

Product datasheet for **RC213380**

ACSL5 (NM_203379) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | ACSL5 (NM_203379) 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:

>RC213380 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGCTCTGAAGCCACCCTGTCTCTGGAGGAACCACGAGCGAGGGAAGAAGGACAGGGACTCGTGTG
 GCAGGAAGAACTCAGAGCCGGGAAGCCCCATTACTAGAAAGCACTGAGAGATGCGGCCCCCTCGCAGGG
 TCTGAATTTCTGCTGCTGTTTCAAAAGATGCTTTTTATCTTTAACTTTTTGTTTTCCCCACTTCGACCC
 CCGGCGTGTATCTGCATCCTGACATTTGGAGCTGCCATCTTCTGTGGCTGATCACCAGACCTCAACCCG
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 AGACCAGTTTGTGGCATCTTTGCTCAGAATAGGCCAGAGTGGATCATCTCCGAATTGGCTTGTACACG
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 CTGATATCGCCATGGTGATCTGTGACACACCCCAAAAGGCATTGGTGCTGATAGGGAATGTAGAGAAAGG
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 AATACTTTCCGACCCAAATTGACAGCCTGTATGAGCACATCCAGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213380 protein sequence
Red=Cloning site Green=Tags(s)

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MDALKPPCLWRNHERGKKDRDSCGRKNSEPGSPHSLEALRDAAPSQGLNLLLFTKMLFIFNFLFSPLPT
PALICILTFGAAIFLWLI TRPQPVLPLLDLNNQSVGIEGGARKGVSQKNNDLTSCCFSDAKTMYEVFQRG
LAVSDNGPCLGYRKNQPYRWLSYKQVSDRAEYLGSCLLHKGYKSSPDQFVGIFAQNRPEWIISELACYT
YSMVAVPLYDTLGPEAIVHIVNKADIAMVICDTPQKALVLI GNVEKGFTPSLKVIILMDPFDDDLKQRGE
KSGIEILSLYDAENL GKEHFRKPVPPSPEDLSVICFTSGTTGDPKGAMITHQNIIVSNAAAF LKCV E HAYE
PTPDDVAISYLPLAHMFERIVQAVVYSCGARVGFQGDIRLLADDMKT LKPTLFPAPRLLNRIYDKVQN
EAKTPLKKFLLKLAVSSKFELQKGIIRHDSFWDKLIFAKIQDSL GGRV RVIVTGAAPMSTSVMTFFRAA
MGCQVYEAYGQTECTGGCTFTLPGDWTSGHVG VPLACNYVKLEADVADMN YFTV NNEGEVCIKGTNVFKGY
LKDPEKTQEALDSGWLHTGDIGRWLPNGTLKIIDRKKNIFKLAQGEYIAPEKIENIYNRSQPV LQIFVH
GESLRSSLVGVVVPD TDVLP SFAAKLGVKGSFEELCQNQVVREAI LEDLQKIGKESGLKTFEQVKAIFLH
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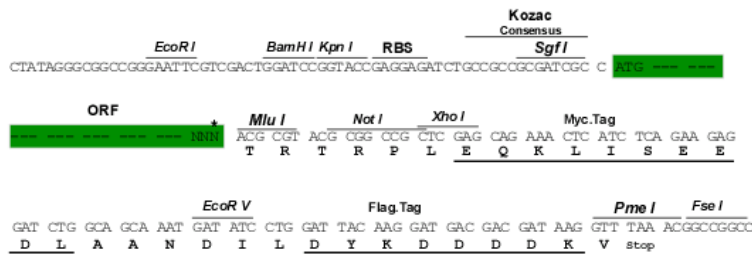
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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_203379

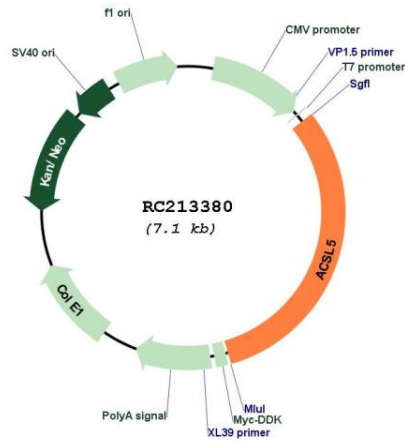
ORF Size: 2220 bp

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](#)

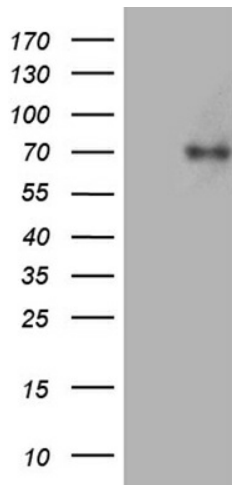
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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| 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 Size: | 3233 bp |
| RefSeq ORF: | 2052 bp |
| Locus ID: | 51703 |
| UniProt ID: | Q9ULC5 |
| 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] |

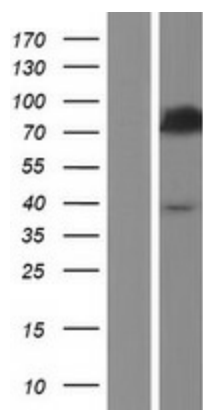
Product images:



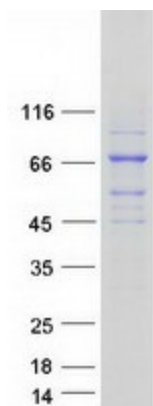
Circular map for RC213380



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACSL5 (Cat# RC213380, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACSL5 (Cat# [TA811897]). Positive lysates [LY404321] (100ug) and [LC404321] (20ug) can be purchased separately from OriGene.



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# [TP313380]). The protein was produced from HEK293T cells transfected with ACSL5 cDNA clone (Cat# RC213380) using MegaTran 2.0 (Cat# [TT210002]).