

For Research Use Only

# CPT1A Recombinant monoclonal antibody, PBS Only

Catalog Number: 82012-2-PBS



## Basic Information

|                                                             |                                                                |                                                       |
|-------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------|
| <b>Catalog Number:</b><br>82012-2-PBS                       | <b>GenBank Accession Number:</b><br>BC000185                   | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ug , Concentration: 1 mg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>1374                                  | <b>CloneNo.:</b><br>251085G11                         |
| <b>Source:</b><br>Rabbit                                    | <b>UNIPROT ID:</b><br>P50416                                   |                                                       |
| <b>Isotype:</b><br>IgG                                      | <b>Full Name:</b><br>carnitine palmitoyltransferase 1A (liver) |                                                       |
| <b>Immunogen Catalog Number:</b><br>AG7202                  | <b>Calculated MW:</b><br>88 kDa                                |                                                       |
|                                                             | <b>Observed MW:</b><br>86 kDa                                  |                                                       |

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), Indirect ELISA

**Species Specificity:**  
human

## Background Information

CPT1A, also named CPT1, CPT1-L and L-CPTI, belongs to the carnitine/choline acetyltransferase family. CPT1A gene is localized Chromosome 11q13.1-2. 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. CPT1A is an active form of related liver-type carnitine palmitoyltransferase I (PMID: 11001805). CPT1A deficiency presents as recurrent attacks of fasting hypoketotic hypoglycemia. (PMID: 15363638). This antibody can bind the close sequences genes.

## Storage

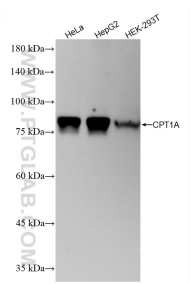
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

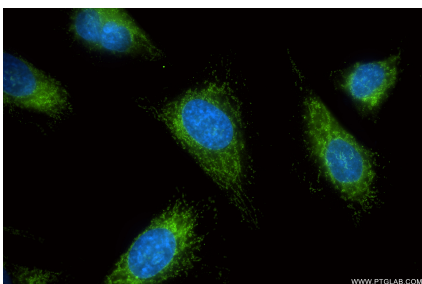
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

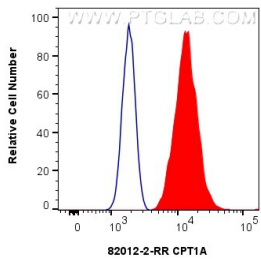
Selected Validation Data



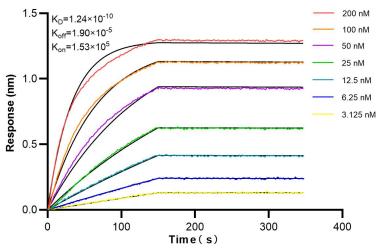
Various lysates were subjected to SDS PAGE followed by western blot with 82012-2-RR (CPT1A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82012-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using CPT1A antibody (82012-2-RR, Clone: 251085G11 ) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 82012-2-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug CPT1A Recombinant monoclonal antibody (82012-2-RR, Clone:251085G11) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019). This data was developed using the same antibody clone with 82012-2-PBS in a



Biolayer interferometry (BLI) kinetic assays of 82012-2-RR against Human CPT1A were performed. The affinity constant is 0.124 nM.