wwPDB X-ray Structure Validation Summary Report (i)

Nov 5, 2023 – 04:17 PM EST

PDB ID	:	2GX2
Title	:	Crystal structural and functional analysis of GFP-like fluorescent protein Dronpa
Authors	:	Hwang, K.Y.; Nam, K.-H.; Park, S.-Y.; Sugiyama, K.
Deposited on	:	2006-05-08
Resolution	:	1.80 Å(reported)

This is a wwPDB X-ray Structure 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/XrayValidationReportHelp
with specific help available everywhere you see the (i) 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 (1)) were used in the production of this report:

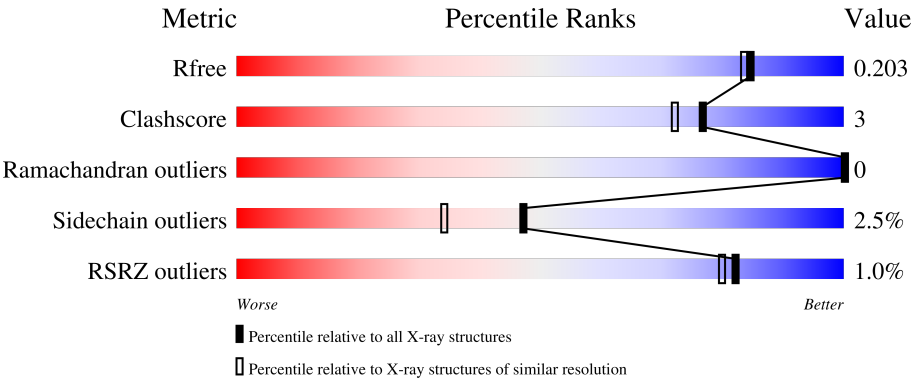
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 1.80 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	5950 (1.80-1.80)
Clashscore	141614	6793 (1.80-1.80)
Ramachandran outliers	138981	6697 (1.80-1.80)
Sidechain outliers	138945	6696 (1.80-1.80)
RSRZ outliers	127900	5850 (1.80-1.80)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	241	83% 6% • 11%
1	B	241	80% 8% • 12%
1	C	241	% 83% 6% • 10%
1	D	241	80% 8% • 11%
1	E	241	84% 5% • 10%

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Mol	Chain	Length	Quality of chain
1	F	241	81% 8% • 10%
1	G	241	84% 5% • 11%
1	H	241	83% 7% • 10%
1	I	241	81% 8% • 10%
1	J	241	79% 10% • 10%
1	K	241	83% 5% 12%
1	L	241	81% 7% • 11%

2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 23035 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 fluorescent protein Dronpa.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	215	Total	C	N	O	S	0	0	0
			1736	1108	292	327	9			
1	B	213	Total	C	N	O	S	0	0	0
			1721	1100	290	322	9			
1	C	218	Total	C	N	O	S	0	0	0
			1762	1125	298	330	9			
1	D	215	Total	C	N	O	S	0	0	0
			1736	1108	292	327	9			
1	E	218	Total	C	N	O	S	0	0	0
			1762	1125	298	330	9			
1	F	218	Total	C	N	O	S	0	0	0
			1762	1125	298	330	9			
1	G	215	Total	C	N	O	S	0	0	0
			1736	1108	292	327	9			
1	H	218	Total	C	N	O	S	0	0	0
			1762	1125	298	330	9			
1	I	218	Total	C	N	O	S	0	0	0
			1762	1125	298	330	9			
1	J	217	Total	C	N	O	S	0	0	0
			1751	1119	294	329	9			
1	K	213	Total	C	N	O	S	0	0	0
			1721	1100	290	322	9			
1	L	214	Total	C	N	O	S	0	0	0
			1730	1105	291	325	9			

There are 276 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-18	MET	-	expression tag	UNP Q5TLG6
A	-17	ARG	-	expression tag	UNP Q5TLG6
A	-16	GLY	-	expression tag	UNP Q5TLG6
A	-15	SER	-	expression tag	UNP Q5TLG6
A	-14	HIS	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
A	-13	HIS	-	expression tag	UNP Q5TLG6
A	-12	HIS	-	expression tag	UNP Q5TLG6
A	-11	HIS	-	expression tag	UNP Q5TLG6
A	-10	HIS	-	expression tag	UNP Q5TLG6
A	-9	HIS	-	expression tag	UNP Q5TLG6
A	-8	GLY	-	expression tag	UNP Q5TLG6
A	-7	SER	-	expression tag	UNP Q5TLG6
A	-6	LEU	-	expression tag	UNP Q5TLG6
A	-5	VAL	-	expression tag	UNP Q5TLG6
A	-4	PRO	-	expression tag	UNP Q5TLG6
A	-3	ARG	-	expression tag	UNP Q5TLG6
A	-2	GLY	-	expression tag	UNP Q5TLG6
A	-1	SER	-	expression tag	UNP Q5TLG6
A	0	MET	-	expression tag	UNP Q5TLG6
A	1	VAL	-	expression tag	UNP Q5TLG6
A	62	GYS	CYS	chromophore	UNP Q5TLG6
A	62	GYS	TYR	chromophore	UNP Q5TLG6
A	62	GYS	GLY	chromophore	UNP Q5TLG6
B	-18	MET	-	expression tag	UNP Q5TLG6
B	-17	ARG	-	expression tag	UNP Q5TLG6
B	-16	GLY	-	expression tag	UNP Q5TLG6
B	-15	SER	-	expression tag	UNP Q5TLG6
B	-14	HIS	-	expression tag	UNP Q5TLG6
B	-13	HIS	-	expression tag	UNP Q5TLG6
B	-12	HIS	-	expression tag	UNP Q5TLG6
B	-11	HIS	-	expression tag	UNP Q5TLG6
B	-10	HIS	-	expression tag	UNP Q5TLG6
B	-9	HIS	-	expression tag	UNP Q5TLG6
B	-8	GLY	-	expression tag	UNP Q5TLG6
B	-7	SER	-	expression tag	UNP Q5TLG6
B	-6	LEU	-	expression tag	UNP Q5TLG6
B	-5	VAL	-	expression tag	UNP Q5TLG6
B	-4	PRO	-	expression tag	UNP Q5TLG6
B	-3	ARG	-	expression tag	UNP Q5TLG6
B	-2	GLY	-	expression tag	UNP Q5TLG6
B	-1	SER	-	expression tag	UNP Q5TLG6
B	0	MET	-	expression tag	UNP Q5TLG6
B	1	VAL	-	expression tag	UNP Q5TLG6
B	62	GYS	CYS	chromophore	UNP Q5TLG6
B	62	GYS	TYR	chromophore	UNP Q5TLG6
B	62	GYS	GLY	chromophore	UNP Q5TLG6
C	-18	MET	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
C	-17	ARG	-	expression tag	UNP Q5TLG6
C	-16	GLY	-	expression tag	UNP Q5TLG6
C	-15	SER	-	expression tag	UNP Q5TLG6
C	-14	HIS	-	expression tag	UNP Q5TLG6
C	-13	HIS	-	expression tag	UNP Q5TLG6
C	-12	HIS	-	expression tag	UNP Q5TLG6
C	-11	HIS	-	expression tag	UNP Q5TLG6
C	-10	HIS	-	expression tag	UNP Q5TLG6
C	-9	HIS	-	expression tag	UNP Q5TLG6
C	-8	GLY	-	expression tag	UNP Q5TLG6
C	-7	SER	-	expression tag	UNP Q5TLG6
C	-6	LEU	-	expression tag	UNP Q5TLG6
C	-5	VAL	-	expression tag	UNP Q5TLG6
C	-4	PRO	-	expression tag	UNP Q5TLG6
C	-3	ARG	-	expression tag	UNP Q5TLG6
C	-2	GLY	-	expression tag	UNP Q5TLG6
C	-1	SER	-	expression tag	UNP Q5TLG6
C	0	MET	-	expression tag	UNP Q5TLG6
C	1	VAL	-	expression tag	UNP Q5TLG6
C	62	GYS	CYS	chromophore	UNP Q5TLG6
C	62	GYS	TYR	chromophore	UNP Q5TLG6
C	62	GYS	GLY	chromophore	UNP Q5TLG6
D	-18	MET	-	expression tag	UNP Q5TLG6
D	-17	ARG	-	expression tag	UNP Q5TLG6
D	-16	GLY	-	expression tag	UNP Q5TLG6
D	-15	SER	-	expression tag	UNP Q5TLG6
D	-14	HIS	-	expression tag	UNP Q5TLG6
D	-13	HIS	-	expression tag	UNP Q5TLG6
D	-12	HIS	-	expression tag	UNP Q5TLG6
D	-11	HIS	-	expression tag	UNP Q5TLG6
D	-10	HIS	-	expression tag	UNP Q5TLG6
D	-9	HIS	-	expression tag	UNP Q5TLG6
D	-8	GLY	-	expression tag	UNP Q5TLG6
D	-7	SER	-	expression tag	UNP Q5TLG6
D	-6	LEU	-	expression tag	UNP Q5TLG6
D	-5	VAL	-	expression tag	UNP Q5TLG6
D	-4	PRO	-	expression tag	UNP Q5TLG6
D	-3	ARG	-	expression tag	UNP Q5TLG6
D	-2	GLY	-	expression tag	UNP Q5TLG6
D	-1	SER	-	expression tag	UNP Q5TLG6
D	0	MET	-	expression tag	UNP Q5TLG6
D	1	VAL	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
D	62	GYS	CYS	chromophore	UNP Q5TLG6
D	62	GYS	TYR	chromophore	UNP Q5TLG6
D	62	GYS	GLY	chromophore	UNP Q5TLG6
E	-18	MET	-	expression tag	UNP Q5TLG6
E	-17	ARG	-	expression tag	UNP Q5TLG6
E	-16	GLY	-	expression tag	UNP Q5TLG6
E	-15	SER	-	expression tag	UNP Q5TLG6
E	-14	HIS	-	expression tag	UNP Q5TLG6
E	-13	HIS	-	expression tag	UNP Q5TLG6
E	-12	HIS	-	expression tag	UNP Q5TLG6
E	-11	HIS	-	expression tag	UNP Q5TLG6
E	-10	HIS	-	expression tag	UNP Q5TLG6
E	-9	HIS	-	expression tag	UNP Q5TLG6
E	-8	GLY	-	expression tag	UNP Q5TLG6
E	-7	SER	-	expression tag	UNP Q5TLG6
E	-6	LEU	-	expression tag	UNP Q5TLG6
E	-5	VAL	-	expression tag	UNP Q5TLG6
E	-4	PRO	-	expression tag	UNP Q5TLG6
E	-3	ARG	-	expression tag	UNP Q5TLG6
E	-2	GLY	-	expression tag	UNP Q5TLG6
E	-1	SER	-	expression tag	UNP Q5TLG6
E	0	MET	-	expression tag	UNP Q5TLG6
E	1	VAL	-	expression tag	UNP Q5TLG6
E	62	GYS	CYS	chromophore	UNP Q5TLG6
E	62	GYS	TYR	chromophore	UNP Q5TLG6
E	62	GYS	GLY	chromophore	UNP Q5TLG6
F	-18	MET	-	expression tag	UNP Q5TLG6
F	-17	ARG	-	expression tag	UNP Q5TLG6
F	-16	GLY	-	expression tag	UNP Q5TLG6
F	-15	SER	-	expression tag	UNP Q5TLG6
F	-14	HIS	-	expression tag	UNP Q5TLG6
F	-13	HIS	-	expression tag	UNP Q5TLG6
F	-12	HIS	-	expression tag	UNP Q5TLG6
F	-11	HIS	-	expression tag	UNP Q5TLG6
F	-10	HIS	-	expression tag	UNP Q5TLG6
F	-9	HIS	-	expression tag	UNP Q5TLG6
F	-8	GLY	-	expression tag	UNP Q5TLG6
F	-7	SER	-	expression tag	UNP Q5TLG6
F	-6	LEU	-	expression tag	UNP Q5TLG6
F	-5	VAL	-	expression tag	UNP Q5TLG6
F	-4	PRO	-	expression tag	UNP Q5TLG6
F	-3	ARG	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
F	-2	GLY	-	expression tag	UNP Q5TLG6
F	-1	SER	-	expression tag	UNP Q5TLG6
F	0	MET	-	expression tag	UNP Q5TLG6
F	1	VAL	-	expression tag	UNP Q5TLG6
F	62	GYS	CYS	chromophore	UNP Q5TLG6
F	62	GYS	TYR	chromophore	UNP Q5TLG6
F	62	GYS	GLY	chromophore	UNP Q5TLG6
G	-18	MET	-	expression tag	UNP Q5TLG6
G	-17	ARG	-	expression tag	UNP Q5TLG6
G	-16	GLY	-	expression tag	UNP Q5TLG6
G	-15	SER	-	expression tag	UNP Q5TLG6
G	-14	HIS	-	expression tag	UNP Q5TLG6
G	-13	HIS	-	expression tag	UNP Q5TLG6
G	-12	HIS	-	expression tag	UNP Q5TLG6
G	-11	HIS	-	expression tag	UNP Q5TLG6
G	-10	HIS	-	expression tag	UNP Q5TLG6
G	-9	HIS	-	expression tag	UNP Q5TLG6
G	-8	GLY	-	expression tag	UNP Q5TLG6
G	-7	SER	-	expression tag	UNP Q5TLG6
G	-6	LEU	-	expression tag	UNP Q5TLG6
G	-5	VAL	-	expression tag	UNP Q5TLG6
G	-4	PRO	-	expression tag	UNP Q5TLG6
G	-3	ARG	-	expression tag	UNP Q5TLG6
G	-2	GLY	-	expression tag	UNP Q5TLG6
G	-1	SER	-	expression tag	UNP Q5TLG6
G	0	MET	-	expression tag	UNP Q5TLG6
G	1	VAL	-	expression tag	UNP Q5TLG6
G	62	GYS	CYS	chromophore	UNP Q5TLG6
G	62	GYS	TYR	chromophore	UNP Q5TLG6
G	62	GYS	GLY	chromophore	UNP Q5TLG6
H	-18	MET	-	expression tag	UNP Q5TLG6
H	-17	ARG	-	expression tag	UNP Q5TLG6
H	-16	GLY	-	expression tag	UNP Q5TLG6
H	-15	SER	-	expression tag	UNP Q5TLG6
H	-14	HIS	-	expression tag	UNP Q5TLG6
H	-13	HIS	-	expression tag	UNP Q5TLG6
H	-12	HIS	-	expression tag	UNP Q5TLG6
H	-11	HIS	-	expression tag	UNP Q5TLG6
H	-10	HIS	-	expression tag	UNP Q5TLG6
H	-9	HIS	-	expression tag	UNP Q5TLG6
H	-8	GLY	-	expression tag	UNP Q5TLG6
H	-7	SER	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
H	-6	LEU	-	expression tag	UNP Q5TLG6
H	-5	VAL	-	expression tag	UNP Q5TLG6
H	-4	PRO	-	expression tag	UNP Q5TLG6
H	-3	ARG	-	expression tag	UNP Q5TLG6
H	-2	GLY	-	expression tag	UNP Q5TLG6
H	-1	SER	-	expression tag	UNP Q5TLG6
H	0	MET	-	expression tag	UNP Q5TLG6
H	1	VAL	-	expression tag	UNP Q5TLG6
H	62	GYS	CYS	chromophore	UNP Q5TLG6
H	62	GYS	TYR	chromophore	UNP Q5TLG6
H	62	GYS	GLY	chromophore	UNP Q5TLG6
I	-18	MET	-	expression tag	UNP Q5TLG6
I	-17	ARG	-	expression tag	UNP Q5TLG6
I	-16	GLY	-	expression tag	UNP Q5TLG6
I	-15	SER	-	expression tag	UNP Q5TLG6
I	-14	HIS	-	expression tag	UNP Q5TLG6
I	-13	HIS	-	expression tag	UNP Q5TLG6
I	-12	HIS	-	expression tag	UNP Q5TLG6
I	-11	HIS	-	expression tag	UNP Q5TLG6
I	-10	HIS	-	expression tag	UNP Q5TLG6
I	-9	HIS	-	expression tag	UNP Q5TLG6
I	-8	GLY	-	expression tag	UNP Q5TLG6
I	-7	SER	-	expression tag	UNP Q5TLG6
I	-6	LEU	-	expression tag	UNP Q5TLG6
I	-5	VAL	-	expression tag	UNP Q5TLG6
I	-4	PRO	-	expression tag	UNP Q5TLG6
I	-3	ARG	-	expression tag	UNP Q5TLG6
I	-2	GLY	-	expression tag	UNP Q5TLG6
I	-1	SER	-	expression tag	UNP Q5TLG6
I	0	MET	-	expression tag	UNP Q5TLG6
I	1	VAL	-	expression tag	UNP Q5TLG6
I	62	GYS	CYS	chromophore	UNP Q5TLG6
I	62	GYS	TYR	chromophore	UNP Q5TLG6
I	62	GYS	GLY	chromophore	UNP Q5TLG6
J	-18	MET	-	expression tag	UNP Q5TLG6
J	-17	ARG	-	expression tag	UNP Q5TLG6
J	-16	GLY	-	expression tag	UNP Q5TLG6
J	-15	SER	-	expression tag	UNP Q5TLG6
J	-14	HIS	-	expression tag	UNP Q5TLG6
J	-13	HIS	-	expression tag	UNP Q5TLG6
J	-12	HIS	-	expression tag	UNP Q5TLG6
J	-11	HIS	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
J	-10	HIS	-	expression tag	UNP Q5TLG6
J	-9	HIS	-	expression tag	UNP Q5TLG6
J	-8	GLY	-	expression tag	UNP Q5TLG6
J	-7	SER	-	expression tag	UNP Q5TLG6
J	-6	LEU	-	expression tag	UNP Q5TLG6
J	-5	VAL	-	expression tag	UNP Q5TLG6
J	-4	PRO	-	expression tag	UNP Q5TLG6
J	-3	ARG	-	expression tag	UNP Q5TLG6
J	-2	GLY	-	expression tag	UNP Q5TLG6
J	-1	SER	-	expression tag	UNP Q5TLG6
J	0	MET	-	expression tag	UNP Q5TLG6
J	1	VAL	-	expression tag	UNP Q5TLG6
J	62	GYS	CYS	chromophore	UNP Q5TLG6
J	62	GYS	TYR	chromophore	UNP Q5TLG6
J	62	GYS	GLY	chromophore	UNP Q5TLG6
K	-18	MET	-	expression tag	UNP Q5TLG6
K	-17	ARG	-	expression tag	UNP Q5TLG6
K	-16	GLY	-	expression tag	UNP Q5TLG6
K	-15	SER	-	expression tag	UNP Q5TLG6
K	-14	HIS	-	expression tag	UNP Q5TLG6
K	-13	HIS	-	expression tag	UNP Q5TLG6
K	-12	HIS	-	expression tag	UNP Q5TLG6
K	-11	HIS	-	expression tag	UNP Q5TLG6
K	-10	HIS	-	expression tag	UNP Q5TLG6
K	-9	HIS	-	expression tag	UNP Q5TLG6
K	-8	GLY	-	expression tag	UNP Q5TLG6
K	-7	SER	-	expression tag	UNP Q5TLG6
K	-6	LEU	-	expression tag	UNP Q5TLG6
K	-5	VAL	-	expression tag	UNP Q5TLG6
K	-4	PRO	-	expression tag	UNP Q5TLG6
K	-3	ARG	-	expression tag	UNP Q5TLG6
K	-2	GLY	-	expression tag	UNP Q5TLG6
K	-1	SER	-	expression tag	UNP Q5TLG6
K	0	MET	-	expression tag	UNP Q5TLG6
K	1	VAL	-	expression tag	UNP Q5TLG6
K	62	GYS	CYS	chromophore	UNP Q5TLG6
K	62	GYS	TYR	chromophore	UNP Q5TLG6
K	62	GYS	GLY	chromophore	UNP Q5TLG6
L	-18	MET	-	expression tag	UNP Q5TLG6
L	-17	ARG	-	expression tag	UNP Q5TLG6
L	-16	GLY	-	expression tag	UNP Q5TLG6
L	-15	SER	-	expression tag	UNP Q5TLG6

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Chain	Residue	Modelled	Actual	Comment	Reference
L	-14	HIS	-	expression tag	UNP Q5TLG6
L	-13	HIS	-	expression tag	UNP Q5TLG6
L	-12	HIS	-	expression tag	UNP Q5TLG6
L	-11	HIS	-	expression tag	UNP Q5TLG6
L	-10	HIS	-	expression tag	UNP Q5TLG6
L	-9	HIS	-	expression tag	UNP Q5TLG6
L	-8	GLY	-	expression tag	UNP Q5TLG6
L	-7	SER	-	expression tag	UNP Q5TLG6
L	-6	LEU	-	expression tag	UNP Q5TLG6
L	-5	VAL	-	expression tag	UNP Q5TLG6
L	-4	PRO	-	expression tag	UNP Q5TLG6
L	-3	ARG	-	expression tag	UNP Q5TLG6
L	-2	GLY	-	expression tag	UNP Q5TLG6
L	-1	SER	-	expression tag	UNP Q5TLG6
L	0	MET	-	expression tag	UNP Q5TLG6
L	1	VAL	-	expression tag	UNP Q5TLG6
L	62	GYS	CYS	chromophore	UNP Q5TLG6
L	62	GYS	TYR	chromophore	UNP Q5TLG6
L	62	GYS	GLY	chromophore	UNP Q5TLG6

- Molecule 2 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	6	Total Mg 6 6	0	0
2	B	8	Total Mg 8 8	0	0
2	C	8	Total Mg 8 8	0	0
2	D	7	Total Mg 7 7	0	0
2	E	7	Total Mg 7 7	0	0
2	F	5	Total Mg 5 5	0	0
2	G	3	Total Mg 3 3	0	0
2	H	4	Total Mg 4 4	0	0
2	I	4	Total Mg 4 4	0	0
2	J	1	Total Mg 1 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	K	6	Total Mg 6 6	0	0
2	L	3	Total Mg 3 3	0	0

- Molecule 3 is water.

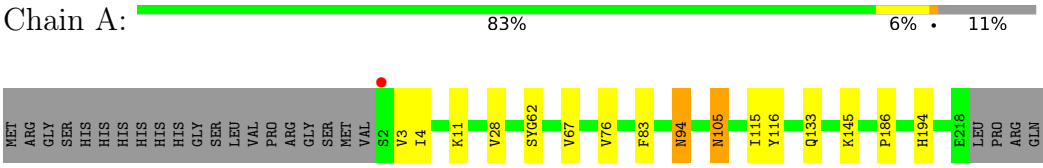
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	135	Total O 135 135	0	0
3	B	196	Total O 196 196	0	0
3	C	190	Total O 190 190	0	0
3	D	158	Total O 158 158	0	0
3	E	216	Total O 216 216	0	0
3	F	172	Total O 172 172	0	0
3	G	219	Total O 219 219	0	0
3	H	186	Total O 186 186	0	0
3	I	157	Total O 157 157	0	0
3	J	134	Total O 134 134	0	0
3	K	127	Total O 127 127	0	0
3	L	142	Total O 142 142	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron 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 dot above a residue indicates a poor fit to the electron density (RSRZ > 2). 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.

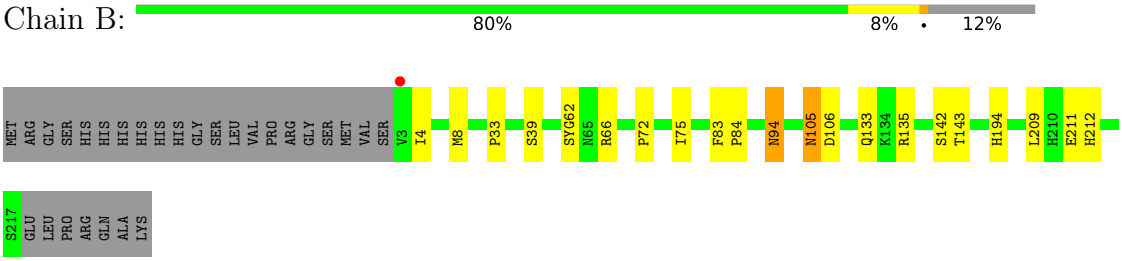
• Molecule 1: fluorescent protein Dronpa

Chain A:



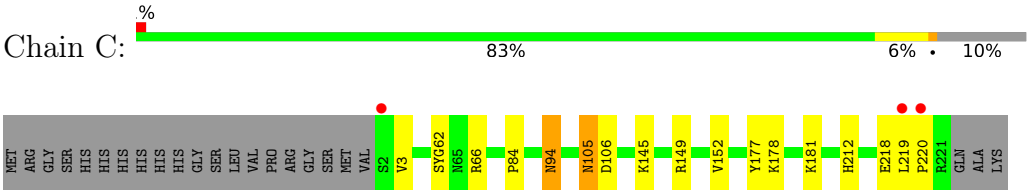
• Molecule 1: fluorescent protein Dronpa

Chain B:



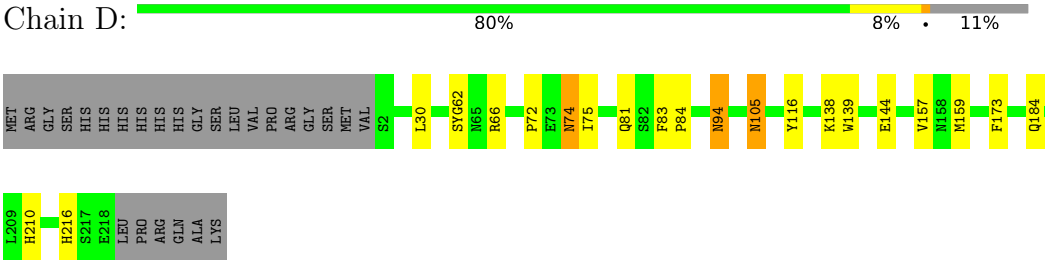
• Molecule 1: fluorescent protein Dronpa

Chain C:



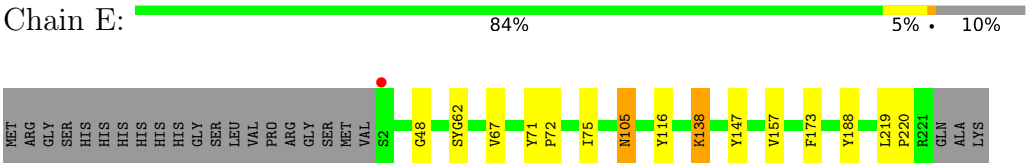
• Molecule 1: fluorescent protein Dronpa

Chain D:



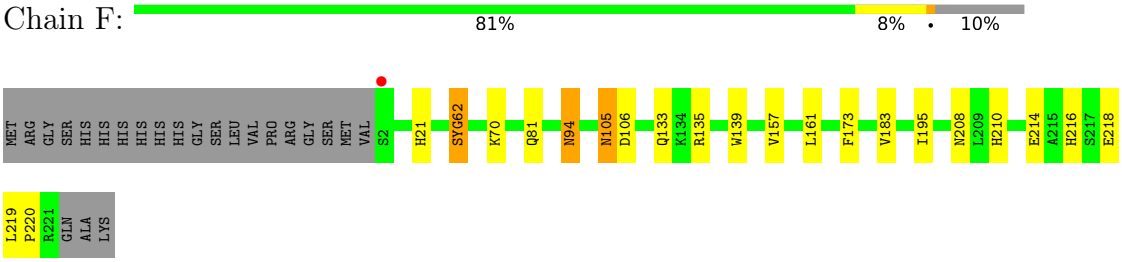
• Molecule 1: fluorescent protein Dronpa

Chain E:



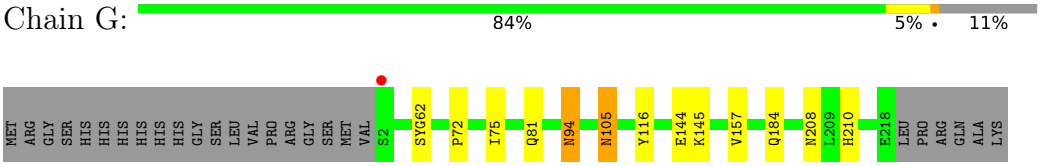
• Molecule 1: fluorescent protein Dronpa

Chain F:



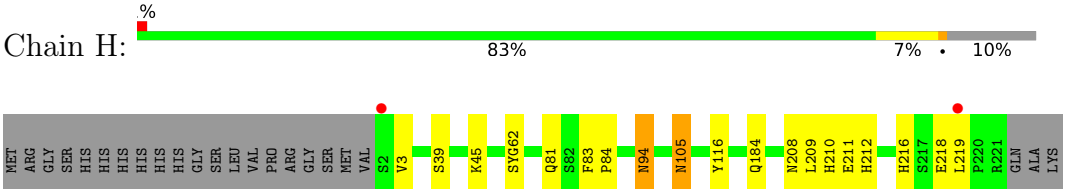
• Molecule 1: fluorescent protein Dronpa

Chain G:



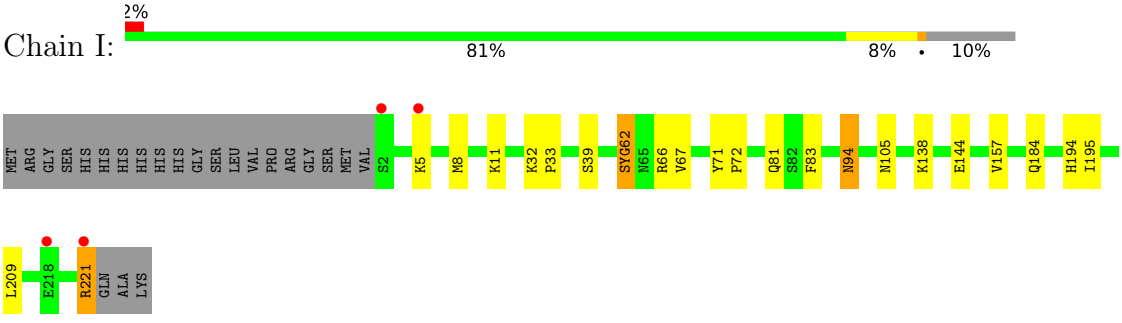
• Molecule 1: fluorescent protein Dronpa

Chain H:



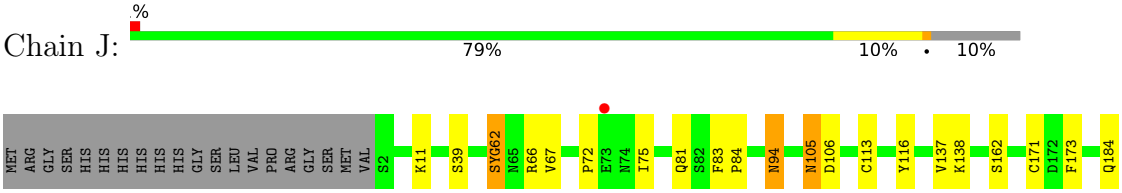
• Molecule 1: fluorescent protein Dronpa

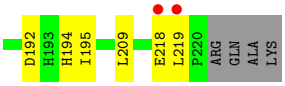
Chain I:



• Molecule 1: fluorescent protein Dronpa

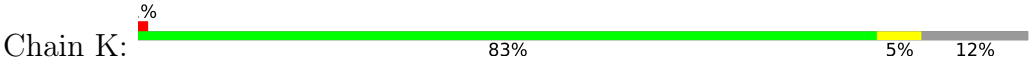
Chain J:

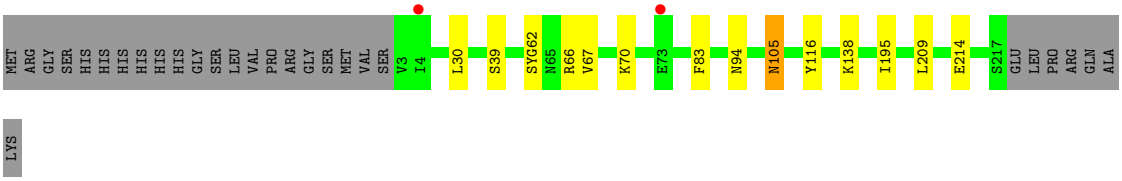




• Molecule 1: fluorescent protein Dronpa

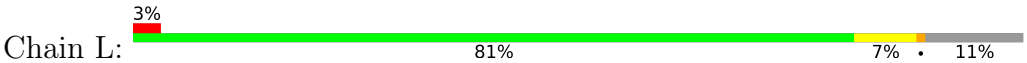
Chain K:

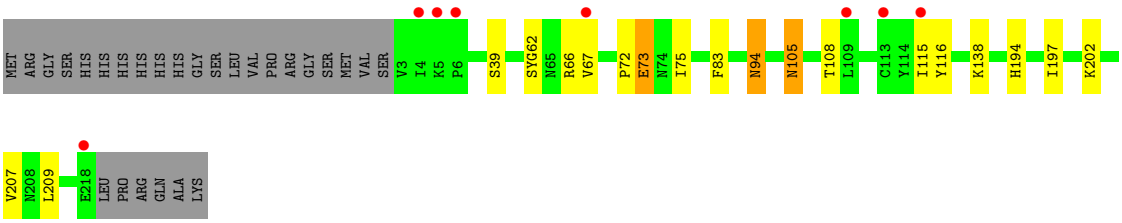




• Molecule 1: fluorescent protein Dronpa

Chain L:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α, β, γ	73.09Å 106.16Å 110.07Å 61.17° 70.85° 86.21°	Depositor
Resolution (Å)	19.99 – 1.80 37.49 – 1.80	Depositor EDS
% Data completeness (in resolution range)	93.9 (19.99-1.80) 94.1 (37.49-1.80)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	2.94 (at 1.81Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.182 , 0.209 0.177 , 0.203	Depositor DCC
R_{free} test set	11803 reflections (4.99%)	wwPDB-VP
Wilson B-factor (Å^2)	15.6	Xtriage
Anisotropy	0.473	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 38.1	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	0.005 for -h,-k,-h-k+l	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	23035	wwPDB-VP
Average B, all atoms (Å^2)	23.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.15% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|>5$	RMSZ	#$\|Z\|>5$
1	A	0.32	0/1760	0.63	0/2375
1	B	0.35	0/1745	0.66	0/2355
1	C	0.35	0/1787	0.66	0/2412
1	D	0.34	0/1760	0.66	0/2375
1	E	0.34	0/1787	0.65	0/2412
1	F	0.34	0/1787	0.65	0/2412
1	G	0.35	0/1760	0.66	0/2375
1	H	0.34	0/1787	0.66	0/2412
1	I	0.33	0/1787	0.64	0/2412
1	J	0.32	0/1776	0.70	2/2398 (0.1%)
1	K	0.31	0/1745	0.61	0/2355
1	L	0.30	0/1754	0.62	0/2367
All	All	0.33	0/21235	0.65	2/28660 (0.0%)

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	J	218	GLU	N-CA-C	12.00	143.41	111.00
1	J	218	GLU	CB-CA-C	-8.72	92.97	110.40

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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	1736	0	1657	10	0
1	B	1721	0	1646	13	0
1	C	1762	0	1688	9	0
1	D	1736	0	1657	12	0
1	E	1762	0	1688	9	0
1	F	1762	0	1688	14	0
1	G	1736	0	1657	7	0
1	H	1762	0	1688	9	0
1	I	1762	0	1688	14	0
1	J	1751	0	1675	16	0
1	K	1721	0	1646	7	0
1	L	1730	0	1652	10	0
2	A	6	0	0	0	0
2	B	8	0	0	0	0
2	C	8	0	0	0	0
2	D	7	0	0	0	0
2	E	7	0	0	0	0
2	F	5	0	0	0	0
2	G	3	0	0	0	0
2	H	4	0	0	0	0
2	I	4	0	0	0	0
2	J	1	0	0	0	0
2	K	6	0	0	0	0
2	L	3	0	0	0	0
3	A	135	0	0	0	0
3	B	196	0	0	0	0
3	C	190	0	0	0	0
3	D	158	0	0	1	0
3	E	216	0	0	0	0
3	F	172	0	0	1	0
3	G	219	0	0	0	0
3	H	186	0	0	0	0
3	I	157	0	0	0	0
3	J	134	0	0	0	0
3	K	127	0	0	0	0
3	L	142	0	0	1	0
All	All	23035	0	20030	123	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 3.

The worst 5 of 123 close contacts within the same asymmetric unit are listed below, sorted by

their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:133:GLN:HE21	1:B:135:ARG:HE	1.18	0.91
1:I:8:MET:HE3	1:I:33:PRO:HG2	1.65	0.78
1:F:133:GLN:HE21	1:F:135:ARG:HE	1.36	0.74
1:A:76:VAL:HG22	1:A:186:PRO:HB3	1.73	0.71
1:G:81:GLN:HE22	1:G:184:GLN:H	1.39	0.70

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 X-ray entries followed by that with respect to entries of similar resolution.

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	210/241 (87%)	206 (98%)	4 (2%)	0	100	100
1	B	208/241 (86%)	206 (99%)	2 (1%)	0	100	100
1	C	213/241 (88%)	208 (98%)	5 (2%)	0	100	100
1	D	210/241 (87%)	208 (99%)	2 (1%)	0	100	100
1	E	213/241 (88%)	211 (99%)	2 (1%)	0	100	100
1	F	213/241 (88%)	211 (99%)	2 (1%)	0	100	100
1	G	210/241 (87%)	209 (100%)	1 (0%)	0	100	100
1	H	213/241 (88%)	211 (99%)	2 (1%)	0	100	100
1	I	213/241 (88%)	210 (99%)	3 (1%)	0	100	100
1	J	212/241 (88%)	209 (99%)	3 (1%)	0	100	100
1	K	208/241 (86%)	206 (99%)	2 (1%)	0	100	100
1	L	209/241 (87%)	204 (98%)	5 (2%)	0	100	100
All	All	2532/2892 (88%)	2499 (99%)	33 (1%)	0	100	100

There are no Ramachandran outliers to report.

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 X-ray entries followed by that with respect to entries of similar resolution.

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	185/207 (89%)	181 (98%)	4 (2%)	52	39
1	B	183/207 (88%)	179 (98%)	4 (2%)	52	39
1	C	188/207 (91%)	182 (97%)	6 (3%)	39	25
1	D	185/207 (89%)	180 (97%)	5 (3%)	44	31
1	E	188/207 (91%)	185 (98%)	3 (2%)	62	54
1	F	188/207 (91%)	185 (98%)	3 (2%)	62	54
1	G	185/207 (89%)	182 (98%)	3 (2%)	62	54
1	H	188/207 (91%)	184 (98%)	4 (2%)	53	42
1	I	188/207 (91%)	180 (96%)	8 (4%)	29	14
1	J	187/207 (90%)	182 (97%)	5 (3%)	44	31
1	K	183/207 (88%)	179 (98%)	4 (2%)	52	39
1	L	184/207 (89%)	178 (97%)	6 (3%)	38	23
All	All	2232/2484 (90%)	2177 (98%)	55 (2%)	47	34

5 of 55 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	H	45	LYS
1	I	94	ASN
1	L	194	HIS
1	L	66	ARG
1	H	94	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 77 such sidechains are listed below:

Mol	Chain	Res	Type
1	J	38	GLN
1	L	81	GLN
1	J	94	ASN
1	K	81	GLN

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Mol	Chain	Res	Type
1	L	184	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

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

12 non-standard protein/DNA/RNA residues are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	GYS	E	62	1	22,22,23	2.09	8 (36%)	27,30,32	1.99	5 (18%)
1	GYS	J	62	1	22,22,23	2.10	4 (18%)	27,30,32	2.06	6 (22%)
1	GYS	G	62	1	22,22,23	2.12	7 (31%)	27,30,32	2.20	6 (22%)
1	GYS	A	62	1	22,22,23	2.03	4 (18%)	27,30,32	2.16	5 (18%)
1	GYS	B	62	1	22,22,23	2.09	6 (27%)	27,30,32	2.06	6 (22%)
1	GYS	H	62	1	22,22,23	2.03	5 (22%)	27,30,32	2.20	8 (29%)
1	GYS	I	62	1	22,22,23	1.99	7 (31%)	27,30,32	2.09	7 (25%)
1	GYS	D	62	1	22,22,23	2.00	4 (18%)	27,30,32	2.14	8 (29%)
1	GYS	K	62	1	22,22,23	2.00	5 (22%)	27,30,32	2.14	6 (22%)
1	GYS	F	62	1	22,22,23	2.01	7 (31%)	27,30,32	2.24	4 (14%)
1	GYS	C	62	1	22,22,23	2.00	5 (22%)	27,30,32	2.06	5 (18%)
1	GYS	L	62	1	22,22,23	2.02	6 (27%)	27,30,32	2.18	8 (29%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	GYS	E	62	1	-	3/9/29/30	0/2/2/2
1	GYS	J	62	1	-	4/9/29/30	0/2/2/2
1	GYS	G	62	1	-	3/9/29/30	0/2/2/2
1	GYS	A	62	1	-	4/9/29/30	0/2/2/2
1	GYS	B	62	1	-	4/9/29/30	0/2/2/2
1	GYS	H	62	1	-	4/9/29/30	0/2/2/2
1	GYS	I	62	1	-	4/9/29/30	0/2/2/2
1	GYS	D	62	1	-	4/9/29/30	0/2/2/2
1	GYS	K	62	1	-	4/9/29/30	0/2/2/2
1	GYS	F	62	1	-	4/9/29/30	0/2/2/2
1	GYS	C	62	1	-	3/9/29/30	0/2/2/2
1	GYS	L	62	1	-	4/9/29/30	0/2/2/2

The worst 5 of 68 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	62	GYS	CB2-CA2	5.75	1.39	1.35
1	J	62	GYS	CB2-CA2	5.54	1.39	1.35
1	H	62	GYS	CB2-CA2	5.39	1.39	1.35
1	I	62	GYS	CB2-CA2	5.35	1.39	1.35
1	E	62	GYS	CB2-CA2	5.23	1.39	1.35

The worst 5 of 74 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	62	GYS	O2-C2-CA2	8.20	135.56	130.96
1	G	62	GYS	O2-C2-CA2	8.04	135.47	130.96
1	H	62	GYS	O2-C2-CA2	7.85	135.37	130.96
1	A	62	GYS	O2-C2-CA2	7.83	135.35	130.96
1	K	62	GYS	O2-C2-CA2	7.72	135.29	130.96

There are no chirality outliers.

5 of 45 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	62	GYS	N1-CA1-CB1-OG1
1	A	62	GYS	C3-CA3-N3-C2
1	B	62	GYS	N1-CA1-CB1-OG1
1	B	62	GYS	C1-CA1-CB1-OG1
1	B	62	GYS	C3-CA3-N3-C2

There are no ring outliers.

3 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	J	62	GYS	1	0
1	I	62	GYS	1	0
1	F	62	GYS	1	0

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 62 ligands modelled in this entry, 62 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	214/241 (88%)	-0.12	1 (0%)	91	89	12, 23, 43, 63	0
1	B	212/241 (87%)	-0.33	1 (0%)	91	89	10, 17, 33, 51	0
1	C	217/241 (90%)	-0.35	3 (1%)	75	72	11, 17, 36, 68	0
1	D	214/241 (88%)	-0.31	0	100	100	10, 18, 38, 53	0
1	E	217/241 (90%)	-0.35	1 (0%)	91	89	11, 17, 33, 48	0
1	F	217/241 (90%)	-0.33	1 (0%)	91	89	10, 17, 36, 64	0
1	G	214/241 (88%)	-0.31	1 (0%)	91	89	10, 16, 33, 62	0
1	H	217/241 (90%)	-0.34	2 (0%)	84	82	11, 17, 32, 56	0
1	I	217/241 (90%)	-0.15	4 (1%)	68	64	11, 21, 45, 67	0
1	J	216/241 (89%)	-0.04	3 (1%)	75	72	12, 25, 46, 66	0
1	K	212/241 (87%)	0.10	2 (0%)	84	82	13, 27, 50, 62	0
1	L	213/241 (88%)	0.21	8 (3%)	40	35	14, 27, 49, 78	0
All	All	2580/2892 (89%)	-0.19	27 (1%)	82	80	10, 20, 43, 78	0

The worst 5 of 27 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	F	2	SER	4.7
1	C	2	SER	4.2
1	A	2	SER	4.0
1	J	219	LEU	4.0
1	C	219	LEU	3.9

6.2 Non-standard residues in protein, DNA, RNA chains

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
1	GYS	L	62	21/22	0.92	0.11	23,25,28,36	0
1	GYS	I	62	21/22	0.94	0.09	15,19,22,30	0
1	GYS	J	62	21/22	0.94	0.11	20,21,26,38	0
1	GYS	K	62	21/22	0.94	0.10	21,24,29,37	0
1	GYS	A	62	21/22	0.94	0.09	15,19,23,34	0
1	GYS	F	62	21/22	0.95	0.09	11,13,17,31	0
1	GYS	G	62	21/22	0.95	0.09	13,14,17,30	0
1	GYS	D	62	21/22	0.95	0.09	13,15,16,24	0
1	GYS	E	62	21/22	0.96	0.10	12,13,15,22	0
1	GYS	C	62	21/22	0.96	0.09	12,14,17,28	0
1	GYS	B	62	21/22	0.96	0.09	11,13,16,29	0
1	GYS	H	62	21/22	0.96	0.10	11,14,15,22	0

6.3 Carbohydrates (i)

There are no monosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	MG	K	3036	1/1	0.67	0.19	52,52,52,52	0
2	MG	J	3017	1/1	0.69	0.22	62,62,62,62	0
2	MG	C	3039	1/1	0.75	0.40	54,54,54,54	0
2	MG	E	3059	1/1	0.78	0.11	53,53,53,53	0
2	MG	H	3038	1/1	0.83	0.23	52,52,52,52	0
2	MG	B	3044	1/1	0.84	0.13	46,46,46,46	0
2	MG	L	3055	1/1	0.86	0.16	54,54,54,54	0
2	MG	I	3019	1/1	0.87	0.24	46,46,46,46	0
2	MG	B	3029	1/1	0.87	0.14	56,56,56,56	0
2	MG	D	3013	1/1	0.88	0.12	51,51,51,51	0
2	MG	B	3041	1/1	0.88	0.13	52,52,52,52	0
2	MG	H	3032	1/1	0.88	0.12	44,44,44,44	0
2	MG	B	3043	1/1	0.88	0.12	47,47,47,47	0
2	MG	D	3020	1/1	0.89	0.16	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	MG	A	3026	1/1	0.90	0.12	51,51,51,51	0
2	MG	K	3051	1/1	0.90	0.08	63,63,63,63	0
2	MG	E	3061	1/1	0.90	0.10	56,56,56,56	0
2	MG	A	3025	1/1	0.92	0.13	51,51,51,51	0
2	MG	B	3042	1/1	0.92	0.12	37,37,37,37	0
2	MG	C	3012	1/1	0.92	0.21	43,43,43,43	0
2	MG	C	3016	1/1	0.92	0.12	44,44,44,44	0
2	MG	D	3021	1/1	0.93	0.13	52,52,52,52	0
2	MG	C	3004	1/1	0.93	0.10	47,47,47,47	0
2	MG	A	3031	1/1	0.93	0.13	46,46,46,46	0
2	MG	I	3022	1/1	0.93	0.10	40,40,40,40	0
2	MG	F	3008	1/1	0.94	0.19	39,39,39,39	0
2	MG	F	3045	1/1	0.94	0.12	42,42,42,42	0
2	MG	K	3035	1/1	0.94	0.11	50,50,50,50	0
2	MG	E	3002	1/1	0.94	0.15	51,51,51,51	0
2	MG	K	3050	1/1	0.94	0.11	38,38,38,38	0
2	MG	C	3048	1/1	0.94	0.08	38,38,38,38	0
2	MG	K	3053	1/1	0.94	0.10	56,56,56,56	0
2	MG	A	3027	1/1	0.94	0.15	42,42,42,42	0
2	MG	G	3040	1/1	0.95	0.12	34,34,34,34	0
2	MG	C	3014	1/1	0.95	0.21	49,49,49,49	0
2	MG	L	3034	1/1	0.95	0.09	31,31,31,31	0
2	MG	E	3030	1/1	0.95	0.12	58,58,58,58	0
2	MG	D	3007	1/1	0.96	0.09	41,41,41,41	0
2	MG	H	3060	1/1	0.96	0.15	49,49,49,49	0
2	MG	E	3024	1/1	0.96	0.08	46,46,46,46	0
2	MG	A	3052	1/1	0.96	0.13	44,44,44,44	0
2	MG	F	3006	1/1	0.97	0.06	34,34,34,34	0
2	MG	B	3037	1/1	0.97	0.05	36,36,36,36	0
2	MG	B	3046	1/1	0.97	0.09	41,41,41,41	0
2	MG	F	3063	1/1	0.97	0.09	46,46,46,46	0
2	MG	D	3009	1/1	0.97	0.11	37,37,37,37	0
2	MG	G	3057	1/1	0.97	0.13	43,43,43,43	0
2	MG	A	3033	1/1	0.97	0.09	45,45,45,45	0
2	MG	D	3018	1/1	0.97	0.09	36,36,36,36	0
2	MG	C	3010	1/1	0.97	0.07	33,33,33,33	0
2	MG	I	3005	1/1	0.97	0.11	40,40,40,40	0
2	MG	D	3011	1/1	0.98	0.06	40,40,40,40	0
2	MG	K	3049	1/1	0.98	0.06	37,37,37,37	0
2	MG	I	3015	1/1	0.98	0.08	26,26,26,26	0
2	MG	G	3058	1/1	0.98	0.07	49,49,49,49	0
2	MG	F	3056	1/1	0.98	0.12	42,42,42,42	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	MG	L	3028	1/1	0.98	0.13	39,39,39,39	0
2	MG	E	3001	1/1	0.98	0.09	40,40,40,40	0
2	MG	C	3003	1/1	0.98	0.12	42,42,42,42	0
2	MG	B	3047	1/1	0.99	0.11	34,34,34,34	0
2	MG	E	3023	1/1	0.99	0.08	41,41,41,41	0
2	MG	H	3054	1/1	0.99	0.08	21,21,21,21	0

6.5 Other polymers (i)

There are no such residues in this entry.