

2XA0

 rcsb.org/structure/2xa0

Biological Assembly 1



Macromolecule Content

- Total Structure Weight: 52.87 kDa
- Atom Count: 2733
- Modelled Residue Count: 326
- Deposited Residue Count: 476
- Unique protein chains: 2

Crystal structure of BCL-2 in complex with a BAX BH3 peptide

PDB DOI: [10.2210/pdb2XA0/pdb](https://doi.org/10.2210/pdb2XA0/pdb)

Classification: APOPTOSIS

Organism(s): Homo sapiens, Mus musculus

Expression System: Escherichia coli BL21(DE3)

Mutation(s): No

Deposited: 2010-03-25 **Released:** 2010-11-24

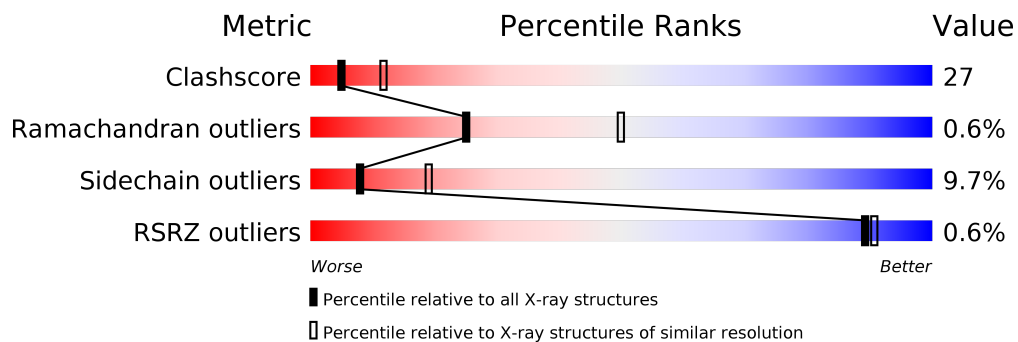
Deposition Author(s): Ku, B., Oh, B.H.

Experimental Data Snapshot

wwPDB Validation

[3D Report](#) [Full Report](#)

This is version 1.2
of the entry. See
complete [history](#).



Evidence that Inhibition of Bax Activation by Bcl- 2 Involves its Tight and Preferential Interaction with the Bh3 Domain of Bax.

Ku, B., Liang, C., Jung, J.U., Oh, B.H.

(2011) Cell Res **21**: 627

DOI: [10.1038/cr.2010.149](#)

Primary Citation of Related Structures:

[2XAO](#)


PubMed Abstract:

Macromolecules

Find similar proteins by:

(by identity cutoff) | [3D Structure](#)

Entity ID: 1

Molecule					
Chains					
Sequence Length					
Organism					
Details					
Image					
APOPTOSIS REGULATOR BCL-2	<u>A</u> , <u>B</u>	207	<u>Homo</u> <u>sapiens</u>	Mutation(s): 0 Gene Names: <u>BCL2</u>	
UniProt & NIH Common Fund Data Resources					
Find proteins for <u>P10415</u> (<i>Homo sapiens</i>) Explore <u>P10415</u> Go to UniProtKB: <u>P10415</u>					
PHAROS: <u>P10415</u> GTEX: <u>ENSG00000171791</u>					
Protein Feature View <u>Expand</u>					

Reference Sequence

2XA0_1



PDB ENTITY 2XA0_1

UNIPROT [P10415](#)

UNMODELED B

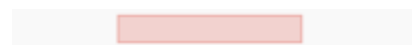
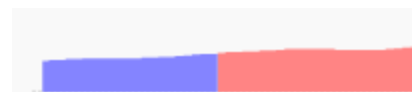
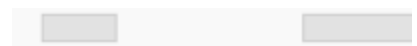
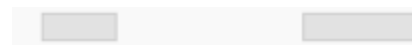
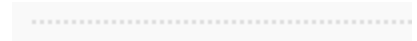
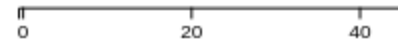
UNMODELED A

HYDROPATHY

DISORDER

DISORDERED BINDING

PFAM



Find similar proteins by:

(by identity cutoff) | [3D Structure](#)

Entity ID: 2

Molecule					
Chains					
Sequence Length					
Organism					
Details					
Image					
APOPTOSIS REGULATOR BAX	<u>C</u> , <u>D</u>	31	<u>Mus</u> <u>musculus</u>	Mutation(s): 0 Gene Names: <u>Bax</u>	
UniProt					
Find proteins for <u>Q07813</u> (<i>Mus musculus</i>)					
Explore <u>Q07813</u>					
Go to UniProtKB: <u>Q07813</u>					
Protein Feature View					
<u>Expand</u>					

Reference Sequence

2XA0_2



PDB ENTITY 2XA0_2

UNIPROT [Q07813](#)

UNMODELED D

UNMODELED C

HYDROPATHY

DISORDER

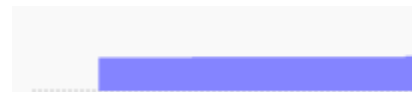
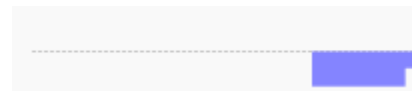
DISORDERED BINDING

PFAM



Q D A S T K

Q D A S T K



Experimental Data & Validation

Experimental Data

Method: X-RAY DIFFRACTION

Resolution: 2.70 Å

R-Value Free: 0.242

R-Value Work: 0.222

R-Value Observed: 0.222

Space Group: $P3_121$

Unit Cell:

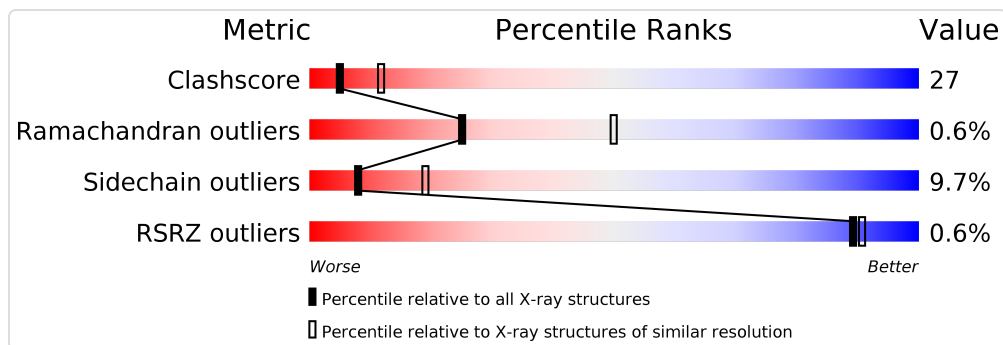
Length (Å)	Angle (°)
a = 81.973	$\alpha = 90$
b = 81.973	$\beta = 90$
c = 138.85	$\gamma = 120$

Software Package:

Software Name	Purpose
CNS	refinement

Structure Validation

View [Full Validation Report](#)



Entry History

Deposition Data

Deposited Date: 2010-03-25

Released Date: 2010-11-24

Deposition Author(s): [Ku, B.](#), [Oh, B.H.](#)

Revision History ([Full details and data files](#))

- **Version 1.0: 2010-11-24**
Type: Initial release
- **Version 1.1: 2011-05-26**
Changes: Version format compliance
- **Version 1.2: 2011-07-13**
Changes: Version format compliance