# Anti-CREBBP Antibody [PS01-16] - BSA and Azide free

# HA751014

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| **Product Type:** | Recombinant Rabbit monoclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse |
| **Applications:** | IHC-P |
| **Molecular Wt:** | Predicted band size: 265 kDa |
| **Clone number:** | PS01-16 |

**Description:** Cyclic adenosine monophosphate Response Element Binding protein Binding Protein (CREB-binding protein), also known as CREBBP or CBP or KAT3A, is a coactivator encoded by the CREBBP gene in humans, located on chromosome 16p13.3. CBP has intrinsic acetyltransferase functions; it is able to add acetyl groups to both transcription factors as well as histone lysines, the latter of which has been shown to alter chromatin structure making genes more accessible for transcription. This relatively unique acetyltransferase activity is also seen in another transcription enzyme, EP300 (p300). Together, they are known as the p300-CBP coactivator family and are known to associate with more than 16,000 genes in humans; however, while these proteins share many structural features, emerging evidence suggests that these two co-activators may promote transcription of genes with different biological functions. For example, CBP alone has been implicated in a wide variety of pathophysiologies including colorectal cancer as well as head and neck squamous cell carcinoma. In these diseases, association of CBP with β-catenin has been shown to promote cancer cell proliferation and disease aggressiveness, whereas p300/ β-catenin leads to cell differentiation and/ or apoptosis. CBP has also been shown to help modulate liver function via maintenance of energy homeostasis in response to changes in cell nutrition conditions by regulating the activity of transcription factors and genes responsible for lipogenesis and gluconeogenesis. CBP is also implicated in the etiologies of several other diseases including hematologic malignancies and other solid tumors, diabetes, schizophrenia, Alzheimer's Disease, depression, and many other neurological conditions.

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| **Immunogen:** | Synthetic peptide within Human CREBBP aa 2400-2500. |
| **Positive control:** | Human colon carcinoma tissue, human breast carcinoma tissue, mousse testis tissue. |
| **Subcellular location:** | Cytoplasm, Nucleus. |
| **Database links:** | SwissProt: Q92793 Human \| P45481 Mouse |
| **Recommended Dilutions:** | |
| **IHC-P** | 1:200-1:1,000 |
| **Storage Buffer:** | 1*PBS (pH7.4). |
| **Storage Instruction:** | Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles. |
| **Purity:** | Protein A affinity purified. |

## Images

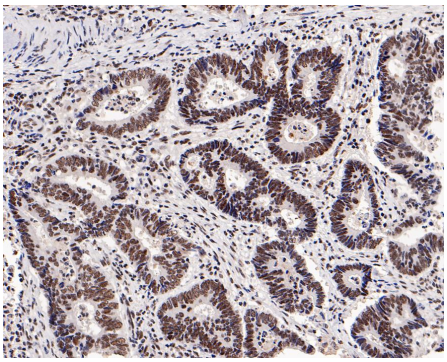

**Fig1:** Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-CREBBP antibody (HA751014) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with dd$H_2O$ and PBS, and then probed with the primary antibody (HA751014) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

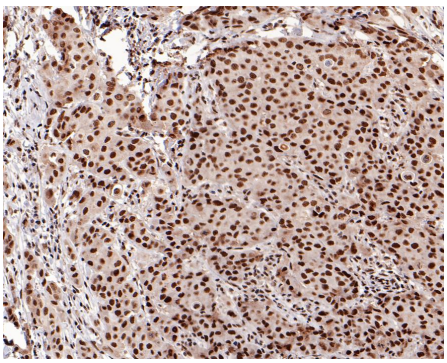

**Fig2:** Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue with Rabbit anti-CREBBP antibody (HA751014) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with dd$H_2O$ and PBS, and then probed with the primary antibody (HA751014) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

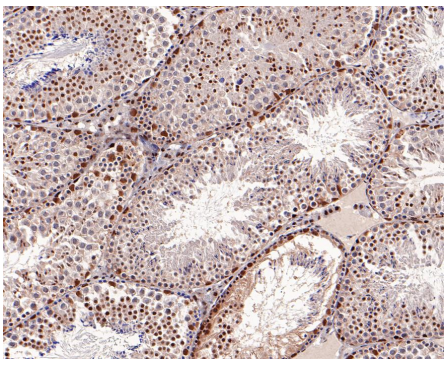

**Fig3:** Immunohistochemical analysis of paraffin-embedded mousse testis tissue with Rabbit anti-CREBBP antibody (HA751014) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with dd$H_2O$ and PBS, and then probed with the primary antibody (HA751014) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

## Background References

1. Huang YH et al. CREBBP/EP300 mutations promoted tumor progression in diffuse large B-cell lymphoma through altering tumor-associated macrophage polarization via FBXW7-NOTCH-CCL2/CSF1 axis. Signal Transduct Target Ther. 2021 Jan
2. Sun Y et al. CREBBP cooperates with the cell cycle machinery to attenuate chidamide sensitivity in relapsed/refractory diffuse large B-cell lymphoma. Cancer Lett. 2021 Sep