

Product datasheet for **MG218697**

Acot4 (NM_134247) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acot4 (NM_134247) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acot4
Synonyms:	B430212I04Rik; PTE-Ib; Pte1b; Pte2b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218697 representing NM_134247 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCGACACTGAGCGTGGAGCCCACGGGCCGACGCTGCTGGGACGAGCCGCTGAGCATCGCCGTGC
GCGGCCTGGCCCCGAGCAGCCCGTCACGCTGCGCTCTGTCTGCGGACGAGAAGGGCGCGCTCTTCCG
AGCCACGCGCGCTACCGCGCGGACTCCACGGCGAGCTGGACCTGGCGCGCTGCCGCGCTGGGCGGC
AGCTTCTCGGGGCTCGAGCCCATGGGGTGTCTGGGCCATGGAGCCGATCGGCCTTTCTGGCGCCTGA
TCAAGCGCGACGTGCAGACGCCCTTCTTGGTGGAGCTGGAGGTGTGGACGGACACGAGCCGATGGCGG
GCGGCGGCTGGCGCGGACGGTGCACGAGCGTCACTTCATGGCTCCCGGGGTGCGGCGCGTCCCCGTGCGC
GAGGGCCGGGTGCGCGCCACGCTCTTCTGCCCCAGGACAAGGACCTTTCCAGGCATCATCGATGTTT
ATGGTGTGGAGGAGGCTGTTGGAATACCGAGCCGCGCTTGTGGCTGGCCATGGCTTTGCCACATTGGC
TCTGGCTTTTATGACTTTGAGGATCTCCCAAAGAGCTCAACGTCATAGAAGTGGACTACTTTGAAGAA
GCAGTGCAGTACATGCTTCGACATCCAAAGGTAAGGAGCCAGACATTGGGCTTCTGGGTCTTCCCTAG
GAGCTGATGTCTGTCTGATCATGGCTTCCTTCTGAATAATGTCTCAGCCACAGTTTCCATCAATGGCTC
TGCAATTCAGTGGAAACAGACATATCAAGTACAAGCAGACCATGATTCCGCCGTTGGGCCATGACCTGAGG
AGAATGAAGGTGGCTTTCTCTGGCATTCTGGACATTGTGGATATACGGAATGATGCTGTAGGAGGCTGTG
AGAACCCAGCATGATACCAATAGAGAAGGCCAAGGGGCCATCCTCTTTGTGGCTGGCCAGGATGATCA
TTGCTGGAGGAGTGAGTTATATACTCAGATAGCCTCGGACCGGTTACAGGCTCATGGAAGGAAAGGCC
CAGGTAATCTCTTACCCTGGGACTGGGCATTACATCGAACACCTTACTTTCCATGTGCCAGCTTCCC
TGCACAAATAGTGAACGAAGCTGTGATTTGGGAGGGGAGGTCAAGGCTCACTCCAAAGCCAGATAGA
TGCATGGAAGCAAATTCTATTCTTTGGCAAACACCTGGGCAGTACCCACAGCAGAGCCTCTGTAGA
CTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG218697 representing NM_134247
 Red=Cloning site Green=Tags(s)

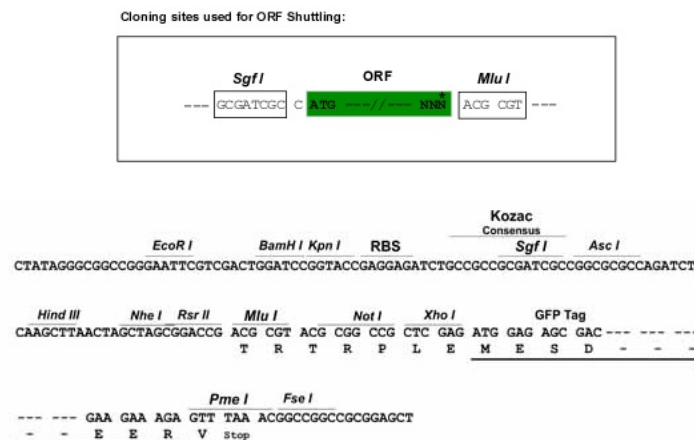
MAATLSVEPTGRSCWDEPLSIAVRGLAPEQPVTLRSVLRDEKGFRAHARYRADSHGELDLARVPALGG
 SFSGLEPMGLLWAMEPDRPFWRLIKRDVQTPFLVELELDGHEPDGGRRLARTVHERHMAPGVRRVPVR
 EGRVRATLFLPPGQGPFGIIDVYGVGGGLLEYRAGLVAGHGAFATLALAFYDFEDLPKELNVEVDYFEE
 AVRYMLRHPKVKGPDIGLLGLSLGADVCLIMASFLNNSATVSINGSASFSGNRHIKYKQTMIPPLGHDLR
 RMKVAFSGILDIVDIRNDAVGGCENPSMIPKAKGPILFVAGQDDHCWRSELYTQIASDRLQAHGKERP
 QVLSYPTGTHYIEPPYFPMCPASLHKIVNEAVIWGGEVKAHSAQIDAWKQILFFFGKHLGSTHSRASCRL

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_134247

ORF Size: 1263 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_134247.3](#), [NP_599008.3](#)

RefSeq Size: 2325 bp

RefSeq ORF: 1266 bp

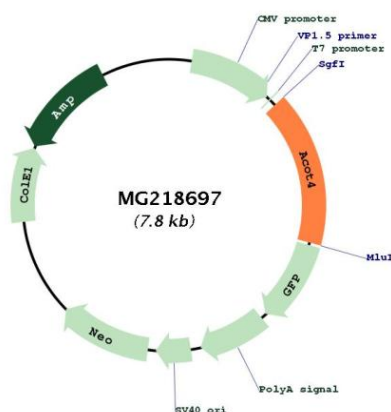
Locus ID: 171282

UniProt ID: [Q8BWN8](#)

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:16141203, PubMed:16940157). In contrast to human peroxisomal succinyl-coenzyme A thioesterase/ACOT4, mouse ACOT4 is essentially a succinyl-CoA thioesterase with no activity with medium to long chain saturated acyl-CoAs and with a low activity toward glutaryl-CoA (PubMed:16141203, PubMed:16940157). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG218697