

Product datasheet for **RG218101**

MEK3 (MAP2K3) (NM_002756) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MEK3 (MAP2K3) (NM_002756) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MEK3
Synonyms: MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG218101 representing NM_002756
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCCAAGCCACCCGCACCCAACCCACACCCCCCGAACCTGGACTCCCGGACCTTCATCACCATTG
 GAGACAGAACTTTGAGGTGGAGGCTGATGACTTGGTGACCATCTCAGAACTGGCCGTGGAGCCTATGG
 GGTGGTAGAGAAGGTGCGGCACGCCAGAGCGGCACCATCATGGCCGTGAAGCGGATCCGGGCCACCGTG
 AACTCACAGGAGCAGAAGCGGCTGCTCATGGACCTGGACATCAACATGCGCACGGTGCAGTGTCTTCTACA
 CTGTCACCTTCTACGGGGCACTATTCAGAGAGGGAGACGTGTGGATCTGCATGGAGCTCATGGACACATC
 CTTGGACAAGTTCTACCGGAAGGTGCTGGATAAAAACATGACAATTCAGAGGACATCCTTGGGGGAGATT
 GCTGTGTCTATCGTGGGGCCCTGGAGCATCTGCACAGCAAGCTGTGGTATCCACAGAGATGTGAAGC
 CCTCCAATGTCCTTATCAACAAGGAGGGCCATGTGAAGATGTGTGACTTTGGCATCAGTGCTACTTGGT
 GGACTCTGTGGCCAAGACGATGGATGCCGGCTGCAAGCCCTACATGGCCCTGAGAGGATCAACCCAGAG
 CTGAACCAAGAAGGGCTACAATGTCAAGTCCGACGTCTGGAGCCTGGGCATCACCATGATTGAGATGGCCA
 TCCTGCGGTTCCCTTACGAGTCTGGGGACCCGTTCCAGCAGCTGAAGCAGGTGGTGGAGGAGCCGTC
 CCCCAGCTCCCAGCCGACCGTTTCTCCCCGAGTTTGTGGACTTCACTGCTCAGTGCCTGAGGAAGAAC
 CCCGCAGAGCGTATGAGCTACCTGGAGCTGATGGAGCACCCCTTTCACCTTGCACAAAACCAAGAAGA
 CGGACATTGCTGCCTTCGTGAAGGAGATCCTGGGAGAAGACTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG218101 representing NM_002756
Red=Cloning site Green=Tags(s)

MSKPPAPNPPTPRNLDsrTFITIGDRNFEVEADDLVTISELGRGAYGVVEKVRHAQSGTIMAVKRIRATV
 NSQEQKRLLMDLDINMRTVDCFYTVTFYGFALFREGDVVICMELMDTSLDKFYRKVL DKNMTIPEDILGEI
 AVSIVRALEHLHSLKLSVIHRDVKPSNVLINKEGHVKMCDFGISGLVDSVAKTMDAGCKPYMAPERINPE
 LNQKGYNVKSDVWSLGITMIEMAILRFPYESWGTFFQQLKQVVEEPSQLPADRF SFEFVDFTAQCLRKN
 PAERMSYLELMEHPFFTLHKTKKDIAAFVKEILGEDS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_002756

ORF Size: 954 bp

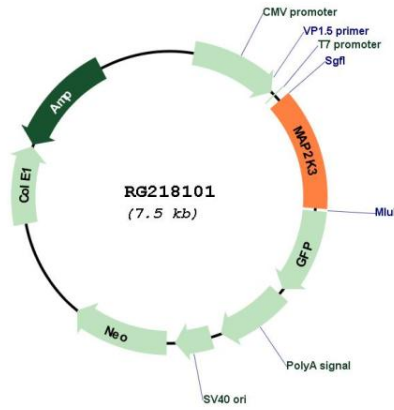
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_002756.4 , NP_002747.2
RefSeq Size:	2061 bp
RefSeq ORF:	957 bp
Locus ID:	5606
UniProt ID:	P46734
Cytogenetics:	17p11.2
Domains:	ppkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase, Transcription Factors
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Fc epsilon RI signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor signaling pathway
Gene Summary:	<p>The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG218101