

Product datasheet

Anti-C4 binding protein/C4BPB antibody [EPR17101] ab199430

Recombinant RabMAb

[1 References](#) [9 Images](#)

Overview

Product name	Anti-C4 binding protein/C4BPB antibody [EPR17101]
Description	Rabbit monoclonal [EPR17101] to C4 binding protein/C4BPB
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, IP, ICC/IF
Species reactivity	Reacts with: Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human plasma and human ovary cancer cell extracts. Human serum. Rat plasma. IHC-P: Human hepatocellular carcinoma and human bladder carcinoma tissue. Rat liver tissue. ICC/IF: HepG2 cells. IP: Human serum.
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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR17101
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab199430 in the following tested applications.

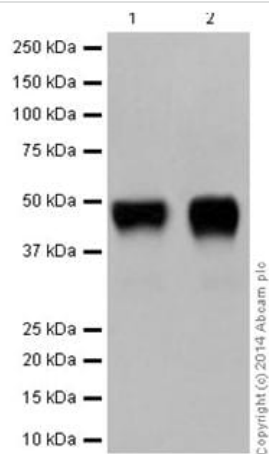
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 45 kDa (predicted molecular weight: 28 kDa).
IP		1/80.
ICC/IF		1/250.

Target

Function	Controls the classical pathway of complement activation. It binds as a cofactor to C3b/C4b inactivator (C3bINA), which then hydrolyzes the complement fragment C4b. It also accelerates the degradation of the C4bC2a complex (C3 convertase) by dissociating the complement fragment C2a. It also interacts with anticoagulant protein S and with serum amyloid P component. The beta chain binds protein S.
Sequence similarities	Contains 3 Sushi (CCP/SCR) domains.
Cellular localization	Secreted.

Images



Western blot - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

All lanes : Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430) at 1/1000 dilution

Lane 1 : Human plasma

Lane 2 : Human ovary cancer extract.

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

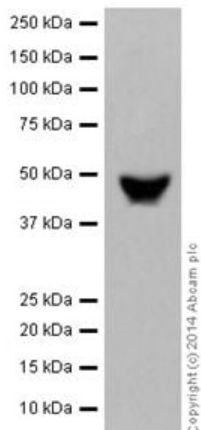
Predicted band size: 28 kDa

Observed band size: 45 kDa

Exposure time: 1 minute

Blocking/dilution buffer: 5% NFDm/TBST.

The observed MW is consistent with what has been described in the literature (PMID: 2300577)



Western blot - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430) at 1/10000 dilution + Human serum at 20 µg

Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

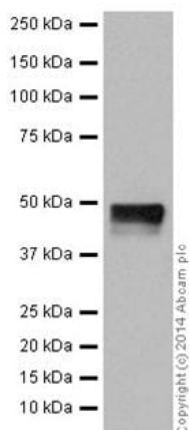
Predicted band size: 28 kDa

Observed band size: 45 kDa

Exposure time: 1 minute

Blocking/dilution buffer: 5% NFDm/TBST.

The observed MW is consistent with what has been described in the literature (PMID: 2300577)



Western blot - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)
at 1/1000 dilution + Rat plasma at 10 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

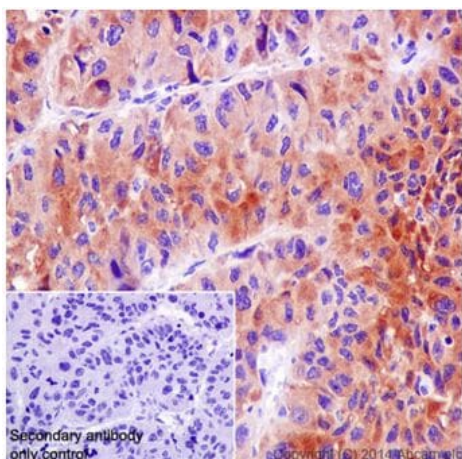
Predicted band size: 28 kDa

Observed band size: 45 kDa

Exposure time: 30 seconds

Blocking/dilution buffer: 5% NFDM/TBST.

The observed MW is consistent with what has been described in the literature (PMID: 2300577)

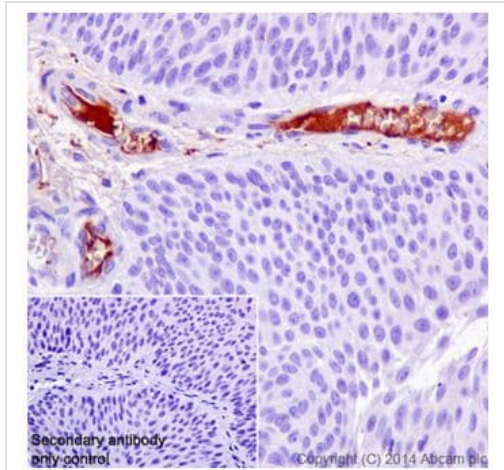


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling C4 binding protein/C4BPB with ab199430 at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasm staining on Human hepatocellular carcinoma tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)).

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

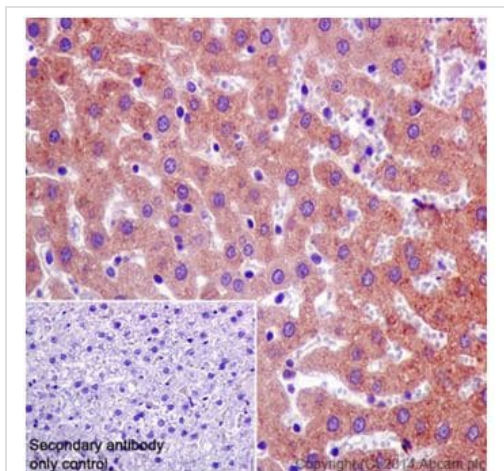


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Immunohistochemical analysis of paraffin-embedded Human bladder carcinoma tissue labeling C4 binding protein/C4BPB with ab199430 at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Plasma staining on Human bladder carcinoma tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)).

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

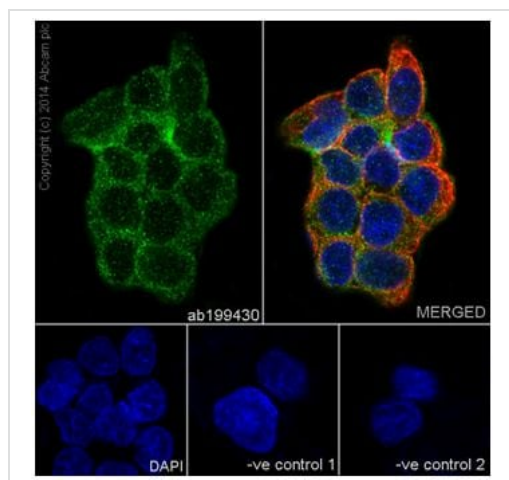


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling C4 binding protein/C4BPB with ab199430 at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasm staining on rat liver tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)).

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



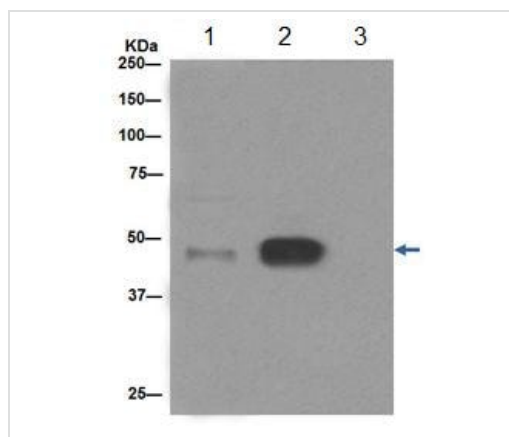
Immunocytochemistry/ Immunofluorescence - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling C4 binding protein/C4BPB with ab199430 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasm staining on HepG2 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution and [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1 - ab199430 at 1/250 dilution followed by [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2. - [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution followed by [ab150077](#) (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Immunoprecipitation - Anti-C4 binding protein/C4BPB antibody [EPR17101] (ab199430)

C4 binding protein/C4BPB was immunoprecipitated from 1mg of Human serum with ab199430 at 1/80 dilution. Western blot was performed from the immunoprecipitate using ab199430 at 1/10000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution. Lane 1: Human serum 10 µg. Lane 2: Human serum following immunoprecipitation. Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab199430 in Human serum.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure: 10 seconds.

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-C4 binding protein/C4BPB antibody
[EPR17101] (ab199430)

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