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# Product datasheet for TL701498

## Mknk2 Rat shRNA Plasmid (Locus ID 299618)

### Product data:

| | |
|---|---|
| **Product Type:** | shRNA Plasmids |
| **Product Name:** | Mknk2 Rat shRNA Plasmid (Locus ID 299618) |
| **Locus ID:** | 299618 |
| **Vector:** | pGFP-C-shLenti (TR30023) |
| **E. coli Selection:** | Chloramphenicol (34 ug/ml) |
| **Mammalian Cell Selection:** | Puromycin |
| **Format:** | Lentiviral plasmids |
| **Components:** | Mknk2 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 299618).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. |
| **RefSeq:** | NM_001011985, NM_001011985.1, BC085941 |
| **UniProt ID:** | Q5U2N4 |
| **Summary:** | Serine/threonine-protein kinase that phosphorylates SFPQ/PSF, HNRNPA1 and EIF4E. May play a role in the response to environmental stress and cytokines. Appears to regulate translation by phosphorylating EIF4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap. Required for mediating PP2A-inhibition-induced EIF4E phosphorylation. Triggers EIF4E shuttling from cytoplasm to nucleus. Enhances the formation of EIF4F complex in pachytene spermatocytes, thus promoting mRNA translation during spermatogenesis. Displays a high basal kinase activity. Acts as a mediator of the suppressive effects of IFNgamma on hematopoiesis. Negative regulator for signals that control generation of arsenic trioxide As(2)O(3)-dependent apoptosis and anti-leukemic responses. Involved in anti-apoptotic signaling in response to serum withdrawal (By similarity).[UniProtKB/Swiss-Prot Function] |
| **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. If you need a special design or shRNA sequence, please utilize our custom shRNA service. |

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**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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).