

Anti-CREB (phospho S129 + S133) antibody ab10564

★★★★★ [3 Abreviews](#) [7 References](#) [画像数 4](#)

製品の概要

製品名	Anti-CREB (phospho S129 + S133) antibody
製品の詳細	Rabbit polyclonal to CREB (phospho S129 + S133)
由来種	Rabbit
アプリケーション	適用あり: ICC/IF, WB
種交差性	交差種: Mouse, Human
免疫原	Synthetic peptide corresponding to Human CREB (phospho S129 + S133).
ポジティブ・コントロール	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.
特記事項	<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&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	<p>pH: 7.3</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol, 0.1% BSA</p> <p>PBS is Ca²⁺ and Mg²⁺ free</p>
精製度	Immunogen affinity purified
特記事項 (精製)	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.

ポリ/モノ

ポリクローナル

アイソタイプ

IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab10564の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/100 - 1/500.
WB	★★★★★ (2)	1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 37 kDa).

ターゲット情報

機能

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.

関連疾患

Defects in CREB1 may be a cause of angiomatoid fibrous histiocyoma (AFH) [MIM:612160]. A distinct variant of malignant fibrous histiocyoma 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 histiocyoma. Translocation t(2;22)(q33;q12) with CREB1 generates a EWSR1/CREB1 fusion gene that is most common genetic abnormality in this tumor type.

配列類似性

Belongs to the bZIP family.
Contains 1 bZIP domain.
Contains 1 KID (kinase-inducible) domain.

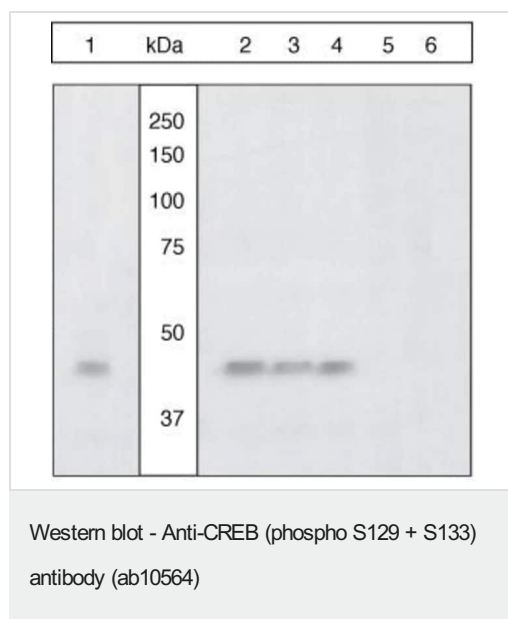
翻訳後修飾

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.

細胞内局在

Nucleus.

画像



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

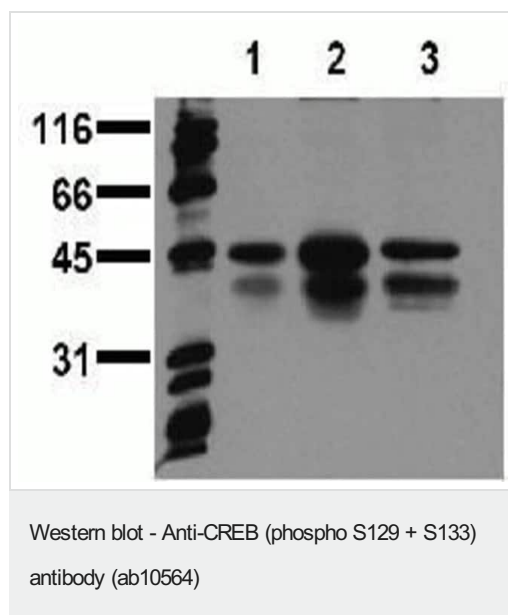
Lane 4 : NIH3T3 treated with 50 ng/mL PDGF for 15 minutes cell extract, incubated with a generic phosphoserine-containing peptide

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')₂ anti-rabbit IgG HRP conjugate and signals were detected using the Pierce SuperSignal™ method.



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.

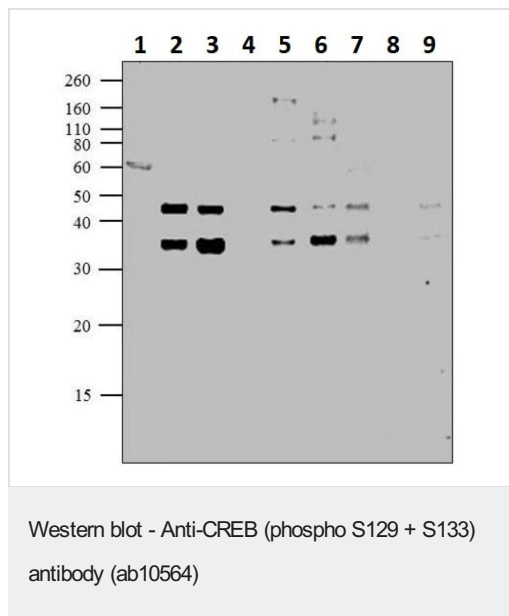
Secondary

All lanes : Anti-mouse, HRP-conjugated

Developed using the ECL technique.

Predicted band size: 37 kDa

Exposure time: 30 seconds



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

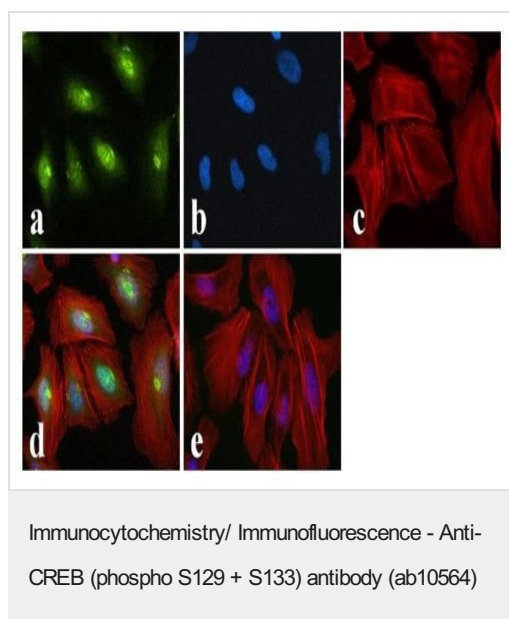
All lanes : Goat Anti-Rabbit IgG - HRP at 1/5000 dilution

Developed using the ECL technique.

Predicted band size: 37 kDa

Observed band size: 35,43 kDa

Detection: Chemiluminescence.



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.

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