

# Datasheet for ABIN389521

# anti-BAD antibody (pSer99)





Overview	
Quantity:	400 μL
Target:	BAD
Binding Specificity:	pSer99
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This BAD antibody is un-conjugated
Application:	Dot Blot (DB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)),
	Immunofluorescence (IF)
Product Details	
Immunogen:	This Bad Antibody is generated from rabbits immunized with a KLH conjugated synthetic
	phosphopeptide corresponding to amino acid residues surrounding S99 of human Bad.
Clone:	RB06933
Isotype:	lg Fraction
Predicted Reactivity:	M Dot
Fredicted Reactivity.	M, Rat
	This antibody is purified through a protein A column, followed by peptide affinity purification.
Purification: Target Details	

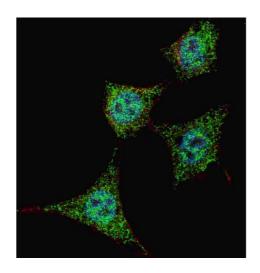
# **Target Details**

Alternative Name:	Bad (BAD Products)
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.
Molecular Weight:	18392
Gene ID:	572
NCBI Accession:	NP_004313, NP_116784
UniProt:	Q92934
Pathways:	MAPK Signaling, PI3K-Akt Signaling, RTK Signaling, Apoptosis, Fc-epsilon Receptor Signaling
	Pathway, Positive Regulation of Peptide Hormone Secretion, Carbohydrate Homeostasis,
	Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process,
	Hepatitis C, CXCR4-mediated Signaling Events
Application Details	
Application Notes:	IF: 1:200. IHC-P: 1:50~100. DB: 1:500
Restrictions:	For Research Use only
Handling	
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Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which
	should be handled by trained staff only.

## Handling

Handling Advice:	Avoid freeze-thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots.
Expiry Date:	6 months

# **Images**



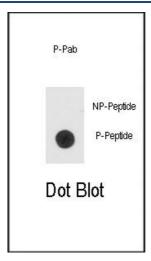
# BC

### **Immunofluorescence**

Image 1. Fluorescent confocal image of HeLa cells stained with phospho-Bad-S99 antibody. HeLa cells were fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.2 %, 30 min). Cells were then incubated with (ABIN389521 and ABIN2850441) phospho-Bad-S99 primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10  $\mu$ g/mL, 5 min). Note the highly specific localization of the phospho-Bad-S99 mainly to the cytoplasm.

## **Immunohistochemistry (Paraffin-embedded Sections)**

**Image 2.** 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.



# **Dot Blot**

**Image 3.** Dot blot analysis of anti-hBad-pS99 Phosphospecific Pab (ABIN389521 and ABIN2850441) on nitrocellulose membrane. 50 ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5 µg per ml.