

#### OriGene Technologies, Inc.

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# Product datasheet for TF318699

## ERK5 (MAPK7) Human shRNA Plasmid Kit (Locus ID 5598)

## Product data:

Product Type:	shRNA Plasmids
Product Name:	ERK5 (MAPK7) Human shRNA Plasmid Kit (Locus ID 5598)
Locus ID:	5598
Synonyms:	BMK1; ERK4; ERK5; PRKM7
Vector:	pRFP-C-RS (TR30014)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MAPK7 - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 5598). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.
RefSeq:	<u>NM 002749, NM 139032, NM 139033, NM 139034, NM 139032.1, NM 139032.2, NM 002749.1, NM 002749.2, NM 002749.3, NM 139034.1, NM 139034.2, NM 139033.1, NM 139033.2, BC007404, BC007404.2, BC009963, BC009963.2, BC030134, BC007992, NM 002749.4, NM 139034.3, NM 139032.3</u>
UniProt ID:	<u>Q13164</u>
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 specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracelluar signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two 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> .



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#### STANDARIGENE ERK5 (MAPK7) Human shRNA Plasmid Kit (Locus ID 5598) – TF318699 ERK5 (MAPK7) Human shRNA Plasmid Kit (Locus ID 5598) – TF318699

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).

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