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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:21242590, PubMed:22633490, PubMed:24269233). Preferentially uses palmitoleate, oleate and linoleate (PubMed:24269233). 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)