

Synonym

CD7,GP40,TP41,LEU-9,Tp40

Source

Biotinylated Cynomolgus CD7 Protein, His, Avitag(CD7-C82E8) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Ser 177 (Accession # <u>A0A2K5VA18</u>).

Predicted N-terminus: Ala 26

Molecular Characterization

CD7(Ala 26 - Ser 177) A0A2K5VA18 Poly-his Avi

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

The protein has a calculated MW of 19.6 kDa. The protein migrates as 30-40 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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 $0.22~\mu m$ 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

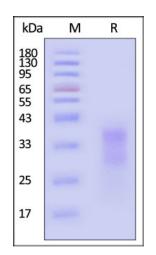
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

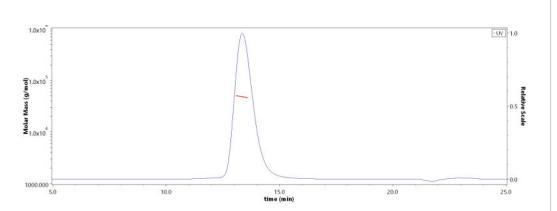
SDS-PAGE



Biotinylated Cynomolgus CD7 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-SPR

SEC-MALS



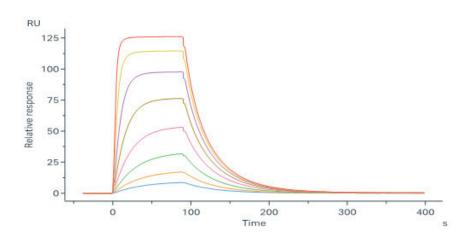
The purity of Biotinylated Cynomolgus CD7 Protein, His, Avitag (Cat. No. CD7-C82E8) is more than 90% and the molecular weight of this protein is around 43-53 kDa verified by SEC-MALS.

<u>Report</u>

Biotinylated Cynomolgus CD7 Protein, His,Avitag™ (MALS & SPR verified)







Biotinylated Cynomolgus CD7 Protein, His, Avitag (Cat. No. CD7-C82E8) immobilized on CM5 Chip can bind Human SECTM1, His Tag (Cat. No. SE1-H5227) with an affinity constant of 12.4 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

T-cell antigen CD7 (CD7) is also known as GP40, LEU-9, TP41 and Tp40. CD7 is a protein that in humans is encoded by the CD7 gene, this gene encodes a transmembrane protein which is a member of the immunoglobulin superfamily. CD7 has been shown to interact with PIK3R1. This protein is found on thymocytes and mature T cells. It plays an essential role in T-cell interactions and also in T-cell/B-cell interaction during early lymphoid development.

Clinical and Translational Updates

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