

Goat Anti-CPT1C Antibody

Peptide-affinity purified goat antibody Catalog # AF2177a

Specification

Goat Anti-CPT1C Antibody - Product Information

Application WB, E
Primary Accession OSTCG5

Other Accession <u>NP_689572</u>, <u>126129</u>

Reactivity Human

Predicted Mouse, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 90989

Goat Anti-CPT1C Antibody - Additional Information

Gene ID 126129

Other Names

Carnitine O-palmitoyltransferase 1, brain isoform, CPT1-B, 2.3.1.21, CPT IC, Carnitine O-palmitoyltransferase I, brain isoform, CPTI-B, Carnitine palmitoyltransferase 1C, CPT1C, CATL1

Dilution

WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CPT1C Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CPT1C Antibody - Protein Information

Name CPT1C (HGNC:18540)

Synonyms CATL1



Function

Palmitoyl thioesterase specifically expressed in the endoplasmic reticulum of neurons. Modulates the trafficking of the glutamate receptor, AMPAR, to plasma membrane through depalmitoylation of GRIA1 (PubMed: <a href="http://www.uniprot.org/citations/30135643"

target=" blank">30135643). Also regulates AMPR trafficking through the regulation of SACM1L phosphatidylinositol-3-phosphatase activity by interaction in a malonyl-CoA dependent manner (By similarity). Binds malonyl-CoA and couples malonyl-CoA to ceramide levels, necessary for proper spine maturation and contributing to systemic energy homeostasis and appetite control (PubMed:16651524). Binds to palmitoyl-CoA, but does not have carnitine palmitoyltransferase 1 catalytic activity or at very low levels (PubMed:25751282, PubMed:<a href="http://www.uniprot.org/citations/30135643"

target="blank">30135643).

Cellular Location

Cell projection, dendrite. Cell projection, axon. Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Localized in the soma and dendritic and axonal projections.

Tissue Location

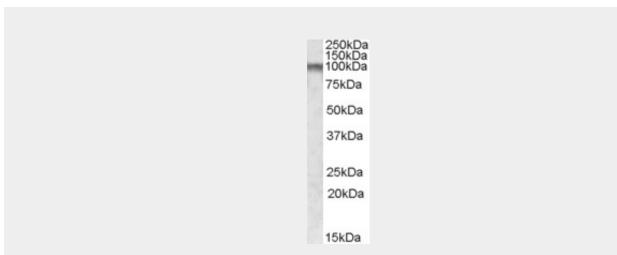
Expressed predominantly in brain and testis. Expressed in motor neurons.

Goat Anti-CPT1C Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Goat Anti-CPT1C Antibody - Images



AF2177a (1 μg/ml) staining of Human Frontal Cortex lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CPT1C Antibody - References





Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

Carnitine palmitoyltransferase I and Acyl-CoA dehydrogenase 9 in retina: insights of retinopathy in mitochondrial trifunctional protein defects. Roomets E, et al. Invest Ophthalmol Vis Sci, 2008 Apr. PMID 18385088.

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