

For Research Use Only

CPT1C-specific Polyclonal antibody

Catalog Number: 12969-1-AP

11 Publications



Basic Information

Catalog Number:

12969-1-AP

Size:

150ul, Concentration: 550 µg/ml by Nanodrop and 307 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3649

GenBank Accession Number:

BC029104

GeneID (NCBI):

126129

UNIPROT ID:

Q8TCG5

Full Name:

carnitine palmitoyltransferase 1C

Calculated MW:

792 aa, 90 kDa

Observed MW:

70-82 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

Applications

Tested Applications:

WB, IP, IHC, ELISA

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

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

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 form 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

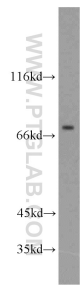
For technical support and original validation data for this product please contact:

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

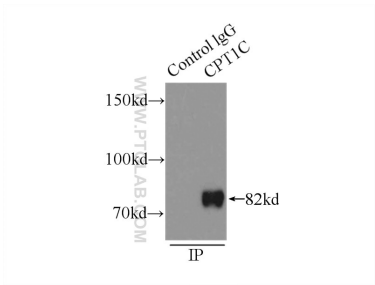
E: proteintech@ptglab.com
W: ptglab.com

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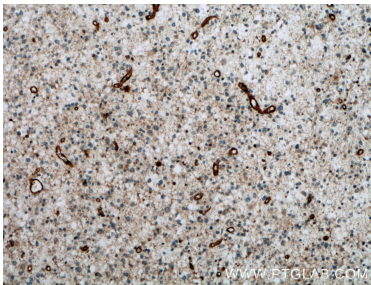
Selected Validation Data



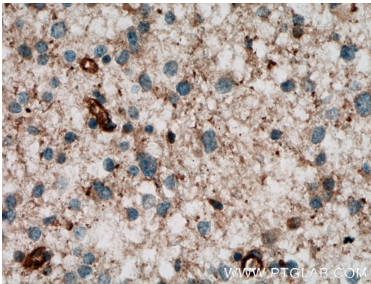
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12969-1-AP (CPT1C-specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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).