

# C/EBP β (phospho Thr235) Polyclonal Antibody

Catalog # AP66972

### **Product Information**

**Application** WB, IHC-P, IF **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~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

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}

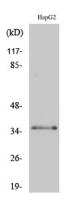
**Tissue Location** 

Expressed at low levels in the lung, kidney and spleen

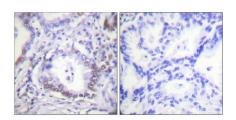
## **Background**

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 Phospho-C/EBP  $\beta$  (T235) Polyclonal Antibody diluted at 1:500



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.