

Goat Anti-CPT1C Antibody
Peptide-affinity purified goat antibody
Catalog # AF2177a

Specification

Goat Anti-CPT1C Antibody - Product Information

Application	WB
Primary Accession	Q8TCG5
Other Accession	NP_689572 , 126129
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

Format

0.5 mg IgG/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:

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: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](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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 Thiazolinedione-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.

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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.
CPT1c is localized in endoplasmic reticulum of neurons and has carnitine palmitoyltransferase activity. Sierra AY, et al. J Biol Chem, 2008 Mar 14. PMID 18192268.
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