

## Product datasheet

### Anti-Bcl-2 antibody ab59348

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

#### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-Bcl-2 antibody  |
| <b>Description</b>         | Rabbit polyclonal to Bcl-2   |
| <b>Host species</b>        | Rabbit   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, IHC-P, ICC/IF   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human  |
| <b>Immunogen</b>           | Synthetic peptide corresponding to Human Bcl-2.<br>Sequence:<br><br>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

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

|                           |  |
|---------------------------|--|
| <b>Purity</b>             | Immunogen affinity purified  |
| <b>Purification notes</b> | Affinity purified from rabbit antiserum by affinity chromatography, using epitope specific immunogen |
| <b>Clonality</b>          | Polyclonal   |
| <b>Isotype</b>            | 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   |
|---------------|-----------|---|
| <b>WB</b>     | ★★★★★ (2) | 1/500 - 1/1000. Detects a band of approximately 26 kDa.<br>Positive control: K562 cell lysate.<br>Please see WB protocol details in the image legend. |
| <b>IHC-P</b>  | ★★★★★ (1) | 1/50 - 1/100.   |
| <b>ICC/IF</b> |           | 1/100 - 1/500.  |

## Target

|   |  |
|---|--|
| <b>Function</b>                         | 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).   |
| <b>Tissue specificity</b>               | Expressed in a variety of tissues.   |
| <b>Involvement in disease</b>           | 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.  |
| <b>Sequence similarities</b>            | Belongs to the Bcl-2 family.   |
| <b>Domain</b>                           | 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.  |
| <b>Post-translational modifications</b> | 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, |

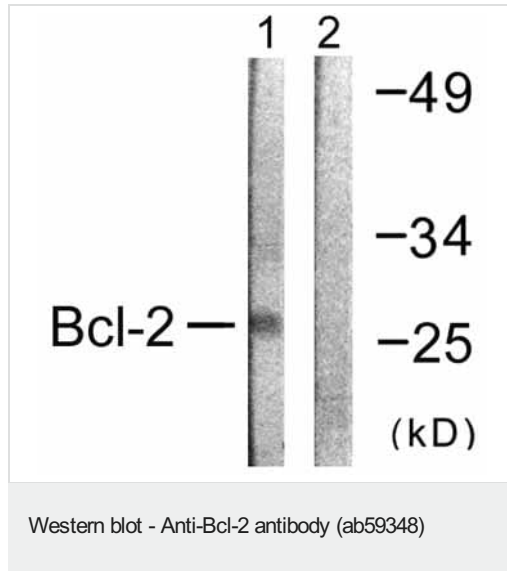
has pro-apoptotic activity, causes the release of cytochrome c into the cytosol promoting further caspase activity.

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.

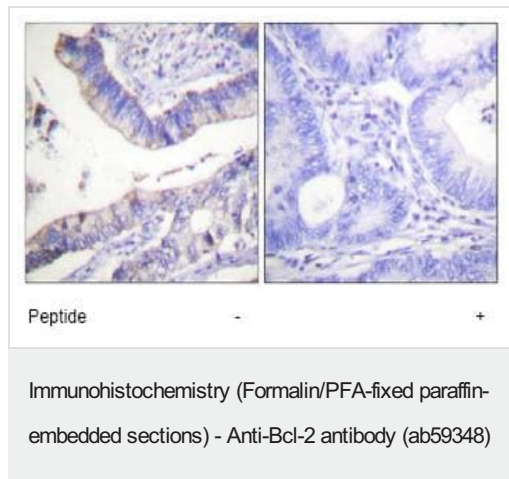
12% SDS gel. Nitrocellulose membrane.

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

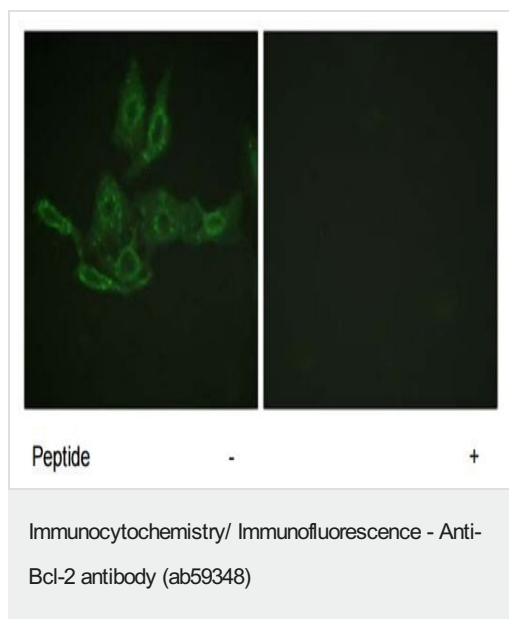
Primary antibody incubation: diluted in TBST at 1/500. Incubate overnight with 4 degrees shaking. Then, in 0.05% TBST, wash membrane 3-4 times for 10min.

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).



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

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