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Phospho-Bad(S118) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3034a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q92934
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB6941
Calculated MW	18392

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 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S118 of human Bad.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Phospho-Bad(S118) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

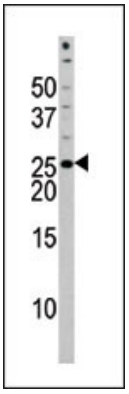
Background

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

References

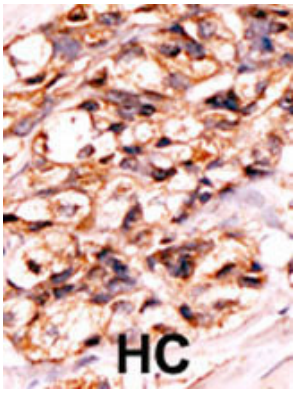
Hurbin, A., et al., J. Biol. Chem. 280(20):19757-19767 (2005).
Antignani, A., et al., Biochemistry 44(10):4074-4082 (2005).
Ying, S., et al., Infect. Immun. 73(3):1399-1403 (2005).
Seo, S.Y., et al., J. Biol. Chem. 279(40):42240-42249 (2004).
Lee, J.W., et al., Carcinogenesis 25(8):1371-1376 (2004).

Images



The anti-Phospho-Bad-S118 Pab (Cat. #AP3034a) is used in Western blot to detect Phospho-Bad-S118 in HL60 tissue lysate

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.



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