

Synonym

CD1d&B2M

Source

Human CD1d&B2M Monomer Protein(CDM-H52H5) is expressed from human 293 cells (HEK293). It contains AA Glu 20 - Ser 301 (CD1d) & Ile 21 - Met 119 (B2M) (Accession # [P15813](#) (CD1d) & [P61769](#) (B2M)).
Predicted N-terminus: Glu 20 & Ile 21

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 37.3 kDa and 15.7 kDa. The protein migrates as 55-60 kDa and 15-16 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.
>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

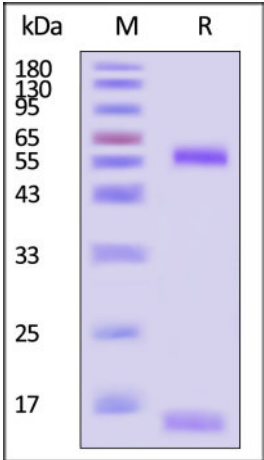
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

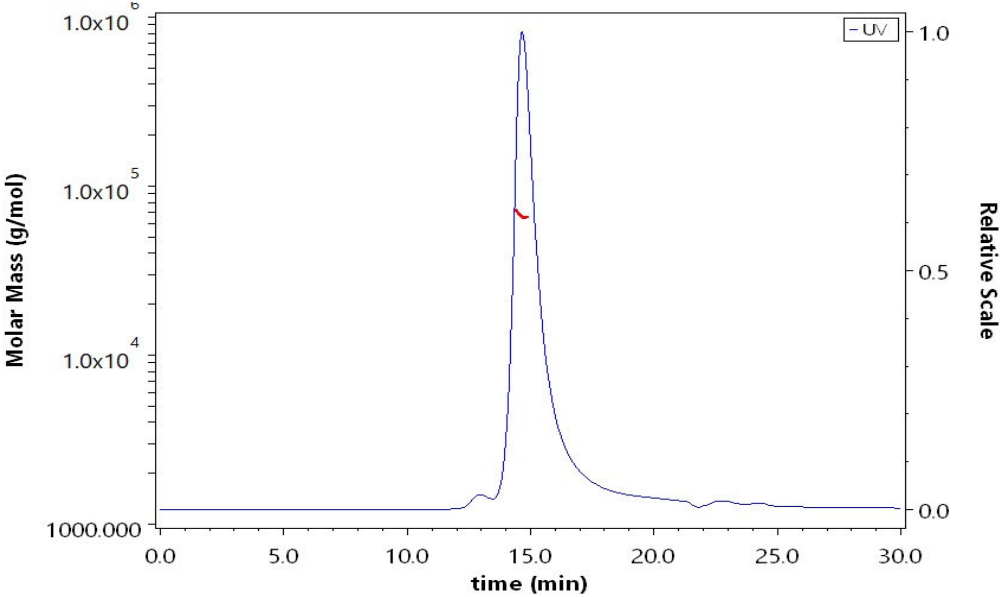
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human CD1d&B2M Monomer Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



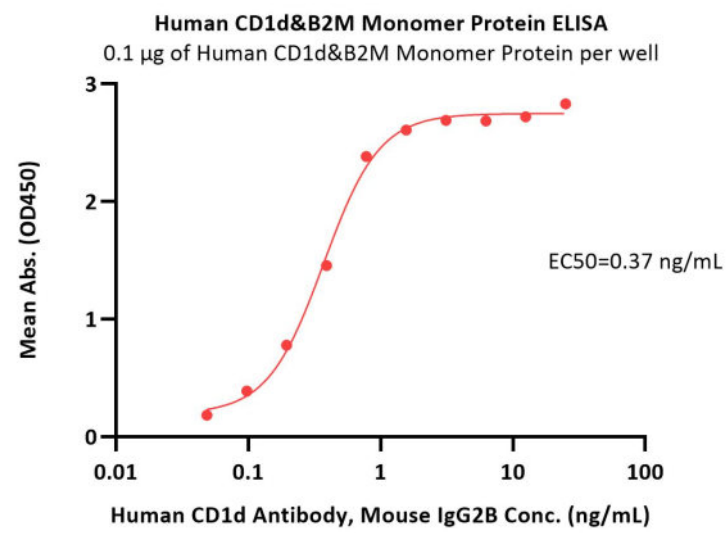
The purity of Human CD1d&B2M Monomer Protein (Cat. No. CDM-H52H5) is more than 95% and the molecular weight of this protein is around 50-75 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA



Human CD1d&B2M Monomer Protein (Peptide free, MALS verified)

Catalog # CDM-H52H5



Immobilized Human CD1d&B2M Monomer Protein (Cat. No. CDM-H52H5) at 1 µg/mL (100 µL/well) can bind Human CD1d Antibody, Mouse IgG2B with a linear range of 0.05-2 ng/mL (QC tested).

Background

CD1d is a membrane protein non-covalently bonded to β2-microglobulin (β2m) and shows high homology between human and mice. CD1d can present α-galactosylceramide (α-GalCer), a glycolipid extracted and isolated from the marine sponge, and this complex can activate human and murine CD1d restricted NKT cells.

