

Datasheet for ABIN7149344
anti-CPEB3 antibody (AA 414-525)



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1 Image

Overview

Quantity:	100 µg
Target:	CPEB3
Binding Specificity:	AA 414-525
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CPEB3 antibody is un-conjugated
Application:	ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Cytoplasmic polyadenylation element-binding protein 3 protein (414-525AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	CPEB3
Alternative Name:	CPEB3 (CPEB3 Products)
Background:	Background: Sequence-specific RNA-binding protein which acts as a translational repressor in

Target Details

the basal unstimulated state but, following neuronal stimulation, acts as a translational activator (By similarity). In contrast to CPEB1, does not bind to the cytoplasmic polyadenylation element (CPE), a uridine-rich sequence element within the mRNA 3'-UTR, but binds to a U-rich loop within a stem-loop structure (By similarity). Required for the consolidation and maintenance of hippocampal-based long term memory (By similarity). In the basal state, binds to the mRNA 3'-UTR of the glutamate receptors GRIA2/GLUR2 mRNA and negatively regulates their translation (By similarity). Also represses the translation of DLG4, GRIN1, GRIN2A and GRIN2B (By similarity). When activated, acts as a translational activator of GRIA1 and GRIA2 (By similarity). In the basal state, suppresses SUMO2 translation but activates it following neuronal stimulation (By similarity). Binds to the 3'-UTR of TRPV1 mRNA and represses TRPV1 translation which is required to maintain normal thermoception (By similarity). Binds actin mRNA, leading to actin translational repression in the basal state and to translational activation following neuronal stimulation (By similarity). Negatively regulates target mRNA levels by binding to TOB1 which recruits CNOT7/CAF1 to a ternary complex and this leads to target mRNA deadenylation and decay (PubMed:21336257). In addition to its role in translation, binds to and inhibits the transcriptional activation activity of STAT5B without affecting its dimerization or DNA-binding activity. This, in turn, represses transcription of the STAT5B target gene EGFR which has been shown to play a role in enhancing learning and memory performance (PubMed:20639532). In contrast to CPEB1, CPEB2 and CPEB4, not required for cell cycle progression (PubMed:26398195).

Aliases: CPE-binding protein 3 antibody, CPE-BP3 antibody, CPEB 3 antibody, CPEB3 antibody, CPEB3_HUMAN antibody, Cytoplasmic polyadenylation element binding protein 3 antibody, Cytoplasmic polyadenylation element-binding protein 3 antibody, hCPEB-3 antibody, KIAA0940 antibody

UniProt: [Q8NE35](#)

Application Details

Application Notes: Recommended dilution: IF:1:50-1:200,

Restrictions: For Research Use only

Handling

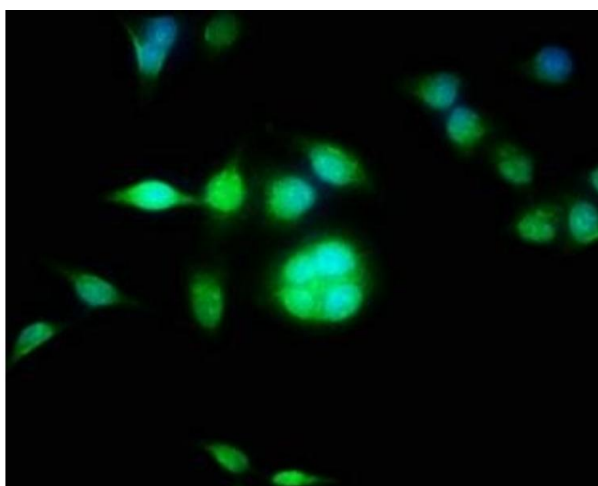
Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescence staining of HeLa cells with ABIN7149344 at 1:100, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde, permeabilized using 0.2 % Triton X-100 and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).