

STARD3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14986b

Specification

STARD3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>014849</u>

STARD3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10948

Other Names

StAR-related lipid transfer protein 3, Metastatic lymph node gene 64 protein, MLN 64, Protein CAB1, START domain-containing protein 3, StARD3, STARD3, CAB1, MLN64

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.

STARD3 Antibody (C-term) Blocking Peptide - Protein Information

Name STARD3 (HGNC:17579)

Function

Sterol-binding protein that mediates cholesterol transport from the endoplasmic reticulum to endosomes (PubMed:11053434, PubMed:15930133, PubMed:22514632, PubMed:28377464, PubMed:33124732). The sterol transport mechanism is triggered by phosphorylation of FFAT motif that leads to membrane tethering between the endoplasmic reticulum and late endosomes via interaction with VAPA and VAPB (PubMed:24105263, PubMed:28377464, PubMed:33124732). Acts as a

href="http://www.uniprot.org/citations/28377464" target="_blank">28377464, PubMed:33124732). Acts as a lipid transfer protein that redirects sterol to the endosome at the expense of the cell membrane and favors membrane formation inside endosomes (PubMed:<a

 $href="http://www.uniprot.org/citations/28377464" target="_blank">28377464). May also mediate cholesterol transport between other membranes, such as mitochondria membrane or cell membrane (PubMed:<a href="http://www.uniprot.org/citations/12070139"$



target="_blank">12070139, PubMed:19965586). However, such results need additional experimental evidences; probably mainly mediates cholesterol transport from the endoplasmic reticulum to endosomes (PubMed:28377464). Does not activate transcriptional cholesterol sensing (PubMed:28377464). Able to bind other lipids, such as lutein, a xanthophyll carotenoids that form the macular pigment of the retina (PubMed:21322544).

Cellular Location

Late endosome membrane; Multi-pass membrane protein. Note=Localizes to contact sites between the endoplasmic reticulum and late endosomes: associates with the endoplasmic reticulum membrane via interaction with VAPA, VAPB or MOSPD2

Tissue Location

Expressed in retina..

STARD3 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

STARD3 Antibody (C-term) Blocking Peptide - Images

STARD3 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of a subfamily of lipidtrafficking proteins that are characterized by a C-terminalsteroidogenic acute regulatory domain and an N-terminal metastaticlymph node 64 domain. The encoded protein localizes to themembranes of late endosomes and may be involved in exportingcholesterol. Alternative splicing results in multiple transcriptvariants.

STARD3 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Charman, M., et al. J. Lipid Res. 51(5):1023-1034(2010)Cai, W., et al. Int. J. Mol. Med. 25(4):573-580(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Alpy, F., et al. J. Biol. Chem. 276(6):4261-4269(2001)