

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

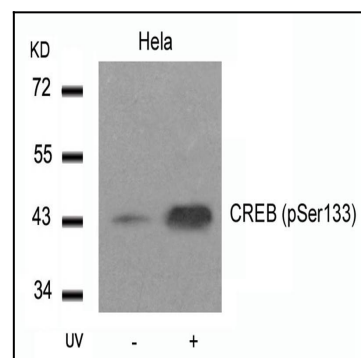


Figure 1: Western blot analysis of extracts from HeLa cells untreated or treated with UV using CREB(Phospho-Ser133) Antibody 35-1051 .

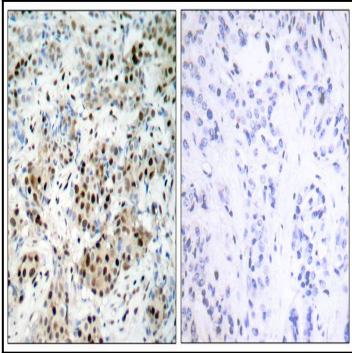


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using CREB(Phospho-Ser133) Antibody 35-1051 (left) or the same antibody preincubated with blocking peptide(right).