

Phospho-Bad(S99) Antibody Blocking peptide Synthetic peptide

Catalog # BP3039a

Specification

Phospho-Bad(S99) Antibody Blocking peptide - Product Information

Primary Accession

<u>Q92934</u>

Phospho-Bad(S99) 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 AP3039a was selected from the region of human Phospho-Bad-S99. 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.

Phospho-Bad(S99) 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.

Phospho-Bad(S99) Antibody Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

Phospho-Bad(S99) Antibody Blocking peptide - Images

Phospho-Bad(S99) Antibody Blocking peptide - Background

Bad is a member of the BCL-2 family. BCL-2 family members are known to be regulators of programmed cell death. This protein positively regulates cell apoptosis by forming heterodimers with BCL-xL and BCL-2, and reversing their death repressor activity. Proapoptotic activity of this protein is regulated through its phosphorylation. Protein kinases AKT and MAP kinase, as well as protein phosphatase calcineurin are found to be involved in the regulation of this protein. Bad is phosphorylated on one or more of Ser-75, Ser-99, Ser-118 and Ser-134 in response to survival stimuli, which blocks its pro-apoptotic activity. Phosphorylation on Ser-99 or Ser-75 promotes heterodimerization with 14-3-3 proteins. This interaction then facilitates the phosphorylation at Ser-118, a site within the BH3 motif, leading to the release of Bcl-X(L) and the promotion of cell survival. Ser-99 is the major site of AKT/PKB phosphorylation, Ser-118 the major site of protein kinase A (CAPK) phosphorylation.

Phospho-Bad(S99) Antibody Blocking peptide - References

Hurbin, A., et al., J. Biol. Chem. 280(20):19757-19767 (2005).Antignani, A., et al., Biochemistry 44(10):4074-4082 (2005).Ying, S., et al., Infect. Immun. 73(3):1399-1403 (2005).Seo, S.Y., et al., J. Biol. Chem. 279(40):42240-42249 (2004).Lee, J.W., et al., Carcinogenesis 25(8):1371-1376 (2004).