OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG206624

ACADL (NM_001608) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADL (NM_001608) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACADL
Synonyms:	ACAD4; LCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG206624 representing NM_001608
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCACGCCTTCTCCGAGGGTCCCTACGCGTCCTGGGCGGCCACCGTGCGCCGCGCCAGCTGCCCG
CCGCGCGATGTTCTCATTCCGGAGGGGAAGAACGTCTAGAAACTCCTTCTGCTAAAAAATTAACAGATAT
AGGAATTCGAAGAATCTTTTCTCCAGAGCATGACATTTTCCGGAAAAGTGTAAGGAAGTTTTTCCAAGAA
GAAGTGATTCCTCATCACTCAGAATGGGAGAAAGCTGGAGAAGTAAGTAGGGAGGTTTGGGAAAAAGCTG
GAAAACAAGGACTGCTTGGTGTCAATATTGCAGAGCATCTTGGTGGAATTGGAGGGGATCTGTACTCCGC
AGCTATTGTCTGGGAGGAGCAAGCTTATTCAAATTGTTCAGGCCCAGGTTTTAGTATTCATTCAGGTATT
GTCATGTCCTATATTACAAACCATGGCTCAGAAGAACAGATTAAGCACTTTATTCCCCAGATGACTGCAG
GCAAATGTATTGGTGCAATAGCAATGACAGAGCCTGGAGCTGGAAGTGACTTACAGGGAATAAAAACAAA
TGCTAAAAAGGATGGAAGTGACTGGATTCTCAATGGAAGCAAGGTGTTCATCAGTAATGGGTCATTAAGT
GATGTTGTGATTGTAGTTGCGGTCACAAATCATGAAGCTCCCTCCCCTGCCCATGGTATTAGCCTTTTTC
TGGTGGAAAATGGAATGAAAGGATTTATCAAGGGACGAAAGCTACATAAAATGGGATTAAAAGCCCAGGA
TACCGCAGAACTATTCTTTGAAGATATACGGTTGCCAGCTAGTGCCCTACTTGGAGAAGAGAATAAAGGC
TTCTATTACATCATGAAAGAGCTTCCACAGGAAAGGCTGTTAATTGCTGATGTGGCAATTTCAGCTAGTG
AATTCATGTTTGAAGAAACCAGGAACTATGTTAAACAAAGAAAAGCTTTTGGCAAAACAGTTGCTCACCT
ACAGACAGTGCAACATAAATTAGCAGAATTAAAAACACATATATGTGTAACCCGAGCATTTGTGGACAAC
TGTCTCCAGCTGCATGAAGCGAAACGTTTGGACTCCGCCACTGCTTGCATGGCGAAATATTGGGCATCTG
AGTTACAAAATAGTGTAGCTTACGACTGTGTACAGCTCCATGGAGGTTGGGGATACATGTGGGAGTACCC
AATTGCAAAAGCTTATGTGGATGCCAGAGTTCAGCCAATCTATGGTGGTACAAATGAAATAATGAAGGAG
CTGATTGCAAGAGAGATTGTCTTTGACAAG

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

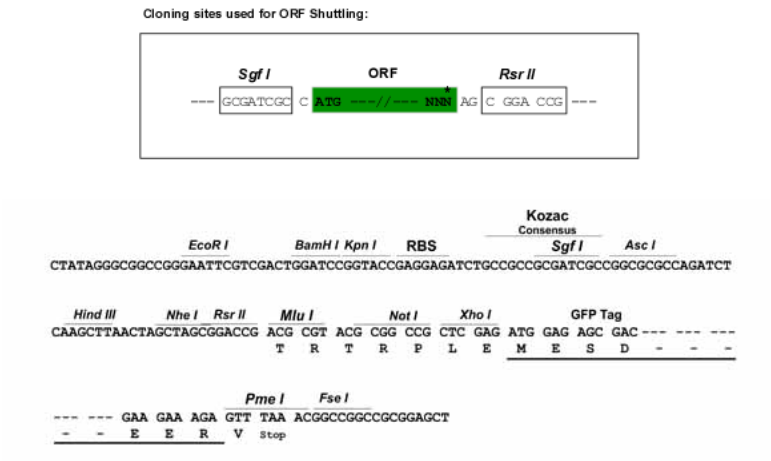
>RG206624 representing NM_001608
Red=Cloning site Green=Tags(s)

MAARLLRGSLRVLGGHRAPRQLPAARCSHSGGEERLETPSAKKLTDIGIRRIFSPEHDIFRKSVRKFFQE
EVIPHHSEWEKAGEVSREVWEKAGKQGLLGVNIAEHLGGIGGDLYSAAIVWEEQAYSNCSGPGFSIHSGI
VMSYITNHGSEEQIKHFIPQMTAGKCIGAIAMTEPGAGSDLQGIKTNAKKDGSDWILNGSKVFISNGSLS
DVVIVVAVTNHEAPSPAHGISLFLVENGMKGFIKGRKLHKMGLKAQDTAELFFEDIRLPASALLGEENKG
FYYIMKELPQERLLIADVAISASEFMFEETRNYVKQRKAFGKTVAHLQTVQHKLAELKTHICVTRAFVDN
CLQLHEAKRLDSATACMAKYWASELQNSVAYDCVQLHGGWGYMWEYPIAKAYVDARVQPIYGGTNEIMKE
LIAREIVFDK

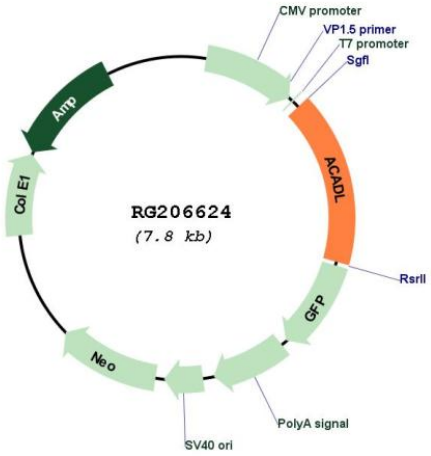
SGPTRTRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_001608

ORF Size:	1290 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_001608.4
RefSeq Size:	2497 bp
RefSeq ORF:	1293 bp
Locus ID:	33
UniProt ID:	P28330
Cytogenetics:	2q34
Domains:	Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N
Protein Families:	Druggable Genome
Protein Pathways:	Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
Gene Summary:	The protein encoded by this gene belongs to the acyl-CoA dehydrogenase family, which is a family of mitochondrial flavoenzymes involved in fatty acid and branched chain amino-acid metabolism. This protein is one of the four enzymes that catalyze the initial step of mitochondrial beta-oxidation of straight-chain fatty acid. Defects in this gene are the cause of long-chain acyl-CoA dehydrogenase (LCAD) deficiency, leading to nonketotic hypoglycemia. [provided by RefSeq, Jul 2008]