



Recombinant Protein Technical Manual
Recombinant Human Transferrin Receptor/TFRC
Protein (His Tag)(Active)
RPES2247

Product Data:

Product SKU: RPES2247

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_003225.2

Protein Information:

Molecular Mass: 77.4 kDa

AP Molecular Mass:

Tag: N-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human CD71 at 10 µg/ml (100 µl/well) can bind human Transferrin. The EC₅₀ of human Transferrin is 5.6 ng/mL.

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Transferrin receptor protein 1; TR; TfR; Trfr; T9; p90;CD71;T9;TFR;TFR;TRFR

Immunogen Information:

Sequence: Cys 89-Phe 760

Background:

Transferrin receptor protein 1, also known as transferrin receptor, Trfr, p90, CD71 and TFRC, is a single-pass type II membrane protein which belongs to the peptidase M28 family and M28B subfamily. TFRC / CD71 is a membrane-bound protein expressed in larger amounts in proliferating. The specific expression of TFRC can represent a diagnostic tool or a therapeutic target in solid tumours expressing this antigen. Transferrin receptor is necessary for development of erythrocytes and the nervous system. TFRC / CD71 is regulated by cellular iron levels through binding of the iron regulatory proteins, IRP1 and IRP2, to iron-responsive elements in the 3'-UTR. Up-regulated upon mitogenic stimulation. TFRC / CD71 represents a marker of malignant transformation in the pancreas that could be applied as potential diagnostic and therapeutic target.