

Full wwPDB X-ray Structure Validation Report (i)

Jun 24, 2024 – 09:22 PM EDT

PDB ID	:	6XF4
Title	:	Crystal structure of STING REF variant in complex with E7766
Authors	:	Chen, Y.; Wang, J.Y.; Kim, DS.
Deposited on		
Resolution	:	2.77 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 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:

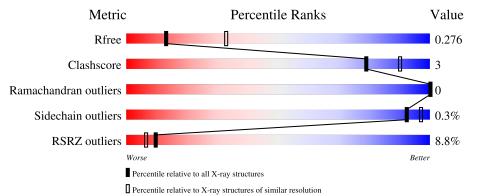
MolProbity	:	4.02b-467
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	1.20.1
EDS	:	2.37.1
buster-report	:	1.1.7(2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.37.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure: $X\text{-}RAY \, DIFFRACTION$

The reported resolution of this entry is 2.77 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	$egin{array}{c} { m Whole \ archive} \ (\#{ m Entries}) \end{array}$	${f Similar\ resolution}\ (\#{ m Entries,\ resolution\ range}({ m \AA}))$
R_{free}	130704	4107 (2.80-2.76)
Clashscore	141614	4575 (2.80-2.76)
Ramachandran outliers	138981	4487 (2.80-2.76)
Sidechain outliers	138945	4489 (2.80-2.76)
RSRZ outliers	127900	4027 (2.80-2.76)

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	А	189	84%	8%	8%
1	В	189	8%	7%	6%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:



Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	EDO	В	403	-	-	-	Х



2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 3002 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 Stimulator of interferon genes protein.

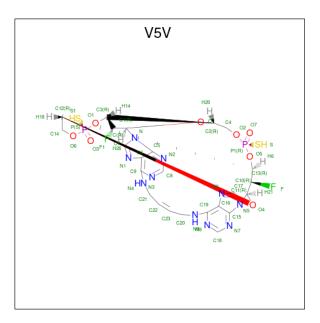
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Δ	174	Total	С	Ν	Ο	S	0	0	0
	A	174	1410	890	250	264	6	0	0	0
1	р	177	Total	С	C N O S O	0	0			
	D	177	1434	904	253	271	6	0	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
А	153	GLY	-	expression tag	UNP Q86WV6
А	154	SER	-	expression tag	UNP Q86WV6
В	153	GLY	-	expression tag	UNP Q86WV6
В	154	SER	-	expression tag	UNP Q86WV6

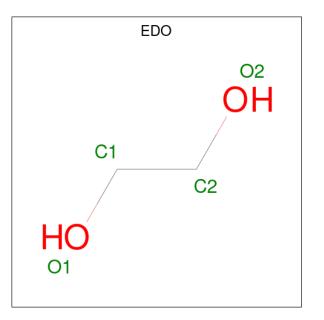
• Molecule 2 is (1R,3R,15E,28R,29R,30R,31R,34R,36R,39S,41R)-29,41-difluoro-34,39-dis ulfanyl-2,33,35,38,40,42-hexaoxa-4,6,9,11,13,18,20,22,25,27-decaaza-34,39-diphosphaoct acyclo[28.6.4.1 3,36 .1 28,31 .0 4,8 .0 7,12 .0 19,24 .0 23,27]dotetraconta-5,7,9,11,15, 19,21,23,25-nonaene 34,39-dioxide (non-preferred name) (three-letter code: V5V) (formula: $C_{24}H_{26}F_2N_{10}O_8P_2S_2$) (labeled as "Ligand of Interest" by depositor).





Mol	Chain	Residues			At	oms				ZeroOcc	AltConf
2	Δ	1	Total	С	F	Ν	Ο	Р	\mathbf{S}	0	1
2	11	T	96	48	4	20	16	4	4	0	1

• Molecule 3 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	А	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
3	А	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
3	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
3	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
3	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0

• Molecule 4 is water.

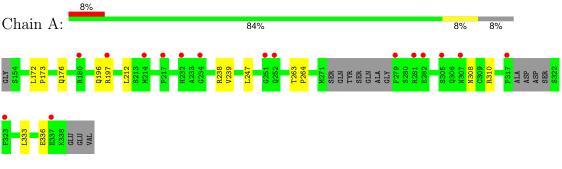
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	А	19	Total O 19 19	0	0
4	В	19	Total O 19 19	0	0



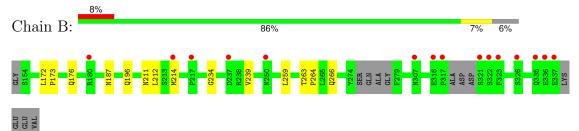
3 Residue-property plots (i)

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: Stimulator of interferon genes protein



• Molecule 1: Stimulator of interferon genes protein





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants	33.73Å 77.83Å 131.69Å	Depositor
a, b, c, α , β , γ	90.00° 90.00° 90.00°	Depositor
Resolution (Å)	38.95 - 2.77	Depositor
Resolution (A)	38.92 - 2.77	EDS
% Data completeness	99.2 (38.95-2.77)	Depositor
(in resolution range)	99.3 (38.92 - 2.77)	EDS
R _{merge}	0.28	Depositor
R _{sym}	(Not available)	Depositor
$< I/\sigma(I) > 1$	$2.22 (at 2.77 \text{\AA})$	Xtriage
Refinement program	REFMAC 5.8.0258	Depositor
D D	0.221 , 0.271	Depositor
R, R_{free}	0.223 , 0.276	DCC
R_{free} test set	434 reflections $(4.64%)$	wwPDB-VP
Wilson B-factor $(Å^2)$	47.7	Xtriage
Anisotropy	0.153	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$, $B_{sol}(Å^2)$	0.33, 30.6	EDS
L-test for twinning ²	$ \langle L \rangle = 0.47, \langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	3002	wwPDB-VP
Average B, all atoms $(Å^2)$	49.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 9.33% of the height of the origin peak. No significant pseudotranslation is detected.

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.



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: EDO, $\rm V5V$

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		lengths	Bond angles		
	Unam	RMSZ	# Z > 5	RMSZ	# Z > 5	
1	А	0.63	0/1436	0.71	0/1943	
1	В	0.63	0/1461	0.71	0/1978	
All	All	0.63	0/2897	0.71	0/3921	

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	А	1410	0	1392	10	0
1	В	1434	0	1406	8	0
2	А	96	0	0	1	0
3	А	8	0	12	0	0
3	В	16	0	24	1	0
4	А	19	0	0	0	0
4	В	19	0	0	0	0
All	All	3002	0	2834	16	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.



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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:239:VAL:HB	1:B:239:VAL:HB	1.91	0.53
1:A:247:LEU:HD12	1:A:333:LEU:HD12	1.90	0.53
1:A:176:GLN:HA	1:A:196:GLN:HE22	1.76	0.50
1:A:197:ARG:HG2	1:A:308:ASN:HA	1.95	0.47
1:B:212:LEU:HD23	1:B:259:LEU:HD23	1.96	0.47
1:B:211:ASN:O	1:B:214:MET:HB3	2.15	0.46
1:A:263:THR:N	1:A:264:PRO:CD	2.80	0.44
1:B:263:THR:N	1:B:264:PRO:CD	2.80	0.44
1:B:176:GLN:HA	1:B:196:GLN:HE22	1.82	0.44
1:A:238:ARG:NH2	2:A:401[B]:V5V:S	2.92	0.43
1:A:176:GLN:H	1:A:176:GLN:CD	2.22	0.43
1:A:310:ARG:NH2	1:A:336:GLU:OE2	2.54	0.41
1:B:172:LEU:N	1:B:173:PRO:CD	2.84	0.41
1:B:187:ASN:HB2	3:B:402:EDO:C2	2.52	0.40
1:A:172:LEU:N	1:A:173:PRO:CD	2.84	0.40
1:A:212:LEU:HD13	1:B:234:GLY:HA3	2.04	0.40

All (16) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

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	А	168/189~(89%)	159~(95%)	9~(5%)	0	100 100
1	В	171/189~(90%)	162~(95%)	9~(5%)	0	100 100
All	All	339/378~(90%)	321 (95%)	18~(5%)	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	А	153/164~(93%)	153~(100%)	0	100 100
1	В	156/164~(95%)	155~(99%)	1 (1%)	86 95
All	All	309/328~(94%)	308 (100%)	1 (0%)	92 97

All (1) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	В	266	GLN

Sometimes side chains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such side chains are listed below:

Mol	Chain	Res	Type
1	А	196	GLN
1	В	196	GLN

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 monosaccharides in this entry.

5.6 Ligand geometry (i)

8 ligands 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	Turne	Type Chain Res		Link	В	ond leng	gths	Bond angles		
	Type	Chain	nes	LIIIK	Counts	RMSZ	# Z >2	Counts	RMSZ	# Z > 2
3	EDO	В	404	-	$3,\!3,\!3$	0.08	0	2,2,2	0.20	0
2	V5V	А	401[B]	-	$43,\!55,\!55$	1.54	8 (18%)	42,84,84	1.41	8 (19%)
3	EDO	В	401	-	$3,\!3,\!3$	0.09	0	2,2,2	0.18	0
3	EDO	В	402	-	3,3,3	0.16	0	2,2,2	0.38	0
3	EDO	А	403	-	$3,\!3,\!3$	0.10	0	2,2,2	0.20	0
3	EDO	В	403	-	$3,\!3,\!3$	0.12	0	2,2,2	0.26	0
2	V5V	А	401[A]	-	$43,\!55,\!55$	1.53	10 (23%)	42,84,84	1.41	8 (19%)
3	EDO	А	402	-	$3,\!3,\!3$	0.09	0	$2,\!2,\!2$	0.11	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	EDO	В	404	-	-	1/1/1/1	-
2	V5V	А	401[B]	-	-	9/27/71/71	-
3	EDO	В	401	-	-	1/1/1/1	-
3	EDO	В	402	-	-	1/1/1/1	-
3	EDO	А	403	-	-	1/1/1/1	-
3	EDO	В	403	-	-	1/1/1/1	-
2	V5V	А	401[A]	-	-	14/27/71/71	-
3	EDO	А	402	-	-	0/1/1/1	-

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	$\operatorname{Observed}(\operatorname{\AA})$	Ideal(Å)
2	А	401[B]	V5V	O4-C11	3.88	1.46	1.40
2	А	401[A]	V5V	O4-C11	3.80	1.45	1.40
2	А	401[A]	V5V	O-C1	3.51	1.45	1.40
2	А	401[B]	V5V	O-C1	3.50	1.45	1.40
2	А	401[A]	V5V	C9-C6	-3.11	1.40	1.44
2	А	401[B]	V5V	C9-C6	-3.05	1.40	1.44
2	А	401[B]	V5V	C19-N9	2.83	1.39	1.34



Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	А	401[A]	V5V	C19-N9	2.79	1.39	1.34
2	А	401[B]	V5V	C9-N4	2.76	1.39	1.34
2	А	401[A]	V5V	C9-N4	2.74	1.38	1.34
2	А	401[A]	V5V	C19-C16	-2.70	1.40	1.44
2	А	401[B]	V5V	C19-C16	-2.68	1.40	1.44
2	А	401[B]	V5V	F1-C	-2.15	1.36	1.40
2	А	401[A]	V5V	C1-N	-2.10	1.44	1.49
2	А	401[A]	V5V	F1-C	-2.09	1.36	1.40
2	А	401[A]	V5V	C11-N5	-2.06	1.44	1.49
2	А	401[A]	V5V	F-C10	-2.06	1.36	1.40
2	А	401[B]	V5V	C1-N	-2.05	1.44	1.49

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All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	$Observed(^{o})$	$Ideal(^{o})$
2	А	401[B]	V5V	C18-N8-C19	3.62	119.41	116.60
2	А	401[A]	V5V	C18-N8-C19	3.61	119.40	116.60
2	А	401[B]	V5V	C8-N3-C9	2.93	118.87	116.60
2	А	401[A]	V5V	C15-C16-N6	-2.87	106.31	109.34
2	А	401[A]	V5V	C8-N3-C9	2.84	118.80	116.60
2	А	401[B]	V5V	C15-C16-N6	-2.82	106.36	109.34
2	А	401[A]	V5V	C-C3-C2	-2.77	98.87	102.41
2	А	401[B]	V5V	C-C3-C2	-2.65	99.03	102.41
2	А	401[A]	V5V	C12-O4-C11	-2.55	107.59	109.92
2	А	401[A]	V5V	C2-O-C1	-2.54	107.59	109.92
2	А	401[B]	V5V	C12-O4-C11	-2.50	107.64	109.92
2	А	401[B]	V5V	C2-O-C1	-2.48	107.65	109.92
2	А	401[B]	V5V	C5-C6-N1	-2.23	106.98	109.34
2	А	401[B]	V5V	O5-C13-C10	2.14	116.51	110.07
2	А	401[A]	V5V	C5-C6-N1	-2.14	107.08	109.34
2	А	401[A]	V5V	O5-C13-C10	2.04	116.22	110.07

There are no chirality outliers.

All (28) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	А	401[A]	V5V	C3-O1-P-O3
2	А	401[A]	V5V	O4-C12-C14-O6
2	А	401[A]	V5V	C-C3-O1-P
2	А	401[A]	V5V	C2-C3-O1-P
3	В	403	EDO	O1-C1-C2-O2
3	В	404	EDO	O1-C1-C2-O2



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Mol	Chain	\mathbf{Res}	Type	Atoms				
2	А	401[B]	V5V	C10-C13-O5-P1				
2	А	401[A]	V5V	N8-C19-N9-C20				
2	А	401[A]	V5V	N3-C9-N4-C21				
2	А	401[B]	V5V	N8-C19-N9-C20				
2	А	401[B]	V5V	N3-C9-N4-C21				
3	А	403	EDO	O1-C1-C2-O2				
2	А	401[A]	V5V	C13-C12-C14-O6				
2	А	401[B]	V5V	C13-O5-P1-O7				
3	В	402	EDO	O1-C1-C2-O2				
2	А	401[A]	V5V	C10-C13-O5-P1				
2	А	401[A]	V5V	C14-O6-P-O1				
2	А	401[A]	V5V	N9-C20-C23-C22				
2	А	401[B]	V5V	N9-C20-C23-C22				
2	А	401[B]	V5V	N4-C21-C22-C23				
2	А	401[A]	V5V	C14-O6-P-O3				
2	А	401[A]	V5V	C12-C13-O5-P1				
2	А	401[B]	V5V	C12-C13-O5-P1				
2	А	401[A]	V5V	N4-C21-C22-C23				
2	А	401[A]	V5V	C4-O2-P1-O7				
3	В	401	EDO	O1-C1-C2-O2				
2	А	401[B]	V5V	C14-O6-P-O3				
2	А	401[B]	V5V	C2-C3-O1-P				

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There are no ring outliers.

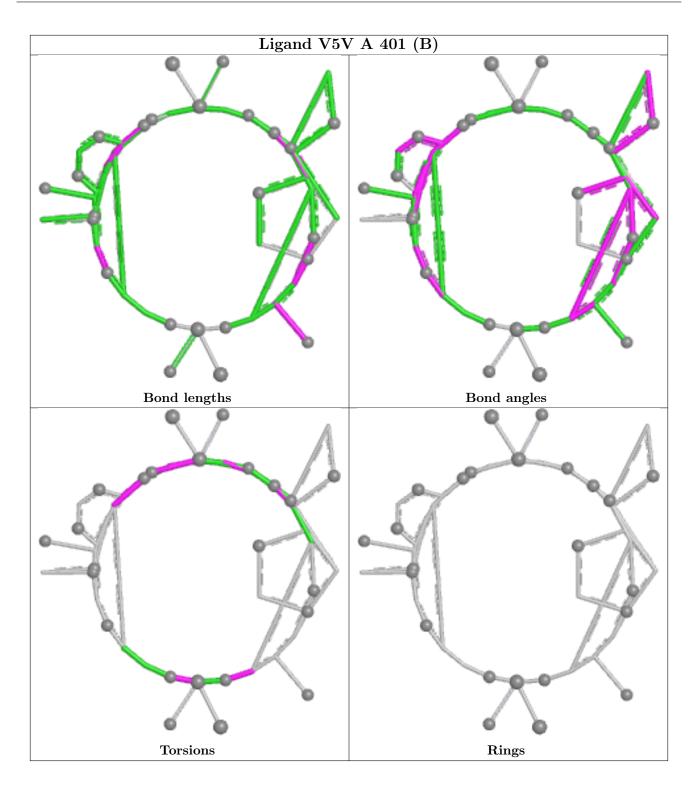
2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	А	401[B]	V5V	1	0
3	В	402	EDO	1	0

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 sufficient 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.

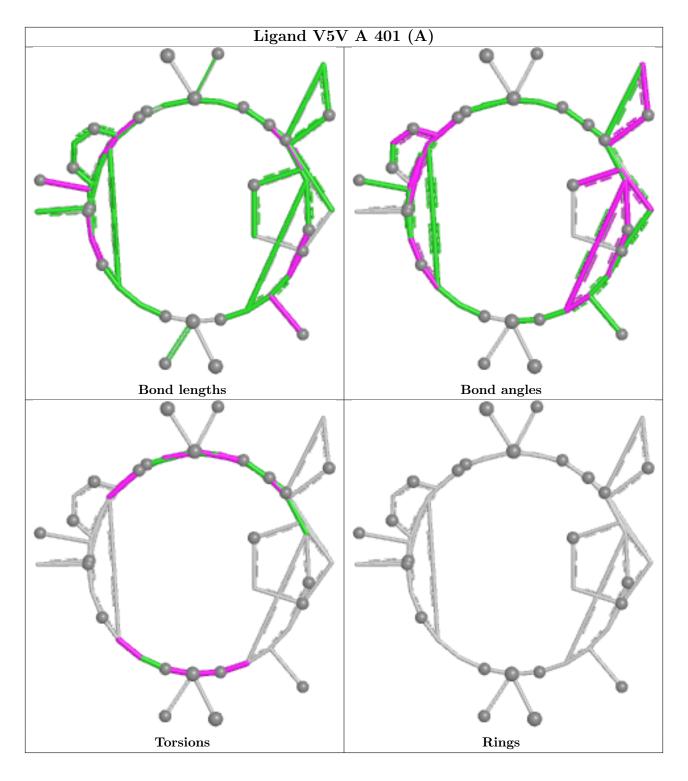












5.7 Other polymers (i)

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 $>$	#RSRZ>2	$OWAB(Å^2)$	Q<0.9
1	А	174/189~(92%)	0.34	16 (9%) 9 6	28, 46, 76, 103	1 (0%)
1	В	177/189~(93%)	0.40	15 (8%) 10 7	28, 47, 79, 93	0
All	All	351/378~(92%)	0.37	31 (8%) 10 6	28, 46, 78, 103	1 (0%)

All (31) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	В	337	GLU	6.3
1	В	323	PHE	5.6
1	В	317	PRO	5.4
1	В	214	MET	5.0
1	А	337	GLU	4.7
1	А	197	ARG	4.0
1	А	251	GLY	4.0
1	А	307	ASN	3.8
1	В	321	SER	3.7
1	А	282	GLU	3.6
1	В	250	ASN	3.3
1	А	214	MET	3.3
1	В	335	GLN	3.3
1	А	217	PRO	3.2
1	В	316	GLU	2.9
1	А	281	ARG	2.6
1	В	217	PRO	2.5
1	А	279	PHE	2.3
1	А	232	HIS	2.3
1	В	322	SER	2.3
1	В	180	ARG	2.2
1	А	252	GLN	2.1
1	А	317	PRO	2.1
1	А	323	PHE	2.1



Mol	Chain	Res	Type	RSRZ
1	А	180	ARG	2.1
1	А	234	GLY	2.1
1	В	326	SER	2.1
1	В	336	GLU	2.1
1	В	237	ASP	2.1
1	В	307	ASN	2.0
1	А	305	SER	2.0

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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 monosaccharides in this entry.

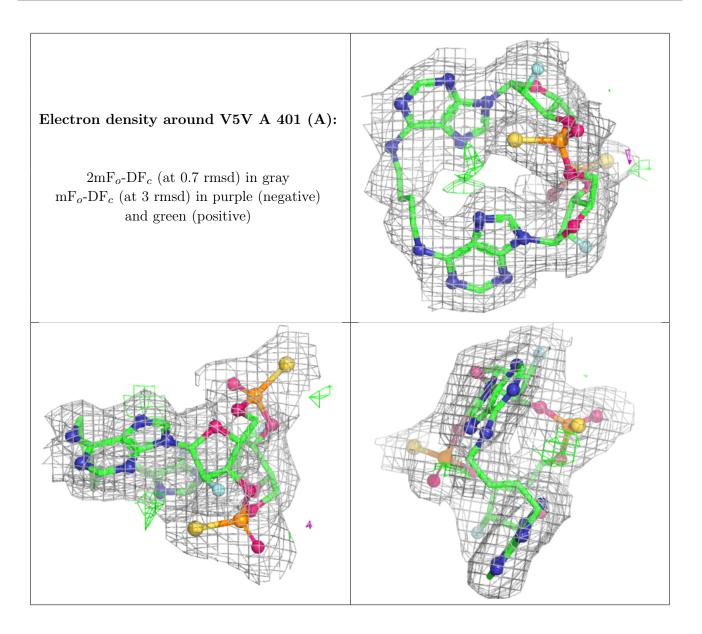
6.4 Ligands (i)

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.

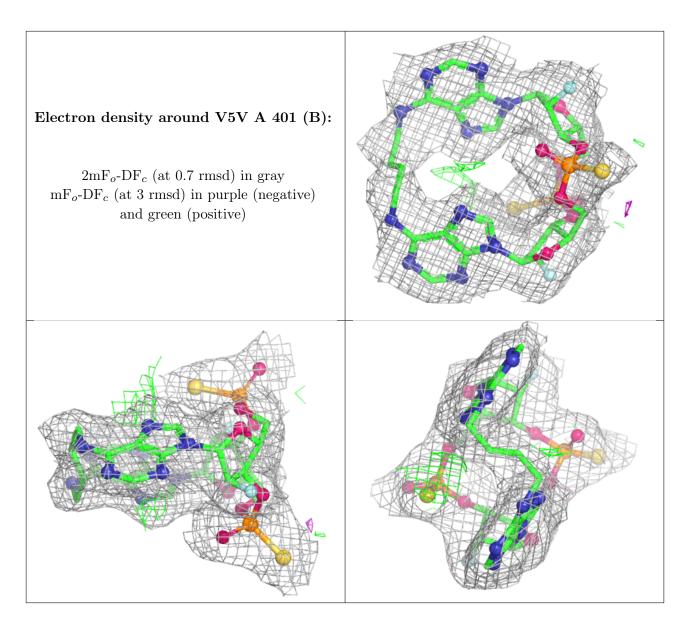
Mol	Type	Chain	Res	Atoms	RSCC	RSR	$B-factors(Å^2)$	Q<0.9
3	EDO	В	403	4/4	0.51	0.41	81,84,85,85	0
3	EDO	А	403	4/4	0.61	0.37	59,62,63,64	0
3	EDO	В	402	4/4	0.70	0.26	69,72,74,74	0
3	EDO	В	404	4/4	0.71	0.30	58, 58, 59, 59	0
3	EDO	В	401	4/4	0.79	0.20	64,65,65,66	0
3	EDO	А	402	4/4	0.86	0.18	60,62,63,64	0
2	V5V	А	401[A]	48/48	0.97	0.14	27,28,30,31	48
2	V5V	А	401[B]	48/48	0.97	0.14	29,30,33,37	48

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.

