Biotinylated Human Transferrin R / CD71 (189-383) Protein, Avitag™,His Tag (MALS verified)

Catalog # TFR-H82E3

Synonyms

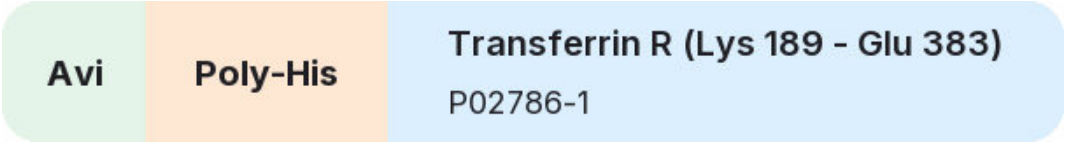
CD71, TFRC, TFR, sTfR, TfR1, Trfr, T9, p90

Source

Biotinylated Human Transferrin R (189-383) Protein, Avitag,His Tag (TFR-H82E3) is expressed from human 293 cells (HEK293). It contains AA Lys 189 - Glu 383 (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 25.0 kDa. The protein migrates as 28-38 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

0.7-1.0 as determined by the SABA assay / HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

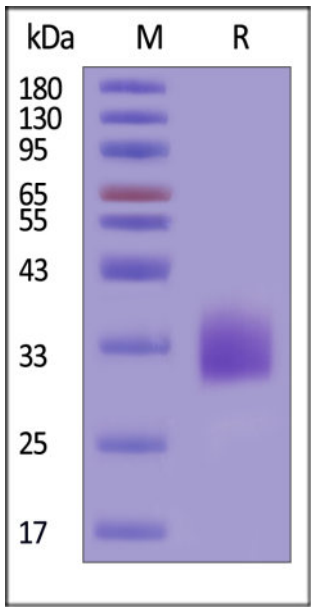
This product is stable after storage at:

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

ACRO Quality Management System

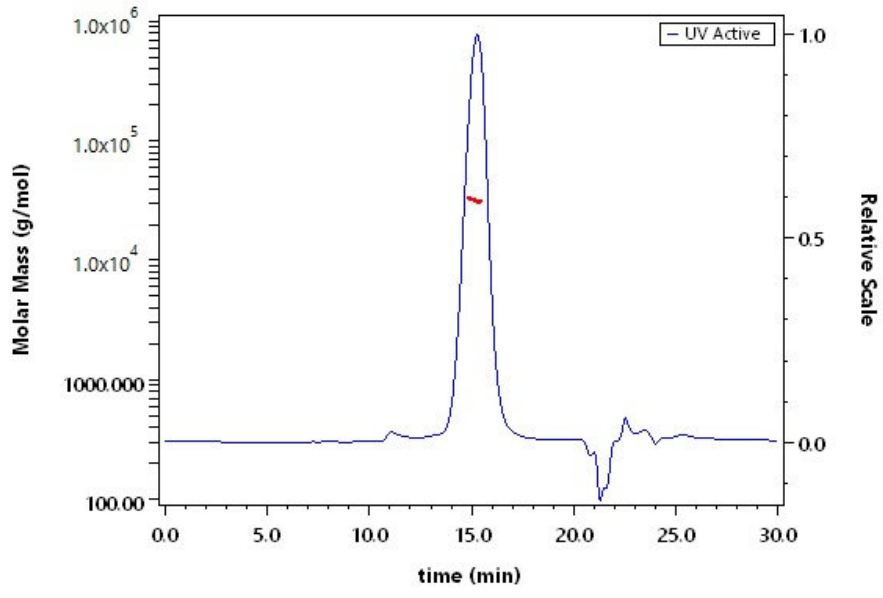
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



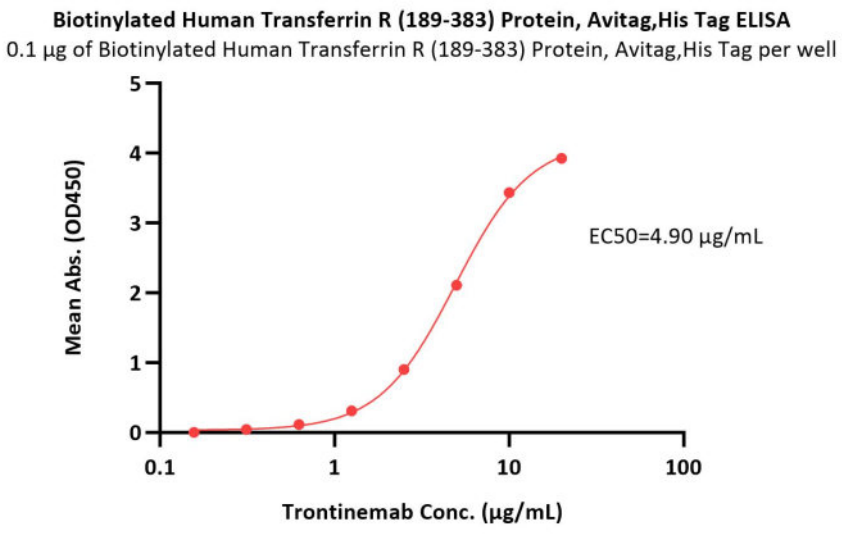
Biotinylated Human Transferrin R (189-383) Protein, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Biotinylated Human Transferrin R (189-383) Protein, Avitag,His Tag (Cat. No. TFR-H82E3) is more than 90% and the molecular weight of this protein is around 25-40 kDa verified by SEC-MALS.

Activity-ELISA



Immobilized Biotinylated Human Transferrin R (189-383) Protein, Avitag,His Tag (Cat. No. TFR-H82E3) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Trontinemab with a linear range of 0.06-1 μg/mL (QC 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.