

Synonym

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

Source

Human Transferrin R Protein, Fc Tag(TFR-H5264) is expressed from human 293 cells (HEK293). It contains AA Cys 89 - Phe 760 (Accession # [P02786-1](#)).
Predicted N-terminus: Cys 89

Molecular Characterization

TfR(Cys 89 - Phe 760) P02786-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 101.6 kDa. The protein migrates as 95-120 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 / rFC 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

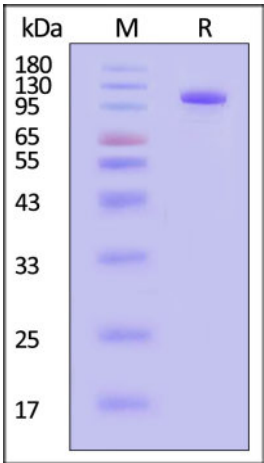
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

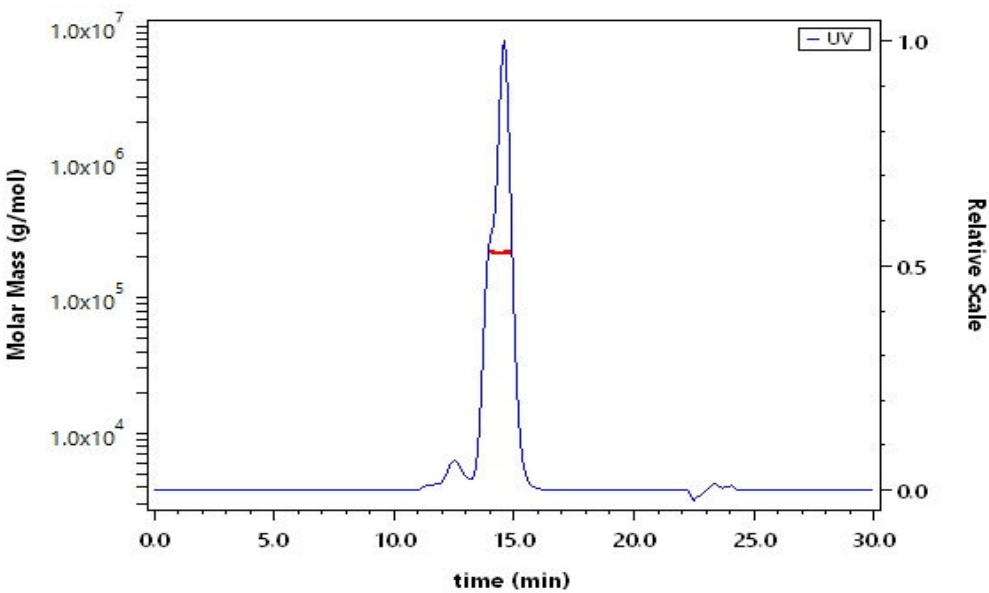
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Transferrin R Protein, Fc 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](#)).

SEC-MALS

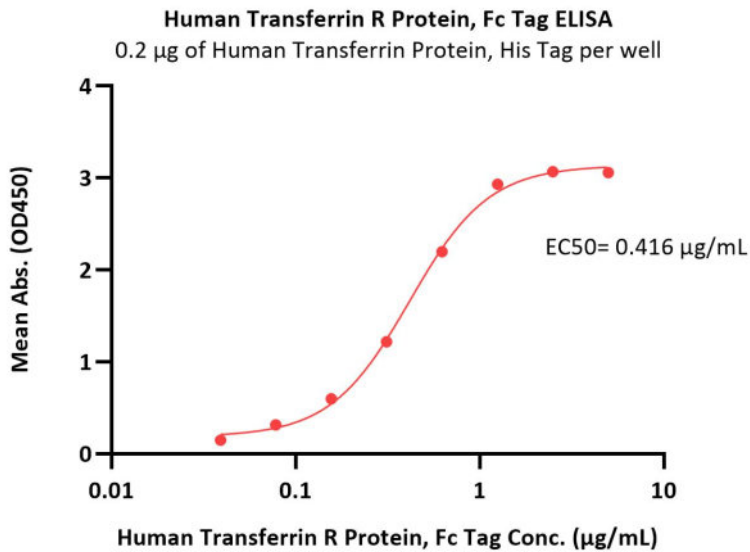


The purity of Human Transferrin R Protein, Fc Tag (Cat. No. TFR-H5264) is more than 85% and the molecular weight of this protein is around 200-240 kDa verified by SEC-MALS.

[Report](#)

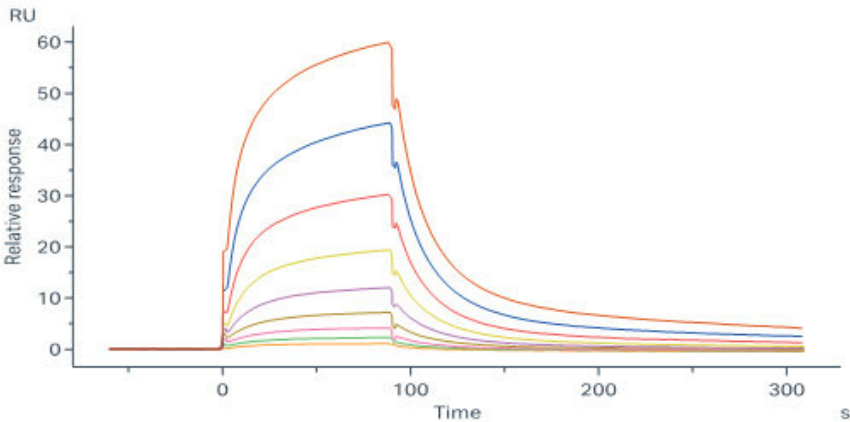
Bioactivity-ELISA



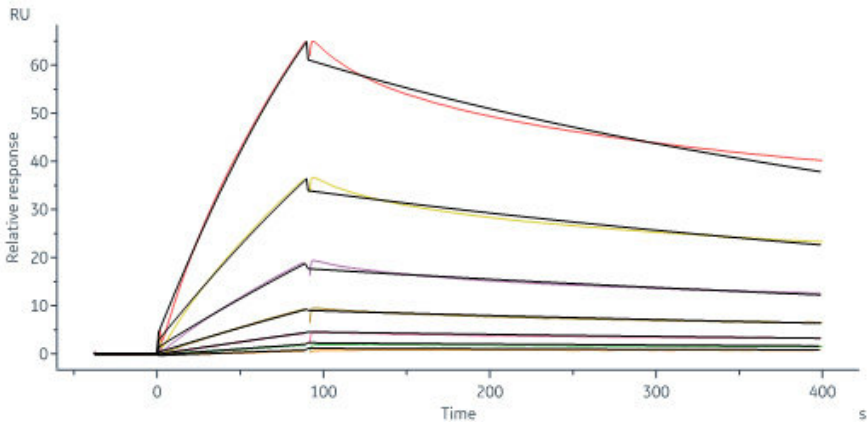


Immobilized Human Transferrin Protein, His Tag (Cat. No. TRN-H52H3) at 2 µg/mL (100 µL/well) can bind Human Transferrin R Protein, Fc Tag (Cat. No. TFR-H5264) with a linear range of 0.039-0.625 µg/mL (QC tested).

Bioactivity-SPR



Human Transferrin R Protein, Fc Tag (Cat. No. TFR-H5264) captured on Protein A Chip can bind Human Transferrin, His Tag with an affinity constant of 0.491 µM 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 Protein, Fc Tag (Cat. No. TFR-H5264) with an affinity constant of 33.4 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.

