

Product datasheet for **RC238727**

ACSL1 (NM_001286712) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL1 (NM_001286712) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACSL1
Synonyms:	ACS1; FACL1; FACL2; LACS; LACS1; LACS2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238727 representing NM_001286712
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGATCGTTCACCTTATGATACCCTTGGAAATGAAGCCATCACGTACATAGTCAACAAAGCTGAAC
 TCTCTCTGGTTTTTGTGACAAGCCAGAGAAGGCCAAACTCTTATTAGAGGGTGTAGAAAATAAGTTAAT
 ACCAGGCCTTAAAATCATAGTTGTCATGGATGCCTACGGCAGTGAAGTGGTGAACGAGGCCAGAGGTGT
 GGGGTGGAAGTACCAGCATGAAGGCGATGGAGGACCTGGGAAGAGCCAACAGACGGAAGCCCAAGCCTC
 CAGCACCTGAAGATCTTGCAAGTAAATTTGTTTCAAGTGGAACTACAGGCAACCCCAAAGGAGCAATGGT
 CACTCACCGAAACATAGTGAGCGATTGTTGAGCTTTTGTGAAAGCAACAGAGAATACAGTCAATCCTTGC
 CCAGATGATACTTTGATATCTTTCTTGCCTCTCGCCCATATGTTTGAGAGAGTTGTAGAGTGTGTAATGC
 TGTGTCATGGAGCTAAAATCGGATTTTTCCAAGGAGATATCAGGCTGCTCATGGATGACCTCAAGGTGCT
 TCAACCCACTGTCTTCCCGTGGTTCCAAGACTGCTGAACCGGATGTTTGACCGAATTTTCGGACAAGCA
 AACACCACGCTGAAGCGATGGCTCTTGGACTTTGCCTCCAAGAGGAAAGAAGCAGAGCTTCGACGGCA
 TCATCAGAAACAACAGCCTGTGGGACCGGCTGATCTTCCACAAAGTACAGTTCGAGCCTGGGCGGAAGAGT
 CCGGCTGATGGTGACAGGAGCCGCCCGGTGTCTGCCACTGTGCTGACGTTCTCAGAGCAGCCCTGGGC
 TGTCAAGTTTTAAGAAGTACGGACAGACAGAGTGCAGTCCCGGTGTGCTGACCATGCCTGGAGACT
 GGACCGCAGGCCATGTTGGGGCCCGATGCCGTGCAATTTGATAAAAATGTTGATGTGGAAGAAATGAA
 TTACATGGCTGCCGAGGGCGAGGGCGAGGTGTGTGAAAGGGCCAAATGATTTTCAGGGCTACTTGAAG
 GACCCAGCGAAAACAGCAGAAGCTTTGGACAAAGACGGCTGGTTACACACAGGGGACATTTGAAAAATGGT
 TACCAAATGGCACCTTAAAAATATCGACCGGAAAAAGCACATATTTAAGCTGGCACAAGGAGAATCAT
 AGCCCTGAAAAGATTGAAAATATCTACATGCGAAGTGAGCCTGTTGCTCAGGTGTTGTCCACGGAGAA
 AGCCTGCAGCATTCTCATTGCAATTGTGGTACCAGATGTTGAGACATTATGTTCTGGGCCCAAAAGA
 GAGGATTTGAAGGGTCGTTTGGAACTGTGCAGAAAATAGGATGTCAAAAAAGCTATCCTCGAAGATAT
 GGTGAGACTTGGGAAGGATTCTGGTCTGAAACATTTGAACAGGTCAAAGGCATCACATTGCACCCTGAA
 TTATTTTCTATCGACAATGGCCTTCTGACTCCAACAATGAAGGCGAAAAGGCCAGAGCTGCGGAATATT
 TCAGGTCGAGATAGATGACCTCTATTCCACTATCAAGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238727 representing NM_001286712
 Red=Cloning site Green=Tags(s)

MVIVPLYDTLGNEAITIVNKAELSLVFVDKPEKALLLEGVENKLIPLGLIIVVMDAYGSELVERGQRC
 GVEVTSMKAMEDLGRANRRKPKPPAPEDLAVICFTSGTTGNPKGAMVTHRNIVSDCSAFVKATENTVNPC
 PDDTLISFLPLAHMFERVVECVMLCHGAKIGFFQGDIRLLMDDLKVLQPTVFPVPRLLNRMFDRIFGQA
 NTTLKRLLDFASKRKEAELRSGIIRNNSLWDRLIFHKVQSSLGGRVRLMVTGAAPVSATVLTFLRAALG
 CQFYEGYQTECTAGCCLTMPGDWTAGHVGAPMPCNLIKLVDVEEMNYMAEGEGEVCKGPNVFGYLK
 DPAKTAEALDKDGLHTGDIKWL PNGTLKI IDRKKHIFKLAQGEYIAPEKIENIYMRSEPVAQVFVHGE
 SLQAFLIAIVVPDVETLCSWAQKRGFEFSFEELCRNKDVKKAILEDMVRLGKDSGLKPFQVKGITLHPE
 LFSIDNGLLTPTMKAKRPELRNYFRSQIDDLYSTIKV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

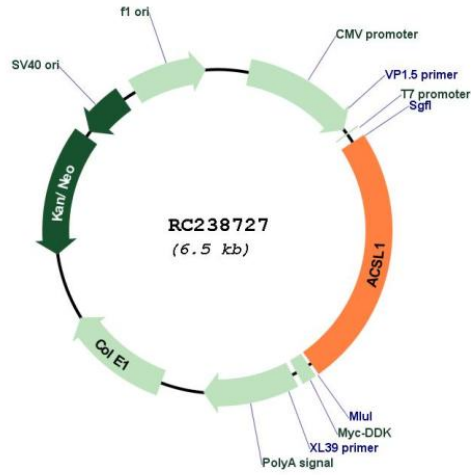
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001286712
ORF Size:	1581 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001286712.1 , NP_001273641.1
RefSeq Size:	4121 bp
RefSeq ORF:	1584 bp
Locus ID:	2180
UniProt ID:	P33121
Cytogenetics:	4q35.1
Protein Families:	Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
MW:	59 kDa
Gene Summary:	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]