



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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.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

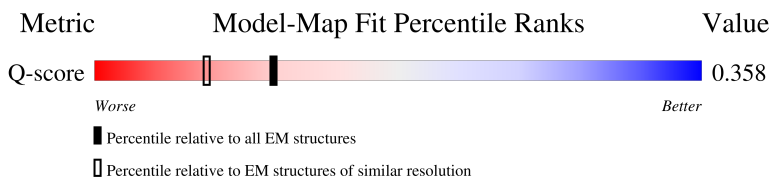
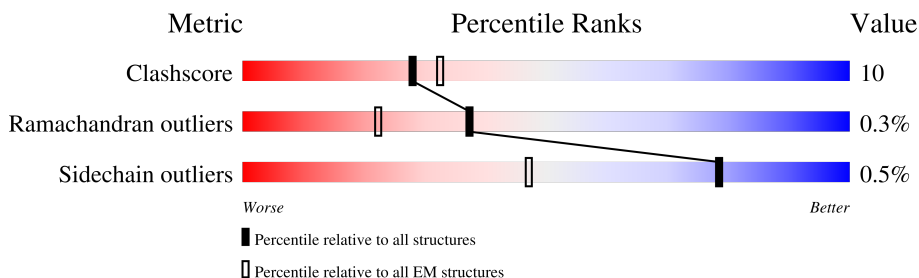
1 Overall quality at a glance

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

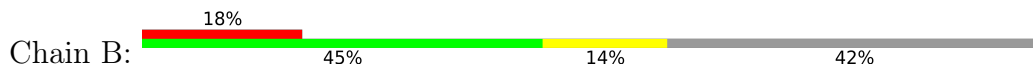
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Chain	Residue	Modelled	Actual	Comment	Reference
D	1026	HIS	-	expression tag	UNP A0A0G2JSH6

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

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



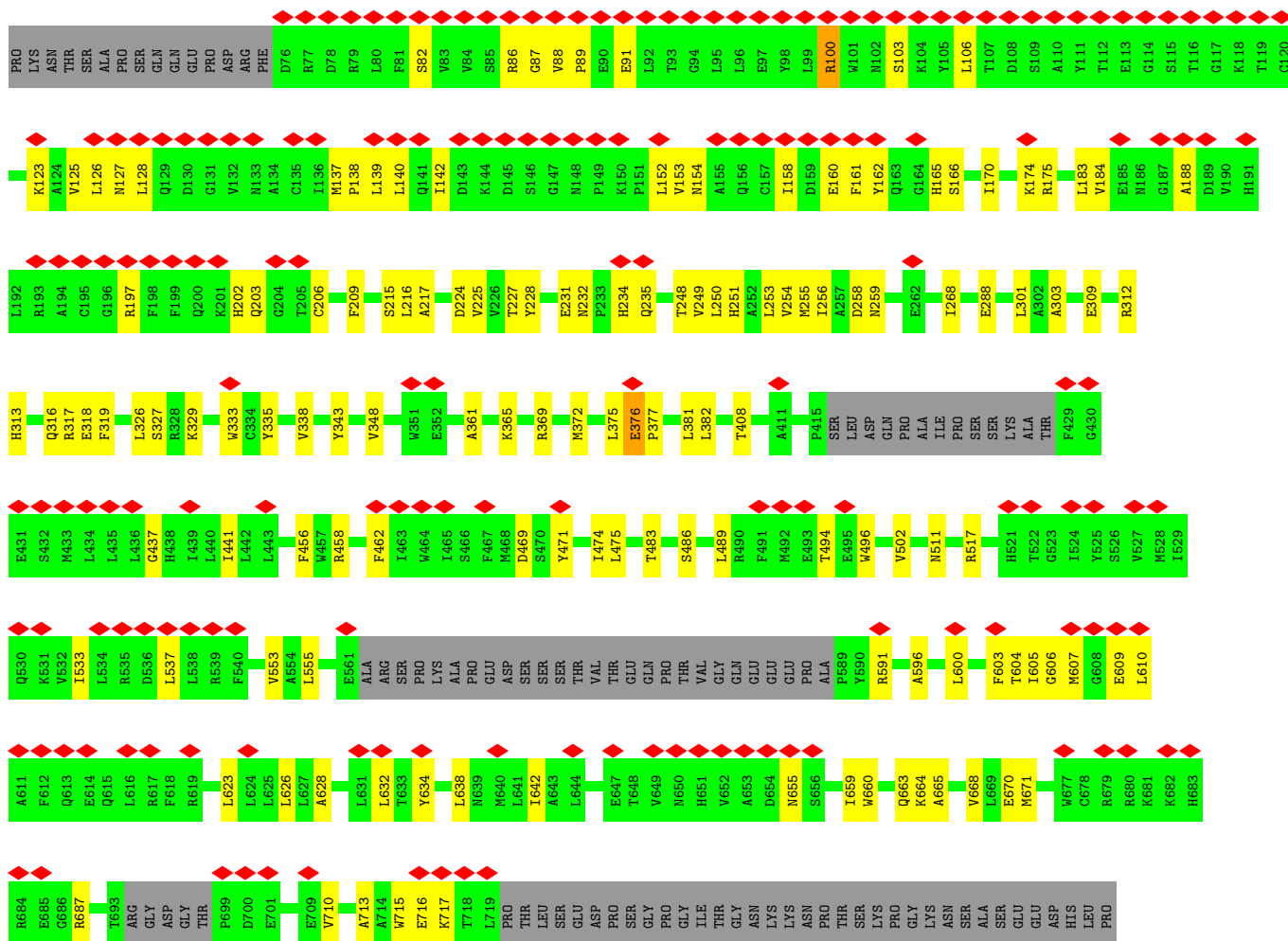
GLY	ASP	GLU	R679	F603	Y526	THR	E509	V190	GLY	PRO
ASP	R680	ASP	R680	T604	S526	F429	R312	H191	GLY	LYS
ALA	HIS	LEU	T603	V527	V527	G430	H313	L192	GLY	ASN
THR	K681	LEU	G605	M528	M528	E431	H313	R193	THR	THR
TYR	K682	PRO	G606	S432	I529	S432	R317	A194	ALA	ALA
GLY	H683	LEU	M607	Q530	Q530	E432	E318	C195	PRO	PRO
LYS	R684	GLN	G608	K531	K531	M433	R328	G196	SER	SER
LEU	R685	VAL	G609	V532	V532	L435	L326	Q129	GLN	GLN
THR	G686	GLN	E609	V532	V532	L435	S327	D130	GLN	GLN
LEU	R687	LEU	L610	I533	I533	L436	R328	F198	GLU	GLU
LYS	ARG	PRO	A611	L534	L534	G437	K329	F199	PRO	PRO
PHE	THR	PRO	F612	R535	R535	H438	F330	Q200	ASP	ASP
ILE	ALA	ALA	Q613	D536	D536	L440	V333	R201	ARG	ARG
CYS	THR	ALA	E614	S537	S537	L440	G334	H202	PHE	PHE
THR	GLY	GLY	Q614	L537	L537	T441	V335	Q203	GLY	GLY
GLY	THR	LEU	Q615	L538	L538	L442	V338	G204	GLY	GLY
LYS	VAL	VAL	L616	R539	R539	L443	V338	T205	ASN	ASN
PRO	PRO	PRO	R617	F540	F540	L443	V338	C206	GLU	GLU
LEU	ARG	ARG	F618	Y540	Y540	L443	V338	C206	GLU	GLU
GLY	GLY	GLY	R619	V553	V553	F456	L342	T209	ALA	ALA
VAL	PRO	PRO	R619	A554	A554	W457	Y343	F209	GLY	GLY
PRO	TRP	VAL	SER	L554	L554	R458	Y343	F209	GLY	GLY
PRO	ALA	ALA	ALA	L555	L555	F462	V348	S215	VAL	VAL
THR	V710	ALA	L624	L558	L558	T463	V348	L216	GLY	GLY
LEU	A713	ALA	L626	A561	A561	T463	V348	A217	GLY	GLY
VAL	THR	VAL	L627	E561	E561	T464	V348	R86	VAL	VAL
VAL	A714	VAL	A628	ALA	ALA	T464	V348	D224	GLY	GLY
THR	THR	SER	W715	ARG	ARG	T465	A361	V225	LYS	LYS
THR	LYS	GLY	E716	SER	SER	T465	A361	V206	GLN	GLN
LEU	GLY	GLY	L631	GLU	GLU	F467	K365	S146	GLY	GLY
THR	THR	GLU	L632	PRO	PRO	F467	K365	T227	GLU	GLU
TYR	TYR	GLU	K717	PRO	PRO	M463	K365	T228	PRO	PRO
GLY	GLY	LEU	T718	LYS	LYS	D469	K369	N148	PRO	PRO
VAL	VAL	PHE	Y634	ALA	ALA	S470	R369	E231	PRO	PRO
GLN	THR	THR	L719	PRO	PRO	S470	R369	E231	PRO	PRO
CYS	GLY	GLY	L638	GLU	GLU	Y471	M372	N232	MET	MET
PHE	LEU	VAL	M639	ASP	ASP	T471	M372	P233	GLY	GLY
VAL	VAL	VAL	R639	LEU	LEU	T474	L375	H234	SER	SER
SER	SER	VAL	M640	SER	SER	L474	L375	L152	PRO	PRO
ARG	ARG	PRO	L641	SER	SER	L475	E376	V153	PHE	PHE
THR	THR	ILE	I642	ASP	SER	L475	P377	G94	GLN	GLN
PRO	PRO	LEU	A643	PRO	THR	T483	P377	L195	ARG	ARG
ASP	ASP	VAL	L644	VAL	THR	S486	L381	L196	GLY	GLY
HIS	HIS	GLY	E647	THR	THR	L489	L381	E97	ASP	ASP
GLY	GLY	ASP	T648	GLN	GLN	L489	L381	C157	ARG	ARG
GLN	GLN	GLY	V649	VAL	VAL	T489	L381	T98	ASN	ASN
ASP	ASP	VAL	N650	THR	THR	F491	T408	L99	SER	SER
PHE	PHE	ASN	H651	THR	THR	R490	A411	R100	PRO	PRO
PHE	PHE	GLY	N650	VAL	VAL	M492	A411	E160	GLN	GLN
LYS	LYS	ASN	G651	GLY	GLY	E493	P415	F161	ILE	ILE
LYS	LYS	LYS	V652	GLN	GLN	T494	SER	Y162	GLN	GLN
LYS	LYS	ASN	A653	GLU	GLU	E495	LEU	Q163	LYS	LYS
ALA	ALA	PHE	D654	GLU	GLU	W496	ASP	G164	VAL	VAL
MET	MET	THR	R655	GLU	GLU	V496	GLN	H165	ASN	ASN
PRO	PRO	VAL	E655	PRO	PRO	V502	PRO	E262	LEU	LEU
PRO	PRO	VAL	S656	ALA	ALA	V502	ALA	S166	ASN	ASN
GLU	GLU	SER	L590	P589	P589	L507	ALA	Y170	LEU	LEU
GLY	GLY	GLY	I659	Y590	Y590	L507	ILE	T168	PHE	PHE
TYR	TYR	GLY	W660	R591	R591	N511	PRO	A171	ILE	ILE
VAL	VAL	GLY	W660	LYS	LYS	N511	SER	I172	ARG	ARG
GLN	GLN	ASN	Q663	ASN	A596	R517	LYS	E173	LYS	LYS
		SER	K664	SER	S597		LYS	K174	ALA	ALA
		SER	A665	SER	L598		LYS	R176	PRO	PRO
		SER	E670	SER	E599		LYS	L183	GLY	GLY
		GLU		GLU	L600		ALA	E185	GLY	GLY
								N186	GLY	GLY
								G187	GLY	GLY
								A188	GLY	GLY
								D189	GLY	GLY
								E189	GLY	GLY
								G189	GLY	GLY
								T189	GLY	GLY
								E190	GLY	GLY
								G190	GLY	GLY
								T190	GLY	GLY
								E191	GLY	GLY
								G191	GLY	GLY
								T191	GLY	GLY
								E192	GLY	GLY
								G192	GLY	GLY
								T192	GLY	GLY
								E193	GLY	GLY
								G193	GLY	GLY
								T193	GLY	GLY
								E194	GLY	GLY
								G194	GLY	GLY
								T194	GLY	GLY
								E195	GLY	GLY
								G195	GLY	GLY
								T195	GLY	GLY
								E196	GLY	GLY
								G196	GLY	GLY
								T196	GLY	GLY
								E197	GLY	GLY
								G197	GLY	GLY
								T197	GLY	GLY
								E198	GLY	GLY
								G198	GLY	GLY
								T198	GLY	GLY
								E199	GLY	GLY
								G199	GLY	GLY
								T199	GLY	GLY
								E200	GLY	GLY
								G200	GLY	GLY
								T200	GLY	GLY
								E201	GLY	GLY
								G201	GLY	GLY
								T201	GLY	GLY
								E202	GLY	GLY
								G202	GLY	GLY
								T202	GLY	GLY
								E203	GLY	GLY
								G203	GLY	GLY
								T203	GLY	GLY
								E204	GLY	GLY
								G204	GLY	GLY
								T204	GLY	GLY
								E205	GLY	GLY
								G205	GLY	GLY
								T205	GLY	GLY
								E206	GLY	GLY
								G206	GLY	GLY
								T206	GLY	GLY
								E207	GLY	GLY
								G207	GLY	GLY
								T207	GLY	GLY
								E208	GLY	GLY
								G208	GLY	GLY
								T208	GLY	GLY
								E209	GLY	GLY
								G209	GLY	GLY
								T209	GLY	GLY
								E210	GLY	GLY
								G210	GLY	GLY
								T210	GLY	GLY
								E211	GLY	GLY
								G211	GLY	GLY
								T211	GLY	GLY
								E212	GLY	GLY
								G212	GLY	GLY
								T212	GLY	GLY
								E213	GLY	GLY
								G213	GLY	GLY
								T213	GLY	GLY
								E214	GLY	GLY
								G214	GLY	GLY
								T214	GLY	GLY
								E215	GLY	GLY
								G215	GLY	GLY
								T215	GLY	GLY
								E216	GLY	GLY
								G216	GLY	GLY
								T216	GLY	GLY
								E217	GLY	GLY
								G217	GLY	GLY
								T217	GLY	GLY
								E218	GLY	GLY
								G218	GLY	GLY
								T218	GLY	GLY
								E219	GLY	GLY
								G219	GLY	GLY
								T219	GLY	GLY
								E220	GLY	GLY
								G220	GLY	GLY
								T220	GLY	GLY
								E221	GLY	GLY
								G221	GLY	GLY
								T221	GLY	GLY
								E222	GLY	GLY
								G222	GLY	GLY
								T222	GLY	GLY
								E223	GLY	GLY
								G223	GLY	GLY
								T223	GLY	GLY
								E224	GLY	GLY
								G224	GLY	GLY
								T224	GLY	GLY
								E225	GLY	GLY
								G225	GLY	GLY
								T225	GLY	GLY
								E226	GLY	GLY
								G226	GLY	GLY
								T226	GLY	GLY
								E227	GLY	GLY
								G227	GLY	GLY
								T227	GLY	GLY
								E228		

ARG	ASP	HIS	MET	VAL	LEU	LEU	GLU	PHE	VAL	THR	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	HIS
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- Molecule 1: Transient receptor potential cation channel subfamily V member 2



MET	THR	SER	ALA	SER	PRO	PRO	ALA	PHE	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	LEU	ASN	PHE	LYS	LYS	ILE	GLN	PRO
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[illegible]

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

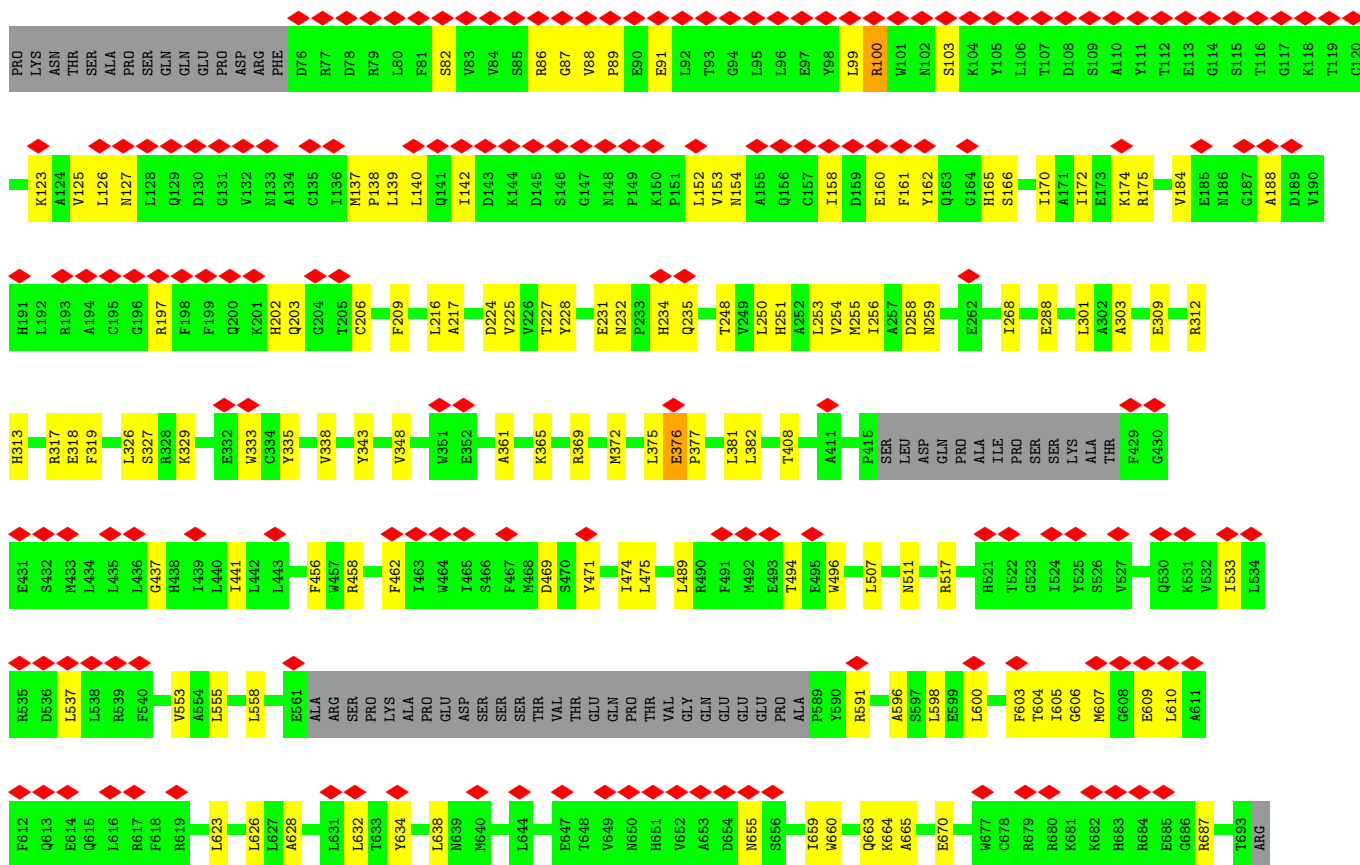
PHE
LYS
ASP
ASP
GLY
ASN
THR
LYS
THR
ALA
VAL
PHE
LYS
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GLY
ASP
THR
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LEU
GLU
THR
ASN
ASN
SER
HIS
ASN
VAL
VAL
THR
ILE
MET
ALA
ASP
GLN
LYS
GLN

[illegible]

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



MET	THR	THR	SER	SER	ALA	SER	SER	PRO	PRO	ALA	ALA	ARG	LEU	GLU	THR	THR	ASP	ASP	GLY	GLY	GLU	GLU	GLY	ASN	ASN	ALA	ALA	GLU	VAL	ASN	ASN	LYS	LYS	LYS	GLN	GLU	PRO	PRO	PRO	PRO	MET	MET	GLU	SER	SER	PRO	PHE	GLN	GLN	ARG	GLU	ASP	GLU	ASN	ASN	LYS	LYS	VAL	VAL	ASN	LEU	ASN	PHE	LYS	LYS	ILE	GLN	PRO	ARG	ARG	PRO
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GLY	ASP	GLY	THR	P689	E700	E701		E709	V710	A713	A714	W715	E716	T717	T718	L719	PRO	THR	LEU	SER	SER	GLY	ASP	GLY	GLY	ILE	THR	GLY	ASN	LYS	LYS	ASN	PRO	PRO	THR	THR	LYS	LYS	GLY	PRO	GLY	PRO	GLY	LYS	LYS	ASN	SER	SER	SER	ALA	ALA	SER	SER	SER	GLU	GLU	ASP	HIS	HIS	LEU	LEU	PRO	PRO	LEU	LEU	GLN	VAL	GLN	SER	SER	PER	PER
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ALA	ALA	ALA	ALA	LEU	VAL	PRO	ARG	GLY	SER	GLY	VAL	ALA	ALA	ALA	VAL	SER	LYS	GLY	GLY	GLU	GLU	LEU	PHE	THR	GLY	VAL	VAL	PRO	PRO	ILE	LEU	VAL	VAL	GLU	GLU	ASP	GLY	ASP	VAL	ASN	GLY	HIS	LYS	PHE	SER	VAL	SER	GLY	GLU	GLY	GLY	GLY	GLY	LYS	THR	ALA	ALA	ALA	THR	THR	GLY	LYS	LEU	LEU	LEU	LYS	THR
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ILE	CYS	THR	THR	GLY	LYS	LEU	PRO	VAL	PRO	THR	PRO	THR	LEU	VAL	THR	THR	LEU	THR	TYR	GLY	GLN	CYS	PHE	SER	ARG	ARG	TYR	PRO	ASP	HIS	MET	LYS	GLN	HIS	ASP	PHE	PHE	LYS	ALA	ALA	MET	PRO	GLU	GLY	TYR	VAL	GLN	GLU	THR	ARG	THR	ILE	PHE	PHE	LYS	ASP	ASP	GLY	ASN	TYR
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[illegible]

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

ALA
GLY
ILE
THR
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GLY
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TYR
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GLY
LEU
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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.

The worst 5 of 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

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	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

5 of 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

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	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

5 of 11 residues with a non-rotameric sidechain are listed below:

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

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 12 such sidechains are listed below:

Mol	Chain	Res	Type
1	C	232	ASN
1	C	438	HIS
1	D	438	HIS
1	D	186	ASN
1	B	186	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 [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.

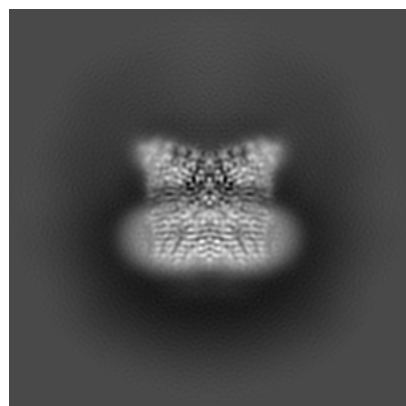
6 Map visualisation [i](#)

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.

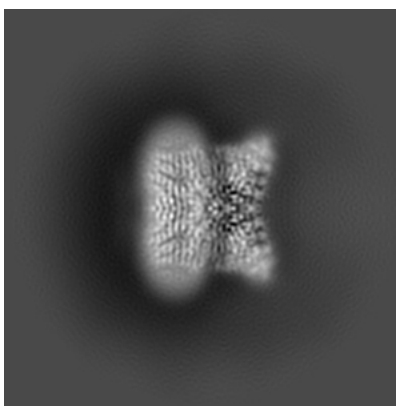
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

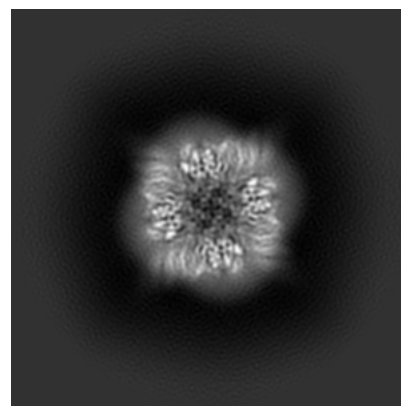
6.1.1 Primary map



X

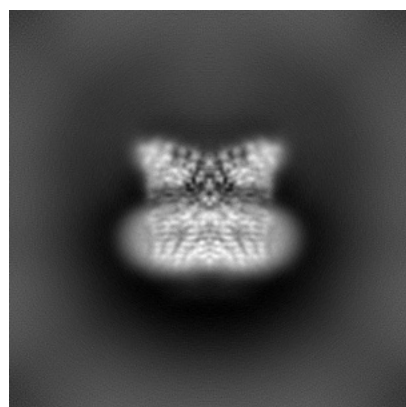


Y

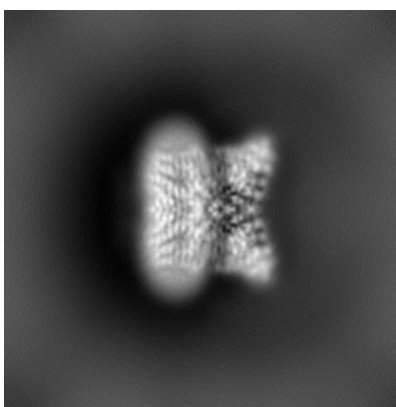


Z

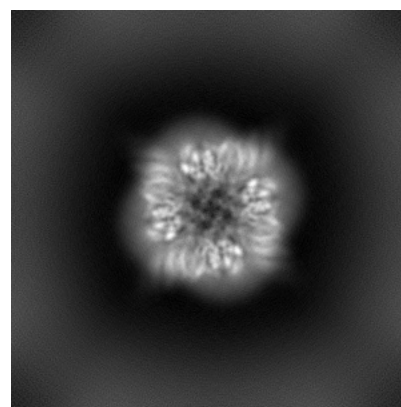
6.1.2 Raw map



X



Y

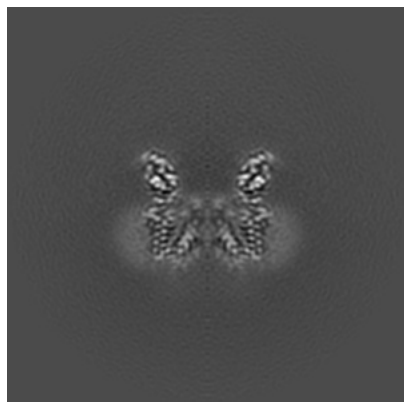


Z

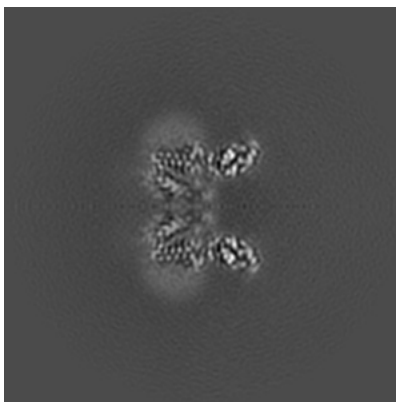
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

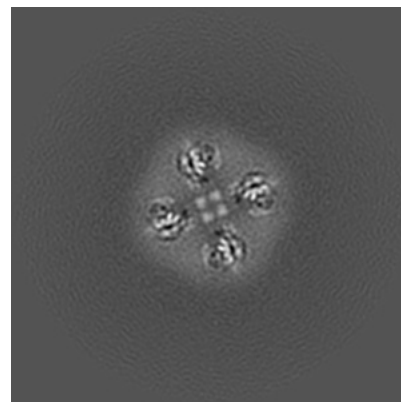
6.2.1 Primary map



X Index: 180

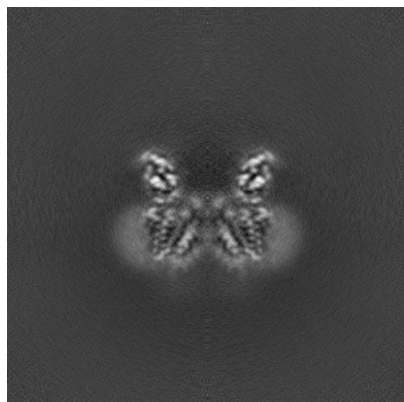


Y Index: 180

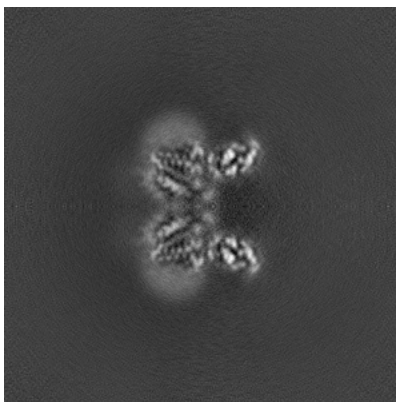


Z Index: 180

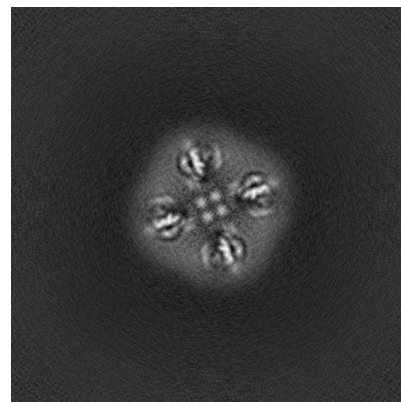
6.2.2 Raw map



X Index: 180



Y Index: 180

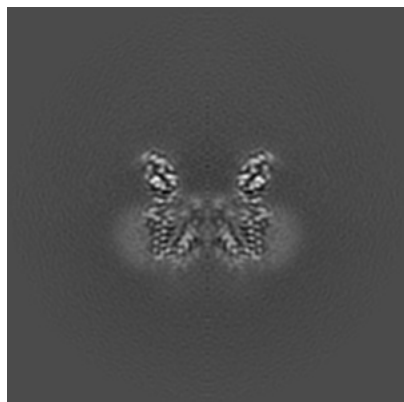


Z Index: 180

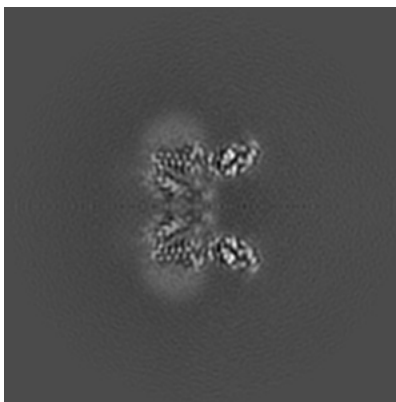
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

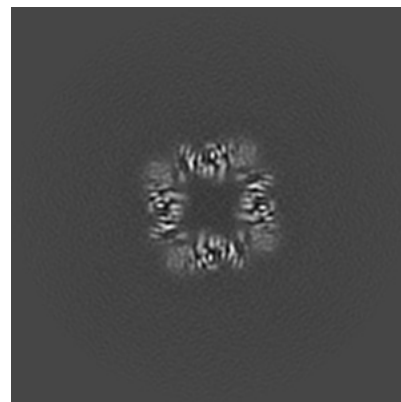
6.3.1 Primary map



X Index: 180

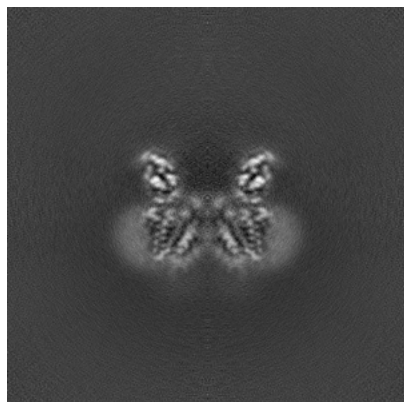


Y Index: 180

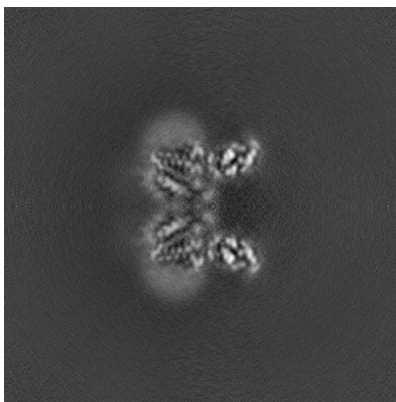


Z Index: 206

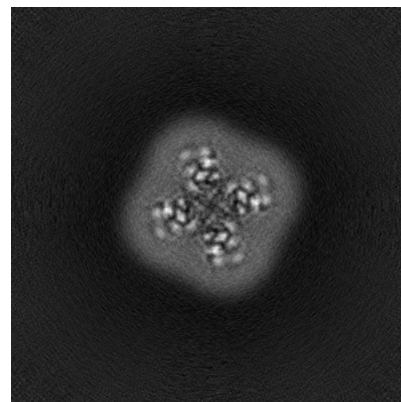
6.3.2 Raw map



X Index: 180



Y Index: 180

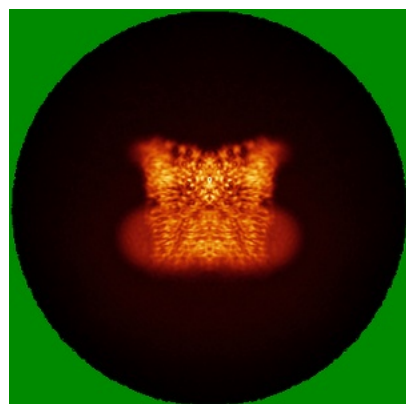


Z Index: 138

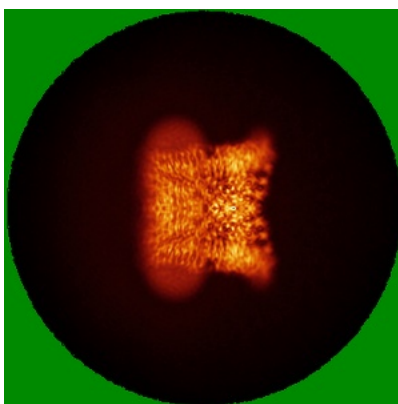
The images above show the largest variance slices of the map in three orthogonal directions.

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

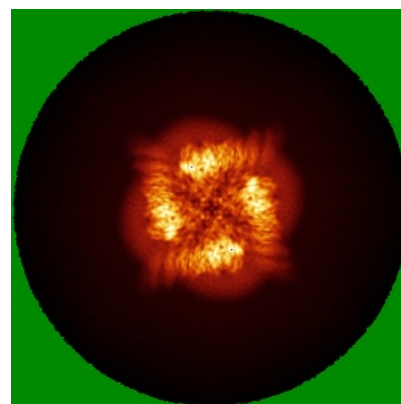
6.4.1 Primary map



X

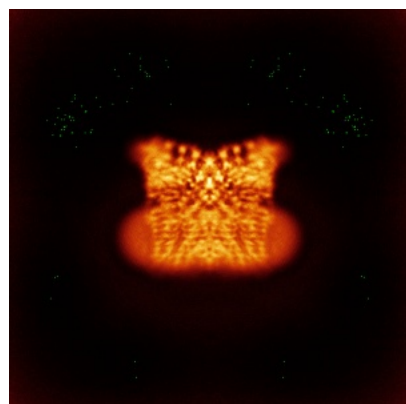


Y

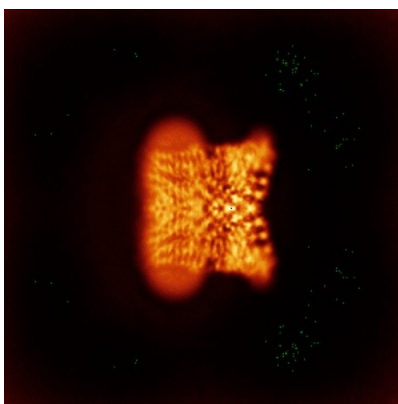


Z

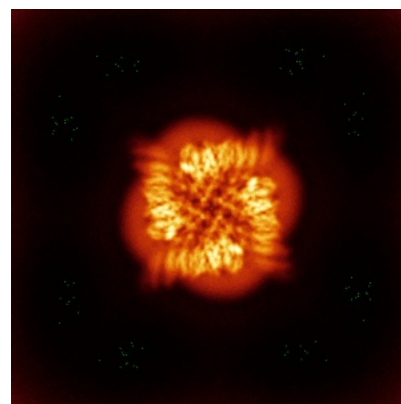
6.4.2 Raw map



X



Y

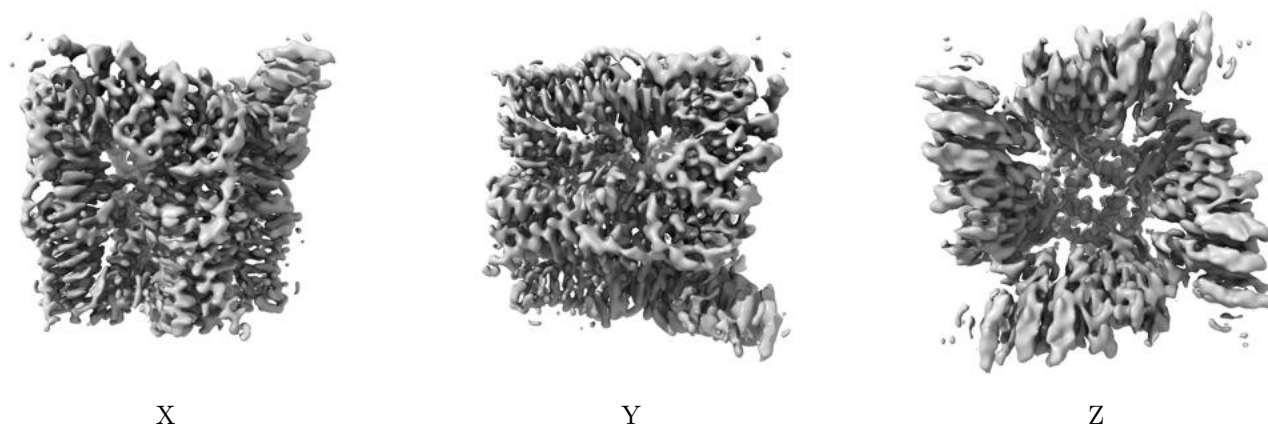


Z

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.

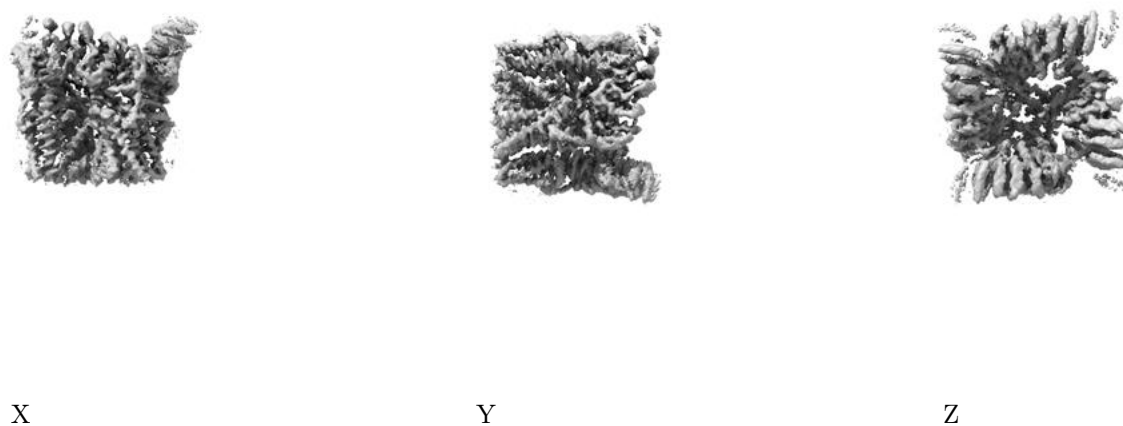
6.5 Orthogonal surface views [i](#)

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.

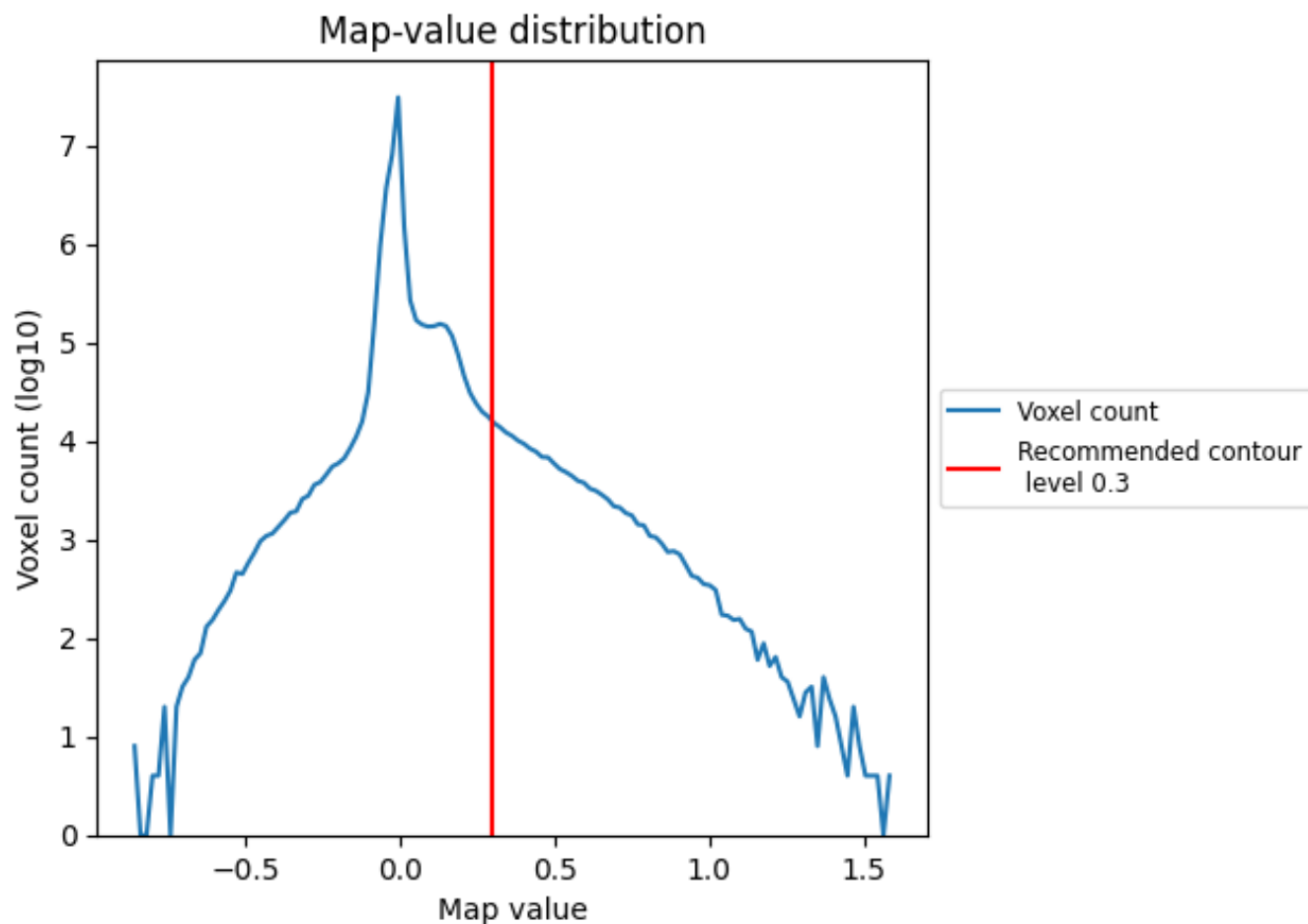
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

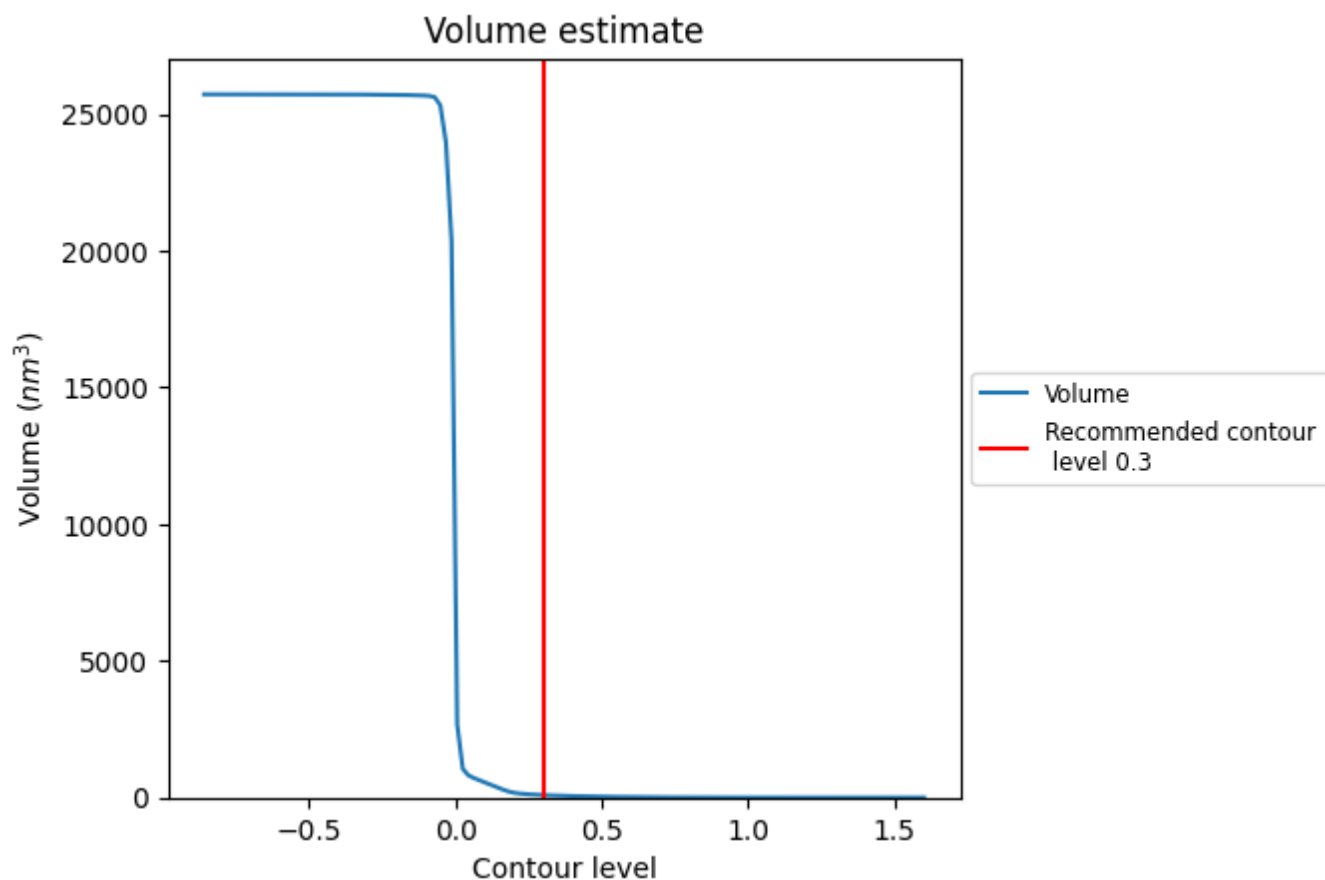
This section contains the results of statistical analysis of the map.

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.

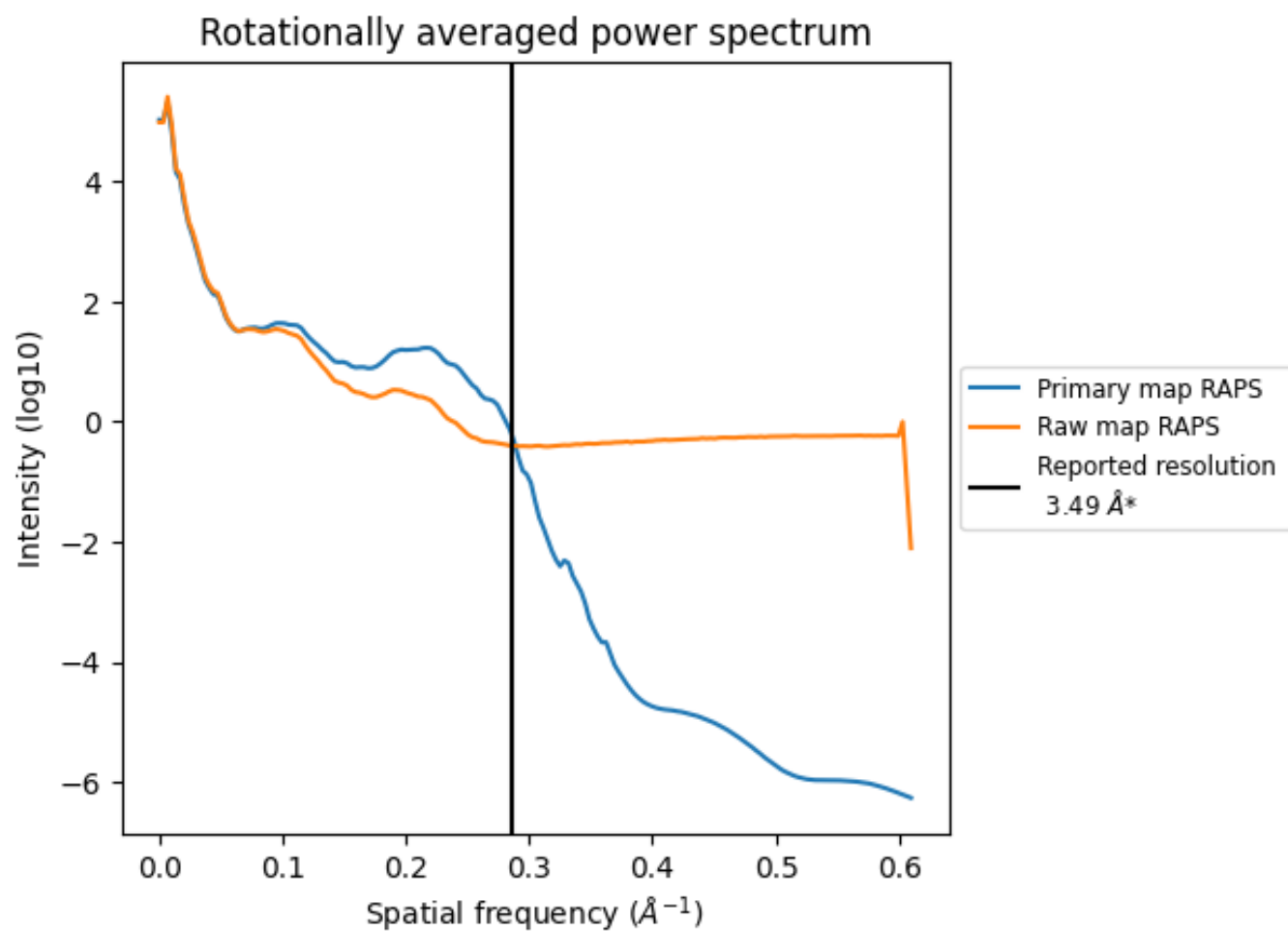
7.2 Volume estimate [i](#)



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 [i](#)

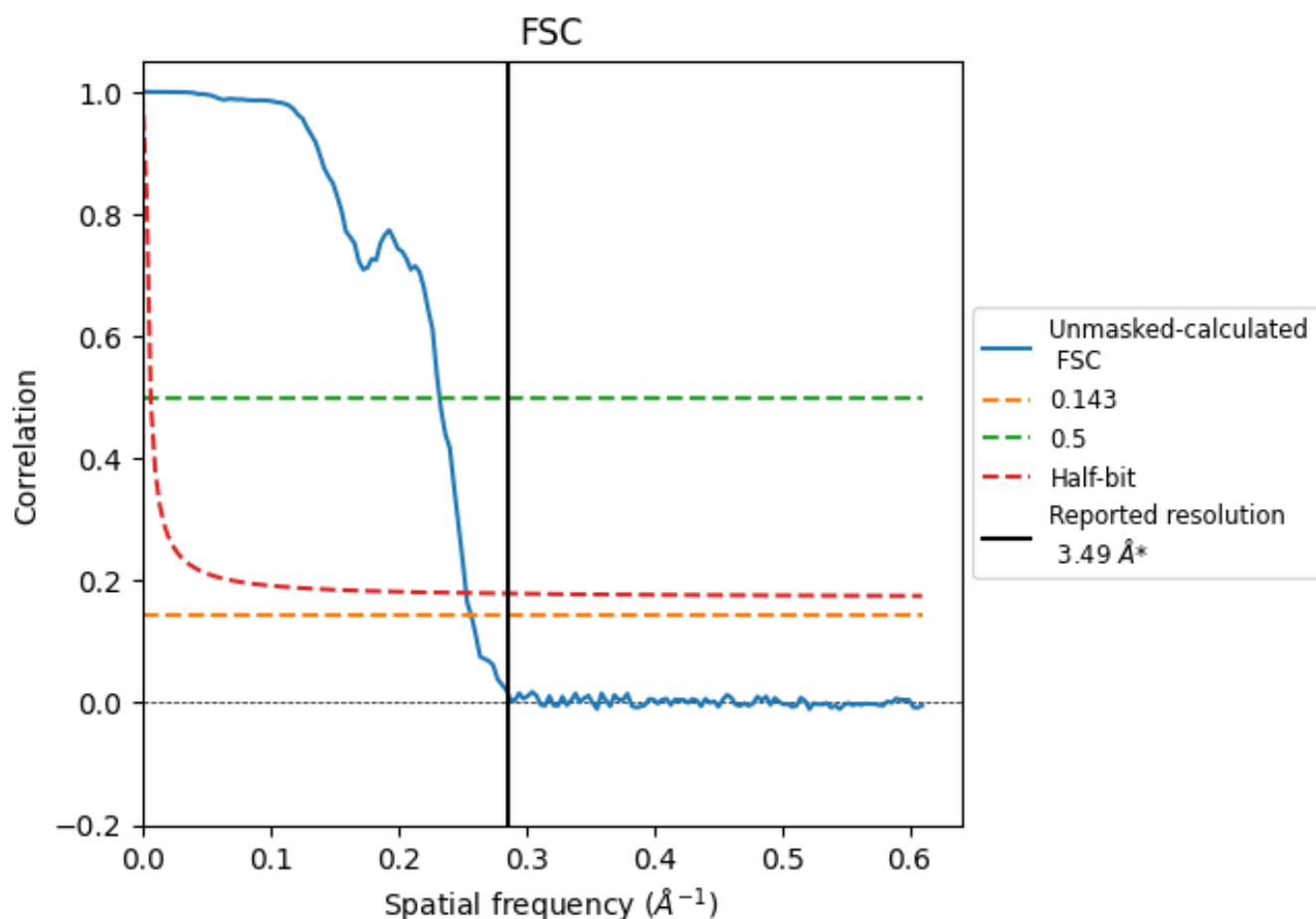


*Reported resolution corresponds to spatial frequency of 0.287 $\text{\AA}^{-1}$

8 Fourier-Shell correlation [i](#)

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

8.1 FSC [i](#)



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

8.2 Resolution estimates [i](#)

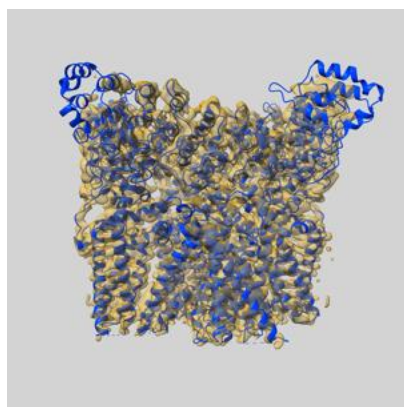
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.49	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.89	4.30	3.95

*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 %

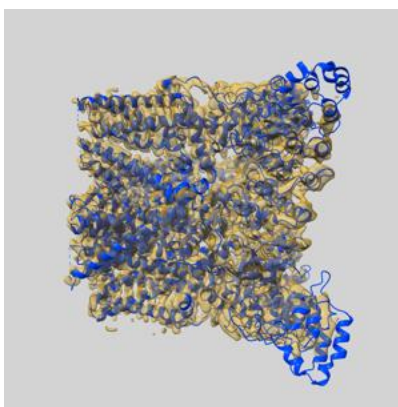
9 Map-model fit [i](#)

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](#).

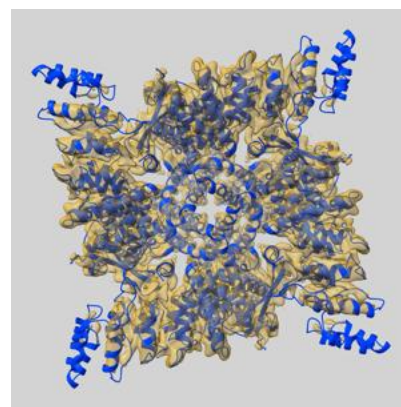
9.1 Map-model overlay [i](#)



X



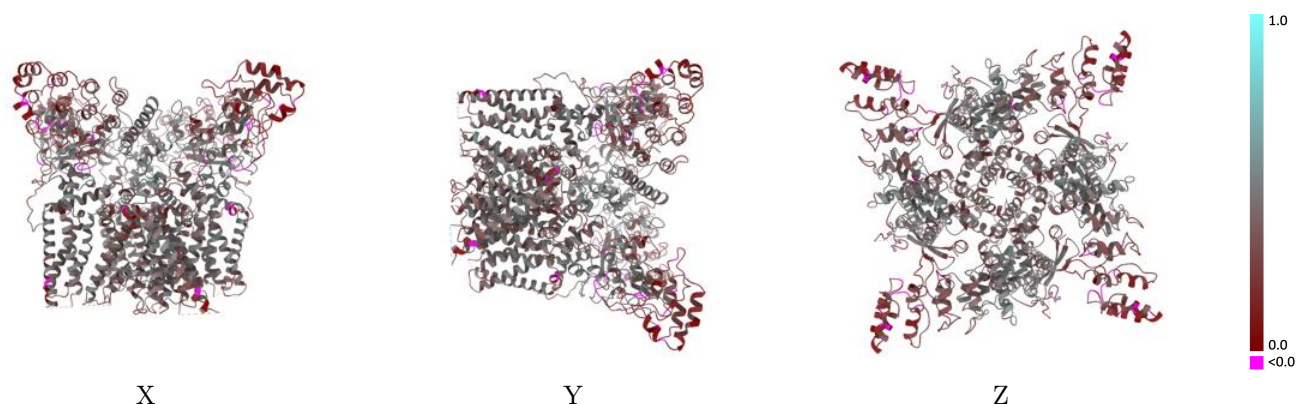
Y



Z

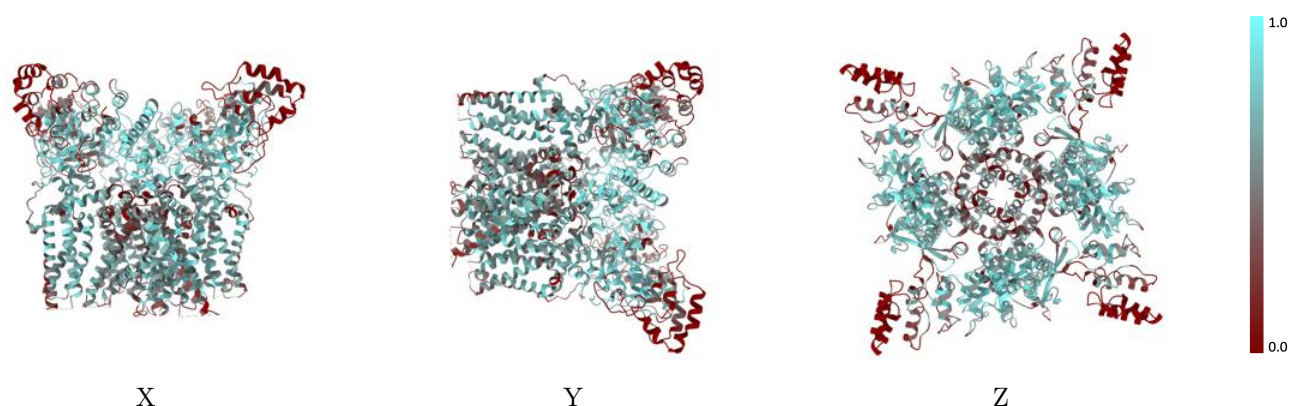
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



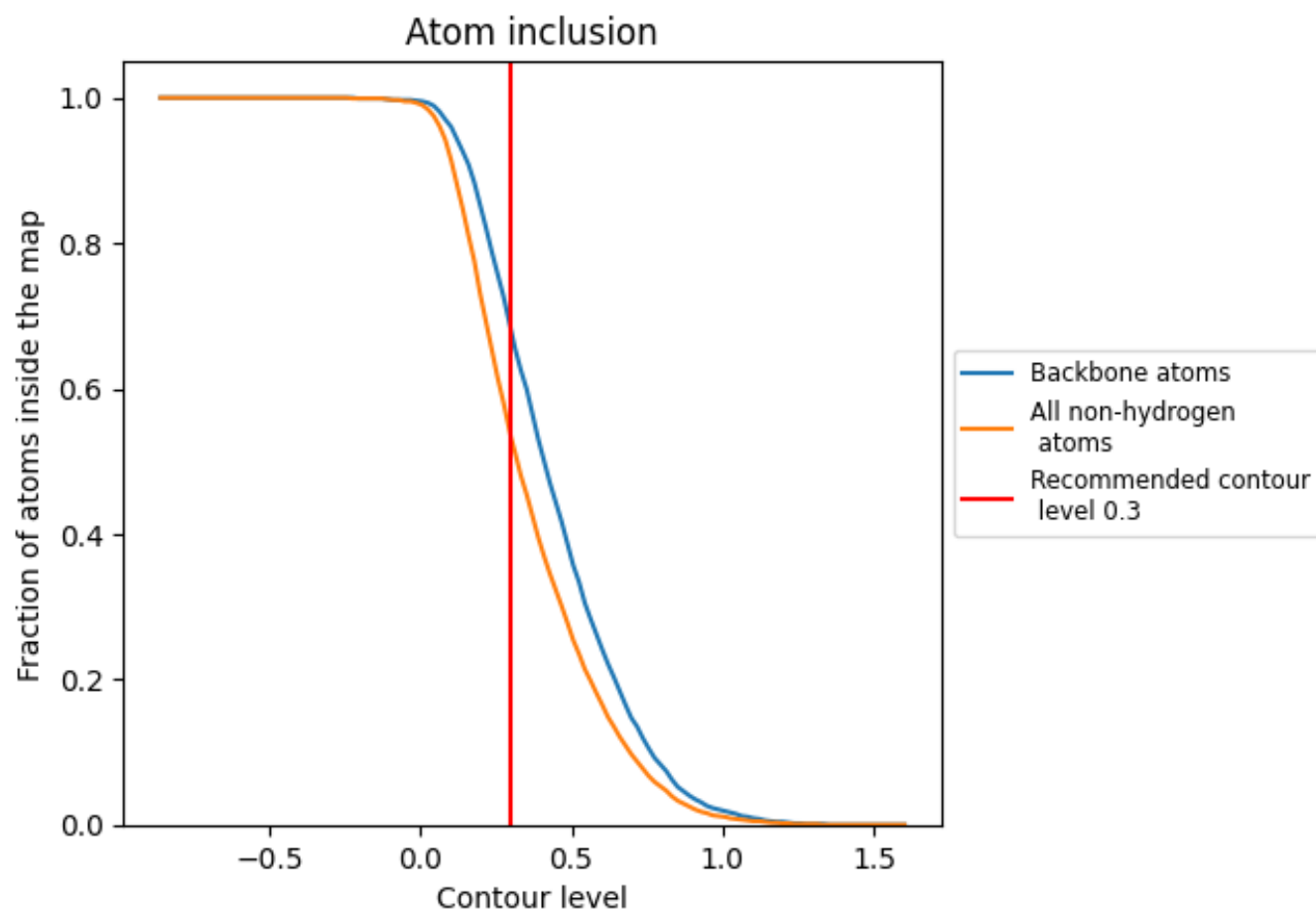
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

