

Product datasheet for **SC109096**

CPT1B (NM_004377) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | CPT1B (NM_004377) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | CPT1B |
| Synonyms: | CPT1-M; CPT1M; CPTI; CPTI-M; M-CPT1; MCCPT1; MCPT1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_004377 edited
ATGGCGGAAGCTCACCAGGCCGTGGCCTTCCAGTTCACGGTGACCCAGACGGGGTCGAC
TTCCGGCTCAGTCGGGAGGCCCTGAAACACGTCTACCTGTCTGGGATCAACTCCTGGAAG
AAACGCCTGATCCGCATCAAGAAATGGCATCCTCAGGGGCGTGTACCCTGGCAGCCCCACC
AGCTGGCTGGTCGTCATCATGGCAACAGTGGGTTCTCCTTCTGCAACGTGGACATCTCC
TTGGGGCTGGTCAGTTGCATCCAGAGATGCCTCCCTCAGGGGTGTGGCCCTACCAGACC
CCGCAGACCCGGGCACTTCTCAGCATGGCCATCTTCTCCACGGGGCTGTGGGTGACGGGC
ATCTTCTTCTCCGCCAAACCCTGAAGCTGCTTCTCTGCTACCATGGGTGGATGTTTGAG
ATGCATGGCAAGACCAGCAACTTGACCAGGATCTGGGCTATGTGTATCCGCCTTCTATCC
AGCCGGCACCCCTATGCTCTACAGCTTCCAGACATCTCTGCCAAAGCTTCTGTGCCCAGG
GTGTCAGCCACAATTCAGCGGTACCTAGAGTCTGTGCGCCCTTGTGGATGATGAGGAA
TATTACCGCATGGAGTTGCTGGCCAAAGAATTCCAGGACAAGACTGCCCCAGGCTGCAG
AAATACCTGGTGTCAAGTCATGGTGGGCAAGTAACTATGTGAGTGAAGTGGTGGGAAGAG
TACATCTACCTTCGAGGCAGGAGCCCTCTCATGGTGAACAGCAACTATTATGTCATGGAC
CTTGCTCATCAAGAATACAGACGTGCAGGCAGCCCGCTGGGAAACATCATCCAGCC
ATGATCATGTATCGCCGTAACCTGGACCGTGAAGAAATCAAGCCTGTGATGGCACTGGGC
ATAGTGCCTATGTGCTCCTACCAGATGGAGAGGATGTTCAACACCACTCGGATCCCGGGC
AAGGACACAGATGTGCTACAGCACCTCTCAGACAGCCGGCACGTGGCTGTCTACCACAAG
GGACGCTTCTTCAAGCTGTGGCTCTATGAGGGCGCCCGTCTGCTCAAGCCTCAGGATCTG
GAGATGCAGTTCAGAGGATCCTGGACGACCCCTCCACCTCAGCCTGGGGAGGAGAAG
CTGGCAGCCCTCACTGCAGGAGGAAGGGTGGAGTGGGCGCAGGCACGCCAGGCCTCTTT
AGCTCTGGAAGAATAAGGCTGCCTTGGAGGCCATCGAGCGTCCCGCTTCTTCTCGTGCC
CTGGATGAGGAATCCTACTCCTATGACCCCGAAGATGAGGCCAGCCTCAGCCTCATGGC
AAGGCCCTGCTACATGGCAACTGCTACAACAGGTGGTTTGACAAATCCTTCACTCTCATT
TCTTCAAGAATGGCCAGTTGGGTCTCAATGCAGAGCATGCGTGGGCAGATGCTCCCATC
ATTGGGCACCTCTGGGAGTTTGTCTGGGCACAGACAGCTTCCACCTGGGCTACACGGAG
ACCGGGCACTGCCTGGGCAAACCGAACCTGCGCTCGCACCTCTACACGGCTGCAGTGG
GACATTCAAAACAGTGCAGGCGGTCAAGAGTTCCTACCAGGTGGCCAAGGCGTTG
GCAGACGACGTGGAGTTGTACTGCTTCCAGTTCCTGCCCTTGGCAAAGGCTCATCAAG
AAGTCCCGGACCAGCCCTGATGCCTTTGTGCAGATCGCGCTGCAGCTGGCTCACTCCGG
GACAGGGTAAGTTCTGCCTGACCTATGAGGCCTCAATGACCAGAATGTTCCGGGAGGGA
CGGACTGAGACTGTGCGTTCCTGTACCAGCGAGTCCACAGCCTTGTGTCAGGCCATGATG
GAGGGTCCCACAAAAAGCAGACCTGCGAGATCTTCCAGAAGGCTGTAAGAAGCAC
CAGAATATGTACCGCTGGCCATGACCGGGGAGGGATCGACAGGCACCTCTTCTGCCTT
TACTTGGTCTCCAAGTACCTAGGAGTCACTCTCCTTCTTCTGCTGAGGTGCTCTCGGAA
CCCTGGCGTCTCTCCACCAGCCAGATCCCCAATCCAGATCCGCATGTTGACCCAGAG
CAGACCCCAATCACCTGGGCGCTGGAGGTGGCTTGGCCCTGTAGCAGATGATGGCTAT
GGAGTTTCTACATGATTGCAGGCGAGAACACGATCTTCTCCACATCTCCAGCAAGTTC
TCAAGCTCAGAGACGAACGCCAGCGCTTGGAAACCACATCCGCAAAGCCCTGCTGGAC
ATTGCTGATCTTTCCAAGTTCCTCAAGGCTACAGCTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004377 unedited
 ACTTGGATTTGTAACCGACTTTATATAGGCGGCCGCGCAATCGGCACGAGGAGTGAACCC
 GAGCTGTGCCGACCAACCCAGGAGGCGGAAGCTCACCAGGCCGTGGCCTTCCAGTTCA
 CCGTGACCCAGACGGGTGCGACTTCCGGCTCAGTCGGGAGGCCCTGAAACACGTCTACC
 TGTCTGGGATCAACTCCTGGAAGAAACGCTGATCCGCATCAAGAATGGCATCCTCAGGG
 GCGTGTACCCTGGCAGCCCCACCAGCTGGCTGGTCGTCATCATGGCAACAGTGGGTTCCT
 CCTTCTGCAACGTGGACATCTCCTTGGGGCTGGTCAGTTGCATCCAGAGATGCCTCCCTC
 AGGGGTGTGGCCCTACCAGACCCCGCAGACCCGGGCACTTCTCAGCATGGCCATCTTCT
 CCACGGGCGTCTGGGTGACGGGCATCTTCTTCTCCGCCAAACCCTGAAGCTGCTTCTCT
 GCTACCATGGGTGGATGTTTGGATGCATGGCAAGACCAGCAACTTGACCAGGATCTGGG
 CTATGTGTATCCGCTTCTATCCAGCCGGCACCCTATGCTCTACAGCTTCCAGACATCTC
 TGCCCAAGCTTCTGTGCCAGGGTGTGAGCCACAATTGAGCGGTACCTAGAGTCTGTGC
 GCCCTTGTGGATGATGAGGAATATTACCGCATGGAGTTGCTGGCCAAAGAATCCAGG
 ACAAGACTGCCCCAGGCTGCAGAAATACCTGGTGTCAAGTATGGTGGCAAGTAACT
 ATGTGAGTGACTGGTGGGAAGAGTACATCTACCTTCGAGGCAGGACCCCTCATGGTGA
 AAACAGCACTATATGTCATGGACCTTGTGCTCATCAAGATACAGACGTGCANGCAGCCCG
 CCTGGGGAACATC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004377 unedited
 TGAACCGCAGGCACGCAATCTATAGTCGAGNNCTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTCGGAATAAAAAAACCAGCCTCTATTTTTTTTATT
 TTTTTTCAAAAAAAAAAAAAATCAAATTCCTTTCTGGTCCAACCCACCTCCACCACT
 TGGGCCCTTAGGGAGCAACTTTTGGCCAGGGGGACCTGGGGCCGAGCTGCCCTTGGAC
 CCTGGGCCCTGGGCACGGCCCCCCTTATGCCTGGGAGCTGCCACAGGCCCTTCTCC
 CCAGGGGGGGGACAAAGGGGCAACTGGCTTTTTTCCAACCTTCAACTGGGGGCTGGGGA
 CCTTGGAAAAATCACCAATGCCAACGGGGCTTTGGGGATGGGGTTCCAAAGCCCGG
 GGGGGCCGCCCTTGACCTGAAAACCTGGCCGGACACTCCGGAAAAAATCGGGTCTCCC
 CCCCCCCTGGCGGAAACCCCTGCCTTCTTTGTTCTCGGGCCAAGCCCCCTCCC
 CCGACTGCGCTGTTGCTATCCCCCACCCTCCGATATCCCCCATCTGGGGTCCGGG
 CCTTCTCCCTGCCCTCCTCGTCCGCTGCCCTACTCACATTGATTTGTTCTAGTTC
 CTGTCCTCCCGTCCGGCCGCCCGGGATGCTAGCGATTTTGTACTATGCGCTTT
 CTCCCCTTTTCGGCGCTGGCCTCCCCAGCTATAGCCCTCACGCGCCCGCGCTTCCC
 TCCCGCTTCTCTTCTCTCTCCCCTTCTCACTTTTTTCCCTCCCCCCTTCGCT
 CTCCCCTGTTCTTCTCCCACTCCCCCTGTCTACTTCTTCTGCTCCCCACCACTACAAC
 CCGCCCTCCCCACTCCACTACATAACCACTTACAT

Restriction Sites:

NotI-NotI

ACCN:

NM_004377

Insert Size:

2710 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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).

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| Reconstitution Method: | <ol style="list-style-type: none">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_004377.2 , NP_004368.1 |
| RefSeq Size: | 2879 bp |
| RefSeq ORF: | 2319 bp |
| Locus ID: | 1375 |
| UniProt ID: | Q92523 |
| Cytogenetics: | 22q13.33 |
| Domains: | Carn_acyltransf |
| Protein Families: | Druggable Genome, Transmembrane |
| Protein Pathways: | Adipocytokine signaling pathway, Fatty acid metabolism, PPAR signaling pathway |
| Gene Summary: | <p>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]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (a). Variants 1, 2, 3, 6, and 8 all encode isoform a.</p> |