

For Research Use Only

Phospho-ACC1 (Ser79) Polyclonal antibody

Catalog Number: 29119-1-AP

20 Publications



Basic Information

Catalog Number:

29119-1-AP

Size:

100ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

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 1:500-1:2000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB, IHC

Species Specificity:

Human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB : λ phosphatase treated SH-SY5Y cells, λ phosphatase treated NIH/3T3 cells

Background Information

ACC1 represents a key enzyme, as it is highly regulated by phosphorylation and allosteric regulation, providing a rapid adaptation to new micro-environmental conditions. AMPK phosphorylates acetyl CoA carboxylase (ACC), a rate-controlling step in the conversion of acetyl-CoA to malonyl CoA. This phosphorylation inhibits the activity of ACC, which results in decreased malonyl CoA levels. Additionally, two isoforms of ACC encoded by two different genes in mammalian cells have been described, ACC1 and ACC2. ACC1 is highly enriched in lipogenic tissues (liver and adipose), while ACC2 is mainly expressed in oxidative tissues (heart, skeletal muscle and liver). (PMID: 29056512, PMID: 16054041, PMID: 30816537)

Notable Publications

Author	Pubmed ID	Journal	Application
Yujie Zhong	36501024	Nutrients	WB
Menglong Wang	35647084	Front Cardiovasc Med	WB
Xiaoting Wang	35544345	J Nat Prod	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

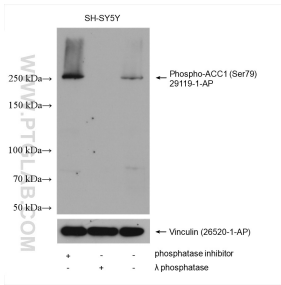
For technical support and original validation data for this product please contact:

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

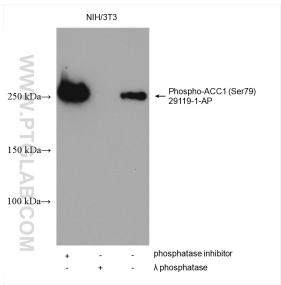
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Selected Validation Data



Non-treated SH-SY5Y, phosphatase inhibitor treated and λ phosphatase treated SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 29119-1-AP (Phospho-ACC1 (Ser79) antibody) at dilution of 1:1000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with Vinculin antibody as loading control.



Non-treated NIH/3T3, phosphatase inhibitor treated and λ phosphatase treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 29119-1-AP (Phospho-ACC1 (Ser79) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.