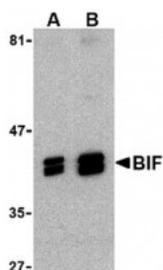


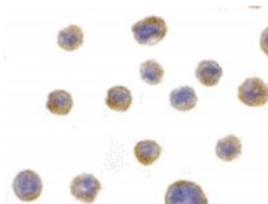


## Bif Antibody

CATALOG NUMBER: 3817



Western blot analysis of BIF in HeLa cell lysate with BIF antibody at (A) 1 and (B) 2 ug/mL.



Immunocytochemistry of BIF in HeLa with BIF antibody at 10 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse
<b>HOMOLOGY:</b>	Predicted species reactivity based on immunogen sequence: Rat: (100%)
<b>TESTED APPLICATIONS:</b>	ELISA, ICC, WB
<b>APPLICATIONS:</b>	BIF antibody can be used for the detection of BIF by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunocytochemistry starting at 10 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1201 - HeLa Cell Lysate
<b>IMMUNOGEN:</b>	BIF antibody was raised against a 15 amino acid synthetic peptide from near the carboxy terminus of human BIF.  The immunogen is located within the last 50 amino acids of Bif.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Bif Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	Bif Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	Bif antibody can be stored at 4°C for three months and -20°C, stable 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.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	Bif Antibody: Bif-1, CGI-61, PPP1R70, dJ612B15.2, KIAA0491, Endophilin-B1, Bax-interacting factor 1, Bif-1
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<b>ACCESSION NO.:</b>	AAK27365
<b>PROTEIN GI NO.:</b>	13469879
<b>OFFICIAL SYMBOL:</b>	SH3GLB1
<b>GENE ID:</b>	51100

## Background

**BACKGROUND:** Bif Antibody: 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.

**REFERENCES:**

- 1) Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. *Cell Death Differ.* 2000; 7:2-7.
- 2) Oltvai ZN, Milliman CL, and Korsmeyer SJ. Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death. *Cell* 1993; 74:609-19.
- 3) Cuddeback SM, Yamaguchi H, Komatsu K, et al. Molecular cloning and characterization of bif-1. *J. Biol. Chem.* 2001; 276:20559-65.
- 4) 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.

**FOR RESEARCH USE ONLY**

December 12, 2016