

# Goat anti-ACADM, Biotinylated Antibody

Peptide-affinity purified goat antibody  
Catalog # AF4364a

## Product Information

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<b>Application</b>	WB, IHC, Pep-ELISA
<b>Primary Accession</b>	<a href="#">P11310</a>
<b>Other Accession</b>	<a href="#">NP_000007.1</a> , <a href="#">NP_001120800.1</a> , <a href="#">NP_001272971.1</a> , <a href="#">NP_001272972.1</a> , <a href="#">NP_001272973.1</a>
<b>Reactivity</b>	Human
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal
<b>Clone Names</b>	ACADM
<b>Calculated MW</b>	46588

## Additional Information

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<b>Gene ID</b>	34
<b>Other Names</b>	ACADM; acyl-CoA dehydrogenase, C-4 to C-12 straight chain; ACAD1; MCAD; MCADH; acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain
<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A
<b>Format</b>	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
<b>Immunogen</b>	This antibody is expected to recognise both reported isoforms (NP_000007.1; NP_001120800.1).
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Goat anti-ACADM, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## 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:[2251268](#)). ETF is the electron acceptor that transfers electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:[15159392](#), PubMed:[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](#), PubMed:[21237683](#), PubMed:[2251268](#), PubMed:[8823175](#)).

**Cellular Location**

Mitochondrion matrix

**Tissue Location**

Expressed ubiquitously with highest levels in heart and muscle.

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