

# CREB(S133) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22383a

## **Product Information**

| Application       | IHC-P-Leica, IF, WB, E |
|-------------------|------------------------|
| Primary Accession | <u>P16220</u>          |
| Reactivity        | Human                  |
| Predicted         | Human                  |
| Host              | Rabbit                 |
| Clonality         | polyclonal             |
| Isotype           | Rabbit IgG             |
| Clone Names       | RB60630                |
| Calculated MW     | 35136                  |

## **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(S133) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 110-140 from the human region of human CREB(S133).                   |
| Dilution           | IHC-P-Leica~~1:500 IF~~1:25 WB~~1:2000 E~~Use at an assay dependent concentration.   |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.<br>This antibody is purified through a protein A column, followed by peptide<br>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        | CREB(S133) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.  |

#### **Protein Information**

| Name     | CREB1  |
|----------|--|
| Function | Phosphorylation-dependent transcription factor that stimulates<br>transcription upon binding to the DNA cAMP response element (CRE), a<br>sequence present in many viral and cellular promoters (By similarity). |

|                   | Transcription activation is enhanced by the TORC coactivators which act<br>independently of Ser-119 phosphorylation (PubMed: <u>14536081</u> ). Involved in<br>different cellular processes including the synchronization of circadian<br>rhythmicity and the differentiation of adipose cells (By similarity). Regulates<br>the expression of apoptotic and inflammatory response factors in<br>cardiomyocytes in response to ERFE-mediated activation of AKT signaling (By<br>similarity). |
|-------------------|--|
| Cellular Location | Nucleus {ECO:0000255 PROSITE-ProRule:PRU00312,<br>ECO:0000255 PROSITE-ProRule:PRU00978, ECO:0000269 PubMed:12552083}   |

## Background

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. Transcription activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation. Involved in different cellular processes including the synchronization of circadian rhythmicity and the differentiation of adipose cells.

## References

Berkowitz L.A., et al. Proc. Natl. Acad. Sci. U.S.A. 87:5258-5262(1990). Yoshimura T., et al.EMBO J. 9:2537-2542(1990). Waeber G., et al.Trans. Assoc. Am. Physicians 103:28-37(1990). Hoeffler J.P., et al.Science 242:1430-1433(1988). Short M.L., et al.Nucleic Acids Res. 19:4290-4290(1991).

## Images





Immunohistochemical analysis of paraffin-embedded Human hepatocarcinoma tissue using AP22383a 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.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela cells labeling CREB1 with AP22383a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus and Weak Cytoplasm staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin(red). The nuclear counter stain is DAPI (blue).



All lanes : Anti-CREB(S133) Antibody at 1:2000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: MDA-MB-468 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.