

**Cat. No:** ABP-0019  
**Conjugate:** Unconjugated  
**Size:** 100 ug  
**Clone:** Poly  
**Concentration:** 1mg/ml  
**Host:** Rb  
**Isotype:** IgG

**Immunogen:** Immunofluorescence analysis of U2OS cell using Phospho-CHEK1-S317 antibody. Blue: DAPI for nuclear staining. RNF168(GFP) can be used to mark cells damaged by UV-A laser for they always gather around DNA damage region.

**Reactivity:** Hu, Ms, Rt

**Applications:** Western Blot: 1:1000 Immunofluorescence: 1:50 - 1:100

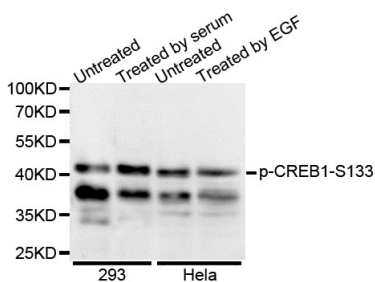
**Molecular Weight:** 43kDa

**Background:** CREB is a bZIP transcription factor that activates target genes through cAMP response elements. CREB is able to mediate signals from numerous physiological stimuli, resulting in regulation of a broad array of cellular responses. While CREB is expressed in numerous tissues, it plays a large regulatory role in the nervous system. CREB is believed to play a key role in promoting neuronal survival, precursor proliferation, neurite outgrowth, and neuronal differentiation in certain neuronal populations (1-3). Additionally, CREB signaling is involved in learning and memory in several organisms (4-6). CREB is able to selectively activate numerous downstream genes through interactions with different dimerization partners. CREB is activated by phosphorylation at Ser133 by various signaling pathways including Erk, Ca<sup>2+</sup>, and stress signaling. Some of the kinases involved in phosphorylating CREB at Ser133 are p90RSK, MSK, CaMKIV, and MAPKAPK-2 (7-9).

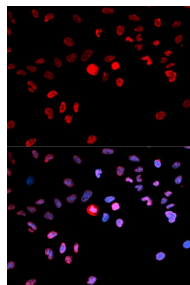
**Form:** liquid

**Buffer:** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage:** Store at -20°C. Avoid freeze / thaw cycles.



Western blot analysis of extracts of various cell lines, using Phospho-CREB1-S133 antibody



Immunofluorescence analysis of MCF7 cell using Phospho-CREB1-S133 antibody. Blue: DAPI for nuclear staining.

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