abcam

Product datasheet

Anti-Transferrin Receptor 2/TFR2 antibody ab80194

★★★★★ 32 Abreviews 5 References 3 Images

Overview

Product name Anti-Transferrin Receptor 2/TFR2 antibody

Description Rabbit polyclonal to Transferrin Receptor 2/TFR2

Host species Rabbit

Specificity From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

Tested applications Suitable for: IHC-P, IHC-Fr, WB

Unsuitable for: ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human Transferrin Receptor 2/TFR2 aa 150-250 conjugated to keyhole

limpet haemocyanin. The exact sequence is proprietary.

(Peptide available as ab87613)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

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scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab80194 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 5 - 10 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-Fr	★★★★ <u>(10)</u>	Use at an assay dependent concentration.
WB	★★★★ (20)	Use a concentration of 1 µg/ml. Detects a band of approximately 88 kDa (predicted molecular weight: 88 kDa). Abcam recommends using 5% BSA as the blocking agent.

Application notes Is unsuitable for ICC/IF.

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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.

Tissue specificity Predominantly expressed in liver. While the alpha form is also expressed in spleen, lung, muscle,

prostate and peripheral blood mononuclear cells, the beta form is expressed in all tissues tested.

albeit weakly.

Involvement in disease Defects in TFR2 are a cause of hemochromatosis type 3 (HFE3) [MIM:604250]. HFE3 is a

disorder of iron hemostasis resulting in iron overload and has a phenotype indistinguishable from

that of hereditary hemochromatosis (HH). HH is characterized by abnormal intestinal iron

absorption and progressive increase of total body iron, which results in midlife in clinical

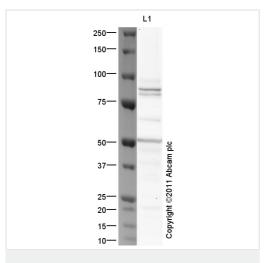
complications including cirrhosis, cardiopathy, diabetes, endocrine dysfunctions, arthropathy, and susceptibility to liver cancer. Since the disease complications can be effectively prevented by regular phlebotomies, early diagnosis is most important to provide a normal life expectancy to the

affected subjects.

Sequence similarities Belongs to the peptidase M28 family. M28B subfamily.

Cellular localizationCell membrane and Cytoplasm. Lacks the transmembrane domain. Probably intracellular.

Images



Western blot - Anti-Transferrin Receptor 2/TFR2 antibody (ab80194)

Anti-Transferrin Receptor 2/TFR2 antibody (ab80194) at 1 μ g/ml + Human Liver Tissue Lysate at 20 μ g

Secondary

Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 88 kDa **Observed band size:** 89 kDa

Additional bands at: 50 kDa, 98 kDa (possible glycosylated form). We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

All lanes: Anti-Transferrin Receptor 2/TFR2 antibody (ab80194) at

1/1000 dilution

All lanes: Rat liver whole tissue lysate

Secondary

All lanes: HRP-conjugated goat anti-rabbit IgG polyclonal at

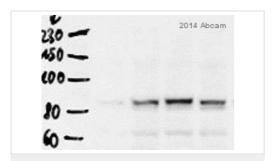
1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

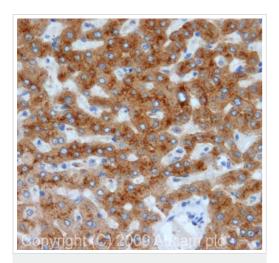
Predicted band size: 88 kDa **Observed band size:** 88 kDa

Exposure time: 10 minutes



Western blot - Anti-Transferrin Receptor 2/TFR2 antibody (ab80194)

This image is courtesy of an anonymous Abreview



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Transferrin Receptor 2/TFR2 antibody (ab80194)

IHC image of Transferrin staining in human normal liver formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pretreated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab80194, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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