Catalog # TFR-C82E3



#### Synonym

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

#### Source

Biotinylated Cynomolgus Transferrin R Protein, His,Avitag(TFR-C82E3) is expressed from human 293 cells (HEK293). It contains AA Cys 89 - Phe 760 (Accession # <u>G8F602-1</u>).

Predicted N-terminus: Gly

### **Molecular Characterization**

TfR(Cys 89 - Phe 760) Poly-his Avi G8F602-1

This protein carries a polyhistidine tag at the N-terminus and an Avi tag (Avitag<sup>TM</sup>) at the C-terminus.

The protein has a calculated MW of 78.8 kDa. The protein migrates as 90-95 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 Avitag<sup>™</sup> 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  $\mu$ g by the LAL method.

# Purity

>95% 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

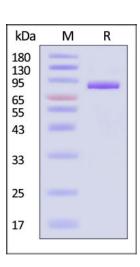
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

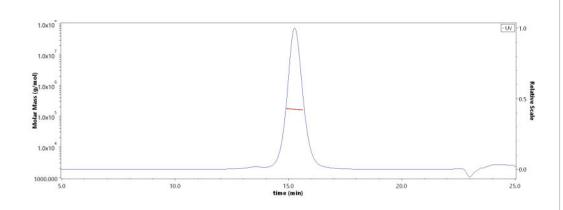
This product is stable after storage at:

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

# **SDS-PAGE**



# SEC-MALS



Biotinylated Cynomolgus Transferrin R 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 95% (With <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u>).

**Bioactivity-ELISA** 

The purity of Biotinylated Cynomolgus Transferrin R Protein, His, Avitag (Cat. No. TFR-C82E3) is more than 90% and the molecular weight of this protein is around 155-195 kDa verified by SEC-MALS. <u>Report</u>

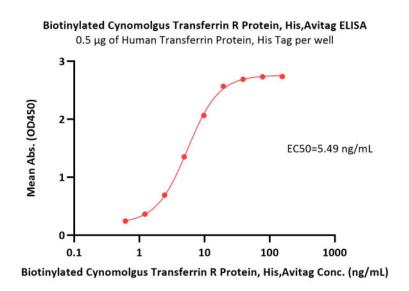


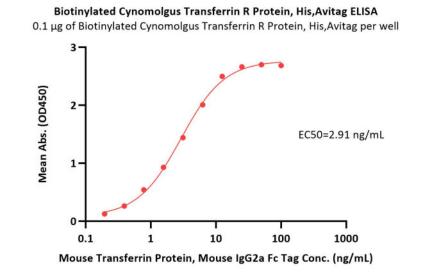
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## Catalog # TFR-C82E3





Immobilized Human Transferrin Protein, His Tag (Cat. No. TRN-H52H3) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Cynomolgus Transferrin R Protein, His,Avitag (Cat. No. TFR-C82E3) with a linear range of 0.6-10 ng/mL (QC tested).

Immobilized Biotinylated Cynomolgus Transferrin R Protein, His,Avitag (Cat. No. TFR-C82E3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Mouse Transferrin Protein, Mouse IgG2a Fc Tag (Cat. No. TRN-M525b) with a linear range of 0.2-6 ng/mL (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.

### **Clinical and Translational Updates**



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