

# **BNIP-3 Polyclonal Antibody**

Catalog # AP73337

### **Product Information**

**Application** WB, IHC-P, IF, ICC

Primary Accession <u>Q12983</u>

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW21541

#### **Additional Information**

Gene ID 664

Other Names BNIP3; NIP3; BCL2/adenovirus E1B 19 kDa protein-interacting protein 3

**Dilution** WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet

tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200

ICC~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name BNIP3 ( HGNC:1084)

Synonyms NIP3

**Function** Apoptosis-inducing protein that can overcome BCL2 suppression. May play a

role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2. 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. Plays an important role in the calprotectin (S100A8/A9)-induced cell death pathway.

**Cellular Location** Mitochondrion. Mitochondrion outer membrane; Single-pass membrane

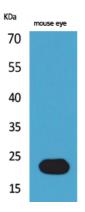
protein. Note=Coexpression with the EIB 19-kDa protein results in a shift in

NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria. Colocalizes with SPATA18 at the mitochondrion outer membrane

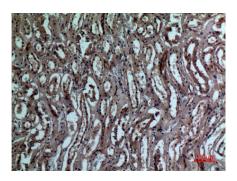
# **Background**

Apoptosis-inducing protein that can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2. 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. Plays an important role in the calprotectin (S100A8/A9)-induced cell death pathway.

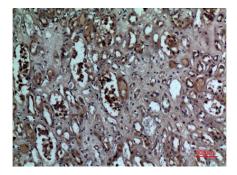
## **Images**



Western Blot analysis of mouse eye cells using BNIP-3 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

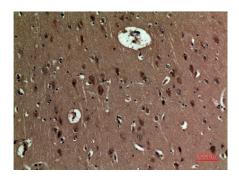


Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



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