



Recombinant Protein Technical Manual  
Recombinant Mouse CD1D/R3G1 Protein (His Tag)  
RPES4107

#### Product Data:

**Product SKU:** RPES4107

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_031665.2

#### Protein Information:

**Molecular Mass:** 33.7 kDa

**AP Molecular Mass:** 45-50 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % 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:** AI747460;CD1.1;Cd1a;Cd1d;Ly-38

## Immunogen Information:

**Sequence:** Met 1-Gly 305

## Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associate with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 1 (CD1) is a member of CD system. It's a family of glycoproteins expressed on the surface of various human antigen-presenting cells which are implicated in the presentation of lipid antigens to T-cells. Due to the different lipid anchoring, the CD1 family is classified into two groups: group1 (CD1a-c) and group2 (CD1d). CD1d with lipid antigens activate NK T-cells which rapidly produce Th1 and Th2 cytokines after being activated.