Pariksha Biotech
A game changer in IVD

High-Q Transferrin

Turbidimetric Immuno Assay

Intended Use : For the Quantitative Determination of Transferrin in Human Serum

HIGH®
Command on Quality

INTENDED USE:

Transferrin is the main plasma protein for transport of iron.Transferrin is synthesized in the liver and in a little quantity in the reticuloendothelial system and in endocrine glands (testes and ovaries). Plasma levels are regulated mainly by availability of iron. In iron deficiency states, transferrin concentration arises; after treatment with iron, transferrin returns to normal value.The transferrin is involved in binding and transferring iron ions, avoiding poisoning and/or their lost through kidneys. Increased levels of Transferrin are present in iron lack, pregnancy, in the therapy based on oestrogens and in the liponephrosis. Decreased levels of Transferrin are present in the hereditary deficiency, in the therapy based on testosterone, in infections, in acute inflammation, in some nephrosis, in cancers,in hemochromatosis, in acute malaria or for malnutrition.

PRINCIPLE:

Quantitative determination of Transferrin may be done by an immunoturbidimetric method, by automatic analyzers or in manual.Mixing a sample with a precise Antigen to a solution having the corresponding anti-serum (Antibody), in a well-defined ratio, it ispossible to have turbidity; the use of undiluted sample mayrequire bichromatism.

PRECAUTIONS FOR USE

1. This product has been formulated for in vitro diagnostic use.
2. A proportional variation of the reaction volumes does not change the result.
3. DO NOT mix Reagents from different Production lots.

ATTENTION!

A) Applications on routine analyzers may be totally different from what developed as manual determination; in addition the procedures are specific for each analyzer.

B) Very deep attention must be given to interfering substances: certain drugs and other substances are able to influence levels of Transferrin

C) The reagent must be used ONLY for the intended purposes

REAGENTS

Components of the kit:

R1 - Anti-TRF

anti-Transferrin (goat) in PBS >25 mmol/L

NaN3 < 0.1%

Calibration:

Transferrin Calibrator is available as ready to use Liquid Calibrator which is stable till the expiry date.

STABILITY: The Reagents are stable up to the expiry date mentioned on the labels, when stored at 2-8°C, if closed and kept in their intact primary container; if not exposed to heat sources and/or pressure variations.

QUALITY CONTROL MATERIALS:

Transferrin NORMAL CONTROL (Optional)
Transferrin ELEVATED CONTROL (Optional)

STABILITY:

All the Reagents are stable up to the expiry date mentioned on the labels when properly stored at stored at 2-8°C.

SAMPLES

- Not haemolysed and not lipemic fresh serum.

Samples collection incompliance with CLSI (NCCLS)
The sample can be stored at 2-8°C, up to 10 days.

TEST PROCEDURE:

System Parameters:

Calibration Method	**Endpoint-Bichromatic**
Reaction Direction	Increasing
Primary Wave Length	340
Secondary Wave Length	700 (600-700)
Flow Cell Temp.	37°C
Blank	Reagent Blank
Reagent Volume	500 µl
Sample Volume)	5 µl
Calibrators Conc	Lot Specific (Check the labels))
Units	mg/dL
Low normal	200
High normal	360
Linearity	800

PROCEDURE:

Reagent	**Reagent Blank**	**Cal**	**Sample**
Transferrin Reagent	**500 µL**	**500 µL**	**500 µL**
Calibrator	-------	**5 µL**	------
Sample	-------	------	**5 µL**

Mix well and incubate for 5 minutes at 37°C Read the absorbance of Calibrator (C) Sample (S) against Reagent Blank (B) Bichromatically at 340 nms (Primary Wavelength) and 700 nms (Secondary Wavelength)

Calculations:

$$\text{Trasnferrin (in mg/dl)} = \frac{\text{Abs. of Sample}}{\text{Abs. of Calibrator}} \times \text{Calibrator Concentration}$$