

Product datasheet for **RC217297**

CPT1B (NM_004377) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CPT1B (NM_004377) 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)



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ORF Nucleotide Sequence:

>RC217297 representing NM_004377
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGAAGCTCACCAGGCCGTGGCCTTCCAGTTCACGGTGACCCAGACGGGGTCGACTTCCGGCTCA
 GTCGGGAGGCCCTGAAACACGTCTACCTGTCTGGGATCAACTCCTGGAAGAAACGCCTGATCCGCATCAA
 GAATGGCATCCTCAGGGCGTGTACCCTGGCAGCCCCACCAGCTGGCTGGTCGTCATCATGGCAACAGTG
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 GGTGTGGCCCTACCAGACCCCGCAGACCCGGGCACTTCTCAGCATGGCCATCTTCTCCACGGGCGTCTG
 GGTGACGGGCATCTTCTTCCGCCAAACCTGAAGTCTTCTCTGCTACCATGGGTGGATGTTTGAG
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 GGCGCCCGTCTGCTCAAGCCTCAGGATCTGGAGATGCAGTTCAGAGGATCCTGGACGACCCCTCCCCAC
 CTCAGCCTGGGGAGGAGAAGCTGGCAGCCCTCACTGCAGGAGGAAGGGTGGAGTGGGCGCAGGCACGCCA
 GGCCCTTCTTAGCTCTGGAAGAATAAGGCTGCCTTGGAGGCCATCGAGCGTGCCGCTTCTTCTGTCGCC
 CTGGATGAGGAATCCTACTCTATGACCCGAAGATGAGGCCAGCCTCAGCCTCTATGGCAAGGCCCTGC
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 GGGTCTCAATGCAGAGCATGCGTGGCAGATGCTCCCATATTGGGCACCTCTGGGAGTTTGTCTGGGC
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 CTCCTACACGGCTGCAGTGGGACATTCAAAACAGTGCCAGGCGGTATCAAGAGTTCTACCAGGTGGC
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 AGTTCTGCTGACCTATGAGGCCTCAATGACCAGAATGTTCCGGGAGGGACGACTGAGACTGTGCGTTC
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 GATCTCTTCCAGAAGGCTGCTAAGAAGCACCAGAATATGTACCGCTGGCCATGACCGGGGACGGGATCG
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 GCTCTCGGAACCTGGCGTCTCTCCACCAGCCAGATCCCCAATCCCAGATCCGCATGTTTCGACCCAGAG
 CAGACCCCAATCACCTGGGCGCTGGAGGTGGCTTTGGCCCTGTAGCAGATGATGGCTATGGAGTTTCT
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 CCAGCGCTTTGAAACCACATCCGCAAAGCCCTGCTGGACATTGCTGATCTTTTCAAGTTCCCAAGGCC
 TACAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217297 representing NM_004377
Red=Cloning site Green=Tags(s)

MAEAHQAVAFQFTVTPDGVDFRLSREALKHVYLSGINSWKKRLIRIKNGILRGVYPGSPTSWLVVIMATV
GSSF CNVDISLGLVSCIQRCLPQCGPYQTPQTRALLSMAIFSTGVWVTGIFFFRQTLKLLLCYHGWMFE
MHGKTSNLTRIWAMCIRLLSSRHPMLYSFQTSPLPKLPVPRVSATIQRYLESVRPLLDDEEYYRMELLAKE
FQDKTAPRLQKYLVLKSWWASNYSWWEYIYLRGRSPLMVNSNYVM DLVLIKNTD VQAARLGNI IHA
MIMYRRKLDREEIKPVMALGIVPMCSYQMERMFNTTRIPGKDTDLVQLHLSDRHVAVYHKGRFFKLWLYE
GARLLKPDLEMQFQRILDDPSPQPGEKLAALTAGGRVEWAQARQAFFSSGKNKAAL EIERAAFFVA
LDEESYSYDPEDEASLSLYGKALLHGNCYNRWFDSFTLISFKNGQLGLNAEHAWADAPIIGHLWEFVLG
TDSFHLGYTETGHCLGKPNPALAPPTRLQWDIPKQCQAVIKSSYQVAKALADDVELYCFQFLPF GKGLIK
KCRTSPDAFVQIALQLAHFRDRGKFCLEYEASMRMFREGRTETVRSCTSESTAFVQAMMEGSHTKADLR
DLFQKAAKKHQMYRLAMTGAGIDRHLFCLYL VSKYLGVSSPFLAEVLSEPWRLSTS QIPQSQIRMFDPE
QHPNHLGAGGGF GPVADDGYGVSYMIAGENTIFFHISSKFSSSETNAQRFGNHIRKALLDIADLFQVPKA
YS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6253_h09.zip

Restriction Sites: Sgfl-Mlul

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_004377.4](#)

RefSeq Size: 2879 bp

RefSeq ORF: 2319 bp

Locus ID: 1375

UniProt ID: [Q92523](#)

Cytogenetics: 22q13.33

Domains: Carn_acyltransf

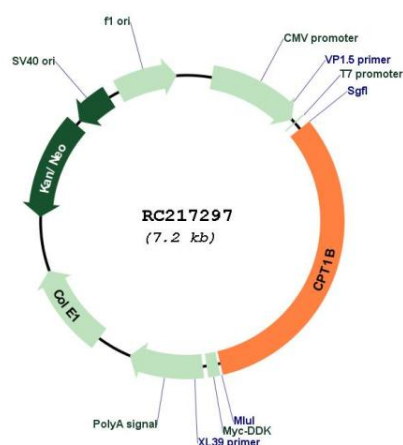
Protein Families: Druggable Genome, Transmembrane

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

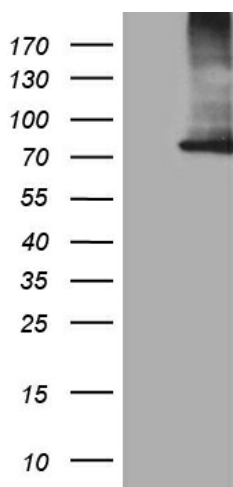
MW: 87.6 kDa

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]

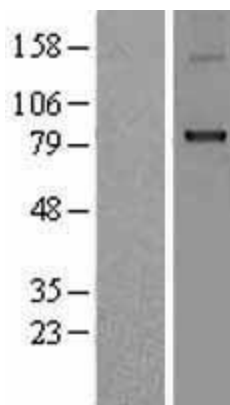
Product images:



Circular map for RC217297



HEK293T cells were transfected with the pCMV-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CPT1B (Cat# RC217297, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CPT1B (Cat# [TA810597])(1:2000). Positive lysates [LY418031] (100ug) and [LC418031] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418031]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217297 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).