

CD71 / Transferrin Receptor Antibody (aa31-47)

Rabbit Polyclonal Antibody Catalog # ALS11604

Specification

CD71 / Transferrin Receptor Antibody (aa31-47) - Product Information

Application IHC
Primary Accession P02786
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 85kDa KDa

CD71 / Transferrin Receptor Antibody (aa31-47) - 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

Amino acids 31 to 47 of human TFRC

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CD71 / Transferrin Receptor Antibody (aa31-47) is for research use only and not for use in diagnostic or therapeutic procedures.

CD71 / Transferrin Receptor Antibody (aa31-47) - 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

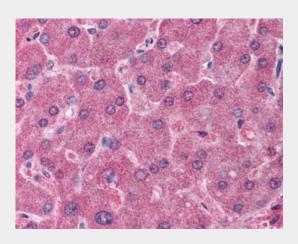
Cell membrane; Single-pass type II membrane protein Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

CD71 / Transferrin Receptor Antibody (aa31-47) - 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

CD71 / Transferrin Receptor Antibody (aa31-47) - Images



Anti-Transferrin Receptor antibody IHC of human liver.

CD71 / Transferrin Receptor Antibody (aa31-47) - Background

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CD71 / Transferrin Receptor Antibody (aa31-47) - References

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





Tel: 858.875.1900 Fax: 858.875.1999

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.