

## Product datasheet for **MG217265**

### Acod1 (NM\_008392) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acod1 (NM_008392) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acod1
Synonyms:	AI323667; CAD; Irg1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG217265 representing NM\_008392  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATGCTCAAGTCTGTACAGAGAGCTTTGCTGGTATGATTCACGGCTTGAAAGTGAACCACTGACAG  
 ATGGTATCATTTCGAGGAGCAAGAGGATGATCCTGGATTCTCTGGCGTTGGCTTCTGGGGACAGGCAC  
 AGAAGTGTTCATAAAGTCAACCAATATAGTAAATCTACAGTTCACCAACCTCCAGCACTGTTTGGGGT  
 CGACCAGACTTCAGGCTCCACCCGACATATGCTGCTTTTGTAAATGGTGTGCTGTTCACTCCATGGATT  
 TTGATGACACATGGCACCTGCCACCCACCTTCTGGGGCTGTCTACCTGTCTCACAGCTCTATCGGA  
 AGCCCTGCCTCAGACTCCCAAGTTTTCTGGCCTCGACCTGCTGCTGGCGTTCAACGTTGGTATTGAAGTA  
 CAGGGACGATTAATGCACCTTCTCAAGGAAGCCAAAGACATACCAAGAGATTCCACCCTCCCTCTGTGG  
 TGGGGACTCTGGGAAGTCTGCTGCTGCTGCTCAAGTTTCTGGGGCTCAGCTTGACAAAGTCCCGCAGGC  
 ATTTGGCTATTGCTGTTTTCCACGCAGGGGCACCCATAGCGAACGCTGCCACTCAGACTAAGCCCCTTCAT  
 ATTTGGCAATGCAGCCAAGCATGGGATGGAAGCCACGTTTCTGGCAATGCTGGGCCTCCAAGGAAACAAC  
 AGATCTTGGACCTGGGGTCAAGGTTTCGGTGCCTTCTATGCCAACTACTCCCCGAAGACCTTCCAAGCCT  
 GGATTCTCACATCTGGCTGTTGGACCAGCAGGATGTGGCCTTTAAGAGCTTCCCGGCACATCTGGCTACC  
 CACTGGGTGGCAGATGCAGCTGCAGCCGTGAGAAAGCACCTTGTGACACCAGAAAGAGCCCTGTTCCCTG  
 CTGACCACATCGAGAGAATCGTGCTCAGGATCCCTGACGTCCAGTACGTAACAGGCCCTTCCCGGACTC  
 AGAGCATGAAGCCCGTCATTCTTCCAGTATGTGGCCTGTGCCTCGCTGCTCGACGGTAGCATCACTGTC  
 CCATCCTCCACAGCCAGCAGGTCATAGGCCTCAGGTGAGAGAGTTGCTCAAGAAGGTGAAGCTGGAGC  
 ATCCTCCTGACAACCCGCAAGCTTCGACACGCTATACTGTGAAATAAGCATCACTTAAGGACGGGC  
 CACTTTCACCGAGCGCTCTGACACCTTCTATGGTCACTGGAGGAAACCACTGAGCCAGGAAGATCTGCGC  
 AACAAAGTTCAGCAATGCCTCAAAGATGCTATGCAGGGACACGGTGGAAAGCCTTATAACGGTAGTAG  
 AAAAGCTAGAAGACCTAGAAGACTGCTCTGTGCTAACCAGACTTCTGAAAGGACCCTCTGTCCAAGATGA  
 AGCTTCAAACACTCCAGCATGCTCTATTGATCACACAACGTTGCCAGGTTTACCAATATC

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>MG217265 representing NM\_008392  
 Red=Cloning site Green=Tags(s)

MMLKSVTESFAGMIHGLKVNHLTDGIIRRSKRMILDLSGVGFLGTGTEVFHKVTQYSKIYSSNTSSTVWG  
 RPDFRLPPTYAAFVNGVAVHSMDFDDTWHPATHPSGAVLPVLTALSEALPQTPKFSGLDLLLAFNVGIEV  
 QGRLMHFSKEAKDIPKRFHPPSVVGTLSAAAAASKFLGLSLTKREALIAVSHAGAPIANAATQTKPLH  
 IGNAAKHGMEATFLAMLGLQGNKQILDLSGFGAFYANYSPEDLPSLDSHIWLLDQDVAFKSFPAPHLAT  
 HWVADAAAARVRLVTPERALFPADHIERIVLRIPDVQYVNRPPDSEHEARHSFYVACASLLDGSITV  
 PSFHSQQVNRPVRELLKVKLEHPPDNPPSFDLYCEISITLKDGTTFERSDTFYGHWKPLSQEDLR  
 NKFRANASKMLCRDVTESLITVVEKLELDLDCSVLTRLKGPSVQDEASKLSSMSSFHTTLPRFTNI

**TRTRPLE - GFP Tag - V**

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja2275\\_d04.zip](https://cdn.origene.com/chromatograms/ja2275_d04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_008392

**ORF Size:** 1464 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

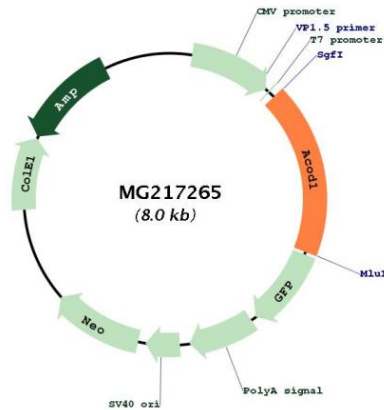
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_008392.1, NP\\_032418.1](#)  
**RefSeq Size:** 2588 bp  
**RefSeq ORF:** 1467 bp  
**Locus ID:** 16365  
**UniProt ID:** [P54987](#)  
**Cytogenetics:** 14 51.67 cM

**Gene Summary:** Involved in the inhibition of the inflammatory response. Acts as a negative regulator of the Toll-like receptors (TLRs)-mediated inflammatory innate response by stimulating the tumor necrosis factor alpha-induced protein TNFAIP3 expression via reactive oxygen species (ROS) in LPS-tolerized macrophages. Involved in antimicrobial response of innate immune cells; ACOD1-mediated itaconic acid production contributes to the antimicrobial activity of macrophages. Plays a role in the embryo implantation.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG217265