

## Product datasheet for **TR503945**

### Cpeb4 Mouse shRNA Plasmid (Locus ID 67579)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Cpeb4 Mouse shRNA Plasmid (Locus ID 67579)
Locus ID:	67579
Synonyms:	Cpe-bp4; Cpeb-4; mCPEB-4
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cpeb4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 67579). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC115430</a> , <a href="#">BC115431</a> , <a href="#">NM_001290676</a> , <a href="#">NM_001290678</a> , <a href="#">NM_026252</a> , <a href="#">NM_026252.1</a> , <a href="#">NM_026252.2</a> , <a href="#">NM_026252.3</a> , <a href="#">NM_026252.4</a> , <a href="#">NM_001290678.1</a> , <a href="#">NM_001290676.1</a> , <a href="#">BC145863</a> , <a href="#">BC079599</a> , <a href="#">BC145865</a>
UniProt ID:	<a href="#">Q7TN98</a>
Summary:	Sequence-specific RNA-binding protein that binds to the cytoplasmic polyadenylation element (CPE), an uridine-rich sequence element (consensus sequence 5'-UUUUUUAU-3') within the mRNA 3' UTR (PubMed:17024188). RNA binding results in a clear conformational change analogous to the Venus fly trap mechanism (By similarity). Regulates activation of unfolded protein response (UPR) in the process of adaptation to ER stress in liver, by maintaining translation of CPE-regulated mRNAs in conditions in which global protein synthesis is inhibited (PubMed:28092655). Required for cell cycle progression, specifically for cytokinesis and chromosomal segregation (By similarity). Plays a role as an oncogene promoting tumor growth and progression by positively regulating translation of t-plasminogen activator/PLAT (PubMed:22138752). Stimulates proliferation of melanocytes (By similarity). In contrast to CPEB1 and CPEB3, does not play role in synaptic plasticity, learning and memory (PubMed:24386439).[UniProtKB/Swiss-Prot Function]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).