

Instruction Manual

Catalog Number	PK-AB718-3817
Synonyms	Bif Antibody: Bax-interacting factor 1, endophilin B1
Description	Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells and is caused by the activation of proteolytic enzymes termed caspases. Proteins that comprise the Bcl-2 family such as Bax appear to control the activation of these enzymes. Bax activity was found to be regulated by its association with Bax-interacting factor 1 (BIF), a member of the endophilin B family that is associated with intracellular membranes. Following this interaction, Bax undergoes a conformational change and translocates to mitochondrial membranes. The Bax/BIF interaction appears to be enhanced by apoptotic stimuli, suggesting that BIF acts as the trigger to activate Bax, and as suppression of BIF promoted HeLa cell colony formation in soft agar, it may have a role in the suppression of cancer progression. At least two isoforms of BIF are known to exist.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	BIF antibody was raised against a 15 amino acid peptide from near the carboxy terminus of human BIF.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, ICC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.
	BIF antibody can be used for the detection of BIF by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL.
Images	Available upon request.
References	Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7. Oltvai ZN, Millman CL, and Korsmeyer SJ. Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death. Cell 1993; 74:609-19. Cuddeback SM, Yamaguchi H, Komatsu K, et al. Molecular cloning and characterization of bif-1. J. Biol. Chem. 2001; 276:20559-65. Takahashi Y, Karbowski M, Yamaguchi H, et al. Loss of Bif-1 suppresses Bax/Bak conformational change and mitochondrial apoptosis. Mol. Cell. Biol. 2005; 25:9369-82.
Images	Available upon request.
Related Products	Bax Antibody, Cat. No. PK-AB718-3351 Bcl-2Antibody, Cat. No. PK-AB718-3335 Bif Peptide, Cat. No. PK-AB718-3817P HeLa Lysate, Cat. No. PK-AB718-1201

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