

Basic Information

Product Name	Anti-ACADS Antibody	
Gene Name	ACADS	
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 ACADS/SCAD, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	44 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.	

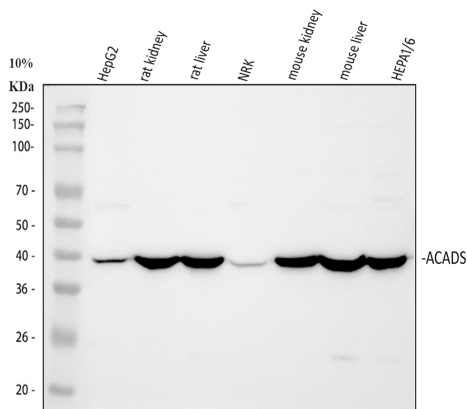
Storage

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

Background Information

Acyl-CoA dehydrogenase, C-2 to C-3 short chain is an enzyme that in humans is encoded by the ACADS gene. This gene encodes a tetrameric mitochondrial flavoprotein, which is a member of the acyl-CoA dehydrogenase family. This enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Mutations in this gene have been associated with short-chain acyl-CoA dehydrogenase (SCAD) deficiency. Alternative splicing results in two variants which encode different isoforms.

Selected Validation Data



Western blot analysis of ACADS using anti-ACADS antibody (A05028-1).

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: rat kidney tissue lysates,

Lane 3: rat liver tissue lysates,

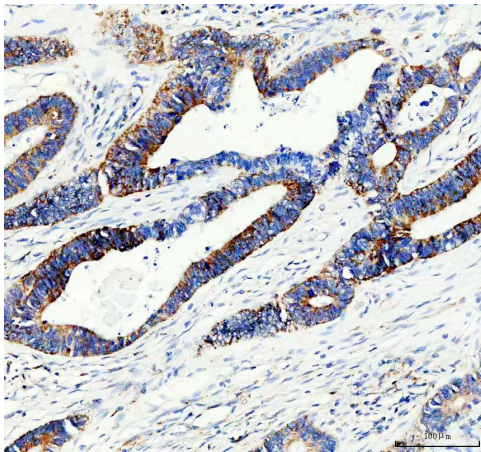
Lane 4: rat NRK whole cell lysates,

Lane 5: mouse kidney tissue lysates,

Lane 6: mouse liver tissue lysates,

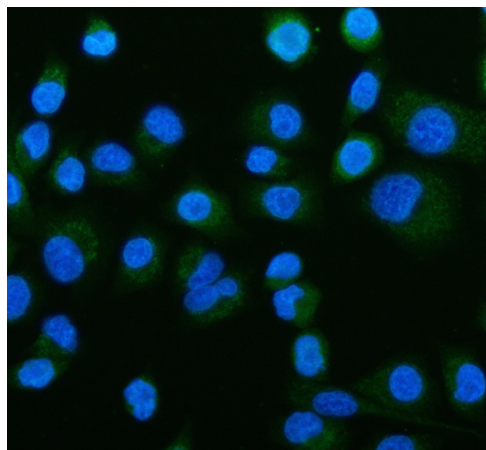
Lane 7: mouse Hepa1/6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ACADS antigen affinity purified polyclonal antibody (A05028-1) 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 ACADS at approximately 44 kDa. The expected band size for ACADS is at 44 kDa.



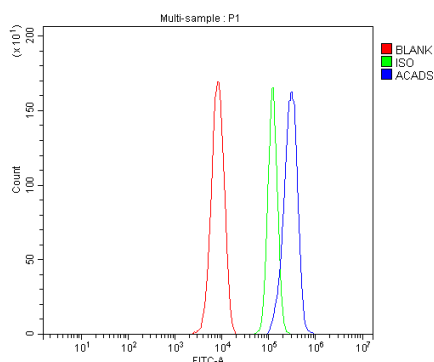
IHC analysis of ACADS using anti-ACADS antibody (A05028-1) .

ACADS was detected in a paraffin-embedded section of human colon cancer tissue. The tissue section was incubated with rabbit anti-ACADS Antibody (A05028-1) 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.



IF analysis of ACADS using anti-ACADS antibody (A05028-1).

ACADS was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-ACADS Antibody (A05028-1) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HepG2 cells using anti-ACADS antibody (A05028-1).

Overlay histogram showing HepG2 cells stained with A05028-1 (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-ACADS Antibody (A05028-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.