Datasheet for ABIN6138978

anti-CPT1B antibody (AA 533-772)

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Overview

Quantity:	100 µL
Target:	CPT1B
Binding Specificity:	AA 533-772
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CPT1B antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 533-772 of human CPT1B (NP_004368.1).
Sequence:	SYQVAKALAD DVELYCFQFL PFGKGLIKKC RTSPDAFVQI ALQLAHFRDR GKFCLTYEAS MTRMFREGRT ETVRSCTSES TAFVQAMMEG SHTKADLRDL FQKAAKKHQN MYRLAMTGAG IDRHLFCLYL VSKYLGVSSP FLAEVLSEPW RLSTSQIPQS QIRMFDPEQH PNHLGAGGGF GPVADDGYGV SYMIAGENTI FFHISSKFSS SETNAQRFGN HIRKALLDIA DLFQVPKAYS
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Target Details

Target:	CPT1B
Alternative Name:	CPT1B (CPT1B Products)
Background:	The protein encoded by this gene, a member of the carnitine/choline acetyltransferase family, 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. Multiple transcript variants encoding different isoforms have been found for this gene, and read-through transcripts are expressed from the upstream locus that include exons from this gene.,CPT1B,CPT1-M,CPT1M,CPTI,CPTI-M,M-CPT1,MCCPT1,MCPT1,Cancer,Signal Transduction,Endocrine & Metabolism,Mitochondrial metabolism,Mitochondrial markers,Lipid Metabolism,Endocrine and metabolic diseases,Obesity,Cardiovascular,Heart,Cardiac metabolism,Lipids,Fatty Acids,CPT1B
Molecular Weight:	66 kDa/78 kDa/83 kDa/87 kDa
Gene ID:	1375
UniProt:	Q92523
Pathways:	AMPK Signaling, Monocarboxylic Acid Catabolic Process

Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

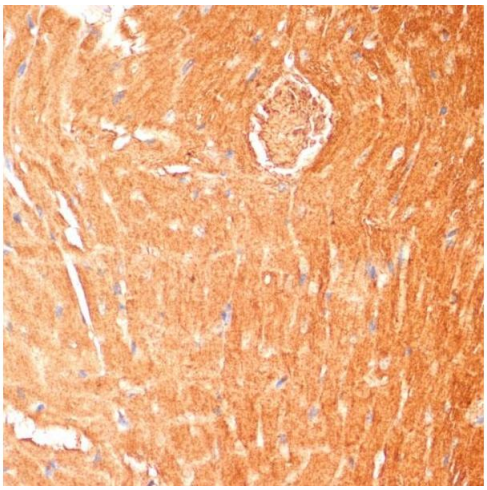
Publications

Product cited in:

Guan, Chen, Wang, Zhang, Fan, Gao, Jiao, Fu, Sun, Yu, Huang, Bi: "Effects of carnitine palmitoyltransferases on cancer cellular senescence." in: **Journal of cellular physiology**, Vol. 234, Issue 2, pp. 1707-1719, (2019) (PubMed).

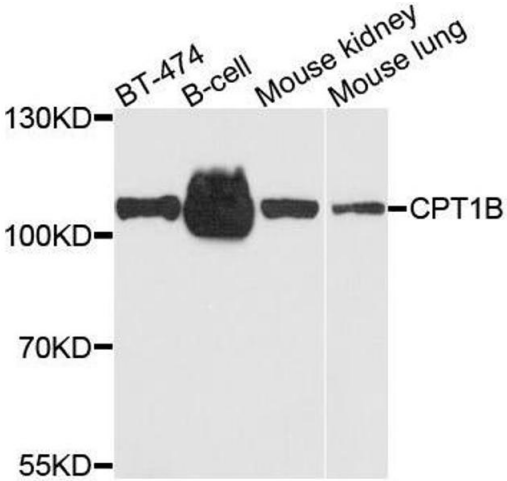
Yu, Zhang, Cui, Wang, Na, Zhu, Li, Xu, Yang, Christian, Liu: "Lipid droplet remodeling and interaction with mitochondria in mouse brown adipose tissue during cold treatment." in: **Biochimica et biophysica acta**, Vol. 1853, Issue 5, pp. 918-28, (2015) (PubMed).

Images



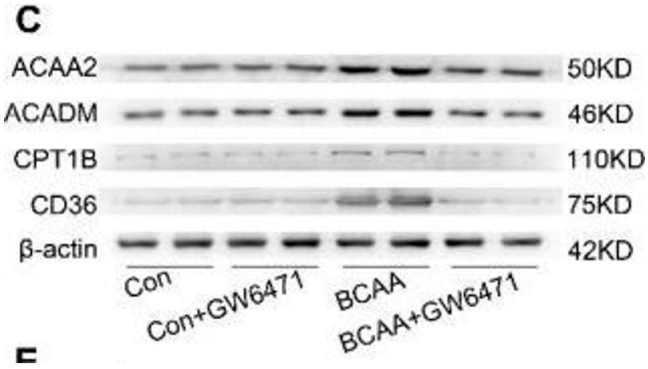
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded mouse heart using CPT1B antibody (ABIN6130130, ABIN6138978, ABIN6138979 and ABIN6222544) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using CPT1B antibody.



Western Blotting

Image 3. BCAA upregulate PPAR-α and PPAR-α targeted genes. (A to B) Adult mouse cardiac myocytes were treated with different concentrations of BCAA (0, 0.429 mM, 0.858 mM, 1.716 mM, 3.432 mM) for 12 h (n=6). (A) Expression of PGC1-α, PPAR-γ, PPAR-α in cardiomyocytes by western blotting. (B) Expression of Ppara in cardiomyocytes by real-time PCR. (C-J) Adult cardiac myocytes were treated with Vehicle (Con), GW6471, BCAA, BCAA+GW6471 for 12 h. (C and D) Expression of ACAA2, ACADM, CD36, CPT1B in cardiomyocytes by western blotting and real-time PCR (n=6). (E) OCR curve of adult cardiac myocytes treated with Vehicle (Con), GW6471, BCAA, BCAA+GW6471 were determined (n=5). (F) Basal respiration (G) ATP production (H) maximal respiration (I) basal respiration due to exogenous palmitate-BSA and (J) maximal respiration due to exogenous palmitate-BSA were calculated according to instruction. N=5 per group. * P<0.05, ** P<0.01. Data were analyzed by one-way ANOVA, followed by a Bonferroni post-hoc test. All values are presented as mean ± SEM. - figure provided by CiteAb. Source: PMID32373236

Please check the product details page for more images. Overall 4 images are available for ABIN6138978.