

Basic Information

Product Name	Anti-Acetyl CoA synthetase/ACSS2 Antibody	
Gene Name	ACSS2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human ACSS2 recombinant protein (Position: E201-A651).	
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 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (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.	

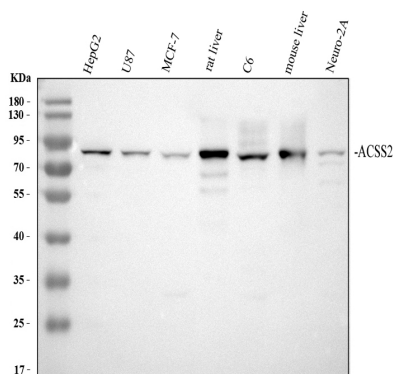
Storage

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

Background Information

Acyl-coenzyme A synthetase short-chain family member 2 is an enzyme that in humans is encoded by the ACSS2 gene. This gene encodes a cytosolic enzyme that catalyzes the activation of acetate for use in lipid synthesis and energy generation. The protein acts as a monomer and produces acetyl-CoA from acetate in a reaction that requires ATP. Expression of this gene is regulated by sterol regulatory element-binding proteins, transcription factors that activate genes required for the synthesis of cholesterol and unsaturated fatty acids. Alternative splicing results in multiple transcript variants.

Selected Validation Data



Western blot analysis of Acetyl CoA synthetase/ACSS2 using anti-Acetyl CoA synthetase/ACSS2 antibody (A02809-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human U87 whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: rat liver tissue lysates,

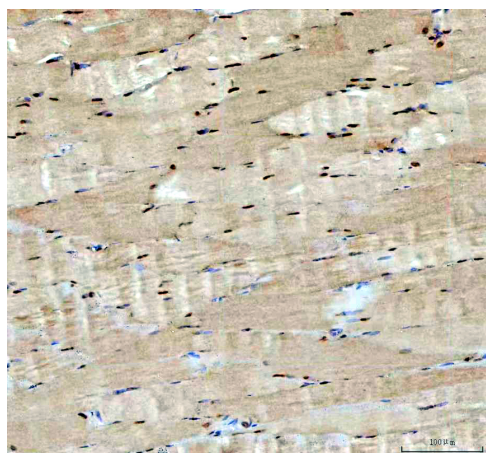
Lane 5: rat C6 whole cell lysates,

Lane 6: mouse liver tissue lysates,

Lane 7: mouse Neuro-2a whole cell lysates.

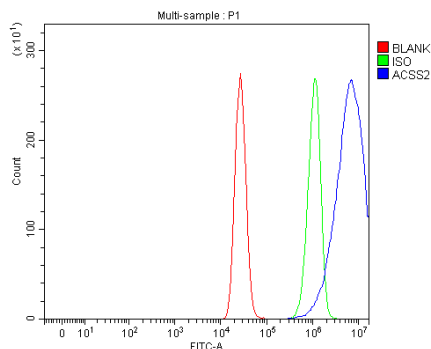
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Acetyl CoA synthetase/ACSS2 antiG03957-Aen affinity purified polyclonal antibody (A02809-1) 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 Acetyl CoA synthetase/ACSS2 at approximately 79 kDa. The expected band size for Acetyl CoA synthetase/ACSS2 is at 79 kDa.



IHC analysis of Acetyl CoA synthetase/ACSS2 using anti-Acetyl CoA synthetase/ACSS2 antibody (A02809-1).

Acetyl CoA synthetase/ACSS2 was detected in a paraffin-embedded section of human skeletal muscle tissue. The tissue section was incubated with rabbit anti-Acetyl CoA synthetase/ACSS2 Antibody (A02809-1) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of MCF-7 cells using anti-Acetyl CoA synthetase/ACSS2 antibody (A02809-1).

Overlay histogram showing MCF-7 cells stained with A02809-1 (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-Acetyl CoA synthetase/ACSS2 Antibody (A02809-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.