

Bcl-2 Antibody
Catalog # ASC10249**Specification****Bcl-2 Antibody - Product Information**

Application	ICC, WB
Primary Accession	P10415
Other Accession	AAH27258 , 596
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Bcl-2 antibody can be used for detection of Bcl-2 by Western blot at 1 to 2 µg/mL. Bcl-2 antibody can also detect Bcl-2 by immunohistochemistry at 2 µg/mL. For immunofluorescence start at 10 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

Bcl-2 antibody was raised against a peptide corresponding to 15 amino acids near the N terminus of human Bcl-2. The immunogen is located within the first 50 amino acids of Bcl-2.

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: [1508712](http://www.uniprot.org/citations/1508712), PubMed: [8183370](http://www.uniprot.org/citations/8183370)). Regulates cell death by controlling the mitochondrial membrane permeability (PubMed: [11368354](http://www.uniprot.org/citations/11368354)). Appears to function in a feedback loop system with caspases (PubMed: [11368354](http://www.uniprot.org/citations/11368354)).

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:11368354). Also acts as an inhibitor of autophagy: interacts with BECN1 and AMBRA1 during non-starvation conditions and inhibits their autophagy function (PubMed:18570871, PubMed:20889974, PubMed:21358617). May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release (PubMed:17418785).

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

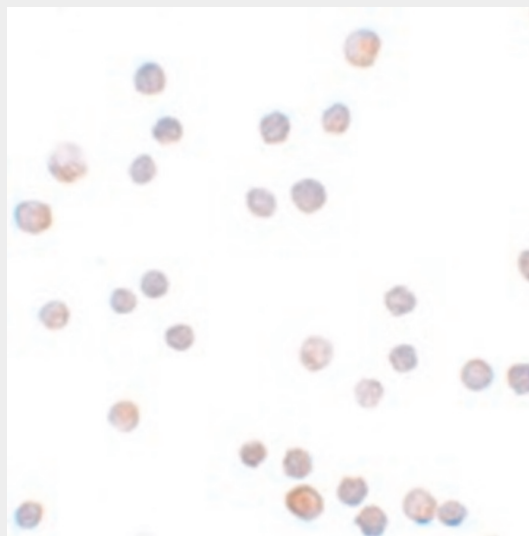
Expressed in a variety of tissues.

Bcl-2 Antibody - Protocols

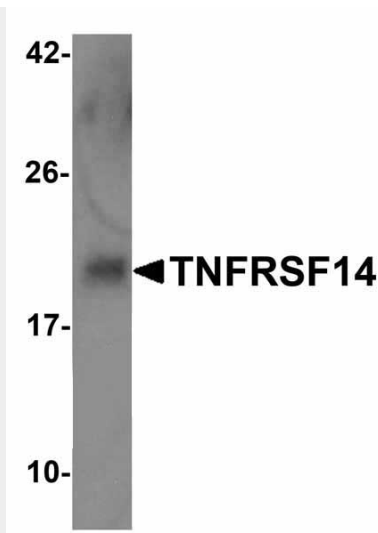
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

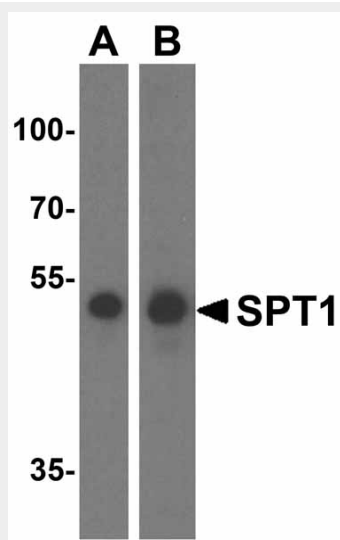
Bcl-2 Antibody - Images



Immunocytochemistry of ZEB1 in HeLa cells with ZEB1 antibody at 20 µg/mL.



Western blot analysis of 5 ng of TNFRSF14 with TNFRSF14 antibody at 1 μ g/mL.



Western blot analysis of SPT1 in (A) A549 and (B) HeLa cell lysate with SUMO2/3 antibody at 1 μ 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. Gerontol.* 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.