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LAMP1 Monoclonal Antibody (LY1C6)

Catalog Number MA1-164

Product data sheet

Details	
Size	100ug
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	LY1C6
Immunogen	Rat liver lysosomal membrane preparations
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/ml
Purification	Protein A
Storage buffer	PBS with 1mg/ml BSA, 30% glycerol
Contains	0.05% sodium azide
Storage Conditions	-20°C

Species Reactivity	
Tested species reactivity	Hamster, Human, Mouse, Rat

Tested Applications	Dilution *
Immunocytochemistry (ICC)	10ug/ml
Immunofluorescence (IF)	10ug/ml
Western Blot (WB)	1:100-1:500

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

MA1-164 detects glycosylated LAMP-1 at ~130kD.M-PER (Product # 78501), IP Lysis Buffer (Product # 87787), or a 1% Triton X-100 lysis buffer are recommended for Western blot. LAMP-1 was not detected when RIPA buffer was used to generate cell lysates.

Background/Target Information

Lysosome associated membrane proteins (LAMP1), also known as Igp 120 or IgpA, is a type 1 intergral membrane protein that is transported from trans-Golgi network to endosomes and then lysosomes. Upon cell activation, LAMP1 transfer to the plasma membrane is dependent on a carboyxl-terminal tyrosine based motif (YXXI). Perturbation in the spacing between the tyrosine based motif relative to the membrane abolishes lysosome localization of LAMP1. This mutant protein then cycles between the plasma membrane and the endosome. Cell surface LAMP1 and LAMP2 have been shown to promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium, therefore they are possibly invovled in the adhesion of PBMC to the site of inflammation.

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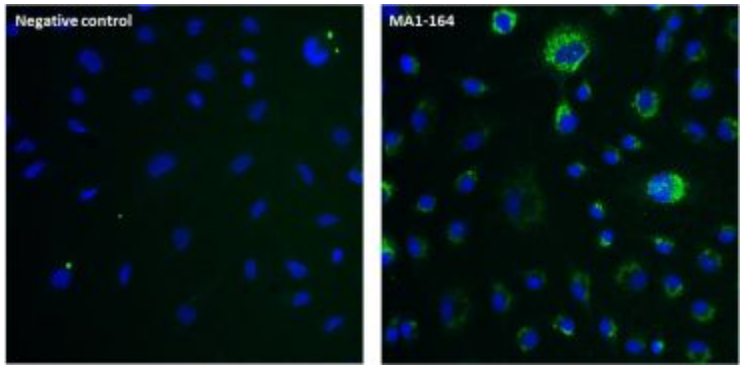
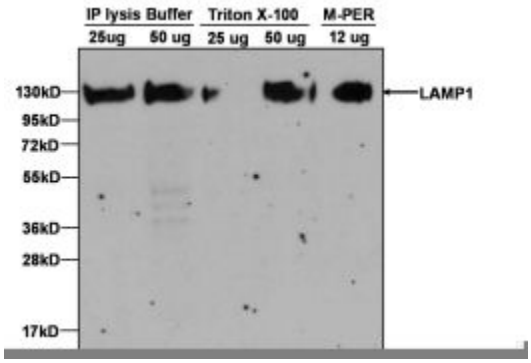
Product Images For LAMP1 Monoclonal Antibody (LY1C6)



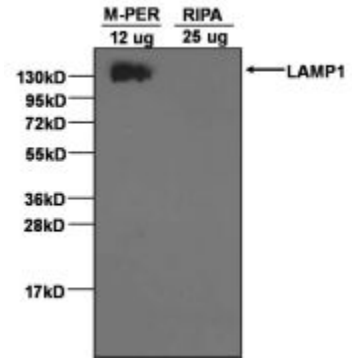
LAMP1 Antibody (MA1-164)

Immunofluorescent analysis of LAMP1 (green) in NRK cells. The cells were fixed with 4% paraformaldehyde, permeabilized with 0.1% Triton X-100 in PBS, and blocked with 1% Blocker BSA (Product # 37525), each for 15 minutes at room temperature. Cells were stained with a LAMP1 monoclonal antibody (Product # MA1-164) at a concentration of 10ug/ml in 1% Blocker BSA in PBS (right panel), or incubated in blocking buffer alone as a negative control (left panel) overnight at 4C, and then incubated with a Dylight 488-conjugated goat anti-mouse IgG secondary antibody (Product # 35502) at a dilution of 1:1000 for 1 hour at room temperature. Nuclei (blue) were stained with DAPI (Product # 46190). Images were taken on a Thermo Scientific ToxInsight Instrument at 20X magnification.



LAMP1 Antibody (MA1-164)

Western blot analysis of LAMP1 was performed by loading NRK cell lysates prepared with indicated lysis buffers and protein amounts per well, and 10ul of PageRuler Plus Prestained Protein Ladder (Product # 26619) onto a 4-20% Tris-HCl polyacrylamide gel. Proteins were transferred to a PVDF membrane using the G2 Fast Blotter (Product # 62288), and blocked with 5% milk in TBST for 1 hour at room temperature. Glycosylated LAMP1 was detected at ~130kDa after probing with a LAMP1 monoclonal antibody (Product # MA1-164) at a dilution of 1:250 in blocking buffer overnight at 4C on a rocking platform, washing in TBST, and probing with an HRP-conjugated goat anti-mouse IgG secondary antibody (Product # 31430) at a dilution of 1:20,000 for 1 hour. Chemiluminescent detection was performed using SuperSignal West Dura (Product # 34076). Note: Triton X-100 lysis buffer contains 25mM HEPES pH7.5, 150mM NaCl, 1% Triton X-100 and 5mM EDTA.



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