

Product datasheet for **MR210270**

AcsI3 (NM_001136222) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AcsI3 (NM_001136222) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AcsI3
Synonyms:	2610510B12Rik; Acs3; C85929; FacI3; Pro2194
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210270 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAATAACCACGTATCTTCAACACCATCAACCATGAAGCTAAAACAAACCATCAACCCATACTTTTAT
ATTTTCATACATTTTATAATATCACTCTATACTATTTTAAACATACATCCCATTTTATTTTTTGTGTGAGTC
AAAAACAAGAGAAACCAAACCAAATTAAGCAAAACCTGTCAAGTCCAAACCGGACTCTGCATACAGATCT
ATCAACAGTGTGGATGGCTTGGCTTCAGTGTGTATCCTGGCTGCGATACACTTGATAAAGTCTTTATGT
ATGCAAAAAACAAATTTAAAAACAAAAGACTATTGGGAACACGTGAAATTTTGAATGAGGAAGATGAAAT
ACAGCCAAATGGAAAAATTTTAAAAAGGTTATTCTGGGGCACTATAATTGGCTTTCCTATGAAGATGTC
TTCATCCGAGCCCTTGACTTTGGAAATGGGTTACAAATGTTGGGCCAGAAACCAAAGGCCAACATCGCCA
TCTTCTGTGAGACCAGGGCTGAGTGGATGATCGCTGCACAGGCGTGTATGTATAACTCCAGCTTGT
TACACTGTATGCTACTCTGGGAGGTCCAGCCATTGTTTCATGGACTGAATGAGACAGAGGTGACCAACATC
ATTACTAGCAAAGAACTCTTGAACAAAGCTGAAGGATATAGTCTCTTTGGTCCCACGTCTGCGGCATA
TCATTACTGTTGATGGGAAGCCTCCAACCTGGTCTGAGTTCCTCCAAAGGTGTCATTGTACACACCATGGC
TGCAGTGCAGGCTCTAGGAGTGAAGGCCAACGTGGAAAAGAAAGCTCACAGCAAACCACTGCCCTCAGAT
ATTGCAGTAATCATGTACACAAGTGGGTCCACAGGAATTCCAAAGGGAGTCATGATCTCACACAGCAACA
TCATTGCTTCTATAACGGGGATGGCGAGAAGGATTCCAAGACTGGGAGAGGAAGATGTGTATTTGGCTA
CTTGCCCTGGCAGATGTTCTAGAATTAAGTGTGAGCTTGTGTGCTTTTCTCATGGATGCCGAATCGGC
TACTCTTACCACAGACATTAGCAGATCAGTCTTCAAAAAATAAAAAAGGAAGCAAAGGAGACACATCCG
TGCTGAAGCCAACACTGATGGCAGCTGTTCCGGAAATCATGGATCGGATCTACAAAAATGTCATGAATAA
AGTGAATGAAATGAGTGTCTTTCAACGAAACTTGTTTATTTTGGCATATAATTATAAGATGGAACAGATT
TCAAAAGGGTGTAGTACTCCACTGTGTGACCGCTTTGTTTTCCGGAATGTCGAAGGCTGCTGGGTGGAA
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CTGCTGTCCCCTGGTGCAGGGGTATGGACTCACAGAATCTACTGGGGCTGGAACAATTACAGAAGTGTGG
GACTACAATACCGGCAGAGTGGGAGCACCATTAGTTTGTGTGAAATCAAATTAAGAACTGGGAGGAAG
GTGGCTATTTAATACTGACAAACCACATCCCAGAGGTGAAATCTTATTGGTGGCCAAAATGTGACAAAT
GGGGTACTACAAAAATGAAGCAAAAACAAAGACAGATTTCTTTGAAGATGAAAATGGACAGCGGTGGCTG
TGCACTGGAGATATTGGAGATTTGACCCTGACGGCTGTCTGAAGATCATTGACCGTAAAAAGGACCTTG
TGAAACTACAGGCAGGAGAGTACGTTTCTCTCGGAAAGTAGAGGCAGCTTTGAAGAACCTCCCCTGAT
AGATAACATTTGTGCGTATGCAACAGCTACCATTCTACGTAATTGGGTTTGTGTGCCAAATCAAAG
GACTTACAGAGCTAGCTAGAACAAAAGGATTTAAAGGAACTTGGGAAGAGCTGTGTAACAGCAGCGAGA
TGGAAAATGAGGTCTTAAAGTGTCTTCTGAAGCTGCTATTTAGCAAGTCTGAAAAAGTTTGAATTC
ACTAAAAATACGTTTGTAGCCCTGACCCATGGACTCCCGAAACTGGTCTGGTGACAGATGCCTTCAAGTTG
AAACGTAAGAGCTTAAACACACTACCAGGCAGACATTGAGCGGATGTATGGAAGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210270 protein sequence
 Red=Cloning site Green=Tags(s)

MNNHVSSTPSTMKLKQITNPILLYFIHFIIISLYTILTYIPFYFLCESKQEKPNQIKAKPVSSKPDAYSRS
 INSVDDLASVLYPGCDTLDKVFMYAKNFKNKRLLGTREILNEEDEIQPNGKIFKKVILGHYNWLSYEDV
 FIRALDFGNLQMLGQPKANIAIFCETRAEWMAAQACFMYNFQLVTL YATLGGPAIVHGLNETEVTNI
 ITSKELLQTKLKDIVSLVPRLRHIITVDGKPPWTSEFPKGVIVHTMAAVQALGVKANVEKKAHSPKLP
 IAVIMYTSGSTGIPKGVMI SHSNI IASITGMARRIPRLGEEDVYIGYLPLAHVLELSAELVCLSHGCRIG
 YSSPQTLADQSSKIKKSGKGDTSVLKPTLMAAVPEIMDRIYKNVMNKNVEMSAFQRNLFILAYNYKMEQI
 SKGCSTPLCDRFVFRNVRLLGGNIRLLLCGGAPLSATTQRFMNICCCPVGGYGLTESTGAGTITEVW
 DYNTGRVGAPLVCCEIKLNWEEGGYFNTDKPHRGEILIGGQNVTMGYKNEAKTKDFFEDENGQRWL
 CTGDIGEFDPDGCLKIIDRKDLVKLQAGEYVSLGKVEAALKNLPLIDNICAYANSYHSYVIGFVVPNQK
 ELTELARTKGFKGTWEELCNSSEMENEVLKVLSEAAISASLEKFEIPLKIRLSPDPWTPETGLVTDFAFKL
 KRKELKTHYQADIERMYGRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001136222

ORF Size: 2163 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_001136222.1](#), [NP_001129694.1](#)

RefSeq Size: 3392 bp

RefSeq ORF: 1707 bp

Locus ID: 74205

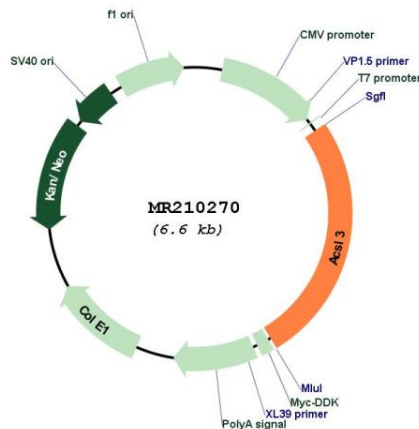
UniProt ID: [Q9CZW4](#)

Cytogenetics: 1 40.84 cM

MW: 80.5 kDa

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]

Product images:



Circular map for MR210270