abcam

Product datasheet

Anti-FABP5 antibody ab84028

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Overview

Product name Anti-FABP5 antibody

Description Rabbit polyclonal to FABP5

Host species Rabbit

Tested applications Suitable for: ICC/IF, 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 lystes; Skin tissue lysate. ICC/IF: HeLa cells.

General notesThe 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

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

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Clonality Polyclonal

Isotype ΙgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> 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.
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.

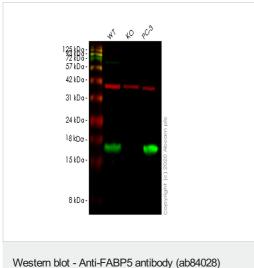
Tissue specificity Keratinocytes; highly expressed in psoriatic skin.

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



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.

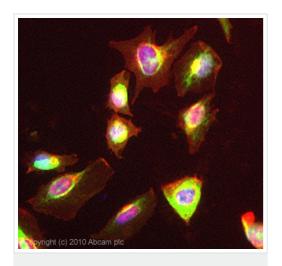
Secondary

All lanes: Goat anti-Rabbit lgG H&L (IRDye® 800CW)

preadsorbed (ab216773) at 1/10000 dilution

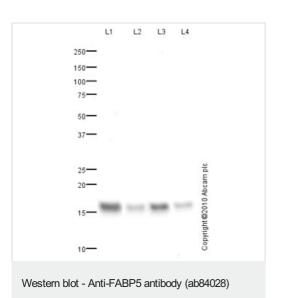
Predicted band size: 15 kDa Observed band size: 17 kDa **Lanes 1-3:** Merged signal (red and green). Green - ab84028 observed at 17 kDa. Red - loading control **ab8245** observed at 36 kDa.

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 (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 lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG 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.



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

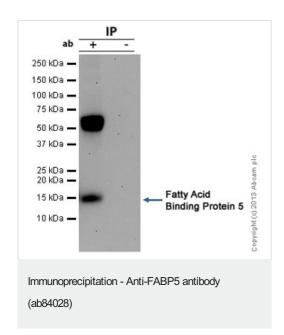
All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 15 kDa **Observed band size:** 16 kDa

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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