

Anti-CREB antibody [E306] - BSA and Azide free ab221216

敲除验证
重组
RabMAb

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概述

产品名称	Anti-CREB抗体[E306] - BSA and Azide free
描述	兔单克隆抗体[E306] to CREB - BSA and Azide free
宿主	Rabbit
特异性	This antibody recognizes CREB, and can also recognize the splice isoform of CREB.
经测试应用	适用于: WB, IHC-P
种属反应性	与反应: Mouse, Rat, Human 预测可用于: Cow 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC/IF: PC 12 cells. WB: A431 cell lysate. IHC-P: Prostatic carcinoma tissue.
常规说明	<p>ab221216 is the carrier-free version of ab32515.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能	
形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	E306
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab221216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
WB		Use at an assay dependent concentration. Detects a band of approximately 40 kDa (predicted molecular weight: 37 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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

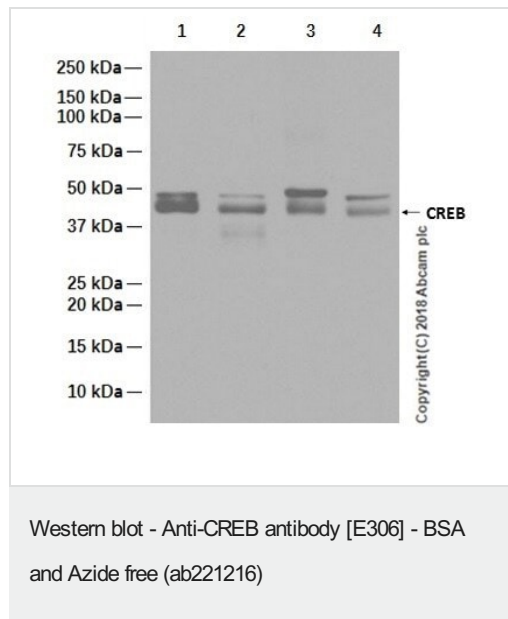
Ser-133 allows CREBBP binding (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.

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



All lanes : Anti-CREB antibody [E306] ([ab32515](#)) at 0.03 µg/ml

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2 : A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate at 20 µg

Lane 4 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

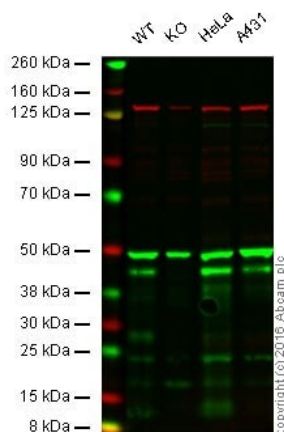
Predicted band size: 37 kDa

Observed band size: 40 kDa

Exposure time: 15 seconds

This data was developed using [ab32515](#), the same antibody clone in a different buffer formulation

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-CREB antibody [E306] - BSA and Azide free (ab221216)

This data was developed using [ab32515](#), the same antibody clone in a different buffer formulation:

Lane 1: Wild-type HAP1 cell lysate (20 µg)

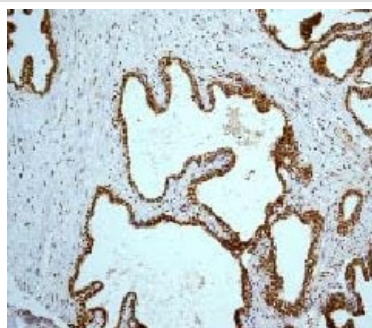
Lane 2: CREB knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: A431 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - [ab32515](#) observed at 44 kDa. Red - loading control, [ab18058](#), observed at 214 kDa.

[ab32515](#) was shown to recognize CREB in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when CREB knockout samples examined. Wild-type and knockout samples were subjected to SDS-PAGE. [ab32515](#) and [ab18058](#) (loading control to Vinculin) diluted to 1/500 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB antibody [E306] - BSA and Azide free (ab221216)

Ab32515, at a 1/500 dilution, staining CREB in paraffin embedded human prostatic carcinoma tissue sections by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab32515](#)).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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(ab221216)

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