

For Research Use Only

Phospho-ACC1 (Ser79) Recombinant antibody, PBS Only

Catalog Number: 80281-2-PBS



Basic Information

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| Catalog Number: 80281-2-PBS | GenBank Accession Number: BC137287 | Purification Method: Protein A purification |
| Size: 100ug, Concentration: 1 mg/ml by Nanodrop; | GeneID (NCBI): 31 | CloneNo.: 240235G11 |
| Source: Rabbit | UNIPROT ID: Q13085 | |
| Isotype: IgG | Full Name: acetyl-Coenzyme A carboxylase alpha | |
| | Calculated MW: 2383 aa, 275 kDa | |
| | Observed MW: 250-270 kDa | |

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), ELISA

Species Specificity:
human, mouse

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)

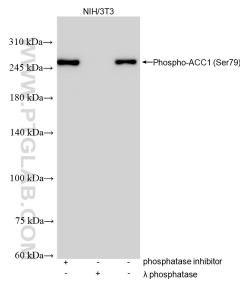
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

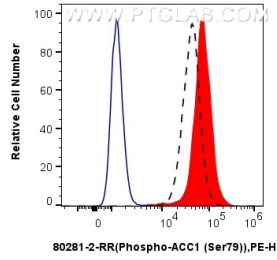
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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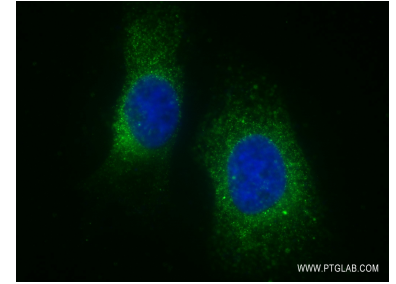
Selected Validation Data



Non-treated NIH/3T3 cells, phosphatase inhibitor treated NIH/3T3 cells and λ phosphatase treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80281-2-RR (Phospho-ACC1 (Ser79) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80281-2-PBS in a different storage buffer formulation.



1×10^6 Calyculin A treated HeLa cells were intracellularly stained with 0.25 ug Phospho-ACC1 (Ser79) Recombinant antibody (80281-2-RR, Clone:240235G11) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 80281-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using Phospho-ACC1 (Ser79) antibody (80281-2-RR, Clone: 240235G11) at dilution of 1:500 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). This data was developed using the same antibody clone with 80281-2-PBS in a different storage buffer formulation.