

Product datasheet for **MR218697**

Acot4 (NM_134247) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acot4 (NM_134247) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acot4
Synonyms:	B430212I04Rik; PTE-Ib; Pte1b; Pte2b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218697 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCAGCGACACTGAGCGTGGAGCCACGGGCCGAGCTGCTGGGACGAGCCGCTGAGCATCGCCGTGC
 GCGGCCTGGCCCCGAGCAGCCGTCACGCTGCGCTCTGTCTGCGCGACGAGAAGGGCGCGCTCTCCG
 AGCCACGCGCGCTACCGCGCGGACTCCACGCGGAGCTGGACCTGGCGCGCGTCCCGCGCTGGCGCGC
 AGCTTCTCGGGGCTCGAGCCCATGGGGTCTCTGGGCCATGGAGCCGATCGGCCTTTCTGGCGCTGA
 TCAAGCGCGACGTGCAGACGCCCTTCTGGTGGAGCTGGAGGTGCTGGACGGACACGAGCCGATGGCGG
 GCGGCGGCTGGCGCGGACGGTGCAGAGCGTCACTTCATGGCTCCCGGGTGGCGCGCTGCCGTGCGC
 GAGGGCCGGTGGCGGCCAGCTCTTCTGCCCCAGGACAAGGACCCTTCCAGGCATCATCGATGTTT
 ATGGTGTGGAGGAGCCTGTTGAATACCGAGCCGGCCTTGTGGCTGGCCATGGCTTTGCCACATTGGC
 TCTGGCTTTTATGACTTTGAGGATCTCCCAAAGAGCTCAACGTCATAGAAGTGGACTACTTTGAAGAA
 GCAGTGGCGGTACATGCTTCGACATCCAAAGGTAAAGGCCAGACATTGGGCTTCTGGGTCTTCCCTAG
 GAGCTGATGTCTGTCTGATCATGGCTTCTTCTTGAATAATGTCTCAGCCACAGTTTCCATCAATGGCTC
 TGCATTAGTGGAAACAGACATATCAAGTACAAGCAGACCATGATTCCGCCGTTGGGCCATGACCTGAGG
 AGAATGAAGGTGGCTTTCTCTGGCATTCTGGACATTGTGGATATACGGAATGATGCTGTAGGAGGCTGTG
 AGAACCCAGCATGATACCAATAGAGAAGGCCAAGGGGCCATCCTCTTTGTGGCTGGCCAGGATGATCA
 TTGCTGGAGGAGTGAGTTATATACTCAGATAGCCTCGGACCGTTACAGGCTCATGGAAAGGAAAGGCC
 CAGGTACTCTCTTACCCTGGGACTGGGCATTACATCGAACCACCTTACTTTCCATGTGCCAGCTTCCC
 TGCACAAATAGTGAACGAAGCTGTGATTGGGGAGGGAGGTCAAGGCTCACTCCAAAGCCAGATAGA
 TGCATGGAAGCAAATTCTATTCTTTTGGCAAACACCTGGGCAGTACCCACAGCAGAGCCTCCTGTAGA
 CTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218697 protein sequence
 Red=Cloning site Green=Tags(s)

MAATLSVEPTGRSCWDEPLSIAVRGLAPEQPVTLRSVLRDEKGALFRAHARYRADSHGELDLARVPALGG
 SFSGLEPMGLLWAMEPDRPFWRLIKRDVQTPFLVELEVLDGHEPDGGRRRLARTVHERHFMAGVRRVPVR
 EGRVRATLFLPPGQGPFGIIDVYGVGGGLLEYRAGLVAGHGFATLALAFYDFEDLPKELNVIEVDYFEE
 AVRYMLRHPKVKGPDIGLLGLSLGADVCLIMASFLNNVSATVSINGSASFSGNRHIKYQTMIPPLGHDLR
 RMKVAFSGILDIVDIRNDVGGCENPSMIEKAKGPILFVAGQDDHCWRSELYTQIASDRLQAHGKERP
 QVLSYPGTGHYIEPPYFPMCPASLHKIVNEAVIWGGEVKAHSAQIDAWKQILFFFGKHLGSTHSRASCR
 L

TRTRPLE**QKLISEEDLAANDILDYKDDDDKV**

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

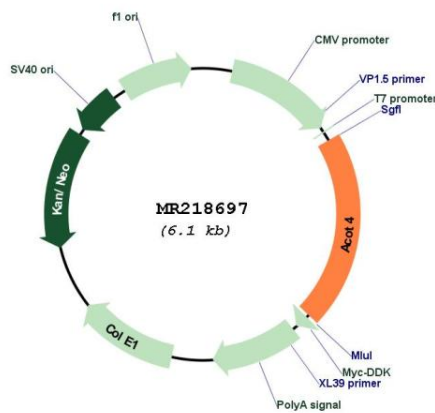
UniProt ID: [Q8BWN8](#)

Cytogenetics: 12 D1

MW: 46.5 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: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 MR218697