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

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, PubMed:7668252, PubMed:9461620, PubMed:9599005, PubMed: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, PubMed:7668252, PubMed:9461620, PubMed: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, PubMed: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).

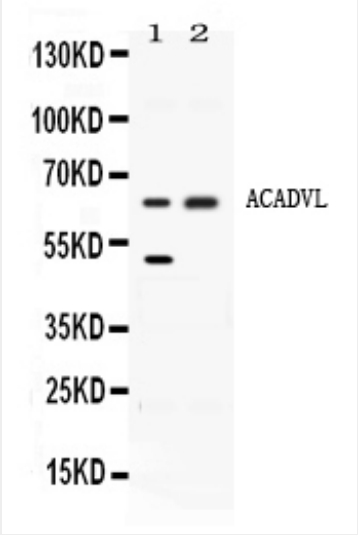
Anti-ACADVL Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ACADVL Picoband Antibody - Images

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



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 ??g/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 dehydrogenaseis 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.