Proteins



Product Data Sheet

LAMP1/CD107a Protein, Human (HEK293, His)

Cat. No.: HY-P7778

Synonyms: rHuCD107a, His; Lysosome-Associated Membrane Glycoprotein 1; LAMP-1; Lysosome-

Associated Membrane Protein 1; CD107 Antigen-Like Family Member A; CD107a; LAMP1

Human Species: Source: **HEK293**

Accession: P11279 (A29-M382)

Gene ID: 3916

Molecular Weight: 60-120 kDa

PROPERTIES

AA Sequence	
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AFSVNYDTKS AMFMVKNGNG TACIMANFSA GPKNMTFDLP SDATVVLNRS SCGKENTSDP SLVIAFGRGH TLTLNFTRNA TRYSVQLMSF VYNLSDTHLF PNASSKEIKT VESITDIRAD IDKKYRCVSG TQVHMNNVTV TLHDATIQAY LSNSSFSRGE SPSPVPKSPS TRCEQDRPSP TTAPPAPPSP VDKYNVSGTN GTCLLASMGL QLNLTYERKD NTTVTRLLNI NPNKTSASGS CGAHLVTLEL HSEGTTVLLF $Q\;F\;G\;M\;N\;A\;S\;S\;S\;R$ FFLQGIQLNT ILPDARDPAF KAANGSLRAL QATVGNSYKC NAEEHVRVTK AFSVNIFKVW VQAFKVEGGQ FGSVEECLLD ENSMHHHHHH

Appearance

Lyophilized powder.

Formulation

Lyophilized after extensive dialysis against 20 mM PB, 150 mM NaCl, pH 7.2.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than $100 \, \mu g/mL$ in ddH_2O . For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Lysosomal associated membrane protein 1 (LAMP1 or CD107a) is a highly glycosylated lysosomal and endosomal membrane protein of 120 kDa. LAMPs and LIMPs are tightly packed and represent more than 50% of the total membrane protein of late endosomes and lysosomes. LAMP1 has been described as a marker of CD8+T-cell degranulation following

stimulation. LAMP1 can be used as a functional marker for the identification of natural killer cell activity $^{[1][2]}$
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REFERENCES

[1]. Alter G, et, al. CD107a as a functional marker for the identification of natural killer cell activity. J Immunol Methods. 2004 Nov;294(1-2):15-22.

[2]. Eskelinen EL, et, al. At the acidic edge: emerging functions for lysosomal membrane proteins. Trends Cell Biol. 2003 Mar;13(3):137-45.

Caution: Product has not been fully validated for medical applications. For research use only.

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