

Product datasheet for **RG204428**

ACADVL (NM_000018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADVL (NM_000018) 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:

>RG204428 representing NM_000018
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGGCGGCTCGGATGGCCGCGAGCTTGGGGCGGCAGCTGCTGAGGCTCGGGGCGGAAGCTCGCGGC
TCACGGCGCTCCTGGGGCAGCCCGGCCGCGCCCTGCCCGGCGGCCCTATGCCGGGGGTGCCGCTCAGCT
GGCTCTGGACAAGTCAGATTCCCACCCCTCTGACGCTCTGACCAGGAAAAACCGCCAAGGCGGAATCT
AAGTCCTTGTGTGGGAATGTTCAAAGGCCAGCTCACCACAGATCAGGTGTTCCCATACCCGTCGCTGC
TCAACGAAGAGCAGACACAGTTTCTAAAGAGCTGGTGGAGCCTGTGTCCCGTTTCTCGAGGAAGTGAA
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CCAGCCCTGTGGAATACTATAACCTCAATGGAAGCAAGCTTTGGATCAGTAATGGGGCCATAGCAGA
CATCTTACCGGTCTTTGCCAAGACACAGTTACAGATCCAGCCACAGGAGCCGTGAAGGAGAAGATCACA
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GGCCTCAAGATCCCTGAGTGGGGCCACCCACGGCCAGCATGAGAAAATGCTCTGTGACACCTGGTG
TATCGAGGCTGCAGCTCGGATCCGAGAGGGCATGGCCGCCTGCAGTCTGACCCCTGGCAGCAAGAGCTC
TACCGCAACTTCAAAGCATCTCAAGGCCTTGGTGGAGCGGGTGGTGTGGTCACCAGCAACCCACTTG
GCTTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG204428 representing NM_000018
 Red=Cloning site Green=Tags(s)

MQAARMAASLGRQLRLGGSSRLTALLGQPRPGPARRPYAGGAAQLALDKSDSHPSDALTRKKPAKES
 KSFVAVGMFKGQLTTDQVFPYPVSVLNEEQTFKELVEPVSRFFEEVNDPAKNDALMVEETTQGLKELG
 AFGLQVPSELGGVGLCNTQYARLVEIVGMHDLVGGITLGAHQSIGFKGILLFGTKAQKEKYLPLASGET
 VAAFCLTEPSSGSDAASIRTSAVPSPCGKYITLNGSKLWISNGGLADIFTVFAKTPVTDPATGAVKEKIT
 AFVVERGFGGITHGPPEKKMGIKASNTAEVFFDGVVRVPSENVLGEVSGFKVAMHILNNGRFGMAAALAG
 TMRGIIAKAVDHATNRTQFGEKIHNFGLIQEKLARMVMLQYVTESMAYMVSANMDQGATDFQIEAAISKI
 FGSEAAWKVTDECIQIMGGMGFMKEPGVERVLRDLRIFRIFEGTNDILRLFVALQGCMGDKGKELSGLSA
 LKNPFGNAGLLLGEAGKQLRRRAGLGSGLSLVHPELSRSGELAVRALEQFATVVEAKLIKHKKGI
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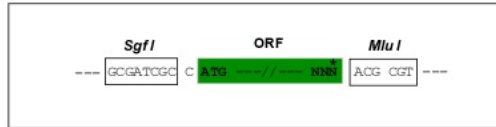
TRTRPLE - GFP Tag - V

Restriction Sites:

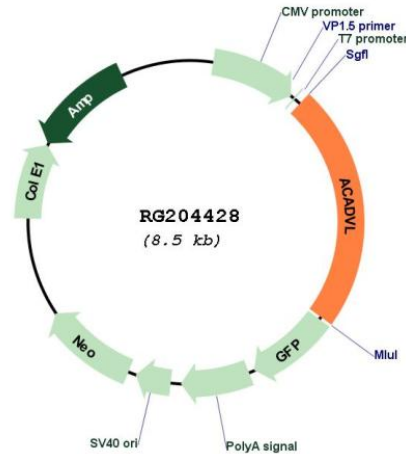
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



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:	2320 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
Gene Summary:	<p>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]</p>