

**ACADL Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
Catalog # AP13134a**Specification**

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**ACADL Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P28330</a>
Other Accession	<a href="#">NP_001599.1</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	14-43

**ACADL Antibody (N-term) - Additional Information****Gene ID** 33**Other Names**

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

**Target/Specificity**

This ACADL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 14-43 amino acids from the N-terminal region of human ACADL.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ACADL Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ACADL Antibody (N-term) - 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:[21237683](#), PubMed:[8823175](#)).

#### Cellular Location

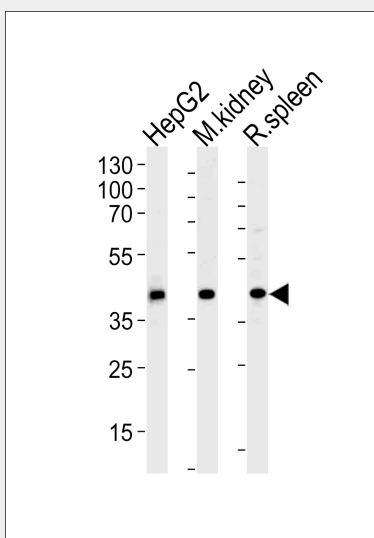
Mitochondrion matrix {ECO:0000250|UniProtKB:P15650}

#### ACADL Antibody (N-term) - 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](#)

#### ACADL Antibody (N-term) - Images



Western blot analysis of lysates from HepG2 cell line and mouse kidney, rat spleen tissue lysates (from left to right), using ACADL Antibody (N-term) (Cat. #AP13134a). AP13134a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

#### ACADL Antibody (N-term) - 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) - 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)