

Product datasheet for **MR230502**

Cpeb1 (NM_001252526) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cpeb1 (NM_001252526) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cpeb1
Synonyms:	AU024112; Cpe-bp1; Cpeb; mCPEB; mCpeb-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230502 representing NM_001252526
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCTTTCTCTCTGGAAGAAGCAGCAGGAAGAATAAAGGATTGCTGGGACAACCAAGAAGTTCCTGCAC
 TCTCTACATGTAGCAATGCCAATATCTTTCGAAGGATAAATGCCATTTTGATGATTCACCTGGACTTCAG
 TAAAGTCTGTACAACACCTATAAATCGAGGAATTCATGATCAGTTGCCAGACTTCCAGGACTCTGAAGAA
 ACAGTTACAAGCAGGATGCTTTTCCCACCTCTGCGCAAGAATCTCCCGTGGCCTCCAGATGCAAATG
 GCTTGTGCCTTGGCTGCAGTCCCTCAGTCTGACTGGCTGGGACCGACCCTGGAGACCCAGGACTCAGA
 CTCCTCAGCCCAGAGCAGCACACAGTCAAGTAAAGCATGCTCCAAAATCCACTGGGAAATGCTTAGGA
 AAAGCCCCCTTGAGTTCCTGTCTCTGGATCCCCTTGGTCTGACTTGGACAAGTCCCAGCACCCCTCAG
 TTAGAGGATCTCGCTGGACACCCGGCCATCCTGGACTCCCGTCTAGCAGCCCCTCTGACTCAGACAC
 GAGTGGCTTCAGCTCTGGATCAGACCATCTCTCAGATTTGATTTCAAGCCTTCGATTTCCCTCCTCTG
 CCCTTTCTTTCTATGACGGGAAATGGTCCCAGAGACCCTCTAAAGATGGGCGTTGGTCCCAGATGGACC
 AAGAACAAGCTGCTCTTGTCTGCAGTTGCTCCCTCTCCAACAGTCTCCAAGAGATGGCCAGGAGCTTC
 TGTGTGGCCATCTTGGACCTTCTTGGAGCTCCTAAAGACCCATTAGCATAAGAGAGAGAGGCTAGACTC
 CACCGGCAGGCTGCAGCTGTGAATGAAGTACGTGTACCTGGAGTGGCCAGCTTCTCCCGGAACATA
 AGAACCCCATCTACTCATGCAAGGTGTTCTAGGAGGCGTTTCTTGGGATATTACAGAAGCTGGATTGGT
 TAACACCTCCGTGTTTTGGCTCTCTGAGTGTGGAGTGGCTGGTAAGGATGGCAAGCACCCCGGTGT
 CCTCCAAAGGTATGTGATTTGGTGTGTTGAAGTGAAGTCCGTCGGGCTTGGCTCAGGCTTGT
 CTCATGACCCGCTGAGCCAGATGGCTGAGTGAATATTATTTCAAGATGTCCAGCCGAAGGATGCGCTG
 CAAAGAGGTACAGGTAATCCCTTGGGTCTTGGCTGACAGCAACTTGTCTGGAGCCCATCTCAGAGGCTG
 GATCCCAGCAGGACGGTGTGTTGTTGGTGCCTTGCACGGATGCTCAATGCTGAGGCTCTGGCTGCCATCT
 TGAATGACCTATTTGGTGGAGTGGTGTATGCTGGGATTGACACAGATAAGCACAAAGTACCCATTGGGTC
 TGGTCTGTGACTTTCAATAACCAACGTAGTTATCTGAAAGCAGTACCCTGCTTTTGTGGAGATCAAA
 ACCACCAAGTTTACCAAGAAGGTTAGATTGACCCCTATCTAGAAGATTCTGTGTCTTATCTGCAGCT
 CACAACCTGGTCTTTCTCTGCCGAGATCAGGCTGCTTCAAGTACTTTTGCAGAAGCTGCTGGCACTG
 GCGACACAGCATGGAAGGCTACGCCACCATAGCCCCCTAATGAGGAACCAAGAAGAAC

**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence:

>MR230502 representing NM_001252526
 Red=Cloning site Green=Tags(s)

MAFSLEEAAGRIKDCWDNQEVPAALSTCSNANIFRRINAILDDSLDFSKVCTTPINRGIHQDLPDFQDSEE
 TVTSRMLFPTSAQESPRGLPDANGLCLGLQSLSLTGWDRPWSTQSDSSAQSSQSVLSMLQNPLGNVLG
 KAPLSFLSLDPLGSDLKFPAPSVRGSRLDTRPILDSRSSPDSSTSGFSSGSDHLSDLISSLRISPLP
 PFLSMTGNGPRDPLKMGVGSRMDQEAALAAVAPSPTSAPKRWPGASVWPSWDLGAPKDPFSIEREARL
 HRQAAAVNEATCTWSGQLPPRNYKNPIYSCKVFLGGVPWDITEAGLVNTRFRVFGSLSVEWPGKDGKHPRC
 PPKGYVYLVFLEKSVRALLQACSHDPLSPDGLSEYYFKMSSRRMRCKEVQVIPWVLADSNFVWSPSQRL
 DPSRTVFVGLHGMNAEALAILNDLFGGVVYAGIDTDKHKYPIGSGRVTFNNQRSYLKAVTAAAFVEIK
 TTKFTKKVQIDPYLEDLSLCLICSSQPGPFFCRDQVCFKYFCRSCWHWRHSMEGLRHHSPLMRNQKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

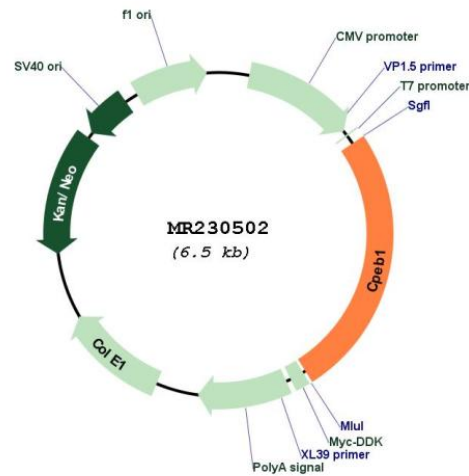
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001252526
ORF Size:	1668 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:	<ol style="list-style-type: none">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_001252526.1 , NP_001239455.1
RefSeq Size:	3123 bp
RefSeq ORF:	1671 bp
Locus ID:	12877
UniProt ID:	P70166
Cytogenetics:	7 D3
MW:	61.8 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'-UUUUUUAU-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]