

Full wwPDB X-ray Structure Validation Report (i)

May 22, 2020 – 04:36 am BST

PDB ID : 5WQJ

Title : Crystal structure of 3-Mercaptopyruvate Sulfurtransferase(3MST) in complex

with compound1

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Deposited on : 2016-11-27

Resolution : 1.20 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)

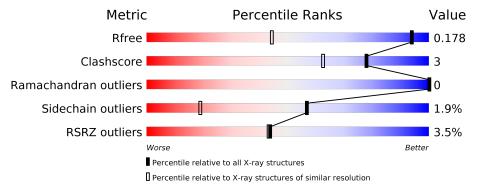
Validation Pipeline (wwPDB-VP) : 2.11

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 1.20 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	$\begin{array}{c} \text{Whole archive} \\ (\#\text{Entries}) \end{array}$	$\begin{array}{c} {\rm Similar \; resolution} \\ (\#{\rm Entries, \; resolution \; range(\AA)}) \end{array}$
R_{free}	130704	1223 (1.22-1.18)
Clashscore	141614	1286 (1.22-1.18)
Ramachandran outliers	138981	1240 (1.22-1.18)
Sidechain outliers	138945	1239 (1.22-1.18)
RSRZ outliers	127900	1200 (1.22-1.18)

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	297	92%	5%	.		
1	В	297	90%	8%			



2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 5270 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 Sulfurtransferase.

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	Trace		
1	A	288	Total 2363	C 1501	N 419	O 436	S 7	0	10	0
1	В	292	Total 2401	C 1520	N 426	O 448	S 7	0	11	0

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	65	SER	CYS	engineered mutation	UNP Q505N7
A	255	SER	CYS	engineered mutation	UNP Q505N7
A	264	SER	CYS	engineered mutation	UNP Q505N7
В	65	SER	CYS	engineered mutation	UNP Q505N7
В	255	SER	CYS	engineered mutation	UNP Q505N7
В	264	SER	CYS	engineered mutation	UNP Q505N7

• Molecule 2 is 2-[2-[(4-oxidanylidene-3 {H}-quinazolin-2-yl)sulfanyl]ethanoylamino]thiophen e-3-carboxamide (three-letter code: 7N3) (formula: $C_{15}H_{12}N_4O_3S_2$).



Mol	Chain	Residues	${f Atoms}$			ZeroOcc	AltConf			
9	Λ	1	Total	С	Ν	О	S	0	0	
2	A	1	24	15	4	3	2	0		
9	D	1	Total	С	N	О	S	0	0	
	Б	1	24	15	4	3	2	0	U	

 \bullet Molecule 3 is SODIUM ION (three-letter code: NA) (formula: Na).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	В	2	Total Na 2 2	0	0
3	A	3	Total Na 3 3	0	0

• Molecule 4 is water.

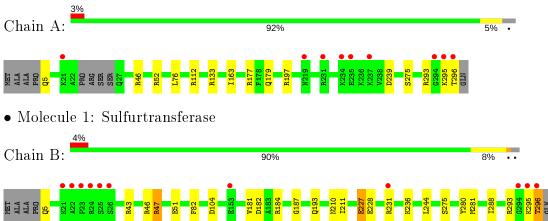
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	223	Total O 223 223	0	0
4	В	230	Total O 230 230	0	0



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: Sulfurtransferase





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants	37.35	Donositon
a, b, c, α , β , γ	90.00° 110.09° 90.00°	Depositor
Resolution (Å)	30.26 - 1.20	Depositor
Resolution (A)	30.26 - 1.20	EDS
% Data completeness	97.4 (30.26-1.20)	Depositor
(in resolution range)	97.8 (30.26-1.20)	EDS
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) > 1$	3.21 (at 1.20Å)	Xtriage
Refinement program	REFMAC 5.8.0073	Depositor
D D.	0.140 , 0.171	Depositor
R, R_{free}	0.150 , 0.178	DCC
R_{free} test set	8379 reflections (4.90%)	wwPDB-VP
Wilson B-factor (Å ²)	10.1	Xtriage
Anisotropy	0.293	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$, $B_{sol}(Å^2)$	0.37 , 43.9	EDS
L-test for twinning ²	$< L >=0.51, < L^2>=0.34$	Xtriage
Estimated twinning fraction	0.118 for h,-k,-h-l	Xtriage
Reported twinning fraction	0.638 for H, K, L	Depositor
Reported twinning fraction	0.362 for -H, -K, H+L	Depositor
Outliers	0 of 171032 reflections	Xtriage
F_o, F_c correlation	0.97	EDS
Total number of atoms	5270	wwPDB-VP
Average B, all atoms (Å ²)	13.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 6.69% of the height of the origin peak. No significant pseudotranslation is detected.

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: NA, CSS, 7N3

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		
MIOI	Chain	RMSZ	# Z >5	RMSZ	# Z > 5	
1	A	0.74	0/2421	0.93	$6/3278 \; (0.2\%)$	
1	В	0.77	0/2462	0.97	$8/3336 \ (0.2\%)$	
All	All	0.76	0/4883	0.95	14/6614 (0.2%)	

There are no bond length outliers.

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	\mathbf{Z}	$Observed(^o)$	$\operatorname{Ideal}({}^{o})$
1	В	184	ARG	NE-CZ-NH2	-9.48	115.56	120.30
1	В	293	ARG	NE-CZ-NH2	-9.30	115.65	120.30
1	В	293	ARG	NE-CZ-NH1	8.54	124.57	120.30
1	A	133	ARG	NE-CZ-NH2	-6.59	117.00	120.30
1	A	52	ARG	NE-CZ-NH1	-6.43	117.08	120.30
1	В	82	PHE	CB-CG-CD2	6.19	125.13	120.80
1	A	52	ARG	NE-CZ-NH2	6.10	123.35	120.30
1	В	182	ASP	CB-CG-OD2	-6.03	112.87	118.30
1	A	46	ARG	NE-CZ-NH2	-5.99	117.31	120.30
1	В	46	ARG	NE-CZ-NH2	-5.97	117.32	120.30
1	В	184	ARG	NE-CZ-NH1	5.73	123.17	120.30
1	В	43	ARG	NE-CZ-NH2	-5.51	117.55	120.30
1	A	293	ARG	NE-CZ-NH2	5.12	122.86	120.30
1	A	112	ARG	NE-CZ-NH1	5.11	122.86	120.30

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	2363	0	2278	10	0
1	В	2401	0	2299	15	0
2	A	24	0	0	1	0
2	В	24	0	0	1	0
3	A	3	0	0	0	0
3	В	2	0	0	0	0
4	A	223	0	0	2	0
4	В	230	0	0	5	0
All	All	5270	0	4577	27	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.

All (27) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	$\begin{array}{c} {\rm Interatomic} \\ {\rm distance} \ ({\rm \AA}) \end{array}$	Clash overlap (Å)
1:B:47:ARG:HD2	4:B:402:HOH:O	1.59	0.99
1:A:177[B]:ARG:O	1:A:177[B]:ARG:HD2	1.67	0.94
1:B:228[B]:GLU:OE2	1:B:231:ARG:NH1	2.14	0.81
1:A:179[A]:GLN:HE22	1:A:239:ASP:H	1.33	0.75
1:B:104:ASP:OD1	4:B:401:HOH:O	2.05	0.75
1:A:177[B]:ARG:HD2	1:A:177[B]:ARG:C	2.11	0.70
1:A:177[B]:ARG:NH2	4:A:402:HOH:O	2.24	0.70
1:B:227[A]:GLU:HG3	4:B:439:HOH:O	1.92	0.69
1:A:177[B]:ARG:CZ	4:A:402:HOH:O	2.43	0.64
1:B:228[B]:GLU:OE2	1:B:231:ARG:CZ	2.50	0.58
1:B:295:LYS:O	1:B:296:THR:HG23	2.05	0.56
1:B:281[B]:MET:HA	1:B:281[B]:MET:HE3	1.87	0.56
1:B:211:ILE:HG12	1:B:236:LYS:HG3	1.89	0.52
2:A:301:7N3:S1	2:A:301:7N3:O	2.68	0.52
1:B:47:ARG:CD	4:B:402:HOH:O	2.36	0.51
1:B:51:GLU:HG2	4:B:402:HOH:O	2.13	0.49
1:B:181:VAL:CG2	1:B:244:LEU:HD11	2.43	0.48
1:B:281[B]:MET:HA	1:B:281[B]:MET:CE	2.44	0.47
2:B:301:7N3:O	2:B:301:7N3:S1	2.73	0.47

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Atom-1	Atom-2	Interatomic	Clash
		${f distance} ({f A})$	overlap(A)
1:A:179[A]:GLN:NE2	1:A:239:ASP:H	2.09	0.45
1:A:76:LEU:CD1	1:A:163[A]:ILE:HD11	2.47	0.45
1:B:210:ASN:O	1:B:236:LYS:HE2	2.17	0.44
1:B:280:TYR:CE2	1:B:288[B]:ILE:HD13	2.52	0.43
1:B:187:GLY:HA3	1:B:193:GLN:CG	2.50	0.42
1:A:177[B]:ARG:C	1:A:177[B]:ARG:CD	2.83	0.42
1:A:197:ARG:HD3	1:A:197:ARG:HA	1.91	0.42
1:A:76:LEU:HD11	1:A:163[A]:ILE:HD11	2.01	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	Perce	ntiles
1	A	$294/297 \ (99\%)$	289 (98%)	5 (2%)	0	100	100
1	В	301/297 (101%)	295 (98%)	6 (2%)	0	100	100
All	All	595/594 (100%)	584 (98%)	11 (2%)	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	249/245 (102%)	245 (98%)	4 (2%)	62 27	

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Mol	Chain	Analysed	$egin{array}{c c} egin{array}{c c} \egin{array}{c c} egin{array}{c c} \egin{array}{c c} arra$		Percentiles		
1	В	254/245 (104%)	248 (98%)	6 (2%)	49	12	
All	All	503/490 (103%)	493 (98%)	10 (2%)	57	17	

All (10) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5	GLN
1	A	275	SER
1	A	295	LYS
1	A	296	THR
1	В	5	GLN
1	В	47	ARG
1	В	227[A]	GLU
1	В	227[B]	GLU
1	В	275	SER
1	В	296	THR

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)

2 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			\mathbf{B}	ond ang	gles
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
1	CSS	A	248	1	4,6,7	0.97	0	1,6,8	0.20	0
1	CSS	В	248	1	4,6,7	0.70	0	1,6,8	0.20	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
1	CSS	A	248	1	-	0/1/5/7	-
1	CSS	В	248	1	-	0/1/5/7	-

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.

5.5 Carbohydrates (i)

There are no carbohydrates in this entry.

5.6 Ligand geometry (i)

Of 7 ligands modelled in this entry, 5 are monoatomic - leaving 2 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	Chain	Chain	Chain	Res	Link	Bo	nd leng	ths	В	ond ang	les
MIOI			nes	Lilik	Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2			
2	7N3	В	301	-	24,26,26	1.45	3 (12%)	24,36,36	3.38	9 (37%)			
2	7N3	A	301	-	24,26,26	1.32	3 (12%)	24,36,36	2.96	7 (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
2	7N3	В	301	_	-	0/8/13/13	0/3/3/3
2	7N3	A	301	_	=	0/8/13/13	0/3/3/3

All (6) bond length outliers are listed below:

Mol	Chain	${f Res}$	Type	${f Atoms}$	\mathbf{Z}	${f Observed(\AA)}$	$oxed{Ideal(A)}$
2	В	301	7N3	C3-N	3.91	1.40	1.34
2	A	301	7N3	C13-C10	3.21	1.48	1.41
2	A	301	7N3	C1-C	3.15	1.47	1.41
2	В	301	7N3	C13-C10	2.78	1.47	1.41
2	A	301	7N3	C4-C	-2.60	1.37	1.41
2	В	301	7N3	C3-S	-2.46	1.71	1.75

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	\mathbf{Z}	$Observed(^o)$	$\operatorname{Ideal}({}^o)$
2	В	301	7N3	C1-C2-N1	-12.47	115.71	124.40
2	A	301	7N3	C1-C2-N1	-9.78	117.59	124.40
2	В	301	7N3	C2-N1-C3	7.25	124.11	115.79
2	A	301	7N3	C2-N1-C3	6.91	123.71	115.79
2	A	301	7N3	C1-C-N	-4.29	121.27	123.60
2	В	301	7N3	C1-C-N	-3.89	121.49	123.60
2	A	301	7N3	C6-C1-C2	3.84	127.24	121.61
2	A	301	7N3	C2-C1-C	-3.42	115.62	118.59
2	В	301	7N3	C13-C14-N3	-2.89	113.84	118.29
2	В	301	7N3	C6-C1-C	2.79	121.62	117.55
2	В	301	7N3	C4-C-C1	-2.20	117.02	120.05
2	A	301	7N3	C10-N2-C9	-2.20	119.55	124.36
2	A	301	7N3	C7-C5-C4	2.09	123.38	120.44
2	В	301	7N3	C8-C9-N2	2.06	117.23	114.41
2	В	301	7N3	N-C3-N1	-2.04	123.22	126.95
2	В	301	7N3	O1-C14-C13	2.00	122.60	120.24

There are no chirality outliers.

There are no torsion outliers.

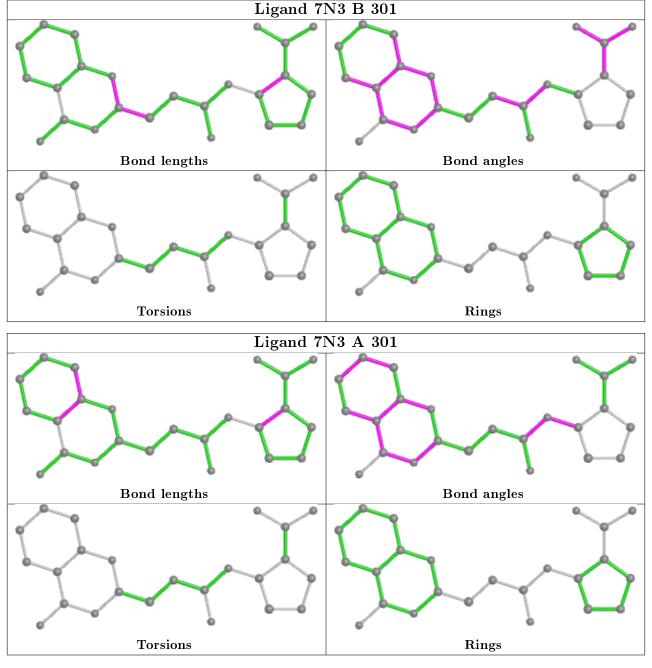
There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	${f Res}$	Type	Clashes	Symm-Clashes
2	В	301	7N3	1	0
2	A	301	7N3	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 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 $>$	$\#\mathrm{RSRZ}{>}2$	$OWAB(Å^2)$	Q < 0.9
1	A	287/297 (96%)	0.21	9 (3%) 49 48	6, 12, 24, 56	0
1	В	291/297 (97%)	0.26	11 (3%) 40 40	5, 11, 26, 50	0
All	All	578/594 (97%)	0.23	20 (3%) 44 43	5, 12, 26, 56	0

All (20) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	В	296	THR	8.8
1	A	296	THR	6.8
1	В	295	LYS	5.8
1	В	294	GLY	5.2
1	В	23	PRO	4.9
1	В	24	ARG	4.4
1	В	22	ALA	4.4
1	В	26	SER	3.5
1	В	25	SER	3.3
1	A	231	ARG	3.3
1	A	295	LYS	3.2
1	A	219	ASN	2.7
1	A	294	GLY	2.5
1	A	235	GLU	2.3
1	В	21	LYS	2.2
1	В	153	GLU	2.2
1	В	231	ARG	2.1
1	A	21	LYS	2.1
1	A	234	LYS	2.0
1	A	237	LYS	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, 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	$\mathbf{B} ext{-}\mathbf{factors}(\mathbf{\mathring{A}}^2)$	Q < 0.9
1	CSS	A	248	7/8	0.99	0.07	6,7,8,8	0
1	CSS	В	248	7/8	0.99	0.07	6,6,8,8	0

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	${f B\text{-factors}}({f \AA}^2)$	Q<0.9
2	7N3	В	301	24/24	0.98	0.07	8,9,13,14	0
2	7N3	A	301	24/24	0.98	0.06	8,10,13,16	0
3	NA	A	304	1/1	0.99	0.16	13,13,13,13	0
3	NA	A	303	1/1	1.00	0.05	18,18,18,18	0
3	NA	В	302	1/1	1.00	0.05	6,6,6,6	0
3	NA	A	302	1/1	1.00	0.04	6,6,6,6	0
3	NA	В	303	1/1	1.00	0.05	17,17,17,17	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.



Electron density around 7N3 B 301: $2 \mathrm{mF}_o\text{-}\mathrm{DF}_c$ (at 0.7 rmsd) in gray mF_o -DF_c (at 3 rmsd) in purple (negative) and green (positive) Electron density around 7N3 A 301: $2 \mathrm{mF}_o\text{-}\mathrm{DF}_c$ (at 0.7 rmsd) in gray mF_o -DF_c (at 3 rmsd) in purple (negative) and green (positive)



6.5 Other polymers (i)

There are no such residues in this entry.

