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TF

Native Human Apotransferrin, Tissue Culture Grade

Catalog No. CSI19788A Quantity: 100 mg

CSI19788B 1 g CSI19788C 5 g

Alternate Names: Serotransferrin, beta-1-metal-binding globulin, siderophilin, TRF, apo-hTF, apotransferrin

Description: 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 (Fe3+). The function of TF is to transport Iron from the intestine, reticuloendothelial system, and liver parenchymal cells to all proliferating cells in the body. Human HOLO transferrin is iron saturated whereas APO transferrin is substantially iron-free. When human transferrin loaded with iron encounters a human transferrin receptor on the surface of a cell, it binds to it and is consequently transported into the cell in a vesicle. The cell will acidify the vesicle, causing human transferrin to release its iron ions.

Apotransferrin is an important transport factor used in defined culture media. Purified to have less than 0.01% iron and an iron-binding capacity of 1.25 ug/mg. Dissolves in water

at 10 mg per ml.

Inquire about Bioprocessing grade (ISO 9001:2015), heat-treated 60°C, < 10

CFU/mg, mycoplasma-free, available in BULK quantities.

UniProt ID P02787 **Gene ID:** 7018

Source: Human plasma Iron Content: < 30 μg per gram

Molecular Weight: 80 kDa

Formulation: Lyophlized from sterile-filtered 10 mM phosphate buffer, pH 7.4

Purity: \geq 98% by SDS-PAGE

Endotoxin Level: < 0.1 EU/mg by LAL analysis

Reconstitution: Centrifuge vial prior to opening. Add sterile distilled water to a concentration of

> 0.1 mg/ml and gently pipette the solution up and down the sides of the vial.

DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Store lyophilized protein at -20 to -80°C for at least 1 year or reconstituted stock solution

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in aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Infectious Disease

Statement:

Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and

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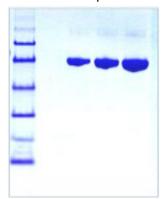
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Website:

negative for anti-HIV 1 & 2 by FDA approved tests.

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SDS-PAGE of Apotransferrin



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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