OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC201683

Acat1 (NM_144784) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acat1 (NM_144784) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Acat1
Synonyms:	6330585C21Rik; Acat
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>BC024763 sequence for NM_144784
GGAGGCCGCGGCGCGTCTCTCTGCCCTTGACAGCCTTTCGCGTCTCCATGGCTGCCCTGGTGGCTCTGCA
CGGCGTCGTCCGCAGGCCTCTGCTTCGCGGGCTGCTGCAGGAAGTAAGATGCCTGGAACGAAGTTATGCA
TCCAAACCCACTTTGAATGAAGTGGTTATAGTAAGTGCTATAAGAACTCCCATTGGATCCTTCCTGGGCA
GCCTTGCCTCTCAGCCGGCCACTAAACTTGGTACTGCTGCAATTCAGGGAGCCATTGAGAAGGCAGGGAT
TCCAAAAGAAGAAGTGAAGGAAGTCTACATGGGCAATGTCATCCAAGGGGGTGAAGGACAGGCCCCTACC
AGGCAAGCAACACTGGGCGCAGGTTTACCTATTTCCACTCCATGCACCACAGTAAACAAGGTTTGTGCTT
CAGGAATGAAAGCCATCATGATGGCCTCTCAAAGTCTTATGTGTGGACATCAGGATGTGATGGTGGCAGG
CGGGATGGAGAGCATGTCCAATGTCCCATACGTAATGAGCAGAGGAGCAACACCATATGGTGGGGTAAAA
CTTGAAGACCTGATTGTAAAAGACGGGCTAACTGATGTCTACAATAAAATTCATATGGGTAACTGTGCTG
AGAATACTGCAAAGAAGATGAATATCTCACGGCAGGAACAGGATACGTACGCTCTCAGCTCTTACACCAG
AAGTAAAGAAGCGTGGGACGCAGGGAAGTTTGCCAGTGAGATTACTCCCATCACCATCTCAGTGAAAGGT
AAACCAGATGTGGTGGTGAAAGAAGATGAAGAATACAAGCGTGTTGACTTTAGTAAAGTGCCAAAGCTCA
AGACCGTGTTCCAGAAAGAAAATGGCACAATAACAGCTGCCAATGCCAGCACACTGAACGATGGAGCAGC
TGCTCTGGTTCTCATGACTGCAGAGGCAGCCCAGAGGCTCAATGTTAAGCCATTGGCACGAATTGCAGCA
TTTGCTGATGCTGCCGTAGACCCCATTGATTTTCCACTTGCGCCTGCATATGCCGTACCTAAGGTTCTTA
AATATGCAGGACTGAAAAAAGAAGACATTGCCATGTGGGAAGTAAATGAAGCATTCAGTGTGGTTGTGCT
AGCCAACATTAAAATGCTGGAGATTGACCCCCAAAAAGTAAATATCCACGGAGGAGCTGTTTCTCTGGGC
CATCCAATTGGGATGTCTGGAGCCCGGATTGTTGTTCATATGGCTCATGCCCTGAAGCCAGGAGAGTTCG
GTCTGGCTAGTATTTGCAACGGAGGAGGAGGTGCTTCCGCCCTGCTGATTGAGAAGCTGTAGACAACCTG
TTTTAGGAGACAGTTCCATGTGACCGGCTGAAGTAAATGTGACTCCCTTGGGCCAGGTTATATTCAGCAT
AAGCTATTTCATTTTTTATTATTTTCTACTAAAATTTTTAAAAAATCATATCCAAAAAACACACTTAAAT
TACAAATAAAAATTTCTTCTTTATTTTATTTTATTTTTTTGTAAACTTAAACAGTTGGATACTCTATTAT
TTGAAATACCAATATAGGTATTTGAGGCATGGCTCAGCAGTTAAGAGAATTTGTTGCTAGTTGGGTGGTA
CATGGCTTTAATCCCAGCACTTGGAGATAGAGGCAAGTGGATCTTTCTGAGTTTAAGGCTAGCCTGGTCC
ACAGAGCTACTTCTATGACAGCCAAGAATACACATAGAAGTAGAAACTCTGGAAACAAACAAACGAACAA
AAGAGCATCTGTTGCTCACACAGAAAACATTTGGTTCCCAGGACCCACACTGGGTGACACAGCAGGGAGG
ACTTGGACACTGCACTGCACGCAGAAACCAGAGAAATGAGGTCCTGTGCTTTTCTACCTCACTGCTGCCG
GTACAGCAGAAGCCAGCCTTGGGGATAACCTGTAACCGGGTTCTCTCCTGATGAAGGCAGGGTAAAGTTC
CAGCATTTTTACATCTAAATACACCAAAGAAATGAGAATATCACAATAGCAGCAACAAAGTTCCTTGACT
CTCCCAAGCCCCAAAATAATCTAACATCCATGGACTTCTATTCTGCCATTAGAATGAACACTGGCTGTTT
ATGTTTTGTTTTGTTTTCGAACTTTAATCCTTGGACAGTCAAAATTGGTTTCAAATAAAGTTATGTGAAT
GAAAATTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_144784

Insert Size: 1275 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:	BC024763, AAH24763
RefSeq Size:	2212 bp
RefSeq ORF:	1275 bp
Locus ID:	110446
UniProt ID:	Q8QZT1
Cytogenetics:	9 29.12 cM
Gene Summary:	This is one of the enzymes that catalyzes the last step of the mitochondrial beta-oxidation pathway, an aerobic process breaking down fatty acids into acetyl-CoA. Using free coenzyme A/CoA, catalyzes the thiolytic cleavage of medium- to long-chain 3-oxoacyl-CoAs into acetyl-CoA and a fatty acyl-CoA shortened by two carbon atoms. The activity of the enzyme is reversible and it can also catalyze the condensation of two acetyl-CoA molecules into acetoacetyl-CoA. Thereby, it plays a major role in ketone body metabolism.[UniProtKB/Swiss-Prot Function]