

For Research Use Only

CPT1B-specific Polyclonal antibody

Catalog Number: 22170-1-AP

Featured Product

47 Publications



Basic Information

Catalog Number:

22170-1-AP

Size:

600 µg/ml

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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

IF-P, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, sheep, mouse, zebrafish, pig, 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: mouse heart tissue,

Background Information

Carnitine palmitoyltransferases (CPTs) mediate the transport of long chain fatty acyl groups into the mitochondrial matrix to undergo β -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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

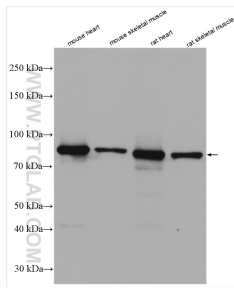
T: 4006900926

E: Proteintech-CN@ptglab.com

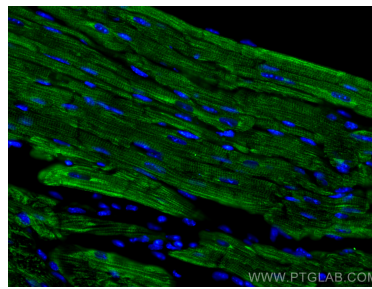
W: ptgcn.com

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

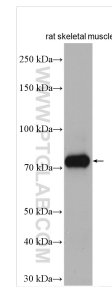
Selected Validation Data



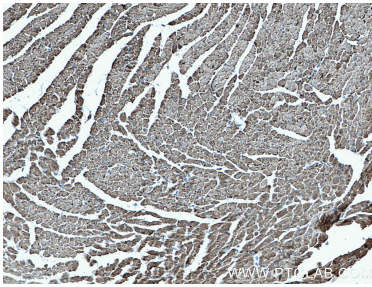
Various lysates were subjected to SDS PAGE followed by western blot with 22170-1-AP (CPT1B-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



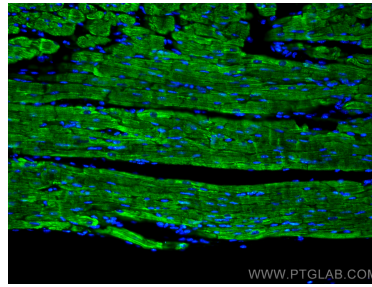
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CPT1B-specific antibody (22170-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



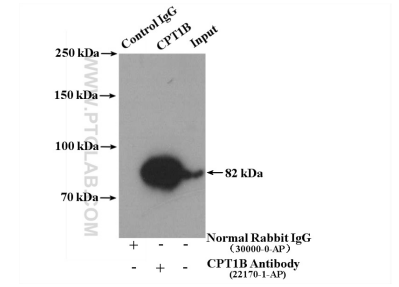
Rat skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 22170-1-AP (CPT1B-specific antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CPT1B-specific antibody (22170-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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