# abcam

## Product datasheet

# Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free ab221934





重组 RabMAb

★★★★★ 1 Abreviews 10 图像

#### 概述

产品名称 Anti-Fatty Acid Synthase抗体[EPR7466] - BSA and Azide free

描述 兔单克隆抗体[EPR7466] to Fatty Acid Synthase - BSA and Azide free

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB, IHC-P, Flow Cyt (Intra), IP

种属反应性 与反应: Mouse. Rat. Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HAP1 and A459 whole cell lysate.

常规说明 ab221934 is the carrier-free version of ab128870.

> 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<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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

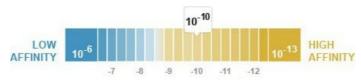
For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® patents.

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**解离常数(K\_D)**  $K_D = 1.34 \times 10^{-10} M$ 



Learn more about K<sub>D</sub>

**存储溶液** pH: 7.20

Constituent: 100% PBS

**无载体** 是

纯**度** Protein A purified

**克隆** 单克隆

同种型 IgG

应用

克隆编号

The Abpromise guarantee Abpromise™承诺保证使用ab221934于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

**EPR7466** 

应用	Ab评论	说明
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 273 kDa.  This antibody does not work well in liver tissue in WB application.  We suggest ab128856 as an alternative.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

靶标

功能 Fatty acid synthetase catalyzes the formation of long-chain fatty acids from acetyl-CoA, malonyl-

CoA and NADPH. This multifunctional protein has 7 catalytic activities and an acyl carrier protein.

组织**特异性** Ubiquitous. Prominent expression in brain, lung, and liver.

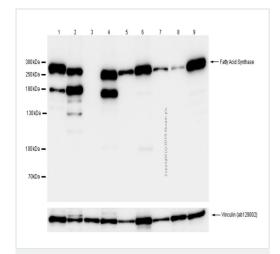
#### 序列相似性

#### 细胞定位

Contains 1 acyl carrier domain.

Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

#### 图片



Western blot - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934) Lanes 1-7: Anti-Fatty Acid Synthase antibody [EPR7466]

(ab128870) at 1/1000 dilution (Purified)

Lanes 8-9: Anti-Fatty Acid Synthase antibody [EPR7466]

(ab128870) at 1/1000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell)

whole cell lysate

Lane 2: A549 (Human lung carcinoma epithelial cell) whole cell

lysate

Lane 3: Mouse liver lysate

Lane 4: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Lane 5: Mouse brain lysate

Lane 6: L6 (Rat skeletal muscle myoblast) whole cell lysate

Lane 7: Rat brain lysate

Lane 8: Rat liver lysate

Lane 9: HEK-293 (Human embryonic kidney epithelial cell) whole

cell lysate

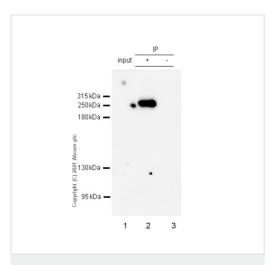
Lysates/proteins at 20 µg per lane.

### **Secondary**

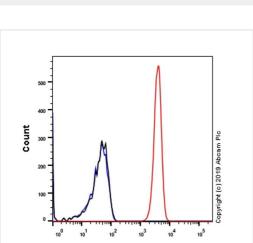
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 273 kDa



Immunoprecipitation - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)



Fatty Acid Synthase - Alexa Fluor®488 (530/30BP)

Flow Cytometry (Intracellular) - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934) Purified <u>ab128870</u> at 1:30 dilution ( $2\mu g$ ) immunoprecipitating Fatty Acid Synthase in HEK-293 whole cell lysate.

Lane 1 (input): HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate 10  $\mu g$ 

Lane 2 (+): ab221934 + HEK-293 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab128870</u> in HEK-293 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)(<u>ab131366</u>) (1:10,000 dilution) was used for Western blotting.

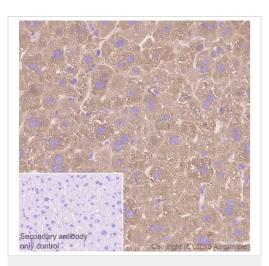
Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: kDa

This data was developed using <u>ab128870</u>, the same antibody clone in a different buffer formulation.

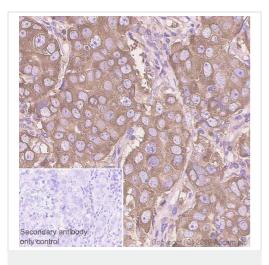
Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labelling Fatty Acid Synthase with Purified <u>ab128870</u> at 1:50 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, <u>ab150077</u>) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)

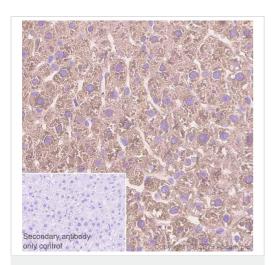
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling Fatty Acid Synthase with Purified <u>ab128870</u> at 1:450 dilution (1.09 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

This data was developed using <u>ab128870</u>, the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)

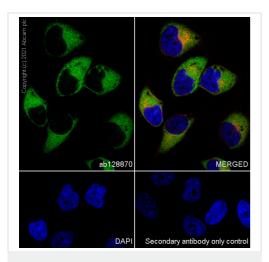
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast cancer tissue sections labeling Fatty Acid Synthase with Purified <u>ab128870</u> at 1:450 dilution (1.09 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)

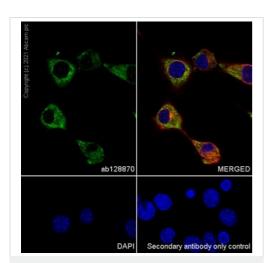
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue sections labeling Fatty Acid Synthase with Purified <u>ab128870</u> at 1:450 dilution (1.09 µg/ml). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

This data was developed using <u>ab128870</u>, the same antibody clone in a different buffer formulation.

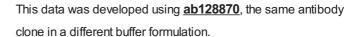


Immunocytochemistry/ Immunofluorescence - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)

Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Fatty Acid Synthase with Purified <u>ab128870</u> at 1:50 dilution (10  $\mu$ g/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  $\mu$ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, <u>ab150077</u>) was used as the secondary antibody at 1:1000 (2  $\mu$ g/ml) dilution. DAPI (blue) was used as the secondary antibody only control.

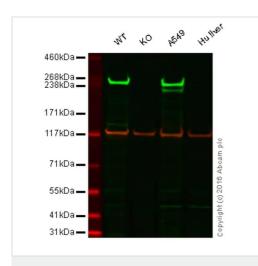


Immunocytochemistry/ Immunofluorescence - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)



Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling with <a href="mailto:ab128870">ab128870</a> at 1/50 dilution, followed by <a href="mailto:ab150081">ab150081</a> antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in NIH/3T3 cells is observed. <a href="mailto:ab195889">ab195889</a> was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** at 1/1000 dilution.



Western blot - Anti-Fatty Acid Synthase antibody [EPR7466] - BSA and Azide free (ab221934)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: Fatty Acid Synthase knockout HAP1 cell lysate (20 µg)

Lane 3: A549 cell lysate (20 µg)

Lane 4: Hu liver tissue lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - <u>ab128870</u> observed at 250 kDa. Red - loading control, <u>ab18058</u>, observed at 124 kDa.

<u>ab128870</u> was shown to react with Fatty Acid Synthase in wild-type HAP1 cells along with additional cross reactive bands. No band was observed when Fatty Acid Synthase knockout samples were examined. Wild-type and Fatty Acid Synthase knockout samples were subjected to SDS-PAGE. <u>ab128870</u> and <u>ab18058</u> (loading control to Vinculin) were both diluted at 1/10,000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

This image was produced using <u>ab128870</u>, the same clone but in a different formulation.



Research with confidence Consistent and



Animal-free





Success from the first experiment Confirmed specificity

production

Anti-Fatty Acid Synthase antibody [EPR7466] -BSA and Azide free (ab221934)

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