

For Research Use Only

CPT1C-specific Polyclonal antibody

Catalog Number: 12969-1-AP

11 Publications



Basic Information

Catalog Number: 12969-1-AP	GenBank Accession Number: BC029104	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 550 µg/ml by Nanodrop and 307 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 126129	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q8TCG5	
Isotype: IgG	Full Name: carnitine palmitoyltransferase 1C	
Immunogen Catalog Number: AG3649	Calculated MW: 792 aa, 90 kDa	
	Observed MW: 70-82 kDa	

Applications

Tested Applications: WB, IP, IHC, ELISA	Positive Controls: WB : mouse brain tissue, HeLa cells, rat brain tissue IP : mouse testis tissue, IHC : human gliomas tissue, human testis tissue, human brain tissue
Cited Applications: WB, IF	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, rat	

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

Background Information

CPT1C 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. CPT1C is an active forms of related brain-type carnitine palmitoyltransferase I. CPT1C may be a regulated target of malonyl-CoA that relays the "malonyl-CoA signal" in hypothalamic neurons that express the orexigenic and anorexigenic neuropeptides that regulate food intake and peripheral energy expenditure (PMID: 17018521). This antibody specifically recognizes CPT1C, and does not cross-react with CPT1A or CPT1B.

Notable Publications

Author	Pubmed ID	Journal	Application
De Huang	25242319	Cell Rep	WB
Carlo Rinaldi	25751282	JAMA Neurol	IF
Brenda Raud	30043753	Cell Metab	WB

Storage

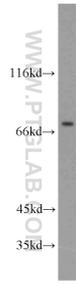
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

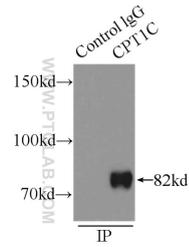
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

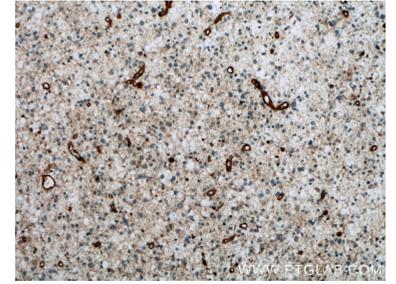
Selected Validation Data



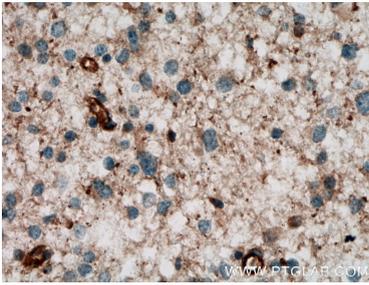
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12969-1-AP (CPT1C-specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



IP result of anti-CPT1C-specific (IP:12969-1-AP, 5ug; Detection:12969-1-AP 1:500) with mouse testis tissue lysate 8000ug.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12969-1-AP (CPT1C-specific antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12969-1-AP (CPT1C-specific antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).