10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MLYCD Rabbit pAb

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Catalog # AP93938

Product Information

Application	WB
Primary Accession	O95822
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55003
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MLYCD
Epitope Specificity	301-400/493
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion. Cytoplasm. Peroxisome.
DISEASE	Malonyl-CoA decarboxylase deficiency (MLYCD deficiency) [MIM:248360]: Autosomal recessive disease characterized by abdominal pain, chronic constipation, episodic vomiting, metabolic acidosis and malonic aciduria. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The product of this gene catalyzes the breakdown of malonyl-CoA to acetyl-CoA and carbon dioxide. Malonyl-CoA is an intermediate in fatty acid biosynthesis, and also inhibits the transport of fatty acyl CoAs into mitochondria. Consequently, the encoded protein acts to increase the rate of fatty acid oxidation. It is found in mitochondria, peroxisomes, and the cytoplasm. Mutations in this gene result in malonyl-CoA decarboyxlase deficiency. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	23417
Other Names	Malonyl-CoA decarboxylase, mitochondrial, MCD, 4.1.1.9, MLYCD (HGNC:7150)
Dilution	WB=1:500-2000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	MLYCD (HGNC:7150)
Function	Catalyzes the conversion of malonyl-CoA to acetyl-CoA. In the fatty acid biosynthesis MCD selectively removes malonyl-CoA and thus assures that methyl-malonyl-CoA is the only chain elongating substrate for fatty acid synthase and that fatty acids with multiple methyl side chains are produced. In peroxisomes it may be involved in degrading intraperoxisomal malonyl-CoA, which is generated by the peroxisomal beta-oxidation of odd chain-length dicarboxylic fatty acids. Plays a role in the metabolic balance between glucose and lipid oxidation in muscle independent of alterations in insulin signaling. May play a role in controlling the extent of ischemic injury by promoting glucose oxidation.
Cellular Location	Cytoplasm. Mitochondrion matrix. Peroxisome. Peroxisome matrix {ECO:0000250|UniProtKB:Q920F5}. Note=Enzymatically active in all three subcellular compartments. {ECO:0000250|UniProtKB:Q920F5}
Tissue Location	Expressed in fibroblasts and hepatoblastoma cells (at protein level). Expressed strongly in heart, liver, skeletal muscle, kidney and pancreas. Expressed in myotubes. Expressed weakly in brain, placenta, spleen, thymus, testis, ovary and small intestine

Background

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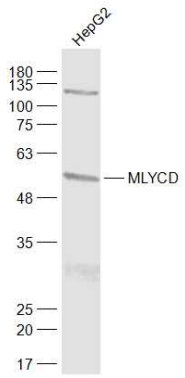
Images



Sample: HepG2(Human) Cell Lysate at 30 ug Primary: Anti-MLYCD (AP93938) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 55 kD Observed band size: 55 kD