

CPT1c

Cat.No. 415 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 784 to 798 from mouse Cpt1c (UniProt Id: Q8BGD5)
Reactivity	Reacts with: mouse (Q8BGD5), rat (F1LN46). Other species not tested yet.
Specificity	Specific for CPT1c.
matching control	415-OP

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

CPT1c is a carnitine palmitoyltransferase 1 (CPT 1) isoform that is expressed only in the brain. It has been shown to be an integral part of native AMPA receptor complexes in neurons and modulates the surface expression of these ionotropic glutamate receptors.

Selected General References

Mechanisms of CPT1C-Dependent AMPAR Trafficking Enhancement.
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Cpt1c regulated by AMPK promotes papillary thyroid carcinomas cells survival under metabolic stress conditions.
Wang R, Cheng Y, Su D, Gong B, He X, Zhou X, Pang Z, Cheng L, Chen Y, Yao Z
Journal of Cancer (2017) 8(18): 3675-3681.

Novel Regulation of the Synthesis of α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA) Receptor Subunit GluA1 by Carnitine Palmitoyltransferase 1C (CPT1C) in the Hippocampus.
Fadó R, Soto D, Miñano-Molina AJ, Pozo M, Carrasco P, Yefimenko N, Rodríguez-Álvarez J, Casals N
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AMPA interacting protein CPT1C enhances surface expression of GluA1-containing receptors.
Gratacòs-Batlle E, Yefimenko N, Cascos-García H, Soto D
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Localization and effect of ectopic expression of CPT1c in CNS feeding centers.
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