

**SLC27A5 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9015c****Specification**

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**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 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](http://www.uniprot.org/citations/20448275), PubMed: [20530735](http://www.uniprot.org/citations/20530735)). Also catalyzes the ATP-dependent formation of fatty acyl-CoA using LCFA and very-long-chain fatty acids (VLCFA) as substrates (PubMed: [10479480](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10749848), PubMed: [11980911](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10749848), PubMed: [11980911](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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)