

## C/EBPβ (LAP) Antibody



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

Applications: W	Reactivity: H M	<b>Sensitivity:</b> Endogenous	MW (kDa): 35 to 38 mouse LAP. 45 to 49 human LAP.	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P17676	Entrez-Gene Id: 1051	
Product Usage Information		<b>Application</b> Western Blotting			<b>Dilution</b> 1:1000		
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.					
Specificity/Sensitivity		C/EBPbeta (LAP) Antibody detects endogenous levels of total C/EBPbeta, the p38 and p36 LAPs, but not the p20 LIP. This antibody does not cross-react with C/EBPalpha, -delta, -gamma, -epsilon or -zeta.					
Species predicted to react based on 100% sequence homology		Rat					
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino-terminal sequence of human C/EBPbeta. 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/EBPa, - $\beta$ , - $\beta$ , - $\xi$ , and - $\zeta$ ) and are distributed in a variety of tissues (1). There are two forms of C/EBP $\beta$ , 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 $\beta$ transcriptional activity (2). Phosphorylation of C/EBP $\beta$ at distinct sites stimulates its transcriptional activity (3-5). Phosphorylation at serine 105 of rat C/EBP $\beta$ , a unique site only present in the rat sequence, seems essential for rat C/EBP $\beta$ activation (6).					
Background References		2. Calkhoven, C.F. et 3. Wegner, M. et al. (' 4. Trautwein, C. et al. 5. Nakajima, T. et al.	m-Himes, J. and Xanthopoulos, K.G. (1998) <i>J. Biol. Chem.</i> 273, 28545-28548. en, C.F. et al. (2000) <i>Genes Dev.</i> 14, 1920-1932. M. et al. (1992) <i>Science</i> 256, 370-373. in, C. et al. (1993) <i>Nature</i> 364, 544-547. ia, T. et al. (1993) <i>Proc. Natl. Acad. Sci. USA</i> 90, 2207-2211. . 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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