

## Product datasheet for TA319433

## **CREB1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type: Primary Antibodies** 

**Applications:** IHC, WB

Recommended Dilution: ELISA: 1:1,000 - 1:6,000, WB: 1:500 - 1:2,000, IHC: 20 ug/ml

Reactivity: Human, Mouse, Rat **Modifications:** Phospho-specific

Host: Rabbit Isotype: **IgG** 

Clonality: Polyclonal

Immunogen: CREB phospho peptide corresponding to amino acid residues 122-147 of the human protein

conjugated to Keyhole Limpet Hemocyanin (KLH).

Formulation: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Concentration:** lot specific Conjugation: Unconjugated

Store at -20°C as received. Storage:

Stability: Stable for 12 months from date of receipt. Gene Name: cAMP responsive element binding protein 1

Database Link: NP 004370

Entrez Gene 12912 MouseEntrez Gene 81646 RatEntrez Gene 1385 Human

P16220

**CREB** Synonyms:

Note: The CREB (Cyclic AMP-response-element-binding-protein 1) gene encodes a transcription

> factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds as a homodimer to the cAMP-responsive element (CRE element TGANNTCA), an octameric palindrome. Phosphorylation by cAMP-dependent protein kinase (PKA) at serine-119 is required for interaction with DNA and phosphorylation at serine-133 allows CREB to interact with CBP (CREB binding protein) leading to interaction with RNA polymerase II. Alternate splicing of this gene results in two transcript variants encoding different isoforms.

**Protein Families:** Druggable Genome, Transcription Factors



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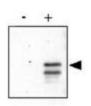
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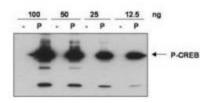


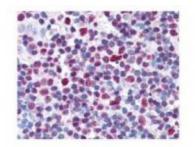
**Protein Pathways:** 

Antigen processing and presentation, Huntington's disease, Melanogenesis, Prostate cancer

## **Product images:**







Anti-CREB pS133 was used to detect phosphorylated CREB by WB. An aliquot of purified CREB was phosphorylated in-vitro using Protein Kinase A and ATP. WB of control (-) and invitro phosphorylated CREB (+) was used to show that the antibody reacts specifically with the phosphorylated form. Detection occurs using a 1:500 dilution of antibody followed by 1:5,000 dilution of HRP Goat-a-Rabbit IgG with visualization via ECL.

Anti-CREB pS133 was used to detect phosphorylated CREB by WB. Recombinant Histagged human CREB was produced in E.coli and purified by metal affinity chromatography. An aliquot of purified CREB was phosphorylated invitro using Protein Kinase A and ATP. WB of indicated amounts of control (-) and in-vitro phosphorylated CREB (P) were loaded to show that the antibody reacts specifically with the phosphorylated form. Detection occurs using a 1:500 dilution of antibody.

affinity purified anti-CREB pS133 antibody was used at 20 ?g/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate to strong nuclear staining of tonsillar lymphocytes. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.