

Product datasheet for **RC208032**

ACSL3 (NM_004457) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL3 (NM_004457) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACSL3
Synonyms:	ACS3; FACL3; LACS 3; LACS3; PRO2194
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC208032 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATAACCACGTGCTTCAAACCATCTACCATGAAGCTAAAACATACCATCAACCCTATTCTTTTAT
 ATTTTATACATTTTCTAATATCACTTTATACTATTTTAAACATACATTCCGTTTTATTTTTCTCCGAGTC
 AAGACAAGAAAAATCAAACCGAATTAAAGCAAAGCCTGTAATTCAAAACCTGATTCTGCATACAGATCT
 GTTAATAGTTTGGATGGTTGGCTTCAGTATTATACCCTGGATGTGATACTTTAGATAAAGTTTTTACAT
 ATGCAAAAAACAAATTTAAGAACAAAAGACTCTTGGGAACACGTGAAGTTTTAAATGAGGAAGATGAAGT
 ACAACCAATGAAAAATTTTTAAAAAGGTTATTCTTGGACAGTATAATTGGCTTTCCTATGAAGATGTC
 TTTGTTGAGCCTTTAATTTGGAAATGGATTACAGATGTTGGTCCAGAAACCAAGACCAACATCGCCA
 TCTTCTGTGAGACCAGGGCCGAGTGGATGATAGCTGCACAGGCGTGTATGTATAATTTTCAGCTTGT
 TACATTATATGCCACTCTAGGAGGTCCAGCCATTGTTTCATGCATTAATGAAACAGAGGTGACCAACATC
 ATTACTAGTAAAGAACTTTACAAAACAAAGTTGAAGGATATAGTTTCTTTGGTCCCACGCTCGCGCACA
 TCATCACTGTTGATGAAAGCCACCGACCTGGTCCGAGTCCCAAGGGCATCATTGTGCATACCATGGC
 TGCAGTGGAGGCCCTGGGAGCCAAGGCCAGCATGGAAAACCAACCTCATAGCAAACCATGCCCCTCAGAT
 ATTGCAGTAATCATGTACACAAGTGGATCCACAGGACTTCAAAGGGAGTCATGATCTCACATAGTAACA
 TTATTGCTGGTATAACTGGGATGGCAGAAAGGATTCCAGAAGTGGAGAGGAAGATGTCTACATTGGATA
 TTTGCCTCGCCCATGTTCTAGAATTAAGTGTGAGCTTGTCTGCTTTCTCACGGATGCCGATTGGT
 TACTCTTACCACAGACTTTAGCAGATCAGTCTCAAAAATTAAGAAAGCAAGGGGATACATCCA
 TGTTGAAACCAACACTGATGGCAGCAGTCCGGAAATCATGGATCGGATCTACAAAATGTCATGAATAA
 AGTCAGTGAAATGAGTAGTTTTCAACGTAATCTGTTTATTCTGGCCTATAATTACAAAATGGAACAGATT
 TCAAAAGGACGTAATACTCCACTGTGCGACAGCTTTGTTTTCCGGAAAGTTCGAAGCTTGTAGGGGAA
 ATATTCGCTCCTGTTGTGTGGTGGCGCTCCACTTTCTGCAACCACGAGCGATTGATGAACATCTGTTT
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 GACTACAATACTGGCAGAGTGGGAGCACCATTAGTTTGTGTGAAATCAAATTAAGAACTGGGAGGAAG
 GTGGATACTTTAATACTGATAAGCCACACCCAGGGGTGAAATCTTATTGGGGCCAAAGTGTGACAAAT
 GGGTACTATAAAAATGAAGCAAAAACAAAAGCTGATTTCTTTGAAGATGAAAATGGACAAAGGTGGCTC
 TGTACTGGGGATATTGGAGAGTTTGAACCCGATGGATGCTTAAAGATTATTGATCGTAAAAGGACCTTG
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 AGATAACATTTGTGCATATGCAAACAGTTATCATTCTTATGTCATTGGATTTGTTGTGCCAAATCAAAG
 GAACTAACTGAACTAGCTCGAAAGAAAGGACTTAAAGGGACTTGGGAGGAGCTGTGTAACAGTTGTGAAA
 TGGAAAATGAGGTACTTAAAGTGCTTTCCGAAGCTGCTATTTTCAGCAAGTCTGAAAAAGTTTGAATTC
 AGTAAAATTCGTTTGTGCTCCTGAACCGTGGACCCTGAAACTGGTCTGGTGACAGATGCCTTCAAGCTG
 AAACGCAAAGAGCTTAAAACACATTACCAGGCGGACATTGAGCGAATGTATGGAAGAAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208032 protein sequence
 Red=Cloning site Green=Tags(s)

MNNHVSSKPMKLTHTINPILLYFIHFLISLYTILTYIPFYFFSESRQEKSNRIKAKPVNSKPDAYSRS
 VNSLDGLASVLYPGCDTLDKVFVYAKNFKFNKRLGTREVLNEEDEVQPNGKIFKKVILGQYNWLSYEDV
 FVRAFNGNGLQMLGQPKTNIAIFCETRAEWMIAAQACFMYNFQLVTL YATLGGPAIVHALNETEVTNI
 ITSKELLQTKLKDIVSLVPRLRHIITVDGKPPWSEFPKGIIVHTMAAVEALGAKASMENQPHSKPLPSD
 IAVIMYTSGSTGLPKGVMI SHSNI IAGITGMAERIPELGEEDVYIGYLP LAHVLELSAELVCLSHGCRIG
 YSSPQTLADQSSKIKKSGKGDTSMLKPTLMAAVPEIMDRYKYNVMNKVSEMSSFQRNLFILAYNYKMEQI
 SKGRNTPLCDSFVFRKVRSLGGINIRLLL CGGAPL SATTQRFMNICCCPVGGYGLTESAGAGTISEVW
 DYNTGRVGAPLVCCEIKLNWEEGGYFNTDKPHRGEILIGGQSVTMGYKNEAKTKADFFEDENGRWL
 CTGDIGEFEPDGCLKIIDRKDLVKLQAGEYVSLGKVEAALKNLPLVDNICAYANSYHSYVIGFVVPNQK
 ELTELARKKGLKGTWEELCNCEMENEVLKVLSEAAISASLEKFEIPVKIRLSPEPWPETGLVTDFAFKL
 KRKELKTHYQADIERMYGRK

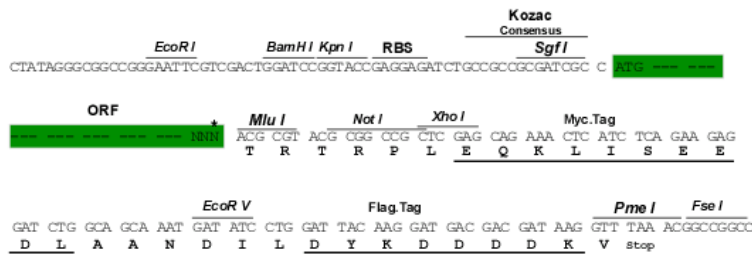
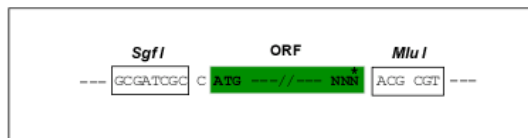
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6342_e02.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_004457

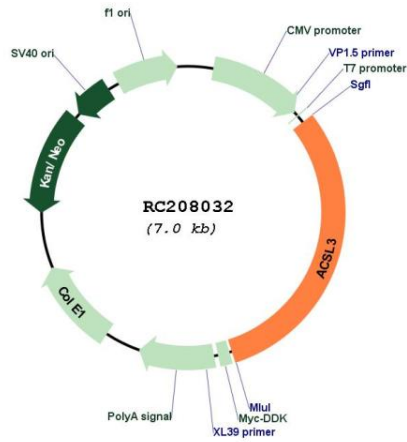
ORF Size: 2160 bp

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](#)

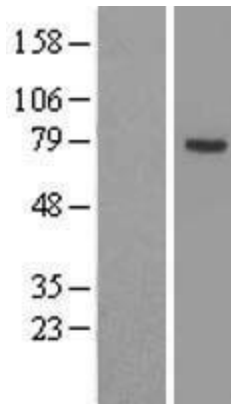
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004457.5
RefSeq Size:	4369 bp
RefSeq ORF:	2163 bp
Locus ID:	2181
UniProt ID:	O95573
Cytogenetics:	2q36.1
Domains:	AMP-binding
Protein Families:	Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
MW:	80.4 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 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]

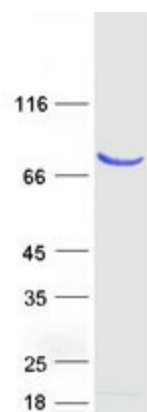
Product images:



Circular map for RC208032



Western blot validation of overexpression lysate (Cat# [LY417974]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208032 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACSL3 protein (Cat# [TP308032]). The protein was produced from HEK293T cells transfected with ACSL3 cDNA clone (Cat# RC208032) using MegaTran 2.0 (Cat# [TT210002]).