

LAMP2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP1824c**Specification****LAMP2 Antibody (Center) Blocking Peptide -
Product Information**Primary Accession [P13473](#)**LAMP2 Antibody (Center) Blocking Peptide -
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

The synthetic peptide sequence used to
generate the antibody [AP1824c](/product/products/AP1824c) was
selected from the Center region of human
LAMP2. A 10 to 100 fold molar excess to
antibody is recommended. Precise
conditions should be optimized for a
particular assay.

Format

Peptides are lyophilized in a solid powder
format. Peptides can be reconstituted in
solution using the appropriate buffer as
needed.

Storage

Maintain refrigerated at 2-8°C for up to 6
months. For long term storage store at
-20°C.

Precautions

This product is for research use only. Not
for use in diagnostic or therapeutic
procedures.

**LAMP2 Antibody (Center) Blocking Peptide -
Protein Information****LAMP2 Antibody (Center) Blocking Peptide
- 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) Blocking Peptide
- 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)

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, 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 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).

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- Protocols

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

- [Blocking Peptides](#)