

Synonym

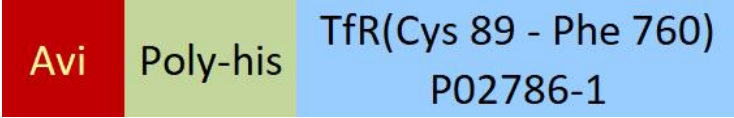
CD71,TFRC,TFR,sTfR,TfR1,Trfr,T9,p90

Source

Biotinylated Human Transferrin R, Avitag,His Tag(TFR-H82E5) is expressed from human 293 cells (HEK293). It contains AA Cys 89 - Phe 760 (Accession # [P02786-1](#)).

Predicted N-terminus: Gly

Molecular Characterization



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

The protein has a calculated MW of 78.7 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

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.

>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

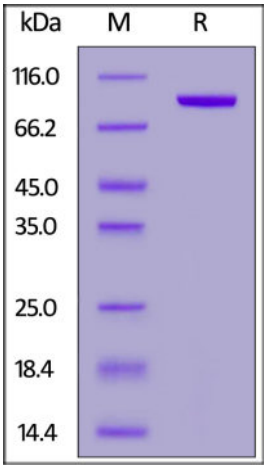
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

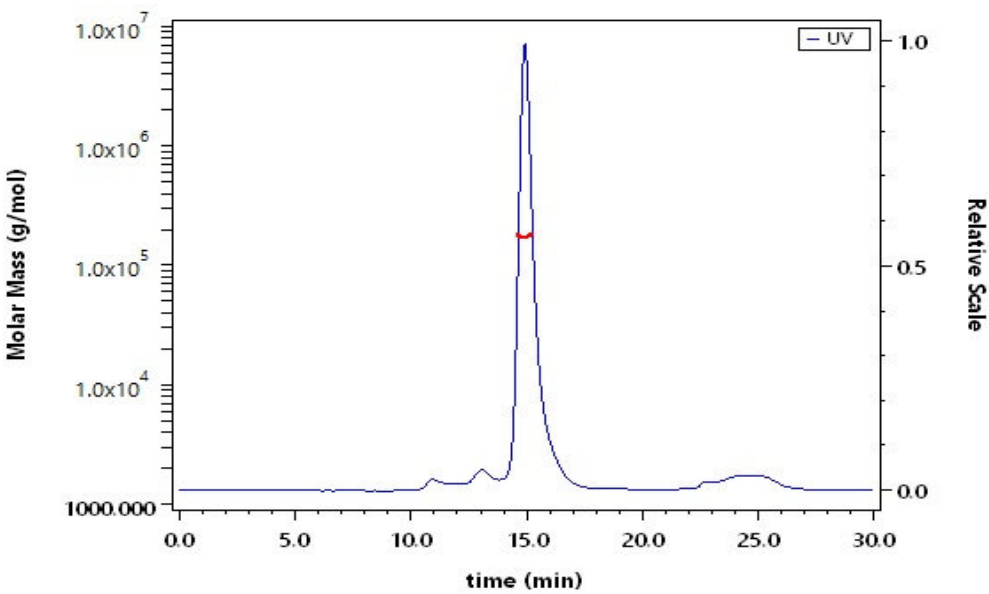
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human Transferrin R, Avitag,His Tag 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

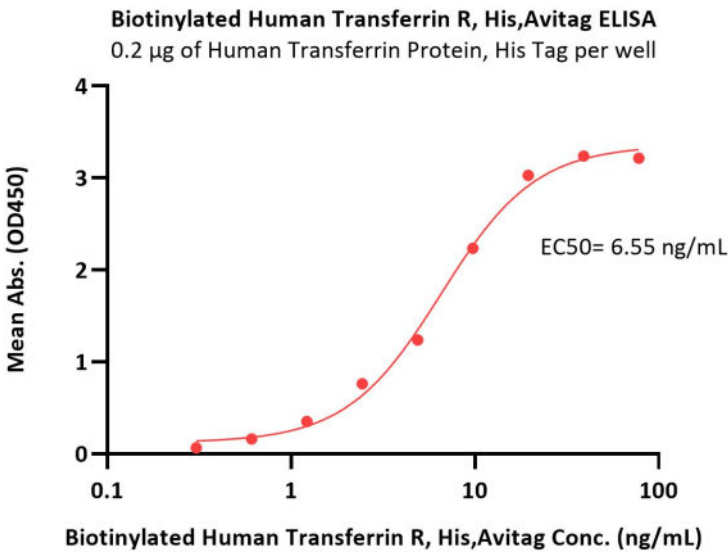


The purity of Biotinylated Human Transferrin R, Avitag,His Tag (Cat. No. TFR-H82E5) is more than 90% and the molecular weight of this protein is around 160-180 kDa verified by SEC-MALS.

[Report](#)

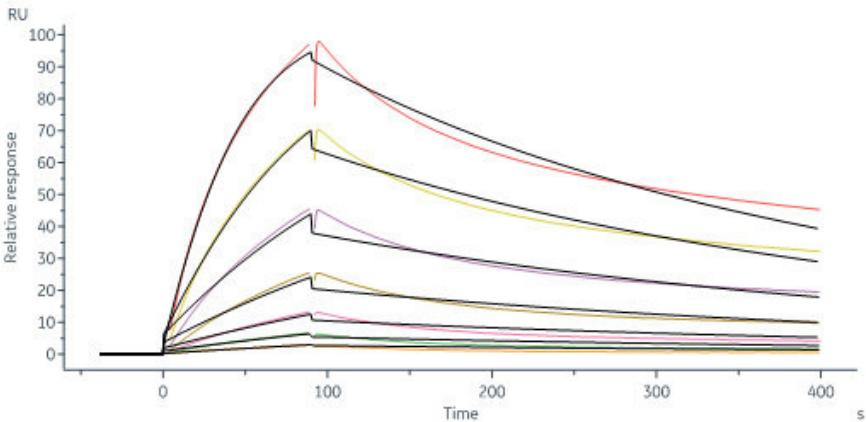
Bioactivity-ELISA





Immobilized Human Transferrin Protein, His Tag (Cat. No. TRN-H52H3) at 2 µg/mL (100 µL/well) can bind Biotinylated Human Transferrin R, Avitag,His Tag (Cat. No. TFR-H82E5) with a linear range of 1.2-9.7 ng/mL (QC tested).

Bioactivity-SPR



Brain-penetrant, anti-amyloid, bispecific antibody immobilized on CM5 Chip can bind Biotinylated Human Transferrin R, Avitag,His Tag (Cat. No. TFR-H82E5) with an affinity constant of 29.2 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

CD antigen CD71 is also known as Transferrin receptor protein 1, TfR, sTfR, p90, TfR1, Trfr, which belongs to the peptidase M28 family and M28B subfamily. CD71 /TfR contains one PA (protease associated) domain. CD71 / TfR1 is required for iron delivery from transferrin to cells. CD71 is a potential new target in cases of human leukomia & lymphoma. CD71 /TFRC / TfR has been shown to interact with GABARAP and HFE.

