

LAMP2 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1851b

Specification

LAMP2 Antibody - Product Information

Application	IF, IHC, WB,E
Primary Accession	P13473
Other Accession	NP_054701.1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,K

LAMP2 Antibody - Additional Information

Gene ID 3920

Other Names

Lysosome-associated membrane glycoprotein 2, LAMP-2, Lysosome-associated membrane protein 2, CD107 antigen-like family member B, CD107b, LAMP2

Target/Specificity

This LAMP2 monoclonal antibody is generated from mouse immunized with LAMP2 recombinant protein.

Dilution

IF~~1:10~50
IHC~~1:500
WB~~1:2000-8000

Format

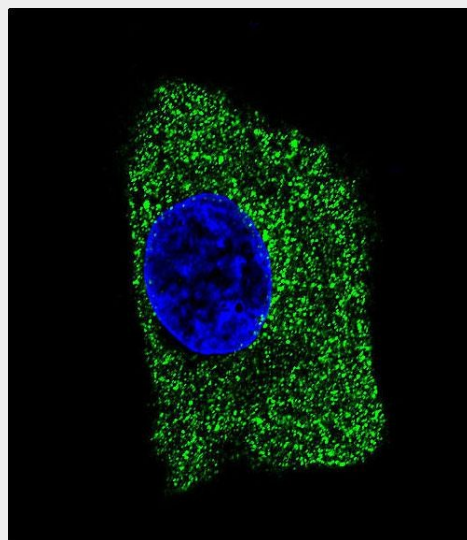
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

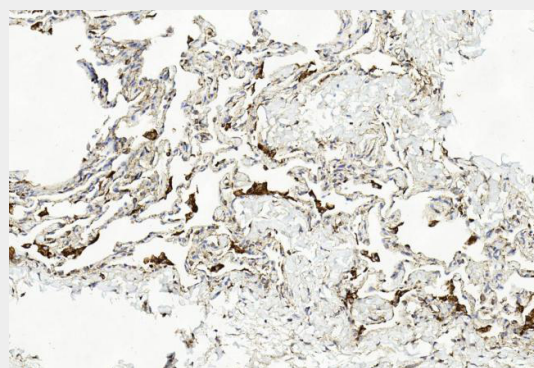
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LAMP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Confocal immunofluorescent analysis of LAMP2 Antibody (Cat#AM1851b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).



Immunohistochemical analysis of paraffin-embedded Human lung section using Pink1(Cat#am1851b). am1851b was diluted at 1:500 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

LAMP2 Antibody - Protein Information

Name LAMP2

Function

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:8662539, PubMed:11082038).

Functions by binding target proteins, such as GAPDH and MLLT11, and targeting them for lysosomal degradation (PubMed:8662539, PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:27628032).

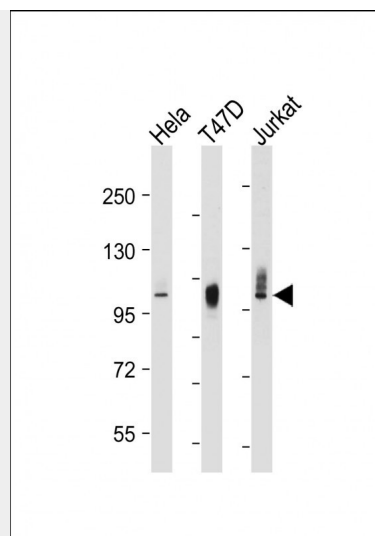
Required for the fusion of autophagosomes with lysosomes during autophagy (PubMed:27628032). Cells that lack LAMP2 express normal levels of VAMP8, but fail to accumulate STX17 on autophagosomes, which is the most likely explanation for the lack of fusion between autophagosomes and lysosomes (PubMed:27628032).

Required for normal degradation of the contents of autophagosomes (PubMed:27628032). Plays a role in lysosomal protein degradation in response to starvation (By similarity).

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All lanes : Anti-LAMP2 Antibody at 1:2000-8000 dilution Lane 1: HeLa whole cell lysate Lane 2: T47D whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

LAMP2 Antibody - Background

Implicated in tumor cell metastasis. May function in protection of the lysosomal membrane from autodigestion, maintenance of the acidic environment of the lysosome, adhesion when expressed on the cell surface (plasma membrane), and inter- and intracellular signal transduction. Protects cells from the toxic effects of methylating mutagens.

www.uniprot.org/citations/27628032
target="_blank">27628032). Required
for efficient MHCII-mediated presentation of
exogenous antigens via its function in
lysosomal protein degradation; antigenic
peptides generated by proteases in the
endosomal/lysosomal compartment are
captured by nascent MHCII subunits
(PubMed:<a href="http://www.uniprot.org/c
itations/20518820"
target="_blank">20518820). Is not
required for efficient MHCII-mediated
presentation of endogenous antigens
(PubMed:<a href="http://www.uniprot.org/c
itations/20518820"
target="_blank">20518820).

Cellular Location

Cell membrane; Single-pass type I
membrane protein
{ECO:0000255|PROSITE-ProRule:PRU00740,
ECO:0000269|PubMed:17897319}
Endosome membrane; Single-pass type I
membrane protein
{ECO:0000255|PROSITE-ProRule:PRU00740,
ECO:0000269|PubMed:17897319}.
Lysosome membrane
{ECO:0000255|PROSITE-
ProRule:PRU00740,
ECO:0000269|PubMed:11082038,
ECO:0000269|PubMed:17897319,
ECO:0000269|PubMed:18644871,
ECO:0000269|PubMed:2912382};
Single-pass type I membrane protein
{ECO:0000255|PROSITE-ProRule:PRU00740,
ECO:0000269|PubMed:17897319}
Cytoplasmic vesicle, autophagosome
membrane
{ECO:0000250|UniProtKB:P17047}.
Note=This protein shuttles between
lysosomes, endosomes, and the plasma
membrane

Tissue Location

Isoform LAMP-2A is highly expressed in
placenta, lung and liver, less in kidney and
pancreas, low in brain and skeletal muscle
(PubMed:7488019, PubMed:26856698).
Isoform LAMP-2B is detected in spleen,
thymus, prostate, testis, small intestine,
colon, skeletal muscle, brain, placenta,
lung, kidney, ovary and pancreas and liver
(PubMed:7488019, PubMed:26856698).
Isoform LAMP-2C is detected in small
intestine, colon, heart, brain, skeletal
muscle, and at lower levels in kidney and
placenta (PubMed:26856698).

LAMP2 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](#)

LAMP2 Antibody - Citations

- [Human non-small cell lung cancer cells can be sensitized to camptothecin by modulating autophagy.](#)