Catalog # TFR-R82E3



#### Synonym

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

#### Source

Biotinylated Rat Transferrin R Protein, Avitag,His Tag(TFR-R82E3) is expressed from human 293 cells (HEK293). It contains AA Gly 87 - Phe 761 (Accession # <u>Q99376-1</u>).

Predicted N-terminus: Gly

### **Molecular Characterization**

TfR(Gly 87 - Phe 761) **Poly-his** Avi Q99376-1

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

The protein has a calculated MW of 79.8 kDa. The protein migrates as 70-85 kDa 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.

# **SDS-PAGE**

kDa	M R
116.0	
66.2	
45.0	
35.0	-
25.0	-
18.4	-
14.4	-

Biotinylated Rat Transferrin R Protein, Avitag, His Tag on SDS-PAGE under

# Purity

>95% as determined by SDS-PAGE.

### 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:

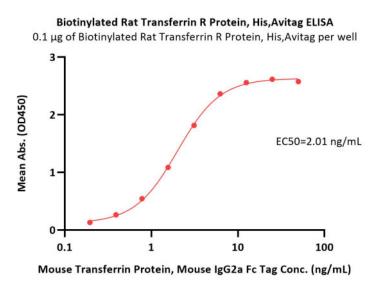
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

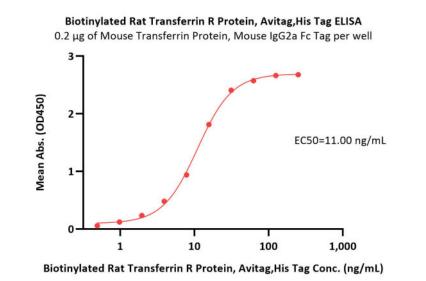
reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA** 



Catalog # TFR-R82E3





BIOSYSTEMS

Immobilized Biotinylated Rat Transferrin R Protein, Avitag,His Tag (Cat. No. TFR-R82E3) 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 (QC tested).

Immobilized Mouse Transferrin Protein, Mouse IgG2a Fc Tag (Cat. No. TRN-M525b) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Rat Transferrin R Protein, Avitag,His Tag (Cat. No. TFR-R82E3) with a linear range of 0.5-31 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**



>>> www.acrobiosystems.com

