

CEBPB (aa68-81) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3988a

Specification

CEBPB (aa68-81) Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P17676</u> <u>NP_005185.2</u>, <u>1051</u>, <u>12608 (mouse)</u>, <u>24253</u> (rat) Mouse Human, Rat, Pig, Dog Goat Polyclonal 0.5 mg/ml IgG 36106

CEBPB (aa68-81) Antibody (internal region) - Additional Information

Gene ID 1051

Other Names

CCAAT/enhancer-binding protein beta, C/EBP beta, Liver activator protein, LAP, Liver-enriched inhibitory protein, LIP, Nuclear factor NF-IL6, Transcription factor 5, TCF-5, CEBPB, TCF5

Dilution WB~~1:1000 E~~N/A

Format 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CEBPB (aa68-81) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

CEBPB (aa68-81) Antibody (internal region) - Protein Information

Name CEBPB (<u>HGNC:1834</u>)

Synonyms TCF5



Function

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:12048245, PubMed:1741402, PubMed:18647749, PubMed:9374525). Also plays a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis. The consensus recognition site is 5'-T[TG]NNGNAA[TG]-3'. Its functional capacity is governed by protein interactions and post-translational protein modifications. During early embryogenesis, plays essential and redundant roles with CEBPA. Has a promitotic effect on many cell types such as hepatocytes and adipocytes but has an antiproliferative effect on T-cells by repressing MYC expression, facilitating differentiation along the T-helper 2 lineage. Binds to regulatory regions of several acute-phase and cytokines genes and plays a role in the regulation of acute-phase reaction and inflammation. Also plays a role in intracellular bacteria killing (By similarity). During adipogenesis, is rapidly expressed and, after activation by phosphorylation, induces CEBPA and PPARG, which turn on the series of adjpocyte genes that give rise to the adjpocyte phenotype. The delayed transactivation of the CEBPA and PPARG genes by CEBPB appears necessary to allow mitotic clonal expansion and thereby progression of terminal differentiation (PubMed:20829347). Essential for female reproduction because of a critical role in ovarian follicle development (By similarity). Restricts osteoclastogenesis: together with NFE2L1; represses expression of DSPP during odontoblast differentiation (By similarity).

Cellular Location

Nucleus. Cytoplasm. Note=Translocates to the nucleus when phosphorylated at Ser-288. In T-cells when sumoylated drawn to pericentric heterochromatin thereby allowing proliferation (By similarity). {ECO:0000250|UniProtKB:P28033, ECO:0000269|PubMed:9374525}

Tissue Location

Expressed at low levels in the lung, kidney and spleen

CEBPB (aa68-81) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CEBPB (aa68-81) Antibody (internal region) - Images



250kDa 150kDa
100kDa
75kDa
50kDa
37kDa
25kDa
20kDa
20000
15kDa

AF3988a (1 μ g/ml) staining of NIH3T3 lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

CEBPB (aa68-81) Antibody (internal region) - References

CCAAT/enhancer-binding proteins are key regulators of human type two deiodinase expression in a placenta cell line. Canettieri G, Santaguida MG, Antonucci L, Della Guardia M, Franchi A, Coni S, Gulino A, Centanni M. Endocrinology 2012 Aug 153 (8): 4030-8. PMID: 22689263