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Rat-Cebpb-S105 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20701b

Product Information

Application	WB, E
Primary Accession	P21272
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB44972
Calculated MW	31503

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.

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.

Background

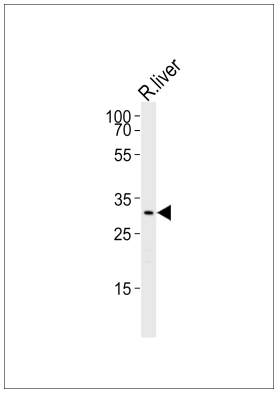
Important transcriptional activator regulating the expression of genes involved in immune and inflammatory responses. Binds to regulatory regions of several acute-phase and cytokines genes and probably plays a role in the regulation of acute-phase reaction, inflammation and hemopoiesis. The consensus 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).

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).

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.



Citations

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