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Anti-ACADM/Mcad Rabbit Monoclonal Antibody

Catalog # ABO13613

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P11310
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-ACADM/Mcad Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

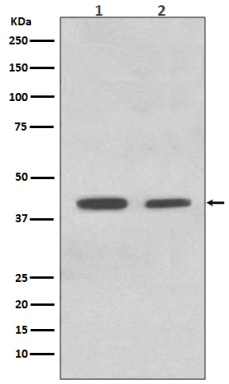
Gene ID	34
Other Names	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial, MCAD, 1.3.8.7, Medium chain acyl-CoA dehydrogenase, MCADH, ACADM (HGNC:89)
Calculated MW	46588
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Mitochondrion matrix.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: COE-1
Immunogen	A synthesized peptide derived from human ACADM
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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.

Images



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

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