

ARG70243

Human CD71 / Transferrin Receptor recombinant protein (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.
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	CD71 / Transferrin Receptor
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.

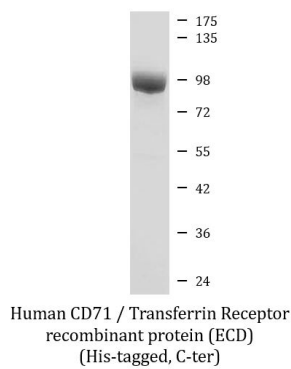
Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).

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



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).