

## **ACSL1 Blocking Peptide (C-term)**

Synthetic peptide Catalog # BP20275B

### **Specification**

## ACSL1 Blocking Peptide (C-term) - Product Information

Primary Accession P33121
Other Accession NP\_001986.2

# ACSL1 Blocking Peptide (C-term) - Additional Information

#### **Gene ID 2180**

#### **Other Names**

Long-chain-fatty-acid--CoA ligase 1, Acyl-CoA synthetase 1, ACS1, Long-chain acyl-CoA synthetase 1, LACS 1, Long-chain acyl-CoA synthetase 2, LACS 2, Long-chain fatty acid-CoA ligase 2, Palmitoyl-CoA ligase 1, Palmitoyl-CoA ligase 2, ACSL1, FACL1, FACL2, LACS, LACS1, LACS2

#### Target/Specificity

The synthetic peptide sequence is selected from aa 520-533 of HUMAN ACSL1

#### **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.

## ACSL1 Blocking Peptide (C-term) - Protein Information

# Name ACSL1 (HGNC:3569)

#### **Function**

Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoAs for both synthesis of cellular lipids, and degradation via beta-oxidation (PubMed:<a

href="http://www.uniprot.org/citations/24269233" target="\_blank">24269233</a>, PubMed:<a href="http://www.uniprot.org/citations/22633490" target="\_blank">22633490</a>, PubMed:<a href="http://www.uniprot.org/citations/21242590" target="\_blank">21242590</a>). Preferentially uses palmitoleate, oleate and linoleate (PubMed:<a

href="http://www.uniprot.org/citations/24269233" target="\_blank">24269233</a>). Preferentially activates arachidonate than epoxyeicosatrienoic acids (EETs) or hydroxyeicosatrienoic acids (HETEs) (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

#### **Tissue Location**

Highly expressed in liver, heart, skeletal muscle, kidney and erythroid cells, and to a lesser extent in brain, lung, placenta and pancreas.

# **ACSL1 Blocking Peptide (C-term) - Protocols**

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

# • Blocking Peptides

### **ACSL1 Blocking Peptide (C-term) - Images**

# ACSL1 Blocking Peptide (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. [provided by RefSeq].

### **ACSL1 Blocking Peptide (C-term) - References**

Phillips, C.M., et al. J. Lipid Res. 51(7):1793-1800(2010) Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008) Soupene, E., et al. BMC Mol. Biol. 7, 21 (2006): Kahn, B.B., et al. Cell Metab. 1(1):15-25(2005) Mashek, D.G., et al. J. Lipid Res. 45(10):1958-1961(2004)