

## Product datasheet for **RG234701**

### ACADVL (NM\_001270447) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACADVL (NM_001270447) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACADVL
Synonyms:	ACAD6; LCACD; VLCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG234701 representing NM\_001270447  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTTGGGGGCTGGCCGCGCGCGGGAACCCGGATAATGGGAAAGGAGATAGAAGCAGAAGCACAGA  
GGCCCTGAGGCAAACATGGAGACCTGGCCAGCCACCAGCGATGACAGCAAAGACGATGAGCTCGCGGCT  
CACGGCGCTCCTGGGGCAGCCCCGGCCCGCCCTGCCCGCGGCCCTATGCCGGGGTGCCGCTCAGCTG  
GCTCTGGACAAGTCAGATTCCCACCCCTCTGACGCTCTGACCAGGAAAAACCGCCAAGGCGGAATCTA  
AGTCCTTTGTGTGGGAATGTTCAAAGGCCAGCTCACCACAGATCAGGTGTTCCCATACCCGTCCTGTCT  
CAACGAAGAGCAGACACAGTTTCTTAAAGAGCTGGTGGAGCCTGTGTCCCCTTCTTCGAGGAAGTGAAC  
GATCCCGCAAGAATGACGCTCTGGAGATGGTGGAGGAGACCCTTGGCAGGGCCTCAAGGAGCTGGGGG  
CCTTTGGTCTGCAAGTGCCAGTGAGCTGGTGGTGTGGGCCCTTGAACACCCAGTACGCCCGTTTGGT  
GGAGATCGTGGGCATGCATGACCTTGGCGTGGGCATTACCCTGGGGGCCATCAGAGCATCGTTTTCAA  
GGCATCTGCTCTTTGGCACAAGGCCAGAAAGAAAAATACCTCCCAAGCTGGCATCTGGGGAGACTG  
TGGCCGCTTTCTGTCTAACCGAGCCCTCAAGCGGGTCAGATGCAGCCTCCATCCGAACCTCTGCTGTGCC  
CAGCCCTGTGGAAAATACTATACCCTCAATGGAAGCAAGCTTTGGATCAGTAATGGGGGCTAGCAGAC  
ATCTTCACGGTCTTTGCCAAGACACCAGTTACAGATCCAGCCACAGGAGCCGTAAGGAGAAGATCACAG  
CTTTTGTGGTGGAGAGGGGCTTCGGGGGCATTACCCATGGGCCCCCTGAGAAGAAGATGGGCATCAAGGC  
TTCAAACACAGCAGAGGTGTTCTTTGATGGAGTACGGGTGCCATCGGAGAACGTGCTGGGTGAGGTTGGG  
CCATGAGAGGCATCATTGCTAAGGCGGTAGATCATGCCACTAATCGTACCCAGTTTGGGGAGAAAAATCA  
CAACTTTGGGCTGATCCAGGAGAAGCTGGCACGGATGGTTATGCTGCAGTATGTAAGTGAAGTCCATGGCT  
TACATGGTGAAGTCTAACATGGACCAGGAGCCACGGACTTCCAGATAGAGGCCGCCATCAGCAAAATCT  
TTGGCTCGGAGGCAGCCTGGAAGGTGACAGATGAATGCATCCAAATCATGGGGGGTATGGGCTTCATGAA  
GGAACCTGGAGTAGAGCGTGTGCTCCGAGATCTTCGCATCTTCGGATCTTTGAGGGGACAAATGACATT  
CTTCGGCTGTTTGTGGCTCTGCAGGGCTGTATGGACAAAGGAAAGGAGCTCTCTGGGCTTGGCAGTGCTC  
TAAAGAATCCCTTTGGGAATGCTGGCCTCCTGCTAGGAGAGGCAGGCAACAGCTGAGGCCGGCGGGCAGG  
GCTGGGCAGCGGCTGAGTCTCAGCGGACTTGTCCACCCGGAGTTGAGTCGGAGTGGCGAGCTGGCAGTA  
CGGGCTCTGGAGCAGTTTGCCACTGTGGTGGAGGCCAAGCTGATAAAACACAAGAAGGGGATTGTCAATG  
AACAGTTTCTGCTGCAGCGGCTGGCAGACGGGGCCATCGACCTCTATGCCATGGTGGTGGTTCTCTCGAG  
GGCCTCAAGATCCCTGAGTGAAGGCCACCCACGGCCAGCATGAGAAAAATGCTCTGTGACACCTGGTGT  
ATCGAGGCTGCAGCTCGGATCCGAGAGGGCATGGCCGCCCTGCAGTCTGACCCCTGGCAGCAAGAGCTCT  
ACCGCAACTTCAAAGCATCTCCAAGGCCTTGGTGGAGCGGGTGGTGTGGTCACCAGCAACCCACTTGG  
CTTC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG234701 representing NM\_001270447  
 Red=Cloning site Green=Tags(s)

```

MLGGLAAAAGTRIMGKEIEAEAQRPLRQTWRPGQPPAMTAKTMSSRLTALLGQPRPGPARRPYAGGAAQL
ALDKSDSHPSDALTRKKPAKAESKSFVGMFKGQLTTDQVFPYPSVLNEEQTFKELVEPVSRFFEEVN
DPAKNDALEMVEETTQGLKELGAFGLQVPSSELGGVGLCNTQYARLVEIVGMHDLGVGITLGAHQSIGFK
GILLFGTKAQKEKYLPLKASGETVAAFCLTEPSSGSDAASIRTSAVPSPCGKYITLNGSKLWISNGGLAD
IFTVFAKTPVTDPATGAVKEKITAFFVVERGGITHGPPPEKMGIKASNTAEVFFDGVVRVPSENVLGEVG
SGFKVAMHILNNGRFGMAAALAGTMRGIIAKAVDHATNRTQFGEKIHNFGLIQEKLARMVMLQYVTE SMA
YMVANMDQGATDFQIEAAISKIFGSEAAWKVTDECIQIMGGMGMKEPVERVLRDLRIFRIFEGTNDI
LRLFVALQGCMKGGKELSGLGSALKPNPFGNAGLLLGEAGQLRRRAGLGSGLSLSGLVHPELSRSGELAV
RALEQFATVVEAKLIKHKKGIVNEQFLQLRQADGAIDLAMVVVLSRASRSLSEGHPAQHEKMLCDTWC
IEAAARIREGMAALQSDPWQQLYRNFKISIKALVERGGVVTSNPLGF
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001270447

**ORF Size:** 2034 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\\_001270447.1](#), [NP\\_001257376.1](#)

**RefSeq Size:** 2232 bp

**RefSeq ORF:** 2037 bp

**Locus ID:** 37

**UniProt ID:** [P49748](#)

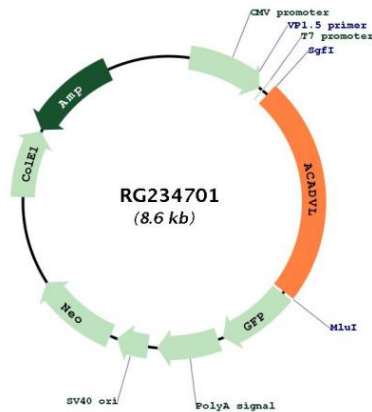
**Cytogenetics:** 17p13.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Fatty acid metabolism, Metabolic pathways

**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 RG234701