

## Recombinant CREBBP (1075-1873) protein

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**Catalog No:** 31590, 31990

**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg

**Concentration:** 0.45 µg/µl

**Source:** Human

**Buffer Contents:** Recombinant CREBBP (1075-1873) protein is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

**Background:** CREBBP (CREB Binding Protein, also known as CBP, KAT3A, RSTS) is a histone acetyltransferase (HAT) that functions primarily as a transcriptional activator. CREBBP was first isolated as a nuclear protein that specifically binds to phosphorylated cAMP-response element binding protein (CREB). It is known to play critical roles in embryonic development, growth control, and homeostasis by coupling chromatin remodeling to transcription factor recognition. It also acts as a scaffold to stabilize additional protein interactions with the transcription complex. CREBBP also acetylates non-histone proteins, like NCOA3 and FOXO1. Mutations of CREBBP cause Rubinstein-Taybi syndrome (RTS).

**Protein Details:** Recombinant CREBBP (1075-1873) that includes amino acids 1075 - 1873 of human CREBBP protein (accession number NP\_004371.2) was expressed in Baculovirus expression system and contains an N-terminal FLAG-Tag with a molecular weight of 94.3 kDa.

**Application Notes:** Recombinant CREBBP (1075-1873) protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

**Assay Conditions:** 0.5 µg Histone H3 (Cat. No. 31294) was incubated with 0 µg (-), 0.5 µg (+) CREBBP (1075-1873) in a 20 µl reaction system containing 50 mM Tris-HCl pH 8.0, 0.1 mM EDTA, 50 ng/µl BSA, 1 mM TCEP and 20 µM Acetyl-CoA for 2 hours at room temperature. Half of each reaction was run on a 13% SDS-PAGE gel, and products were detected by Western blot. H3ac (pan-acetyl) antibody (Cat. NO. 61637) was used to recognize acetylated histone H3.

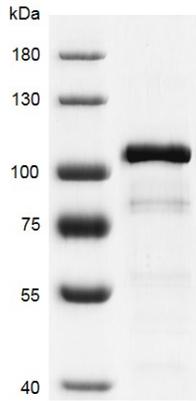
### References:

This product was used in the following publications:

*Cell Rep* (2018). Aug. 14;24(7):1722-1729. PMID: 30110629. (Histone Acetyltransferase Assay)

**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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

### CREBBP (1075-1873)



### Recombinant CREBBP (1075-1873) protein, SDS-PAGE gel.

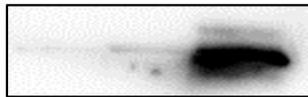
Recombinant CREBBP protein was run on an 7.5% SDS-PAGE gel and stained with Coomassie blue

MW: 94.3 kDa

Purity: > 90%

Histone H3	-	+	+
CREBBP (1075-1873)	+	-	+

$\alpha$ -H3ac (pan-acetyl)



### Western blot for recombinant CREBBP (1075-1873) protein activity

0.5  $\mu$ g Histone H3 was incubated with 0  $\mu$ g (-), 0.5  $\mu$ g (+) CREBBP (1075-1873) in 20  $\mu$ l reaction system for 2 hours at room temperature. Half of each reaction was run on a 13% SDS-PAGE gel, and products were detected by Western blot. H3ac (pan-acetyl) antibody was used to recognize acetylated histone H3.