

LAMP3/CD208 Protein, Human, Recombinant (His)

General Information

Synonyms:	LAMP;DC LAMP;lysosomal associated membrane protein 3;DCLAMP;CD208;TSC403;LAMP-3;DC-LAMP
Protein Construction:	A DNA sequence encoding the mature form of human LAMP3 (NP_055213.2) (Lys 28-Thr 381) with a carboxy-terminal polyhistidine tag was expressed. Predicted N terminal: Lys 28
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9UQV4
Molecular Weight:	39 kDa (predicted); 70-90 kDa (reducing condition, due to glycosylation)

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481