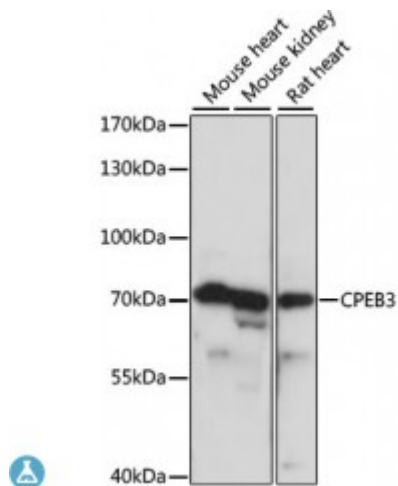


Anti-CPEB3 Antibody



Model	STJ117597
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 150-400 of human CPEB3 (NP_055727.3).
Gene ID	22849
Gene Symbol	CPEB3
Dilution range	WB 1:200 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Cytoplasmic polyadenylation element-binding protein 3 CPE-BP3 CPE-binding protein 3 hCPEB-3
Molecular Weight	76.014 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:21746 OMIM:610606
Alternative Names	Cytoplasmic polyadenylation element-binding protein 3 CPE-BP3 CPE-

binding protein 3 hCPEB-3

Function

Sequence-specific RNA-binding protein which acts as a translational repressor in the basal unstimulated state but, following neuronal stimulation, acts as a translational activator , 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 , Required for the consolidation and maintenance of hippocampal-based long term memory , In the basal state, binds to the mRNA 3'-UTR of the glutamate receptors GRIA2/GLUR2 mRNA and negatively regulates their translation , Also represses the translation of DLG4, GRIN1, GRIN2A and GRIN2B , When activated, acts as a translational activator of GRIA1 and GRIA2 , In the basal state, suppresses SUMO2 translation but activates it following neuronal stimulation , Binds to the 3'-UTR of TRPV1 mRNA and represses TRPV1 translation which is required to maintain normal thermoception , Binds actin mRNA, leading to actin translational repression in the basal state and to translational activation following neuronal stimulation , 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 ,

Cellular Localization

Cytoplasm,

Post-translational Modifications

Activated by NEURL1-mediated monoubiquitination, resulting in the growth of new dendritic spines and increased levels of GRIA1 and GRIA2, NEURL1-mediated monoubiquitination facilitates synaptic plasticity and hippocampal-dependent memory storage,

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