

Product datasheet for **TA336036**

CPT1A Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	IHC, WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for Anti-CPT1A Antibody: synthetic peptide directed towards the middle region of human CPT1A. Synthetic peptide located within the following region: LTSQTPQQQVELFDLENNPEYVSSGGGFGPVADDGYGVSYILVGENLIN
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	86 kDa
Gene Name:	carnitine palmitoyltransferase 1A
Database Link:	NP_001027017 Entrez Gene 1374 Human P50416



[View online »](#)

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. 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.

Synonyms:

CPT1; CPT1-L; L-CPT1

Note:

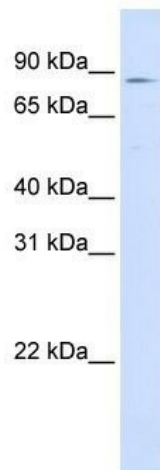
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Mouse: 100%; Sheep: 100%; Bovine: 100%; Rabbit: 100%; Zebrafish: 100%; Guinea pig: 100%

Protein Families:

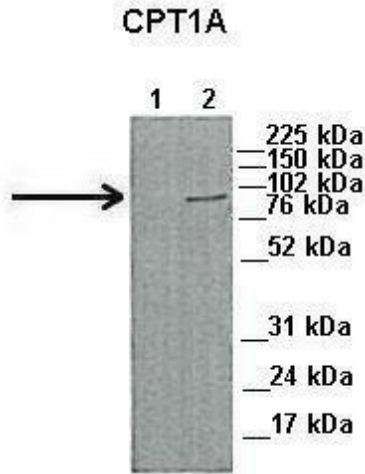
Druggable Genome, Transmembrane

Protein Pathways:

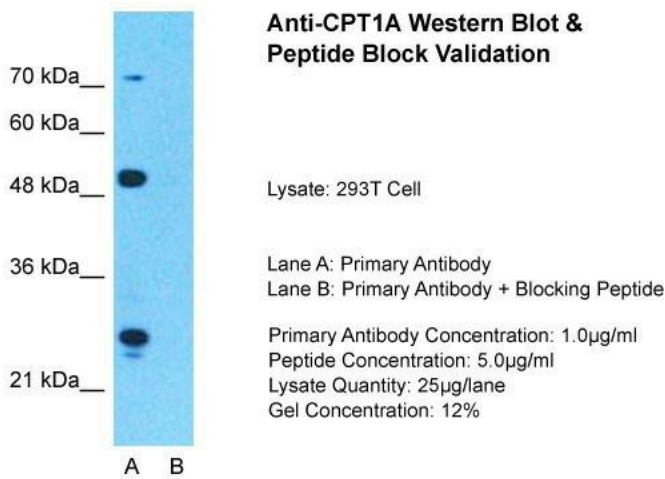
Adipocytokine signaling pathway, Fatty acid metabolism, PPAR signaling pathway

Product images:

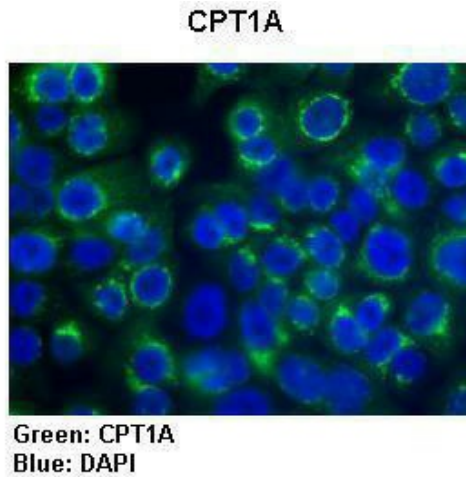
WB Suggested Anti-CPT1A Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1: 312500; Positive Control: 293T cell lysate



Lanes: 1. 45ug capan1 cell lysate; 2. 45 ug HPAF cell lysate; Primary Antibody Dilution: 1: 1000; Secondary Antibody: Anti-Rabbit HRP; Secondary Antibody Dilution: 1: 5000; Gene Name: CPT1A; Submitted by: Dr. Pankaj Singh, UNMC, Omaha, NE;



Host: Rabbit; Target Name: CPT1A; Sample Tissue: 293T; Lane A: Primary Antibody; Lane B: Primary Antibody + Blocking Peptide; Primary Antibody Concentration: 1 ug/ml; Peptide Concentration: 5 ug/ml; Lysate Quantity: 25 ug/lane/lane; Gel Concentration: 0.12



Sample Type: Human Capan1 cells (Pancreatic cancer cell line) Primary Antibody Dilution: 1: 300; Secondary Antibody: Anti-rabbit-AlexaFluor-488; Secondary Antibody dilution: 1: 200; Color/Signal Descriptions: CPT1A: Green DAPI: Blue; Gene Name: CPT1A; Submitted by: Dr. Pankaj Singh, UNMC, Omaha, NE