

Anti Phospho CREB (Ser133) antibody (KLH)

Catalog No: tcsa25582



Available Sizes

Size: 100μl



Specifications

Application:

WB, IHC

Species Reactivity:

Bovine, Dog, Chicken, Human, Mouse, Non-Human Primate, Rat, Sheep, Xenopus, Zebrafish

Host Species:

Rabbit

Immunogen / Amino acids:

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser133 conjugated to KLH.

Conjugation:

KLH

Clonality:

Polyclonal

Form:

Liquid

Storage Buffer:

100 μl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μg per ml BSA and 50% glycerol.

Recommended Dilution:

WB 1:1000; IHC 1:100

Storage Instruction:

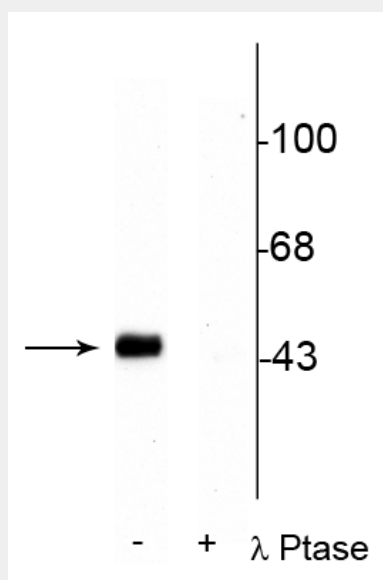
Store at -20°C, and avoid repeated freeze-thaw cycles.

Alternative Names:

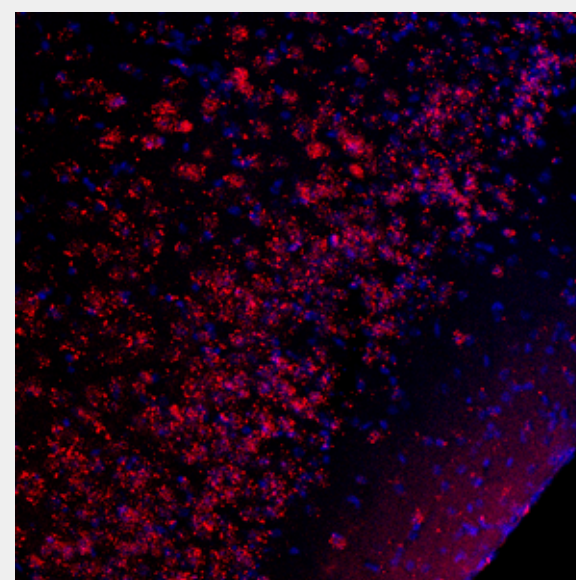
Creb1 antibody; Creb-1 antibody; Cyclic AMP-responsive element-binding protein 1 antibody; CREB-1 antibody; cAMP-responsive element-binding protein 1 antibody; Phospho-CREB (Ser133) (KLH) antibody

Product Description

It was well known that the control of gene expression involves activation of protein kinase cascades that regulate transcription factors within the nucleus (Karin and Hunter, 1995). The cyclic AMP response element binding protein (CREB) was one of the best characterized stimulus-induced transcription factors (Montminy, 1997). This transcription factor was a component of intracellular signaling events that regulate a wide range of biological functions, from spermatogenesis to circadian rhythms and memory (Shaywitz and Greenberg, 1999; Silva et al., 1998). A variety of protein kinases including protein kinase A (PKA), mitogen-activated protein kinases (MAPKs), and Ca²⁺/calmodulin-dependent protein kinases (CaMKs) phosphorylate CREB at serine 133 (Ser133), and phosphorylation of Ser133 are required for CREB-mediated transcription (Johannessen et al., 2004; Kornhauser et al., 2002).



Western blot of rat hippocampal lysate stimulated with forskolin showing specific immunolabeling of the ~45 kDa CREB phosphorylated at Ser133 in the first lane (-). Phosphospecificity was shown in the second lane (+) where immunolabeling was completely eliminated by lysate treatment with lambda phosphatase (λ -Ptase, 800 units/mg protein for 30 min), using Anti-Phospho-CREB (Ser133) (KLH) polyclonal antibody.



Immunostaining of CREB Ser133 (red) in mouse piriform cortex. Cell nuclei are visualized with DAPI DNA stain (blue), using Anti-Phospho-CREB (Ser133) (KLH) polyclonal antibody.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!