

ACADVL Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6597a**Specification**

ACADVL Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P49748](#)**ACADVL Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 37**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6597a](/products/AP6597a) was selected from the N-term region of human ACADVL. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACADVL Antibody (N-term) Blocking Peptide - 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: [7668252](http://www.uniprot.org/citations/7668252), PubMed: [9461620](http://www.uniprot.org/citations/9461620), PubMed: [18227065](http://www.uniprot.org/citations/18227065), PubMed: [9839948](http://www.uniprot.org/citations/9839948), PubMed: [9599005](http://www.uniprot.org/citations/9599005)). 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: [7668252](http://www.uniprot.org/citations/7668252), PubMed: [9461620](http://www.uniprot.org/citations/9461620)),

PubMed:18227065,
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).

ACADVL Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACADVL Antibody (N-term) Blocking Peptide - Images**ACADVL Antibody (N-term) Blocking Peptide - Background**

ACADVL 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 its gene product reduces myocardial fatty
acid beta-oxidation and is associated with cardiomyopathy.

ACADVL Antibody (N-term) Blocking Peptide - References

Gobin-Limballe,S., Am. J. Hum. Genet. 81 (6), 1133-1143 (2007)Zia,A., J. Inherit. Metab. Dis. 30 (5),
817 (2007)