

Product datasheet

Anti-Bcl-2 (phospho T56) antibody ab28820

2 Images

Overview

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<b>Product name</b>	Anti-Bcl-2 (phospho T56) antibody
<b>Description</b>	Rabbit polyclonal to Bcl-2 (phospho T56)
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab28820 recognises Phospho-BCL-2(Thr56)
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, ELISA, ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human Bcl-2. Database link: <a href="#">P10415</a>
<b>Positive control</b>	Breast carcinoma

Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS (without Mg <sup>++</sup> and Ca <sup>++</sup> ), 150mM Sodium chloride, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab28820 was affinity-purified from rabbit antiserum by affinity chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

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Our [Abpromise guarantee](#) covers the use of **ab28820** in the following tested applications.

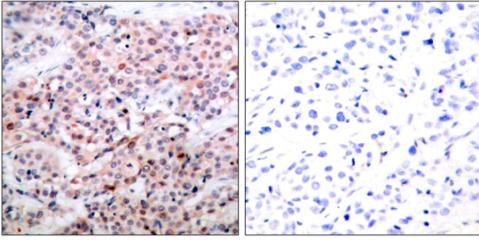
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.
ELISA		1/20000.
ICC/IF		1/100 - 1/500.
WB		1/500 - 1/1000.

## Target

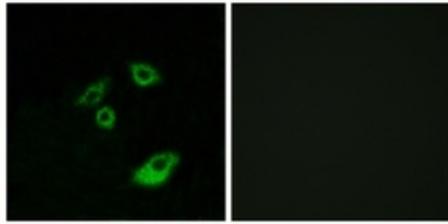
<b>Function</b>	Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. Regulates cell death by controlling the mitochondrial membrane permeability. Appears to function in a feedback loop system with caspases. Inhibits caspase activity either 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.
<b>Cellular localization</b>	Mitochondrion outer membrane. Nucleus membrane. Endoplasmic reticulum membrane.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl-2 (phospho T56) antibody (ab28820)

Immunohistochemical analysis of paraffin-embedded breast carcinoma, using Anti-Phospho-BCL2(Thr56) Antibody (ab28820).  
Left: Untreated; Right: Treated with synthesized phospho-peptide.



Immunocytochemistry/ Immunofluorescence - Anti-Bcl-2 (phospho T56) antibody (ab28820)

Immunofluorescence analysis of A549 cells, using ab28820.  
The image on the right is treated with the synthesized peptide.

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