

## Product datasheet for **MR224284**

### Acot12 (NM\_028790) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acot12 (NM_028790) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acot12
Synonyms:	1300004O04Rik; 4930449F15Rik; AV027244; Cach; mCACH-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR224284 representing NM\_028790  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTCGATGGTGGCCCGGGTGGAGGTGCTCATGAGCCAGGCCATCCAGCCGGCTCATGCCGACTCCC  
 GCGGCGAGCTGAGCGCAGGGCAGCTGCTCAAGTGGATGGACACCACCGCTTGCCTGGCGGCCGAAAAGCA  
 TGCTGGGATTTCTGTGTACAGCCTCCATGGATGACATTCTGTTTGAGGACACAGCGAGAATTGGACAA  
 ATTATTACCATCAGAGCAAAAGTACTAGGGCGTTGAGCACAAGCATGGAGATCAGTATCAAGGTATAG  
 TCCAGGACAAGTTCACGGGCATCCAGAAGCTCCTCTGCGTGGCTTTCTCTACGTTTGTAGCTAAACCAGT  
 TGGCAAAGAAAAGTTCACTTAAAACCTGTCTGCTTCAAACAGAGCAAGAACAAGTGGAGCACAATCTG  
 GCTTCAGAGAGAAGGAAAGTCCGACTGCAGCATGAGAACACCTTCAACAACATTATGAAGGAGAGCAGCA  
 GGTTCCAGCGATTCCATTTGTAATGAAGAAGAAGGAACGGCCACCACCATGGGCACCTCTGTCCAGAGCAT  
 CGAGCTTGTCTCCGCCACGCAACCATCACGAAACACATTTGGTGGCCAGATCATGGCATGGATG  
 GAGACAGTCGCCACCATTTCTGCAAGCCGCTGTGTATGGGCATCCCTTTCTGAAGTCTGTGGATATGT  
 TTAATTCGGGGACCGTCCACAGTTGGAGACCGCTTGTCTTCAAGTCCATAGTCAACAACACCTTTCA  
 GAACAGTGTGGAAGTCCGAGTGCCTGTTGAGGCCCTTGTACTGTCAGGAGTGGGCCGAGGGCCAAGGCCGC  
 CACATCAACAGCGCTTTTCTCATTTACAATGCTGTTGATGACCAGGAGAACTCATCACCTTTCCAGAA  
 TCCAACCCATTTCAAAGGACGATTTTCGCCGTTACCAGGGAGCCATCGCACGGAGGAGAATTGCGCTAGG  
 CAGGAAATATGTTATTTCCACAAGAAAGTCCACTCAGTGCACAGTGGGATATAAGCAAAAAGGGA  
 TCCCTAAGTAACCAATGTGGAAGCTCTCAAAAATCTGGCATCCAAAAGCGTTGGGAGATTACCACCA  
 CCTTGGAGAAGATAAAAATATATACCCTGGAGGAGCAAGATGCCATATCTGTTAAGGTTGAAAAGCTTGT  
 GGGCAGTCCAGCCACATAGCTTATCATCTTGTCTGACCTCACAAAGCGACCTTTATGGGACCCCAT  
 TACATATCTTGTGAAGTTATAGACCAGGTGAGCGAGGACGATCAGATATATTACATCACTTGTCTGGTGG  
 TAAATGGAGACAAACCAAGGACTTTGTGGTGTGTGTACGAAGAAAGCCCTCAAAGACAACAACAC  
 CTACACCGTGGCACTAAGGTGAGTGTGCTGCCGTCTGTCCCCTCATCTCCACAGTACATCAGAAGTGAG  
 GTCATTTGTGCTGGTTTCTCATCCAGGCTGTCGACAGCAATTCGTGCACCGTAACGTACCTGAACCAGA  
 TGTGACAGCATCCTCCCTTACTTTGCTGGCAATATTGGTGGCTGGTCAAATCCATTGAGGAAGCTGC  
 AGCCTCTGTATAAAATTCATAGAGAATGCTACTCCTGATGGACTTAAAAGTGTGTTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224284 representing NM\_028790  
 Red=Cloning site Green=Tags(s)

MESMVAPGEVLSQAIQPAHADSRGELSAGQLLKWMDTTACLAAEKHAGISCVTASMDLIFEDTARIGQ  
 IITIRAKVTRAFSTSMELSIKVIQDKFTGIQKLLCVAFSTFVAKPVGKEKVLKPVLLQTEQEVEHNL  
 ASERRKVRQLQHENTFNNIMKESRFSDSICNEEETATTMGTSVQSIELVLPphanHhGNTFGGQIMAWM  
 ETVATISASRLCHGHPFLKSDMFKFRGPSTVGDRLVFSAINNTFQNSVEVGRVEAFDCQEWAEQGGR  
 HINSAFLIYNVDDQEKLITFPRIQPIKDDFRRYQGAIAARRIRLGRKYVISHKKEVPLSAQWDISKKG  
 SLSNTNVEALKNLASKSGWEITTTLEKIKIYTLLEEQDAISVKVEKLVGSPAHIAYHLLSDLTKRPLWDPH  
 YISCEVIDQVSEDDQIYYITCSVVNGDKPKDFVVLVSRKPLKDNNTYVALRSVVLPSVSPSPQYIRSE  
 VICAGFLIQAVDSNSCTVTYLNQMSDSILPYFAGNIGGWSKSIEEAAASCIKFIENATPDGLKSVL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9079\\_c05.zip](https://cdn.origene.com/chromatograms/mm9079_c05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_028790

**ORF Size:** 1668 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\\_028790.3](#), [NP\\_083066.1](#)

**RefSeq Size:** 3049 bp

**RefSeq ORF:** 1671 bp

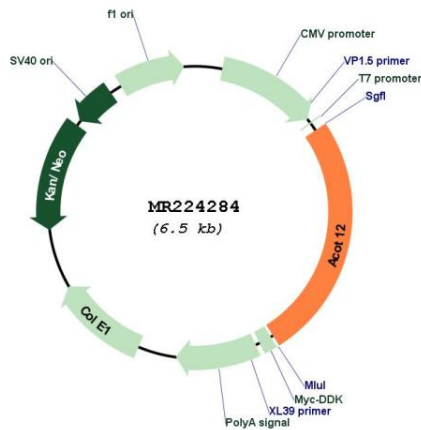
**Locus ID:** 74156

**UniProt ID:** [Q9DBK0](#)

**Cytogenetics:** 13 C3  
**MW:** 61.8 kDa

**Gene Summary:** Acyl-CoA thioesterases are a group of enzymes that catalyze the hydrolysis of acyl-CoAs to the free fatty acid and coenzyme A (CoASH), providing the potential to regulate intracellular levels of acyl-CoAs, free fatty acids and CoASH. Acyl-coenzyme A thioesterase 12/ACOT12 preferentially hydrolyzes acetyl-CoA.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR224284