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LAMP1 Antibody
Rabbit mAb
Catalog # AP91029

Specification

LAMP1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P11279
Clonality	**Monoclonal**

Other Names
LAMP-1; CD107 antigen-like family member A; CD107a; LAMP1;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**44882 Da**

LAMP1 Antibody - Additional Information

Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human LAMP1**
Description	**LAMP1 and LAMP2 (lysosome-associated membrane protein 1 and 2) are two abundant lysosomal membrane proteins. Both are transmembrane proteins and heavily glycosylated at the amino-terminal luminal side of the lysosomal inner leaflet, which protects the proteins from proteolysis. The carboxy terminus of LAMP1 is exposed to the cytoplam and contains a tyrosine sorting motif which targets LAMP to lysosomal membranes.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

LAMP1 Antibody - 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:37390818). Also plays an

important role in NK-cells cytotoxicity (PubMed:2022921, PubMed:23632890). Mechanistically, participates in cytotoxic granule movement to the cell surface and perforin trafficking to the lytic granule (PubMed: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).

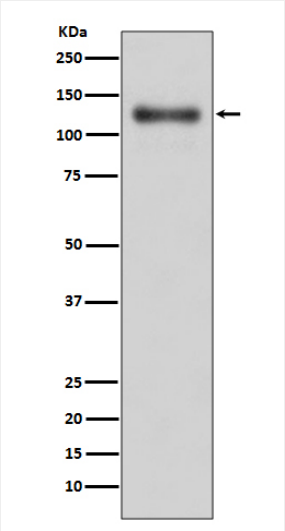
Cellular Location
Lysosome membrane; Single-pass type I membrane protein. Endosome membrane; Single- pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Cytolytic granule membrane; Single-pass type I membrane protein. 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LAMP1 Antibody - Images



Western blot analysis of LAMP1 expression in A431 cell lysate.