For Research Use Only

Phospho-CREB1 (Ser133) Recombinant antibody

Catalog Number:81871-1-RR



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

81871-1-RR BC010636 Protein A purification
Size: GenelD (NCBI): CloneNo.:
100ul , Concentration: 1000 ug/ml by 1385 5H5

 Nanodrop;
 UNIPROT ID:
 Recommended Dilutions:

 Source:
 P16220
 WB 1:5000-1:50000

 Rabbit
 Full Name:
 IHC 1:1000-1:4000

Isotype: cAMP responsive element binding

IgG protein 1

Calculated MW: 341 aa, 35 kDa Observed MW: 35-46 kDa

Applications

Tested Applications: Positive Controls:

WB, IHC, ELISA

WB: Calyculin A treated HEK-293 cells,
Species Specificity:

human, mouse

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 kinases (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.

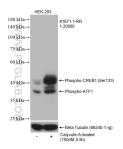
Storage Buffer:

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

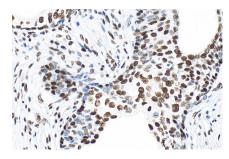
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

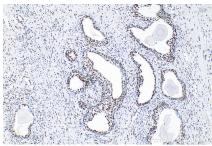
Selected Validation Data



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).