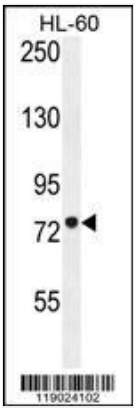
CPT1C Antibody – Rabbit Polyclonal

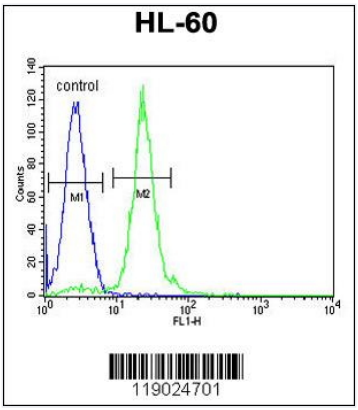
PRODUCT OVERVIEW

Product Name	CPT1C, Polyclonal Antibody
Full Product Name	CPT1C, CT (CPT1C, CATL1, Carnitine O-palmitoyltransferase 1, brain isoform, CPT IC, Carnitine O-palmitoyltransferase I, brain isoform, Carnitine palmitoyltransferase 1C) (APC)
Product Gene Name	anti-CPT1C antibody
Product Synonym Names	CPT1C; CATL1; Carnitine O-palmitoyltransferase 1; brain isoform; CPT IC; Carnitine O-palmitoyltransferase I; brain isoform; Carnitine palmitoyltransferase 1C
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: APC conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	81,000 Da
OMIM	608846
3D Structure	ModBase 3D Structure for Q8TCG5
Immunogen	CPT1C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 759-790 amino acids from the C-terminal region of human CPT1C.
Conjugate	APC
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-CPT1C antibody	Antibodies; Enzymes
Applications Tested/Suitable for anti-CPT1C antibody	Flow Cytometry (FC/FACS), FLISA, Western Blot (WB)
Application Notes for anti-CPT1C antibody	FC/FACS: 1:10-50 FLISA: 1:1,000 WB: 1:100-500 Applications are based on unconjugated antibody.

Related Product Information for anti-CPT1C antibody	The Cpt1 family of proteins are outer mitochondrial membrane proteins that regulate the entry into, and oxidation of fatty acids by, mitochondria. Malonyl-CoA, an intermediate in fatty acid synthesis, has been implicated as a regulatory component of the energy sensing system that feeds into hypothalmic neurons to impart energy homeostasis. Malonyl-CoA levels in the hypothalamus are dynamically regulated by fasting and feeding, altering subsequent feeding behaviour. Cpt1c, the brain-specific carnitine O-palmitoyltransferase 1, is thought to relay information about malonyl-CoA levels in hypothalamic neurons that express orexigenic and anorexigenic neuropeptides that regulate food intake and peripheral energy expenditure. Unlike other Cpt1 proteins, Cpt1c binds Malonyl-CoA but does not catalyse the transfer of the malonyl group from CoA to carnitine.
Product References and Citations for anti-CPT1C antibody	Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010). Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009). Roomets, E., et al. Invest. Ophthalmol. Vis. Sci. 49(4):1660-1664(2008). Sierra, A.Y., et al. J. Biol. Chem. 283(11):6878-6885(2008). Price, N., et al. Genomics 80(4):433-442(2002).
Other Notes	Small volumes of anti-CPT1C antibody 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 CPT1C purchase	MBS6288495 is an antibody targeting CPT1C. Also known as CPT1C, CT (CPT1C, CATL1, Carnitine O-palmitoyltransferase 1, brain isoform, CPT IC, Carnitine O-palmitoyltransferase I, brain isoform, Carnitine palmitoyltransferase 1C) (APC). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-CPT1C antibody
CPT1C Antibody (C-term) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the CPT1C antibody detected the CPT1C protein (arrow).



Flow Cytometry (FC/FACS) of anti-CPT1C antibody
CPT1C Antibody (C-term) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CPT1C. It may not necessarily be applicable to this product.

NCBI GI #	209862905
NCBI GeneID	126129
NCBI Accession #	NP_001129524.1
NCBI Related Accession #	NP_689572.1
UniProt Primary Accession #	Q8TCG5
UniProt Secondary Accession #	Q5K6N5; Q8N6Q9; Q8NDS6; Q8TE84; A8K0Z8
UniProt Related Accession #	Q8TCG5
GenBank Nucleotide #	NM_001136052.2
NCBI Official Full Name	carnitine O-palmitoyltransferase 1, brain isoform isoform 1
NCBI Official Synonym Full Names	carnitine palmitoyltransferase 1C
NCBI Official Symbol	CPT1C
NCBI Official Synonym Symbols	CATL1; CPT1P; CPTIC; SPG73; CPT1-B; CPTI-B

UniProt Protein Name	Carnitine O-palmitoyltransferase 1, brain isoform
UniProt Synonym Protein Names	CPT IC; Carnitine O-palmitoyltransferase I, brain isoform; CPTI-B; Carnitine palmitoyltransferase 1C
Protein Family	Carnitine O-palmitoyltransferase
UniProt Gene Name	CPT1C
UniProt Synonym Gene Names	CATL1; CPT1-B; CPTI-B
UniProt Entry Name	CPT1C_HUMAN
NCBI Protein Information	carnitine O-palmitoyltransferase 1, brain isoform
NCBI Summary for CPT1C	This gene encodes a member of the carnitine/choline acetyltransferase family. The encoded protein regulates the beta-oxidation and transport of long-chain fatty acids into mitochondria, and may play a role in the regulation of feeding behavior and whole-body energy homeostasis. Alternatively spliced transcript variants encoding multiple protein isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]
UniProt Comments for CPT1C	CPT1C: a member of the carnitine/choline acetyltransferase family. The encoded protein regulates the beta-oxidation and transport of long-chain fatty acids into mitochondria, and may play a role in the regulation of feeding behavior and whole-body energy homeostasis. Alternatively spliced transcript variants encoding multiple protein isoforms have been observed for this gene. [provided by RefSeq, Dec 2010] Protein type: Lipid Metabolism - fatty acid; Membrane protein, multi-pass; Membrane protein, integral; Transferase; EC 2.3.1.21 Chromosomal Location of Human Ortholog: 19q13.33 Cellular Component: endoplasmic reticulum membrane; mitochondrial outer membrane; synapse; cell junction Molecular Function: carnitine O-palmitoyltransferase activity Biological Process: fatty acid beta-oxidation; carnitine metabolic process Disease: Spastic Paraplegia 73, Autosomal Dominant
Research Articles on CPT1C	**1.** Depletion of PPARalpha resulted in low CPT1C expression.
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/polyclonal-human-antibody/cpt1c/6288495