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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). 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

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 Cytomety
- Cell Culture

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