

**ACSL4 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14406A**

**Specification**

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**ACSL4 Antibody (N-term) - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB,E  |
| Primary Accession | <a href="#">O60488</a>  |
| Other Accession   | <a href="#">O35547</a> , <a href="#">O9OUJ7</a> , <a href="#">NP_075266.1</a> , <a href="#">NP_004449.1</a> |
| Reactivity        | Human   |
| Predicted         | Mouse, Rat  |
| Host              | Rabbit  |
| Clonality         | Polyclonal  |
| Isotype           | Rabbit IgG  |
| Calculated MW     | 79188   |
| Antigen Region    | 28-56   |

**ACSL4 Antibody (N-term) - Additional Information**

**Gene ID** 2182

**Other Names**

Long-chain-fatty-acid--CoA ligase 4, Long-chain acyl-CoA synthetase 4, LACS 4, ACSL4, ACS4, FACL4, LACS4

**Target/Specificity**

This ACSL4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 28-56 amino acids from the N-terminal region of human ACSL4.

**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**

ACSL4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ACSL4 Antibody (N-term) - Protein Information**

**Name** ACSL4

### Synonyms ACS4, FACL4, LACS4

**Function** Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoA for both synthesis of cellular lipids, and degradation via beta-oxidation (PubMed:[21242590](#), PubMed:[22633490](#), PubMed:[24269233](#)). Preferentially activates arachidonate and eicosapentaenoate as substrates (PubMed:[21242590](#)). Preferentially activates 8,9-EET > 14,15-EET > 5,6-EET > 11,12-EET. Modulates glucose- stimulated insulin secretion by regulating the levels of unesterified EETs (By similarity). Modulates prostaglandin E2 secretion (PubMed:[21242590](#)).

### Cellular Location

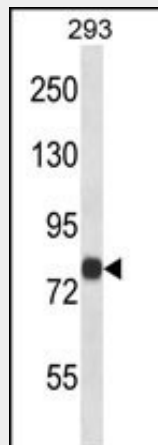
Mitochondrion outer membrane; Single-pass type III membrane protein. Peroxisome membrane; Single-pass type III membrane protein. Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein. Cell membrane

### ACSL4 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](#)

### ACSL4 Antibody (N-term) - Images



ACSL4 Antibody (N-term) (Cat. #AP14406a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the ACSL4 antibody detected the ACSL4 protein (arrow).

### ACSL4 Antibody (N-term) - Background

The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role

in lipid biosynthesis and fatty acid degradation. This isozyme preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the mental retardation or Alport syndrome. Alternative splicing of this gene generates 2 transcript variants.

#### **ACSL4 Antibody (N-term) - References**

Bosker, F.J., et al. Mol. Psychiatry (2010) In press :  
Zhang, Y., et al. Hum. Mol. Genet. 18(20):3894-3905(2009)  
Zeman, M., et al. Tohoku J. Exp. Med. 217(4):287-293(2009)  
An, C., et al. Neurosci. Lett. 441(2):197-200(2008)  
Hu, C., et al. Cancer Biol. Ther. 7(1):131-134(2008)

#### **ACSL4 Antibody (N-term) - Citations**

- [Methodology for Subcellular Fractionation and MicroRNA Examination of Mitochondria, Mitochondria Associated ER Membrane \(MAM\), ER, and Cytosol from Human Brain](#)