

Transferrin Receptor (CD71) Antibody
Rabbit mAb
Catalog # AP91049**Specification**

Transferrin Receptor (CD71) Antibody - Product Information

| | |
|--|------------------------|
| Application | WB, IHC, FC, IP |
| Primary Accession | P02786 |
| Reactivity | Rat |
| Clonality | Monoclonal |
| Other Names | |
| CD71 antigen; T9; TFRC; TR; Tfr1; Transferrin receptor protein 1; Trfr; p90; | |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 84871 Da |

Transferrin Receptor (CD71) Antibody - Additional Information

| | |
|------------------------------|--|
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human TFR |
| Description | Binds the telomeric double-stranded TTAGGG repeat and negatively regulates telomere length. Involved in the regulation of the mitotic spindle. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

Transferrin Receptor (CD71) 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: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

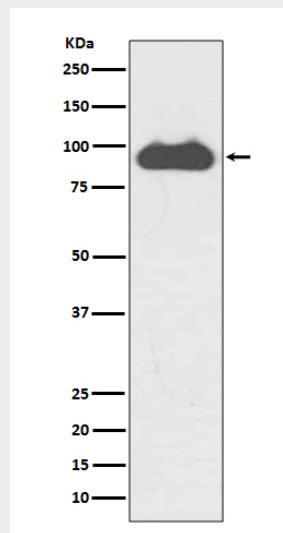
Cell membrane; Single-pass type II membrane protein Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Transferrin Receptor (CD71) 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](#)

Transferrin Receptor (CD71) Antibody - Images



Western blot analysis of Transferrin Receptor (CD71) expression in HeLa cell lysate.