

Product name:	CBP (Acetyl Lys1535) Rabbit Polyclonal Antibody
Cat number:	ABN06176
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human CBP around the acetylated site of Lys1535. AA range:1501-1550
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	265kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene is ubiquitously expressed and is involved in the transcriptional coactivation of many different transcription factors. First isolated as a nuclear protein that binds to cAMP-response element binding protein (CREB), this gene is now known to play critical roles in embryonic development, growth control, and homeostasis by coupling chromatin remodeling to transcription factor recognition. The protein encoded by this gene has intrinsic histone acetyltransferase activity and also acts as a scaffold to stabilize additional protein interactions with the transcription complex. This protein acetylates both histone and non-histone proteins. This protein shares regions of very high sequence similarity with protein p300 in its bromodomain, cysteine-histidine-rich regions, and histone acetyltransferase domain. Mutations in this gene cause Rubinstein-Taybi syndrome (RTS). Chromosomal translocations invocalytic activity:Acetyl-CoA + histone = CoA + acetylhistone.,disease:Chromosomal aberrations involving CREBBP may be a cause of acute myeloid leukemias. Translocation t(8;16)(p11;p13) with MYST3/MOZ; translocation t(11;16)(q23;p13.3) with MLL/HRX; translocation t(10;16)(q22;p13) with MYST4/MORF. MYST3-CREBBP may induce leukemia by inhibiting RUNX1-mediated transcription.,disease:Defects in CREBBP are a cause of Rubinstein-Taybi syndrome (RSTS) [MIM:180849]. RSTS is an autosomal dominant disorder characterized by craniofacial abnormalities, broad thumbs, broad big toes, mental retardation and a propensity for development of malignancies.,domain:The KIX domain mediates binding to HIV-1 Tat.,function:Acetylates histones, giving a specific tag for transcriptional activation. Also acetylates non-histone proteins, like NCOA3 coactivator. Binds specifically to phosphorylated CREB and enhances its transcriptional activity toward cAMP-responsive genes.,online information:P300/CBP entry,PTM:Methylation of the KIX domain by CARM1 blocks association with CREB. This results in the blockade of CREB signaling, and in activation of apoptotic response.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,PTM:Sumoylation negatively regulates transcriptional activity via the recruitment of DAAX.,similarity:Contains 1 bromo domain.,similarity:Contains 1 KIX domain.,similarity:Contains 1 ZZ-type zinc finger.,similarity:Contains 2 TAZ-type zinc fingers.,subunit:Found in a complex containing NCOA2; NCOA3; IKKA; IKKB and IKBKG. Probably part of a complex with HIF1A and EP300. Interacts with phosphorylated CREB1. Interacts with the C-terminal region of CITED4. The TAZ-type 1 domain interacts with HIF1A. Interacts with MAF, SRCAP, CARM1, ELF3, MLLT7/FOXO4, N4BP2, NCOA1, NCOA3, NCOA6, PCAF, PELP1, PML, SMAD1, SMAD2, SMAD3, SPIB and TRERF1. Interacts with HTLV-1 Tax and p300. Interacts with HIV-1 Tat. Interacts with KLF1; the interaction results in acetylation of KLF1 and enhancement of its transcriptional activity. Interacts with ZCCHC12 (By similarity). Interacts with DAXX; the interaction is dependent on CBP sumoylation and results in suppression of the transcriptional activity via recruitment of HDAC2 to DAAX (By similarity). Interacts with MTDH. Interacts with NFATC4. Interacts with MAFG; the interaction acetylates MAFG in the basic region and stimulates NFE2 transcriptional activity through increasing its DNA-binding activity. Interacts with IRF2; the interaction acetylates IRF2 and regulates its activity on the H4 promoter.,