

Phospho-C/EBP β (Thr235) Antibody

✓ 100 μ l
(10 western blots)

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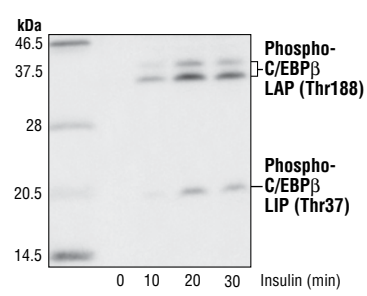
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

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

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, (B)	19 k Da LIP 36 kDa LAP 38 kDa 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/EBP α , - β , - δ , - γ , - 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).



Western blot analysis of extracts from adipocytes (differentiated 3T3-L1) treated with insulin for the indicated times, using Phospho-C/EBP β (Thr235) 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.

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 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.

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.

*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.

Please visit 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.