

Product datasheet for TR320490

OriGene Technologies, Inc.

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MEK2 (MAP2K2) Human shRNA Plasmid Kit (Locus ID 5605)

Product data:

Product Type: shRNA Plasmids

Product Name: MEK2 (MAP2K2) Human shRNA Plasmid Kit (Locus ID 5605)

Locus ID: 5605

Synonyms: CFC4; MAPKK2; MEK2; MKK2; PRKMK2

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MAP2K2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5605). 5µg purified plasmid DNA per construct

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

RefSeq: NM 030662, NM 030662.1, NM 030662.2, NM 030662.3, BC000471, BC000471.2, BC018645

UniProt ID: P36507

Summary: The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP

kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase

kinase kinases. Mutations in this gene cause cardiofaciocutaneous syndrome (CFC

syndrome), a disease characterized by heart defects, cognitive disability, and distinctive facial features similar to those found in Noonan syndrome. The inhibition or degradation of this

kinase is also found to be involved in the pathogenesis of Yersinia and anthrax. A

pseudogene, which is located on chromosome 7, has been identified 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 <u>techsupport@origene.com</u>. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).