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KD-Validated Anti-ACADM Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1369

Product Information

Application	WB, FC, ICC
Primary Accession	P11310
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB3145
Calculated MW	46588
Gene Name	ACADM
Aliases	ACADM; Acyl-CoA Dehydrogenase Medium Chain 2 3 5; MCAD; ACAD1; Medium-Chain Specific Acyl-CoA Dehydrogenase, Mitochondrial; Acyl-Coenzyme A Dehydrogenase, C-4 To C-12 Straight Chain; Medium-Chain Acyl-CoA Dehydrogenase; Acyl-CoA Dehydrogenase, C-4 To C-12 Straight Chain; Medium Chain Acyl-CoA Dehydrogenase; Testicular Tissue Protein Li 7; EC 1.3.99.3; EC 1.3.8.7; EC 1.3.99
Immunogen	A synthesized peptide derived from human ACADM

Additional Information

Gene ID	34
Other Names	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial, MCAD, 1.3.8.7, Medium chain acyl-CoA dehydrogenase, MCADH, ACADM (HGNC:89)

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, PubMed:21237683, PubMed:2251268, PubMed: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). 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.

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