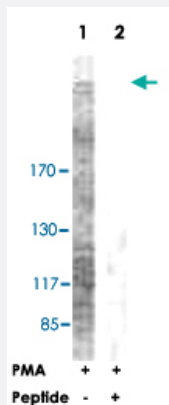


# ACACA polyclonal antibody

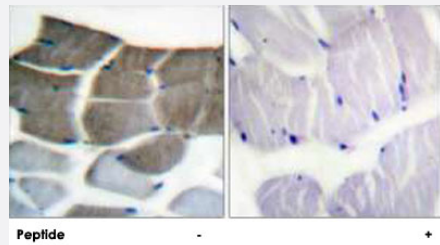
Catalog # PAB17282      Size 100 ug

## Applications



### Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with PMA (125 ng/ml, 30 mins), using ACACA polyclonal antibody (Cat # PAB17282). Peptide "+" means "with peptide blocking".



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue using ACACA polyclonal antibody (Cat # PAB17282). Peptide "+" means "with peptide blocking".

## Specification

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Product Description | Rabbit polyclonal antibody raised against synthetic peptide of ACACA.               |
| Immunogen           | A synthetic peptide corresponding to residues surrounding serine 79 of human ACACA. |
| Host                | Rabbit                                                                              |
| Reactivity          | Human, Mouse, Rat                                                                   |
| Specificity         | This antibody detects endogenous levels of total ACACA protein.                     |
| Form                | Liquid                                                                              |

|                            |                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Recommend Usage</b>     | Western Blot (1:500-1:1000)<br>Immunohistochemistry (1:50-1:100)<br>ELISA (1:5000)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>      | In PBS, pH 7.4 (150mM NaCl, 0.02% sodium azide, 50% glycerol)                                                                                            |
| <b>Storage Instruction</b> | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.                                                                                       |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                   |

## Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with PMA (125 ng/ml, 30 mins), using ACACA polyclonal antibody (Cat # PAB17282).

Peptide "+" means "with peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry analysis of paraffin-embedded human skeletal muscle tissue using ACACA polyclonal antibody (Cat # PAB17282).

Peptide "+" means "with peptide blocking".

## Gene Info — ACACA

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">31</a>                  |
| <b>Protein Accession#</b> | <a href="#">Q13085</a>              |
| <b>Gene Name</b>          | ACACA                               |
| <b>Gene Alias</b>         | ACAC, ACC, ACC1, ACCA               |
| <b>Gene Description</b>   | acetyl-Coenzyme A carboxylase alpha |
| <b>Omim ID</b>            | <a href="#">200350</a>              |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>           |

## Gene Summary

Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha is highly enriched in lipogenic tissues. The enzyme is under long term control at the transcriptional and translational levels and under short term regulation by the phosphorylation/dephosphorylation of targeted serine residues and by allosteric transformation by citrate or palmitoyl-CoA. Multiple alternatively spliced transcript variants divergent in the 5' sequence and encoding distinct isoforms have been found for this gene. [provided by RefSeq]

## Other Designations

ACC-alpha|OTTHUMP00000164069|acetyl-CoA carboxylase 1|acetyl-CoA carboxylase-alpha

## Publication Reference

- [Hepatic de novo lipogenesis is present in liver-specific ACC1-deficient mice.](#)

Harada N, Oda Z, Hara Y, Fujinami K, Okawa M, Ohbuchi K, Yonemoto M, Ikeda Y, Ohwaki K, Aragane K, Tamai Y, Kusunoki J. Molecular and Cellular Biology 2007 Jan; 27(5):1881.

Application: WB, Mouse, Mouse liver

- [Wheat cytosolic acetyl-CoA carboxylase complements an ACC1 null mutation in yeast.](#)

Joachimiak M, Tevzadze G, Podkowinski J, Haselkorn R, Gornicki P. PNAS 1997 Sep; 94(18):9990.

- [Expression of the Acc1 Gene-Encoded Acetyl-Coenzyme A Carboxylase in Developing Maize \(Zea mays L.\) Kernels.](#)

Somers DA, Keith RA, Egli MA, Marshall LC, Gengenbach BG, Gronwald JW, Wyse DL. Plant Physiology 1993 Mar; 101(3):1097.

## Pathway

- [Fatty acid biosynthesis](#)
- [Insulin signaling pathway](#)
- [Metabolic pathways](#)
- [Propanoate metabolism](#)
- [Pyruvate metabolism](#)

## Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Hyperlipidemias](#)
- [Hypertriglyceridemia](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Psychotic Disorders](#)
- [Tobacco Use Disorder](#)