Recombinant CD1D protein (His tag)

Catalog Number	544425
Synonyms	R3G1; CD antigen CD1d
Species	Human
Expression System	E. coli
Accession	P15813
Molecular Weight	Predictes a molecular mass of 33.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	20-301
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 20-301 aa (P15813) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein corresponds to amino acids 20-301 of the human Antigen-presenting glycoprotein CD1d (CD1D), encompassing the full Ig-like domain. It serves as a valuable tool for investigating CD1d-mediated antigen presentation and glycolipid recognition in immunological studies. Antigen-presenting glycoprotein CD1d is a key immune protein that binds both self and non-self glycolipids, presenting them to T-cell receptors on natural killer T-cells, thereby bridging innate and adaptive immunity. The full-length protein is a single-pass type I membrane protein localized to multiple cellular compartments including the cell membrane, endosomes, lysosomes, endoplasmic reticulum, and basolateral membrane, with dynamic intracellular trafficking between these sites. This strategic localization supports its role in glycolipid antigen processing and presentation across various cellular environments.