10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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	Q12983
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; 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 (HGNC:1084), 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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

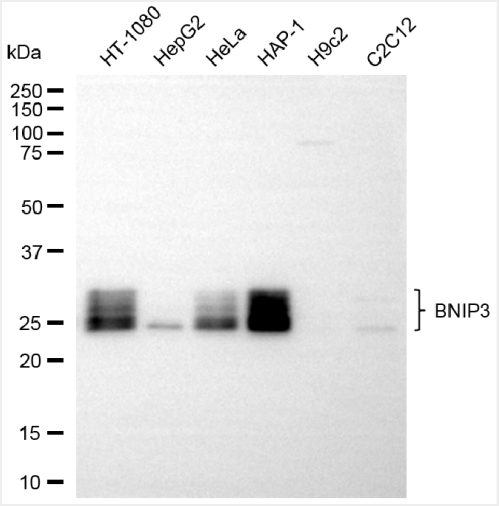
Cellular Location
Mitochondrion. Mitochondrion outer membrane; Single-pass membrane protein. Note=Coexpression with the EIB 19-kDa protein results in a shift in NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria. Colocalizes with SPATA18 at the mitochondrion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

KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Protocols

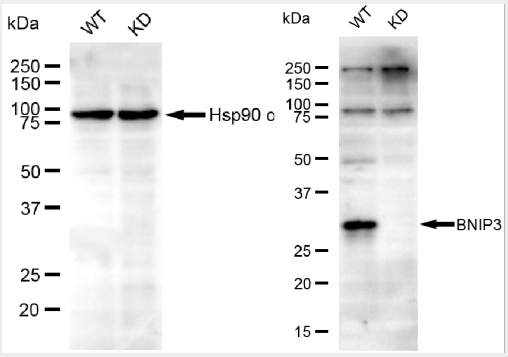
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-BNIP3 Rabbit Monoclonal Antibody - Images

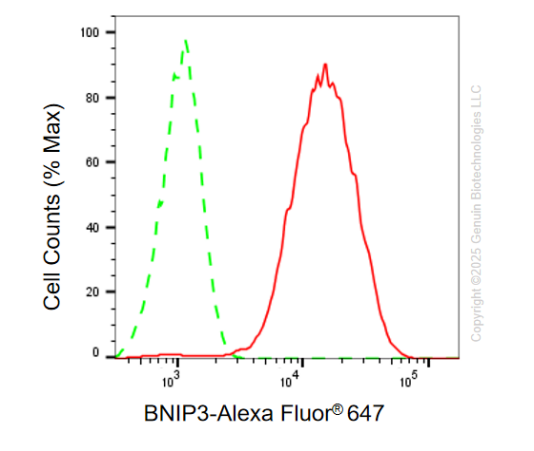


Western blotting analysis using anti-BNIP3 antibody (Cat#AGI2099). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BNIP3 antibody (Cat#AGI2099, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Western blotting analysis using anti-BNIP3 antibody (Cat# AGI2099). BNIP3 expression in wild-type (WT) and BNIP3 knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α 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.