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

Catalog # TFR-H8243





Synonym

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

Source

Biotinylated Human Transferrin R, His Tag, primary amine labeling is expressed from human HEK293 cells. It contains AA Cys 89 - Phe 760 (Accession # <u>AAH01188.1</u>). It is the biotinylated form of Human Transferrin R protein, His Tag (Cat. No. CD1-H5243).

Predicted N-terminus: His

Molecular Characterization

Poly-his

TfR(Cys 89 - Phe 760) AAH01188.1

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

The protein has a calculated MW of 76.0 kDa. The protein migrates as 75-85 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.

>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

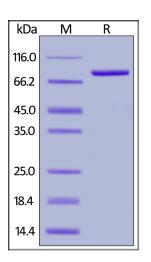
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

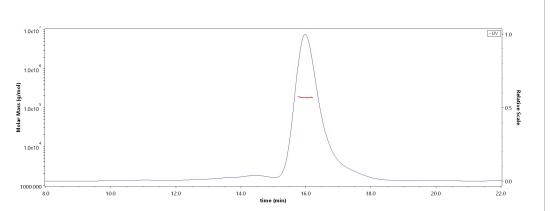


Biotinylated Human Transferrin R, His Tag, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

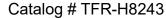


SEC-MALS

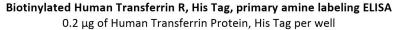


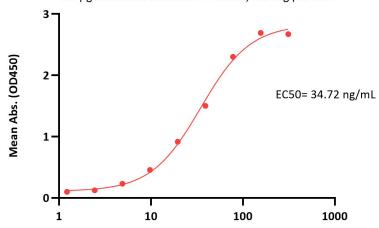
The purity of Biotinylated Human Transferrin R, His Tag, primary amine labeling (Cat. No. TFR-H8243) is more than 90% and the molecular weight of this protein is around 155-195 kDa verified by SEC-MALS. Report

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

Immobilized Human Transferrin Protein, His Tag (Cat. No. TRN-H52H3) at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human Transferrin R, His Tag, primary amine labeling (Cat. No. TFR-H8243) with a linear range of 1.2-78 ng/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.

Clinical and Translational Updates

