

## Product datasheet for **RG208032**

### ACSL3 (NM\_004457) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL3 (NM_004457) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACSL3
Synonyms:	ACS3; FACL3; LACS 3; LACS3; PRO2194
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG208032 representing NM\_004457  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATAACCACGTGCTTCAAACCATCTACCATGAAGCTAAAACATACCATCAACCCTATTCTTTTAT  
 ATTTTATACATTTTCTAATATCACTTTATACTATTTTAAACATACATTCCGTTTTATTTTTCTCCGAGTC  
 AAGACAAGAAAAATCAAACCGAATTAAAGCAAAGCCTGTAATTCAAAACCTGATTCTGCATACAGATCT  
 GTTAATAGTTTGGATGGTTGGCTTCAGTATTATACCCTGGATGTGATACTTTAGATAAAGTTTTTACAT  
 ATGCAAAAAACAAATTTAAGAACAAAAGACTCTTGGGAACACGTGAAGTTTTAAATGAGGAAGATGAAGT  
 ACAACCAATGAAAAATTTTTAAAAAGGTTATTCTTGGACAGTATAATTGGCTTTCCTATGAAGATGTC  
 TTTGTTGAGCCTTTAATTTGGAAATGGATTACAGATGTTGGGTCAGAAACCAAAGACCAACATCGCCA  
 TCTTCTGTGAGACCAGGGCCGAGTGGATGATAGCTGCACAGGCGTGTATGTATAATTTTCAGCTTGT  
 TACATTATATGCCACTCTAGGAGGTCCAGCCATTGTTTCATGCATTAATGAAACAGAGGTGACCAACATC  
 ATTAAGTAAAGAACTTTACAACAAAGTTGAAGGATATAGTTTCTTTGGTCCCACGCTCGCGCACA  
 TCATCACTGTTGATGAAAGCCACCGACCTGGTCCGAGTTCCTCAAGGGCATCATTGTGCATACCATGGC  
 TGCAGTGGAGGCCCTGGGAGCCAAGGCCAGCATGGAAAACCAACCTCATAGCAAACCATTCGCCCTCAGAT  
 ATTGCAGTAATCATGTACACAAGTGGATCCACAGGACTTCAAAGGGAGTCATGATCTCAGATAGTAACA  
 TTATTGCTGGTATAACTGGGATGGCAGAAAGGATTCCAGAAGTGGAGAGGAAGATGTCTACATTGGATA  
 TTTGCCTCGCCCATGTTCTAGAATTAAGTGTGAGCTTGTCTGCTTTCTCACGGATGCCGATTGGT  
 TACTCTTACCACAGACTTTAGCAGATCAGTCTCAAAAATTAAGAAAGCAAGGGGATACATCCA  
 TGTGAAACCAACACTGATGGCAGCAGTCCGGAAATCATGGATCGGATCTACAAAAATGTCATGAATAA  
 AGTCAGTGAAATGAGTAGTTTTCAACGTAATCTGTTTATTCTGGCCTATAATTACAAAAATGGAACAGATT  
 TCAAAAGGACGTAATACTCCACTGTGCGACAGCTTTGTTTTCCGGAAAGTTCGAAGCTTGTAGGGGAA  
 ATATTCGCTCCTGTTGTGTGGTGGCGCTCCACTTTCTGCAACCACGAGCGATTGATGAACATCTGTTT  
 CTGCTGCTCCTGTTGGTACGGGATACGGGCTCACTGAATCTGCTGGGGCTGGAACAATTTCCGAAGTGTGG  
 GACTACAATACTGGCAGAGTGGGAGCACCATTAGTTTGTGTGAAATCAAATTAAGAACTGGGAGGAAG  
 GTGGATACTTTAATACTGATAAGCCACACCCAGGGGTGAAATCTTATTGGGGCCAAAGTGTGACAAAT  
 GGGTACTATAAAAAATGAAGCAAAAACAAAAGCTGATTTCTTTGAAGATGAAATGGACAAAGGTGGCTC  
 TGTACTGGGGATATTGGAGAGTTTGAACCCGATGGATGCTTAAAGATTATTGATCGTAAAAAGGACCTTG  
 TAAAACTACAGGCAGGGGAATATGTTTCTTGGGAAAGTAGAGGCAGCTTTGAAGAATCTTCCACTAGT  
 AGATAACATTTGTGCATATGCAAACAGTTATCATTCTTATGTCATTGGATTTGTTGTGCCAAATCAAAG  
 GAATAACTGAACTAGCTCGAAAGAAAGGACTTAAAGGGACTTGGGAGGAGCTGTGTAACAGTTGTGAAA  
 TGGAAAATGAGGTACTTAAAGTGCTTTCCGAAGCTGCTATTTAGCAAGTCTGAAAAAGTTTGAATTTCC  
 AGTAAAAATTCGTTTGTGCTGAAACCGTGGACCCCTGAAACTGGTCTGGTGACAGATGCCTTCAAGCTG  
 AAACGCAAAGAGCTTAAACACATTACCAGCGGACATTGAGCGAATGTATGGAAGAAAA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG208032 representing NM\_004457  
Red=Cloning site Green=Tags(s)

MNNHVSSKPMKLTHTINPILLYFIHFLISLYTILTYIPFYFFSESRQEKSNRIKAKPVNSKPDSAYRS  
VNSLDGLASVLYPGCDTLDKVFYAKNFKNKRLLGTREVLNEEDEVQPNGKIFKKVILGQYNWLSYEDV  
FVRAFNFNGLQMLGQPKTNIAIFCETRAEWIAAQACFMYNFQLVTL YATLGGPAIVHALNETEVTNI  
ITSKELLQTKLKDIVSLVPRLRHIITVDGKPPTWSEFPKGIIVHTMAAVEALGAKASMENQPHSKPLPSD  
IAVIMYTSGSTGLPKGVMI SHSNI IAGITGMAERIPELGEEDVYIGYLPLAHVLELSAELVCLSHGCRIG  
YSSPQTLADQSSKIKKSGKGDTSMLKPTLMAAVPEIMDRIYKNVMNKVSEMSSFQRNLFILAYNYKMEQI  
SKGRNTPLCDSFVFRKVRSLGGINIRLLCGGAPLSATTQRFMNICCCPVGGYGLTESAGAGTISEVW  
DYNTGRVGAPLVCCEIKLNWEEGGYFNTDKPHPRGEILIGGQSVTMGYKNEAKTKADFFEDENGRWL  
CTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLVDNICAYANSYHSYVIGFVVPNQK  
ELTELARKKGLKGTWEELCNCEMENEVLKVLSEAAISASLEKFEIPVKIRLSPEPWPETGLVTDFAFKL  
KRKELKTHYQADIERMYGRK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004457

**ORF Size:** 2160 bp

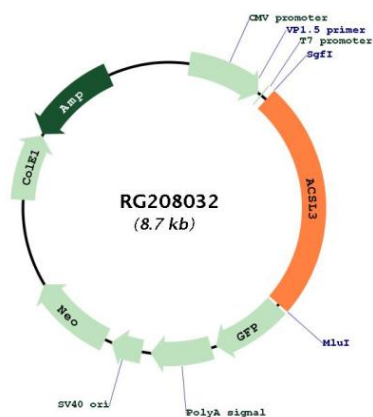
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004457.3</a> , <a href="#">NP_004448.2</a>
<b>RefSeq Size:</b>	4369 bp
<b>RefSeq ORF:</b>	2163 bp
<b>Locus ID:</b>	2181
<b>UniProt ID:</b>	<a href="#">O95573</a>
<b>Cytogenetics:</b>	2q36.1
<b>Domains:</b>	AMP-binding
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
<b>Gene Summary:</b>	<p>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 brain, and preferentially utilizes myristate, arachidonate, and eicosapentaenoate as substrates. The amino acid sequence of this isozyme is 92% identical to that of rat homolog. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG208032