abcam

Product datasheet

Anti-Bcl-2 antibody [100/D5] - BSA and Azide free ab212800

3 Images

Overview

Product name Anti-Bcl-2 antibody [100/D5] - BSA and Azide free

Description Mouse monoclonal [100/D5] to Bcl-2 - BSA and Azide free

Host species Mouse

Tested applications Suitable for: WB, Flow Cyt, IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide corresponding to Human Bcl-2 aa 1-100 (Cysteine residue).

Database link: P10415

Run BLAST with
Run BLAST with

Positive control Jurkat, K562, HL60, or HeLa Cells. Tonsil or follicular lymphomas. Non- Hodgkin's lymphoma

tissue. Human skin lysate.

General notesThe 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Constituent: 100% PBS

Carrier free Yes

Purity Protein A/G purified

Purification notes ab212800 is purified from Bioreactor Concentrate by Protein A/G.

1

ClonalityMonoclonalClone number100/D5IsotypeIgG1Light chain typekappa

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab212800 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		Use a concentration of 1 - 2 μg/ml. Predicted molecular weight: 26 kDa.
Flow Cyt		Use 1-2µg for 10 ⁶ cells. (in 0.1ml volume)
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. (for 30 minutes at RT)

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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-inflamma some 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 lg 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

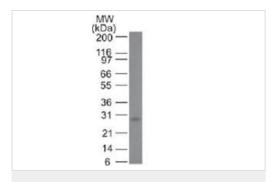
caspase activity.

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.

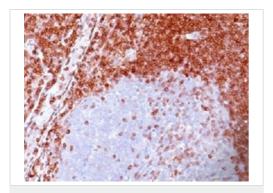
Images



Western blot - Anti-Bcl-2 antibody [100/D5] - BSA and Azide free (ab212800)

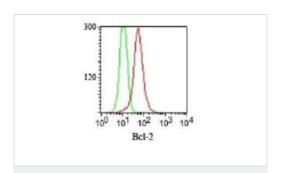
Anti-Bcl-2 antibody [100/D5] - BSA and Azide free (ab212800) at 1 μ g/ml + Human skin lysate

Predicted band size: 26 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Bcl-2 antibody [100/D5] - BSA and Azide free (ab212800)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human non-Hodgkin's Lymphoma tissue labeling Bcl-2 with ab212800 at 1 μ g/ml.



Flow Cytometry - Anti-Bcl-2 antibody [100/D5] - BSA and Azide free (ab212800)

Flow cytometric analysis of Jurkat cells labeling Bcl-2 uwith ab212800 at $1\mu g/10^6$ cells (red), compared with an isotype control (green).

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