

Product datasheet for **SC116331**

ACADS (NM_000017) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | ACADS (NM_000017) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | ACADS |
| Synonyms: | ACAD3; SCAD |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC116331 sequence for NM_000017 edited (data generated by NextGen Sequencing) |

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ATGGCCGCGCTGCTGCCCCGGCCCTCGGGCCCTGCCCGCAGAGCTCTCTGTCTTAGG
GCCTGGCGGCAGTTACACACCATCTACCACTGTGGAAGTGGCCGAGACACACCAGATG
TTGCTCCAGACATGCCGGGACTTTGCCGAGAAGGAGTTGTTCCATTGCAGCCAGGTG
GATAAGGAACATCTCTCCAGCGGCTCAGGTGAAGAAGATGGCGGGCTTGGGCTTCTG
GCCATGGACGTGCCCGAGGAGCTTGGCGGTGCTGGCCTCGATTACCTGGCCTACGCCATC
GCCATGGAGGAGATCAGCCGCGGCTGCGCCTCCACCGAGTCATCATGAGTGCAACAAC
TCTCTCTACCTGGGGCCATCTTGAAGTTGGCTCCAAGGAGCAGAAGCAGGCGTGGGTC
ACGCCTTTCACCACTGGTGACAAAATTGGCTGCTTGGCCTCAGCGAACCAGGGAACGGC
AGTGATGCAGGAGCTGCGTCCACCACCGCCGGCCGAGGGCGACTCATGGGTTCTGAAT
GGAACCAAGCCTGGATACCAATGCCTGGGAGGCTTCGGCTGCCGTGGTCTTGGCCAGC
ACGGACAGAGCCCTGCAAAACAAGAGCATCAGTGCCTTCTGGTCCCCATGCCAACGCCCT
GGGCTCACGTTGGGAAGAAAGAAGACAAGCTGGGCATCCGGGGCTCATCCACGGCCAAC
CTCATCTTTGAGGACTGTGCGATCCCCAAGGACAGCATCTGGGGGAGCCAGGGATGGGC
TTCAAGATAGCCATGCAAAACCCTGGACATGGGCCGCATCGGCATCGCCTCCCAGGCCCTG
GGCATTGCCAGACCCGCTCGATTGTGCTGTGAACTACGCTGAGAATCGCATGGCCTTC
GGGGCGCCCTCACCAAGCTCCAGGTCATCCAGTCAAGTTGGCAGACATGGCCCTGGCC
CTGGAGAGTGCCCGGCTGCTGACCTGGCGTGTGCCATGCTGAAGGATAACAAGAAGCCT
TTCATCAAGGAGCAGCCATGGCCAAGCTGGCCGCTCGGAGGCCGCGACCCGATCAGC
CACCAGGCCATCCAGATCTGGCGGCATGGGCTACGTGACAGAGATGCCGGCAGAGCGG
CACTACCGCGACGCCGATCACTGAGATCTACGAGGGCACCAGCGAAATCCAGCGGCTG
GTGATCGCCGGCATCTGCTCAGGAGCTACCGGAGCTGA

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Clone variation with respect to NM_000017.2
321 t=>c;625 g=>a;990 c=>t



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| 5' Read Nucleotide Sequence: | <p>>OriGene 5' read for NM_000017 unedited GGATTTTGTAAATACGACTCACTATAGGGCGGCNCGCAATTCGCACGAGGCCTGGGACTG TGTCTGTGCGCCATGGCCGCCGCTGCTCGCCGGGCTCGGGCCCTGCCCGCAGAGCT CTCTGTCTAGGGCTGGCGGCAGTTACACACCATCTACCAGTCTGTGGAAGTGGCCGAG ACACACCAGATGTTGCTCCAGACATGCCGGGACTTTGCCGAGAAGGAGTTGTTTCCCATT GCAGCCCAGGTGGATAAAGAACATCTCTTCCCAGCGGCTCAGGTGAAGAAGATGGGCGGG CTTGGGCTTCTGGCCATGGACGTGCCCGAGGAGCTTGGCGGTGCTGGCCTCGATTACCTG GCCTACGCCATCGCCATGGAGGAGATCAGCCGCGGCTGCGCCTCCACCGAGTCATCATG AGTGTCAACAACCTCTCTACCTGGGGCCCATCTTGAAGTTTGGTCCAAGGAGCAGAAG CAGGCGTGGGTCACGCCTTTCACCAAGTGGTGACAAAATTGGTGTCTTGCCTCAGCGAA CCAGGGAACGGCAGTGTGCAGGAGCTGCGTCCACCACCGCCGGGCGGAGGGGACTCA TGGGTTCTGAATGGAACCAAAGCCTGGATACCAATGCCTGNGAGGCTTCGGCTGCCGTG GTCTTGGCAGCACGGACAGAGCCCTGCAAAAACAAGAGCATCAGTGCCTTCTGGTCCCC ATGCCAACGCCTGNGCTCAGTTGGGGAAGAAAAGAAGACAAGCTGNGCATCCGGNGCTCA TCCACGGCCAACCTCATCTTTGAGGACTGTCGCATCCCCAAGGACAGCATCCTGNGGGAG CCAGGGATGGGCTTTCAGATACCATGCAAACCCTGGACATGGGCCCGCATCGCATCGNCT TCCCAGCCCTGGNGCATGCCAGACCGNCCCTCGATGTGCTGTGAACTACGCTGAGAATC GCATGGGCTTTCGGGGGCCCCNTCAAAAN</p> |
| 3' Read Nucleotide Sequence: | <p>>OriGene 3' read for NM_000017 unedited CCGTCGAGAGTCGAGTTTTTTTTTTTTTTTTTTTTGGGGGACAGGTGTGTTTATTACCCACA GTCAGCCACACAGCATGAATCACCACCCTGCCTTCATCAGACTTACAAAGGGCTGAGG GGCCTCTGGGCCAGCTCCATGGCCAGCCCCACCCTGCCAACACCAGGACCCAGGC CTGTCATCCTGACCCAGTCTGCTTCTGACCTCTGACCTCAAGGAAAAGACAGACCCC ACCAAGGGCCTGTAGTACTGGGCCTTAATGCCAGGGCACCAGGGCCCGGGGAGGACAAC TGAGGTGTCCCTGAGTGGCGCTCAGCCCCCACAACCCCGCCCTCAGGAGGCCAGGGCC ACTTACATGAGGAACTTGAGGCACAGTGGTGAGGAGGCCGAAAGGCCCATAGGCCGACCT GCCAACGGTCGGAGGGCCTCATTCCCATGTGATCTGATCTGGGTGGCACAACCTGAACCA TCTGGGGTACCCAGGGAGCCCCGACGGGCCGACCATACTCTGACCCGGGTTGGCGCGG AGGCCCCCTGGCTACCGCGCTTACCAGCACAGTGGGGCAAACCCCGGCTCAACTA CGGTAGCTACTGAGCAAATGCCCGGTGATCACCACACCGCTGGACCACCCTGGTGCCTT ATCCACTAAATGATCCGGTCCCACCGGACACGCCACTCTGTCTGATTCCCTTCGCACACT CAACCCTGCCACCAGGAACCTGCAGGCCCTGGTGGCCTAATGTCCGACCCCGCCAAA CGAGCGGCACCCCTTGAACCTGGCTGCCTACTTGATACACGCCTACTGTAACCCCTCCAC ATGCCCCCCCCCGTAAAAATACCGGGCCCTCCCGGCCATGACACGGTTGCCACTTGAC CGGCTAACCGAACCTGGAGAGGGGGCCCCGACGGCCCCAATCTTCCCTTACAAGACCA ATTAGGGGTTGGGCATGCCAGGCCGGAGGCACACCACCGCCCC</p> |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_000017 |
| Insert Size: | 1880 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| 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_000017.1](#), [NP_000008.1](#)

RefSeq Size: 1829 bp

RefSeq ORF: 1239 bp

Locus ID: 35

UniProt ID: [P16219](#)

Cytogenetics: 12q24.31

Domains: Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N

Protein Families: Druggable Genome

Protein Pathways: Butanoate metabolism, Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation

Gene Summary: This gene encodes a tetrameric mitochondrial flavoprotein, which is a member of the acyl-CoA dehydrogenase family. This enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Mutations in this gene have been associated with short-chain acyl-CoA dehydrogenase (SCAD) deficiency. Alternative splicing results in two variants which encode different isoforms. [provided by RefSeq, Oct 2014]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).