

**Transferrin Receptor 1 Rabbit mAb**  
Catalog # AP78616**Specification**

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**Transferrin Receptor 1 Rabbit mAb - Product Information**

Application	WB, IHC-P, FC, IP
Primary Accession	<a href="#">P02786</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	84871

**Transferrin Receptor 1 Rabbit mAb - Additional Information**

Gene ID 7037

**Other Names**

TFRC

**Format**

Liquid

**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: [26214738](http://www.uniprot.org/citations/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 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: [26642240](http://www.uniprot.org/citations/26642240)). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway (PubMed: [26214738](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26214738)). When dietary levels of stearate (C18:0) are high, TFRC stearylates and inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 (PubMed: [26214738](http://www.uniprot.org/citations/26214738)). 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**