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SLC27A4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP13227b

Specification

SLC27A4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q6P1M0

SLC27A4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10999

Other Names
Long-chain fatty acid transport protein 4, FATP-4, Fatty acid transport protein 4, 621-, Solute carrier family 27 member 4, SLC27A4, ACSVL4, FATP4

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13227b was selected from the C-term region of SLC27A4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SLC27A4 Antibody (C-term) Blocking Peptide - Protein Information

Name SLC27A4 (HGNC:10998)

Function
Mediates the levels of long-chain fatty acids (LCFA) in the cell by facilitating their transport across cell membranes (PubMed:10518211, PubMed:12556534, PubMed:20448275, PubMed:21395585, PubMed:22022213). Appears to be the principal fatty acid transporter in small intestinal enterocytes (PubMed:20448275). Also functions as an acyl-CoA ligase catalyzing the ATP-dependent formation of fatty acyl- CoA using LCFA and very-long-chain fatty acids (VLCFA) as substrates, which prevents fatty acid efflux from cells and might drive more fatty acid uptake (PubMed:22022213,

PubMed:24269233). Plays a role in the formation of the epidermal barrier. Required for fat absorption in early embryogenesis (By similarity). Probably involved in fatty acid transport across the blood barrier (PubMed:21395585). Indirectly inhibits RPE65 via substrate competition and via production of VLCFA derivatives like lignoceroyl-CoA. Prevents light-induced degeneration of rods and cones (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location
Expressed at highest levels in brain, testis, colon and kidney. Expressed at medium levels in heart and liver, small intestine and stomach. Expressed at low levels in peripheral leukocytes, bone marrow, skeletal muscle and aorta. Expressed in adipose tissue (PubMed:24269233, PubMed:9878842). Expressed in brain gray matter (PubMed:21395585).

SLC27A4 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SLC27A4 Antibody (C-term) Blocking Peptide - Images

SLC27A4 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of a family of fatty acidtransport proteins, which are involved in translocation oflong-chain fatty acids cross the plasma membrane. This protein isexpressed at high levels on the apical side of mature enterocytesin the small intestine, and appears to be the principal fatty acidtransporter in enterocytes. Clinical studies suggest this gene as acandidate gene for the insulin resistance syndrome. Mutations inthis gene have been associated with ichthyosis prematuritysyndrome.

SLC27A4 Antibody (C-term) Blocking Peptide - References

Morice-Picard, F., et al. Am. J. Med. Genet. A 152A (10), 2664-2665 (2010) :Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :Ban, H.J., et al. BMC Genet. 11, 26 (2010) :Klar, J., et al. Am. J. Hum. Genet. 85(2):248-253(2009)Jia, Z., et al. J. Mol. Neurosci. 33(1):25-31(2007)