

Basic Information

Product Name	Anti-ACADM Antibody	
Gene Name	ACADM	
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 in the middle region of human ACADM/MCAD.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	47 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.	

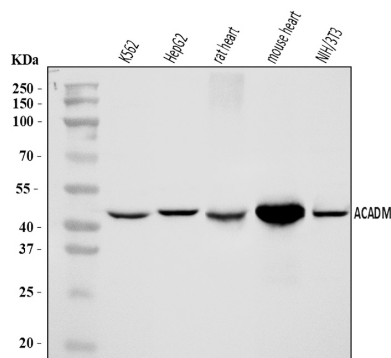
Storage

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

Background Information

ACADM (acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain) is a gene that provides instructions for making an enzyme called acyl-coenzyme A dehydrogenase that is important for breaking down (degrading) a certain group of fats called medium-chain fatty acids. This gene encodes the medium-chain specific (C4 to C12 straight chain) acyl-Coenzyme A dehydrogenase. The homotetramer enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Defects in this gene cause medium-chain acyl-CoA dehydrogenase deficiency, a disease characterized by hepatic dysfunction, fasting hypoglycemia, and encephalopathy, which can result in infantile death. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Selected Validation Data



Western blot analysis of ACADM using anti-ACADM antibody (A02383-2).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: K562 whole cell lysates,

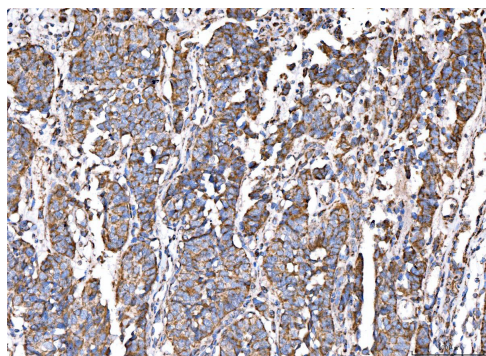
Lane 2: HepG2 whole cell lysates,

Lane 3: rat heart tissue lysates,

Lane 4: mouse heart tissue lysates,

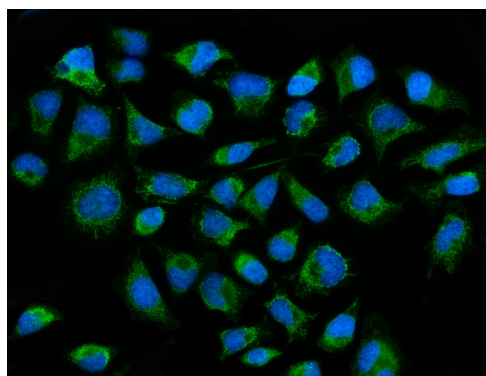
Lane 5: NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ACADM antigen affinity purified polyclonal antibody (A02383-2) 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 ACADM at approximately 47 kDa. The expected band size for ACADM is at 47 kDa.



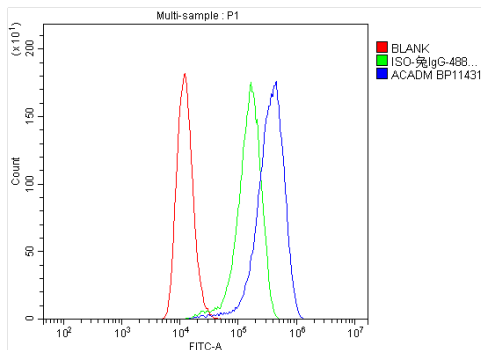
IHC analysis of ACADM using anti-ACADM antibody (A02383-2).

ACADM was detected in a paraffin-embedded section of human Bladder epithelial carcinoma tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ACADM Antibody (A02383-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of ACADM using anti-ACADM antibody (A02383-2).

ACADM was detected in an immunocytochemical section of Hela cells. The section was incubated with rabbit anti-ACADM Antibody (A02383-2) 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 Hela cells using anti-ACADM antibody (A02383-2).

Overlay histogram showing Hela cells stained with A02383-2 (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-ACADM Antibody (A02383-2) 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.