Product Name: **KD-Validated Phospho-ACC(S79) Recombinant Rabbit Monoclonal Antibody**

Catalog #: **KVAb01654**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 265.6kDa

Antigen Information

Gene Name	ACACA
Alternative Names	ACACA; Acetyl-CoA Carboxylase Alpha; ACC1; ACCA; Acetyl-Coenzyme A; Carboxylase Alpha; Acetyl-CoA Carboxylase 1; ACC-Alpha; HACC1; ACAC; ACACalpha; ACCalpha; Acac1; ACC; EC 6.4.1.2; ACACALPHA; ACC-ALPHA; ACCALPHA 5; ACACAD 3; ACAC1
Gene ID	31.0
SwissProt ID	Q13085
Immunogen	A synthesized peptide derived from human Phospho-ACC(S79)

Background

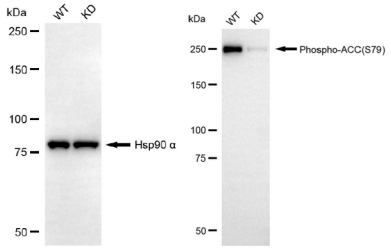
Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes

the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha is highly enriched in lipogenic tissues. The enzyme is under long term control at the transcriptional and translational levels and under short term regulation by the phosphorylation/dephosphorylation of targeted serine residues and by allosteric transformation by citrate or palmitoyl-CoA. Multiple alternatively spliced transcript variants divergent in the 5' sequence and encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

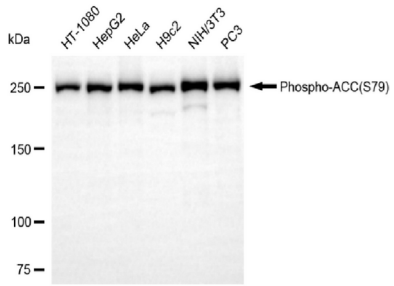
Research Area

Cardiovascular,Signal Transduction,Cancer,Metabolism

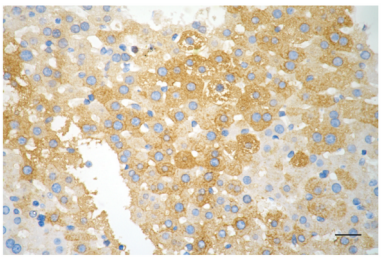
Image Data



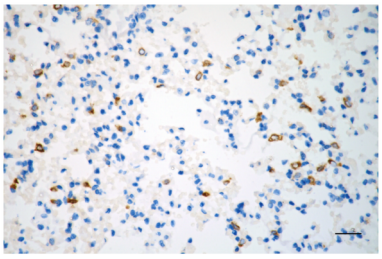
Western blotting analysis using phospho-ACC(S79) antibody (KVAb01654). Phospho-ACC(S79) expression in wild-type (WT) and ACACA knockdown (KD) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with phospho-ACC(S79) antibody (KVAb01654, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



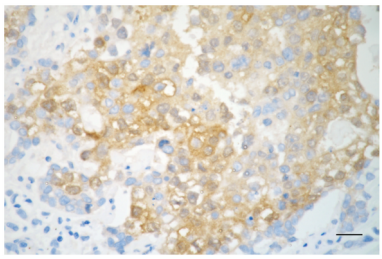
Western blotting analysis using phospho-ACC(S79) antibody (KVAb01654). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-ACC(S79) antibody (KVAb01654, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



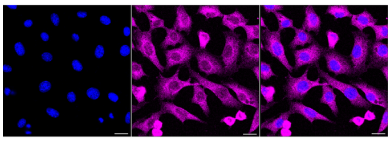
Immunohistochemistry was performed on paraffin-embedded mouse liver using phospho-ACC(S79) antibody (KVAb01654, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded mouse lung using phospho-ACC(S79) antibody (KVAb01654, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using phospho-ACC(S79) antibody (KVAb01654, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



Immunocytochemical staining of C2C12 cells with Phospho-ACC(S79) antibody (KVAb01654, 1:1,000). Nuclei were stained blue with DAPI; Phospho-ACC(S79) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 μm.