

Transferrin receptor 1 Antibody (N-Term)
Peptide-affinity purified goat antibody
Catalog # AF3935a

Specification

Transferrin receptor 1 Antibody (N-Term) - Product Information

Application	WB
Primary Accession	P02786
Other Accession	NP_003225.2 , 7037 , 22042 (mouse) , 64678 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	84871

Transferrin receptor 1 Antibody (N-Term) - Additional Information

Gene ID 7037

Other Names

Transferrin receptor protein 1, TR, TfR, TfR1, Trfr, T9, p90, CD71, Transferrin receptor protein 1, serum form, sTfR, TFRC

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Transferrin receptor 1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Transferrin receptor 1 Antibody (N-Term) - 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). 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 stearylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 (PubMed:26214738). Mediates uptake of NICOL1 into fibroblasts where it may regulate extracellular matrix production (By similarity).

Cellular Location

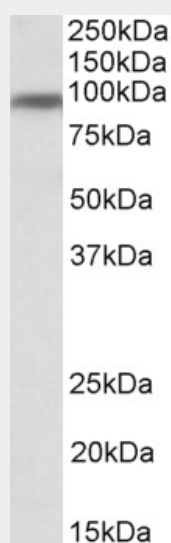
Cell membrane; Single-pass type II membrane protein Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Transferrin receptor 1 Antibody (N-Term) - 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 Antibody (N-Term) - Images



AF3935a (1 µg/ml) staining of Human Breast lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Transferrin receptor 1 Antibody (N-Term) - Background

Reported variants represent identical protein: NP_003225.2, NP_001121620.1.

Transferrin receptor 1 Antibody (N-Term) - References

Src regulates Tyr(20) phosphorylation of transferrin receptor-1 and potentiates breast cancer cell survival. Jian J, Yang Q, Huang X. J Biol Chem. 2011 Oct 14;286(41):35708-15. PMID: 21859709