

## Product datasheet

# Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] ab68191

KO VALIDATED Recombinant RabMAb

★★★★★ 1 Abreviews 30 References 6 Images

### Overview

Product name	Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y]
Description	Rabbit monoclonal [EP1885Y] to Acetyl Coenzyme A Carboxylase (phospho S79)
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Dot blot, WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF, IHC-P or IP
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: A431 cell lysate, PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate (treated and untreated), RAW264.7 (mouse abelson murine leukemia virus-induced tumor) whole cell lysate (treated and untreated).
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP1885Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab68191 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

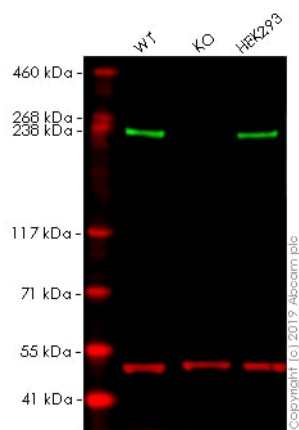
Application	Abreviews	Notes
<b>Dot blot</b>		Use at an assay dependent concentration.
<b>WB</b>	★★★★★ (1)	1/5000 - 1/10000. Detects a band of approximately 265 kDa (predicted molecular weight: 277 kDa).

**Application notes** Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed at low level in pulmonary tissue; not detected in the liver.
<b>Pathway</b>	Lipid metabolism; malonyl-CoA biosynthesis; malonyl-CoA from acetyl-CoA: step 1/1.
<b>Involvement in disease</b>	Acetyl-CoA carboxylase 1 deficiency
<b>Sequence similarities</b>	Contains 1 ATP-grasp domain. Contains 1 biotin carboxylation domain. Contains 1 biotinyl-binding domain. Contains 1 carboxyltransferase domain.
<b>Post-translational modifications</b>	Phosphorylation on Ser-1263 is required for interaction with BRCA1.
<b>Cellular localization</b>	Cytoplasm.

## Images



Western blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191)

**All lanes :** Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191) at 1/5000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** ACACA knockout HAP1 whole cell lysate

**Lane 3 :** HEK293 whole cell lysate

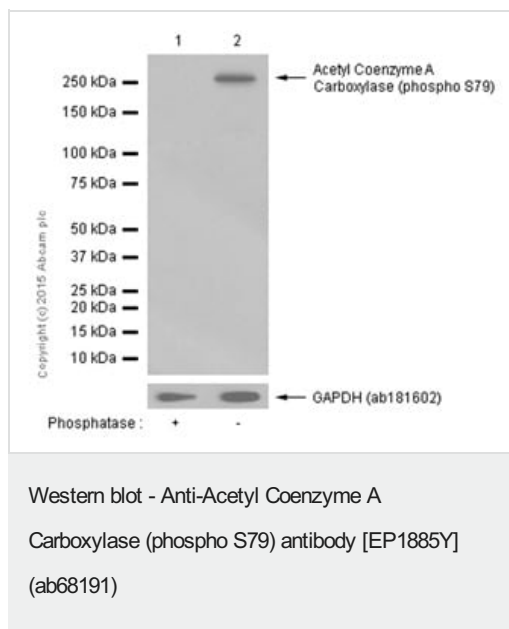
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 277 kDa

**Observed band size:** 266 kDa

**Lanes 1 - 3:** Merged signal (red and green). Green - ab68191 observed at 266 kDa. Red - loading control, **ab130007**, observed at 130 kDa.

ab68191 was shown to specifically react with in wild-type HAP1 cells as signal was lost in ACACA knockout cells. Wild-type and ACACA knockout samples were subjected to SDS-PAGE. Ab68191 and **ab130007** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/5000 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.



**All lanes :** Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191) at 1/1000 dilution

**Lane 1 :** PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate. Then the membrane was incubated with phosphatase.

**Lane 2 :** Untreated PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate.

Lysates/proteins at 10 µg per lane.

### Secondary

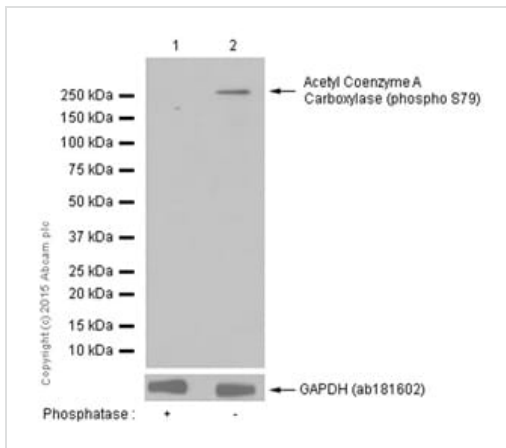
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 277 kDa

**Observed band size:** 265 kDa

**Exposure time:** 5 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191)

**All lanes :** Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191) at 1/1000 dilution

**Lane 1 :** RAW264.7 (mouse abelson murine leukemia virus-induced tumor) whole cell lysate. Then the membrane was incubated with phosphatase.

**Lane 2 :** Untreated RAW264.7 (mouse abelson murine leukemia virus-induced tumor) whole cell lysate.

Lysates/proteins at 10 µg per lane.

## Secondary

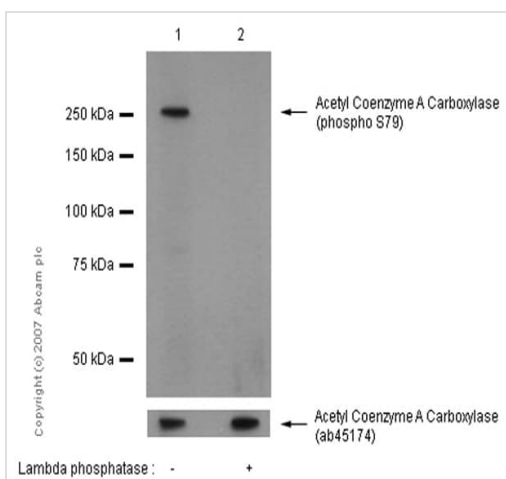
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 277 kDa

**Observed band size:** 265 kDa

**Exposure time:** 8 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191)

**All lanes :** Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191) at 1/10000 dilution

**Lane 1 :** Untreated A431 whole cell lysate

**Lane 2 :** A431 whole cell lysate - treated with lambda phosphatase

Lysates/proteins at 10 µg per lane.

## Secondary

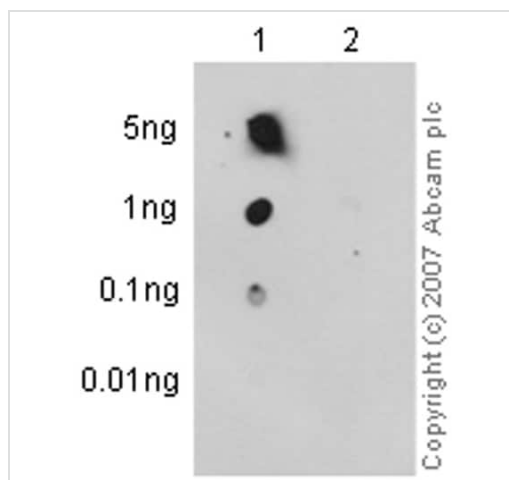
**All lanes :** Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/2000 dilution

**Predicted band size:** 277 kDa

**Observed band size:** 265 kDa

**Exposure time:** 30 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Dot Blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191)

Dot blot analysis of Acetyl Coenzyme A Carboxylase (pS79) phosphopeptide (lane 1) and Acetyl Coenzyme A Carboxylase non-phosphopeptide (lane 2) labelling Acetyl Coenzyme A Carboxylase (phospho S79) with ab68191 at a dilution of 1/1000. A peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/2500).

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody [EP1885Y] (ab68191)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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