

For Research Use Only

# ACC1 Polyclonal antibody

Catalog Number: 21923-1-AP

Featured Product

64 Publications



## Basic Information

### Catalog Number:

21923-1-AP

### Size:

150ul, Concentration: 800 µg/ml by Nanodrop and 527 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG16452

### GenBank Accession Number:

BC137287

### GeneID (NCBI):

31

### Full Name:

acetyl-Coenzyme A carboxylase alpha

### Calculated MW:

2383 aa, 275 kDa

### Observed MW:

260-270 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

IHC 1:50-1:500

IF 1:50-1:500

## Applications

### Tested Applications:

FC, IF, IHC, IP, WB, ELISA

### Cited Applications:

IF, IHC, WB

### Species Specificity:

human, rat, mouse

### Cited Species:

bovine, human, pig, rat

**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 : HEK-293 cells, HeLa cells, PC-3 cells, HepG2 cells

IP : HeLa cells,

IHC : mouse skeletal muscle tissue, human kidney tissue, human skeletal muscle tissue

IF : HeLa cells,

## Background Information

ACACA (Acetyl-CoA carboxylase 1, ACC), also named as ACAC, ACC1 and ACCA, belongs to the biotin containing enzyme family. It catalyzes the synthesis of malonyl-CoA, which is an intermediate substrate playing a pivotal role in the regulation of fatty acid metabolism and energy production. ACACA is involved in the biosynthesis of fatty acids, and malonyl-CoA produced is used as a building block to extend the chain length of fatty acids by fatty acid synthase (FAS) (PMID:19900410). It has 4 isoforms produced by alternative promoter usage with the molecular weight between 260 kDa and 270 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Lihua Luo	34593005	J Nanobiotechnology	WB
Shifeng Pan	29152131	Oncotarget	WB
Zhongwen Feng	33182043	Int Immunopharmacol	WB

## 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

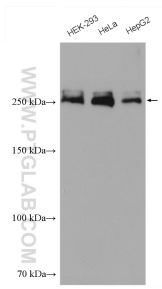
For technical support and original validation data for this product please contact:

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

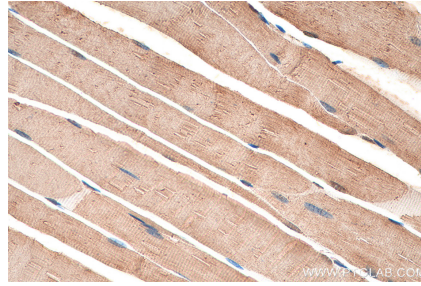
E: proteintech@ptglab.com  
W: ptglab.com

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

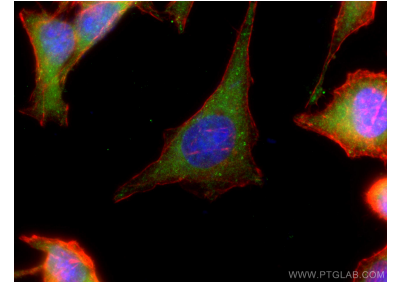
## Selected Validation Data



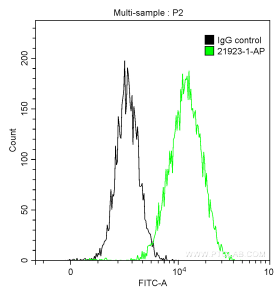
Various lysates were subjected to SDS PAGE followed by western blot with 21923-1-AP (ACC1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



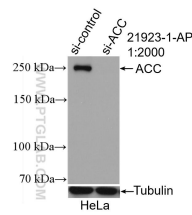
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 21923-1-AP (ACC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



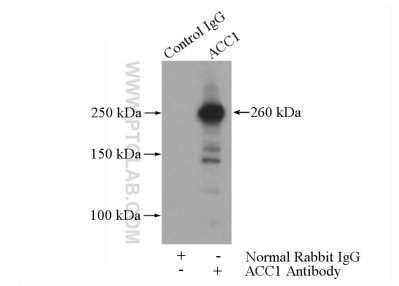
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ACC1 antibody (21923-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.2 ug Anti-Human ACC1 (21923-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.



WB result of ACC1 antibody (21923-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACC1 transfected HeLa cells.



IP Result of anti-ACC1 (IP:21923-1-AP, 5ug; Detection:21923-1-AP 1:500) with HeLa cells lysate 2800ug.