

**Transferrin Receptor 1 Rabbit mAb**  
**Catalog # AP76195****Specification****Transferrin Receptor 1 Rabbit mAb - Product Information**

Application	WB, IP, ICC
Primary Accession	<a href="#">P02786</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	84871

**Transferrin Receptor 1 Rabbit mAb - Additional Information****Gene ID 7037****Other Names**

TFRC

**Dilution**

WB~~1/500-1/1000

IP~~N/A

ICC~~N/A

**Format**

50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.

**Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

**Transferrin Receptor 1 Rabbit mAb - Protein Information****Name** TFRC**Function**

Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes (PubMed:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>). 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. Positively regulates T and B cell proliferation through iron uptake (PubMed:<a href="http://www.uniprot.org/citations/26642240" target="\_blank">26642240</a>). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway (PubMed:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>). 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:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>). 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:<a href="http://www.uniprot.org/citations/26214738" target="\_blank">26214738</a>). Mediates uptake of NICOL1 into fibroblasts where it may regulate extracellular matrix production (By similarity).

#### Cellular Location

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 1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Transferrin Receptor 1 Rabbit mAb - Images



