

Product datasheet for RR204288L4

Cpeb1 (NM_001106276) Rat Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cpeb1 (NM_001106276) Rat Tagged Lenti ORF Clone

Tag: mGFP Symbol: Cpeb1

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

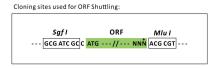
ORF Nucleotide The ORF insert of this cl

Sequence:

The ORF insert of this clone is exactly the same as(RR204288).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.



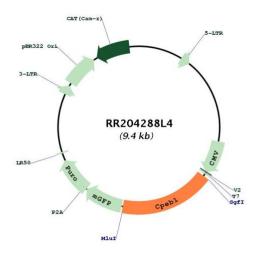
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Plasmid Map:



ACCN: NM_001106276

ORF Size: 1683 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: <u>NM 001106276.1</u>, <u>NP 001099746.1</u>

RefSeq Size: 2615 bp



Cpeb1 (NM_001106276) Rat Tagged Lenti ORF Clone - RR204288L4

 RefSeq ORF:
 1686 bp

 Locus ID:
 293056

 UniProt ID:
 P0C279

 Cytogenetics:
 1q31

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'-UUUUUAU-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. 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. Required for cell cycle progression, specifically for prophase entry.

[UniProtKB/Swiss-Prot Function]