



Recombinant Protein Technical Manual

Recombinant Mouse MD1 Protein (His Tag)

RPES4491

Product Data:

Product SKU: RPES4491

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_034875.1

Protein Information:

Molecular Mass: 18 kDa

AP Molecular Mass: 24-30 kDa

Tag: C-His

Bio-activity:

Purity: > 92 % as determined by SDS-PAGE

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: MD;MD1

Immunogen Information:

Sequence: Met 1-Ser 162

Background:

MD and MD-2 are secretory glycoproteins that exist on the cell surface in complexes with transmembrane proteins. MD is anchored by radioprotective 105 (RP105) which is a molecule containing leucine-rich repeats and is expressed on B cells, dendritic cells and macrophages, while MD-2 is associated with TLR4. MD 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 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 respectively. MD is mainly expressed in spleen, and also detectable in liver, brain, thymus, and kidney.