# abcam

## Product datasheet

## Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] ab269272

יעלאעבע RabMAb

## 画像数 11

#### 製品の概要

製品名 Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47]

製品の詳細 Rabbit monoclonal [EPR23235-47] to Acetyl Coenzyme A carboxylase alpha

由来種 Rabbit

アプリケーション 適用あり: IHC-P, Flow Cyt (Intra), ICC/IF, WB, IP

適用なし: IHC-Fr

種交差性 交差種: Mouse, Rat, Human

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

ポジティブ・コントロール WB: 293T, HeLa, PC-12 and C2C12 lysates. IHC-P: Human breast carcinoma and endometrial

carcinoma tissue. Mouse and rat lung tissue. ICC/IF: C2C12 and 293T cells. Flow Cyt (intra):

C2C12 and 293T cells. IP: C2C12 and 293T cells.

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: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

**ポリ/モノ** モノクローナル **ウローン名** EPR23235-47

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab269272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
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/500.
ICC/IF		1/50.
WB		1/5000. Predicted molecular weight: 265 kDa.
IP		1/30.

追加情報 Is unsuitable for IHC-Fr.

#### ターゲット情報

機能 Catalyzes the rate-limiting reaction in the biogenesis of long-chain fatty acids. Carries out three

functions: biotin carboxyl carrier protein, biotin carboxylase and carboxyltransferase.

組織特異性 Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed

at low level in pulmonary tissue; not detected in the liver.

Lipid metabolism; malonyl-CoA biosynthesis; malonyl-CoA from acetyl-CoA: step 1/1.

関連疾患 Defects in ACACA are a cause of acetyl-CoA carboxylase 1 deficiency (ACACAD)

[MIM:200350]; also known as ACAC deficiency or ACC deficiency. An inborn error of de novo fatty acid synthesis associated with severe brain damage, persistent myopathy and poor growth.

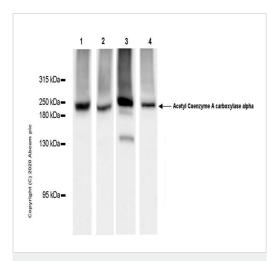
**配列類似性** Contains 1 ATP-grasp domain.

Contains 1 biotin carboxylation domain.
Contains 1 biotinyl-binding domain.
Contains 1 carboxyltransferase domain.

翻訳後修飾 Phosphorylation on Ser-1263 is required for interaction with BRCA1.

細胞内局在 Cytoplasm.

#### 画像



Western blot - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

**All lanes :** Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272) at 1/5000 dilution

**Lane 1**: 293T (human embryonic kidney epithelial cell), whole cell lysate, in the loading buffer containing double DTT

Lane 2: HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate, in the loading buffer containing double DTT

**Lane 3**: PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate, in the loading buffer containing double DTT

**Lane 4 :** C2C12 (mouse myoblasts myoblast), whole cell lysate, in the loading buffer containing double DTT

Lysates/proteins at 20 µg per lane.

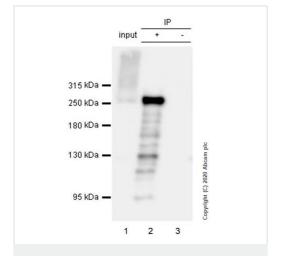
### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

**Predicted band size:** 265 kDa **Observed band size:** 265 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: Lane 1, 4: 48 seconds; Lane 2, 3: 26 seconds.



Immunoprecipitation - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Acetyl Coenzyme A carboxylase alpha was immunoprecipitated from 0.35 mg 293T (human embryonic kidney epithelial cell), whole cell lysate 10 μg with ab269272 at 1/30 dilution (2μg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab269272 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

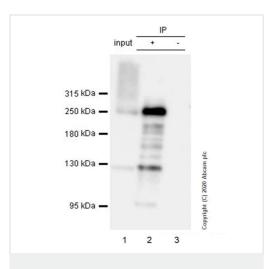
Lane 1: 293T whole cell lysate 10 µg.

Lane 2: ab269272 IP in 293T whole cell lysate.

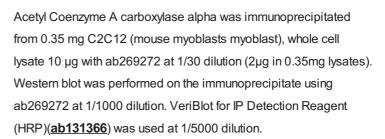
**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab269272 in 293T whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 8 seconds.



Immunoprecipitation - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)



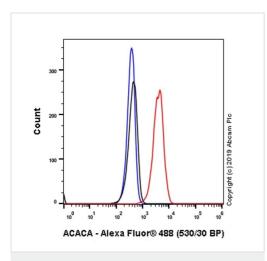
Lane 1: C2C12 whole cell lysate 10 µg.

Lane 2: ab269272 IP in C2C12 whole cell lysate 10 µg.

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab269272 in C2C12 whole cell lysate.

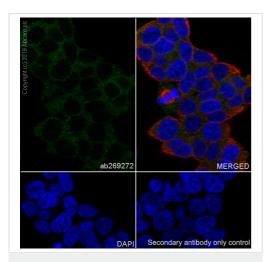
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 8 seconds.



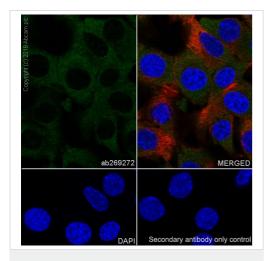
Flow Cytometry (Intracellular) - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized 293T (Human embryonic kidney epithelial cell) cells labelling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

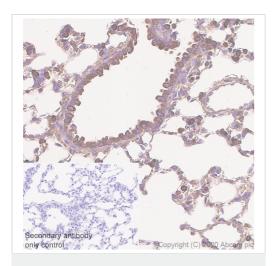
Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) at  $1/1000 \ 2 \ \mu g/ml$  dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized C2C12 cells labelling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 2 µg/ml dilution (Green). Confocal image showing cytoplasmic staining in C2C12 cell line. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used to counterstain tubulin at 1/200 2.5 µg/ml dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) at  $1/1000 \ 2 \ \mu g/ml$  dilution.

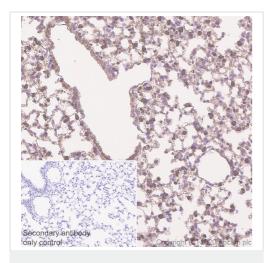


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Immunohistochemical analysis of paraffin-embedded rat lung tissue labeling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on rat lung (PMID: 17521700). The section was incubated with ab269272 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

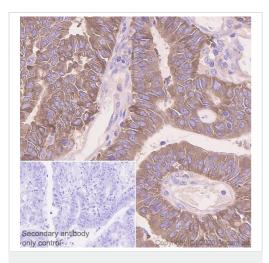


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>). Positive staining on mouse lung (PMID: 17521700). The section was incubated with ab269272 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

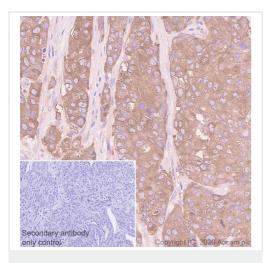


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Immunohistochemical analysis of paraffin-embedded human endometrial carcinoma tissue labeling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on human endometrial carcinoma. The section was incubated with ab269272 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labeling Acetyl Coenzyme A carboxylase alpha with ab269272 at 1/500 dilution followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on human breast carcinoma (PMID: 21415164). The section was incubated with ab269272 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Anti-Acetyl Coenzyme A carboxylase alpha antibody [EPR23235-47] (ab269272)

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