


Product datasheet

Anti-FABP5 antibody ab84028

1 Abreviews 4 References 4 Images

Overview

Product name	Anti-FABP5 antibody
Description	Rabbit polyclonal to FABP5
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, IP, WB
Species reactivity	Reacts with: Human Predicted to work with: Sheep, Cow, Pig 
Immunogen	Synthetic peptide corresponding to Human FABP5 aa 1-100 conjugated to keyhole limpet haemocyanin. (Peptide available as ab94388)
Positive control	WB: HeLa, PC-3, HepG2 and A431 whole cell lysates; Skin tissue lysate. ICC/IF: HeLa cells.
General notes	This product was previously labelled as Fatty Acid Binding Protein 5

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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 agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab84028** in the following tested applications.

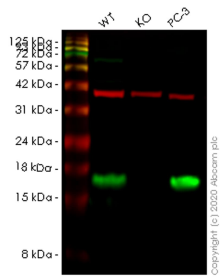
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		Use a concentration of 1 µg/ml.
IP		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 16 kDa (predicted molecular weight: 15 kDa).

Target

Function	High specificity for fatty acids. Highest affinity for C18 chain length. Decreasing the chain length or introducing double bonds reduces the affinity. May be involved in keratinocyte differentiation.
Tissue specificity	Keratinocytes; highly expressed in psoriatic skin.
Sequence similarities	Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.
Domain	Forms a beta-barrel structure that accommodates the hydrophobic ligand in its interior.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-FABP5 antibody (ab84028)

All lanes : Anti-FABP5 antibody (ab84028) at 1/500 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : FABP5 knockout HeLa cell lysate

Lane 3 : PC-3 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

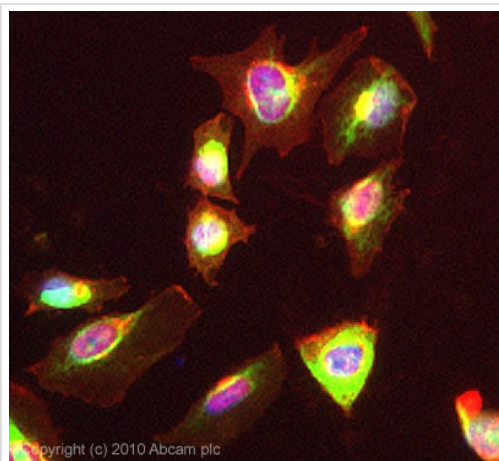
Predicted band size: 15 kDa

Observed band size: 17 kDa

[why is the actual band size different from the predicted?](#)

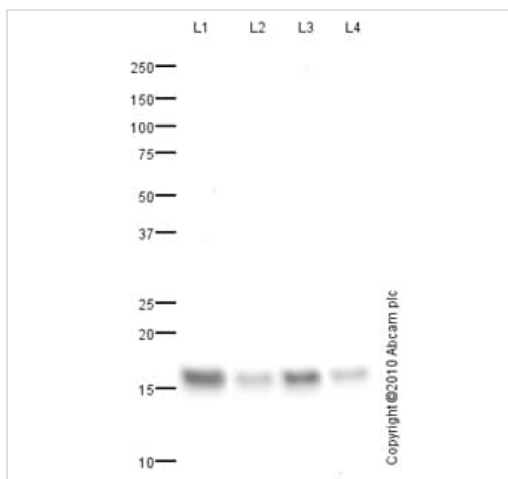
Lanes 1-3: Merged signal (red and green). Green - ab84028 observed at 17 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab84028 Anti-FABP5 antibody was shown to specifically react with FABP5 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265905](#) (knockout cell lysate [ab257431](#)) was used. Wild-type and FABP5 knockout samples were subjected to SDS-PAGE. ab84028 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-FABP5 antibody (ab84028)

ICC/IF image of ab84028 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab84028, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) Hek293, HepG2, MCF-7 cells at 5µg/ml, and in 100% Methanol fixed (5 min) HeLa, Hek293, HepG2, MCF-7 cells at 5µg/ml.



Western blot - Anti-FABP5 antibody (ab84028)

All lanes : Anti-FABP5 antibody (ab84028) at 1 µg/ml

Lane 1 : Human skin tissue lysate - total protein ([ab30166](#))

Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 4 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

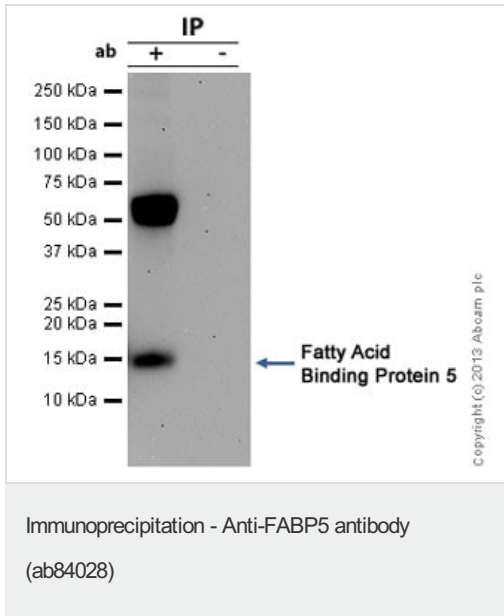
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 15 kDa

Observed band size: 16 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes



FABP5 was immunoprecipitated using 0.5mg A431 whole cell extract, 5µg of Rabbit polyclonal to and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, A431 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab84028.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 16kDa; FABP5.

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

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