

### **KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI2099

## **Specification**

### **KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Product Information**

Application WB, FC Primary Accession 012983

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 22 kDa, observed, 24 kDa KDa

Gene Name BNIP3

Aliases BNIP3; BCL2 Interacting Protein 3; HABON;

Nip3; BCL2/Adenovirus E1B 19 KDa Protein-Interacting Protein 3;

Hypoxia-Activated BNIP3 Overlapping
Non-Coding RNA; BCL2/Adenovirus E1B
19kDa Interacting Protein 3; Nineteen KD

Interacting Protein-3; Nineteen KD
Interacting Protein-3; BCL2/Adenovirus E1B

**Interacting Protein 3; NIP3** 

Immunogen A synthesized peptide derived from human

BNIP3

## KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Additional Information

Gene ID 664

**Other Names** 

BCL2/adenovirus E1B 19 kDa protein-interacting protein 3, BNIP3 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=1084" target=" blank">HGNC:1084</a>), NIP3

#### KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - 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**

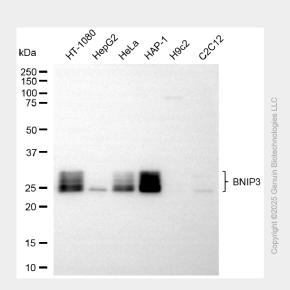
Mitochondrion. Mitochondrion outer membrane; Single-pass membrane protein. Note=Coexpression with the EIB 19-kDa protein results in a shift in NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria. Colocalizes with SPATA18 at the mitochondrion outer membrane

## **KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Protocols**

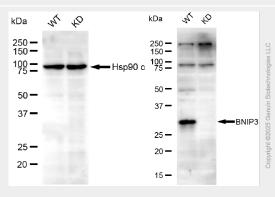
Provided below are standard protocols that you may find useful for product applications.

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

# KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Images

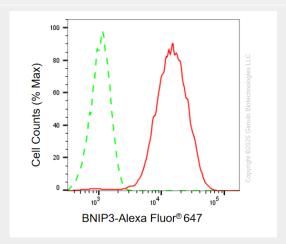


Western blotting analysis using anti-BNIP3 antibody (Cat#AGI2099). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BNIP3 antibody (Cat#AGI2099, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-BNIP3 antibody (Cat# AGI2099). BNIP3 expression in wild-type (WT) and BNIP3 knockdown (KD) HeLa cells with 20  $\mu g$  of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-BNIP3 antibody (Cat# AGI2099, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat# 201, 1:20,000) respectively.



Flow cytometric analysis of BNIP3 expression in HepG2 cells using anti-BNIP3 antibody (Cat#AGI2099, 1:1,000). Green, isotype control; red, BNIP3.