10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

phospho-BAD (Ser128) Rabbit pAb

Catalog # AP97207

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q61337
Other Accession	Q61337
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22080
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from mouse BAD around the phosphorylation site of Ser128
Epitope Specificity	EL(p-S)PF
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Bcl-2 family.
SUBUNIT	Forms heterodimers with the anti-apoptotic proteins, Bcl-X(L), Bcl-2 and Bcl-W. Also binds protein S100A10 (By similarity). The Ser-75/Ser-99 phosphorylated form binds 14-3-3 proteins (By similarity). Interacts with AKT1 and PIM3.
Post-translational modifications	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. Ser-75 is phosphorylated by AKT/PKB, protein kinase A and PIM2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Bad is a member of the Bcl2 family and acts to promote apoptosis by forming heterodimers with the survival proteins Bcl2 and BclxL, thus preventing them from binding with BAX. Bad is found on the outer mitochondrial membrane and, once phosphorylated in response to growth stimuli, translocates to the cytoplasm. The phosphorylation status of Bad represents a key checkpoint for death or cell survival. JNK-induced phosphorylation of BAD serine 128 promotes the apoptotic role of Bad by opposing the inhibitory effect of growth factor on Bad-mediated apoptosis. Cdc2-induced phosphorylation of Bad serine 128 has an inhibitory effect on its interaction with 14-3-3 proteins. The latter interaction is critical for Bad phosphorylation at serine 155, a site within the BH3 domain that leads to the release of BclxL and the promotion of cell survival. Alternative splicing of this gene results in two transcript variants which encode the same isoform.

Additional Information

Gene ID	12015
Other Names	BBC2; BCL2L8; Bad_v1; Bad_v2; BAD_HUMAN; 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; BBC6; BAD_MOUSE; BAD_RAT; BCL2 associated agonist of cell death; BAD (phospho-S128); p-BAD; phospho-BAD; BAD (phospho-Ser128)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug /Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Bad
Synonyms	Bbc6
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. Appears to act as a link between growth factor receptor signaling and the apoptotic pathways.
Cellular Location	Mitochondrion outer membrane. Cytoplasm. Note=Colocalizes with HIF3A isoform 2 in the cytoplasm (PubMed:21546903). Upon phosphorylation, locates to the cytoplasm.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.