

# Transferrin Receptor (CD71) Rabbit mAb [VY3i]

Cat NO. :A35137

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB IHC IP FC	Human,Mouse,R	P02786	90kDa	Rabbit	IgG	50ul,100ul,200ul
	at					

Applications detail:

Application

WB

1:1000-2000

IHC

The optimal dilutions should be determined by the end user

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Con	iua	ate:

UnConjugate

Form:

Liquid

sensitivity:

**Endogenous** 

**Purification**:

Affinity-chromatography

# Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human TFR

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

Tissue specificity:

# Subcellular location:

Cell membrane, Single-pass type II membrane protein. Melanosome.

Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes (PubMed:26214738). 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 heditary 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). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway (PubMed:26214738). When dietary levels of stearate (C18:0) are low, promotes activation of the JNK pathway, resulting in HUWE1-mediated ubiquitination and subsequent degradation of the mitofusin MFN2 and inhibition of mitochondrial fusion (PubMed:26214738). When dietary levels of stearate (C18:0) are high, TFRC stearoylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 (PubMed:26214738)..., (Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus...

#### **Validation Data:**

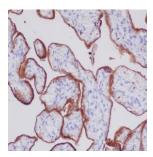
#### Transferrin Receptor (CD71) Rabbit mAb [VY3i] Images



Western blot (SDS PAGE) analysis of extracts from HeLa cell lysate. Using Transferrin Receptor (CD71) Rabbit mAb [VY3i]at dilution of 1:1000 incubated at 4°C over night.

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Immunohistochemical analysis of paraffin-embedded human placenta, .Using Transferrin Receptor (CD71) Rabbit mAb [VY3i] at dilution of 1:100 incubated at  $4^{\circ}$ C over night.Perform heat mediated antigen retrieval before commencing with IHC staining protocol.