

## Recombinant Human Transferrin Receptor/TFRC Protein (His Tag)

**Catalog No.** PKSH031302

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

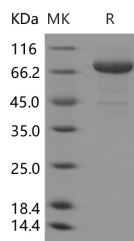
### Description

<b>Synonyms</b>	Transferrin receptor protein 1;TR;TfR;Trfr;T9;p90;CD71;T9;TFR;TFR;TRFR
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Cys 89-Phe 760
<b>Accession</b>	NP_003225.2
<b>Calculated Molecular Weight</b>	77.4 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Immobilized human CD71 at 10 µg/ml (100 µl/well) can bind human Transferrin. The EC50 of human Transferrin is 5.6 ng/mL.

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 85 % as determined by reducing SDS-PAGE.

### 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 thepeptidase M28 family and M28B subfamily. TFRC / CD71 is a membrane-bound

### For Research Use Only

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.