

SPATA18 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13960A**Specification**

SPATA18 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q8TC71
Other Accession	NP_660306.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	61109
Antigen Region	92-120

SPATA18 Antibody (N-term) - Additional Information**Gene ID** 132671**Other Names**

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

Target/Specificity

This SPATA18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-120 amino acids from the N-terminal region of human SPATA18.

Dilution

WB~~1:1000

IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SPATA18 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPATA18 Antibody (N-term) - Protein Information**Name** SPATA18

Synonyms MIEAP

Function Key regulator of mitochondrial quality that mediates the repairing or degradation of unhealthy mitochondria in response to mitochondrial damage (PubMed:[21264221](#), PubMed:[21264228](#), PubMed:[22292033](#), PubMed:[22532927](#)). 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 (PubMed:[21264221](#), PubMed:[21264228](#), PubMed:[22292033](#), PubMed:[22532927](#)). 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 (PubMed:[21264228](#)). 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 (PubMed:[22292033](#)). Binds cardiolipin (PubMed:[38322995](#)). May form molecular condensates (non- membrane-bounded organelles) within mitochondria that compartmentalize and promote cardiolipin metabolism (PubMed:[38322995](#)).

Cellular Location

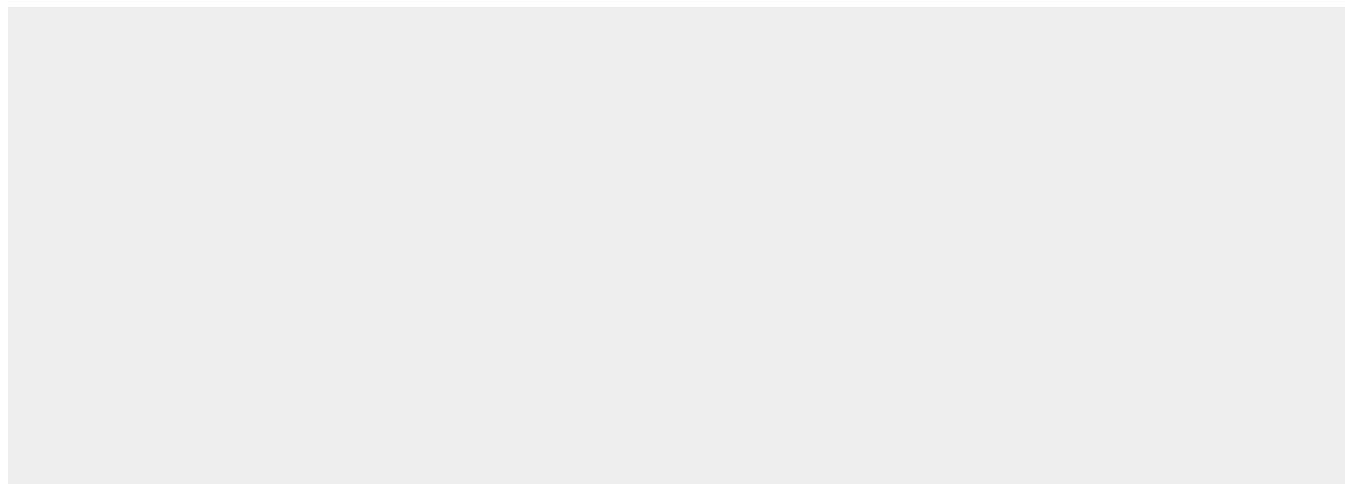
Cytoplasm, cytosol Mitochondrion outer membrane. Mitochondrion matrix Note=Localizes to the cytosol under normal conditions (PubMed:[21264228](#), PubMed:[22532927](#)). Relocalizes to mitochondrion outer membrane following cellular stress. May form molecular condensates in the mitochondrial matrix (PubMed:[38322995](#)). Colocalizes with BNIP3 and BNIP3L at the mitochondrion outer membrane (PubMed:[22292033](#)) [Isoform 2]: Cytoplasm, cytosol. Mitochondrion matrix. Note=Appears to predominantly localize to the mitochondrial matrix following induction of MALM (mitochondrial protein catabolic process).

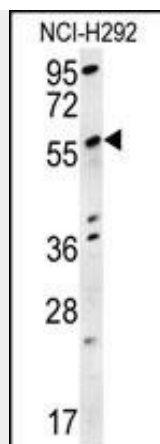
SPATA18 Antibody (N-term) - Protocols

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

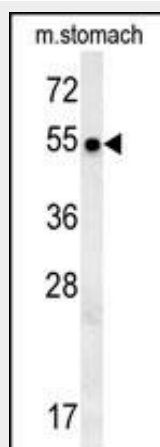
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SPATA18 Antibody (N-term) - Images

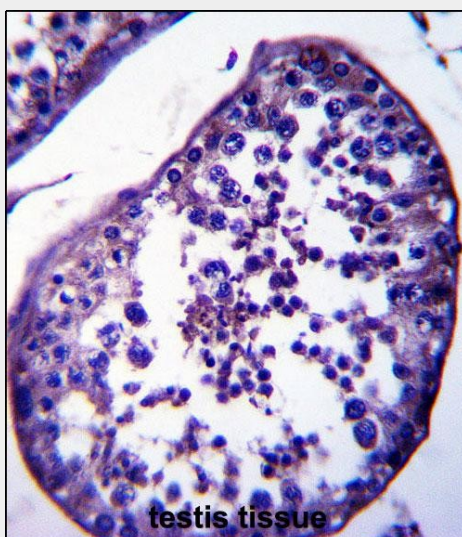




SPATA18 Antibody (N-term) (Cat. #AP13960a) western blot analysis in NCI-H292 cell line lysates (15ug/lane). This demonstrates the SPATA18 antibody detected SPATA18 protein (arrow).



SPATA18 Antibody (N-term) (Cat. #AP13960a) western blot analysis in mouse stomach tissue lysates (15ug/lane). This demonstrates the SPATA18 antibody detected SPATA18 protein (arrow).



SPATA18 Antibody (N-term) (Cat. #AP13960a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SPATA18 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

SPATA18 Antibody (N-term) - Background

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

SPATA18 Antibody (N-term) - 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)

SPATA18 Antibody (N-term) - Citations

- [Ebselen alleviates testicular pathology in mice with Zika virus infection and prevents its sexual transmission.](#)