

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1781

Specification

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody - Product Information

Application	WB
Primary Accession	P11279
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1 kappa
Calculated MW	Predicted, 45 kDa , o bserved , 90-120 kDa
Gene Name	KDa
Aliases	LAMP1 LAMP1; Lysosomal Associated Membrane Protein 1; CD107a; Lysosome-Associated Membrane Glycoprotein 1; Lysosome-Associated Membrane Protein 1; CD107 Antigen-Like Family Member A; LAMP-1; Lysosomal-Associated Membrane Protein 1; CD107a Antigen; LGP120; LAMPA
Immunogen	Recombinant protein of human CD107a

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody - 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 {ECO:0000303 PubMed:23632890, ECO:0000312 HGNC:HGNC:6499}	

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/23632890"

target="_blank">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

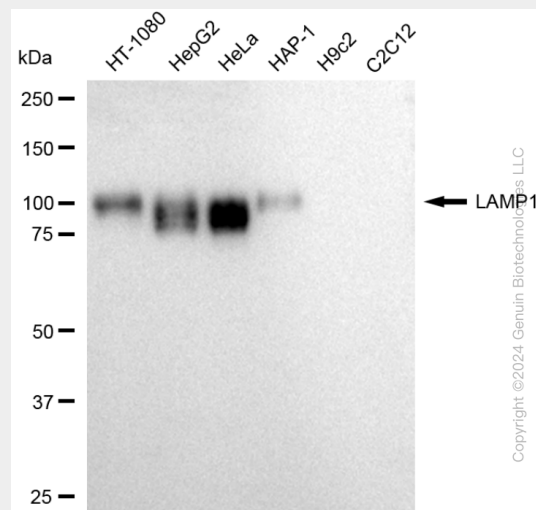
Lysosome membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Cytolytic granule membrane; Single-pass type I membrane protein. Note=This protein 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}

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody - Protocols

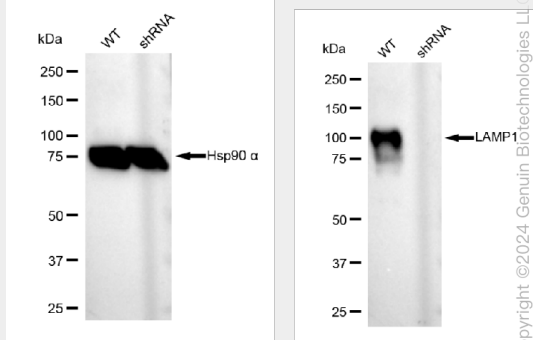
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-LAMP1 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-LAMP1 antibody (Cat#AGI1781). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-LAMP1 antibody (Cat#AGI1781, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-LAMP1 antibody (Cat#AGI1781). LAMP1 expression in wild type (WT) and LAMP1 shRNA knockdown (KD) HT-1080 cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-LAMP1 antibody (Cat#AGI1781, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.