

Product datasheet for TF320309

OriGene Technologies, Inc.

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p38 (MAPK14) Human shRNA Plasmid Kit (Locus ID 1432)

Product data:

Product Type: shRNA Plasmids

Product Name: p38 (MAPK14) Human shRNA Plasmid Kit (Locus ID 1432)

Locus ID: 1432

Synonyms: CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; p38; p38ALPHA; PRKM14; PRKM15; RK; SAPK2A

Vector: pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: MAPK14 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 1432).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001315, NM 139012, NM 139013, NM 139014, NM 139012.1, NM 139012.2,

NM 139013.1, NM 001315.1, NM 001315.2, NM 139014.1, BC031574, BC031574.1, BC000092,

NM 139012.3, NM 139013.3

UniProt ID: Q16539

Summary: The protein encoded by this gene is a member of the MAP kinase family. MAP kinases 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. This kinase is activated by various environmental stresses and

proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in

genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding

distinct isoforms have been reported. [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 <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).