

Anti-Transferrin Receptor 2 Antibody

Catalog # ABO11205

Specification

Anti-Transferrin Receptor 2 Antibody - Product Information

ApplicationWBPrimary AccessionQ9JKX3HostRabbitReactivityMouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Transferrin receptor protein 2(TFR2) detection. Tested with WB in Mouse:Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Transferrin Receptor 2 Antibody - Additional Information

Gene ID 50765

Other Names Transferrin receptor protein 2, TfR2, Tfr2, Trfr2

Calculated MW 88402 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Mouse, Rat

Subcellular Localization Cell membrane; Single-pass type II membrane protein.

Tissue Specificity Predominantly expressed in liver. Also expressed in kidney, spleen, brain, lung, heart and muscle with very low expression in kidney, muscle and heart.

Protein Name Transferrin receptor protein 2

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of mouse Transferrin Receptor 2(1-15aa MEQRWGLLRRVQQWS), different from the related rat sequence by one amino acid.

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-Transferrin Receptor 2 Antibody - Protein Information

Name Tfr2

Synonyms Trfr2

Function

Mediates cellular uptake of transferrin-bound iron in a non- iron dependent manner. May be involved in iron metabolism, hepatocyte function and erythrocyte differentiation.

Cellular Location

Cell membrane; Single-pass type II membrane protein

Tissue Location

Predominantly expressed in liver. Also expressed in kidney, spleen, brain, lung, heart and muscle with very low expression in kidney, muscle and heart

Anti-Transferrin Receptor 2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Transferrin Receptor 2 Antibody - Images





Anti-Transferrin Receptor 2 antibody, ABO11205, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Mouse Liver Tissue Lysate

Anti-Transferrin Receptor 2 Antibody - Background

TFR2(Transferrin receptor protein 2), is a protein that in humans is encoded by the TFR2 gene. This gene is a member of the transferrin receptor-like family and encodes a single-pass type II membrane protein with a protease associated(PA) domain, an M28 peptidase domain and a transferrin receptor-like dimerization domain. By radiation hybrid analysis, Kawabata et al.(1999) mapped the TFR2 gene to chromosome 7q22.The majority of hepatic iron uptake under normal circumstances is transferrin-mediated. However, expression of TFRC in hepatocytes, as in other nonreticuloendothelial cell types, is downregulated in response to increased intracellular iron. As a consequence, TFRC expression in liver is undetectable in hereditary hemochromatosis patients with hepatic iron loading. Nonetheless, hepatic iron loading in hemochromatosis patients is progressive. Fleming et al.(2000) provided support for a mechanism that involves the uptake of transferrin-bound iron by TFR2.