WORLDWIDE wwPDB PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report (i)

Oct 11, 2023 – 10:29 AM EDT

PDB ID : 7L59
Title : Crystal structure of the dark-adapted full-length bacteriophytochrome XccBphP-G454E variant from Xanthomonas campestris in the Pfr state
Authors : Otero, L.H.; Antelo, G.; Sanchez-Lamas, M.; Klinke, S.; Goldbaum, F.A.; Rinaldi, J.; Bonomi, H.R.
Deposited on : 2020-12-21
Resolution : 2.68 Å(reported)

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

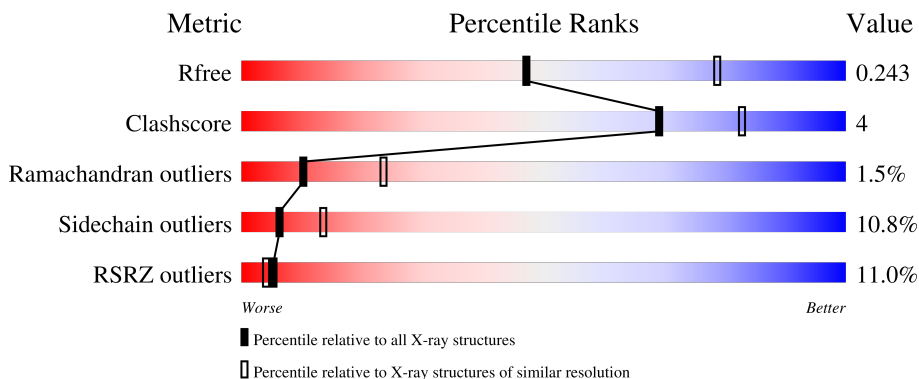|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

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 2.68 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	Percentile Ranks	Value
Rfree		0.243
Clashscore		4
Ramachandran outliers		1.5%
Sidechain outliers		10.8%
RSRZ outliers		11.0%

Worse   *Better*

▌ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	3863 (2.70-2.66)
Clashscore	141614	4210 (2.70-2.66)
Ramachandran outliers	138981	4141 (2.70-2.66)
Sidechain outliers	138945	4141 (2.70-2.66)
RSRZ outliers	127900	3780 (2.70-2.66)

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	640	10% 76% 15% • 6%

2 Entry composition ⓘ

There are 3 unique types of molecules in this entry. The entry contains 4806 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 Bacteriophytochrome.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	600	4713	2988	851	858	16	0	0	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-5	MET	-	initiating methionine	UNP A0A0H2XCS3
A	-4	HIS	-	expression tag	UNP A0A0H2XCS3
A	-3	HIS	-	expression tag	UNP A0A0H2XCS3
A	-2	HIS	-	expression tag	UNP A0A0H2XCS3
A	-1	HIS	-	expression tag	UNP A0A0H2XCS3
A	0	HIS	-	expression tag	UNP A0A0H2XCS3
A	1	HIS	-	expression tag	UNP A0A0H2XCS3
A	454	GLU	GLY	engineered mutation	UNP A0A0H2XCS3

- Molecule 2 is BILIVERDINE IX ALPHA (three-letter code: BLA) (formula: $C_{33}H_{34}N_4O_6$) (labeled as "Ligand of Interest" by depositor).

BLA
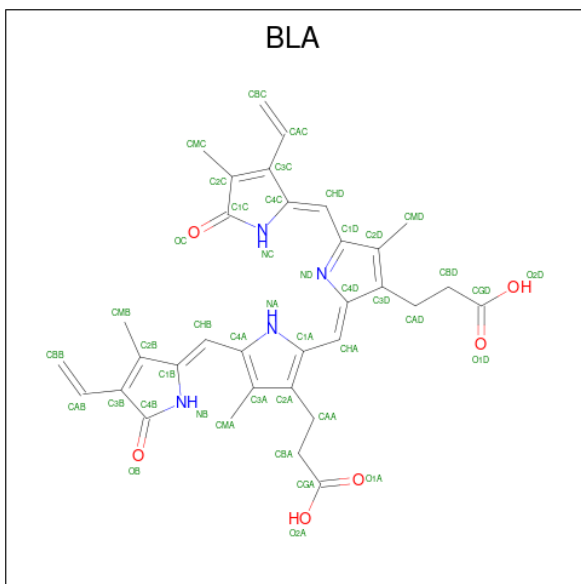
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total 43	C 33	N 4	O 6	0	0

- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	50	Total 50	O 50	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: Bacteriophytochrome
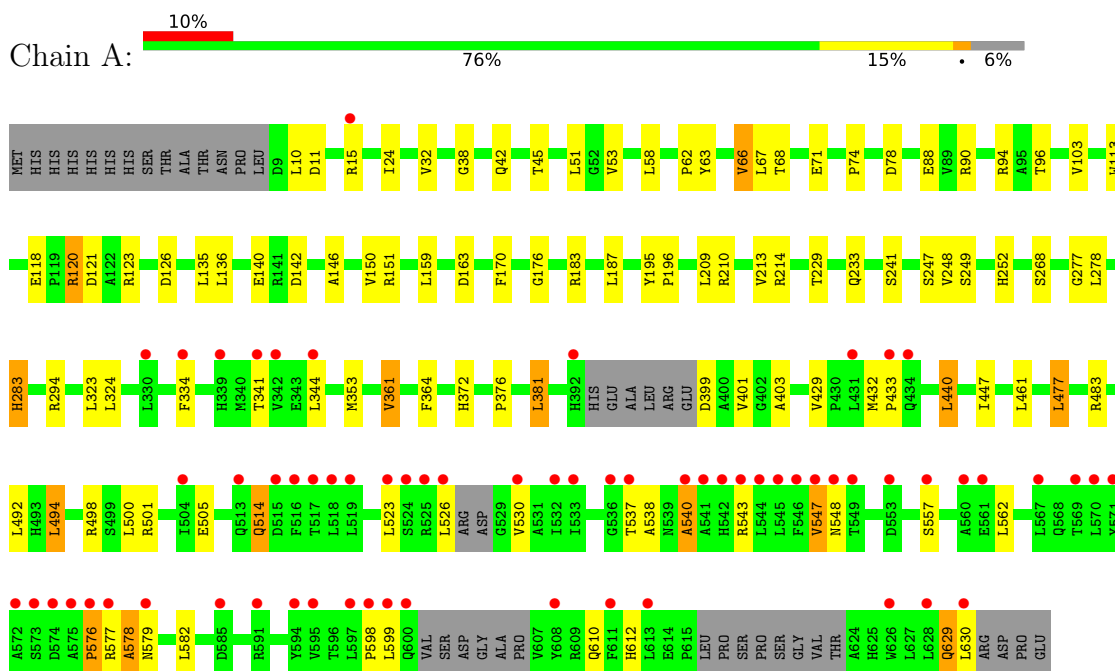
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	I 41	Depositor
Cell constants a, b, c, α, β, γ	182.03Å 182.03Å 40.06Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	45.51 – 2.68 45.51 – 2.68	Depositor EDS
% Data completeness (in resolution range)	100.0 (45.51-2.68) 100.0 (45.51-2.68)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.74 (at 2.69Å)	Xtriage
Refinement program	BUSTER 2.10.3	Depositor
R, R_{free}	0.196 , 0.236 0.200 , 0.243	Depositor DCC
R_{free} test set	1019 reflections (5.38%)	wwPDB-VP
Wilson B-factor (Å^2)	85.9	Xtriage
Anisotropy	0.020	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 71.9	EDS
L-test for twinning[2]	$< |L| > = 0.51, < L^2 > = 0.35$	Xtriage
Estimated twinning fraction	0.006 for -k,-h,-l	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	4806	wwPDB-VP
Average B, all atoms (Å^2)	105.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.16% of the height of the origin peak. No significant pseudotranslation is detected.*

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[1]Intensities estimated from amplitudes.
[2]Theoretical 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.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: BLA

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	0.51	0/4817	0.73	0/6568

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 ⓘ

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	4713	0	4713	35	0
2	A	43	0	30	2	0
3	A	50	0	0	0	0
All	All	4806	0	4743	35	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.

All (35) 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:576:PRO:HB3	1:A:598:PRO:HD2	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:213:VAL:HG11	1:A:294:ARG:HG2	1.77	0.66
1:A:447:ILE:H	1:A:447:ILE:HD12	1.62	0.65
1:A:53:VAL:HG21	1:A:66:VAL:HG12	1.80	0.63
1:A:32:VAL:HB	1:A:42:GLN:HB2	1.84	0.60
1:A:353:MET:HG3	1:A:361:VAL:HG22	1.84	0.60
1:A:163:ASP:H	1:A:283:HIS:HD2	1.48	0.60
1:A:210:ARG:NH1	1:A:241:SER:HB3	2.20	0.57
1:A:547:VAL:HG21	1:A:562:LEU:HD23	1.91	0.53
1:A:376:PRO:HG2	1:A:381:LEU:HD13	1.92	0.51
1:A:540:ALA:HB1	1:A:543:ARG:HH22	1.75	0.51
1:A:51:LEU:HD12	1:A:58:LEU:HD11	1.93	0.51
1:A:68:THR:HB	1:A:90:ARG:HB2	1.94	0.50
1:A:612:HIS:HB3	1:A:629:GLN:HG2	1.94	0.50
1:A:401:VAL:HG12	1:A:498:ARG:HD3	1.93	0.49
1:A:196:PRO:HG3	1:A:477:LEU:HB3	1.95	0.49
1:A:38:GLY:O	1:A:62:PRO:HA	2.13	0.49
1:A:176:GLY:HA3	1:A:195:TYR:CZ	2.47	0.49
1:A:433:PRO:HD3	1:A:505:GLU:OE2	2.13	0.49
1:A:142:ASP:OD2	1:A:151:ARG:HD2	2.16	0.46
1:A:63:TYR:O	1:A:67:LEU:HG	2.16	0.46
1:A:403:ALA:HB2	1:A:429:VAL:HG12	1.97	0.46
1:A:364:PHE:HE1	1:A:440:LEU:HB2	1.82	0.45
1:A:577:ARG:HB3	1:A:578:ALA:H	1.69	0.44
1:A:361:VAL:HG23	1:A:372:HIS:HB2	1.99	0.44
1:A:74:PRO:HB2	1:A:113:TRP:CZ3	2.52	0.44
1:A:88:GLU:HB2	1:A:120:ARG:HH22	1.82	0.44
1:A:557:SER:HB3	1:A:562:LEU:HD13	2.01	0.42
1:A:249:SER:HB3	2:A:900:BLA:HMD2	2.01	0.42
1:A:170:PHE:CD2	1:A:277:GLY:HA2	2.55	0.42
1:A:94:ARG:HD3	1:A:96:THR:O	2.20	0.42
1:A:146:ALA:O	1:A:150:VAL:HG23	2.20	0.42
1:A:494:LEU:HD12	1:A:494:LEU:HA	1.95	0.41
1:A:252:HIS:CD2	2:A:900:BLA:HBD1	2.56	0.41
1:A:447:ILE:HD11	1:A:483:ARG:HA	2.03	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	590/640 (92%)	551 (93%)	30 (5%)	9 (2%)	10 23

All (9) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	229	THR
1	A	540	ALA
1	A	578	ALA
1	A	579	ASN
1	A	432	MET
1	A	514	GLN
1	A	538	ALA
1	A	159	LEU
1	A	576	PRO

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	498/533 (93%)	444 (89%)	54 (11%)	6 13

All (54) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	10	LEU
1	A	11	ASP

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Mol	Chain	Res	Type
1	A	15	ARG
1	A	24	ILE
1	A	45	THR
1	A	66	VAL
1	A	71	GLU
1	A	78	ASP
1	A	103	VAL
1	A	118	GLU
1	A	120	ARG
1	A	121	ASP
1	A	123	ARG
1	A	126	ASP
1	A	135	LEU
1	A	136	LEU
1	A	140	GLU
1	A	183	ARG
1	A	187	LEU
1	A	209	LEU
1	A	214	ARG
1	A	233	GLN
1	A	247	SER
1	A	248	VAL
1	A	268	SER
1	A	278	LEU
1	A	283	HIS
1	A	323	LEU
1	A	324	LEU
1	A	334	PHE
1	A	341	THR
1	A	344	LEU
1	A	361	VAL
1	A	381	LEU
1	A	399	ASP
1	A	440	LEU
1	A	461	LEU
1	A	477	LEU
1	A	492	LEU
1	A	494	LEU
1	A	500	LEU
1	A	501	ARG
1	A	514	GLN
1	A	523	LEU

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Mol	Chain	Res	Type
1	A	526	LEU
1	A	530	VAL
1	A	537	THR
1	A	547	VAL
1	A	548	ASN
1	A	582	LEU
1	A	599	LEU
1	A	610	GLN
1	A	629	GLN
1	A	630	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	283	HIS

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

There are no monosaccharides in this entry.

5.6 Ligand geometry ⓘ

1 ligand is 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			Bond angles		
					Counts	RMSZ	#|Z| > 2	Counts	RMSZ	#|Z| > 2
2	BLA	A	900	1	42,46,46	3.71	19 (45%)	53,67,67	1.64	14 (26%)

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	BLA	A	900	1	-	10/26/74/74	0/4/4/4

All (19) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	900	BLA	C4C-NC	9.82	1.54	1.37
2	A	900	BLA	C1B-NB	9.22	1.53	1.37
2	A	900	BLA	C3D-C2D	7.56	1.52	1.36
2	A	900	BLA	C1C-NC	7.38	1.53	1.38
2	A	900	BLA	C4B-NB	7.06	1.52	1.38
2	A	900	BLA	C4D-ND	5.75	1.50	1.38
2	A	900	BLA	CHD-C1D	5.53	1.53	1.40
2	A	900	BLA	C1D-ND	5.15	1.48	1.36
2	A	900	BLA	C4D-C3D	4.42	1.52	1.45
2	A	900	BLA	CHA-C4D	-4.14	1.31	1.35
2	A	900	BLA	C1B-C2B	3.71	1.51	1.45
2	A	900	BLA	C1A-CHA	3.07	1.53	1.41
2	A	900	BLA	C4A-CHB	3.03	1.52	1.41
2	A	900	BLA	C3C-C2C	2.84	1.43	1.37
2	A	900	BLA	OB-C4B	-2.82	1.18	1.23
2	A	900	BLA	C3B-C2B	2.75	1.42	1.37
2	A	900	BLA	CHD-C4C	-2.59	1.31	1.38
2	A	900	BLA	CAB-C3B	2.43	1.54	1.47
2	A	900	BLA	OC-C1C	-2.38	1.19	1.23

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	900	BLA	C1A-CHA-C4D	-4.89	122.96	128.81
2	A	900	BLA	C3D-C4D-ND	-3.11	105.53	110.05
2	A	900	BLA	CBD-CAD-C3D	-2.96	104.40	112.63
2	A	900	BLA	CBA-CAA-C2A	-2.83	107.80	112.62
2	A	900	BLA	CHB-C1B-C2B	2.79	132.48	126.97
2	A	900	BLA	C1B-NB-C4B	-2.62	107.33	110.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	A	900	BLA	CMB-C2B-C3B	-2.54	122.08	128.30
2	A	900	BLA	C4C-NC-C1C	-2.48	107.51	110.67
2	A	900	BLA	CMB-C2B-C1B	2.46	127.24	124.17
2	A	900	BLA	CHB-C1B-NB	-2.46	122.15	130.40
2	A	900	BLA	C4C-CHD-C1D	-2.32	122.41	128.08
2	A	900	BLA	O2D-CGD-CBD	2.29	121.39	114.03
2	A	900	BLA	C3B-C2B-C1B	2.19	110.67	108.03
2	A	900	BLA	O2A-CGA-CBA	2.06	120.66	114.03

There are no chirality outliers.

All (10) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	900	BLA	NA-C4A-CHB-C1B
2	A	900	BLA	C3A-C4A-CHB-C1B
2	A	900	BLA	NB-C1B-CHB-C4A
2	A	900	BLA	C2B-C1B-CHB-C4A
2	A	900	BLA	C2C-C3C-CAC-CBC
2	A	900	BLA	NC-C4C-CHD-C1D
2	A	900	BLA	C3C-C4C-CHD-C1D
2	A	900	BLA	C4C-C3C-CAC-CBC
2	A	900	BLA	CAD-CBD-CGD-O2D
2	A	900	BLA	CAD-CBD-CGD-O1D

There are no ring outliers.

1 monomer is involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	900	BLA	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.

Ligand BLA A 900
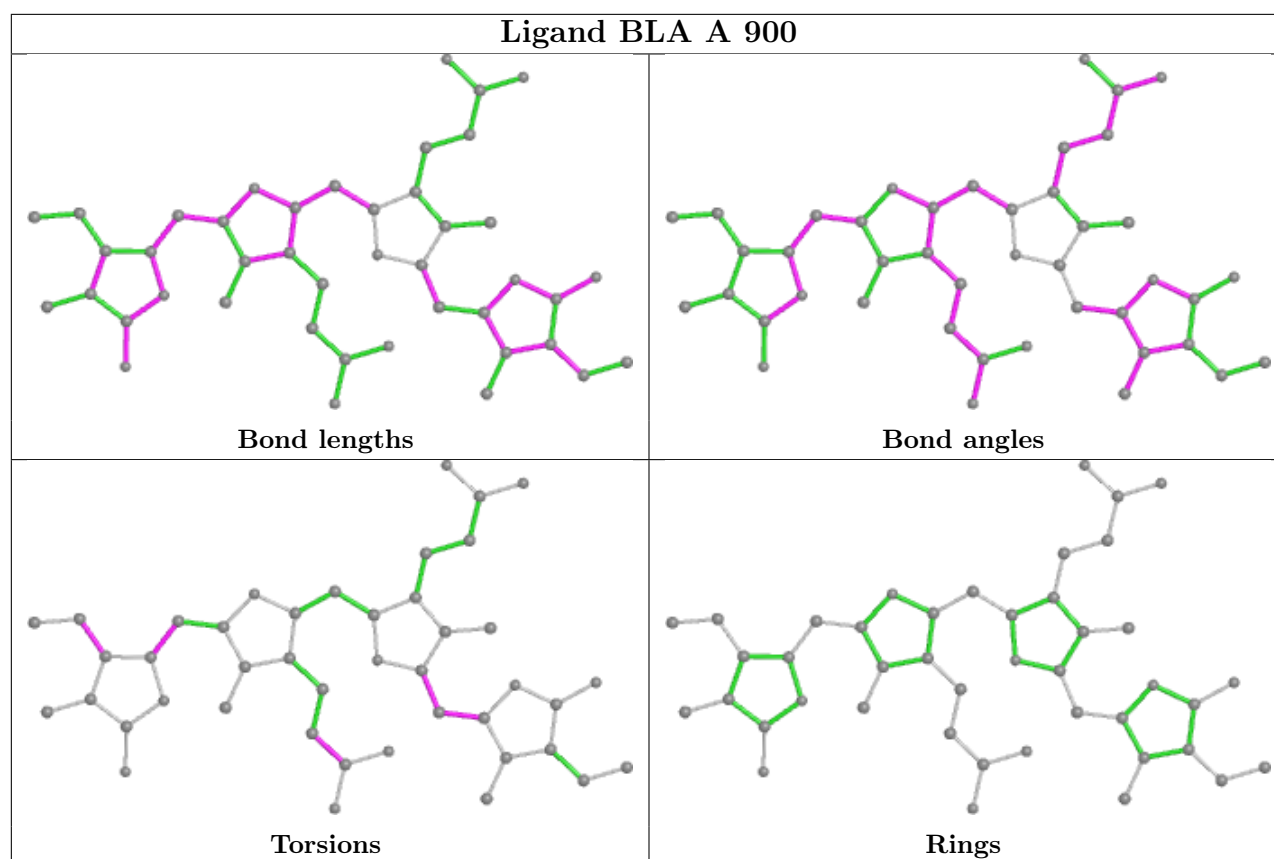
5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

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(Å²)	Q<0.9
1	A	600/640 (93%)	0.42	66 (11%) 5 4	58, 93, 192, 219	0

All (66) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	572	ALA	8.2
1	A	630	LEU	8.2
1	A	517	THR	7.5
1	A	575	ALA	6.0
1	A	532	ILE	5.6
1	A	530	VAL	5.4
1	A	576	PRO	5.3
1	A	570	LEU	5.0
1	A	434	GLN	5.0
1	A	540	ALA	4.9
1	A	344	LEU	4.8
1	A	523	LEU	4.2
1	A	599	LEU	4.1
1	A	524	SER	4.0
1	A	598	PRO	4.0
1	A	595	VAL	4.0
1	A	571	TYR	4.0
1	A	573	SER	3.9
1	A	547	VAL	3.8
1	A	553	ASP	3.7
1	A	597	LEU	3.7
1	A	334	PHE	3.5
1	A	594	TYR	3.5
1	A	585	ASP	3.5
1	A	533	ILE	3.4
1	A	339	HIS	3.4
1	A	525	ARG	3.3

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Mol	Chain	Res	Type	RSRZ
1	A	574	ASP	3.3
1	A	526	LEU	3.3
1	A	342	VAL	3.2
1	A	515	ASP	3.2
1	A	545	LEU	3.2
1	A	591	ARG	3.1
1	A	579	ASN	3.0
1	A	561	GLU	3.0
1	A	542	HIS	3.0
1	A	543	ARG	3.0
1	A	613	LEU	2.9
1	A	536	GLY	2.8
1	A	433	PRO	2.8
1	A	560	ALA	2.8
1	A	546	PHE	2.7
1	A	567	LEU	2.7
1	A	341	THR	2.7
1	A	628	LEU	2.7
1	A	577	ARG	2.7
1	A	557	SER	2.7
1	A	611	PHE	2.6
1	A	392	HIS	2.6
1	A	600	GLN	2.5
1	A	504	ILE	2.5
1	A	549	THR	2.5
1	A	516	PHE	2.5
1	A	519	LEU	2.5
1	A	544	LEU	2.5
1	A	548	ASN	2.4
1	A	608	TYR	2.3
1	A	431	LEU	2.3
1	A	541	ALA	2.3
1	A	537	THR	2.2
1	A	569	THR	2.1
1	A	518	LEU	2.1
1	A	626	TRP	2.1
1	A	15	ARG	2.1
1	A	330	LEU	2.1
1	A	513	GLN	2.0

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

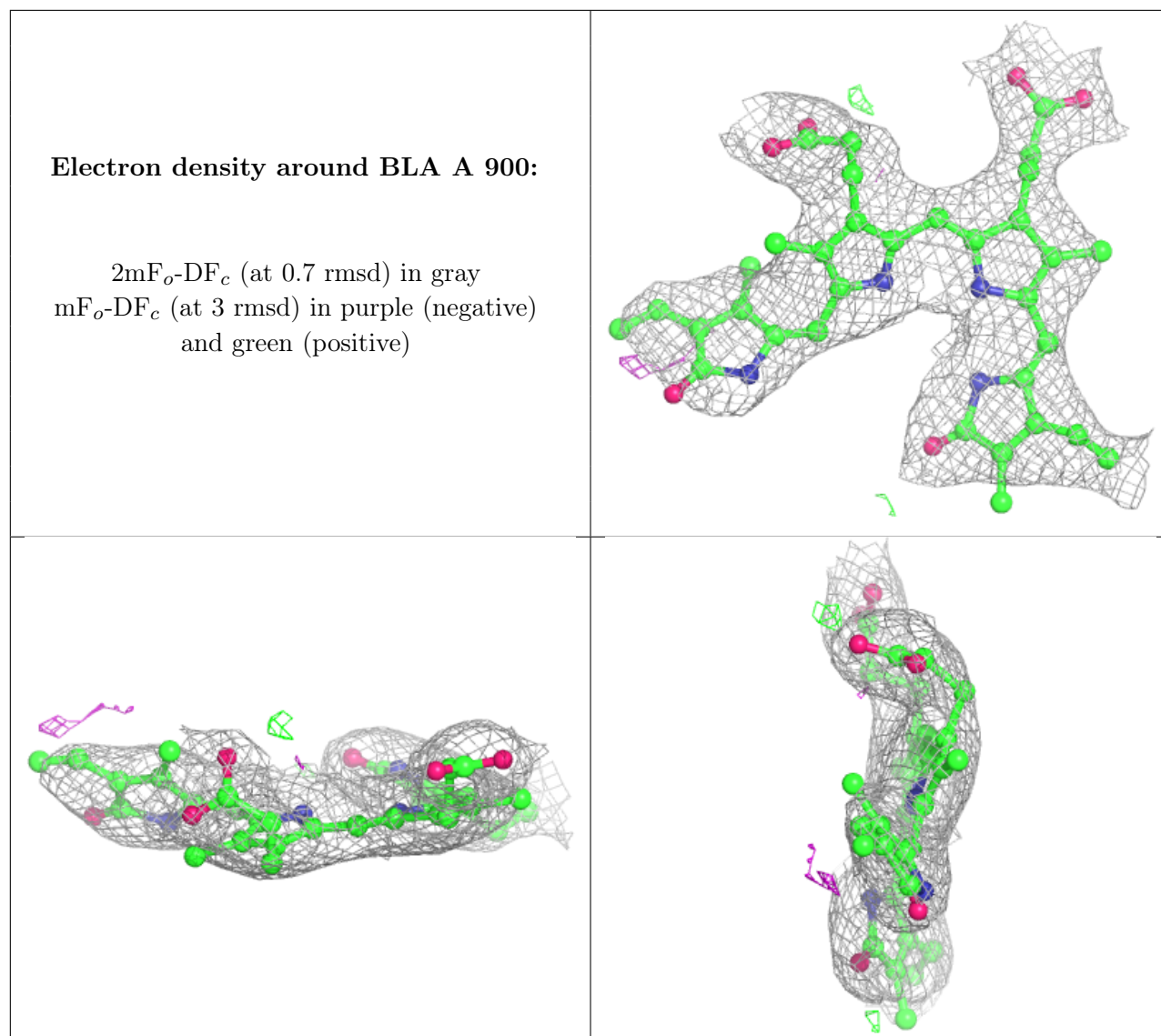There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates ⓘ

There are no monosaccharides in this entry.

6.4 Ligands ⓘ

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($Å^2$)	Q<0.9
2	BLA	A	900	43/43	0.96	0.20	61,73,83,93	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 BLA A 900:

$2mF_o\text{-}DF_c$ (at 0.7 rmsd) in gray
$mF_o\text{-}DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

6.5 Other polymers ⓘ

There are no such residues in this entry.