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CREB1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP11707c

Specification

CREB1 Antibody (Center) - Product Information

Application	**IF, WB, FC,E**
Primary Accession	P16220
Other Accession	P15337, Q01147, P27925, NP_004370.1
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**35136**
Antigen Region	**105-132**

CREB1 Antibody (Center) - 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 CREB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 105-132 amino acids from the Central region of human CREB1.

Dilution
IF~~1:10~50
WB~~1:2000
FC~~1:25

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
CREB1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CREB1 Antibody (Center) - 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).

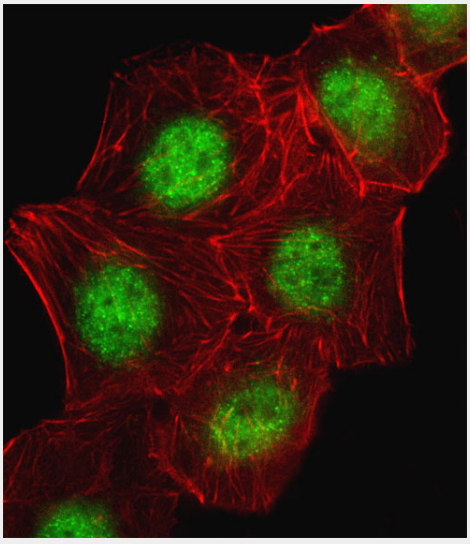
Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

CREB1 Antibody (Center) - Protocols

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

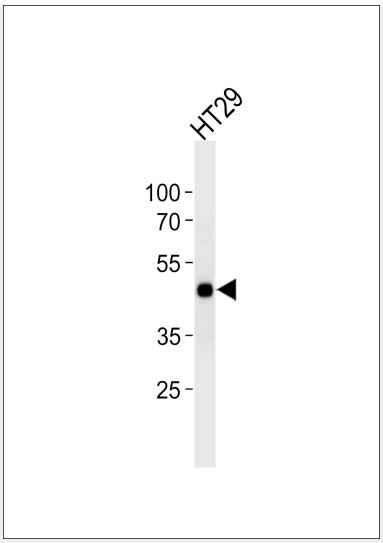
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CREB1 Antibody (Center) - Images

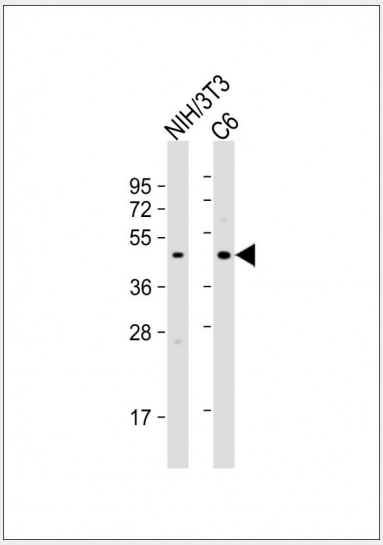


Fluorescent image of A549 cell stained with CREB1 Antibody (Center)(Cat#AP11707c).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with CREB1 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃).CREB1 immunoreactivity is localized to Nucleus significantly.

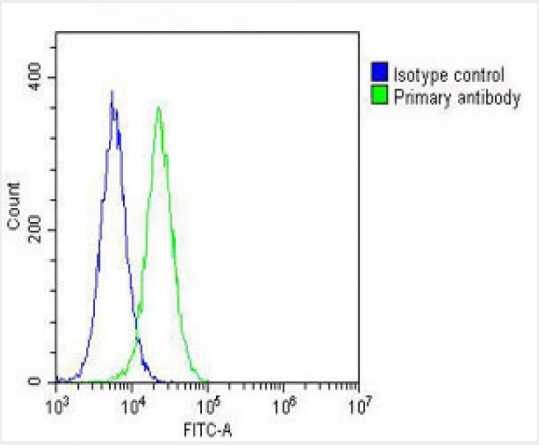
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CREB1 Antibody (Center) (Cat. #AP11707c) western blot analysis in HT29 cell line lysates (35ug/lane).This demonstrates the CREB1 antibody detected the CREB1 protein (arrow).



All lanes : Anti-CREB1 Antibody (Center) at 1:2000 dilution Lane 1: NIH/3T3 whole cell lysate Lane 2: C6 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.



Overlay histogram showing Hela cells stained with AP11707c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11707c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

CREB1 Antibody (Center) - 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.

CREB1 Antibody (Center) - References

Jablonski, K.A., et al. Diabetes 59(10):2672-2681(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Chen, G., et al. J. Neurosci. 30(39):13066-13077(2010) Serretti, A., et al. J Affect Disord (2010) In press : Melnikova, V.O., et al. PLoS ONE 5 (8), E12452 (2010) :

CREB1 Antibody (Center) - Citations

- cis-Acting elements and trans-acting factors in the transcriptional regulation of raf kinase inhibitory protein expression.