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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Anti-LAMP2 Antibody [GL2A7]

Rat Anti-Mouse LAMP2 Monoclonal IgG1
Catalog No. SMC-141

StressMarq Biosciences INC.
Discovery through partnership | Excellence through quality

Overview

Product Name

LAMP2 Antibody

Description

Rat Anti-Mouse LAMP2 Monoclonal IgG1

Species Reactivity

Human, Mouse, Rabbit

Applications

WB, ICC/IF, IP

Antibody Dilution

WB (1:1000), ICC/IF (1:500); optimal dilutions for assays should be determined by the user.

Host Species

Rat

Immunogen Species

Mouse

Immunogen

Purified preparation of mouse liver lysosomal membranes

Concentration

1 mg/ml

Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

Properties

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Storage Temperature

-20ºC

Shipping Temperature

Blue Ice or 4ºC

Purification

Protein G Purified

Clonality

Monoclonal

Clone Number

GL2A7

Isotype

IgG1

Specificity

Detects ~100-110kDa.

Cite This Product

Rat Anti-Mouse LAMP2 Monoclonal, Clone GL2A7 (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SMC-141)

Certificate Of Analysis

1 µg/ml of SMC-141 was sufficient for detection of LAMP2 in 20 µg of rat liver microsomes by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Biological Description

Alternative Names

CD107b Antibody, Igp110 Antibody, Igp2 Antibody, Lamp2C Antibody, LampB Antibody, MAC3 Antibody, Lysosome-associated membrane glycoprotein 2 Antibody, LAMP-2 Antibody, Lysosome-associated membrane protein 2 Antibody, CD107 antigen-like family member B Antibody, Lysosomal membrane glycoprotein type B Antibody, LGP-B Antibody

Research Areas

Cell Signaling, Chaperones, Neuroscience, Organelle Markers, Trafficking

Cellular Localization

Cell membrane, Endosome, Endosome membrane, Lysosome, Lysosome membrane

Accession Number

NP_001017959.1

Gene ID

16784

Swiss Prot

P17047

Scientific Background

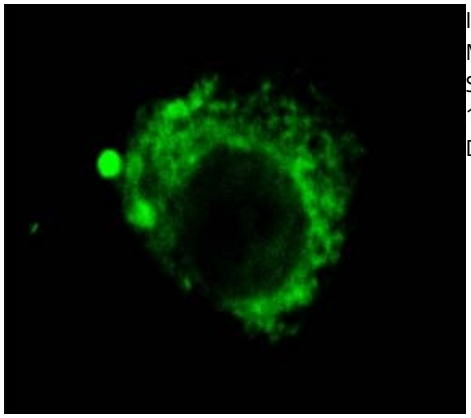
Lysosme associated membrane proteins, or LAMP1 and LAMP2, are major constituents of the lysosomal membrane. The two have closely related structures, with 37% sequence homology (2). They are both transmembrane glycoproteins that are localized primarily in lysosomes and late endosomes. Newly synthesized molecules are mostly transported from the trans-Golgi network directly to endosomes and then to lysosomes. A second pathway involves the lamps being delivered from the Golgi to the cell surface, and then along the endocytic pathway to the lysosomes. A minor pathway involves transport via the plasma membrane (3).
LAMP2 has also been detected at the plasma membrane of cells, as well as in cells that secrete lysosomal hydrolases. A study in the developmental expresses patterns of membrane LAMP2 transcripts indicate a possible involvement of this protein in cell-cell or cell-extracellular matrix interaction, and appear to reflect tissue and cell type specific roles of lysosomes during morphogenesis

(4).
Upon stimulation, a rapid translocation of intracellular LAMPs to the cell membrane is dependent on a carboxyl-terminal tyrosine based motif (YXXI) (5). This stimulation has also been shown to have an associated release of histamine, leukotriene C4 and prostaglandin D2, which shows that LAMP1 and LAMP2 are activation markers for normal mast cells (5). They have also been linked to the inflammatory response in that they promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium, and therefore possibly the adhesion of PBMC to the site of inflammation (6). LAMP2 has also been shown to be critical for autophagy, in conversion of early autophagic vacuoles to vacuoles which rapidly degrade their content (7).

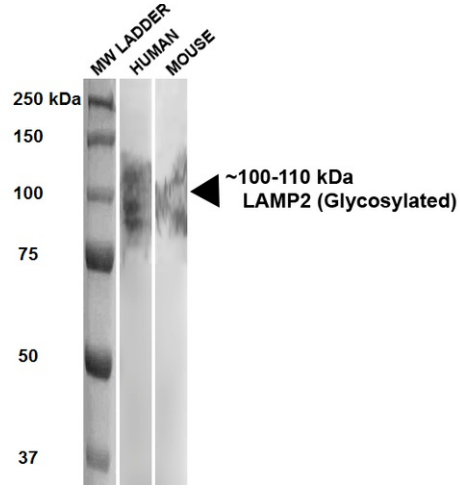
References

1. Granger B.L., et al. (1990) J. Biol. Chem. 265: 12036-12043.
2. Furuta K., et al. (1999) EMBO J. 17(5):1304-14.
3. Rohrer J., et al. (1996) J Cell Biol. 132(4): 565-76.
4. Lichter-Konecki U., et al (1999) Differentiation 65(1): 43-58.
5. Grutzkau A., et al. (2004) Cytometry A. 61(1): 62-68.
6. Kannan K., et al. (1996) Cell Immunol. 171: 10-19.
7. Tanaka Y., et al. (2000) Nature 406: 902-906.

Product Images



Immunocytochemistry/Immunofluorescence analysis using Rat Anti-LAMP2 Monoclonal Antibody, Clone GL2A7 (SMC-141). Tissue: Corneal Endothelial Cell (CEC). Species: Rabbit. Primary Antibody: Rat Anti-LAMP2 Monoclonal Antibody (SMC-141) at 1:1000. Secondary Antibody: FITC Goat Anti-Rat (green). Courtesy of: Eunduck E.P. Kay, Doheny Eye Institue.



Western Blot analysis of Human, Mouse HEK293 and 3T3NIH cell lysates showing detection of ~100-110 kDa LAMP2 protein using Rat Anti-LAMP2 Monoclonal Antibody, Clone GL2A7 (SMC-141). Lane 1: MW ladder. Lane 2: Human HEK293 lysate (20 µg). Lane 3: Mouse 3T3NIH lysate (10 µg). Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rat Anti-LAMP2 Monoclonal Antibody (SMC-141) at 1:500 for 1 hour at RT. Secondary Antibody: HRP Goat Anti-Rat at 1:100 for 1 hour at RT. Color Development: TMB solution for 5 min at RT. Predicted/Observed Size: ~100-110 kDa.

Product Citations (0)

Currently there are no citations for this product.

Reviews

There are no reviews yet.