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Bcl-2 Antibody

Catalog # ASC10250

Product Information

Application	WB, ICC, E
Primary Accession	P10415
Other Accession	AAH27258, 20072668
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26266
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Bcl-2 antibody can be used for detection of Bcl-2 by Western blot at 1 to 4 g/mL. Antibody can also be used for immunocytochemistry starting at 2 g/mL.

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℃ for three months and -20℃, 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.

Protein Information

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

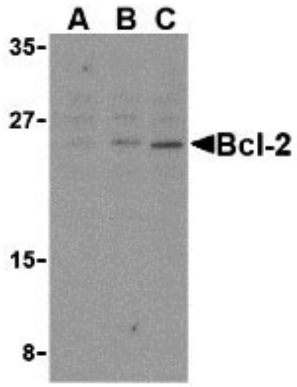
Background

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

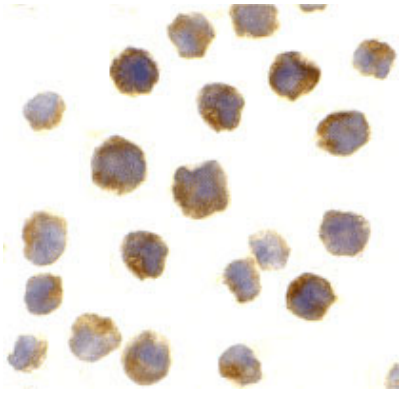
Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7.
Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene 2003; 22:8590-607.
Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in 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 A-20 cell lysates with Bcl-2 antibody at (A) 1, (B) 2, and (C) 4 µg/mL.

Immunocytochemistry of Bcl-2 in A20 cells with Bcl-2 antibody at 2 µg/mL.



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