

Rat-Cebpb-S105 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20701b

Specification

Rat-Cebpb-S105 Antibody - Product Information

Application	WB,E
Primary Accession Reactivity	<u>P21272</u> 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 E~~Use at an assay dependent concentration.

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:<u>8336793</u>). Also plays a significant role in adipogenesis, as



well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis (PubMed:<u>10635333</u>). 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:<u>10635333</u>). 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). Restricts osteoclastogenesis: together with NFE2L1; represses expression of DSPP during odontoblast differentiation (PubMed:<u>15308669</u>).

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.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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

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