

Recombinant CREBBP (1081-1197) protein

Catalog No: 31373, 31873

Lot No: 15718003

Expressed In: *E. coli*

Quantity: 100, 1000 µg

Concentration: 1.2 µg/µl

Source: Human

Buffer Contents: Recombinant CREBBP (1081-1197) protein is supplied in 25 mM Tris pH 8, 150 mM NaCl and 10% glycerol.

Background: CREB-binding protein (CREBBP) or CBP, is a protein known to play critical roles in embryonic development, growth control, and homeostasis by coupling chromatin remodeling to transcription factor recognition. CREBBP shares regions of very high sequence similarity with protein p300 in its bromodomain, cysteine-histidine-rich regions, and histone acetyltransferase domain. The CREBBP bromodomain recognizes acetylated histone lysine residues and functions as a 'reader' of these epigenetic histone marks to regulate chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. CREBBP has intrinsic histone acetyltransferase activity and also acts as a scaffold to stabilize additional protein interactions with the transcription complex. CREBBP acetylates histones as well as non-histone proteins, like NCOA3 coactivator. In addition, CREBBP binds specifically to phosphorylated CREB and enhances its transcriptional activity toward cAMP-responsive genes. CREBBP also has been shown to act as a coactivator of ALX1 in the presence of p300.

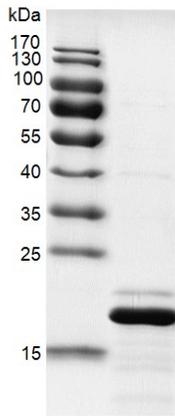
Protein Details: Recombinant CREBBP protein that includes amino acids 1081 - 1197 that contains the bromodomain sequences of CREBBP (accession number NM_004380.2) was expressed in *E. coli* and contains an N-terminal His-Tag and C-terminal FLAG-Tag with an observed molecular weight of 18.7 kDa. It shows binding specificity for acetylated H2BK85, H3K9/K14, H3K14, H3K36, H3K56, H3S10/K14/K18, H4K12, H4K20 and H4K44, as well as acetylated p53-K382, MyoD-K99 and MyoD-K99/K102. The recombinant protein is >85% pure by SDS-PAGE.

Application Notes: Recombinant CREBBP (1081-1197) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

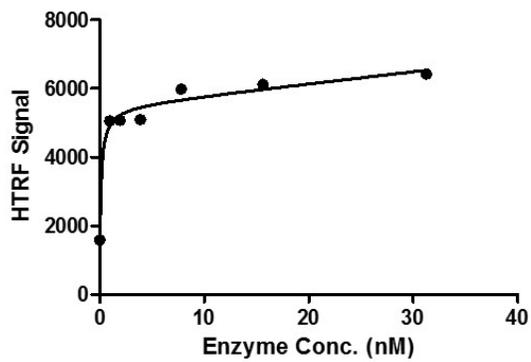
CREBBP (1081-1197)



Recombinant CREBBP (1081-1197) protein gel.

CREBBP (1081-1197) protein was run on a 12.5% SDS-PAGE gel and stained with Coomassie Blue.

CREBBP (1081-1197)



Recombinant CREBBP (1081-1197) HTRF activity assay.

3 μ M H4K5/8/12/16 (ac4) peptide was incubated with different concentrations of CREBBP (1081-1197) protein in 10 μ l reaction system containing 50 mM HEPES-NaOH pH 7.5, 0.1% BSA for 1 hour, then 10 μ l FLAG antibody and SA-XL665 mixture (1:100 dilution in reaction buffer) was added to each reaction system and incubated for 1 hour. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.