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SLC27A2 Rabbit pAb

Rabbit Polyclonal Antibody
Catalog # AP93288

Specification

SLC27A2 Rabbit pAb - Product Information

Application	**E**
Primary Accession	O14975
Reactivity	**Mouse, Rat**
Predicted	**Human, Rabbit, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**70 kDa KDa**

SLC27A2 Rabbit pAb - Additional Information

Gene ID 11001

Other Names
ACSVL1; FACVL1; FATP 2; FATP2; Fatty acid coenzyme A ligase, very long chain 1; Fatty acid transport protein 2; hFACVL1; HsT17226; Long chain fatty acid CoA ligase; Solute carrier family 27 (fatty acid transporter), member 2; Solute carrier family 27 member 2; THCA CoA ligase; Very long chain acyl CoA synthetase; Very long chain fatty acid CoA ligase; Very long chain fatty acid coenzyme A ligase 1; VLACS; VLCS; S27A2_HUMAN.

Target/Specificity
Acyl-CoA synthetase probably involved in bile acid metabolism. Proposed to activate C27 precurors of bile acids to their CoA thioesters derivatives before side chain cleavage via peroxisomal beta-oxidation occurs. In vitro, 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. Does not utilize C24 bile acids as substrates. In vitro, also activates long- and branched-chain fatty acids and may have additional roles in fatty acid metabolism. May be involved in translocation of long-chain fatty acids (LFCA) across membranes (By similarity).

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

SLC27A2 Rabbit pAb - Protein Information

Name SLC27A2

Synonyms ACSVL1, FACVL1, FATP2, VLACS

Function
Mediates the import of long-chain fatty acids (LCFA) into the cell by facilitating their transport across cell membranes, playing an important role in hepatic fatty acid uptake (PubMed:10198260, PubMed:10749848, PubMed:11980911, PubMed:20530735, PubMed:22022213, PubMed:24269233). 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:10198260, PubMed:10749848, PubMed:11980911, PubMed:20530735, PubMed:22022213, PubMed:24269233). Plays a pivotal role in regulating available LCFA substrates from exogenous sources in tissues undergoing high levels of beta-oxidation or triglyceride synthesis (PubMed:20530735). Can also activate branched-chain fatty acids such as phytanic acid and pristanic acid (PubMed:10198260). May contribute to the synthesis of sphingosine-1-phosphate (PubMed:24269233). Does not activate C24 bile acids, cholate and chenodeoxycholate (PubMed:11980911). In vitro, 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). However, it is not critical for THCA activation and bile synthesis in vivo (PubMed:20530735).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Peroxisome membrane; Peripheral membrane protein. Cell membrane; Multi-pass membrane protein. Microsome

Tissue Location
[Isoform 1]: Expressed in liver, kidney, placenta, intestine, brain, heart, and colon (PubMed:10198260, PubMed:21768100, PubMed:24269233). Predominantly expressed in liver (PubMed:20530735)

SLC27A2 Rabbit pAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC27A2 Rabbit pAb - Images

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SLC27A2 Rabbit pAb - Background

SLC27A2 is an isozyme of long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long chain fatty acids into fatty acyl-CoA esters, and thereby may play a key role in lipid biosynthesis and fatty acid degradation. This isozyme activates long-chain, branched-chain and very-long-chain fatty acids containing 22 or more carbons to their CoA derivatives.