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Product datasheet for AP07767PU-N

LAMP2 Rabbit Polyclonal Antibody

Product data:

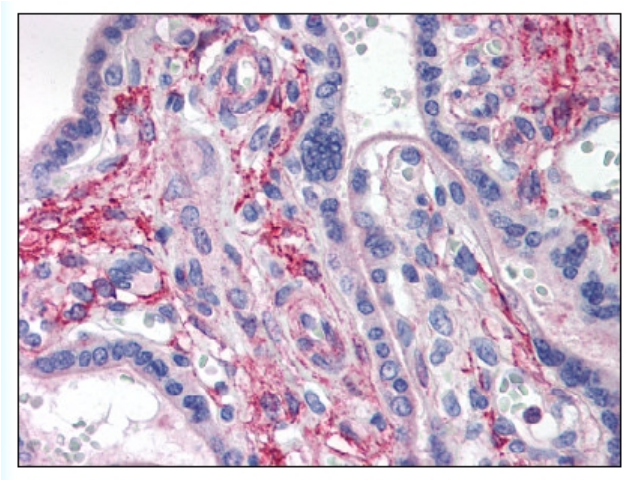
Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	**Immunocytochemistry:** 7.5 - 10 µg/ml. **Immunohistochemistry on Paraffin Sections:** 5 µg/ml. **Western Blot:** 1 - 2 µg/ml.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic Peptide corresponding to 17 amino acid peptide from near the center of human LAMP-2
Specificity:	This antibody detects CD107b.
Formulation:	PBS containing 0.02% Sodium Azide as preservative State: Aff - Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Dilute only prior to immediate use. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	lysosomal associated membrane protein 2
Database Link:	Entrez Gene 3920 Human P13473

View online »

Background: Lysosme associated membrane proteins, or LAMP1 and LAMP2, are major constituents of the lysosomal membrane. The two have closely related structures, with 37% sequence homology (2). They are both transmembrane glycoproteins that are localized primarily in lysosomes and late endosomes. Newly synthesized molecules are mostly transported from the trans-Golgi network directly to endosomes and then to lysosomes. A second pathway involves the lamps being delivered from the Golgi to the cell surface, and then along the endocytic pathway to the lysosomes. A minor pathway involves transport via the plasma membrane (3). LAMP2 has also been detected at the plasma membrane of cells, as well as in cells that secrete lysosomal hydrolases. A study in the developmental expresses patterns of membrane LAMP2 transcripts indicate a possible involvement of this protein in cell-cell or cellextracellular matrix interaction, and appear to reflect tissue and cell type specific roles of lysosomes during morphogenesis (4).
Upon stimulation, a rapid translocation of intracellular LAMPs to the cell membrane is dependent on a carboxylterminal tyrosine based motif (YXXI) (5). This stimulation has also been shown to have an associated release of histamine, leukotriene C 9$) and prostaglandin D 9@), which shows that LAMP1 and LAMP2 are activation markers for normal mast cells (5). They have also been linked to the inflammatory response in that they promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium, and therefore possibly the adhesion of PBMC to the site of inflammation (6).
LAMP2 has also been shown to be critical for autophagy, in conversion of early autophagic vacuoles to vacuoles which rapidly degrade their content (7).

Synonyms: LAMP-2, LAMP-2C, LAMPB

Product images:



LAMP2 antibody staining of Formalin-Fixed Paraffin-Embedded Human Placenta at 5 ug/ml followed by biotinylated goat anti-rabbit IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.