abcam

Product datasheet

Anti-CREB antibody [E306] ab32515





重组 RabMAb

★★★★★ 3 Abreviews 126 References 4 图像

概述

产品名称 Anti-CREB抗体[E306]

描述 兔单克隆抗体[E306] to CREB

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

不适用于: Flow Cyt

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Cow 📤

免疫原 Synthetic peptide within Human CREB aa 250-350. The exact sequence is proprietary.

阳性对照 ICC/IF: PC 12 cells. WB: A431 cell lysate. IHC-P: Prostatic carcinoma tissue.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

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ab32515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	*** <u>*</u>	1/500 - 1/1000. Detects a band of approximately 40 kDa (predicted molecular weight: 37 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

应**用说明** Is unsuitable for Flow Cyt.

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

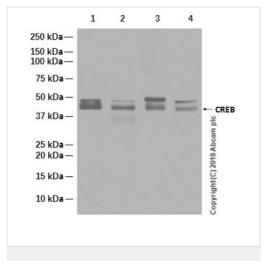
ATM or ATR.

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 antibody [E306] (ab32515)

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

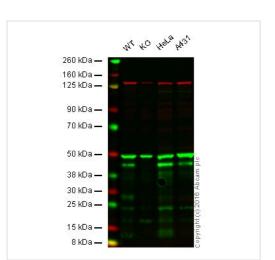
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 37 kDa **Observed band size:** 40 kDa

Exposure time: 15 seconds

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-CREB antibody [E306] (ab32515)

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

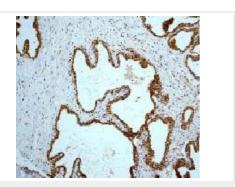
Lane 2: CREB knockout HAP1 cell lysate (20 µg)

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, <u>ab18058</u>, 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 paraffinembedded sections) - Anti-CREB antibody [E306] (ab32515)

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

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



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