

## Summary

Production Name	CREB-1 (phospho Thr100) Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	WB,ELISA	
Reactivity	Human, Mouse, Rat	

### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
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 around the phosphorylation site of Thr100. AA range:71-120

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	42kD



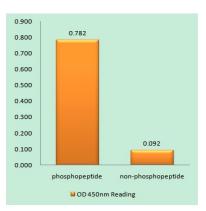
### Background

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**

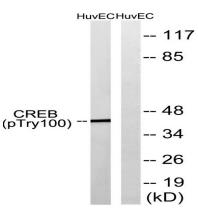
Antigen processing and presentation; Melanogenesis; Huntington's disease; Prostate cancer;

### Image Data



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.

Note

For research use only.