

Product datasheet for TP321740M

OriGene Technologies, Inc.

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CPT1A (NM_001876) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human carnitine palmitoyltransferase 1A (liver) (CPT1A), nuclear gene

encoding mitochondrial protein, transcript variant 1, 100 μg

Species: Human Expression Host: HEK293T

Expression cDNA Clone >RC221740 representing NM_001876 or AA Sequence: Red=Cloning site Green=Tags(s)

MAEAHQAVAFQFTVTPDGIDLRLSHEALRQIYLSGLHSWKKKFIRFKNGIITGVYPASPSSWLIVVVGVM
TTMYAKIDPSLGIIAKINRTLETANCMSSQTKNVVSGVLFGTGLWVALIVTMRYSLKVLLSYHGWMFTEH
GKMSRATKIWMGMVKIFSGRKPMLYSFQTSLPRLPVPAVKDTVNRYLQSVRPLMKEEDFKRMTALAQDFA
VGLGPRLQWYLKLKSWWATNYVSDWWEEYIYLRGRGPLMVNSNYYAMDLLYILPTHIQAARAGNAIHAIL
LYRRKLDREEIKPIRLLGSTIPLCSAQWERMFNTSRIPGEETDTIQHMRDSKHIVVYHRGRYFKVWLYHD
GRLLKPREMEQQMQRILDNTSEPQPGEARLAALTAGDRVPWARCRQAYFGRGKNKQSLDAVEKAAFFVTL
DETEEGYRSEDPDTSMDSYAKSLLHGRCYDRWFDKSFTFVVFKNGKMGLNAEHSWADAPIVAHLWEYVMS
IDSLQLGYAEDGHCKGDINPNIPYPTRLQWDIPGECQEVIETSLNTANLLANDVDFHSFPFVAFGKGIIK
KCRTSPDAFVQLALQLAHYKDMGKFCLTYEASMTRLFREGRTETVRSCTTESCDFVRAMVDPAQTVEQRL
KLFKLASEKHQHMYRLAMTGSGIDRHLFCLYVVSKYLAVESPFLKEVLSEPWRLSTSQTPQQQVELFDLE
NNPEYVSSGGGFGPVADDGYGVSYILVGENLINFHISSKFSCPETDSHRFGRHLKEAMTDIITLFGLSSN

SKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 88.2 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.





CPT1A (NM_001876) Human Recombinant Protein - TP321740M

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001867

Locus ID: 1374

UniProt ID: P50416, A0A024R5F4, Q8WZ48, B2RAQ8

RefSeg Size: 2941

Cytogenetics: 11q13.3 RefSeq ORF: 2319

Synonyms: CPT1; CPT1-L; L-CPT1

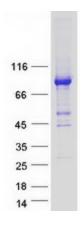
Summary: The mitochondrial oxidation of long-chain fatty acids is initiated by the sequential action of

carnitine palmitoyltransferase I (which is located in the outer membrane and is detergent-labile) and carnitine palmitoyltransferase II (which is located in the inner membrane and is detergent-stable), together with a carnitine-acylcarnitine translocase. CPT I is the key enzyme in the carnitine-dependent transport across the mitochondrial inner membrane and its deficiency results in a decreased rate of fatty acid beta-oxidation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Transmembrane

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

Product images:



Coomassie blue staining of purified CPT1A protein (Cat# [TP321740]). The protein was produced from HEK293T cells transfected with CPT1A cDNA clone (Cat# [RC221740]) using MegaTran 2.0 (Cat# [TT210002]).