

CPT1B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2532b

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>Q92523</u>
Other Accession	<u>NP_004368</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4661/4662
Calculated MW	87801
Antigen Region	606-637

Additional Information

Gene ID	1375
Other Names	Carnitine O-palmitoyltransferase 1, muscle isoform, CPT1-M, Carnitine O-palmitoyltransferase I, muscle isoform, CPT I, CPTI-M, Carnitine palmitoyltransferase 1B, Carnitine palmitoyltransferase I-like protein, CPT1B, KIAA1670
Target/Specificity	This CPT1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 606-637 amino acids from the C-terminal region of human CPT1B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CPT1B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CPT1B
Synonyms	KIAA1670

Function	Catalyzes the transfer of the acyl group of long-chain fatty acid-CoA conjugates onto carnitine, an essential step for the mitochondrial uptake of long-chain fatty acids and their subsequent beta-oxidation in the mitochondrion.
Cellular Location	Mitochondrion outer membrane; Multi-pass membrane protein
Tissue Location	Strong expression in heart and skeletal muscle. No expression in liver and kidney

Background

CPT1B is a member of the carnitine/choline acetyltransferase family, and is the rate-controlling enzyme of the long-chain fatty acid beta-oxidation pathway in muscle mitochondria. This enzyme is required for the net transport of long-chain fatty acyl-CoAs from the cytoplasm into the mitochondria.

References

Dai, J., et al., Biochem. Biophys. Res. Commun. 301(3):758-763 (2003). van der Leij, F.R., et al., J. Biol. Chem. 277(30):26994-27005 (2002). Hirosawa, M., et al., DNA Res. 8(1):1-9 (2001). Yamazaki, N., et al., J. Biol. Chem. 275(41):31739-31746 (2000). Britton, C.H., et al., Genomics 40(1):209-211 (1997).

Images



Western blot analysis of CPT1B (arrow) using rabbit polyclonal CPT1B Antibody (C-term) (Cat.#AP2532b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CPT1B gene (Lane 2).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.