

For Research Use Only



# CoraLite® Plus 647-conjugated Phospho-ACC1 (Ser79) Recombinant monoclonal antibody

Catalog Number:CL647-80281-2

## Basic Information

Catalog Number:

CL647-80281-2

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:

250-270 kDa

Purification Method:

Protein A purification

CloneNo.:

240235G11

Recommended Dilutions:

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a  
100 µl suspension

Excitation/Emission maxima  
wavelengths:

654 nm / 674 nm

## Applications

Tested Applications:

FC (Intra)

Species Specificity:

human, mouse

Positive Controls:

FC (Intra) : 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)

## Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

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

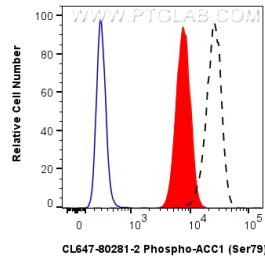
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



1X10<sup>6</sup> NIH/3T3 cells untreated (dashed lines) or treated with  $\lambda$  phosphatase which intracellularly stained with 0.25  $\mu$ g Coralite® Plus 647 Phospho-Acc1 (Ser79) Recombinant Antibody (CL647-80281-2, Clone:240235G11)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with Flow Cytometry Phosphorylated Protein Fixation/Permeabilization Kit (PF00026).