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Anti-Bnip3L (IN) *Bnip3α, Nix*

CATALOG No.: PX051A SIZE: 100 µg
PX051B SIZE: 0.5 mg

BACKGROUND:

Members in the Bcl-2 family are critical regulators of apoptosis by either inhibiting or promoting cell death. Bcl-2 homology 3 (BH3) domain is a potent death domain. BH3 domain containing pro-apoptotic proteins, including Bad, Bax, Bid, Bik, Hrk, Nip3, and Bim, form a growing subclass of the Bcl-2 family. A novel BH3 domain containing protein was recently identified and designated Bnip3L, Bnip3α, and Nix (for Nip3-like protein X) (1-3). Bnip3L/Bnip3α/Nix is a homolog of the E1B 19K/Bcl-2 binding and pro-apoptotic protein Bnip3. Overexpression of Bnip3L induces apoptosis (2,3). Bnip3L interacts with and overcomes suppresses by Bcl-2 and Bcl-xL. Bnip3L is localized in mitochondria. The messenger RNA of Bnip3L is ubiquitously expressed in human tissues (1,2). Bnip3L and Bnip3 form a new subfamily of the pro-apoptotic mitochondrial proteins.

SOURCE:

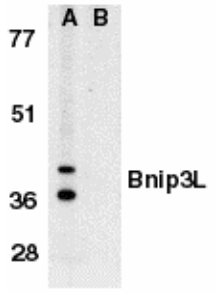
Rabbit anti-Bnip3L (IN) polyclonal antibody was raised against a peptide (DAQHESGQSSSRGSSH) corresponding to amino acids 77 to 92 of human origin, which are identical to those of mouse Bnip3L (3).

APPLICATION:

This polyclonal antibody can be used for detection of Bnip3L by Western blot at 0.5 to 1 µg/ml. K562 cell lysate can be used as positive control and the approximate 40 kDa top band represents monomer of Bnip3L (4). It is human and mouse reactive. For research use only.

STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100 µg in 200 µl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Bnip3L in K562 whole cell lysate in the absence (A), or presence (B) of immunogenic peptide (2289P) with anti-Bnip3L (IN) at 1 µg/ml.

RELATED PRODUCTS:

Blocking peptide, 50 µg at 200 µg/ml, is available for competition studies.

K562 cell lysate, 200 µg at 2 mg/ml, is available for positive control.

REFERENCES:

1. Matsushima M, Fujiwara T, Takahashi E, et al. Isolation, mapping, and functional analysis of a novel human cDNA (BNIP3L) encoding a protein homologous to human NIP3. *Genes Chromosomes Cancer* 1998;21:230-5

2. Yasuda M, Han JW, Dionne CA, Boyd JM, Chinnadurai G. BNIP3alpha: a human homolog of mitochondrial proapoptotic protein BNIP3. *Cancer Res* 1999;59:533-7

3. Chen G, Cizeau J, Vande Velde C, et al. Nix and Nip3 form a subfamily of pro-apoptotic mitochondrial proteins. *J Biol Chem* 1999;274(1):7-10

4. Imazu T, Shimizu S, Tagami S, et al. Bcl-2/E1B 19 kDa-interacting protein 3-like protein (Bnip3L) interacts with bcl-2/Bcl-xL and induces apoptosis by altering mitochondrial membrane permeability. *Oncogene.* 1999;18:4523-9

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.

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