

#3658 Store at -20C

## AceCS1 (D19C6) Rabbit mAb



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	78	Rabbit IgG	#Q9NR19	55902

### Product Usage Information

#### Application

Western Blotting

Immunoprecipitation

#### Dilution

1:1000

1:50

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

AceCS1 (D19C6) Rabbit mAb detects endogenous levels of total cytoplasmic acetyl-CoA synthetase (AceCS1).

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human cytoplasmic acetyl-CoA synthetase (AceCS1).

### Background

Cytoplasmic acetyl-CoA synthetase (AceCS1) catalyzes the conversion of acetate and CoA to acetyl-CoA (1, 2). Acetyl-CoA synthesized by AceCS1 is used for fatty acid and lipid biosynthesis (1, 2). Studies suggest that this enzyme is regulated by sterol regulatory element-binding proteins (2). It was also shown that this enzyme is acetylated by protein acetyltransferases in cells (3, 4). SIRT1 deacetylates this enzyme at Lys661 resulting in its activation and the increase of fatty acid synthesis (3, 4).

### Background References

- Ikeda, Y. et al. (2001) *J Biol Chem* 276, 34259-69.
- Luong, A. et al. (2000) *J Biol Chem* 275, 26458-66.
- Hallows, W.C. et al. (2006) *Proc Natl Acad Sci U S A* 103, 10230-5.
- Schwer, B. and Verdin, E. (2008) *Cell Metab* 7, 104-12.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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