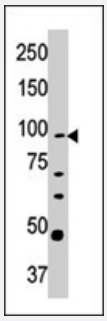
CPT1A polyclonal antibody

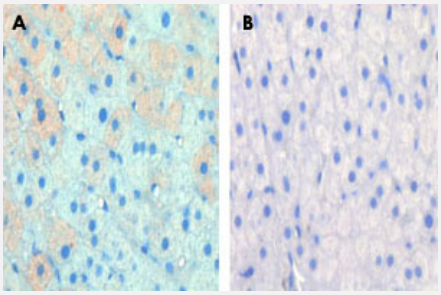
Catalog # PAB4370 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of CPT1A polyclonal antibody (Cat # PAB4370) in Y-79 cell line lysate (35 ug/lane). CPT1A (arrow) was detected using the purified CPT1A polyclonal antibody (Cat # PAB4370).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded cow lactatingreacted with CPT1A polyclonal antibody (Cat # PAB4370), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.
This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CPT1A.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human CPT1A.
Host	Rabbit
Reactivity	Bovine, Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of CPT1A polyclonal antibody (Cat # PAB4370) in Y-79 cell line lysate (35 ug/lane). CPT1A (arrow) was detected using the purified CPT1A polyclonal antibody (Cat # PAB4370).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Formalin-fixed and paraffin-embedded cow lactatingreacted with CPT1A polyclonal antibody (Cat # PAB4370), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.
  This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CPT1A

Entrez GeneID	1374
Protein Accession#	CPT1_HUMAN
Gene Name	CPT1A
Gene Alias	CPT1, CPT1-L, L-CPT1
Gene Description	carnitine palmitoyltransferase 1A (liver)
Omim ID	255120 600528
Gene Ontology	Hyperlink

Gene Summary	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
Other Designations	carnitine palmitoyltransferase 1A|carnitine palmitoyltransferase I, liver

Publication Reference

- Malonyl coenzyme A and the regulation of functional carnitine palmitoyltransferase-1 activity and fat oxidation in human skeletal muscle.

  Rasmussen BB, Holmback UC, Volpi E, Morio-Liondore B, Paddon-Jones D, Wolfe RR.

  The Journal of Clinical Investigation 2002 Dec; 110(11):1687.

- Expression analysis of two mutations in carnitine palmitoyltransferase IA deficiency.

  Ogawa E, Kanazawa M, Yamamoto S, Ohtsuka S, Ogawa A, Ohtake A, Takayanagi M, Kohno Y.

  Journal of Human Genetics 2002 Jan; 47(7):342.

  Application: WB-Tr, Human, Human fibroblasts

Pathway

- Adipocytokine signaling pathway
- Fatty acid metabolism
- PPAR signaling pathway

Disease

- Alzheimer disease
- Atherosclerosis
- Cardiovascular Diseases
- Diabetes Complications
- Diabetes Mellitus

- Disease Progression
- Drug Toxicity
- Edema
- Fatty Liver
- Genetic Predisposition to Disease
- Hepatitis C
- Hypercholesterolemia
- Hypertension
- Hypertrophy
- Insulin Resistance
- Lipid Metabolism
- Liver Cirrhosis
- Metabolic Syndrome X
- Neoplasms
- Obesity
- Osteoporosis
- Sudden Infant Death