

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 immunoabsorption 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](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.