

Synonym

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

Source

Biotinylated Human CD155, Fc,Avitag(CD5-H82F6) is expressed from human 293 cells (HEK293). It contains AA Trp 21 - Asn 343 (Accession # [NP_006496.2](#)).

Predicted N-terminus: Trp 21

Molecular Characterization

CD155(Trp 21 - Asn 343) NP_006496.2	Fc(Pro 100 - Lys 330) P01857	Avi
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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 63.5 kDa. The protein migrates as 80-106 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 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

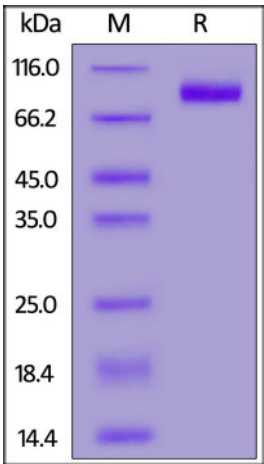
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

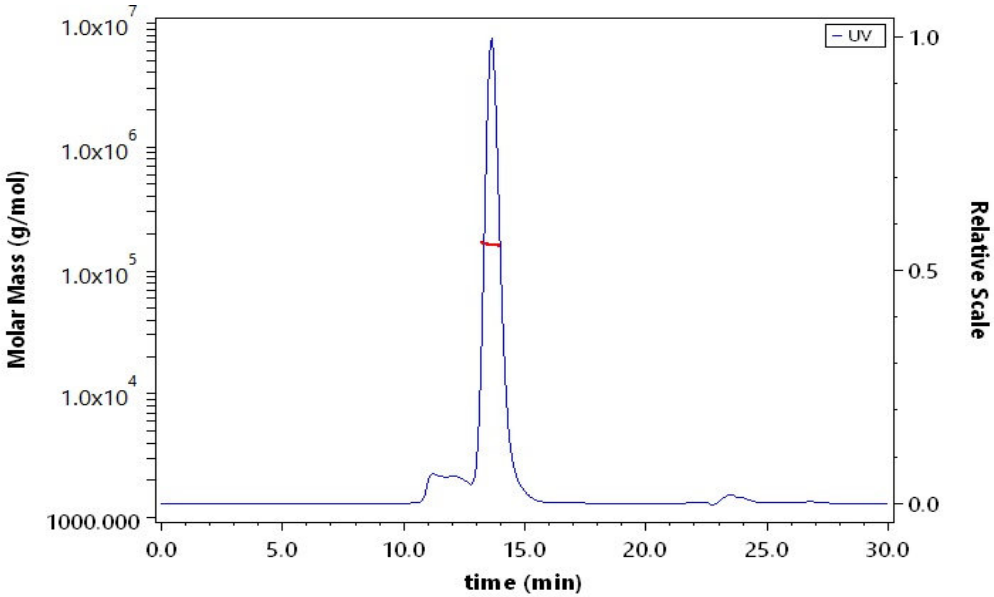
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human CD155, Fc,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

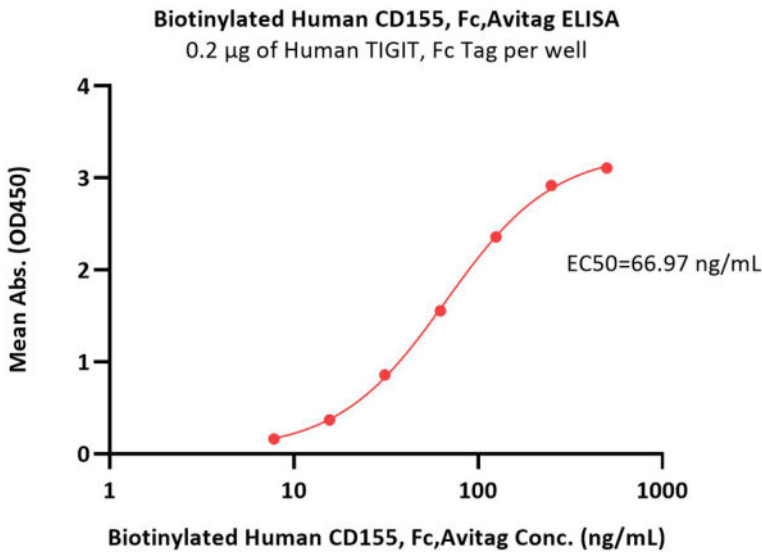


The purity of Biotinylated Human CD155, Fc,Avitag (Cat. No. CD5-H82F6) is more than 85% and the molecular weight of this protein is around 155-185 kDa verified by SEC-MALS.

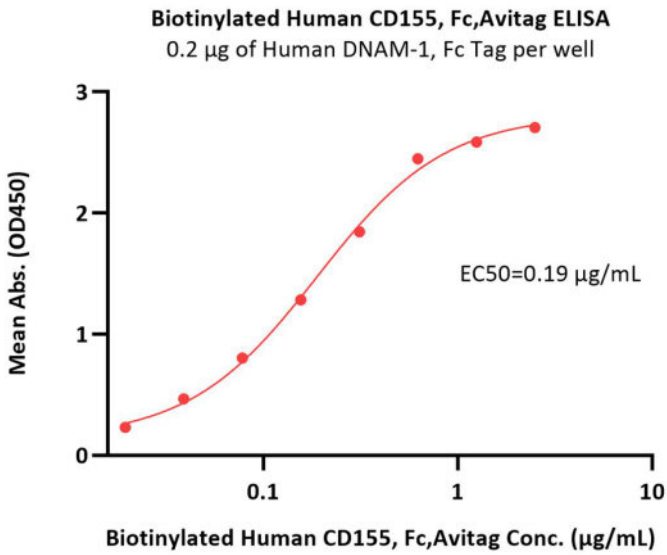
[Report](#)

Bioactivity-ELISA

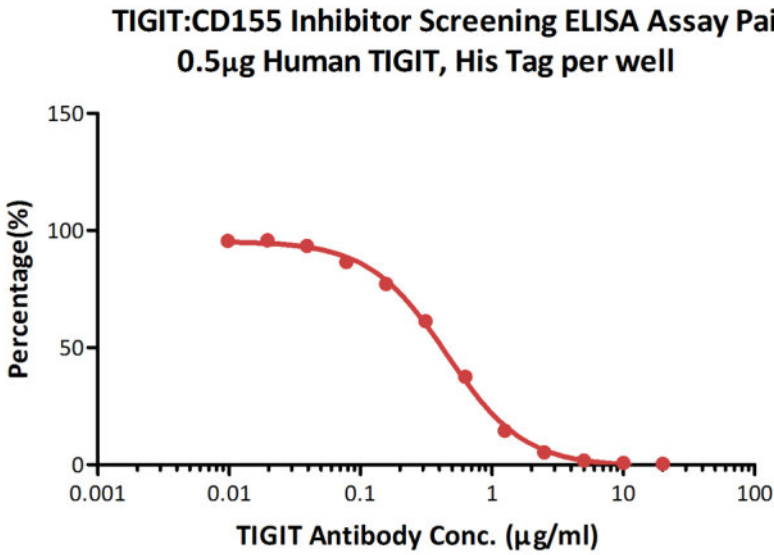




Immobilized Human TIGIT, Fc Tag (Cat. No. TIT-H5254) at 2 µg/mL (100 µL/well) can bind Biotinylated Human CD155, Fc,Avitag (Cat. No. CD5-H82F6) with a linear range of 8-125 ng/mL (QC tested).

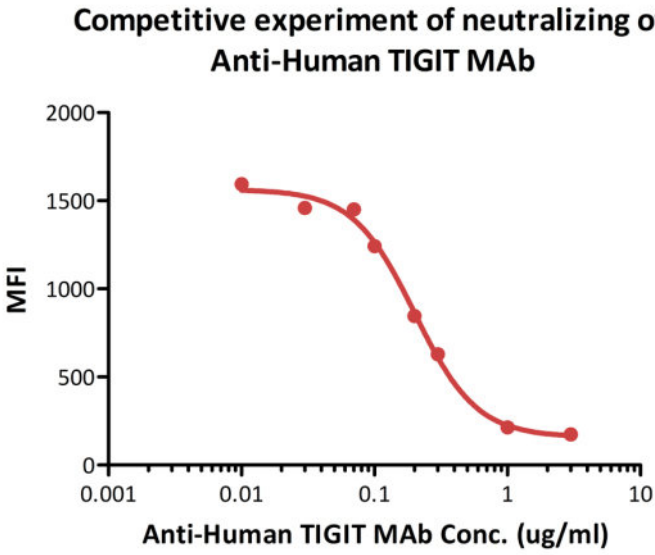


Immobilized Human DNAM-1, Fc Tag (Cat. No. DN1-H5257) at 2 µg/mL (100 µL/well) can bind Biotinylated Human CD155, Fc,Avitag (Cat. No. CD5-H82F6) with a linear range of 0.02-0.312 µg/mL (Routinely tested).



Serial dilutions of TIGIT antibody (1:2 serial dilutions, from 20 µg/mL to 0.0097 µg/mL) were added into Human TIGIT, His Tag: Biotinylated Human CD155, Fc,Avitag (Cat. No. CD5-H82F6) binding reactions. The assay was performed according to the above described protocol. Background was subtracted from data points before curve fitting.

Bioactivity-FACS



FACS analysis shows that the binding of Biotinylated Human CD155, Fc,Avitag (Cat. No. CD5-H82F6) to 293T overexpressing TIGIT was inhibited





by increasing concentration of neutralizing Anti-Human TIGIT MAb. The concentration of CD155 used is 1 µg/mL. The IC50 is 0.201 µg/mL (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.

