

For Research Use Only

# ACAT1 Polyclonal antibody

Catalog Number: 16215-1-AP

Featured Product

36 Publications



## Basic Information

### Catalog Number:

16215-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9215

### GenBank Accession Number:

BC010942

### GeneID (NCBI):

38

### UNIPROT ID:

P24752

### Full Name:

acetyl-Coenzyme A acetyltransferase 1

### Calculated MW:

45 kDa

### Observed MW:

38-45 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat, rabbit

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : mouse heart tissue, Caco-2 cells, human skeletal muscle tissue, MCF-7 cells, rat skeletal muscle tissue, mouse colon tissue

IP : mouse heart tissue,

IHC : human colon, human liver tissue

IF/ICC : HeLa cells,

## Background Information

ACAT1 (acetyl-CoA acetyltransferase), is a mitochondrial enzyme catalyzing the reversible formation or breakdown of acetoacetyl-CoA and plays important roles in ketogenesis and ketolysis. Deficiency of ACAT1 causes an inherited metabolic disorder. Recently ACAT1 has been reported to get involved in cancer progression.

## Notable Publications

Author	Pubmed ID	Journal	Application
De Huang	27644987	Cell Res	WB
Tim Düking	36112685	Sci Adv	WB
Jingqian Guan	33103371	J Cell Mol Med	WB,IF,CoIP

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

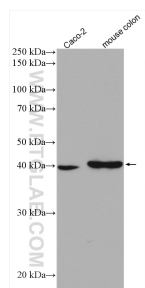
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

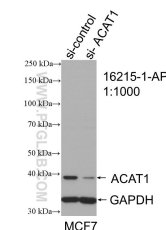
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

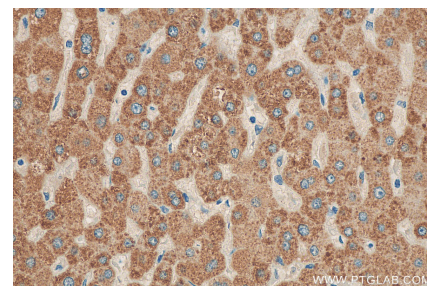
## Selected Validation Data



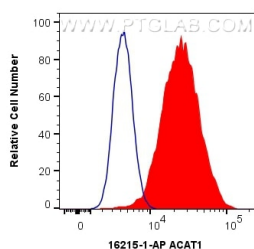
Various lysates were subjected to SDS PAGE followed by western blot with 16215-1-AP (ACAT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



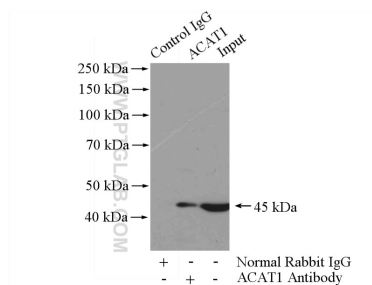
WB result of ACAT1 antibody (16215-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACAT1 transfected MCF-7 cells.



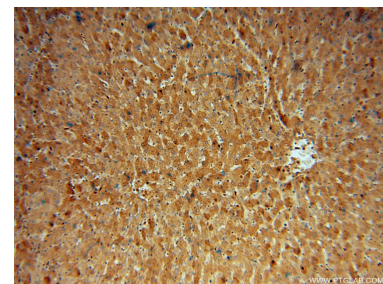
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 16215-1-AP (ACAT1 antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



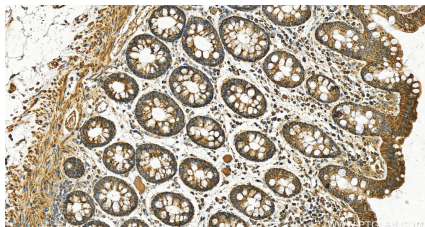
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human ACAT1 (16215-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



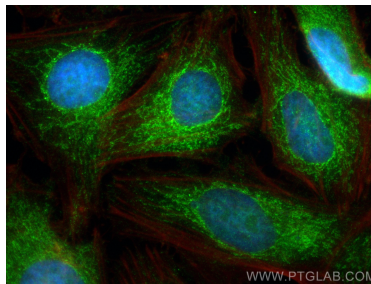
IP result of anti-ACAT1 (IP: 16215-1-AP, 4ug; Detection: 16215-1-AP 1:500) with mouse heart tissue lysate 4400ug.



Immunohistochemical analysis of paraffin-embedded human liver using 16215-1-AP (ACAT1 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon slide using 16215-1-AP (ACAT1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using ACAT1 antibody (16215-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-Phalloidin (red).