

ZMPSTE24 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2415a**Specification**

ZMPSTE24 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [O75844](#)
Other Accession [NP_005848](#)

ZMPSTE24 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10269

Other Names

CAAX prenyl protease 1 homolog, Farnesylated proteins-converting enzyme 1, FACE-1, Prenyl protein-specific endoprotease 1, Zinc metalloproteinase Ste24 homolog, ZMPSTE24, FACE1, STE24

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2415a](/product/products/AP2415a) was selected from the Center region of human ZMPSTE24. 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.

ZMPSTE24 Antibody (Center) Blocking Peptide - Protein Information

Name ZMPSTE24 {ECO:0000303|PubMed:28246125, ECO:0000312|HGNC:HGNC:12877}

Function

Transmembrane metalloprotease whose catalytic activity is critical for processing lamin A/LMNA on the inner nuclear membrane and clearing clogged translocons on the endoplasmic reticulum (PubMed: [33293369](http://www.uniprot.org/citations/33293369), PubMed: [33315887](http://www.uniprot.org/citations/33315887)). Proteolytically removes the C- terminal three residues of farnesylated proteins (PubMed: [33293369](http://www.uniprot.org/citations/33293369), PubMed: [33315887](http://www.uniprot.org/citations/33315887)). Also plays an antiviral role independently of its protease activity by restricting enveloped RNA and DNA viruses, including influenza A, Zika, Ebola, Sindbis, vesicular stomatitis, cowpox, and vaccinia (PubMed: [28169297](http://www.uniprot.org/citations/28169297), PubMed: [28169297](http://www.uniprot.org/citations/28169297)).

href="http://www.uniprot.org/citations/28246125" target="_blank">28246125). Mechanistically, controls IFITM antiviral pathway to hinder viruses from breaching the endosomal barrier by modulating membrane fluidity (PubMed:35283811).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus inner membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein

Tissue Location

Widely expressed. High levels in kidney, prostate, testis and ovary.

ZMPSTE24 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ZMPSTE24 Antibody (Center) Blocking Peptide - Images**ZMPSTE24 Antibody (Center) Blocking Peptide - Background**

ZMPSTE24 is a zinc metalloprotease similar to yeast Ste24p. It is an integral membrane protein belonging to peptidase family M48 and is found in the endoplasmic reticulum and possibly in the Golgi compartment. It is thought to be involved in the proteolytic processing of farnesylated proteins.

ZMPSTE24 Antibody (Center) Blocking Peptide - References

Freije, J.M., et al., Genomics 58(3):270-280 (1999). Kumagai, H., et al., Biochim. Biophys. Acta 1426(3):468-474 (1999). Tam, A., et al., J. Cell Biol. 142(3):635-649 (1998).