

C/EBP β Antibody

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

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 20 KD (LIP), 46 KD (LAP), 48 KD (Full Length)	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. <i>Do not aliquot the antibody.</i>	
Specificity/Sensitivity	C/EBP β Antibody recognizes endogenous levels of total C/EBP β protein. This antibody does not cross-react with C/EBP α protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human C/EBP β protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	C/EBP β is a member of the transcription factor family of CCAAT/enhancer-binding proteins (C/EBPs) that are critical for cellular differentiation and function (1). There are various N-terminally truncated C/EBP β isoforms: full-length C/EBP β , C/EBP β -LAP (liver-enriched activator protein), and C/EBP β -LIP (liver-enriched inhibitory protein). In triple-negative breast cancer cells, aerobic glycolysis was shown to control the expression of C/EBP β -LAP, which in turn stimulates the expression of granulocyte colony-stimulating factor (G-CSF) and granulocyte macrophage colony-stimulating factor (GM-CSF). These factors are secreted from the cancer cells to promote myeloid-derived suppressor cell (MDSC) development in the tumor microenvironment, thereby suppressing anti-tumor immunity (2). In addition, research studies showed that decreased C/EBP β -LIP expression delays age-related phenotypes in mice, suggesting a potential role for C/EBP β -LIP in aging (3).	
Background References	<ol style="list-style-type: none"> 1. Lekstrom-Himes, J. and Xanthopoulos, K.G. (1998) <i>J Biol Chem</i> 273, 28545-8. 2. Li, W. et al. (2018) <i>Cell Metab</i> 28, 87-103.e6. 3. Müller, C. et al. (2018) <i>Elife</i> 7, pii: e34985. doi: 10.7554/eLife.34985. 	
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	
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