

**CPT1A Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14666b****Specification**

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**CPT1A Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P50416](#)**CPT1A Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 1374**Other Names**

Carnitine O-palmitoyltransferase 1, liver isoform, CPT1-L, Carnitine O-palmitoyltransferase I, liver isoform, CPT I, CPTI-L, Carnitine palmitoyltransferase 1A, CPT1A, CPT1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CPT1A Antibody (C-term) Blocking Peptide - Protein Information****Name** CPT1A ([HGNC:2328](#))**Synonyms** CPT1**Function**Catalyzes the transfer of the acyl group of long-chain fatty acid-CoA conjugates onto carnitine, an essential step for the mitochondrial uptake of long-chain fatty acids and their subsequent beta-oxidation in the mitochondrion (PubMed: [9691089](http://www.uniprot.org/citations/9691089), PubMed: [11350182](http://www.uniprot.org/citations/11350182), PubMed: [14517221](http://www.uniprot.org/citations/14517221), PubMed: [16651524](http://www.uniprot.org/citations/16651524)). Plays an important role in hepatic triglyceride metabolism (By similarity).**Cellular Location**

Mitochondrion outer membrane; Multi-pass membrane protein

**Tissue Location**

Strong expression in kidney and heart, and lower in liver and skeletal muscle

## **CPT1A Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

## **CPT1A Antibody (C-term) Blocking Peptide - Images**

## **CPT1A Antibody (C-term) Blocking Peptide - Background**

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.

## **CPT1A Antibody (C-term) Blocking Peptide - References**

Gessner, B.D., et al. Pediatrics 126(5):945-951(2010) Collins, S.A., et al. Mol. Genet. Metab. 101 (2-3), 200-204 (2010) :Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Song, S., et al. Mol. Cell. Endocrinol. 325 (1-2), 54-63 (2010) :Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)