

Product datasheet for **MC216033**

Acot2 (NM_134188) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acot2 (NM_134188) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Acot2
Synonyms:	AA571646; MTE-I; Mte1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC216033 representing NM_134188
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGGCCTCGTCTTTGCTGTCTGAGAGCAAGCAGGTTGTGCCAACAGGATTGGAAGAGCTGGGCGC
 GGCTGTTTGTACCTCCGCCGCTCAGCACTGGTGGCCGGACCATTGGGCGCGACAAATGCGACGCTGAG
 CGTAGAGCCCAGGGCCGAGCTGCTGGGACGAGCCGCTGAGCATCGCCGTGCGCGCCCTGGCCCCGAG
 CAGCCCGTCACGCTGCGCTCTGCCTTGCAGCAGAGAAGGGCGCGCTCTCCGAGCCACGCGCGCTACC
 GCGCCGACGCTGGCGGCGAGCTGAACCTGGCGCGCGCCCGCGCTGGGCGGAGCTTCTCGGGGCTCGA
 GCCCATGGGGCTGCTCTGGGCCATGGAGCCGAACGGCCTCTCTGGCGCTGATCAAGCGCGACGTGCAG
 ACGCCCTTCTGGTGGAGCTGGAGGTGCTGGACGGACACGAGCCCGATGGCGGGCAGCGGCTGGCGCAGG
 CGGTGCACGAGCGTCACTTCTGGCTCCCGGGGTGCGGGCGGTGCCCGTACGAGAGGGCCGGGTGCGCGC
 CAGCCTTCTGCCCCAGAACCTGGACCCTTCTGGGATCATAGACCTTTTGGAGTTGGAGGTGGC
 CTCTGGAGTATCGGGCGAGCCTGCTGGCTGGGAAGGGCTTTGCCGTGATGGCTCTGGCTATTACAAC
 ACGACGACCTCCCAAGAGCATAGAAACCATGCACATGGAGTACTTTGAAGAAGCCGTGAACTACCTGCG
 CAGCCACCCCGAGGTAAGGACCTGGAATTGGGCTGCTTGGGATTTCAAAGGGGGTGAACCTGGCCTT
 GCTATGGCCTCCTTCTGAAGGGCATCACAGCTGCTGTGGTCAATGGCTCCGTGGCTGCTGTTGGGA
 ACACCATCTCCTACAAGGATGAGACTATACCCCTGTGTCCCTTCTGAGAAACCAAGTCAAAATGACCAA
 AGATGGTCTCTTGGATGTCGTGGAAGCTCTGCAAAGCCCTCTGGTAGACAAGAAGAGCTTCAATCCCGTG
 GAAAGGCTGACACGACCTTCTGTTCTCGTAGGTGAGGACGACCAACTGGAAGAGCGAGTTCTATG
 CTGATGAGATCTCAAACGCCTGCAGGCGACGGGAAGGAGAAGCCCGATCATCTGCTACCCAGCAGC
 AGGGCATTACATCGAGCCCTTACTTCCCGCTGTGACGCGTGGCATGCACCTCCTGGTGGGTGCCAAC
 ATCACCTTTGGAGGGGAGCCAGGGCTCATGCCGTGGCCAGGTGGACGATGGCAGCAGCTCCAGACTT
 TCTTCCACAAACAGTTGGGTAGCAAGAGT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_134188
- Insert Size:** 1362 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_134188.3](#), [NP_598949.3](#)

RefSeq Size: 2215 bp

RefSeq ORF: 1362 bp

Locus ID: 171210

UniProt ID: [Q9QYR9](#)

Cytogenetics: 12 D1

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:25114170). Acyl-coenzyme A thioesterase 2/ACOT2 displays higher activity toward long chain acyl CoAs (C14-C20) (PubMed:25114170). The enzyme is involved in enhancing the hepatic fatty acid oxidation in mitochondria (PubMed:25114170).[UniProtKB/Swiss-Prot Function]