

**ACSL3 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16647b****Specification**

---

**ACSL3 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [O95573](#)**ACSL3 Antibody (C-term) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ACSL3 Antibody (C-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/22633490" target="\_blank">22633490</a>). Required for the incorporation of fatty acids into phosphatidylcholine, the major phospholipid located on the surface of VLDL (very low density lipoproteins) (PubMed:<a href="http://www.uniprot.org/citations/18003621" target="\_blank">18003621</a>). 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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **ACSL3 Antibody (C-term) Blocking Peptide - Images**

### **ACSL3 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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)