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Bad BH3 Domain Antibody Blocking Peptide

Synthetic peptide
Catalog # BP1322a

Specification

Bad BH3 Domain Antibody Blocking Peptide - Product Information

Primary Accession Q92934

Bad BH3 Domain Antibody Blocking Peptide - Additional Information

Gene ID 572

Other Names
Bcl2-associated agonist of cell death, BAD, Bcl-2-binding component 6, Bcl-2-like protein 8, Bcl2-L-8, Bcl-xL/Bcl-2-associated death promoter, Bcl2 antagonist of cell death, BAD, BBC6, BCL2L8

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1322a was selected from the region of human Bad 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.

Bad BH3 Domain Antibody Blocking Peptide - Protein Information

Name BAD

Synonyms BBC6, BCL2L8

Function
Promotes cell death. Successfully competes for the binding to Bcl-X(L), Bcl-2 and Bcl-W, thereby affecting the level of heterodimerization of these proteins with BAX. Can reverse the death repressor activity of Bcl-X(L), but not that of Bcl-2 (By similarity). Appears to act as a link between growth factor receptor signaling and the apoptotic pathways.

Cellular Location
Mitochondrion outer membrane. Cytoplasm {ECO:0000250|UniProtKB:Q61337}. Note=Colocalizes with HIF3A in the cytoplasm (By similarity). Upon phosphorylation, locates to the cytoplasm.

{ECO:0000250|UniProtKB:Q61337}

Tissue Location
Expressed in a wide variety of tissues.

Bad BH3 Domain Antibody Blocking Peptide - Protocols

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

- Blocking Peptides

Bad BH3 Domain Antibody Blocking Peptide - Images

Bad BH3 Domain Antibody Blocking Peptide - Background

Apoptosis or programmed cell death is a physiological cellular process characterized by cell shrinkage, membrane blebbing, DNA fragmentation, and release of Cytochrome C from the mitochondria. It is utilized by the organism to get rid of unwanted cells, which is critical for normal development and homeostasis of an organism. Disregulation of normal apoptosis process have been implicated in a variety of diseases, including cancer, autoimmune diseases, viral infections, etc. Programmed cell death occurs through complex cascades of cell signaling in which Bcl-2 family members, among others, play an important role.The Bcl-2 family of proteins regulate apoptosis as well as execute death signals at the mitochondrion. Members of this family include both pro- and anti-apoptotic proteins that hare homology sequences called Bcl-2 Homology domains (BH1-4) which mediate dimmer formation. The BH3 proteins, such as BID, NOXA, PUMA, BIK, BIM and BAD are all pro-apoptotic and share sequence homology within the amphipathic alpha-helical BH3 region, which is required for their apoptotic function. They may trigger release of death-inducing molecules such as Cytochrome C, Smac, and endonuclease G. Anti-apoptotic family members, including Bcl-2 and Bcl-XL, play inhibitory roles. Bcl-2 family proteins may form homodimers or heterodimers between pro- and anti-apoptotic members, the ratios of which determine the cell fate.

Bad BH3 Domain Antibody Blocking Peptide - References

Won, J., et al., J. Biol. Chem. 278(21):19347-19351 (2003).Mabuchi, S., et al., J. Biol. Chem. 277(36):33490-33500 (2002).Cowburn, A.S., et al., Blood 100(7):2607-2616 (2002).Moriishi, K., et al., Virology 292(2):258-271 (2002).Kim, H.T., et al., J. Biol. Chem. 277(36):32510-32515 (2002).