

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

Mouse Anti Human Monoclonal Antibody  
Catalog # ALS17689

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P02786</a>
<b>Predicted</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2b,k
<b>Clone Names</b>	1E6
<b>Calculated MW</b>	84871
<b>Concentration (mg/ml)</b>	0.36 mg/ml

## Additional Information

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<b>Gene ID</b>	7037
<b>Alias Symbol</b>	TFRC
<b>Other Names</b>	TFRC, CD71, TFR1, TRFR, TFR, TR, CD71 antigen, p90, T9, Transferrin receptor, Transferrin receptor protein 1
<b>Target/Specificity</b>	Human Transferrin Receptor
<b>Reconstitution &amp; Storage</b>	Protein A purified
<b>Precautions</b>	Anti-CD71 / Transferrin Receptor Antibody (clone 1E6) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	TFRC
<b>Function</b>	Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes (PubMed: <a href="#">26214738</a> ). 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: <a href="#">26642240</a> ). Acts as a lipid sensor that regulates mitochondrial fusion by regulating activation of the JNK pathway (PubMed: <a href="#">26214738</a> ). 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

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