

Rabbit Anti-CREB1 Polyclonal Antibody

CPB-1150RH Rabbit(CREB1)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-CREB1 Polyclonal Antibody
Antigen Description	CREB1 is a transcription factor that is a member of the bZIP family of DNA binding proteins. It binds as a homodimer to the CRE (CAMP-Responsive Element), an octameric palindrome containing a conserved core sequence, 5-prime-TGACG-3-prime. It consists of two transcript variants encoding respective isoforms produced by alternate splicing. It is mapped to 2q32.3-q34. It is phosphorylated by several protein kinases and induces transcription of genes in response to hormonal stimulation of the cAMP pathway. CREB1 is crucial for the consolidation of long-term conditioned fear memories, but not for encoding, storage, or retrieval of these memories. It is required for the stability of reactivated or retrieved conditioned fear memories.
specificity	The antibody detects endogenous level of total CREB1 protein.
Target	CREB1
Immunogen	Peptide sequence around aa. 127~131 (I-L-S-R-R) derived from Human CREB1.
Host	Rabbit
Species	Human
Cross Reactivity	Human; Mouse; Rat
conjugation	N/A
Applications	WB,IHC

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

ANTIGEN GENE INFORMATION

Gene Name	CREB1 cAMP responsive element binding protein 1 [Homo sapiens]
Official Symbol	CREB1
Synonyms	CREB1; cAMP responsive element binding protein 1; cyclic AMP-responsive element-binding protein 1; CREB-1; transactivator protein; active transcription factor CREB; cAMP-response element-binding protein-1; cAMP-responsive element-binding protein 1; CREB; MGC9284;
GeneID	1385
mRNA Refseq	NM_004379
Protein Refseq	NP_004370
MIM	123810
UniProt ID	P16220
Chromosome Location	2q34

Pathway

AKT phosphorylates targets in the nucleus, organism-specific biosystem; ATF-2 transcription factor network, organism-specific biosystem; Activated TLR4 signalling, organism-specific biosystem; Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem; Adipogenesis, organism-specific biosystem; Amphetamine addiction, organism-specific biosystem;

Function

RNA polymerase II activating transcription factor binding; RNA polymerase II distal enhancer sequence-specific DNA binding; RNA polymerase II transcription factor binding transcription factor activity involved in positive regulation of transcription; cAMP response element binding; double-stranded DNA binding; protein binding; protein dimerization activity; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; sequence-specific distal enhancer binding RNA polymerase II transcription factor activity; transcription cofactor activity; transcription factor binding;