

Product datasheet

Anti-Bcl-2 antibody ab59348

★★★★☆ [3 Abreviews](#) [601 References](#) [3 Images](#)

Overview

Product name	Anti-Bcl-2 antibody
Description	Rabbit polyclonal to Bcl-2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human Bcl-2. Sequence: The antiserum was produced against synthesized non-phosphopeptide derived from human BCL-2 around the phosphorylation site of threonine 69 (A-R-TP-S-P).

Database link: [P10415](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes Store at -20°C for year

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride Without Mg+2 and Ca+2

Purity	Immunogen affinity purified
Purification notes	Affinity purified from rabbit antiserum by affinity chromatography, using epitope specific immunogen
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab59348 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 26 kDa. Positive control: K562 cell lysate. Please see WB protocol details in the image legend.
IHC-P	★★★★☆ (1)	1/50 - 1/100.
ICC/IF		1/100 - 1/500.

Target

Function	Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. Regulates cell death by controlling the mitochondrial membrane permeability. Appears to function in a feedback loop system with caspases. Inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor (APAF-1). May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release (PubMed:17418785).
Tissue specificity	Expressed in a variety of tissues.
Involvement in disease	A chromosomal aberration involving BCL2 has been found in chronic lymphatic leukemia. Translocation t(14;18)(q32;q21) with immunoglobulin gene regions. BCL2 mutations found in non-Hodgkin lymphomas carrying the chromosomal translocation could be attributed to the Ig somatic hypermutation mechanism resulting in nucleotide transitions.
Sequence similarities	Belongs to the Bcl-2 family.
Domain	BH1 and BH2 domains are required for the interaction with BAX and for anti-apoptotic activity. The BH4 motif is required for anti-apoptotic activity and for interaction with RAF1 and EGLN3. The loop between motifs BH4 and BH3 is required for the interaction with NLRP1.
Post-translational modifications	Phosphorylation/dephosphorylation on Ser-70 regulates anti-apoptotic activity. Growth factor-stimulated phosphorylation on Ser-70 by PKC is required for the anti-apoptosis activity and occurs during the G2/M phase of the cell cycle. In the absence of growth factors, BCL2 appears to be phosphorylated by other protein kinases such as ERKs and stress-activated kinases. Phosphorylated by MAPK8/JNK1 at Thr-69, Ser-70 and Ser-87, wich stimulates starvation-induced autophagy. Dephosphorylated by protein phosphatase 2A (PP2A). Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif,

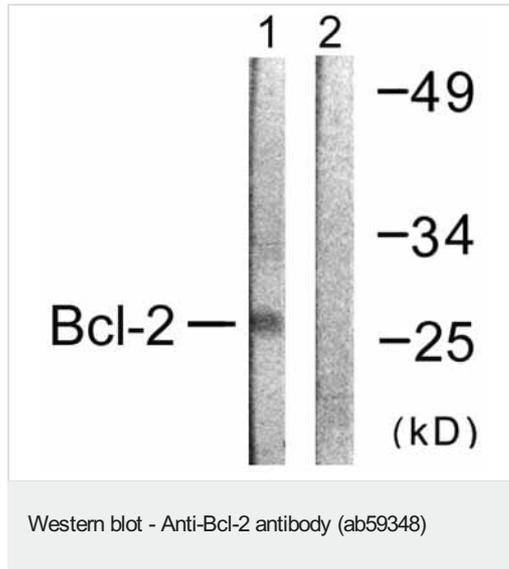
has pro-apoptotic activity, causes the release of cytochrome c into the cytosol promoting further caspase activity.

Monoubiquitinated by PARK2, leading to increase its stability. Ubiquitinated by SCF(FBXO10), leading to its degradation by the proteasome.

Cellular localization

Mitochondrion outer membrane. Nucleus membrane. Endoplasmic reticulum membrane.

Images



All lanes : Anti-Bcl-2 antibody (ab59348) at 1/500 dilution

Lane 1 : Extracts from K562 cells with no immunizing peptide

Lane 2 : Extracts from K562 cells with immunizing peptide

Lysates/proteins at 40 µg per lane.

Observed band size: 26 kDa

Blocking buffer: 5% (w/v) non-fat dry milk in TBST.

Primary antibody dilution buffer: 5%(w/v)non-fat dried milk,0.1% (v/v), Tween-20 in TBST.

Secondary antibody dilution buffer: 5%(w/v)non-fat dried milk,0.1% (v/v),Tween-20 in TBST.

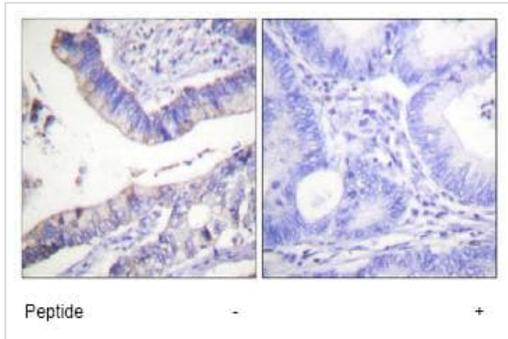
12% SDS gel. Nitrocellulose membrane.

Blocking: Room temperature for 2 hours or overnight at 4°C. Then wash 3x for 5 minutes with 0.05% blocking buffer.

Primary antibody incubation: diluted in TBST at 1/500. Incubate overnight with 4 degrees shaking. Then, in 0.05% TBST, wash membrane 3-4 times for 10min.

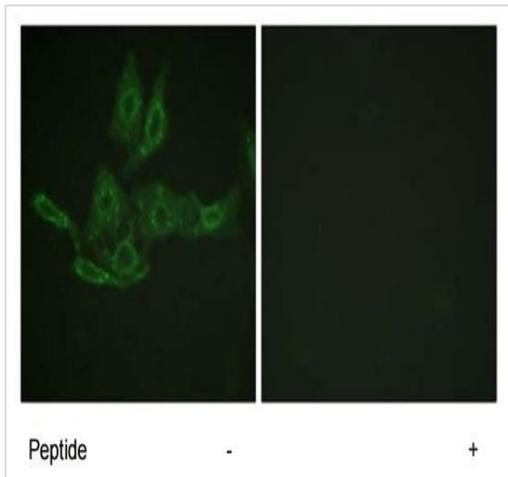
Secondary antibody incubation: diluted in TBST at 1/2000. Incubate 37°C for 1 hour. Then, in 0.05% TBST, wash membrane 3-4 times for 10min.

ECL development.



ab59348, at a 1/50 dilution, staining human Bcl-2 in colon carcinoma, using Immunohistochemistry, Paraffin embedded tissue, in the absence (left image) and presence of the immunizing peptide (right image).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl-2 antibody (ab59348)



Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labelling Bcl-2 with ab59348 in the absence (left image) and presence of the immunizing peptide (right image).

Immunocytochemistry/ Immunofluorescence - Anti-Bcl-2 antibody (ab59348)

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