

# Human Transferrin R/CD71 Protein

Cat. No. TFR-HM201

## Description

<b>Source</b>	Recombinant Human Transferrin R/CD71 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Cys89-Phe760.
<b>Accession</b>	P02786-1
<b>Molecular Weight</b>	The protein has a predicted MW of 101.8 kDa. Due to glycosylation, the protein migrates to 105-115 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 24 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



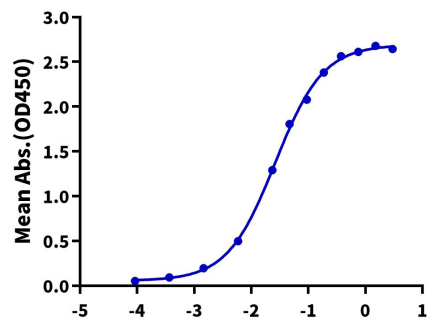
Human Transferrin R on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

Assay Data

**Human Transferrin R, hFc Tag ELISA**

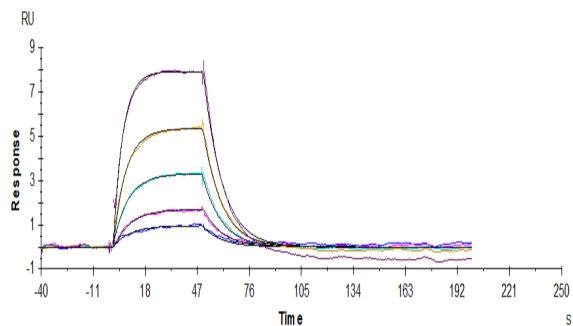
0.2µg Human Transferrin R, hFc Tag Per Well



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

Immobilized Human Transferrin R, hFc Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-Transferrin R Antibody, hFc Tag with the EC50 of 26.3ng/ml determined by ELISA (QC Test).

SPR Data



Human Transferrin R, hFc Tag captured on CM5 Chip via Anti-Fc Antibody can bind Human Transferrin, His Tag with an affinity constant of 0.1µM as determined in SPR assay (Biacore T200).