

CBP (Acetyl Lys1535) Polyclonal Antibody

Catalog # AP63216

Product Information

ApplicationWB, IHC-PPrimary AccessionQ92793

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW265351

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.

ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

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:<u>11154691</u>, PubMed:<u>12738767</u>, PubMed:<u>12929931</u>, PubMed:<u>24207024</u>, PubMed:<u>28790157</u>, PubMed:<u>30540930</u>,

PubMed:<u>35675826</u>, PubMed:<u>9707565</u>). 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:<u>14645221</u>). Acetylates PCNA; acetylation promotes removal of chromatin-bound PCNA

and its degradation during nucleotide excision repair (NER)

(PubMed:<u>24939902</u>). 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).

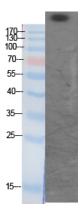
Cellular Location

Cytoplasm. Nucleus. Note=Recruited to nuclear bodies by SS18L1/CREST (PubMed:15488321). In the presence of ALX1 relocalizes 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 Acetyl-CBP (K1535) Polyclonal Antibody diluted at 1: 1000. Secondary antibody was diluted at 1:20000

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