

Product datasheet for **RC218932**

ACSL5 (NM_203380) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL5 (NM_203380) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACSL5
Synonyms:	ACS2; ACS5; FACL5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC218932 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGCTCTGAAGCCACCCTGTCTCTGGAGGAACCACGAGCGAGGGAAGAAGGACAGGGACTCGTGTG
 GCAGGAAGAACTCAGAGCCGGGAAGCCCCATTACTAGAAAGCACTGAGAGATGCCGCCCCCTCGCAGGG
 TCTGAATTTCTGCTGCTGTTCAAAAAGATGCTTTTTATCTTTAACTTTTTGTTTTCCCCACTTCGACC
 CCGGCGTGTATCTGCATCCTGACATTTGGAGCTGCCATCTTCTGTGGCTGATCACCAGACCTCAACCCG
 TCTTACCTCTTCTGACCTGAACAATCAGTCTGTGGGAATTGAGGGAGGAGCACGGAAGGGGTTTCCCA
 GAAGAACAATGACCTAACAAGTTGCTGCTTCTCAGATGCCAAGACTATGTATGAGTTTTTCAAAGAGGA
 CTCGCTGTGTCTGACAATGGGCCCTGCTGGGATATAGAAAACCAACCAGCCCTACAGATGGCTATCTT
 ACAAACAGGTGTCTGATAGAGCAGAGTACCTGGGTTCTGTCTTGCATAAAGGTTATAAATCATCACC
 AGACCAGTTTGTGGCATCTTTGCTCAGAATAGGCCAGAGTGGATCATCTCCGAATTGGCTTGTACACG
 TACTCTATGGTAGCTGTACCTCTGTATGACACCTTGGGACCAGAAGCCATCGTACATATTGTCAACAAGG
 CTGATATCGCCATGGTGATCTGTGACACACCCCAAAAGGCATTGGTGTGATAGGGAATGTAGAGAAAGG
 CTTACCCCGAGCCTGAAGGTGATCATCCTTATGGACCCCTTGTATGATGACCTGAAGCAAGAGGGGAG
 AAGAGTGGAAATTGAGATCTTATCCCTATATGATGCTGAGAACCTAGGCAAGAGCACTTCAGAAAACCTG
 TGCCTCTAGCCAGAAGACCTGAGCGTCATCTGCTTACCAGTGGGACCACAGGTGACCCCAAGGAGC
 CATGATAACCCATCAAAATATTGTTTCAAATGCTGCTGCCTTCTCAAATGTGTGGAGCATGCTTATGAG
 CCCACTCTGATGATGTGGCCATATCTACCTCCCTCTGGCTCATATGTTTGAGAGGATTGTACAGGCTG
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 CATGAACTACTTTACAGTGAATAATGAAGGAGAGGTCTGCATCAAGGGTACAACGTGTTCAAAGGATAC
 CTGAAGGACCCTGAGAAGACACAGGAAGCCCTGGACAGTGTGCTGGCTTCCACACAGGAGACATTGGTC
 GCTGGCTCCCGAATGGAATCTGAAGATCATCGACCGTAAAAAGAACATTTTCAAGCTGGCCCAAGGAGA
 ATACATTCACCAGAGAAGATAGAAAATCTACAACAGGAGTCAACCAGTGTACAAAATTTTTGTACAC
 GGGGAGAGCTTACGGTATCCTTAGTAGGAGTGGTGGTTCCTGACACAGATGACTTCCCTCATTTCGAG
 CCAAGCTTGGGGTGAAGGGCTCCTTTGAGGAAGTGTGCCAAAACCAAGTTGTAAGGGAAGCCATTTTGA
 AGACTTGCAAAAATGGGAAAGAAAGTGGCCTTAAAACCTTTTGAACAGGTCAAAGCCATTTTCTTCAT
 CCAGAGCCATTTCCATTGAAAATGGGCTTTGACACCAACATTGAAAGCAAAGCGAGGAGAGCTTTCCA
 AATACTTTCCGACCCAAATTGACAGCCTGTATGAGCACATCCAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218932 protein sequence
Red=Cloning site Green=Tags(s)

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MDALKPPCLWRNHERGKKDRDSCGRKNSEPGSPHSLEALRDAAPSQGLNFLLLFTKMLFIFNFLFSPLPT
PALICILTFGAAIFLWLITRPQVPLPLDLNNSVGIIEGGARKGVSQKNDLTSCEFSDAKTMYEVFQRG
LAVSDNGPCLGYRKNQPYRWLSYKQVSDRAEYLGSCLLHKGYKSSPDQFVGIFAQNRPEWIISELACYT
YSMVAVPLYDTLGPDAIIVHIVNKADIAMVICDTPQKALVLIIGNVEKGFTPSLKVIILMDPFDDDLKQGE
KSGIEILSLYDAENLKEHFRKPVPPSPEDLSVICFTSGTTGDPKGAMITHQNIIVSNAAAFLLKCVHAYE
PTPDDVAISYLPLAHMFERIVQAVVYSCGARVGFQGDIRLLADDMKTLPKPTLFPVAVPRLNRIYDKVQN
EAKTPLKFLKLAIVSSKFKELQKGIIRHDSFWDKLIFAKIQDSLGGVRVIVTGAAPMSTSVMTFFRAA
MGCQVYEAYGQTECTGGCTFTLPGDWTSGHVGVLACNYVKLEADVADNMYFTVNNEGEVCIKGTNVFKGY
LKDPEKTQEAALSDGWLHTGDIGRWLPNGTLKIIDRKNIFKLAQGEYIAPEKIENIYNRSQVPLQIFVH
GESLRSSLVGVVVPDTPVPSFAAKLVKGSFEELCQNQVREAILEDLQKIGKESGLKTFEQVKAIFLH
PEPFSIENGLLTPTLKAKRGELSKYFRTQIDSLYEHIQD
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6409_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_203380

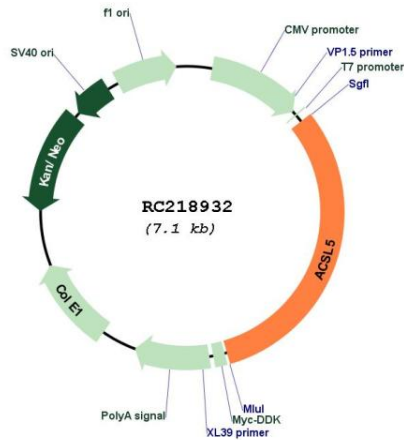
ORF Size: 2220 bp

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](#)

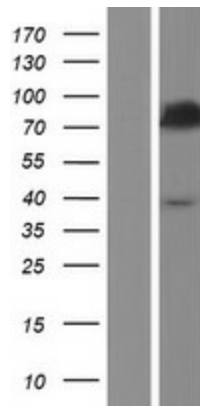
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_203380.1</u> , <u>NP_976314.1</u>
RefSeq Size:	3399 bp
RefSeq ORF:	2052 bp
Locus ID:	51703
UniProt ID:	<u>Q9ULC5</u>
Cytogenetics:	10q25.2
Protein Families:	Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
MW:	82.3 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. This isozyme is highly expressed in uterus and spleen, and in trace amounts in normal brain, but has markedly increased levels in malignant gliomas. This gene functions in mediating fatty acid-induced glioma cell growth. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

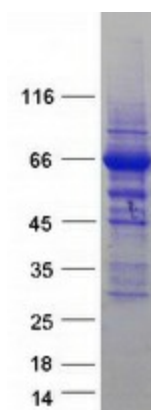
Product images:



Circular map for RC218932



Western blot validation of overexpression lysate (Cat# [LY404322]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218932 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACSL5 protein (Cat# [TP318932]). The protein was produced from HEK293T cells transfected with ACSL5 cDNA clone (Cat# RC218932) using MegaTran 2.0 (Cat# [TT210002]).