



CPEB1 Monoclonal Antibody

Catalog No	YP-mAb-06566
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CPEB1 CPEB
Protein Name	Cytoplasmic polyadenylation element-binding protein 1 (CPE-BP1) (CPE-binding protein 1) (h-CEBP) (hCPEB-1)
Immunogen	Synthesized peptide derived from human protein . at AA range: 230-310
Specificity	CPEB1 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	62kD
Cell Pathway	Cytoplasm . Nucleus . Cytoplasm, P-body. Cytoplasmic granule. Cell junction, synapse. Membrane. Cell junction, synapse, postsynaptic density . Cell projection, dendrite . Continuously shuttling between nucleus and cytoplasm (PubMed:18923137). Also found in stress granules. Recruited to stress granules (SGs) upon arsenite treatment. In dendrites (By similarity). Localizes in synaptosomes at dendritic synapses of neurons (By similarity). Strongly enriched in postsynaptic density (PSD) fractions (By similarity). Transported into dendrites in a microtubule-dependent fashion and colocalizes in mRNA-containing particles with TACC3, dynein and kinesin (By similarity). Membrane-associated (By similarity). Colocalizes at excitatory synapses with members of the polyadenylation and translation comple
Tissue Specificity	Isoform 1 is expressed in immature oocytes, ovary, brain and heart. Isoform 2 is expressed in brain and heart. Isoform 3 and isoform 4 are expressed in brain. Expressed in breast tumors and several tumor cell lines.
Function	domain:The 2 RRM domains and the C-terminal region mediate interaction with CPE-containing RNA.,function:Sequence-specific RNA-binding protein that regulates mRNA cytoplasmic polyadenylation and translation initiation during oocyte maturation, early development and at postsynapse sites of neurons. Binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence



element (consensus sequence 5'-UUUUUAU-3') within the mRNA 3'-UTR. In absence of phosphorylation and in association with MASKIN is also involved as a repressor of translation of CPE-containing mRNA; a repression that is relieved by phosphorylation or degradation (By similarity). Involved in the transport of CPE-containing mRNA to dendrites; those mRNAs may be transported to dendrites in a translationally dormant form and translationally activated at synapses (By similarity). Its interaction with APLP1 promotes loca

Background

This gene encodes a member of the cytoplasmic polyadenylation element binding protein family. This highly conserved protein binds to a specific RNA sequence, called the cytoplasmic polyadenylation element, found in the 3' untranslated region of some mRNAs. The encoded protein functions in both the cytoplasm and the nucleus. It is involved in the regulation of mRNA translation, as well as processing of the 3' untranslated region, and may play a role in cell proliferation and tumorigenesis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images