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Mouse Monoclonal Antibody to BNIP3
Purified Mouse Monoclonal Antibody
Catalog # AO2406a

Specification

Mouse Monoclonal Antibody to BNIP3 - Product Information

Application	**WB, IHC, FC, ICC, E**
Primary Accession	Q12983
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2a**
Calculated MW	**21.5kDa KDa**

Description
This gene is encodes a mitochondrial protein that contains a BH3 domain and acts as a pro-apoptotic factor. The encoded protein interacts with anti-apoptotic proteins, including the E1B 19 kDa protein and Bcl2. This gene is silenced in tumors by DNA methylation.;

Immunogen
Purified recombinant fragment of human BNIP3 (AA: 50-155) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

Application Note
ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/50 - 1/250; FCM: 1/200 - 1/400

Mouse Monoclonal Antibody to BNIP3 - Additional Information

Gene ID 664

Other Names
NIP3

Dilution
WB~~1:1000
IHC~~1:100~500
FC~~1:10~50
ICC~~N/A
E~~N/A

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Mouse Monoclonal Antibody to BNIP3 is for research use only and not for use in diagnostic or therapeutic procedures.

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Mouse Monoclonal Antibody to BNIP3 - 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.

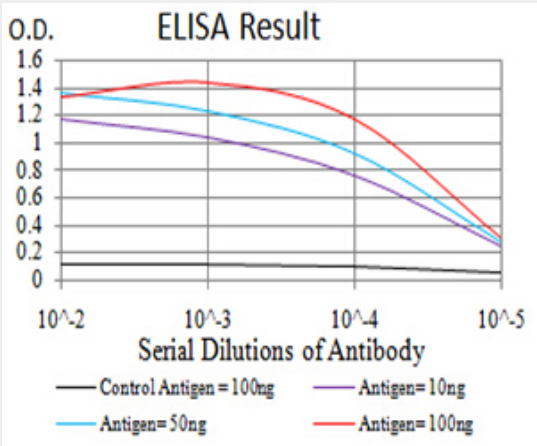
Cellular Location
Mitochondrion. Mitochondrion outer membrane; Single-pass membrane protein.
Note=Coexpression with the EIB 19-kDa protein results in a shift in NIP3 localization pattern to the nuclear envelope. Colocalizes with ACAA2 in the mitochondria. Colocalizes with SPATA18 at the mitochondrion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

Mouse Monoclonal Antibody to BNIP3 - 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

Mouse Monoclonal Antibody to BNIP3 - Images



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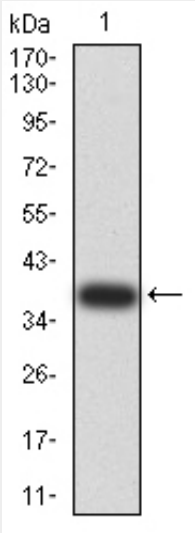
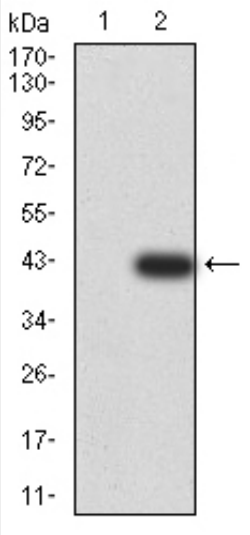
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Western blot analysis using BNIP3 mAb against human BNIP3 (AA: 50-155) recombinant protein. (Expected MW is 38 kDa)



Western blot analysis using BNIP3 mAb against HEK293 (1) and BNIP3 (AA: 50-155)-hIgGFc transfected HEK293 (2) cell lysate.

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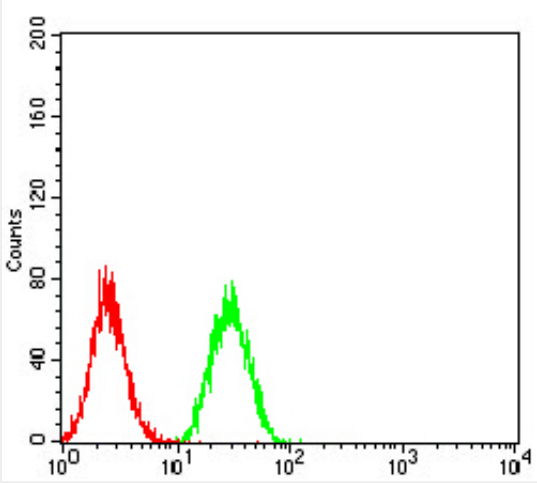
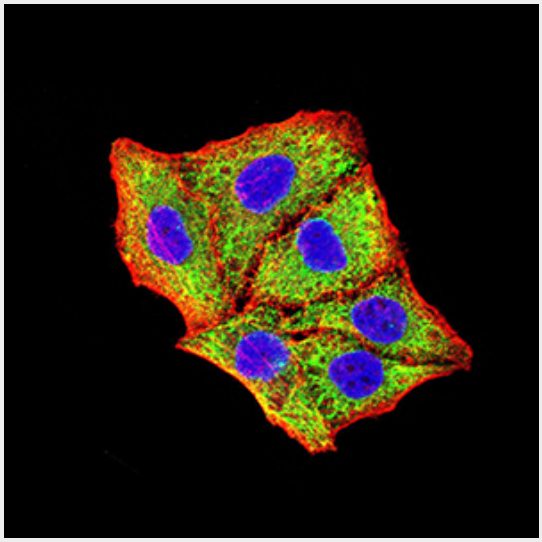
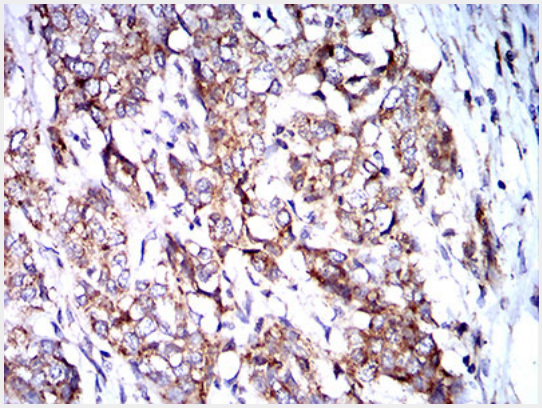


Flow cytometric analysis of Hela cells using BNIP3 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using BNIP3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher



Immunohistochemical analysis of paraffin-embedded breast cancer tissues using BNIP3 mouse mAb with DAB staining.

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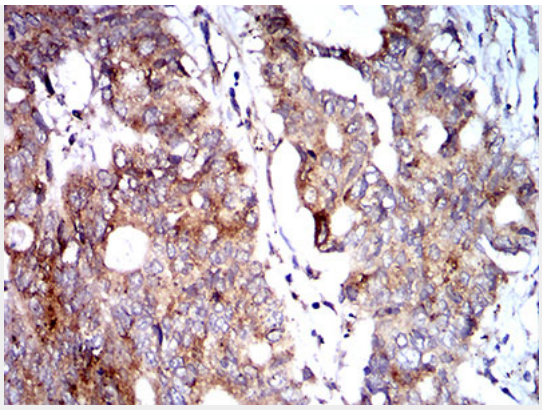

Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using BNIP3 mouse mAb with DAB staining.

Mouse Monoclonal Antibody to BNIP3 - References

1.Tumour Biol. 2015 Jun;36(6):4731-40. ; 2.PLoS One. 2014 May 13;9(5):e96733. ;