

# MCAD Polyclonal Antibody

Catalog # AP73207

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">P11310</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	46588

## Additional Information

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<b>Gene ID</b>	34
<b>Other Names</b>	ACADM; Medium-chain specific acyl-CoA dehydrogenase, mitochondrial; MCAD
<b>Dilution</b>	WB--Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. IHC-P--N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	ACADM ( <a href="#">HGNC:89</a> )
<b>Function</b>	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: <a href="#">1970566</a> , PubMed: <a href="#">21237683</a> , PubMed: <a href="#">2251268</a> , PubMed: <a href="#">8823175</a> ). 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: <a href="#">2251268</a> ). ETF is the electron acceptor that transfers electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed: <a href="#">15159392</a> , PubMed: <a href="#">25416781</a> ). 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: <a href="#">1970566</a> , PubMed: <a href="#">21237683</a> , PubMed: <a href="#">2251268</a> , PubMed: <a href="#">8823175</a> ).

**Cellular Location**

Mitochondrion matrix

**Tissue Location**

Expressed ubiquitously with highest levels in heart and muscle.

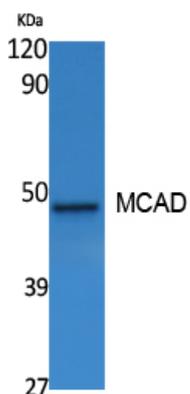
## Background

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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).

## Images

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Western Blot analysis of extracts from A549 cells, using MCAD Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.