

**Bit1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1323a****Specification**

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**Bit1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q9Y3E5](#)**Bit1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 51651**Other Names**

Peptidyl-tRNA hydrolase 2, mitochondrial, PTH 2, Bcl-2 inhibitor of transcription 1, PTRH2, BIT1, PTH2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP1323a was selected from the Center region of human Bit1. 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.

**Bit1 Antibody (Center) Blocking Peptide - Protein Information****Name** PTRH2**Synonyms** BIT1, PTH2**Function**

Peptidyl-tRNA hydrolase which releases tRNAs from the ribosome during protein synthesis (PubMed: <a href="http://www.uniprot.org/citations/14660562" target="\_blank">14660562</a>). Promotes caspase- independent apoptosis by regulating the function of two transcriptional regulators, AES and TLE1.

**Cellular Location**

Mitochondrion outer membrane; Single-pass membrane protein

## **Bit1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **Bit1 Antibody (Center) Blocking Peptide - Images**

## **Bit1 Antibody (Center) Blocking Peptide - Background**

Adhesion to extracellular matrix regulates cell survival via integrin engagement and cell spreading. Anoikis is the molecular mechanism of apoptosis induced by integrin detachment. A role for Bit1 (Bcl-2 inhibitor of transcription 1) has been identified in this process. Bit1 is a mitochondrial protein released into the cytoplasm upon onset of apoptosis where it forms a complex with AES, a small Groucho/transducin-like enhancer of split (TLE) protein and induces caspase-independent apoptosis. AES and TLE proteins are transcriptional co-repressors that play important roles in neurogenesis, segmentation, and sex determination. Bit1-AES complexes may switch off a survival-promoting gene transcription program controlled by TLE. Apoptosis of Bit1/AES transfected cells is inhibited when cells are permitted to attach to fibronectin through the alpha-beta integrin, suggesting that the contribution of the Bit1-AES pathway to anoikis is regulated by integrins.

## **Bit1 Antibody (Center) Blocking Peptide - References**

Cell 116(5):751-762 (2004). Biochim Biophys Acta. 1692:145-57 (2004). Gene 2000; 249:1-16.