

Synonym

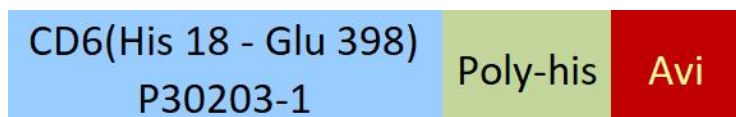
CD6,TP120,T12

Source

Biotinylated Human CD6 Protein, His,Avitag(CD6-H82E3) is expressed from human 293 cells (HEK293). It contains AA His 18 - Glu 398 (Accession # [P30203-1](#)).

Predicted N-terminus: His 18

Molecular Characterization



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

The protein has a calculated MW of 44.2 kDa. The protein migrates as 70-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

>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

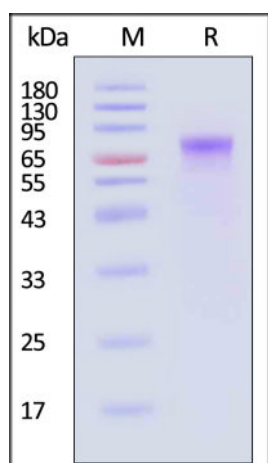
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

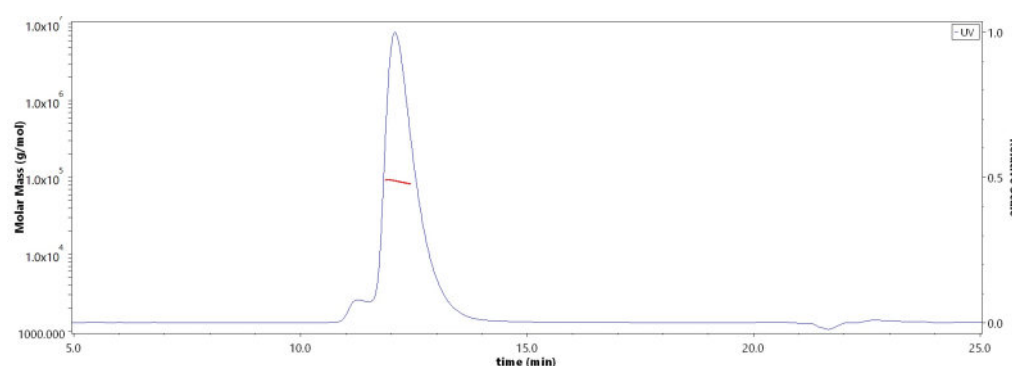
SDS-PAGE



Biotinylated Human CD6 Protein, His,Avitag 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](#)).

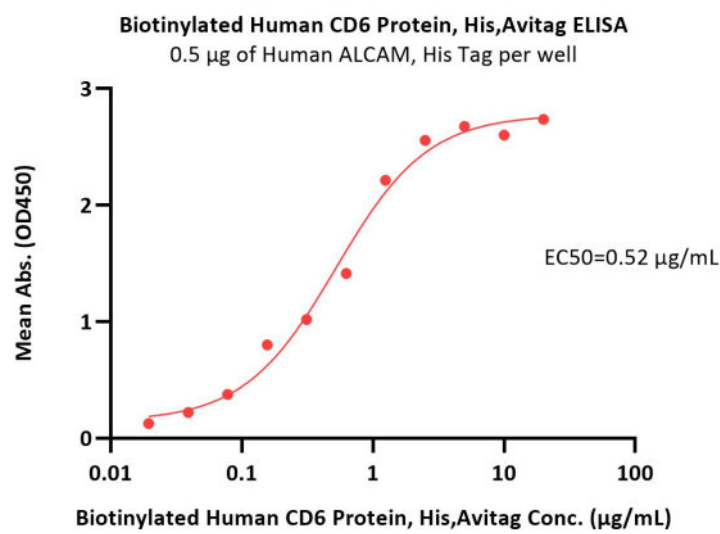
Bioactivity-ELISA

SEC-MALS



The purity of Biotinylated Human CD6 Protein, His,Avitag (Cat. No. CD6-H82E3) is more than 90% and the molecular weight of this protein is around 75-95 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human ALCAM, His Tag (Cat. No. CD6-H5228) at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD6 Protein, His,Avitag (Cat. No. CD6-H82E3) with a linear range of 0.02-5 µg/mL (QC tested).

Background

CD6 (Cluster of Differentiation 6) is a cell surface glycoprotein that is involved in T cell activation and a member of the scavenger receptor cysteine rich protein superfamily (SRCRSF). CD6 is expressed at low levels on immature thymocytes and at high levels on mature thymocytes. The majority of peripheral blood T cells, a subset of B cells, and a subset of neuronal cells express CD6. CD6 appears to play a role as both a costimulatory molecule in T cell activation and as an adhesion receptor. Studies demonstrating a mitogenic effect for T cells with some CD6 specific monoclonal antibodies, in conjunction with either accessory cells or PMA and anti-CD2 mAb, support the concept of CD6 as a co stimulatory molecule.

Clinical and Translational Updates

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