

Rabbit anti-Human, Mouse CEBPB Polyclonal Antibody | anti-CEBPB antibody

CEBPB Antibody

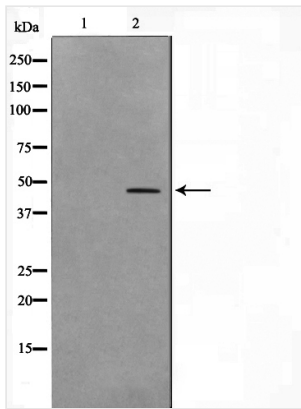
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321032	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

CEBPB; Polyclonal Antibody; CEBPB Antibody; AGP/EBP; C EBP beta; C/EBP beta; C/EBP related protein 2; CCAAT Enhancer Binding Protein beta; CCAAT/enhancer-binding protein beta; CEBPB_HUMAN; CRP2; IL 6DBP; IL6DBP; Interleukin 6 dependent binding protein; LAP; Liver activator protein; Liver enriched transcriptional activator; NF IL6; NFIL6; Nuclear factor NF IL6; Nuclear factor NF-IL6; SF B; SFB; Silencer factor B; TCF-5; TCF5; Transcription factor 5; anti-CEBPB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	CEBPB antibody detects endogenous levels of CEBPB
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	322
Applicable Applications for anti-CEBPB antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CEBPB
Subcellular Location	Nucleus.
Tissue Specificity	Expressed at low levels in the lung, kidney and spleen.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis on HepG2 cell lysate using CEBPB Antibody, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA321032 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-CEBPB antibody	Description: The protein encoded by this intronless gene is a bZIP transcription factor which can bind as a homodimer to certain DNA regulatory regions. It can also form heterodimers with the related proteins CEBP-alpha, CEBP-delta, and CEBP-gamma. The encoded protein is important in the regulation of genes involved in immune and inflammatory responses and has been shown to bind to the IL-1 response element in the IL-6 gene, as well as to regulatory regions of several acute-phase and cytokine genes. In addition, the encoded protein can bind the promoter and upstream element and stimulate the expression of the collagen type I gene. Function: Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:1741402, PubMed:9374525, PubMed:12048245, PubMed:18647749). Plays also 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 functions with CEBPA. Has a prometotic 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. Plays also 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). Subunit Structure: Binds DNA as a homodimer and as a heterodimer (PubMed:11018027, PubMed:11257229, PubMed:11792321). Interacts with ATF4. Binds DNA as a heterodimer with ATF4 (PubMed:11018027). Interacts with MYB; within the complex, MYB and CEBPB bind to different promoter regions (PubMed:11792321). Can form stable heterodimers with CEBPD (PubMed:1741402). Can form stable heterodimers with CEBPA and CEBPE (By similarity). Isoform 2 and isoform 3 also form heterodimers. Interacts with TRIM28 and PTGES2. Interacts with PRDM16. Interacts with CCDC85B. Forms a complex with THOC5. Interacts with ZNF638; this interaction increases transcriptional activation. Interacts with CIDEA and CIDEA; these interactions increase transcriptional activation of a subset of CEBPB downstream target genes (By similarity). Interacts with DDIT3/CHOP (PubMed:20829347). Interacts with EP300; recruits EP300 to chromatin. Interacts with RORA; the interaction disrupts interaction with EP300. Interacts (not methylated) with MED23, MED26, SMARCA2, SMARCB1 and SMARCC1 (PubMed:20111005). Interacts with KAT2A and KAT2B (By similarity). Interacts with ATF5; EP300 is required for ATF5 and CEBPB interaction and DNA binding (By similarity). Interacts with NFE2L1; the heterodimer represses expression of DSPP during odontoblast differentiation (By similarity). Post-translational Modifications: Methylated. Methylation at Arg-3 by CARM1 and at Lys-43 by EHMT2 inhibit transactivation activity. Methylation is probably inhibited by phosphorylation at Thr-235. Sumoylated by polymeric chains of SUMO2 or SUMO3 (PubMed:12810706). Sumoylation at Lys-174 is required for inhibition of T-cells proliferation. In adipocytes, sumoylation at Lys-174 by PIAS1 leads to ubiquitination and subsequent proteasomal degradation. Desumoylated by SENP2, which abolishes ubiquitination and stabilizes protein levels (By similarity). Ubiquitinated, leading to proteasomal degradation. Phosphorylated at Thr-235 by MAPK and CDK2, serves to prime phosphorylation at Thr-226 and Ser-231 by GSK3B and acquire DNA-binding as well as transactivation activities, required to induce adipogenesis. MAPK and CDK2 act sequentially to maintain Thr-235 in the primed phosphorylated state during mitotical cloning expansion and thereby progression of terminal differentiation. Phosphorylation at Thr-266 enhances transactivation activity. Phosphorylation at Ser-325 in response to calcium increases transactivation activity. Phosphorylated at Thr-235 by RPS6KA1 (PubMed:11684016). O-glycosylated, glycosylation at Ser-227 and Ser-228 prevents phosphorylation on Thr-235, Ser-231 and Thr-226 and DNA binding activity which delays the adipocyte differentiation program. Acetylated. Acetylation at Lys-43 is an important and dynamic regulatory event that contributes to its ability to transactivate target genes, including those associated with adipogenesis and adipocyte function. Deacetylation by HDAC1 represses its transactivation activity. Acetylated by KAT2A and KAT2B within a cluster of lysine residues between amino acids 129-133, this acetylation is strongly induced by glucocorticoid treatment and enhances transactivation activity. Similarity: The 9aaTAD motif is a transactivation domain present in a large number of yeast and animal transcription factors. Belongs to the bZIP family. C/EBP subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	551895085
NCBI GeneID	1051
NCBI Accession #	NP_001272807.1

NCBI GenBank Nucleotide #	NM_001285878.1
UniProt Accession #	P17676; Q96IH2; Q9H4Z5; A8K671
Molecular Weight	Observed: 49 kDa Predicted: 37 kDa
NCBI Official Full Name	CCAAT/enhancer-binding protein beta isoform b
NCBI Official Synonym Full Names	CCAAT enhancer binding protein beta
NCBI Official Symbol	CEBPB
NCBI Official Synonym Symbols	TCF5; IL6DBP; NF-IL6; C/EBP-beta
NCBI Protein Information	CCAAT/enhancer-binding protein beta
UniProt Protein Name	CCAAT/enhancer-binding protein beta
UniProt Gene Name	CEBPB
UniProt Synonym Gene Names	TCF5; C/EBP betaImportedManual assertion inferred from database entriesHGNC:1834; LAP; LIP; TCF-5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cebpb-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321032>