

Synonym

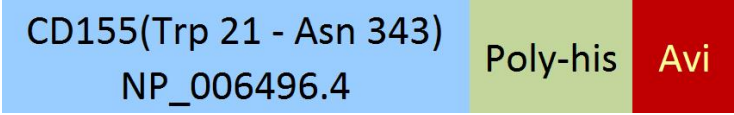
PVR,FLJ25946,PVS,CD155,TAGE4,HVED,NECL5

Source

Biotinylated Human CD155, His,Avitag(CD5-H82E3) is expressed from human 293 cells (HEK293). It contains AA Trp 21 - Asn 343 (Accession # [NP_006496.4](#)).

Predicted N-terminus: Trp 21

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 38.8 kDa. The protein migrates as 55-66 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.

Purity

>95% as determined by SDS-PAGE.

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

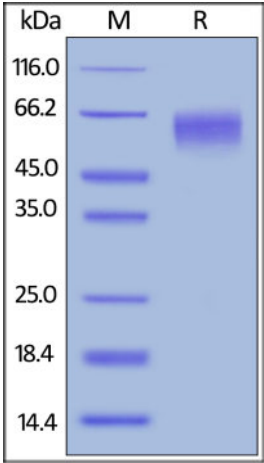
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

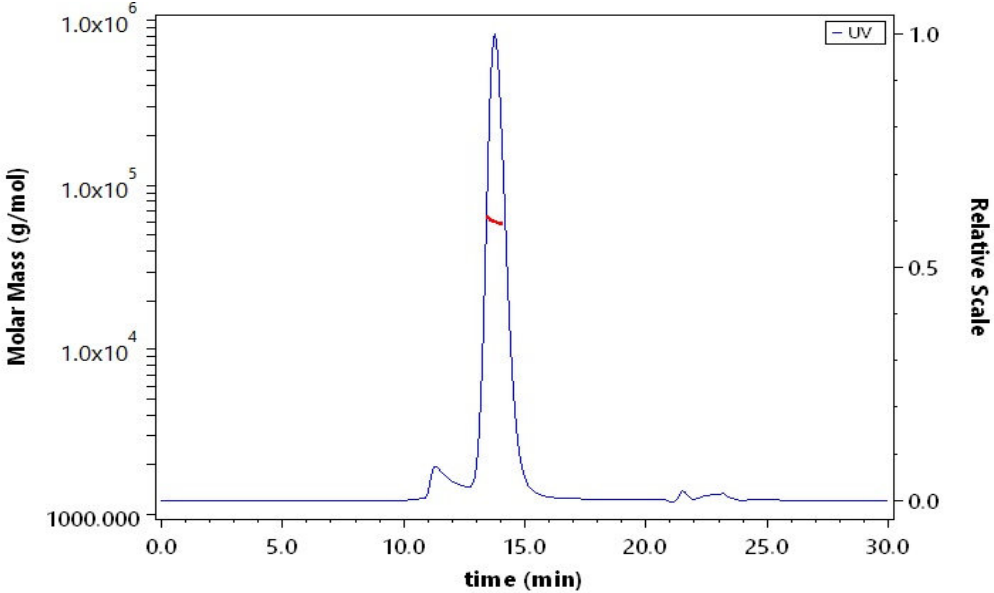
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human CD155, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

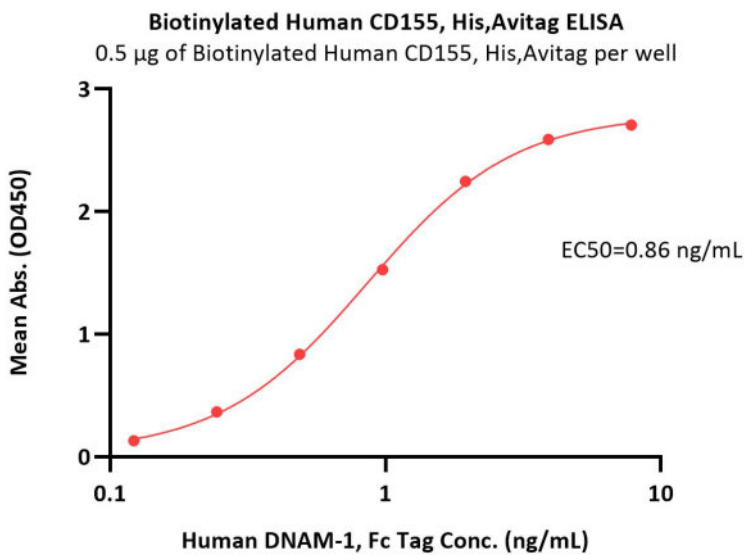
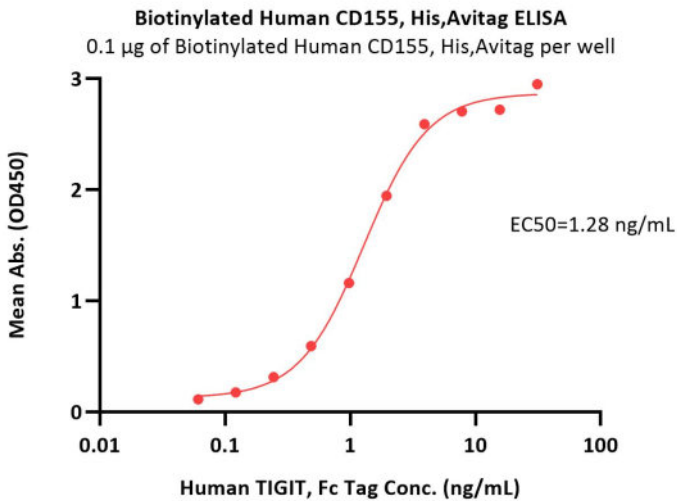


The purity of Biotinylated Human CD155, His,Avitag (Cat. No. CD5-H82E3) is more than 85% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA

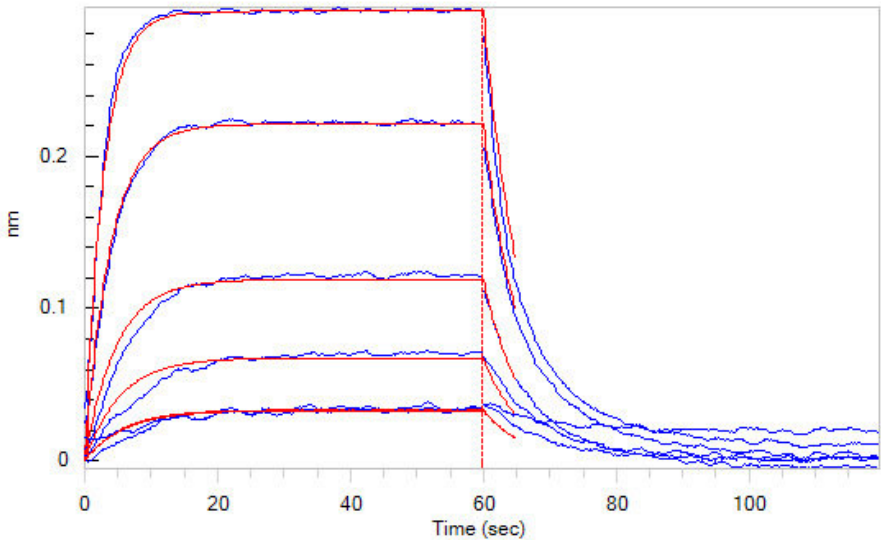




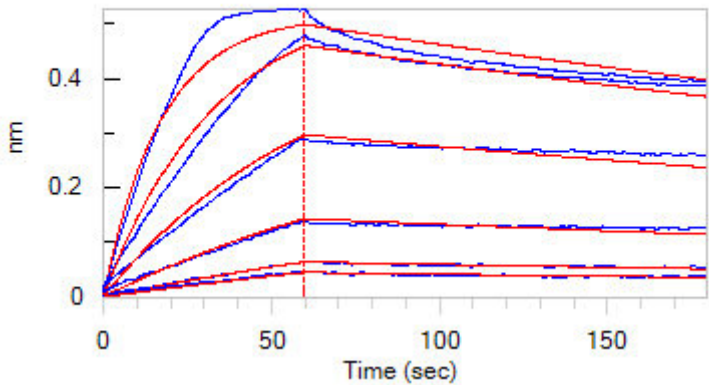
Immobilized Biotinylated Human CD155, His,Avitag (Cat. No. CD5-H82E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Human TIGIT, Fc Tag (Cat. No. TIT-H5254) with a linear range of 0.1-4 ng/mL (QC tested).

Immobilized Biotinylated Human CD155, His Tag, Avi Tag (Cat. No. CD5-H82E3) at 5 µg/mL (100 µL/well) via streptavidin can bind Human DNAM-1, Fc Tag (Cat. No. DN1-H5257) with a linear range of 0.1-1 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human CD155, His,Avitag (Cat. No. CD5-H82E3) on SA Biosensor, can bind Human DNAM-1, His Tag(Cat. No. DN1-H52H6) with an affinity constant of 0.81 µM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Biotinylated Human CD155, His,Avitag (Cat. No. CD5-H82E3) on SA Biosensor, can bind Human TIGIT, His Tag (Cat. No. TIT-H52H5) with an affinity constant of 1.9 nM as determined in BLI assay (ForteBio Octet R8) (Routinely tested).

Background

CD155 is a Type I transmembrane glycoprotein in the immunoglobulin superfamily. Commonly known as Poliovirus Receptor (PVR) due to its involvement in the cellular poliovirus infection in primates, CD155's normal cellular function is in the establishment of intercellular adherens junctions between epithelial cells. CD155/PVR was originally isolated based on its ability to mediate polio virus attachment to host cells. The fulllength (or CD155 alpha isoform) is synthesized as a 417 amino acid (aa) precursor that contains a 20 aa signal sequence, a 323 aa extracellular region, a 24 aa TM segment and a 50 aa cytoplasmic tail. The extracellular region contains one N terminal V type and two C2 type Ig like domains. CD155 is a transmembrane protein with 3 extracellular immunoglobulin-like domains, D1-D3, where D1 is recognized by the virus. Low resolution structures of CD155 complexed with poliovirus have been obtained using electron microscopy while a high resolution structures of theectodomain D1 and D2 of CD155 were solved by x-ray crystallography.

