

## Product datasheet for **TF320372**

### **MNK2 (MKNK2) Human shRNA Plasmid Kit (Locus ID 2872)**

#### **Product data:**

<b>Product Type:</b>	shRNA Plasmids
<b>Product Name:</b>	MNK2 (MKNK2) Human shRNA Plasmid Kit (Locus ID 2872)
<b>Locus ID:</b>	2872
<b>Synonyms:</b>	GPRK7; MNK2
<b>Vector:</b>	pRFP-C-RS (TR30014)
<b>E. coli Selection:</b>	Chloramphenicol (34 ug/ml)
<b>Mammalian Cell Selection:</b>	Puromycin
<b>Format:</b>	Retroviral plasmids
<b>Components:</b>	MKNK2 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 2872). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
<b>RefSeq:</b>	<a href="#">NM_017572</a> , <a href="#">NM_199054</a> , <a href="#">NM_017572.1</a> , <a href="#">NM_017572.2</a> , <a href="#">NM_017572.3</a> , <a href="#">NM_199054.1</a> , <a href="#">NM_199054.2</a> , <a href="#">BC073140</a> , <a href="#">BC073140.1</a> , <a href="#">BC018345</a> , <a href="#">BC021235</a> , <a href="#">BM977403</a> , <a href="#">NM_017572.4</a> , <a href="#">NM_199054.3</a>
<b>UniProt ID:</b>	<a href="#">Q9HBH9</a>
<b>Summary:</b>	This gene encodes a member of the calcium/calmodulin-dependent protein kinases (CAMK) Ser/Thr protein kinase family, which belongs to the protein kinase superfamily. This protein contains conserved DLG (asp-leu-gly) and ENIL (glu-asn-ile-leu) motifs, and an N-terminal polybasic region which binds importin A and the translation factor scaffold protein eukaryotic initiation factor 4G (eIF4G). This protein is one of the downstream kinases activated by mitogen-activated protein (MAP) kinases. It phosphorylates the eukaryotic initiation factor 4E (eIF4E), thus playing important roles in the initiation of mRNA translation, oncogenic transformation and malignant cell proliferation. In addition to eIF4E, this protein also interacts with von Hippel-Lindau tumor suppressor (VHL), ring-box 1 (Rbx1) and Cullin2 (Cul2), which are all components of the CBC(VHL) ubiquitin ligase E3 complex. Multiple alternatively spliced transcript variants have been found, but the full-length nature and biological activity of only two variants are determined. These two variants encode distinct isoforms which differ in activity and regulation, and in subcellular localization. [provided by RefSeq, Aug 2011]



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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).