

SLC25A20 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19135b

Specification

SLC25A20 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>043772</u>
Other Accession	<u>NP_000378.1</u>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	32944
Antigen Region	235-264

SLC25A20 Antibody (C-term) - Additional Information

Gene ID 788

Other Names

Mitochondrial carnitine/acylcarnitine carrier protein, Carnitine/acylcarnitine translocase, CAC, Solute carrier family 25 member 20, SLC25A20, CAC, CACT

Target/Specificity

This SLC25A20 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 235-264 amino acids from the C-terminal region of human SLC25A20.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

SLC25A20 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC25A20 Antibody (C-term) - Protein Information

Name SLC25A20 (<u>HGNC:1421</u>)



Synonyms CAC, CACT

Function Mediates the electroneutral exchange of acylcarnitines (O- acyl-(R)-carnitine or L-acylcarnitine) of different acyl chain lengths (ranging from O-acetyl-(R)-carnitine to long-chain O-acyl-(R)- carnitines) with free carnitine ((R)-carnitine or L-carnitine) across the mitochondrial inner membrane, via a ping-pong mechanism (Probable) (PubMed:<u>12892634</u>, PubMed:<u>18307102</u>). Key player in the mitochondrial oxidation pathway, it translocates the fatty acids in the form of acylcarnitines into the mitochondrial matrix, where the carnitine palmitoyltransferase 2 (CPT-2) activates them to undergo fatty acid beta-oxidation (Probable). Catalyzes the unidirectional transport (uniport) of carnitine at lower rates than the antiport (exchange) (PubMed:<u>18307102</u>).

Cellular Location

Mitochondrion inner membrane; Multi-pass membrane protein

SLC25A20 Antibody (C-term) - Protocols

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

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

SLC25A20 Antibody (C-term) - Images



SLC25A20 Antibody (C-term) (Cat. #AP19135b) western blot analysis in mouse cerebellum tissue lysates (35ug/lane). This demonstrates the SLC25A20 antibody detected the SLC25A20 protein (arrow).

SLC25A20 Antibody (C-term) - Background

This gene product is one of several closely related mitochondrial-membrane carrier proteins that shuttle substrates between cytosol and the intramitochondrial matrix space. This protein mediates the transport of acylcarnitines into mitochondrial matrix for their oxidation by the mitochondrial fatty



acid-oxidation pathway. Mutations in this gene are associated with carnitine-acylcarnitine translocase deficiency, which can cause a variety of pathological conditions such as hypoglycemia, cardiac arrest, hepatomegaly, hepatic dysfunction and muscle weakness, and is usually lethal in new born and infants.

SLC25A20 Antibody (C-term) - References

Tachibana, K., et al. Biochem. Biophys. Res. Commun. 389(3):501-505(2009) De Lucas, J.R., et al. Mol. Membr. Biol. 25(2):152-163(2008) Pierre, G., et al. J. Inherit. Metab. Dis. 30 (5), 815 (2007) : Peluso, G., et al. J. Cell. Physiol. 203(2):439-446(2005) Kahn, B.B., et al. Cell Metab. 1(1):15-25(2005)