For Research Use Only

# CPT2 Polyclonal antibody

Catalog Number:26555-1-AP 52 Publications

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## Basic Information

Catalog Number:
26555-1-AP

Size:
150ul , Concentration: 550 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG24897

GenBank Accession Number:
BC002445

GeneID (NCBI):
1376

UNIPROT ID:
P23786

Full Name:
carnitine palmitoyltransferase 2

Calculated MW:
74 kDa

Observed MW:
65-70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:2000-1:16000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:300-1:1200
IF/ICC: 1:50-1:500

## Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, monkey, bovine

***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 : HEK-293T cells, T-47D cells, LNCaP cells, mouse liver tissue, rat liver tissue, MCF-7 cells

IP : mouse liver tissue,

IHC : mouse heart tissue,

IF/ICC : C2C12 cells,

## Background Information

Carnitine palmitoyltransferase-1 and -2 (CPT1 and CPT2) are two genetically distinct mitochondrial membrane bound enzymes and play critical role in the regulation of FAO in normal cells. CPT2 is an ubiquitous protein and locates in the inner membrane of mitochondrial (PMID: 29437870). CPT2 is frequently down-regulated in primary ovarian serous carcinomas, which is significantly correlated with poor survival of ovarian cancer patients (PMID: 33486313). Down-regulation of CPT2 was a major cause of acylcarnitine accumulation and a common feature in mouse models of obesity- and NASH-driven HCC and human SH-HCC (PMID: 29872321).

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Lihua Luo | 34593005 | J Nanobiotechnology | WB |
| Pablo Ranea-Robles | 34651140 | Kidney360 | WB |
| Pablo Ranea-Robles | 34564857 | J Inherit Metab Dis | WB |

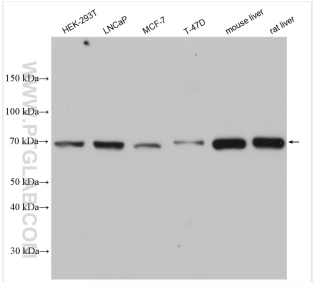
## Storage

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

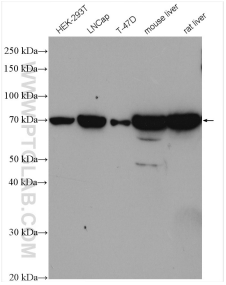
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

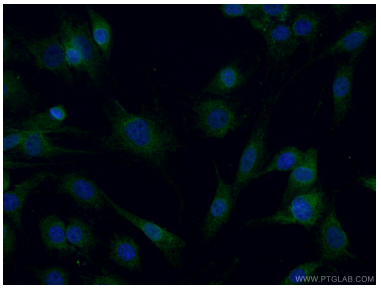
## Selected Validation Data



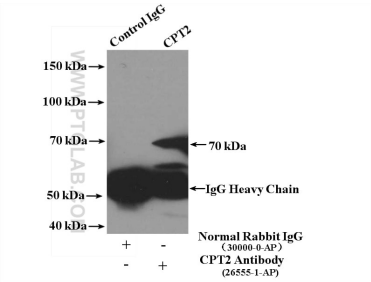

Various lysates were subjected to SDS PAGE followed by western blot with 26555-1-AP (CPT2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



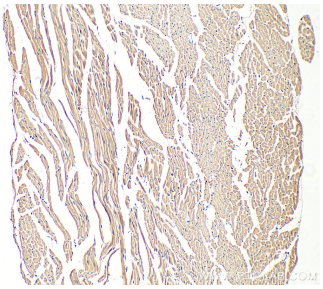

Various lysates were subjected to SDS PAGE followed by western blot with 26555-1-AP (CPT2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



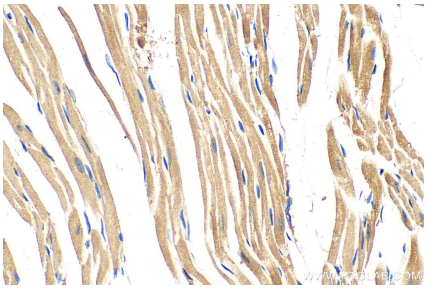

Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using 26555-1-AP (CPT2 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).




IP result of anti-CPT2 (IP:26555-1-AP, 4ug; Detection:26555-1-AP 1:300) with mouse liver tissue lysate 6000ug.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 26555-1-AP (CPT2 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 26555-1-AP (CPT2 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).