

For Research Use Only

# CPT1B-specific Polyclonal antibody

Catalog Number: 22170-1-AP

Featured Product

78 Publications



## Basic Information

### Catalog Number:

22170-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG17840

### GenBank Accession Number:

BC131570

### GeneID (NCBI):

1375

### UNIPROT ID:

Q92523

### Full Name:

carnitine palmitoyltransferase 1B (muscle)

### Calculated MW:

567 aa, 64 kDa

### Observed MW:

75-85 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:10000

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

IHC: 1:50-1:500

IF-P: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, zebrafish, sheep, ewes

**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 heart tissue, rat skeletal muscle tissue, mouse skeletal muscle tissue, rat heart tissue

IP: mouse heart tissue, mouse skeletal muscle tissue

IHC: mouse heart tissue,

IF-P: mouse heart tissue,

## Background Information

Carnitine palmitoyltransferases (CPTs) mediate the transport of long chain fatty acyl groups into the mitochondrial matrix to undergo  $\beta$ -oxidation. Type I CPT resides in the outer mitochondrial membrane. Mammalian tissues express three isoforms: CPT1A (liver), CPT1B (muscle and heart), and CPT1C (brain). Several isoforms of CPT1B exist due to the alternative splicing, with predicted MW of 88/84/79/66 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Kevin Gibbs	32997738	J Gerontol A Biol Sci Med Sci	WB
Myeong-Hwa Song	34571434	Biomaterials	WB
Weiwei Gui	33115498	Cell Commun Signal	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

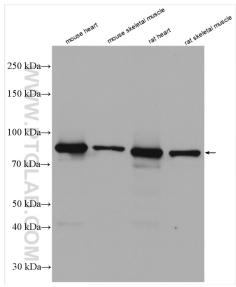
For technical support and original validation data for this product please contact:

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

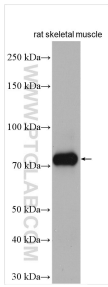
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

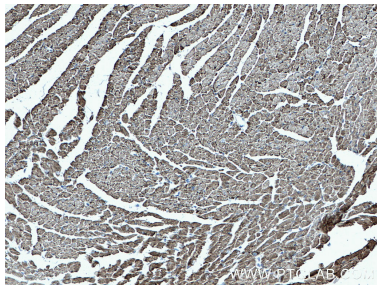
Selected Validation Data



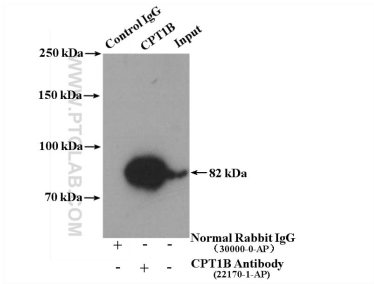
Various lysates were subjected to SDS PAGE followed by western blot with 22170-1-AP (CPT1B-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



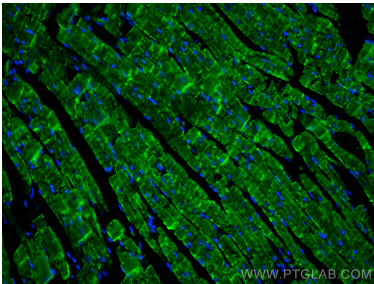
Rat skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 22170-1-AP (CPT1B-specific antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



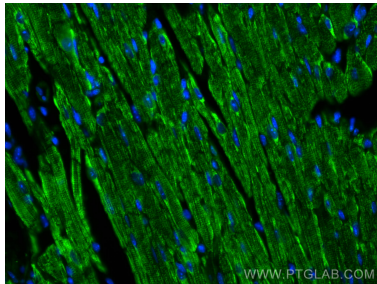
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 22170-1-AP (CPT1B-specific antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CPT1B-specific (IP:22170-1-AP, 4ug; Detection:22170-1-AP 1:600) with mouse heart tissue lysate 3600 ug.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using CPT1B-specific antibody (22170-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using CPT1B-specific antibody (22170-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).