

Product datasheet for TR320575

OriGene Technologies, Inc.

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MAPKAP Kinase 3 (MAPKAPK3) Human shRNA Plasmid Kit (Locus ID 7867)

Product data:

Product Type: shRNA Plasmids

Product Name: MAPKAP Kinase 3 (MAPKAPK3) Human shRNA Plasmid Kit (Locus ID 7867)

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Synonyms: 3PK; MAPKAP-K3; MAPKAP3; MAPKAPK-3; MDPT3; MK-3; MK3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: MAPKAPK3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 7867). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001243925, NM 001243926, NM 004635, NM 004635.1, NM 004635.2, NM 004635.3,

NM 004635.4, NM 001243925.1, NM 001243926.1, BC001662, BC001662.2, BC007591,

BC010407, BC068497, BM848086, NM 001243925.2

UniProt ID: Q16644

Summary: This gene encodes a member of the Ser/Thr protein kinase family. This kinase functions as a

mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAP kinases are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the

role of this kinase as an integrative element of signaling in both mitogen and stress

responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2011]

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).