

LAMP2 Mouse mAb

Catalog No: #64437

Package Size: #64437-1 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

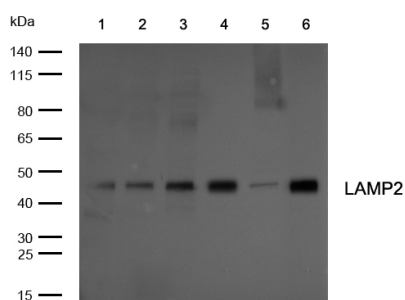
Description

Product Name	LAMP2 Mouse mAb
Host Species	Mouse
Clonality	Monoclonal
Clone No.	MR4560
Isotype	Mouse IgG2b
Applications	ELISA, WB, IHC, IF, FC
Species Reactivity	Human, Mouse, Rat
Immunogen Description	Purified recombinant fragment of human CD107b (AA: extra 29-168) expressed in E. Coli.
Target Name	LAMP2
Other Names	LAMPB; LAMP2; LAMP-2; LGP-96; LGP110
Calculated MW	45kDa
SDS-PAGE MW	45kDa
Formulation	Purified antibody in PBS with 0.05% sodium azide
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

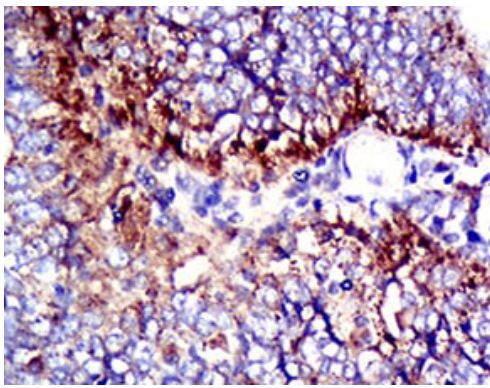
Application Details

WB 1:500-1:2000 IHC 1:200-1:1000 FCM 1:200-1:400 ELISA 1:10000

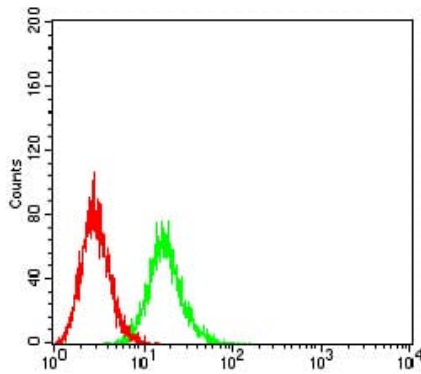
Images



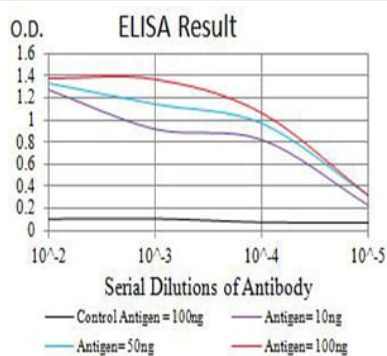
All lanes : LAMP2 Mouse mAb at 1/1k dilution Lane 1 : U937 whole cell lysates Lane 2 : HepG2 whole cell lysates Lane 3 : RAW264.7 whole cell lysates Lane 4 : 3T3 whole cell lysates Lane 5 : C6 whole cell lysates Lane 6 : T47D whole cell lysates Lysates/proteins at 20 µg per lane. Secondary All lanes : Goat Anti-Mouse IgG H&L (HRP) at 1/20000 dilution Predicted band size: 45 kDa Observed band size: 45 kDa Exposure time: 5 seconds



Formalin-fixed, paraffin-embedded human endometrial cancer tissues stained for LAMP2 using 64437 at 1/200 dilution in immunohistochemical analysis.



Flow cytometric analysis of Ramos cells using LAMP2 mouse mAb (green) and negative control (red).



Black line: Control Antigen (100 ng); Purple line: Antigen (10 ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

Background

Lysosomal membrane glycoprotein which plays an important role in lysosome biogenesis, lysosomal pH regulation and autophagy (PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:27628032, PubMed:36586411, PubMed:37390818, PubMed:8662539). 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). Plays an important role in chaperone-mediated autophagy, a process that mediates lysosomal degradation of proteins in response to various stresses and as part of the normal turnover of proteins with a long biological half-life (PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:27628032, PubMed:36586411, PubMed:8662539). Functions by binding target proteins, such as GAPDH, NLRP3 and MLLT11, and targeting them for lysosomal degradation (PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:36586411, PubMed:8662539). In the chaperone-mediated autophagy, acts downstream of chaperones, such as HSPA8/HSC70, which recognize and bind substrate proteins and mediate their recruitment to lysosomes, where target proteins bind LAMP2 (PubMed:36586411). Plays a role in lysosomal protein degradation in response to starvation (By similarity). Required for the fusion of autophagosomes with lysosomes during autophagy (PubMed:27628032). Cells that lack LAMP2 express normal levels of VAMP8, but fail to accumulate STX17 on autophagosomes, which is the most likely explanation for the lack of fusion between autophagosomes and lysosomes (PubMed:27628032).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.