

# C/EBP β (phospho Thr235) Polyclonal Antibody

Catalog # AP66972

#### Specification

### C/EBP $\beta$ (phospho Thr235) Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF <u>P17676</u> Human, Mouse, Rat Rabbit Polyclonal

#### C/EBP $\beta$ (phospho Thr235) Polyclonal Antibody - 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

#### C/EBP $\beta$ (phospho Thr235) Polyclonal Antibody - Protein Information

Name CEBPB (HGNC:1834)

Synonyms TCF5

Function

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:<a href="http://www.uniprot.org/citations/12048245" target="\_blank">12048245</a>, PubMed:<a href="http://www.uniprot.org/citations/1741402" target="\_blank">1741402</a>, PubMed:<a href="http://www.uniprot.org/citations/18647749" target="\_blank">18647749</a>, PubMed:<a href="http://www.uniprot.org/citations/18647749" target="\_blank">18647749</a>, PubMed:<a href="http://www.uniprot.org/citations/9374525" target="\_blank">9374525</a>). 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:<a

href="http://www.uniprot.org/citations/20829347" target="\_blank">20829347</a>). 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

#### C/EBP β (phospho Thr235) Polyclonal Antibody - 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>

C/EBP β (phospho Thr235) Polyclonal Antibody - Images





## C/EBP $\beta$ (phospho Thr235) Polyclonal Antibody - Background

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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).