

Rabbit Anti-Human/Mouse Bcl-2 Interacting Killer (Apoptosis Inducer NBK)

Instruction Manual

Catalog Number	PK-AB718-3819
Synonyms	Bik Antibody: Bcl-2-interacting killer, apoptosis inducer NBK
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 appear to control the activation of these enzymes. One such protein BIK was recently identified as an endoplasmic reticulum (ER)-residing pro-apoptotic member of the Bcl-2 homology domain-3 (BH3)-only group of the Bcl-2 family that stimulates mitochondrial release of cytochrome c following p53 induction of apoptosis. A significant fraction of BIK is found as an ER transmembrane protein, with most of the protein facing the cytosol. Restricting BIK to the ER membrane by replacing the transmembrane region with that of the ER-selective membrane anchor of cytochrome b(5) resulted in a decreased cytochrome c release from mitochondria and a corresponding drop in cell death. Recent evidence suggests that BIK cooperates with NOXA, another BH3-only protein, to somehow enhance the activation of Bax to stimulate the rapid release of cytochrome c from mitochondria.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	BIK antibody was raised against a 15 amino acid peptide from near the amino terminus of human BIK.
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, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. BIK antibody can be used for the detection of BIK by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 1 µg/mL. For immunofluorescence start 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. Germain M, Mathai JP, and Shore GC. BH-3-only BIK functions at the endoplasmic reticulum to stimulate cytochrome c release from mitochondria. J. Biol. Chem. 277:18053-60. Germain M, Mathai JP, McBride HM, et al. Endoplasmic reticulum BIK initiates DRP1-regulated remodelling Bax Antibody, Catalog No. PK-AB718-3351
Images	Available upon request.
Related Products	Bcl-2 Antibody, Cat. No. PK-AB718-3335; Noxa Antibody, Cat. No. PK-AB718-2437 Bik Peptide, Cat. No. PK-AB718-3819P HeLa Lysate, Cat. No. PK-AB718-1201

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