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#8578

Acetyl-CoA Carboxylase 2 (D5B9) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 280	Source/Isotype: Rabbit IgG	UniProt ID: #O00763	Entrez-Gene Id: 32
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Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	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	Acetyl-CoA Carboxylase 2 (D5B9) Rabbit mAb recognizes endogenous levels of total acetyl-CoA carboxylase 2 protein and does not cross-react acetyl-CoA carboxylase 1.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val1400 of human acetyl-CoA carboxylase 2 protein.	
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 (ACC α) form is primarily expressed in lipogenic tissues, while 280 kDa ACC2 (ACC β) 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).	
Background References	<ol style="list-style-type: none"> 1. Castle, J.C. et al. (2009) <i>PLoS One</i> 4, e4369. 2. Kreuz, S. et al. (2009) <i>Diabetes Metab Res Rev</i> 25, 577-86. 3. Ha, J. et al. (1994) <i>J Biol Chem</i> 269, 22162-8. 4. Abu-Elheiga, L. et al. (2001) <i>Science</i> 291, 2613-6. 5. Levert, K.L. et al. (2002) <i>J Biol Chem</i> 277, 16347-50. 	
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	W: Western Blotting IP: Immunoprecipitation	
Cross-Reactivity Key	H: Human	
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