

Product datasheet for **MG216519**

AcsI3 (NM_028817) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AcsI3 (NM_028817) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AcsI3
Synonyms:	2610510B12Rik; Acs3; C85929; FacI3; Pro2194
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG216519 representing NM_028817
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAATAACCACGTATCTTCAACACCATCAACCATGAAGCTAAAAACAAACCATCAACCCATACTTTTAT
 ATTTTCATACATTTTATAATATCACTCTATACTATTTTAAACATACATCCCATTTTATTTTTTGTGTGAGTC
 AAAACAAGAGAAACCAAACCAAATTAAGCAAAACCTGTCAAGTCCAAACCGGACTCTGCATACAGATCT
 ATCAACAGTGTGGATGGCTTGGCTTCAGTGTGTATCCTGGCTGCGATACACTTGATAAAGTCTTTATGT
 ATGCAAAAAACAAATTTAAAAACAAAAGACTATTGGGAACACGTGAAATTTTGAATGAGGAAGATGAAAT
 ACAGCCAAATGGAAAAATTTTAAAAAGGTTATTCTGGGGCACTATAATTGGCTTTCCTATGAAGATGTC
 TTCATCCGAGCCCTTGACTTTGGAAATGGGTTACAATGTTGGGCCAGAAACCAAAGGCCAACATCGCCA
 TCTTCTGTGAGACCAGGGCTGAGTGGATGATCGCTGCACAGGCGTGTATGTATAACTCCAGCTTGT
 TACACTGTATGCTACTCTGGGAGGTCCAGCCATTGTTTCATGGACTGAATGAGACAGAGGTGACCAACATC
 ATTACTAGCAAAGAACTCTTGC AAAACAAAGCTGAAGGATATAGTCTCTTTGGTCCCACGCTCTGCGGCATA
 TCATTACTGTTGATGGGAAGCCTCCAACCTGGTCTGAGTTCCTCCAAAGGTGTCATTGTACACACCATGGC
 TGCAGTGCAGGCTCTAGGAGTGAAGGCCAACGTGGAAAAGAAAGCTCACAGCAAACCACTGCCCTCAGAT
 ATTGCAGTAATCATGTACACAAGTGGGTCCACAGGAATTCCAAAGGGAGTCATGATCTCACACAGCAACA
 TCATTGCTTCTATAACGGGGATGGCGAGAAGGATTCCAAGACTGGGAGAGGAAGATGTGTATATTGGCTA
 CTTGCCCTGGCAGATGTTCTAGAATTAAGTGTGAGCTTGTGTGCTTTTCTCATGGATGCCGAATCGGC
 TACTCTTACCACAGACATTAGCAGATCAGTCTTCAAAAAATAAAAAAGGAAGCAAAGGAGACACATCCG
 TGCTGAAGCCAACACTGATGGCAGCTGTTCCGGAATCATGGATCGGATCTACAAAAATGTCATGAATAA
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 TCAAAAGGGTGTAGTACTCCACTGTGTGACCGCTTTGTTTTCCGGAATGCCGAAGGCTGCTGGGTGGAA
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 GACTACAATACCGGCAGAGTGGGAGCACCATTAGTTTGTGTGAAATCAAATTAAGAACTGGGAGGAAG
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 GGGGTACTACAAAAATGAAGCAAAAACAAAGACAGATTTCTTTGAAGATGAAAATGGACAGCGGTGGCTG
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 TGAAACTACAGGCAGGAGAGTACGTTTCTCTCGGAAAAGTAGAGGCAGCTTTGAAGAACCTCCCAGTAT
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 GAATTTACAGAGCTAGCTAGAACAAAAGGATTTAAAGGAACTTGGGAAGAGCTGTGTAACAGCAGCGAGA
 TGGAAAATGAGGTCTTAAAGTGCTTTCTGAAGCTGCTATTTAGCAAGTCTGGAAAAGTTTGAATTTCC
 ACTAAAAATACGTTTGTAGCCCTGACCCATGGACTCCCGAAACTGGTCTGGTGACAGATGCCTTCAAGTTG
 AAACGTAAGAGCTTAAAAACACTACCAGGCAGACATTGAGCGGATGTATGGAAGAAAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG216519 representing NM_028817
 Red=Cloning site Green=Tags(s)

MNNHVSSTPSTMKLKQITNPILLYFIHFIIISLYTILTYIPFYFLCESKQEKPNQIKAKPVSSKPD SAYRS
 INSV DGLASVL YPGCDTLDKVFMYAKNFKNKRL LGTRELNEE DEI QPNGKIFKKVILGHYNWLSYEDV
 FIRALDFGNLQMLGQPKANIAIFCETRAEWIAAQACFMYNFQLVTL YATLGGPAIVHGLNETEVTNI
 ITSKELLQTKLKDIVSLVPRLRHIITVDGKPPTWSEFPKGVIVHTMAAVQALGVKANVEKKAH SKPLPSD
 IAVIMYTSGSTGIPKGVMI SHSNI IASITGMARRIPRLGEEDVYIGYLAHVLELSAELVCLSHGCRIG
 YSSPQTLADQSSKIKKSGKGDTSVLKPTLMAAVPEIMDRIYKNVMNKVNEMSAFQRNLFILAYNYKMEQI
 SKGCSTPLCDRFVFRNVRRLGGNIRLLCGGAPLSATTQRFMNICCCPVGGYGLTESTGAGTITEVW
 DYNTGRVGAPLVCCEIKLNWEEGGYFNTDKPHRGEILIGGQNVTMGYKNEAKTKDFFEDENGQRWL
 CTGDIGEFDPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLIDNICAYANSYHSYVIGFVVPNQK
 ELTELARTKGFKTWEELCNSSEMENEVLKVLSEAAISASLEKFEIPLKIRLSPDPWTPETGLVTD AFKL
 KRKELKTHYQADIERMYGRK

TRTRPLE - GFP Tag - V

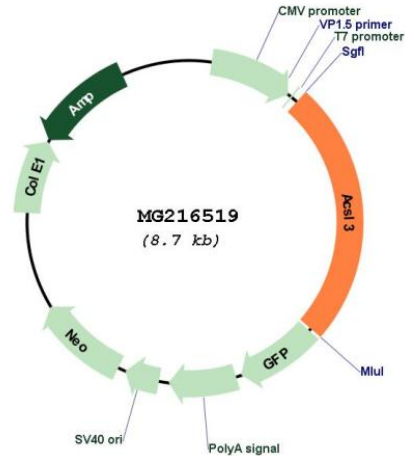
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_028817

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:

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_028817.3](#), [NP_083093.2](#)

RefSeq Size: 3950 bp

RefSeq ORF: 2163 bp

Locus ID: 74205

UniProt ID: [Q9CZW4](#)

Cytogenetics: 1 40.84 cM

Gene Summary: Acyl-CoA synthetases (ACSL) activates long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. ACSL3 has mainly an anabolic role in energy metabolism (By similarity). Required for the incorporation of fatty acids into phosphatidylcholine, the major phospholipid located on the surface of VLDL (very low density lipoproteins) (By similarity). Mediates hepatic lipogenesis (By similarity). Preferentially uses myristate, laurate, arachidonate and eicosapentaenoate as substrates (By similarity). [UniProtKB/Swiss-Prot Function]