Human B7-H7 / HHLA2 Protein, His Tag (MALS verified)

Catalog # B77-H52H6

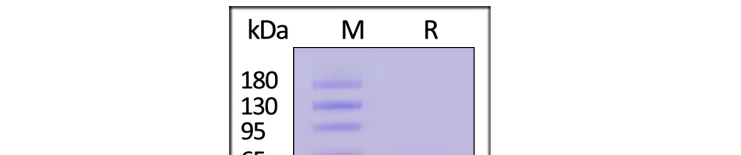
Synonym

B7-H7,HHLA2,B7 Homolog 7

Source

Human B7-H7, His Tag(B77-H52H6) is expressed from human 293 cells (HEK293). It contains AA Ile 23 - Asn 344 (Accession # Q9UM44-1).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 39.0 kDa. The protein migrates as 50-66 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>90% 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

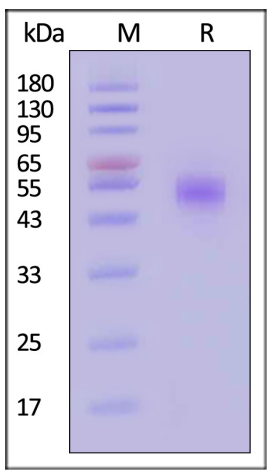
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

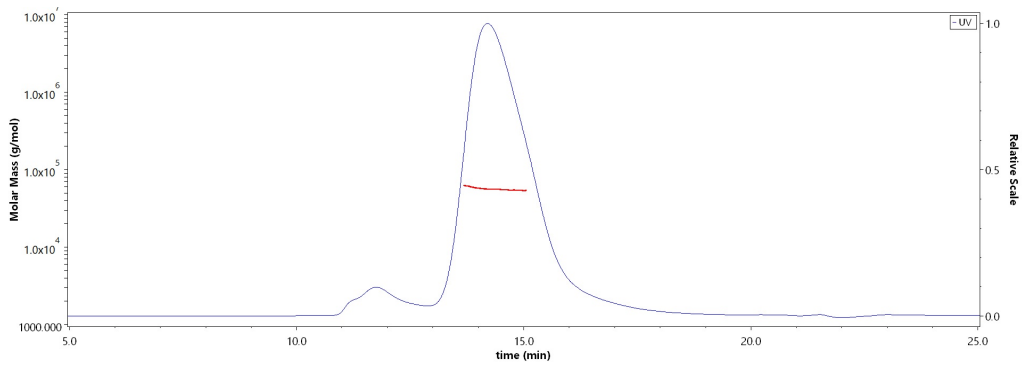
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



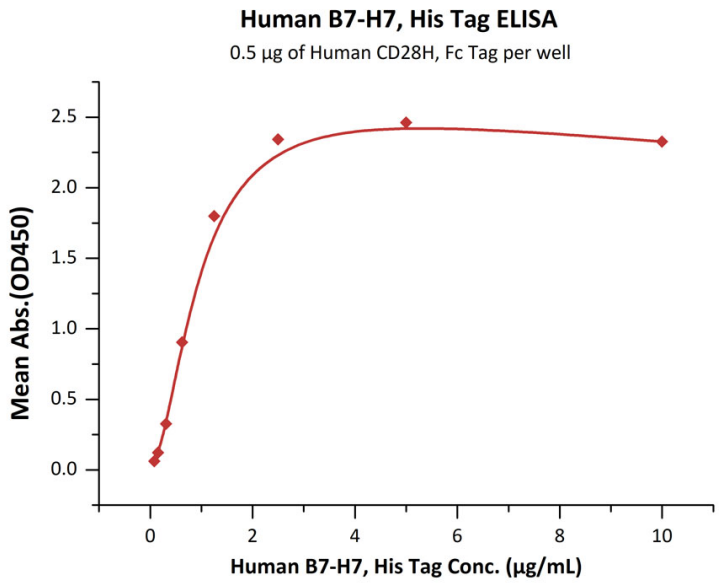
Human B7-H7, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

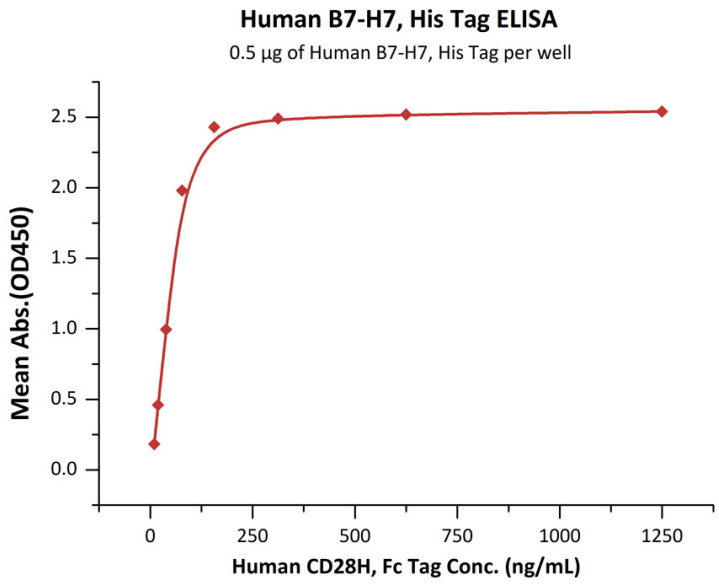


The purity of Human B7-H7, His Tag (Cat. No. B77-H52H6) is more than 90% and the molecular weight of this protein is around 47-65 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human CD28H, Fc Tag (Cat. No. CDH-H5251) at 5 μg/mL (100 μL/well) can bind Human B7-H7, His Tag (Cat. No. B77-H52H6) with a linear range of 0.078-2.5 μg/mL (QC tested).



Immobilized Human B7-H7, His Tag (Cat. No. B77-H52H6) at 5 μg/mL (100 μL/well) can bind Human CD28H, Fc Tag (Cat. No. CDH-H5251) with a linear range of 10-156 ng/mL (Routinely tested).

B7-H7 ELISA

Immobilized Biotinylated Human KIR3DL3 / CD158z Protein, Fc,Avitag (Cat. No. KI3-H82F3) at 2 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human B7-H7, His Tag (Cat. No. B77-H52H6) with a linear range of 0.02-5 μg/mL (Routinely tested).

Background

B7-H7 (HHLA2) is a newly identified B7 family member that regulates human T-cell functions. B7-H7 was previously known as human endogenous retrovirus-H long terminal repeat associating 2 (HHLA2) with unidentified function. Recently, B7-H7 has been identified as a specific ligand for human CD28H. The B7-H7-CD28H pathway strongly promoted CD4+ T-cell proliferation and cytokine production via an AKT-dependent signaling cascade in the presence of TCR signaling, suggesting B7-H7 comprises a new co-stimulatory pathway. The first IgV domain of B7-H7, which presumably binds to a putative receptor, shows the highest homology to other B7 family members.