abcam

Product datasheet

Anti-Fatty Acid Synthase antibody [EPR7465] ab128856

KO VALIDATED Recombinant RabMAb

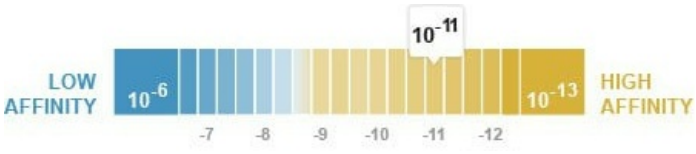
★★★★★ 5 Abreviews 16 References 5 Images

Overview

Product name	Anti-Fatty Acid Synthase antibody [EPR7465]
Description	Rabbit monoclonal [EPR7465] to Fatty Acid Synthase
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF, Flow Cyt (Intra) **Unsuitable for:** IHC-P or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Fatty Acid Synthase aa 1-100. The exact sequence is proprietary. Database link: **P49327**
Positive control	WB: HeLa, HEK-293, 293T, A549, SHSY-5Y, NIH/3T3, L6 (Rat skeletal muscle myoblast) and MOLT4 cell lysates; Mouse brain, Rat brain lysates. ICC/IF: A549 cells. IHC-Fr: Human peritoneal tumor tissue. Flow Cyt (intra): A549 cells.
General notes	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**.

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 long term. Avoid freeze / thaw cycle.
Dissociation constant (K_D)	$K_D = 1.58 \times 10^{-11}$ M



Learn more about K_D

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7465
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab128856 in the following tested applications.

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

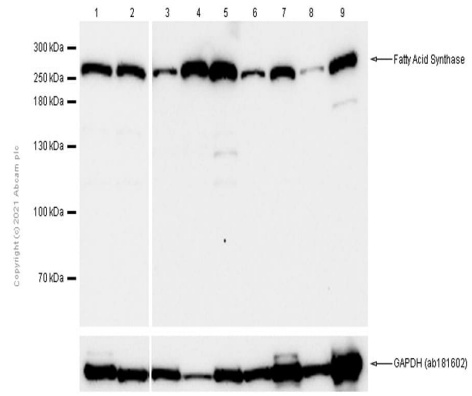
Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 273 kDa.
ICC/IF	★★★★★ (1)	1/50. For unpurified version, use at 1/250 - 1/500 dilution.
Flow Cyt (Intra)		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for IHC-P or IP.

Target

Function	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.
Tissue specificity	Ubiquitous. Prominent expression in brain, lung, and liver.
Sequence similarities	Contains 1 acyl carrier domain.
Cellular localization	Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Western blot - Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856)

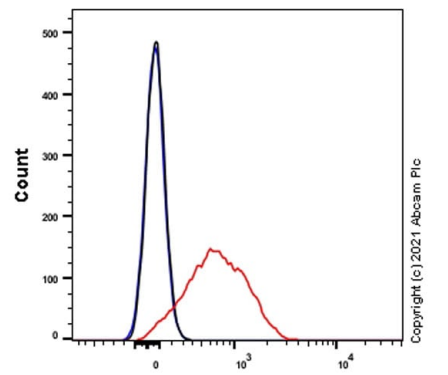
All lanes : Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856) at 1/5000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate
Lane 3 : A549 (Human lung carcinoma epithelial cell) whole cell lysate
Lane 4 : MOLT-4 (Human lymphoblastic leukemia T lymphoblast) whole cell lysate
Lane 5 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate
Lane 6 : Mouse brain lysate
Lane 7 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate
Lane 8 : Rat brain lysate
Lane 9 : L6 (Rat skeletal muscle myoblast) whole cell lysate

Lysates/proteins at 20 µg per lane.

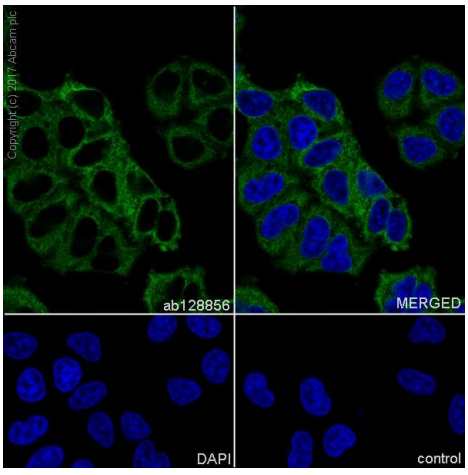
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 273 kDa
Observed band size: 273 kDa



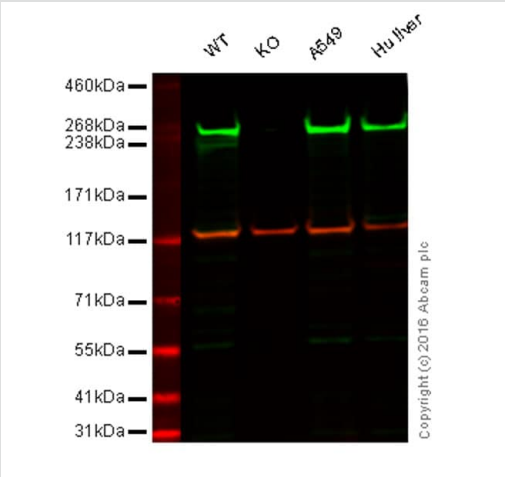
Flow Cytometry (Intracellular) - Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856)

Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labelling Fatty Acid Synthase with Purified ab128856 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, **ab150077**) 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).



Immunocytochemistry/ Immunofluorescence - Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856)

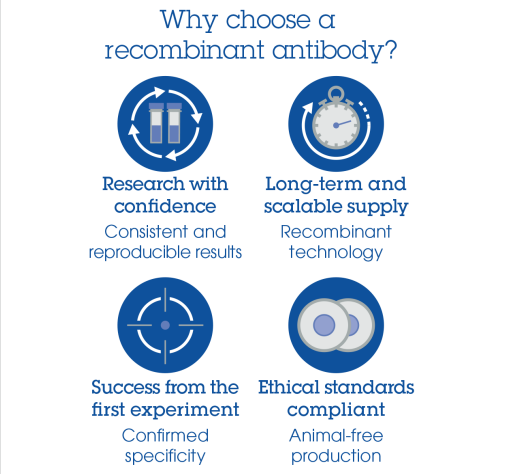
Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Fatty Acid Synthase with Purified ab128856 at 1:50 dilution (4.5 µg/ml). Cells were fixed in 100% Methanol and permeabilized with 0.1% tritonX-100. Cells were counterstained with . Goat anti rabbit IgG (Alexa 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.



Western blot - Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856)

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 - ab128856 observed at 250 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab128856 was shown to specifically react with Fatty Acid Synthase in wild-type HAP1 cells. 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. ab128856 and **ab18058** (loading control to Vinculin) were diluted at 1/1000 and 1/10,000 respectively and incubated overnight at 4°C. 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 1/10,000 dilution for 1 hour at room temperature before imaging.



Anti-Fatty Acid Synthase antibody [EPR7465] (ab128856)

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