

ACSL3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16647b

Specification

ACSL3 Antibody (C-term) - Product Information

Application WB,E **Primary Accession** 095573 063151, NP 976251.1, NP 004448.2 Other Accession Reactivity Human Predicted Rat Rabbit Host Clonality Polyclonal Isotype Rabbit IgG Calculated MW 80420 Antigen Region 528-556

ACSL3 Antibody (C-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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 528-556 amino acids from the C-terminal region of human ACSL3.

Dilution

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 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

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

ACSL3 Antibody (C-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

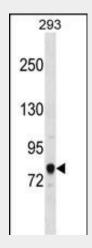
Mitochondrion outer membrane; Single-pass type III membrane protein. Peroxisome membrane; Single-pass type III membrane protein. Microsome membrane; Single-pass type III membrane protein. Endoplasmic reticulum membrane; Single-pass type III membrane protein

ACSL3 Antibody (C-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
- <u>Cell Culture</u>

ACSL3 Antibody (C-term) - Images



ACSL3 Antibody (C-term) (Cat. #AP16647b) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the ACSL3 antibody detected the ACSL3 protein (arrow).

ACSL3 Antibody (C-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 is



highly expressed in brain, and preferentially utilizes myristate, arachidonate, and eicosapentaenoate as substrates. The amino acid sequence of this isozyme is 92% identical to that of rat homolog. Two transcript variants encoding the same protein have been found for this gene.

ACSL3 Antibody (C-term) - References

Weedon-Fekjaer, M.S., et al. J. Lipid Res. 51(7):1886-1896(2010) Cao, A., et al. J. Biol. Chem. 285(22):16664-16674(2010) Perera, F., et al. PLoS ONE 4 (2), E4488 (2009) : Yao, H., et al. J. Biol. Chem. 283(2):849-854(2008) Jia, Z., et al. J. Mol. Neurosci. 33(1):25-31(2007)