

Product datasheet for SC334656

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

ACADM (NM 001286044) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: ACADM (NM_001286044) Human Untagged Clone

Tag: Tag Free ACADM Symbol:

Synonyms: ACAD1; MCAD; MCADH

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001286044, the custom clone sequence may differ by one or

more nucleotides

ATGTGGATAACCAACGGAGGAAAAGCTAATTGGTATTTTTTATTGGCACGTTCTGATCCAGATCCTAAAG CTCCTGCTAATAAAGCCTTTACTGGATTCATTGTGGAAGCAGATACCCCAGGAATTCAGATTGGGAGAAA GGAATTAAACATGGGCCAGCGATGTTCAGATACTAGAGGAATTGTCTTCGAAGATGTGAAAGTGCCTAAA GAAAATGTTTTAATTGGTGACGGAGCTGGTTTCAAAGTTGCAATGGGAGCTTTTGATAAAACCAGACCTG TAGTAGCTGCTGGTGCTGTTGGATTAGCACAAAGAGCTTTGGATGAAGCTACCAAGTATGCCCTGGAAAG GTTGAACTAGCTAGAATGAGTTACCAGAGAGCAGCTTGGGAGGTTGATTCTGGTCGTCGAAATACCTATT ATGCTTCTATTGCAAAGGCATTTGCTGGAGATATTGCAAATCAGTTAGCTACTGATGCTGTGCAGATACT TGGAGGCAATGGATTTAATACAGAATATCCTGTAGAAAAACTAATGAGGGATGCCAAAATCTATCAGATT TATGAAGGTACTTCACAAATTCAAAGACTTATTGTAGCCCGTGAACACATTGACAAGTACAAAAAT<mark>TAA</mark>

Restriction Sites: Sgfl-Mlul

ACCN: NM 001286044

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).





Cytogenetics:

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: <u>NM 001286044.1</u>, <u>NP 001272973.1</u>

1p31.1

RefSeq Size: 2353 bp
RefSeq ORF: 699 bp
Locus ID: 34

Protein Families: Druggable Genome

Protein Pathways: beta-Alanine metabolism, Fatty acid metabolism, Metabolic pathways, PPAR signaling

pathway, Propanoate metabolism, Valine, leucine and isoleucine degradation

Gene Summary: This gene encodes the medium-chain specific (C4 to C12 straight chain) acyl-Coenzyme A

dehydrogenase. The homotetramer enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Defects in this gene cause medium-chain acyl-CoA dehydrogenase deficiency, a disease characterized by hepatic dysfunction, fasting

hypoglycemia, and encephalopathy, which can result in infantile death. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Jul 2008]

Transcript Variant: This variant (6) uses an alternate 5' structure that results in the use downstream AUG compared to variant 1. The encoded isoform (e) has a shorter N-terminus compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript

alignments.