abcam

Product datasheet

Anti-FABP5 antibody [EPR22552-64] - BSA and Azide free ab255291





RabMAb



★★★☆☆ 1 Abreviews

7 Images

Overview

Product name Anti-FABP5 antibody [EPR22552-64] - BSA and Azide free

Description Rabbit monoclonal [EPR22552-64] to FABP5 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, IHC-P

Unsuitable for: ChIP, Flow Cyt or IP

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: MDA-MB-231, HeLa and PC-3 whole cell lysates; IHC-P: Human placenta, cerebral cortex

and skin tissue. ICC/IF: MDA-MB-231 cells.

General notes ab255291 is the carrier-free version of ab255276.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the

need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

Properties

Form

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR22552-64

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab255291 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 at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 15 kDa (predicted molecular weight: 15 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes Is unsuitable for ChIP, Flow Cyt or IP.

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.

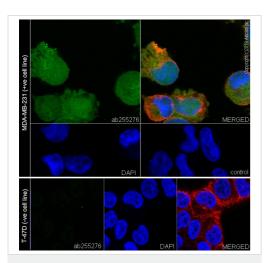
Tissue specificity Keratinocytes; highly expressed in psoriatic skin.

Sequence similaritiesBelongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.

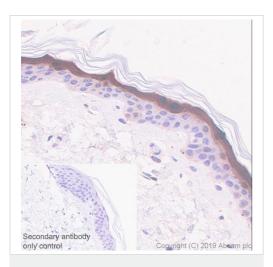
Domain Forms a beta-barrel structure that accommodates the hydrophobic ligand in its interior.

Cellular localization Cytoplasm.

Images



Immunocytochemistry/ Immunofluorescence - Anti-FABP5 antibody [EPR22552-64] - BSA and Azide free (ab255291)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FABP5 antibody

[EPR22552-64] - BSA and Azide free (ab255291)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MDA-MB-231 (human breast adenocarcinoma epithelial cell) labeling FABP5 with <u>ab255276</u> at 1/50 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution (green).

Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor $^{(\!0)}$ 594) (ab195889) at 1/200 was used as a counterstain (red).

The nuclear counterstain is DAPI (blue).

Confocal image showing cytoplasmic and nuclear staining in MDA-MB-231 cells.

Negative control: T-47D (PMID: 21356353).

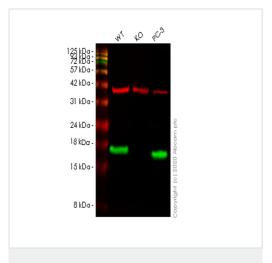
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab255276).

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling FABP5 with <u>ab255276</u> at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on human skin (PMID: 8092987) is observed. Counter stained with hematoxylin.

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

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab255276</u>).



Western blot - Anti-FABP5 antibody [EPR22552-64]
- BSA and Azide free (ab255291)

All lanes : Anti-FABP5 antibody [EPR22552-64] (**ab255276**) at 1/1000 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

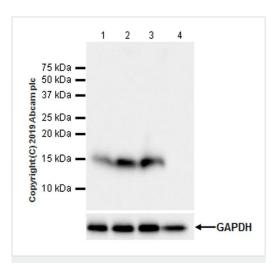
All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 15 kDa **Observed band size:** 17 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab255276</u>).

Lanes 1-3: Merged signal (red and green). Green - <u>ab255276</u> observed at 17 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab255276 Anti-FABP5 antibody [EPR22552-64] 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. ab255276 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2.5 hours at 1 in 1000 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.



Western blot - Anti-FABP5 antibody [EPR22552-64] - BSA and Azide free (ab255291)

All lanes : Anti-FABP5 antibody [EPR22552-64] (**ab255276**) at 1/1000 dilution

Lane 1 : MDA-MB-231 (human breast adenocarcinoma cell line) whole cell lysate

Lane 2: HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3 : PC-3 (human prostate adenocarcinoma epithelial cell line) whole cell lysate

Lane 4 : T-47D (human ductal breast epithelial tumor cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

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

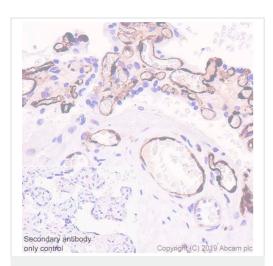
Exposure time: 8 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab255276).

Blocking and dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 25260874).

Negative control: T47D (PMID: 21356353).



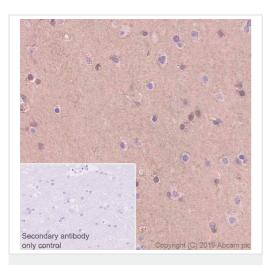
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FABP5 antibody

[EPR22552-64] - BSA and Azide free (ab255291)

Immunohistochemical analysis of paraffinembedded human placenta tissue labeling FABP5 with ab255276 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on blood vessels of human placenta (PMID: 19625659) 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.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab255276).



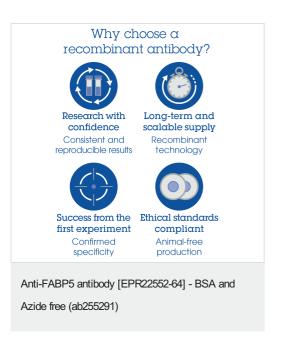
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FABP5 antibody

[EPR22552-64] - BSA and Azide free (ab255291)

Immunohistochemical analysis of paraffinembedded human cerebral cortex tissue labeling FABP5 with ab255276 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on human cerebral cortex (PMID: 24114376) 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.

Heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab255276).



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