

ACC1 Polyclonal antibody

Catalog Number: 21923-1-AP

Featured Product

119 Publications

Basic Information

Catalog Number:

21923-1-AP

Size:

150ul, Concentration: 800 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG16452

GenBank Accession Number:

BC137287

GeneID (NCBI):

31

UNIPROT ID:

Q13085

Full Name:

acetyl-Coenzyme A carboxylase alpha

Calculated MW:

2383 aa, 275 kDa

Observed MW:

250 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:8000

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

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, IP, RIP, WB

Species Specificity:

human, rat, mouse

Cited Species:

human, chicken, rat, mouse, pig, bovine

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, mouse brain tissue, HepG2 cells

IP: HepG2 cells,

IHC: mouse 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

*** 20ul sizes contain 0.1% BSA

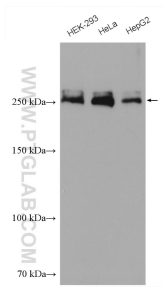
For technical support and original validation data for this product please contact:

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

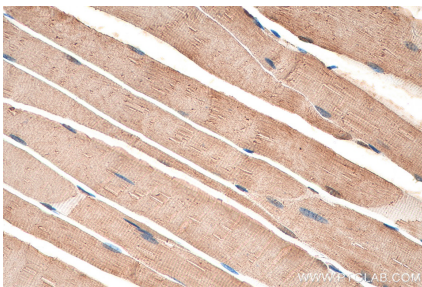
E: proteintech@ptglab.com
W: ptglab.com

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

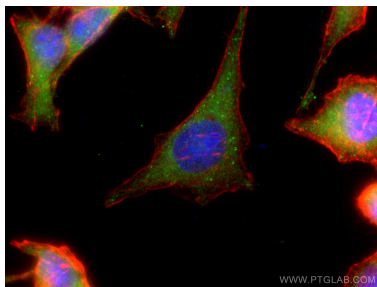
Selected Validation Data



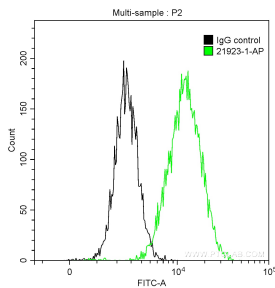
Various lysates were subjected to SDS PAGE followed by western blot with 21923-1-AP (ACC1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



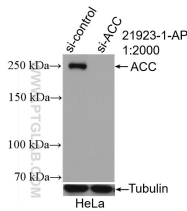
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 21923-1-AP (ACC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



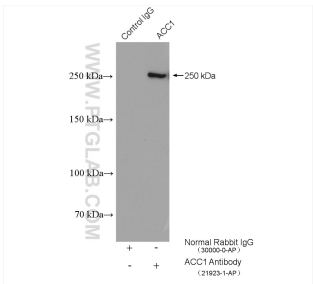
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ACC1 antibody (21923-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10⁶ 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, 4ug; Detection:21923-1-AP 1:2000) with HepG2 cells lysate 1800 ug.