

Human Transferrin R/CD71 Protein

Cat. No. TFR-HM102

Description

Source	Recombinant Human Transferrin R/CD71 Protein is expressed from HEK293 with His tag at the N-terminus. It contains Cys89-Phe760.
Accession	P02786
Molecular Weight	The protein has a predicted MW of 77.25 kDa. Due to glycosylation, the protein migrates to 78-90 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per μg by the LAL method.
Purity	> 90% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

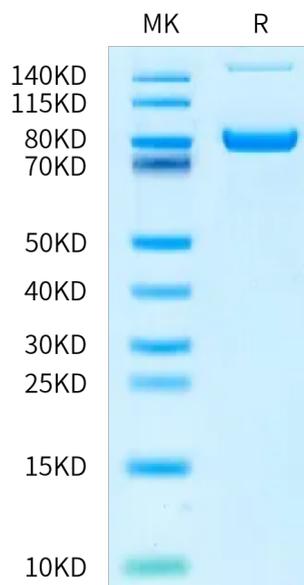
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The transferrin receptor (CD71) is known as a receptor for IgA1 on mesangial cells. The transcript and protein expression of glomerular CD71 was determined by real-time polymerase chain reaction and immunohistochemistry. Human mesangial cells (HMCs) were treated with sera from IgAN patients and expression levels of CD71 and inflammatory cytokine markers were compared according to disease status.

Assay Data

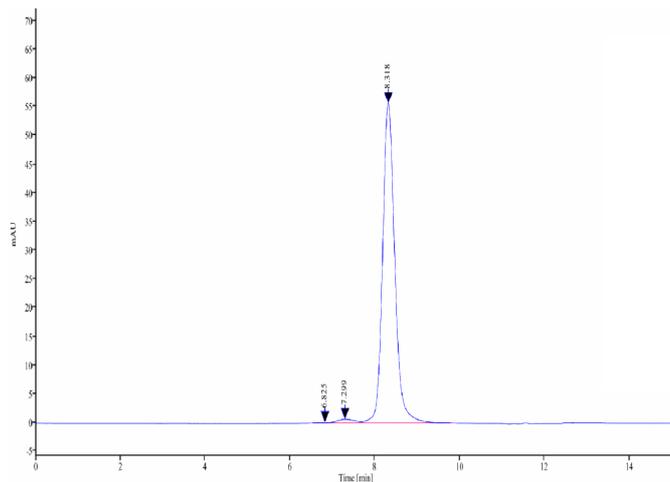
Bis-Tris PAGE



Human Transferrin R on Bis-Tris PAGE under reduced condition. The purity is greater than 90%.

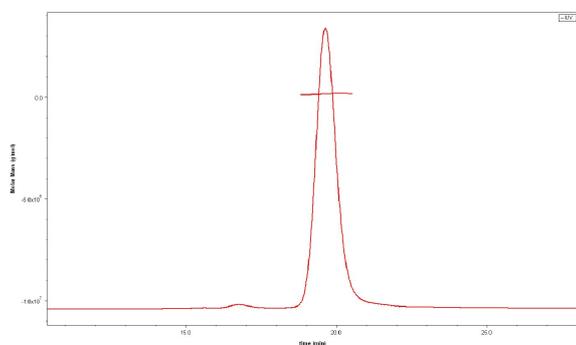
SEC-HPLC

Assay Data



The purity of Human Transferrin R is greater than 95% as determined by SEC-HPLC.

SEC-MALS

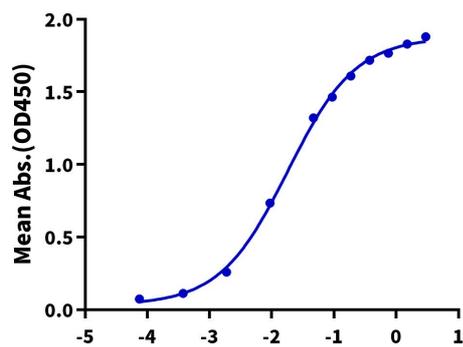


The purity of Human Transferrin R is greater than 95% and the molecular weight of this protein is around 125-180 kDa as determined by SEC-MALS.

ELISA Data

Human Transferrin R, His Tag ELISA

0.2µg Human Transferrin R, His Tag Per Well



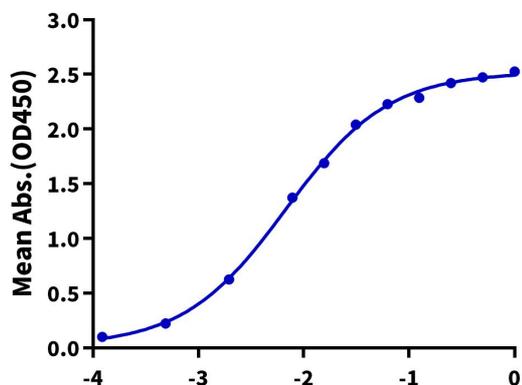
Immobilized Human Transferrin R, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human Transferrin, His Avi Tag (Cat. TFN-HM401B) with the EC50 of 14.3ng/ml determined by ELISA.

Log Biotinylated Human Transferrin, His Avi Tag Conc.(µg/ml)

Assay Data

Human Transferrin R, His Tag ELISA

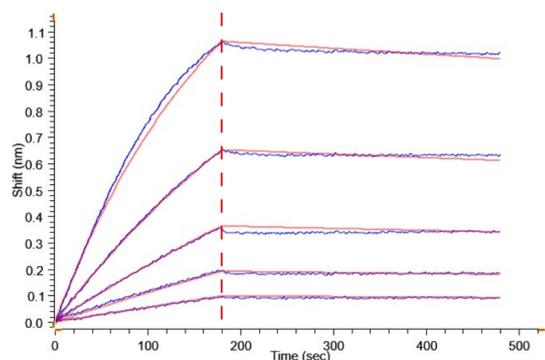
0.1µg Human Transferrin R, His Tag Per Well



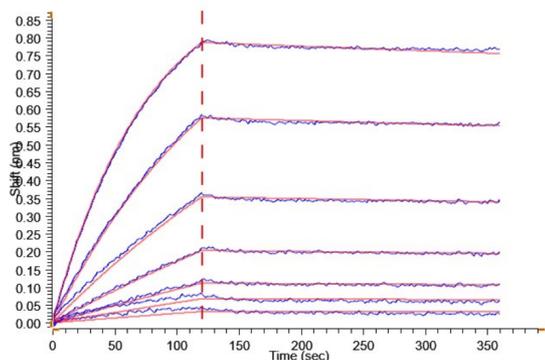
Immobilized Human Transferrin R, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-Transferrin R Antibody, hFc Tag with the EC50 of 6.8ng/ml determined by ELISA.

Log Anti-Transferrin R Antibody, hFc Tag Conc.(µg/ml)

BLI Data



Loaded Biotinylated Human Transferrin, His-Avi Tag (Cat. TFN-HM401B) on Streptavidin-Biosensor can bind Human Transferrin R, His Tag with an affinity constant of 10.30 nM as determined in BLI assay .



Loaded Anti-Transferrin R Antibody, hFc Tag on ProA-Biosensor can bind Human Transferrin R, His Tag with an affinity constant of 0.65 nM as determined in BLI assay .