Datasheet for ABIN7558227

CPEB3 Protein (AA 1-716) (His tag)

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Overview

Quantity:	1 mg
Target:	CPEB3
Protein Characteristics:	AA 1-716
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPEB3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Cpeb3 Protein expressed in mammalian cells.
Sequence:	MQDDLLMDKS KTQPQSQQQQ RQQQQQQQQL QPEPGAAEAP STPLSSEIPK PEDSSAVPAL SPASAPPAPN GPDKMQMESP LLPGLSFHQP PQQPPPPQEP TAPGASLSPS FGSTWSTGTT NAVEDSFFQG ITPVNGTMLF QNFPHHVNPV FGGTFSPQIG LAQTQHHQQP PPPAPQPPQP AQPPQAQPSQ QRRSPASPSQ APYAQRSAAA YGHQPIMTSK PSSSSAVAAA AAAAAASSAS SSWNTHQSVN AAWSAPSNPW GGLQAGRDPR RAVGVGVGVG VGVPSPLNPI SPLKKPFSSN VIAPPKFPRA APLTSKSWME DNAFRTDNGN NLLPFQDRSR PYDTFNLHSL ENSLMDMIRT DHEPLKGKHY PNSGPPMSFA DIMWRNHFAG RMGINFHHPG TDNIMALNTR SYGRRRGRSS LFPFEDAFLD DSHGDQALSS GLSSPTRCQN GERVERYSRK VFVGGLPPDI DEDEITASFR RFGPLVVDWP HKAESKSYFP PKGYAFLLFQ EESSVQALID ACLEEDGKLY LCVSSPTIKD KPVQIRPWNL SDSDFVMDGS QPLDPRKTIF VGGVPRPLRA VELAMIMDRL YGGVCYAGID TDPELKYPKG AGRVAFSNQQ SYIAAISARF VQLQHNDIDK RVEVKPYVLD DQMCDECQGT RCGGKFAPFF CANVTCLQYY CEYCWASIHS RAGREFHKPL VKEGGDRPRH VPFRWS **Sequence**

Product Details

	without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	CPEB3
Alternative Name:	Cpeb3 (CPEB3 Products)
Background:	Cytoplasmic polyadenylation element-binding protein 3 (CPE-BP3) (CPE-binding protein 3) (mCPEB-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 (PubMed:17024188, PubMed:26074072). 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 (PubMed:17024188). Required for the consolidation and maintenance of hippocampal-based long term memory (PubMed:26074003). In the basal state, binds to the mRNA 3'-UTR of the glutamate receptors

Target Details

	GRIA1 and GRIA2 and negatively regulates their translation (PubMed:17024188, PubMed:22153079). Also represses the translation of DLG4, GRIN1 GRIN2A and GRIN2B (PubMed:24155305). When activated, acts as a translational activator of GRIA1 and GRIA2 (PubMed:22153079, PubMed:26074003). In the basal state, suppresses SUMO2 translation but activates it following neuronal stimulation (PubMed:26074071). Binds to the 3'-UTR of TRPV1 mRNA and represses TRPV1 translation which is required to maintain normal thermoception (PubMed:26915043). Binds actin mRNA, leading to actin translational repression in the basal state and to translational activation following neuronal stimulation (PubMed:26074072). 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 (By similarity). 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 (By similarity). In contrast to CPEB1, CPEB2 and CPEB4, not required for cell cycle progression (By similarity). {ECO:0000250|UniProtKB:Q8NE35, ECO:0000269|PubMed:17024188, ECO:0000269|PubMed:22153079, ECO:0000269|PubMed:22711986, ECO:0000269|PubMed:24155305, ECO:0000269|PubMed:26074003, ECO:0000269|PubMed:26074071, ECO:0000269|PubMed:26074072, ECO:0000269|PubMed:26915043}.
Molecular Weight:	78.3 kDa
UniProt:	Q7TN99

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months