

Anti-CREB (Ser-271), Phosphospecific Antibody

Catalog # AN1725

Specification

Anti-CREB (Ser-271), Phosphospecific Antibody - Product Information

Application WB
Primary Accession P16220

Reactivity Bovine, Chicken

Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 35136

Anti-CREB (Ser-271), Phosphospecific Antibody - Additional Information

Gene ID 1385 Other Names

Other Names Cyclic AMP, CREB

Target/Specificity

CREB (cyclic AMP response element-binding protein) is a stimulus-induced transcription factor that plays pivotal roles in cell survival and proliferation. CREB is expressed in various tissues, and has important gene-regulating roles in the nervous system. The transactivation function of CREB is primarily regulated through Ser-133 phosphorylation by cAMP-dependent protein kinase A (PKA) and related kinases. CREB is phosphorylated at other sites in response to calcium influx and DNA damage. The DNA-damage responsive nuclear kinase, HIPK2, can phosphorylate Ser-271 but not Ser-133 in CREB, and this phosphorylation activates CREB transactivation function. Mutation of Ser-271 to Glu-271 potentiates the CREB transactivation function. Thus, phosphorylation of Ser-271 may be the mode of activation for CREB-dependent transcription in response to genotoxic stress.

Dilution

WB~~1:1000

Format

Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-CREB (Ser-271), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

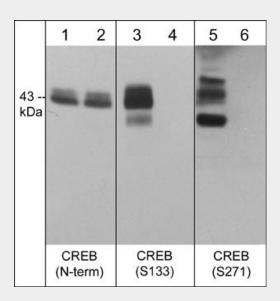


Anti-CREB (Ser-271), Phosphospecific Antibody - Protocols

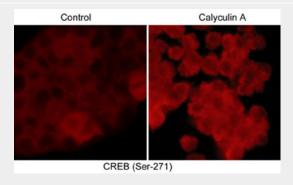
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CREB (Ser-271), Phosphospecific Antibody - Images



Western blot analysis of human A431 cells treated with calyculin A (100 nM) for 30 min. (lanes 1, 3, & 5) then blots were treated with lambda phosphatase (lanes 2, 4, & 6). The blots were probed with anti-CREB (N-terminal region) (lanes 1 & 2), anti-CREB (Ser-133) (lanes 3 & 4), and anti-CREB (Ser-271) (lanes 5 & 6).



Immunocytochemical labeling of phosphorylated CREB in control and calyculin A-treated A431 cells. The cells were fixed in paraformaldehyde and permeabilized using NP-40 before labeling with rabbit polyclonal CREB (Ser-271). The antibody was detected using goat anti-rabbit DyLight® 594.

Anti-CREB (Ser-271), Phosphospecific Antibody - Background

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