

Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] ab45174











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概述

产品名称	Anti-Acetyl Coenzyme A Carboxylase抗体[EP687Y]
描述	兔单克隆抗体[EP687Y] to Acetyl Coenzyme A Carboxylase
宿主	Rabbit
特异性	Acetyl Coenzyme A Carboxylase is highly expressed in lipogenic tissues such as liver, adipose, and lactating mammary gland, and its activities are regulated at various levels [Proc Natl Acad Sci U S A. 2003 Jun 24;100(13):7515-20.].
经测试应用	适用于: WB, IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide within Human Acetyl Coenzyme A Carboxylase aa 350-450. The exact sequence is proprietary. (Peptide available as ab195232)
阳性对照	WB: HAP1, HeLa, C2C12 and A431 cell lysate; Rat adrenal gland tissue lysates IHC-P: Human liver and breast carcinoma tissue, Rat stomach tissue, Mouse kidney tissue
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	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.
存储溶液	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p>

	Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EP687Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab45174于以下的经测试应用

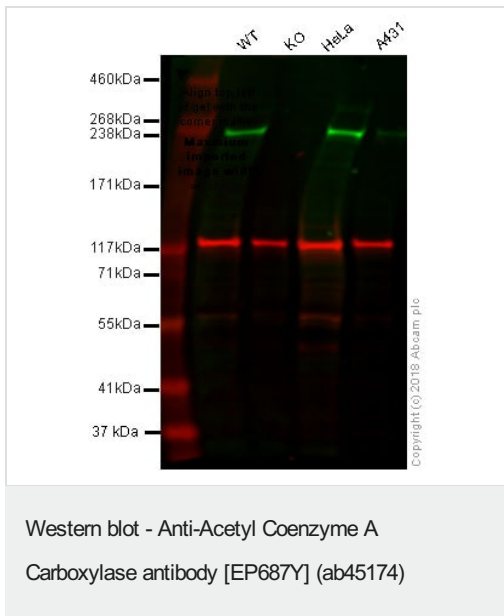
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (2)	1/1000 - 1/2000. Detects a band of approximately 265 kDa (predicted molecular weight: 265 kDa).Can be blocked with <u>Acetyl Coenzyme A Carboxylase peptide (ab195232)</u> .
IHC-P		1/400. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .

靶标

功能	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.
组织特异性	Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed at low level in pulmonary tissue; not detected in the liver.
通路	Lipid metabolism; malonyl-CoA biosynthesis; malonyl-CoA from acetyl-CoA: step 1/1.
疾病相关	Acetyl-CoA carboxylase 1 deficiency
序列相似性	Contains 1 ATP-grasp domain. Contains 1 biotin carboxylation domain. Contains 1 biotinyl-binding domain. Contains 1 carboxyltransferase domain.
翻译后修饰	Phosphorylation on Ser-1263 is required for interaction with BRCA1.
细胞定位	Cytoplasm.

图片



All lanes : Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174) at 1/2000 dilution (unpurified)

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : ACACA (Acetyl Coenzyme A Carboxylase) knockout HAP1 whole cell lysate

Lane 3 : HeLa whole cell lysate

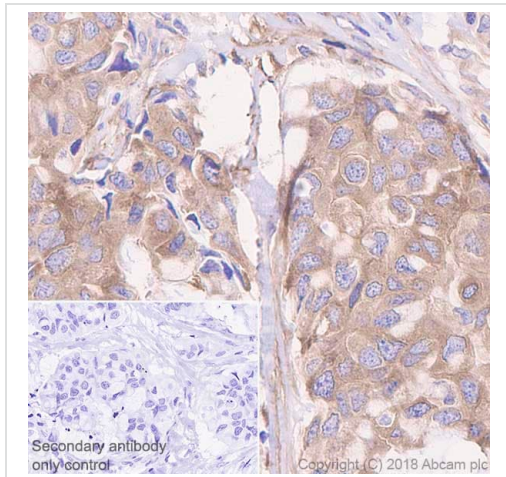
Lane 4 : A431 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 265 kDa

Lanes 1 -4: Merged signal (red and green). Green - ab45174 observed at 265 kDa. Red - loading control, **ab130007**, observed at 130 kDa.

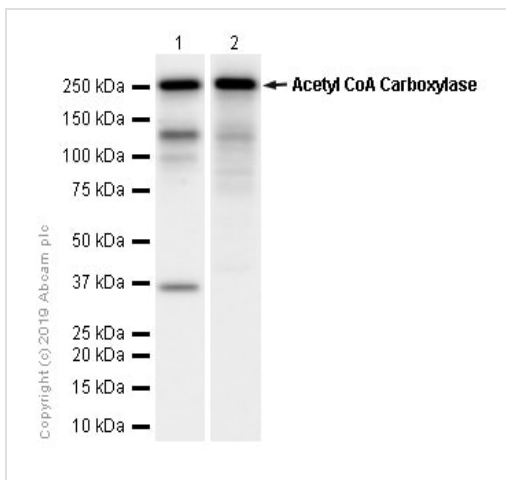
ab45174 was shown to specifically react with Acetyl Coenzyme A Carboxylase in wild-type HAP1 cells as signal was lost in ACACA (Acetyl Coenzyme A Carboxylase) knockout cells. Wild-type and ACACA (Acetyl Coenzyme A Carboxylase) knockout samples were subjected to SDS-PAGE. Ab45174 and **ab130007** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/2000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue sections labeling Acetyl Coenzyme A Carboxylase with purified ab45174 at 1/400 dilution (2.06 µg/mL). Heat mediated antigen retrieval was performed 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.



Western blot - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

All lanes : Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174) at 1/1000 dilution (Purified)

Lane 1 : C2C12 (Mouse myoblasts myoblast) whole cell lysates

Lane 2 : Rat adrenal gland lysates

Lysates/proteins at 15 µg per lane.

Secondary

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

Predicted band size: 265 kDa

Observed band size: 265 kDa

Blocking/Diluting Buffer and concentration: 5% NFDM/TBST

We are unsure how to define the extra bands.



Western blot - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174) at 1/1000 dilution (Purified) + A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates at 15 µg

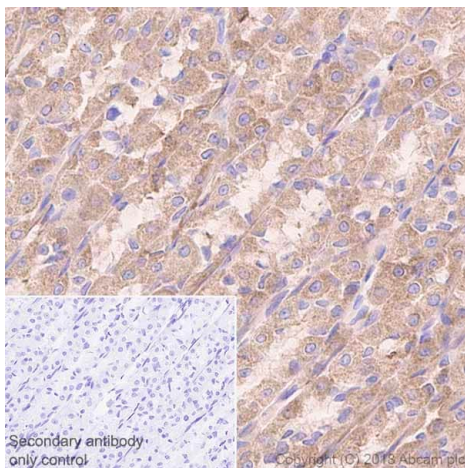
Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 265 kDa

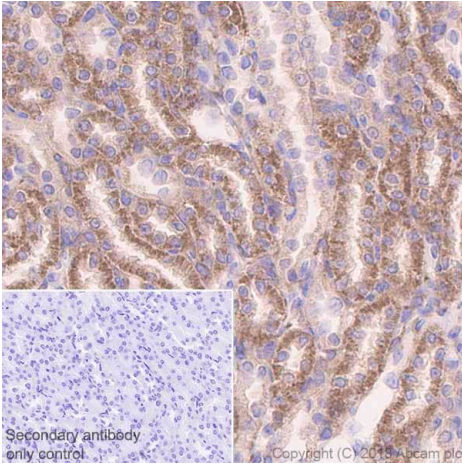
Observed band size: 265 kDa

Blocking/Diluting Buffer and concentration: 5% NFDM/TBST



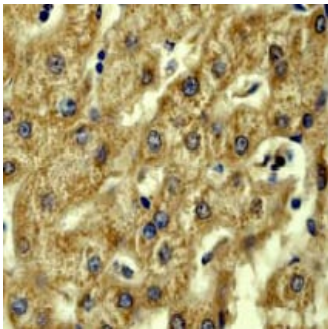
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue sections labeling Acetyl Coenzyme A Carboxylase with purified ab45174 at 1/400 dilution (2.06 µg/mL). Heat mediated antigen retrieval was performed 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.



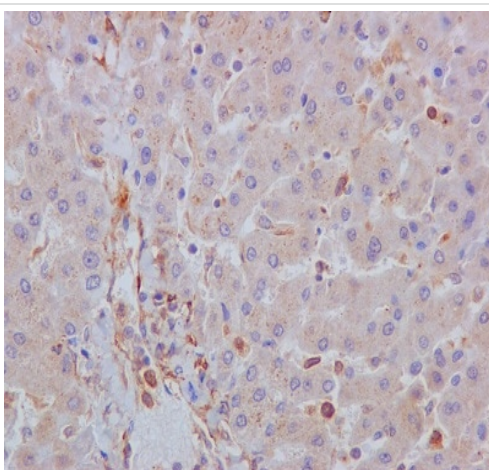
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling Acetyl Coenzyme A Carboxylase with purified ab45174 at 1/400 dilution (2.06 µg/mL). Heat mediated antigen retrieval was performed 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

ab45174 (unpurified), at a dilution of 1/50, staining human Acetyl Coenzyme A Carboxylase in human liver by immunohistochemistry using paraffin embedded tissue. Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase antibody [EP687Y] (ab45174)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Acetyl Coenzyme A Carboxylase with ab45174 (unpurified) at 1/250 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**, 1/500). Counter stained with hematoxylin. Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

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Anti-Acetyl Coenzyme A Carboxylase antibody
[EP687Y] (ab45174)

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