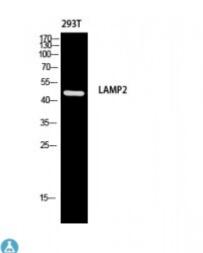


## Anti-CD107b antibody



**Description** 

Rabbit polyclonal to CD107b.

Model STJ97664

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IHC, WB

**Immunogen** Synthesized peptide derived from human CD107b.

Immunogen Region 121-170 aa, Internal

**Gene ID** <u>3920</u>

Gene Symbol <u>LAMP2</u>

**Dilution range** WB 1:500-1:2000IHC-P 1:100-1:300ELISA 1:10000

**Specificity** CD107b Polyclonal Antibody detects endogenous levels of CD107b protein.

**Tissue Specificity** Isoform LAMP-2A is highly expressed in placenta, lung and liver, less in

kidney and pancreas, low in brain and skeletal muscle . Isoform LAMP-2B is detected in spleen, thymus, prostate, testis, small intestine, colon, skeletal muscle, brain, placenta, lung, kidney, ovary and pancreas and liver . Isoform LAMP-2C is detected in small intestine, colon, heart, brain, skeletal muscle,

and at lower levels in kidney and placenta.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Lysosome-associated membrane glycoprotein 2 LAMP-2 Lysosome-

associated membrane protein 2 CD107 antigen-like family member B LGP-96

CD antigen CD107b

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6501OMIM:300257</u>

Alternative Names Lysosome-associated membrane glycoprotein 2 LAMP-2 Lysosome-

associated membrane protein 2 CD107 antigen-like family member B LGP-96

CD antigen CD107b

**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. Functions by binding target proteins, such as GAPDH and MLLT11, and targeting them for lysosomal degradation. Plays a role in lysosomal protein

degradation in response to starvation . Required for the fusion of

autophagosomes with lysosomes during autophagy . 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. Required for normal degradation of the contents of autophagosomes. 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 . Is not required for efficient MHCII-mediated presentation of endogenous antigens . Isoform LAMP-2C: Modulates chaperone-mediated autophagy. Decreases presentation of endogenous antigens by MHCII. Does not play a role in the presentation of exogenous and membrane-derived antigens by

MHCII.

Cellular Localization Cell membrane Endosome membrane Lysosome membrane Cytoplasmic

vesicle, autophagosome membrane. This protein shuttles between lysosomes,

endosomes, and the plasma membrane.

Post-translational

Modifications

O- and N-glycosylated; some of the 16 N-linked glycans are

polylactosaminoglycans.

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