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Anti-ACSL5 Picoband Antibody

Catalog # ABO10317

Product Information

Application	WB
Primary Accession	Q9ULC5
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Long-chain-fatty-acid--CoA ligase 5(ACSL5) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	51703
Other Names	Long-chain-fatty-acid--CoA ligase 5, 6.2.1.3, Long-chain acyl-CoA synthetase 5, LACS 5, ACSL5, ACS5, FACL5
Calculated MW	75991
Application Details	Western blot, 0.1-0.5 □g/ml, Mouse, Rat, Human
Subcellular Localization	Mitochondrion. Endoplasmic reticulum. Mitochondrion outer membrane ; Single-pass type III membrane protein . Endoplasmic reticulum membrane ; Single-pass type III membrane protein .
Source	Eukaryota
Protein Name	Long-chain-fatty-acid--CoA ligase 5
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ACSL5 (337-378aa ADDMKTLKPTLFPAVPRLLNRIYDKVQNEAKTPLKKFLLKLA), different from the related mouse and rat sequences by six amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated

freezing and thawing.

Protein Information

Name ACSL5 (HGNC:16526)

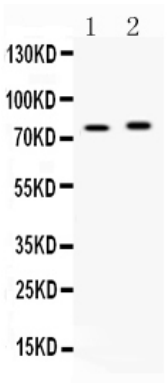
Function Catalyzes the conversion of long-chain fatty acids to their active form acyl-CoAs for both synthesis of cellular lipids, and degradation via beta-oxidation (PubMed:17681178, PubMed:22633490, PubMed:24269233, PubMed:33191500). ACSL5 may activate fatty acids from exogenous sources for the synthesis 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

Background

Long-chain-fatty-acid â€"CoA ligase 5 is an enzyme that in humans is encoded by the ACSL5 gene. 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 is highly expressed in uterus and spleen, and in trace amounts in normal brain, but has markedly increased levels in malignant gliomas. This gene functions in mediating fatty acid-induced glioma cell growth. Three transcript variants encoding two different isoforms have been found for this gene.

Images



Western blot analysis of ACSL5 expression in rat brain extract (lane 1) and mouse brain extract (lane 2). ACSL5 at 76KD was detected using rabbit anti- ACSL5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10317) at 0.5 Â¼g/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.