

Product datasheet for AP02351PU-S

OriGene Technologies, Inc.

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CREB1 pSer133 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Suitable for use in Western blot (1:500~1:1000) and Immunohistochemistry (1:50~1:100).

Reactivity: Human

Host: Rabbit

Clonality: Polyclonal

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human CREB

around the phosphorylation site of serine 133 (R-P-SP-Y-R).

Specificity: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using

epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by

chromatography using non-phosphopeptide corresponding to the phosphorylation site. CREB (phospho-Ser133) antibody detects endogenous levels of CREB only when

phosphorylated at serine 133.

Formulation: Phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium

Azide and 50% glycerol. State: Aff - Purified

State: Liquid purified Ig fraction.

Concentration: lot specific

Purification: Immunoaffinity chromatography.

Conjugation: Unconjugated

Storage: Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.

Gene Name: cAMP responsive element binding protein 1

Database Link: Entrez Gene 1385 Human

P16220





Background:

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.

Synonyms: CREB-1

Product images:

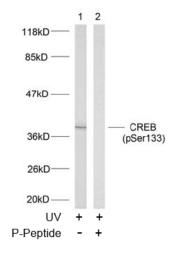


Figure 2. Western blot analysis of extracts from HeLa cells using CREB (phospho-Ser133) antibody.

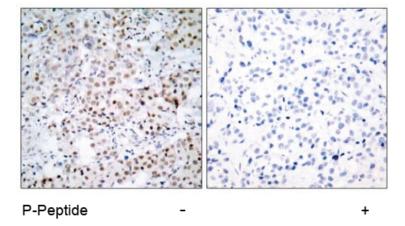


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using CREB (phospho-Ser133) antibody.