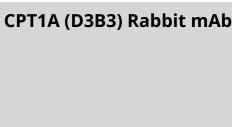
Store at -20C

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Applications: W, W-S, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 88	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P50416	Entrez-Gene Id: 1374
Product Usage Information	2	<b>Application</b> Western Blotting Simple Western™ Immunoprecipitation			<b>Dilution</b> 1:1000 1:10 - 1:50 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		CPT1A (D3B3) Rabbit mAb recognizes endogenous levels of total CPT1A protein. CPT1A (D3B3) Rabbit mAb recognizes endogenous levels of total CPT1A protein. This antibody does not cross-react with CPT1B, CPT1C, or CPT2.				
Source / Purification		Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu213 of human CPT1A protein.				
Background		Carnitine palmitoyltransferase-1 (CPT1), localized to the mitochondrial outer membrane, translocates fatty acids across the mitochondrial membranes and catalyzes the rate-limiting step of $\beta$ -oxidation (1,2). There are three isoforms of this enzyme: CPT1A (liver), CPT1B (muscle), and CPT1C (brain) (1,2). Deficiency of CPT1A results in an autosomal recessive mitochondrial fatty acid oxidation disorder (3). Studies have shown that physiological high blood glucose and insulin levels inhibit CPT1B activity in human muscle and therefore divert long-chain fatty acids toward storage in human muscle as triglycerides (4). Furthermore, mice deficient in CPT1C show less food intake and reduced body weight (5). These findings suggest that CPT1 may play a role in metabolic syndromes.				
Background References		1. Wolfgang, M.J. et al. (2006) <i>Proc Natl Acad Sci U S A</i> 103, 7282-7. 2. Bonnefont, J.P. et al. <i>Mol Aspects Med</i> 25, 495-520. 3. Ogawa, E. et al. (2002) <i>J Hum Genet</i> 47, 342-7. 4. Rasmussen, B.B. et al. (2002) <i>J Clin Invest</i> 110, 1687-93. 5. Wolfgang, M.J. and Lane, M.D. (2011) <i>FEBS J</i> 278, 552-8.				
Species Reacti	vity	Species reactivity is de	termined by testing	g in at least one approve	ed 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 W-S: Simple Western™ IP: Immunoprecipitation				
Cross-Reactivity Key		H: Human				
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