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ACSL4 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14406a

Specification

ACSL4 Antibody (N-term) Blocking Peptide - Product Information

Primary 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:21242590, PubMed:22633490, PubMed:24269233). 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 thelong-chain fatty-acid-coenzyme A ligase family. Although differingin substrate specificity, subcellular localization, and tissuedistribution, all isozymes of this family convert free long-chainfatty acids into fatty acyl-CoA esters, and thereby play a key rolein lipid biosynthesis and fatty acid degradation. This isozymepreferentially utilizes arachidonate as substrate. The absence ofthis enzyme may contribute to the mental retardation or Alportsyndrome. Alternative splicing of this gene generates 2 transcriptvariants.

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)