

# Bcl-2 Antibody

Catalog # ASC10249

## Product Information

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<b>Application</b>	WB, IF, E, IHC-P
<b>Primary Accession</b>	<a href="#">P10415</a>
<b>Other Accession</b>	<a href="#">AAH27258</a> , <a href="#">20072668</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	26266
<b>Concentration (mg/ml)</b>	1 mg/mL
<b>Conjugate</b>	Unconjugated
<b>Application Notes</b>	Bcl-2 antibody can be used for detection of Bcl-2 by Western blot at 1 to 4 $\mu$ g/mL. Bcl-2 antibody can also detect Bcl-2 by immunohistochemistry at 2 $\mu$ g/mL. For immunofluorescence start at 10 $\mu$ g/mL.

## Additional Information

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<b>Gene ID</b>	596
<b>Other Names</b>	Bcl-2 Antibody: Bcl-2, PPP1R50, Apoptosis regulator Bcl-2, B-cell CLL/Lymphoma 2
<b>Target/Specificity</b>	BCL2;
<b>Reconstitution &amp; Storage</b>	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.
<b>Precautions</b>	Bcl-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	BCL2
<b>Function</b>	Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells (PubMed: <a href="#">1508712</a> , PubMed: <a href="#">8183370</a> ). Regulates cell death by controlling the mitochondrial membrane permeability (PubMed: <a href="#">11368354</a> ). Appears to function in a feedback loop system with caspases (PubMed: <a href="#">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="#">11368354</a> ). 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.

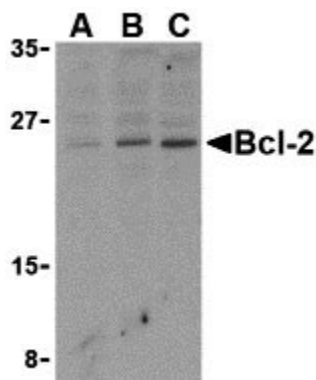
## Background

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.

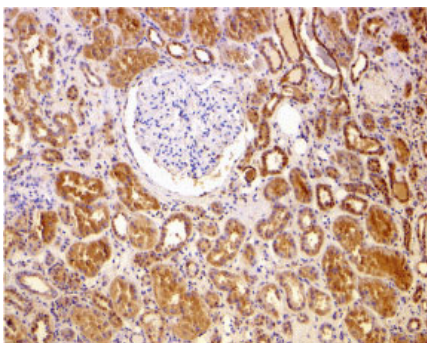
## References

- 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.

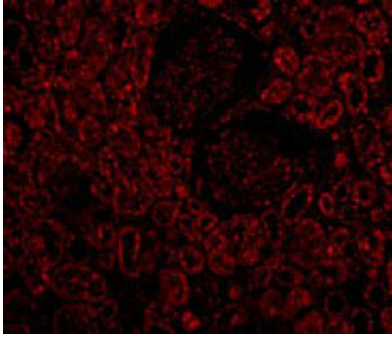
## Images



Western blot analysis of Bcl-2 in Daudi cell lysates with Bcl-2 antibody at (A) 1, (B) 2, and (C) 4 µg/mL.



Immunohistochemical staining of human kidney using Bcl-2 antibody at 2 µg/mL.



Immunofluorescence of Bcl-2 in Human Kidney cells with Bcl-2 antibody at 10  $\mu\text{g}/\text{mL}$ .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.