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Bnip3L Antibody

Catalog # ASC10111

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O60238
Other Accession	NP_004322, 4138825
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23930
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Bnip3L antibody can be used for detection of Bnip3L by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 2 g/mL. For immunofluorescence start at 10 g/mL.

Additional Information

Gene ID	665
Other Names	Bnip3L Antibody: NIX, BNIP3a, BNIP3A, BNIP3H, NIX, Adenovirus E1B19K-binding protein B5, NIP3L, BCL2/adenovirus E1B 19kDa interacting protein 3-like
Target/Specificity	BNIP3L; At least two isoforms of Bnip3L are known to exist.
Reconstitution & Storage	Bnip3L antibody can be stored at 4℃ for three months and -20℃, 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.
Precautions	Bnip3L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BNIP3L
Synonyms	BNIP3A, BNIP3H, NIX
Function	Induces apoptosis. Interacts with viral and cellular anti- apoptosis proteins. Can overcome the suppressors BCL-2 and BCL-XL, although high levels of BCL-XL expression will inhibit apoptosis. Inhibits apoptosis induced by BNIP3. Involved in mitochondrial quality control via its interaction with SPATA18/MIEAP: in response to mitochondrial damage, participates in mitochondrial protein catabolic process (also named MALM) leading to the

degradation of damaged proteins inside mitochondria. The physical interaction of SPATA18/MIEAP, BNIP3 and BNIP3L/NIX at the mitochondrial outer membrane regulates the opening of a pore in the mitochondrial double membrane in order to mediate the translocation of lysosomal proteins from the cytoplasm to the mitochondrial matrix. May function as a tumor suppressor.

Cellular Location Nucleus envelope. Endoplasmic reticulum. Mitochondrion outer membrane. Membrane; Single-pass membrane protein. Note=Colocalizes with SPATA18 at the mitochondrion outer membrane

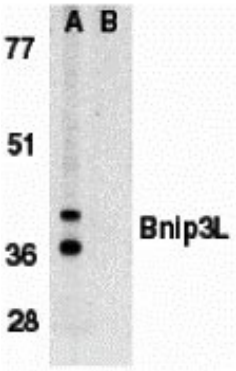
Background

Bnip3L Antibody: 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, Bnip3alpha, and Nix (for Nip3-like protein X). Bnip3L/Bnip3alpha/Nix is a homolog of the E1B 19K/Bcl-2 binding and pro-apoptotic protein Bnip3. Overexpression of Bnip3L induces apoptosis. 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. Bnip3L and Bnip3 form a new subfamily of the pro-apoptotic mitochondrial proteins.

References

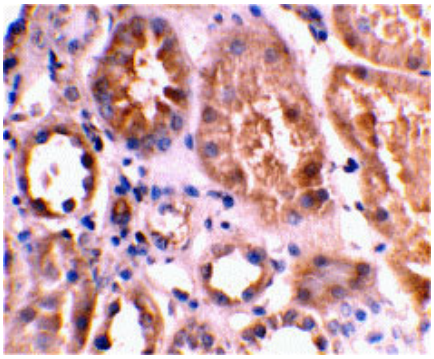
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Yasuda M, Han JW, Dionne CA, et al. BNIP3α: a human homolog of mitochondrial proapoptotic protein BNIP3. Cancer Res. 1999; 59:533-7
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Imazu T, Shimizu S, Tagami S, et al. Bcl-2/E1B 19 kDa-interacting protein 3-like protein (Bnip3L) interacts with bcl-2/Bcl-xL and induces apoptosis by altering mitochondrial membrane permeability. Oncogene 1999;18:4523-9.

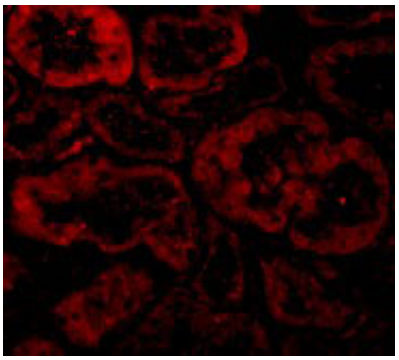
Images



Western blot analysis of Bnip3L in K562 whole cell lysate in (A) the absence, or (B) presence of immunogenic peptide with Bnip3L antibody at 1 µg/mL.

Immunohistochemical staining of human kidney tissue using Bnip3L antibody at 2 µg/mL.





Immunofluorescence of Bnip3L in Human Kidney tissue with Bnip3L antibody at 10 µg/mL.

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