10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACSL5 (FACL5) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP2536a

Specification

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q9ULC5
Other Accession	ACSL5_HUMAN

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Additional Information

Gene ID 51703

Other Names
Long-chain-fatty-acid--CoA ligase 5, Long-chain acyl-CoA synthetase 5, LACS 5, ACSL5, ACS5, FACL5

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2536a was selected from the N-term region of human FACL5 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Protein Information

Name ACSL5 (HGNC:16526)

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:17681178, PubMed:22633490, PubMed:24269233, PubMed:33191500). ACSL5 may activate fatty acids from exogenous sources for the synthesis of triacylglycerol destined for intracellular storage (By similarity). Utilizes a wide range of saturated fatty acids with a preference for C16-C18 unsaturated fatty acids (By similarity). It was suggested that it may also stimulate fatty acid oxidation (By similarity). At the villus tip of the crypt- villus axis of the small intestine

may sensitize epithelial cells to apoptosis specifically triggered by the death ligand TRAIL. May have a role in the survival of glioma cells.

Cellular Location
Mitochondrion. Endoplasmic reticulum. Mitochondrion outer membrane; Single-pass type III membrane protein Endoplasmic reticulum membrane; Single-pass type III membrane protein. Cell membrane

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Images

ACSL5 (FACL5) Antibody (N-term) Blocking peptide - Background

Long chain acyl-CoA synthetase (LACS), or long chain fatty acid-CoA ligases (FACLs), convert free long chain fatty acids into fatty acyl-CoA esters, which are key intermediates in the synthesis of complex lipids. The deduced 683-amino acid FACL5 protein shares approximately 80% amino acid identity with the rat sequence. Northern blot analysis detected major FACL5 transcripts of 2.5 and 3.7 kb in a many tissues, with highest expression in uterus and spleen. Markedly increased levels of FACL5 transcripts are detected in a glioma line and in primary gliomas of grade IV malignancy, Cultured glioma cells infected with an adenovirus encoding FACL5 displayed induced cell growth on exposure to palmitate. These results suggest a novel fatty acid-induced glioma cell growth mediated by FACL5.