

Apotransferrin Antibody

Rabbit Polyclonal Antibody Catalog # ABV11484

Specification

Apotransferrin Antibody - Product Information

Application WB
Primary Accession P02786

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 84871

Apotransferrin Antibody - Additional Information

Gene ID 7037

Positive Control Western blot: Human serum, Mouse muscle

lysate, Rat kidney lysate, Human

Apotransferrin

Western blot: 1-4 μg

Application & Usage **Other Names** Siderophilin, TRF

Target/Specificity
Apotransferrin

Antibody Form

Liquid

Appearance Colorless liquid

Formulation

100 μg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20°C

Background Descriptions

Precautions

Apotransferrin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Apotransferrin 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 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

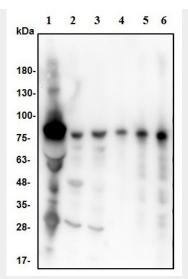
Apotransferrin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Apotransferrin Antibody - Images





Western blot with Apotransferrin antibody: Lane 1: 20 μ g Human serum; Lane 2: 22 μ g Mouse muscle lysate. Lane 3: 60 μ g Rat kidney lysate. Lane 4: 2 μ g Human Apotransferrin; Lane 5: 10 μ g Human Apotransferrin; Lane 6: 50 μ g Human Apotransferrin;

Apotransferrin Antibody - Background

Apotransferrin is the ion-free form of Transferrin. Like transferrin, apotransferrin has a physiological role in the transportation and distribution of iron among the body organs. It is also an important transport factor used in defined culture media.