

**Recombinant Mouse CD1D / R3G1 Protein (His tag)**

**Cat.NO.: TP08048**

3th Edition

**Synonyms:** AI747460; CD1.1; Cd1a; Cd1d; Ly-38

**Description:** 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 associating 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 been activated.

**Form:** PBS

**Molecular Weight:** 33.7 kDa

**Sequences:** Met 1-Gly 305

**Purity:** > 95% by HPLC

**Concentration:**

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.