

CD71 / Transferrin Receptor Antibody
Rabbit Polyclonal Antibody
Catalog # ALS13248**Specification**

CD71 / Transferrin Receptor Antibody - Product Information

Application	WB
Primary Accession	P02786
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	85kDa KDa

CD71 / Transferrin Receptor Antibody - 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

Target/Specificity

Human and mouse CD71. Predicted cross-reactivity based on amino acid sequence homology: cat (86%), dogs (81%), pig (82%).

Reconstitution & Storage

Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions

CD71 / Transferrin Receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD71 / Transferrin Receptor Antibody - 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 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:<a

<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: <http://www.uniprot.org/citations/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: <http://www.uniprot.org/citations/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

Volume

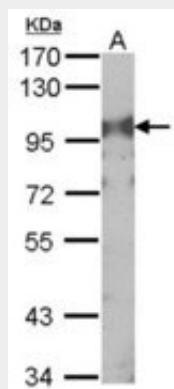
50 μ l

CD71 / Transferrin Receptor Antibody - 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](#)

CD71 / Transferrin Receptor Antibody - Images



Sample (30 μ g of whole cell lysate).

CD71 / Transferrin Receptor Antibody - Background

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CD71 / Transferrin Receptor Antibody - References

Schneider C.,et al.Nature 311:675-678(1984).

McClelland A.,et al.Cell 39:267-274(1984).

Evans P.,et al.Gene 199:123-131(1997).

Wheeler D.L.,et al.Thesis (1999), University of Iowa, United States.

Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.