

For Research Use Only

CPT1A Recombinant monoclonal antibody

Catalog Number: 82012-2-RR



Basic Information

Catalog Number: 82012-2-RR	GenBank Accession Number: BC000185	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 1374	CloneNo.: 251085G11
Source: Rabbit	UNIPROT ID: P50416	Recommended Dilutions: WB: 1:2000-1:10000 IF/ICC: 1:250-1:1000
Isotype: IgG	Full Name: carnitine palmitoyltransferase 1A (liver)	FC (Intra): 0.25 ug per 10 ⁶ cells in a 100 µl suspension
Immunogen Catalog Number: AG7202	Calculated MW: 88 kDa Observed MW: 86 kDa	

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human	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

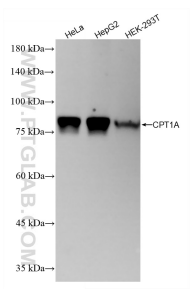
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

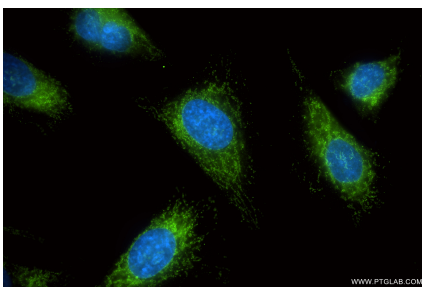
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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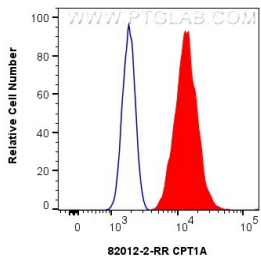
Selected Validation Data



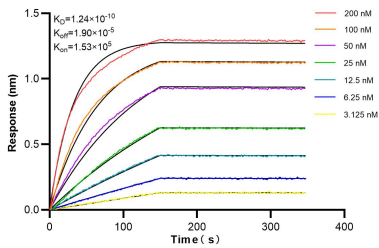
Various lysates were subjected to SDS PAGE followed by western blot with 82012-2-RR (CPT1A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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.