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LAMP1 Antibody

Rabbit mAb
Catalog # AP91029

Product Information

Application	WB, IHC
Primary Accession	P11279
Reactivity	Human
Clonality	Monoclonal
Other Names	LAMP-1; CD107 antigen-like family member A; CD107a; LAMP1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	44882

Additional Information

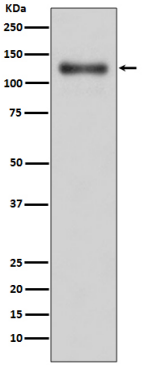
Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human LAMP1
Description	LAMP1 and LAMP2 (lysosome-associated membrane protein 1 and 2) are two abundant lysosomal membrane proteins. Both are transmembrane proteins and heavily glycosylated 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.

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}

Images



Western blot analysis of LAMP1 expression in A431 cell lysate.

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