

Product datasheet for BM745S

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Transferrin (TF) (N-term) Mouse Monoclonal Antibody [Clone ID: HTF-14]

Product data:

Product Type: Primary Antibodies

Clone Name: HTF-14

Applications: ELISA, FN, IF, IHC, IP, R, WB

Recommended Dilution: ELISA.

RIA.

Western Blotting (non-reducing conditions).

Immunocytochemistry.

Functional Application: This antibody blocks binding of Transferrin to the Receptor.

Immunohistochemistry on Paraffin Sections: 10 µg/ml.

Positive Control Tissue: Placenta.

Reactivity: Human, Porcine, Rabbit

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Purified Porcine Transferrin.

Specificity: The antibody *HTF-14* recognizes an epitope located in the N-terminal domain of human

serum transferrin, a 77 kDa single polypeptide chain glycoprotein (member of the iron binding family of proteins). It is synthesised in the liver and consists of two domains each

having a high affinity reversible binding site for Fe³⁺.

Negative Species: Bovine, Sheep, Canine (Dog) and Equine (Horse).

Formulation: Phosphate buffered saline (PBS), pH~7.4

State: Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

Preservative: 15 mM Sodium Azide

Concentration: lot specific

Purification: Precipitation Methods and Ion Exchange Chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.





Stability: Shelf life: one year from despatch.

Gene Name: transferrin

Database Link: Entrez Gene 7018 Human

P02787

Background: Transferrin is a monomeric glycoprotein of approximately 77 kDa, which serves as an iron-

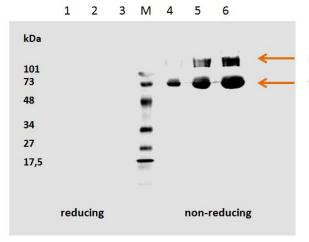
transporter. In normal plasma, transferrin has a concentration of 25-50 mmol / liter, and is

usually about one-third saturated with iron, thus providing a large buffering capacity in case of an acute increase in plasma iron levels. Cells take up transferrin-iron complexes (holotransferrin) using transferrin receptor dimers. Upon binding of holotransferrin, the receptor is internalized by clathrin-mediated endocytosis. Acidification of endosomes by vesicular membrane proton pumps leads to dissociation of iron ions, whereas transferrin (apotransferrin) remains associated with its receptor (CD71) and recycles to the cell surface, where apotransferrin is released upon exposure to normal pH. Internalization of labeled transferrin thus represents an usefull approach to study endocytosis. Serum concentration rises in iron deficiency and pregnancy and falls in iron overload, infection and inflammatory conditions. Iron/transferrin complex is essential in haemoglobin synthesis and for certain

types of cell division.

Serotransferrin, Siderophilin Synonyms:

Product images:

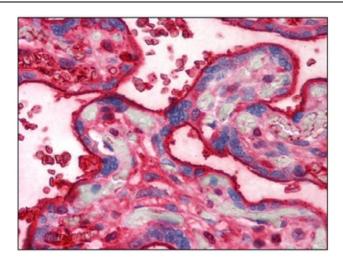


aggregated transferrin dimer

transferrin (77 kDa)

Human transferrin detected by the mouse monoclonal antibody HTF-14. 1. hTransferrin: 5ug/well (red. con.) 2. hTransferrin: 3ug/well (red. con.) 3. hTransferrin: 1ug/well (red. con.) M: Low Range marker (Bio-Rad) 4. hTransferrin: 1ug/well (non-red. con.) 5. hTransferrin: 3ug/well (non-red. con.) 6. hTransferrin: 5ug/well (non-red. con.)





Immunohistochemistry: Transferrin antibody staining of Formalin-Fixed Paraffin-Embedded Human Placenta tissue at 10 ug/ml.