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 SC109099

CRAT (NM_000755) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRAT (NM_000755) Human Untagged Clone
Tag:	Tag Free
Symbol:	CRAT
Synonyms:	CAT; CAT1; NBIA8
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF sequence for NM_000755 edited
ATGTTAGCCTTCGCTGCCAGGACCGTGGTGAAGCCTCTGGGCTTCCTGAAGCCCTTCTCC
TTGATGAAGGCTTCCAGCCGCTTCAAGGCACACCAGGATGCACTGCCACGGCTGCCCGTG
CCCCCTCTCCAGCAGTCCCTGGACCACTACCTGAAGGCGCTGCAGCCCATCGTGAGTGAG
GAGGAGTGGGCCCACACCAAGCAGCTGGTGGATGAGTTTCAGGCCTCAGGAGGTGTAGGG
GAGCGCCTGCAGAAGGGGCTGGAGCGTCGGGCCAGGAAGACGGAGAACTGGCTGTCTGAG
TGGTGGCTCAAGACCGCCTACCTCCAGTACCGCCAGCCTGTGGTCATCTACTCGAGCCCA
GGCGTGATGCTACCCAAGCAGGACTTCGTGGACCTGCAGGGTCAGCTCCGATTTGCTGCC
AAACTCATTGAGGGTGTGTTGGATTTCAAGGTCATGATTGACAACGAGACCCTGCCCGTG
GAGTACCTGGGGGGGAAGCCACTGTGCATGAACCAGTACTATCAGATCTTGTCCTCCTGC
CGAGTGCCGGGCCCCAAGCAGGACACAGTCAGCAACTTCAGCAAGACCAAGAAGCCTCCC
ACGCACATCACCGTGGTACACAACTACCAGTTTTTTGAGCTGGATGTGTACCACAGTGAC
GGGACACCCCTCACTGCGGATCAGATCTTTGTGCAGCTGGAGAAGATCTGGAACTCATCC
CTACAGACCAACAAGGAGCCTGTGGGCATCCTCACCTCCAACCACCGCAACTCCTGGGCC
AAGGCATACAACACCCTCATCAAAGACAAGGTGAACCGGGATTCCGTGCGCTCCATCCAG
AAGAGCATCTTCACCGTGTGCCTAGATGCAACCATGCCCAGGGTCTCAGAAGACGTGTAC
CGCAGCCACGTGGCAGGCCAGATGCTGCATGGGGGCGGCAGCAGGCTCAACAGCGGCAAC
CGCTGGTTCGACAAGACGCTGCAGTTCATCGTGGCAAAAGATGGCTCCTGTGGGCTTGTG
TACGAGCATGCTGCAGCGGAGGGGCCCCCTATTGTCACCCTTCTGGACTATGTCATCGAG
TACACGAAGAAACCCGAGCTTGTGCGGTCTCCCATGGTGCCCCTGCCCATGCCCAAGAAG
CTGCGGTTCAACATCACCCCCGAGATCAAGAGCGACATCGAGAAGGCCAAGCAGAACCTC
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TTCCCCAAGTCGGAGAAGCTAAGCCCAGATGCCTTCATCCAGATGGCTTTGCAGCTGGCC
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CACCTGGGCCGCACCGACACCATCCGCTCGGCTTCCATGGACTCACTCACCTTTGTCAAG
GCCATGGATGACTCCAGCGTCACGGAGCACCAGAAGGTGGAGCTGCTGCGGAAGGCCGTG
CAGGCCCACCGAGGCTACACCGACCGGGCCATCCGCGGGGAGGCCTTTGATCGACACCTG
CTGGGCCTGAAGCTGCAGGCCATCGAGGACCTGGTGAGCATGCCCGACATCTTCATGGAC
ACCTCCTACGCCATCGCCATGCACTTCCACCTCTCCACCAGCCAGGTCCCTGCCAAGACA
GACTGTGTCATGTTCTTCGGGCCCGTGGTCCCCGACGGCTACGGTGTCTGCTATAACCCC
ATGGAGGCCCACATCAACTTCTCCCTGTCGGCCTACAACAGCTGCGCGGAGACCAACGCC
GCCCGCCTGGCGCATTACCTGGAGAAGGCGCTCCTGGACATGCGTGCCCTGCTGCAGAGC
CACCCCCGGGCCAAGCTCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000755 unedited
GTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCAGCGAAGAGTTAGCCT
TCGCTGCCAGGACCGTGGTGAAGCCTCTGGGCTTCCTGAAGCCCTTCTCCTTGATGAAGG
CTTCCAGCCGCTTCAAGGCACACCAGGATGCACTGCCACGGCTGCCCGTGCCCCCTCTCC
AGCAGTCCCTGGACCACTACCTGAAGGCGCTGCAGCCCATCGTGAGTGAGGAGGAGTGGG
CCCACACCAAGCAGCTGGTGGATGAGTTTCAGGCCTCAGGAGGTGTAGGGGAGCGCCTGC
AGAAGGGGCTGGAGCGTCGGGCCAGGAAGACGGAGAACTGGCTGTCTGAGTGGTGGCTCA
AGACCGCCTACCTCCAGTACCGCCAGCCTGTGGTCATCTACTCGAGCCCAGGCGTGATGC
TACCCAAGCAGGACTTCGTGGACCTGCAGGGTCAGCTCCGATTTGCTGCCAAACTCATTG
AGGGTGTGTTGGATTTCAAGGTCATGATTGACAACGAGACCCTGCCCGTGGAGTACCTGG
GGGGGAAGCCACTGTGCATGAACCAGTACTATCAGATCTTGTCCTCCTGCCGAGTGCCGG
GCCCCAAGCAGGACACAGTCAGCAACTTCAGCAAGACCAAGAAGCCTCCCACGCACATCA
CCGTGGTACACAACTACCAGTTTTTTGAGCTGGATGTGTACCACAGTGACGGGACACCCC
TCACTGCGGATCAGATCTTTGTGCAGCTGGAGAAGATCTGGAACTCATCCCTACAGACCA
ACAAGGAGCCTGTGGGCATNCTCACCTNCAACCACCGGAACTNCTGGGCCAGGCATACAA
CACCCTCATCAAAGACAGGTGAACCGGNNATNCGTGCGCTCCATNCAGAAGAGCATCTTA
CCGTGTGCCTAGATGCAACATGCCCANGGTCTCANAAGACGTGTACCGCACCCACGTG

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_000755 unedited
GTGGGCGGGGCGGTNAAANAATATTTATATCACCAACAGCCNCTCACCACAATACCCCAC
CNTTGTTGNNACCTTCCACATTAATATCATACAGCAGGGGCGGGGCGCAGGTAACCAAGC
TGAGTGGAACCAGAGCGGCTCGCTAGCAATGTTATCCACAGGAGCACAGCCGCAACGGAG
GTGAAACCTCACACCCTGGCCCCTCGGCCCCAGACAATCCTGTCTCCAGGTCCTGGGAGT
CCGGGAAGCACGGCACACCATGGTGGCCCGCCCATGGAGTTGGCAGGGAGTGGCGGGCGC
TGAGCTGGTGAGACAAAGAGCTCTTGCCAGTCTCCTGCTCTGGAGGGCTGGTTCCCTTCC
CCAGAGGAGGCACCGGTGGACGACGTGCCATGGGCCCGGGTCTAACGTGCTGTTTAGCCT
CTGCACTCTACCCCACGTTGGTCCCTGACAGGTGCTGGGATGACCCACGGTAGGCACTTG
CCTGGGGCCTGAATGCCCTATGGATGCCGCGGCTCGTGGCTTCACTATTTCTGGTCGGAC
CATTGCTTATGGAACCAAGGTACAGCGTAACTATCGGTCTCTGCTTTGATGGATGGATCA
TTTAACTGTGTTGCTGTCCGTCGCTATTCCATGTCATGTTCCTACTGTCTTTATTTTCCT
CACCTCGGGCCGCCCCTGGATTTTGGTACTTCTGCTCTGTATCACATTTTCTTCTTATTT
CTCTTGTTTTCTCTCTTCCTTCCTCCATCTCTTCATTGCTTTTTTAATTTTTTAATTTAT
CTATCATTTTCTTCATTTCTCTATATTCTTATCCCCTTTCCTCCCAATAATCTCCCTCTT
TCTCCTTCCACACCTTCTTCCCCCTCGTCTCCTCCAGGTTCCCTTGTCTCTCCTATCACA
GACAAAACACCCCCCTATTCATGCGTTCCCTCCCCCCCCATATCTAT
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Restriction Sites: NotI-NotI

ACCN: NM_000755

Insert Size: 2600 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_000755.2, NP_000746.2

RefSeq Size: 2804 bp

RefSeq ORF: 1881 bp

Locus ID: 1384

Cytogenetics: 9q34.11

Domains: Carn_acyltransf

Protein Families: Druggable Genome

Gene Summary: This gene encodes carnitine O-acetyltransferase, a member of the carnitine acyltransferase family and a key metabolic pathway enzyme which plays an important role in energy homeostasis and fat metabolism. This enzyme catalyzes the reversible transfer of acyl groups from an acyl-CoA thioester to carnitine and regulates the ratio of acyl-CoA/CoA. It is found in both the mitochondria and the peroxisome. Alternative splicing results in transcript variants encoding different isoforms that may localize to different subcellular compartments. [provided by RefSeq, Oct 2016]
Transcript Variant: This variant (1) encodes isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.