



href="http://www.uniprot.org/citations/20952656" target="\_blank">20952656</a>, PubMed:<a href="http://www.uniprot.org/citations/26976583" target="\_blank">26976583</a>). Catalyzes a 2 steps reaction starting with the ATP-dependent carboxylation of the biotin carried by the biotin carboxyl carrier (BCC) domain followed by the transfer of the carboxyl group from carboxylated biotin to acetyl-CoA (PubMed:<a href="http://www.uniprot.org/citations/19236960" target="\_blank">19236960</a>, PubMed:<a href="http://www.uniprot.org/citations/20457939" target="\_blank">20457939</a>, PubMed:<a href="http://www.uniprot.org/citations/20952656" target="\_blank">20952656</a>, PubMed:<a href="http://www.uniprot.org/citations/26976583" target="\_blank">26976583</a>). Through the production of malonyl-CoA that allosterically inhibits carnitine palmitoyltransferase 1 at the mitochondria, negatively regulates fatty acid oxidation (By similarity). Together with its cytosolic isozyme ACACA, which is involved in de novo fatty acid biosynthesis, promotes lipid storage (By similarity).

### Cellular Location

Mitochondrion.

### Tissue Location

Widely expressed with highest levels in heart, skeletal muscle, liver, adipose tissue, mammary gland, adrenal gland and colon (PubMed:9099716). Isoform 3 is expressed in skeletal muscle, adipose tissue and liver (at protein level) (PubMed:19190759). Isoform 3 is detected at high levels in adipose tissue with lower levels in heart, liver, skeletal muscle and testis (PubMed:19190759)

### ACACB (mouse) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### ACACB (mouse) Antibody (internal region) - Images

### ACACB (mouse) Antibody (internal region) - References

ACC2 gene polymorphisms, metabolic syndrome, and gene-nutrient interactions with dietary fat. Phillips CM, Goumidi L, Bertrais S, Field MR, Cupples LA, Ordovas JM, McMonagle J, Defoort C, Lovegrove JA, Drevon CA, Blaak EE, Kiec-Wilk B, Riserus U, Lopez-Miranda J, McManus R, Hercberg S, Lairon D, Planells R, Roche HM. J Lipid Res. 2010 Dec;51(12):3500-7. PMID: 20855566