

# C/EBPβ (LAP) Antibody

✓ 100 µl  
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #1051  
Swiss-Prot Acc. #P17676

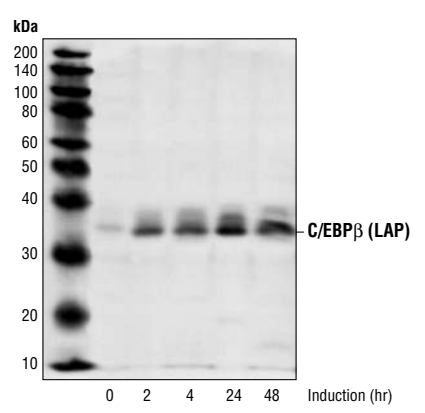
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, (R)	35-38 kDa mouse LAP, 45-49 kDa human LAP	Rabbit**

**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/EBPα, -β, -δ, -γ, -ε and -ζ) and are distributed in a variety of tissues (1). There are two forms of C/EBPβ, 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/EBPβ transcriptional activity (2). Phosphorylation of C/EBPβ at distinct sites stimulates its transcriptional activity (3-5). Phosphorylation at Ser105 of rat C/EBPβ, a unique site only present in the rat sequence, seems essential for rat C/EBPβ activation (6).

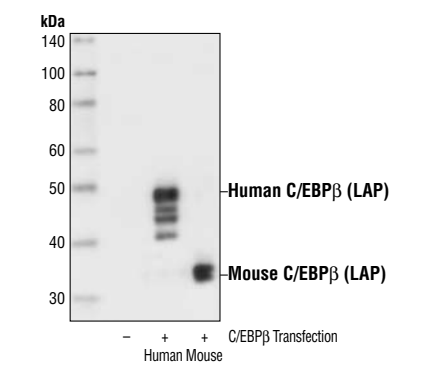
**Specificity/Sensitivity:** C/EBPβ (LAP) Antibody detects endogenous levels of total C/EBPβ, the p38 and p36 LAPs, but not the p20 LIP. This antibody does not cross-react with C/EBPα, -δ, -γ, -ε or -ζ.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino-terminal sequence of human C/EBPβ. Antibodies are purified by protein A and peptide affinity chromatography

- Background References:**
- (1) Lekstrom-Himes, J. and Xanthopoulos, K.G. (1998) *J. Biol. Chem.* 273, 28545-28548.
  - (2) Calkhoven, C.F. et al. (2000) *Genes Dev.* 14, 1920-1932.
  - (3) Wegner, M. et al. (1992) *Science* 256, 370-373.
  - (4) Trautwein, C. et al. (1993) *Nature* 364, 544-547.
  - (5) Nakajima, T. et al. (1993) *Proc. Natl. Acad. Sci. USA* 90, 2207-2211.
  - (6) Buck, M. et al. (1999) *Mol. Cell* 4, 1087-1092.



Western blot analysis of extracts from 3T3-L1, differentiated for the indicated times, using C/EBPβ (LAP) Antibody.



Western blot analysis of extracts from COS cells, untransfected or transfected with human or mouse C/EBPβ (LAP), using C/EBPβ (LAP) Antibody.

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

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**  
Western Blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

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