

Human Transferrin Protein

Cat. No. TFN-HM101

Description

Source	Recombinant Human Transferrin Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val20-Pro698.
Accession	AAH59367
Molecular Weight	The protein has a predicted MW of 76.3 kDa. Due to glycosylation, the protein migrates to 78-82 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

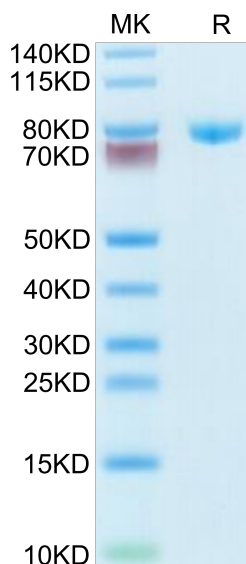
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
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 β 1,4-GlcNAc and core α 1,6-Fuc. The glycans of serum-type Tf in the CSF are similar to those of Tf in serum.

Assay Data

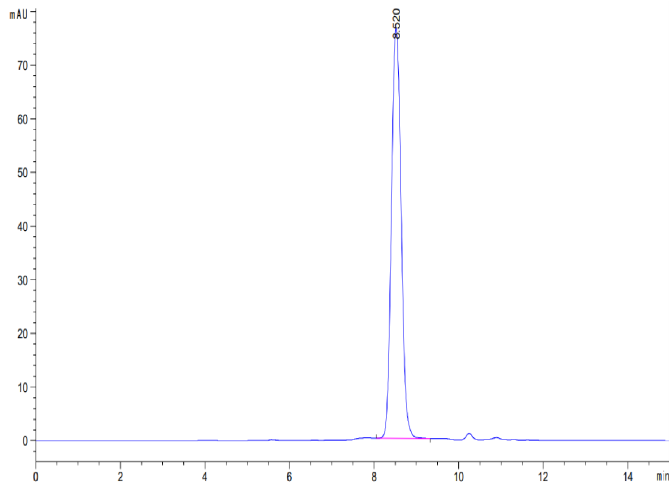
Bis-Tris PAGE



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

SEC-HPLC

Assay Data



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