10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

Phospho-CREB(S133) Antibody - Product Information

Application	**WB, IHC-P, IF, IHC-P-Leica,E**
Primary Accession	P16220
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~~N/A
IF~~1:50~200
IHC-P-Leica~~1:500
E~~Use at an assay dependent concentration.

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).

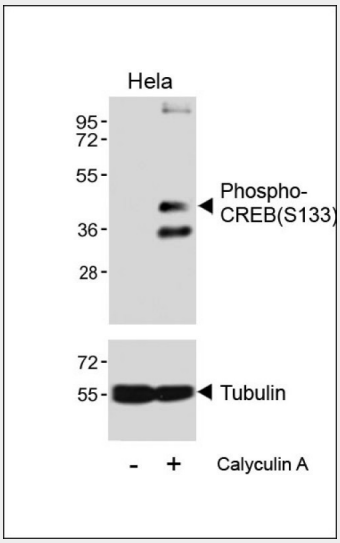
Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

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 Cytomety
- 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).

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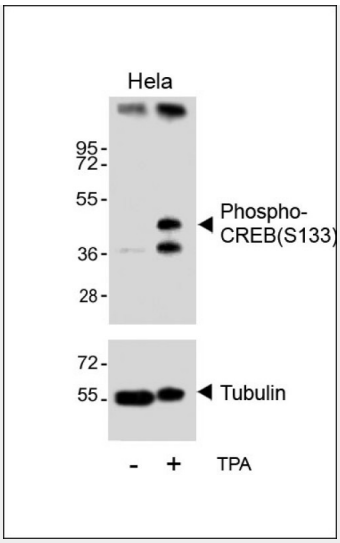
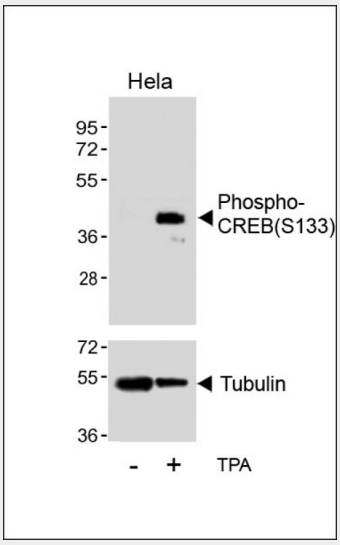
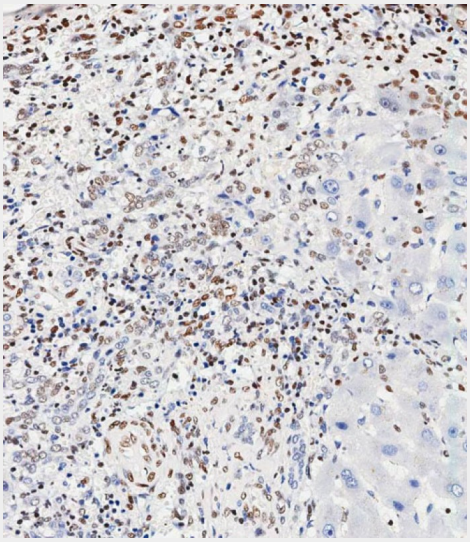


Western blot analysis of lysates from Hela cell line, untreated or treated with TPA, 200nM, using Phospho-CREB(S133) Antibody(upper) or tubulin(lower).



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



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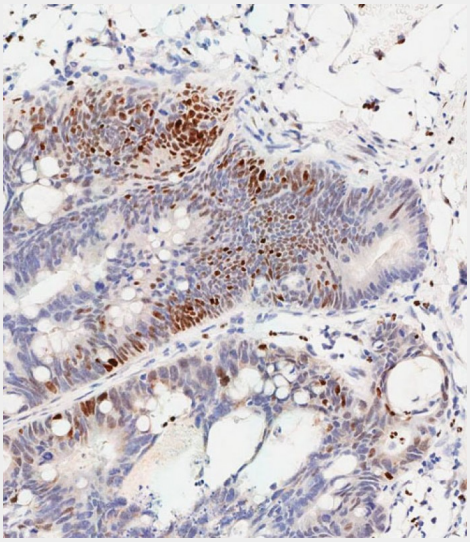
Immunohistochemical analysis of paraffin-embedded Human hepatocarcinoma tissue using AP3077a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) 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.