

## Product datasheet for **MR217265**

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

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Acod1 (NM_008392) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acod1
Synonyms:	AI323667; CAD; Irg1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR217265 representing NM\_008392  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATGCTCAAGTCTGTACAGAGAGCTTTGCTGGTATGATTCACGGCTTGAAAGTGAACCACTGACAG  
 ATGGTATCATTTCGAGGAGCAAGAGGATGATCCTGGATTCTCTGGCGTTGGCTTCTGGGGACAGGCAC  
 AGAAGTGTTCATAAAGTCACCCAATATAGTAAAATCTACAGTTCACCAACCTCCAGCACTGTTTGGGGT  
 CGACCAGACTTCAGGCTCCACCCGACATATGCTGCTTTTGTAAATGGTGTGCTGTTCACTCCATGGATT  
 TTGATGACACATGGCACCTGCCACCCACCTTCTGGGGCTGTCTACCTGTCTCACAGCTCTATCGGA  
 AGCCCTGCCTCAGACTCCAAGTTTTCTGGCTCGACCTGCTGCTGGCGTTCAACGTTGGTATTGAAGTA  
 CAGGGACGATTAATGCACCTTCTCAAGGAAGCCAAAGACATACCAAGAGATTCCACCCTCCCTCTGTGG  
 TGGGGACTCTGGGAAGTCTGCTGCTGCTGCTCAAGTTTCTGGGGCTCAGCTTGACAAAGTCCCGCAGGC  
 ATTTGGCTATTGCTGTTTTCCACGCAGGGGCACCCATAGCGAACGCTGCCACTCAGACTAAGCCCCTTCAT  
 ATTTGGCAATGCAGCCAAGCATGGGATGGAAGCCACGTTTCTGGCAATGCTGGGCCTCCAAGGAAACAAC  
 AGATCTTGGACCTGGGGTCAAGGTTTCGGTGCCTTCTATGCCAACTACTCCCCGAAGACCTTCCAAGCCT  
 GGATTCTCACATCTGGCTGTTGGACCAGCAGGATGTGGCCTTAAAGAGCTTCCGGGCACATCTGGCTACC  
 CACTGGGTGGCAGATGCAGCTGCAGCCGTGAGAAAGCACCTTGTGACACCAGAAAGAGCCCTGTTCCCTG  
 CTGACCACATCGAGAGAAATCGTGTCTCAGGATCCCTGACGTCCAGTACGTAACAGGCCCTTCCGGACTC  
 AGAGCATGAAGCCCGTATTCTTCCAGTATGTGGCCTGTGCCTCGTGTGACGGTAGCATCACTGTC  
 CCATCCTCCACAGCCAGCAGGTCATAGGCCTCAGGTGAGAGAGTTGCTCAAGAAGTGAAGCTGGAGC  
 ATCTCCTGACAACCCGCAAGCTTCGACACGCTATACTGTGAAATAAGCATCACTCTAAGGACGGGAC  
 CACTTTACCGAGCGCTCTGACACCTTCTATGGTCACTGGAGGAAACCACTGAGCCAGGAAGATCTGCGC  
 AACAAAGTCCGAGCCAATGCCTCAAAGATGCTATGCAGGGACACGGTGGAAAGCCTTATAACGGTAGTAG  
 AAAAGCTAGAAGACCTAGAAGACTGCTCTGTGCTAACCAGACTTCTGAAAGGACCCTCTGTCCAAGATGA  
 AGCTTCAAACACTATCCAGCATGCTCTATTGATCACACAACGTTGCCAGGTTTACCAATATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR217265 representing NM\_008392  
 Red=Cloning site Green=Tags(s)

MMLKSVTESFAGMIHGLKVNHLTDGIIRRSKRMILDSLGVGFLGTGTEVFKVYQYSKIYSSNTSSTVWG  
 RPDFRLPPTYAAAFVNGVAVHSMDFDDTWHPATHPSGAVLPVLTALSEALPQTPKFSGLDLLLAFVNGIEV  
 QGRLMHFSKEAKDIPKRFHPPSVVGTLSAAAASKFLGLSLTKREALAIAVSHAGAPIANAATQTKPLH  
 IGNAAKHGMEATFLAMLGLQGNKQILDLSGFGAFYANYSPEDLPSLDLWLLDQQDVAFKSFPAPHLAT  
 HWVADAAAARVRLVTPERALFPADHIERIVLRIPDVQYVNRPFDPSEHEARHSFYVACASLLDGSITV  
 PSFHSQQVNRQVRELLKVKLEHPPDNPPSFDLYCEISITLKDGTTFTERSDFYGHWRKPLSQEDLR  
 NKFRANASKMLCRDVTESLITVVEKLELDLDCSVLTRLKGPSVQDEASKLSSMSSFDHTLPRFTNI

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1541\\_c08.zip](https://cdn.origene.com/chromatograms/ja1541_c08.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.

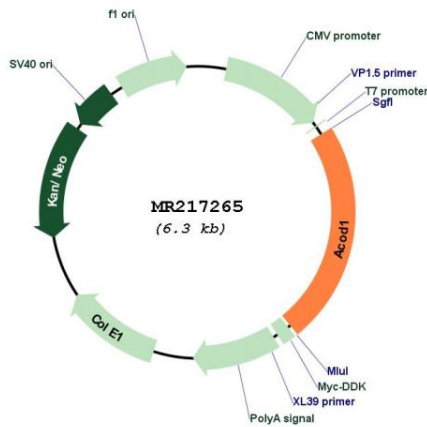
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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  
**MW:** 54.2 kDa

**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 MR217265