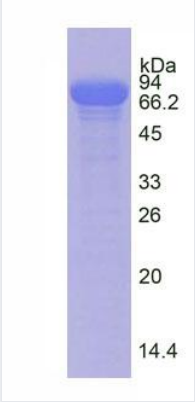
# Transferrin (TRF) Native Protein

## PRODUCT OVERVIEW

| | |
|---|---|
| **Product Name** | Transferrin (TRF), Native Protein |
| **Full Product Name** | Native Transferrin (TRF) |
| **Product Gene Name** | TRF native protein |
| **Host** | Pig |
| **Form/Format** | Supplied as lyophilized form in 50mM TRIS, 200mM NaCl |
| **Purity/Purification** | > 95% |
| **Preparation and Storage** | Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months.<br>Stability Test: The thermal stability is described by the loss rate of the targetprotein. The loss rate was determined by accelerated thermal degradation test,that is, incubate the protein at 37 degree C for 48h, and no obvious degradation andprecipitation were observed. (Referring from China Biological Products Standard,which was calculated by the Arrhenius equation.) The loss of this protein is lessthan 5% within the expiration date under appropriate storage condition. |
| **Matching Pairs** | Unconjugated Antibody: TRF (MBS2001484)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | Biotin Conjugated Antibody: TRF (MBS2001773)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | FITC Conjugated Antibody: TRF (MBS2017199)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | APC-CY7 Conjugated Antibody: TRF (MBS2062380)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | PE Conjugated Antibody: TRF (MBS2062382)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | APC Conjugated Antibody: TRF (MBS2062384)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | Cy3 Conjugated Antibody: TRF (MBS2062386)<br>Immunogen: TRF (MBS2018635) |
| **Matching Pairs** | HRP Conjugated Antibody: TRF (MBS2062389)<br>Immunogen: TRF (MBS2018635) |
| **Molecular Weight** | 77,064 Da |
| **Chromosome Location** | Chromosome: 3; NC_000003.11 (133464977..133497850). Location: 3q22.1 |
| **OMIM** | 190000 |
| **3D Structure** | ModBase 3D Structure for P02787 |
| **Supply Chain Verification** | Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire. |
| **Organism** | Sus scrofa; Porcine (Pig) |
| **Endotoxin Level** | <1.0EU per 1ug (determined by the LAL method) |
| **Reconstitution** | Reconstitute in sterile PBS, pH7.2-pH7.4. |

| | |
|---|---|
| **ISO Certification** | Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory. |
| **Applications Tested/Suitable for TRF native protein** | SDS-PAGE, Western Blot (WB), ELISA (EIA), Immunoprecipitation (IP) |
| **Related Product Information for TRF native protein** | Transferrins are iron-binding blood plasma glycoproteins that control the level of free iron in biological fluids. When a transferrin protein loaded with iron encounters a transferrin receptor on the surface of a cell, it binds to it and, as a consequence, is transported into the cell in a vesicle by receptor-mediated endocytosis. The liver is the main site of transferrin synthesis, but other tissues and organs, such as the brain, also produce it. Transferrin is also associated with the innate immune system. It is found in the mucosa and binds iron, thus creating an environment low in free iron that impedes bacterial survival in a process called iron withholding. The level of transferrin decreases in inflammation. Transferrin imbalance can haveserious health effects for those with low or high serum transferrin levels. |
| **Other Notes** | Small volumes of TRF native protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for TRF purchase** | MBS2018635 is a native protein targeting TRF. Also known as Native Transferrin (TRF). Host: Pig. |




**SDS-Page of TRF native protein**

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TRF. It may not necessarily be applicable to this product.

| | |
|---|---|
| **NCBI GI #** | 339453 |
| **NCBI GeneID** | 7018 |
| **NCBI Accession #** | AAA61140.1 |
| **UniProt Primary Accession #** | P02787 |
| **UniProt Secondary Accession #** | O43890; Q1HBA5; Q9NQB8; Q9UHV0 |
| **UniProt Related Accession #** | P02787 |
| **NCBI Official Full Name** | transferrin |
| **NCBI Official Synonym Full Names** | transferrin |
| **NCBI Official Symbol** | TF |
| **NCBI Official Synonym Symbols** | TFQTL1; PRO1557; PRO2086 |
| **UniProt Protein Name** | Serotransferrin |
| **UniProt Synonym Protein Names** | Beta-1 metal-binding globulin; Siderophilin |
| **Protein Family** | TBP-related factor |
| **UniProt Gene Name** | TF |

| | |
|---|---|
| **UniProt Synonym Gene Names** | Transferrin |
| **UniProt Entry Name** | TRFE_HUMAN |
| **NCBI Protein Information** | serotransferrin; siderophilin; beta-1 metal-binding globulin |
| **NCBI Summary for TRF** | This gene encodes a glycoprotein with an approximate molecular weight of 76.5 kDa. It is 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. The function of this protein is to transport iron from the intestine, reticuloendothelial system, and liver parenchymal cells to all proliferating cells in the body. This protein may also have a physiologic role as granulocyte/pollen-binding protein (GPBP) involved in the removal of certain organic matter and allergens from serum. [provided by RefSeq, Sep 2009] |
| **UniProt Comments for TRF** | TF: Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further role in stimulating cell proliferation. Defects in TF are the cause of atransferrinemia (ATRAF). Atransferrinemia is rare autosomal recessive disorder characterized by iron overload and hypochromic anemia. Belongs to the transferrin family.<br><br>Protein type: Secreted; Secreted, signal peptide<br><br>Chromosomal Location of Human Ortholog: 3q22.1<br><br>Cellular Component: extracellular space; cell surface; early endosome; cytoplasmic membrane-bound vesicle; extracellular region; coated pit; recycling endosome; endocytic vesicle; perinuclear region of cytoplasm; late endosome; apical plasma membrane; basal plasma membrane; endosome membrane; vesicle<br><br>Molecular Function: protein binding; ferric iron binding; ubiquitin protein ligase binding<br><br>Biological Process: platelet activation; retinal homeostasis; platelet degranulation; cellular iron ion homeostasis; transferrin transport; blood coagulation; transmembrane transport<br><br>Disease: Atransferrinemia |
| **Research Articles on TRF** | **1.** Data suggest that there is no association between plasma level of carbohydrate-deficient transferrin and volume decrease of brain gray or white matter in male subjects as result of current/recent or lifetime alcohol drinking in the Netherlands. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |
| **Disclaimer** | While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice.<br><br>It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information. |
| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures.

**MyBioSource** | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/native-protein/transferrin-trf/2018635