

Product datasheet for **MR223088**

Cpeb1 (NM_007755) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cpeb1 (NM_007755) 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)



[View online »](#)

ORF Nucleotide Sequence:

>MR223088 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTTCTCTCTGGAAGAAGCAGCAGGAAGAATAAAGGATTGCTGGGACAACCAAGAAGTTCCTGCAC
 TCTCTACATGTAGCAATGCCAATATCTTTGGAAGGATAAATGCCATTTTGGATGATTCACTGGACTTCAG
 TAAAGTCTGTACAACACCTATAAATCGAGGAATTCATGATCAGTTGCCAGCAGACTTCCAGGACTCTGAA
 GAAACAGTTACAAGCAGGATGCTTTTCCACCTCTGCGCAAGAACTCCCCGTTGGCCTCCAGATGCAA
 ATGGCTTGTGCCTTGGCCTGCAGTCCCTCAGTCTGACTGGCTGGGACCGACCTGGAGCACCAGGACTC
 AGACTCCTCAGCCAGAGCAGCACAGTCAGTATTAAGCATGCTCCAAAATCCACTGGGAAATGTCTTA
 GGGAAAGCCCCCTTGGCTTCTGTCTCTGGATCCCTTGGGTCTGACTGGACAAGTCCAGCACCCCT
 CAGTTAGAGGATCTGCCTGGACACCCGGCCCATCCTGGACTCCGTTCTAGCAGCCCTCTGACTCAGA
 CACGAGTGGCTTACGCTCTGGATCAGACCATCTCTCAGATTTGATTTCAAGCCTTCGCATTTCCCTCCT
 CTGCCCTTTCTTCTATGACGGGAAATGGTCCCAGAGACCCTCTAAAGATGGGCGTTGGTCCCGAATGG
 ACCAAGAACAAGCTGCTCTTGTGTCAGTTGCTCCCTCTCCAACAGTGTCCAAAGAGATGGCCAGGAGC
 TTCTGTGTGGCCATCTTGGGACCTTCTTGGAGCTCCTAAAGACCCATTACAGCATAGAGAGAGAGGCTAGA
 CTCCACCGGCAGGCTGCAGCTGTGAATGAAGCTACGTGTACCTGGAGTGGCCAGCTTCTCCCGGAACT
 ATAAGAACCCCATCTACTCATGCAAGGTGTTCTTAGGAGGCGTTCCTTGGGATATTACAGAAGCTGGATT
 GGTAAACACCTCCCGTGTCTTGGCTCTCTGAGTGTGGAGTGGCCTGGTAAGGATGGCAAGCACCCTGG
 TGCTCTCCAAAGGTAATATGCCTAAAGGATGTGTATTTGGTGTGAACTAGAGAAGTCCGTCCTGGG
 CAGCCGAAGGATGCGCTGCAAAGAGGTACAGGTAATCCCTTGGGTCTGGCTGACAGCAACTTTGTCTGG
 AGCCCATCTCAGAGGCTGGATCCAGCAGGACGGTGTGTTGGTGCCTTGCACGGGATGCTCAATGCTG
 AGGCTCTGGCTGCCATCTTGAATGACCTATTTGGTGGAGTGGTGTATGCTGGATTGACACAGATAAGCA
 CAAGTACCCCATGGGTCTGGTCTGTGACTTTCAATAACCAACGTAGTTATCTGAAAGCAGTCACCGCT
 GCTTTTGTGGAGATCAAACCACCAAGTTACCAAGAAGGTTAGATTGACCCCTATCTAGAAGATTCTC
 TGTGTCTTATCTGCAGCTCACACCTGGTCTTTCTTCTGCCGAGATCAGGTCTGCTTCAAGTACTTTTG
 CAGAAGCTGCTGGCACTGGCGACACAGCATGGAAGGCTACGCCACCATAGCCCCCTAATGAGGAACCG
 AAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR223088 protein sequence
 Red=Cloning site Green=Tags(s)

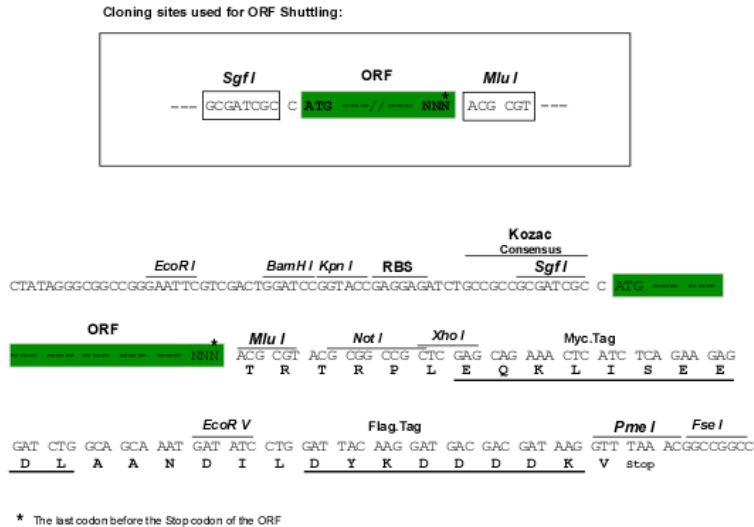
MAFSLEEAAGRIKDCWDNQEVPAALSTCSNANIFRRINAILDDSLDFSKVCTTPINRGIHDQLPADFDQSE
 ETVTSRMLFPTSAQESPRGLPDANGLCLGLQSLSLTGWDRPWSTQSDSSAQSSSTQSVLSMLQNPLGNVL
 GKAPLSFLSLDPLGSDLDKFPAPSVRGSRLDTRPILDSRSSSPSDSTSGFSSGSDHLSLIISSLRISPP
 LPFLSMTGNGPRDPLKMGVGSRMDQEQAALAAVAPSPTSAPKRWPASVWPSWDLGAPKDPFSIEREAR
 LHRQAAAVNEATCTWSGQLPPRNYKNPIYSCKVFLGGVPWDITEAGLVNTFRVFGSLSVEWPGDKGKHP
 CPPKGNMPKGYVYLVFELEKSVRALLQACSHDPLSPDGLSEYYFKMSSRRMRCKEVQVIPWVLADSNFVW
 SPSQRLDPSRTVFGALHGMLNAEALAILNDLFGGVVYAGIDTDKHKYPIGSGRVTFNQRSYLKAVTA
 AFVEIKTKTKKVKQIDPYLEDLCLICSSQPGPFFCRDQVCFKYFCRSCWHWRHSMGLRHHSPLMRNQ
 KN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_007755

ORF Size: 1689 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_007755.1](#), [NM_007755.2](#), [NM_007755.3](#), [NM_007755.4](#), [NM_007755.5](#), [NP_031781.1](#)

RefSeq Size: 3138 bp

RefSeq ORF: 1686 bp

Locus ID: 12877

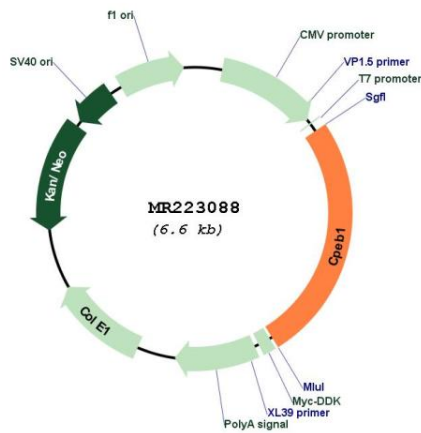
UniProt ID: [P70166](#)

Cytogenetics: 7 D3

MW: 62 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 MR223088