

35-1051: Polyclonal Antibody to CREB (Phospho-Ser133)

Clonality :	Polyclonal
Application :	WB,IHC
Reactivity :	Human,Mouse,Rat
Gene :	CREB1
Gene ID :	1385
Uniprot ID :	P16220
Format :	Purified
Alternative Name :	CREB-1, CREB1
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 133 (R-P-S(p)-Y-R) derived from Human CREB.

Description

CREB1 is a transcription factor that is a member of the bZIP family of DNA binding proteins. It binds as a homodimer to the CRE (cAMP-Responsive Element), an octameric palindrome containing a conserved core sequence, 5-prime-TGACG-3-prime. It consists of two transcript variants encoding respective isoforms produced by alternate splicing. It is mapped to 2q32.3-q34. It is phosphorylated by several protein kinases and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. CREB1 is crucial for the consolidation of long-term conditioned fear memories, but not for encoding, storage, or retrieval of these memories. It is required for the stability of reactivated or retrieved conditioned fear memories. Xing J, et al. (1998) Mol Cell Biol 18(4): 1946-55. Tan Y, et al. (1996) EMBO J; 15(17): 4629-42. Hao, M. et al. (1996) J. Biol. Chem. 271, 29380-29385. Mayo LD, et al. (2001) Biol Chem; 276(27): 25184-9.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 43kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

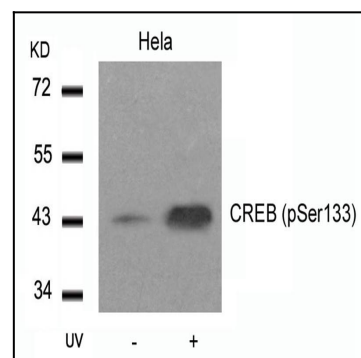


Figure 1: Western blot analysis of extracts from HeLa cells untreated or treated with UV using CREB(Phospho-Ser133) Antibody 35-1051.

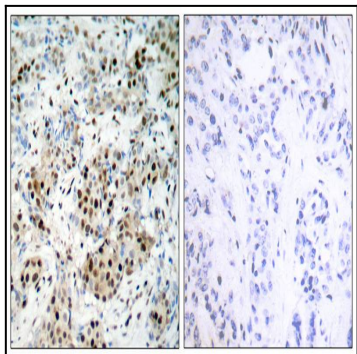


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using CREB(Phospho-Ser133) Antibody 35-1051 (left) or the same antibody preincubated with blocking peptide(right).