

For Research Use Only

Phospho-CREB1 (Ser133) Recombinant antibody

Catalog Number: 81871-1-RR



Basic Information

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| Catalog Number: 81871-1-RR | GenBank Accession Number: BC010636 | Purification Method: Protein A purification |
| Size: 1000 ug/ml | GeneID (NCBI): 1385 | CloneNo.: 5H5 |
| Source: Rabbit | UNIPROT ID: P16220 | Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 |
| Isotype: IgG | Full Name: cAMP responsive element binding protein 1 | |
| | Calculated MW: 341 aa, 35 kDa | |
| | Observed MW: 35-46 kDa | |

Applications

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| Tested Applications: WB, IHC, ELISA | Positive Controls: |
| Species Specificity: human, mouse | WB : Calyculin A treated HEK-293 cells, IHC : human prostate cancer tissue, mouse colon tissue |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

The cAMP-response element binding protein (CREB) is localized in the nucleus and acts as a transcription factor, which binds to the cAMP response element (CRE) of the promoters of its target genes, upon phosphorylation at Ser133 by different receptor-activated protein kinases, such as protein kinase A (PKA), calmodulin-dependent protein kinase (CaMK), mitogen-activated protein kinases (MAPK), and other kinases. The activity of CREB1 in neurons has been correlated with various intracellular processes, including proliferation, differentiation, survival, long-term synaptic potentiation, neurogenesis, and neuronal plasticity. CREB1 belongs to the CREB/activating transcription factor (ATF) family of transcription factors. The antibody also detects the phosphorylated form of the CREB-related protein ATF1. (PMID: 30214393, PMID: 33917483, PMID: 32605164)

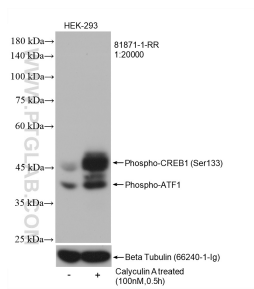
Storage

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| Storage: Store at -20°C. Stable for one year after shipment. |
| Storage Buffer: PBS with 0.02% sodium azide and 50% glycerol pH 7.3. |
| Aliquoting is unnecessary for -20°C storage |

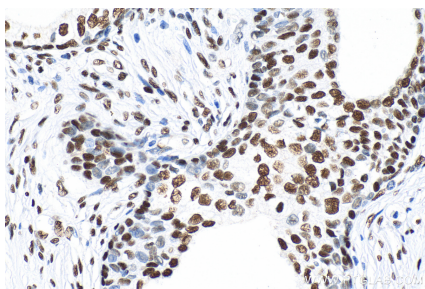
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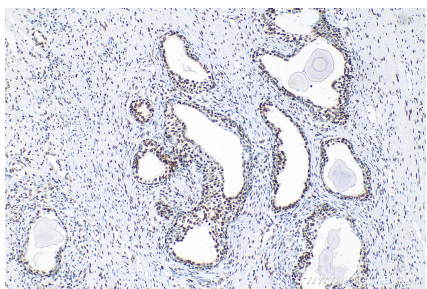
Selected Validation Data



Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 81871-1-RR (Phospho-CREB1 (Ser133) antibody) at dilution of 1:20000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with Beta-tubulin antibody as loading control.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 81871-1-RR (Phospho-CREB1 (Ser133) antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 81871-1-RR (Phospho-CREB1 (Ser133) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).