Anti-Phospho-Acetyl Coenzyme A Carboxylase (S79) Antibody [JE55-54]

HA721516

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 277 kDa
Clone number:	JE55-54

Description: Acetyl-CoA carboxylase (ACC) is a biotin-dependent enzyme (EC 6.4.1.2) that catalyzes the irreversible carboxylation of acetyl-CoA to produce malonyl-CoA through its two catalytic activities, biotin carboxylase (BC) and carboxyltransferase (CT). ACC is a multi-subunit enzyme in most prokaryotes and in the chloroplasts of most plants and algae, whereas it is a large, multi-domain enzyme in the cytoplasm of most eukaryotes. The most important function of ACC is to provide the malonyl-CoA substrate for the biosynthesis of fatty acids. The activity of ACC can be controlled at the transcriptional level as well as by small molecule modulators and covalent modification. The human genome contains the genes for two different ACCs —ACACA and ACACB.

Immunogen: Synthetic phosphopeptide corresponding to residues surrounding Ser79 of human acetyl-CoA carboxylase protein.

Positive control: SH-SY5Y treated with 0.5μM Oligomycin for 30 minutes whole cell lysate.

Subcellular location: Mitochondrion.

Database links: SwissProt: Q13085 Human | Q5SWU9 Mouse | P11497 Rat

Recommended Dilutions:

WB	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

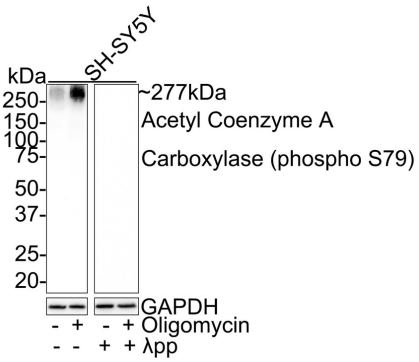

Fig1: Western blot analysis of Phospho-Acetyl Coenzyme A Carboxylase (S79) on different lysates with Rabbit anti-Phospho-Acetyl Coenzyme A Carboxylase (S79) antibody (HA721516) at 1/1,000 dilution.

Lane 1: SH-SY5Y whole cell lysate
Lane 2: SH-SY5Y treated with 0.5μM Oligomycin for 30 minutes whole cell lysate
Lane 3: SH-SY5Y treated with λpp for 1 hour whole cell lysate
Lane 4: SH-SY5Y treated with 0.5μM Oligomycin for 30 minutes then treated with λpp for 1 hour whole cell lysate

Lysates/proteins at 20 μg/Lane.

Predicted band size: 277 kDa
Observed band size: 277 kDa

Exposure time: 1 minute;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721516) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Background References

1. Bates J et al. Acetyl-CoA carboxylase inhibition disrupts metabolic reprogramming during hepatic stellate cell activation. J Hepatol. 2020 Oct
2. Chan GCW et al. Acetyl-coenzyme A carboxylase beta gene polymorphism does not predict cardiovascular risk susceptibility in Chinese type 2 diabetic individuals. Nephrology (Carlton). 2022 May