

For Research Use Only

# ACC1 Monoclonal antibody

Catalog Number: 67373-1-Ig

Featured Product

25 Publications



## Basic Information

<b>Catalog Number:</b> 67373-1-Ig	<b>GenBank Accession Number:</b> BC137287	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 2100 µg/ml by 31 Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 31	<b>CloneNo.:</b> 1A11G10
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q13085	<b>Recommended Dilutions:</b> WB 1:10000-1:50000 IHC 1:500-1:2000 IF 1:400-1:1600
<b>Isotype:</b> IgG2a	<b>Full Name:</b> acetyl-Coenzyme A carboxylase alpha	
<b>Immunogen Catalog Number:</b> AG17503	<b>Calculated MW:</b> 2383 aa, 275 kDa	
	<b>Observed MW:</b> 250-270 kDa	

## Applications

### Tested Applications:

WB, IF, IHC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

Human, Mouse, Rat

### Cited Species:

human, rat, mouse, monkey

**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: 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

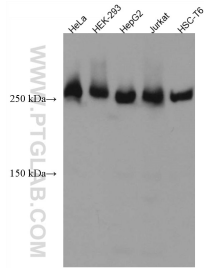
For technical support and original validation data for this product please contact:

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

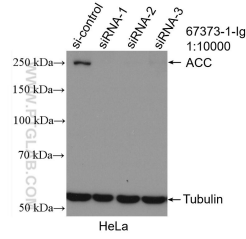
E: proteintech@ptglab.com  
W: ptglab.com

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

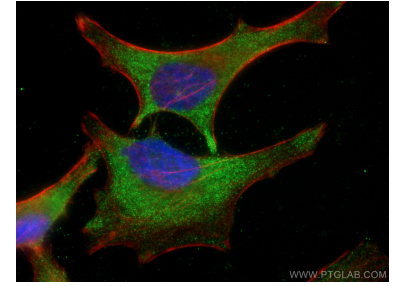
## Selected Validation Data



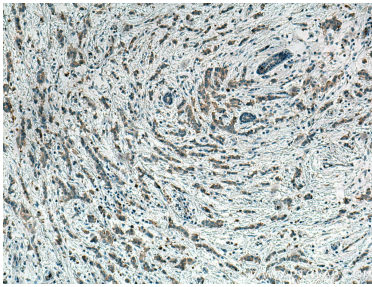
Various lysates were subjected to SDS PAGE followed by western blot with 67373-1-Ig (ACC1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



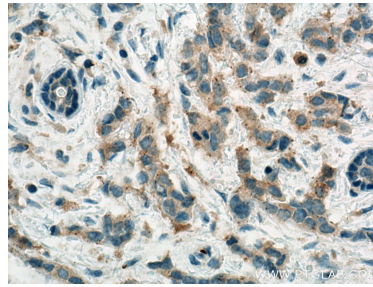
WB result of ACC1 antibody (67373-1-Ig; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACC1 transfected HeLa cells.



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).