

## Basic Information

<b>Product Name</b>	Anti-ACAA2 Antibody (Clone#26A90)		
<b>Gene Name</b>	ACAA2		
<b>Source</b>	Rabbit		
<b>Clonality</b>	Monoclonal		
<b>Isotype</b>	IgG		
<b>Species Reactivity</b>	human, mouse, rat		
<b>Tested Application</b>	WB, IHC, ICC/IF		
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.		
<b>Immunogen</b>	A synthesized peptide derived from human ACAA2		
<b>Concentration</b>	500 ug/ml		
<b>Purification</b>	Affinity-chromatography		
<b>Observed MW</b>	42 kDa		
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000	
	Immunohistochemistry (IHC):	1:50-200	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200	

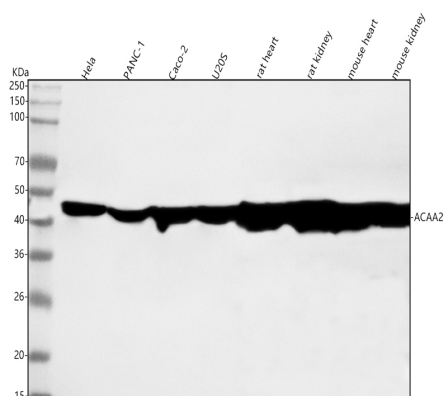
## Storage

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

## Background Information

3-Ketoacyl-CoA thiolase, mitochondrial, also known as acetyl-Coenzyme A acyltransferase 2, is an acetyl-CoA C-acyltransferase enzyme that in humans is encoded by the ACAA2 gene. The ACAA2 gene encodes a 41.9 kDa protein that is composed of 397 amino acids and contains 88 observed peptides. The encoded protein catalyzes the last step of the mitochondrial fatty acid beta oxidation spiral. Unlike most mitochondrial matrix proteins, it contains a non-cleavable amino-terminal targeting signal. Additionally, ACAA2 has been shown to be a functional BNIP3 binding partner, which provides a possible link between fatty acid metabolism and cell apoptosis.

## Selected Validation Data



Western blot analysis of anti-ACAA2 antibody (M08341-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human PANC-1 whole cell lysates,

Lane 3: human Caco-2 whole cell lysates,

Lane 4: human U2OS whole cell lysates,

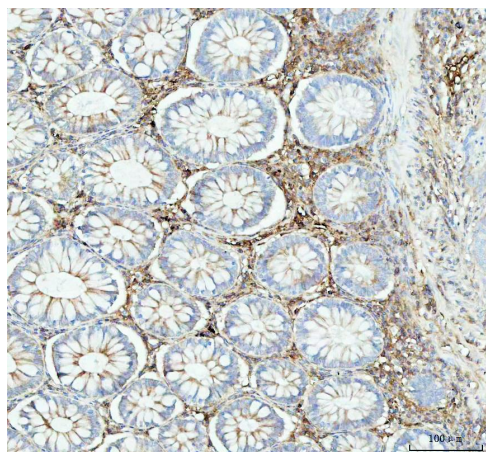
Lane 5: rat heart tissue lysates,

Lane 6: rat kidney tissue lysates,

Lane 7: mouse heart tissue lysates,

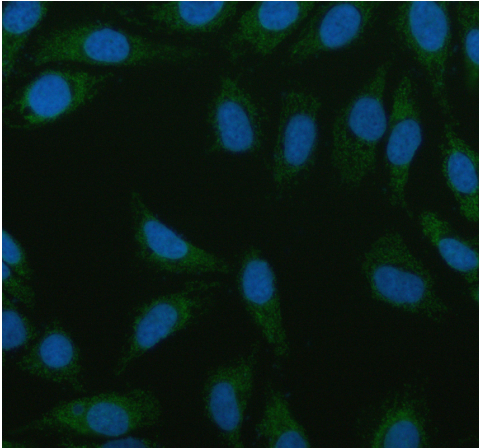
Lane 8: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ACAA2 antigen affinity purified monoclonal antibody (M08341-1) 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 ACAA2 at approximately 42 kDa. The expected band size for ACAA2 is at 42 kDa.



IHC analysis of ACAA2 using anti-ACAA2 antibody (M08341-1) .

ACAA2 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. The tissue section was incubated with rabbit anti-ACAA2 Antibody (M08341-1) 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 ACAA2 using anti-ACAA2 antibody (M08341-1).

ACAA2 was detected in an immunocytochemical section of Hela cells. The section was incubated with rabbit anti-ACAA2 Antibody (M08341-1) 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).