Store at -20°C

#4190

Acetyl-CoA Carboxylase 1 Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not For Use In Diagnostic Procedures.

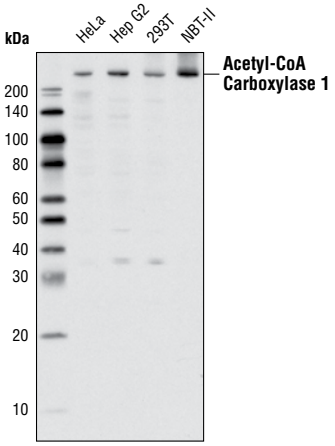
Entrez-Gene ID # 31
UniProt ID #Q13085

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R	265 kDa	Rabbit**

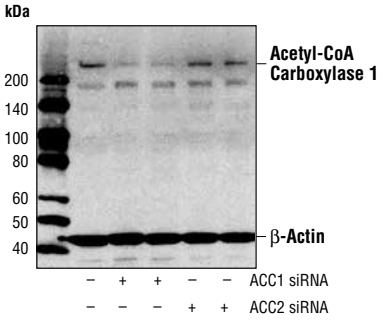
Background: Acetyl-CoA carboxylase (ACC) catalyzes the pivotal step of the fatty acid synthesis pathway. The 265 kDa ACCα (ACC1) is the predominant isoform found in liver, adipocytes and mammary gland, while the 280 kDa ACCβ (ACC2) is the major isoform in skeletal muscle and heart (1). Phosphorylation by AMPK at Ser79 or by PKA at Ser1200 inhibits the enzymatic activity of ACC (2). ACC is a potential target of anti-obesity drugs (3,4).

Specificity/Sensitivity: Acetyl-CoA Carboxylase 1 Antibody detects endogenous levels of total acetyl-CoA carboxylase 1 protein and does not cross-react with acetyl-CoA carboxylase 2. Immunofluorescence data indicate that the antibody is more reactive to rodent than human proteins.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human acetyl-CoA carboxylase 1 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell types using Acetyl-CoA Carboxylase 1 Antibody.



Western blot analysis of extracts from HeLa cells 48 hours after transfection with Signal Silence® ACC1 siRNA or ACC2 siRNA using Acetyl-CoA Carboxylase 1 Antibody and β-Actin (13E5) Rabbit mAb #4970

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

(1) Ruderman, N.B. et al. (1999) *Am. J. Physiol.* 276, E1-E18.

(2) Ha, J. et al. (1994) *J. Biol. Chem.* 269, 22162-22168.

(3) Abu-Elheiga, L. et al. (2001) *Science* 291, 2613-2616.

(4) Levert, K.L. et al. (2002) *J. Biol. Chem.* 277, 16347-16350.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.