

For Research Use Only

# Phospho-CREB1 (Ser133) Polyclonal antibody



Catalog Number: 28792-1-AP

15 Publications

## Basic Information

<b>Catalog Number:</b> 28792-1-AP	<b>GenBank Accession Number:</b> BC010636	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 200 µg/ml	<b>GeneID (NCBI):</b> 1385	<b>Recommended Dilutions:</b> WB 1:1000-1:8000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P16220	
<b>Isotype:</b> IgG	<b>Full Name:</b> cAMP responsive element binding protein 1	
	<b>Calculated MW:</b> 341 aa, 35 kDa	
	<b>Observed MW:</b> 35-46 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b> WB : Forskolin treated HSC-T6 cells, IHC : human liver tissue,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> Human, rat	
<b>Cited Species:</b> human, rat, mouse	

**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)

## Notable Publications

Author	Pubmed ID	Journal	Application
Jia Liu	35605921	J Ethnopharmacol	WB
Peng Xu	35278661	Brain Res Bull	WB
Xiaoye Fan	36608590	Redox Biol	WB

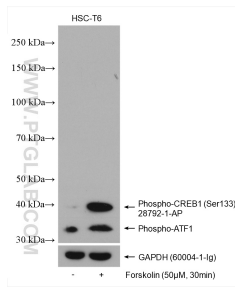
## Storage

**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

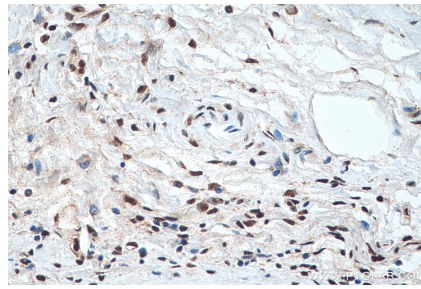
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## Selected Validation Data



Non-treated and Forskolin treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 28792-1-AP (Phospho-CREB1 (Ser133) antibody) at dilution of 1:4000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 28792-1-AP (Phospho-CREB1 (Ser133) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).