

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide Synthetic peptide Catalog # BP1306a

Specification

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - Product Information

Primary Accession

<u>Q07817</u>

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - Additional Information

Gene ID 598

Other Names Bcl-2-like protein 1, Bcl2-L-1, Apoptosis regulator Bcl-X, BCL2L1, BCL2L, BCLX

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1306a was selected from the region of human Bcl-x BH3 Domain. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - 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-x Antibody (BH3 Domain Specific) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - Images

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - Background

The Bcl-x protein belongs to the BCL-2 protein family. BCL-2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. The proteins encoded by this gene are located at the outer mitochondrial membrane, and have been shown to regulate outer mitochondrial membrane channel (VDAC) opening. VDAC regulates mitochondrial membrane potential, and thus controls the production of reactive oxygen species and release of cytochrome C by mitochondria, both of which are the potent inducers of cell apoptosis. Two alternatively spliced transcript variants, which encode distinct isoforms, have been reported. The longer isoform acts as an apoptotic inhibitor and the shorter form acts as an apoptotic activator.

Bcl-x Antibody (BH3 Domain Specific) Blocking peptide - References

Wacheck, V., et al., Br. J. Cancer 89(7):1352-1357 (2003).Yajima, H., et al., Biochem. Biophys. Res. Commun. 309(3):520-527 (2003).Hartmann, K., et al., Am. J. Pathol. 163(3):819-826 (2003).Yang, C.C., et al., J. Biol. Chem. 278(28):25872-25878 (2003).Haughn, L., et al., J. Biol. Chem. 278(27):25158-25165 (2003).