Datasheet for ABIN5533658

anti-ACSL4 antibody (AA 236-267)

3 Images

Go to Product page

Overview

Quantity:	400 µL
Target:	ACSL4
Binding Specificity:	AA 236-267
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ACSL4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This ACSL4 (FACL4) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 236-267 amino acids from the Central region of human ACSL4 (FACL4).
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis

Target Details

Target:	ACSL4
Alternative Name:	ACSL4 (ACSL4 Products)

Target Details

Background:	Long chain acyl-CoA synthetase (LACS), or long chain fatty acid-CoA ligase (FACL), converts free long chain fatty acids into fatty acyl-CoA esters, key intermediates in the synthesis of complex lipids. The FACL4 gene encodes a form of LACS and is expressed in several tissues, including brain. FACL4 cDNA from brain encodes a gene product that shows preference for arachidonic acid as a substrate when expressed in mammalian cells.1 The sequence of the predicted 670-amino acid human protein is 97 % identical to that of rat ACS4. FACL4 is highly expressed in adult human brain, especially in the cerebellum and hippocampus, similar to the mouse.2 A strong cytoplasmic staining was found in the Purkinje and granular cells of the cerebellum and the pyramidal layer of hippocampus, indicating that FACL4 is specifically expressed in neurons and not in glial cells. Two patients with Alport syndrome, elliptocytosis, and mental retardation carried a large deletion of the COL4A5 region that included FACL4.3 The absence of FACL4 might play a role in the development of mental retardation or other signs associated with Alport syndrome. Two point mutations, 1 missense and 1 splice site change, were reported in the FACL4 gene in 2 families with nonspecific mental retardation.2 Analysis of enzymatic activity in lymphoblastoid cell lines of affected individuals revealed low levels compared with normal cells, indicating that both mutations are null mutations.
Molecular Weight:	79 kDa
Gene ID:	2182
UniProt:	O60488

Application Details

Application Notes:	For WB starting dilution is: 1:1000 For IF starting dilution is: 1:10~50 For IHC-P starting dilution is: 1:50~100
Restrictions:	For Research Use only

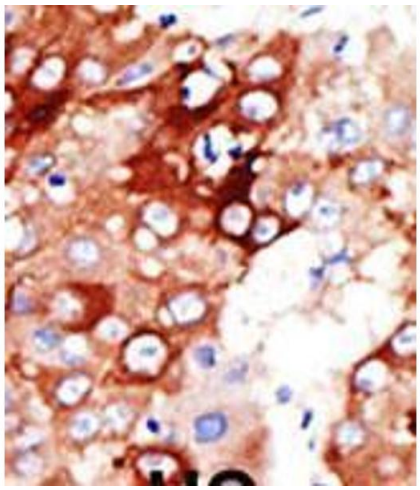
Handling

Format:	Liquid
Concentration:	2 mg/mL
Buffer:	Supplied in PBS with 0.09 % (W/V) sodium azide.

Handling

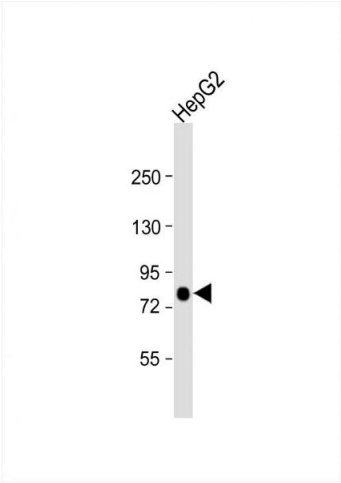
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



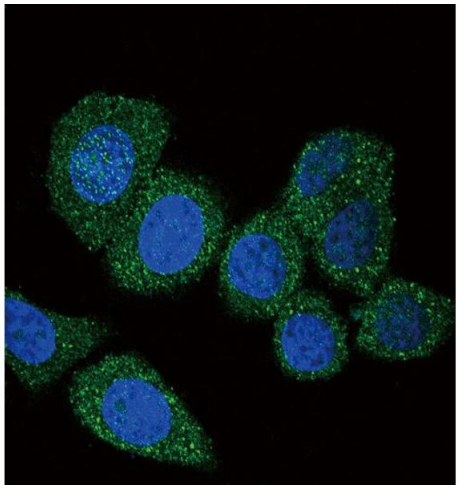
Immunohistochemistry

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. BC = breast carcinoma; HC = hepatocarcinoma.



Western Blotting

Image 2. Western Blot at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 ug per lane.



Immunofluorescence

Image 3. Confocal immunofluorescent analysis of ACSL4 (FACL4) Antibody with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).