Recombinant Mouse MD1 Protein (His Tag)

Catalog Number: PKSM040948

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Species	Mouse
Source	HEK293 Cells-derived Mouse MD1 protein Met 1-Ser 162, with an C-terminal His
Calculated MW	18.0 kDa
Observed MW	24-30 kDa
Accession	NP_034875.1
Bio-activity	Not validated for activity

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data

> 92 % as determined by reducing SDS-PAGE.

Background

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.

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