

Product datasheet for **RG226801**

CROT (NM_001143935) Human Tagged ORF Clone

Product data:

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



ORF Nucleotide Sequence: >RG226801 representing NM_001143935
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

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 AGCCTGGAATCCTGTCCGAGACTGATGCGGAAAAGCTAGTTCAGCTGACTTTTTGTGCTTTTCATGAT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

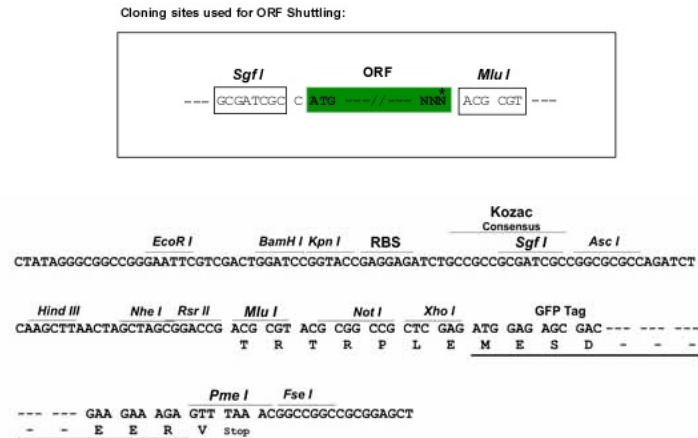
Protein Sequence: >RG226801 representing NM_001143935
 Red=Cloning site Green=Tags(s)

MENQLAKSTEERTFYQDLSPLPVPSLEESLKKYLESVTRTCYQIRGLDPAKRGFLDLTREGIQVKPF
 ANQEEYKKTTEEIVQKFQSGIGELKHQKLLERAKGKRNWLEEWLNVAYLDVRIPSQLNVNFAGPAAHFEH
 YWPPKEGTQLERGSITLWHNLNYWQLLRKEKVPVHKVGNTPLDMNQFRMLFSTCKVPGITRDSIMNYFRT
 ESEGRSPNHIVLCRGRAVFVDVIEHGLVTPPELLRQLTYIHKKCHSEPDGPGIAALTSEERTRWAKAR
 EYLIGLDPENLALLEKIQSSLLVYSMEDSSPHVTPEDYSEIIAAILIGDPTVRWGDKSYNLISFSNGVFG
 CNCDHAPFDAMIMVNIYYVDEKIFQNEGRWKSEKVRDIPLPEELIFIVDEKVLNDINQAKAQYLREAS
 DLQIAAYAFTSFGKKLTKNKMHPDTFIQLALQLAYYRLHGHGPGCCYETAMTRHFYHGRTEMRSCTVEA
 VRWCQSMQDPSVNLRRERQKMLQAFKHNKMMKDCSAGKGFDRLHLLGLLLIAKEEGLPVPELFTDPLFSK
 SGGGNGFVLSTSLVGYLRVQGVVPMVHNGYGFFYHIRDDRFVACSAWKSCPETDAEKLVLQTFCAFDH
 MIQLMNSTHL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001143935

ORF Size: 1920 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:

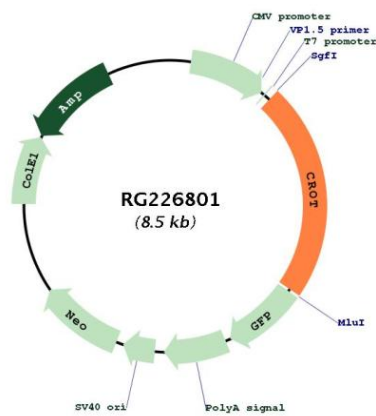
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001143935.2](#)

RefSeq Size:	3342 bp
RefSeq ORF:	1923 bp
Locus ID:	54677
UniProt ID:	Q9UKG9
Cytogenetics:	7q21.12
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 RG226801