

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP1321a****Specification**

---

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - Product Information**Primary Accession [Q12983](#)**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - Additional Information****Gene ID** 664**Other Names**

BCL2/adenovirus E1B 19 kDa protein-interacting protein 3, BNIP3, NIP3

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1321a](/product/products/AP1321a) was selected from the region of human NIP3 BH3 Domain. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - 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 E1B 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

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - Images****BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - Background**

NIP3 is a member of the BCL2/adenovirus E1B 19 kd-interacting protein (BNIP) family. It interacts with the E1B 19 kDa protein which is responsible for the protection of virally-induced cell death, as well as E1B 19 kDa-like sequences of BCL2, also an apoptotic protector. NIP3 contains a BH3 domain and a transmembrane domain, which have been associated with pro-apoptotic function. The dimeric mitochondrial protein is known to induce apoptosis, even in the presence of BCL2.

**BNIP3 Antibody (BH3 Domain Specific) Blocking peptide - References**

Kothari, S., et al., Oncogene 22(30):4734-4744 (2003).Lee, S.M., et al., Life Sci. 71(19):2267-2277 (2002).Ray, R., et al., J. Biol. Chem. 275(2):1439-1448 (2000).Chen, G., et al., J. Biol. Chem. 274(1):7-10 (1999).Yasuda, M., et al., J. Biol. Chem. 273(20):12415-12421 (1998).