

## 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% NaN3, 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

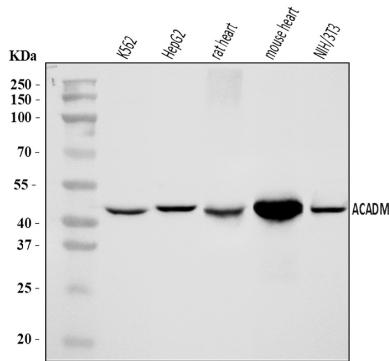
12 months from date of receipt, -20°C as supplied.

## 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.

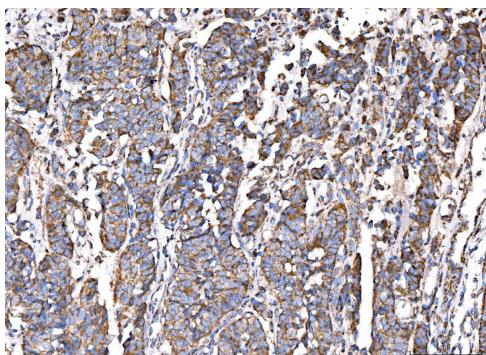
## Selected Validation Data



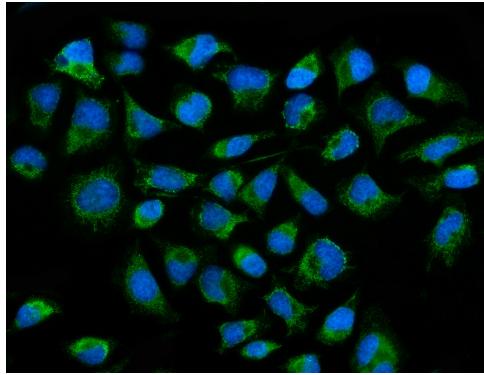
Western blot analysis of ACADM using anti-ACADM antibody (A02383-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

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.

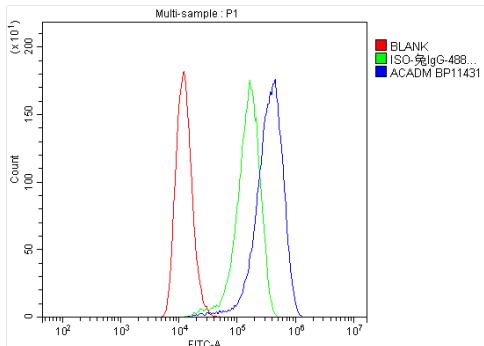


IHC analysis of ACADM using anti-ACADM antibody (A02383-2). ACADM was detected in a paraffin-embedded section of human Bladder epithelial carcinoma tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ACADM Antibody (A02383-2) at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



ICC/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. Fluoro488 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. 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.