

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS17689**Specification**

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) - Product Information

Application	WB, IHC-P, E
Primary Accession	P02786
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Calculated MW	84871

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) - Additional Information**Gene ID** 7037**Alias Symbol** **TFRC****Other Names**

TFRC, CD71, TFR1, TRFR, TFR, TR, CD71 antigen, p90, T9, Transferrin receptor, Transferrin receptor protein 1

Target/Specificity

Human Transferrin Receptor

Reconstitution & Storage

Protein A purified

Precautions

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) - Protein Information**Name** TFRC**Function**

Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes (PubMed:[26214738](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) - 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](#)

Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) - Images