

Rabbit C/EBP alpha Polyclonal Antibody | anti-C/EBPalpha antibody

Phospho-C/EBP alpha (Ser190) Antibody

CATALOG # AAA329638	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

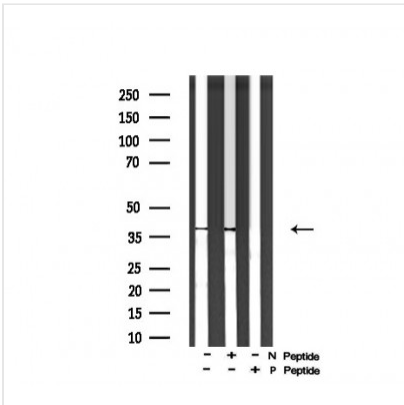
C/EBP alpha; Polyclonal Antibody; Phospho-C/EBP alpha (Ser190) Antibody; Apoptotic cysteine protease; Apoptotic protease Mch 5; C/ebpalpha; CAP4; Caspase 8 precursor; CBF-A; CCAAT Enhancer Binding Protein alpha; CCAAT/enhancer binding protein (C/EBP); alpha; CCAAT/enhancer-binding protein alpha; CEBP; CEBP A; CEBP alpha; Cebpa; CEBPA_HUMAN; FADD homologous ICE/CED 3 like protease; FADD like ICE; FLICE; ICE like apoptotic protease 5; ICE8; MACH; MCH5; MORT1 associated CED 3 homolog; anti-C/EBPalpha antibody

PRODUCT SPECIFICATIONS

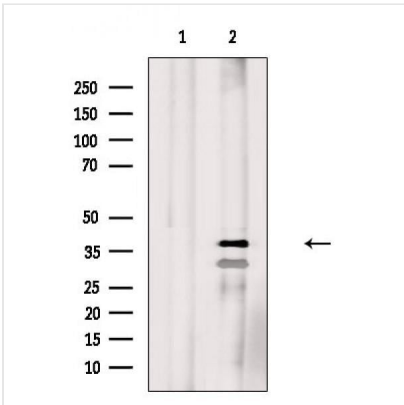
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-C/EBP alpha (Ser190) Antibody detects endogenous levels of C/EBP alpha only when phosphorylated at Ser190.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-C/EBPalpha antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human C/EBP-alpha around the phosphorylation site of Ser190.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylation at Ser-190 is required for interaction with CDK2, CDK4 and SWI/SNF complex leading to cell cycle inhibition. Dephosphorylated at Ser-190 by protein phosphatase 2A (PP2A) through PI3K/AKT signaling pathway regulation. Phosphorylation at Thr-226 and Thr-230 by GSK3 is constitutive in adipose tissue and lung. In liver, both Thr-226 and Thr-230 are phosphorylated only during feeding but not during fasting. Phosphorylation of the GSK3 consensus sites selectively decreases transactivation activity on IRE-controlled promoters. Sumoylated, sumoylation blocks the inhibitory effect on cell proliferation by disrupting the interaction with SMARCA2. Ubiquitinated by COP1 upon interaction with TRIB1.
Subunit Structure	Binds DNA as a homodimer and as a heterodimer. Can form stable heterodimers with CEBPB, CEBPD, CEBPE and CEBPG (By similarity). Interacts with PRDM16 (By similarity). Interacts with UBN1. Interacts with ZNF638; this interaction increases transcriptional activation (By similarity). Interacts with the complex TFDP2:E2F1; the interaction prevents CEBPA binding to target gene promoters and represses its transcriptional activity. Interacts with RB1. Interacts (when phosphorylated at SER-190) with CDK2, CDK4, E2F4 and SMARCA2. Interacts with SREBPF1 (By similarity). Interacts with FOXO1 (via the Fork-head domain); the interaction increases when FOXO1 is deacetylated (By similarity). Isoform 1 and isoform 4 interacts with TAF1A and UBTF. Isoform 4 interacts with NPM1. Interacts (via recognition sequence) with TRIB1. (Microbial infection) Interacts with HBV protein X.
Similarity	The recognition sequence (54-72) is required for interaction with TRIB1. Belongs to the bZIP family. C/EBP subfamily.

Subcellular Location	Nucleus. Nucleus>Nucleolus.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of C/EBP-α (Phospho-Ser190) using EGF treated HepG2 whole cell lysates. -/+ means absence or presence of N peptide and non-phospho peptide) and P peptide(phospho peptide).



WB (Western Blot)
Western blot analysis of extracts from Mouse kidney, using Phospho-C/EBP alpha (Ser190) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-C/EBPalpha antibody	Transcription factor that coordinates proliferation arrest and the differentiation of myeloid progenitors, adipocytes, hepatocytes, and cells of the lung and the placenta. Binds directly to the consensus DNA sequence 5'-T[TG]NNGNAA[TG]-3' acting as an activator on distinct target genes. During early embryogenesis, plays essential and redundant functions with CEBPB. Essential for the transition from common myeloid progenitors (CMP) to granulocyte/monocyte progenitors (GMP). Critical for the proper development of the liver and the lung (By similarity). Necessary for terminal adipocyte differentiation, is required for postnatal maintenance of systemic energy homeostasis and lipid storage (By similarity). To regulate these different processes at the proper moment and tissue, interplays with other transcription factors and modulators. Downregulates the expression of genes that maintain cells in an undifferentiated and proliferative state through E2F1 repression, which is critical for its ability to induce adipocyte and granulocyte terminal differentiation. Reciprocally E2F1 blocks adipocyte differentiation by binding to specific promoters and repressing CEBPA binding to its target gene promoters. Proliferation arrest also depends on a functional binding to SWI/SNF complex. In liver, regulates gluconeogenesis and lipogenesis through different mechanisms. To regulate gluconeogenesis, functionally cooperates with FOXO1 binding to IRE-controlled promoters and regulating the expression of target genes such as PCK1 or G6PC. To modulate lipogenesis, interacts and transcriptionally synergizes with SREBF1 in promoter activation of specific lipogenic target genes such as ACAS2. In adipose tissue, seems to act as FOXO1 coactivator accessing to ADIPOQ promoter through FOXO1 binding sites (By similarity).Can act as dominant-negative. Binds DNA and have transctivation activity, even if much less efficiently than isoform 2. Does not inhibit cell proliferation.Directly and specifically enhances ribosomal DNA transcription interacting with RNA polymerase I-specific cofactors and inducing histone acetylation.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	28872794
NCBI GeneID	1050
NCBI Accession #	NP_004355.2
NCBI GenBank Nucleotide #	NM_004364.3
UniProt Accession #	P49715; P78319; Q05CA4; A7LNP2
Molecular Weight	37,561 Da
NCBI Official Full Name	CCAAT/enhancer-binding protein alpha
NCBI Official Synonym Full Names	CCAAT/enhancer binding protein (C/EBP), alpha

NCBI Official Symbol	CEBPA
NCBI Official Synonym Symbols	CEBP; C/EBP-alpha
NCBI Protein Information	CCAAT/enhancer-binding protein alpha
UniProt Protein Name	CCAAT/enhancer-binding protein alpha
UniProt Gene Name	CEBPA
UniProt Synonym Gene Names	C/EBP alpha
UniProt Entry Name	CEBPA_HUMAN

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/c-ebp-alpha-antibody-peptide-elisa-western-blot-elisa/329638>