

Anti-CREB-1 (p43) (RABBIT) Antibody

CREB-1 Antibody
Catalog # ASR3679

Specification

Anti-CREB-1 (p43) (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species Human

Reactivity Rat, Human, Mouse

Clonality Polyclonal Application WB, E, I, LCI

Application Note Anti-CREB-1 Antibody has been tested in

western blot and suitable in ELISA assays. Specific conditions for reactivity should be

optimized by the end user.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen CREB-1 (p43) peptide corresponding to a

region near the N-terminus of the human protein, conjugated to Keyhole Limpet

Hemocyanin (KLH).

Preservative 0.01% (w/v) Sodium Azide

Anti-CREB-1 (p43) (RABBIT) Antibody - Additional Information

Gene ID 1385

Other Names

1385

Purity

Anti-CREB-1 was prepared from monospecific antiserum by delipidation and immunoadsorption against an E.coli lysate immobilized on agarose beads. Anti-CREB-1 (p43) may react non-specifically with other proteins. A partial cross-reactivity is observed against CREM-1 protein.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-CREB-1 (p43) (RABBIT) Antibody - Protein Information



Name CREB1

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).

Cellular Location

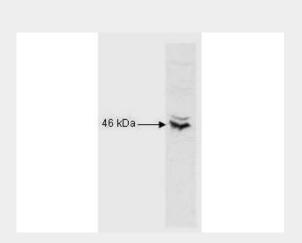
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00312, ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12552083}

Anti-CREB-1 (p43) (RABBIT) Antibody - Protocols

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

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

Anti-CREB-1 (p43) (RABBIT) Antibody - Images

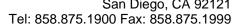


Anti-CREB is shown to detect CREB-1 present in Raji B cell nuclear extract. Detection occurs using a 1:1,000 dilution of antibody followed by a 1:5,000 dilution of HRP Goat-a-Rabbit IgG with visualization via ECL. Film exposure was approximately 1'. Other detection systems will yield similar results.

Anti-CREB-1 (p43) (RABBIT) Antibody - Background

Anti CREB-1 Antibody recognizes CREB (cAMP response element-binding), a cellular transcription factor. CREB binds to certain DNA sequences called cAMP response elements (CRE), thereby increasing or decreasing the transcription of the downstream genes. CREB was first described in







1987 as a cAMP-responsive transcription factor regulating the somatostatin gene. Genes whose transcription is regulated by CREB include: c-fos, the neurotrophin BDNF (Brain-derived neurotrophic factor), tyrosine hydroxylase, and many neuropeptides (such as somatostatin, enkephalin, VGF, and corticotropin-releasing hormone). CREB is closely related in structure and function to CREM (cAMP response element modulator) and ATF-1 (activating transcription factor-1) proteins. CREB proteins are expressed in many animals, including humans. CREB has a well-documented role in neuronal plasticity and long-term memory formation in the brain.