

Summary

Production Name	CREB-1(4B4)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,IHC
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG1/ kappa
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	PBS, pH 7.4, containing 0.5%BSA, 0.02% New type preservative N as Preservative and
	50% Glycerol.
Purification	Affinity purification

Immunogen

Gene Name	CREB1	
Alternative Names	CREB1; Cyclic AMP-responsive element-binding protein 1; CREB-1; cAMP-responsive	
	element-binding protein 1	
Gene ID	1385.0	
SwissProt ID	P16220.Recombinant Protein of human CREB-1 AA range: 100-200	

Application

Dilution Ratio	WB 1:500-1000 IHC 1:100-200
Molecular Weight	43kD



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],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.,similarity:Belongs to the bZIP family.,similarity:Contains 1 bZIP domain.,similarity:Contains 1 KID (kinase-inducible) domain.,subunit.Interacts with PPRC1. Binds DNA as a dimer. This dimer is stabilized by magnesium ions. Interacts, through the bZIP domain, with the coactivators TORC1/CRTC1, TORC2/CRTC2 and TORC3/CRTC3. When phosphorylated on Ser-133, binds CREBBP,

Research Area

Antigen processing and presentation; Melanogenesis; Huntington's disease; Prostate cancer;

Image Data



Western blot analysis of 1) A431, 2) 3T3 using CREB-1 Monoclonal Antibody.





Immunohistochemical analysis of paraffin-embedded Human Lung Carcinoma using CREB-1 Monoclonal Antibody.

Note

For research use only.