abcam

Product datasheet

Anti-FABP4 antibody [EPR3579] ab92501

リコンビナント RabMAb

3 Abreviews 78 References 画像数 9

製品の概要

製品名	Anti-FABP4 antibody [EPR3579]
製品の詳細	Rabbit monoclonal [EPR3579] to FABP4
由来種	Rabbit
特異性	This antibody may cross-react with FABP, FABP3 and FABP9 based on the blast alignments. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
アプリケーション	**適用あり:** WB, ICC/IF, IHC-P, mIHC
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Mouse brown adipose tissue, Mouse heart, Mouse kidney, Mouse lung, Human adipose tissue,Rat adipose tissue and fetal heart lysates; ICC/IF: Adipocytes and 3T3-L1 cells; IHC-P: human breast tissue. mIHC: Human parathyroid gland and breast tissues.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EPR3579
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab92501の使用に適用されます

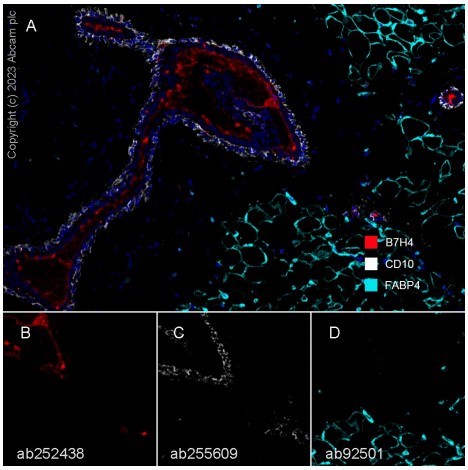
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	(2)	1/1000 - 1/5000. Detects a band of approximately 15 kDa (predicted molecular weight: 15 kDa).
ICC/IF		1/50. **For unpurified use at 1/1000.**
IHC-P		1/16000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
mIHC		1/10000.

ターゲット情報

機能	Lipid transport protein in adipocytes. Binds both long chain fatty acids and retinoic acid. Delivers long-chain fatty acids and retinoic acid to their cognate receptors in the nucleus.
配列類似性	Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.
ドメイン	Forms a beta-barrel structure that accommodates hydrophobic ligands in its interior.
細胞内局在	Cytoplasm. Nucleus. Depending on the nature of the ligand, a conformation change exposes a nuclear localization motif and the protein is transported into the nucleus. Subject to constitutive nuclear export.

画像



Multiplex immunohistochemistry - Anti-FABP4 antibody [EPR3579] (ab92501)

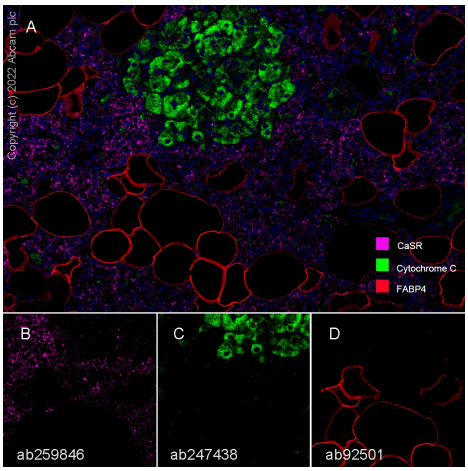
Fluorescence multiplex immunohistochemical analysis of the human breast (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-B7H4 (**ab252438**, red; Opal™690), anti-CD10 (**ab255609**, gray; Opal™520) and anti-FABP4 (ab92501, cyan; Opal™570) on human breast. Panel B: anti-B7H4 stained on glandular lumens. Panel C: anti-CD10 stained on myoepithelial cells. Panel D: anti-FABP4 stained on adipocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab252438** at 1/100 dilution (4.69 µg/ml), **ab255609** at 1/1000 dilution (0.615 µg/ml) and ab92501 at 1/10000 dilution (0.047 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.



Multiplex immunohistochemistry - Anti-FABP4 antibody [EPR3579] (ab92501)

Fluorescence multiplex immunohistochemical analysis of the Human parathyroid gland (Formalin/PFA-fixed paraffin-embedded sections).

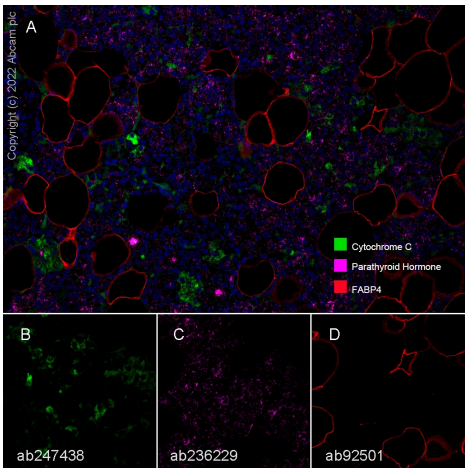
Panel A: merged staining of anti-CaSR (**ab259846**, magenta; Opal™690), anti-Cytochrome C (**ab247438**, green; Opal™520) and anti-FABP4 (ab92501, red; Opal™570) on human parathyroid gland. Panel B: anti-CaSR stained on parathyroid chief cells. Panel C: anti-Cytochrome C stained on parathyroid oxyphil cells. Panel D: anti-FABP4 stained on adipocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab259846** at 1/5000 dilution (0.103 µg/ml), **ab247438** at 1/5000 dilution (0.195 µg/ml), and ab92501 at 1/10000 dilution (0.047

µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.



Multiplex immunohistochemistry - Anti-FABP4 antibody [EPR3579] (ab92501)

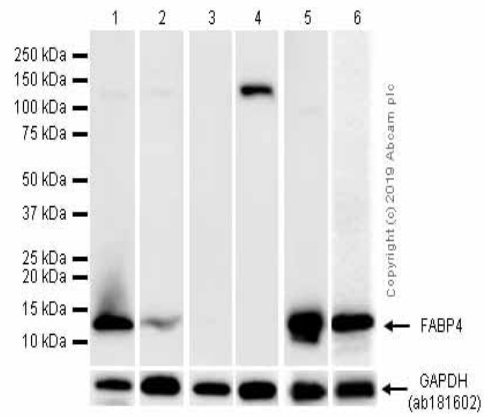
Fluorescence multiplex immunohistochemical analysis of the human parathyroid gland (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-Parathyroid Hormone (**ab236229**, magenta; Opal™690), anti-Cytochrome C (**ab247438**, green; Opal™520) and anti-FABP4 (ab92501, red; Opal™570) on human parathyroid gland. Panel B: anti-Cytochrome C stained on parathyroid oxyphil cells. Panel C: anti-Parathyroid Hormone stained on parathyroid chief cells. Panel D: anti-FABP4 stained on adipocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab236229** at 1/200 dilution (5.065 µg/ml) for 10 mins, then **ab247438** at 1/5000 dilution (0.195 µg/ml) and ab92501 at 1/10000 dilution (0.047 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. DAPI (blue) was used as a nuclear counter stain.



Western blot - Anti-FABP4 antibody [EPR3579] (ab92501)

All lanes : Anti-FABP4 antibody [EPR3579] (ab92501) at 1/1000 dilution (Purified)

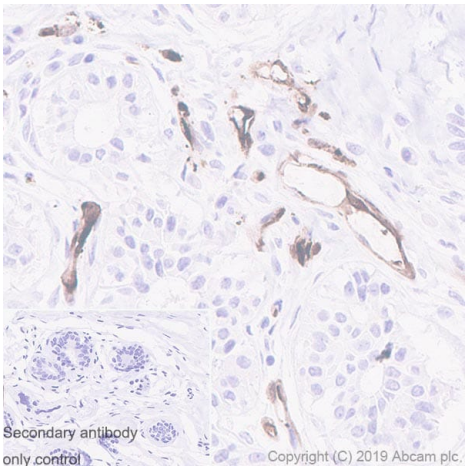
Lane 1 : Mouse brown adipose tissue lysates
Lane 2 : Mouse heart lysates
Lane 3 : Mouse kidney lysates
Lane 4 : Mouse lung lysates
Lane 5 : Human adipose tissue lysates
Lane 6 : Rat adipose tissue lysates

Lysates/proteins at 20 µg per lane.

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

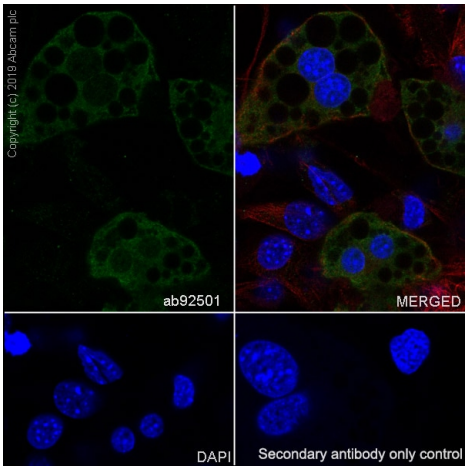
Predicted band size: 15 kDa
Observed band size: 15 kDa

FABP4 is abundantly expressed in adipose tissue and at a lower level in lung, heart, skin, kidney, liver and brain (PMID: 23143994).



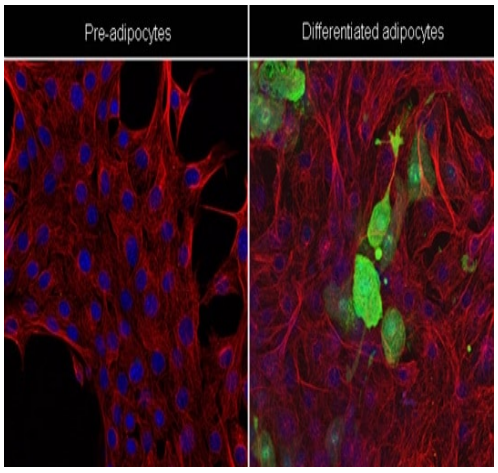
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FABP4 antibody [EPR3579] (ab92501)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast tissue sections labeling FABP4 with Purified ab92501 at 1/16,000 dilution (0.03 µg/ml). Heat mediated antigen retrieval was performed Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



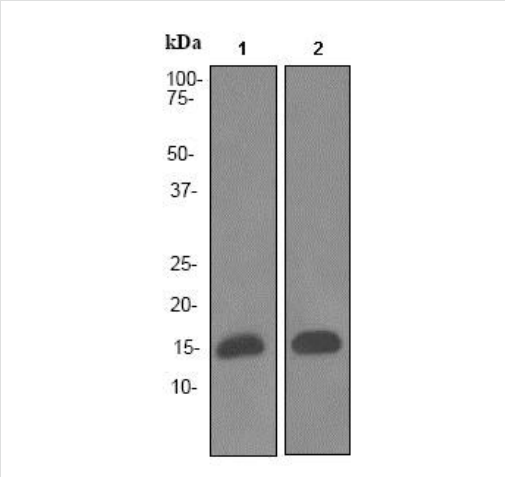
Immunocytochemistry/ Immunofluorescence - Anti-FABP4 antibody [EPR3579] (ab92501)

Immunocytochemistry/ Immunofluorescence analysis of 3T3-L1 (Mouse embryonic fibroblast) differentiated for 6 days cells labeling FABP4 with Purifiedab92501 at 1/50 dilution (9.9 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-FABP4 antibody [EPR3579] (ab92501)

FABP4 (green) was detected using FABP4 primary antibody (unpurified ab92501; diluted 1/1000). Alpha tubulin (red) was detected using our mouse monoclonal (**ab7291**) antibody. Cells were imaged by confocal microscopy, using z-stack for adipocyte-like cells.



Western blot - Anti-FABP4 antibody [EPR3579] (ab92501)

All lanes : Anti-FABP4 antibody [EPR3579] (ab92501) at 1/1000 dilution (unpurified)

Lane 1 : Human adipose tissue lysate

Lane 2 : Human fetal heart lysate

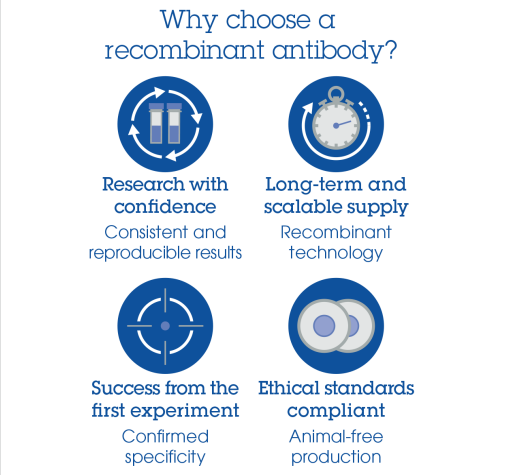
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 15 kDa

Observed band size: 15 kDa



Anti-FABP4 antibody [EPR3579] (ab92501)

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