

## Product datasheet

# Anti-Transferrin antibody [EPR20149-224] ab277635

Recombinant RabMAb

8 Images

### Overview

<b>Product name</b>	Anti-Transferrin antibody [EPR20149-224]
<b>Description</b>	Rabbit monoclonal [EPR20149-224] to Transferrin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, ICC, IP, Flow Cyt, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment within Human Transferrin aa 1-350. The exact sequence is proprietary. Database link: <a href="#">P02787</a>
<b>Positive control</b>	WB: Human breast, kidney, testis and liver tissue lysates; Human plasma. IHC-P: Human liver and testis tissue. ICC: HepG2 cells. Flow cyt: HepG2 cells. IP: Human liver tissue lysate.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20149-224
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab277635** 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		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC		1/100.
IP		1/30.
Flow Cyt		1/500.
WB		1/1000. Detects a band of approximately 77 kDa (predicted molecular weight: 77 kDa).

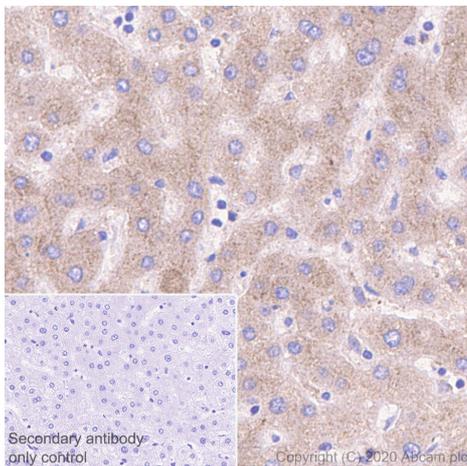
## Target

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<b>Function</b>	Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further role in stimulating cell proliferation.
<b>Tissue specificity</b>	Expressed by the liver and secreted in plasma.
<b>Involvement in disease</b>	Defects in TF are the cause of atransferrinemia (ATRAF) [MIM:209300]. Atransferrinemia is rare autosomal recessive disorder characterized by iron overload and hypochromic anemia.
<b>Sequence similarities</b>	Belongs to the transferrin family. Contains 2 transferrin-like domains.
<b>Cellular localization</b>	Secreted.

## Images

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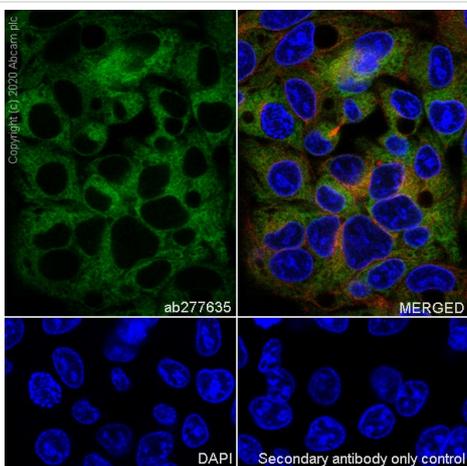


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Transferrin antibody [EPR20149-224] (ab277635)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Transferrin with ab277635 at 1/100 (5.04 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on human liver. The section was incubated with ab277635 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

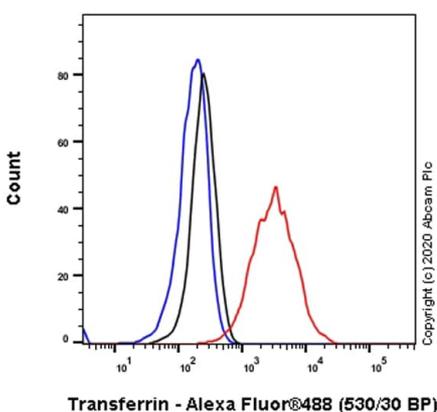
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunocytochemistry - Anti-Transferrin antibody [EPR20149-224] (ab277635)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 cells labelling Transferrin with ab277635 at 1/100 (5.04 ug/ml) dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in HepG2 cell line. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

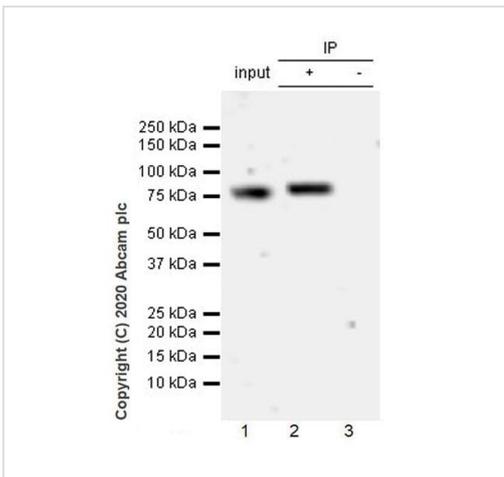
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Flow Cytometry - Anti-Transferrin antibody [EPR20149-224] (ab277635)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling Transferrin with ab277635 at 1/500 dilution (0.1 ug)(Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Transferrin antibody  
[EPR20149-224] (ab277635)

Transferrin was immunoprecipitated from 0.35 mg Human liver tissue lysate with ab277635 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab277635 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

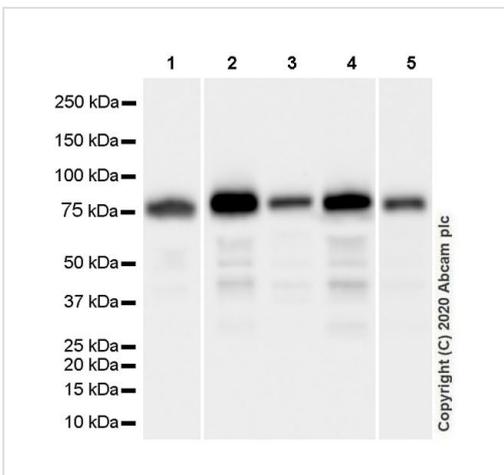
**Lane 1:** Human liver tissue lysate 10 ug

**Lane 2:** ab277635 IP in Human liver tissue lysate

**Lane 3:** Rabbit monoclonal IgG (ab172730) instead of ab277635 in Human liver tissue lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 3 minutes.



Western blot - Anti-Transferrin antibody [EPR20149-224] (ab277635)

**All lanes :** Anti-Transferrin antibody [EPR20149-224] (ab277635) at 1/1000 dilution

**Lane 1 :** Human plasma at 20 µl

**Lane 2 :** Human breast tissue lysate at 20 µg

**Lane 3 :** Human kidney tissue lysate at 20 µg

**Lane 4 :** Human testis tissue lysate at 20 µg

**Lane 5 :** Human liver tissue lysate at 20 µg

### Secondary

**Lane 1 :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Lanes 2-5 :** VeriBlot for IP secondary antibody(HRP)(ab131366) at 1/1000 dilution

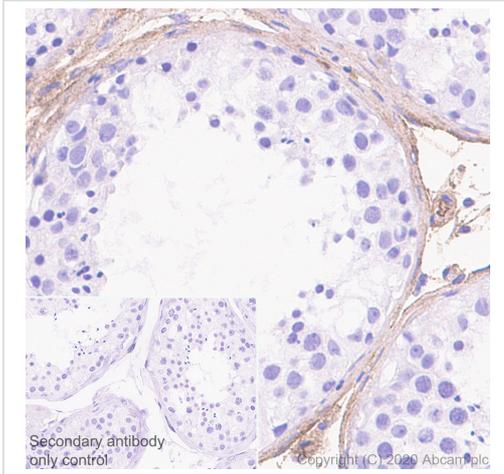
**Predicted band size:** 77 kDa

**Observed band size:** 77 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

Exposure times: Lane 1-4: 3.25 seconds

Lane 5: 15 seconds.

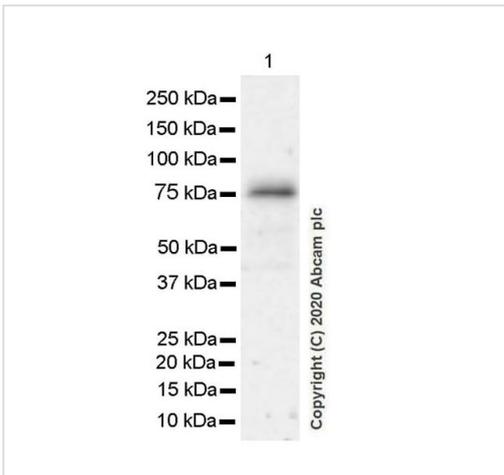


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Transferrin antibody [EPR20149-224] (ab277635)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling Transferrin with ab277635 at 1/100 (5.04 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on stromal cells of human testis. The section was incubated with ab277635 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-Transferrin antibody [EPR20149-224] (ab277635)

Anti-Transferrin antibody [EPR20149-224] (ab277635) at 1/1000 dilution + HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate at 20 µg

**Secondary**

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

**Predicted band size:** 77 kDa

**Observed band size:** 77 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

This blot was developed using a higher sensitivity ECL substrate.

Exposure time: 3 minutes.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Transferrin antibody [EPR20149-224]  
(ab277635)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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