WORLDWIDE PDB

PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

Aug 26, 2023 – 04:39 PM EDT

PDB ID	:	3G6G
Title	:	Equally potent inhibition of c-Src and Abl by compounds that recognize inactive kinase conformations
Authors	:	Seeliger, M.A.; Ranjitkar, P.; Kasap, C.; Shan, Y.; Shaw, D.E.; Shah, N.P.; Kuriyan, J.; Maly, D.J.
Deposited on	:	2009-02-06
Resolution	:	2.31 Å(reported)

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

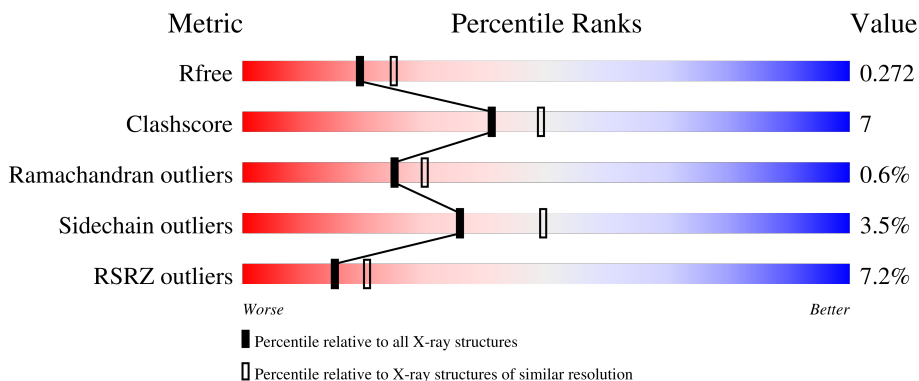|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35

1 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 2.31 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		0.272
Clashscore		7
Ramachandran outliers		0.6%
Sidechain outliers		3.5%
RSRZ outliers		7.2%

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	5974 (2.34-2.30)
Clashscore	141614	6604 (2.34-2.30)
Ramachandran outliers	138981	6523 (2.34-2.30)
Sidechain outliers	138945	6523 (2.34-2.30)
RSRZ outliers	127900	5855 (2.34-2.30)

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	286	4% / 80% 10% · 8%
1	B	286	9% / 74% 15% · 8%

2 Entry composition ⓘ

There are 4 unique types of molecules in this entry. The entry contains 4394 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 Proto-oncogene tyrosine-protein kinase Src.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	264	Total	C	N	O	S	0	0	0
			2118	1359	354	388	17			
1	B	263	Total	C	N	O	S	0	0	0
			2114	1357	353	387	17			

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	248	GLY	-	expression tag	UNP P00523
A	249	HIS	-	expression tag	UNP P00523
A	250	MET	-	expression tag	UNP P00523
B	248	GLY	-	expression tag	UNP P00523
B	249	HIS	-	expression tag	UNP P00523
B	250	MET	-	expression tag	UNP P00523

- Molecule 2 is N-{3-[(3-{4-[(4-methoxyphenyl)amino]-1,3,5-triazin-2-yl}pyridin-2-yl)amino]-4-methylphenyl}-4-[(4-methylpiperazin-1-yl)methyl]benzamide (three-letter code: G6G) (formula: $C_{35}H_{37}N_9O_2$).
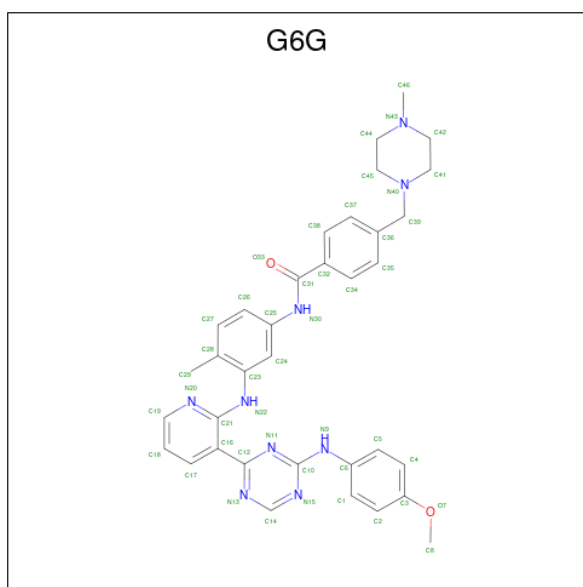
G6G

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
2	A	1	Total 46	C 35	N 9	O 2	0	0
2	B	1	Total 46	C 35	N 9	O 2	0	0

• Molecule 3 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).

GOL

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total 6	C 3	O 3	0	0
3	B	1	Total 6	C 3	O 3	0	0

- Molecule 4 is water.

| Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	40	Total O 40 40		0	0
4	B	18	Total O 18 18		0	0

3 Residue-property plots ⓘ

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: Proto-oncogene tyrosine-protein kinase Src

Chain A:

• Molecule 1: Proto-oncogene tyrosine-protein kinase Src

Chain B:
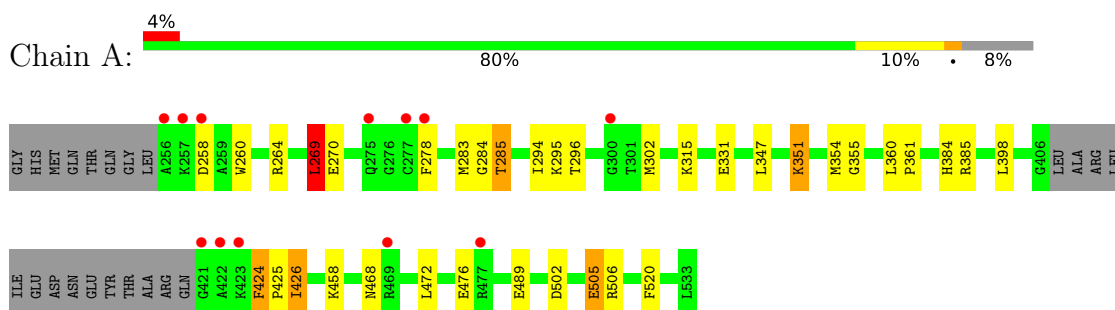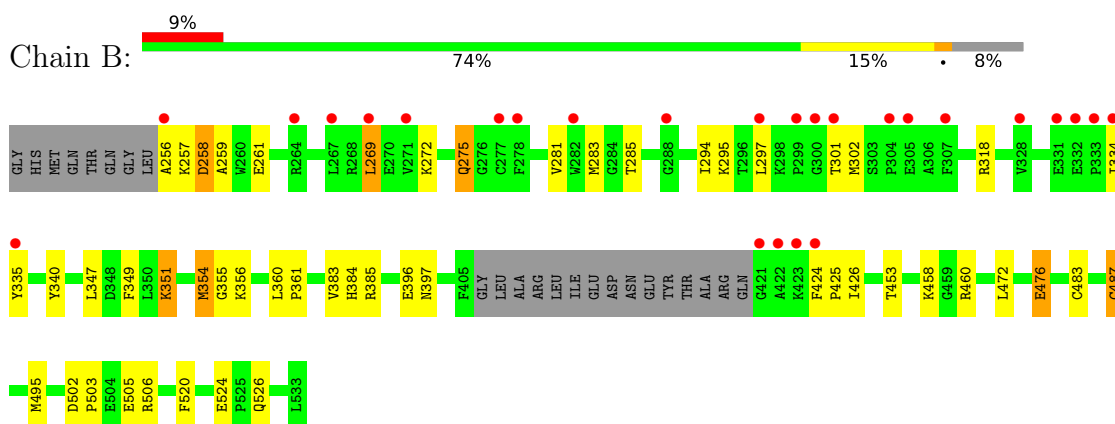
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α, β, γ	41.88Å　　63.85Å　　76.62Å 102.50°　　89.40°　　90.29°	Depositor
Resolution (Å)	43.48　–　2.31 43.48　–　2.31	Depositor EDS
% Data completeness (in resolution range)	95.1 (43.48-2.31) 95.1 (43.48-2.31)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.06	Depositor
$< I/\sigma(I) >$ [1]	2.19 (at 2.32Å)	Xtriage
Refinement program	REFMAC 5.5.0035	Depositor
R, R_{free}	0.229　,　0.277 0.228　,　0.272	Depositor DCC
R_{free} test set	1652 reflections (5.09%)	wwPDB-VP
Wilson B-factor (Å^2)	42.0	Xtriage
Anisotropy	0.095	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 37.6	EDS
L-test for twinning[2]	$< |L| > = 0.51, < L^2 > = 0.35$	Xtriage
Estimated twinning fraction	0.023 for h,-k,-l	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	4394	wwPDB-VP
Average B, all atoms (Å^2)	46.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.25% 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 (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: GOL, G6G

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	0.73	2/2170 (0.1%)	0.74	3/2936 (0.1%)
1	B	0.72	1/2166 (0.0%)	0.78	1/2931 (0.0%)
All	All	0.73	3/4336 (0.1%)	0.76	4/5867 (0.1%)

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	505	GLU	CG-CD	6.01	1.60	1.51
1	B	487	CYS	CB-SG	-5.55	1.72	1.81
1	A	489	GLU	CB-CG	5.01	1.61	1.52

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	460	ARG	NE-CZ-NH2	-8.75	115.92	120.30
1	A	506	ARG	NE-CZ-NH1	6.99	123.80	120.30
1	A	506	ARG	NE-CZ-NH2	-6.00	117.30	120.30
1	A	269	LEU	CA-CB-CG	5.04	126.89	115.30

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.

W O R L D W I D E
wwPDB
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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2118	0	2104	23	0
1	B	2114	0	2101	34	0
2	A	46	0	37	2	0
2	B	46	0	37	6	0
3	A	6	0	8	0	0
3	B	6	0	8	0	0
4	A	40	0	0	0	0
4	B	18	0	0	0	0
All	All	4394	0	4295	61	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 7.

All (61) 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:B:426:ILE:HD11	1:B:472:LEU:HG	1.42	0.98
1:A:269:LEU:HD22	1:A:294:ILE:HD13	1.62	0.82
1:B:526:GLN:OE1	1:B:526:GLN:N	2.12	0.79
1:A:426:ILE:HD11	1:A:472:LEU:HD11	1.63	0.79
1:B:476:GLU:HA	1:B:476:GLU:OE1	1.89	0.73
1:A:502:ASP:HB3	1:A:505:GLU:HG3	1.71	0.73
1:B:354:MET:O	1:B:356:LYS:N	2.21	0.72
1:B:426:ILE:CD1	1:B:472:LEU:HG	2.18	0.72
1:B:502:ASP:HB3	1:B:505:GLU:HG3	1.72	0.71
1:B:295:LYS:HB2	2:B:2:G6G:H29B	1.73	0.70
1:B:272:LYS:HZ1	1:B:275:GLN:HG3	1.60	0.66
1:A:295:LYS:HB2	2:A:1:G6G:H29B	1.80	0.63
1:A:384:HIS:O	1:A:385:ARG:HB2	1.99	0.62
1:B:334:ILE:O	1:B:335:TYR:HD1	1.83	0.60
1:B:272:LYS:NZ	1:B:275:GLN:HG3	2.15	0.60
1:A:424:PHE:HD1	1:A:425:PRO:HD2	1.67	0.60
1:B:258:ASP:O	1:B:261:GLU:HB2	2.01	0.60
1:B:383:VAL:HG12	1:B:385:ARG:HG3	1.83	0.59
2:B:2:G6G:H5	2:B:2:G6G:N11	2.17	0.59
2:A:1:G6G:N11	2:A:1:G6G:H5	2.22	0.55
2:B:2:G6G:H24	2:B:2:G6G:O33	2.06	0.55
1:A:347:LEU:O	1:A:351:LYS:HG2	2.07	0.54
1:B:256:ALA:O	1:B:257:LYS:HG3	2.08	0.54
1:A:270:GLU:OE1	1:A:285:THR:OG1	2.26	0.54
1:A:426:ILE:HG21	1:A:468:ASN:CG	2.31	0.50
1:A:426:ILE:HD11	1:A:472:LEU:CD1	2.35	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:283:MET:HG3	1:B:340:TYR:CE1	2.47	0.50
1:B:349:PHE:CZ	1:B:354:MET:HG3	2.49	0.47
1:A:424:PHE:CD1	1:A:425:PRO:HD2	2.49	0.47
1:A:264:ARG:NH2	1:A:331:GLU:O	2.47	0.47
1:B:453:THR:HG22	1:B:495:MET:SD	2.54	0.47
1:A:258:ASP:HB3	1:A:260:TRP:H	1.79	0.46
1:B:269:LEU:HD22	1:B:294:ILE:HD13	1.98	0.45
2:B:2:G6G:N11	2:B:2:G6G:C5	2.79	0.45
1:B:483:CYS:SG	1:B:487:CYS:O	2.73	0.45
1:B:297:LEU:HD11	1:B:302:MET:HB3	1.99	0.44
1:A:384:HIS:O	1:A:385:ARG:CB	2.66	0.44
1:B:396:GLU:O	1:B:397:ASN:HB3	2.17	0.44
1:A:361:PRO:HA	1:A:520:PHE:CE1	2.52	0.43
1:B:354:MET:C	1:B:356:LYS:H	2.19	0.43
1:A:354:MET:O	1:A:355:GLY:C	2.55	0.43
1:B:524:GLU:OE2	1:B:526:GLN:NE2	2.51	0.43
1:A:458:LYS:HD3	1:A:458:LYS:HA	1.75	0.43
1:B:361:PRO:HA	1:B:520:PHE:CE1	2.54	0.43
1:B:384:HIS:O	1:B:385:ARG:HB2	2.19	0.43
1:B:503:PRO:HA	1:B:506:ARG:CZ	2.49	0.43
1:B:458:LYS:HA	1:B:458:LYS:HD3	1.79	0.42
1:A:476:GLU:OE1	1:A:476:GLU:HA	2.20	0.42
1:A:278:PHE:CD2	1:A:302:MET:HB2	2.55	0.42
1:B:424:PHE:HA	1:B:425:PRO:HD3	1.87	0.41
1:A:260:TRP:NE1	1:A:315:LYS:HG2	2.35	0.41
1:B:354:MET:CA	1:B:354:MET:CE	2.97	0.41
1:A:354:MET:HA	1:A:354:MET:HE3	2.02	0.41
1:B:385:ARG:HD3	2:B:2:G6G:H46A	2.02	0.41
1:B:281:VAL:HG21	2:B:2:G6G:C19	2.51	0.41
1:A:283:MET:HG2	1:A:284:GLY:N	2.35	0.40
1:B:258:ASP:OD1	1:B:259:ALA:N	2.54	0.40
1:B:347:LEU:O	1:B:351:LYS:HG3	2.21	0.40
1:A:354:MET:HE3	1:A:354:MET:CA	2.51	0.40
1:B:354:MET:CE	1:B:354:MET:HA	2.51	0.40
1:B:354:MET:HA	1:B:354:MET:HE3	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	260/286 (91%)	254 (98%)	6 (2%)	0	100	100
1	B	259/286 (91%)	242 (93%)	14 (5%)	3 (1%)	13	13
All	All	519/572 (91%)	496 (96%)	20 (4%)	3 (1%)	25	30

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	354	MET
1	B	301	THR
1	B	355	GLY

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	227/245 (93%)	219 (96%)	8 (4%)	36	49
1	B	227/245 (93%)	219 (96%)	8 (4%)	36	49
All	All	454/490 (93%)	438 (96%)	16 (4%)	36	49

All (16) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	269	LEU
1	A	285	THR
1	A	296	THR

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Mol	Chain	Res	Type
1	A	351	LYS
1	A	360	LEU
1	A	398	LEU
1	A	424	PHE
1	A	426	ILE
1	B	258	ASP
1	B	269	LEU
1	B	275	GLN
1	B	285	THR
1	B	318	ARG
1	B	351	LYS
1	B	360	LEU
1	B	476	GLU

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

Mol	Chain	Res	Type
1	B	397	ASN

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 ⓘ

4 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	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#$|Z| > 2$	Counts	RMSZ	#$|Z| > 2$
2	G6G	B	2	-	50,51,51	1.17	5 (10%)	64,70,70	1.95	13 (20%)
3	GOL	A	1003	-	5,5,5	0.33	0	5,5,5	0.50	0
3	GOL	B	1002	-	5,5,5	0.36	0	5,5,5	0.29	0
2	G6G	A	1	-	50,51,51	1.16	5 (10%)	64,70,70	1.87	10 (15%)

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	G6G	B	2	-	-	2/22/36/36	0/6/6/6
3	GOL	A	1003	-	-	2/4/4/4	-
3	GOL	B	1002	-	-	4/4/4/4	-
2	G6G	A	1	-	-	0/22/36/36	0/6/6/6

All (10) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	1	G6G	C25-N30	-3.45	1.34	1.41
2	B	2	G6G	C25-N30	-3.14	1.35	1.41
2	B	2	G6G	C6-N9	-2.60	1.35	1.40
2	B	2	G6G	O7-C8	2.34	1.49	1.42
2	B	2	G6G	C21-C16	-2.25	1.42	1.44
2	B	2	G6G	C32-C31	2.25	1.54	1.50
2	A	1	G6G	C29-C28	2.23	1.55	1.51
2	A	1	G6G	C6-N9	-2.13	1.36	1.40
2	A	1	G6G	C18-C17	2.02	1.41	1.36
2	A	1	G6G	C32-C31	2.01	1.54	1.50

All (23) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2	G6G	N15-C10-N11	-8.74	118.08	126.52
2	A	1	G6G	N15-C10-N11	-7.74	119.04	126.52
2	A	1	G6G	C10-N11-C12	5.67	121.72	115.28
2	B	2	G6G	C10-N11-C12	5.13	121.10	115.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	A	1	G6G	N13-C14-N15	-4.63	121.44	128.68
2	B	2	G6G	N13-C14-N15	-4.43	121.75	128.68
2	B	2	G6G	C16-C21-N22	3.66	123.75	119.73
2	A	1	G6G	C41-C42-N43	-3.57	106.77	110.80
2	B	2	G6G	C23-N22-C21	-3.37	119.98	129.29
2	A	1	G6G	C44-N43-C42	3.19	113.99	109.52
2	B	2	G6G	C39-N40-C41	3.05	117.85	111.06
2	B	2	G6G	C19-N20-C21	3.01	122.86	116.79
2	A	1	G6G	C19-N20-C21	2.94	122.71	116.79
2	A	1	G6G	C14-N13-C12	2.91	120.28	113.45
2	B	2	G6G	C44-N43-C42	2.57	113.12	109.52
2	B	2	G6G	C14-N13-C12	2.50	119.30	113.45
2	B	2	G6G	C41-C42-N43	-2.43	108.06	110.80
2	B	2	G6G	C27-C28-C23	2.35	119.65	117.44
2	B	2	G6G	C16-C21-N20	-2.12	119.60	121.35
2	A	1	G6G	C27-C28-C23	2.06	119.38	117.44
2	A	1	G6G	C23-N22-C21	-2.06	123.59	129.29
2	A	1	G6G	C18-C19-N20	-2.02	120.12	123.43
2	B	2	G6G	C46-N43-C42	2.00	113.66	110.66

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	B	1002	GOL	O1-C1-C2-C3
3	A	1003	GOL	O2-C2-C3-O3
3	B	1002	GOL	O1-C1-C2-O2
3	B	1002	GOL	O2-C2-C3-O3
2	B	2	G6G	C4-C3-O7-C8
3	B	1002	GOL	C1-C2-C3-O3
3	A	1003	GOL	O1-C1-C2-C3
2	B	2	G6G	C2-C3-O7-C8

There are no ring outliers.

2 monomers are involved in 8 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	B	2	G6G	6	0
2	A	1	G6G	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 G6G B 2

Bond lengths

Bond angles

Torsions

Rings

Ligand G6G A 1

Bond lengths | Bond angles

Torsions | Rings
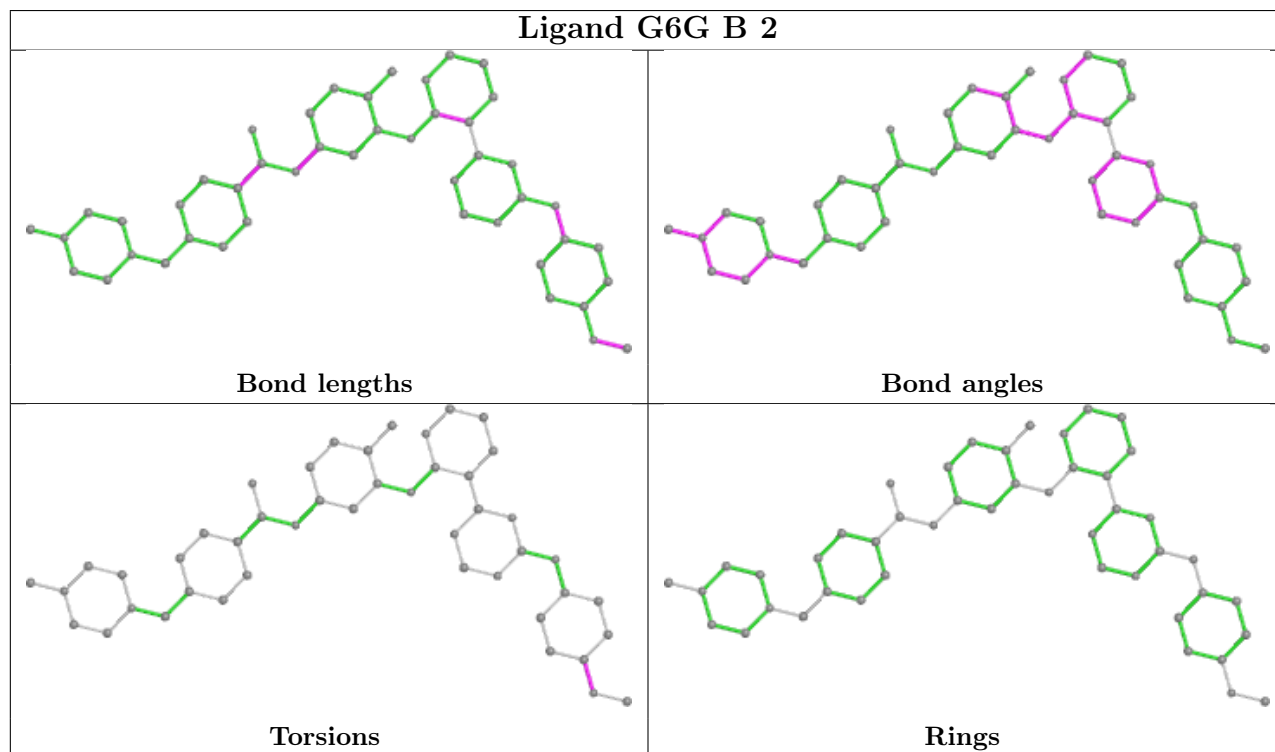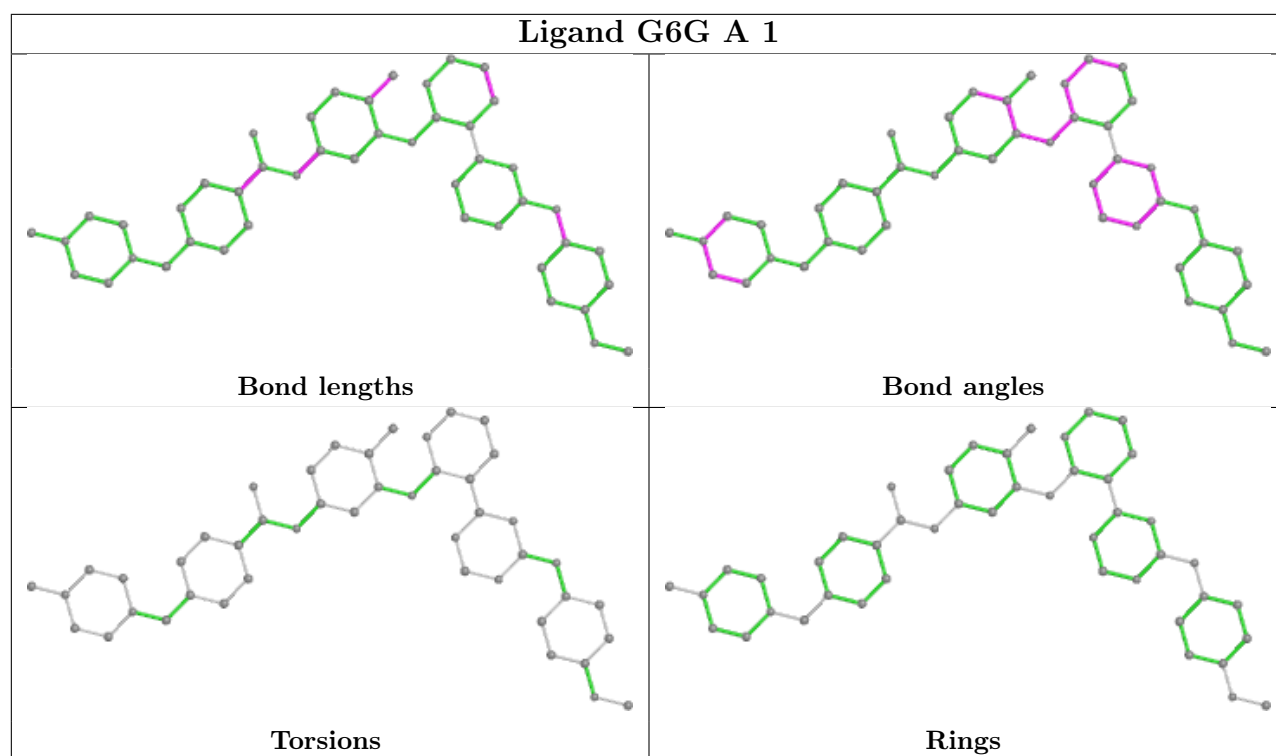
5.7 Other polymers ⓘ

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	264/286 (92%)	0.40	12 (4%)	33	40	25, 42, 74, 83	0
1	B	263/286 (91%)	0.47	26 (9%)	7	10	27, 42, 83, 91	0
All	All	527/572 (92%)	0.43	38 (7%)	15	20	25, 42, 78, 91	0

All (38) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	422	ALA	10.8
1	B	421	GLY	10.8
1	A	423	LYS	8.7
1	B	422	ALA	7.5
1	A	256	ALA	6.7
1	B	423	LYS	6.4
1	B	424	PHE	5.7
1	B	297	LEU	5.3
1	B	277	CYS	4.6
1	A	277	CYS	4.6
1	A	421	GLY	4.3
1	B	278	PHE	4.2
1	A	300	GLY	3.9
1	B	256	ALA	3.8
1	B	299	PRO	3.5
1	B	333	PRO	3.4
1	B	300	GLY	3.1
1	B	282	TRP	2.9
1	A	275	GLN	2.6
1	A	469	ARG	2.5
1	B	307	PHE	2.5
1	B	264	ARG	2.5
1	B	267	LEU	2.5
1	B	334	ILE	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	257	LYS	2.4
1	B	288	GLY	2.4
1	B	304	PRO	2.4
1	A	278	PHE	2.3
1	A	477	ARG	2.3
1	B	332	GLU	2.3
1	B	335	TYR	2.2
1	B	331	GLU	2.2
1	B	269	LEU	2.2
1	B	305	GLU	2.1
1	A	258	ASP	2.1
1	B	271	VAL	2.1
1	B	328	VAL	2.1
1	B	301	THR	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.

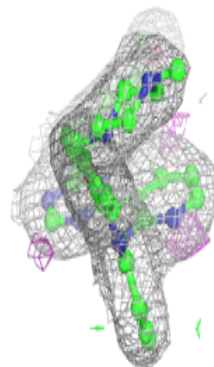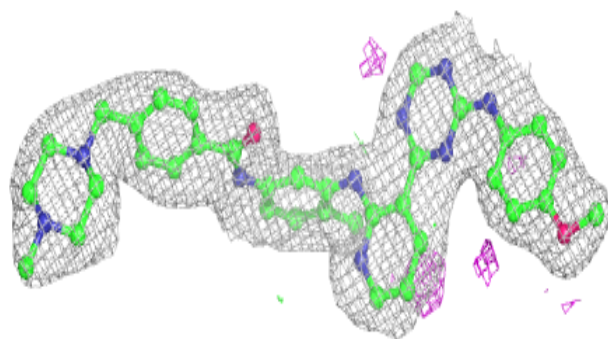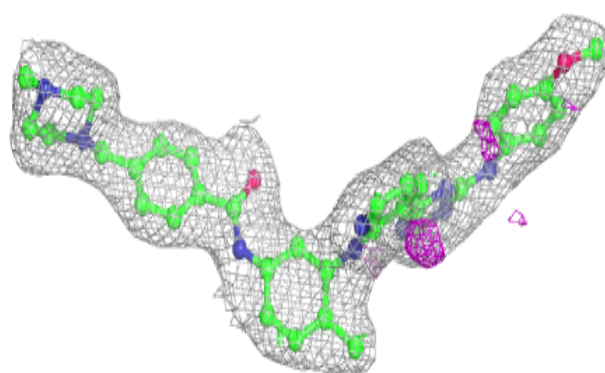| Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	GOL	B	1002	6/6	0.90	0.21	54,55,55,56	0
3	GOL	A	1003	6/6	0.91	0.23	55,56,57,58	0
2	G6G	B	2	46/46	0.95	0.13	34,40,45,46	0
2	G6G	A	1	46/46	0.96	0.14	29,37,41,45	0

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.

WORLDWIDE
wwPDB
PROTEIN DATA BANK

Electron density around G6G B 2:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)
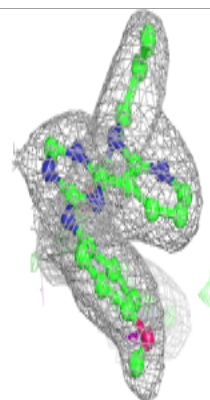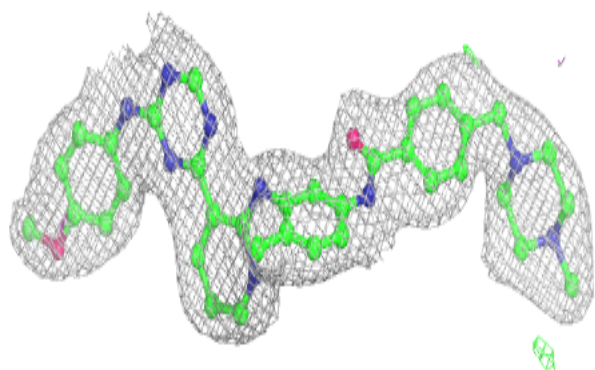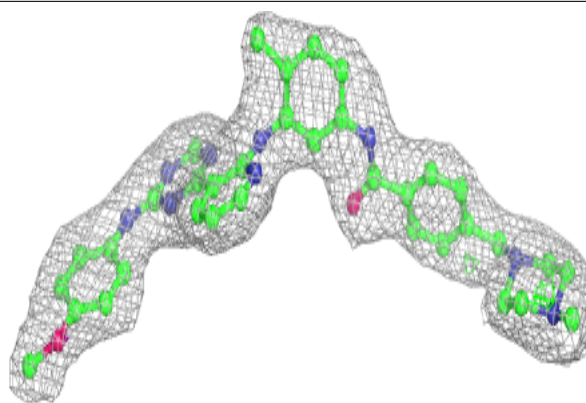
Electron density around G6G A 1:

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

6.5 Other polymers ⓘ

There are no such residues in this entry.