

## CREB-1 (phospho Ser142) Polyclonal Antibody

Catalog No: YP0856

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: CREB-1

**Fields:** >>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>PI3K-Akt

signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Adrenergic signaling in cardiomyocytes;>>Osteoclast differentiation;>>Antigen processing and presentation;>>TNF signaling

pathway;>>Circadian rhythm;>>Circadian

entrainment;>>Thermogenesis;>>Cholinergic synapse;>>Dopaminergic

synapse;>>Insulin secretion;>>Estrogen signaling

pathway;>>Melanogenesis;>>Thyroid hormone synthesis;>>Glucagon signaling pathway;>>Renin secretion;>>Aldosterone synthesis and secretion;>>Relaxin signaling pathway;>>Cortisol synthesis and secretion;>>Parathyroid hormone

synthesis, secretion and action;>>Insulin resistance;>>Cushing

syndrome;>>Growth hormone synthesis, secretion and action;>>Vasopressin-regulated water reabsorption;>>Huntington disease;>>Prion disease;>>Cocaine addiction;>>Amphetamine addiction;>>Alcoholism;>>Tuberculosis;>>Hepatitis

B;>>Human cytomegalovirus infection;>>Human papillomavirus

infection;>>Human

Gene Name: CREB1

**Protein Name:** Cyclic AMP-responsive element-binding protein 1

Human Gene Id: 1385

**Human Swiss Prot** 

P16220

No:

Mouse Gene Id: 12912

**Mouse Swiss Prot** 

Q01147

No:

Rat Gene ld: 81646

Rat Swiss Prot No: P15337

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**Immunogen:** The antiserum was produced against synthesized peptide derived from human

CREB around the phosphorylation site of Ser142. AA range:111-160

Specificity: Phospho-CREB-1 (S142) Polyclonal Antibody detects endogenous levels of

CREB-1 protein only when phosphorylated at S142.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 37kD

**Cell Pathway:** Antigen processing and presentation; Melanogenesis; Huntington's

disease; Prostate cancer;

**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],

**Function:** 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. Transciption 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

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

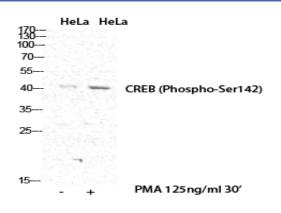
Subcellular

Nucleus.

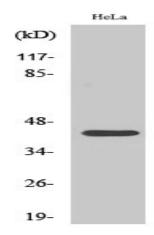
Location:

**Expression :** Eye,Placenta,Spleen,Testis,

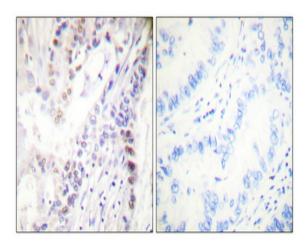
## **Products Images**



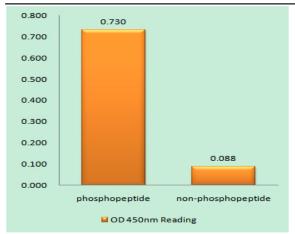
Western Blot analysis of various cells using Phospho-CREB-1 (S142) Polyclonal Antibody diluted at 1:500



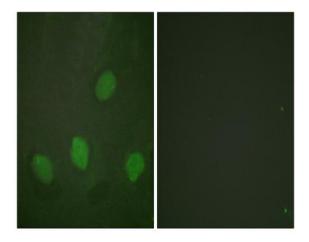
Western Blot analysis of HeLa cells using Phospho-CREB-1 (S142) Polyclonal Antibody diluted at 1:500



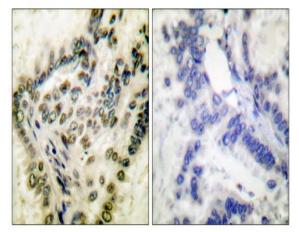
Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



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.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using CREB (Phospho-Ser142) Antibody. The picture on the right is blocked with the phospho peptide.