

## Product datasheet for **TR320491**

### MEK3 (MAP2K3) Human shRNA Plasmid Kit (Locus ID 5606)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	MEK3 (MAP2K3) Human shRNA Plasmid Kit (Locus ID 5606)
Locus ID:	5606
Synonyms:	MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MAP2K3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5606). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001316332</a> , <a href="#">NM_002756</a> , <a href="#">NM_145109</a> , <a href="#">NM_145110</a> , <a href="#">NM_145109.1</a> , <a href="#">NM_145109.2</a> , <a href="#">NM_002756.1</a> , <a href="#">NM_002756.2</a> , <a href="#">NM_002756.3</a> , <a href="#">NM_002756.4</a> , <a href="#">NM_145110.1</a> , <a href="#">BC032478</a> , <a href="#">BC032478.1</a> , <a href="#">BM836867</a> , <a href="#">NM_145109.3</a>
UniProt ID:	<a href="#">P46734</a>
Summary:	The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene. [provided by RefSeq, Jul 2008]
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> .



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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](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).