

# ACSL3 (FACL3) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2535A

### Specification

# ACSL3 (FACL3) Antibody (N-term) - Product Information

| Application<br>Primary Accession<br>Reactivity<br>Host<br>Clonality<br>Isotype<br>Calculated MW | IHC-P, WB,E<br><u>095573</u><br>Human<br>Rabbit<br>Polyclonal<br>Rabbit IgG<br>80420 |
|---|--|
| Calculated MW<br>Antigen Region   |  |
|   |  |

## ACSL3 (FACL3) Antibody (N-term) - Additional Information

Gene ID 2181

**Other Names** Long-chain-fatty-acid--CoA ligase 3, Long-chain acyl-CoA synthetase 3, LACS 3, ACSL3, ACS3, FACL3, LACS3

#### **Target/Specificity** This ACSL3 (FACL3) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human ACSL3 (FACL3).

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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** ACSL3 (FACL3) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# ACSL3 (FACL3) Antibody (N-term) - Protein Information

Name ACSL3 (<u>HGNC:3570</u>)



# Synonyms ACS3, FACL3, LACS3

**Function** Acyl-CoA synthetases (ACSL) activates long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta- oxidation (PubMed:<u>22633490</u>). Required for the incorporation of fatty acids into phosphatidylcholine, the major phospholipid located on the surface of VLDL (very low density lipoproteins) (PubMed:<u>18003621</u>). Has mainly an anabolic role in energy metabolism. Mediates hepatic lipogenesis. Preferentially uses myristate, laurate, arachidonate and eicosapentaenoate as substrates. Both isoforms exhibit the same level of activity (By similarity).

### **Cellular Location**

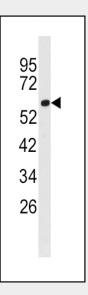
Mitochondrion outer membrane; Single-pass type III membrane protein. Peroxisome membrane; Single-pass type III membrane protein. Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein

# ACSL3 (FACL3) Antibody (N-term) - Protocols

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

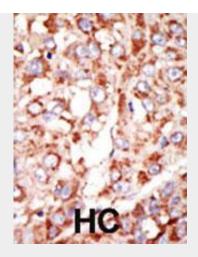
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACSL3 (FACL3) Antibody (N-term) - Images



Western blot analysis of anti-FACL3 Antibody (N-term) (Cat.#AP2535a) in 293 cell line lysates (35ug/lane). FACL3 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# ACSL3 (FACL3) Antibody (N-term) - Background

An initial reaction in fatty acid metabolism in eukaryotic cells is activation of fatty acids catalyzed by acyl-CoA synthetase. FACL3 (fatty acid CoA ligase, long-chain 3) is identified as member of the acyl-CoA synthetase (ACS) family by PCR of rat brain cDNAs using primers based on the conserved region of the ACS protein. The 720-amino acid rat protein preferentially utilizes myristate, laurate, arachidonate, and eicosapentaenoate, and is expressed primarily in brain. The predicted 720-amino acid FACL3 human protein is 92% identical to that of rat.

# ACSL3 (FACL3) Antibody (N-term) - References

Genomics 42:180-181(1997). Gene 278:185-192(2001).