

## Product datasheet for **RG213380**

### ACSL5 (NM\_203379) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL5 (NM_203379) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACSL5
Synonyms:	ACS2; ACS5; FACL5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG213380 representing NM\_203379  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACGCTCTGAAGCCACCCTGTCTCTGGAGGAACCACGAGCGAGGGAAGAAGGACAGGGACTCGTGTG  
 GCAGGAAGAACTCAGAGCCGGGAAGCCCCATTACTAGAAAGCACTGAGAGATGCGGCCCCCTCGCAGGG  
 TCTGAATTTCTGCTGCTGTTCAAAAAGATGCTTTTTATCTTTAACTTTTTGTTTTCCCACTTCGGACC  
 CCGGCGTGTATCTGCATCCTGACATTTGGAGCTGCCATCTTCTGTGGCTGATCACCAGACCTCAACCCG  
 TCTTACCTCTTCTGACCTGAACAATCAGTCTGTGGGAATTGAGGGAGGAGCACGGAAGGGGTTTCCCA  
 GAAGAACAATGACCTAACAAGTTGCTGCTTCTCAGATGCCAAGACTATGTATGAGTTTTTCAAAGAGGA  
 CTCGCTGTGTCTGACAATGGGCCCTGCTGGGATATAGAAAACCAACCAGCCCTACAGATGGCTATCTT  
 ACAAACAGGTGTCTGATAGAGCAGAGTACCTGGGTTCTGTCTTGCATAAAGGTTATAAATCATCACC  
 AGACCAGTTTGTGGCATCTTTGCTCAGAATAGGCCAGAGTGGATCATCTCCGAATTGGCTTGTACACG  
 TACTCTATGGTAGCTGTACCTCTGTATGACACCTTGGGACCAGAAGCCATCGTACATATTGTCAACAAGG  
 CTGATATCGCCATGGTGTCTGTGACACACCCCAAAAGGCATTGGTGTCTGATAGGGAATGTAGAGAAAGG  
 CTTACCCCGAGCCTGAAGGTGATCATCCTTATGGACCCCTTGTATGATGACCTGAAGCAAGAGGGGAG  
 AAGAGTGGAAATTGAGATCTTATCCCTATATGATGCTGAGAACCTAGGCAAGAGCACTTCAGAAAACCTG  
 TGCCTCTAGCCAGAAGACCTGAGCGTCATCTGCTTACCAGTGGGACCACAGGTGACCCCAAAGGAGC  
 CATGATAACCCATCAAAATATTGTTTCAAATGCTGCTGCCTTCTCAAATGTGTGGAGCATGCTTATGAG  
 CCCACTCTGATGATGTGGCCATATCCTACCTCCCTCTGGCTCATATGTTTGAGAGGATTGTACAGGCTG  
 TTGTGTACAGCTGTGGAGCCAGAGTTGGATTCTTCCAAGGGGATATTCGGTTGCTGGCTGACGACATGAA  
 GACTTTGAAGCCACATTGTTTTCCGCGGTGCCTCGACTCCTAACAGGATCTACGATAAGGTACAAAAT  
 GAGGCCAAGACACCCCTGAAGAAGTTCTTGTGAAGCTGGCTGTTTCCAGTAAATTCAAAGAGCTTCAAA  
 AGGGTATCATCAGGCATGATAGTTTCTGGGACAAGCTCATCTTTGCAAAGATCCAGGACAGCCTGGGCGG  
 AAGGGTTCGTGTAATTGCTACTGGAGCTGCCCCATGTCCACTTCAGTCATGACATTCTTCGGGCAGCA  
 ATGGGATGTCAGGTGATGAAGCTTATGGTCAAACAGAATGCACAGGTGGCTGTACATTTACATTACCTG  
 GGGACTGGACATCAGGTCAGTTGGGGTGCCCTGGCTTGCAATTACGTGAAGCTGGAAGATGTGGCTGA  
 CATGAACTACTTTACAGTGAATAATGAAGGAGAGGTCTGCATCAAGGGTACAACGTGTTCAAAGGATAC  
 CTGAAGGACCCCTGAGAAGACACAGGAAGCCCTGGACAGTGTGGCTGGCTTACACAGGAGACATTGGTC  
 GCTGGCTCCCGAATGGAATCTGAAGATCATCGACCGTAAAAAGAACATTTTCAAGCTGGCCCAAGGAGA  
 ATACATTTGCACCAGAGAAGATAGAAAATATCTACAACAGGAGTCAACCAGTGTACAAAATTTTTGTACAC  
 GGGGAGAGCTTACGGTATCCTTAGTAGGAGTGGTGGTTCTGACACAGATGACTTCCCTCATTTCGAG  
 CCAAGCTTGGGGTGAAGGGCTCCTTTGAGGAAGTGTGCCAAAACCAAGTTGTAAGGGAAGCCATTTTGA  
 AGACTTGAGAAAATGGGAAAGAAAGTGGCCTTAAAACTTTTGAACAGGTCAAAGCCATTTTCTTCAT  
 CCAGAGCCATTTCCATTGAAAATGGGCTTTGACACCAACATTGAAAGCAAAGCGAGGAGAGCTTTCCA  
 AATACTTTCCGACCCAAATTGACAGCCTGTATGAGCACATCCAGGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG213380 representing NM\_203379  
 Red=Cloning site Green=Tags(s)

```
MDALKPPCLWRNHERGKKDRDSCGRKNSEPGSPHSLEALRDAAPSQGLNFLLLFTKMLFIFNFLFSPLPT
PALICILTFGAAIFLWLI TRPQVPLPLDLNNSVGI EGGARKGVSQKNDLTSCCFSDAKTMYEVFQRG
LAVSDNGPCLGYRKPQPYRWLSYKQVSDRAEYLGSCLLHKGYKSSPDQFVGIFAQNRPEWIISELACYT
YSMVAVPLYDTLGPEAIVHIVNKADIAMVICDTPQKALVLI GNVEKGFTPSLKVIIILMDPFDDDLKQRGE
KSGIEILSLYDAENL GKEHFRKPVPPSPEDLSVICFTSGTTGDPKGAMITHQNI VSNAAAFKLCVEHAYE
PTPDDVAISYLPLAHMFERIVQAVVYSCGARVGFQGDIRLLADD MKTLKPTLFPAPRLLNRIYDKVQN
EAKTPLKKFLLKLAVSSKFELQKGIIRHDSFWDKLIFAKIQDSL GGRVIVTGAAPMSTSVMTFFRAA
MGCQVYEAYGQTECTGGCTFTLPGDWTSGHVGVP LACNYVKLEADVADMN YFTVNNEGEVCIKGTNVFKGY
LKDPEKTQEALDSGWLHTGDIGRWLPNGTLKIIDRKKNIFKLAQGEYI APEKIENIYNRSQPV LQIFVH
GESLRSSLVGVVVPD TDVLP SFAAKLVGKGSFEELCQNQVVREAI LEDLQKIGKESGLKTFEQVKAIFLH
PEPFSIENGLLTPTLKAKRGELSKYFRTQIDSLYEHIQD
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_203379

**ORF Size:** 2217 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\\_203379.1](#), [NP\\_976313.1](#)

**RefSeq Size:** 3233 bp

**RefSeq ORF:** 2052 bp

**Locus ID:** 51703

**UniProt ID:** [Q9ULC5](#)

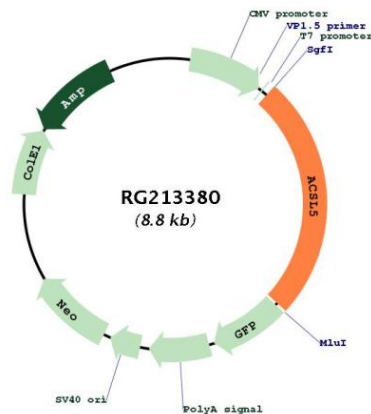
**Cytogenetics:** 10q25.2

**Protein Families:** Transmembrane

**Protein Pathways:** Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway

**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 RG213380