10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC27A5 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP9015c

Specification

SLC27A5 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9Y2P5

SLC27A5 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10998

Other Names
Bile acyl-CoA synthetase, BACS, Bile acid-CoA ligase, BA-CoA ligase, BAL, Cholate--CoA ligase, Fatty acid transport protein 5, FATP-5, Fatty-acid-coenzyme A ligase, very long-chain 3, Solute carrier family 27 member 5, Very long-chain acyl-CoA synthetase homolog 2, VLCS-H2, VLCSH2, Very long-chain acyl-CoA synthetase-related protein, VLACS-related, VLACSR, SLC27A5, ACSB, ACSVL6, FACVL3, FATP5

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9015c was selected from the Center region of human SLC27A5. 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.

SLC27A5 Antibody (Center) Blocking Peptide - Protein Information

Name SLC27A5

Synonyms ACSB, ACSVL6, FACVL3, FATP5

Function
May mediate the import of long-chain fatty acids (LCFA) by facilitating their transport across cell membranes (PubMed:20448275, PubMed:20530735). Also catalyzes the ATP-dependent formation of fatty acyl-CoA using LCFA and very-long-chain fatty acids (VLCFA) as substrates (PubMed:10479480). Mainly

functions as a bile acyl-CoA synthetase catalyzing the activation of bile acids via ATP-dependent formation of bile acid CoA thioesters which is necessary for their subsequent conjugation with glycine or taurine (PubMed:10749848, PubMed:11980911). Both primary bile acids (cholic acid and chenodeoxycholic acid) and secondary bile acids (deoxycholic acid and lithocholic acid) are the principal substrates (PubMed:10749848, PubMed:11980911). In vitro, activates 3-alpha,7-alpha,12-alpha- trihydroxy-5-beta-cholestanate ((25R)-3alpha,7alpha,12alpha-trihydroxy- 5beta-cholestan-26-oate or THCA), the C27 precursor of cholic acid deriving from the de novo synthesis from cholesterol (PubMed:11980911). Plays an important role in hepatic fatty acid uptake and bile acid reconjugation and recycling but not in de novo synthesis of bile acids (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Microsome {ECO:0000250|UniProtKB:Q9ES38}. Cell membrane {ECO:0000250|UniProtKB:Q4LDG0}; Multi-pass membrane protein

Tissue Location
Predominantly expressed in liver.

SLC27A5 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

SLC27A5 Antibody (Center) Blocking Peptide - Images

SLC27A5 Antibody (Center) Blocking Peptide - Background

SLC27A5 is an isozyme of very long-chain acyl-CoA synthetase (VLCS). It is capable of activating very long-chain fatty-acids containing 24- and 26-carbons. It is expressed in liver and associated with endoplasmic reticulum but not with peroxisomes. Its primary role is in fatty acid elongation or complex lipid synthesis rather than in degradation.

SLC27A5 Antibody (Center) Blocking Peptide - References

Watkins,P.A., et.al., Prostaglandins Leukot. Essent. Fatty Acids 60 (5-6), 323-328 (1999)Steinberg,S.J., et.al., J. Biol. Chem. 275 (21), 15605-15608 (2000)