



# CREB-1 (phospho Ser142) Polyclonal Antibody

<b>Catalog No</b>	BYab-01379
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CREB1
<b>Protein Name</b>	Cyclic AMP-responsive element-binding protein 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CREB around the phosphorylation site of Ser142. AA range:111-160
<b>Specificity</b>	Phospho-CREB-1 (S142) Polyclonal Antibody detects endogenous levels of CREB-1 protein only when phosphorylated at S142.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CREB1; Cyclic AMP-responsive element-binding protein 1; CREB-1; cAMP-responsive element-binding protein 1
<b>Observed Band</b>	37kD
<b>Cell Pathway</b>	Nucleus .
<b>Tissue Specificity</b>	Eye,Placenta,Spleen,Testis,
<b>Function</b>	disease:A chromosomal aberration involving CREB1 is associated with angiomatoid fibrous histiocytoma (AFH) [MIM:612160]. Translocation t(2;22)(q33;q12) with CREB1 generates a EWSR1/CREB1 fusion gene that is most common genetic abnormality in this tumor type.,function:This protein binds the cAMP response element (CRE), a sequence present in many viral and cellular promoters. CREB stimulates transcription on binding to the CRE. Transcription activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation. Implicated in synchronization of circadian rhythmicity.,PTM:Stimulated by phosphorylation. Phosphorylation of both Ser-133

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and Ser-142 in the SCN regulates the activity of CREB and participates in circadian rhythm generation. Phosphorylation of Ser-133 allows CREBBP binding (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.,similarit

**Background**

This 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, an octameric palindrome. The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. Alternate splicing of this gene results in several transcript variants encoding different isoforms. [provided by RefSeq, Mar 2016],

**matters needing attention**

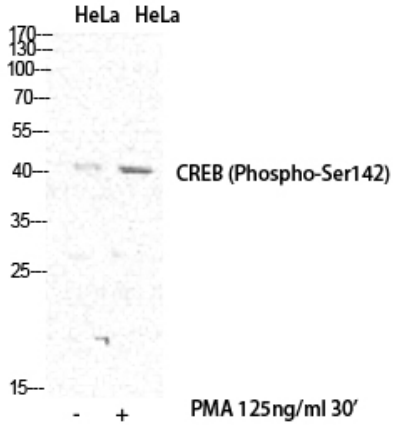
Avoid repeated freezing and thawing!

**Usage suggestions**

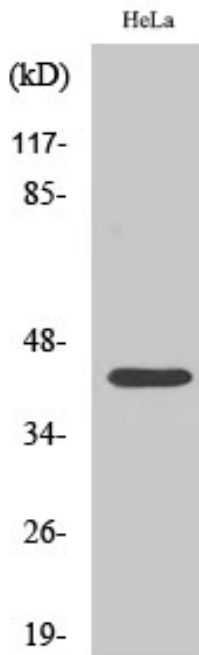
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



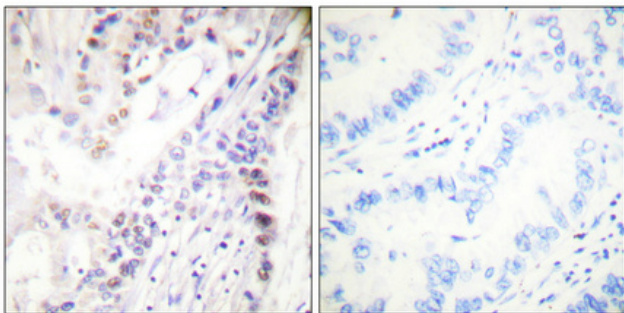
## Products Images



Western Blot analysis of various cells using Phospho-CREB-1 (S142) Polyclonal Antibody diluted at 1:500

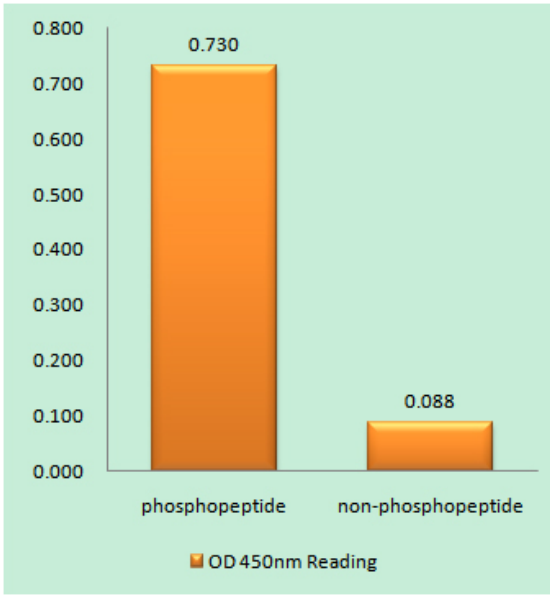


Western Blot analysis of HeLa cells using Phospho-CREB-1 (S142) Polyclonal Antibody diluted at 1:500

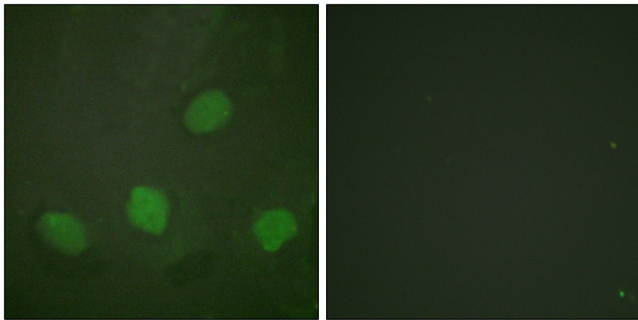


Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4<sup>o</sup> overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CREB (Phospho-Ser142) Antibody



Immunofluorescence analysis of HeLa cells, using CREB (Phospho-Ser142) Antibody. The picture on the right is blocked with the phospho peptide.