

Product datasheet for **RC234551**

CRAT (NM_001257363) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | CRAT (NM_001257363) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | CRAT |
| Synonyms: | CAT; CAT1; NBIA8 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC234551 representing NM_001257363
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGGCTTCCAGCCGCTTCAAGGCACACCAGGATGCACTGCCACGGCTGCCCGTGCCCTCTCCAGC
 AGTCCCTGGACCACTACCTGAAGGCGCTGCAGCCCATCGTGAGTGAGGAGGAGTGGGCCACACCAAGCA
 GCTGGTGGATGAGTTTTCAGGCCTCAGGAGGTGTAGGGGAGCGCCTGCAGAAGGGGCTGGAGCGTCGGGCC
 AGGAAGACGGAGAAGTGGCTGTCTGAGTGGTGGCTCAAGACCGCCTACCTCCAGTACCGCCAGCCTGTGG
 TCATCTACTCGAGCCAGGCGTGATGCTACCAAGCAGGACTTCGTGGACCTGCAGGGTCAGCTCCGATT
 TGCTGCCAAACTCATTGAGGGTGTGTTGGATTTCAAGGTCATGATTGACAACGAGACCCTGCCCGTGGAG
 TACCTGGGGGGAAGCCACTGTGCATGAACCACTACTATCAGATCTTGTCTCCTGCCGAGTGCCGGGCC
 CCAAGCAGGACACAGTCAGCAACTTCAGCAAGACCAAGAAGCCTCCACGCACATCACCGTGGTACACAA
 CTACCAGTTTTTGTAGCTGGATGTGTACCACAGTGACGGGACACCCCTCACTGCGGATCAGATCTTTGTG
 CAGCTGGAGAAGATCTGGAACCTATCCCTACAGACCAACAAGGAGCCTGTGGGCATCCTCACCTCCAACC
 ACCGCAACTCCTGGGCCAAGGCATACAACACCCTCATCAAGACAAAGGTGAACCGGGATTCCGTGGCTC
 CATCCAGAAGAGCATCTTACCCTGTGCCTAGATGCAACCATGCCAGGGTCTCAGAAGACGTGTACCGC
 AGCCACGTGGCAGGCCAGATGCTGCATGGGGGCGCAGCAGGCTCAACAGCGGCAACCGCTGGTTCGACA
 AGACGCTGCAGTTCATCGTGGCAGAAGATGGCTCCTGTGGGCTTGTGTACGAGCATGCTGCAGCGGAGGG
 GCCCCTATTGTACCCTTCTGGACTATGTCATCGAGTACACGAAGAAACCCGAGCTTGTGCGGTCTCCC
 ATGGTCCCCTGCCATGCCAAGAAGCTGCGGTTCAACATCACCCCGAGATCAAGAGCGACATCGAGA
 AGGCCAAGCAGAACCTCAGCATCATGATCCAGGACCTGGATATCACCGTATGGTGTTCACCATTTTTGG
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 TACAGGATCTACGACAGGCATGTGCCACCTATGAAAGTGCCTCCTGCCATGTTTTACCTGGGCCGCA
 CCGACACCATCCGCTCGGCTTCCATGGACTCACTCACCTTTGTCAAGGCCATGGATGACTCCAGCGTCAC
 GGAGCACCAGAAGGTGGAGCTGCTGCGGAAGCCGTGCAGGCCACCGAGGCTACACCGACCGGGCCATC
 CGCGGGGAGGCCTTTGTATCGACACCTGCTGGGCTGAAGCTGCAGGCCATCGAGGACCTGGTGGATGC
 CCGACATCTTATGGACACCTCTACGCCATCGCCATGCACCTCCACCTCTCCACCAGCCAGGTCCCTGC
 CAAGACAGACTGTGTATGTTCTTGGGCCGTTGGTCCCCGACGGCTACGGTGTCTGCTATAACCCCATG
 GAGGCCACATCAACTTCTCCCTGTCGGCTACAACAGCTGCGCGGAGACCAACCGCCCGCCTGGCCG
 ATTACCTGGAGAAGGCGCTCCTGGACATGCGTGCCTGCTGCAGAGCCACCCCGGGCCAAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC234551 representing NM_001257363
 Red=Cloning site Green=Tags(s)

MKASSRFKAHQDALPRLVPPLQQSLDHYLKALQPIVSEEEWAHTKQLVDEFQASGGVGERLQKGLERRA
 RKTENWLEWLLKAYLQYRQPVVYSSPGVMLPKQDFVDLQGLRFAAKLIEGVLDFKVMIDNETLPVE
 YLGGKPLCMNQYQILSSCRVPGPKQDVTSNFSKTKKPPHITVVHNYQFFELDVYHSDGTPLTADQIFV
 QLEKIWNSSLQTNKEPVGILTSNHRNSWAKAYNTLIKDKVNRDSVRSIQKSIFTVCLDATMPRVSEDVYR
 SHVAGQMLHGGGSRNLNSGNRWFDKTLQFIVAEDGSCGLVYEHAAEGPPIVTLDDYVIEYTKKPELVRSP
 MVPLPMPKRLRFNITPEIKSDIEKAKQNLSIMIQDLITVMVFHFGKDFPKSEKLSDFAFIQMALQLAY
 YRIYGQACATYESASLRMFHLGRDITIRSASMDSLTFVKAMDDSSVTEHQKVELLRKAVQAHRGYTDRAI
 RGEAFDRHLLGLKQAIEDLVSMPIFMDTSYAIAMHFHLSTSQVPAKTDVCMFFGVPVDPGYGVYCNPM
 EAHINFSLSAYNSCAETNAARLAHYLEKALLDMRALLQSHPRAKL

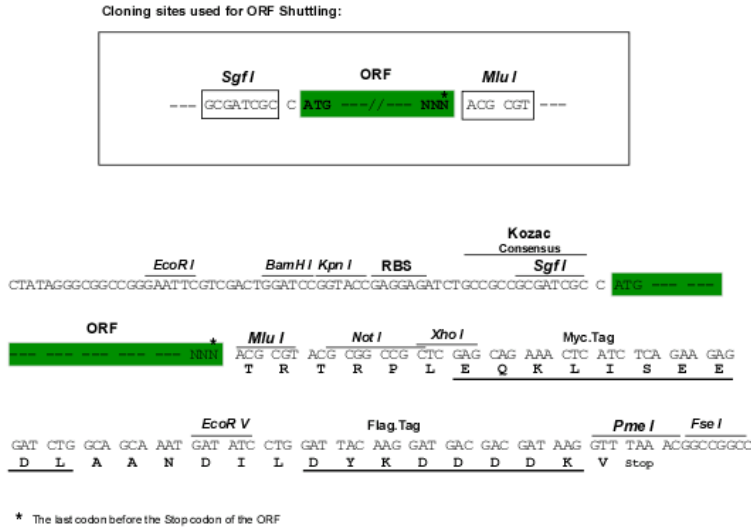
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6611_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001257363

ORF Size: 1815 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_001257363.2](#)

RefSeq Size: 2865 bp

RefSeq ORF: 1818 bp

Locus ID: 1384

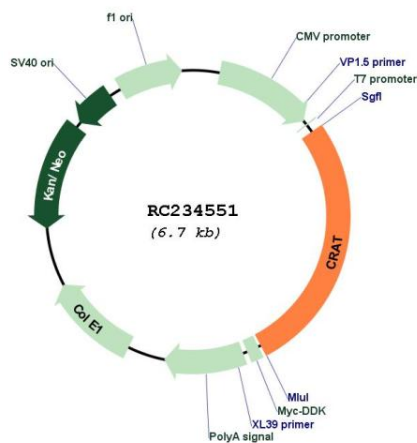
Cytogenetics: 9q34.11

Protein Families: Druggable Genome

MW: 68.6 kDa

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]

Product images:



Circular map for RC234551