

For Research Use Only

# ACC1 Monoclonal antibody

Catalog Number: 67373-1-Ig

Featured Product

37 Publications



## Basic Information

Catalog Number:

67373-1-Ig

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG17503

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:

250-270 kDa

Purification Method:

Protein A purification

CloneNo.:

1A11G10

Recommended Dilutions:

WB: 1:10000-1:50000

IHC: 1:500-1:2000

IF/ICC: 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, monkey, hamster, goat

**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, NIH/3T3 cells, HEK-293 cells, HepG2  
cells, Jurkat cells, HSC-T6 cells

IHC: human breast cancer 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 |
|--------------|-----------|-----------------------|-------------|
| Zhao Yang    | 36120828  | J Biochem Mol Toxicol | WB          |
| Mengqiu Yuan | 34472622  | EMBO J                | WB          |
| Yujie Zhong  | 36501024  | Nutrients             | 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:

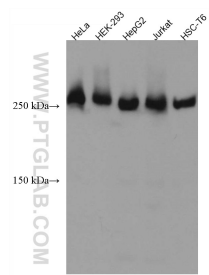
T: 4006900926

E: Proteintech-CN@ptglab.com

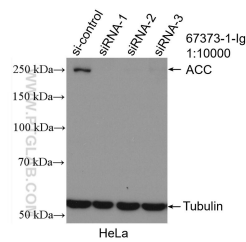
W: ptgcn.com

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

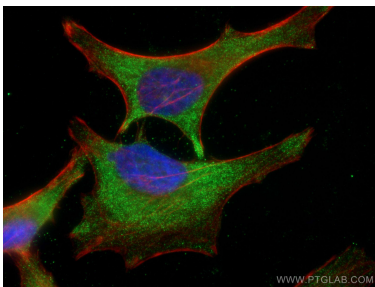
Selected Validation Data



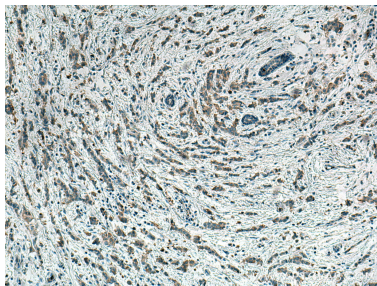
Various lysates were subjected to SDS PAGE followed by western blot with 67373-1-Ig (ACC1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



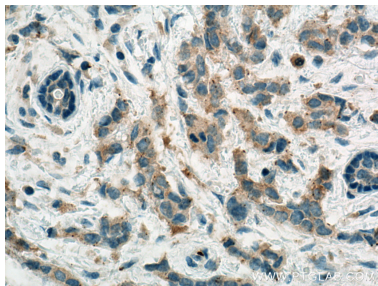
WB result of ACC1 antibody (67373-1-Ig; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACC1 transfected HeLa cells.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ACC1 antibody (67373-1-Ig, Clone: 1A11G10 ) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67373-1-Ig (ACC1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67373-1-Ig (ACC1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).