



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 05:20 PM UTC

PDB ID : 6CYB / pdb_00006cyb
Title : PDE2 in complex with compound 7
Authors : Lu, J.
Deposited on : 2018-04-05
Resolution : 1.62 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 types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4-5-2 with Phenix2.0
Mogul : 2022.3.0, CSD as543be (2022)
Xtriage (Phenix) : 2.0
EDS : 3.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.010 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

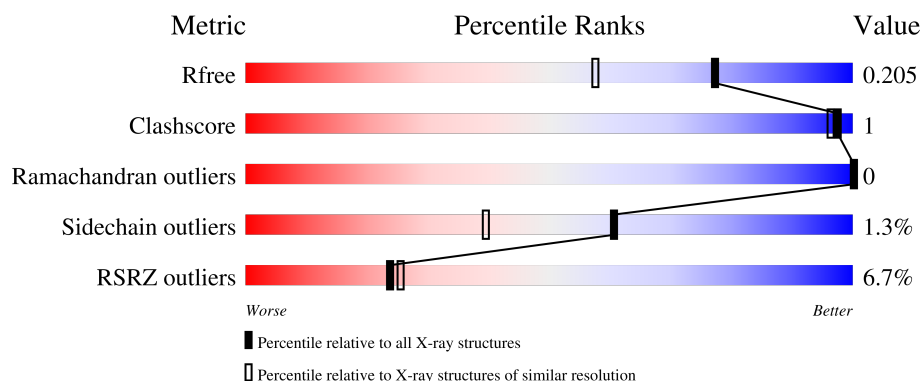
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

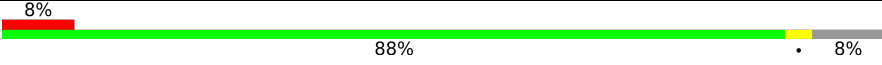
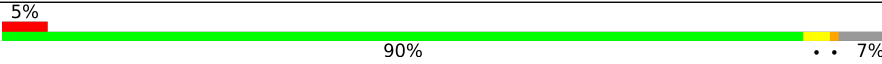
The reported resolution of this entry is 1.62 Å.

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}	180053	6728 (1.64-1.60)
Clashscore	190562	7023 (1.64-1.60)
Ramachandran outliers	187476	6898 (1.64-1.60)
Sidechain outliers	187428	6896 (1.64-1.60)
RSRZ outliers	180081	6727 (1.64-1.60)

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 $\leq 5\%$. 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	373	
1	B	373	

2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 6067 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 cGMP-dependent 3',5'-cyclic phosphodiesterase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	343	Total	C	N	O	S	0	5	0
			2771	1768	465	511	27			
1	B	347	Total	C	N	O	S	0	5	0
			2835	1807	483	518	27			

There are 62 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	547	MET	-	expression tag	UNP O00408
A	548	HIS	-	expression tag	UNP O00408
A	549	HIS	-	expression tag	UNP O00408
A	550	HIS	-	expression tag	UNP O00408
A	551	HIS	-	expression tag	UNP O00408
A	552	HIS	-	expression tag	UNP O00408
A	553	HIS	-	expression tag	UNP O00408
A	554	GLU	-	expression tag	UNP O00408
A	555	ASN	-	expression tag	UNP O00408
A	556	LEU	-	expression tag	UNP O00408
A	557	TYR	-	expression tag	UNP O00408
A	558	PHE	-	expression tag	UNP O00408
A	559	GLN	-	expression tag	UNP O00408
A	560	GLY	-	expression tag	UNP O00408
A	561	GLU	-	expression tag	UNP O00408
A	562	LEU	-	expression tag	UNP O00408
A	563	SER	-	expression tag	UNP O00408
A	564	THR	-	expression tag	UNP O00408
A	565	SER	-	expression tag	UNP O00408
A	566	LEU	-	expression tag	UNP O00408
A	567	TYR	-	expression tag	UNP O00408
A	568	LYS	-	expression tag	UNP O00408
A	569	LYS	-	expression tag	UNP O00408
A	570	ALA	-	expression tag	UNP O00408
A	571	GLY	-	expression tag	UNP O00408

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Chain	Residue	Modelled	Actual	Comment	Reference
A	572	PHE	-	expression tag	UNP O00408
A	573	ASP	-	expression tag	UNP O00408
A	574	ASP	-	expression tag	UNP O00408
A	575	ASP	-	expression tag	UNP O00408
A	576	ASP	-	expression tag	UNP O00408
A	577	LYS	-	expression tag	UNP O00408
B	547	MET	-	expression tag	UNP O00408
B	548	HIS	-	expression tag	UNP O00408
B	549	HIS	-	expression tag	UNP O00408
B	550	HIS	-	expression tag	UNP O00408
B	551	HIS	-	expression tag	UNP O00408
B	552	HIS	-	expression tag	UNP O00408
B	553	HIS	-	expression tag	UNP O00408
B	554	GLU	-	expression tag	UNP O00408
B	555	ASN	-	expression tag	UNP O00408
B	556	LEU	-	expression tag	UNP O00408
B	557	TYR	-	expression tag	UNP O00408
B	558	PHE	-	expression tag	UNP O00408
B	559	GLN	-	expression tag	UNP O00408
B	560	GLY	-	expression tag	UNP O00408
B	561	GLU	-	expression tag	UNP O00408
B	562	LEU	-	expression tag	UNP O00408
B	563	SER	-	expression tag	UNP O00408
B	564	THR	-	expression tag	UNP O00408
B	565	SER	-	expression tag	UNP O00408
B	566	LEU	-	expression tag	UNP O00408
B	567	TYR	-	expression tag	UNP O00408
B	568	LYS	-	expression tag	UNP O00408
B	569	LYS	-	expression tag	UNP O00408
B	570	ALA	-	expression tag	UNP O00408
B	571	GLY	-	expression tag	UNP O00408
B	572	PHE	-	expression tag	UNP O00408
B	573	ASP	-	expression tag	UNP O00408
B	574	ASP	-	expression tag	UNP O00408
B	575	ASP	-	expression tag	UNP O00408
B	576	ASP	-	expression tag	UNP O00408
B	577	LYS	-	expression tag	UNP O00408

- Molecule 2 is ZINC ION (CCD ID: ZN) (formula: Zn).

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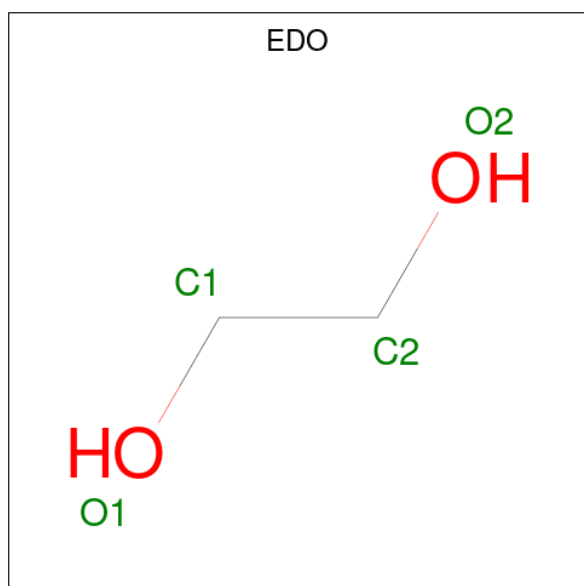
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Zn 1 1	0	0
2	B	1	Total Zn 1 1	0	0

- Molecule 3 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Mg 1 1	0	0
3	B	1	Total Mg 1 1	0	0

- Molecule 4 is 1,2-ETHANEDIOL (CCD ID: EDO) (formula: C₂H₆O₂).



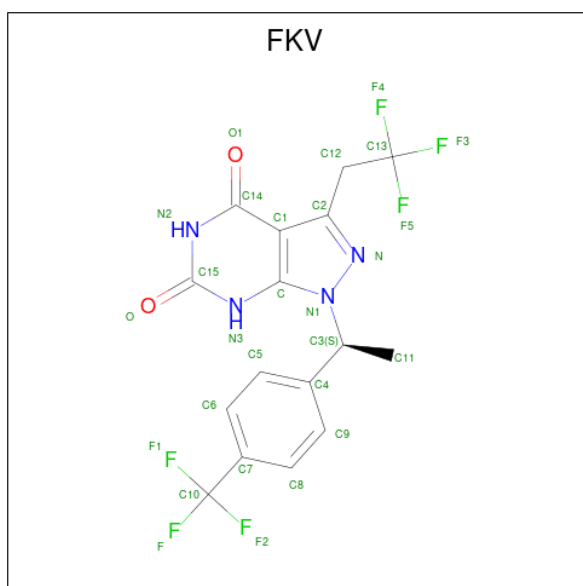
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 4 2 2	0	0
4	A	1	Total C O 4 2 2	0	0
4	A	1	Total C O 4 2 2	0	0
4	A	1	Total C O 4 2 2	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total	C	O	0	0
			4	2	2		
4	B	1	Total	C	O	0	0
			4	2	2		
4	B	1	Total	C	O	0	0
			4	2	2		
4	B	1	Total	C	O	0	0
			4	2	2		

- Molecule 5 is 3-(2,2,2-trifluoroethyl)-1-[(1S)-1-[4-(trifluoromethyl)phenyl]ethyl]-1H-pyrazolo[3,4-d]pyrimidine-4,6(5H,7H)-dione (CCD ID: FKV) (formula: C₁₆H₁₂F₆N₄O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
5	A	1	Total	C	F	N	O	0	0
			28	16	6	4	2		
5	B	1	Total	C	F	N	O	0	0
			28	16	6	4	2		

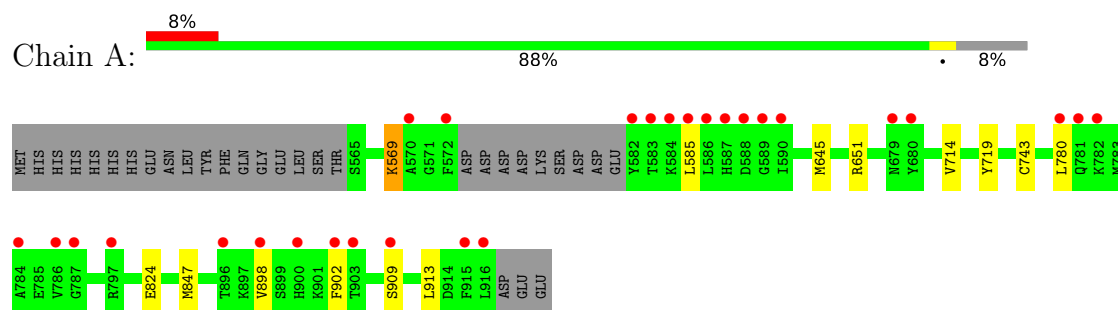
- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	176	Total	O	0	0
			176	176		
6	B	193	Total	O	0	0
			193	193		

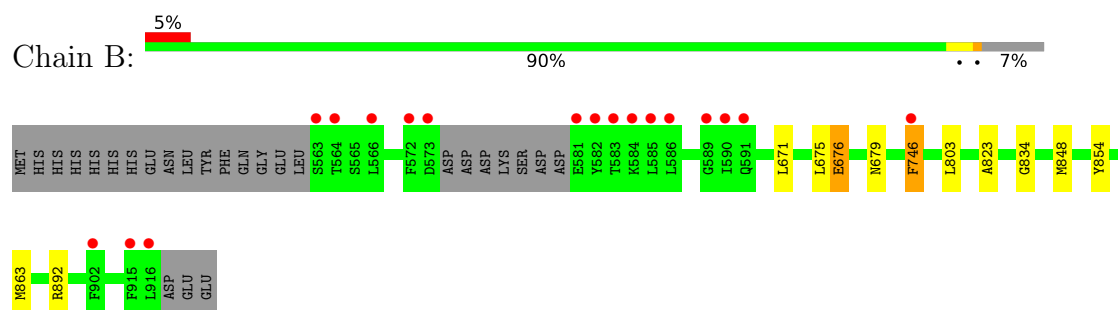
3 Residue-property plots [i](#)

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: cGMP-dependent 3',5'-cyclic phosphodiesterase



- Molecule 1: cGMP-dependent 3',5'-cyclic phosphodiesterase



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	72.26Å 96.64Å 102.04Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	70.17 – 1.62 70.17 – 1.62	Depositor EDS
% Data completeness (in resolution range)	99.4 (70.17-1.62) 99.9 (70.17-1.62)	Depositor EDS
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.97 (at 1.63Å)	Xtriage
Refinement program	BUSTER 2.11.7	Depositor
R, R_{free}	0.179 , 0.201 0.180 , 0.205	Depositor DCC
R_{free} test set	4512 reflections (4.97%)	wwPDB-VP
Wilson B-factor (Å ²)	19.7	Xtriage
Anisotropy	0.364	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 39.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	6067	wwPDB-VP
Average B, all atoms (Å ²)	25.0	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 22.06 % 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 6.1660e-03. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ZN, FKV, 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	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.83	1/2843 (0.0%)	1.12	4/3846 (0.1%)
1	B	0.82	0/2903	1.07	3/3920 (0.1%)
All	All	0.83	1/5746 (0.0%)	1.10	7/7766 (0.1%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	847	MET	SD-CE	-5.10	1.66	1.79

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	746	PHE	CA-CB-CG	9.14	122.94	113.80
1	B	854	TYR	CA-C-N	5.45	125.66	120.43
1	B	854	TYR	C-N-CA	5.45	125.66	120.43
1	A	902	PHE	CA-CB-CG	5.23	119.03	113.80
1	A	719	TYR	N-CA-C	5.13	121.25	114.12
1	A	780	LEU	CA-C-N	5.04	127.00	120.44
1	A	780	LEU	C-N-CA	5.04	127.00	120.44

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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	2771	0	2647	3	0
1	B	2835	0	2737	6	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
4	A	20	0	30	0	0
4	B	12	0	18	0	0
5	A	28	0	0	0	0
5	B	28	0	0	0	0
6	A	176	0	0	0	0
6	B	193	0	0	2	0
All	All	6067	0	5432	9	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 (9) 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:A:824[B]:GLU:HG2	1:A:913:LEU:HG	1.97	0.47
1:B:676:GLU:HG3	1:B:679:ASN:HD22	1.82	0.45
1:A:645:MET:HG3	1:A:743:CYS:SG	2.57	0.45
1:B:823:ALA:HA	6:B:1102:HOH:O	2.18	0.43
1:B:863:MET:HE1	6:B:1116:HOH:O	2.19	0.41
1:B:675:LEU:O	1:B:676:GLU:HG2	2.21	0.41
1:B:834:GLY:HA3	1:B:848:MET:O	2.21	0.41
1:B:671:LEU:HD13	1:B:803:LEU:HD22	2.02	0.41
1:A:569:LYS:HG2	1:A:651:ARG:HG2	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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	A	344/373 (92%)	340 (99%)	4 (1%)	0	100	100
1	B	348/373 (93%)	344 (99%)	4 (1%)	0	100	100
All	All	692/746 (93%)	684 (99%)	8 (1%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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	298/337 (88%)	293 (98%)	5 (2%)	53	29
1	B	308/337 (91%)	305 (99%)	3 (1%)	68	50
All	All	606/674 (90%)	598 (99%)	8 (1%)	61	39

All (8) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	569	LYS
1	A	585	LEU
1	A	714	VAL
1	A	898	VAL
1	A	909	SER
1	B	676	GLU
1	B	746	PHE
1	B	892	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (6) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	591	GLN
1	A	624	GLN
1	A	630	ASN
1	A	708	GLN
1	B	679	ASN

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Mol	Chain	Res	Type
1	B	708	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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 14 ligands modelled in this entry, 4 are monoatomic - leaving 10 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	$\# Z > 2$
4	EDO	B	1005	-	3,3,3	0.34	0	2,2,2	0.37	0
4	EDO	A	1004	-	3,3,3	0.48	0	2,2,2	0.48	0
4	EDO	B	1003	-	3,3,3	0.66	0	2,2,2	0.25	0
5	FKV	B	1006	-	30,30,30	1.00	2 (6%)	40,47,47	1.37	6 (15%)
4	EDO	A	1003	-	3,3,3	0.50	0	2,2,2	0.46	0
4	EDO	B	1004	-	3,3,3	0.51	0	2,2,2	0.46	0
4	EDO	A	1005	-	3,3,3	0.46	0	2,2,2	0.45	0
4	EDO	A	1007	-	3,3,3	0.70	0	2,2,2	0.38	0
4	EDO	A	1006	-	3,3,3	0.67	0	2,2,2	0.44	0
5	FKV	A	1008	-	30,30,30	1.03	3 (10%)	40,47,47	1.44	4 (10%)

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
4	EDO	B	1005	-	-	0/1/1/1	-
4	EDO	A	1004	-	-	0/1/1/1	-
4	EDO	B	1003	-	-	0/1/1/1	-
5	FKV	B	1006	-	-	0/17/19/19	0/3/3/3
4	EDO	A	1003	-	-	0/1/1/1	-
4	EDO	B	1004	-	-	0/1/1/1	-
4	EDO	A	1005	-	-	0/1/1/1	-
4	EDO	A	1007	-	-	0/1/1/1	-
4	EDO	A	1006	-	-	0/1/1/1	-
5	FKV	A	1008	-	-	0/17/19/19	0/3/3/3

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	B	1006	FKV	O-C15	3.93	1.31	1.23
5	A	1008	FKV	C15-N3	-3.26	1.32	1.37
5	B	1006	FKV	C15-N3	-3.08	1.32	1.37
5	A	1008	FKV	O-C15	2.88	1.29	1.23
5	A	1008	FKV	C3-N1	2.76	1.51	1.48

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1008	FKV	N3-C15-N2	5.70	124.70	115.74
5	B	1006	FKV	N3-C15-N2	5.27	124.02	115.74
5	A	1008	FKV	C14-N2-C15	-3.35	121.75	126.37
5	B	1006	FKV	O-C15-N2	-3.18	116.21	121.86
5	A	1008	FKV	O-C15-N2	-2.84	116.82	121.86
5	B	1006	FKV	C11-C3-N1	2.71	112.11	110.06
5	B	1006	FKV	C14-N2-C15	-2.40	123.06	126.37
5	B	1006	FKV	C14-C1-C2	2.26	136.90	131.43
5	A	1008	FKV	C1-C2-N	-2.20	109.44	112.03
5	B	1006	FKV	C-N1-N	-2.10	109.70	112.12

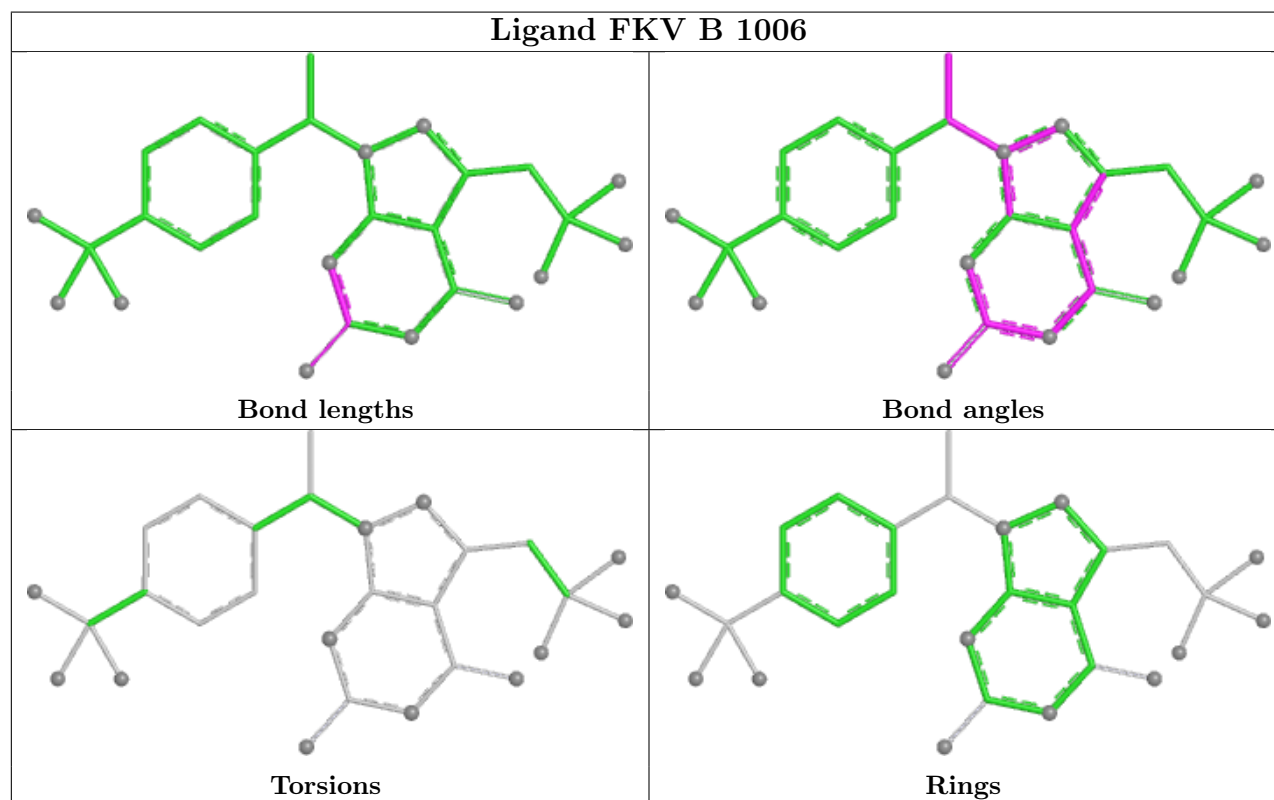
There are no chirality outliers.

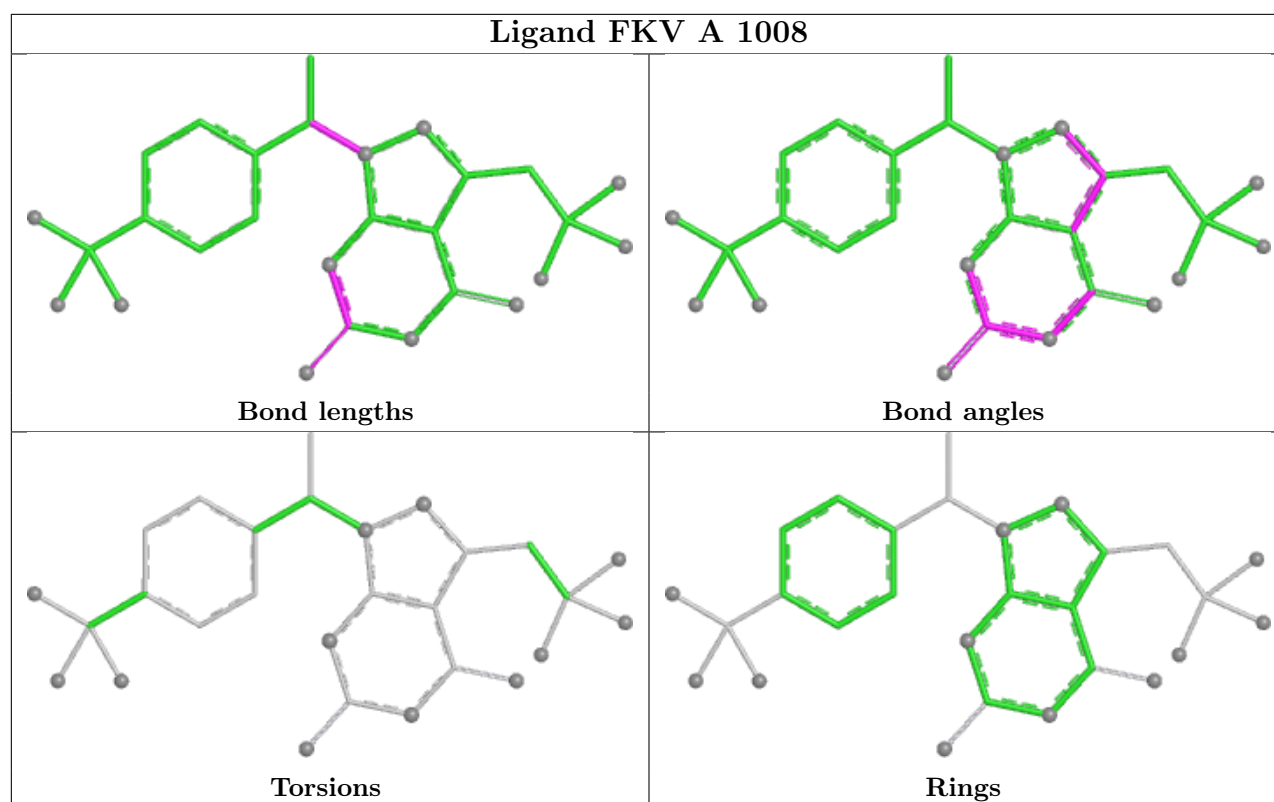
There are no torsion outliers.

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 than 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

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	343/373 (91%)	0.35	28 (8%) 17 18	8, 23, 44, 65	5 (1%)
1	B	347/373 (93%)	0.27	18 (5%) 33 35	7, 22, 45, 72	5 (1%)
All	All	690/746 (92%)	0.31	46 (6%) 24 25	7, 23, 45, 72	10 (1%)

All (46) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	564	THR	7.2
1	B	916	LEU	6.4
1	B	582	TYR	5.9
1	A	570	ALA	5.2
1	B	583	THR	5.0
1	B	563	SER	4.7
1	A	916	LEU	4.7
1	A	786	VAL	4.7
1	B	585	LEU	4.5
1	B	581	GLU	4.2
1	B	915	PHE	4.2
1	B	586	LEU	4.1
1	A	588	ASP	4.1
1	B	584	LYS	3.7
1	B	746	PHE	3.5
1	B	573	ASP	3.5
1	A	572	PHE	3.4
1	A	915	PHE	3.3
1	A	587	HIS	3.2
1	A	583	THR	3.1
1	B	902	PHE	2.8
1	A	585	LEU	2.8
1	A	903	THR	2.8
1	A	909	SER	2.7

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Mol	Chain	Res	Type	RSRZ
1	A	902	PHE	2.6
1	A	782	LYS	2.6
1	B	572	PHE	2.5
1	A	586	LEU	2.5
1	A	781	GLN	2.5
1	A	787	GLY	2.5
1	B	590	ILE	2.5
1	B	566	LEU	2.4
1	A	896	THR	2.4
1	B	589	GLY	2.4
1	A	898	VAL	2.4
1	A	582	TYR	2.3
1	A	900	HIS	2.2
1	A	784	ALA	2.2
1	A	680	TYR	2.2
1	A	590	ILE	2.1
1	A	584	LYS	2.1
1	A	679	ASN	2.1
1	B	591	GLN	2.1
1	A	780	LEU	2.1
1	A	797	ARG	2.0
1	A	589	GLY	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 oligosaccharides 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.

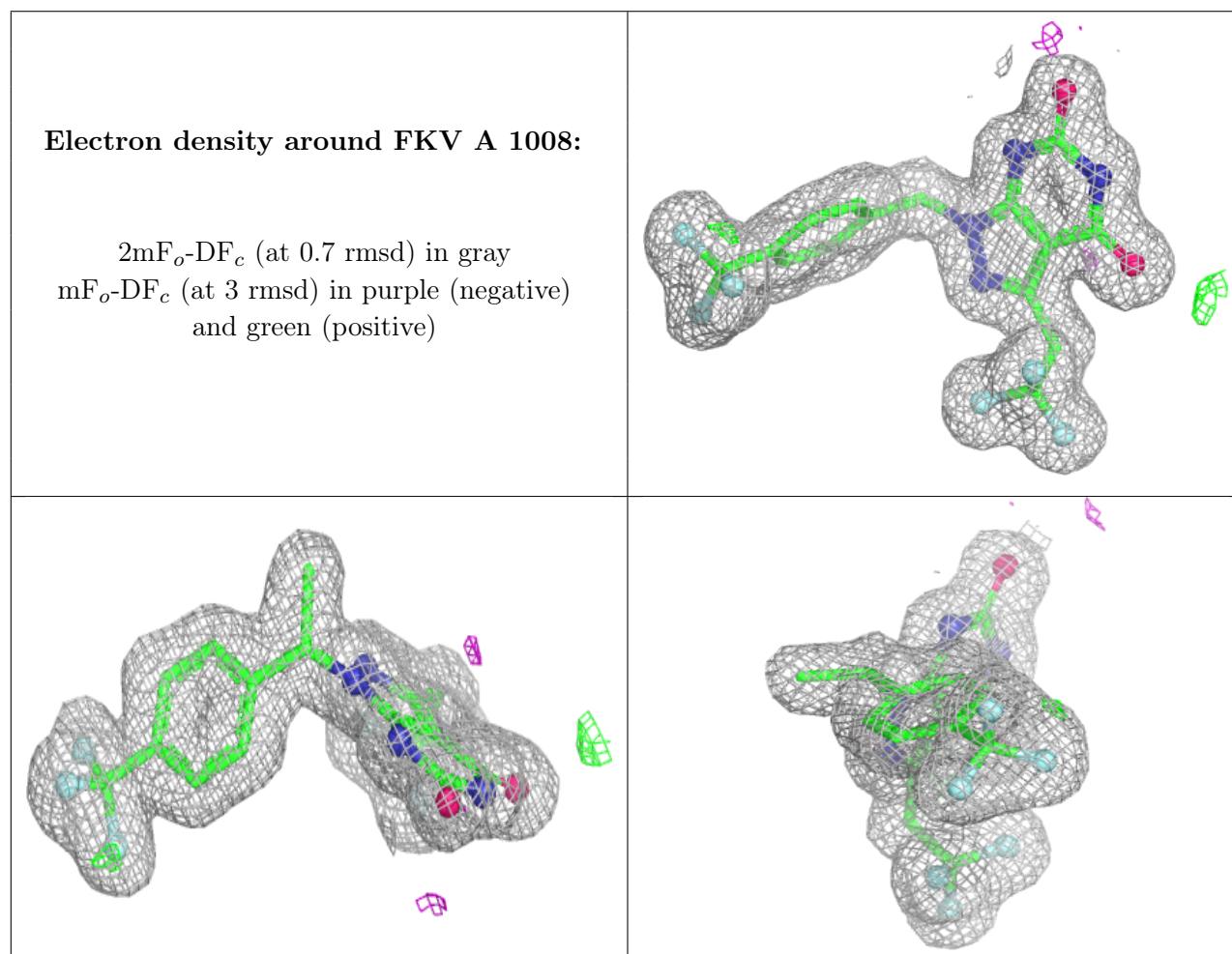
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
4	EDO	A	1007	4/4	0.92	0.13	18,24,26,27	0

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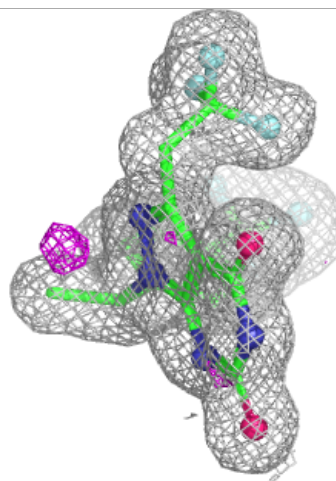
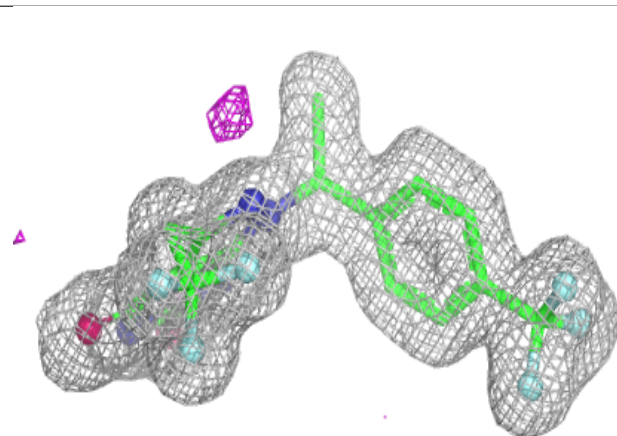
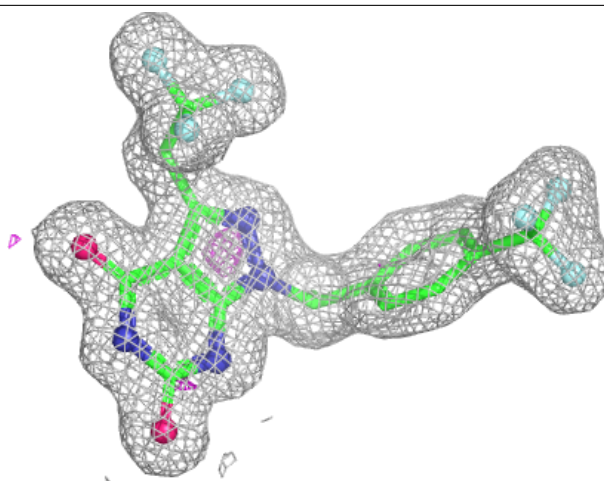
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
4	EDO	A	1006	4/4	0.94	0.08	26,26,27,28	0
4	EDO	B	1005	4/4	0.95	0.08	22,24,25,29	0
4	EDO	A	1005	4/4	0.96	0.07	21,23,23,24	0
4	EDO	A	1003	4/4	0.97	0.06	19,21,21,21	0
4	EDO	B	1003	4/4	0.97	0.06	19,21,21,22	0
4	EDO	B	1004	4/4	0.97	0.07	20,25,25,25	0
4	EDO	A	1004	4/4	0.97	0.06	19,23,24,25	0
5	FKV	A	1008	28/28	0.97	0.05	14,17,24,28	0
5	FKV	B	1006	28/28	0.97	0.05	14,17,24,27	0
3	MG	A	1002	1/1	0.99	0.02	14,14,14,14	0
2	ZN	A	1001	1/1	1.00	0.02	18,18,18,18	0
3	MG	B	1002	1/1	1.00	0.02	15,15,15,15	0
2	ZN	B	1001	1/1	1.00	0.02	18,18,18,18	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 FKV B 1006:

$2mF_o-DF_c$ (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.