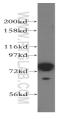


DATASHEET

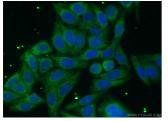
FOR IN VITRO RESEARCH USE ONLY NOT FOR USE IN HUMANS OR ANIMALS USA: proteintech@ptglab.com Europe: europe@ptglab.com China: service@ptglab.com

ACSL1 Polyclonal Antibody

Catalog number: 13989-1-AP Size: 33 µg/150 µl Source: Rabbit Isotype: IgG Synonyms: ACSL1; ACS1, ACSL1, Acyl CoA synthetase 1, FACL1, FACL2, LACS, LACS 1, LACS 2, LACS1, LACS2, Palmitoyl CoA ligase 1, Palmitoyl CoA ligase 2



HepG2 cells were subjected to SDS PAGE followed by western blot with 13989-1-AP(ACSL1 antibody) at dilution of 1:800



Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 13989-1-AP(ACSL1 Antibody) at dilution of 1:50 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)



Immunohistochemistry of paraffinembedded human liver cancer tissue slide using 13989-1-AP(ACSL1 Antibody) at dilution of 1:50 (under 10x lens)

Background

ACSL1(Long-chain-fatty-acid--CoA ligase 1) is also named as FACL1, FACL2, LACS, LACS1, LACS2 and belongs to the ATP-dependent AMP-binding enzyme family. ACSL1 is a 75 kDa protein that is associated peripherally with the plasma membrane(Brian M Wiczer, etc., 2006). ACSL1 is abundantly expressed in tissues, such as liver and brown fat, that metabolize substantial amounts of triglycerides as fuel, and as such, a deficiency in ACSL1 function could have a more profound affect in those cells, resulting in hepatosteatosis and potentially increased very low density lipoprotein production by the liver or decreased thermogenic capacity in brown adipose tissue(PMID:19429676). An anti-rat ACSL1 antibody recognized a band of the predicted 68 kDa in high-speed supernatant from rat liver and in human and murine SMCs, monocyte-derived macrophages, and murine peritoneal macrophages (PMID:17259370). It has 2 isoforms produced by alternative splicing.

Applications

Tested suplications.	
Tested applications:	ELISA, WB, IHC, IP, IF
Cited applications:	IHC, WB
Species specificity:	Human,Mouse,Rat; other species not tested.
Cited species:	Human, mouse, rat
Caculated ACSL1 MW:	78 kDa
Observed ACSL1 MW:	68 kDa,78 kDa
Positive WB detected in	HepG2 cells, human cerebellum tissue, rat liver tissue
Positive IP detected in	Mouse liver tissue
Positive IHC detected in	Human liver cancer tissue, human heart tissue
Positive IF detected in	HepG2 cells
Recommended dilution:	WB: 1:200-1:2000
	IP: 1:200-1:2000
	IHC: 1:20-1:200

IF: 1:20-1:200

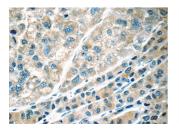
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

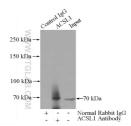
Immunogen information

Immunogen:	Ag5059
GenBank accession number:	BC050073
Gene ID (NCBI):	2180
Full name:	Acyl-CoA synthetase long-chain family member 1

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.





Immunohistochemistry of paraffin-embedded human liver cancer tissue slide using 13989-1-AP(ACSL1 Antibody) at dilution of 1:50 (under 40x lens) IP Result of anti-ACSL1 (IP:13989-1-AP, 4ug; Detection:13989-1-AP 1:600) with mouse liver tissue lysate 4000ug.