

Product datasheet

Anti-Bcl-2 (phospho S70) antibody ab28819

3 References 2 Images

Overview

Product name	Anti-Bcl-2 (phospho S70) antibody
Description	Rabbit polyclonal to Bcl-2 (phospho S70)
Host species	Rabbit
Specificity	ab28819 recognises Phospho-BCL-2(Ser70).
Tested applications	Suitable for: WB, ELISA, IP, IHC-P, Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human Bcl-2. Database link: P10415
Positive control	Breast carcinoma

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 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	ab28819 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.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab28819** in the following tested applications.

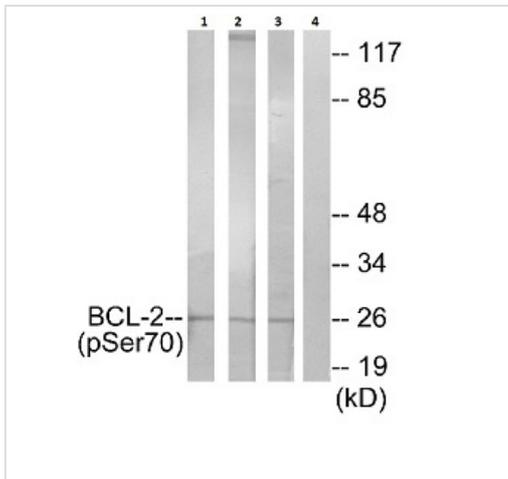
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 26 kDa.
ELISA		1/10000.
IP		Use at an assay dependent concentration.
IHC-P		1/50 - 1/100.
Flow Cyt		Use at an assay dependent concentration. PubMed: 19738029 ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Target

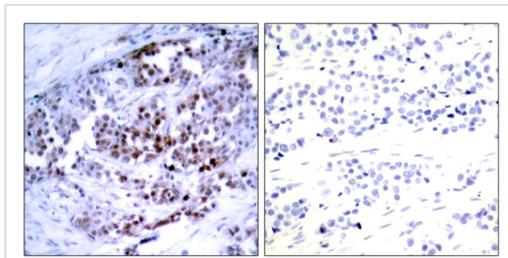
Function	Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. Regulates cell death by controlling the mitochondrial membrane permeability. Appears to function in a feedback loop system with caspases. Inhibits caspase activity either by preventing 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



Western blot analysis of lysates from HeLa cells treated with LPS (40nM, 30mins), K562 cells treated with calyculin A (50ng/ml, 30mins) and COS-7 cells treated with H₂O₂ (1ng/ml, 15mins), using BCL-2 (Phospho-Ser70) Antibody. The lane on the right is blocked with the phospho peptide.

Western blot - Anti-Bcl-2 (phospho S70) antibody (ab28819)



Immunohistochemical analysis of paraffin-embedded breast carcinoma, using anti-Phospho-BCL2(Ser70) antibody (ab28819). Left: Untreated; Right: Treated with synthesized phosphopeptide.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bcl-2 (phospho S70) antibody (ab28819)

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