



Synonym

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

Source

Human Transferrin R, His Tag(CD1-H5243) is expressed from human 293 cells (HEK293). It contains AA Cys 89 - Phe 760 (Accession # P02786-1). Predicted N-terminus: His

Molecular Characterization

Poly-his

TfR(Cys 89 - Phe 760) P02786-1

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

The protein has a calculated MW of 77.0 kDa. The protein migrates as 80 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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

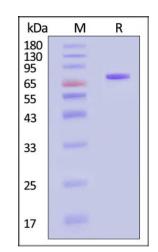
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 12 months under sterile conditions after reconstitution.

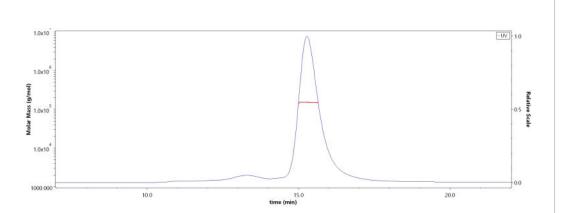
SDS-PAGE



Human Transferrin R, 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).

Bioactivity-ELISA

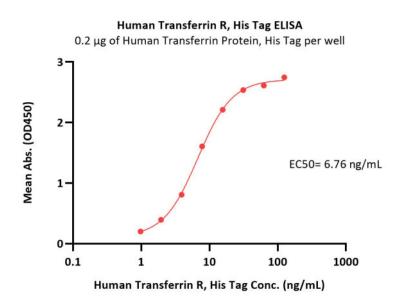
SEC-MALS



The purity of Human Transferrin R, His Tag (Cat. No. CD1-H5243) is more than 85% and the molecular weight of this protein is around 145-180 kDa verified by SEC-MALS.

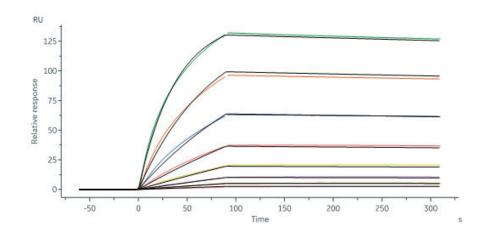
<u>Report</u>



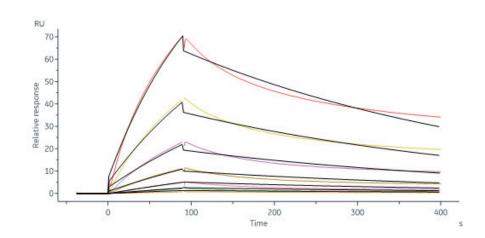


Immobilized Human Transferrin Protein, His Tag (Cat. No. TRN-H52H3) at 2 μ g/mL (100 μ L/well) can bind Human Transferrin R, His Tag (Cat. No. CD1-H5243) with a linear range of 2-7.8 ng/mL (QC tested).

Bioactivity-SPR



Captured Monoclonal Anti-CD71 Antibody, Mouse IgG1 (5B5) (Cat. No. CD1-MY2101) on CM5 chip via anti-mouse antibodies surface can bind Human Transferrin R, His Tag (Cat. No. CD1-H5243) with an affinity constant of 0.821 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).



Brain-penetrant, anti-amyloid, bispecific antibody immobilized on CM5 Chip can bind Human Transferrin R, His Tag (Cat. No. CD1-H5243) with an affinity constant of 94.4 nM as determined in a SPR assay (Biacore 8K) (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

