

LAMP3/CD208 Protein, Rhesus, Recombinant (His)

General Information

Synonyms:	lysosomal associated membrane protein 3;LAMP3
Protein Construction:	A DNA sequence encoding the rhesus LAMP3 (Q8MJJ2) (Lys28-Thr381) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Lys 28
Species:	Rhesus
Expression Host:	HEK293 Cells
Accession:	Q8MJJ2
Molecular Weight:	36.6 kDa (predicted)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, PH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Dendritic cell-lysosomal associated membrane protein (DC-LAMP)/CD208, also known as LAMP3, is a member of the lysosomal associated membrane protein (LAMP) family, which is specifically expressed by human dendritic cells (DCs) upon activation and therefore serves as a marker of human DC maturation. Confocal and immunoelectron microscopy showed that mouse DC-LAMP protein co-localizes with lbm180, a specific marker for the limiting membrane of lamellar bodies that contain surfactant protein B. The present study demonstrates that

DC-LAMP is constitutively expressed by mouse, sheep, and human type II pneumocytes. DC-LAMP is constitutively expressed in normal type II pneumocytes. DC-LAMP is detected first in the activated human DC within MHC class II molecules-containing compartments just before the translocation of MHC class II-peptide complexes to the cell surface, suggesting a possible involvement in this process. Furthermore, overexpression of LAMP3 is actively involved in tumor invasion through increased migration into lymph-vascular spaces.

Reference

Salaun B, et al. (2003) Cloning and characterization of the mouse homologue of the human dendritic cell maturation marker CD208/DC-LAMP. *Eur J Immunol.* 33(9): 2619-29.

Salaun B, et al. (2004) CD208/dendritic cell-lysosomal associated membrane protein is a marker of normal and transformed type II pneumocytes. *Am J Pathol.* 164(3): 861-71.

Ishigami S, et al. (2010) Prognostic value of CD208-positive cell infiltration in gastric cancer. *Cancer Immunol Immunother.* 59(3): 389-95.

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