

Bad BH3 Domain Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1322a

Specification

Bad BH3 Domain Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region FC, IHC-P, WB,E <u>092934</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 92-127

Bad BH3 Domain Antibody - 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

This Bad BH3 Domain antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-127 amino acids from human Bad BH3 Domain.

Dilution FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Bad BH3 Domain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Bad BH3 Domain Antibody - 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 - 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>

Bad BH3 Domain Antibody - Images



Western blot analysis of Bad BH3 Domain antibody (Cat.# AP1322a) in mouse bladder tissue lysates (35ug/lane). Bad (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Bad BH3 Domain Antibody (Cat. #AP1322a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Bad BH3 Domain Antibody - 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 - 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).