

Product datasheet for **SC109100**

CRAT (NM_004003) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CRAT (NM_004003) Human Untagged Clone
Tag:	Tag Free
Symbol:	CRAT
Synonyms:	CAT; CAT1; NBIA8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene ORF sequence for NM_004003 edited
 ATGAAGGCTTCCAGCCGTTCAAGGCACACCAGGATGCACTGCCACGGCTGCCCGTGCC
 CCTCTCCAGCAGTCCCTGGACCACTACCTGAAGGCGTGACGCCCATCGTGAGTGAGGAG
 GAGTGGGCCCACCAAGCAGCTGGTGGATGAGTTTCAGGCCACAGGAGGTGTAGGGGAG
 CGCCTGCAGAAGGGGCTGGAGCGTCGGGCCAGGAAGACGGAGAAGTGGCTGTCTGAGTGG
 TGGCTCAAGACCCTACCTCCAGTACCAGCCAGCCTGTGGTCATCTACTCGAGCCACGGC
 GTGATGTACCCAAGCAGGACTTCGTGGACCTGCAGGGTCAGCTCCGATTTGCTGCCAAA
 CTATTGAGGGTGTGTTGGATTTCAAGGTCATGATTGACAACGAGACCCTGCCCGTGGAG
 TACCTGGGGGGGAAGCCACTGTGCATGAACCACTACTATCAGATCTTGTCTCCTGCCGA
 GTGCCGGGCCCAAGCAGGACACAGTCAGCAACTTCAGCAAGACCAAGAAGCCTCCCACG
 CACATCACCGTGGTACACAACCTACCAGTTTTTTGAGCTGGATGTGTACCACAGTGACGGG
 ACACCCCTCACTGCGGATCAGATCTTTGTGCAGCTGGAGAAGATCTGGAACCTATCCCTA
 CAGACCAACAAGGAGCCTGTGGGCATCCTCACCTCCAACCACCGCAACTCCTGGGCCAAG
 GCATACAACACCCTCATCAAAGACAAGGTGAACCGGGATTCCGTGCGCTCCATCCAGAAG
 AGCATCTTCACCGTGTGCCTAGATGCAACCATGCCAGGGTCTCAGAAGACGTGTACCGC
 AGCCACGTGGCAGGCCAGATGCTGCATGGGGGCGCAGCAGGCTCAACAGCGGAACCCG
 TGGTTCGACAAGACGCTGCAGTTCATCGTGGCAGAAGATGGCTCCTGTGGGCTTGTGTAC
 GAGCATGCTGCAGCGGAGGGGCCCTATTGTCACCCCTTCTGGACTATGTTCATCGAGTAC
 ACGAAGAAACCCGAGCTTGTGCGGTCTCCCATGGTGCCCTGCCCATGCCCAAGAAGCTG
 CGGTTCAACATCACCCCGAGATCAAGAGCGACATCGAGAAGGCCAAGCAGAACCTCAGC
 ATCATGATCCAGGACCTGGATATCACCGTGTGGTGTCCACCATTTTGGAAAAGACTTC
 CCCAAGTCGGAGAAGCTAAGCCAGATGCCTTCATCCAGATGGCTTTGCAGCTGGCCAT
 TACAGGATCTACGGACACCATGTGCCACCTATGAAAGTGCCTCCCTGCGCATGTTTAC
 CTGGGCCGACCCGACACCATCCGCTCGGCTTCCATGGACTCACTACCTTTGTCAAGGCC
 ATGGATGACTCCAGCGTACGGAGCACCAGAAGGTGGAGCTGCTGCGGAAGGCCGTGCAG
 GCCACCGAGGCTACACCGACCGGGCCATCCGCGGGGAGGCTTTGATCGACACCTGCTG
 GGCCTGAAGCTGCAGGCCATCGAGGACCTGGTGGAGCATGCCCGACATCTTCATGGACAC
 TCCTACGCCATCGCCATGCACTTCCACCTCTCCACCAGCCAGGTCCTGCCAAGACAGAC
 TGTGTCTGTTCTTCGGGCCCGTGGTCCCCGACGGCTACGGTGTCTGCTATAACCCCATG
 GAGGCCACATCAACTTCTCCCTGTCCGCTACAACAGCTGCGCGGAGACCAACGCCGCC
 CGCTGGCGCATTACCTGGAGAAGGCGCTCCTGGACATGCGTGCCCTGCTGCAGAGCCAC
 CCCCGGCCAAGCTCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004003 unedited
 ACGATTTTGTAAACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGGCTGCCTCT
 GGCTAGGTTCTGCTCACCACTTTGTAGCACAGTTAGGCTTAGAGATCCAGCCAAGGCAG
 ACAGACAGGGCCAGAACCTCAGTCTGCCATGGAGGAGGACGGGCAGCAGAGAGAGAAG
 GTGAAGCCTCTGGGCTTCTGAAGCCCTTCTCCTTGATGAAGGCTTCCAGCCGTTCAAG
 GCACACCAGGATGCACTGCCACGGCTGCCCGTGGCCCTCTCCAGCAGTCCCTGGACCAC
 TACCTGAAGGCGCTGCAGCCATCGTGAGTGAGGAGGAGTGGGCCACACCAAGCAGCTG
 GTGGATGAGTTTCAGGCCTCAGGAGGTGTAGGGGAGCGCCTGCAGAAGGGGCTGGAGCGT
 CGGGCCAGGAAGACGGAGAAGTGGCTGTCTGAGTGGTGGCTCAAGACCGCCTACCTCCAG
 TACCGCCAGCCTGTGGTCATCTACTCGAGCCAGGCGTGTGCTACCCAAGCAGGACTTC
 GTGGACCTGCAGGGTCAGCTCCGATTTGCTGCCAACTCATTGAGGGTGTGTTGGATTTT
 AAGGTCATGATTGACAACGAGACCCTGCCCGTGGAGTACCTGGGGGGGAAGCCACTGTGC
 ATGAACCAAGTACTATCAGATCTTGTCTCCTGCGGAGTGCCGGGCCCAAGCAGGACACA
 GTCAGCAACTTCAGCAAGACCAAGAAGCCTCCACGCACATCACCGTGGTACACAACCTAC
 CAGTTTTTTGAGCTGGATGTGTACCACAGTGACGGGACACCCCTCACTGCGGATCAGATC
 TTTGTGCAGCTGGAGAAGATCTGGAACCTATCCCTACAGACAACAAGGAGCTGTGGGCAT
 NCTTACCTNACCAACCGNACTCCTGGCCCAAGCATACACACCTCATCAAAGACAGGGAA
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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 (6) contains an alternate exon in the 5' region and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (2) is shorter at the N-terminus, compared to isoform 1. Variants 2 and 6 encode the same protein.

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.