

Anti-C/EBP beta (pT235) Antibody

Rabbit polyclonal antibody to C/EBP beta (pT235)

Catalog # AP60441

Product Information

Application	WB, IF/IC, IHC
Primary Accession	P17676
Other Accession	P28033
Reactivity	Human, Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36106

Additional Information

Gene ID	1051
Other Names	TCF5; 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
Target/Specificity	Recognizes endogenous levels of C/EBP beta (pT235) protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CEBPB (HGNC:1834)
Synonyms	TCF5
Function	Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed: 12048245 , PubMed: 1741402 , PubMed: 18647749 , PubMed: 9374525). Also plays a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis. The consensus recognition site is 5'-[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}

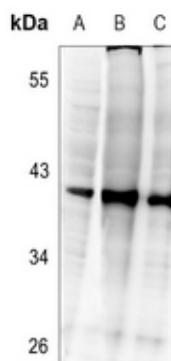
Tissue Location

Expressed at low levels in the lung, kidney and spleen

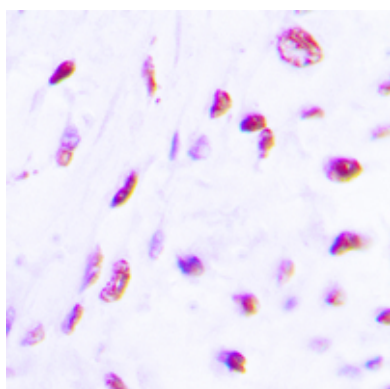
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human C/EBP beta (pT235). The exact sequence is proprietary.

Images

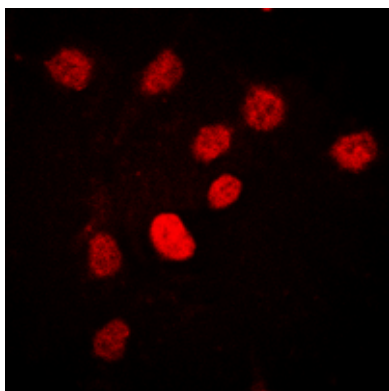


Western blot analysis of C/EBP beta (pT235) expression in HEK293T (A), MCF7-insulin-5min (B), MCF7 (C) whole cell lysates.



Immunohistochemical analysis of C/EBP beta (pT235) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Immunofluorescent analysis of C/EBP beta (pT235) staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at



room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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