

CREB-1 (phospho Thr100) Polyclonal Antibody

Catalog No: YP0405

Reactivity: Human; Mouse; Rat

Applications: WB;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 Thr100. AA range:71-120

Specificity: Phospho-CREB-1 (T100) Polyclonal Antibody detects endogenous levels of

CREB-1 protein only when phosphorylated at T100.

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. ELISA: 1:20000. 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: 42kD

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

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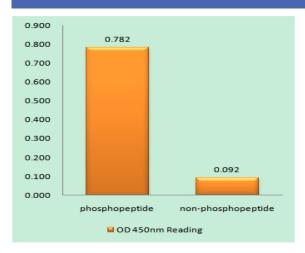
Subcellular

Nucleus.

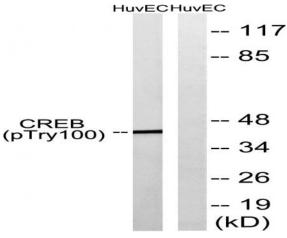
Location:

Expression : Eye,Placenta,Spleen,Testis,

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CREB (Phospho-Thr100) Antibody



Western blot analysis of lysates from HUVEC cells treated with etoposide 25uM 24H, using CREB (Phospho-Thr100) Antibody. The lane on the right is blocked with the phospho peptide.