

For Research Use Only

ACC1 Polyclonal antibody

Catalog Number: 21923-1-AP

Featured Product

187 Publications



Basic Information

Catalog Number:

21923-1-AP

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: 1:1000-1:20000

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, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, RIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, chicken, 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: HeLa cells, HEK-293 cells, HepG2 cells, mouse
brain tissue, rat brain tissue

IP: HepG2 cells,

IHC: mouse skeletal muscle tissue, mouse brain tissue

IF/ICC: 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

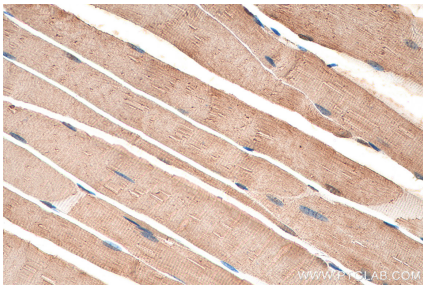
T: 4006900926

E: Proteintech-CN@ptglab.com

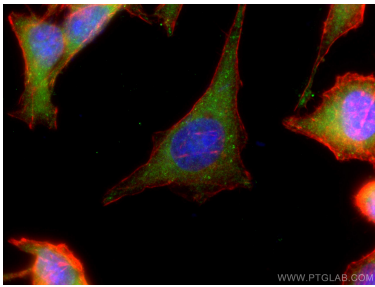
W: ptgcn.com

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

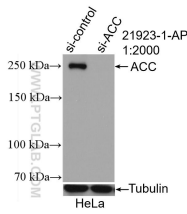
Selected Validation Data



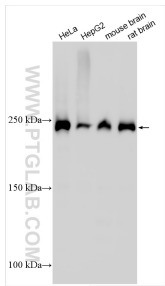
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 21923-1-AP (ACC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



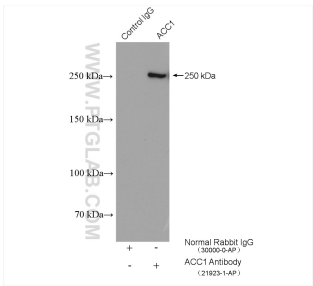
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ACC1 antibody (21923-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



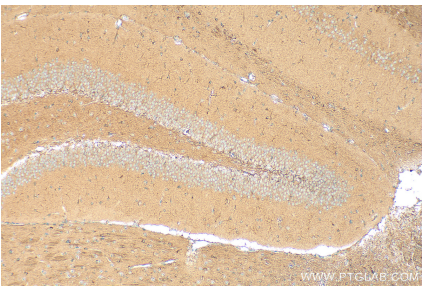
WB result of ACC1 antibody (21923-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACC1 transfected HeLa cells.



Various lysates were subjected to SDS PAGE followed by western blot with 21923-1-AP (ACC1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



IP result of anti-ACC1 (IP:21923-1-AP, 4ug; Detection:21923-1-AP 1:2000) with HepG2 cells lysate 1800 ug.



Immunohistochemical analysis of paraffin-embedded mouse brain 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).