

### ACADL Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8536C

### Specification

# ACADL Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>P28330</u> <u>P79274</u>, <u>P51174</u>, <u>O60HI0</u> Human, Mouse Monkey, Pig Rabbit Polyclonal Rabbit IgG 292-319

# ACADL Antibody (Center) - 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 292-319 amino acids from the Central region of human ACADL.

**Dilution** WB~~1:1000 IHC-P~~1:10~50

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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# ACADL Antibody (Center) - Protein Information

#### Name ACADL (<u>HGNC:88</u>)

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:<u>21237683</u>, PubMed:<u>8823175</u>).

**Cellular Location** 

Mitochondrion matrix {ECO:0000250|UniProtKB:P15650}

# **ACADL Antibody (Center) - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### ACADL Antibody (Center) - Images



Western blot analysis of ACADL Antibody (Center) (Cat. #AP8536c) in mouse kidney tissue lysates (35ug/lane). ACADL (arrow) was detected using the purified Pab.





ACADL Antibody (Center) (Cat. #AP8536c) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ACADL Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# ACADL Antibody (Center) - Background

ACADL 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.

# **ACADL Antibody (Center) - References**

Lu,Y., et.al., J. Lipid Res. 49 (12), 2582-2589 (2008) Lea,W., et.al., Biochim. Biophys. Acta 1485 (2-3), 121-128 (2000)