

Basic Information

Product Name	Anti-ACSL4/FACL4 Antibody	
Gene Name	ACSL4	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
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 at the C-terminus of human FACL4/ACSL4.	
Concentration	500 ug/ml	
Purification	Immunogen affinity 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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

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被引用在8文献中。

Selected Validation Data

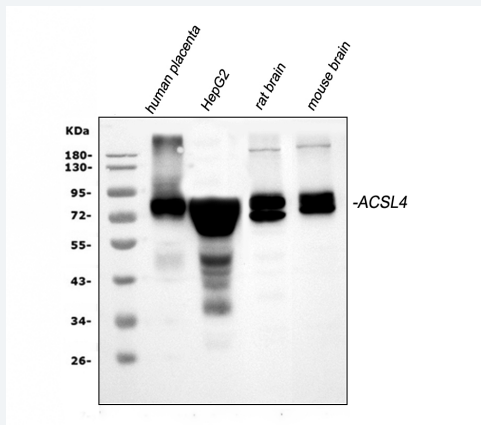


Figure 1. Western blot analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (A04372-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,
Lane 2: human HepG2 whole cell lysates,
Lane 3: rat brain tissue lysates,
Lane 4: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ACSL4/FACL4 antigen affinity purified polyclonal antibody (A04372-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). 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.

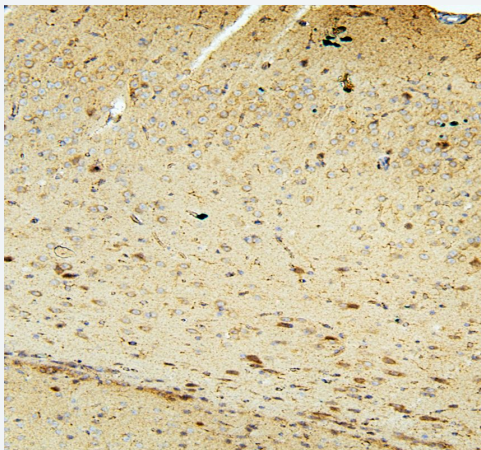


Figure 2. IHC analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (A04372-2) .

ACSL4/FACL4 was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-ACSL4/FACL4 Antibody (A04372-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

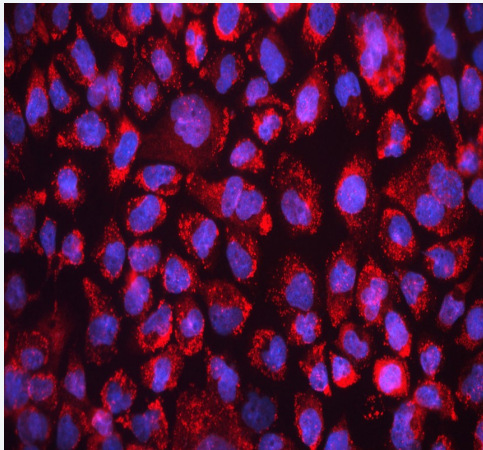


Figure 4. IF analysis of ACSL4/FACL4 using anti-ACSL4/FACL4 antibody (A04372-2).

ACSL4/FACL4 was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-ACSL4/FACL4 Antibody (A04372-2) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

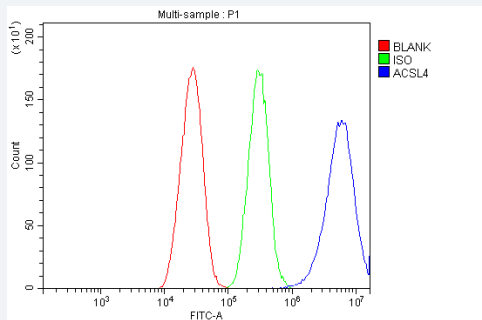


Figure 5. Flow Cytometry analysis of HepG2 cells using anti-ACSL4/FACL4 antibody (A04372-2).

Overlay histogram showing HepG2 cells stained with A04372-2 (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 rabbit anti-ACSL4/FACL4 Antibody (A04372-2, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.