

For Research Use Only

# CROT Polyclonal antibody

Catalog Number: 13543-1-AP

Featured Product

5 Publications



## Basic Information

### Catalog Number:

13543-1-AP

### Size:

150ul, Concentration: 750 ug/ml by Nanodrop and 400 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4486

### GenBank Accession Number:

BC039004

### GeneID (NCBI):

54677

### UNIPROT ID:

Q9UKG9

### Full Name:

carnitine O-octanoyltransferase

### Calculated MW:

612 aa, 66 kDa

### Observed MW:

65-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:20-1:200

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

**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 kidney tissue, mouse liver tissue

IHC : human liver cancer tissue,

IF/ICC : HepG2 cells,

## Background Information

CROT, also named as COT, belongs to the carnitine/choline acetyltransferase family. It is a beta-oxidation of fatty acids. The highest activity concerns the C6 to C10 chain length substrate. CROT converts the end product of pristanic acid beta oxidation, 4,8-dimethylnonanoyl-CoA, to its corresponding carnitine ester. 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. CROT is an active forms for carnitine octanoyltransferase. This antibody can bind the close sequences genes.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xin Li	36120434	Front Endocrinol (Lausanne)	WB,IHC,IF
Jake Hsu	36587768	J Biol Chem	WB
Joseph Choi	39252970	iScience	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

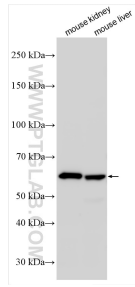
For technical support and original validation data for this product please contact:

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

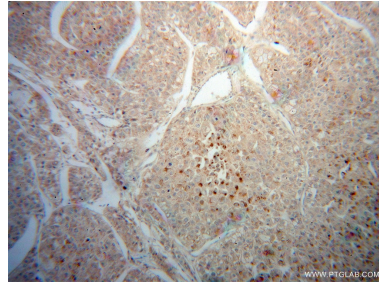
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

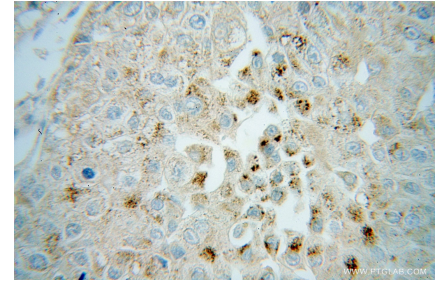
## Selected Validation Data



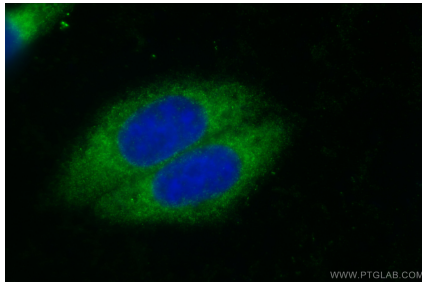
Various lysates were subjected to SDS PAGE followed by western blot with 13543-1-AP (CROT antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



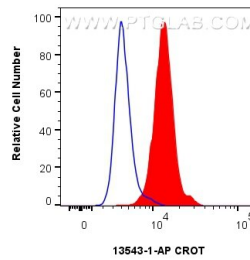
Immunohistochemical analysis of paraffin-embedded human liver cancer using 13543-1-AP (CROT antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver cancer using 13543-1-AP (CROT antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CROT antibody (13543-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25  $\mu$ g CROT Polyclonal antibody (13543-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).