

Product datasheet for **MR230529**

Cpeb1 (NM_001252525) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cpeb1 (NM_001252525) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cpeb1
Synonyms:	AU024112; Cpe-bp1; Cpeb; mCPEB; mCpeb-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR230529 representing NM_001252525
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTTCTCTCTGGAAGAAGCAGCAGGAAGAATAAAGGATTGCTGGGACAACCAAGAAGTTCCTGCAC
 TCTCTACATGTAGCAATGCCAATATCTTTGGAAGGATAAATGCCATTTTGGATGATTCACTGGACTTCAG
 TAAAGTCTGTACAACACCTATAAATCGAGGAATTCATGATCAGTTGCCAGCAGACTTCCAGGACTCTGAA
 GAAACAGTTACAAGCAGGATGCTTTTCCACCTCTGCGCAAGAACTCCCCGTGGCCTCCAGATGCAA
 ATGGCTTGTGCCTTGGCCTGCAGTCCCTCAGTCTGACTGGCTGGGACCGACCCTGGAGCACCAGGACTC
 AGACTCCTCAGCCAGAGCAGCACAGTCAGTATTAAGCATGCTCCAAAATCCACTGGGAAATGTCTTA
 GGGAAAGCCCCCTTGAGTTCCTGTCTCTGGATCCCCTGGGTCTGACTGGACAAGTCCCAGCACCT
 CAGTTAGAGGATCTGCCTGGACACCCGCCCATCCTGGACTCCGTTCTAGCAGCCCTCTGACTCAGA
 CACGAGTGGCTTACGCTCTGGATCAGACCATCTCTCAGATTTGATTTCAAGCCTTCGCATTTCCCCTCT
 CTGCCCTTTCTTCTATGACGGGAAATGGTCCCAGAGACCCTCTAAAGATGGGCGTTGGTCCCAGATGG
 ACCAAGAACAAGCTGCTCTTGTGTCAGTTGCTCCCTCTCCAACAGTGTCCAAAGAGATGGCCAGGAGC
 TTCTGTGTGGCCATCTTGGGACCTTCTTGGAGCTCCTAAAGACCCATTACAGCATAGAGAGAGAGGCTAGA
 CTCCACCGGCAGGCTGCAGCTGTGAATGAAGCTACGTGTACCTGGAGTGGCCAGCTTCTCCCAGAACT
 ATAAGAACCCCATCTACTCATGCAAGGTGTTCTAGGAGGCGTTCCTGGGATATTACAGAAGCTGGATT
 GGTAAACACCTCCCGTGTCTTGGCTCTCTGAGTGTGGAGTGGCCTGGTAAGGATGGCAAGCACCCTGG
 TGCTCTCCAAAGGTAATATGCCTAAAGGATATGTGATTTGGTGTGAACTAGAGAAGTCCGTCGGG
 CAGCCGAAGGATGCGCTGCAAAGAGGTACAGGTAATCCCTTGGGTCTGGCTGACAGCAACTTTGTCTGG
 AGCCCATCTCAGAGGCTGGATCCAGCAGGACGGTGTGTTGGTGCCTTGCACGGGATGCTCAATGCTG
 AGGCTCTGGCTGCCATCTTGAATGACCTATTTGGTGGAGTGGTGTATGCTGGATTGACACAGATAAGCA
 CAAGTACCCCATGGGTCTGGTCTGTGACTTTCAATAACCAACGTAGTTATCTGAAAGCAGTACCCTGCT
 GCTTTTGTGGAGTCAAAACCACCAAGTTACCAAGAAGGTTAGATTGACCCCTATCTAGAAGATTCTC
 TGTGTCTTATCTGCAGCTCACACCTGGTCTTCTTCTGCCGAGATCAGGTCTGCTTCAAGTACTTTTG
 CAGAAGCTGCTGGCACTGGCAGACAGCATGGAAGGCTACGCCACCATAGCCCCCTAATGAGGAACCA
 AAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230529 representing NM_001252525
 Red=Cloning site Green=Tags(s)

MAFSLEEAAGRIKDCWDNQEVPAALSTCSNANIFRRINAILDDSLDFSKVCTTPINRGIHDQLPADFDSE
 ETVTSRMLFPTSAQESPRGLPDANGLCLGLQSLSLTGWDRPWSTQSDSSAQSSQSVLSMLQNPLGNVL
 GKAPLSFLSLDPLGSDLDKFPAPSVRGRSLDTRPILDSRSSSPSDSDTSGFSSGSDHLSLIISSLRISPP
 LPFLSMTGNGPRDPLKMGVGSRMDQEAALAAVAPSPTSAPKRWPASVWPSWDLGAPKDPFSIEREAR
 LHRQAAAVNEATCTWSGQLPPRNYKNPIYSCKVFLGGVPWDITEAGLVNTRFRVFGSLSVEWPGKDGKHP
 CPPKGNMPKGYVYLVFELEKSVRALLQACSHDPLSPDGLSEYYFKMSSRRMRCKEVQVIPWVLADSNFVW
 SPSQRLDPSRTVFGALHGMLNAEALAILNDLFGGVVYAGIDTDKHKYPIGSGRVTFNNQRSYLKAVTA
 AFVEIKTKTKKVKQIDPYLEDLCLICSSQPGPFFCRDQVCFKYFCRSCWHWRHSMGLRHHSPLMRNQ
 KN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001252525

ORF Size: 1686 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001252525.1](#), [NP_001239454.1](#)

RefSeq Size: 3141 bp

RefSeq ORF: 1689 bp

Locus ID: 12877

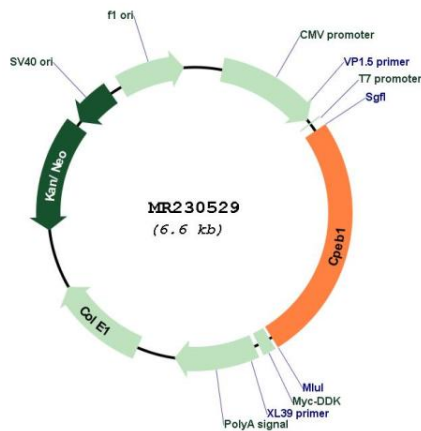
UniProt ID: [P70166](#)

Cytogenetics: 7 D3

MW: 62.4 kDa

Gene Summary: Sequence-specific RNA-binding protein that regulates mRNA cytoplasmic polyadenylation and translation initiation during oocyte maturation, early development and at postsynapse sites of neurons. Binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence element (consensus sequence 5'-UUUUU-3') within the 3' UTR of mRNAs. In absence of phosphorylation and in association with TACC3 is also involved as a repressor of translation of CPE-containing mRNA; a repression that is relieved by phosphorylation or degradation (By similarity). Involved in the transport of CPE-containing mRNA to dendrites; those mRNAs may be transported to dendrites in a translationally dormant form and translationally activated at synapses. Its interaction with APLP1 promotes local CPE-containing mRNA polyadenylation and translation activation. Induces the assembly of stress granules in the absence of stress (By similarity). Required for cell cycle progression, specifically for prophase entry (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230529