

Anti-BNIP3 Antibody

Catalog Number: PA1057

About BNIP3

The Bcl-2 nineteen kilodalton interacting protein 3 (BNIP3 or NIP3), is a hypoxia-inducible proapoptotic member of the Bcl-2 family that induces cell death by associating with the mitochondria. BNIP3, expressed in skeletal muscle and in the brain at low levels, is primarily localized to the nucleus of glial cells of the normal human brain, as well as in the malignant glioma cell line U251. BNIP3 expression in the cytoplasm increases and localizes with the mitochondria, contributing to induction of cell death. Cellular protein BNIP3 interacts with E1B-19K, BCL-2, BCL-xL, and EBV-BHRF1. BNIP3 contains Bcl-2 homology 3 (BH3) domain and COOH-terminal transmembrane (TM) domain. The BH3 domain of BNIP3 mediates Bcl-2/Bcl-X (L) heterodimerization and confers pro-apoptotic activity; whereas the TM domain is critical for homodimerization, pro-apoptotic function, and mitochondrial targeting.

Overview

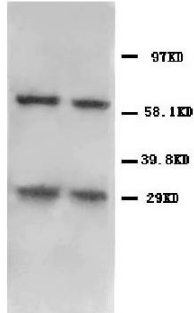
Product Name	Anti-BNIP3 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-BNIP3 Antibody catalog # PA1057. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q12983

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human BNIP3, identical to the related mouse and rat sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p>

Anti-BNIP3 Antibody (PA1057) Images



Anti-BNIP3 antibody, PA1057, Western blotting
All lanes: Anti BNIP3 (PA1057) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: MM231 Whole Cell Lysate at 40ug
Predicted bind size: 22KD
Observed bind size: 30KD

2 Publications Citing This Product

1. PubMed ID: 33716067, Zhao YC, Guo W, Gao BH. Hypoxic training upregulates mitochondrial turnover and angiogenesis of skeletal muscle in mice. *Life Sci.* 2021 Mar 11;119340. doi:10.1016/j.lfs.2021.119340. Epub ahead of print. PMID:33716067.

2. PubMed ID: 28977881, Du Y, Li J, Xu T, Zhou DD, Zhang L, Wang X. *Oncotarget.* 2017 Jun 22;8(37):61510-61527. doi:10.18632/oncotarget.18604. eCollection 2017 Sep 22. MicroRNA-145 induces apoptosis of glioma cells by targeting BNIP3 and Notch signaling

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