

## Product datasheet for **TL502521**

### Mapk7 Mouse shRNA Plasmid (Locus ID 23939)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Mapk7 Mouse shRNA Plasmid (Locus ID 23939)
Locus ID:	23939
Synonyms:	BMK-1; BMK1; ERK-5; ERK5; Erk5-T; PRKM7
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Mapk7 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 23939). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">BC100398</a> , <a href="#">NM_001291033</a> , <a href="#">NM_001291034</a> , <a href="#">NM_001291035</a> , <a href="#">NM_001291036</a> , <a href="#">NM_001291037</a> , <a href="#">NM_011841</a> , <a href="#">NM_011841.1</a> , <a href="#">NM_011841.2</a> , <a href="#">NM_001291035.1</a> , <a href="#">NM_001291036.1</a> , <a href="#">NM_001291037.1</a> , <a href="#">NM_001291033.1</a> , <a href="#">NM_001291034.1</a> , <a href="#">BC013745</a> , <a href="#">BC033598</a> , <a href="#">BC051020</a> , <a href="#">BC058096</a> , <a href="#">BC082315</a> , <a href="#">NM_001361989</a>
UniProt ID:	<a href="#">Q9WVS8</a>
Summary:	Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression (By similarity). Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction (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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



[View online »](#)

**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).