



# Full wwPDB X-ray Structure Validation Report ⓘ

Oct 2, 2023 – 05:24 PM EDT

PDB ID : 6NER  
Title : Synthetic Haliangium ochraceum BMC shell  
Authors : Sutter, M.; McGuire, S.; Aussignargues, C.; Kerfeld, C.A.  
Deposited on : 2018-12-18  
Resolution : 3.59 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](mailto: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>.

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

MolProbity : **FAILED**  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtrriage (Phenix) : 1.13  
EDS : **FAILED**  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
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 3.59 Å.

There are no overall percentile quality scores available for this entry.

MolProbity and EDS failed to run properly - the sequence quality summary graphics cannot be shown.

## 2 Entry composition [i](#)

There are 2 unique types of molecules in this entry. The entry contains 39510 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 BMC-H tandem fusion protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	185	1320	828	241	245	6	0	0	0
1	B	185	1320	828	241	245	6	0	0	0
1	C	185	1320	828	241	245	6	0	0	0
1	D	182	1304	818	238	242	6	0	0	0
1	E	186	1324	830	242	246	6	0	0	0
1	F	184	1316	826	240	244	6	0	0	0
1	G	183	1309	821	239	243	6	0	0	0
1	H	185	1320	828	241	245	6	0	0	0
1	I	184	1316	826	240	244	6	0	0	0
1	J	184	1316	826	240	244	6	0	0	0
1	K	185	1320	828	241	245	6	0	0	0
1	L	183	1311	823	239	243	6	0	0	0
1	M	183	1311	823	239	243	6	0	0	0
1	N	183	1311	823	239	243	6	0	0	0
1	O	184	1316	826	240	244	6	0	0	0
1	P	183	1309	821	239	243	6	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	Q	184	1316	826	240	244	6	0	0	0
1	R	184	1316	826	240	244	6	0	0	0
1	S	182	1304	818	238	242	6	0	0	0
1	T	184	1316	826	240	244	6	0	0	0
1	U	184	1316	826	240	244	6	0	0	0
1	V	185	1320	828	241	245	6	0	0	0
1	W	184	1316	826	240	244	6	0	0	0
1	X	184	1315	825	240	244	6	0	0	0
1	Y	185	1320	828	241	245	6	0	0	0
1	Z	185	1320	828	241	245	6	0	0	0
1	a	184	1316	826	240	244	6	0	0	0
1	b	182	1302	816	238	242	6	0	0	0
1	c	185	1320	828	241	245	6	0	0	0
1	d	185	1320	828	241	245	6	0	0	0

There are 480 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	100	LEU	-	linker	UNP D0LID5
A	101	ASP	-	linker	UNP D0LID5
A	102	ALA	-	linker	UNP D0LID5
A	103	PRO	-	linker	UNP D0LID5
A	104	VAL	-	linker	UNP D0LID5
A	105	VAL	-	linker	UNP D0LID5
A	106	ALA	-	linker	UNP D0LID5
A	107	ASP	-	linker	UNP D0LID5
A	108	ALA	-	linker	UNP D0LID5
A	109	TRP	-	linker	UNP D0LID5
A	110	GLU	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
A	111	GLU	-	linker	UNP D0LID5
A	112	ASP	-	linker	UNP D0LID5
A	113	THR	-	linker	UNP D0LID5
A	114	GLU	-	linker	UNP D0LID5
A	115	SER	-	linker	UNP D0LID5
B	100	LEU	-	linker	UNP D0LID5
B	101	ASP	-	linker	UNP D0LID5
B	102	ALA	-	linker	UNP D0LID5
B	103	PRO	-	linker	UNP D0LID5
B	104	VAL	-	linker	UNP D0LID5
B	105	VAL	-	linker	UNP D0LID5
B	106	ALA	-	linker	UNP D0LID5
B	107	ASP	-	linker	UNP D0LID5
B	108	ALA	-	linker	UNP D0LID5
B	109	TRP	-	linker	UNP D0LID5
B	110	GLU	-	linker	UNP D0LID5
B	111	GLU	-	linker	UNP D0LID5
B	112	ASP	-	linker	UNP D0LID5
B	113	THR	-	linker	UNP D0LID5
B	114	GLU	-	linker	UNP D0LID5
B	115	SER	-	linker	UNP D0LID5
C	100	LEU	-	linker	UNP D0LID5
C	101	ASP	-	linker	UNP D0LID5
C	102	ALA	-	linker	UNP D0LID5
C	103	PRO	-	linker	UNP D0LID5
C	104	VAL	-	linker	UNP D0LID5
C	105	VAL	-	linker	UNP D0LID5
C	106	ALA	-	linker	UNP D0LID5
C	107	ASP	-	linker	UNP D0LID5
C	108	ALA	-	linker	UNP D0LID5
C	109	TRP	-	linker	UNP D0LID5
C	110	GLU	-	linker	UNP D0LID5
C	111	GLU	-	linker	UNP D0LID5
C	112	ASP	-	linker	UNP D0LID5
C	113	THR	-	linker	UNP D0LID5
C	114	GLU	-	linker	UNP D0LID5
C	115	SER	-	linker	UNP D0LID5
D	100	LEU	-	linker	UNP D0LID5
D	101	ASP	-	linker	UNP D0LID5
D	102	ALA	-	linker	UNP D0LID5
D	103	PRO	-	linker	UNP D0LID5
D	104	VAL	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
D	105	VAL	-	linker	UNP D0LID5
D	106	ALA	-	linker	UNP D0LID5
D	107	ASP	-	linker	UNP D0LID5
D	108	ALA	-	linker	UNP D0LID5
D	109	TRP	-	linker	UNP D0LID5
D	110	GLU	-	linker	UNP D0LID5
D	111	GLU	-	linker	UNP D0LID5
D	112	ASP	-	linker	UNP D0LID5
D	113	THR	-	linker	UNP D0LID5
D	114	GLU	-	linker	UNP D0LID5
D	115	SER	-	linker	UNP D0LID5
E	100	LEU	-	linker	UNP D0LID5
E	101	ASP	-	linker	UNP D0LID5
E	102	ALA	-	linker	UNP D0LID5
E	103	PRO	-	linker	UNP D0LID5
E	104	VAL	-	linker	UNP D0LID5
E	105	VAL	-	linker	UNP D0LID5
E	106	ALA	-	linker	UNP D0LID5
E	107	ASP	-	linker	UNP D0LID5
E	108	ALA	-	linker	UNP D0LID5
E	109	TRP	-	linker	UNP D0LID5
E	110	GLU	-	linker	UNP D0LID5
E	111	GLU	-	linker	UNP D0LID5
E	112	ASP	-	linker	UNP D0LID5
E	113	THR	-	linker	UNP D0LID5
E	114	GLU	-	linker	UNP D0LID5
E	115	SER	-	linker	UNP D0LID5
F	100	LEU	-	linker	UNP D0LID5
F	101	ASP	-	linker	UNP D0LID5
F	102	ALA	-	linker	UNP D0LID5
F	103	PRO	-	linker	UNP D0LID5
F	104	VAL	-	linker	UNP D0LID5
F	105	VAL	-	linker	UNP D0LID5
F	106	ALA	-	linker	UNP D0LID5
F	107	ASP	-	linker	UNP D0LID5
F	108	ALA	-	linker	UNP D0LID5
F	109	TRP	-	linker	UNP D0LID5
F	110	GLU	-	linker	UNP D0LID5
F	111	GLU	-	linker	UNP D0LID5
F	112	ASP	-	linker	UNP D0LID5
F	113	THR	-	linker	UNP D0LID5
F	114	GLU	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
F	115	SER	-	linker	UNP D0LID5
G	100	LEU	-	linker	UNP D0LID5
G	101	ASP	-	linker	UNP D0LID5
G	102	ALA	-	linker	UNP D0LID5
G	103	PRO	-	linker	UNP D0LID5
G	104	VAL	-	linker	UNP D0LID5
G	105	VAL	-	linker	UNP D0LID5
G	106	ALA	-	linker	UNP D0LID5
G	107	ASP	-	linker	UNP D0LID5
G	108	ALA	-	linker	UNP D0LID5
G	109	TRP	-	linker	UNP D0LID5
G	110	GLU	-	linker	UNP D0LID5
G	111	GLU	-	linker	UNP D0LID5
G	112	ASP	-	linker	UNP D0LID5
G	113	THR	-	linker	UNP D0LID5
G	114	GLU	-	linker	UNP D0LID5
G	115	SER	-	linker	UNP D0LID5
H	100	LEU	-	linker	UNP D0LID5
H	101	ASP	-	linker	UNP D0LID5
H	102	ALA	-	linker	UNP D0LID5
H	103	PRO	-	linker	UNP D0LID5
H	104	VAL	-	linker	UNP D0LID5
H	105	VAL	-	linker	UNP D0LID5
H	106	ALA	-	linker	UNP D0LID5
H	107	ASP	-	linker	UNP D0LID5
H	108	ALA	-	linker	UNP D0LID5
H	109	TRP	-	linker	UNP D0LID5
H	110	GLU	-	linker	UNP D0LID5
H	111	GLU	-	linker	UNP D0LID5
H	112	ASP	-	linker	UNP D0LID5
H	113	THR	-	linker	UNP D0LID5
H	114	GLU	-	linker	UNP D0LID5
H	115	SER	-	linker	UNP D0LID5
I	100	LEU	-	linker	UNP D0LID5
I	101	ASP	-	linker	UNP D0LID5
I	102	ALA	-	linker	UNP D0LID5
I	103	PRO	-	linker	UNP D0LID5
I	104	VAL	-	linker	UNP D0LID5
I	105	VAL	-	linker	UNP D0LID5
I	106	ALA	-	linker	UNP D0LID5
I	107	ASP	-	linker	UNP D0LID5
I	108	ALA	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
I	109	TRP	-	linker	UNP D0LID5
I	110	GLU	-	linker	UNP D0LID5
I	111	GLU	-	linker	UNP D0LID5
I	112	ASP	-	linker	UNP D0LID5
I	113	THR	-	linker	UNP D0LID5
I	114	GLU	-	linker	UNP D0LID5
I	115	SER	-	linker	UNP D0LID5
J	100	LEU	-	linker	UNP D0LID5
J	101	ASP	-	linker	UNP D0LID5
J	102	ALA	-	linker	UNP D0LID5
J	103	PRO	-	linker	UNP D0LID5
J	104	VAL	-	linker	UNP D0LID5
J	105	VAL	-	linker	UNP D0LID5
J	106	ALA	-	linker	UNP D0LID5
J	107	ASP	-	linker	UNP D0LID5
J	108	ALA	-	linker	UNP D0LID5
J	109	TRP	-	linker	UNP D0LID5
J	110	GLU	-	linker	UNP D0LID5
J	111	GLU	-	linker	UNP D0LID5
J	112	ASP	-	linker	UNP D0LID5
J	113	THR	-	linker	UNP D0LID5
J	114	GLU	-	linker	UNP D0LID5
J	115	SER	-	linker	UNP D0LID5
K	100	LEU	-	linker	UNP D0LID5
K	101	ASP	-	linker	UNP D0LID5
K	102	ALA	-	linker	UNP D0LID5
K	103	PRO	-	linker	UNP D0LID5
K	104	VAL	-	linker	UNP D0LID5
K	105	VAL	-	linker	UNP D0LID5
K	106	ALA	-	linker	UNP D0LID5
K	107	ASP	-	linker	UNP D0LID5
K	108	ALA	-	linker	UNP D0LID5
K	109	TRP	-	linker	UNP D0LID5
K	110	GLU	-	linker	UNP D0LID5
K	111	GLU	-	linker	UNP D0LID5
K	112	ASP	-	linker	UNP D0LID5
K	113	THR	-	linker	UNP D0LID5
K	114	GLU	-	linker	UNP D0LID5
K	115	SER	-	linker	UNP D0LID5
L	100	LEU	-	linker	UNP D0LID5
L	101	ASP	-	linker	UNP D0LID5
L	102	ALA	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
L	103	PRO	-	linker	UNP D0LID5
L	104	VAL	-	linker	UNP D0LID5
L	105	VAL	-	linker	UNP D0LID5
L	106	ALA	-	linker	UNP D0LID5
L	107	ASP	-	linker	UNP D0LID5
L	108	ALA	-	linker	UNP D0LID5
L	109	TRP	-	linker	UNP D0LID5
L	110	GLU	-	linker	UNP D0LID5
L	111	GLU	-	linker	UNP D0LID5
L	112	ASP	-	linker	UNP D0LID5
L	113	THR	-	linker	UNP D0LID5
L	114	GLU	-	linker	UNP D0LID5
L	115	SER	-	linker	UNP D0LID5
M	100	LEU	-	linker	UNP D0LID5
M	101	ASP	-	linker	UNP D0LID5
M	102	ALA	-	linker	UNP D0LID5
M	103	PRO	-	linker	UNP D0LID5
M	104	VAL	-	linker	UNP D0LID5
M	105	VAL	-	linker	UNP D0LID5
M	106	ALA	-	linker	UNP D0LID5
M	107	ASP	-	linker	UNP D0LID5
M	108	ALA	-	linker	UNP D0LID5
M	109	TRP	-	linker	UNP D0LID5
M	110	GLU	-	linker	UNP D0LID5
M	111	GLU	-	linker	UNP D0LID5
M	112	ASP	-	linker	UNP D0LID5
M	113	THR	-	linker	UNP D0LID5
M	114	GLU	-	linker	UNP D0LID5
M	115	SER	-	linker	UNP D0LID5
N	100	LEU	-	linker	UNP D0LID5
N	101	ASP	-	linker	UNP D0LID5
N	102	ALA	-	linker	UNP D0LID5
N	103	PRO	-	linker	UNP D0LID5
N	104	VAL	-	linker	UNP D0LID5
N	105	VAL	-	linker	UNP D0LID5
N	106	ALA	-	linker	UNP D0LID5
N	107	ASP	-	linker	UNP D0LID5
N	108	ALA	-	linker	UNP D0LID5
N	109	TRP	-	linker	UNP D0LID5
N	110	GLU	-	linker	UNP D0LID5
N	111	GLU	-	linker	UNP D0LID5
N	112	ASP	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
N	113	THR	-	linker	UNP D0LID5
N	114	GLU	-	linker	UNP D0LID5
N	115	SER	-	linker	UNP D0LID5
O	100	LEU	-	linker	UNP D0LID5
O	101	ASP	-	linker	UNP D0LID5
O	102	ALA	-	linker	UNP D0LID5
O	103	PRO	-	linker	UNP D0LID5
O	104	VAL	-	linker	UNP D0LID5
O	105	VAL	-	linker	UNP D0LID5
O	106	ALA	-	linker	UNP D0LID5
O	107	ASP	-	linker	UNP D0LID5
O	108	ALA	-	linker	UNP D0LID5
O	109	TRP	-	linker	UNP D0LID5
O	110	GLU	-	linker	UNP D0LID5
O	111	GLU	-	linker	UNP D0LID5
O	112	ASP	-	linker	UNP D0LID5
O	113	THR	-	linker	UNP D0LID5
O	114	GLU	-	linker	UNP D0LID5
O	115	SER	-	linker	UNP D0LID5
P	100	LEU	-	linker	UNP D0LID5
P	101	ASP	-	linker	UNP D0LID5
P	102	ALA	-	linker	UNP D0LID5
P	103	PRO	-	linker	UNP D0LID5
P	104	VAL	-	linker	UNP D0LID5
P	105	VAL	-	linker	UNP D0LID5
P	106	ALA	-	linker	UNP D0LID5
P	107	ASP	-	linker	UNP D0LID5
P	108	ALA	-	linker	UNP D0LID5
P	109	TRP	-	linker	UNP D0LID5
P	110	GLU	-	linker	UNP D0LID5
P	111	GLU	-	linker	UNP D0LID5
P	112	ASP	-	linker	UNP D0LID5
P	113	THR	-	linker	UNP D0LID5
P	114	GLU	-	linker	UNP D0LID5
P	115	SER	-	linker	UNP D0LID5
Q	100	LEU	-	linker	UNP D0LID5
Q	101	ASP	-	linker	UNP D0LID5
Q	102	ALA	-	linker	UNP D0LID5
Q	103	PRO	-	linker	UNP D0LID5
Q	104	VAL	-	linker	UNP D0LID5
Q	105	VAL	-	linker	UNP D0LID5
Q	106	ALA	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
Q	107	ASP	-	linker	UNP D0LID5
Q	108	ALA	-	linker	UNP D0LID5
Q	109	TRP	-	linker	UNP D0LID5
Q	110	GLU	-	linker	UNP D0LID5
Q	111	GLU	-	linker	UNP D0LID5
Q	112	ASP	-	linker	UNP D0LID5
Q	113	THR	-	linker	UNP D0LID5
Q	114	GLU	-	linker	UNP D0LID5
Q	115	SER	-	linker	UNP D0LID5
R	100	LEU	-	linker	UNP D0LID5
R	101	ASP	-	linker	UNP D0LID5
R	102	ALA	-	linker	UNP D0LID5
R	103	PRO	-	linker	UNP D0LID5
R	104	VAL	-	linker	UNP D0LID5
R	105	VAL	-	linker	UNP D0LID5
R	106	ALA	-	linker	UNP D0LID5
R	107	ASP	-	linker	UNP D0LID5
R	108	ALA	-	linker	UNP D0LID5
R	109	TRP	-	linker	UNP D0LID5
R	110	GLU	-	linker	UNP D0LID5
R	111	GLU	-	linker	UNP D0LID5
R	112	ASP	-	linker	UNP D0LID5
R	113	THR	-	linker	UNP D0LID5
R	114	GLU	-	linker	UNP D0LID5
R	115	SER	-	linker	UNP D0LID5
S	100	LEU	-	linker	UNP D0LID5
S	101	ASP	-	linker	UNP D0LID5
S	102	ALA	-	linker	UNP D0LID5
S	103	PRO	-	linker	UNP D0LID5
S	104	VAL	-	linker	UNP D0LID5
S	105	VAL	-	linker	UNP D0LID5
S	106	ALA	-	linker	UNP D0LID5
S	107	ASP	-	linker	UNP D0LID5
S	108	ALA	-	linker	UNP D0LID5
S	109	TRP	-	linker	UNP D0LID5
S	110	GLU	-	linker	UNP D0LID5
S	111	GLU	-	linker	UNP D0LID5
S	112	ASP	-	linker	UNP D0LID5
S	113	THR	-	linker	UNP D0LID5
S	114	GLU	-	linker	UNP D0LID5
S	115	SER	-	linker	UNP D0LID5
T	100	LEU	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
T	101	ASP	-	linker	UNP D0LID5
T	102	ALA	-	linker	UNP D0LID5
T	103	PRO	-	linker	UNP D0LID5
T	104	VAL	-	linker	UNP D0LID5
T	105	VAL	-	linker	UNP D0LID5
T	106	ALA	-	linker	UNP D0LID5
T	107	ASP	-	linker	UNP D0LID5
T	108	ALA	-	linker	UNP D0LID5
T	109	TRP	-	linker	UNP D0LID5
T	110	GLU	-	linker	UNP D0LID5
T	111	GLU	-	linker	UNP D0LID5
T	112	ASP	-	linker	UNP D0LID5
T	113	THR	-	linker	UNP D0LID5
T	114	GLU	-	linker	UNP D0LID5
T	115	SER	-	linker	UNP D0LID5
U	100	LEU	-	linker	UNP D0LID5
U	101	ASP	-	linker	UNP D0LID5
U	102	ALA	-	linker	UNP D0LID5
U	103	PRO	-	linker	UNP D0LID5
U	104	VAL	-	linker	UNP D0LID5
U	105	VAL	-	linker	UNP D0LID5
U	106	ALA	-	linker	UNP D0LID5
U	107	ASP	-	linker	UNP D0LID5
U	108	ALA	-	linker	UNP D0LID5
U	109	TRP	-	linker	UNP D0LID5
U	110	GLU	-	linker	UNP D0LID5
U	111	GLU	-	linker	UNP D0LID5
U	112	ASP	-	linker	UNP D0LID5
U	113	THR	-	linker	UNP D0LID5
U	114	GLU	-	linker	UNP D0LID5
U	115	SER	-	linker	UNP D0LID5
V	100	LEU	-	linker	UNP D0LID5
V	101	ASP	-	linker	UNP D0LID5
V	102	ALA	-	linker	UNP D0LID5
V	103	PRO	-	linker	UNP D0LID5
V	104	VAL	-	linker	UNP D0LID5
V	105	VAL	-	linker	UNP D0LID5
V	106	ALA	-	linker	UNP D0LID5
V	107	ASP	-	linker	UNP D0LID5
V	108	ALA	-	linker	UNP D0LID5
V	109	TRP	-	linker	UNP D0LID5
V	110	GLU	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
V	111	GLU	-	linker	UNP D0LID5
V	112	ASP	-	linker	UNP D0LID5
V	113	THR	-	linker	UNP D0LID5
V	114	GLU	-	linker	UNP D0LID5
V	115	SER	-	linker	UNP D0LID5
W	100	LEU	-	linker	UNP D0LID5
W	101	ASP	-	linker	UNP D0LID5
W	102	ALA	-	linker	UNP D0LID5
W	103	PRO	-	linker	UNP D0LID5
W	104	VAL	-	linker	UNP D0LID5
W	105	VAL	-	linker	UNP D0LID5
W	106	ALA	-	linker	UNP D0LID5
W	107	ASP	-	linker	UNP D0LID5
W	108	ALA	-	linker	UNP D0LID5
W	109	TRP	-	linker	UNP D0LID5
W	110	GLU	-	linker	UNP D0LID5
W	111	GLU	-	linker	UNP D0LID5
W	112	ASP	-	linker	UNP D0LID5
W	113	THR	-	linker	UNP D0LID5
W	114	GLU	-	linker	UNP D0LID5
W	115	SER	-	linker	UNP D0LID5
X	100	LEU	-	linker	UNP D0LID5
X	101	ASP	-	linker	UNP D0LID5
X	102	ALA	-	linker	UNP D0LID5
X	103	PRO	-	linker	UNP D0LID5
X	104	VAL	-	linker	UNP D0LID5
X	105	VAL	-	linker	UNP D0LID5
X	106	ALA	-	linker	UNP D0LID5
X	107	ASP	-	linker	UNP D0LID5
X	108	ALA	-	linker	UNP D0LID5
X	109	TRP	-	linker	UNP D0LID5
X	110	GLU	-	linker	UNP D0LID5
X	111	GLU	-	linker	UNP D0LID5
X	112	ASP	-	linker	UNP D0LID5
X	113	THR	-	linker	UNP D0LID5
X	114	GLU	-	linker	UNP D0LID5
X	115	SER	-	linker	UNP D0LID5
Y	100	LEU	-	linker	UNP D0LID5
Y	101	ASP	-	linker	UNP D0LID5
Y	102	ALA	-	linker	UNP D0LID5
Y	103	PRO	-	linker	UNP D0LID5
Y	104	VAL	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
Y	105	VAL	-	linker	UNP D0LID5
Y	106	ALA	-	linker	UNP D0LID5
Y	107	ASP	-	linker	UNP D0LID5
Y	108	ALA	-	linker	UNP D0LID5
Y	109	TRP	-	linker	UNP D0LID5
Y	110	GLU	-	linker	UNP D0LID5
Y	111	GLU	-	linker	UNP D0LID5
Y	112	ASP	-	linker	UNP D0LID5
Y	113	THR	-	linker	UNP D0LID5
Y	114	GLU	-	linker	UNP D0LID5
Y	115	SER	-	linker	UNP D0LID5
Z	100	LEU	-	linker	UNP D0LID5
Z	101	ASP	-	linker	UNP D0LID5
Z	102	ALA	-	linker	UNP D0LID5
Z	103	PRO	-	linker	UNP D0LID5
Z	104	VAL	-	linker	UNP D0LID5
Z	105	VAL	-	linker	UNP D0LID5
Z	106	ALA	-	linker	UNP D0LID5
Z	107	ASP	-	linker	UNP D0LID5
Z	108	ALA	-	linker	UNP D0LID5
Z	109	TRP	-	linker	UNP D0LID5
Z	110	GLU	-	linker	UNP D0LID5
Z	111	GLU	-	linker	UNP D0LID5
Z	112	ASP	-	linker	UNP D0LID5
Z	113	THR	-	linker	UNP D0LID5
Z	114	GLU	-	linker	UNP D0LID5
Z	115	SER	-	linker	UNP D0LID5
a	100	LEU	-	linker	UNP D0LID5
a	101	ASP	-	linker	UNP D0LID5
a	102	ALA	-	linker	UNP D0LID5
a	103	PRO	-	linker	UNP D0LID5
a	104	VAL	-	linker	UNP D0LID5
a	105	VAL	-	linker	UNP D0LID5
a	106	ALA	-	linker	UNP D0LID5
a	107	ASP	-	linker	UNP D0LID5
a	108	ALA	-	linker	UNP D0LID5
a	109	TRP	-	linker	UNP D0LID5
a	110	GLU	-	linker	UNP D0LID5
a	111	GLU	-	linker	UNP D0LID5
a	112	ASP	-	linker	UNP D0LID5
a	113	THR	-	linker	UNP D0LID5
a	114	GLU	-	linker	UNP D0LID5

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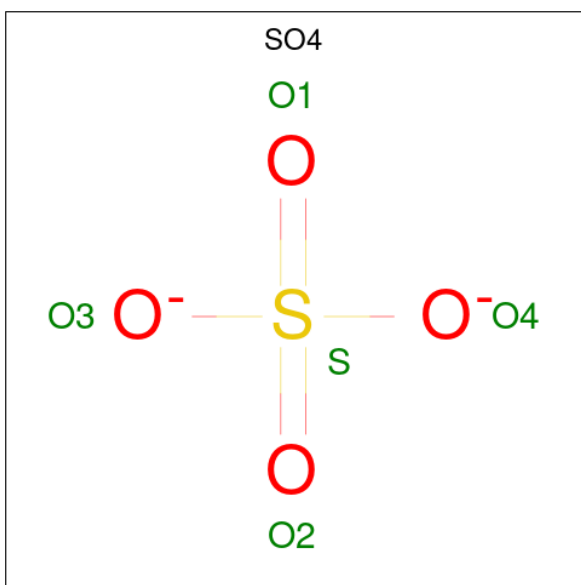
Chain	Residue	Modelled	Actual	Comment	Reference
a	115	SER	-	linker	UNP D0LID5
b	100	LEU	-	linker	UNP D0LID5
b	101	ASP	-	linker	UNP D0LID5
b	102	ALA	-	linker	UNP D0LID5
b	103	PRO	-	linker	UNP D0LID5
b	104	VAL	-	linker	UNP D0LID5
b	105	VAL	-	linker	UNP D0LID5
b	106	ALA	-	linker	UNP D0LID5
b	107	ASP	-	linker	UNP D0LID5
b	108	ALA	-	linker	UNP D0LID5
b	109	TRP	-	linker	UNP D0LID5
b	110	GLU	-	linker	UNP D0LID5
b	111	GLU	-	linker	UNP D0LID5
b	112	ASP	-	linker	UNP D0LID5
b	113	THR	-	linker	UNP D0LID5
b	114	GLU	-	linker	UNP D0LID5
b	115	SER	-	linker	UNP D0LID5
c	100	LEU	-	linker	UNP D0LID5
c	101	ASP	-	linker	UNP D0LID5
c	102	ALA	-	linker	UNP D0LID5
c	103	PRO	-	linker	UNP D0LID5
c	104	VAL	-	linker	UNP D0LID5
c	105	VAL	-	linker	UNP D0LID5
c	106	ALA	-	linker	UNP D0LID5
c	107	ASP	-	linker	UNP D0LID5
c	108	ALA	-	linker	UNP D0LID5
c	109	TRP	-	linker	UNP D0LID5
c	110	GLU	-	linker	UNP D0LID5
c	111	GLU	-	linker	UNP D0LID5
c	112	ASP	-	linker	UNP D0LID5
c	113	THR	-	linker	UNP D0LID5
c	114	GLU	-	linker	UNP D0LID5
c	115	SER	-	linker	UNP D0LID5
d	100	LEU	-	linker	UNP D0LID5
d	101	ASP	-	linker	UNP D0LID5
d	102	ALA	-	linker	UNP D0LID5
d	103	PRO	-	linker	UNP D0LID5
d	104	VAL	-	linker	UNP D0LID5
d	105	VAL	-	linker	UNP D0LID5
d	106	ALA	-	linker	UNP D0LID5
d	107	ASP	-	linker	UNP D0LID5
d	108	ALA	-	linker	UNP D0LID5

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Chain	Residue	Modelled	Actual	Comment	Reference
d	109	TRP	-	linker	UNP D0LID5
d	110	GLU	-	linker	UNP D0LID5
d	111	GLU	-	linker	UNP D0LID5
d	112	ASP	-	linker	UNP D0LID5
d	113	THR	-	linker	UNP D0LID5
d	114	GLU	-	linker	UNP D0LID5
d	115	SER	-	linker	UNP D0LID5

- Molecule 2 is SULFATE ION (three-letter code: SO4) (formula: O<sub>4</sub>S).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
2	A	1	Total	O	S	0	0
			5	4	1		
2	D	1	Total	O	S	0	0
			5	4	1		
2	G	1	Total	O	S	0	0
			5	4	1		
2	L	1	Total	O	S	0	0
			5	4	1		
2	M	1	Total	O	S	0	0
			5	4	1		
2	P	1	Total	O	S	0	0
			5	4	1		
2	S	1	Total	O	S	0	0
			5	4	1		
2	V	1	Total	O	S	0	0
			5	4	1		

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<b>Mol</b>	<b>Chain</b>	<b>Residues</b>	<b>Atoms</b>			<b>ZeroOcc</b>	<b>AltConf</b>
2	Y	1	Total	O	S	0	0
			5	4	1		
2	c	1	Total	O	S	0	0
			5	4	1		

MolProbity and EDS failed to run properly - this section is therefore empty.

### 3 Data and refinement statistics i

EDS failed to run properly - this section is therefore incomplete.

Property	Value	Source
Space group	P 21 3	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	325.51Å 325.51Å 325.51Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.64 – 3.59	Depositor
% Data completeness (in resolution range)	99.9 (49.64-3.59)	Depositor
$R_{merge}$	0.58	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.74 (at 3.57Å)	Xtrriage
Refinement program	PHENIX 1.14_3260	Depositor
R, $R_{free}$	0.171 , 0.210	Depositor
Wilson B-factor (Å <sup>2</sup> )	117.3	Xtrriage
Anisotropy	0.000	Xtrriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	0.029 for l,-k,h	Xtrriage
Total number of atoms	39510	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	113.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.80% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical 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.

## 4 Model quality [i](#)

### 4.1 Standard geometry [i](#)

MolProbity failed to run properly - this section is therefore empty.

### 4.2 Too-close contacts [i](#)

MolProbity failed to run properly - this section is therefore empty.

### 4.3 Torsion angles [i](#)

#### 4.3.1 Protein backbone [i](#)

MolProbity failed to run properly - this section is therefore empty.

#### 4.3.2 Protein sidechains [i](#)

MolProbity failed to run properly - this section is therefore empty.

#### 4.3.3 RNA [i](#)

MolProbity failed to run properly - this section is therefore empty.

### 4.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

### 4.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

### 4.6 Ligand geometry [i](#)

10 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	SO4	P	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	V	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	D	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	L	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	G	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	Y	301	-	4,4,4	0.15	0	6,6,6	0.05	0
2	SO4	c	301	-	4,4,4	0.14	0	6,6,6	0.06	0
2	SO4	M	301	-	4,4,4	0.15	0	6,6,6	0.06	0
2	SO4	S	301	-	4,4,4	0.14	0	6,6,6	0.05	0
2	SO4	A	301	-	4,4,4	0.14	0	6,6,6	0.05	0

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

#### 4.7 Other polymers [i](#)

There are no such residues in this entry.

#### 4.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 5 Fit of model and data

### 5.1 Protein, DNA and RNA chains

EDS failed to run properly - this section is therefore empty.

### 5.2 Non-standard residues in protein, DNA, RNA chains

EDS failed to run properly - this section is therefore empty.

### 5.3 Carbohydrates

EDS failed to run properly - this section is therefore empty.

### 5.4 Ligands

EDS failed to run properly - this section is therefore empty.

### 5.5 Other polymers

EDS failed to run properly - this section is therefore empty.