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
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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
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<tr>
<td>WB</td>
<td>★★★★★ (2)</td>
<td>1/2000 - 1/10000. Detects a band of approximately 266 kDa (predicted molecular weight: 266 kDa).</td>
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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
Phosphorylation on Ser-1263 is required for interaction with BRCA1.

Cellular localization
Cytoplasm.

Images

All lanes : Anti-Acetyl Coenzyme A Carboxylase antibody (ab72046) at 0.1 µg/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
Lane 5 : NIH/3T3 whole cell lysate at 50 µg

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 paraffin-embedded 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™ 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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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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