

## **Bcl-2 Antibody**

Catalog # ASC10250

## **Specification**

# **Bcl-2 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality

**Application Notes** 

Isotype

WB, ICC P10415

AAH27258, 20072668

Human Rabbit Polyclonal

IgG

Bcl-2 antibody can be used for detection of

Bcl-2 by Western blot at 1 to 4  $\mu$ g/mL.

Antibody can also be used for

immunocytochemistry starting at 2 μg/mL.

# **Bcl-2 Antibody - Additional Information**

Gene ID 596

**Other Names** 

Bcl-2 Antibody: Bcl-2, PPP1R50, Apoptosis regulator Bcl-2, B-cell CLL/lymphoma 2

Target/Specificity

BCL2;

#### **Reconstitution & Storage**

Bcl-2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

Bcl-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Bcl-2 Antibody - Protein Information**

#### Name BCL2

### **Function**

Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells (PubMed:<a href="http://www.uniprot.org/citations/1508712" target="\_blank">1508712</a>, PubMed:<a href="http://www.uniprot.org/citations/8183370" target="\_blank">8183370</a>). Regulates cell death by controlling the mitochondrial membrane permeability (PubMed:<a href="http://www.uniprot.org/citations/11368354" target="\_blank">11368354" target="\_blank">11368354</a>). Appears to function in a feedback loop system with caspases (PubMed:<a href="http://www.uniprot.org/citations/11368354" target="\_blank">11368354</a>). 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) (PubMed:<a



href="http://www.uniprot.org/citations/11368354" target="\_blank">11368354</a>). Also acts as an inhibitor of autophagy: interacts with BECN1 and AMBRA1 during non-starvation conditions and inhibits their autophagy function (PubMed:<a href="http://www.uniprot.org/citations/18570871" target="\_blank">18570871</a>, PubMed:<a href="http://www.uniprot.org/citations/21358617" target="\_blank">21358617</a>, PubMed:<a href="http://www.uniprot.org/citations/20889974" target="\_blank">20889974</a>). 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**

Mitochondrion outer membrane; Single-pass membrane protein. Nucleus membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:P10417}

#### **Tissue Location**

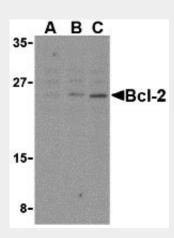
Expressed in a variety of tissues.

## **Bcl-2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

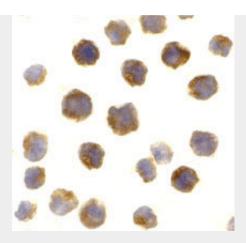
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Bcl-2 Antibody - Images**



Western blot analysis of Bcl-2 in A-20 cell lysates with Bcl-2 antibody at (A) 1, (B) 2, and (C) 4  $\mu$ g/mL.





Immunocytochemistry of Bcl-2 in A20 cells with Bcl-2 antibody at 2  $\mu g/mL$ .

# **Bcl-2 Antibody - Background**

Bcl-2 Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. Bcl-2 is the founding member of a family of over 20 proteins that are critical regulators of apoptosis. These can be divided into two classes: those that inhibit apoptosis and those that promote cell death. Bcl-2 is an inner mitochondrial membrane protein that inhibits apoptosis. It is thought to act by interacting with pro-apoptotic Bcl-2 family members such as Bak and Bad. Overexpression of Bcl-2 has been linked to human cancers such as B-cell lymphoma and prostate cancer.

## **Bcl-2 Antibody - References**

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7.

Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene 2003; 22:8590-607.

Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron. 2004; 39:1125-35.

Hockenbery D, Nunez G, Milliman C, et al. Bcl-2 is an inner mitochondrial membrane protein that blocks programmed cell death. Nature 1990; 348:334-6.