

For Research Use Only

Transferrin Receptor 2/TFR2 Polyclonal antibody

Catalog Number: 32381-1-AP



Basic Information

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|---|--|--|
| Catalog Number: 32381-1-AP | GenBank Accession Number: BC142630 | Purification Method: Antigen affinity Purification |
| Concentration: 400 ug/ml | GeneID (NCBI): 7036 | Recommended Dilutions: WB 1:1000-1:4000 IHC 1:200-1:800 |
| Source: Rabbit | UNIPROT ID: Q9UP52 | |
| Isotype: IgG | Full Name: transferrin receptor 2 | |
| Immunogen Catalog Number: AG37959 | Calculated MW: 801 aa, 89 kDa | |
| | Observed MW: 88-97 kDa | |

Applications

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| Tested Applications: WB, IHC, ELISA | Positive Controls: WB : mouse liver tissue, rat liver tissue IHC : mouse liver tissue, |
| Species Specificity: human, mouse, rat | |

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Transferrin Receptor 2 (TFR2) is a type II transmembrane glycoprotein that plays a crucial role in iron homeostasis. It is highly homologous to Transferrin Receptor 1 (TFR1) and is primarily expressed in the liver and erythroid precursor cells. TFR2 is involved in the regulation of hepcidin, a hormone that controls iron absorption and distribution in the body. It helps mediate the cellular uptake of iron-bound transferrin, although its affinity for iron is lower than that of TFR1 (PMID: 24658816). It is more involved in sensing iron levels and regulating hepcidin expression rather than direct iron uptake. TFR2 is predominantly expressed in hepatocytes (liver cells) and erythroid precursors (cells that give rise to red blood cells). It is also found in the enterocytes of the small intestine (PMID: 29969719). In the liver, TFR2 acts as a sensor for circulating iron-bound transferrin and helps regulate hepcidin production. Hepcidin, in turn, controls iron absorption from the diet and iron release from macrophages. The molecular weight of TFR2 is 88 kDa, its observed molecular weight is 88-97 kDa.

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

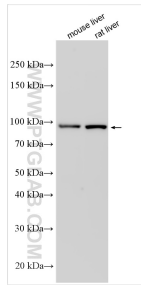
T: 4006900926

E: Proteintech-CN@ptglab.com

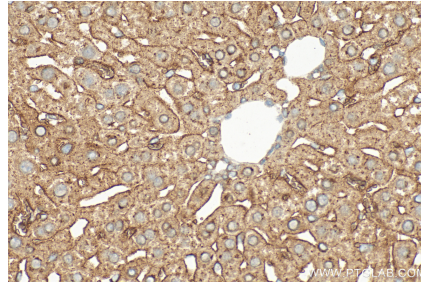
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 32381-1-AP (TFR2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 32381-1-AP (Transferrin Receptor 2/TFR2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).