

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

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">P10415</a>
Other Accession	<a href="#">AAH27258</a> , <a href="#">596</a>
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:<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/20889974" target="\_blank">20889974</a>, PubMed:<a href="http://www.uniprot.org/citations/21358617" target="\_blank">21358617</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

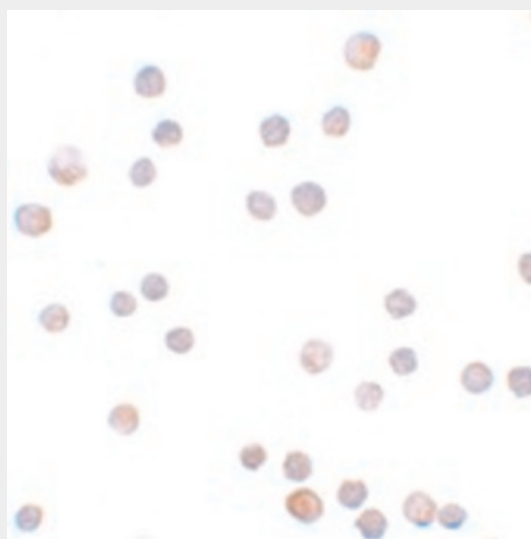
Expressed in a variety of tissues.

### Bcl-2 Antibody - Protocols

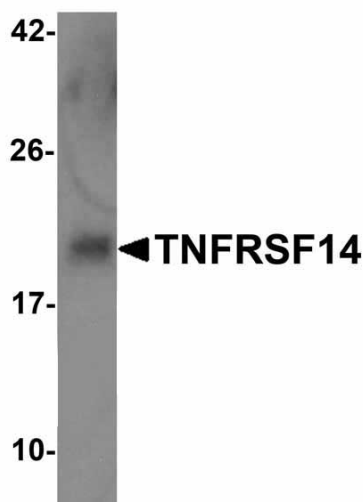
Provided below are standard protocols that you may find useful for product applications.

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

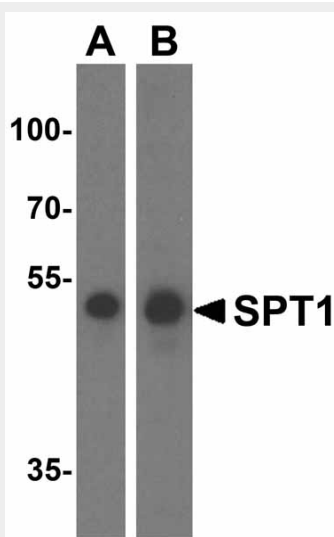
### Bcl-2 Antibody - Images



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  $\mu$ g/mL.



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