

Product datasheet for RC218101

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:	Myc-DDK
Symbol:	MEK3
Synonyms:	MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218101 representing NM_002756 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAAGCCACCCGCACCCAACCCACACCCCCCGAACCTGGACTCCCGGACCTTCATCACCATTG
GAGACAGAACTTTGAGGTGGAGGCTGATGACTTGGTGACCATCTCAGAACTGGCCGTGGAGCCTATGG
GGTGGTAGAGAAGGTGCGGCACGCCAGAGCGGCACCATCATGGCCGTGAAGCGGATCCGGGCCACCGTG
AACTCACAGGAGCAGAAGCGGCTGCTCATGGACCTGGACATCAACATGCGCACGGTGCAGTGTCTTCTACA
CTGTCACCTTCTACGGGGCACTATTCAGAGAGGGAGACGTGTGGATCTGCATGGAGCTCATGGACACATC
CTTGACAAAGTTCTACCGGAAGGTGCTGGATAAAAACATGACAATTCAGAGGACATCCTTGGGGAGATT
GCTGTGTCTATCGTGCGGGCCCTGGAGCATCTGCACAGCAAGCTGTGGTATCCACAGAGATGTGAAGC
CCTCCAATGTCCTTATCAACAAGGAGGGCCATGTGAAGATGTGTGACTTTGGCATCAGTGCTACTTGGT
GGACTCTGTGGCCAAGACGATGGATGCCGGCTGCAAGCCCTACATGGCCCTGAGAGGATCAACCCAGAG
CTGAACCAGAAGGGCTACAATGTCAAGTCCGACGTCTGGAGCCTGGGCATCACCATGATTGAGATGGCCA
TCCTGCGGTTCCCTTACGAGTCTGGGGACCCGTTCCAGCAGCTGAAGCAGGTGGTGGAGGAGCCGTC
CCCCAGCTCCCAGCCGACCGTTTCTCCCCGAGTTTGTGGACTTCACTGCTCAGTGCCTGAGGAAGAAC
CCCGCAGAGCGTATGAGCTACCTGGAGCTGATGGAGCACCCCTTCTTACCTTGCACAAAACCAAGAAGA
CGGACATTGCTGCCTTCGTGAAGGAGATCCTGGGAGAAGACTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218101 representing NM_002756
Red=Cloning site Green=Tags(s)

MSKPPAPNPPTPPRNLDSTRFITIGDRNFEVEADDLVTISELGRGAYGVVEKVRHAQSGTIMAVKRIRATV
 NSQEQKRLLMDLDINMRTVDCFYTVTFYGALFREGDVVICMELMDTSLDKFYRKVLDKNMTIPEDILGEI
 AVSIVRALEHLHSLKLSVIHRDVKPSNVLINKEGHVKMCDFGISGYLVDSVAKTMDAGCKPYMAPERINPE
 LNQKGYNVKSDVWSLGITMIEMAILRFPYESWGTFFQQLKQVVEEPPQLPADRFSPFVDFTAQCLRKN
 PAERMSYLELMEHPFFTLHKTKKTDIAAFVKEILGEDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2288_a04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002756

ORF Size: 954 bp

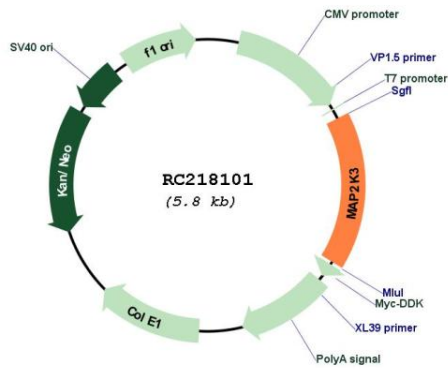
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

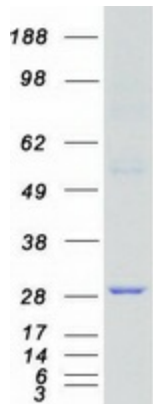
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	pkinase, 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
MW:	36.6 kDa
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 RC218101



Coomassie blue staining of purified MAP2K3 protein (Cat# [TP318101]). The protein was produced from HEK293T cells transfected with MAP2K3 cDNA clone (Cat# RC218101) using MegaTran 2.0 (Cat# [TT210002]).