

## ARG70243 Human CD71 / Transferrin Receptor recombinant protein (ECD) (His-tagged, C-ter)

Package: 100 µg

Store at: -20°C

### Summary

Product Description	HEK293 expressed, His-tagged (C-ter) Human CD71 / Transferrin Receptor recombinant protein (ECD).
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	CD71 / Transferrin Receptor (ECD)
Species	Human
A.A. Sequence	Cys89 - Phe760 of Human CD71 / Transferrin Receptor (NP_001121620.1) with 6X His tag at the C-terminus.
Expression System	HEK293
Alternate Names	TFR1; CD antigen CD71; CD71; T9; p90; TR; Trfr; Transferrin receptor protein 1; TRFR; sTfR; TfR1; TfR; TFR

### Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant human Transferrin at 2 µg/ml (100 µl/well) can bind Recombinant human TfR with a linear range of 4-17 ng/ml.
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### Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 97% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol	TFRC
Gene Full Name	transferrin receptor
Function	Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the hereditary hemochromatosis

protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240).

(Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus. [UniProt]

**Calculated Mw**

85 kDa

**PTM**

N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated.

Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).

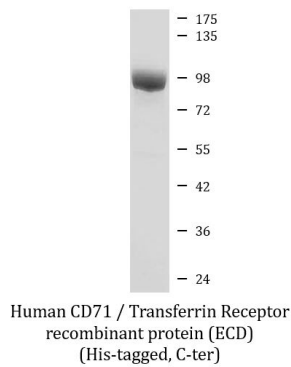
Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation. [UniProt]

**Cellular Localization**

Cell membrane; Single-pass type II membrane protein. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Transferrin receptor protein 1, serum form: Secreted. [UniProt]

## Images

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ARG70243 Human CD71 / Transferrin Receptor recombinant protein (ECD) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70243 Human CD71 / Transferrin Receptor recombinant protein (ECD) (His-tagged, C-ter).