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Product datasheet for RC225693

ACADM (NM_001127328) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADM (NM_001127328) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACADM
Synonyms:	ACAD1; MCAD; MCADH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC225693 representing NM_001127328
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGCGGGGTTCGGGCGATGCTGCAGGTGTTCTTTACAGGTCCTGAGAAGTATTTCTCGTTTTCATT
GGAGATCACAGCATACAAAAGCCAATCGACAACGTGAACCAGGATTAGGATTTAGTTTTGAGTTCACCGA
ACAGCAGAAAGAATTTCAAGCTACTGCTCGTAAATTTGCCAGAGAGGAAATCATCCCAGTGGCTGCAGAA
TATGATAAAACTGGTGAATATCCAGTCCCCCTAATTAGAAGAGCCTGGGAACTTGGTTTAATGAACACAC
ACATTCCAGAGAACTGTGGAGGTCTTGGACTTGGAACTTTTGATGCTTGTTTAATTAGTGAAGAATTGGC
TTATGGATGTACAGGGGTTCAGACTGCTATTGAAGGAAATTCTTTGGGGCAAATGCCTATTATTATTGCT
GGAAATGATCAACAAAAGAAGAAGTATTTGGGGAGAATGACTGAGGAGCCATTGATGTGTGCTTATTGTG
TAACAGAACCTGGAGCAGGCTCTGATGTAGCTGGTATAAAGACCAAAGCAGAAAAGAAAGGAGATGAGTA
TATTATTAATGGTCAGAAGATGTGGATAACCAACGGAGGAAAAGCTAATTGGTATTTTTTATTGGCACGT
TCTGATCCAGATCCTAAAGCTCCTGCTAATAAAGCCTTTACTGGATTCATTGTGGAAGCAGATACCCCAG
GAATTCAGATTGGGAGAAAGGAATTAAACATGGGCCAGCGATGTTCAGATACTAGAGGAATTGTCTTCGA
AGATGTGAAAGTGCCTAAAGAAAATGTTTTAATTGGTGACGGAGCTGGTTTCAAAGTTGCAATGGGAGCT
TTTGATAAAACCAGACCTGTAGTAGCTGCTGGTGCTGTTGGATTAGCACAAAGAGCTTTGGATGAAGCTA
CCAAGTATGCCCTGGAAAGGAAAACTTTCGGAAAGCTACTTGTAGAGCACCAAGCAATATCATTTATGCT
GGCTGAAATGGCAATGAAAGTTGAACTAGCTAGAATGAGTTACCAGAGAGCAGCTTGGGAGGTTGATTCT
GGTCGTCGAAATACCTATTATGCTTCTATTGCAAAGGCATTTGCTGGAGATATTGCAAATCAGTTAGCTA
CTGATGCTGTGCAGATACTTGGAGGCAATGGATTTAATACAGAATATCCTGTAGAAAAACTAATGAGGGA
TGCCAAAATCTATCAGATTTATGAAGGTACTTCACAAATTCAAAGACTTATTGTAGCCCGTGAACACATT
GACAAGTACAAAAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225693 representing NM_001127328
Red=Cloning site Green=Tags(s)

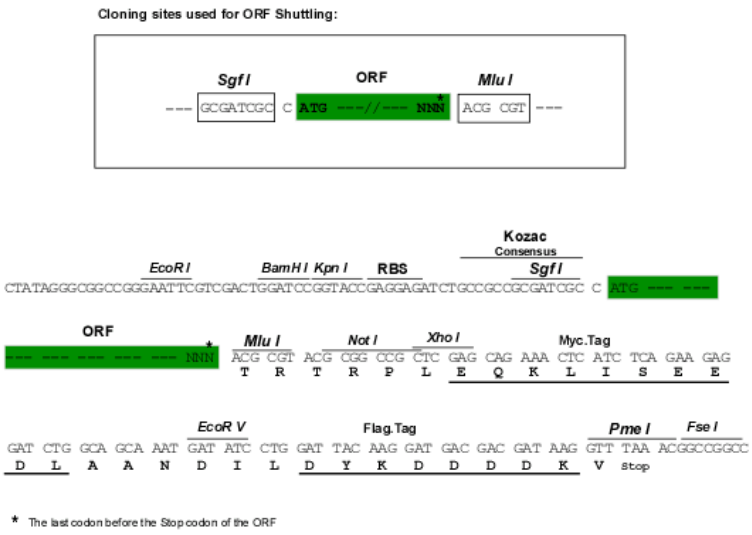
MAAGFGRCCRCSLQVLRSISRFHWRSQHTKANRQREPGLGFSFEFTEQQKEFQATARKFAREEIIPVAAE
YDKTGEYPVPLIRRAWELGLMNTHIPENCGGLGLGTFDACLISEELAYGCTGVQTAIEGNSLGQMPIIIA
GNDQQKKKYLGRMTEEPLMCAYCVTEPGAGSDVAGIKTKAEKKGDEYIINGQKMWITNGGKANWYFLLAR
SDPDPKAPANKAFTGFIVEADTPGIQIGRKELNMGQRCSDTRGIVFEDVKVPKENVLIGDGAGFKVAMGA
FDKTRPVVAAGAVGLAQRALDEATKYALERKTFGKLLVEHQAISFMLAEMAMKVELARMSYQRAAWEVDS
GRRNTYYASIAKAFAGDIANQLATDAVQILGGNGFNTEYPVEKLMRDAKIYQIYEGTSQIQRLIVAREHI
DKYKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8059_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001127328

ORF Size: 1275 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_001127328.2, NP_001120800.1

RefSeq ORF: 1278 bp

Locus ID: 34

UniProt ID: P11310

Cytogenetics: 1p31.1

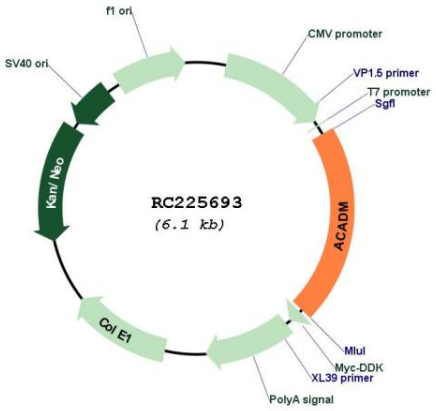
Protein Families: Druggable Genome

Protein Pathways: beta-Alanine metabolism, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway, Propanoate metabolism, Valine, leucine and isoleucine degradation

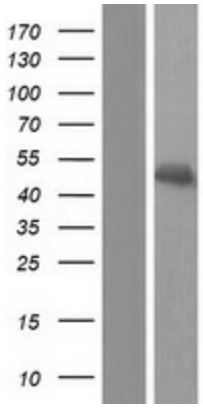
MW: 47.02 kDa

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]

Product images:



Circular map for RC225693



Western blot validation of overexpression lysate (Cat# [LY426749]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225693 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).