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LAMP2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1824c

Specification

LAMP2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P13473
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**196-225**

LAMP2 Antibody (Center) - 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

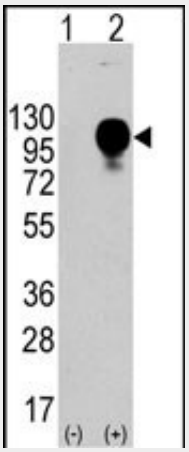
Target/Specificity
This LAMP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 196-225 amino acids from the Central region of human LAMP2.

Dilution
WB~~1:2000

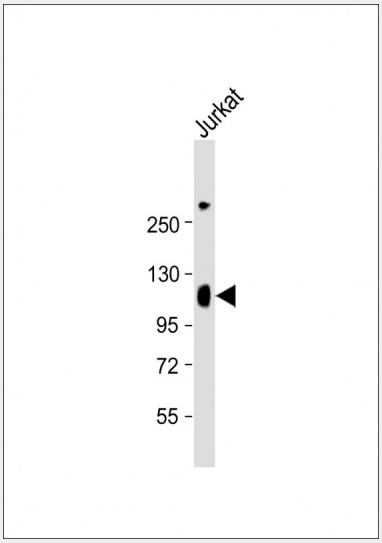
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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 (Center) is for research use only and not for use in diagnostic or



Western blot analysis of LAMP2 (arrow) using LAMP2 Antibody (Center) (Cat.#AP1824c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the LAMP2 gene (Lane 2) (Origene Technologies). Mature, functional LAMP2 is extensively glycosylated with a variety of different N linked and O linked oligosaccharides with a total molecular weight of ~100-110 kDa.



Anti-LAMP2 Antibody (Center) at 1:2000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),

therapeutic procedures.

LAMP2 Antibody (Center) - 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-live (PubMed:8662539, PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:27628032). Functions by binding target proteins, such as GAPDH and MLLT11, and targeting them for lysosomal degradation (PubMed:8662539, PubMed:11082038, PubMed:18644871, PubMed:24880125). 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). Required

Peroxidase conjugated at 1/10000 dilution.
Predicted band size : 45 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

LAMP2 Antibody (Center) - Background

LAMP2 is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may play a role in tumor cell metastasis. It may also function in the protection, maintenance, and adhesion of the lysosome.

LAMP2 Antibody (Center) - References

Sarafian,V.S., Acta. Biol. Hung. 57 (3), 315-322 (2006)
Liu,T., J. Proteome Res. 4 (6), 2070-2080 (2005)
Mane,S.M., Arch. Biochem. Biophys. 268 (1), 360-378 (1989)
Fukuda,M., J. Biol. Chem. 263 (35), 18920-18928 (1988)

for normal degradation of the contents of autophagosomes (PubMed: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:20518820). Is not required for efficient MHCII-mediated presentation of endogenous antigens (PubMed: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 (Center) - 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