

CPEB4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5628a

Specification

CPEB4 Antibody (N-term) - Product Information

Application	
Primary Accession	
Other Accession	
Reactivity	
Host	
Clonality	
Isotype	
Calculated MW	
Antigen Region	

WB, IHC-P,E <u>Q17RY0</u> <u>NP_085130.2</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 80152 109-137

CPEB4 Antibody (N-term) - 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~~1:50~100

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.

CPEB4 Antibody (N-term) - 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).

CPEB4 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CPEB4 Antibody (N-term) - 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.

CPEB4 Antibody (N-term) - Background

There are 3 named isoforms produced by alternative splicing.

CPEB4 Antibody (N-term) - References

Kurihara, Y., et al. Biol. Reprod. 69(1):261-268(2003)
 CPEB4 Antibody (N-term) - Citations

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