

## SLC25A20 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP19135b

### **Specification**

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

Primary Accession

043772

## 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:<a

href="http://www.uniprot.org/citations/12892634" target="\_blank">12892634</a>, PubMed:<a href="http://www.uniprot.org/citations/18307102" target="\_blank">18307102</a>). 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:<a

href="http://www.uniprot.org/citations/18307102" target=" blank">18307102</a>).

#### **Cellular Location**

Mitochondrion inner membrane; Multi-pass membrane protein



# 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)