

Datasheet for ABIN2484738
anti-LAMP1 antibody (Atto 488)



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2 Images

Overview

Quantity:	100 µg
Target:	LAMP1
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LAMP1 antibody is conjugated to Atto 488
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Immunogen:	Rat liver lysosomal membrane preparations
Clone:	Ly1C6
Isotype:	IgG1
Specificity:	Detects ~120 kDa.
Cross-Reactivity:	Hamster, Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	LAMP1
Alternative Name:	LAMP1 (LAMP1 Products)

Target Details

Background: Lysosome 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). Upon stimulation, a rapid translocation of intracellular LAMPs to the cell membrane is dependent on a carboxylterminal tyrosine ba based motif (YXXI) (1). If there is a disturbance in this spacing, lysosome localization of LAMP1 is abolished and the mutant protein then cycles between the membrane and the endosome (3). This stimulation has also been shown to have an associated release of histamine, leukotriene C (4) and prostaglandin D (2), which shows that LAMP-1 and LAMP-2 are activation markers for normal mast cells (1). 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 (4).

Gene ID: 25328

NCBI Accession: [NP_036989](#)

UniProt: [P14562](#)

Pathways: [Autophagy](#)

Application Details

Application Notes:

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

Comment: 1 µg/ml was sufficient for detection of LAMP1 in rat liver microsome by ECL immunoblot analysis.

Restrictions: For Research Use only

Handling

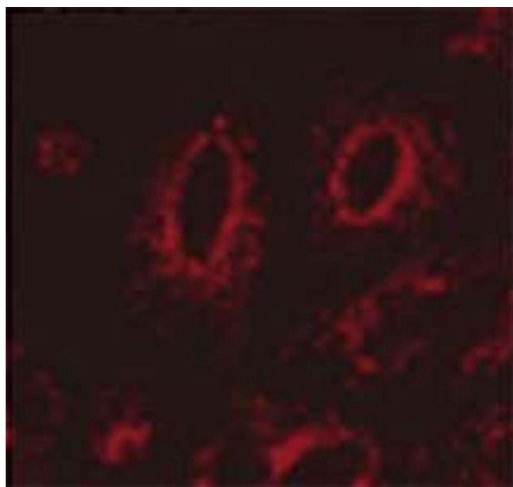
Format: Liquid

Concentration: 1 mg/mL

Handling

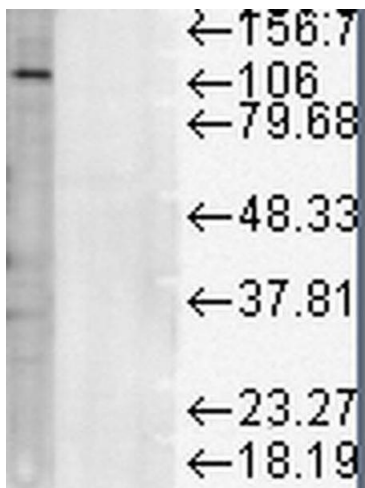
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-LAMP1 Monoclonal Antibody, Clone Ly1C6 . Tissue: transfected HeLa cells. Species: Human. Primary Antibody: Mouse Anti-LAMP1 Monoclonal Antibody at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Courtesy of: Robert H Edwards, U. of Cali, San Fran School of Medicine.



Western Blotting

Image 2. Western Blot analysis of Rat liver microsome lysate showing detection of LAMP1 protein using Mouse Anti-LAMP1 Monoclonal Antibody, Clone Ly1C6 . Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-LAMP1 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.