

**ACACA Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant ACACA.****Catalog # AT1018a****Specification**

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**ACACA Antibody (monoclonal) (M01) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB, E                     |
| Primary Accession | <a href="#">Q13085</a>    |
| Other Accession   | <a href="#">NM_198834</a> |
| Reactivity        | Human                     |
| Host              | mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG2a Kappa               |
| Calculated MW     | 265554                    |

**ACACA Antibody (monoclonal) (M01) - Additional Information****Gene ID** 31**Other Names**

Acetyl-CoA carboxylase 1, ACC1, ACC-alpha, Biotin carboxylase, ACACA, ACAC, ACC1, ACCA

**Target/Specificity**

ACACA (NP\_942131, 1 a.a. ~ 99 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

E~~N/A

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

ACACA Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

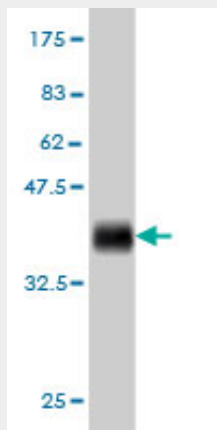
**ACACA Antibody (monoclonal) (M01) - Protocols**

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

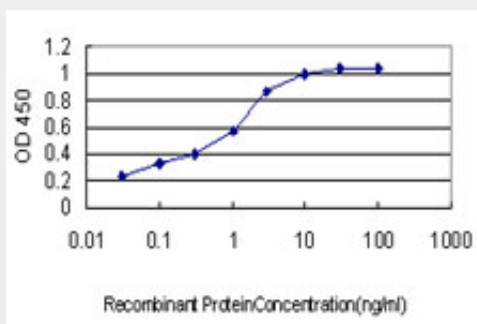
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ACACA Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 kDa) .



Detection limit for recombinant GST tagged ACACA is approximately 0.03ng/ml as a capture antibody.

#### ACACA Antibody (monoclonal) (M01) - Background

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.

#### ACACA Antibody (monoclonal) (M01) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Ruafo G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615. Induced polymerization

of mammalian acetyl-CoA carboxylase by MIG12 provides a tertiary level of regulation of fatty acid synthesis. Kim CW, et al. Proc Natl Acad Sci U S A, 2010 May 25. PMID 20457939. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. Hormonal regulation of acetyl-CoA carboxylase isoenzyme gene transcription. Zhao LF, et al. Endocr J, 2010. PMID 20139635.