



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 21, 2020 – 06:51 AM BST

PDB ID : 6EOP
Title : DPP8 - SLRFLYEG, space group 20
Authors : Ross, B.R.; Huber, R.
Deposited on : 2017-10-10
Resolution : 2.40 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The following versions of software and data (see [references ⓘ](#)) 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 : 2.13.1
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) : 2.13.1

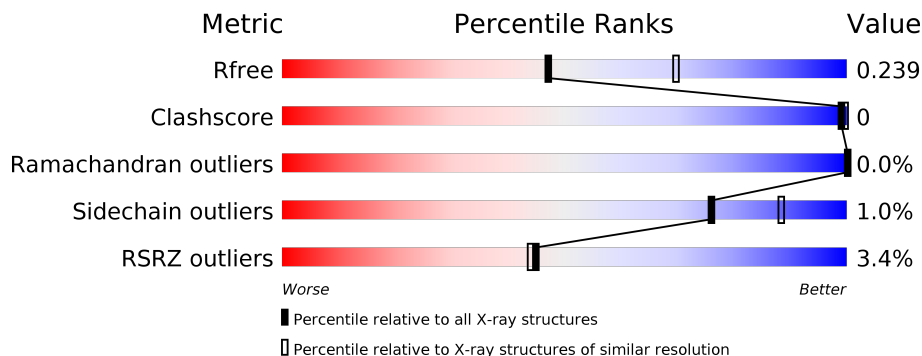
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.40 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	3907 (2.40-2.40)
Clashscore	141614	4398 (2.40-2.40)
Ramachandran outliers	138981	4318 (2.40-2.40)
Sidechain outliers	138945	4319 (2.40-2.40)
RSRZ outliers	127900	3811 (2.40-2.40)

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 on 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 $\leq 5\%$. 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	898	 3% 92% 6%
1	B	898	 2% 91% 7%
1	C	898	 3% 92% 7%
2	D	8	 38% 100%
2	E	8	 25% 100%
2	F	8	 25% 100%

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 21351 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.

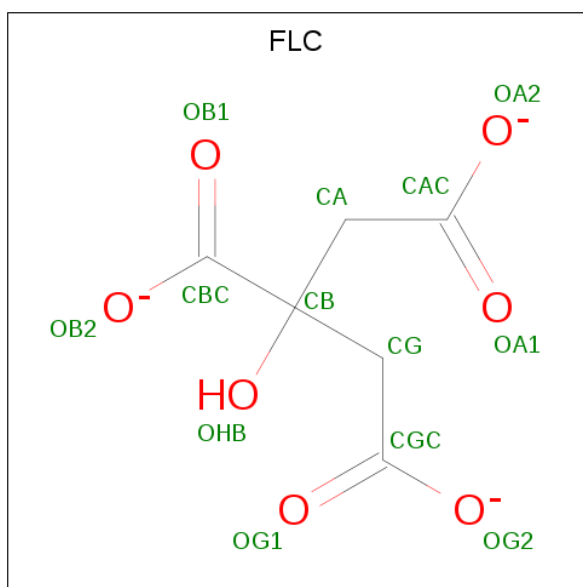
- Molecule 1 is a protein called Dipeptidyl peptidase 8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	841	Total 6849	C 4398	N 1151	O 1271	S 29	0	0	0
1	B	838	Total 6821	C 4380	N 1146	O 1266	S 29	0	0	0
1	C	837	Total 6815	C 4377	N 1145	O 1264	S 29	0	0	0

- Molecule 2 is a protein called SER-LEU-ARG-PHE-LEU-TYR-GLU-GLY.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
2	D	8	Total 69	C 46	N 11	O 12	0	0	0
2	E	8	Total 69	C 46	N 11	O 12	0	0	0
2	F	8	Total 69	C 46	N 11	O 12	0	0	0

- Molecule 3 is CITRATE ANION (three-letter code: FLC) (formula: C₆H₅O₇).

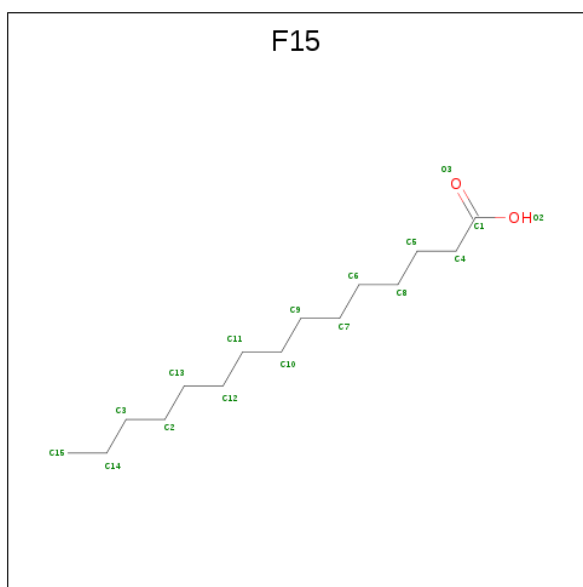


Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C O 13 6 7	0	0

- Molecule 4 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	B	1	Total Ca 1 1	0	0
4	A	1	Total Ca 1 1	0	0
4	C	1	Total Ca 1 1	0	0

- Molecule 5 is PENTADECANOIC ACID (three-letter code: F15) (formula: C₁₅H₃₀O₂).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	D	1	Total C O 17 15 2	0	0
5	E	1	Total C O 17 15 2	0	0
5	F	1	Total C O 17 15 2	0	0

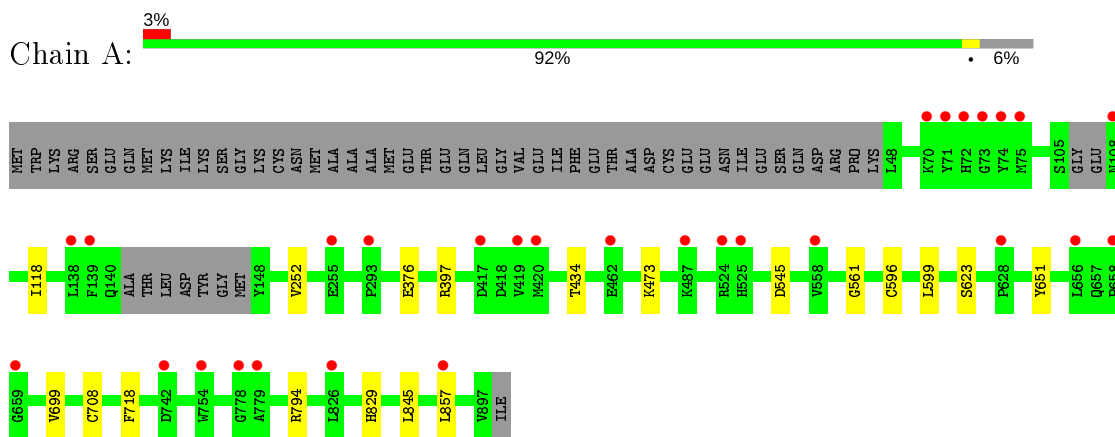
- Molecule 6 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	214	Total O 214 214	0	0
6	B	215	Total O 215 215	0	0
6	C	158	Total O 158 158	0	0
6	D	2	Total O 2 2	0	0
6	E	1	Total O 1 1	0	0
6	F	2	Total O 2 2	0	0

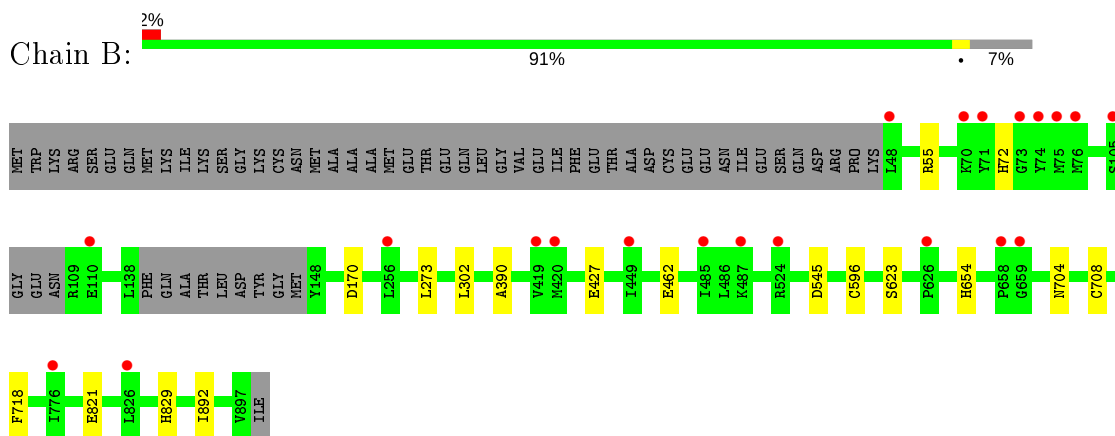
3 Residue-property plots [i](#)

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.

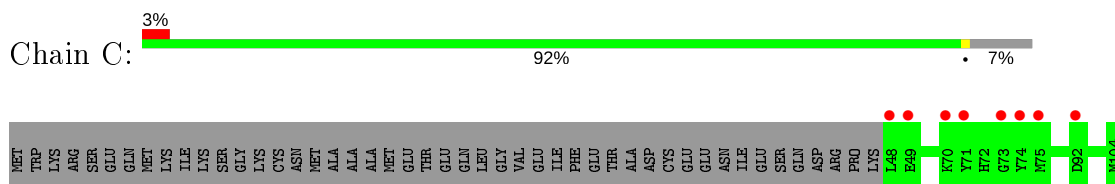
- Molecule 1: Dipeptidyl peptidase 8

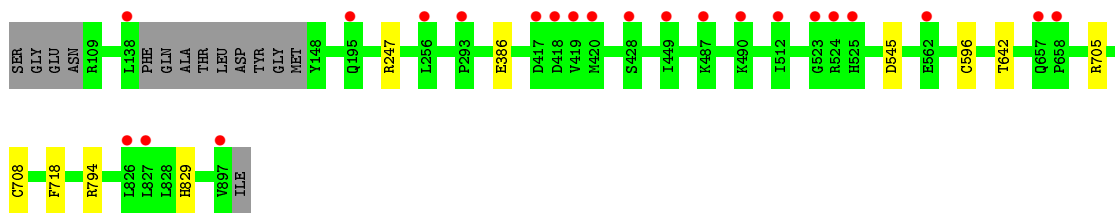


- Molecule 1: Dipeptidyl peptidase 8

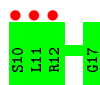
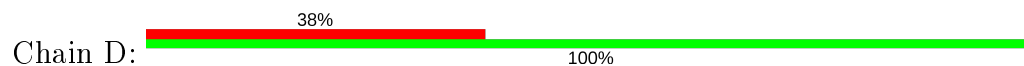


- Molecule 1: Dipeptidyl peptidase 8

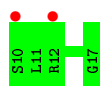




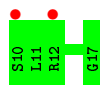
- Molecule 2: SER-LEU-ARG-PHE-LEU-TYR-GLU-GLY



- Molecule 2: SER-LEU-ARG-PHE-LEU-TYR-GLU-GLY



- Molecule 2: SER-LEU-ARG-PHE-LEU-TYR-GLU-GLY



4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α , β , γ	162.83Å 246.37Å 261.19Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	44.62 – 2.40 44.62 – 2.40	Depositor EDS
% Data completeness (in resolution range)	99.9 (44.62-2.40) 99.9 (44.62-2.40)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.17	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.13 (at 2.39Å)	Xtrriage
Refinement program	REFMAC 5.8.0155	Depositor
R, R_{free}	0.214 , 0.237 0.216 , 0.239	Depositor DCC
R_{free} test set	10161 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å ²)	61.9	Xtrriage
Anisotropy	0.298	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 32.8	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.33$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	21351	wwPDB-VP
Average B, all atoms (Å ²)	65.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.31% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: CME, CA, FLC, F15

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	0.36	0/7027	0.60	0/9528
1	B	0.36	0/6998	0.60	0/9489
1	C	0.36	0/6992	0.59	0/9481
2	D	0.45	0/70	0.52	0/92
2	E	0.43	0/70	0.51	0/92
2	F	0.46	0/70	0.63	0/92
All	All	0.36	0/21227	0.60	0/28774

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	6849	0	6668	7	0
1	B	6821	0	6646	4	0
1	C	6815	0	6640	2	0
2	D	69	0	66	0	0
2	E	69	0	66	0	0
2	F	69	0	66	0	0
3	A	13	0	5	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	A	1	0	0	0	0
4	B	1	0	0	0	0
4	C	1	0	0	0	0
5	D	17	0	29	0	0
5	E	17	0	29	0	0
5	F	17	0	29	0	0
6	A	214	0	0	1	0
6	B	215	0	0	0	0
6	C	158	0	0	1	0
6	D	2	0	0	0	0
6	E	1	0	0	0	0
6	F	2	0	0	0	0
All	All	21351	0	20244	13	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 0.

All (13) 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:642:THR:HG21	1:C:705:ARG:NH1	2.30	0.46
1:B:55:ARG:HE	1:B:892:ILE:HG21	1.81	0.46
1:B:302:LEU:HD22	1:B:390:ALA:HB1	2.00	0.44
1:C:794:ARG:NH2	6:C:1002:HOH:O	2.51	0.43
1:B:596:CYS:SG	1:B:623:SER:HB2	2.59	0.42
1:B:72:HIS:O	1:B:72:HIS:CG	2.72	0.42
1:A:794:ARG:NH2	6:A:1004:HOH:O	2.53	0.42
1:A:376:GLU:HG3	1:A:397:ARG:HB2	2.01	0.42
1:A:651:TYR:HB2	1:A:699:VAL:HB	2.02	0.42
1:A:118:ILE:HD12	1:A:599:LEU:CD2	2.50	0.41
1:A:596:CYS:SG	1:A:623:SER:HB2	2.60	0.41
1:A:118:ILE:HD12	1:A:599:LEU:HD22	2.02	0.41
1:A:845:LEU:HD11	1:A:857:LEU:HD22	2.03	0.41

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	
						51	68
1	A	834/898 (93%)	809 (97%)	24 (3%)	1 (0%)	51	68
1	B	831/898 (92%)	805 (97%)	26 (3%)	0	100	100
1	C	830/898 (92%)	803 (97%)	27 (3%)	0	100	100
2	D	6/8 (75%)	6 (100%)	0	0	100	100
2	E	6/8 (75%)	6 (100%)	0	0	100	100
2	F	6/8 (75%)	6 (100%)	0	0	100	100
All	All	2513/2718 (92%)	2435 (97%)	77 (3%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	561	GLY

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	
					81	91
1	A	746/794 (94%)	740 (99%)	6 (1%)	81	91
1	B	743/794 (94%)	733 (99%)	10 (1%)	69	84
1	C	742/794 (94%)	736 (99%)	6 (1%)	81	91
2	D	7/7 (100%)	7 (100%)	0	100	100
2	E	7/7 (100%)	7 (100%)	0	100	100
2	F	7/7 (100%)	7 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	2252/2403 (94%)	2230 (99%)	22 (1%)	76 88

All (22) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	252	VAL
1	A	434	THR
1	A	473	LYS
1	A	545	ASP
1	A	718	PHE
1	A	829	HIS
1	B	170	ASP
1	B	273	LEU
1	B	427	GLU
1	B	462	GLU
1	B	545	ASP
1	B	654	HIS
1	B	704	ASN
1	B	718	PHE
1	B	821	GLU
1	B	829	HIS
1	C	247	ARG
1	C	386	GLU
1	C	545	ASP
1	C	596	CYS
1	C	718	PHE
1	C	829	HIS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

3 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	CME	A	708	1	8,9,10	0.86	0	5,9,11	1.21	1 (20%)
1	CME	C	708	1	8,9,10	0.87	0	5,9,11	1.35	1 (20%)
1	CME	B	708	1	8,9,10	0.98	1 (12%)	5,9,11	1.73	1 (20%)

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	CME	A	708	1	-	5/5/8/10	-
1	CME	C	708	1	-	3/5/8/10	-
1	CME	B	708	1	-	4/5/8/10	-

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	708	CME	CB-SG	-2.06	1.74	1.81

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed($^{\circ}$)	Ideal($^{\circ}$)
1	B	708	CME	CB-SG-SD	-3.41	94.99	103.82
1	C	708	CME	CB-SG-SD	-2.58	97.13	103.82
1	A	708	CME	CB-SG-SD	-2.56	97.20	103.82

There are no chirality outliers.

All (12) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	708	CME	N-CA-CB-SG
1	A	708	CME	SD-CE-CZ-OH
1	B	708	CME	N-CA-CB-SG
1	B	708	CME	CZ-CE-SD-SG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
1	B	708	CME	SD-CE-CZ-OH
1	A	708	CME	CE-SD-SG-CB
1	C	708	CME	SD-CE-CZ-OH
1	A	708	CME	CZ-CE-SD-SG
1	C	708	CME	CE-SD-SG-CB
1	A	708	CME	CA-CB-SG-SD
1	C	708	CME	CZ-CE-SD-SG
1	B	708	CME	CA-CB-SG-SD

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 7 ligands modelled in this entry, 3 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	F15	E	101	-	13,16,16	0.27	0	12,16,16	0.51	0
3	FLC	A	901	-	3,12,12	0.25	0	3,17,17	0.82	0
5	F15	F	101	-	13,16,16	0.27	0	12,16,16	0.51	0
5	F15	D	101	-	13,16,16	0.29	0	12,16,16	0.48	0

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
5	F15	E	101	-	-	5/12/14/14	-
3	FLC	A	901	-	-	3/6/16/16	-
5	F15	F	101	-	-	3/12/14/14	-
5	F15	D	101	-	-	7/12/14/14	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (18) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	E	101	F15	C1-C4-C5-C8
5	F	101	F15	C8-C6-C7-C9
5	E	101	F15	C7-C6-C8-C5
5	E	101	F15	C4-C5-C8-C6
5	F	101	F15	C10-C11-C12-C13
3	A	901	FLC	CAC-CA-CB-CG
3	A	901	FLC	CAC-CA-CB-OHB
5	D	101	F15	C10-C11-C12-C13
5	D	101	F15	C12-C13-C2-C3
5	D	101	F15	C6-C7-C9-C10
5	D	101	F15	C1-C4-C5-C8
3	A	901	FLC	CAC-CA-CB-CBC
5	D	101	F15	C4-C5-C8-C6
5	E	101	F15	C8-C6-C7-C9
5	E	101	F15	C9-C10-C11-C12
5	F	101	F15	C9-C10-C11-C12
5	D	101	F15	C9-C10-C11-C12
5	D	101	F15	C13-C2-C3-C14

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

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, 95th 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	840/898 (93%)	0.09	29 (3%) 44 43	42, 59, 96, 165	0
1	B	837/898 (93%)	0.10	21 (2%) 57 55	42, 59, 95, 152	0
1	C	836/898 (93%)	0.10	30 (3%) 42 42	46, 64, 99, 163	0
2	D	8/8 (100%)	1.57	3 (37%) 0 0	57, 63, 88, 89	0
2	E	8/8 (100%)	1.28	2 (25%) 0 0	60, 67, 92, 94	0
2	F	8/8 (100%)	1.12	2 (25%) 0 0	64, 69, 88, 90	0
All	All	2537/2718 (93%)	0.11	87 (3%) 45 44	42, 61, 97, 165	0

All (87) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	74	TYR	10.2
1	A	74	TYR	9.4
1	A	71	TYR	8.4
1	B	71	TYR	8.3
1	C	71	TYR	6.4
1	B	74	TYR	5.4
1	B	420	MET	4.4
1	B	70	LYS	4.2
1	A	72	HIS	4.0
1	B	659	GLY	4.0
1	A	138	LEU	4.0
1	C	75	MET	3.7
1	C	420	MET	3.7
1	A	73	GLY	3.6
1	A	108	ASN	3.6
1	B	256	LEU	3.4
1	A	417	ASP	3.3
1	B	105	SER	3.3
1	C	70	LYS	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	524	ARG	3.2
1	B	487	LYS	3.2
1	B	76	MET	3.2
2	E	10	SER	3.1
1	A	525	HIS	3.1
1	C	256	LEU	3.0
1	C	419	VAL	3.0
2	D	10	SER	3.0
1	B	419	VAL	2.9
1	B	48	LEU	2.9
1	A	420	MET	2.9
1	A	75	MET	2.9
1	B	110	GLU	2.9
1	A	419	VAL	2.9
2	D	12	ARG	2.8
1	B	75	MET	2.8
1	A	139	PHE	2.7
1	A	826	LEU	2.7
1	C	92	ASP	2.7
1	A	524	ARG	2.6
2	F	10	SER	2.6
1	C	417	ASP	2.6
1	B	73	GLY	2.6
1	A	779	ALA	2.6
1	A	857	LEU	2.6
1	A	462	GLU	2.6
1	C	138	LEU	2.6
1	C	525	HIS	2.5
1	B	826	LEU	2.5
1	A	293	PRO	2.5
1	B	776	ILE	2.5
1	C	658	PRO	2.5
2	D	11	LEU	2.5
2	E	12	ARG	2.5
1	A	558	VAL	2.5
1	C	73	GLY	2.5
1	A	70	LYS	2.4
1	C	562	GLU	2.4
1	A	628	PRO	2.3
1	C	49	GLU	2.3
1	C	657	GLN	2.3
1	A	659	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	C	428	SER	2.3
1	C	490	LYS	2.3
1	A	742	ASP	2.2
1	C	418	ASP	2.2
1	A	487	LYS	2.2
1	C	826	LEU	2.2
1	C	897	VAL	2.2
1	C	195	GLN	2.2
1	A	656	LEU	2.2
1	B	485	ILE	2.2
1	B	658	PRO	2.2
1	A	255	GLU	2.2
1	B	524	ARG	2.2
1	A	754	TRP	2.1
1	A	658	PRO	2.1
1	A	778	GLY	2.1
1	C	523	GLY	2.1
1	C	449	ILE	2.1
1	C	827	LEU	2.1
1	B	449	ILE	2.0
1	C	293	PRO	2.0
1	C	512	ILE	2.0
2	F	12	ARG	2.0
1	C	487	LYS	2.0
1	C	48	LEU	2.0
1	B	626	PRO	2.0

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

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, 95th 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	CME	B	708	10/11	0.88	0.22	51,62,92,96	0
1	CME	A	708	10/11	0.91	0.20	59,71,97,98	0
1	CME	C	708	10/11	0.92	0.20	57,72,100,103	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, 95th 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
3	FLC	A	901	13/13	0.59	0.37	110,120,123,124	0
5	F15	F	101	17/17	0.81	0.62	83,95,103,104	0
5	F15	D	101	17/17	0.83	0.58	74,80,99,103	0
5	F15	E	101	17/17	0.86	0.45	72,77,91,93	0
4	CA	B	901	1/1	0.90	0.20	96,96,96,96	0
4	CA	C	901	1/1	0.93	0.13	85,85,85,85	0
4	CA	A	902	1/1	0.95	0.08	78,78,78,78	0

6.5 Other polymers [i](#)

There are no such residues in this entry.