

**R1188****Polyclonal Antibody to CREB1 (N-term) - Liquid**

<b>Alternate names:</b>	CREB-1, Cyclic AMP-responsive element-binding protein 1, cAMP-responsive element-binding protein 1
<b>Quantity:</b>	0.1 ml
<b>Concentration:</b>	2.56 mg/ml (by UV absorbance at 280 nm)
<b>Background:</b>	Cyclic AMP Response Element Binding protein (CREB) is a basic / leucine zipper transcription factor that binds the cyclic AMP response element (CRE) and activates transcription in response to a variety of extracellular signals including neurotransmitters, hormones, membrane depolarization, and growth and neurotrophic factors. Activation of CREB is dependent upon the phosphorylation of serine 133. Phosphorylation occurs via p44 / 42 MAP kinase and p90RSK and also via p38 MAP kinase and MSK 1. Although CREB will bind DNA independent of its phosphorylation state, only the phosphorylated form is competent as a transcription factor. CREB binding protein (CBP), a transcriptional coactivator that directly interacts with CREB, binds to CREB in the region of serine 133. CREB appears to play an important role in learning and memory. CREB knock out mice show diminished learning ability.
<b>Uniprot ID:</b>	<a href="#">P16220</a>
<b>NCBI:</b>	<a href="#">NP_004370.1</a>
<b>GenID:</b>	<a href="#">1385</a>
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	CREB-1 (p43) peptide corresponding to a region near the N-terminus of the Human protein conjugated to Keyhole Limpet Hemocyanin (KLH).
<b>Format:</b>	<b>State:</b> Liquid (sterile filtered) Serum <b>Buffer System:</b> 0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2 <b>Preservatives:</b> 0.01% (w/v) Sodium Azide <b>Stabilizers:</b> None
<b>Applications:</b>	<b>Western Blot:</b> 1/5,00-1/1,000. This antibody was assayed against a lysate of $1 \times 10^6$ Raji B cells by Immunoblot and found to be reactive against CREB-1 (p43), showing a 46 kDa band at a dilution of 1/500-1/1,000 followed by reaction with Peroxidase conjugated anti-Rabbit IgG (H&L) [Goat] (Cat#R1364HRP) <b>ELISA:</b> 1/5,000-1/25,000. <b>Immunoprecipitation.</b> <b>Gel Shift:</b> This antibody was also tested in a <i>Gel Supershift Assay</i> and found to be reactive against CREB-1 (p43) using 0.5-1.0 $\mu$ l per assay. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** This product was prepared from monospecific antiserum by delipidation and Immunoabsorption against an E.coli lysate immobilized on agarose beads. This antibody may react non-specifically with other proteins. A partial cross-reactivity is observed against CREM-1 protein.  
**Species:** Human, Mouse and Rat.  
Other species not tested.
- Storage:** Store the antibody (in aliquots) at -20°C.  
Dilute only prior to immediate use.  
Avoid repeated freezing and thawing.  
Shelf life: 6 month from despatch.
- General Readings:** 1. Moreno, C.S., Beresford, G., Louis-Plence, P., Morris, A.C., and Boss, J.M. (1999) CREB regulates MHC class II expression in a CIITA dependent manner. *Immunity* 10: 143-151.
- Pictures:** R1188 CREB antibody is shown to detect CREB-1 present in Raji B cell nuclear extract lysates. Detection occurs using a 1/1,000 dilution of antibody followed by 1/5,000 dilution of HRP Goat-anti Rabbit IgG with visualization via ECL. Film exposure approximately 1'. Other detection systems will yield similar results.

