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

Bim BH3 Domain Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1308a

Product Information

Application	WB, IHC-P, E
Primary Accession	O43521
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22171
Antigen Region	130-165

Additional Information

Gene ID	10018
Other Names	Bcl-2-like protein 11, Bcl2-L-11, Bcl2-interacting mediator of cell death, BCL2L11, BIM
Target/Specificity	This Bim BH3 Domain antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 130-165 amino acids from human Bim BH3 Domain.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Bim BH3 Domain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BCL2L11
Synonyms	BIM
Function	Induces apoptosis and anoikis. Isoform BimL is more potent than isoform BimEL. Isoform Bim-alpha1, isoform Bim-alpha2 and isoform Bim-alpha3

induce apoptosis, although less potent than isoform BimEL, isoform BimL and isoform BimS. Isoform Bim-gamma induces apoptosis. Isoform Bim-alpha3 induces apoptosis possibly through a caspase- mediated pathway. Isoform BimAC and isoform BimABC lack the ability to induce apoptosis.

Cellular Location

Endomembrane system; Peripheral membrane protein. Note=Associated with intracytoplasmic membranes. [Isoform BimL]: Mitochondrion. [Isoform Bim-alpha1]: Mitochondrion.

Tissue Location

Isoform BimEL, isoform BimL and isoform BimS are the predominant isoforms and are widely expressed with tissue-specific variation. Isoform Bim-gamma is most abundantly expressed in small intestine and colon, and in lower levels in spleen, prostate, testis, heart, liver and kidney.

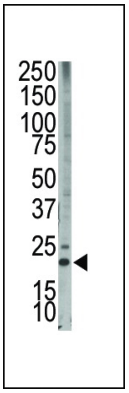
Background

Bim belongs to the BCL-2 protein family. BCL-2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. Bim contains a Bcl-2 homology domain 3 (BH3). It has been shown to interact with other members of the BCL-2 protein family, including BCL2, BCL2L1/BCL-X(L), and MCL1, and to act as an apoptotic activator. The expression of this gene can be induced by nerve growth factor (NGF), as well as by the forkhead transcription factor FKHR-L1, which suggests a role of this gene in neuronal and lymphocyte apoptosis. Transgenic studies of the mouse counterpart suggested that this gene functions as an essential initiator of apoptosis in thymocyte-negative selection.

References

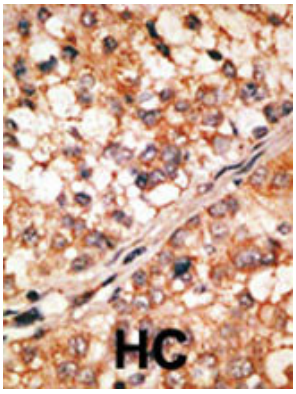
Chen, D., et al., Proc. Natl. Acad. Sci. U.S.A. 101(5):1235-1240 (2004).
Luciano, F., et al., Oncogene 22(43):6785-6793 (2003).
Sunters, A., et al., J. Biol. Chem. 278(50):49795-49805 (2003).
Reginato, M.J., et al., Nat. Cell Biol. 5(8):733-740 (2003).
Chen, D., et al., EMBO J. 21(24):6801-6810 (2002).

Images



The anti-Bim BH3 domain Pab (Cat. #AP1308a) is used in Western blot to detect Bim BH3 in HL-60 cell lysate.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Citations

- Role of Sirtuin3 in high glucose-induced apoptosis in renal tubular epithelial cells.
- BCL-2 dependence and ABT-737 sensitivity in acute lymphoblastic leukemia.

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