

# ACSL3 (FACL3) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2535A

# **Specification**

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

IHC-P, WB,E Application **Primary Accession** 095573 Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 80420 Antigen Region 1-30

## 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, ACSS, 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 (HGNC:3570)



# 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:22633490). Required for the incorporation of fatty acids into phosphatidylcholine, the major phospholipid located on the surface of VLDL (very low density lipoproteins) (PubMed:18003621). 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**

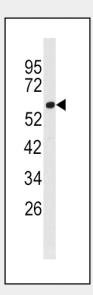
Mitochondrion outer membrane; Single-pass type III membrane protein. Peroxisome membrane; Single-pass type III membrane protein. Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein

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

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

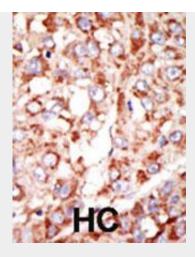
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# 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).