

TFR1 Rabbit Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP13013
Host	Rabbit
Isotype	IgG
Size	100ul, 50ul, 20ul
Immunogen	Synthesized peptide derived from human TFR1
Mol wt	83600
Species reactivity	Human, Mouse
Clonality	Polyclonal
Recommended application	WB, ELISA
Concentration	1 mg/ml
Full name	TFR1
Synonyms	TFR1; Transferrin receptor protein 1; TR; TfR; TfR1; Trfr; T9; p90; CD antigen CD71; Transferrin receptor protein 1; serum form; sTfR;

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

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).|Belongs to the peptidase M28 family. M28B subfamily.|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.|

Recommended Dilution

WB: 1: 1000 - 1: 2000

ELISA: 1: 5000 - 1: 20000

Not yet tested in other applications.

Images

No images.

Storage

-20°C for 1 year

