

## Product datasheet for **RG234902**

### **CPT1C (NM\_001199753) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CPT1C (NM_001199753) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CPT1C
Synonyms:	CATL1; CPT1-B; CPT1P; CPTI-B; CPTIC; SPG73
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234902 representing NM\_001199753  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGAAGCGCACCAGGCCGTGGCTTCCGACCCTCGCTGACCTCGGACGGGGCTGAAGTGAAGTCA  
 GTGCCCTGTGCTGCAGGAGATCTACCTCTGGCCTGCGCTCCTGGAAAAGGCATCTCTCACGTTTCTG  
 GAATGACTTTCTCACCGGTGTGTTTCTGCCAGCCCCCTCAGTTGGCTTTTCTCTTTCAGTGCCATCCAG  
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 CGGTTTCAGAGGGTCAGGGAAGGAGAATCCAGGCACAGGTGTGGATTTCTCTCCCGCCAGACTGGGCGCT  
 CCAAGGCCTCAATGACATCCACCGACTTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG234902 representing NM\_001199753  
Red=Cloning site Green=Tags(s)

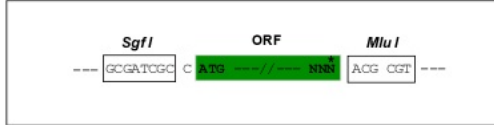
MAEAHQAVGFRPSLTS DGA EVEL SAPVLQEIYLSGLRSWKRHL SRFW NDFLTGVFPASPLSWLFLFS AIQ  
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GAMSSPTKTWLALVRIFSGRHPMLFSYQRSLPRQPVPSVQD TVRKYLESVRPILSDEDFDWTAVLAQEFL  
RLQASLLQWYLR LKSWWASNYVSDWEEFVYLR SRNPLMVSNYMMDFLYVTP TPLQAARAGNAVHALL  
LYRHRLNRQEIPPTLLMGM RPLCSAQYEKIFNTTRIPGVQKDYIRHLHDSQH VAVFHRGRFFRMGTHSRN  
SLLSPRALEQQFQRILDDPSPAC PHEEHLAALTAAPRG TWAQVRTSLKTQAAEAL EAVEGA AFFVSLDAE  
PAGLTREDPAASL DAYAHALLAGRGH DRWFDKSF TLIVFSNGKLG LSV EHSWADCPISGHMWEFTLATEC  
FQLGYSTDGHCKGHPDPTLPQPQLQWDL PDQIHSSISLALRGAKIL SENVDCHVVPFSLFGKSFIRRH  
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RVAVDKHQALLKAAMSGQGVDRHLFALYIVSRFLHLQSPFLTQVHSEQWQLSTSQIPVQQMHLFDVHNYP  
DYVSSGGGFGPADDHGYVSYIFMGDGMITFHIS SKKSSTKTDSHRLGQHIEDALLDVASL FQAGQHFKR  
RFRGSGKENS RHRCGFLSRQTGASKASMTSTDF

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Kozac  
Consensus

*EcoR I*     *BamH I* *Kpn I*     RBS     *Sgf I*     *Asc I*

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

*Hind III*     *Nhe I*     *Rsr II*     *Mlu I*     *Not I*     *Xho I*     GFP Tag

CAAGCTTAACTAGCTAGCGGACCG     ACG CGT     ACG CGG     CCG CTC GAG     ATG GAG AGC GAC --- --- ---

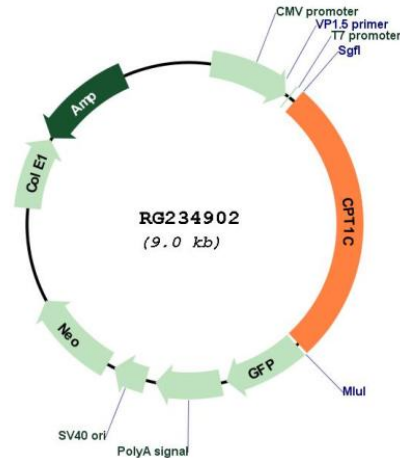
T   R   T   R   P   L   E   M   E   S   D   -   -   -

*Pme I*     *Fse I*

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

**Plasmid Map:**


**ACCN:** NM\_001199753

**ORF Size:** 2409 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\\_001199753.2](#)

**RefSeq Size:** 2883 bp

**RefSeq ORF:** 2412 bp

**Locus ID:** 126129

**UniProt ID:** [Q8TCG5](#)

**Cytogenetics:** 19q13.33

<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Adipocytokine signaling pathway, Fatty acid metabolism, PPAR signaling pathway
<b>Gene Summary:</b>	This gene encodes a member of the carnitine/choline acetyltransferase family. The encoded protein regulates the beta-oxidation and transport of long-chain fatty acids into mitochondria, and may play a role in the regulation of feeding behavior and whole-body energy homeostasis. Alternatively spliced transcript variants encoding multiple protein isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]