#1062 Store at –20°C

Acetyl-CoA Carboxylase Blocking Peptide

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 05/29/17

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

Description: This peptide is used to block Acetyl-CoA Carboxylase Antibody #3662 reactivity by peptide dot blot.

Background: Acetyl-CoA carboxylase (ACC) catalyzes the carboxylation of acetyl-CoA to malonyl-CoA (1). It is the key enzyme in the biosynthesis and oxidation of fatty acids (1). In rodents, the 265 kDa ACC1 (ACCα) form is primarily expressed in lipogenic tissues, while 280 kDa ACC2 (ACCβ) is the main isoform in oxidative tissues (1,2). However, in humans, ACC2 is the predominant isoform in both lipogenic and oxidative tissues (1,2). Phosphorylation by AMPK at Ser79 or by PKA at Ser1200 inhibits the enzymatic activity of ACC (3). ACC is a potential target of anti-obesity drugs (4,5).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Acetyl-CoA Carboxylase Antibody #3662 by peptide dot blot.

Directions for Use: Use as a blocking reagent to evaluate the specificity of antibody reactivity in peptide dot blot protocols.

Entrez Gene ID #31, 32
UniProt ID #Q13085, O00763

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. 1% DMSO Store at –20°C.

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

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

Background References:

(1) Castle, J.C. et al. (2009) *PLoS One* 4, e4369.

(2) Kreuz, S. et al. (2009) *Diabetes Metab Res Rev* 25, 577-86.

(3) Ha, J. et al. (1994) *J Biol Chem* 269, 22162-8.

(4) Abu-Elheiga, L. et al. (2001) *Science* 291, 2613-6.

(5) Levert, K.L. et al. (2002) *J Biol Chem* 277, 16347-50.

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.