

## **Product datasheet for TR320527**

## OriGene Technologies, Inc.

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## MEK4 (MAP2K4) Human shRNA Plasmid Kit (Locus ID 6416)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** MEK4 (MAP2K4) Human shRNA Plasmid Kit (Locus ID 6416)

Locus ID: 6416

Synonyms: JNKK; JNKK1; MAPKK4; MEK4; MKK4; PRKMK4; SAPKK-1; SAPKK1; SEK1; SERK1; SKK1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: MAP2K4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

6416). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001281435, NM 003010, NM 003010.1, NM 003010.2, NM 003010.3, NM 001281435.1,

BC036032, BC036032.1, BC050386, BC060764, NM 001281435.2, NM 003010.4

UniProt ID: P45985

**Summary:** This gene encodes a member of the mitogen-activated protein kinase (MAPK) family.

Members of this family act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. They form a three-tiered signaling module composed of MAPKKKS, MAPKKS, and MAPKS. This protein is phosphorylated at serine and threonine residues by MAPKKKS and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Jul 2013]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## 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).