For Research Use Only

## Phospho-CREB1 (Ser133) Recombinant antibody

www.ptglab.com

Catalog Number:81871-1-RR

**Basic Information** 

Catalog Number: GenBank Accession Number:

81871-1-RR BC010636 GeneID (NCBI): CloneNo.:

100ul, Concentration: 1000 µg/ml by 1385 5H5

Source: cAMP responsive element binding Rabbit IHC 1:1000-1:4000 protein 1

Isotype: Calculated MW: IgG 341 aa, 35 kDa

Observed MW: 35-46 kDa

**Applications** 

**Tested Applications:** 

IHC, WB, ELISA Species Specificity:

Human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** Protein A purification

Recommended Dilutions: WB 1:5000-1:50000

**Positive Controls:** 

WB: Calyculin A treated HEK-293 cells, IHC: human prostate cancer tissue,

## **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  $Ser 133\ by\ different\ receptor-activated\ protein\ kinases, such\ as\ protein\ kinase\ A\ (PKA),\ calmodulin-dependent$ 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

Storage:

Store at -20°C. Stable for one year after shipment.

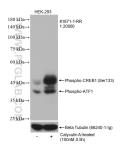
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

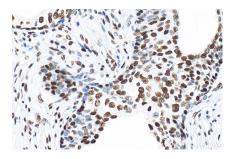
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

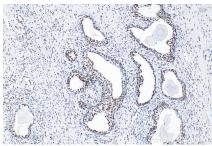
## **Selected Validation Data**



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 paraffinembedded 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 paraffinembedded 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).