

CREB-1 Polyclonal Antibody

Catalog No :	YT1097
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 No :	P16220
Mouse Gene Id :	12912
Mouse Swiss Prot No :	Q01147
Rat Gene Id :	81646
Rat Swiss Prot No :	P15337

Immunogen :	The antiserum was produced against synthesized peptide derived from human CREB. AA range:100-149
Specificity :	CREB-1 Polyclonal Antibody detects endogenous levels of CREB-1 protein.
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. 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 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

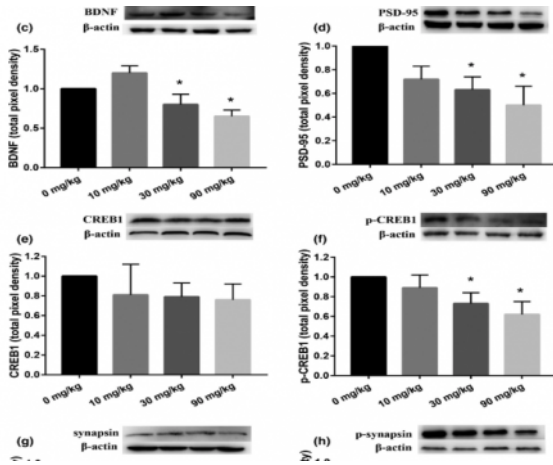
Subcellular Location :

Nucleus .

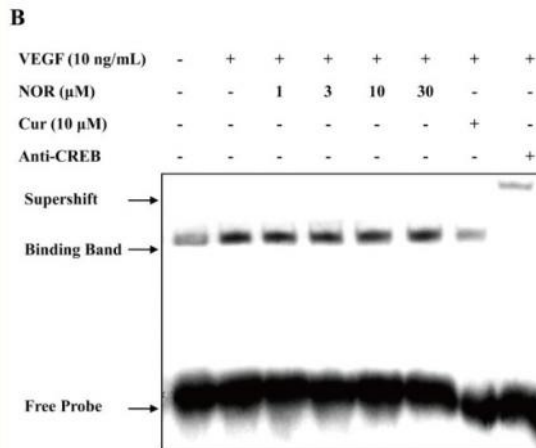
Expression :

Eye,Placenta,Spleen,Testis,

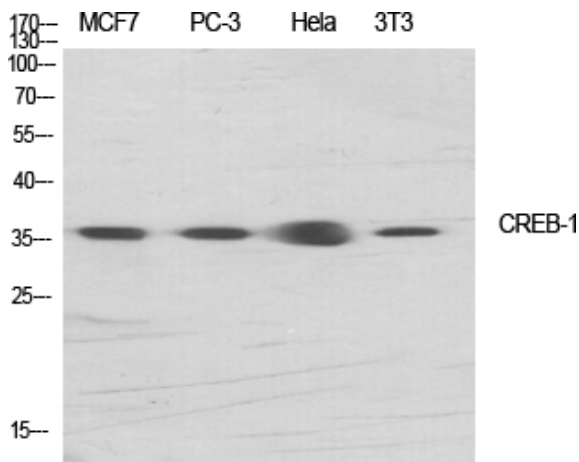
Products Images



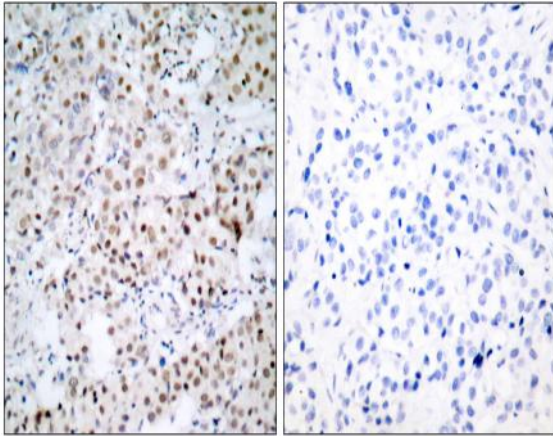
Wang, Yue, et al. "Fetal exposure to dichloroacetic acid and impaired cognitive function in the adulthood." *Brain and Behavior* 10.10 (2020): e01801.



Lu, Qian, et al. "Norisoboldine suppresses VEGF-induced endothelial cell migration via the cAMP-PKA-NF- κ B/Notch1 pathway." *PloS one* 8.12 (2013): e81220.



Western Blot analysis of various cells using CREB-1 Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using CREB Antibody. The picture on the right is blocked with the synthesized peptide.