

CREB(S133) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22383a

Specification

CREB(S133) Antibody - Product Information

Application IHC-P-Leica, IF, WB,E

Primary Accession P16220

Other Accession <u>P27925</u>, <u>Q01147</u>, <u>P15337</u>, <u>Q1LZH5</u>, <u>Q03060</u>,

P27699, Q03061

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 35136

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(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. This antibody is purified through a protein A column, followed by peptide affinity purification.

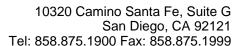
Storage

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

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

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

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

CREB(S133) Antibody - Protocols

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

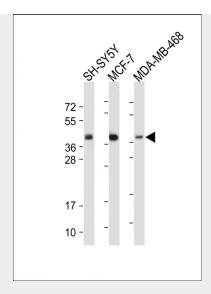
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CREB(S133) Antibody - Images

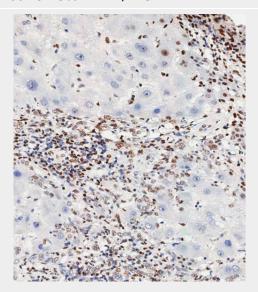


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela cells labeling CREB1 with AP22383a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus and Weak 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.



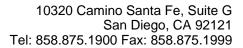
Immunohistochemical analysis of paraffin-embedded Human hepatocarcinoma tissue using AP22383a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

CREB(S133) Antibody - 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.

CREB(S133) Antibody - 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).