CPT1A Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	CPT1A, Blocking Peptide
Full Product Name	CPT1A Blocking Peptide
Product Gene Name	CPT1A blocking peptide
Product Synonym Names	Carnitine O palmitoyltransferase 1 liver isoform; Carnitine O palmitoyltransferase I; Carnitine O palmitoyltransferase I liver isoform; Carnitine O-palmitoyltransferase 1; Carnitine O-palmitoyltransferase I; Carnitine palmitoyltransferase 1A (liver); Carnitine palmitoyltransferase 1A; Carnitine palmitoyltransferase I; Carnitine palmitoyltransferase I liver; CPT 1; CPT I; CPT1; CPT1 L; CPT1-L; Cpt1a; CPT1A_HUMAN; CPTI; CPTI-L; L CPT1; liver isoform
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	CPT1A peptide (MBS9620709) is used for blocking the activity of CPT1A antibody (MBS9603232)
Molecular Weight	88,368 Da
OMIM	255120
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for CPT1A blocking peptide	Blocking/Control
Related Product Information for CPT1A blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of CPT1A blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CPT1A purchase	MBS9620709 is a blocking peptide targeting CPT1A.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CPT1A. It may not necessarily be applicable to this product.

NCBI GI #	73623028
NCBI GeneID	1374
NCBI Accession #	NP_001027017.1
UniProt Primary Accession #	P50416

UniProt Secondary Accession #	Q8TCU0; Q9BWK0
UniProt Related Accession #	P50416
GenBank Nucleotide #	NM_001031847.2
NCBI Official Full Name	carnitine O-palmitoyltransferase 1, liver isoform isoform 2
NCBI Official Synonym Full Names	carnitine palmitoyltransferase 1A (liver)
NCBI Official Symbol	CPT1A
NCBI Official Synonym Symbols	CPT1; CPT1-L; L-CPT1
UniProt Protein Name	Carnitine O-palmitoyltransferase 1, liver isoform
UniProt Synonym Protein Names	Carnitine O-palmitoyltransferase I, liver isoform; CPT I; CPTI-L; Carnitine palmitoyltransferase 1A
Protein Family	Carnitine O-palmitoyltransferase
UniProt Gene Name	CPT1A
UniProt Synonym Gene Names	CPT1; CPT1-L; CPT I; CPTI-L
UniProt Entry Name	CPT1A_HUMAN
NCBI Protein Information	carnitine O-palmitoyltransferase 1, liver isoform; CPT I; CPTI-L; carnitine palmitoyltransferase I, liver; carnitine O-palmitoyltransferase I, liver isoform
NCBI Summary for CPT1A	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]
UniProt Comments for CPT1A	CPT1A: Belongs to the carnitine/choline acetyltransferase family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Mitochondrial; Transferase; EC 2.3.1.21; Membrane protein, integral; Membrane protein, multi-pass; Lipid Metabolism - fatty acid Chromosomal Location of Human Ortholog: 11q13.2 Cellular Component: mitochondrial outer membrane; membrane; mitochondrion; mitochondrial inner membrane; integral to mitochondrial outer membrane Molecular Function: identical protein binding; carnitine O-palmitoyltransferase activity Biological Process: circadian rhythm; response to drug; eating behavior; glucose metabolic process; carnitine shuttle; long-chain fatty acid metabolic process; cellular lipid metabolic process; response to organic cyclic substance; positive regulation of fatty acid beta-oxidation; triacylglycerol metabolic process; fatty acid beta-oxidation; epithelial cell differentiation; carnitine metabolic process; regulation of insulin secretion; protein homooligomerization Disease: Carnitine Palmitoyltransferase I Deficiency
Research Articles on CPT1A	**1.** The results suggest the generality of carnitine palmitoyltransferase-1 inhibition under various stress conditions associated with ROS generation, providing an insight into a mechanism for oxidative dysfunction in mitochondrial metabolism.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.

Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/cpt1a/9620709