

C/EBP β Polyclonal Antibody

Catalog # AP74337

Product Information

Application WB Primary Accession P17676

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 36106

Additional Information

Gene ID 1051

Other Names CEBPB; LAP; TCF5; PP9092; CCAAT/enhancer-binding protein beta; C/EBP beta;

Liver activator protein; Nuclear factor NF-IL6; Transcription factor 5; TCF-5

Dilution WB~~WB 1:500-2000, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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}

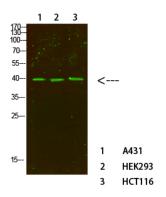
Tissue Location

Expressed at low levels in the lung, kidney and spleen

Background

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:1741402, PubMed:9374525, PubMed:12048245, PubMed:18647749). Plays also 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 functions 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. Plays also 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).

Images



Western Blot analysis of various cells using primary antibody diluted at 1:500(4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)

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