

CREB(Phospho-Ser133) Antibody

Catalog No: #11052



Package Size: #11052-1 50ul #11052-2 100ul

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Description

Product Name	CREB(Phospho-Ser133) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of CREB only when phosphorylated at serine 133.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 133 (R-P-S(p)-Y-R) derived from Human CREB.
Conjugates	Unconjugated
Target Name	CREB
Modification	Phospho
Other Names	CREB-1; CREB1;
Accession No.	Swiss-Prot: P16220NCBI Protein: NP_004370.1
Concentration	1.0mg/ml
Formulation	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	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

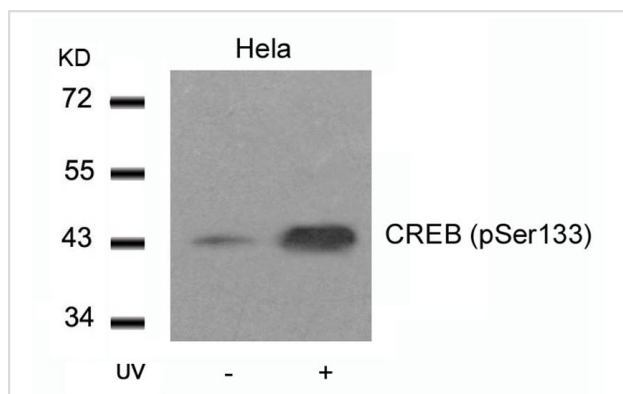
Application Details

Predicted MW: 43kd

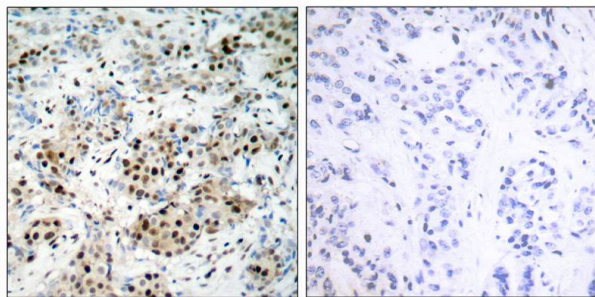
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from HeLa cells untreated or treated with UV using CREB(Phospho-Ser133) Antibody #11052.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using CREB(Phospho-Ser133) Antibody #11052(left) or the same antibody preincubated with blocking peptide(right).

Background

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.

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Tan Y, et al. (1996) *EMBO J*; 15(17): 4629-42.

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Mayo LD, et al. (2001) *Biol Chem*; 276(27): 25184-9.

Published Papers

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el at., Mogrol Derived from *Siraitia grosvenorii* Mogrosides Suppresses 3T3-L1 Adipocyte Differentiation by Reducing cAMP-Response Element-Binding Protein Phosphorylation and Increasing AMP-Activated Protein Kinase Phosphorylation. In *PLoS One* on 2016 Sep 1 by Naoki Harada, Mikako Ishihara et al..PMID:27583359, , (2016)

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el at., Hydrogen sulfide decreases ϵ -Y-adrenergic agonist-stimulated lung liquid clearance by inhibiting ENaC-mediated transepithelial sodium absorption. In *Am J Physiol Regul Integr Comp Physiol* on 2015 Apr 1 by Alisa M Agnø, Jan-Peter Baldin, et al..PMID: 25632025, , (2015)

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el at., Connexin Hemichannels Contribute to the Activation of cAMP Signaling Pathway and Renin Production. In *Int J Mol Sci* on 2020 Jun 23 by Jingru Hong,

Jian Yao,et al..PMID:32585970, , (2020)

[PMID:32585970](#)

el at., Anti-melanogenesis effect from Wampee fruit pectin via α -MSH/TRY pathway in A375 cells. In BMC Complement Med Ther on 2022 Jun 25 by Weiyu Fu, Xuehua Liao, et al..PMID:35752787, , (2022)

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.