

ZMPSTE24 Blocking Peptide (C-term)

Synthetic peptide

Catalog # BP19939b

Specification

ZMPSTE24 Blocking Peptide (C-term) - Product Information

Primary Accession

[O75844](#)

Other Accession

[Q80W54](#), [NP_005848.2](#)**ZMPSTE24 Blocking Peptide (C-term) - 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 is selected from aa 419-433 of HUMAN ZMPSTE24

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 Blocking Peptide (C-term) - 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:33315887, PubMed:33293369). Proteolytically removes the C- terminal three residues of farnesylated proteins (PubMed:33315887, PubMed:33293369). Plays also 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:28246125, PubMed:28169297). Mechanistically, controls IFITM antiviral pathway to hinder viruses from breaching the endosomal barrier by modulating membrane fluidity (PubMed:28246125).

href="http://www.uniprot.org/citations/35283811" target="_blank">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 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

ZMPSTE24 Blocking Peptide (C-term) - Images**ZMPSTE24 Blocking Peptide (C-term) - Background**

This gene encodes a member of the peptidase M48A family. The encoded protein is a zinc metalloproteinase involved in the two step post-translational proteolytic cleavage of carboxy terminal residues of farnesylated prelamin A to form mature lamin A. Mutations in this gene have been associated with mandibuloacral dysplasia and restrictive dermopathy.

ZMPSTE24 Blocking Peptide (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Miner, J.H. Am. J. Med. Genet. A 152A (8), 2140-2141 (2010) :
Smigiel, R., et al. Am. J. Med. Genet. A 152A (2), 447-452 (2010) :
Fontaine-Bisson, B., et al. J. Mol. Med. 88(2):193-201(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)