

# Native Human Transferring

**Cat. No.** TF-5341H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Native human TF expressed by Human Plasma is a 76.5 kDa protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | Human Plasma                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>      | <p>Transferrin (TF) is a glycoprotein thought to have been created as a result of an ancient gene duplication event that led to generation of homologous C- and N-terminal domains each of which binds one ion of Ferric Iron. Therefore, each Human TF molecule has the ability to carry two Iron ions in the Ferric form (<math>Fe^{3+}</math>). The function of TF is to transport Iron from the intestine, reticuloendothelial system, and liver parenchymal cells to all proliferating cells in the body. TF may also have a physiologic role as Granulocyte/Pollen-Binding Protein (GPBP) involved in the removal of certain organic matter and allergens from serum. Apo-Transferrin designates the form of the molecule without Iron bound. Like TF, APO-TF has a physiological role in the transportation and distribution of Iron among the body organs. It is also an important transport factor used in defined culture media.</p> |
| <b>Form</b>             | Lyophilized from Ammonium Bicarbonate pH 7.2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Molecular Weight</b> | 76.5 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reconstitution</b>   | Centrifuge vial prior to opening. Add deionized water to a concentration of 10 mg/ml, aliquot and freeze unused portion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>              | > 95% by SDS-PAGE; Purified to have < 0.02 mg Iron/g TF.                                                                                                                                                                                                                                                               |
| <b>Storage</b>             | Store at -70°C. 3 years from delivery. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                              |
| <b>Official Symbol</b>     | TF                                                                                                                                                                                                                                                                                                                     |
| <b>GENE INFORMATION</b>    |                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Name</b>           | TF transferrin [ Homo sapiens]                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>            | TF; transferring; TFQTL1; PRO1557; PRO2086; DKFZp781D0156; serotransferrin; siderophilin; OTTHUMP00000197155; beta-1 metal-binding globulin                                                                                                                                                                            |
| <b>Gene ID</b>             | 7018                                                                                                                                                                                                                                                                                                                   |
| <b>mRNA Refseq</b>         | NM_001063                                                                                                                                                                                                                                                                                                              |
| <b>Protein Refseq</b>      | NP_001054                                                                                                                                                                                                                                                                                                              |
| <b>MIM</b>                 | 190000                                                                                                                                                                                                                                                                                                                 |
| <b>UniProt ID</b>          | P02787                                                                                                                                                                                                                                                                                                                 |
| <b>Chromosome Location</b> | 3q22.1                                                                                                                                                                                                                                                                                                                 |
| <b>Pathway</b>             | EPHB forward signaling; HIF-1-alpha transcription factor network; Hemostasis; Iron uptake and transport; Mineral absorption; Platelet activation; Platelet degranulation; Response to elevated platelet cytosolic Ca <sup>2+</sup> ; Transferrin endocytosis and recycling; Transmembrane transport of small molecules |
| <b>Function</b>            | ferric iron binding; metal ion binding; protein binding; ubiquitin protein ligase binding                                                                                                                                                                                                                              |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

PDBrendering based  
on 1a8e.



Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA