

#3084 Store at -20C

Phospho-C/EBP β (Thr235) Antibody

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

Applications: W	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 19 LIP. 36 LAP. 38 LAP.	Source/Isotype: Rabbit	UniProt ID: #P17676	Entrez-Gene Id: 1051
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Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	Phospho-C/EBP β (Thr235) Antibody detects endogenous levels of human LAP only when phosphorylated at Thr235, mouse and rat LAP only when phosphorylated at Thr188, and LIP only when phosphorylated at Thr37. This antibody does not cross-react with other phosphorylated C/EBPs.	
Species predicted to react based on 100% sequence homology	Bovine, Pig	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding threonine 235 of human C/EBP β . Antibodies are purified by protein A and peptide affinity chromatography.	
Background	CCAAT/enhancer-binding proteins (C/EBPs) are a family of transcription factors critical for cellular differentiation, terminal functions, and inflammatory response (1). Six members of the family have been characterized (C/EBP α , - β , - γ , - δ , - ϵ , and - ζ) and are distributed in a variety of tissues (1). There are two forms of C/EBP β , the 38 kDa liver activating protein (LAP) and the 20 kDa liver inhibitory protein (LIP) which may be products of alternative translation. The 38 kDa LAP protein is a transcriptional activator while LIP may act as an inhibitor of C/EBP β transcriptional activity (2). Phosphorylation of C/EBP β at distinct sites stimulates its transcriptional activity (3-5). Phosphorylation at serine 105 of rat C/EBP β , a unique site only present in the rat sequence, seems essential for rat C/EBP β activation (6).	
Background References	<ol style="list-style-type: none"> 1. Lekstrom-Himes, J. and Xanthopoulos, K.G. (1998) <i>J. Biol. Chem.</i> 273, 28545-28548. 2. Calkhoven, C.F. et al. (2000) <i>Genes Dev.</i> 14, 1920-1932. 3. Wegner, M. et al. (1992) <i>Science</i> 256, 370-373. 4. Trautwein, C. et al. (1993) <i>Nature</i> 364, 544-547. 5. Nakajima, T. et al. (1993) <i>Proc. Natl. Acad. Sci. USA</i> 90, 2207-2211. 6. Buck, M. et al. (1999) <i>Mol. Cell</i> 4, 1087-1092. 	

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
Cross-Reactivity Key	H: Human M: Mouse
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