

**DATASHEET**

**CPT1A Rabbit Polyclonal Antibody**

CAT. NO. APA12715

**KEY FEATURES**

Target	CPT1A	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

Catalyzes the transfer of the acyl group of long-chain fatty acid-CoA conjugates onto carnitine, an essential step for the mitochondrial uptake of long-chain fatty acids and their subsequent beta-oxidation in the mitochondrion . Also possesses a lysine succinyltransferase activity that can regulate enzymatic activity of substrate proteins such as ENO1 and metabolism independent of its classical carnitine O-palmitoyltransferase activity . Plays an important role in hepatic triglyceride metabolism . Also plays a role in inducible regulatory T-cell (iTreg) differentiation once activated by butyryl-CoA that antagonizes malonyl-CoA-mediated CPT1A repression . Sustains the IFN-I response by recruiting ZDHCC4 to palmitoylate MAVS at the mitochondria leading to MAVS stabilization and activation .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to CPT1A
Specificity	Recognizes endogenous levels of CPT1A protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human CPT1A
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 86; Observed: 88 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	CPT1; Carnitine O-palmitoyltransferase 1, liver isoform; CPT1-L; Carnitine O-palmitoyltransferase I, liver isoform; CPT I; CPTI-L; Carnitine palmitoyltransferase 1A
Gene Symbol	CPT1A
Entrez Gene	1374(Human); 25757(Rat)
SwissProt	P50416(Human); P32198(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

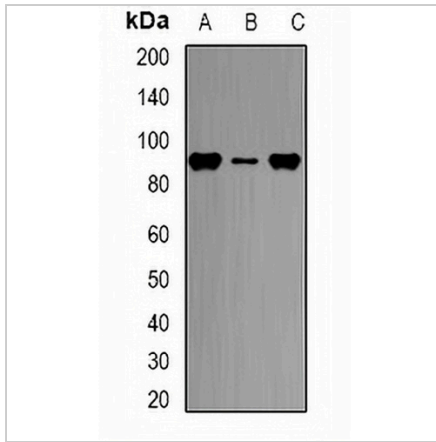
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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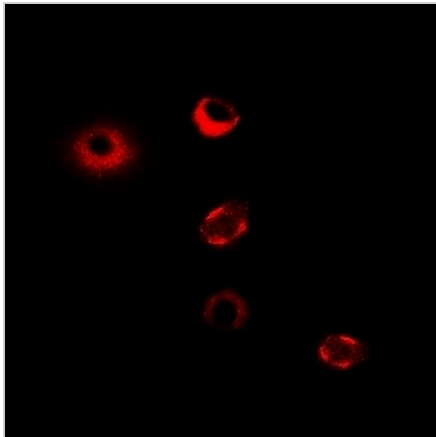
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**DATA**



Western blot analysis of CPT1A expression in HL60 (A), THP1 (B), BT474 (C) whole cell lysates. (Predicted band size: 86; 88 kD; Observed band size: 88 kD)



Immunofluorescent analysis of CPT1A staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.