

**ACADM Antibody**  
Rabbit mAb  
Catalog # AP90327

## Specification

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### ACADM Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">P11310</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
Medium-chain specific acyl-CoA dehydrogenase;MCAD; ACAD1; MCADH;ACADM	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	46588 Da

### ACADM Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ACADM
Description	This gene encodes the medium-chain specific (C4 to C12 straight chain) acyl-Coenzyme A dehydrogenase. The homotetramer enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Defects in this gene cause medium-chain acyl-CoA dehydrogenase deficiency, a disease characterized by hepatic dysfunction, fasting hypoglycemia, and encephalopathy, which can result in infantile death. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### ACADM Antibody - Protein Information

Name ACADM ([HGNC:89](#))

**Function**

Medium-chain specific acyl-CoA dehydrogenase is one of the acyl-CoA dehydrogenases that catalyze the first step of mitochondrial fatty acid beta-oxidation (FAO), breaking down fatty acids into acetyl-CoA and allowing the production of energy from fats (PubMed:[1970566](http://www.uniprot.org/citations/1970566), PubMed:[21237683](http://www.uniprot.org/citations/21237683), PubMed:[2251268](http://www.uniprot.org/citations/2251268), PubMed:[8823175](http://www.uniprot.org/citations/8823175)). The first step of FAO consists in the proR-proR stereospecific alpha, beta-dehydrogenation of fatty acyl-CoA thioesters using the electron transfer flavoprotein (ETF) as their physiologic electron acceptor, resulting in the formation of trans-2-enoyl-CoA ((2E)-enoyl-CoA) (PubMed:[2251268](http://www.uniprot.org/citations/2251268)). ETF is the electron acceptor that transfers electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:[15159392](http://www.uniprot.org/citations/15159392), PubMed:[25416781](http://www.uniprot.org/citations/25416781)). Among the different mitochondrial acyl-CoA dehydrogenases, medium-chain specific acyl-CoA dehydrogenase has preference for fatty acyl-CoAs with saturated 6 to 12 carbons long primary chains, making it but can also catalyze longer chains such as C14 and C16 (PubMed:[1970566](http://www.uniprot.org/citations/1970566), PubMed:[21237683](http://www.uniprot.org/citations/21237683), PubMed:[2251268](http://www.uniprot.org/citations/2251268), PubMed:[8823175](http://www.uniprot.org/citations/8823175)).

**Cellular Location**

Mitochondrion matrix

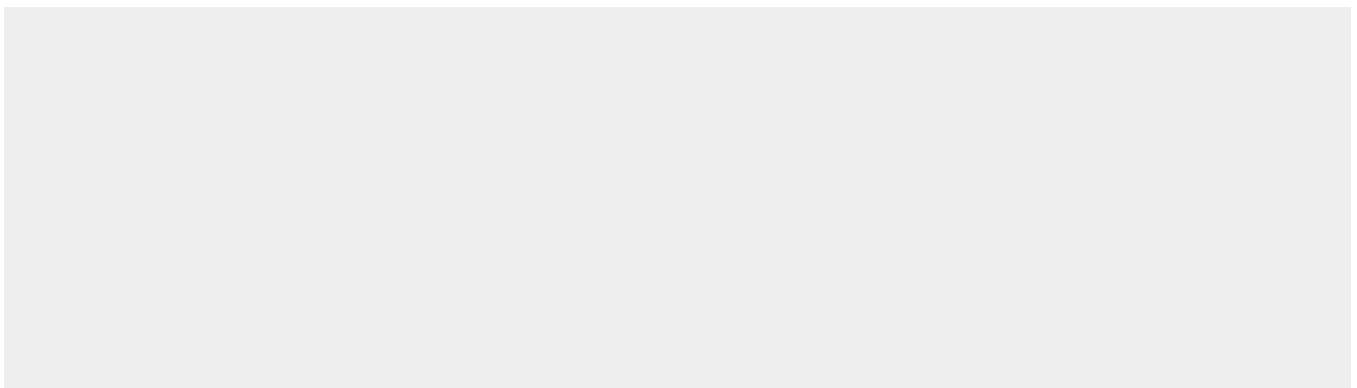
**Tissue Location**

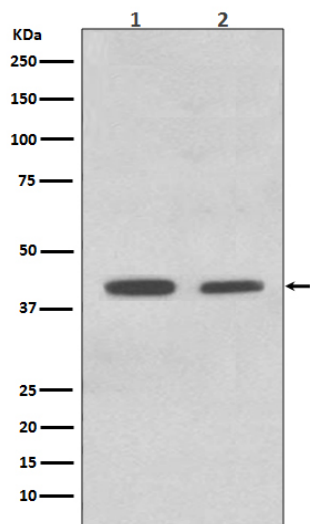
Expressed ubiquitously with highest levels in heart and muscle.

**ACADM Antibody - 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](#)

**ACADM Antibody - Images**



Western blot analysis of ACADM expression in (1) HeLa cell lysate; (2) K562 cell lysate.