

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](/product/products/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**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 have homology sequences called Bcl-2 Homology domains (BH1-4) which mediate dimer 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).

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](#)