

## Product datasheet for **MG206849**

### Acadl (NM\_007381) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Acadl (NM\_007381) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Acadl  
**Synonyms:** AA960361; AU018452; C79855; LC; LCAD  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG206849 representing NM\_007381  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTGCGCGCCTGCTCCTCCGCTCCCTGCGCGTCTGAAAGCCCGCTCGGCGCCACGCCCGCCCT  
 CCGCCCGATGTTCTCATTCTGGAGCAGAAGCGCTCTAGAACTCCTTCTGCTAAAAATTAAGTACGT  
 TGGAAATCAGGAGAATCTTTTCTCGGAGCATGACATTTTCCGGGAGAGTGAAGGAAGTTTTCCAAGAA  
 GAAGTATTCTCACACACAGAATGGGAGAAAGCTGGAGAAGTGAAGTAGAGAGGTTGGGAAAAAGCTG  
 GCAAGCAGGGCTTGTGGCATCAACATCGCAGAGAAACATGGCGGCATTGGTGGGACTTGTCTCAAC  
 AGCAGTTACTGGGAAGAGCAAGCGTACTCCAATTGCACAGGCCCTGGCTTCAGCCTCCACTCAGATATT  
 GTCATGCCCTATATTGCGAATTACGGCACAAAAGAAGATCGAGAAGTTCATCCCCAGATGACGGCAG  
 GCAAGTGTATCGGTGCCATAGCCATGACAGAGCCTGGGGCCGGAAGTGAAGTACAAGGAGTAAGAACGAA  
 CGCCAAAAGATCTGGGAGTATTGGATTCTCAATGGAAGCAAGGTGTTCACTAATGGCTGGTTAAGT  
 GATCTCGTGATCGTGGCCGTACCAACCGTGAAGCTCGATCGCTGCCATGGCATTAGCCTTTTT  
 TGGTGGAAAATGGAATGAAAGGATTTATCAAGGGCCGGAAGCTGCATAAGATGGGAATGAAAGCTCAGGA  
 CACAGCAGAATCTTTGAAGATGTCGATTGCCAGCTAATGCCTTACTGGAGAAGAGAATAAAGGC  
 TTCTACTACCTCATGCAAGAGCTCCACAGGAAAGGCTTTAATTGCTGAGTTGGCGATTTCTGCCTGTG  
 AGTTCATGTTTGAAGAAACAGGAACACGTGAAGCAAAGAAAAGCTTTTGGGAAAACAGTTGCACACAT  
 ACAGACGGTGCAGCATAAACTAGCAGAATTAAGACACACATATGTGTCACCAGAGCTTTTGTGGACAGC  
 TGCTGACAGTTGCATGAAACCAACGTCTGGACTCCGGTCCGCTTCCATGGCAAATACTGGGCATCTG  
 AATTACAAAACAGTGTAGCTTATGAATGTGTTCAACTCCAGGAGGCTGGGGTACATGTGGGAGTACCC  
 GATTGCAAAGCTTATGTGGATGCTCGGGTGCAGCCGATCTACGGTGGTACCAACGAAATAATGAAAGAG  
 CTGATCGCAAGACAGATCGTCAGTGACAGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG206849 representing NM\_007381  
 Red=Cloning site Green=Tags(s)

MAARLLLRSLRVLKARSAPRPPPSARCSHSGAEARLETPSAKKL TDVGIRRFSSSEHDIFRESVRKFFQE  
 EVIPHTEWEKAGEVSREWEKAGKQGLLGINIAEKHGGIGDDLSTAVTWEEQAYSNCTGPGFSLHSDI  
 VMPYIANYGTKEQIEKFIPOMTAGKCIGAIAMTEPGAGSDLQGVRTNAKRSGSDWILNGSKVFITNGWLS  
 DLVIVVAVTNREARSPAHGISLFLVENGKMGFIKGRKLRHGMGMKAQDTAELFFEDVRLPANALLGEENKQ  
 FYYLMQELPQERLLIAELAISACEFMFEETRNYYKQRKAFGKTVAHIQTVOHKLAEKTHICVTRAFVDS  
 CLQLHETKRLDSGSASMAKYWASELQNSVAYECVQLHGGWGYMWEYPIAKAYVDARVQPIYGGTNEIMKE  
 LIARQIVSDS

TRTRPLE - GFP Tag - V

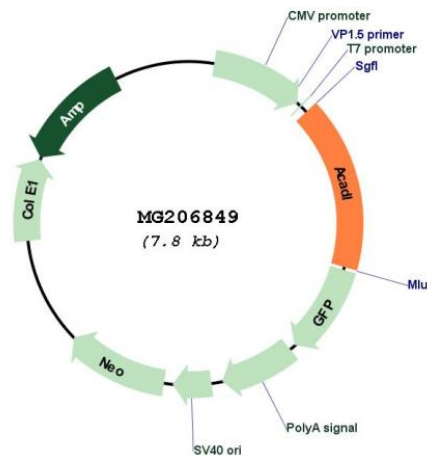
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_007381

<b>ORF Size:</b>	1290 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_007381.2</a> , <a href="#">NP_031407.2</a>
<b>RefSeq Size:</b>	1893 bp
<b>RefSeq ORF:</b>	1293 bp
<b>Locus ID:</b>	11363
<b>UniProt ID:</b>	<a href="#">P51174</a>
<b>Cytogenetics:</b>	1 33.64 cM
<b>Gene Summary:</b>	This gene encodes a homotetrameric 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 C12- and C16-acylCoA. In mice, deficiency of this gene can cause sudden death, cardiomyopathy as well as fasting and cold intolerance. [provided by RefSeq, Nov 2012]