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CPEB4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5628a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q17RY0
Other Accession	NP_085130.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27196
Calculated MW	80152
Antigen Region	109-137

Additional Information

Gene ID	80315
Other Names	Cytoplasmic polyadenylation element-binding protein 4, CPE-BP4, CPE-binding protein 4, hCPEB-4, CPEB4, KIAA1673
Target/Specificity	This CPEB4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 109-137 amino acids from the N-terminal region of human CPEB4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CPEB4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CPEB4
Synonyms	KIAA1673

Function	Sequence-specific RNA-binding protein that binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence element (consensus sequence 5'-UUUUUAU-3') within the mRNA 3'-UTR (PubMed:24990967). RNA binding results in a clear conformational change analogous to the Venus fly trap mechanism (PubMed:24990967). Regulates activation of unfolded protein response (UPR) in the process of adaptation to ER stress in liver, by maintaining translation of CPE- regulated mRNAs in conditions in which global protein synthesis is inhibited (By similarity). Required for cell cycle progression, specifically for cytokinesis and chromosomal segregation (PubMed:26398195). Plays a role as an oncogene promoting tumor growth and progression by positively regulating translation of t-plasminogen activator/PLAT (PubMed:22138752). Stimulates proliferation of melanocytes (PubMed:27857118). In contrast to CPEB1 and CPEB3, does not play role in synaptic plasticity, learning and memory (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q7TN98}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q7TN98}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q7TN98}. Postsynaptic density {ECO:0000250|UniProtKB:Q7TN98}. Cell projection, axon {ECO:0000250|UniProtKB:Q7TN98}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q7TN98}. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q7TN98}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q7TN98}
Tissue Location	Expressed in pancreas in islets and ductal cells (at protein level) (PubMed:22138752). Expressed in melanocytes (PubMed:27857118).

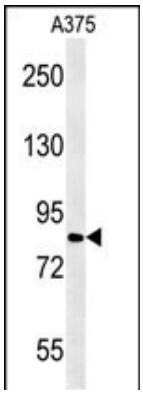
Background

There are 3 named isoforms produced by alternative splicing.

References

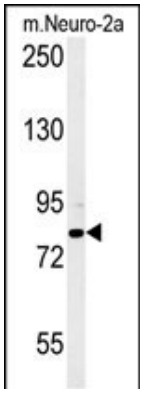
Kurihara, Y., et al. Biol. Reprod. 69(1):261-268(2003)

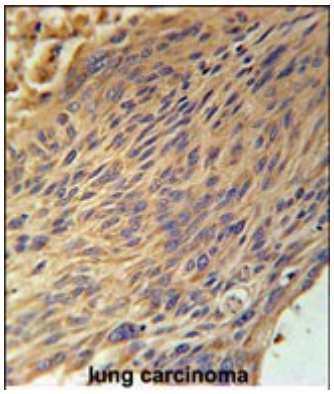
Images



CPEB4 Antibody (N-term) (Cat. #AP5628a) western blot analysis in A375 cell line lysates (15ug/lane).This demonstrates the CPEB4 antibody detected the CPEB4 protein (arrow).

CPEB4 Antibody (N-term) (Cat. #AP5628a) western blot analysis in mouse Neuro-2a cell line lysates (15ug/lane).This demonstrates the CPEB4 antibody detected the CPEB4 protein (arrow).





CPEB4 Antibody (N-term) (Cat. #AP5628a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CPEB4 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- CPEB4 regulates glioblastoma cell proliferation and predicts poor outcome of patients.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.