Mouse LY86 / MD-1 Protein (His Tag)

Catalog Number: **50062-M08H**

General Information

Gene Name Synonym:

MD-1; MD1

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Ser 162) of mouse LY86 (NP_034875.1) precursor was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % 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: Asp 20

Molecular Mass:

The secreted recombinant mouse LY86 consists of 166 amino acids and has a calculated molecular mass of 18 kDa. As a result of glycosylation, the apparent molecualr mass of rmLY86 is approximately 24-30 kDa protein in SDS-PAGE under reducing conditions.

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:

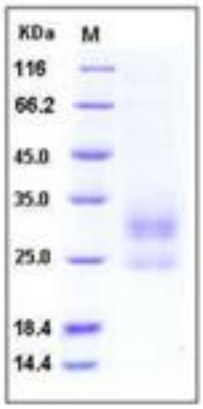
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

MD-1 and MD-2 are secretory glycoproteins that exist on the cell surface in complexes with transmembrane proteins. MD-1 is anchored by radioprotective 105 (RP105) which is a molecule containing leucine-rich repeats and is expressed on B cells, dentritic cells and macrophages, while MD-2 is associated with TLR4. MD-1 is required for efficient RP105 cell surface expression and function. It is indicated that the RP105/MD1 complex, in conjunction with TLR4, mediates the innate immune response to LPS in B cells, and also plays a role in protecting against apoptosis, B-cell proliferation, etc. Mouse MD-1 cDNA encodes a 162 amino acid precursor protein with a putative 19 aa signal peptide and two potential N-linked glycosylation sites. It shares 40% and 66% amino acid sequence identity with chicken and human MD-1 respectively. MD-1 is mainly expressed in spleen, and also detectable in liver, brain, thymus, and kidney.

References

1.Miura Y., *et al.*,(1998), RP105 is associated with MD-1 and transmits an activation signal in human B cells. Blood 92:2815-2822. 2.Begum N.A., *et al.*, (1999), Human MD-1 homologue is a BCG-regulated gene product in monocytes: Its identification by differential display.Biochem. Biophys. Res. Commun. 256:325-329. 3.Mungall A.J., *et al.*,(2003), The DNA sequence and analysis of human chromosome 6.Nature 425:805-811.