
Product Name: CD71 Rabbit Polyclonal Antibody**Catalog #: APRab08446**

For research use only.

Summary

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

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	85kDa

Antigen Information

Gene Name	TFRC
Alternative Names	TFRC; Transferrin receptor protein 1; TR; TfR; TfR1; Trfr; T9; p90; CD71
Gene ID	7037.0
SwissProt ID	P02786
Immunogen	The antiserum was produced against synthesized peptide derived from the N-terminal region of human TFRC. AA range:101-150

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.,

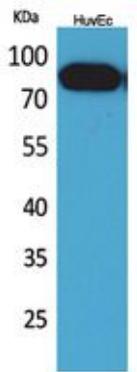
Research Area

Endocytosis;Hematopoietic cell lineage;

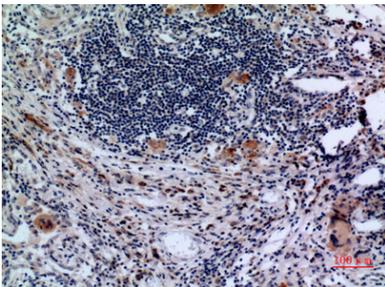
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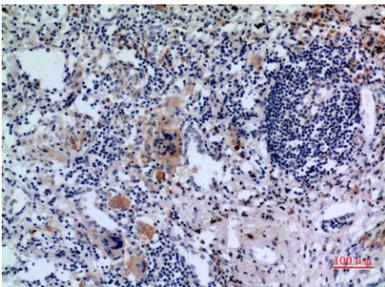
Western blot analysis of lysate from HUVEC cells, using TFRC Antibody.



Western Blot analysis of HuvEc cells using CD71 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100