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

# ACSL1 Recombinant Rabbit mAb

Catalog # AP98679

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IHC-F, IF, E |
| **Primary Accession** | P33121 |
| **Other Accession** | P33121 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Recombinant |
| **Calculated MW** | 77943 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the ATP-dependent AMP-binding enzyme family. |
| **Background Descriptions** | 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. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013], |

## Additional Information

| | |
|---|---|
| **Gene ID** | 2180 |
| **Other Names** | ACS1; FACL1; FACL2; LACS; LACS1; LACS2; Acas; Acas1; Acs; FACS; LACS 1; COAA; ACSL1_HUMAN; ACSL1; Acyl-CoA synthetase 1 (ACS1); Arachidonate--CoA ligase; Long-chain acyl-CoA synthetase 1 (LACS 1); Long-chain acyl-CoA synthetase 2 (LACS 2); Long-chain fatty acid-CoA ligase 2; Palmitoyl-CoA ligase 1; Palmitoyl-CoA ligase 2; Phytanate--CoA ligase; 6.2.1.3; ACSL1_MOUSE; Acsl2; ACSL1_RAT; Long-chain-fatty-acid--CoA ligase, liver isozyme; acyl-CoA synthetase long chain family member 1; fatty-acid-Coenzyme A ligase, long-chain 2; lignoceroyl-CoA synthase; long-chain fatty-acid-coenzyme A ligase 1; Long-chain-fatty-acid--CoA ligase 1 (Acyl-CoA synthetase 1) (ACS1) (Long-chain acyl-CoA synthetase 1) (LACS 1) (Long-chain acyl-CoA synthetase 2) (LACS 2) (Long-chain fatty acid-CoA ligase 2) (Palmitoyl-CoA ligase 1) (Palmitoyl-CoA ligase 2) |
| **Dilution** | IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

| | |
|---|---|
| **Name** | ACSL1 ( HGNC:3569) |
| **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:21242590, PubMed:22633490, PubMed:24269233). Preferentially uses palmitoleate, oleate and linoleate (PubMed:24269233). Preferentially activates arachidonate than epoxyeicosatrienoic acids (EETs) or hydroxyeicosatrienoic acids (HETEs) (By similarity). |
| **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 |
| **Tissue Location** | Highly expressed in liver, heart, skeletal muscle, kidney and erythroid cells, and to a lesser extent in brain, lung, placenta and pancreas. |

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