

Mouse anti-Rat, Hamster LAMP1 Monoclonal Antibody | anti-Lamp1 antibody

LAMP1 Antibody: ATTO 594

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103228	Mouse	Rat, Hamster	Immunocytochemistry, Immunoprecipitation, Western Blot

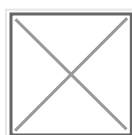
PRODUCT SYNONYMS

LAMP1; Monoclonal Antibody; LAMP1 Antibody: ATTO 594; CD107; CD107a; LAMPA; LGP120; IgpA; Lysosome-associated membrane glycoprotein 1; CD107 antigen-like family member A; 120 kDa lysosomal membrane glycoprotein; Lamp-1; anti-Lamp1 antibody

PRODUCT SPECIFICATIONS

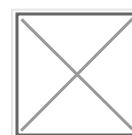
Host	Mouse
Reactivity	Rat, Hamster
Clonality	Monoclonal
Isotype	IgG1
Clone Number	Ly1C6
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	407
Applicable Applications for anti-Lamp1 antibody	ICC (Immunocytochemistry), IP (Immunoprecipitation), WB (Western Blot)
Conjugate	ATTO 594
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



WB (Western Blot)

Western Blot analysis of Rat liver microsome lysate showing detection of LAMP1 protein using Mouse Anti-LAMP1 Monoclonal Antibody, Clone Ly1C6. Load: 15 ug. 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.



ICC (Immunocytochemistry)

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.

ADDITIONAL INFORMATION

Related Product Information for anti-Lamp1 antibody	Background Info: Detects an ~120kDa protein corresponding to the molecular mass of LAMP1 on SDS PAGE immunoblots. 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). Upon stimulation, a rapid translocation of intracellular LAMPs to the cell membrane is dependent on a carboxyl-terminal 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).
Product Categories/Family for anti-Lamp1 antibody	Chaperones; Organelle Markers; Trafficking
References	1. Grutzkau, A. et al (2004) Cytometry A. 61(10): 62-68. 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. Kannan, K., et al. (1996) Cell Immunol. 171: 10-19. 5. Lewis, V., et al. (1985) J. Cell Biol. 100: 1839-1847. 6. Jones, K.A., et al. (2004) Exp Cell Res 295(2): 512-524. 1. Hiasa, M. et al. (2014). Essential role of vesicular nucleotide transporter in vesicular storage and release of nucleotides in platelets. Physiol Rep. 2(6). pii: e12034. doi: 10.14814/phy2.12034

NCBI AND UNIPROT INFORMATION

NCBI GI #	6981144
NCBI GeneID	25328
NCBI Accession #	NP_036989.1
NCBI GenBank Nucleotide #	NM_012857.2
UniProt Accession #	P14562; P97620
Molecular Weight	43,969 Da
NCBI Official Full Name	lysosome-associated membrane glycoprotein 1
NCBI Official Synonym Full Names	lysosomal-associated membrane protein 1
NCBI Official Symbol	Lamp1
NCBI Official Synonym Symbols	LGP120
NCBI Protein Information	lysosome-associated membrane glycoprotein 1; LAMP-1; LGP-120; lysosomal membrane glycoprotein 1; CD107 antigen-like family member A; lysosome-associated membrane protein 1; 120 kDa lysosomal membrane glycoprotein; Lysosomal associated membrane protein 1 (120 kDa)
UniProt Protein Name	Lysosome-associated membrane glycoprotein 1
UniProt Gene Name	Lamp1
UniProt Synonym Gene Names	Lamp-1; LAMP-1; Lysosome-associated membrane protein 1; LGP-120
UniProt Entry Name	LAMP1_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.