

C/EBP Beta / CEBPB Antibody (clone 47A1)
Mouse Monoclonal Antibody
Catalog # ALS12542**Specification**

C/EBP Beta / CEBPB Antibody (clone 47A1) - Product Information

Application	IHC, WB
Primary Accession	P17676
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	36kDa KDa

C/EBP Beta / CEBPB Antibody (clone 47A1) - Additional Information**Gene ID** 1051**Other Names**

CCAAT/enhancer-binding protein beta, C/EBP beta, Liver activator protein, LAP, Liver-enriched inhibitory protein, LIP, Nuclear factor NF-IL6, Transcription factor 5, TCF-5, CEBPB, TCF5

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

C/EBP Beta / CEBPB Antibody (clone 47A1) is for research use only and not for use in diagnostic or therapeutic procedures.

C/EBP Beta / CEBPB Antibody (clone 47A1) - Protein Information**Name** CEBPB ([HGNC:1834](#))**Synonyms** TCF5**Function**

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed: [1741402](http://www.uniprot.org/citations/1741402), PubMed: [9374525](http://www.uniprot.org/citations/9374525), PubMed: [12048245](http://www.uniprot.org/citations/12048245), PubMed: [18647749](http://www.uniprot.org/citations/18647749)). 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: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).

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

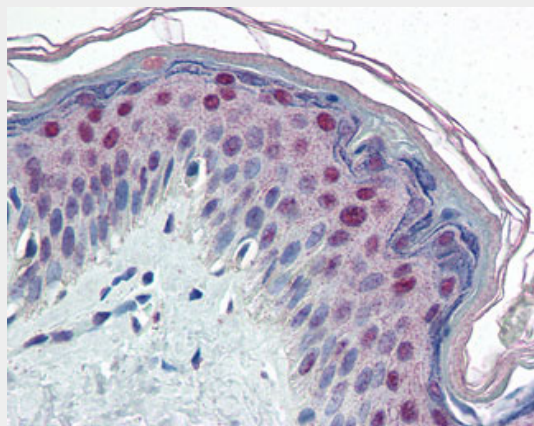
Expressed at low levels in the lung, kidney and spleen

C/EBP Beta / CEBPB Antibody (clone 47A1) - Protocols

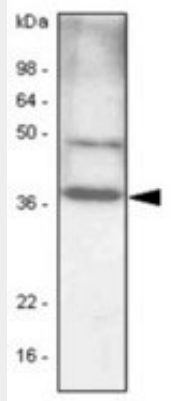
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

C/EBP Beta / CEBPB Antibody (clone 47A1) - Images



Anti-CEBPB / CEBP Beta antibody IHC of human skin.



NIH 3T3 cell lysates(30 ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed...

C/EBP Beta / CEBPB Antibody (clone 47A1) - Background

Important transcription factor 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'. Plays an important role in adipose tissue differentiation. Regulates the transcriptional induction of peroxisome proliferator-activated receptor gamma (PPARG) as well as other adipogenesis key player genes.

C/EBP Beta / CEBPB Antibody (clone 47A1) - References

Akira S.,et al.EMBO J. 9:1897-1906(1990).
Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.