

**Phospho-CREB(S133) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3077a**

**Specification**

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

Application	WB, IHC-P-Leica,E
Primary Accession	<a href="#">P16220</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

**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**

This CREB Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S133 of human CREB.

**Dilution**

WB~~1:500  
IHC-P-Leica~~1:500

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. 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:[14536081](#)). 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

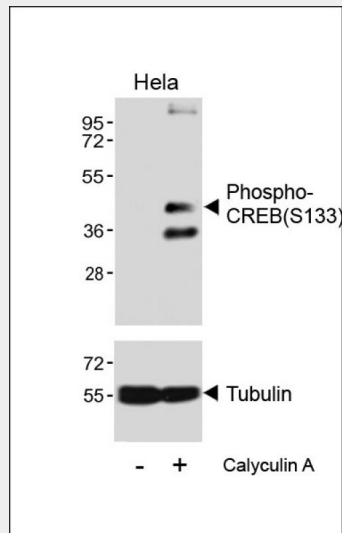
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

#### Phospho-CREB(S133) Antibody - Protocols

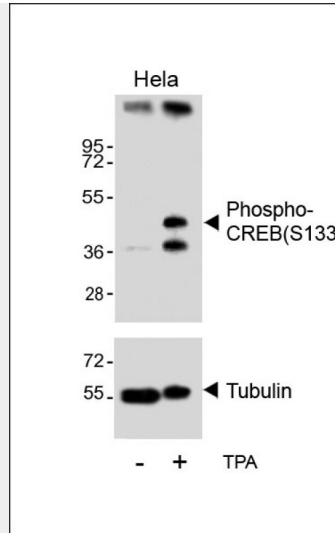
Provided below are standard protocols that you may find useful for product applications.

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

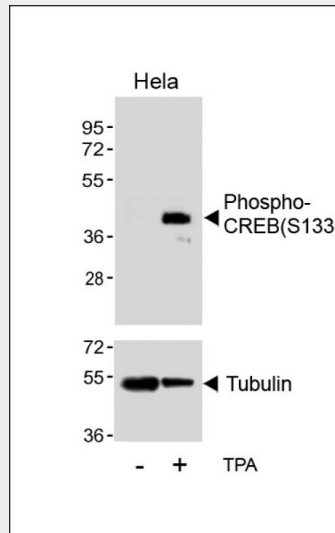
#### Phospho-CREB(S133) Antibody - Images



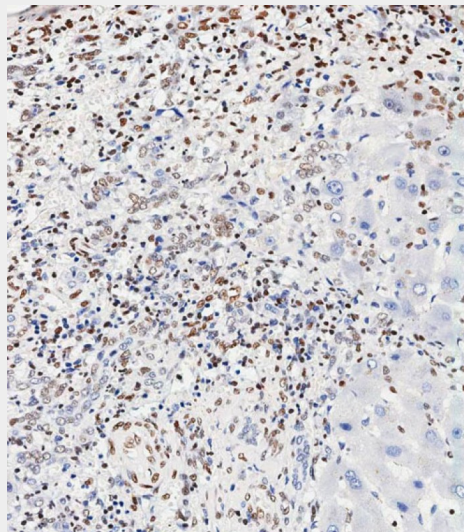
Western blot analysis of lysates from HeLa cell line, untreated or treated with 20% FBS + 100nM Calyculin A, using Phospho-CREB(S133) Antibody(upper) or tubulin(lower).



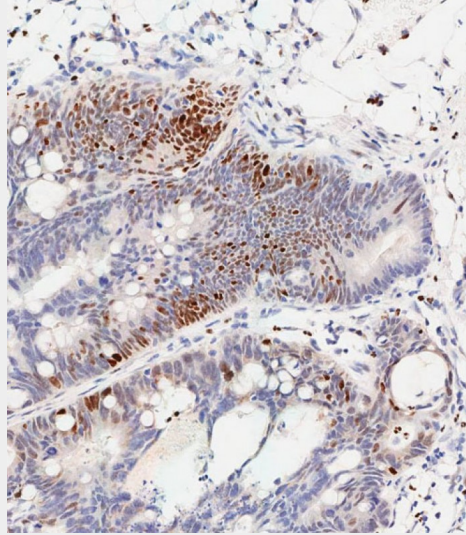
Western blot analysis of lysates from HeLa cell line, untreated or treated with TPA, 200nM, using Phospho-CREB(S133) Antibody(upper) or tubulin(lower).



Western blot analysis of lysates from HeLa cell line, untreated or treated with TPA, 200nM, using Phospho-CREB(S133) Antibody(upper) or tubulin(lower).



Immunohistochemical analysis of paraffin-embedded Human hepatocarcinoma tissue using AP3077a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue using AP3077a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

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

CREB is 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, (CRE), a sequence present in many viral and cellular promoters. The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway.

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

- Samten, B., et al., J. Immunol. 174(10):6357-6363 (2005).  
Zhang, X., et al., Proc. Natl. Acad. Sci. U.S.A. 102(12):4459-4464 (2005).  
Cho, K.N., et al., J. Biol. Chem. 280(8):6676-6681 (2005).  
Bailey, J., et al., J. Mol. Endocrinol. 34(1):1-17 (2005).  
Perry, C., et al., Neoplasia 6(3):279-286 (2004).

#### **Phospho-CREB(S133) Antibody - Citations**

- [Transgenic songbirds with suppressed or enhanced activity of CREB transcription factor.](#)