

CD71 Antibody

Rabbit Monoclonal Antibody (Mab)

Catalog # AD80066

Product Information

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|-------------------|------------------------|
| Application | IHC |
| Primary Accession | P02786 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Monoclonal |
| Isotype | IgG |
| Clone Names | 587B2H6 |
| Calculated MW | 84871 |

Additional Information

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|-------------|----------------------------------------------------------------------------------------------------------------------------|
| Gene ID | 7037 |
| Gene Name | TFRC |
| Other Names | Transferrin receptor protein 1, TR, TfR, TfR1, Trfr, T9, p90, CD71, Transferrin receptor protein 1, serum form, sTfR, TFRC |
| Dilution | IHC~~Ready-to-use |
| Storage | Maintain refrigerated at 2-8°C. |
| Precautions | CD71 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| 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: 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 |

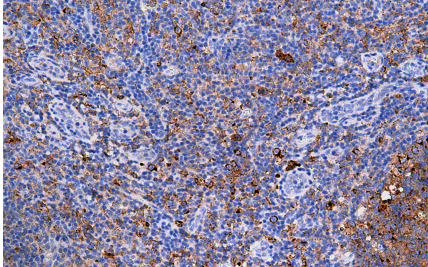
stearate (C18:0) are high, TFRC stearylation inhibits activation of the JNK pathway and thus degradation of the mitofusin MFN2 (PubMed:[26214738](#)). Mediates uptake of NICOL1 into fibroblasts where it may regulate extracellular matrix production (By similarity).

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

Images



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using AD80066 performed on the Abcarta® FAIP-48 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems(Abcepta:ADR005) was used as the secondary antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.