

## Product datasheet for **RG217297**

### **CPT1B (NM\_004377) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CPT1B (NM_004377) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CPT1B
Synonyms:	CPT1-M; CPT1M; CPTI; CPTI-M; M-CPT1; MCCPT1; MCPT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG217297 representing NM\_004377  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAAGCTCACCAGGCCGTGGCCTTCCAGTTACCGTGACCCAGACGGGGTCGACTTCCGGCTCA  
 GTCGGGAGGCCCTGAAACACGTCTACCTGTCTGGGATCAACTCCTGGAAGAAACGCCTGATCCGCATCAA  
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 GGTTCCTCCTTCTGCAACGTGGACATCTCCTTGGGGCTGGTCAGTTGCATCCAGAGATGCCTCCCTCAGG  
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**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

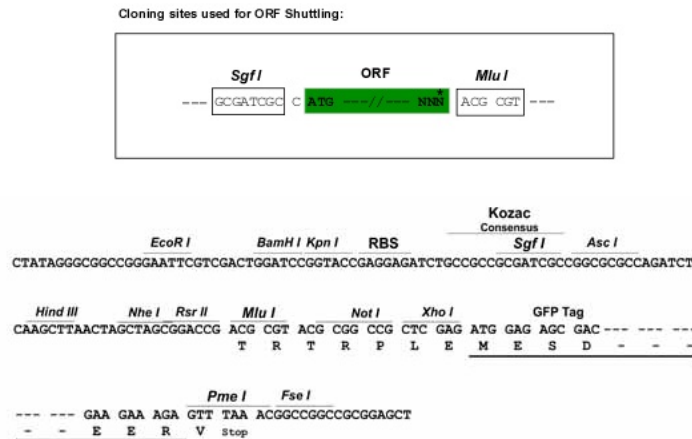
**Protein Sequence:** >RG217297 representing NM\_004377  
Red=Cloning site Green=Tags(s)

```
MAEAHQAVAFQFTVTPDGVDFRLSREALKHVYLSGINSWKKRLIRIKNGILRGVYPGSPTSWLVVIMATV
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YS
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004377

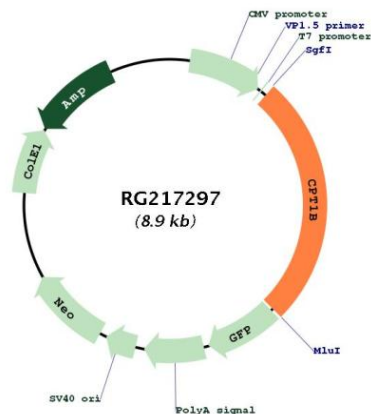
**ORF Size:** 2316 bp

**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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_004377.2, NP_004368.1</u>
<b>RefSeq Size:</b>	2879 bp
<b>RefSeq ORF:</b>	2319 bp
<b>Locus ID:</b>	1375
<b>UniProt ID:</b>	<u>Q92523</u>
<b>Cytogenetics:</b>	22q13.33
<b>Domains:</b>	Carn_acyltransf
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Adipocytokine signaling pathway, Fatty acid metabolism, PPAR signaling pathway
<b>Gene Summary:</b>	The protein encoded by this gene, a member of the carnitine/choline acetyltransferase family, is the rate-controlling enzyme of the long-chain fatty acid beta-oxidation pathway in muscle mitochondria. This enzyme is required for the net transport of long-chain fatty acyl-CoAs from the cytoplasm into the mitochondria. Multiple transcript variants encoding different isoforms have been found for this gene, and read-through transcripts are expressed from the upstream locus that include exons from this gene. [provided by RefSeq, Jun 2009]

### Product images:



Circular map for RG217297