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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, Cow**
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). 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).

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 Cytomety
- 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

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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