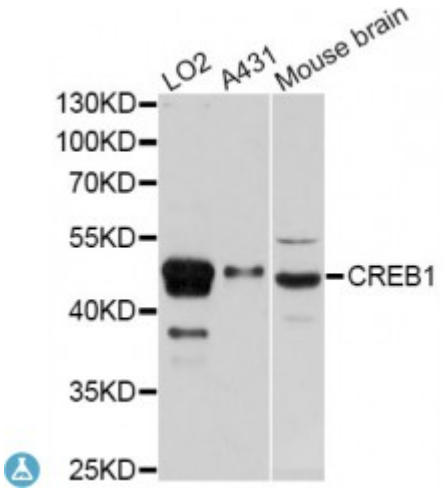
Anti-CREB1 Antibody



Description	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.

Model	STJ114197
Host	Rabbit
Reactivity	Human, Mouse
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-341 of human CREB1 (NP_604391.1).
Gene ID	1385
Gene Symbol	CREB1
Dilution range	WB 1:500 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Cyclic AMP-responsive element-binding protein 1 CREB-1 cAMP-responsive element-binding protein 1
Molecular Weight	36.688 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:2345OMIM:123810Reactome:R-HSA-111931
Alternative Names	Cyclic AMP-responsive element-binding protein 1 CREB-1 cAMP-responsive element-binding protein 1
Function	Phosphorylation-dependent transcription factor that stimulates transcription upon binding to the DNA cAMP response element (CRE), a sequence present in many viral and cellular promoters, Transcription activation is enhanced by the TORC coactivators which act independently of Ser-133 phosphorylation, Involved in different cellular processes including the synchronization of circadian rhythmicity and the differentiation of adipose cells
Cellular Localization	Nucleus
Post-translational Modifications	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, In liver, phosphorylation is induced by fasting or glucagon in a circadian fashion , CREBL2 positively regulates phosphorylation at Ser-133 thereby stimulating CREB1 transcriptional activity , Phosphorylated upon calcium influx by CaMK4 and CaMK2 on Ser-133, CaMK4 is much more potent than CaMK2 in activating CREB, Phosphorylated by CaMK2 on Ser-142, Phosphorylation of Ser-142 blocks CREB-mediated transcription even when Ser-133 is phosphorylated, Phosphorylated by CaMK1 , Phosphorylation of Ser-271 by HIPK2 in response to genotoxic stress promotes CREB1 activity, facilitating the recruitment of the coactivator CBP, Phosphorylated at Ser-133 by RPS6KA3, RPS6KA4 and RPS6KA5 in response to mitogenic or stress stimuli,