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Anti-FATP5 Antibody

Catalog # AP60091

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9Y2P5
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75385

Additional Information

Gene ID	10998
Other Names	ACSB; ACSVL6; FACVL3; FATP5; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human FATP5. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

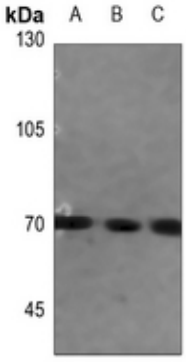
Cellular Location

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

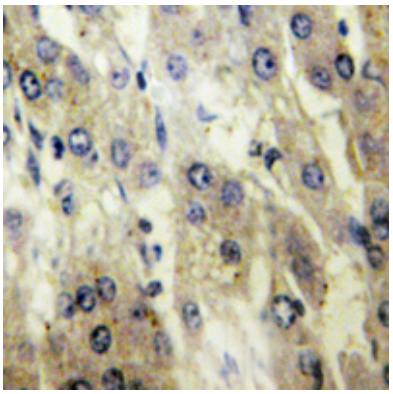
Tissue Location

Predominantly expressed in liver.

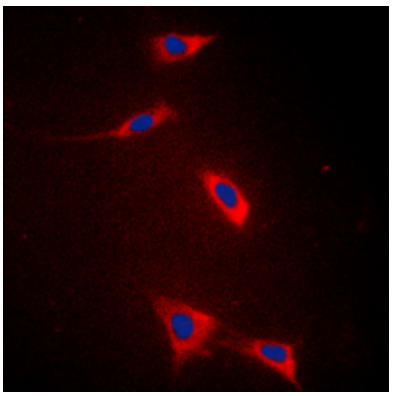
Images



Western blot analysis of FATP5 expression in MCF7 (A), U2OS (B), DLD (C) whole cell lysates. (Predicted band size: 75 kD; Observed band size: 70 kD)

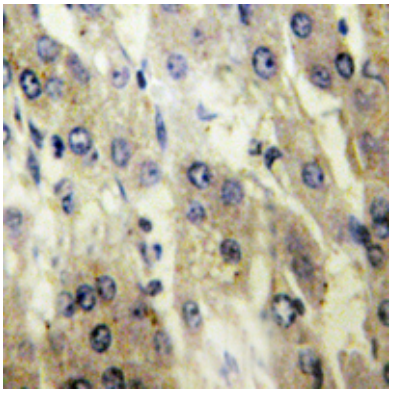


Immunohistochemical analysis of FATP5 staining in human liver formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of FATP5 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of FATP5 staining in human liver formalin fixed paraffin embedded tissue



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