

Bcl-xL Antibody

Catalog # ASC10251

Specification

Bcl-xL Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <u>Q07817</u> <u>CAA80661, 510901</u> Human Rabbit Polyclonal IgG Bcl-xL antibody can be used for detection of Bcl-xL by Western blot at 1 to 2 µg/mL.

Bcl-xL Antibody - Additional Information

Gene ID 598 Other Names Bcl-xL Antibody: BCLX, BCL2L, BCLXL, BCLXS, Bcl-X, bcl-xL, bcl-xS, PPP1R52, BCL-XL/S, BCLX, Bcl-2-like protein 1, Apoptosis regulator Bcl-X, Bcl2-L-1, BCL2-like 1

Target/Specificity BCL2L1;

Reconstitution & Storage

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

Bcl-xL Antibody - Protein Information

Name BCL2L1

Synonyms BCL2L, BCLX

Function

Potent inhibitor of cell death. Inhibits activation of caspases. Appears to regulate cell death by blocking the voltage- dependent anion channel (VDAC) by binding to it and preventing the release of the caspase activator, CYC1, from the mitochondrial membrane. Also acts as a regulator of G2 checkpoint and progression to cytokinesis during mitosis. Isoform Bcl-X(S) promotes apoptosis.

Cellular Location

[Isoform Bcl-X(L)]: Mitochondrion inner membrane. Mitochondrion outer membrane Mitochondrion matrix. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Cytoplasm, cytosol.



Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus membrane; Single-pass membrane protein; Cytoplasmic side. Note=After neuronal stimulation, translocates from cytosol to synaptic vesicle and mitochondrion membrane in a calmodulin-dependent manner (By similarity). Localizes to the centrosome when phosphorylated at Ser-49

Tissue Location

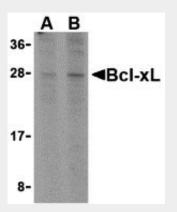
Bcl-X(S) is expressed at high levels in cells that undergo a high rate of turnover, such as developing lymphocytes. In contrast, Bcl-X(L) is found in tissues containing long-lived postmitotic cells, such as adult brain

Bcl-xL Antibody - Protocols

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

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

Bcl-xL Antibody - Images



Western blot analysis of Bcl-xL in A549 cell lysates with Bcl-xL antibody at (A) 1 and (B) 2 µg/mL.

Bcl-xL Antibody - Background

Bcl-xL 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-xL is a member of the Bcl-2 family of 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-xL is an anti-apoptotic mitochondrial protein related to Bcl-w and the major transcript of the bcl-x gene. Its high expression in tumors is correlated with advanced disease and poor prognosis. Bcl-xL expression level increases in response to several stimuli such as ionizing radiation and treatment with chemotherapeutic agents.

Bcl-xL 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.

Gonzalez-Garcia M, Perez-Ballestro R, Ding L et al. bcl-xL is the major bcl-x mRNA form expressed during murine development and its product localizes to mitochondria. Development 1994; 120:3033-42.