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SLC25A20 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP19135b

Specification

SLC25A20 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O43772

SLC25A20 Antibody (C-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC25A20 Antibody (C-term) Blocking Peptide - Protein Information

Name SLC25A20 (HGNC:1421)

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:12892634, PubMed:18307102). 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:18307102).

Cellular Location
Mitochondrion inner membrane; Multi-pass membrane protein

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SLC25A20 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SLC25A20 Antibody (C-term) Blocking Peptide - Images

SLC25A20 Antibody (C-term) Blocking Peptide - Background

This gene product is one of several closely relatedmitochondrial-membrane carrier proteins that shuttle substratesbetween cytosol and the intramitochondrial matrix space. Thisprotein mediates the transport of acylcarnitines into mitochondrialmatrix for their oxidation by the mitochondrial fattyacid-oxidation pathway. Mutations in this gene are associated withcarnitine-acylcarnitine translocase deficiency, which can cause avariety of pathological conditions such as hypoglycemia, cardiacarrest, hepatomegaly, hepatic dysfunction and muscle weakness, andis usually lethal in new born and infants.

SLC25A20 Antibody (C-term) Blocking Peptide - 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)