

Basic Information

Product Name	Anti-ACSL4/FACL4 Antibody (Clone#4I7)	
Gene Name	ACSL4	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human FACL4/ACSL4.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	79 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

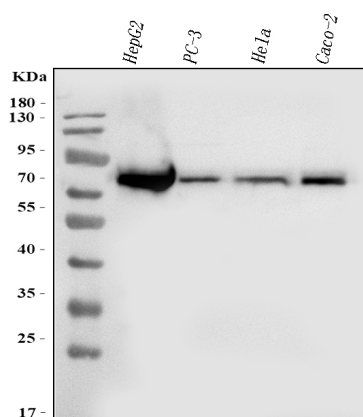
Background Information

Long-chain-fatty-acid—CoA ligase 4 is an enzyme that in humans is encoded by the ACSL4 gene. It is mapped to Xq23. The protein encoded by this gene is an isozyme of the 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 play a key role in lipid biosynthesis and fatty acid degradation. This isozyme preferentially utilizes arachidonate as substrate. The absence of this enzyme may contribute to the cognitive disability or Alport syndrome. Alternative splicing of this gene generates multiple transcript variants.

Reference

Anti-ACSL4/FACL4 Antibody (Clone#4I7)被引用在2文献中。

Selected Validation Data



Western blot analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (M04372). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HepG2 whole cell lysates,

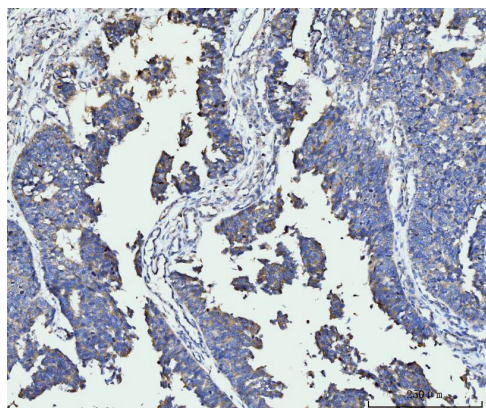
Lane 3: PC-3 whole cell lysates,

Lane 4: Hela whole cell lysates,

Lane 5: Caco-2 whole cell lysates.

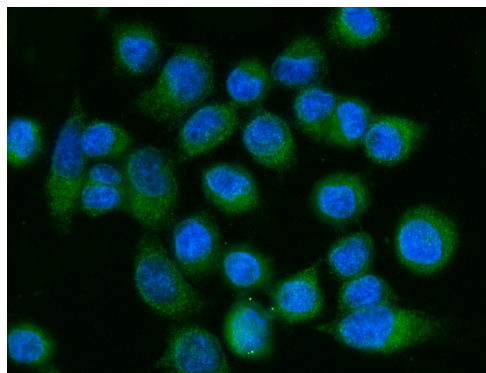
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-ACSL4/FACL4 antigen affinity purified monoclonal antibody (M04372) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ACSL4/FACL4 at approximately 79 kDa. The expected band size for ACSL4/FACL4 is at 79 kDa.



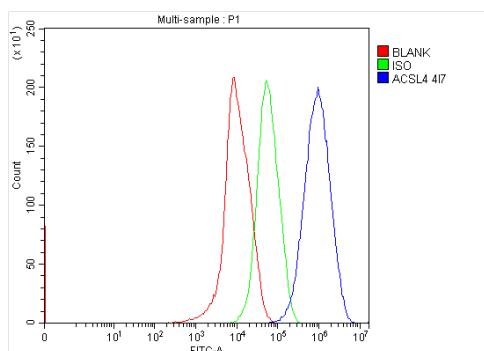
IHC analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (M04372).

ACSL4/FACL4 was detected in a paraffin-embedded section of human Bladder epithelial carcinoma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-ACSL4/FACL4 Antibody (M04372) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (M04372).

ACSL4/FACL4 was detected in an immunocytochemical section of SiHa cells. The section was incubated with mouse anti-ACSL4/FACL4 Antibody (M04372) at a dilution of 1:100. Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HepG2 cells using anti-ACSL4/FACL4 antibody (M04372).

Overlay histogram showing HepG2 cells stained with M04372 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-ACSL4/FACL4 Antibody (M04372) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.