

Product datasheet for **RC238315**

ACADM (NM_001286043) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADM (NM_001286043) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACADM
Synonyms:	ACAD1; MCAD; MCADH
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238315 representing NM_001286043
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGCGGGTTCGGGCGATGCTGCAGGGTCTGAGAAGTATTCTCGTTTTTCATTGGAGATCACAGC
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 GAAAACTAATGAGGGATGCCAAAATCTATCAGATTTATGAAGGTAAGTACTTCAAAAATTCAAAGACTTATTG
 TAGCCCGTGAACACATTGACAAGTACAAAAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238315 representing NM_001286043
 Red=Cloning site Green=Tags(s)

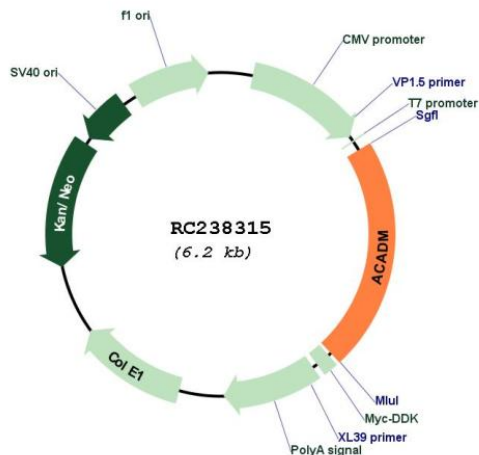
MAAGFGRCCRVLRISRFHWRSQHTKANRQREPGLGFSFEFTEQQKEFQATARKFAREEIIIPVAAEYDKT
 GEYPVPLIRRAWELGLMNTHIPENCDSVCPLEACTLYLDAFFLLLTGSLNHLNLGGLGLGTFDA
 ISEELAYGCTGVQTAIEGNSLGQMPIIIAGNDQKKKYLGRMTEEPLMCAVCVTEPGAGSDVAGIKTAE
 KKGDEYIINGQKMWITNGGKANWYFLLARSDPKAPANKAFTGFIVEADTPGIQIGRKELNMGQRCS
 DT RGIVFEDVKVPKENVLIIGDAGFKVAMGAFDKTRPVVAVAGVLAQRALDEATKYALERKTFGKLLVEHQ
 AISFMLAEMAMKVELARMSYQRAAWEVDSGRRNTYYASIAKAFAGDIANQLATDAVQILGGNGFNTEYPV
 EKLMRDAKIYQIYEGTSQIQRLIVAREHIDKYKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001286043

ORF Size: 1362 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:	<ol style="list-style-type: none">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_001286043.1, NP_001272972.1</u>
RefSeq Size:	2722 bp
RefSeq ORF:	1365 bp
Locus ID:	34
Cytogenetics:	1p31.1
Protein Families:	Druggable Genome
Protein Pathways:	beta-Alanine metabolism, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway, Propanoate metabolism, Valine, leucine and isoleucine degradation
MW:	50.7 kDa
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]