

Product datasheet for **RC239340**

ACSL1 (NM_001286710) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL1 (NM_001286710) 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



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC239340 representing NM_001286710
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAAGCCCATGAGCTGTTCCGGTATTTTCGAATGCCAGAGCTGGTTGACTTCCGACAGTACGTGCGTA
 CTCTTCGACCAACACGCTTATGGGCTTCGGAGCTTTTGCAGCACTCACACCTTCTGGTACGCCACGAG
 ACCCAAACCCCTGAAGCCGCCATGCGACCTCTCCATGCAGTCAGTGAAGTGGCGGGTAGTGGTGGTGCA
 CGAAGATCCGCACTACTTGACAGCGACGAGCCCTTGGTGTATTTCTATGATGATGCACAACATTATACG
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 CTATGAATGGCTTTCATATAAACAGGTTGCAGAATTGTCGGAGTGCATAGGCTCAGCACTGATCCAGAAG
 GGCTTCAAGACTGCCCCAGATCAGTTCATTGGCATCTTGGCTCAAATAGACCTGAGTGGGTGATTATTG
 AACAGGATGCTTTGCTTATTCGATGGTATCGTTCACCTTTATGATACCCTTGGAAATGAAGCCATCAC
 GTACATAGTCAACAAAGCTGAACCTCTCTGGTTTTTGTGACAAGCCAGAGAAGCCAAACTCTTATTA
 GAGGGTGTAGAAAATAAGTTAATACCAGGCCTTAAAATCATAGTTGTATGGATGCCTACGGCAGTGAAC
 TGGTGAACGAGGCCAGAGGTGTGGGTGGAAGTCACCAGCATGAAGCGGATGGAGGACCTGGGAAGAGC
 CAACAGACGGAAGCCCAAGCCTCCAGCCTGAAGATCTTGCAAGTAAATTTGTTTCAAGTGAAGTACA
 GGCAACCCCAAGGAGCAATGGTCACTACCGAAACATAGTGAGCGATTGTTTCCAGCTTTTGTGAAAGCAA
 CAGAGAAAGCACTTCCCTTGGTGCAGTGACACACATTTTCAATTTACCCTTGCTCACATTTATGA
 ACAGTTATTGAAGTGTGAATGCTGTGCATGGAGCTAAAATCGGATTTTCCAAGGAGATACAGGCTG
 CTCATGGATGACCTCAAGGTGCTTCAACCACTGTCTTCCCGTGGTCCAAGACTGCTGAACCGGATGT
 TTGACCGAATTTTCGGACAAGCAAACACCAGCTGAAGCGATGGCTCTTGGACTTTGCCTCAAGAGGAA
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 AAAAAAGCTATCCTCGAAGATATGGTGAGACTGGGAAGGATTCTGGTCTGAAACCATTTGAACAGGTCA
 AAGGCATCACATTGCACCCTGAATTATTTTCTATCGACAATGGCCTTCTGACTCCAACAATGAAGGCGAA
 AAGGCCAGAGCTGCGGAATTTTCAAGTGCAGATAGATGACCTCTATTCCACTATCAAGTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239340 representing NM_001286710
 Red=Cloning site Green=Tags(s)

MQAHELFYFRMPPELVDFRQYVRTLPTNTLMGFGAFAAL TTFWYATRPKPLKPPCDLSMQSVEVAGSGGA
 RRSALLDSDEPLVYFYDDVTTL YEGFQRGIQVSNNGPCLGSRKPDQPYEWL SYKQVAELSECIGSALI QK
 GFKTAPDQFIGIFAQNRPEWVIEEQGCFAYSMVIVPLYDTL GNEAITYIVNKAELSLVFVDKPEKAKLLL
 EGVENKLIPGLKII VVMDAYGSELVERGQRCGVEVTSMKAMEDLGRANRRKPKPPAPEDLAVICFTSGTT
 GNPKGAMVTHRNI VSDCSAFVKATEKALPLSASDTHISYLP LAHIYEQLLKCVMLCHGAKIGFFQGD IRL
 LMDDLKVLQPTVFPVPRLLNRMFDRIFGQANTTLKRWLLDFASKRKEAELRSGIIRNNSLWDRLI FHKV
 QSSLGGRVRLMVTGAAPVSATVLTFLRAALGCQFYEGYQQT ECTAGCCLTMPGDWTAGHV GAMPNCNLIK
 LVDVEEMNYMAE GEGEVCKGPNVFGYLGKDPAKTAEALDKDGLHTGDIGKWL PNTLKIIDRKKHIF
 KLAQGEYIAPEKIENIYMRSEPVAVQFVHGESLQAFLIAI VVPDVETLCSWAQKRGFE GSFEEELCRNKDV
 KKAILEDMVR LGKDSGLKPF EQVKGITLHPELFSIDNGLL TPTMKAKRPELRNYFRSQIDDLYSTIKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

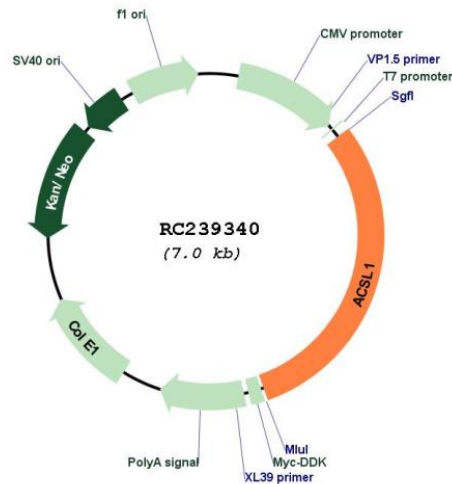
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001286710

ORF Size: 2094 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:

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_001286710.2](#)

RefSeq Size: 3938 bp

RefSeq ORF:	2097 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:	78.4 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]