

## Product datasheet for **MR216341**

### Acot5 (NM\_145444) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acot5 (NM_145444) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acot5
Synonyms:	BC016076; PTE-lc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR216341 representing NM\_145444  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGCCAAACAGTAAGCCTGGAGCCACGGGCCACAGCTGCTGGGACGAACCGCTGAGCATCGCTGTGC  
 GCGGCTTGGCCCCGAGCAGCCCGTCACTGCGCACTGCCCTGCGCGACGAGAAGGGCGCGCTCTCCG  
 AGCCACGCGCGCTACCGCGCGGACTCCACGCGGAGCTGGACCTGGCGCGCACGCCCGCTGGGCGGC  
 AGCTTCTCGGGCTCGAGCCATGGGGCTGCTCTGGCCATGGAGCCGATCGGCCCTTCTGGCGCTGA  
 TCAAGCGCGACGTGCAGACGCCCTTCGTGGTGGAGCTGGAGGTGCTGGACGGACACGAGCCGACGGCGG  
 GCGGCTGCTGGCGGGCGGTGCACGAGCGTCACTTCATGGCTCCCGGGTGGCGCGCTGCCCGTGGC  
 GAGGGCCGGTGGCGCCACGCTCTTCTGCCCCAGAACTGGACCCTTCTGGGATCATAGACCTTT  
 TTGGAGTTGGAGTGGCCTTCTGGAGTATCGGGCGAGCCTGCTGGCTGGGAAGGGCTTTGCCGTCATGGC  
 TCTGGCTTATTATAAATATGATGACCTCCCTAAGTTATAGACATCCTTCATCTGGAGTACTTTGAGGAA  
 GCTGTGACCTACCTGCTCAGTCACCCTCAGGTCAAGGTCAGGAGTTGGCCTGTAGGGATTTCCAAG  
 GGGCTGAACCTCTCCCTCTCCATGGCTTCTTCTGAAAGGCATCACGGCCGCTGTCGTAATCAATGGCGC  
 CACGGTCAACGTTATTTCAACATTATACTACAAGGAAGAGAGTCTGCCTGGTTGGGCATGCACCTAGAA  
 AGGATCAAGGTGACCAAAGATGGGTTAAAGATATTATAGATATCCTGAATGTCCCTCTAGAAGCTCCAG  
 ACCAGAAGAGCCTCATCCCCTGGAAAGGTCTGACACGGCCTTCTGTTCTCGTAGGTCAAGGACGACCA  
 CAACTGGAAGAGCGAGTTCTATGCCAGAGAGCCCTCCAACGCCCTGCAGGCGCACGGGAAGGAGAAGCCC  
 CAGATTGCTGCTACCCAAAACAGGACACCACATTGAACCCCTTACATCCCTTGGTCCATAGCTGCCC  
 CCCACAGCTATTTTGATAAGCCTATCCTCCTTGGAGGGGAGCCTAGGGCTCATGCCATGGCCAGGTGGA  
 CGCTGGCAGCGGCTCCAGACTTTTTCCATAAACATTTGAGTGGGACAAGAGGCCAAGCCAGCAAAAA  
 CTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR216341 representing NM\_145444  
 Red=Cloning site Green=Tags(s)

MVPTVSLEPTGHSCWDEPLSIAVRGLAPEQPVTLRALRDEKGFRAHARYRADSHGELDLARTPALGG  
 SFSGLEPMGLLWAMEPDRPFWRLIKRDVQTPFVVELEVLDGHEPDGGRLARAVHERHFMAPGVRVPVR  
 EGRVRLATLFLPPGTGPFPGIIDLFGVGGGLLEYRASLLAGKGFAYMALAYKYDDLPKVIDILHLEYFEE  
 AVTYLLSHPQVKGPGVGLLGISKAELSLSMASFLKGITAAVINGATVNVISTLYYKEESLPLGMHLE  
 RIKVTKDGFKDIIDILNVPLEAPDQKSLIPLERSDTAFLFLVGQDDHNWKSEFYAREASKRLQAHGKEKP  
 QIVCYPKTGHHEPPYIPWSIAAPHSYFDKPIILGGEPRAHAMAQVDAWQRLQTFHFKHLSGDKRPSPAK  
 L

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_145444

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.

RefSeq: [NM\\_145444.3](#), [NP\\_663419.3](#)

RefSeq Size: 1518 bp

RefSeq ORF: 1266 bp

Locus ID: 217698

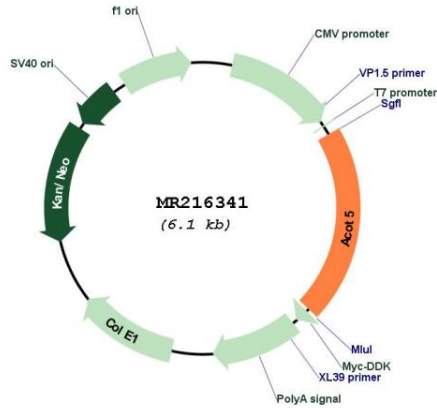
UniProt ID: [Q6Q2Z6](#)

Cytogenetics: 12 D1

**MW:** 47 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:16940157). Mainly active on medium-chain acyl-CoAs (PubMed:15007068). Seems to be involved in intraperoxisomal regulation of acyl-CoA levels, but not CoASH levels (PubMed:15007068). May have a function in termination of beta-oxidation of fatty acids (PubMed:15007068).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR216341