

For Research Use Only

ACAT1 Polyclonal antibody

Catalog Number: 16215-1-AP

Featured Product

37 Publications



Basic Information

Catalog Number:

16215-1-AP

Concentration:

600 ug/ml

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: 1:200-1:800

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

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,

FC (Intra) : 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
Shanshan Zhong	30375985	J Clin Invest	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

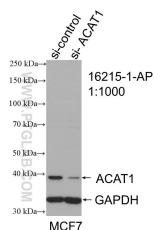
T: 4006900926

E: Proteintech-CN@ptglab.com

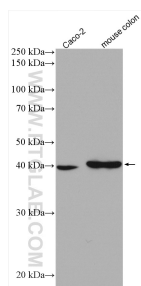
W: ptgcn.com

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

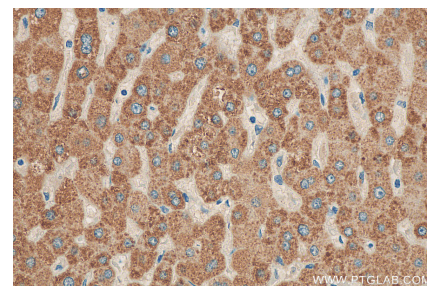
Selected Validation Data



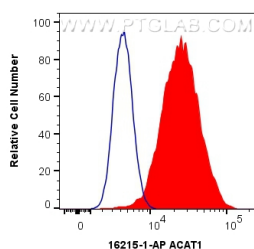
WB result of ACAT1 antibody (16215-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACAT1 transfected MCF-7 cells.



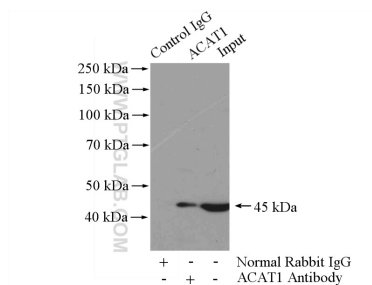
Various lysates were subjected to SDS PAGE followed by western blot with 16215-1-AP (ACAT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



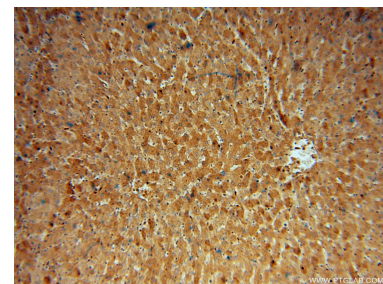
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 16215-1-AP (ACAT1 antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



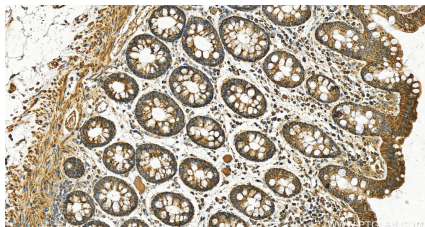
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human ACAT1 (16215-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



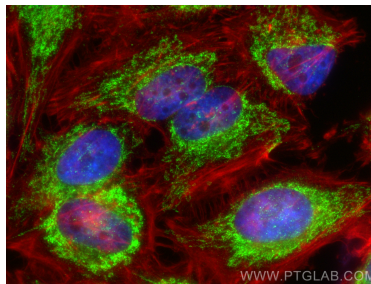
IP result of anti-ACAT1 (IP:16215-1-AP, 4ug; Detection:16215-1-AP 1:500) with mouse heart tissue lysate 4400ug.



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 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).