Human LAMP2 / CD107b Protein (His Tag)

Catalog Number: **13555-H08H**

General Information

Gene Name Synonym:

CD107b; LAMP-2; LAMPB; LGP110

Protein Construction:

A DNA sequence encoding the human LAMP2 (NP_054701.1) (Met1-Ile375) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Leu 29

Molecular Mass:

The recombinant human LAMP2 comprises 35.8 amino acids and has a predicted molecular mass of 39.8 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

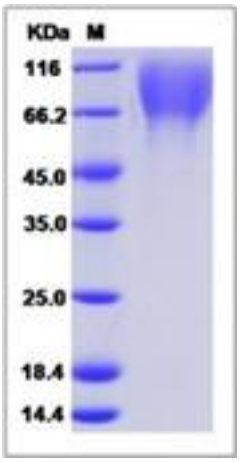
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

LAMP2 (Lysosomal-associated membrane protein 2), also known as CD107b (Cluster of Differentiation 107b), is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. In human, LAMP2, the causative gene of Danon disease, located on chromosome Xq24, encodes the lysosome-associated membrane protein-2 (LAMP-2). LAMP-2 deficiency, or Danon disease, is a rare X-linked lysosomal disease characterized by cardiomyopathy, vacuolar myopathy, and mental retardation. LAMP2 cardiomyopathy is an X-linked and highly progressive myocardial storage disorder associated with diminished survival, which clinically resembles sarcomeric hypertrophic cardiomyopathy.

References

1.Maron BJ, *et al.* (2010) Profound left ventricular remodeling associated with LAMP2 cardiomyopathy. Am J Cardiol. 106(8): 1194-6. 2.Di Blasi C, *et al.* (2008) Danon disease: a novel LAMP2 mutation affecting the pre-mRNA splicing and causing aberrant transcripts and partial protein expression. Neuromuscul Disord. 18(12): 962-6. 3.Echaniz-Laguna A, *et al.* (2006) Novel Lamp-2 gene mutation and successful treatment with heart transplantation in a large family with Danon disease. Muscle Nerve. 33(3): 393-7.