

# Human Transferrin/TF (His Tag) recombinant protein



Catalog Number: 500681

## General Information

### Protein Construction

A DNA sequence encoding the human transferrin (NP\_001054.1) (Met 1-Pro 698) was fused with a polyhistidine tag at the C-terminus.

### Organism

Human

### Expression Host

Human Cells

## QC Testing

### Activity

1. Measured by its binding ability in a functional ELISA. Immobilized human CD71 at 10  $\mu\text{g/ml}$  (100  $\mu\text{l/well}$ ) can bind human Transferrin. The  $\text{EC}_{50}$  of human Transferrin is 5.6  $\text{ng/mL}$ .
2. Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. Karey, K.P. et al. (1988) Cancer Research 48:4083. The  $\text{ED}_{50}$  for this effect is typically 0.01-0.04  $\mu\text{g/mL}$ .

### Purity

> 95 % as determined by SDS-PAGE

### Endotoxin

< 1.0 EU per  $\mu\text{g}$  of the protein as determined by the LAL method

### Stability

Samples are stable for up to twelve months from date of receipt at  $-70^{\circ}\text{C}$

### Predicted N terminal

Val 20

### Molecular Mass

The secreted recombinant human transferrin comprises 690 amino acids with a predicted molecular mass of 76.6 kDa. It migrates as an approximately 74 kDa band in SDS-PAGE under reducing conditions due to glycosylation.

### Formulation

- Lyophilized from sterile PBS, pH 7.4
1. 5 % trehalose and mannitol are added as protectants before lyophilization.
  2. Please contact us for any concerns or special requirements.

## Usage Guide

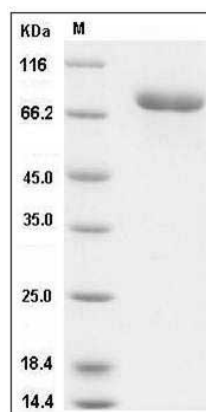
### Storage

Store it under sterile conditions at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$ . It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

### Reconstitution

Adding sterile water, prepare a stock solution of 0.25  $\text{mg/ml}$ . Concentration is measured by UV-Vis.

### SDS-PAGE



Human Transferrin / TF Protein (His Tag) SDS-PAGE