Immunotag™ MCAD Polyclonal Antibody

Antibody Specification

Catalog No.	ITT5024
Product Description	Immunotag™ MCAD Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MCAD
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human MCAD
Specificity	MCAD Polyclonal Antibody detects endogenous levels of MCAD protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	ACADM
Accession No.	P11310 P45952 P08503
Alternate Names	ACADM; Medium-chain specific acyl-CoA dehydrogenase, mitochondrial; MCAD

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Description	acyl-CoA dehydrogenase, C-4 to C-12 straight chain(ACADM) Homo sapiens This gene encodes the medium-chain specific (C4 to C12 straight chain) acyl-Coenzyme A dehydrogenase. The homotetramer enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Defects in this gene cause medium-chain acyl-CoA dehydrogenase deficiency, a disease characterized by hepatic dysfunction, fasting hypoglycemia, and encephalopathy, which can result in infantile death. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Fatty acid metabolism,Valine, leucine and isoleucine degradation,beta-Alanine metabolism,Propanoate metabolism,PPAR,
Protein Expression	Brain,Cajal-Retzius cell,Cerebellum,Colon,Liver,
Subcellular Localization	nucleus,mitochondrion,mitochondrial matrix,peroxisome,axon,extracellular exosome,
Protein Function	catalytic activity:Acyl-CoA + acceptor = 2,3-dehydroacyl-CoA + reduced acceptor.,cofactor:FAD.,disease:Defects in ACADM are the cause of medium-chain acyl-CoA dehydrogenase deficiency (MCAD deficiency) [MIM:201450]. It is an autosomal recessive disease which causes fasting hypoglycemia, hepatic dysfunction, and encephalopathy, often resulting in death in infancy. The disease frequency is one in 13000.,function:This enzyme is specific for acyl chain lengths of 4 to 16.,miscellaneous:A number of straight-chain acyl-CoA dehydrogenases of different substrate specificities are present in mammalian tissues.,miscellaneous:Utilizes the electron transfer flavoprotein (ETF) as electron acceptor that transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase).,pathway:Lipid metabolism; mitochondrial fatty acid beta-oxidation.,similarity:Belongs to the acyl-CoA dehydrogenase family.,subunit:Homotetramer. Interacts with the heterodimeric electron transfer flavoprotein ETF.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.