

Recombinant Human CD1B/CD1A Protein (Fc Tag)

Catalog Number: PKSH030990

Note: Centrifuge before opening to ensure complete recovery of vial contents.

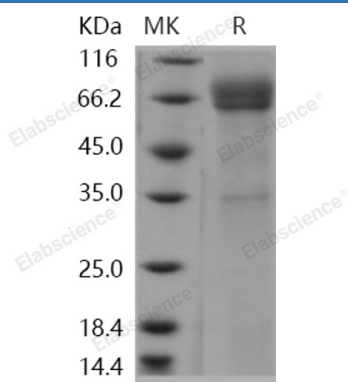
Description

Species	Human
Source	HEK293 Cells-derived Human CD1B/CD1A protein Met 1-Ser 303, with an C-terminal hFc
Calculated MW	58.6 kDa
Observed MW	59-69 kDa
Accession	NP_001755
Bio-activity	Not validated for activity

Properties

Purity	> 88 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 88 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

CD1B contains 1 Ig-like (immunoglobulin-like) domain and belongs to the CD1 family. CD1 family members are transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. During protein synthesis and maturation, they bind endogenous lipids that are replaced by lipid or glycolipid antigens when the proteins are internalized and pass through endosomes, before trafficking back to the cell surface. CD1B localizes to late endosomes and lysosomes via a tyrosine-based motif in the cytoplasmic tail, and requires vesicular acidification to bind lipid antigens.. It is expressed on cortical thymocytes, epidermal Langerhans cells, dendritic cells, on certain T-cell leukemias, and in various other tissues. CD1B is an antigen-presenting protein that binds self and non-self lipid and glycolipid antigens and presents them to T-cell receptors on natural killer T-cells.