

CBP Polyclonal Antibody

Catalog # AP68877

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q92793
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	265351

Additional Information

Gene ID	1387
Other Names	CREBBP; CBP; CREB-binding protein
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	CREBBP (HGNC:2348)
Synonyms	CBP
Function	Acetylates histones, giving a specific tag for transcriptional activation (PubMed: 21131905 , PubMed: 24616510). Mediates acetylation of histone H3 at 'Lys-18' and 'Lys-27' (H3K18ac and H3K27ac, respectively) (PubMed: 21131905). Also acetylates non-histone proteins, like DDX21, FBL, IRF2, MAFG, NCOA3, POLR1E/PAF53 and FOXO1 (PubMed: 10490106 , PubMed: 11154691 , PubMed: 12738767 , PubMed: 12929931 , PubMed: 24207024 , PubMed: 28790157 , PubMed: 30540930 , PubMed: 35675826 , PubMed: 9707565). Binds specifically to phosphorylated CREB and enhances its transcriptional activity toward cAMP-responsive genes. Acts as a coactivator of ALX1. Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-BMAL1 and CLOCK-BMAL1 heterodimers (PubMed: 14645221). Acetylates PCNA; acetylation promotes removal of chromatin-bound PCNA and its degradation during nucleotide excision repair (NER) (PubMed: 24939902). Acetylates POLR1E/PAF53, leading to decreased

association of RNA polymerase I with the rDNA promoter region and coding region (PubMed:[24207024](#)). Acetylates DDX21, thereby inhibiting DDX21 helicase activity (PubMed:[28790157](#)). Acetylates FBL, preventing methylation of 'Gln-105' of histone H2A (H2AQ104me) (PubMed:[30540930](#)). In addition to protein acetyltransferase, can use different acyl-CoA substrates, such as lactoyl-CoA, and is able to mediate protein lactylation (PubMed:[38128537](#)). Catalyzes lactylation of MRE11 in response to DNA damage, thereby promoting DNA double-strand breaks (DSBs) via homologous recombination (HR) (PubMed:[38128537](#)). Functions as a transcriptional coactivator for SMAD4 in the TGF-beta signaling pathway (PubMed:[25514493](#)).

Cellular Location

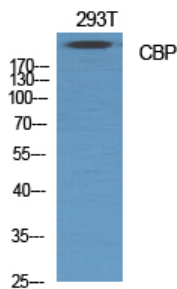
Cytoplasm. Nucleus. Note=Recruited to nuclear bodies by SS18L1/CREST (PubMed:15488321). In the presence of ALX1 relocates from the cytoplasm to the nucleus (PubMed:12929931). Relocalizes from the nucleus to the cytoplasm following UV cell damage (PubMed:15023334).

Background

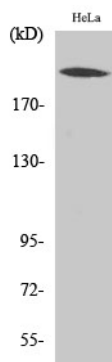
Acetylates histones, giving a specific tag for transcriptional activation. Also acetylates non-histone proteins, like NCOA3 and FOXO1. Binds specifically to phosphorylated CREB and enhances its transcriptional activity toward cAMP-responsive genes. Acts as a coactivator of ALX1. Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-ARNTL/BMAL1 and CLOCK-ARNTL/BMAL1 heterodimers. Acetylates PCNA; acetylation promotes removal of chromatin-bound PCNA and its degradation during nucleotide excision repair (NER) (PubMed:[24939902](#)). Functions as a transcriptional coactivator for SMAD4 in the TGF-beta signaling pathway (PubMed:[25514493](#)).

Images

Western Blot analysis of various cells using CBP Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of HeLa cells using CBP Polyclonal Antibody diluted at 1 : 1000



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.