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Anti-BNIP3 Antibody

Catalog # AP53287

Product Information

Application	WB, IHC
Primary Accession	Q12983
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21541

Additional Information

Gene ID	664
Other Names	NIP3; BCL2/adenovirus E1B 19 kDa protein-interacting protein 3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BNIP3. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

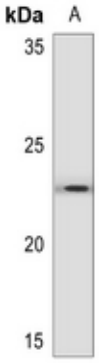
Name	BNIP3 (HGNC:1084)
Synonyms	NIP3
Function	Apoptosis-inducing protein that can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2. Involved in mitochondrial quality control via its interaction with SPATA18/MIEAP: 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

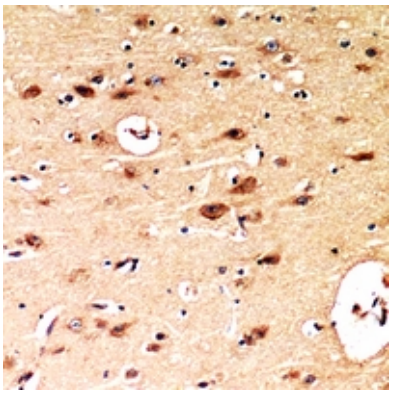
References

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Chen G.,et al.J. Exp. Med. 186:1975-1983(1997).
Deloukas P.,et al.Nature 429:375-381(2004).
Ohi N.,et al.Cell Death Differ. 6:314-325(1999).
Cao W.,et al.Biochim. Biophys. Acta 1780:873-880(2008).

Images



Western blot analysis of BNIP3 expression in Jurkat (A) whole cell lysates. (Predicted band size: 27 kD; Observed band size: 22 kD)



Immunohistochemical analysis of BNIP3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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