

Product datasheet for **RG207888**

CROT (NM_021151) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CROT (NM_021151) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CROT
Synonyms:	COT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG207888 representing NM_021151
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAAAATCAATTGGCTAAATCAACTGAAGAACGAACATTTTCAGTACCAGGATTCTCTCCATCACTGCTG
 CTGTTCCCTTCACTTGAAGAATCATTAAAAAATACCTTGAATCAGTGAAACCATTGCAAAATCAAGAAGA
 ATATAAGAAAACCTGAAGAATAGTTCAAAAATTTCAAAGTGGGATTGGAGAAAAATTGCACCAGAAATTG
 CTTGAAAGAGCAAAAAGAAAAAGAAATTGGCTGGAAGAGTGGTGGCTGAATGTTGCCTATCTGGATGTT
 GTATACCATCACAAATGAATGTCAACTTTCGCGGCTCCTGCAGCTCATTGAACTACTGGCCTCCAAA
 GGAAGGGACTCAATTAGAAAGAGGAAGTATAACTCTTGGCATACTGAACTACTGGCAGCTATTAAGA
 AAAGAAAAAGTGCCTGTTATAAAGTTGGAATACTCCTCTAGATATGAATCAATCCGAATGCTATTTT
 CTACCTGCAAGGTTCCAGGAATTACTAGAGACTCCATTATGAATTATTTTAGGACTGAGAGTGAAGGGCG
 TTCCCAAACACATTGTAGTGTGTGCGAGGCCGAGCTTTTGTCTTGTATGAATACATGAAGGATGT
 TTGGTCACCCCGCCAGAGCTTCTCAGACAACCTGACATATATCCACAAGAAGTGCCATAGTGAACCTGATG
 GACCTGGGATTGCAGCATTAACTAGTGAGGAGCGAACTCGATGGGCTAAGGCACGAGAATATCTGATTGG
 TCTTGATCCAGAGAACTTGGCTTTGTTAGAAAAATTCAGAGTAGTTTACTGGTATATCCATGGAGGAT
 AGCAGTCCACATGTAACACCAGAGGATTATTCTGAGATTATTGCAGCCATCCTTATTGGAGATCCAACAG
 TACGCTGGGGTGACAAATCCTATAACTTGATTTCTTTTCTAATGGAGTATTTGGCTGTAATTGTGATCA
 TGCTCCTTTTGTGCAATGATTATGGTGAACATCAGTTATTATGTGGATGAGAAAAATTTTCAGAATGAA
 GGAAGATGGAAGGTTCCAGAGAAGGTACGAGATATACCACTTCCAGAAGAGCTCATTTCATTGTGGATG
 AGAAAGTTTTAAATGACATCAACCAAGCTAAAGCCCAGTATCTCAGGGAGGCATCTGATCTACAGATTGC
 GGCTTATGCCTTTACATCTTTTGGCAAAAAGCTAACCAAGAACAAGATGCTTACCCTGGATACGTTTATT
 CAGCTTGCACCTCAGCTGGCCTATTACAGACTTACATGGACACCCTGGTTGTTGCTATGAAACAGCTATGA
 CAAGACATTTTTATCATGGCCGTACAGAGACTATGCGATCATGCACAGTTGAAGCAGTGAGGTGGTGCCA
 GTCCATGCAGGATCCTTCTGTCAATCTTCGTGAGCGGCAGCAAAAGATGTTACAAGCTTTTGGAAAGCAT
 AATAAAATGATGAAAGATTGTTCCAGCTGGAAAAGGATTTGATCGTCACCTTTTAGGTCTCTTACTCATAG
 CAAAAGAGGAAGGTCTTCTGTTCCAGAACTCTTACGGACCCACTTTTTTCCAAAAGCGGAGGAGGTGG
 AAATTTTGTCTCTCAACAAGTCTGTTGGCTATTTACGAGTCCAGGGAGTGGTAGTCCCATGGTACAC
 AATGGTTATGGATTTTTCTACCATATCAGAGATGACAGGTTTGTGTGGCCTGTTACGCCTGAAATCCT
 GTCCCGAGACTGATGCGGAAAAGCTAGTTCAGCTGACTTTTTGTGCTTTTCATGATATGATACAGCTGAT
 GAACTCTACTCATCTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207888 representing NM_021151
 Red=Cloning site Green=Tags(s)

MENQLAKSTEERTFYQYQDSLPSLPVPSLEESLKKYLESVKPFANQEYKTEEIVQKFQSGIGEKLHQKL
 LERAKGKRNLWLEEWLNVAYLDVRIPSQNLNVNFAAGPAHFEHYWPPKEGTQLERGSITLWHNLNYWQLLR
 KEKVPVHKVGNTPLDMNQFRMLFSTCKVPGITRDSIMNYFRTESEGRSPNHIVVLCRGRAVFVDVIHEGC
 LVTPPELLRQLTYIHKKCHSEPDGPGIAALTSEERTRWAKAREYLIGLDPENLALLEKIQSLLLVYSMED
 SSPHVTPEDYSEIIAAILIGDPTVRWGDKSYNLISFSNGVFGCNCDHAPFDAMIMVNI SYVVDEKIFQNE
 GRWKGSEKVRDIPLPEELIFIVDEKVLNDINQAKAQYLREASDLQIAAYAFTSFGKKLTKNMLHPDFTFI
 QLALQLAYYRLHGHGPGCCYETAMTRHFYHGRTEMRSCVEAVRWCQSMQDPSVNLRRERQKMLQAFKHK
 NKMMKDCSAGKGFDRHLLGLLLIAKEEGLVPPELFTDPLFSKSGGGNFVLSLSTLVGYLRVQGVVPMVH
 NGYGFFYHIRDDRFVAVCSAWKSCPETADEKLVQLTFCAFHDMIQLMNSTHL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_021151

ORF Size: 1836 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

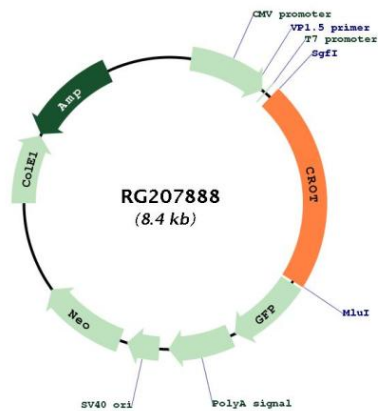
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_021151.4](#)

RefSeq Size:	3211 bp
RefSeq ORF:	1839 bp
Locus ID:	54677
UniProt ID:	Q9UKG9
Cytogenetics:	7q21.12
Domains:	Carn_acyltransf
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a member of the carnitine/choline acetyltransferase family. The encoded protein converts 4,8-dimethylnonanoyl-CoA to its corresponding carnitine ester. This transesterification occurs in the peroxisome and is necessary for transport of medium- and long- chain acyl-CoA molecules out of the peroxisome to the cytosol and mitochondria. The protein thus plays a role in lipid metabolism and fatty acid beta-oxidation. Alternatively spliced transcript variants have been described.[provided by RefSeq, Jan 2009]

Product images:


Circular map for RG207888