For Research Use Only

Recombinant Human CD107a/LAMP1 protein (rFc Tag)



Catalog Number: Eg2611

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human CD107a protein Ala26-Ser381 (Accession#P11279-1) with a rabbit IgG Fc tag at the Cterminus.

GeneID:

3916

Accession:

P11279-1

Predicted Molecular Mass:

64.5 kDa

SDS-PAGE:

75-105 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

LAMP1 (CD107a) is a heavily glycosylated membrane protein enriched in the lysosomal membrane. LAMP1 is extensively glycosylated with asparagine-linked oligosaccharides which protect it from intracellular proteolysis. Although LAMP1 is expressed largely in the endosome-lysosomal membrane of cells, it is also found on the plasma membrane. Elevated LAMP1 expression at the cell surface has also been detected during platelet and granulocytic cell activation, as well as in some tumor cells. LAMP1 functions to provide selectins with carbohydrate ligands. This protein has also been shown to be a marker of degranulation on lymphocytes such as CD8+ and NK cells and may also play a role in tumor cell differentiation and metastasis.

References

- 1. Kundra R. et al. (1999) J Biol Chem. Oct 22;274(43):31039-31046. 2. Parkinson-Lawrence. E. J. et al. (2005) Cell Immunol. 236(1-2):161-166. 3. Wang Q. et al. (2017) Oncol Lett. 14(4):4729-4735.
- 4. Aktaš E. et al. (2009) Cell Immunol. 254(2):149-154.

Synonyms

CD107a, LAMP1, CD107 antigen-like family member A, LAMP 1, LAMP-1

Selected Validation Data



Purity of Recombinant Human CD107a was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.