



## Product Datasheet

<b>Product Name</b>	Holo Transferrin Human
<b>Cata No</b>	CB500936
<b>Source</b>	Human
<b>Synonyms</b>	Serotransferrin, Transferrin, Siderophilin, Beta-1-metal-binding globulin, TF, PRO1557, PRO2086, DKFZp781D0156, Holo Transferrin, HTF

### Description

Transferrin is the iron-transport protein of vertebrate serum and donates iron to cells through interaction with a specific membrane receptor, CD71. Transferrin appears to be indispensable for most cells growing in tissue culture. It is referred to frequently as a growth factor because, in analogy to other growth factor-receptor interactions, proliferating cells express high numbers of transferrin receptors, and the binding of transferrin to their receptors is needed for cells to initiate and maintain their DNA synthesis. Apart from its role as an iron transport protein transferrin acts as a cytokine and has functions that may not be related to its iron-carrying capacity. Human Holo Transferrin is a glycoprotein of approximately 77 kDa containing 679 amino acids.

### Purity

Purity as determined by HPLC is 100%.

### Human Virus Test

FDA approved Plasma from each donor has been tested and found negative for antibody to HIV-1, HIV-2, HCV, HBSAG, HBc, ALT and Syphilis. Viral inactivation by pasteurization (60°C for 10 hours) has been validated using three different test viruses, with removal of 8-14.5 logs of virus documented. The purification process has also been found to remove significant additional quantities of virus.

### Applications

Human Transferrin is a crucial component for the cultivation of mammalian cells *in-vitro*. Human Transferrin is Critical for long-term cells growth *in-vitro*.

Human Transferrin is used as detoxificant in media by binding contaminating metal ions. Human Transferrin is often used as a nutrient in fermentation media for recombinant protein and biopharmaceutical production.

### Storage

It is recommended to reconstitute the lyophilized Holo Transferrin in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Lyophilized Holo Transferrin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Holo Transferrin should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

### Formulation

The protein (1mg/ml) was lyophilized with no additives. Physical Appearance is sterile Filtered Pink lyophilized (freeze-dried) powder