

Product datasheet for **RG238727**

ACSL1 (NM_001286712) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL1 (NM_001286712) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACSL1
Synonyms:	ACS1; FACL1; FACL2; LACS; LACS1; LACS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238727 representing NM_001286712.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGTGATCGTTCCACTTTATGATACCCCTTGGAAATGAAGCCATCACGTACATAGTCAACAAAGCTGAA
CTCTCTCTGGTTTTTGTGACAAGCCAGAGAAGGCCAAACTCTTATTAGAGGGTGTAGAAAATAAGTTA
ATACCAGGCCTTAAAATCATAGTTGTTCATGGATGCCTACGGCAGTGAAGTGGTGAACGAGGCCAGAGG
TGTGGGGTGAAGTCACCAGCATGAAGGCGATGGAGGACCTGGGAAGAGCCAACAGACGGAAGCCCAAG
CCTCCAGCACCTGAAGATCTTGCAGTAATTTGTTTCAAGTGGAACTACAGGCAACCCCAAGGAGCA
ATGGTCACTCACCGAAACATAGTGAGCGATTGTTGAGCTTTTGTGAAAGCAACAGAGAATACAGTCAAT
CCTTGCCAGATGATACTTTGATATCTTCTTGCCTCTCGCCATATGTTTGAGAGAGTTGTAGAGTGT
GTAATGCTGTGCATGGAGCTAAAATCGGATTTTCCAAGGAGATATCAGGCTGCTCATGGATGACCTC
AAGGTGCTTCAACCCACTGTCTTCCCGTGGTTCCAAGACTGCTGAACCGGATGTTTGACCGAATTTTC
GGACAAGCAAACACCACGCTGAAGCGATGGCTCTTGGACTTTGCCTCAAGAGGAAAGAAGCAGAGCTT
CGCAGCGGCATCATCAGAAACAACAGCCTGTGGGACCGGCTGATCTTCCACAAAGTACAGTCGAGCCTG
GGCGGAAGAGTCCGGCTGATGGTGACAGGAGCCGCCCGGTGTCTGCCACTGTGTGACGTTCTCAGA
GCAGCCCTGGGCTGTGAGTTTTATGAAGGATACGGACAGACAGAGTGCAGTGCAGGCTGCTGCTGACC
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CAGGGCTACTTGAAGGACCCAGCGAAAACAGCAGAAGCTTTGGACAAAGACGGCTGGTTACACACAGGG
GACATTGAAAAATGGTTACCAAATGGCACCTTAAAAATATCTACATGCGAAGTGAAGCTGTTGCTCAG
GCACAAGGAGAAATACATAGCCCTGAAAAGATTGAAAATATCTACATGCGAAGTGAAGCTGTTGCTCAG
GTGTTTTGTCCACGAGAAAGCCTGCAGGCAATTTCTCATTGCAATTGTGGTACCAGATGTTGAGACATTA
TGTTCTGGGCCAAAAGAGAGGATTTGAAGGGTGTGTTGAGGAACTGTGCAGAAAATAAGGATGTCAAA
AAAGCTATCCTCGAAGATATGGTGAGACTTGGGAAGGATCTGGTCTGAAACATTTGAACAGGTCAAA
GGCATCACATTGCACCCTGAATATTTTCTATCGACAATGGCCTTCTGACTCCAACAATGAAGGCGAAA
AGGCCAGAGCTGCGGAATTTTTCAGGTCGAGATAGATGACCTCTATTCCACTATCAAGGTT
ACCGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
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Protein Sequence:

>Peptide sequence encoded by RG238727
 Blue=ORF Red=Cloning site Green=Tag(s)

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MVIVPLYDTLGNEAITYIVNKAELSLVFVDKPEKALLLEGVENKLIPLGLKIIVVMDAYGSELVERGQR
CGVEVTSMKAMEDLGRANRRKPKPPAPEDLAVICFTSGTTGNPKGAMVTHRNI VSDCSAFVKATENTVN
PCPDDTLISFLPLAHMFERVVECVMLCHGAKIGFFQGDIRLLMDDLKVLQPTVFPVPRLLNRMFDRIF
GQANTTLKRWLLDFASKRKEAELRSGIIRNNSLWDRLIFHKVQSSLGGRVRLMVTGAAPVSATVLTFLR
AALGCQFYEGYQTECTAGCCLTMPGDWTAGHVGAPMPCNLIKLVDVEEMNYMAEAGEGEVCKGPNVF
QGYLKDPAKTAEALDKDGLHTGDIKWL PNGTLKIIDRKKHIFKLAQGEYIAPEKIENIYMRSEPAVQ
V FVHGESLQAFLIAIVVPDVETLCSWAQKRGFEFSFEELCRNKDVKKAILEDMVR LGKDSGLKPFEQVK
GITLHPELFSIDNGLLTPTMKAKRPELRNYFRSQIDDLYSTIKV
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites:

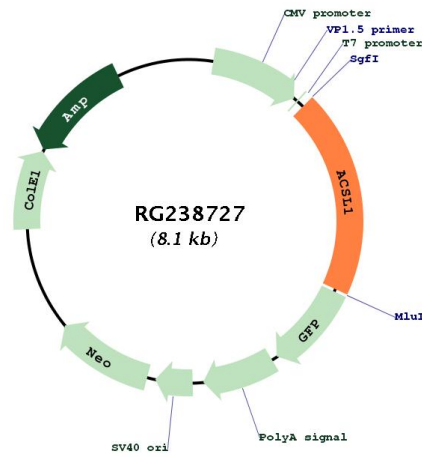
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



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).
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]