

**Phospho-CREB-S133 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AE1010d**

**Specification**

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**Phospho-CREB-S133 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P16220</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Concentration	1mg/ml
Isotype	Rabbit IgG
Calculated MW	35136

**Phospho-CREB-S133 Antibody - Additional Information**

**Gene ID** 1385

**Other Names**

Cyclic AMP-responsive element-binding protein 1, CREB-1, cAMP-responsive element-binding protein 1, CREB1

**Target/Specificity**

The antibody was affinity-purified from rabbit antiserum using epitope-specific phosphopeptide column, and the antibody against non-phosphopeptide was removed using non-phosphopeptide column corresponding to the phosphorylation site.

**Dilution**

WB~~1:500~1:1000  
IHC~~1:50~1:100

**Format**

affinity Purified IgG, in PBS, 0.02% sodium azide and 50% glycerol.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-CREB-S133 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-CREB-S133 Antibody - Protein Information**

**Name** CREB1

### Function

Phosphorylation-dependent transcription factor that stimulates transcription upon binding to the DNA cAMP response element (CRE), a sequence present in many viral and cellular promoters (By similarity). Transcription activation is enhanced by the TORC coactivators which act independently of Ser-119 phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/14536081" target="\_blank">14536081</a>). Involved in different cellular processes including the synchronization of circadian rhythmicity and the differentiation of adipose cells (By similarity). Regulates the expression of apoptotic and inflammatory response factors in cardiomyocytes in response to ERFE-mediated activation of AKT signaling (By similarity).

### Cellular Location

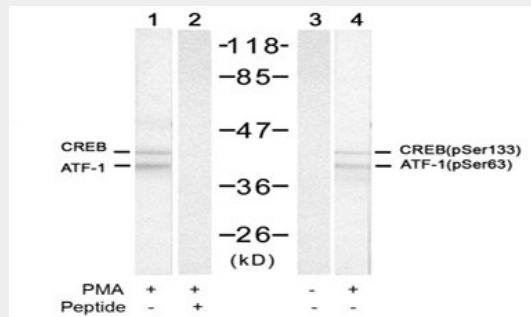
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

### Phospho-CREB-S133 Antibody - Protocols

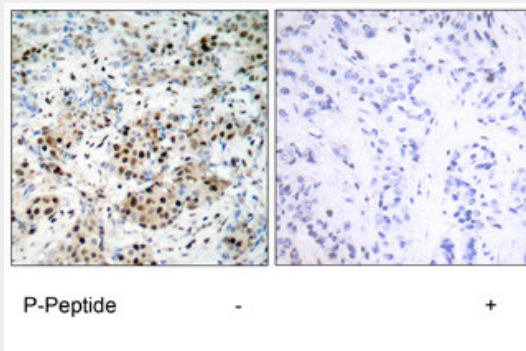
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Phospho-CREB-S133 Antibody - Images



Western blot analysis of extracts from HeLa cells using CREB Antibody (S133) (#AE1010b, Lane 1 and 2) and Phospho-CREB-S133 Antibody (#AE1010d, Lane 3 and 4).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Phospho-CREB-S133 Antibody (#AE1010d).

### **Phospho-CREB-S133 Antibody - Background**

This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds as a homodimer to the cAMP-responsive element, an octameric palindrome. The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. Alternate splicing of this gene results in two transcript variants encoding different isoforms.

### **Phospho-CREB-S133 Antibody - References**

COMMON VARIANTS IN 40 GENES ASSESSED FOR DIABETES INCIDENCE AND RESPONSE TO METFORMIN AND LIFESTYLE INTERVENTIONS IN THE DIABETES PREVENTION PROGRAM. Jablonski KA, et al. *Diabetes*, 2010 Aug 3. PMID 20682687.

A preliminary investigation of the influence of CREB1 gene on treatment resistance in major depression. Serretti A, et al. *J Affect Disord*, 2010 Jul 17. PMID 20643483.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086.

cAMP-response-element-binding protein positively regulates breast cancer metastasis and subsequent bone destruction. Son J, et al. *Biochem Biophys Res Commun*, 2010 Jul 23. PMID 20599715.

GSK-3 promotes conditional association of CREB and its coactivators with MEIS1 to facilitate HOX-mediated transcription and oncogenesis. Wang Z, et al. *Cancer Cell*, 2010 Jun 15. PMID 20541704.