

wwPDB X-ray Structure Validation Summary Report (i)

Apr 7, 2022 – 12:13 PM EDT

PDB ID : 3KZL

Title: Crystal structure of BA2930 mutant (H183G) in complex with AcCoA

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GID)

Deposited on : 2009-12-08

Resolution : 2.10 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 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 : 2.27

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)

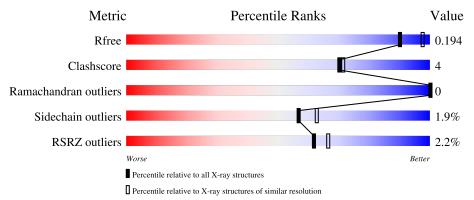
Validation Pipeline (wwPDB-VP) : 2.27

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 2.10 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 $(\# \mathrm{Entries})$	${f Similar \ resolution} \ (\#{f Entries},\ {f resolution \ range}({f \AA}))$		
R_{free}	130704	5197 (2.10-2.10)		
Clashscore	141614	5710 (2.10-2.10)		
Ramachandran outliers	138981	5647 (2.10-2.10)		
Sidechain outliers	138945	5648 (2.10-2.10)		
RSRZ outliers	127900	5083 (2.10-2.10)		

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	268	90%	9%	-			
1	В	268	90%	9%	-			
1	С	268	92%	6%				
1	D	268	90%	9%				



2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 8859 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 Aminoglycoside N3-acetyltransferase.

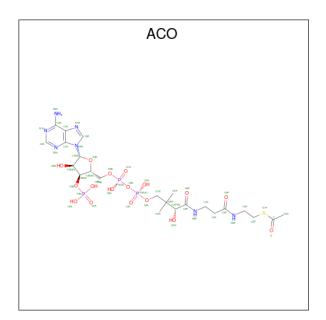
Mol	Chain	Residues		Atoms					ZeroOcc	AltConf	Trace
1	Λ	266	Total	С	N	О	S	Se	0	1	0
1	A	200	2024	1284	346	382	3	9	U	1	
1	D	266	Total	С	N	О	S	Se	0	0	0
1	D	200	2060	1305	350	393	3	9	U		
1	С	264	Total	С	N	О	S	Se	0	0	0
1		204	2017	1281	341	383	3	9		U	
1	В	266	Total	С	N	О	S	Se	0	2	0
1	D	200	2071	1311	358	390	3	9	U	<u> </u>	

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-2	SER	-	expression tag	UNP Q81P86
A	-1	ASN	-	expression tag	UNP Q81P86
A	0	ALA	-	expression tag	UNP Q81P86
A	183	GLY	HIS	engineered mutation	UNP Q81P86
D	-2	SER	-	expression tag	UNP Q81P86
D	-1	ASN	-	expression tag	UNP Q81P86
D	0	ALA	-	expression tag	UNP Q81P86
D	183	GLY	HIS	engineered mutation	UNP Q81P86
С	-2	SER	-	expression tag	UNP Q81P86
С	-1	ASN	-	expression tag	UNP Q81P86
С	0	ALA	-	expression tag	UNP Q81P86
С	183	GLY	HIS	engineered mutation	UNP Q81P86
В	-2	SER	-	expression tag	UNP Q81P86
В	-1	ASN	-	expression tag	UNP Q81P86
В	0	ALA	-	expression tag	UNP Q81P86
В	183	GLY	HIS	engineered mutation	UNP Q81P86

• Molecule 2 is ACETYL COENZYME *A (three-letter code: ACO) (formula: C₂₃H₃₈N₇O₁₇P₃S).





Mol	Chain	Residues	Atoms				ZeroOcc	AltConf			
2	Λ	1	Total	С	N	О	Р	S	0	0	
2	A	1	51	23	7	17	3	1	0	0	
2	D	1	Total	С	N	О	Р	S	0	0	
2	ט	1	51	23	7	17	3	1			
2	С	1	Total	С	N	О	Р	S	0	0	
2		1	51	23	7	17	3	1	0	0	
2	В	1	Total	С	N	О	Р	S	0	0	
	Ъ	1	51	23	7	17	3	1			

• Molecule 3 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Cl 1 1	0	0
3	D	3	Total Cl 3 3	0	0
3	С	4	Total Cl 4 4	0	0
3	В	3	Total Cl 3 3	0	0

• Molecule 4 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	D	1	Total Mg 1 1	0	0

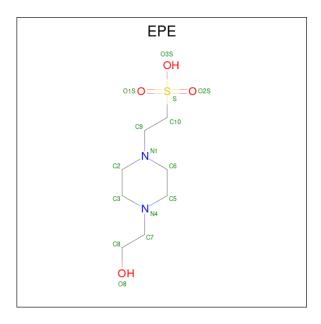
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	В	1	Total Mg 1 1	0	0

• Molecule 5 is 4-(2-HYDROXYETHYL)-1-PIPERAZINE ETHANESULFONIC ACID (three-letter code: EPE) (formula: $C_8H_{18}N_2O_4S$).



Mol	Chain	Residues		Ato	oms			ZeroOcc	AltConf
5	В	1	Total 15	C 8	N 2	O 4	S 1	0	0

• Molecule 6 is water.

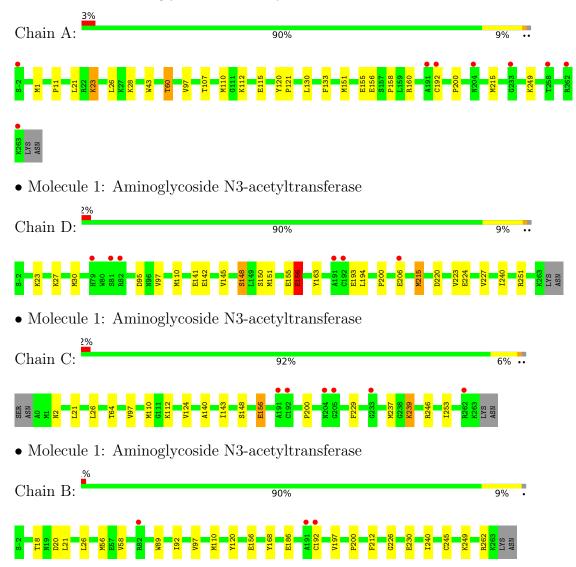
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	98	Total O 98 98	0	0
6	D	126	Total O 126 126	0	0
6	С	102	Total O 102 102	0	0
6	В	129	Total O 129 129	0	0



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: Aminoglycoside N3-acetyltransferase





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants	71.83Å 109.18Å 73.72Å	Denogitor
a, b, c, α , β , γ	90.00° 111.91° 90.00°	Depositor
Resolution (Å)	34.57 - 2.10	Depositor
rtesolution (A)	40.46 - 2.15	EDS
% Data completeness	98.8 (34.57-2.10)	Depositor
(in resolution range)	91.3 (40.46-2.15)	EDS
R_{merge}	0.12	Depositor
R_{sym}	0.12	Depositor
$< I/\sigma(I) > 1$	3.14 (at 2.16Å)	Xtriage
Refinement program	REFMAC 5.5.0072	Depositor
P. P.	0.180 , 0.232	Depositor
R, R_{free}	0.192 , 0.194	DCC
R_{free} test set	2664 reflections (5.09%)	wwPDB-VP
Wilson B-factor (Å ²)	24.7	Xtriage
Anisotropy	0.099	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$, $B_{sol}(Å^2)$	0.35 , 40.6	EDS
L-test for twinning ²	$< L > = 0.50, < L^2> = 0.33$	Xtriage
Estimated twinning fraction	0.006 for l,-k,h	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	8859	wwPDB-VP
Average B, all atoms (Å ²)	17.0	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 52.45 % 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 4.8533e-05. 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: CL, EPE, MG, ACO

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).

Mal	Chain	Bo	nd lengths	Bond angles		
IVIOI	Mol Chain		# Z > 5	RMSZ	# Z > 5	
1	A	0.63	0/2060	0.68	0/2790	
1	В	0.68	0/2108	0.71	0/2845	
1	С	0.65	0/2052	0.71	0/2776	
1	D	0.69	$1/2095 \ (0.0\%)$	0.72	1/2828 (0.0%)	
All	All	0.66	1/8315 (0.0%)	0.70	1/11239 (0.0%)	

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	$Ideal(\AA)$
1	D	156	GLU	CB-CG	5.31	1.62	1.52

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	$Observed(^o)$	$Ideal(^{o})$
1	D	95	ASP	CB-CG-OD1	5.01	122.81	118.30

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	2024	0	1960	18	0
1	В	2071	0	2053	21	0

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Mol	Chain		H(model)	H(added)	Clashes	Symm-Clashes
1	С	2017	0	1968	11	0
1	D	2060	0	2043	12	0
2	A	51	0	34	2	0
2	В	51	0	34	1	0
2	С	51	0	34	1	0
2	D	51	0	34	1	0
3	A	1	0	0	0	0
3	В	3	0	0	0	0
3	С	4	0	0	0	0
3	D	3	0	0	0	0
4	В	1	0	0	0	0
4	D	1	0	0	0	0
5	В	15	0	17	0	0
6	A	98	0	0	2	0
6	В	129	0	0	0	0
6	С	102	0	0	1	0
6	D	126	0	0	0	0
All	All	8859	0	8177	60	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 4.

The worst 5 of 60 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	$egin{aligned} & ext{Interatomic} \ & ext{distance} \ & ext{(Å)} \end{aligned}$	$\begin{array}{c} \text{Clash} \\ \text{overlap } (\text{\AA}) \end{array}$
1:D:151:MSE:HE1	1:D:215:MSE:HG3	1.51	0.91
1:B:110:MSE:HE1	2:B:266:ACO:H22	1.61	0.81
1:A:110:MSE:HE1	2:A:266:ACO:H22	1.68	0.74
1:D:110:MSE:HE1	2:D:266:ACO:H22	1.70	0.74
1:D:97:VAL:HG13	1:D:200:PRO:HG3	1.72	0.71

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 r	number of residu	ies for which	the backbone	conformation	was
analysed, and the total number of	residues.				

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Perce	ntiles
1	A	265/268~(99%)	256 (97%)	9 (3%)	0	100	100
1	В	$266/268 \ (99\%)$	259 (97%)	7 (3%)	0	100	100
1	С	$262/268 \; (98\%)$	254 (97%)	8 (3%)	0	100	100
1	D	264/268 (98%)	257 (97%)	7 (3%)	0	100	100
All	All	1057/1072 (99%)	1026 (97%)	31 (3%)	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	$216/224\ (96\%)$	212 (98%)	4 (2%)	57 63
1	В	$227/224 \ (101\%)$	226 (100%)	1 (0%)	91 94
1	C	217/224 (97%)	213 (98%)	4 (2%)	59 65
1	D	$228/224 \ (102\%)$	220 (96%)	8 (4%)	36 38
All	All	888/896 (99%)	871 (98%)	17 (2%)	57 63

5 of 17 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	С	156	GLU
1	В	156	GLU
1	D	206	GLU
1	D	215	MSE
1	D	220	ASP

Sometimes 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 monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 18 ligands modelled in this entry, 13 are monoatomic - leaving 5 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	Вс	ond leng	ths	Bond angles		
MIOI	туре	Chain	nes	Lilik	Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	ACO	D	266	-	45,53,53	0.91	1 (2%)	56,79,79	2.03	13 (23%)
2	ACO	С	266	-	45,53,53	0.76	0	56,79,79	2.36	10 (17%)
5	EPE	В	267	-	15,15,15	0.98	1 (6%)	18,20,20	1.09	2 (11%)
2	ACO	В	266	-	45,53,53	0.81	0	56,79,79	1.16	4 (7%)
2	ACO	A	266	-	45,53,53	0.92	2 (4%)	56,79,79	2.38	10 (17%)

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	ACO	D	266	-	-	1/47/67/67	0/3/3/3
2	ACO	С	266	-	-	5/47/67/67	0/3/3/3
5	EPE	В	267	-	-	8/9/19/19	0/1/1/1
2	ACO	В	266	-	-	0/47/67/67	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	ACO	A	266	_	-	4/47/67/67	0/3/3/3

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	\mathbf{Z}	$\operatorname{Observed}(\text{\AA})$	$\operatorname{Ideal}(ext{\AA})$
5	В	267	EPE	C10-S	3.25	1.82	1.77
2	D	266	ACO	CDP-CBP	-2.82	1.47	1.53
2	A	266	ACO	C5A-C4A	2.43	1.47	1.40
2	A	266	ACO	C5A-N7A	-2.01	1.32	1.39

The worst 5 of 39 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	\mathbf{Z}	$\mathbf{Observed}(^o)$	$\mathrm{Ideal}(^{o})$
2	С	266	ACO	CDP-CBP-CAP	-9.37	92.58	108.82
2	A	266	ACO	CDP-CBP-CAP	-8.93	93.33	108.82
2	A	266	ACO	CEP-CBP-CAP	-7.91	95.11	108.82
2	С	266	ACO	CEP-CBP-CAP	-7.15	96.43	108.82
2	С	266	ACO	CEP-CBP-CDP	7.06	123.56	109.17

There are no chirality outliers.

5 of 18 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	266	ACO	S1P-C2P-C3P-N4P
5	В	267	EPE	C10-C9-N1-C6
5	В	267	EPE	C9-C10-S-O1S
5	В	267	EPE	C9-C10-S-O2S
5	В	267	EPE	C9-C10-S-O3S

There are no ring outliers.

4 monomers are involved in 5 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	D	266	ACO	1	0
2	С	266	ACO	1	0
2	В	266	ACO	1	0
2	A	266	ACO	2	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></rsrz>	$\# \mathrm{RSRZ}{>}2$	$OWAB(A^2)$	Q<0.9
1	A	257/268 (95%)	-0.04	8 (3%) 49 55	9, 16, 32, 45	0
1	В	257/268 (95%)	-0.06	3 (1%) 79 82	8, 15, 29, 39	0
1	С	255/268~(95%)	-0.02	6 (2%) 59 64	8, 16, 30, 39	0
1	D	257/268 (95%)	0.01	6 (2%) 60 65	8, 15, 30, 40	0
All	All	1026/1072 (95%)	-0.03	23 (2%) 62 66	8, 16, 30, 45	0

The worst 5 of 23 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	191	ALA	5.0
1	С	204	ASN	4.9
1	В	192	CYS	4.8
1	С	191	ALA	4.1
1	A	263	LYS	4.0

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 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.



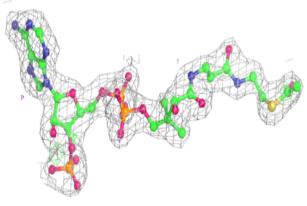
Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\operatorname{B-factors}(\mathrm{\AA}^2)$	Q<0.9
5	EPE	В	267	15/15	0.56	0.27	74,79,86,86	0
4	MG	D	270	1/1	0.84	0.06	36,36,36,36	0
4	MG	В	269	1/1	0.90	0.06	36,36,36,36	0
3	CL	A	267	1/1	0.93	0.09	38,38,38,38	0
3	CL	D	269	1/1	0.94	0.10	38,38,38,38	0
3	CL	С	269	1/1	0.96	0.09	34,34,34,34	0
2	ACO	A	266	51/51	0.96	0.11	20,28,44,47	0
3	CL	С	270	1/1	0.97	0.07	37,37,37,37	0
3	CL	В	268	1/1	0.97	0.10	38,38,38,38	0
2	ACO	D	266	51/51	0.97	0.12	13,21,37,38	0
2	ACO	С	266	51/51	0.97	0.11	18,24,40,44	0
2	ACO	В	266	51/51	0.97	0.12	15,22,37,40	0
3	CL	D	267	1/1	0.98	0.05	37,37,37,37	0
3	CL	С	267	1/1	0.98	0.08	34,34,34,34	0
3	CL	В	271	1/1	0.99	0.11	36,36,36,36	0
3	CL	С	268	1/1	0.99	0.07	35,35,35,35	0
3	CL	D	268	1/1	0.99	0.10	41,41,41,41	0
3	CL	В	270	1/1	0.99	0.08	32,32,32,32	0

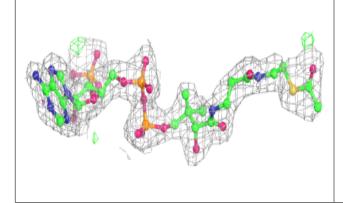
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

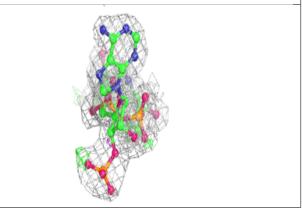


Electron density around ACO A 266: $2 {\rm mF}_o\text{-}{\rm DF}_c \ ({\rm at}\ 0.7\ {\rm rmsd}) \ {\rm in}\ {\rm gray}$

 ${
m mF}_o{
m -DF}_c$ (at 3 rmsd) in purple (negative) and green (positive)

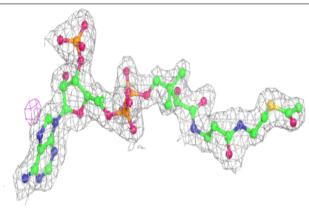


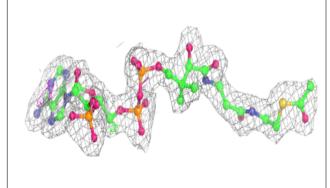


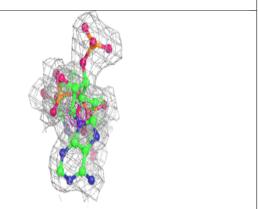


Electron density around ACO D 266:

 $2 {
m mF}_o {
m -DF}_c$ (at 0.7 rmsd) in gray ${
m mF}_o {
m -DF}_c$ (at 3 rmsd) in purple (negative) and green (positive)



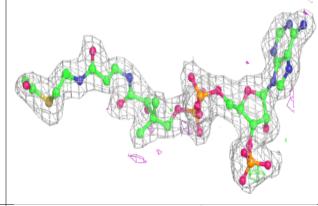


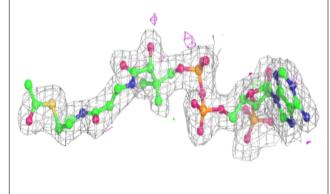


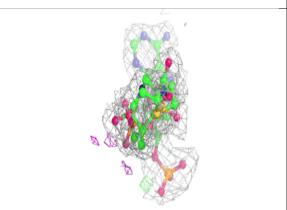


Electron density around ACO C 266:

 $2 {\rm mF}_o\text{-}{\rm DF}_c$ (at 0.7 rmsd) in gray ${\rm mF}_o\text{-}{\rm DF}_c$ (at 3 rmsd) in purple (negative) and green (positive)

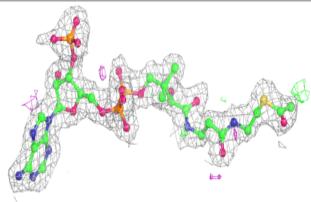


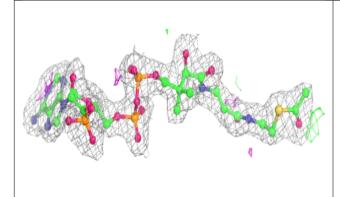


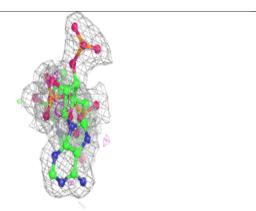


Electron density around ACO B 266:

 $2 \mathrm{mF}_o\text{-}\mathrm{DF}_c$ (at 0.7 rmsd) in gray $\mathrm{mF}_o\text{-}\mathrm{DF}_c$ (at 3 rmsd) in purple (negative) and green (positive)









6.5 Other polymers (i)

There are no such residues in this entry.

