

## Product datasheet for **RC222144**

### **CPT1B (NM\_152246) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CPT1B (NM_152246) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CPT1B
Synonyms:	CPT1-M; CPT1M; CPTI; CPTI-M; M-CPT1; MCCPT1; MCPT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC222144 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

RCATGGCGGAAGCTCACCAGGCCGTGGCCTTCCAGTTCACGGTGACCCAGACGGGTGCAGTTCGGCT  
 CAGTCGGGAGGCCCTGAAACACGCTACCTGTCTGGGATCAACTCCTGGAAGAAACGCCTGATCCGCATC  
 AAGAATGGCATCCTCAGGGCGTGTACCCTGGCAGCCCCACCAGCTGGCTGGTCGTCATCATGGCAACAG  
 TGGGTTCTCCTTCTGCAACGTGGACATCTCCTTGGGGCTGGTCAGTTGCATCCAGAGATGCCTCCCTCA  
 GGGGTGTGGCCCTACCAGACCCCGCAGACCCGGGCACCTTCTCAGCATGGCCATCTTCTCCACGGGCGTC  
 TGGGTGACGGGCATCTTCTTCTCCGCCAAACCCTGAAGCTGCTTCTCTGCTACCATGGGTGGATGTTTG  
 AGATGCATGGCAAGACCAGCAACTTGACCAGGATCTGGGCTATGTGTATCCGCTTCTATCCAGCCGGCA  
 CCCTATGCTCTACAGCTTCCAGACATCTCTGCCAAGCTTCTGTGCCAGGGTGTGAGCCACAATTCAG  
 CGGTACCTAGAGTCTGTGCGCCCTTGTGGATGATGAGGAATATTACCGCATGGAGTTGCTGGCCAAAG  
 AATTCCAGGACAAGACTGCCCCAGGCTGCAGAAATACCTGGTGTCAAGTCATGGTGGGCAAGTAACTA  
 TGTGAGTGACTGGTGGGAAGAGTACATCTACCTTCGAGGCAGGAGCCCTCTCATGGTGAACGCAACTAT  
 TATGTCATGGACCTTGTGCTCATCAAGAATACAGACGTGCAGGCAGCCCGCTGGGAAACATCATCCACG  
 CCATGATCATGTATCGCCGTAACCTGGACCGTGAAGAAATCAAGCCTGTGATGGCACTGGGCATAGTGCC  
 TATGTGCTCCTACCAGATGGAGGGGATGTTCAACACCCTCGGATCCCGGCAAGGACACAGATGTGCTA  
 CAGCACCTCTCAGACAGCCGGCAGTGGCTGTCTACCACAAGGGACGCTTCTTCAAGCTGTGGCTCTATG  
 AGGGCGCCCGTCTGCTCAAGCCTCAGGATCTGGAGATGCAGTTCAGAGGATCCTGGACGACCCCTCCCC  
 ACCTCAGCCTGGGAGGAGAAGCTGGCAGCCCTCACTGCAGGAGGAAGGGTGGAGTGGGCGCAGGCACGC  
 CAGGCCTTCTTTAGCTCTGGAAAGAATAAGGCTGCCTTGGAGGCCATCGAGCGTGCCGCTTCTTCTGTGG  
 CCCTGGATGAGGAATCCTACTCCTATGACCCCGAAGATGAGGCCAGCCTCAGCCTCTATGGCAAGGCCCT  
 GCTACATGGCAACTGCTACAACAGGTGGTTTGACAAATCCTTCACTCTCATTTTCTTCAAGAATGGCCAG  
 TTGGGTCTCAATGCAGAGCATGCGTGGGCAGATGCTCCCATATTGGGCACCTCTGGGAGTTTGTCTGG  
 GCACAGACAGCTTCCACCTGGGCTACACGGAGACCGGGCACTGCCTGGGCAAACCGAACCTGCGCTCGC  
 ACCTCCTACACGGCTGCAGTGGGACATTCCAAAACAGTGCAGGGCGTTCATCGAGAGTTCCTACCAGGTG  
 GCCAAGGCGTTGGCAGACGACGTGGAGTTGTACTGCTTCCAGTTCCTGCCCTTTGGCAAAGGCCTCATCA  
 AGAAGTGGCGGACAGCCCTGATGCCTTTGTGAGATCGCGCTGCAGCTGGCTCACTTCCGGGACAGGGG  
 TAAGTTCTGCCTGACCTATGAGGCCTCAATGACCAAGAATGTTCCGGGAGGGACGGACTGAGACTGTGCGT  
 TCCTGTACCAGCGAGTCCACAGCCTTTGTGAGGCCATGATGGAGGGTCCCACACAAAAGCAGACCTGC  
 GAGATCTTCCAGAAGGCTGCTAAGAAGCACCAGAATATGTACCGCTGGCCATGACCGGGGACAGGGAT  
 CGACAGGCACCTTCTGCTTTACTTGGTCTCCAAGTACCTAGGAGTCACTCTCCTTTCTTGTGAG  
 GTGCTCTCGGAACCCTGGCGTCTCTCCACCAGCCAGATCCCCAATCCCAGATCCGCATGTTGACCCAG  
 AGCAGCACCCCAATCACCTGGGCGCTGGAGGTGGCTTTGGCCCTGTAGCAGATGATGGCTATGGAGTTTC  
 CTACATGATTGCAGGCGAGAACACGATCTTCTCCACATCTCCAGCAAGTCTCAAGCTCAGAGACGAAC  
 GCCCAGCGCTTTGGAAACCACATCCGCAAAGCCCTGCTGGACATTGCTGATCTTTTCAAGTTCCTAAGG  
 CCTACAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC222144 protein sequence  
 Red=Cloning site Green=Tags(s)

XWRKLRPWPSSSR\*PQTGSTSGSVGRP\*NTSTCLGSTPGRNA\*SASRMASGACTLAAPPAGWSSSWQQ  
 WYPPSATWTSPWGWSVASRDASLRGVAPTRRRPGHFSAWPSSPRASG\*RASSSSAKP\*SCFSATMGCL  
 RCMARPAT\*PGSGLCVSAFYAGTLCSTASRHLCPSFLCPGCQPQFSGT\*SLCAPCWMMRNITAWSCWPK  
 NSRTRLPPGCRNTWCSSHGGQVTM\*VTGGKSTSTFEAGALSW\*TATIMSWTLCSSRIQTCRQPAWETSST  
 P\*SCIAVNWTVKKSSL\*WHWA\*CLCAPTRWRCSTPLGSRARTQMCYSTSQTAGTWLSTTRDASSSCGSM  
 RAPVCSSLRIWRCSSRGSWTTPPHLSLGRRSWQPSLQEEGWSGRRHARPSLALERIRLPWRPSSVPLSSW  
 PWMRNPTMTPKMRPASASMARPCYMATATTGGLTNP SL SFPSRMASWVSMQSMRGQMLPSLGTSGLSW  
 AQTASTWATRRPGTAWANRTLRSHELLHGCSGTFQNSARRSSRVPTRWPRRWQTTWCTASSSCPLAKASS  
 RSAGPALMPLCRSRSWLTSGTGVSSA\*PMRPQ\*PECSGRDGLRLCVPVPASPQPLCRP\*WRGPTQKQTC  
 EISSRLLRSTRICAWP\*PGQGSTGTSSAFTWSPST\*ESALLSLLRCSRNPVSPPARSPNPRSACSTQ  
 SSTPITWALEVALAL\*QMMAMEFPT\*LQARTRSSSTSPASSQAQRRTPSALETTSAKPCWTL LIFSKFPR  
 PT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6253\\_h09.zip](https://cdn.origene.com/chromatograms/mk6253_h09.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_152246

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.

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\\_152246.3](#)

**RefSeq Size:** 2658 bp

**RefSeq ORF:** 2319 bp

**Locus ID:** 1375

**UniProt ID:** [Q92523](#)

**Cytogenetics:** 22q13.33

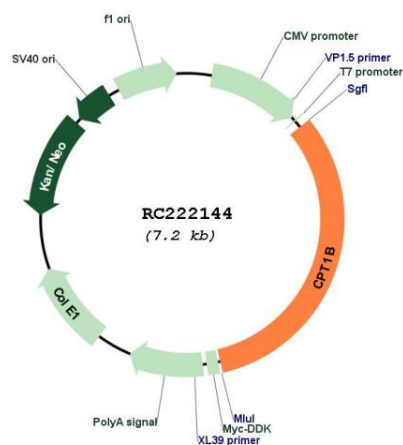
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Adipocytokine signaling pathway, Fatty acid metabolism, PPAR signaling pathway

**MW:** 87.7 kDa

**Gene Summary:** 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 RC222144