

Anti-ACADVL Picoband Antibody
Catalog # ABO11641

Specification

Anti-ACADVL Picoband Antibody - Product Information

Application	WB
Primary Accession	P49748
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Very long-chain specific acyl-CoA dehydrogenase, mitochondrial(ACADVL) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ACADVL Picoband Antibody - Additional Information

Gene ID 37

Other Names

Very long-chain specific acyl-CoA dehydrogenase, mitochondrial, VLCAD, 1.3.8.9, ACADVL, VLCAD

Calculated MW

70390 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Mitochondrion inner membrane.

Protein Name

Very long-chain specific acyl-CoA dehydrogenase, mitochondrial

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ACADVL (538-576aa RALEQFATVVEAKLIKHKKGIVNEQFLLQRLADGAIDLY), different from the related mouse sequence by three amino acids, and from the related rat sequence by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-ACADVL Picoband Antibody - Protein Information

Name ACADVL ([HGNC:92](#))

Function

Very long-chain specific acyl-CoA dehydrogenase is one of the acyl-CoA dehydrogenases that catalyze the first step of mitochondrial fatty acid beta-oxidation, an aerobic process breaking down fatty acids into acetyl-CoA and allowing the production of energy from fats (PubMed:[18227065](http://www.uniprot.org/citations/18227065), PubMed:[7668252](http://www.uniprot.org/citations/7668252), PubMed:[9461620](http://www.uniprot.org/citations/9461620), PubMed:[9599005](http://www.uniprot.org/citations/9599005), PubMed:[9839948](http://www.uniprot.org/citations/9839948)). The first step of fatty acid beta-oxidation consists in the removal of one hydrogen from C-2 and C-3 of the straight-chain fatty acyl-CoA thioester, resulting in the formation of trans-2-enoyl- CoA (PubMed:[18227065](http://www.uniprot.org/citations/18227065), PubMed:[7668252](http://www.uniprot.org/citations/7668252), PubMed:[9461620](http://www.uniprot.org/citations/9461620), PubMed:[9839948](http://www.uniprot.org/citations/9839948)). Among the different mitochondrial acyl-CoA dehydrogenases, very long- chain specific acyl-CoA dehydrogenase acts specifically on acyl-CoAs with saturated 12 to 24 carbons long primary chains (PubMed:[21237683](http://www.uniprot.org/citations/21237683), PubMed:[9839948](http://www.uniprot.org/citations/9839948)).

Cellular Location

Mitochondrion inner membrane; Peripheral membrane protein

Tissue Location

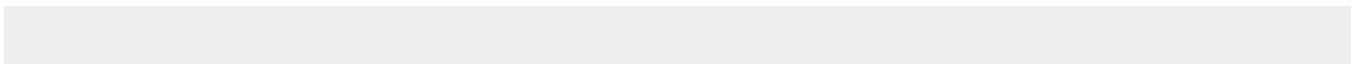
Predominantly expressed in heart and skeletal muscle (at protein level). Also detected in kidney and liver (at protein level).

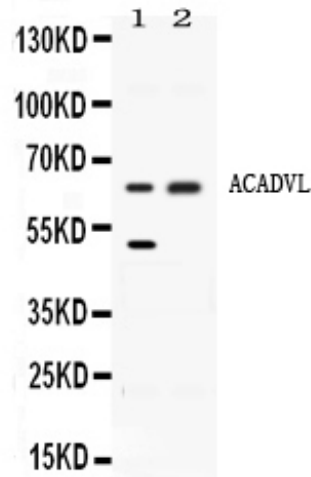
Anti-ACADVL Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ACADVL Picoband Antibody - Images





Western blot analysis of ACADVL expression in rat liver extract (lane 1) and HELA whole cell lysates (lane 2). ACADVL at 66KD was detected using rabbit anti- ACADVL Antigen Affinity purified polyclonal antibody (Catalog # ABO11641) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-ACADVL Picoband Antibody - Background

Very long-chain specific acyl-CoA dehydrogenase, mitochondrial (VLCAD) is an enzyme that in humans is encoded by the ACADVL gene. 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.