

Product datasheet for **RC204428**

ACADVL (NM_000018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADVL (NM_000018) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACADVL
Synonyms:	ACAD6; LCACD; VLCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC204428 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCAGGCGGCTCGGATGGCCGCGAGCTTGGGGCGCAGCTGCTGAGGCTCGGGGCGGAAGCTCGCGGC
TCACGGCGCTCCTGGGGCAGCCCGGCCGCCCTGCCCGCGGCCCTATGCCGGGGTGCCGCTCAGCT
GGCTCTGGACAAGTCAGATTCCACCCCTCTGACGCTCTGACCAGGAAAAACCGCCAAGGCGGAATCT
AAGTCCTTGTGTGGGAATGTTCAAAGGCCAGCTCACCACAGATCAGGTGTTCCCATACCCGTCGGTGC
TCAACGAAGAGCAGACACAGTTTCTAAAGAGCTGGTGGAGCCTGTGTCCCGTTTCTCGAGGAAGTGA
CGATCCCGCAAGAATGACGCTCTGGAGATGGTGGAGGAGACACTTGGCAGGGCCTCAAGGAGCTGGGG
GCCTTTGGTCTGCAAGTGCCAGTGAGCTGGTGGTGTGGGCCTTTC AACACCCAGTACGCCCGTTTGG
TGGAGATCGTGGGCATGCATGACCTTGGCGTGGCATTACCTGGGGGCCATCAGAGCATCGGTTTCAA
AGGCATCTGCTCTTTGGCACAAGGCCAGAAAGAAAAATACCTCCCAAGCTGGCATCTGGGGAGACT
GTGGCCGCTTTCTGTCTAACCGAGCCCTCAAGCGGGTCAAGTGCAGCCTCCATCCGAACCTCTGCTGTGC
CCAGCCCTGTGGAATACTATAACCTCAATGGAAGCAAGCTTTGGATCAGTAATGGGGCCATAGCAGA
CATCTTACCGTCTTTGCCAAGACACAGTTACAGATCCAGCCACAGGAGCCGTGAAGGAGAAGATCACA
GCTTTTGGTGGAGAGGGGCTTCGGGGCATTACCCATGGGCCCCCTGAGAAGAAGATGGGCATCAAGG
CTTCAAACACAGCAGAGGTGTTCTTTGATGGAGTACGGGTGCCATCGGAGAACGTGCTGGGTGAGTTGG
GAGTGGCTTCAAGTTGCCATGCACATCTCAACAATGGAAGTTTGGCATGGCTGCGGCCCTGGCAGGT
ACCATGAGAGGCATCATTGCTAAGGCGGTAGATCATGCCACTAATCGTACCCAGTTTGGGAGAAAAATC
ACAATTTGGCTGATCCAGGAGAAGCTGGCAGGGATGGTTATGCTGCAGTATGTAAGTGCATCCATGGC
TTACATGGTGTGCTAACATGGACCAGGAGCCACGGACTTCCAGATAGAGGCCCCATCAGCAAATC
TTTGGCTCGGAGGCAGCCTGGAAGGTGACAGATGAATGCATCAAATCATGGGGGTATGGGCTTCATGA
AGGAACCTGGAGTAGAGCGTGTGCTCCGAGATCTTCGATCTTCCGGATCTTTGAGGGGACAAATGACAT
TCTTCGGCTGTTTGTGGCTCTGCAGGGCTGTATGGACAAAGGAAAGGAGCTCTCTGGCTTGGCAGTGT
CTAAAGAATCCCTTTGGGAATGCTGGCCTCCTGCTAGGAGAGGCAGGCAAACAGCTGAGGCGCGGGCAG
GGCTGGCAGCGGCTGAGTCTCAGCGGACTTGTCCACCCGGAGTTGAGTCGGAGTGGCGAGCTGGCAGT
ACGGGCTCTGGAGCAGTTTGCCACTGTGGTGGAGGCAAGCTGATAAAACACAAGAAGGGGATTGTCAAT
GAACAGTTTCTGCTGCAGCGGCTGGCAGACGGGCCATCGACCTCTATGCCATGGTGGTGGTTCTCTCGA
GGCCTCAAGATCCCTGAGTGGGGCCACCCACGGCCAGCATGAGAAAATGCTCTGTGACACCTGGTG
TATCGAGGCTGCAGCTCGGATCCGAGAGGGCATGGCCGCCCTGCAGTCTGACCCCTGGCAGCAAGAGCTC
TACCGCAACTTCAAAGCATCTCAAGGCCTTGGTGGAGCGGGTGGTGTGGTCACCAGCAACCCACTTG
GCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204428 protein sequence
Red=Cloning site Green=Tags(s)

MQAARMAASLGRQLRLGGSSRLTALLGQPRPGPARRPYAGGAAQLALDKSDSHPSDALTRKKPAKAES
 KSFVAVGMFKGQLTTDQVFPYPSVLNEEQTFLEKELVEPVSRRFEEVNDPAKNDALMVEETTQGLKELG
 AFGLQVPSELGGVGLCNTQYARLVEIVGMHDLVGGITLGAHQSIGFKGILLFGTKAQKEKYLPLKASGET
 VAAFCLTEPSSGSDAASIRTSAVPSPCGKYITLNGSKLWISNGGLADIFTVFAKTPVTDPATGAVKEKIT
 AFVVERGFGGITHPPEKKMGIKASNTAEVFFDGVVPSENVLGEVSGFKVAMHILNNGRFGMAAALAG
 TMRGIIAKAVDHATNRTQFGEKIHNFGLIQEKLARMVMLQYVTESMAYMVSANMDQGATDFQIEAAISKI
 FGSEAAWKVTDECIQIMGGMGFMKEPGVERVLRDLRIFRIFEGTNDILRLFVALQGCMKDGKELSGLSA
 LKNPFGNAGLLLGEAGKQLRRRAGLGSGLSLVPELRSRSELAVRALEQFATVVEAKLIKHKKGI
 EQFLQLRADGAIDLAMVVVLSRASRSLSEGHPAQHEKMLCDTWCIEAAARIREGMAALQSDPWQQL
 YRNFKSIKALVERGGVVTSNPLGF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000018

ORF Size: 1965 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_000018.4](#)

RefSeq Size: 2296 bp

RefSeq ORF: 1968 bp

Locus ID: 37

UniProt ID: [P49748](#)

Cytogenetics: 17p13.1

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

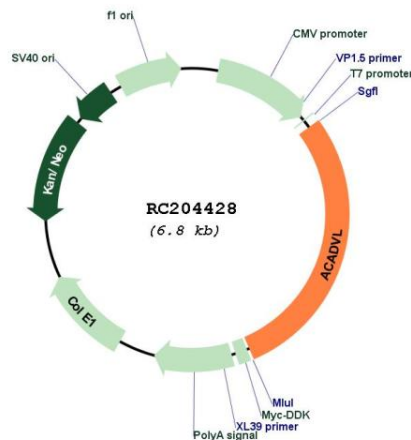
Protein Families: Druggable Genome

Protein Pathways: Fatty acid metabolism, Metabolic pathways

MW: 70.4 kDa

Gene Summary: The protein encoded by this gene is targeted to the inner mitochondrial membrane where it catalyzes the first step of the mitochondrial fatty acid beta-oxidation pathway. This acyl-Coenzyme A dehydrogenase is specific to long-chain and very-long-chain fatty acids. A deficiency in this gene product reduces myocardial fatty acid beta-oxidation and is associated with cardiomyopathy. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204428