

## Product datasheet for MR205033

### Acot7 (NM\_133348) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acot7 (NM_133348) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acot7
Synonyms:	2410041A17Rik; Ach1; Act; Bach; Cte-II; CTE-IIa; Lach1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205033 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGGCCCCACCACAGACACGCCGGCCCATCCAGATCTGCCGGATCATGCGTCCAGATGATGCCA  
ATGTGGCTGGCAATGTTTCATGGAGGGACCATTCTGAAGATGATTGAGGAGGCCGGGGCCATCATCAGCAC  
GCGGCACTGTAAACAGCCAGAATGGGGAGCGCTGTGTGGCTGCCCTGGCACGGGTGGAGCGCACTGACTTC  
CTGTACCCATGTGCATCGGCGAGGTGGCTCATGTGAGTGCAGAGATCACCTACACTTCCAAGCACTCTG  
TGGAGGTCCAGGTCCACGTGATGTCGGAGAACATCCTCACAGGTACCAAAAAGCTGACCAATAAAGCCAC  
CTTGTGGTATGTGCCCTGTCTTGAAGAATGTGGACAAGGTCCCTGAGGTGCCTCCATTGTGTATTTA  
CGGCAGGAGCAGGAGGAGGGTCCGAAACGCTATGAAGCCCAGAAGCTGGAACGCATGGAGACCAAGT  
GGAGGAACGGAGACATTGTCCAGCCTGTCTGAACCCAGAGCCGAACACGGTGAGCTACAGCCAGTCCAG  
CCTGATCCACCTGGTGGGGCCCTCGGACTGCACCCTTCATGGCTTCGTGCACGGAGGTGTACCATGAAG  
CTCATGGATGAGGTGGCTGGGATTGTGGCTGCACGCCACTGCAAGACCAACATAGTAACTGCCTCTGTGG  
ATGCCATCAATTTCCACGACAAGATCCGAAAGGCTGTGTGCATCACCATCTCCGGACGCATGACCTTAC  
AAGCAATAAGTCCATGGAGATTGAGTCTGTTGGTGGACGCTGACCTGTGGTGGACAACTCACAAAAGCC  
TACCGGGCCCGCAGTGCCTTCTTACCTACGTGTCCCTGAACCAGGAGGGCAAGCCAATGCCTGTGCCTC  
AGCTTGTGCCAGAGACGGAGGATGAGAAGAAGCGCTTCGAAGAAGGCAAAGGCCGTTATCTGCAGATGAA  
GGCGAAGCGACAGGGCCACAGAGCCTCAGCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205033 protein sequence  
Red=Cloning site Green=Tags(s)

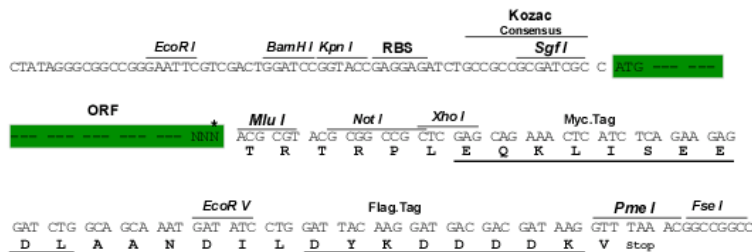
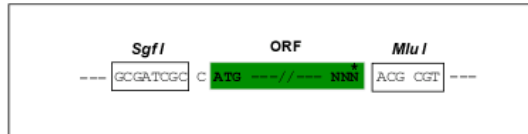
MSGPTTDTPAAIQICRIMRPDDANVAGNVHGGTILKMIEEAGAIISTRHCNSQNGERCVAALARVERTDF  
 LSPMCIGEVAVHSAEITYTSKHSVEVQVHVMSENILTGTKKLTNKATLWYVPLSLKNVDKLVLEVPPIVYL  
 RQEQQEEGRKRYEAQKLERMETKWRNGDIVQPVLPNPEPNTVSYSQSSLIHLVGPSDCTLHGfVHGGVTMK  
 LMDEVAGIVAARHCKTNIIVTASVDAINFHDKIRKGCVITISGRMTFTSNKSMEIEVLVDADPVDNSQKR  
 YRAASAFFTYVSLNQEKGKMPVPQQLVPETEDEKKRFEEGKGRYLQMKAKRQGHTEPQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_133348

**ORF Size:** 1017 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\\_133348.1](#), [NP\\_579926.1](#)

**RefSeq Size:** 1494 bp

**RefSeq ORF:** 1140 bp

**Locus ID:** 70025

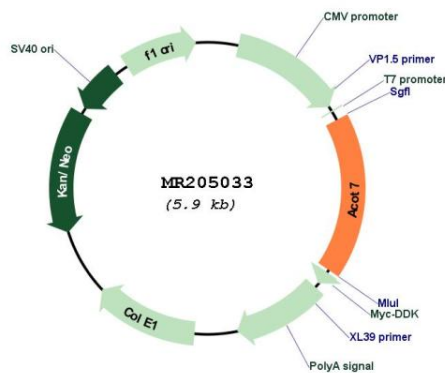
**UniProt ID:** [Q91V12](#)

**Cytogenetics:** 4 E2

**MW:** 37.6 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 (PubMed:15288813). Acyl-coenzyme A thioesterase 7/ACOT7 preferentially hydrolyzes palmitoyl-CoA, but has a broad specificity acting on other fatty acyl-CoAs with chain-lengths of C8-C18 (Probable). May play an important physiological function in brain (PubMed:15288813).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR205033