#3087 Store at -20C

C/EBPβ (LAP) Antibody



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications: Reactivity: Sensitivity: MW (kDa): Source: **UniProt ID:** Entrez-Gene Id: WB н м Endogenous 35 to 38 mouse Rabbit #P17676 1051 LAP. 45 to 49 human LAP.

Product Usage
InformationApplicationDilutionWestern Blotting1:1000

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.

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 ($C/EBP\alpha$, $-\beta$, $-\gamma$, $-\delta$, $-\epsilon$, 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 1. Lekstrom-Himes, J. and Xanthopoulos, K.G. (1998) J. Biol. Chem. 273, 28545-28548.

Calkhoven, C.F. et al. (2000) Genes Dev. 14, 1920-1932.
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.

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 WB: Western Blotting

Cross-Reactivity Key H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

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1/1/24, 3:40 PM **Limited Uses** C/EBPβ (LAP) Antibody (#3087) Datasheet Without Images Cell Signaling Technology

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