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Rabbit Anti-BNIP3 antibody

SL4239R

Product Name:	BNIP3
Chinese Name:	促凋亡调节蛋白BNIP3抗体
Alias:	BCL2 Adenovirus E1B 19kDa Interacting Protein 3; BCL2/adenovirus E1B 19 kDa protein interacting protein 3; BCL2/adenovirus E1B 19 kDa protein-interacting protein 3; BNIP 3; BNIP3_HUMAN; NIP 3; NIP3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BNIP3:101-194/194
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Apoptosis-inducing protein that, which can overcome BCL2 suppression. May play a role in repartitioning calcium between the two major intracellular calcium stores in association with BCL2. **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 to 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.

Subunit:
Homodimer. Binds to BCL2. Interacts with BNIP3L and ACAA2. Also can interact with adenovirus E1B 19 kDa protein or Epstein-Barr virus BHRF1. Interacts (via BH3 domain) with SPATA18 (via coiled-coil domains).

Subcellular Location:
Mitochondrion. Mitochondrion membrane. 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.

Similarity:
Belongs to the NIP3 family.

SWISS:
Q12983

Gene ID:
664

Database links:

Entrez Gene: 664 Human

Entrez Gene: 12176 Mouse

Entrez Gene: 84480 Rat

Omim: 603293 Human

SwissProt: Q12983 Human

SwissProt: O55003 Mouse

Unigene: 144873 Human

Unigene: 378890 Mouse

	Unigene: 2060 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. BNIP3蛋白在缺氧条件下可诱导细胞发生Apoptosis。BNIP3促ApoptosisMitochondrion途径根据有无caspase的参与而具有不同的作用机制，也是研究的热点。BNIP3还可诱导Autophagy。BNIP3全称为Bcl2/腺病毒E1B19kD相互作用蛋白3。(Bcl2/adenovirusE1B19kDainteractingprotein3，BNIP3)，是新近发现的BH3only亚家族成员之一，也是低氧敏感的凋亡基因。在化学性低氧诱导Apoptosis的过程中，ATP是BNIP3导致Apoptosis的关键性因素之一。单独ATP下降不诱导Apoptosis，但ATP下降到一定程度能促进BNIP3向Mitochondrion转位，从而诱导了BNIP3相关的凋亡。这可能是低氧诱导BNIP3表达导致Apoptosis的重要机制之一。