

**Rat-Cebpb-S105 Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP20701b****Specification**

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**Rat-Cebpb-S105 Blocking Peptide - Product Information**Primary Accession [P21272](#)**Rat-Cebpb-S105 Blocking Peptide - Additional Information****Gene ID** 24253**Other Names**

CCAAT/enhancer-binding protein beta, C/EBP beta, C/EBP-related protein 2, Interleukin-6-dependent-binding protein, IL-6DBP, Liver-enriched inhibitory protein, LIP, Liver-enriched transcriptional activator, LAP, Silencer factor B, SF-B, Cebpb, Crp2, Sfb

**Target/Specificity**

The synthetic peptide sequence is selected from aa 99-111 of RAT Cebpb

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Rat-Cebpb-S105 Blocking Peptide - Protein Information****Name** Cebpb {ECO:0000312|RGD:2327}**Function**

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:<a href="http://www.uniprot.org/citations/8336793" target="\_blank">8336793</a>). Also plays a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis (PubMed:<a href="http://www.uniprot.org/citations/10635333" target="\_blank">10635333</a>). 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 (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/10635333" target="\_blank">10635333</a>). 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 (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/15308669" target="\_blank">15308669</a>).

#### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:P17676}. Cytoplasm {ECO:0000250|UniProtKB:P17676}. 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:P17676, ECO:0000250|UniProtKB:P28033}

#### **Tissue Location**

Liver and lung.

### **Rat-Cebpb-S105 Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **Rat-Cebpb-S105 Blocking Peptide - Images**

### **Rat-Cebpb-S105 Blocking Peptide - Background**

Important transcriptional activator regulating the expression of genes involved in immune and inflammatory responses. Binds to regulatory regions of several acute-phase and cytokines genes and probably plays a role in the regulation of acute-phase reaction, inflammation and hemopoiesis. The consensus recognition site is 5'-T[TG]NNGNAA[TG]-3'. Functions in brown adipose tissue (BAT) differentiation. Regulates the transcriptional induction of peroxisome proliferator-activated receptor gamma (PPARG).

### **Rat-Cebpb-S105 Blocking Peptide - References**

Poli V.,et al.Cell 63:643-653(1990).  
Descombes P.,et al.Genes Dev. 4:1541-1551(1990).  
Thomassin H.,et al.Nucleic Acids Res. 20:3091-3098(1992).  
Imagawa M.,et al.Submitted (JUL-1991) to the EMBL/GenBank/DDBJ databases.  
Williams S.C.,et al.Genes Dev. 5:1553-1567(1991).