**Bcl-2 Antibody (BH3 Domain Specific)**
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1303a

**Specification**

Bcl-2 Antibody (BH3 Domain Specific) -
Product Information

**Application**
WB, IHC-P, IF,E

**Primary Accession**
P10415

**Other Accession**
P49950, O02718

**Reactivity**
Human, Rat

**Predicted**
Bovine

**Host**
Rabbit

**Clonality**
Polyclonal

**Isotype**
Rabbit Ig

**Antigen Region**
75-110

**Bcl-2 Antibody (BH3 Domain Specific) -**
Additional Information

**Gene ID** 596

**Other Names**
 Apoptosis regulator Bcl-2, BCL2

**Target/Specificity**
This Bcl antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 75-110 amino acids from human Bcl.

**Dilution**
WB 1:1000
IHC-P 1:10-50
IF 1:10-50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
Bcl-2 Antibody (BH3 Domain Specific) is for research use only and not for use in diagnostic or therapeutic procedures.

**Bcl-2 Antibody (BH3 Domain Specific) - Protein Information**

Anti-Bcl-2 Antibody (BH3) at 1:2000 dilution + THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Anti-Bcl-2-BH3 Antibody at 1:1000 dilution + PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26.2 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
Name BCL2

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:<a href="http://www.uniprot.org/citations/17418785" target="_blank">17418785</a>).

Cellular Location

Tissue Location
Expressed in a variety of tissues.

Bcl-2 Antibody (BH3 Domain Specific) - Protocols
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytometry
- Cell Culture

Formalin-fixed and paraffin-embedded human testis tissue reacted with Bcl-2 BH3 Domain Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of Bcl-2 Antibody (BH3 Domain Specific) (Cat#AP1303a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

Left panel, analysis of Bcl-2 BH3 domain exposure in HEK293 cells transfected with a plasmid coding for a DNA-binding domain-deleted construct of Nur77
Bcl-2 Antibody (BH3 Domain Specific) - Background

BCL2 is integral outer mitochondrial membrane protein that blocks the apoptotic death of some cells such as lymphocytes. Constitutive expression of BCL2, such as in the case of translocation of BCL2 to Ig heavy chain locus, is thought to be the cause of follicular lymphoma.

Bcl-2 Antibody (BH3 Domain Specific) - References


Bcl-2 Antibody (BH3 Domain Specific) - Citations

- Nanoformulated paclitaxel and AZD9291 synergistically eradicate non-small-cell lung cancers in vivo.
- Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.
- Photodynamic Therapy Using Indolines-Fused-Triazoles Induces Mitochondrial Apoptosis in Human Non-Melanoma BCC Cells.
- Synergy between thioredoxin reductase inhibitor ethaselen and sodium selenite in inhibiting proliferation and inducing death of human non-small cell lung cancer cells.
- Hypoxic postconditioning attenuates apoptosis via inactivation of adenosine A2a receptor through NDRG3-Raf-ERK pathway.
- A versatile nanoplatform for synergetic combination therapy to treat human esophageal cancer.
- Differential Roles for Bim and Nur77 in Thymocyte Clonal Deletion Induced by Ubiquitous Self-Antigen.
- Retinoids Induce Nur77-dependent Apoptosis in Mouse Thymocytes.
- Oridonin phosphate-induced autophagy effectively enhances cell apoptosis of human breast cancer cells.
- Mitochondrial damage revealed by immunoselection for ALS-linked misfolded SOD1.
- An over-oxidized form of superoxide dismutase found in sporadic amyotrophic lateral sclerosis with bulbar onset shares a toxic mechanism with mutant SOD1.
- Natural diterpenoid compound elevates expression of Bim protein, which interacts with antiapoptotic protein Bcl-2, converting it to proapoptotic Bax-like molecule.
- Pyruvate kinase [removed]PKM1 and PKM2) in cancer-associated fibroblasts drives stromal nutrient production and tumor growth.
- ALS-linked mutant SOD1 damages mitochondria by promoting conformational changes in Bcl-2.
- The conformation change of Bcl-2 is involved in arsenic trioxide-induced apoptosis and inhibition of proliferation in SGC7901 human gastric cancer cells.
- Paclitaxel directly binds to Bcl-2 and functionally mimics activity of Nur77.
- Protein phosphatase 2A inactivates Bcl(2)'s antiapoptotic function by dephosphorylation and up-regulation of Bcl(2)-p53 binding.
- Modulation of orphan nuclear receptor Nur77-mediated apoptotic pathway by acetylshikonin and analogues.
- A short Nur77-derived peptide converts Bcl-2 from a protector to a killer.
- During negative selection, Nur77 family proteins translocate to mitochondria where they associate with Bcl-2 and expose its proapoptotic BH3 domain.
- BCL-2 dependence and ABT-737 sensitivity in acute lymphoblastic leukemia.
• Gossypol induces Bax/Bak-independent activation of apoptosis and cytochrome c release via a conformational change in Bcl-2.