

**Bnip3L Antibody**  
**Catalog # ASC10111****Specification**

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**Bnip3L Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">O60238</a>
Other Accession	<a href="#">NP_004322</a> , <a href="#">4138825</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 24 kDa

Application Notes	<b>Observed: 36, 40 kDa KDa</b> <b>Bnip3L antibody can be used for detection of Bnip3L by Western blot at 1 µg/mL.</b> <b>Antibody can also be used for immunohistochemistry starting at 2 µg/mL.</b> <b>For immunofluorescence start at 10 µg/mL.</b>
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**Bnip3L Antibody - 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°C for three months and -20°C, 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.

**Bnip3L 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**

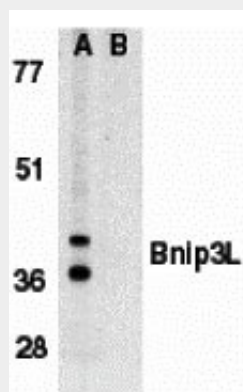
Nucleus envelope. Endoplasmic reticulum. Mitochondrion outer membrane. Membrane; Single-pass membrane protein. Note=Colocalizes with SPATA18 at the mitochondrion outer membrane

#### **Bnip3L Antibody - Protocols**

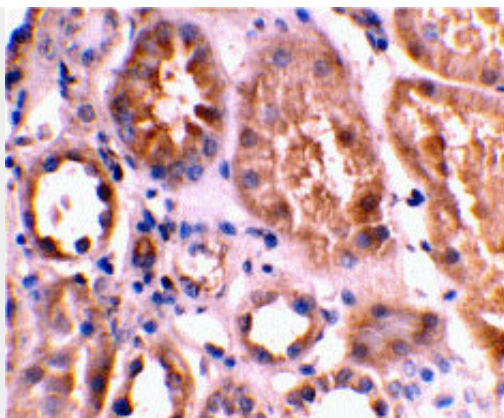
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

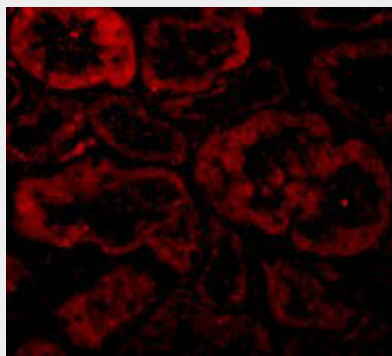
#### **Bnip3L Antibody - Images**



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.

### **Bnip3L Antibody - 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.

### **Bnip3L Antibody - References**

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

Yasuda M, Han JW, Dionne CA, et al. BNIP3α: a human homolog of mitochondrial proapoptotic protein BNIP3. *Cancer Res.* 1999; 59:533-7

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

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.