

Human Carnitine Palmitoyltransferase 1A, Liver (CPT1A) ELISA Kit | CPT1A elisa kit

Human Carnitine Palmitoyltransferase 1A, Liver (CPT1A) Wide-range ELISA Kit

CATALOG # AAA189214	REACTIVITY Human	APPLICATIONS ELISA
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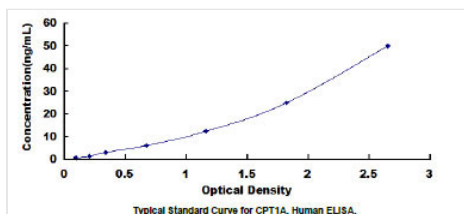
PRODUCT SYNONYMS

Carnitine Palmitoyltransferase 1A; Liver (CPT1A); Human Carnitine Palmitoyltransferase 1A; Liver (CPT1A) Wide-range ELISA Kit; Liver; CPT1-L; Carnitine O-palmitoyltransferase I; liver isoform; CPT1A elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of CPT1A. No significant cross-reactivity or interference between CPT1A and analogues was observed.
Sequence Length	756
Assay Type	Quantitative Sandwich
Samples	Human tissue homogenates, cell lysates and other biological fluids
Detection Range	0.78-50ng/mL
Sensitivity	< 0.28ng/mL
Applicable Applications for CPT1A elisa kit	ELISA
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level CPT1A were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level CPT1A were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CPT1A elisa kit	Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to CPT1A. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to CPT1A. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain CPT1A, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of CPT1A in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of CPT1A in human tissue homogenates, cell lysates and other biological fluids.
References	Vitamin D Counteracts Lipid Accumulation, Augments Free Fatty Acid-Induced ABCA1 and CPT-1A Expression While Reducing CD36 and C/EBPbeta Protein Levels in Monocyte-Derived Macrophages; Biomedicines; 2022 Mar 26;10(4):775.; PMID: 35453525; Mirko Marino; Department of Food, Environmental and Nutritional Sciences (DeFENS), Division of Human Nutrition, Università degli Studi di Milano, 20133 Milan, Italy.

NCBI AND UNIPROT INFORMATION

NCBI GI #	73623028
NCBI GeneID	1374
NCBI Accession #	NP_001027017.1
NCBI GenBank Nucleotide #	NP_001027017.1
UniProt Accession #	P50416
NCBI Official Full Name	carnitine O-palmitoyltransferase 1, liver isoform isoform 2
NCBI Official Synonym Full Names	carnitine palmitoyltransferase 1A
NCBI Official Symbol	CPT1A
NCBI Official Synonym Symbols	CPT1; CPT1-L; L-CPT1
NCBI Protein Information	carnitine O-palmitoyltransferase 1, liver isoform
UniProt Protein Name	Carnitine O-palmitoyltransferase 1, liver isoform
UniProt Gene Name	CPT1A
UniProt Synonym Gene Names	CPT1; CPT1-L; CPT I; CPTI-L
UniProt Entry Name	CPT1A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.