

For Research Use Only

CPT1A Recombinant monoclonal antibody

Catalog Number: 82012-2-RR



Basic Information

Catalog Number:

82012-2-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7202

GenBank Accession Number:

BC000185

GeneID (NCBI):

1374

UNIPROT ID:

P50416

Full Name:

carnitine palmitoyltransferase 1A (liver)

Calculated MW:

88 kDa

Observed MW:

86 kDa

Purification Method:

Protein A purification

CloneNo.:

251085G11

Recommended Dilutions:

WB: 1:2000-1:10000

IF/ICC: 1:250-1:1000

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Species Specificity:

human

Positive Controls:

WB : HeLa cells, HepG2 cells, HEK-293T cells

IF/ICC : HeLa cells,

FC (Intra) : HeLa cells,

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 -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

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

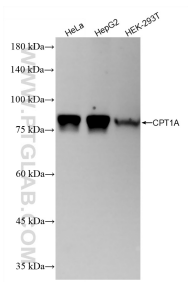
T: 4006900926

E: Proteintech-CN@ptglab.com

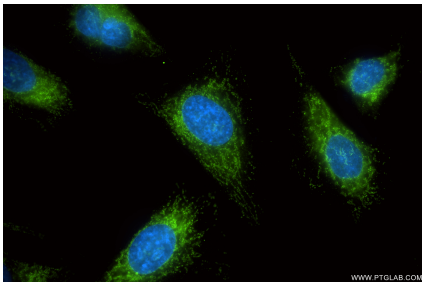
W: ptgcn.com

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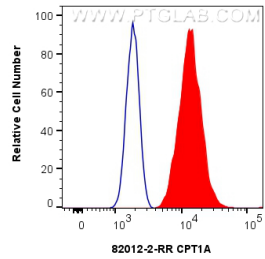
Selected Validation Data



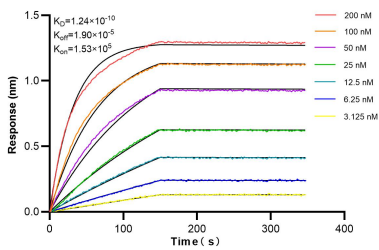
Various lysates were subjected to SDS PAGE followed by western blot with 82012-2-RR (CPT1A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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).



1x10⁶ 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).



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