

Biotinylated Human Transferrin Protein, Ultra Low Endotoxin

Cat. No. TFN-HM401B-UL

Description	
Source	Recombinant Biotinylated Human Transferrin Protein is expressed from HEK293 with His tag and Avi tag at the C-terminus. It contains Val20-Pro698.
Accession	AAH59367
Molecular Weight	The protein has a predicted MW of 78.11 kDa. Due to glycosylation, the protein migrates to 80-100 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% 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

Transferrin (Tf), an iron transporter, is mainly biosynthesized in the liver, but can also be biosynthesized in the brain; i.e., by oligodendrocytes and the choroid plexus, a cerebrospinal fluid (CSF) producing tissue. The CSF contains two Tf isoforms, brain-type Tf and serum-type Tf, which differ in their glycan structures. Brain-type Tf is uniquely glycosylated with biantennary asialo- and agalacto-complex type N-glycans that carry bisecting β1,4-GlcNAc and core α1,6-Fuc. The glycans of serum-type Tf in the CSF are similar to those of Tf in serum.

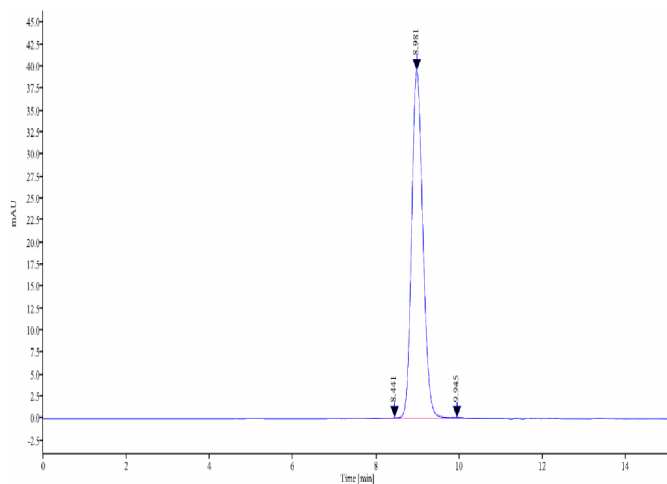
Assay Data



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

SEC-HPLC

Assay Data

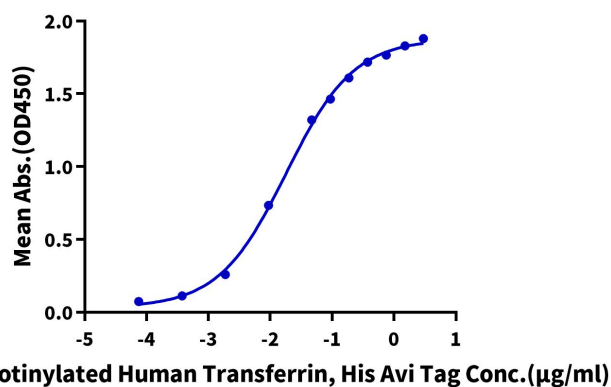


The purity of Biotinylated Human Transferrin is greater than 95% as determined by SEC-HPLC.

ELISA Data

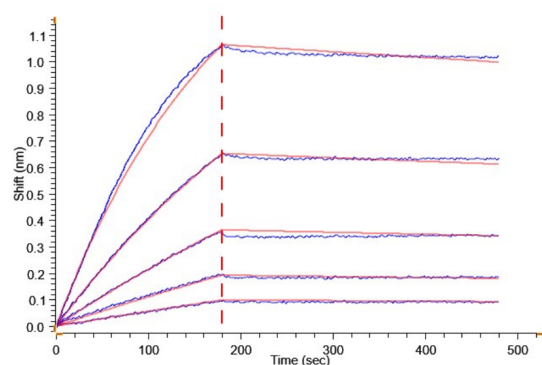
Biotinylated Human Transferrin, His Avi Tag ELISA

0.2µg Human Transferrin R, His Tag Per Well



Immobilized Human Transferrin R, His Tag (Cat. TFR-HM102) at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human Transferrin, His Avi Tag with the EC50 of 14.3ng/ml determined by ELISA.

BLI Data



Loaded Biotinylated Human Transferrin, His-Avi Tag on Streptavidin-Biosensor can bind Human Transferrin R, His Tag (Cat. TFR-HM102) with an affinity constant of 10.30 nM as determined in BLI assay .