

For Research Use Only

CPT1A Monoclonal antibody

Catalog Number: 66039-1-Ig

Featured Product

19 Publications



Basic Information

Catalog Number: 66039-1-Ig	GenBank Accession Number: BC000185	Purification Method: Protein A purification
Size: 150ul, Concentration: 2100 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1374	CloneNo.: 5D8G9
Source: Mouse	Full Name: carnitine palmitoyltransferase 1A (liver)	Recommended Dilutions: WB 1:2000-1:12000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:200-1:800
Isotype: IgG2a	Calculated MW: 88 kDa	
Immunogen Catalog Number: AG7745	Observed MW: 86 kDa	

Applications

Tested Applications:
FC, IHC, IP, WB, ELISA

Cited Applications:
CoIP, FC, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : A549 cells,

IP : MCF-7 cells,

IHC : human breast cancer tissue, human liver tissue

Background Information

CPT1A, also named as CPT1, CPT1-L and L-CPTI, belongs to the carnitine/choline acetyltransferase family. Carnitine palmitoyltransferase (CPT) deficiencies are common disorders of mitochondrial fatty acid oxidation. The CPT system is made up of two separate proteins located in the outer (CPT1) and inner (CPT2) mitochondrial membranes. CPT1A is an active form of related liver-type carnitine palmitoyltransferase I. (PMID: 11001805). CPT1A deficiency presents as recurrent attacks of fasting hypoketotic hypoglycemia. (PMID: 15363638). This antibody can bind the close sequences genes.

Notable Publications

Author	Pubmed ID	Journal	Application
Xinhui Liu	36313325	Front Pharmacol	WB
Patrick Vancura	27727308	PLoS One	WB, IHC
Mohamed A Zayed	33214136	Diabetes	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

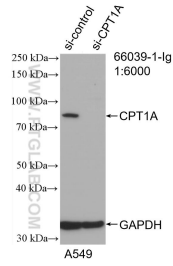
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

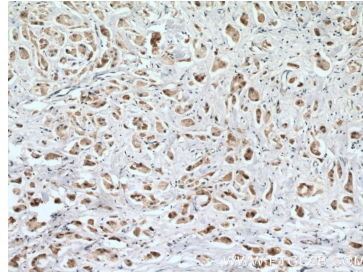
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

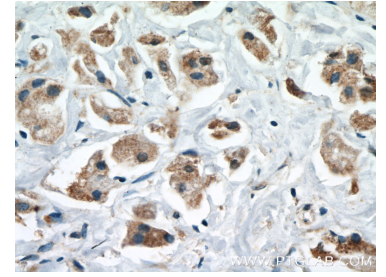
Selected Validation Data



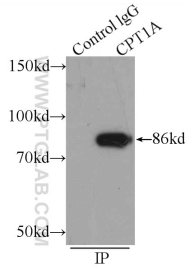
WB result of CPT1A antibody (66039-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CPT1A transfected A549 cells.



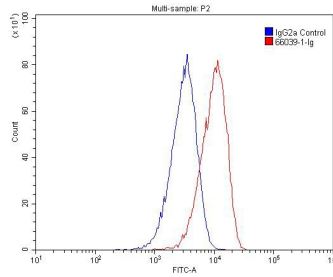
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66039-1-Ig (CPT1A antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66039-1-Ig (CPT1A antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-CPT1A (IP:66039-1-Ig, 4ug; Detection:66039-1-Ig 1:500) with MCF-7 cells lysate 1200ug.



1X10⁶ HeLa cells were stained with 0.2ug CPT1A antibody (66039-1-Ig, red) and control antibody (blue). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1500. Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100.