

Summary

Production Name	CREB-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC, WB,
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
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. The antiserum was produced against synthesized peptide derived from human CREB. AA range: 100-149

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	37kD

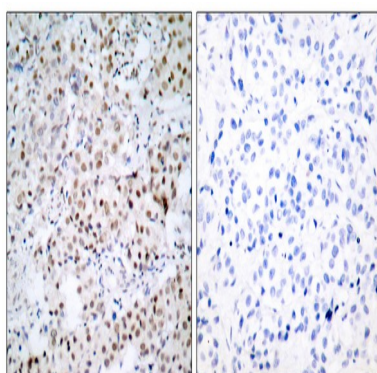
Background

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. 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., 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

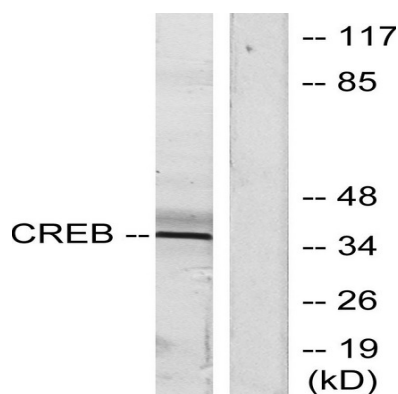
Antigen processing and presentation; Melanogenesis; Huntington's disease; Prostate cancer;

Image Data

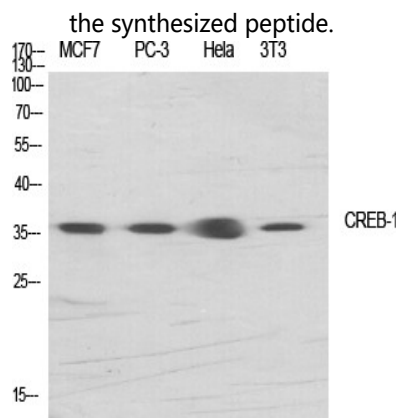


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using CREB Antibody. The picture on the right is blocked with the synthesized peptide.

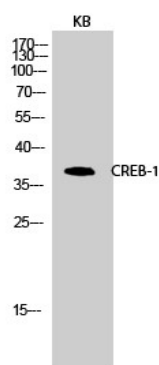
Product Name: CREB-1 Rabbit Polyclonal Antibody
Catalog #: APRab09375



Western blot analysis of lysates from HeLa cells, treated with UV, using CREB Antibody. The lane on the right is blocked with the synthesized peptide.



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



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

Note

For research use only.