Recombinant CD1B protein (His tag)

Catalog Number	542247
Synonyms	CD antigen CD1b
Species	Human
Expression System	E. coli
Accession	P29016
Molecular Weight	Predictes a molecular mass of 33.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	18-303
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 18-303 aa (P29016) 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	Recombinant Human CD1b Protein Fragment (aa 18-303) - A high-quality antigen-presenting protein fragment designed for immunological research. This fragment encompasses the complete Ig-like domain (aa 185-295) of T-cell surface glycoprotein CD1b, providing researchers with a specialized tool for studying lipid and glycolipid antigen presentation mechanisms. CD1b is a crucial antigen-presenting protein that binds both self and non-self lipid and glycolipid antigens, presenting them to T-cell receptors on natural killer T-cells. This protein is localized to multiple cellular compartments including the cell membrane, endosomes, and lysosomes, functioning as a single-pass type I membrane protein. CD1b undergoes dynamic intracellular trafficking between these membrane systems, highlighting its essential role in immune surveillance and antigen presentation pathways. The protein's ability to present diverse lipid antigens makes it a key player in immune recognition and response mechanisms.