

SPATA18 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP13960a

Specification

SPATA18 Antibody (N-term) Blocking peptide - Product Information

Primary Accession <u>Q8TC71</u>

SPATA18 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 132671

Other Names

Mitochondria-eating protein, Spermatogenesis-associated protein 18, SPATA18, MIEAP

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13960a was selected from the N-term region of SPATA18. 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.

SPATA18 Antibody (N-term) Blocking peptide - Protein Information

Name SPATA18

Synonyms MIEAP

SPATA18 Antibody (N-term) Blocking peptide - Background

Potential role in spermatogenesis, especially in cell differentiation from late elongate spematids to mature spermatozoa (By similarity).

SPATA18 Antibody (N-term) Blocking peptide - References

Zemunik, T., et al. Croat. Med. J. 50(1):23-33(2009)Kaindl, A.M., et al. Hum. Mutat. 26(3):279-280(2005)



Function

Key regulator of mitochondrial quality that mediates the repairing or degradation of unhealthy mitochondria in response to mitochondrial damage. Mediator of mitochondrial protein catabolic process (also named MALM) by mediating the degradation of damaged proteins inside mitochondria by promoting the accumulation in the mitochondrial matrix of hydrolases that are characteristic of the lysosomal lumen. Also involved in mitochondrion degradation of damaged mitochondria by promoting the formation of vacuole-like structures (named MIV), which engulf and degrade unhealthy mitochondria by accumulating lysosomes. 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.

Cellular Location

Cytoplasm. Mitochondrion outer membrane Note=Localizes to the cytoplasm under normal conditions (PubMed:21264228). Relocalizes to mitochondrion outer membrane following cellular stress. Colocalizes with BNIP3 and BNIP3L at the mitochondrion outer membrane (PubMed:22292033)

SPATA18 Antibody (N-term) Blocking peptide - Protocols

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

• Blocking Peptides