

**ACADL Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP13134a****Specification**

---

**ACADL Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P28330](#)**ACADL Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 33**Other Names**

Long-chain specific acyl-CoA dehydrogenase, mitochondrial, LCAD, ACADL

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13134a was selected from the N-term region of ACADL. 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.

**ACADL Antibody (N-term) Blocking Peptide - Protein Information****Name** ACADL ([HGNC:88](#))**Function**

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 (By similarity). 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 (By similarity). Among the different mitochondrial acyl-CoA dehydrogenases, long-chain specific acyl-CoA dehydrogenase can act on saturated and unsaturated acyl-CoAs with 6 to 24 carbons with a preference for 8 to 18 carbons long primary chains (PubMed:<a href="http://www.uniprot.org/citations/8823175" target="\_blank">8823175</a>, PubMed:<a href="http://www.uniprot.org/citations/21237683" target="\_blank">21237683</a>).

**Cellular Location**

Mitochondrion matrix {ECO:0000250|UniProtKB:P15650}

## **ACADL Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **ACADL Antibody (N-term) Blocking Peptide - Images**

## **ACADL Antibody (N-term) Blocking Peptide - Background**

The protein encoded by this gene belongs to the acyl-CoA dehydrogenase family, which is a family of mitochondrial flavoenzymes involved in fatty acid and branched chain amino-acid metabolism. This protein is one of the four enzymes that catalyze the initial step of mitochondrial beta-oxidation of straight-chain fatty acid. Defects in this gene are the cause of long-chain acyl-CoA dehydrogenase (LCAD) deficiency, leading to nonketotic hypoglycemia.

## **ACADL Antibody (N-term) Blocking Peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Maher, A.C., et al. Mol. Genet. Metab. 100(2):163-167(2010) Illig, T., et al. Nat. Genet. 42(2):137-141(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008)