

ACSL4 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14406a**Specification**

ACSL4 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O60488](#)**ACSL4 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 2182**Other Names**

Long-chain-fatty-acid--CoA ligase 4, Long-chain acyl-CoA synthetase 4, LACS 4, ACSL4, ACS4, FACL4, LACS4

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.

ACSL4 Antibody (N-term) Blocking Peptide - Protein Information**Name** ACSL4**Synonyms** ACS4, FACL4, LACS4**Function**

Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoA for both synthesis of cellular lipids, and degradation via beta-oxidation (PubMed:24269233, PubMed:22633490, PubMed:21242590). Preferentially activates arachidonate and eicosapentaenoate as substrates (PubMed:21242590). Preferentially activates 8,9-EET > 14,15-EET > 5,6-EET > 11,12-EET. Modulates glucose- stimulated insulin secretion by regulating the levels of unesterified EETs (By similarity). Modulates prostaglandin E2 secretion (PubMed:21242590).

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. Cell membrane

ACSL4 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACSL4 Antibody (N-term) Blocking Peptide - Images

ACSL4 Antibody (N-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 preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the mental retardation or Alport syndrome. Alternative splicing of this gene generates 2 transcript variants.

ACSL4 Antibody (N-term) Blocking Peptide - References

Bosker, F.J., et al. Mol. Psychiatry (2010) In press :Zhang, Y., et al. Hum. Mol. Genet. 18(20):3894-3905(2009) Zeman, M., et al. Tohoku J. Exp. Med. 217(4):287-293(2009) An, C., et al. Neurosci. Lett. 441(2):197-200(2008) Hu, C., et al. Cancer Biol. Ther. 7(1):131-134(2008)