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LAMP1 / CD107a Antibody (clone H4A3)

Mouse Monoclonal Antibody
Catalog # ALS16934

Specification

LAMP1 / CD107a Antibody (clone H4A3) - Product Information

Application	**IHC**
Primary Accession	P11279
Other Accession	3916
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**44882**

LAMP1 / CD107a Antibody (clone H4A3) - Additional Information

Gene ID 3916

Other Names
LAMP1, CD107a, CD107a antigen, LAMP-1, LGP120, LAMPA

Target/Specificity
Monoclonal antibody H4A3 recognizes CD107a, an approximately 100-120 kD glycoprotein expressed mainly on lysosomal, but also on the plasma membrane.

Reconstitution & Storage
PBS, pH 7.4, sterile filtered. Store at 2-8°C. Do not freeze.

Precautions
LAMP1 / CD107a Antibody (clone H4A3) is for research use only and not for use in diagnostic or therapeutic procedures.

LAMP1 / CD107a Antibody (clone H4A3) - 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: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}

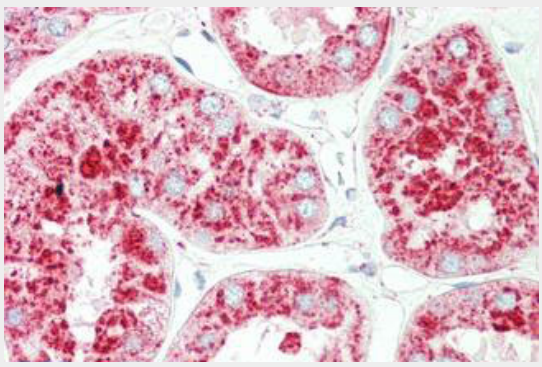
Volume
50 µl

LAMP1 / CD107a Antibody (clone H4A3) - Protocols

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

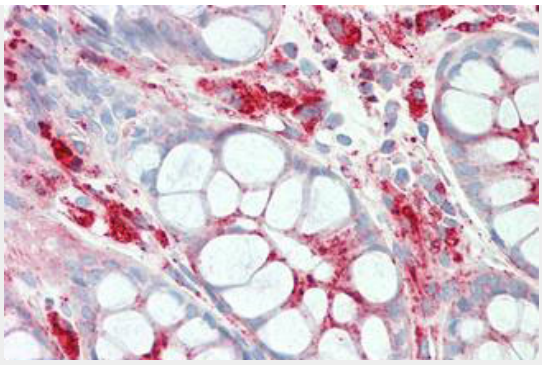
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LAMP1 / CD107a Antibody (clone H4A3) - Images



Anti-LAMP1 / CD107a antibody IHC staining of human kidney.

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Anti-LAMP1 / CD107a antibody IHC staining of human colon.

LAMP1 / CD107a Antibody (clone H4A3) - Background

Presents carbohydrate ligands to selectins. Also implicated in tumor cell metastasis.

LAMP1 / CD107a Antibody (clone H4A3) - References

Fukuda M.,et al.J. Biol. Chem. 263:18920-18928(1988).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham A.,et al.Nature 428:522-528(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Mane S.M.,et al.Arch. Biochem. Biophys. 268:360-378(1989).