

MBTPS2 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12972a**Specification**

MBTPS2 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [O43462](#)**MBTPS2 Antibody (N-term) Blocking peptide - Additional Information**

Gene ID 51360

Other Names

Membrane-bound transcription factor site-2 protease, Endopeptidase S2P, Sterol regulatory element-binding proteins intramembrane protease, SREBPs intramembrane protease, MBTPS2, S2P

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.

MBTPS2 Antibody (N-term) Blocking peptide - Protein Information

Name MBTPS2 {ECO:0000303|PubMed:19361614, ECO:0000312|HGNC:HGNC:15455}

Function

Zinc metalloprotease that mediates intramembrane proteolysis of proteins such as ATF6, ATF6B, SREBF1/SREBP1 and SREBF2/SREBP2 (PubMed:10805775, PubMed:11163209). Catalyzes the second step in the proteolytic activation of the sterol regulatory element-binding proteins (SREBPs) SREBF1/SREBP1 and SREBF2/SREBP2: cleaves SREBPs within the first transmembrane segment, thereby releasing the N- terminal segment with a portion of the transmembrane segment attached (PubMed:10805775, PubMed:27380894, PubMed:9659902). Mature N-terminal SREBP fragments shuttle to the nucleus and activate gene transcription (PubMed:10805775, PubMed:27380894, PubMed:9659902). Also mediates the second step in the proteolytic activation of the cyclic AMP-dependent transcription factor ATF-6 (ATF6 and ATF6B) (PubMed:<a

[11163209](http://www.uniprot.org/citations/11163209)). Involved in intramembrane proteolysis during bone formation (PubMed:[27380894](http://www.uniprot.org/citations/27380894)). In astrocytes and osteoblasts, upon DNA damage and ER stress, mediates the second step of the regulated intramembrane proteolytic activation of the transcription factor CREB3L1, leading to the inhibition of cell- cycle progression (PubMed:[16417584](http://www.uniprot.org/citations/16417584)).

Cellular Location

Membrane; Multi-pass membrane protein. Cytoplasm. Golgi apparatus membrane; Multi-pass membrane protein

Tissue Location

Expressed in heart, brain, placenta, lung, liver, muscle, kidney and pancreas.

MBTPS2 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MBTPS2 Antibody (N-term) Blocking peptide - Images**MBTPS2 Antibody (N-term) Blocking peptide - Background**

This gene encodes a intramembrane zinc metalloprotease, which is essential in development. This protease functions in the signal protein activation involved in sterol control of transcription and the ER stress response. Mutations in this gene have been associated with ichthyosis follicularis with atrichia and photophobia (IFAP syndrome); IFAP syndrome has been quantitatively linked to a reduction in cholesterol homeostasis and ER stress response.

MBTPS2 Antibody (N-term) Blocking peptide - References

Ming, A., et al. *Pediatr Dermatol* 26(4):427-431(2009) Oeffner, F., et al. *Am. J. Hum. Genet.* 84(4):459-467(2009) Lu, Y., et al. *J. Lipid Res.* 49(12):2582-2589(2008) Shen, J., et al. *J. Biol. Chem.* 279(41):43046-43051(2004) Lee, K., et al. *Genes Dev.* 16(4):452-466(2002)