

## Rat-Cebpb-S105 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20701b

### **Specification**

### Rat-Cebpb-S105 Antibody - Product Information

Application WB,E
Primary Accession P21272
Reactivity Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

## Rat-Cebpb-S105 Antibody - 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**

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 99-131 amino acids from Rat.

#### **Dilution**

WB~~1:1000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

# **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Rat-Cebpb-S105 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Rat-Cebpb-S105 Antibody - Protein Information

Name Cebpb {ECO:0000312|RGD:2327}

**Function** Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:8336793). Also plays a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis (PubMed:10635333).



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:10635333). 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:15308669).

#### **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.

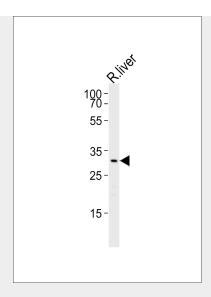
#### Rat-Cebpb-S105 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Rat-Cebpb-S105 Antibody - Images





Western blot analysis of lysate from R. liver cell line, using rat-Cebpb-S105(Cat. #AP20701b). AP20701b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

# Rat-Cebpb-S105 Antibody - 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 Antibody - 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).

#### Rat-Cebpb-S105 Antibody - Citations

 TGF-β Induced CTGF Expression in Human Lung Epithelial Cells through ERK, ADAM17, RSK1, and C/EBPβ Pathways