

# Phospho-Acetyl-CoA Carboxylase (Ser79) Antibody

- Small 100 µl (10 Western mini-blot)
- Large 300 µl (30 Western mini-blot)

rev. 01/19/10

**Orders** ■ 877-616-CELL (2355)  
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**Support** ■ 877-678-TECH (8324)  
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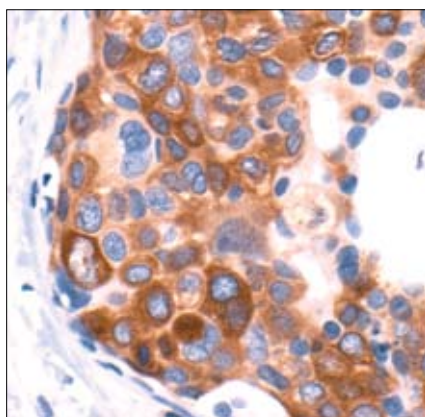
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IHC-P Endogenous	H, M, R, Mk, (C, B)	280 kDa	Rabbit**

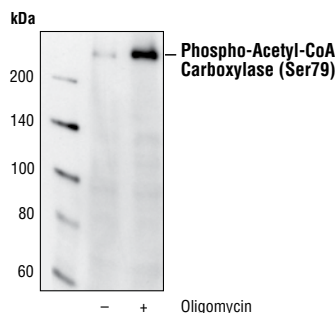
**Background:** Acetyl-CoA carboxylase (ACC) catalyzes the pivotal step of the fatty acid synthesis pathway. The 265 kDa ACC $\alpha$  is the predominant isoform in liver, adipocytes and mammary gland, while the 280 kDa ACC $\beta$  is the major isoform in skeletal muscle and heart (1). Phosphorylation 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:** Phospho-Acetyl-CoA Carboxylase (Ser79) Antibody detects endogenous levels of ACC only when phosphorylated at serine 79. The antibody recognizes both ACC $\alpha$  and ACC $\beta$ .

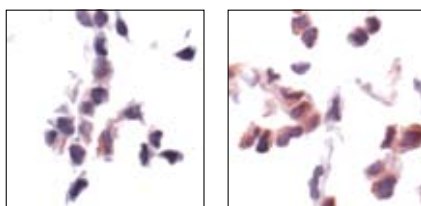
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic phospho-peptide (KLH-coupled) corresponding to residues surrounding Ser79 of rat ACC. Antibodies are purified by protein A and peptide affinity chromatography.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, showing cytoplasmic localization, using Phospho-Acetyl-CoA Carboxylase (Ser79) Antibody.



Western blot analysis of extracts from HEK293 cells, untreated or oligomycin-treated, using Phospho-Acetyl-CoA Carboxylase (Ser79) Antibody.



Immunohistochemical analysis of paraffin-embedded NIH/3T3 cells, untreated (left) or serum-starved (right), using Phospho-Acetyl-CoA Carboxylase (Ser79) Antibody.

Entrez-Gene ID #31  
Swiss-Prot Acc. #Q13085

**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:**

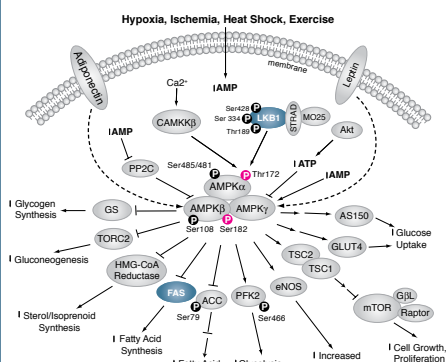
Western blotting	1:1000
Immunoprecipitation	1:100
Immunohistochemistry (Paraffin)	1:400
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**Background References:**

- Ruderman, N.B. et al. (1999) *Am. J. Physiol.* 276, E1-E18.
- Ha, J. et al. (1994) *J. Biol. Chem.* 269, 22162-22168.
- Abu-Elheiga, L. et al. (2001) *Science* 291, 2613-2616.
- Leverit, K.L. et al. (2002) *J. Biol. Chem.* 277, 16347-16350.



**IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% 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.