

## Product datasheet for **MR209811**

### Acadvl (NM\_017366) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acadvl (NM_017366) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acadvl
Synonyms:	VL; vlcad
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

&gt;MR209811 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCCATGCAGTCGGCTCGGATGACCCCGAGTGTGGGGCGACAGCTGCTGCGGCTGGGGGCCGAAGCTCGCGAT  
CTACTACTGTGCTTCAGGGACAACCCCGCCTATCTCTGCCAGCGACTTATGCCAGGGAGGCCACTCA  
GGCAGTTCTGGACAAGCCAGAAACCTCTCCTCTGATGCTTCCACCAGAGAAAAACCAGCCAGGGCAGAA  
TCGAAGTCCTTTGCTGTGGGGATGTTCAAAGGCCAGCTTACCATTGATCAGGTGTTCCCATACCCATCTG  
TGCTCAGTGAAGAACAGGCACAATTTCTCAAAGAGCTGGTGGGACCAGTGGCCCGTTCTTTGAGGAAGT  
GAATGACCCTGCCAAGAACGACGCCTTGGAGAAGGTGGAGGACGACACTTTCAGGGACTCAAGGAAGT  
GGGGCATTGGCCTGCAAGTACCCAGCGAGCTGGGTGGTTGGGCCTCTAATACCCAGTATGCTCGCT  
TGGCAGAGATTGGGCATGCATGACCTTGGTGTAGCGTTACCCTGGGAGCTCATCAGAGCATCGGTTT  
CAAAGGCATCTTGTCTATGGCACAAGGCCAGAGAGAAAAATACCTTCCAGAGTGGCATCTGGGCAG  
GCTTTGGCTGCTTCTGCCTAACAGAGCCCTCGAGTGGATCCGATGTAGCCTCCATCCGAAGCTCAGCCA  
TACCCAGCCCCTGTGAAAAATATTACACTCTCAATGGGAGCAAGATCTGGATCAGTAATGGGGGCCTGGC  
CGCATTTTCACTGTCTTTGCCAAGACGCCAATTAAGATGCAGCCACGGGGGCCGTGAAAGAGAAGATC  
ACAGCTTTTGTAGTGGAAAGGAGCTTCGGAGGGGTTACCCATGGGCTCCCTGAAAAGAAGATGGGCATCA  
AAGCATTAACACGTGAGAGGTGACTTTGATGGAGTGAAGGTGCCATCAGAGAAATGTGCTAGGAGAGGT  
GGGAGATGGCTTCAAGTTGCTGTCAACATCCTCAACAACGGAAGATTTGGGATGGCTGCAACCCCTCGA  
GGCACCATGAAATCCCTCATTGCCAAGGCGGTTGATCATGCTACTAATCGTACCCAGTTTGGGGACAAAA  
TTCACAACCTTTGGGGTATCCAGGAAAAGCTGGCTCGGATGGCTATTCTGCAGTATGTGACTGAGTCCAT  
GGCTTACATGCTGAGTGCCAACATGGACCAGGGATTCAAAGACTTCCAGATAGAAGCCGCCATCAGCAAA  
ATCTTTTGTGCTCGGAGGGCCCTGAAAAGTGGCAGATGAGTGCATCCAAATAATGGGGGCATGGGCTTCA  
TGAAGGAACCAGGGGTGGAGCGTGTGCTCCGAGATATTGAAATCTTCCGGATCTTTGAAGGGGCAATGA  
CATTCTTCGACTGTTTGTGGCTCTCAAGGCTGTATGGACAAAGGAAAGGAACTCACTGGGCTGGGCAAT  
GCCCTGAAGAATCCTTTTGGAAACGTTGGCCTCCTGATGGGAGAAGCAGGCAACAGCTGAGACGGAGGA  
CAGGAATCGGCAGTGGTTTGTGCTGTGTCAGGGATTGTCCACCCAGAGTTAAGTCGCAGTGGTGAAGTGGC  
AGTGCAGGCTCTGGATCAATTTGCCACCGTGGTGGAGGCAAGCTGGTGAACACAAGAAAGGGATTGTC  
AACGAGCAGTTCTGCTGCAGCGACTGGCGGACGCGCCATTGACCTCTATGCCATGGTGGTGGTTCTGT  
CCAGAGCCTCAAGTCCCTGAGTGAAGGCTACCCGACGGCACAGCATGAGAAAATGCTCTGTGATAGCTG  
GTGCATTGAGGCTGCAACTCGGATCCGAGAAAACATGGCCAGTCTGCAGTCCAGCCCTCAGCATCAGGAG  
CTCTTCCGGAACCTCAGAAGCATCTCCAAGGCCATGGTGGAGAATGGTGGCCTGGTACCAGGTAACCCCC  
TGGGAATCACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR209811 protein sequence  
Red=Cloning site Green=Tags(s)

MQSARMTPSVGRQLRLGARSSRSTTVLQGQPRPISAQRLYAREATQAVLDKPETLSSDASTREKPARAE  
 SKSFVGMFKGQLTIDQVFPYPSVLSEEQAQFLKELVGPVARFFEEVNDPAKNDALEKVEDDTLQGLKEL  
 GAFGLQVPSSELGGLGLSNTQYARLAEIVGMHDLGVSVTLGAHQSIGFKGILLYGTKAQREKYLPRVASGQ  
 ALAAFCLTEPSSGSDVASIRSSAIPSPCGKYYTLNGSKIWISNGGLADIFTVFAKTIKDAATGAVKEKI  
 TAFVVERSFGGVTHGLPEKKMGIKASNTSEVYFDGVKVPSENVLGEVGDGFKVAVNINLNGRFGMAATLA  
 GTMKSLIAKAVDHATNRTQFGDKIHNFVGIQEKLARMAILQYVTESMAYMLSANMQGFKDFQIEAAISK  
 IFCSEAAWKVADECIQIMGGMGFMKEPVERVLRDIRIFRIFEGANDILRLFVALQGCMDKGKELTGLGN  
 ALKNPFGNVLLMGEAGQLRRRTGIGSGLSLSGIVHPELSRSGELAVQALDQFATVVEAKLVKHKKGIV  
 NEQFLLQLADGAIDLAMVVVLSRASRSLSEGYPYTAQHEKMLCDSWCIEAATRIENMASLQSSPQHQE  
 LFRNFRSISKAMVENGLVTGNPLGI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_017366

**ORF Size:** 1971 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\\_017366.1](#)

**RefSeq Size:** 2205 bp

**RefSeq ORF:** 1971 bp

**Locus ID:** 11370

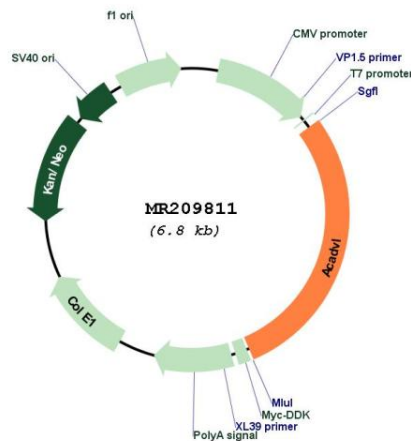
**UniProt ID:** [P50544](#)

**Cytogenetics:** 11 42.96 cM

**MW:** 70.9 kDa

**Gene Summary:** This gene encodes a homodimeric mitochondrial flavoprotein and is a member of the acyl-CoA dehydrogenase family. Members of this family catalyze the first step of fatty acid beta-oxidation, forming a C2-C3 trans-double bond in a FAD-dependent reaction. As beta-oxidation cycles through its four steps, each member of the acyl-CoA dehydrogenase family works at an optimum fatty acid chain-length. This enzyme has its optimum length between C16- and C20- acylCoA and localizes to the inner mitochondrial membrane (unlike related acyl-CoA dehydrogenases). In mice, deficiency of this gene can cause ventricular arrhythmias as well as fasting and cold intolerance. [provided by RefSeq, Nov 2012]

### Product images:



Circular map for MR209811