

Full wwPDB X-ray Structure Validation Report (i)

May 14, 2020 – 08:59 pm BST

PDB ID : 5ABG

Title: Structure of GH84 with ligand

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Deposited on : 2015-08-05

Resolution : 2.00 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 (i) symbol.

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 : 2.11

buster-report : 1.1.7 (2018)

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)

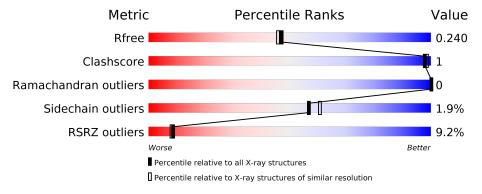
Validation Pipeline (wwPDB-VP) : 2.11

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 2.00 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	$\begin{array}{c} \text{Whole archive} \\ (\#\text{Entries}) \end{array}$	$\begin{array}{c} {\rm Similar\ resolution} \\ (\#{\rm Entries,\ resolution\ range}({\rm \AA})) \end{array}$		
R_{free}	130704	8085 (2.00-2.00)		
Clashscore	141614	9178 (2.00-2.00)		
Ramachandran outliers	138981	9054 (2.00-2.00)		
Sidechain outliers	138945	9053 (2.00-2.00)		
RSRZ outliers	127900	7900 (2.00-2.00)		

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 <=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	726	8%	•	9%			
1	В	726	88%		9%			



2 Entry composition (i)

There are 5 unique types of molecules in this entry. The entry contains 21834 atoms, of which 10707 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 O-GLCNACASE BT_4395.

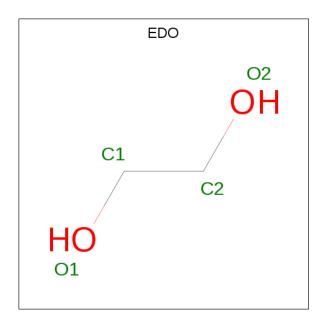
\mathbf{M}	ol	Chain	Residues		Atoms					ZeroOcc	AltConf	Trace
1	L	A	663	Total 10732	C 3460	H 5334	N 912	O 1007	S 19	0	3	0
1	L	В	662	Total 10691	C 3445	H 5311	N 910	O 1006	S 19	0	1	0

There are 20 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-9	MET	-	expression tag	UNP Q89ZI2
A	-8	GLY	-	expression tag	UNP Q89ZI2
A	-7	SER	_	expression tag	UNP Q89ZI2
A	-6	SER	_	expression tag	UNP Q89ZI2
A	-5	HIS	-	expression tag	UNP Q89ZI2
A	-4	HIS	-	expression tag	UNP Q89ZI2
A	-3	HIS	-	expression tag	UNP Q89ZI2
A	-2	HIS	-	expression tag	UNP Q89ZI2
A	-1	HIS	-	expression tag	UNP Q89ZI2
A	0	HIS	_	expression tag	UNP Q89ZI2
В	-9	MET	_	expression tag	UNP Q89ZI2
В	-8	GLY	_	expression tag	UNP Q89ZI2
В	-7	SER	-	expression tag	UNP Q89ZI2
В	-6	SER	-	expression tag	UNP Q89ZI2
В	-5	HIS	_	expression tag	UNP Q89ZI2
В	-4	HIS	_	expression tag	UNP Q89ZI2
В	-3	HIS	-	expression tag	UNP Q89ZI2
В	-2	HIS	=	expression tag	UNP Q89ZI2
В	-1	HIS	=	expression tag	UNP Q89ZI2
В	0	HIS	-	expression tag	UNP Q89ZI2

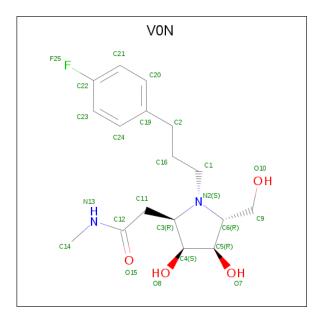
• Molecule 2 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).



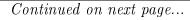


Mol	Chain	Residues					ZeroOcc	AltConf	
2	A	1	Total				0	0	
			10						
9	B	1	Total	С	Η	Ο	0	0	
	ע	1	10	2	6	2		0	

• Molecule 3 is 2-[(2R,3S,4R,5R)-1-[3-(4-fluorophenyl)propyl]-5-(hydroxymethyl)-3,4-bis(oxidanyl)pyrrolidin-2-yl]-N-methyl-ethanamide (three-letter code: V0N) (formula: $C_{17}H_{25}FN_2O_4$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	
2	Λ	1	Total	С	F	Н	N	О	0	0
ا ا	Α	1	49	17	1	25	2	4	0	0





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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	
3	В	1	Total 49			H 25			0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	В	1	Total Ca 1 1	0	0

• Molecule 5 is water.

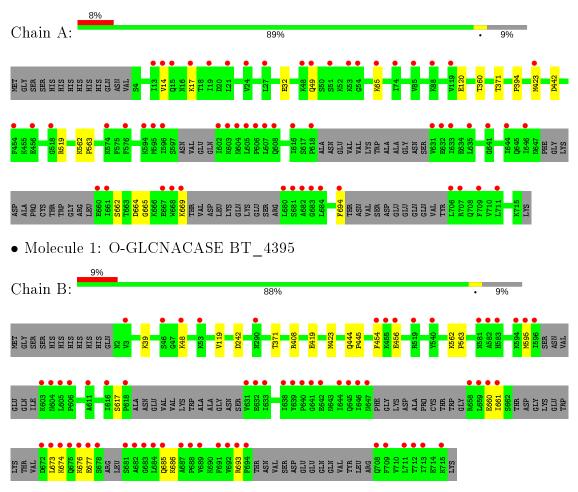
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	148	Total O 148 148	0	0
5	В	144	Total O 144 144	0	0



3 Residue-property plots (i)

These plots are drawn for all protein, RNA and DNA 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: O-GLCNACASE BT_4395





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 2 21 21	Depositor
Cell constants	51.53Å 161.18Å 223.98Å	Depositor
a, b, c, α , β , γ	90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.44 - 2.00	Depositor
resolution (A)	48.44 - 2.00	EDS
% Data completeness	98.7 (48.44-2.00)	Depositor
(in resolution range)	84.6 (48.44-2.00)	EDS
R_{merge}	0.09	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) > 1$	0.98 (at 2.00Å)	Xtriage
Refinement program	PHENIX (PHENIX.REFINE)	Depositor
D D.	0.204 , 0.235	Depositor
R, R_{free}	0.211 , 0.240	DCC
R_{free} test set	6269 reflections (4.99%)	wwPDB-VP
Wilson B-factor (Å ²)	31.3	Xtriage
Anisotropy	0.823	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$, $B_{sol}(Å^2)$	0.39, 51.2	EDS
L-test for twinning ²	$ < L > = 0.50, < L^2 > = 0.34$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	21834	wwPDB-VP
Average B, all atoms (Å ²)	69.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The analyses of the Patterson function reveals a significant off-origin peak that is 21.91 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 6.3489e-03. The detected translational NCS is most likely also responsible for the elevated intensity ratio.

²Theoretical 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.



¹Intensities estimated from amplitudes.

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: CA, V0N, EDO

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 Chair		Bond	lengths	Bond angles		
MIOI	Chain	RMSZ	# Z >5	RMSZ	# Z > 5	
1	A	0.22	0/5544	0.39	0/7506	
1	В	0.22	0/5512	0.39	0/7460	
All	All	0.22	0/11056	0.39	0/14966	

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	5398	5334	5325	6	0
1	В	5380	5311	5310	9	0
2	A	4	6	6	0	0
2	В	4	6	6	0	0
3	A	24	25	25	0	0
3	В	24	25	25	0	0
4	В	1	0	0	0	0
5	A	148	0	0	0	0
5	В	144	0	0	0	0
All	All	11127	10707	10697	15	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 1.

All (15) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic	Clash
7100III I	7100III 2	${f distance} \; ({f A})$	Clash overlap (Å) 0.60 0.58 0.58 0.57 0.55 0.50 0.47 0.44 0.43 0.42 0.42 0.41 0.41 0.41 0.40
1:A:662:SER:OG	1:A:664:ASP:O	2.20	0.60
1:B:676:LYS:CB	1:B:677:GLU:HA	2.34	0.58
1:A:360:THR:OG1	1:A:394:PRO:O	2.21	0.58
1:B:408:ARG:NH1	1:B:419:GLU:OE2	2.38	0.57
1:A:32:GLU:OE2	1:A:65:LYS:NZ	2.29	0.55
1:B:676:LYS:HB3	1:B:677:GLU:HA	1.94	0.50
1:A:664:ASP:OD1	1:A:665:GLY:N	2.47	0.47
1:B:562:LYS:HB3	1:B:563:PRO:HD3	1.98	0.44
1:A:562[B]:LYS:HB3	1:A:563:PRO:HD3	2.01	0.43
1:A:442:ASP:N	1:A:442:ASP:OD1	2.53	0.42
1:B:444:GLN:N	1:B:445:PRO:HD2	2.35	0.42
1:B:660:GLU:HB2	1:B:693:ARG:HB3	2.02	0.41
1:B:660:GLU:CG	1:B:661:ILE:H	2.33	0.41
1:B:242:ASP:N	1:B:242:ASP:OD1	2.54	0.41
1:B:676:LYS:CB	1:B:677:GLU:CA	2.99	0.40

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	Perce	entiles
1	A	$654/726 \ (90\%)$	625 (96%)	29 (4%)	0	100	100
1	В	649/726 (89%)	626 (96%)	23 (4%)	0	100	100
All	All	$1303/1452 \ (90\%)$	1251 (96%)	52 (4%)	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	587/639 (92%)	577 (98%)	10 (2%)	60 65
1	В	585/639 (92%)	571 (98%)	14 (2%)	49 51
All	All	1172/1278 (92%)	1148 (98%)	24 (2%)	57 58

All (24) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	14	VAL
1	A	17	LYS
1	A	49	GLN
1	A	120	GLU
1	A	371	THR
1	A	423[A]	MET
1	A	423[B]	MET
1	A	519	ARG
1	A	669	LYS
1	A	694	PHE
1	В	39	LYS
1	В	48	LYS
1	В	119	VAL
1	В	371	THR
1	В	423[A]	MET
1	В	423[B]	MET
1	В	454	PHE
1	В	456	GLU
1	В	595	MET
1	В	617	SER
1	В	673	LEU
1	В	674	LYS
1	В	685	GLN
1	В	686	LYS

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)

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

5.5 Carbohydrates (i)

There are no carbohydrates in this entry.

5.6 Ligand geometry (i)

Of 5 ligands modelled in this entry, 1 is 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	Во	ond leng	ths	В	ond ang	les
MIOI	Type	Chain	ites	Lilik	Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
3	V0N	В	1718	-	25,25,25	0.63	0	32,34,34	0.98	1 (3%)
2	EDO	В	1717	-	3,3,3	0.46	0	2,2,2	0.23	0
3	V0N	A	1717	-	25,25,25	0.59	0	32,34,34	1.13	3 (9%)
2	EDO	A	1716	-	3,3,3	0.45	0	2,2,2	0.28	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
3	V0N	В	1718	-	-	3/14/34/34	0/2/2/2
2	EDO	В	1717	_	-	0/1/1/1	-
3	V0N	A	1717	-	-	4/14/34/34	0/2/2/2
2	EDO	A	1716	-	-	0/1/1/1	-



There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	$\mathbf{Observed}(^o)$	$\operatorname{Ideal}({}^o)$
3	A	1717	V0N	C23-C22-C21	-2.19	119.91	122.83
3	A	1717	V0N	C1-N2-C3	-2.12	109.70	114.05
3	A	1717	V0N	C1-C16-C2	-2.09	107.47	113.20
3	В	1718	V0N	C23-C22-C21	-2.08	120.07	122.83

There are no chirality outliers.

All (7) torsion outliers are listed below:

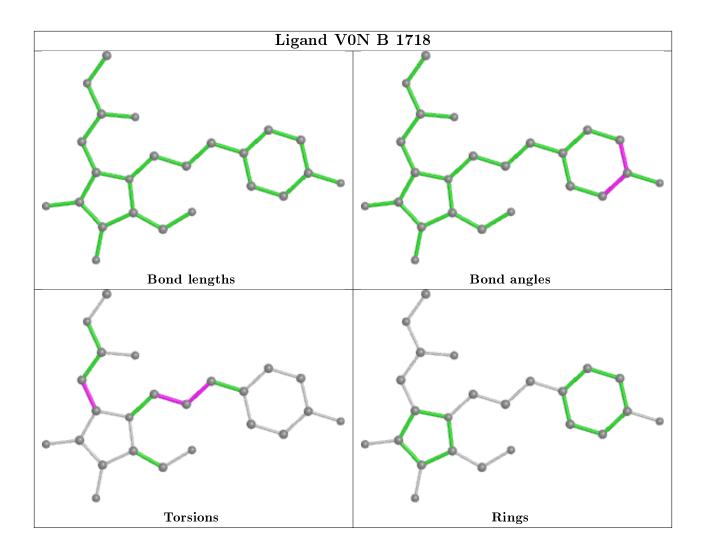
Mol	Chain	Res	Type	Atoms
3	В	1718	V0N	C12-C11-C3-N2
3	A	1717	V0N	C1-C16-C2-C19
3	A	1717	V0N	C12-C11-C3-N2
3	В	1718	V0N	N2-C1-C16-C2
3	В	1718	V0N	C1-C16-C2-C19
3	A	1717	V0N	C24-C19-C2-C16
3	A	1717	V0N	C20-C19-C2-C16

There are no ring outliers.

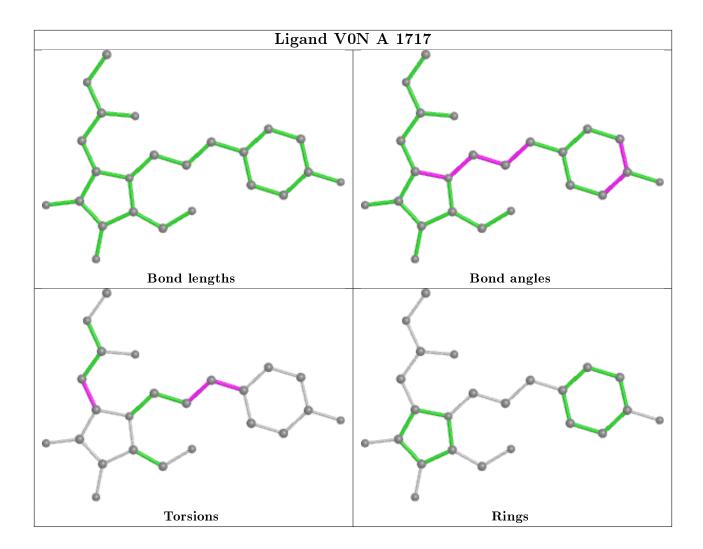
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.









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 (i)

6.1 Protein, DNA and RNA chains (i)

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 $>$	$\# \mathrm{RSR}$	Z>2	2	$OWAB(\AA^2)$	Q < 0.9
1	A	663/726 (91%)	0.64	58 (8%)	10	9	36, 57, 111, 144	0
1	В	$662/726 \ (91\%)$	0.63	64 (9%)	7	7	34, 54, 113, 164	0
All	All	$1325/1452 \ (91\%)$	0.63	122 (9%)	9	8	34, 56, 112, 164	0

All (122) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	В	646	ILE	9.3
1	В	685	GLN	8.1
1	В	692	VAL	8.0
1	A	53	LYS	7.5
1	В	684	LEU	7.4
1	A	616	ILE	7.4
1	В	673	LEU	6.9
1	В	596	ILE	6.4
1	В	631	VAL	6.4
1	В	659	LEU	6.3
1	A	604	ASN	6.3
1	В	683	GLY	6.1
1	В	709	PHE	6.0
1	В	682	ALA	5.7
1	A	682	ALA	5.7
1	В	644	ILE	5.7
1	A	603	LYS	5.7
1	A	680	LEU	5.4
1	В	674	LYS	5.4
1	В	633	ILE	5.3
1	В	694	PHE	5.2
1	В	661	ILE	5.2
1	В	688	PRO	5.2
1	A	709	PHE	5.2

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Mol	nued fron Chain	Res	Type	RSRZ
1	В	618	PRO	5.1
1	В	691	PHE	5.1
1	В	603	LYS	4.9
1	A	14	VAL	4.9
1	В	658	ARG	4.9
1	В	583	HIS	4.8
1	A	631	VAL	4.7
1	A	706	LEU	4.7
1	В	675	GLN	4.6
1	В	687	ALA	4.5
1	В	641	GLY	4.5
1	В	290	ASN	4.4
1	A	661	ILE	4.4
1	В	693	ARG	4.4
1	В	595	MET	4.3
1	В	689	VAL	4.3
1	A	596	ILE	4.2
1	В	715	LYS	4.2
1	A	49	GLN	4.2
1	В	616	ILE	4.1
1	В	672	ASP	4.0
1	A	607	LEU	4.0
1	В	604	ASN	3.8
1	A	51	SER	3.7
1	В	581	ASN	3.7
1	A	606	PRO	3.6
1	A	24	VAL	3.6
1	В	632	GLU	3.5
1	В	605	LEU	3.4
1	A	644	ILE	3.4
1	A	21	LEU	3.4
1	В	676	LYS	3.3
1	A	646	ILE	3.3
1	A	15	GLN	3.2
1	A	595	MET	3.2
1	A	605	LEU	3.2
1	A	683	GLY	3.2
1	В	681	SER	3.2
1	A	85	VAL	3.2
1	A	518	GLY	3.1
1	В	48	LYS	3.1
1	В	660	GLU	3.1

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Mol	Chain	Res	Type	RSRZ		
1	В	594	LYS	3.1		
1	В	640	PRO	3.1		
1	В	642	GLU	3.1		
1	A	668	TRP	3.0		
1	A	27	LEU	3.0		
1	В	519	ARG	2.9		
1	A	681	SER	2.9		
1	A	54	GLY	2.9		
1	A	119	VAL	2.9		
1	A	602	ILE	2.8		
1	В	606	PRO	2.8		
1	A	694	PHE	2.8		
1	В	46	SER	2.7		
1	В	711	LEU	2.7		
1	A	17	LYS	2.7		
1	В	582	ALA	2.6		
1	A	707	ARG	2.6		
1	A	65	LYS	2.6		
1	A	618	PRO	2.6		
1	A	594	LYS	2.6		
1	A	13	ILE	2.5		
1	В	638	ILE	2.5		
1	В	639	TYR	2.5		
1	A	635	LEU	2.5		
1	A	632	GLU	2.5		
1	A	684	LEU	2.5		
1	В	712	THR	2.4		
1	A	19	ILE	2.4		
1	В	645	GLN	2.4		
1	В	611	ALA	2.3		
1	В	713	ILE	2.3		
1	В	454	PHE	2.3		
1	В	677	GLU	2.3		
1	В	53	LYS	2.3		
1	В	678	SER	2.3		
1	A	48	LYS	2.3		
1	A	88	LYS	2.2		
1	A	633	ILE	2.2		
1	A	454	PHE	2.2		
1	A	576	PHE	2.2		
1	A	641	GLY	2.2		
1	В	3	VAL	2.2		
	<u> </u>					

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Mol	Chain	Res	Type	RSRZ	
1	В	455	LYS	2.2	
1	A	456	GLU	2.2	
1	В	647	ASN	2.2	
1	A	574	LYS	2.1	
1	A	667	GLU	2.1	
1	A	711	LEU	2.1	
1	A	423[A]	MET	2.1	
1	В	540	TYR	2.1	
1	A	660	GLU	2.1	
1	A	608	GLN	2.1	
1	В	708	GLN	2.1	
1	В	456	GLU	2.0	
1	A	74	ILE	2.0	
1	A	669	LYS	2.0	

6.2 Non-standard residues in protein, DNA, RNA chains (i)

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

6.3 Carbohydrates (i)

There are no carbohydrates in this entry.

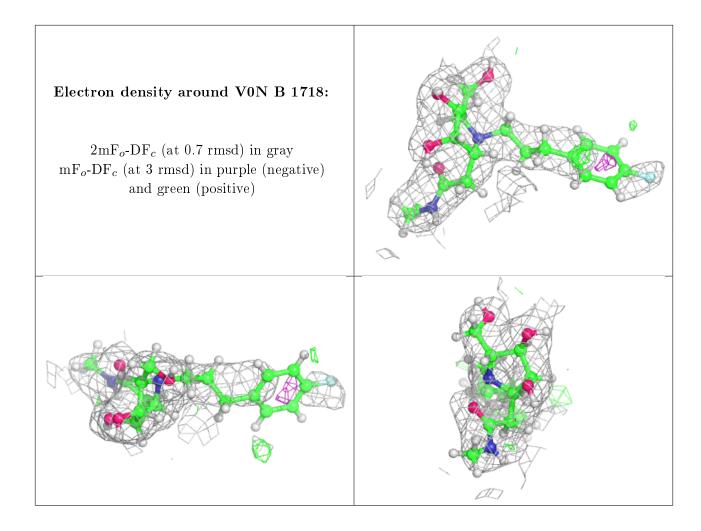
6.4 Ligands (i)

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.

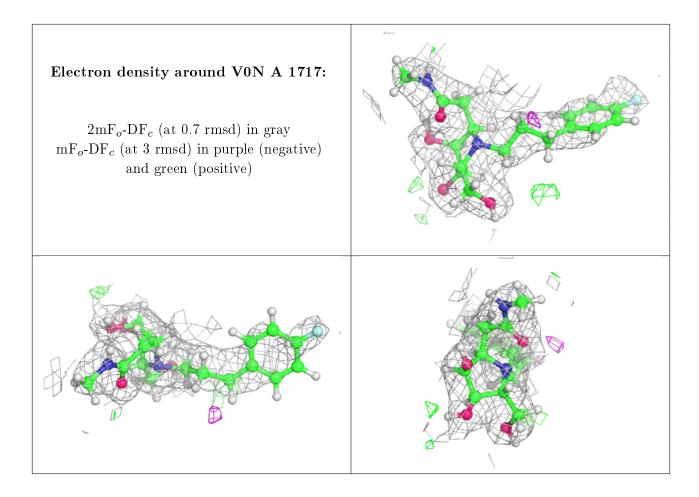
Mol	Type	Chain	Res	Atoms	RSCC	RSR	${f B-factors}({f \AA}^2)$	Q < 0.9
2	EDO	A	1716	4/4	0.85	0.16	48,58,70,70	0
2	EDO	В	1717	4/4	0.92	0.20	50,60,67,67	0
3	V0N	В	1718	24/24	0.92	0.19	40,53,111,116	0
3	V0N	A	1717	24/24	0.94	0.17	37,52,98,106	0
4	CA	В	1716	1/1	0.97	0.14	50,50,50,50	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.









6.5 Other polymers (i)

There are no such residues in this entry.

