Biotinylated Human B7-H7 / HHLA2 Protein, Fc,Avitag™

Catalog # B77-H82F5

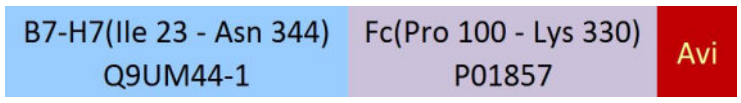
Synonym

B7-H7,HHLA2,B7 Homolog 7

Source

Biotinylated Human B7-H7, Fc,Avitag(B77-H82F5) is expressed from human 293 cells (HEK293). It contains AA Ile 23 - Asn 344 (Accession # Q9UM44-1).
Predicted N-terminus: Ile 23

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 65.9 kDa. The protein migrates as 80-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in
Tris with Glycine, Arginine and NaCl, pH7.5 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

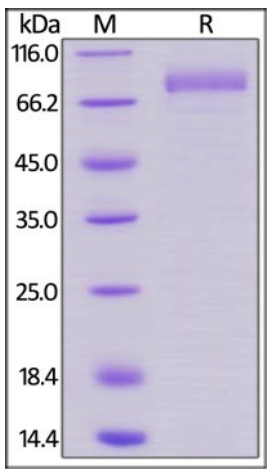
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

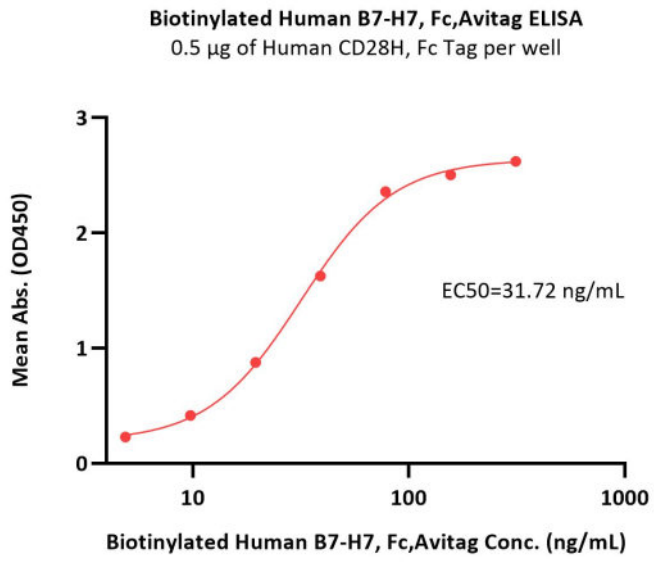
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human B7-H7, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human CD28H, Fc Tag (Cat. No. CDH-H5251) at 5 μg/mL (100 μL/well) can bind Biotinylated Human B7-H7, Fc,Avitag (Cat. No. B77-H82F5) with a linear range of 5-78 ng/mL (QC 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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.