





Product datasheet

Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody ab31931

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Overview

Product name	Anti-Acetyl Coenzyme A Carboxylase (phospho S79) antibody
Description	Rabbit polyclonal to Acetyl Coenzyme A Carboxylase (phospho S79)
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Sheep, Goat, Chicken, Cow 
Immunogen	Synthetic peptide corresponding to Rat Acetyl Coenzyme A Carboxylase aa 50-150 (phospho S79) conjugated to keyhole limpet haemocyanin.  Run BLAST with  Run BLAST with 
Positive control	RIPA lysates from mouse heart cytosol.
General notes	<p>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.</p> <p>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</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 long term.
Storage buffer	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: 0.184% Tris glycine, 30% Glycerol, 0.87% Sodium chloride
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab31931 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
WB		Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 265 kDa. Pretreating the blot with lambda phosphatase abolished antibody binding.

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.

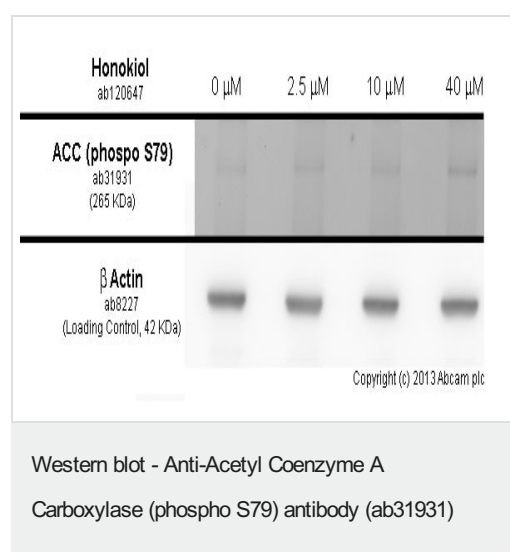
Post-translational modifications

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

Cellular localization

Cytoplasm.

Images



MCF7 cells were incubated at 37°C for 6h with vehicle control (0 µM) and different concentrations of honokiol (**ab120647**). Increased expression of acetyl coenzyme A carboxylase (phospho S79) (**ab31931**) in MCF7 cells correlates with an increase in honokiol concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with **ab31931** at 1 µg/ml and **ab8227** at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 dilution and visualised using ECL development solution.



HepG2 cells were incubated at 37°C for 60 minutes with vehicle control (0 μ M) and different concentrations of KU-55933 (**ab120637**). Decreased expression of Acetyl Coenzyme A Carboxylase (phospho S79) (ab31931) in HepG2 cells correlates with an increase in KU-55933 concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 μ g of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab31931 at 1 μ g/ml and **ab8227** at 1 μ g/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 dilution and visualised using ECL development solution.

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

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