

# **BNIP3L BH3 Domain Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1320a

# **Specification**

# **BNIP3L BH3 Domain Antibody - Product Information**

Application IHC-P,E Primary Accession 060238

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 122-152

# **BNIP3L BH3 Domain Antibody - Additional Information**

#### Gene ID 665

#### **Other Names**

BCL2/adenovirus E1B 19 kDa protein-interacting protein 3-like, Adenovirus E1B19K-binding protein B5, BCL2/adenovirus E1B 19 kDa protein-interacting protein 3A, NIP3-like protein X, NIP3L, BNIP3L, BNIP3A, BNIP3H, NIX

## Target/Specificity

This BNIP3L BH3 Domain antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between  $122\sim152$  amino acids within aa 100-150 (BH3 domain) of human BNIP3L.

#### **Dilution**

IHC-P~~1:50~100

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**

BNIP3L BH3 Domain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **BNIP3L BH3 Domain Antibody - 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**

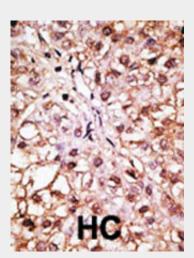
Nucleus envelope. Endoplasmic reticulum. Mitochondrion outer membrane. Membrane; Single-pass membrane protein. Note=Colocalizes with SPATA18 at the mitochondrion outer membrane

# **BNIP3L BH3 Domain Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **BNIP3L BH3 Domain Antibody - Images**



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.

# **BNIP3L BH3 Domain Antibody - Background**

BNIP3L is a member of the BCL2/adenovirus E1B 19 kd-interacting protein (BNIP) family. It interacts



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with the E1B 19 kDa protein which is responsible for the protection of virally-induced cell death, as well as E1B 19 kDa-like sequences of BCL2, also an apoptotic protector. The protein encoded by this gene is a functional homolog of BNIP3, a proapoptotic protein. This protein may function simultaneously with BNIP3 and may play a role in tumor suppression.

# **BNIP3L BH3 Domain Antibody - References**

Aerbajinai, W., et al., Blood 102(2):712-717 (2003). Passer, B.J., et al., Proc. Natl. Acad. Sci. U.S.A. 100(5):2284-2289 (2003). Ohi, N., et al., Cell Death Differ. 6(4):314-325 (1999). Chen, G., et al., J. Biol. Chem. 274(1):7-10 (1999). Yasuda, M., et al., Cancer Res. 59(3):533-537 (1999).

## **BNIP3L BH3 Domain Antibody - Citations**

- BNIP3L/Nix-induced mitochondrial fission, mitophagy, and impaired myocyte glucose uptake are abrogated by PRKA/PKA phosphorylation
- Pyruvate kinase [removed]PKM1 and PKM2) in cancer-associated fibroblasts drives stromal nutrient production and tumor growth.
- Autophagy in cancer associated fibroblasts promotes tumor cell survival: Role of hypoxia. HIF1 induction and NFkB activation in the tumor stromal microenvironment.