## Biotinylated Mouse Transferrin R / CD71 Protein, His Tag, ultra sensitivity (primary amine labeling) (MALS verified)

Catalog # TFR-M8249



#### Synonym

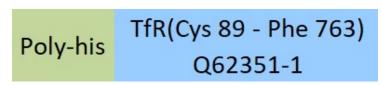
CD71,TFRC,TFR,sTfR,TfR1,Trfr,T9,p90

#### Source

Biotinylated Mouse Transferrin R, His Tag, primary amine labeling (TFR-M8249) is expressed from human 293 cells (HEK293). It contains AA Cys 89 -Phe 763 (Accession # Q62351-1). It is the biotinylated form of Mouse Transferrin R, His Tag(Cat. No. TFR-M524b)

# **Molecular Characterization**

Predicted N-terminus: His



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 77.8 kDa. The protein migrates as 80-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

#### **Purity**

>95% as determined by SDS-PAGE.

>95% 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**

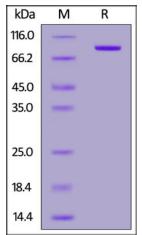
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

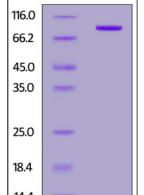
This product is stable after storage at:

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

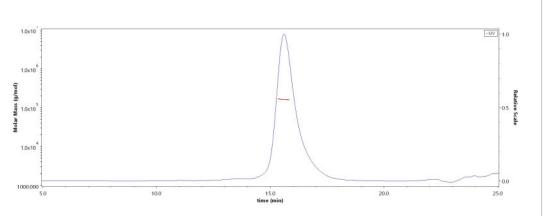
#### **SDS-PAGE**



Biotinylated Mouse Transferrin R, His Tag, primary amine labeling 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 Mouse Transferrin R, His Tag, primary amine labeling (Cat. No. TFR-M8249) is more than 95% and the molecular weight of this protein is around 140-170 kDa verified by SEC-MALS. <u>Report</u>

**Bioactivity-ELISA** 

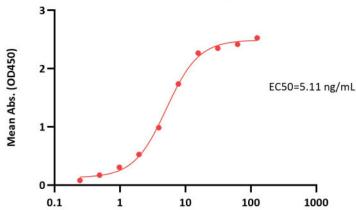


# Biotinylated Mouse Transferrin R / CD71 Protein, His Tag, ultra sensitivity (primary amine labeling) (MALS verified)





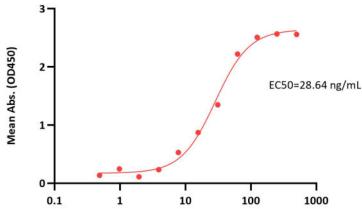
Biotinylated Mouse Transferrin R, His Tag, primary amine labeling ELISA 0.1  $\mu$ g of Biotinylated Mouse Transferrin R, His Tag, primary amine labeling per well



Mouse Transferrin, Mouse IgG2a Fc Tag, low endotoxin Conc. (ng/mL)

Immobilized Biotinylated Mouse Transferrin R, His Tag, primary amine labeling (Cat. No. TFR-M8249) 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, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. TRN-M525b) with a linear range of 0.2-16 ng/mL (QC tested).

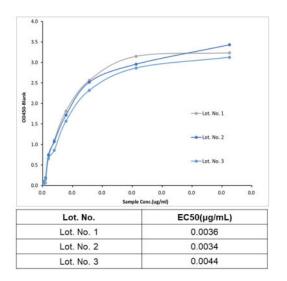
Biotinylated Mouse Transferrin R, His Tag, primary amine labeling ELISA 0.2  $\mu g$  of Mouse Transferrin, Mouse IgG2a Fc Tag, low endotoxin per well



Biotinylated Mouse Transferrin R, His Tag, primary amine labeling Conc. (ng/mL)

Immobilized Mouse Transferrin, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. TRN-M525b) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse Transferrin R, His Tag, primary amine labeling (Cat. No. TFR-M8249) with a linear range of 0.5-63 ng/mL (Routinely tested).

#### **Batch consistency**



### **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

