

# Anti-CREB (phospho S129 + S133) antibody ab10564

★★★★★ [3 Abreviews](#) [7 References](#) [4 图像](#)

### 概述

<b>产品名称</b>	Anti-CREB (phospho S129 + S133)抗体
<b>描述</b>	兔多克隆抗体to CREB (phospho S129 + S133)
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> ICC/IF, WB
<b>种属反应性</b>	<b>与反应:</b> Mouse, Human
<b>免疫原</b>	Synthetic peptide corresponding to Human CREB (phospho S129 + S133).
<b>阳性对照</b>	WB: NIH3T3 cell extract with various treatments; A549 cell extract with various treatments; NIH3T3, A549, SK-N-SH, MCF7, and MDA-MB-231 untreated, EGF-treated or PDGF-treated cell lysates. ICC/IF: 70% confluent log phase HeLa cells.
<b>常规说明</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>存储溶液</b>	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 0.1% BSA  PBS is Ca <sup>2+</sup> and Mg <sup>2+</sup> free
<b>纯度</b>	Immunogen affinity purified
<b>纯化说明</b>	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using a spanning peptide corresponding to the cleavage-site to remove antibody that is reactive with non-phosphorylated CREB. The final product is generated

by affinity chromatography using a CREB-derived peptide that is phosphorylated at serines 129 and 133.

**克隆** 多克隆  
**同种型** IgG

## 应用

**The Abpromise guarantee** **Abpromise™**承诺保证使用ab10564于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100 - 1/500.
WB	★★★★☆ (2)	1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 37 kDa).

## 靶标

**功能** This protein binds the cAMP response element (CRE), a sequence present in many viral and cellular promoters. CREB stimulates transcription on binding to the CRE. Transcription activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation. Implicated in synchronization of circadian rhythmicity.

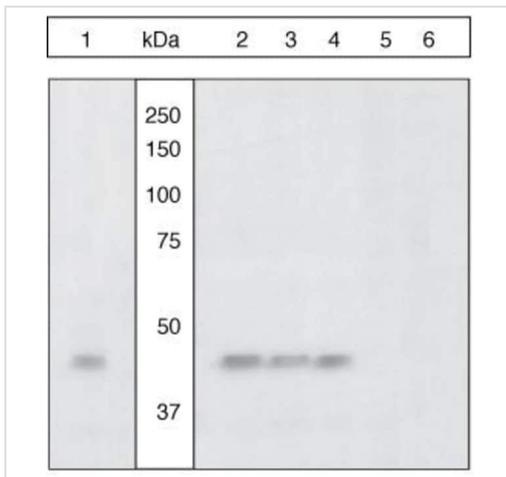
**疾病相关** Defects in CREB1 may be a cause of angiomatoid fibrous histiocytoma (AFH) [MIM:612160]. A distinct variant of malignant fibrous histiocytoma that typically occurs in children and adolescents and is manifest by nodular subcutaneous growth. Characteristic microscopic features include lobulated sheets of histiocyte-like cells intimately associated with areas of hemorrhage and cystic pseudovascular spaces, as well as a striking cuffing of inflammatory cells, mimicking a lymph node metastasis. Note=A chromosomal aberration involving CREB1 is found in a patient with angiomatoid fibrous histiocytoma. Translocation t(2;22)(q33;q12) with CREB1 generates a EWSR1/CREB1 fusion gene that is most common genetic abnormality in this tumor type.

**序列相似性** Belongs to the bZIP family.  
Contains 1 bZIP domain.  
Contains 1 KID (kinase-inducible) domain.

**翻译后修饰** Stimulated by phosphorylation. Phosphorylation of both Ser-133 and Ser-142 in the SCN regulates the activity of CREB and participates in circadian rhythm generation. Phosphorylation of Ser-133 allows CREBBP binding (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.  
Sumoylated by SUMO1. Sumoylation on Lys-304, but not on Lys-285, is required for nuclear localization of this protein. Sumoylation is enhanced under hypoxia, promoting nuclear localization and stabilization.

**细胞定位** Nucleus.

## 图片



Western blot - Anti-CREB (phospho S129 + S133) antibody (ab10564)

**All lanes** : Anti-CREB (phospho S129 + S133) antibody (ab10564) at 1/1000 dilution

**Lane 1** : NIH3T3 cell extract

**Lane 2** : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract

**Lane 3** : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract, incubated with the non-phosphopeptide corresponding to the phosphopeptide immunogen

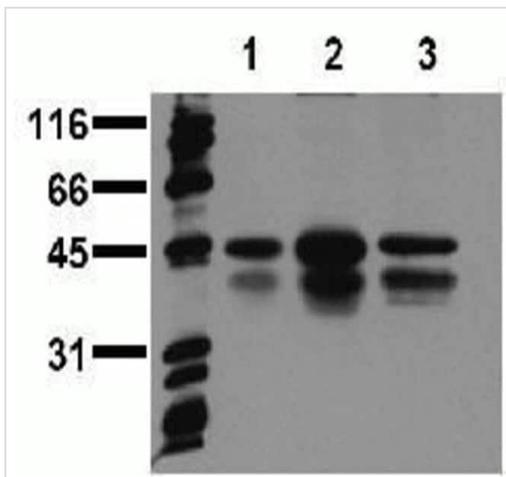
**Lane 4** : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract, incubated with a generic phosphoserine-containing peptide

**Lane 5** : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract, incubated with the phosphopeptide immunogen

**Lane 6** : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract, treated with lambda phosphatase

**Predicted band size:** 37 kDa

The membrane was incubated with goat F(ab')<sub>2</sub> anti-rabbit IgG HRP conjugate and signals were detected using the Pierce SuperSignal™ method.



Western blot - Anti-CREB (phospho S129 + S133) antibody (ab10564)

**All lanes** : Anti-CREB (phospho S129 + S133) antibody (ab10564) at 0.5 µg/ml

**Lane 1** : Human A549 whole cell extract

**Lane 2** : Human A549 whole cell extract stimulated with EGF

**Lane 3** : Human A549 whole cell extract treated with pervanadate

Lysates/proteins at 20000 cells per lane.

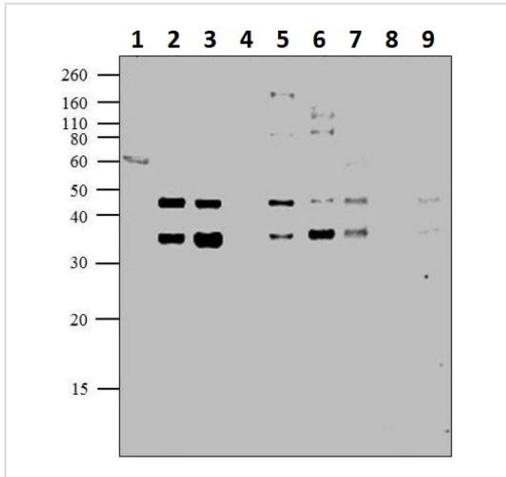
**Secondary**

**All lanes** : Anti-mouse, HRP-conjugated

Developed using the ECL technique.

**Predicted band size:** 37 kDa

**Exposure time:** 30 seconds



Western blot - Anti-CREB (phospho S129 + S133) antibody (ab10564)

**All lanes :** Anti-CREB (phospho S129 + S133) antibody (ab10564) at 1/1000 dilution

**Lane 1 :** NIH/3T3 cell lysate

**Lane 2 :** NIH/3T3 treated for 10 minutes with 50 ng/mL of PDGF cell lysate

**Lane 3 :** NIH/3T3 treated for 10 minutes with 200 ng/mL of EGF cell lysate

**Lane 4 :** A549 cell lysate

**Lane 5 :** A549 treated for 10 minutes with 200 ng/mL of EGF cell lysate

**Lane 6 :** A431 cell lysate

**Lane 7 :** SK-N-SH cell lysate

**Lane 8 :** MCF7 cell lysate

**Lane 9 :** MDA-MB-231 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

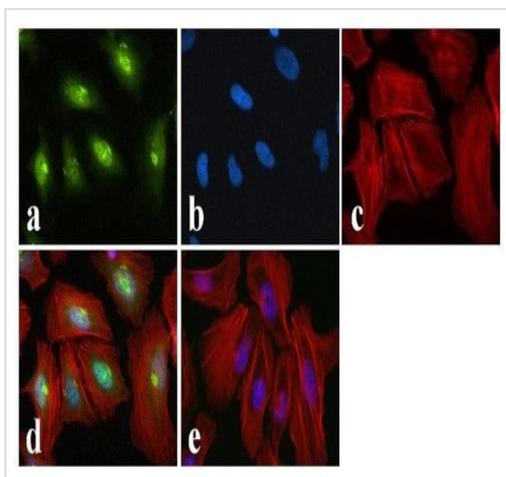
**All lanes :** Goat Anti-Rabbit IgG - HRP at 1/5000 dilution

Developed using the ECL technique.

**Predicted band size:** 37 kDa

**Observed band size:** 35,43 kDa

**Detection:** Chemiluminescence.



Immunocytochemistry/ Immunofluorescence - Anti-CREB (phospho S129 + S133) antibody (ab10564)

Immunofluorescent analysis of CREB (phospho S129/pS133) was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with CREB (phospho S129/pS133) Rabbit polyclonal Antibody (ab10564) at 2 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody at a dilution of 1/400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin. Panel d is a merged image showing nuclear localization. Panel e shows no primary antibody control. The images were captured at 20X

magnification.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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