

For Research Use Only

# CPT1C-specific Polyclonal antibody

Catalog Number: 12969-1-AP

11 Publications



## Basic Information

### Catalog Number:

12969-1-AP

### Size:

550 µg/ml

### 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

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

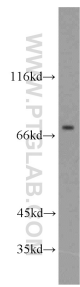
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

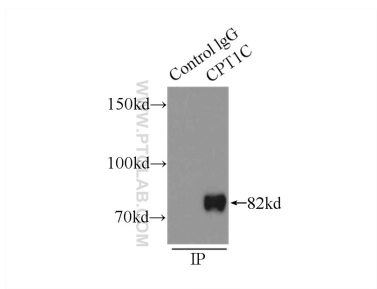
W: [ptgcn.com](http://ptgcn.com)

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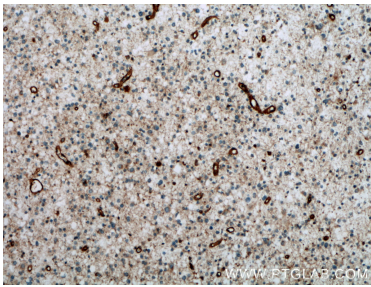
Selected Validation Data



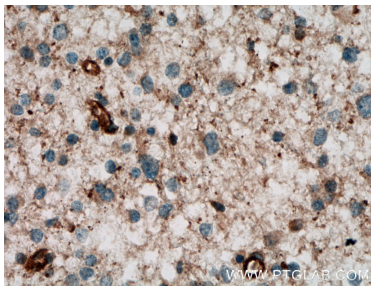
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12969-1-AP (CPT1C-specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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).