

Product datasheet

Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] ab109540

Recombinant RabMAB

3 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] |
| Description | Rabbit monoclonal [EPR3143Y] to Acetyl Coenzyme A Carboxylase (phospho S221) |
| Host species | Rabbit |
| Specificity | The immunogen used for this product shares 100% homology with ACACB. Cross-reactivity with this protein has not been confirmed experimentally. |
| Tested applications | Suitable for: WB, IP, IHC-P, ICC Unsuitable for: Flow Cyt |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide within Human Acetyl Coenzyme A Carboxylase. The exact sequence is proprietary. |
| Positive control | HeLa cell lysate treated with calyculin A; Human muscles. |
| General notes | Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. |

Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMab[®] patents](#)

This product is a recombinant rabbit monoclonal antibody.

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| Storage buffer | pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant |
| Purity | Tissue culture supernatant |
| Clonality | Monoclonal |
| Clone number | EPR3143Y |

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab109540** 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 | | 1/1000 - 1/10000. Predicted molecular weight: 277 kDa. |
| IP | | 1/10. |
| IHC-P | | 1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| ICC | | 1/100. |

Application notes

Is unsuitable for Flow Cyt.

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.

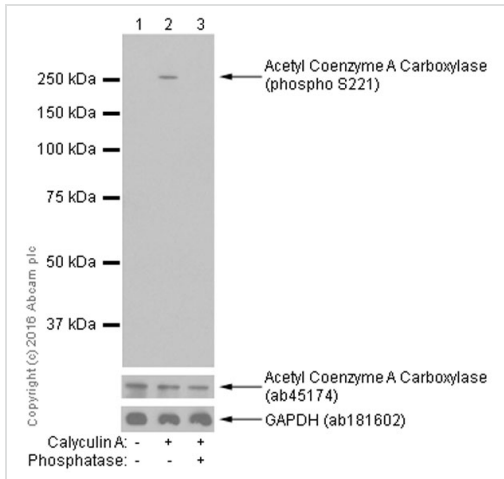
Post-translational modifications

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

Cellular localization

Cytoplasm.

Images



Western blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] (ab109540)

All lanes : Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] (ab109540) at 1/1000 dilution

Lane 1 : Untreated HeLa (human cervix adenocarcinoma) whole cell lysates

Lane 2 : HeLa (human cervix adenocarcinoma) cells were treated with Calyculin A whole cell lysates

Lane 3 : HeLa (human cervix adenocarcinoma) cells were treated with Calyculin A whole cell lysates. Then the membrane was incubated with Alkaline phosphatase.

Lysates/proteins at 10 µg per lane.

Secondary

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

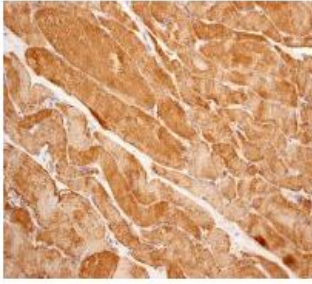
Predicted band size: 277 kDa

Observed band size: 265 kDa

[why is the actual band size different from the predicted?](#)

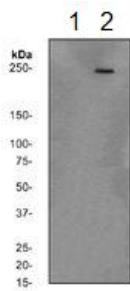
Exposure time: 3 minutes

Blocking/Diluting buffer: 5% NFDm/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] (ab109540)

ab109540, at 1/100 dilution, staining paraffin-embedded Human muscles by Immunohistochemistry.



Western blot - Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] (ab109540)

All lanes : Anti-Acetyl Coenzyme A Carboxylase (phospho S221) antibody [EPR3143Y] (ab109540) at 1/5000 dilution

Lane 1 : HeLa cell lysate, untreated

Lane 2 : HeLa cell lysate treated with calyculin A

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP-labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 277 kDa

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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