

# wwPDB X-ray Structure Validation Summary Report (i)

Jan 8, 2024 – 01:28 pm GMT

PDB ID : 5M90

Title: PCE reductive dehalogenase from S. multivorans in complex with 3,4,5-triflu

orophenol

Authors: Kunze, C.; Bommer, M.; Hagen, W.R.; Uksa, M.; Dobbek, H.; Schubert, T.;

Diekert, G.

Deposited on : 2016-10-31

Resolution : 1.60 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 types of validation reports are described at http://www.wwpdb.org/validation/2017/FAQs#types.

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

MolProbity: 4.02b-467

Mogul : 1.8.4, CSD as541be (2020)

Xtriage (Phenix) : 1.13

EDS : 2.36

buster-report : 1.1.7 (2018)

Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)

 $Refmac \quad : \quad 5.8.0158$ 

CCP4 : 7.0.044 (Gargrove)

Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)

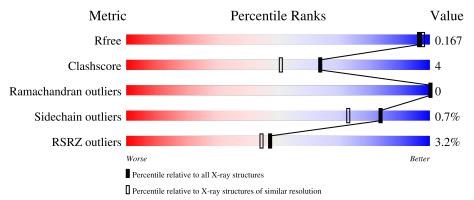
Validation Pipeline (wwPDB-VP) : 2.36

# 1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:  $X\text{-}RAY\ DIFFRACTION$ 

The reported resolution of this entry is 1.60 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	Similar resolution
Metric	$(\#  ext{Entries})$	$(\#  ext{Entries},  ext{ resolution range}( ext{Å}))$
$R_{free}$	130704	3398 (1.60-1.60)
Clashscore	141614	3665 (1.60-1.60)
Ramachandran outliers	138981	3564 (1.60-1.60)
Sidechain outliers	138945	3563 (1.60-1.60)
RSRZ outliers	127900	3321 (1.60-1.60)

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 <=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	464	90%	5% 5%
1	В	464	84%	10%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:



Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	BVQ	A	503	X	-	-	-
3	BVQ	В	503	X	-	-	-



# 2 Entry composition (i)

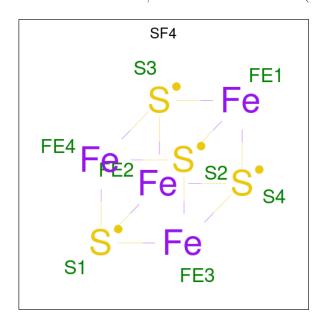
There are 7 unique types of molecules in this entry. The entry contains 7908 atoms, of which 0 are hydrogens and 0 are deuteriums.

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 Tetrachloroethene reductive dehalogenase catalytic subunit PceA.

Mol	Chain	Residues		$\mathbf{At}$	oms			ZeroOcc	AltConf	Trace
1	A	441	Total 3526	C 2239	N 603	O 653	S 31	0	5	0
1	В	416	Total 3293	C 2089	N 562	O 612	S 30	0	2	0

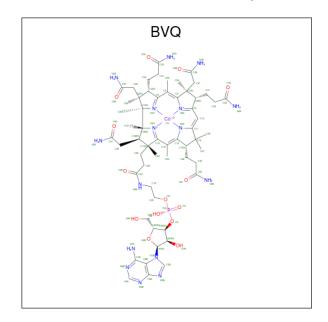
• Molecule 2 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Fe S 8 4 4	0	0
2	A	1	Total Fe S 8 4 4	0	0
2	В	1	Total Fe S 8 4 4	0	0
2	В	1	Total Fe S 8 4 4	0	0

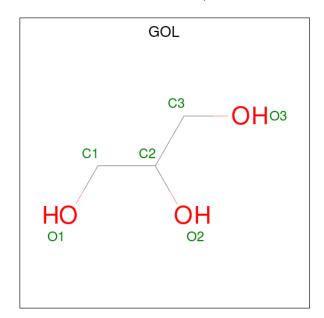


 $\bullet$  Molecule 3 is NORPSEUDO-B12 (three-letter code: BVQ) (formula:  $\mathrm{C_{57}H_{82}CoN_{16}O_{14}P}).$ 



Mol	Chain	Residues		1	Aton	ıs			ZeroOcc	AltConf
2	Λ	1	Total	С	Со	N	О	Р	0	0
3	A	1	89	57	1	16	14	1		0
9	D	1	Total	С	Со	N	О	Р	0	0
3	В	1	89	57	1	16	14	1	U	U

 $\bullet$  Molecule 4 is GLYCEROL (three-letter code: GOL) (formula:  $\mathrm{C_3H_8O_3}).$ 



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

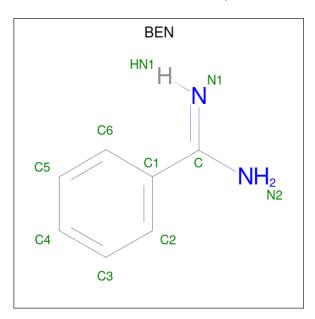
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 6 3 3	0	0
4	A	1	Total C O 6 3 3	0	0
4	A	1	Total C O 6 3 3	0	0
4	В	1	Total C O 6 3 3	0	0

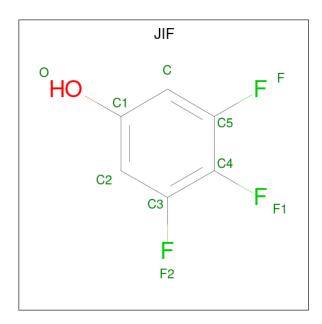
• Molecule 5 is BENZAMIDINE (three-letter code: BEN) (formula:  $C_7H_8N_2$ ).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	1	Total C N 9 7 2	()	0
5	В	1	Total C N 9 7 2	()	0
5	В	1	Total C N 9 7 2	0	0

 $\bullet$  Molecule 6 is 3,4,5-tris (fluoranyl)phenol (three-letter code: JIF) (formula: C\_6H\_3F\_3O).





Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	1	Total C F O 10 6 3 1	0	0
6	В	1	Total C F O 9 6 2 1	0	0
6	В	1	Total C F O 10 6 3 1	0	0

## • Molecule 7 is water.

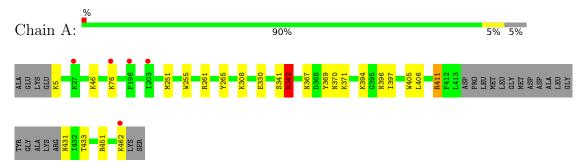
$\mathbf{Mol}$	Chain	Residues	Atoms	ZeroOcc	AltConf
7	A	431	Total O 431 431	0	0
7	В	362	Total O 362 362	0	0



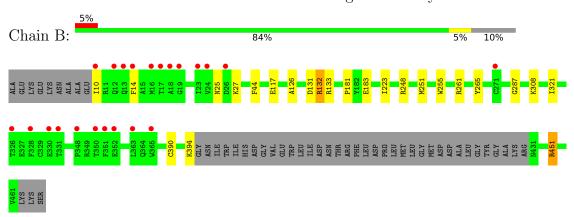
# 3 Residue-property plots (i)

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: Tetrachloroethene reductive dehalogenase catalytic subunit PceA



• Molecule 1: Tetrachloroethene reductive dehalogenase catalytic subunit PceA





# 4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 41	Depositor
Cell constants	73.63Å 73.63Å 185.14Å	Depositor
a, b, c, $\alpha$ , $\beta$ , $\gamma$	$90.00^{\circ}$ $90.00^{\circ}$ $90.00^{\circ}$	Depositor
Resolution (Å)	47.30 - 1.60	Depositor
rtesolution (A)	47.30 - 1.60	EDS
% Data completeness	99.6 (47.30-1.60)	Depositor
(in resolution range)	99.9 (47.30-1.60)	EDS
$R_{merge}$	0.05	Depositor
$R_{sym}$	(Not available)	Depositor
$< I/\sigma(I) > 1$	2.41  (at  1.60Å)	Xtriage
Refinement program	PHENIX (1.10.1_2155: ???)	Depositor
$R, R_{free}$	0.143 , $0.167$	Depositor
it, it free	0.143 , $0.167$	DCC
$R_{free}$ test set	6461  reflections  (5.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	19.7	Xtriage
Anisotropy	0.193	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$ , $B_{sol}(Å^2)$	0.38, 53.1	EDS
L-test for twinning <sup>2</sup>	$< L >=0.48, < L^2>=0.30$	Xtriage
Estimated twinning fraction	0.042 for h,-k,-l	Xtriage
$F_o, F_c$ correlation	0.98	EDS
Total number of atoms	7908	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	26.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 3.11% of the height of the origin peak. No significant pseudotranslation is detected.

<sup>&</sup>lt;sup>2</sup>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.



<sup>&</sup>lt;sup>1</sup>Intensities 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: SF4, GOL, BEN, BVQ, JIF

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		Boı	nd lengths	Bond angles		
MIOI	Chain	RMSZ   #  Z  > 5		RMSZ	# Z  > 5	
1	A	0.40	1/3616 (0.0%)	0.57	0/4908	
1	В	0.37	0/3377	0.63	4/4584 (0.1%)	
All	All	0.39	1/6993 (0.0%)	0.60	4/9492 (0.0%)	

#### All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	$\mathbf{Z}$	$\operatorname{Observed}(\text{\AA})$	$Ideal(\AA)$
1	A	342	LYS	CG-CD	-6.22	1.31	1.52

#### All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	$\mathbf{Z}$	$\mathbf{Observed}(^o)$	$\mathbf{Ideal}(^{o})$
1	В	451	ARG	NE-CZ-NH1	-13.55	113.52	120.30
1	В	132	ARG	NE-CZ-NH2	9.40	125.00	120.30
1	В	451	ARG	NE-CZ-NH2	8.07	124.33	120.30
1	В	132	ARG	NH1-CZ-NH2	-5.26	113.61	119.40

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	3526	0	3415	30	0	

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	В	3293	0	3190	26	0
2	A	16	0	0	0	0
2	В	16	0	0	0	0
3	A	89	0	82	4	0
3	В	89	0	82	4	0
4	A	24	0	32	0	0
4	В	6	0	8	0	0
5	A	9	0	7	0	0
5	В	18	0	14	3	0
6	A	10	0	0	0	0
6	В	19	0	0	0	0
7	A	431	0	0	3	2
7	В	362	0	0	6	2
All	All	7908	0	6830	58	2

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 58 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	$\begin{array}{c} \text{Clash} \\ \text{overlap } (\text{\AA}) \end{array}$
1:B:126:ALA:O	7:B:601:HOH:O	1.62	1.15
1:B:132:ARG:NH2	7:B:602:HOH:O	1.96	0.98
1:B:390:CYS:O	1:B:394:LYS:NZ	1.99	0.94
1:B:131:ASP:OD1	1:B:132:ARG:NH1	2.03	0.91
5:B:505:BEN:N1	7:B:604:HOH:O	2.04	0.89

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	$egin{aligned}  ext{Interatomic} \  ext{distance} & ( ext{Å}) \end{aligned}$	Clash overlap (Å)
7:A:914:HOH:O	7:B:611:HOH:O[3_455]	2.08	0.12
7:A:611:HOH:O	7:B:741:HOH:O[1_565]	2.16	0.04



## 5.3 Torsion angles (i)

#### 5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured Allowed		Outliers	Percentiles		
1	A	442/464 (95%)	434 (98%)	8 (2%)	0	100	100	
1	В	414/464~(89%)	405 (98%)	9 (2%)	0	100	100	
All	All	856/928 (92%)	839 (98%)	17 (2%)	0	100	100	

There are no Ramachandran outliers to report.

#### 5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles		
1	A	377/389 (97%)	373 (99%)	4 (1%)	73 57		
1	В	353/389 (91%)	352 (100%)	1 (0%)	92 87		
All	All	730/778~(94%)	725 (99%)	5 (1%)	84 73		

All (5) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	308	LYS
1	A	342	LYS
1	A	406	LEU
1	A	411	ARG
1	В	308	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:



Mol	Chain	$\operatorname{Res}$	Type
1	A	370	ASN
1	В	13	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 monosaccharides in this entry.

## 5.6 Ligand geometry (i)

17 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	Trino	Chain	Res	Link	Вс	ond leng	ths	Boı	nd angle	es
MIOI	Type	Chain	nes	LIIIK	Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z >2
2	SF4	A	502	1	0,12,12	-	-	-		
5	BEN	В	506	-	9,9,9	1.28	1 (11%)	7,11,11	0.95	1 (14%)
4	GOL	A	507	-	5,5,5	0.36	0	5,5,5	0.38	0
4	GOL	A	504	-	5,5,5	0.40	0	5,5,5	0.21	0
3	BVQ	A	503	7	87,99,99	0.99	4 (4%)	129,162,162	1.15	8 (6%)
3	BVQ	В	503	7	87,99,99	0.94	4 (4%)	129,162,162	1.15	12 (9%)
2	SF4	A	501	1	0,12,12	-	-	-		
4	GOL	A	506	-	5,5,5	0.35	0	5,5,5	0.30	0
4	GOL	В	504	_	5,5,5	0.33	0	5,5,5	0.50	0
5	BEN	A	508	-	9,9,9	1.29	1 (11%)	7,11,11	0.87	1 (14%)
5	BEN	В	505	-	9,9,9	1.20	1 (11%)	7,11,11	1.25	1 (14%)
6	JIF	A	509	-	10,10,10	0.16	0	14,14,14	0.40	0



Mol Type		Chain	Chain	Chain	Chain	Chain	Chain	Chain	Dog	Res Link	Bond lengths			Bond angles		
Mol   Type	nes		Res	nes	nes	nes	nes	nes	nes	nes	Lilik	Counts	RMSZ	# Z  > 2	Counts	RMSZ
6	JIF	В	507	-	9,9,10	0.30	0	12,12,14	0.90	1 (8%)						
6	JIF	В	508	-	10,10,10	0.06	0	14,14,14	0.33	0						
4	GOL	A	505	-	5,5,5	0.33	0	5,5,5	0.44	0						
2	SF4	В	501	1	0,12,12	-	-	-								
2	SF4	В	502	1	0,12,12	-	-	-								

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	SF4	В	501	1	-	-	0/6/5/5
5	BEN	В	506	-	-	0/4/4/4	0/1/1/1
4	GOL	A	507	-	-	4/4/4/4	-
4	GOL	A	504	-	-	2/4/4/4	-
3	BVQ	A	503	7	4/4/35/37	2/50/221/221	0/3/11/11
3	BVQ	В	503	7	4/4/35/37	2/50/221/221	0/3/11/11
2	SF4	A	501	1	-	-	0/6/5/5
4	GOL	A	506	-	-	0/4/4/4	-
4	GOL	В	504	-	-	0/4/4/4	-
5	BEN	A	508	-	-	0/4/4/4	0/1/1/1
5	BEN	В	505	-	-	0/4/4/4	0/1/1/1
6	JIF	A	509	-	-	-	0/1/1/1
6	JIF	В	507	-	-	-	0/1/1/1
6	JIF	В	508	-	-	-	0/1/1/1
4	GOL	A	505	-	-	0/4/4/4	-
2	SF4	A	502	1	-	-	0/6/5/5
2	SF4	В	502	1	-	_	0/6/5/5

The worst 5 of 11 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	$\mathbf{Z}$	$\operatorname{Observed}(\operatorname{\AA})$	Ideal(Å)
3	A	503	BVQ	C14-N23	6.58	1.43	1.35
3	В	503	BVQ	C14-N23	5.76	1.42	1.35
5	A	508	BEN	C1-C	-3.56	1.40	1.47
5	В	506	BEN	C1-C	-3.55	1.40	1.47
5	В	505	BEN	C1-C	-3.19	1.41	1.47

The worst 5 of 24 bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	$Observed(^o)$	$\operatorname{Ideal}({}^{o})$
3	A	503	BVQ	C1R-N1B-C8B	6.10	136.16	125.57
3	В	503	BVQ	C1R-N1B-C8B	6.03	136.03	125.57
3	A	503	BVQ	C48-C13-C14	3.48	117.16	108.49
3	В	503	BVQ	C48-C13-C14	3.35	116.84	108.49
3	A	503	BVQ	C10-C9-N22	3.26	129.47	125.73

5 of 8 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
3	A	503	BVQ	N22
3	A	503	BVQ	N21
3	A	503	BVQ	N23
3	A	503	BVQ	N24
3	В	503	BVQ	N22

5 of 10 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	503	BVQ	C14-C13-C48-C49
4	A	504	GOL	O1-C1-C2-C3
3	В	503	BVQ	C14-C13-C48-C49
4	A	504	GOL	O1-C1-C2-O2
3	A	503	BVQ	C38-C37-C7-C6

There are no ring outliers.

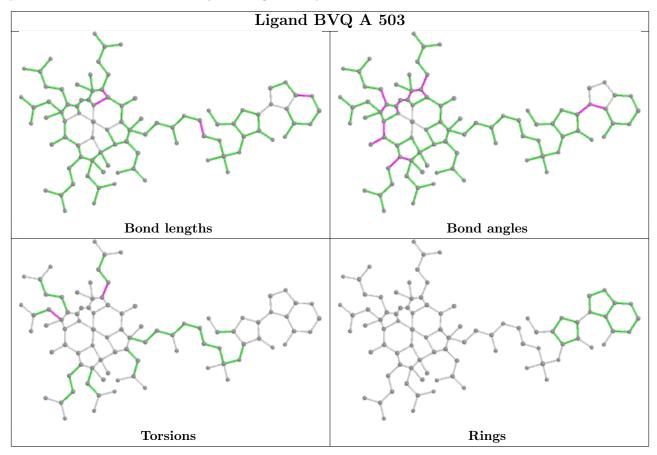
4 monomers are involved in 11 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	В	506	BEN	1	0
3	A	503	BVQ	4	0
3	В	503	BVQ	4	0
5	В	505	BEN	2	0

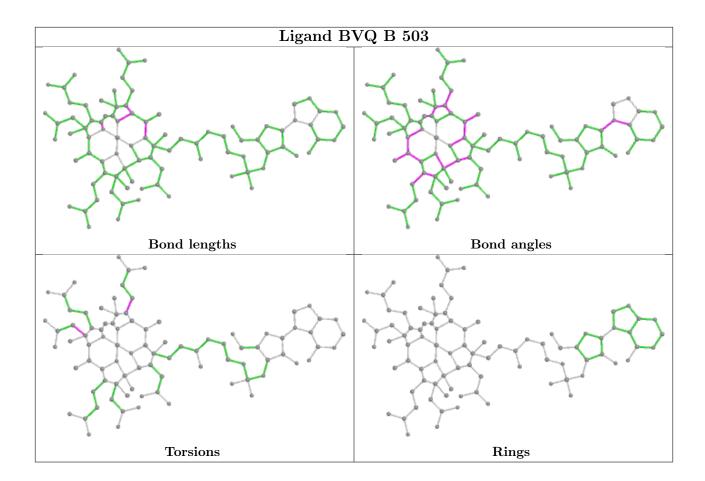
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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	sed $		$OWAB(Å^2)$	Q<0.9
1	A	441/464 (95%)	-0.14	5 (1%) 80 80	13, 21, 39, 57	0
1	В	416/464 (89%)	0.03	22 (5%) 26 24	15, 24, 45, 73	0
All	All	857/928 (92%)	-0.06	27 (3%) 47 44	13, 22, 42, 73	0

The worst 5 of 27 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	В	10	ILE	10.1
1	В	14	PHE	4.6
1	В	18	ALA	4.5
1	В	328	PHE	4.5
1	В	17	THR	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.



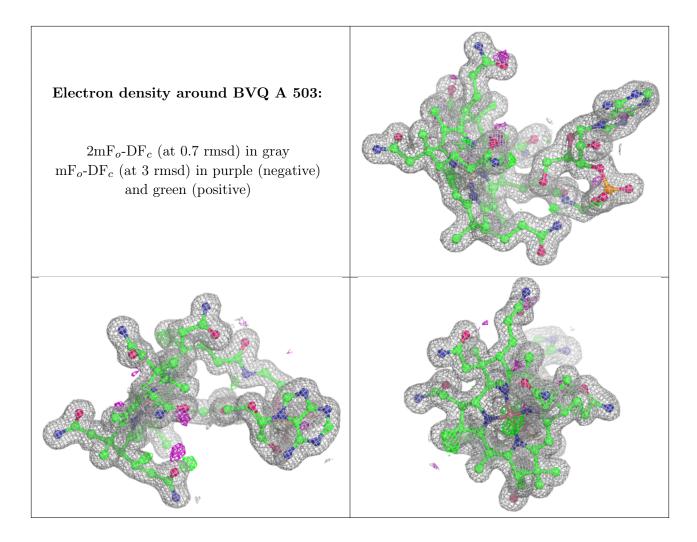
Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\mathbf{B} ext{-}\mathbf{factors}(\mathbf{\mathring{A}}^2)$	Q < 0.9
4	GOL	A	506	6/6	0.72	0.15	46,52,59,62	0
4	GOL	A	507	6/6	0.80	0.14	53,58,59,59	0
6	JIF	В	508	10/10	0.82	0.23	21,31,36,46	10
5	BEN	В	505	9/9	0.85	0.11	39,44,49,50	0
6	JIF	В	507	9/10	0.85	0.16	25,30,33,36	9
5	BEN	A	508	9/9	0.85	0.15	39,46,46,50	0
4	GOL	A	504	6/6	0.87	0.17	59,61,61,62	0
5	BEN	В	506	9/9	0.89	0.12	33,39,43,46	0
6	JIF	A	509	10/10	0.89	0.15	17,23,28,28	10
4	GOL	A	505	6/6	0.92	0.10	22,27,30,31	0
4	GOL	В	504	6/6	0.93	0.09	22,27,29,31	0
3	BVQ	В	503	89/89	0.96	0.08	13,19,27,32	0
2	SF4	В	501	8/8	0.97	0.06	23,26,28,30	0
2	SF4	В	502	8/8	0.98	0.07	19,21,23,24	0
3	BVQ	A	503	89/89	0.98	0.07	12,16,21,26	0
2	SF4	A	502	8/8	0.99	0.06	14,17,18,18	0
2	SF4	A	501	8/8	0.99	0.06	16,17,17,19	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.



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# 6.5 Other polymers (i)

There are no such residues in this entry.

