

Product datasheet

Anti-RBP4 antibody [EPR18020-115] **ab188230**

Recombinant **RabMAb**

[4 References](#) [7 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-RBP4 antibody [EPR18020-115] |
| Description | Rabbit monoclonal [EPR18020-115] to RBP4 |
| Host species | Rabbit |
| Tested applications | Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP |
| Species reactivity | Reacts with: Mouse, Rat |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Mouse kidney tissue lysate and serum; Rat kidney tissue lysate; Hepa1-6 whole cell lysate. IP: Hepa1-6 whole cell lysate. IHC-P: Mouse and rat liver tissues. ICC/IF: Hepa1-6 cells. Flow Cyt (intra): Hepa1-6 cells. |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> |

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 long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR18020-115 |

Isotype

IgG

Applications

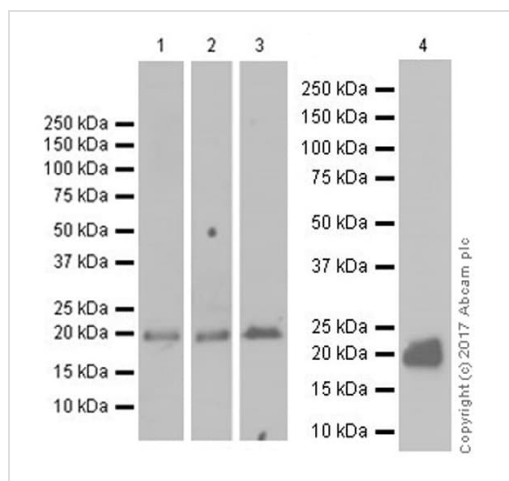
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab188230 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|------------------|-----------|--|
| Flow Cyt (Intra) | | 1/500. |
| WB | | 1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 23 kDa). |
| IHC-P | | 1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| ICC/IF | | 1/500. |
| IP | | 1/30. |

Target

| | |
|-------------------------------|---|
| Function | Delivers retinol from the liver stores to the peripheral tissues. In plasma, the RBP-retinol complex interacts with transthyretin, this prevents its loss by filtration through the kidney glomeruli. |
| Involvement in disease | Defects in RBP4 are a cause of retinol-binding protein deficiency (RBP deficiency) [MIM:180250]. This condition causes night vision problems. It produces a typical 'fundus xerophthalmicus', featuring a progressed atrophy of the retinal pigment epithelium. |
| Sequence similarities | Belongs to the calycin superfamily. Lipocalin family. |
| Cellular localization | Secreted. |

Images



Western blot - Anti-RBP4 antibody [EPR18020-115] (ab188230)

All lanes : Anti-RBP4 antibody [EPR18020-115] (ab188230) at 1/1000 dilution

Lane 1 : Mouse serum

Lane 2 : Mouse kidney tissue lysate

Lane 3 : Hepa1-6 (mouse hepatoma epithelial cell line) whole cell lysate

Lane 4 : Rat kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

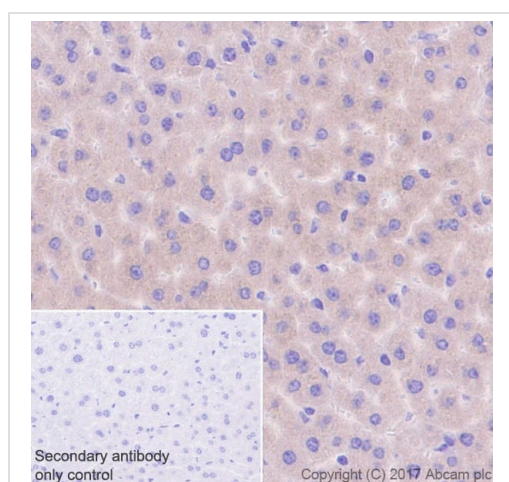
Developed using the ECL technique.

Predicted band size: 23 kDa

Observed band size: 21 kDa

Exposure times: Lanes 1, 2 and 4: 1 minute; Lane 3: 30 seconds.

Blocking/dilution buffer: 5% NFDM/TBST.

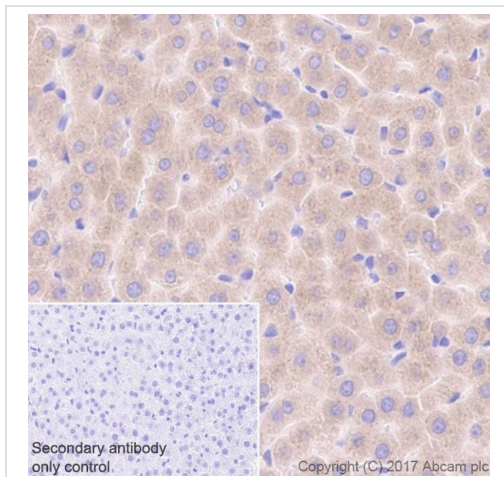


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBP4 antibody [EPR18020-115] (ab188230)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling RBP4 with ab188230 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on hepatocytes of mouse liver (PMID: 19624771; PMID: 21324757) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

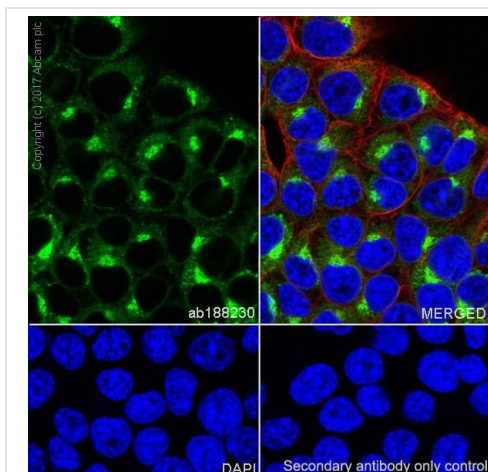


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RBP4 antibody [EPR18020-115] (ab188230)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling RBP4 with ab188230 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on hepatocytes of rat liver (PMID: 19624771; PMID: 21324757) is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

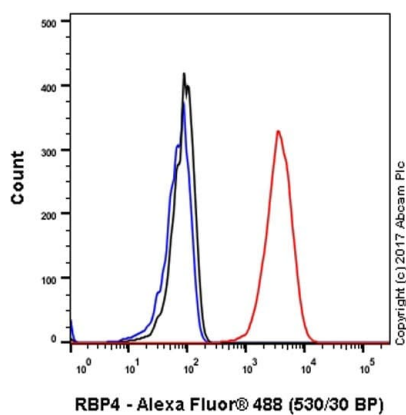


Immunocytochemistry/ Immunofluorescence - Anti-RBP4 antibody [EPR18020-115] (ab188230)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hepa1-6 (mouse hepatoma epithelial cell line) cells labeling RBP4 with ab188230 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on Hepa1-6 cells.

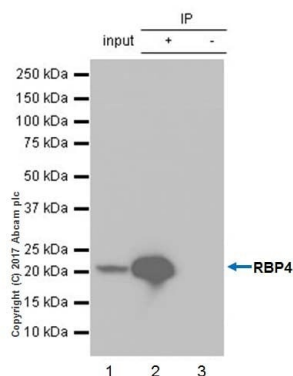
The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-RBP4 antibody
[EPR18020-115] (ab188230)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized Hepa1-6 (mouse hepatoma epithelial cell line) cell line labeling RBP4 with ab188230 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor®488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-RBP4 antibody
[EPR18020-115] (ab188230)

RBP4 was immunoprecipitated from 0.35 mg of Hepa1-6 (mouse hepatoma epithelial cell line) whole cell lysate with ab188230 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab188230 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: Hepa1-6 whole cell lysate 10 µg (Input).

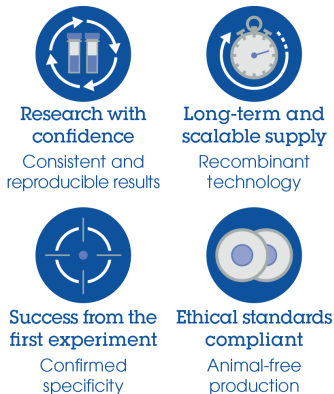
Lane 2: ab188230 IP in Hepa1-6 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab188230 in Hepa1-6 whole cell lysate.

Exposure time: 2 seconds.

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

Why choose a recombinant antibody?



Anti-RBP4 antibody [EPR18020-115] (ab188230)

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