

ACADVL Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ACADVL. Catalog # AT1019a

Product Information

Application	WB, IHC, E
Primary Accession	<u>P49748</u>
Other Accession	<u>NM_000018</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	5D3
Calculated MW	70390

Additional Information

Gene ID	37
Other Names	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial, VLCAD, ACADVL, VLCAD
Target/Specificity	ACADVL (NP_000009, 345 a.a. ~ 434 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ACADVL Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

The protein encoded by this gene is targeted to the inner mitochondrial membrane where it catalyzes the first step of the mitochondrial fatty acid beta-oxidation pathway. This acyl-Coenzyme A dehydrogenase is specific to long-chain and very-long-chain fatty acids. A deficiency in this gene product reduces myocardial fatty acid beta-oxidation and is associated with cardiomyopathy. Alternative splicing results in multiple transcript variants encoding different isoforms.

References

1.ACAD9, a complex I assembly factor with a moonlighting function in fatty acid oxidation

deficiencies.Nouws J, Te Brinke H, Nijtmans LG, Houten SMHum Mol Genet. 2013 Nov 6.2.Mild mitochondrial uncoupling does not affect mitochondrial biogenesis but downregulates pyruvate carboxylase in adipocytes: role for triglyceride content reduction.De Pauw A, Demine S, Tejerina S, Dieu M, Delaive E, Kel A, Renard P, Raes M, Arnould T.Am J Physiol Endocrinol Metab. 2012 May;302(9):E1123-41. Epub 2012 Feb 21.

Images





1.6

1.2 1 0 0.8 0.6 0.4 0.2 0 0.01

0.1

1

Recombinant ProteinConcentration(ng/ml)

10

100

1000

Immunoperoxidase of monoclonal antibody to ACADVL on formalin-fixed paraffin-embedded human heart. [antibody concentration 3 ug/ml]

Detection limit for recombinant GST tagged ACADVL is approximately 0.03ng/ml as a capture antibody.

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