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LAMP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1823b

Product Information

Application	WB, E
Primary Accession	P11279
Other Accession	P14562, P11438, P49129, P05300, Q05204
Reactivity	Human
Predicted	Bovine, Chicken, Hamster, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB12510
Calculated MW	44882
Antigen Region	391-417

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	This LAMP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-417 amino acids from the C-terminal region of human LAMP1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LAMP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

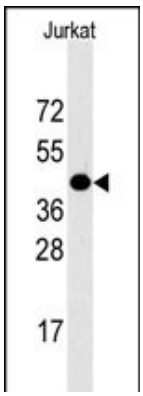
Background

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.

References

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

Images



Western blot analysis of LAMP1 Antibody (C-term) (Cat.#AP1823b) in Jurkat cell line lysates (35ug/lane). LAMP1 (arrow) was detected using the purified Pab.

Citations

- Ambient temperature reduction extends lifespan via activating cellular degradation activity in an annual fish (Nothobranchius rachovii).