:165:HIS:CE1	1:B:170:ILE:HB	2.55	0.41
1:B:184:VAL:HB	1:B:234:HIS:NE2	2.35	0.41
1:B:153:VAL:HG21	1:B:183:LEU:HD21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:638:LEU:O	1:B:642:ILE:HG12	2.21	0.41
1:C:381:LEU:HD21	1:C:687:ARG:NH2	2.36	0.41
1:C:555:LEU:HD12	1:C:600:LEU:HD21	2.02	0.41
1:A:100:ARG:HB3	1:A:103:SER:O	2.20	0.41
1:A:318:GLU:HA	1:A:327:SER:OG	2.21	0.41
1:B:184:VAL:HA	1:B:188:ALA:HB2	2.02	0.41
1:C:160:GLU:C	1:C:162:TYR:H	2.29	0.41
1:C:184:VAL:HB	1:C:234:HIS:NE2	2.35	0.41
1:C:318:GLU:HA	1:C:327:SER:OG	2.21	0.41
1:D:140:LEU:HD23	1:D:140:LEU:H	1.85	0.41
1:A:598:LEU:HD13	1:D:623:LEU:HD11	2.02	0.41
1:B:172:ILE:HD11	1:B:216:LEU:HD23	2.03	0.41
1:C:348:VAL:HA	1:C:687:ARG:HH21	1.86	0.41
1:C:638:LEU:O	1:C:642:ILE:HG12	2.21	0.41
1:D:152:LEU:HG	1:D:154:ASN:HB2	2.02	0.41
1:D:160:GLU:C	1:D:162:TYR:H	2.29	0.41
1:A:170:ILE:O	1:A:174:LYS:HG3	2.21	0.41
1:A:600:LEU:HD13	1:A:603:PHE:HD2	1.86	0.41
1:B:507:LEU:HD12	1:B:507:LEU:HA	1.91	0.41
1:C:215:SER:HA	1:C:249:VAL:HG23	2.03	0.41
1:D:170:ILE:O	1:D:174:LYS:HG3	2.21	0.41
1:D:318:GLU:HA	1:D:327:SER:OG	2.20	0.41
1:A:319:PHE:H	1:A:327:SER:HB2	1.86	0.40
1:D:319:PHE:H	1:D:327:SER:HB2	1.86	0.40
1:D:348:VAL:HA	1:D:687:ARG:HH21	1.86	0.40
1:A:502:VAL:HG21	1:D:558:LEU:HD22	2.02	0.40
1:A:638:LEU:O	1:A:642:ILE:HG12	2.21	0.40
1:B:160:GLU:C	1:B:162:TYR:H	2.29	0.40
1:C:184:VAL:HA	1:C:188:ALA:HB2	2.03	0.40
1:C:319:PHE:H	1:C:327:SER:HB2	1.86	0.40
1:D:172:ILE:HD11	1:D:216:LEU:HD23	2.03	0.40
1:D:600:LEU:HD13	1:D:603:PHE:HD2	1.86	0.40
1:B:215:SER:HA	1:B:249:VAL:HG23	2.03	0.40
1:C:312:ARG:O	1:C:316:GLN:HG2	2.22	0.40
1:C:329:LYS:HE2	1:C:343:TYR:CE1	2.56	0.40
1:C:668:VAL:HA	1:C:671:MET:HG2	2.03	0.40
1:A:623:LEU:HD11	1:B:598:LEU:HD13	2.02	0.40
1:B:126:LEU:O	1:B:128:LEU:HG	2.22	0.40
1:B:152:LEU:HG	1:B:154:ASN:HB2	2.02	0.40
1:B:330:PHE:HB2	1:B:342:LEU:HB3	2.04	0.40
1:C:127:ASN:OD1	1:C:127:ASN:N	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:153:VAL:HG21	1:C:183:LEU:HD21	2.03	0.40
1:A:215:SER:HA	1:A:249:VAL:HG23	2.03	0.40
1:A:329:LYS:HE2	1:A:343:TYR:CE1	2.56	0.40
1:A:330:PHE:HB2	1:A:342:LEU:HB3	2.04	0.40
1:B:600:LEU:HD13	1:B:603:PHE:HD2	1.86	0.40
1:C:126:LEU:O	1:C:128:LEU:HG	2.22	0.40
1:C:170:ILE:O	1:C:174:LYS:HG3	2.21	0.40
1:D:127:ASN:OD1	1:D:127:ASN:N	2.54	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	591/1026 (58%)	539 (91%)	50 (8%)	2 (0%)	36	67
1	B	591/1026 (58%)	539 (91%)	50 (8%)	2 (0%)	36	67
1	C	591/1026 (58%)	541 (92%)	48 (8%)	2 (0%)	36	67
1	D	591/1026 (58%)	540 (91%)	49 (8%)	2 (0%)	36	67
All	All	2364/4104 (58%)	2159 (91%)	197 (8%)	8 (0%)	37	67

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	158	ILE
1	B	158	ILE
1	C	158	ILE
1	D	158	ILE
1	A	376	GLU
1	B	376	GLU
1	C	376	GLU

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Mol	Chain	Res	Type
1	D	376	GLU

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	531/903 (59%)	528 (99%)	3 (1%)	78	79
1	B	531/903 (59%)	528 (99%)	3 (1%)	78	79
1	C	531/903 (59%)	529 (100%)	2 (0%)	84	81
1	D	531/903 (59%)	528 (99%)	3 (1%)	78	79
All	All	2124/3612 (59%)	2113 (100%)	11 (0%)	78	80

All (11) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	99	LEU
1	A	100	ARG
1	A	517	ARG
1	B	99	LEU
1	B	100	ARG
1	B	517	ARG
1	C	100	ARG
1	C	517	ARG
1	D	99	LEU
1	D	100	ARG
1	D	517	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	186	ASN
1	A	222	GLN
1	A	438	HIS
1	B	186	ASN

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Mol	Chain	Res	Type
1	B	438	HIS
1	C	186	ASN
1	C	222	GLN
1	C	232	ASN
1	C	438	HIS
1	D	186	ASN
1	D	222	GLN
1	D	438	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

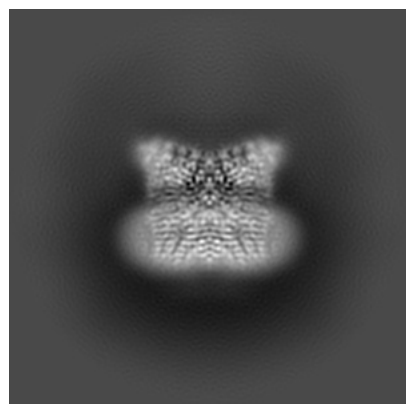
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-14747. These allow visual inspection of the internal detail of the map and identification of artifacts.

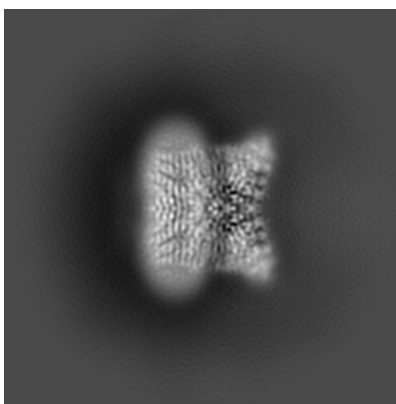
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

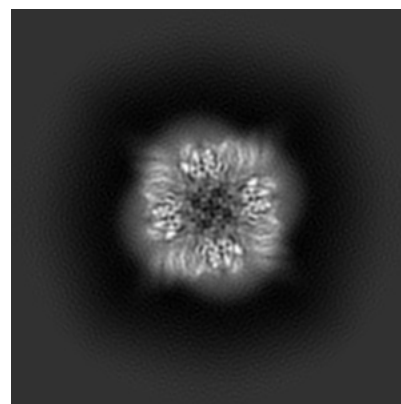
6.1.1 Primary map



X

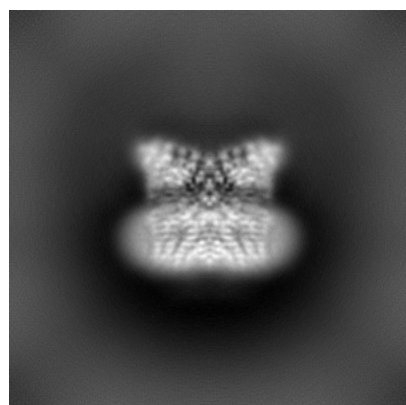


Y

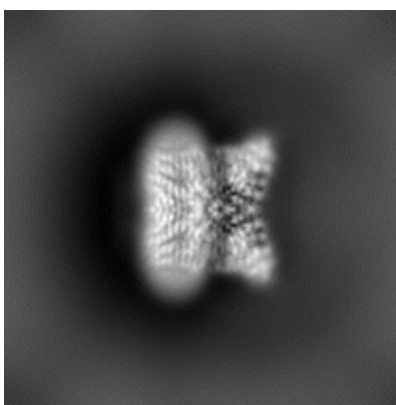


Z

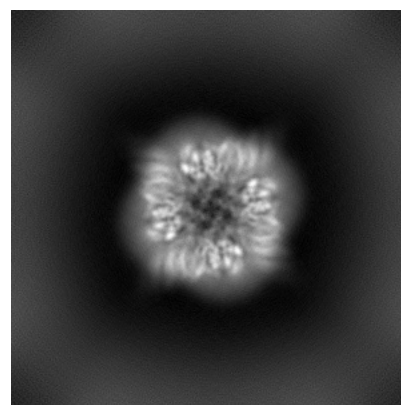
6.1.2 Raw map



X



Y

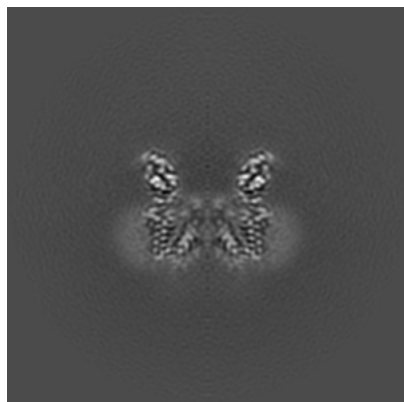


Z

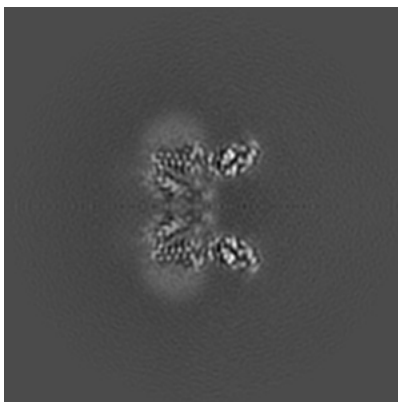
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

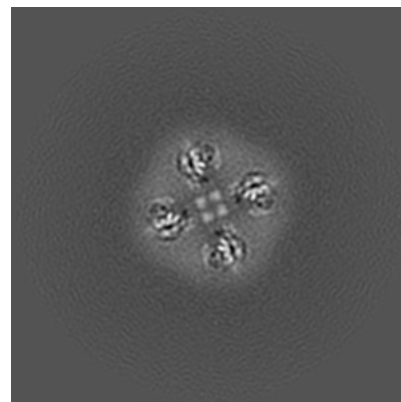
6.2.1 Primary map



X Index: 180

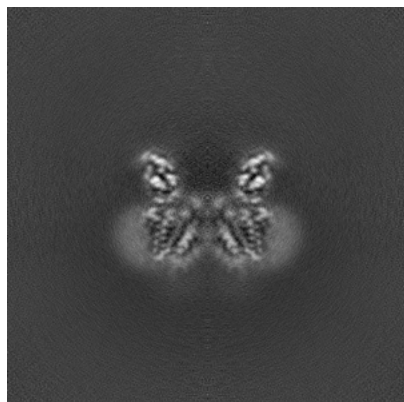


Y Index: 180

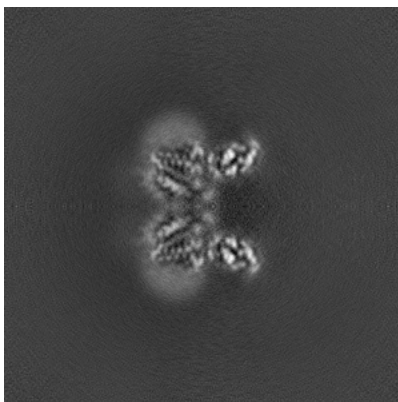


Z Index: 180

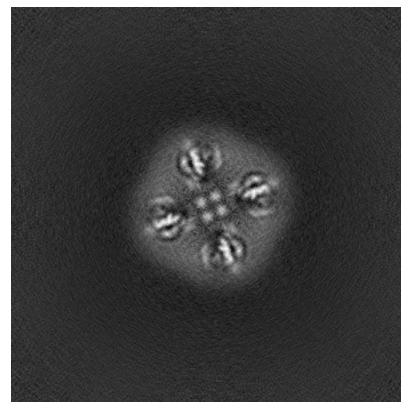
6.2.2 Raw map



X Index: 180



Y Index: 180

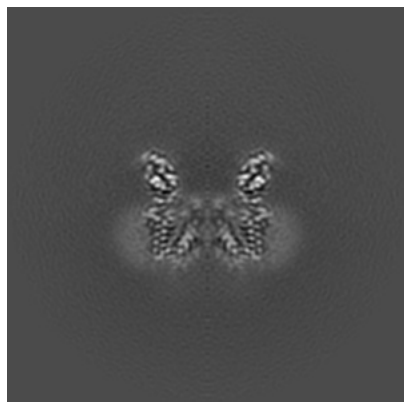


Z Index: 180

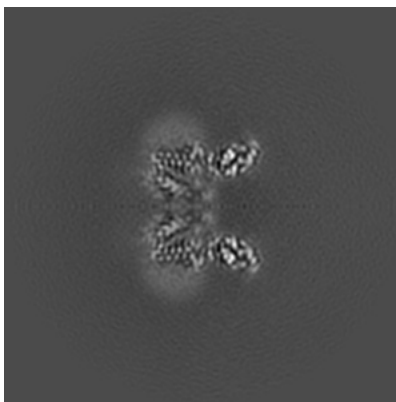
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

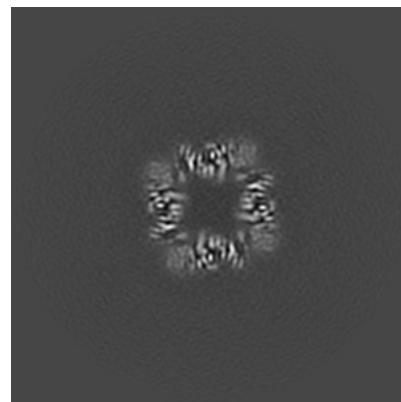
6.3.1 Primary map



X Index: 180

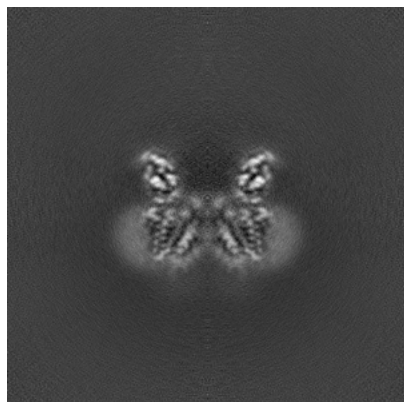


Y Index: 180

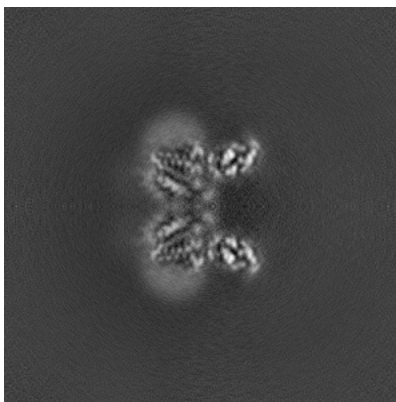


Z Index: 206

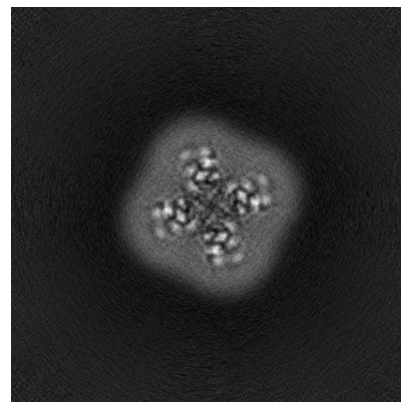
6.3.2 Raw map



X Index: 180



Y Index: 180

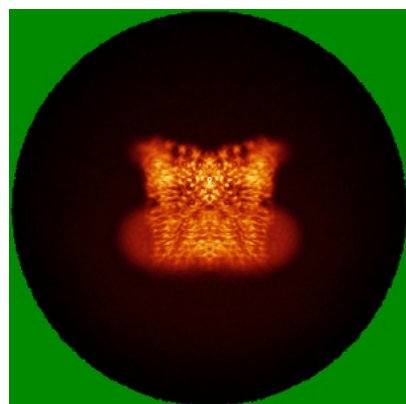


Z Index: 138

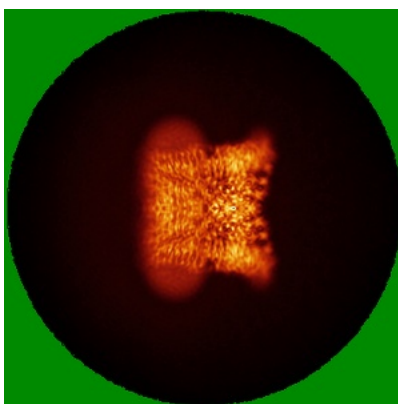
The images above show the largest variance slices of the map in three orthogonal directions.

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

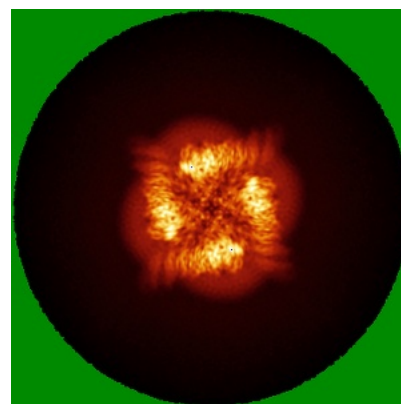
6.4.1 Primary map



X

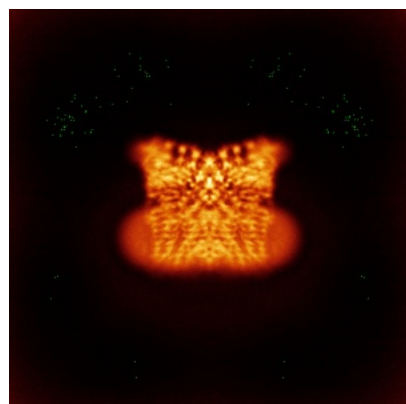


Y

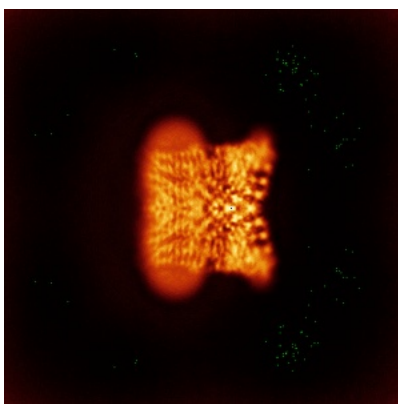


Z

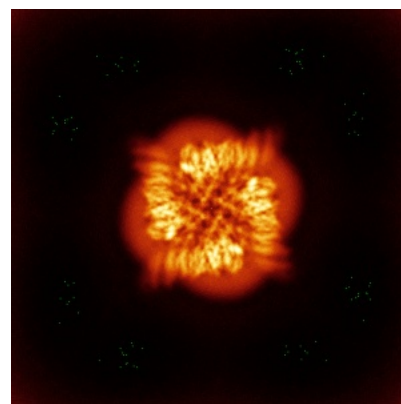
6.4.2 Raw map



X



Y

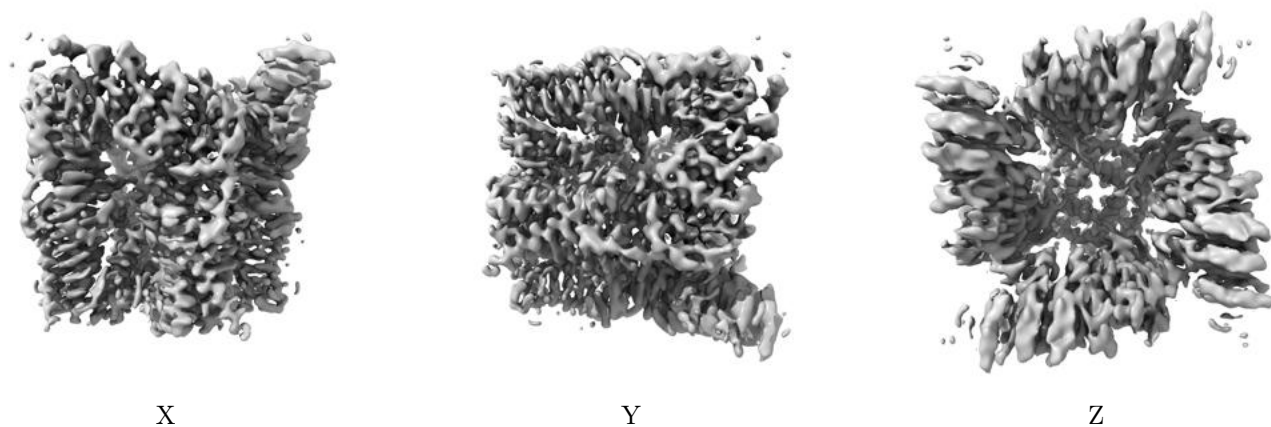


Z

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 0.3. 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.

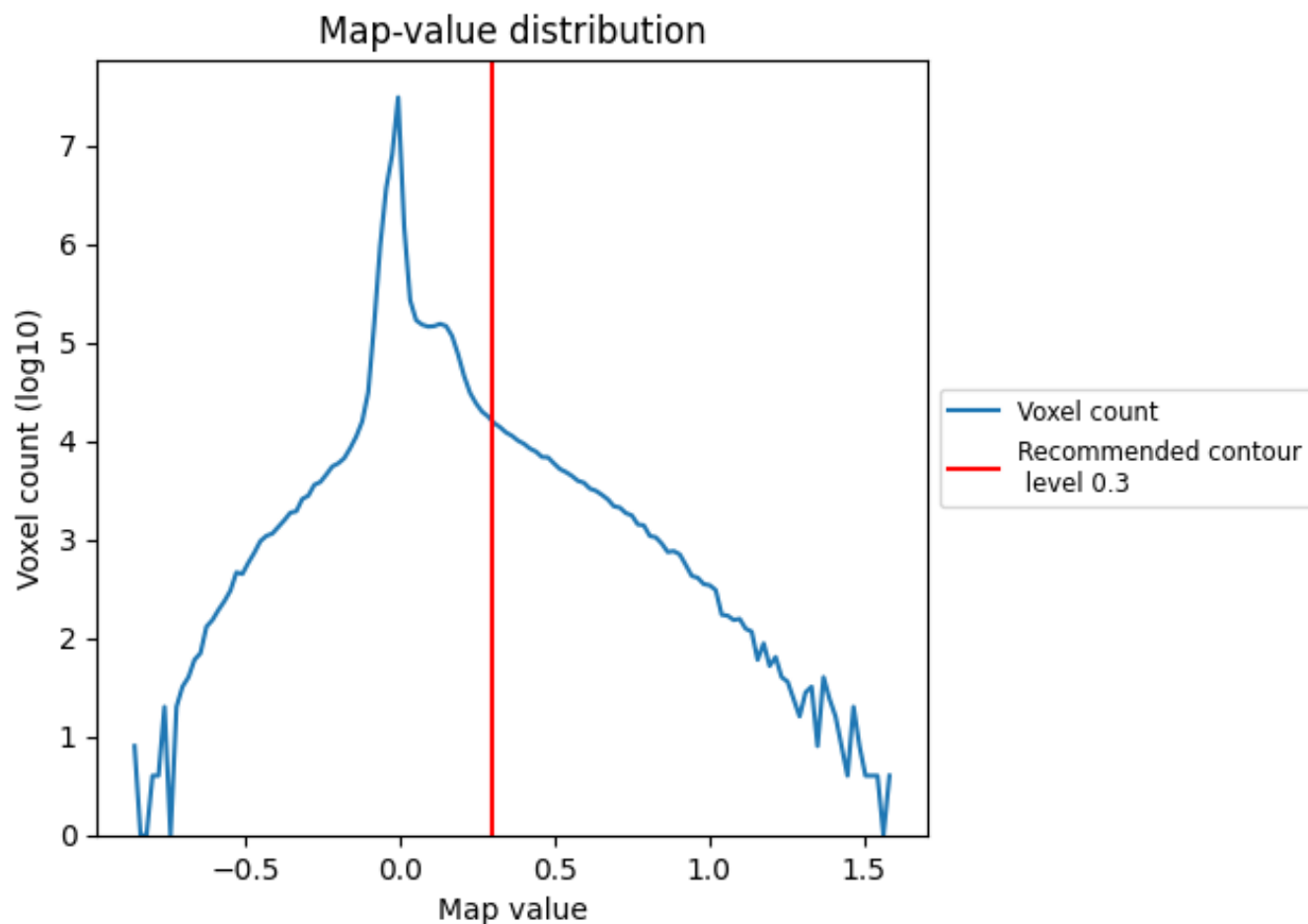
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

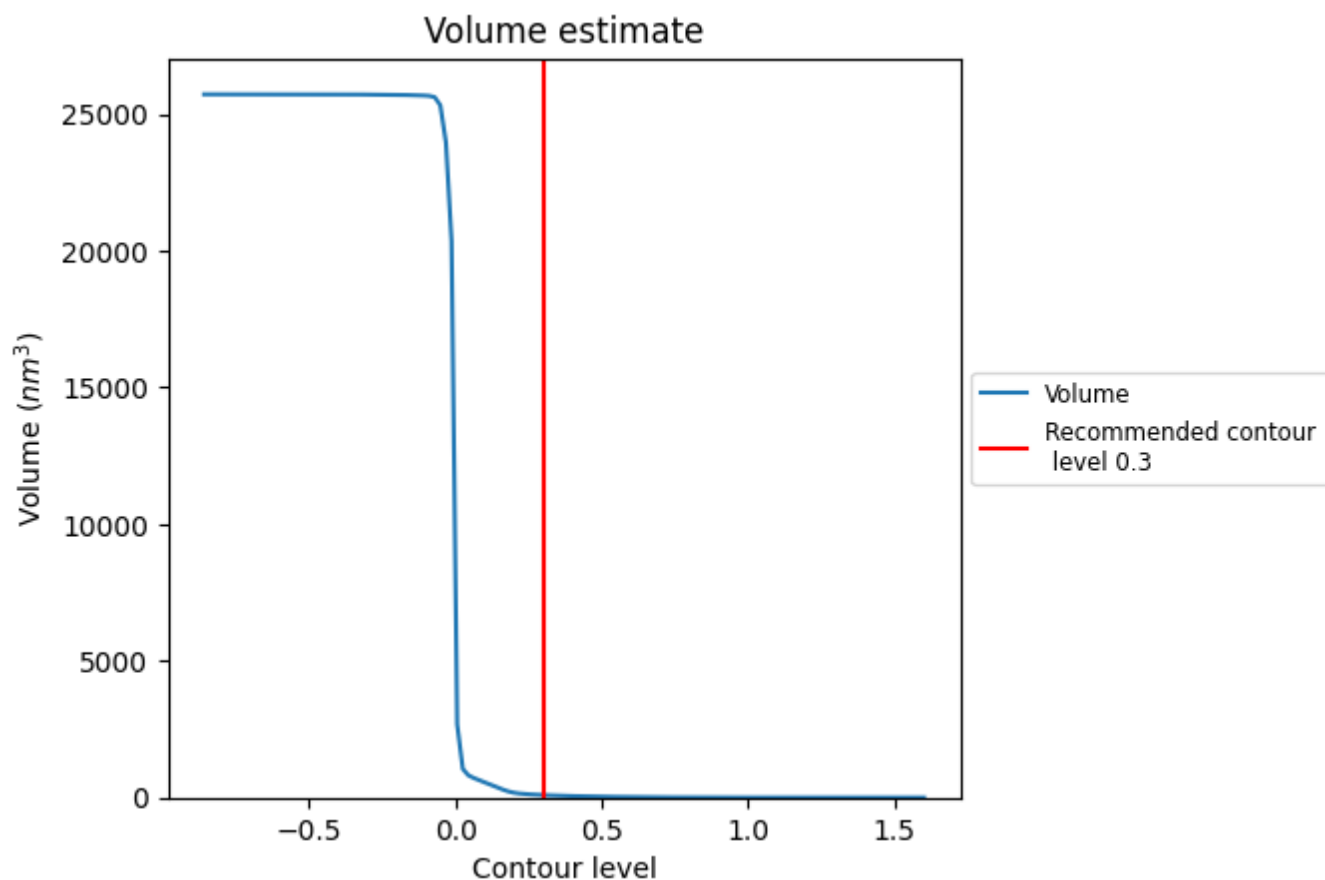
This section contains the results of statistical analysis of the map.

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.

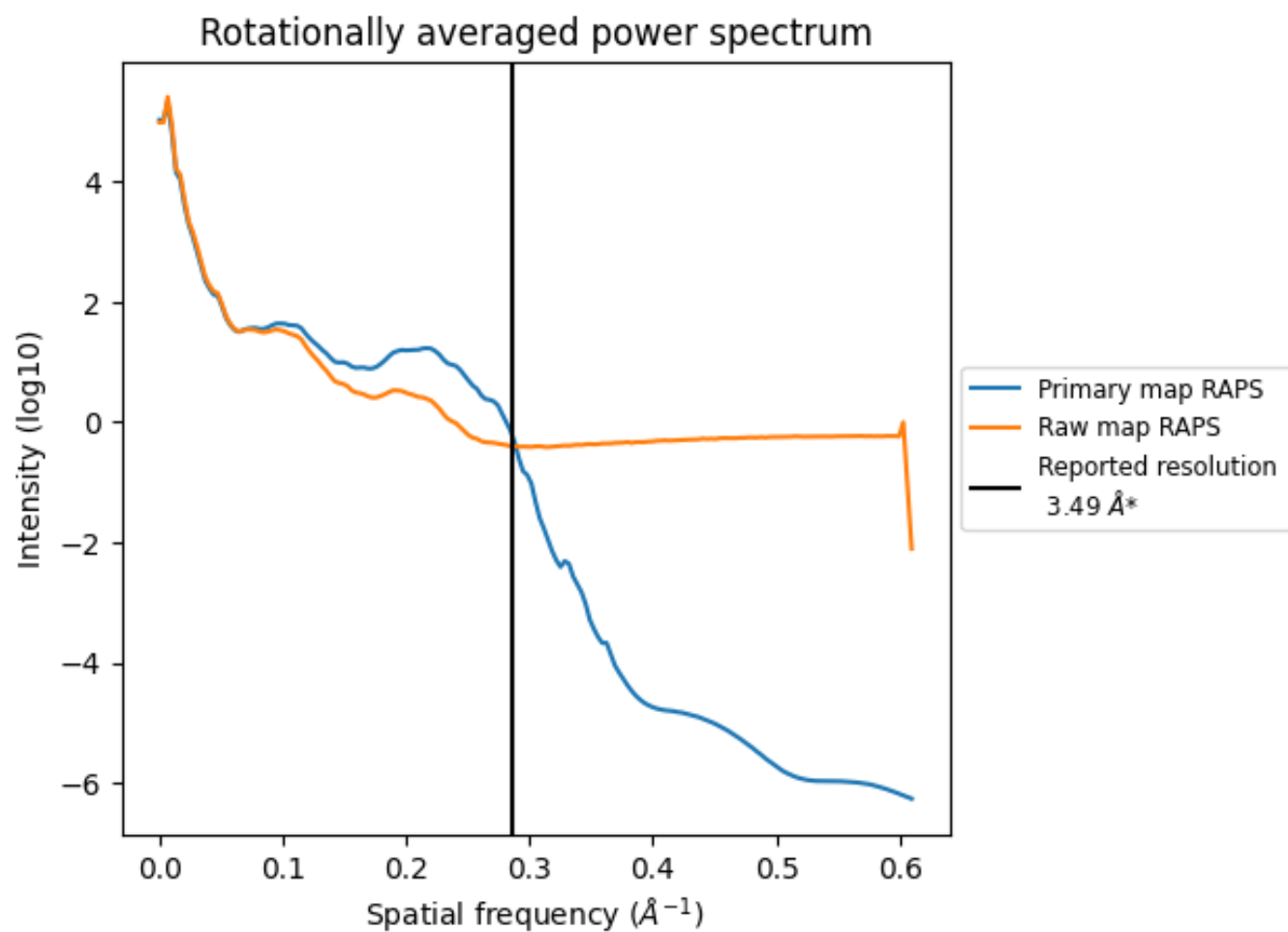
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 91 nm^3 ; this corresponds to an approximate mass of 82 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 ⓘ

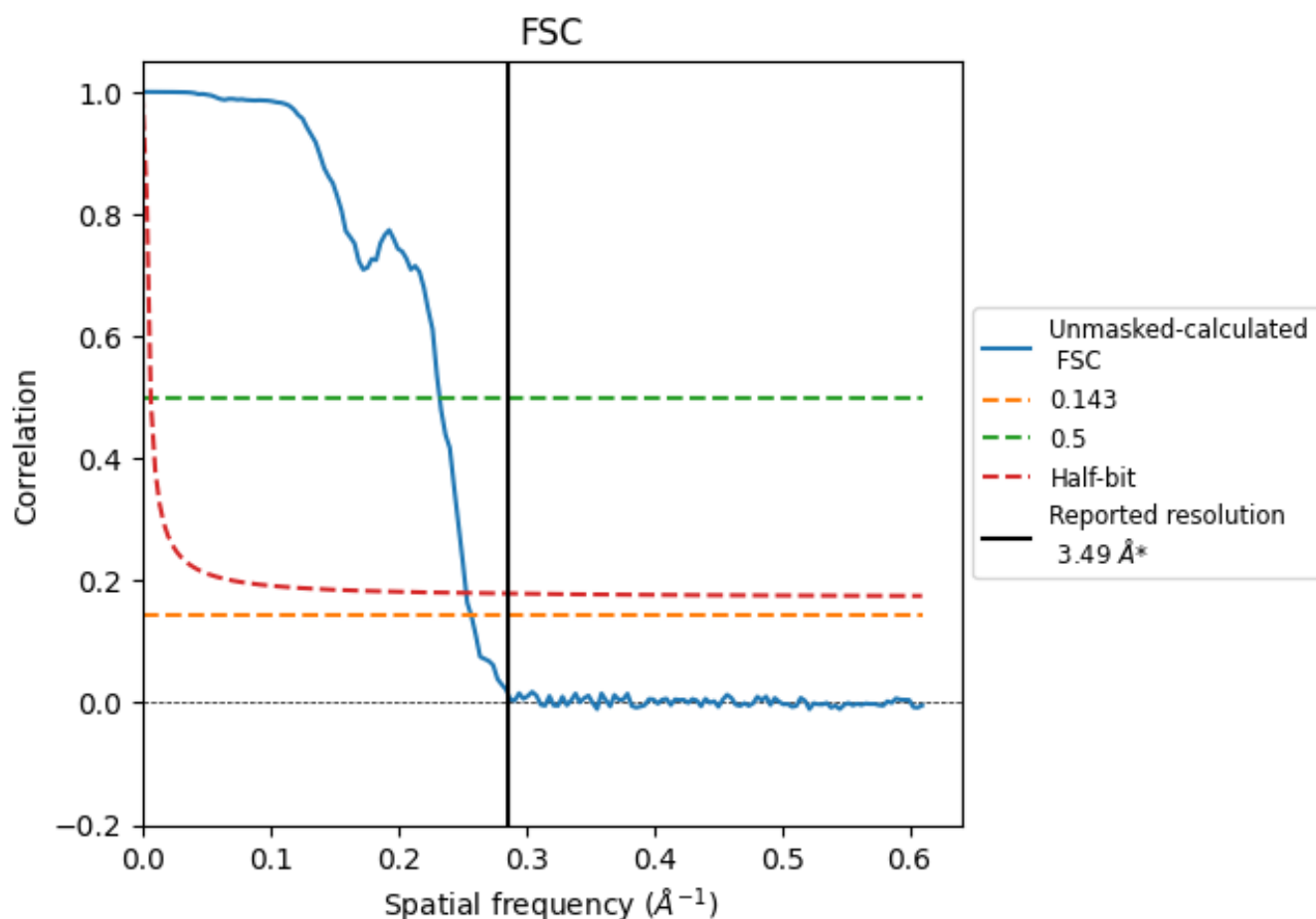


*Reported resolution corresponds to spatial frequency of 0.287 Å⁻¹

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 0.287 Å⁻¹

8.2 Resolution estimates [i](#)

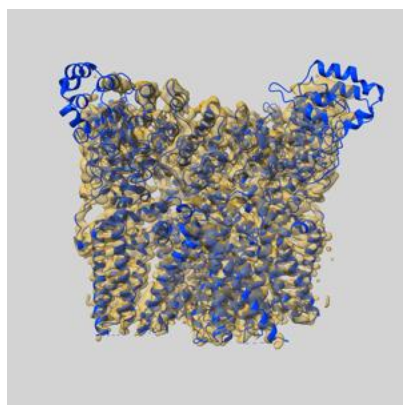
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.49	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.89	4.30	3.95

*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 3.89 differs from the reported value 3.49 by more than 10 %

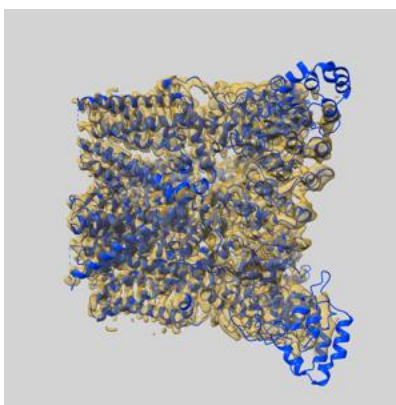
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-14747 and PDB model 7ZJG. Per-residue inclusion information can be found in section [3](#) on page [30](#).

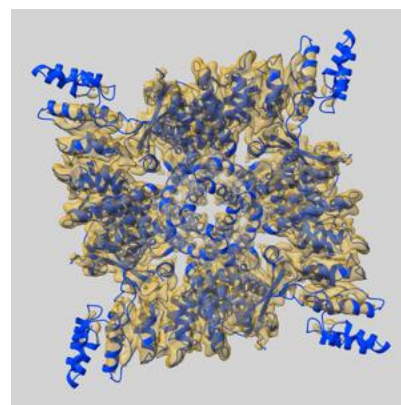
9.1 Map-model overlay [i](#)



X



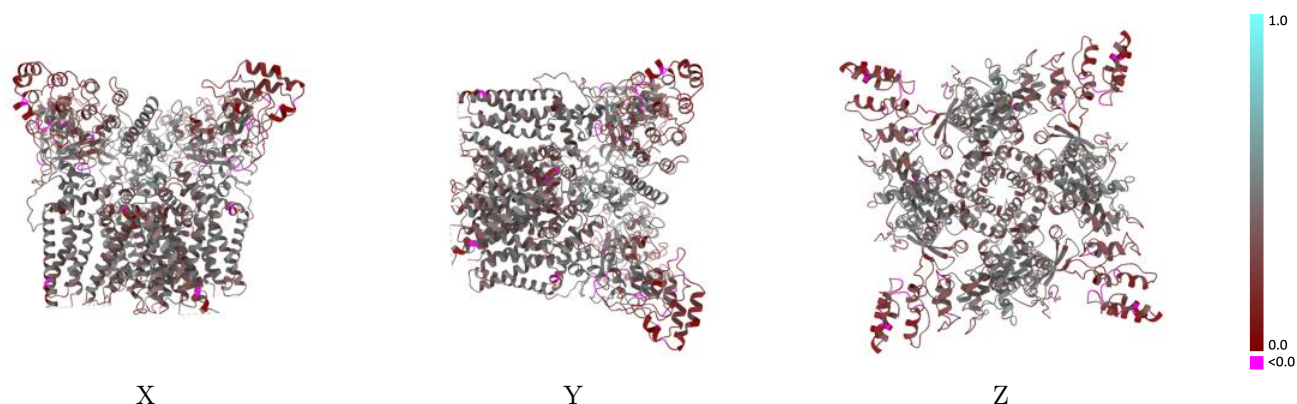
Y



Z

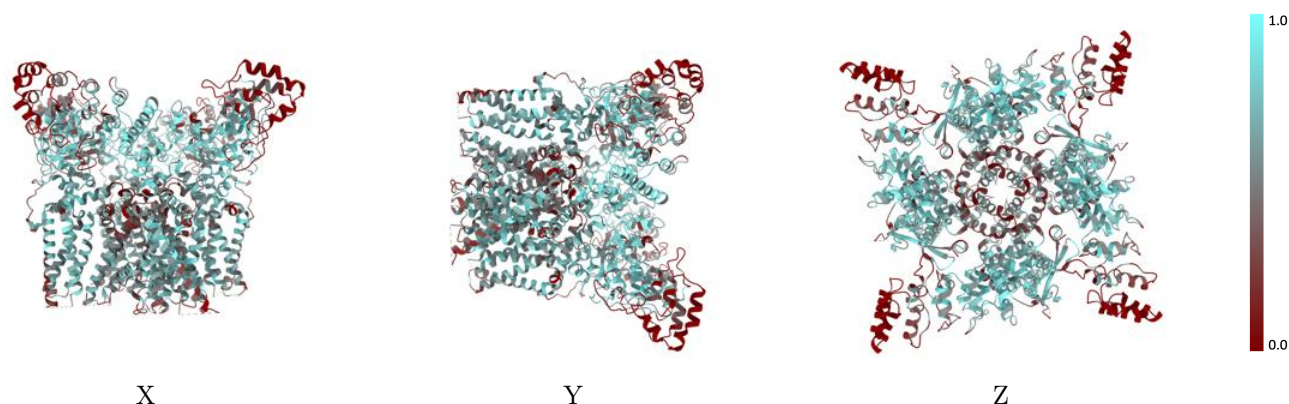
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



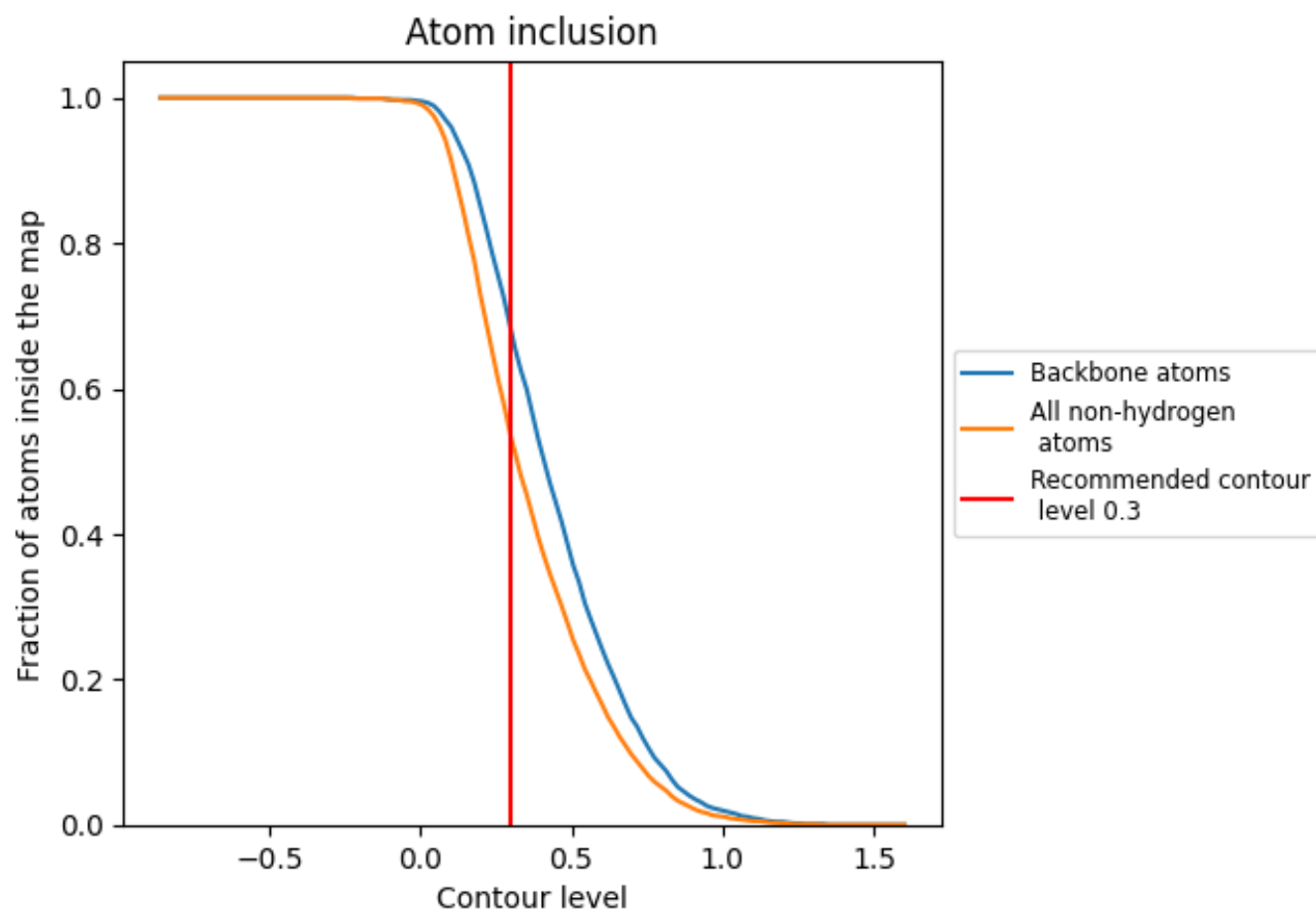
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.3).

9.4 Atom inclusion [i](#)



At the recommended contour level, 68% of all backbone atoms, 53% 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 (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5330	0.3580
A	0.5340	0.3600
B	0.5330	0.3580
C	0.5340	0.3580
D	0.5320	0.3590

