ACSL4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ACSL4, Polyclonal Antibody
Full Product Name	ACSL4 (FACL4) (Center) Rabbit pAb
Product Gene Name	anti-ACSL4 antibody
Product Synonym Names	Long-chain-fatty-acid--CoA ligase 4; Long-chain acyl-CoA synthetase 4; LACS 4; ACSL4; ACS4; FACL4; LACS4
Clonality	Polyclonal
Isotype	Ig
Clone Number	RB04697
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied in PBS with 0.09% (W/V) Sodium Azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Purity/Purification	Affinity Purified
OMIM	phenotype 300387
3D Structure	ModBase 3D Structure for O60488
Immunogen	This ACSL4 (FACL4) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-267 amino acids from the central region of human ACSL4 (FACL4).
Cellular Localization	Endoplasmic Reticulum, Membrane, Microsome, Mitochondrion, Mitochondrion Outer Membrane, Peroxisome
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-ACSL4 antibody	Western Blot (WB), Immunocytochemistry (ICC), Immunohistochemistry (IHC)
Application Notes for anti-ACSL4 antibody	WB: 1:1000 ICC: 1:10-50 IHC: 1:50-100
Related Product Information for anti-ACSL4 antibody	MBS8553831 is an antibody targeting ACSL4. Also known as ACSL4 (FACL4) (Center) Rabbit pAb. Reactive in Human. Host: Rabbit.
Other Notes	Small volumes of anti-ACSL4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ACSL4. It may not necessarily be applicable to this product.

NCBI GI #	4758332
NCBI GeneID	2182
NCBI Accession #	NP_004449.1
UniProt Primary Accession #	O60488

UniProt Related Accession #	O60488
GenBank Nucleotide #	NP_004449.1
NCBI Official Full Name	long-chain-fatty-acid--CoA ligase 4 isoform 1
NCBI Official Synonym Full Names	acyl-CoA synthetase long chain family member 4
NCBI Official Symbol	ACSL4
NCBI Official Synonym Symbols	ACS4; FACL4; LACS4; MRX63; MRX68
UniProt Protein Name	Long-chain-fatty-acid--CoA ligase 4
UniProt Synonym Protein Names	Long-chain acyl-CoA synthetase 4; LACS 4
UniProt Gene Name	ACSL4
UniProt Synonym Gene Names	ACS4; FACL4; LACS4; LACS 4
UniProt Entry Name	ACSL4_HUMAN
NCBI Protein Information	long-chain-fatty-acid--CoA ligase 4
NCBI Summary for ACSL4	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 cognitive disability or Alport syndrome. Alternative splicing of this gene generates multiple transcript variants. [provided by RefSeq, Jan 2016]
UniProt Comments for ACSL4	ACSL4: Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Preferentially uses arachidonate and eicosapentaenoate as substrates. Defects in ACSL4 are the cause of mental retardation X- linked type 63 (MRX63). Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. Non- syndromic mental retardation patients do not manifest other clinical signs. Defects in ACSL4 are involved in Alport syndrome with mental retardation midface hypoplasia and elliptocytosis (ATS-MR). A X-linked contiguous gene deletion syndrome characterized by glomerulonephritis, deafness, mental retardation, midface hypoplasia and elliptocytosis. Belongs to the ATP-dependent AMP-binding enzyme family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Ligase; EC 6.2.1.3; Membrane protein, integral; Lipid Metabolism - fatty acid Chromosomal Location of Human Ortholog: Xq22.3-q23 Cellular Component: peroxisomal membrane; mitochondrial outer membrane; endoplasmic reticulum membrane; cell soma; membrane; cytoplasm; integral to membrane; lipid particle Molecular Function: arachidonate-CoA ligase activity; very-long-chain-fatty-acid-CoA ligase activity; ATP binding; long-chain-fatty-acid-CoA ligase activity Biological Process: embryonic process involved in female pregnancy; lipid biosynthetic process; triacylglycerol biosynthetic process; cellular lipid metabolic process; lipid metabolic process; long-chain fatty acid metabolic process; negative regulation of prostaglandin secretion; positive regulation of cell growth; response to nutrient; fatty acid transport Disease: Mental Retardation, X-linked 63
Research Articles on ACSL4	**1.** ACSL4 role in the drug resistance in breast cancer cell lines.
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