

## HUMAN CD1D PROTEIN, HFC TAG

**Cat.#:** 11748

**Product Name:** Human CD1D Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** CD1A;R3;R3G1

**Target:** CD1D

**UNIPROT ID:** P15813

**Description:** Recombinant human CD1D protein with C-terminal human Fc tag

**Background:** This gene encodes a divergent member of the CD1 family of transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. The CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. The human genome contains five CD1 family genes organized in a cluster on chromosome 1. The CD1 family members are thought to differ in their cellular localization and specificity for particular lipid ligands. The protein encoded by this gene localizes to late endosomes and lysosomes via a tyrosine-based motif in the cytoplasmic tail. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 56.54 kDa after removal of the signal peptide.

**Molecular Characterization:** CD1D (Gln20-Ser301) hFc(Glu99-ALA330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.