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**Product Name: CD71 Rabbit Polyclonal Antibody****Catalog #: APRab08445**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	89kDa

**Antigen Information**

<b>Gene Name</b>	TFRC
<b>Alternative Names</b>	TFRC; Transferrin receptor protein 1; TR; TfR; TfR1; Trfr; T9; p90; CD antigen CD71
<b>Gene ID</b>	7037.0
<b>SwissProt ID</b>	P02786
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CD71/TfR. AA range:15-64

**Background**

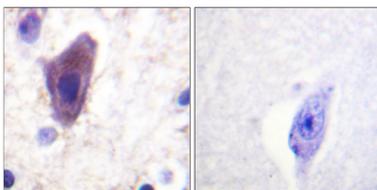
This gene encodes a cell surface receptor necessary for cellular iron uptake by the process of receptor-mediated endocytosis.

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 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.,induction: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.,miscellaneous:Canine and feline parvoviruses bind human and feline transferrin receptors and use these receptors to enter and infect cells.,miscellaneous:Serum transferrin receptor (sTfR) is used as a means of detecting erythropoietin (EPO) misuse by athletes and as a diagnostic test for anemia resulting from a number of conditions including rheumatoid arthritis, pregnancy, irritable bowel syndrome and in HIV patients.,PTM:N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated.,PTM:Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.,PTM:Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR),similarity:Belongs to the peptidase M28 family. M28B subfamily.,similarity:Contains 1 PA (protease associated) domain.,subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,subunit:Homodimer; disulfide-linked. Binds one transferrin or HFE molecule per subunit. Binds the HLA class II histocompatibility antigen, DR1. Interacts with SH3BP3. Interacts with Machupo arenavirus GPC.,

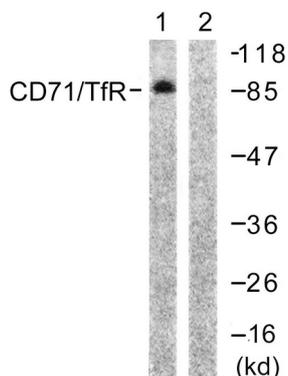
## Research Area

Protein\_Acetylation

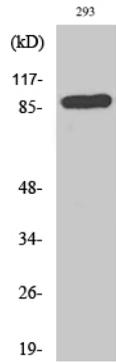
## Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using CD71/TfR Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with PMA 125ng/ml 30 ' , using CD71/TfR Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using CD71 Polyclonal Antibody diluted at 1:2000