abcam

ab32096

Anti-CREB (phospho S133) antibody [E113]

Anti-CREB (phospho S133) antibody [E113] (ab32096) is a rabbit monoclonal antibody detecting CREB in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF, Dot Blot**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 230 publications
- Trusted since 2006

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	E113
Purification technique	Affinity purification Protein A
Specificity	This antibody is specific for CREB phosphorylated on Serine 133. The immunogen of the antibody shares 94% homology with CREB (S136) and 86% homology with ATF1 (pS63). No experiment has been performed to verify the possible cross-reactivity. This antibody can't detect signal in mouse and rat brain related tissues in western blot.
Concentration	0.695 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/40 - 1/100
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/5000
Notes	**For unpurified use at 1/500.**

	This antibody can't detect signal in mouse and rat brain related tissues in western blot.

Species	Rat
Dilution info	1/5000
Notes	**For unpurified use at 1/500.** This antibody can't detect signal in mouse and rat brain related tissues in western blot.

Species	Human
Dilution info	1/5000
Notes	**For unpurified use at 1/500.** This antibody can't detect signal in mouse and rat brain related tissues in western blot.

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Expected

Species	Mouse, Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	1/100 - 1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/100 - 1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/100 - 1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

Dot

Tested

Species	Synthetic peptide
Dilution info	1/1000
Notes	-

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Cow, Zebrafish
Dilution info	-
Notes	-

Target data

See full target information CREB1 pS133

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).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Stable for 12 months at -20°C

Notes

Product Specifications

Anti-CREB (phospho S133) antibody [E113] (ab32096) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in Flow Cyt (Intra), ICC/IF, IHC-P, IP, WB in human, mouse, rat samples. Anti-CREB (phospho S133) antibody [E113] (ab32096) specifically detects CREB Phospho-S133 (UniProt ID: P16220; Molecular weight: 35kDa) and is sold in a convenient trial size to enable initial testing (20 µL) and larger sizes for subsequent scaling up experiments (100 µL and 1 mL).

Quality and Validation

Abcam's high quality manufacturing and validation processes ensure Anti-CREB (phospho S133) antibody [E113] (ab32096) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.
Anti-CREB (phospho S133) antibody [E113] (ab32096) has been cited over 230 times in peer reviewed journals and is trusted by the scientific community.
Anti-CREB (phospho S133) antibody [E113] (ab32096) has 13 independent reviews from customers.

Related Products
Conjugation-ready, carrier free format available for antibody clone E113 - ab220798.
Antibody clone E113 is also available pre-conjugated to a variety of labels for your convenience - HRP (ab219741).
Target Information
CREB (phospho S133) is a transcription factor that plays a vital role in regulating gene expression upon phosphorylation at serine 133. This phosphorylation enhances CREB's ability to activate genes involved in cell survival, metabolism, and proliferation. Dysregulation of CREB phosphorylation at S133 is implicated in several conditions, including cancer, where it aids in tumor development and resistance to apoptosis, and neurodegenerative disorders such as Alzheimer's disease, where it influences neuronal resilience and cognitive function.
Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CAMP response element-binding protein better known as CREB functions as a transcription factor that regulates gene expression. CREB protein operates by binding to specific DNA sequences called cAMP response elements in the promoters of target genes leading to increased or altered transcription. The protein has a molecular weight around 43 kDa. Expressed broadly in many tissues CREB's activity is particularly high in the brain where it plays key roles in neuronal functions. Researchers also refer to phospho-CREB when discussing the activated form of this protein often analyzed through methods like CREB Western blot.
Biological function summary	CREB contributes significantly to cellular processes such as proliferation differentiation and survival through transcriptional regulation. CREB does not function alone; it frequently associates with other proteins forming complexes to exert its regulatory roles. Additionally CREB influences the development of memory and learning in neurons highlighting its extensive involvement in neurophysiological processes.
Pathways	CREB plays a substantial role in the cAMP signaling pathway as well as the mitogen-activated protein kinase (MAPK) pathway. Through its interaction with kinases and other signaling proteins CREB influences numerous downstream targets affecting cellular responses to external stimuli. Notably protein kinase A (PKA) activates CREB by phosphorylation facilitating its role in various signal transduction pathways and linking it to downstream transcriptional events.
Associated diseases and disorders	Research links CREB to neurological disorders and some forms of cancer. Aberrant CREB activity associates with neurodegenerative diseases like Alzheimer’s where dysregulated gene expression impacts neuronal viability and function. Furthermore in cancer CREB's role in cell proliferation and survival ties it to oncogenes such as BCL2 where abnormal CREB function can promote tumorigenesis. Understanding these connections provides valuable insights for therapeutic strategies against such diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

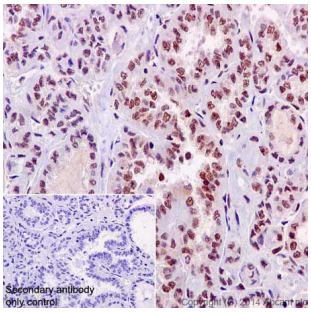
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

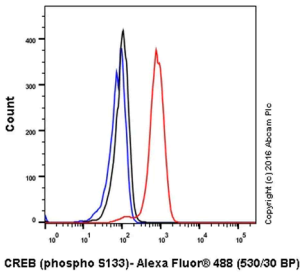
19 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CREB (phospho S133) antibody

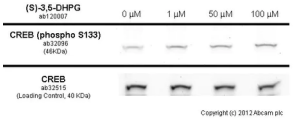
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue labelling CREB with purified ab32096 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a goat anti-rabbit IgG H&L (HRP) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Flow Cytometry (Intracellular) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

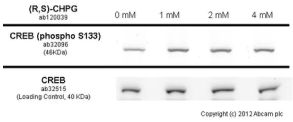
CREB (phospho S133) Flow Cytometry (Intracellular) staining using rabbit Anti-CREB (phospho S133) antibody

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling CREB with purified ab32096 at 1/70 dilution (10µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



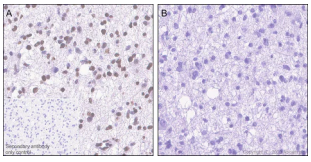
Functional Studies - Anti-CREB (phospho S133) antibody [E113] (ab32096)

SK-N-SH cells were incubated at 37°C for 30 minutes with vehicle control (0 µM) and different concentrations of (S)-3,5-DHPG (ab120007). Increased expression of CREB (phospho S133) in SK-N-SH cells correlates with an increase in (S)-3,5-DHPGconcentration, as described in literature. Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 20µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 3% milk before being incubated with unpurified ab32096 at 1/500 dilution and ab32515 at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (ab97051) at 1/10000 dilution and visualised using ECL development solution.



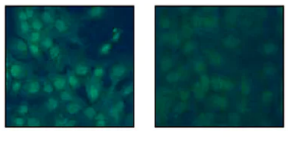
Functional Studies - Anti-CREB (phospho S133) antibody [E113] (ab32096)

SK-N-SH cells were incubated at 37°C for 30 minutes with vehicle control (0 µM) and different concentrations of (R,S)-CHPG (ab120039). Increased expression of CREB (phospho S133) in SK-N-SH cells correlates with an increase in (R,S)-CHPG concentration, as described in literature. Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 20µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 3% milk before being incubated with unpurified ab32096 at 1/500 dilution and ab32515 at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (ab97051) at 1/10000 dilution and visualised using ECL development solution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

Immunohistochemical analysis of paraffin-embedded Human astrocytoma tissue labeling CREB with ab32096 at 1/2000 followed by a ready to use ab209101. Nuclear staining on human astrocytoma without alkaline phosphatase treatment (image A). No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with ab32096 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use ab209101. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

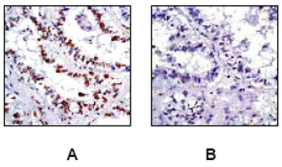


Immunocytochemistry/ Immunofluorescence - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CREB (phospho S133) antibody

Immunocytochemistry/Immunofluorescence analysis of A431 cells labelling CREB with unpurified ab32096 at 1/250.
Panel A: Cells are untreated.

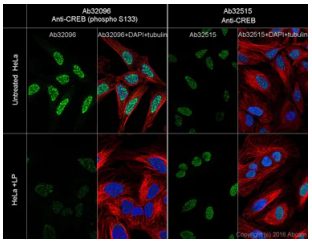
Panel B: Cells are treated with Phosphatase.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CREB (phospho S133) antibody

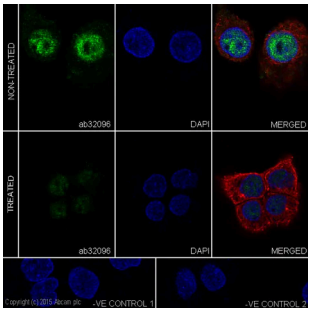
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid gland adenocarcinoma tissue labelling CREB with unpurified ab32096 at 1/250 dilution.
Panel A: Cells are untreated.
Panel B: Cells are treated with Phosphatase.



Immunocytochemistry/ Immunofluorescence - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CREB (phospho S133) antibody

Immunocytochemistry/Immunofluorescence analysis of LP treated and untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) labelling CREB with purified ab32096 at 1/200. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain at a dilution of 1/200.
Confocal image showing nuclear staining on HeLa cells .The signal decreased after Lambda Protein Phosphatase treatment (31☒,2h).

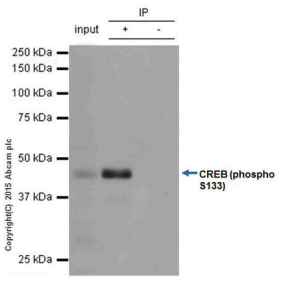


Immunocytochemistry/ Immunofluorescence - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CREB (phospho S133) antibody

Immunocytochemistry/Immunofluorescence analysis of A431(human epidermoid carcinoma) cells +/- AP 37☒ 1h labelling CREB with purified ab32096 at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.
Control 1: primary antibody (1/100) and secondary antibody, ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500).



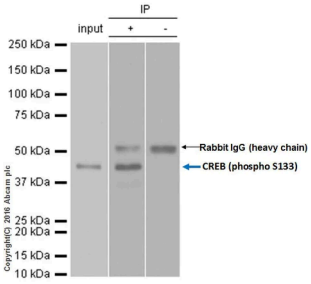
Immunoprecipitation - Anti-CREB (phospho S133) antibody [E113] (ab32096)

ab32096 (purified) at 1/50 immunoprecipitating CREB (phospho S133) in HeLa whole cell lysate. 10 ug of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent (ab131366) (1/1,500) was used for detection. A rabbit monoclonal IgG (ab172730) was used intead of ab128913 as a negative control (Lane 3).
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

All lanes:
Immunoprecipitation - Anti-CREB (phospho S133) antibody [E113] (ab32096)

Predicted band size: 36 kDa



Immunoprecipitation - Anti-CREB (phospho S133) antibody [E113] (ab32096)

ab32096 at 1/100 dilution immunoprecipitating CREB (phospho S133) in HeLa (human cervix adenocarcinoma) treated with 25ug/mL anisomycin for 30 minutes, whole cell lysate, observed at 40 kDa (lanes 1 and 2).
Lane 1 (input): HeLa treated with 25ug/mL anisomycin for 30 minutes. Whole cell lysate, 10µg.

Lane 2 (+): ab32096 + HeLa treated with 25ug/mL anisomycin for 30 minutes. Whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32096 in treated with 25ug/mL anisomycin for 30 minutes. Whole cell lysate

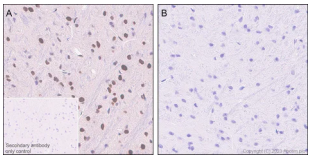
For western blotting, ab32096 at 1/200 dilution followed by ab131366 VeriBlot for IP Detection Reagent (HRP) at 1/1000 for detection.

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-CREB (phospho S133) antibody [E113] (ab32096)

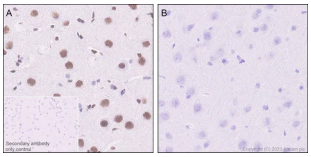
Predicted band size: 36 kDa

Exposure time: 5s



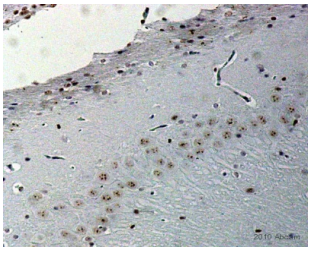
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling CREB with ab32096 at 1/2000 followed by a ready to use ab209101. Nuclear staining on mouse cerebrum without alkaline phosphatase treatment (image A). No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with ab32096 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use ab209101. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling CREB with ab32096 at 1/2000 followed by a ready to use ab209101. Nuclear staining on rat cerebrum without alkaline phosphatase treatment (image A). No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with ab32096 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use ab209101. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

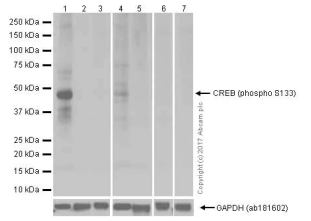


This image is courtesy of a customer review submitted by Akiko Shingo.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CREB (phospho S133) antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat hippocampus tissue labelling CREB with unpurified ab32096 at 1/100 dilution. Sections were subjected to antigen retrieval by autoclave prior to blocking with 8% milk for 30 minutes at 37°C. The primary antibody was diluted 1/100 with DAKO antibody diluent and incubated with the sample for 18 hours at 4°C. An LSAB-labeled Streptavidin-Biotin conjugated Goat polyclonal antibody was used undiluted as the secondary antibody.



Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Western blot staining using rabbit Anti-CREB (phospho S133) antibody

Blocking and diluting buffer: 5% NFDM/TBST
This antibody can't detect signal in mouse and rat brain related tissues.

All lanes:
Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096) at 1/200 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) treated with 250ng/ml anisomycin for 30 minutes whole cell lysates at 15 µg

Lane 2:
Mouse brain lysates at 15 µg

Lane 3:
Rat brain lysates at 15 µg

Lane 4:
Rat cerebellum lysate at 15 µg

Lane 5:
Mouse hippocampus lysate at 15 µg

Lane 6:
Rat hippocampus lysate at 15 µg

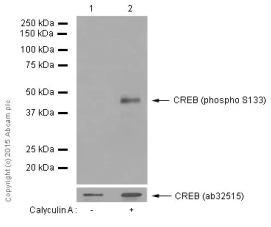
Lane 7:
Rat cerebral cortex lysate at 15 µg

Secondary

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

Predicted band size: 36 kDa

Exposure time: 3s



Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Western blot staining using rabbit Anti-CREB (phospho S133) antibody

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.
All lanes:
Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096) at 1/5000 dilution

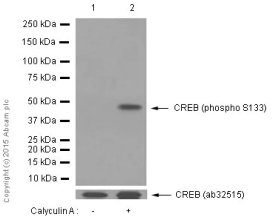
Lane 1:
Untreated HeLa cell lysate at 10 µg

Lane 2:
HeLa treated with Calyculin A cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution

Predicted band size: 36 kDa



Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Western blot staining using rabbit Anti-CREB (phospho S133) antibody

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.
All lanes:
Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096) at 1/5000 dilution

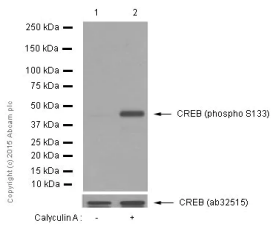
Lane 1:
Untreated C6 cell lysate at 10 µg

Lane 2:
C6 treated with Calyculin A cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution

Predicted band size: 36 kDa



Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096)

CREB (phospho S133) Western blot staining using rabbit Anti-CREB (phospho S133) antibody

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.
All lanes:
Western blot - Anti-CREB (phospho S133) antibody [E113] (ab32096) at 1/5000 dilution

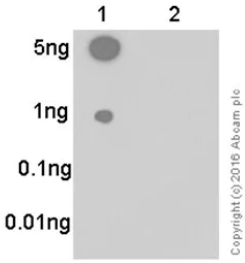
Lane 1:
Untreated NIH/3T3 cell lysate at 10 µg

Lane 2:
NIH/3T3 treated with Calyculin A at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution

Predicted band size: 36 kDa



Dot Blot - Anti-CREB (phospho S133) antibody [E113] (ab32096)

Dot blot analysis of CREB (pS133) phospho peptide (Lane 1) and CREB non-phospho peptide (Lane 2) using ab32096 at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution.
Blocking and Diluting buffer and concentration: 5% NFDM /TBST.

Exposure time: 3 minutes.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.