

# Product datasheet

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# ARG82585 Human CD71 / Transferrin Receptor ELISA Kit

Package: 96 wells Store at: 4°C

### **Summary**

**Product Description** ARG82585 Human CD71 / Transferrin Receptor ELISA Kit is an Enzyme Immunoassay kit for the

quantification of Human CD71 / Transferrin Receptor in serum, plasma and cell culture supernatants.

Tested Reactivity Hu

Tested Application ELISA

Specificity This kit could assay both natural and recombinant Human CD71 / Transferrin Receptor.

No significant cross-reactivity or interference was observed in the following samples:

Human: Holo-Tramsfected, errin, IFN gamma, IL1 beta, IL2, IL4, IL5, IL6, IL8, IL10, IL12, IL17A, IL18, IL21,

IL22, IL23, MCP1, TFR2, TGF beta 1, TNF alpha and VEGF.

Mouse: GM-CSF, IFN gamma, IL1 beta, IL2, IL4, IL6, IL10, IL17A, TFR and TNF alpha.

Rat: IFN gamma, IL1 beta, IL4, IL6, IL10 and TNF alpha.

Target Name CD71 / Transferrin Receptor

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 7.8 pg/ml

Sample Type Serum, plasma and cell culture supernatants.

Standard Range 15.6 - 1000 pg/ml

Sample Volume  $100 \ \mu l$ 

Precision Intra-Assay CV: 1.9%

Inter-Assay CV: 2.8%

Alternate Names TFR1; CD antigen CD71; CD71; T9; p90; TR; Trfr; Transferrin receptor protein 1; TRFR; sTfR; TfR1; TfR;

TFR

## **Application Instructions**

Assay Time ~ 3.5 hours

#### **Properties**

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test

reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual

for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol TFRC

Gene Full Name transferrin receptor

Background

This gene encodes a cell surface receptor necessary for cellular iron uptake by the process of receptor-

mediated endocytosis. This receptor is required for erythropoiesis and neurologic development.

Multiple alternatively spliced variants have been identified. [provided by RefSeq, Sep 2015]

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 apotransferrinreceptor 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 heditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. [UniProt]

Highlight Related products:

CD71 antibodies; CD71 ELISA Kits; CD71 Duos / Panels;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

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.

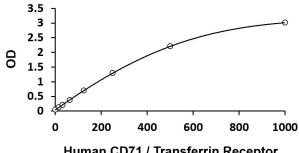
[UniProt]

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**



Human CD71 / Transferrin Receptor concentration (pg/ml)

ARG82585 Human CD71 / Transferrin Receptor ELISA Kit standard curve image

ARG82585 Human CD71 / Transferrin Receptor ELISA Kit results of a typical standard run with optical density reading at 450 nm.