

LAMP1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1823a

Specification

LAMP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

P11279

LAMP1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3916

Other Names

Lysosome-associated membrane glycoprotein 1, LAMP-1, Lysosome-associated membrane protein 1, CD107 antigen-like family member A, CD107a, LAMP1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1823a was selected from the N-term region of human Autophagy LAMP1. 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.

LAMP1 Antibody (N-term) Blocking Peptide - Protein Information

Name LAMP1 {ECO:0000303|PubMed:23632890, ECO:0000312|HGNC:HGNC:6499}

Function

Lysosomal membrane glycoprotein which plays an important role in lysosome biogenesis, lysosomal pH regulation, autophagy and cholesterol homeostasis (PubMed:37390818). Acts as an important regulator of lysosomal lumen pH regulation by acting as a direct inhibitor of the proton channel TMEM175, facilitating lysosomal acidification for optimal hydrolase activity (PubMed:373908183739081837390818

href="http://www.uniprot.org/citations/2022921" target="_blank">2022921, PubMed:23632890). Mechanistically, participates in cytotoxic granule movement to the cell surface and perforin trafficking to the lytic granule (PubMed:<a href="http://www.uniprot.org/citations/23632890"



target="_blank">23632890). In addition, protects NK-cells from degranulation-associated damage induced by their own cytotoxic granule content (PubMed:23847195). Presents carbohydrate ligands to selectins (PubMed:7685349).

Cellular Location

Lysosome membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Cytolytic granule membrane; Single-pass type I membrane protein. Note=This protein shuttles between lysosomes, endosomes, and the plasma membrane (By similarity). Colocalizes with OSBPL1A at the late endosome (PubMed:16176980). {ECO:0000250|UniProtKB:P05300, ECO:0000269|PubMed:16176980, ECO:0000269|PubMed:17897319}

LAMP1 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

LAMP1 Antibody (N-term) Blocking Peptide - Images

LAMP1 Antibody (N-term) Blocking Peptide - Background

LAMP1 is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may also play a role in tumor cell metastasis.

LAMP1 Antibody (N-term) Blocking Peptide - References

Fukuda M., J. Biol. Chem. 263:18920-18928(1988). Sawada R., J. Biol. Chem. 268:9014-9022(1993).