

## Product datasheet for **MR210117**

### **Acs11 (NM\_007981) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Acs11 (NM_007981) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acs11
Synonyms:	Ac; Acas; Acas1; Acs; Fac; Fac12; FACS; LACS 1; LACS1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>MR210117 representing NM\_007981  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAAGTCCATGAATTGTTCCGGTATTTTCGAATGCCAGAGCTGATTGACATTCGGCAGTACGTGCGCA  
CCCTTCCAACCAACACCCTCATGGGTTTGGGGCTTTTGACGCGCTCACCACCTTCTGGTATGCCACCAG  
GCCTAAGGCCCTGAAGCCACCATGTGACCTCTCCATGCAGTCAGTGAAAATAGCGGGTACCACTGATGGT  
ATTCGAAGATCAGCAGTCTTGAAGATGACAAGCTCTTGGTGTACTACTACGACGATGTCAGAACCATGT  
ACGATGGCTTCCAGAGGGGATTGAGGTGTCAAAATAATGGTCTTGTAGGTTCTCGGAAGCCAAACCA  
GCCCTATGAGTGGATTTCTACAAAGAGGTGCCAGAACTGGCTGAGTGCATAGGCTCCGGGCTGATCCAG  
AAGGGTTCAAGCCTTGCTCCGAGCAGTTCATCGGCCTTCTCTCAAACAGACCCGAGTGGGTGATCG  
TCGAGCAAGGATGCTTCTTACTCAATGGTGGTCGTCGCCCTCTATGACACCCTGGAGCTGACGCCAT  
CACCTACATAGTGAACAAAGCTGAACTCTCTGTGATTTTTGCTGACAAGCCAGAAAAAGCCAAACTTTA  
TTAGAAGGTGTAGAAAACAGTTAACACCATGCCTTAAAATCATAGTCATCATGGACTCCTACGGCAGTG  
ATCTGGTGGAAACGAGGCAAGAAGTGTGGGTGGAAATCATCAGCCTCAAAGCTCTGGAGGACCTTGGAA  
AGTGAACAGAGTGAAGCCCAAGCCTCCAGAACCAGGATCTTGCATAATTTGTTTCAAGTGGAACT  
ACAGGCAACCCCAAGGAGCAATGATCACTCACCAAAACATTATAAACGACTGCTCAGGTTTTATAAAAG  
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TGAGACCGTTGTAGAGTGTGAATGCTGTGTCATGGAGCTAAGATAGGATTTTTCCAAGGAGATACAGG  
CTGCTTATGGACGACCTCAAGGTGCTTCAGCCCACCATCTCCCTGTGGTCCCAGGCTGCTGAACCGGA  
TGTTTCGACAGAAATTTTGGACAAGCAAACACTTCCTTGAAGCGATGGCTGTTGGACTTTGCCTCCAAAAG  
GAAAGAGCGGAGCTTCGCAGTGGCATCGTCAGAAACAACAGCCTGTGGGATAAACTCATCTTCCACAAG  
ATACAGTCGAGCCTGGTGGGAAAGTCCGGCTGATGATCAGAGGAGCAGCCCGGTGTCTGCCACAGTGC  
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TGCCCCAGGTGTTTGTCCACGGAGAAAGCTTGCAGGCCTTCTCATAGCAGTTGTGGTACCCGACGTTGA  
GAGCCTACCGTCTGGGCACAGAAGAGAGGCTTACAAGGGTCTTGAAGAACTGTGCAGGAACAAGGAT  
ATCAATAAAGCTATCCTGGACGACTTGTGAAACTTGGGAAGGAAGCCGGTCTGAAGCCATTTGAACAGG  
TCAAAGGCATTGCTGTGCACCCGGAATTTTTCTATTGACAACGGCCTTCTGACTCCAACACTGAAGGC  
GAAGAGGCCAGAGCTACGGAACTATTTCAAGTTCGAGATAGATGAACTGTACGCCACCATCAAGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210117 representing NM\_007981  
 Red=Cloning site Green=Tags(s)

MEVHELFRYFRMPELIDIRQYVRTLPTNTLMGFGAFAAL TTFWYATRPKALKPPCDLSMQSVEIAGTTDG  
 IRRSAVLEDDKLLVYYYDDVRTMYDGFQRIQVSNNGPCLGSRKPNQPYEWISYKEVAELAECIGSGLIQ  
 KGFKPCSEQFIGLFSQNRPEWVIVEQGCFYSMVVVPLYDTLGADAITYIVNKAELSVIFADKPEKAKLL  
 LEGVENKLTPLCKIIVIMDSYGSDLVERGKCGVEIISLKALEDLGRVNRVKPKPPEPEDLAIICFTSGT  
 TGNPKGAMITHQNIINDCSGFIKATESAFIASTDDVLISFLPLAHMFETVVECVM LCHGAKIGFFQGDIR  
 LLMDDLKVLQPTIFPVVPRLLNRMFDRIFGQANTSLKRWLLDFASKRKEAELRSGIVRNNSLWDKLI FHK  
 IQSSLGGKVRMLITGAAPVSATVLTFLRTALGCQFYEGYQTECTAGCCLSLPGDWTAGHV GAMPKNYV  
 KLVDVEEMNYLASKGEGEVCKGANVFKGYLKDPARTAEALDKDGLHTGDIGKWL PNGTLKIIDRKKHI  
 FKLAQGEYIAPEKIENIYLRSEAVAQVFVHGESLQAFLIAVVVPDVELPSWAQKRGLQGSFEELCRNKD  
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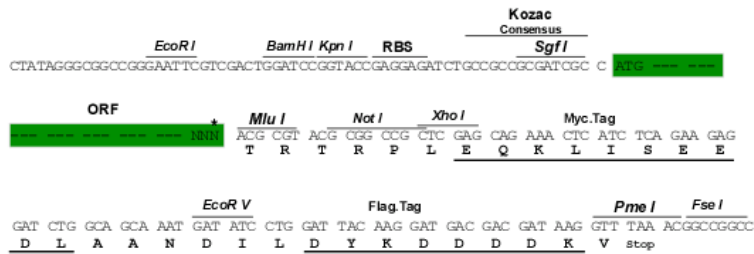
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mm9026\\_f01.zip](https://cdn.origene.com/chromatograms/mm9026_f01.zip)

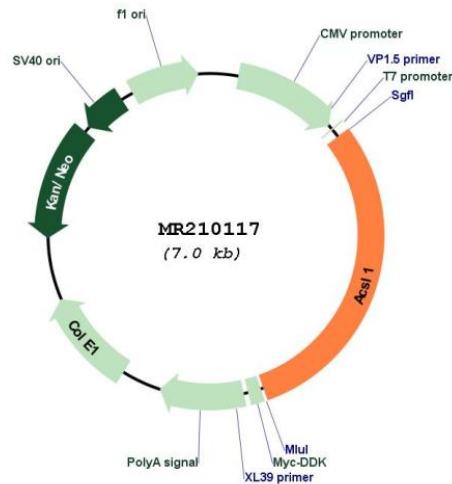
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_007981

**ORF Size:** 2097 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\\_007981.4](#), [NP\\_032007.2](#)

**RefSeq Size:** 3891 bp

**RefSeq ORF:** 2100 bp

Locus ID: 14081  
UniProt ID: [P41216](#)  
Cytogenetics: 8 B1.1  
MW: 78.4 kDa

**Gene Summary:** The protein encoded by this gene belongs to a family of acyl coenzyme A synthetase proteins, which convert long chain fatty acids to acyl CoA products via an ATP-dependent pathway. This enzyme is enriched in heart, liver and adipose tissue, where it functions in lipid synthesis and mitochondrial and peroxisomal beta-oxidation. In addition, it is expressed in monocytes and macrophages where it appears to have a functionally distinct role in mediating inflammatory and innate immune responses. A pseudogene of this gene is found on chromosome 5. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]