

CEBP Beta Antibody

Rabbit mAb Catalog # AP90131

Product Information

Application WB, FC, IP **Primary Accession** P17676

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names AGP/EBP; CCAAT/enhancer binding protein beta; CEBPB; CRP2; IL-6DBP;

C/EBP beta; C/EBP-related protein 2

IsotypeRabbit IgGHostRabbitCalculated MW36106

Additional Information

Dilution WB 1:500~1:2000 IP 1:50 FC 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human CEBP Beta

Description The protein encoded by this intronless gene is a bZIP transcription factor

which can bind as a homodimer to certain DNA regulatory regions. It can also form heterodimers with the related proteins CEBP-alpha, CEBP-delta, and CEBP-gamma. The encoded protein is important in the regulation of genes involved in immune and inflammatory responses and has been shown to bind to the IL-1 response element in the IL-6 gene, as well as to regulatory regions

of several acute-phase and cytokine genes.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name CEBPB (HGNC:1834)

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 adipocyte genes that give rise to the adipocyte 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).

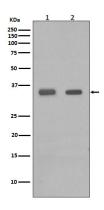
Cellular Location

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

Images



Western blot analysis of CEBP Beta in (1) PC-12 cell lysate; (2) Human spleen lysate.

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