

## Recombinant Rat LAMP1/CD107a Protein (Fc Tag)

Catalog No. PKSR030304

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

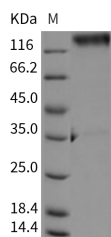
### Description

<b>Synonyms</b>	LAMP1
<b>Species</b>	Rat
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met1-Asn371
<b>Accession</b>	P14562
<b>Calculated Molecular Weight</b>	65.1 kDa
<b>Observed molecular weight</b>	123 kDa
<b>Tag</b>	C-hFc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 92 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 92 % as determined by reducing SDS-PAGE.

### Background

Lysosome-associated membrane glycoprotein 1, also known as CD107 antigen-like family member A, CD107a, and LAMP1, is a single-pass type I membrane protein which belongs to the LAMP family. CD107a is expressed largely in the

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endosome-lysosome membranes of cells, but is also found on the plasma membrane (1-2% of total LAMP1). LAMP1 has been implicated in a variety of cellular functions, including cancer metastasis. It has been proposed LAMP1 serves as a therapeutic agent for some cancers, as well as a marker for lysosomal storage disorders and different cell types such as cytotoxic T cells. LAMP2, also known as CD107b, may also play a role in tumor cell metastasis and functions in the protection, maintenance, and adhesion of the lysosome. Cell surface LAMP1 and LAMP2 have been shown to promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium, therefore they are possibly involved in the adhesion of PBMCs to the site of inflammation. LAMP-1 is a glycoprotein highly expressed in lysosomal membranes. LAMP-1 has been suggested to be a cell surface receptor for a specific amelogenin isoform, leucine-rich amelogenin peptide or LRAP. LAMP-1 can serve as a cell surface binding site for amelogenin on dental follicle cells and cementoblasts.