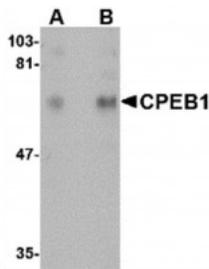




## CPEB1 Antibody

CATALOG NUMBER: 4687



Western blot analysis of CPEB1 in rat brain tissue lysate with CPEB1 antibody at (A) 1 and (B) 2 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>TESTED APPLICATIONS:</b>	ELISA, WB
<b>APPLICATIONS:</b>	CPEB1 antibody can be used for detection of CPEB1 by Western blot at 1 - 2 ug/mL.  Antibody validated: Western Blot in rat samples. All other applications and species not yet tested.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1463 - Rat Brain Tissue Lysate
<b>IMMUNOGEN:</b>	CPEB1 antibody was raised against a 14 amino acid synthetic peptide from near the amino terminus of human CPEB1.  The immunogen is located within amino acids 50 - 100 of CPEB1.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	CPEB1 Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	CPEB1 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	CPEB1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

**ALTERNATIVE NAMES:** CPEB1 Antibody; CERP; CPEB; CPEB-1; CPE-BP1; hCPEB-1; Cytoplasmic polyadenylation element-binding

<b>ALTERNATE NAMES:</b>	CPEB1 antibody, CEB1, CPEB, CPEB1, CPEB1, HCEB1, Cytoplasmic polyadenylation element binding protein 1
<b>ACCESSION NO.:</b>	Q9BZB8
<b>PROTEIN GI NO.:</b>	74762720
<b>OFFICIAL SYMBOL:</b>	CPEB1
<b>GENE ID:</b>	64506

## Background

**BACKGROUND:** CPEB1 Antibody: CPEB1 is an RNA binding protein that contains an RNA-recognition motif and a zinc finger-containing region found in a wide range of vertebrates and invertebrates. CPEB1 forms the nucleus of a complex of factors that regulate poly(A) elongation and promotes polyadenylation-induced translation. CPEB1 mediates many diverse biological processes such as germ cell development, cell division and senescence, and synaptic plasticity. Recently, it was discovered that CPEB1 is involved in beta-catenin mRNA translation and cell migration in astrocytes as well as regulating hypoxia-inducible factor (HIF)-1 expression, demonstrating the wide range of processes in which CPEB1 plays a role. At least four isoforms of CPEB1 are known to exist.

**REFERENCES:**

- 1) Richter JD. CPEB: a life in translation. Trends in Biochem. Sci.2007; 32:179-85.
- 2) Jones KJ, Korb E, Kundel MA, et al. CPEB1 regulates beta-catenin mRNA translation and cell migration in astrocytes. Glia2008; 56:1401-13.
- 3) Hagele S, Kuhn U, Boning M, et al. Cytoplasmic polyadenylation element binding protein (CPEB)1 and 2 bind to the HIF-1alpha mRNA 3'UTR and modulate HIF-1 alpha protein expression. Biochem. J.2008; epub.

**FOR RESEARCH USE ONLY**

January 12, 2019