

**MCAD Polyclonal Antibody**  
Catalog # AP73207**Specification****MCAD Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P11310</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**MCAD Polyclonal Antibody - Additional Information**

Gene ID 34

**Other Names**

ACADM; Medium-chain specific acyl-CoA dehydrogenase, mitochondrial; MCAD

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**MCAD Polyclonal 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, an aerobic process 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 fatty acid beta-oxidation consists in the removal of one hydrogen from C-2 and C-3 of the straight-chain fatty acyl-CoA thioester, resulting in the formation of trans-2-enoyl-CoA (PubMed:[2251268](http://www.uniprot.org/citations/2251268)). Electron transfer flavoprotein (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 acts specifically on acyl-CoAs with saturated 6 to 12 carbons long primary chains

(PubMed:<a href="http://www.uniprot.org/citations/1970566" target="\_blank">1970566</a>,  
PubMed:<a href="http://www.uniprot.org/citations/21237683" target="\_blank">21237683</a>,  
PubMed:<a href="http://www.uniprot.org/citations/2251268" target="\_blank">2251268</a>,  
PubMed:<a href="http://www.uniprot.org/citations/8823175" target="\_blank">8823175</a>).

### Cellular Location

Mitochondrion matrix

### MCAD Polyclonal 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](#)

### MCAD Polyclonal Antibody - Images



### MCAD Polyclonal Antibody - Background

Acyl-CoA dehydrogenase specific for acyl chain lengths of 4 to 16 that catalyzes the initial step of fatty acid beta- oxidation. Utilizes the electron transfer flavoprotein (ETF) as an electron acceptor to transfer electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase).