

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](/products/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

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)

procedures.

SLC27A5 Antibody (Center) Blocking Peptide - Protein Information

Name SLC27A5

Synonyms ACSB, ACSVL6, FACVL3, FATP5

Function

Acyl-CoA synthetase that catalyzes the activation of bile acids via 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). Also exhibits acyl CoA synthetase activity that activates very long-chain fatty acids (VLCFAs) by catalyzing the formation of fatty acyl-CoA (PubMed:10479480). In vitro, also activates 3-alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholestanate (THCA), the C27 precursor of cholic acid deriving from the de novo synthesis from cholesterol (PubMed:11980911). Exhibits long-chain fatty acids (LCFA) transport activity (PubMed:20530735). 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](#)