# abcam

# Product datasheet

# Anti-Acetyl Coenzyme A Carboxylase antibody ab72046

\*\*\* \* \* \* 2 Abreviews 9 References 2 Images

Overview

Product name Anti-Acetyl Coenzyme A Carboxylase antibody

**Description** Rabbit polyclonal to Acetyl Coenzyme A Carboxylase

Host species Rabbit

**Tested applications** Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Sheep, Rabbit, Horse, Guinea pig, Dog, Pig, Chimpanzee,

Rhesus monkey, Gorilla, Orangutan

Immunogen Synthetic peptide corresponding to Human Acetyl Coenzyme A Carboxylase aa 2300 to the C-

terminus (C terminal).

Database link: **Q13085** 

Positive control WB: HeLa, 293T and NIH/3T3 whole cell lysates. IHC-P: Human normal skin.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7

Preservative: 0.09% Sodium azide

Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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# **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab72046 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
IHC-P		Use a concentration of 1 $\mu$ g/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	*** <u>(2)</u>	1/2000 - 1/10000. Detects a band of approximately 266 kDa (predicted molecular weight: 266 kDa).

# **Target**

Function 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.

Tissue specificity Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed

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

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

Involvement in disease Acetyl-CoA carboxylase 1 deficiency

Sequence similarities Contains 1 ATP-grasp domain.

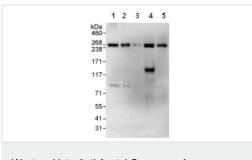
Contains 1 biotin carboxylation domain.
Contains 1 biotinyl-binding domain.
Contains 1 carboxyltransferase domain.

Post-translational

modifications

Cellular localization Cytoplasm.

# **Images**



Western blot - Anti-Acetyl Coenzyme A Carboxylase antibody (ab72046) All lanes: Anti-Acetyl Coenzyme A Carboxylase antibody

(ab72046) at 0.1  $\mu$ g/ml

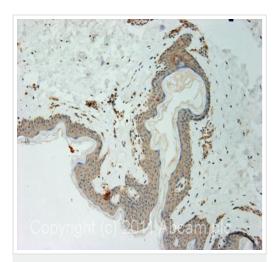
Lane 1 : HeLa whole cell lysate at 50 μg Lane 2 : HeLa whole cell lysate at 15 μg Lane 3 : HeLa whole cell lysate at 5 μg Lane 4 : 293T whole cell lysate at 50 μg

Phosphorylation on Ser-1263 is required for interaction with BRCA1.

Lane 5 : NIH/3T3 whole cell lysate at 50  $\mu g$ 

**Predicted band size:** 266 kDa **Observed band size:** 266 kDa

**Additional bands at:** 130 kDa, 90 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acetyl Coenzyme A
Carboxylase antibody (ab72046)

IHC image of ab72046 staining in human normal skin formalin fixed paraffin embedded tissue section, performed on a Leica Bond  $^{TM}$  system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9, epitope retrieval solution 2) for 20 mins. The section was then incubated with ab72046, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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