



CREB-1 (phospho Ser133) Polyclonal Antibody

Catalog No	YP-Ab-01236
Isotype	IgG
Reactivity	Human;Mouse;Rat;Pig
Applications	IF;WB;IHC;IP;ELISA
Gene Name	CREB1
Protein Name	Cyclic AMP-responsive element-binding protein 1
Immunogen	The antiserum was produced against synthesized peptide derived from human CREB around the phosphorylation site of Ser133. AA range:100-149
Specificity	Phospho-CREB-1 (S133) Polyclonal Antibody detects endogenous levels of CREB-1 protein only when phosphorylated at S133.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CREB1; Cyclic AMP-responsive element-binding protein 1; CREB-1; cAMP-responsive element-binding protein 1
Observed Band	37kD
Cell Pathway	Nucleus .
Tissue Specificity	Eye,Placenta,Spleen,Testis,
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



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],

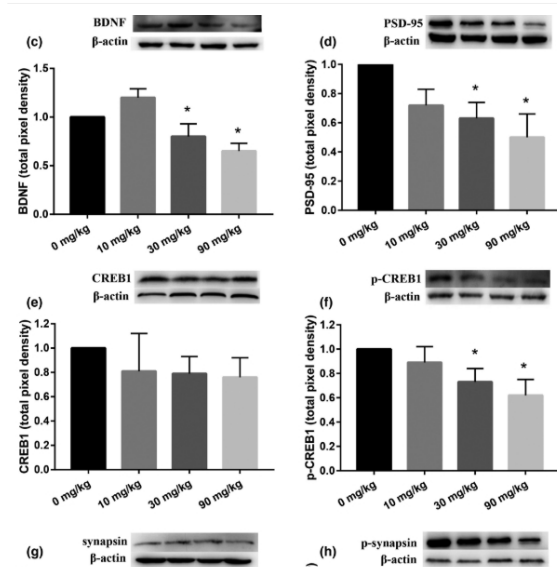
matters needing attention

Avoid repeated freezing and thawing!

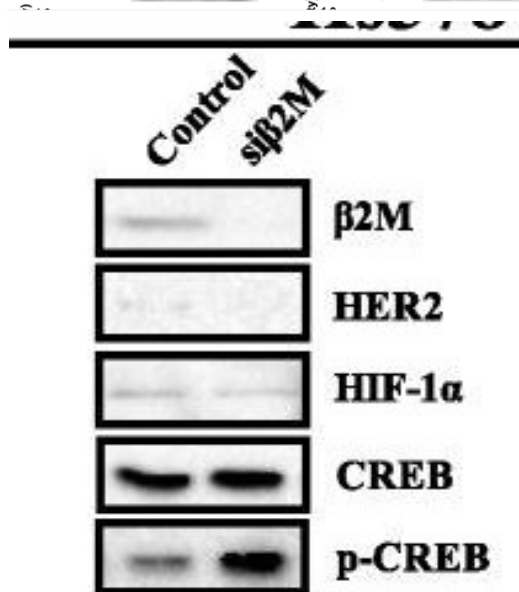
Usage suggestions

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

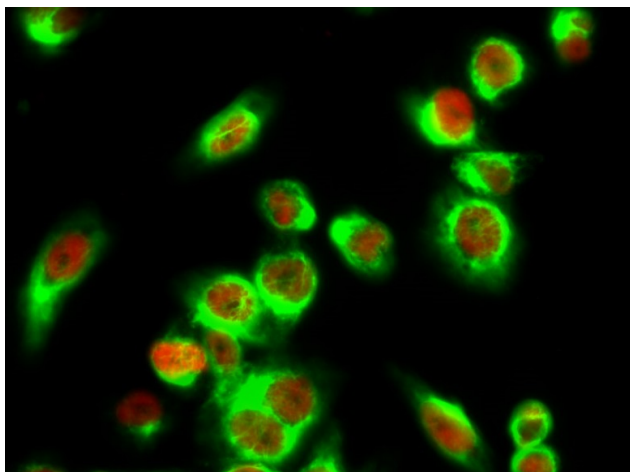
Products Images



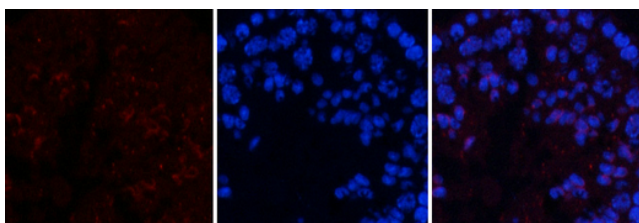
Wang, Yue, et al. "Fetal exposure to dichloroacetic acid and impaired cognitive function in the adulthood." *Brain and Behavior* 10.10 (2020): e01801.



Chai, Dandan, et al. "β2-microglobulin has a different regulatory molecular mechanism between ER+ and ER- breast cancer with HER2-." *BMC cancer* 19.1 (2019) 223.



Immunofluorescence analysis of Hela cell. 1, CREB-1 (phospho Ser133) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). β -Tubulin Monoclonal Antibody (5G3) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).

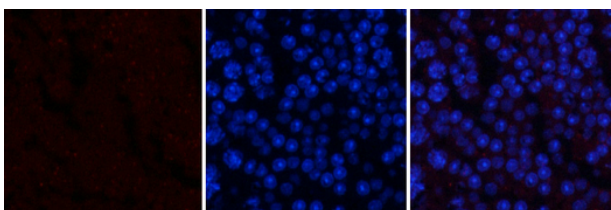


A

B

C

Immunofluorescence analysis of mouse-testis tissue. 1, CREB-1 (phospho Ser133) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



A

B

C

Immunofluorescence analysis of mouse-testis tissue. 1, CREB-1 (phospho Ser133) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B