

Product datasheet for **RC239655**

MAP3K9 (NM_001284232) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP3K9 (NM_001284232) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAP3K9
Synonyms:	MEKK9; MLK1; PRKE1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239655 representing NM_001284232
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGTGGCGGAGGACGTATGCTTGGATGGCACCCGAAGTCATCCGGCCTCCATGTTTTCCAAGGCA
 GTGATGTGTGGAGCTATGGGGTGTACTTTGGGAGTTGCTGACTGGTGGAGTGCCCTTCGAGGCATTGA
 TGGCTTAGCAGTCGTTATGGAGTGGCCATGAACAACTCGCCCTTCTATTCTTCTACGTGCCAGAA
 CCTTTTGCCAACTCATGGAAGACTGCTGGAATCCTGATCCCACTCACGACCATCTTTCACGAATATCC
 TGGACCAGCTAACACCATAGAGGAGTCTGGTTCTTTGAAATGCCCAAGGACTCCTTCCACTGCCTGCA
 GGACAACGGAAACACGAGATTCAGGAGATGTTTGACCAACTCAGGGCCAAAGAAAGGAACTTCGCACC
 TGGGAGGAGGAGCTGACGCGGGCTGCACTGCAGCAGAAGAACCAGGAGGAACTGCTGCGGCGTGGGAGC
 AGGAGCTGGCCGAGCGGGAGATTGACATCCTGGAACGGGAGCTCAACATCATATCCACCAGCTGTGCCA
 GGAGAAGCCCCGGTGAAGAAACGCAAGGGCAAGTTGAGGAAGAGCCGGTGAAGCTCAAGGATGGCAAC
 CGCATCAGCCTCCCTTCTGATTTCCAGCACAAGTTCACGGTGCAGGCCTCCCTACCATGGATAAAAGGA
 AGAGTCTTATCAACAGCCGCTCCAGTCTCCTGCAAGCCCCACCATCATTCTCGCCTTCGAGCCATCCA
 GTGTGAGACTGTTTTCCAAATTAGCTGGGGCCAGAACACACAGGGGCACCTGTCCCTGTCTGTCCAGC
 CACCGACTGGTCCAGGCTTGCTCCATCCATAACTTCTGCCACCTCTCCTCGACAATGTGTATATACATGC
 ACATATTGACACCAGGTGAAAGCAGCAAAACCTGGGGCAGGAGCTCAGTCGTCCCAAAGGAGGAAGGGGA
 GGAGGAGGAGAAGAGGGCCCCAAGAAGAAGGGACGGAGCTGGGGCCAGGGACGCTTGGTCAGAAGGAG
 CTTGCCTCGGGAGATGAAGGCCCAAGTCCCTGGTAGATGGATATAAGCAGTGGTCGTCCAGTGGCCCCA
 ACCTGGTGAAGGGCCCCAAGGAGTAGCCCGCCCTGCCAGGTTCCAGCCTTATGGAGATGGCCTTGCT
 GGCAGCCAGTTGGGTGGTGGCCATCGACATTGAAGAGGATGAGGACAGTGAAGGCCCAGGGAGTGGAGAG
 AGTCGCCTACAGCATTACCCAGCCAGTCTACCTCTGTATCCCATCCCTCGTGAGAGGATGGCGATG
 GCCCTCCAGTGTGGAATCCATGAGGAGCCACCCAGTCAACTCGGCCACGAGTACCCCTCAGCTGAC
 GCCAACCAACAGCCTCAAGCGGGCGGTGCCACCACCGCCGCTGCGAGGTGGCTCTGCTCGGCTGTGGG
 GCTGTTCTGGCAGCCACAGGCTAGGGTTTGACTTGTGGAAGCTGGCAAGTGCCAGCTGCTTCCCTGG
 AGGAGCCTGAGCCACCAGCCGGGAGGAGAAGAAAGACGGGAGGGTCTTTTTCAGAGGTCCAGCCGTCC
 TCGTGGAGCACCAGCCCCCATCCGAAAGCTTTTCAAGAAGGAGGAGCCCATGCTGTTGTAGGAGAC
 CCCTCTGCCTCCCTGACGCTGCTCTCCCTCCTCCATCTCCGAGTGCAACTCCACAGCTCCCTGTGTC
 GCTCCGACAGCGATGAAATTGTGCTGTATGAGATGCCAGTCAGCCAGTCGAGGCCCTCCCTGAGTCC
 ATGTACCCACAACCCCTGGTCAATGTCGAGTAGAGCGCTTCAAACGAGATCCTAACCAATCTCTGACT
 CCCACCATGTACCCCTCACCACCCCTCGCAGCCAGCAGTCACCGGGGACTCCTTCTGATGGGGCC
 TTAAGCCAGAGACTCTCCTAGCCAGCAGGAGCCCTCCAGCAATGGGTTGAGCCCCAGTCTGGAGCAGG
 AATGTTGAAAACCCCAAGTCCCAGCCGAGACCCAGGTGAATCCCCCGTCTCCCTGACCCCAATGTGGTC
 TTCCCCCAACCCCAAGGCGCTGGAACACTCAGCAGGACTCTACCTTGGAGAGACCAAGACTCTGGAGT
 TTCTGCCTCGGCCGCTCCTTCTGCCAACCGGCAACGGCTGGACCCTTGGTGGTTTGTGTCCCCAGCCA
 TGCCCGCAGCACCTCCCAGCCAACAGCTCCAGCACAGAGACGCCAGCAACCTGGACTCCTGCTTTGCT
 AGCAGTAGCAGCACTGTAGAGGAGCGCCCTGGACTTCCAGCCCTGCTCCGTTCCAGGCAGGGCCGCTGC
 CCCCAGCTGAGCGGACGCTCCTGGACCTGGATGCAGAGGGGCAGAGTCAGGACAGCACCGTGGCGTGTG
 CAGAGCGGAACCTGAACACACACAGGCTGCCCTTATGAGATCCAGCAGGAGTTCTGGTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239655 representing NM_001284232
Red=Cloning site Green=Tags(s)

MSAAGTYAWMAPEVIRASMFSGSDVWSYGVLLWELLTGEVPPFRGIDGLAVAYGVAMNKLALPIPSTCPE
PFAKLMEDCWNPDPHSRPSFTNILDQLTTIEESGFFEMPKDSFHCLQDNWKHEIQEMFDQLRAKEKELRT
WEEELTRAAALQQKNQEELLRRREQELAEREIDILERELNIIHQLCQEKPRVKKRKGKFRKSRLKLDGN
RISLPSDFQHKFTVQASPTMDKRSLSINSRSPASPTIIPRLRAIQCETVSQISWGQNTQGHLSPALSS
HRLVQACSIHNFCHLSSTMCIYMHILTPGESSKTWGRSSVVPKEEGEEEEKRAPKKKGRTWGPGTLGQKE
LASGDEGLKSLVDGYKQWSSAPNLVKGPRSSPALPGFTSLMEMALLAASWVVPIDIEEDEDSEPGSGE
SRLQHSPSQSYLCIPFPRGEDGDGPSSDGIHEEPTVNSATSTPQLTPTNSLKRGGAHHRCEVALLGCG
AVLAATGLGFDLLEAGKCQLLPLEEPEPPAREEKKRREGLFQRSSRPRRSTSPPSRKLFKKEEPMLLLGD
PSASLTLLSLSSISECNSTRSLLRSDSDEIVVYEMPVSPVEAPPLSPCTHNPLVNVVVERFKRDPNQSLT
PTHVTLTTPSQSSHRRTPSDGALKPETLLASRSPSSNGLSPSPGAGMLKTPSPSRDPGEFPRLDPNVV
FPPTPRRWNTQQDSTLERPKTLEFLPRPRPSANRQRLDPWWFVSPSHARSTSPANSSSTETPSNLDSCFA
SSSSTVEERPGLPALLPFQAGPLPPTERTLLDLDAEGSQDSTVPLCRAELNTHRPAPYEIQQEFWS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

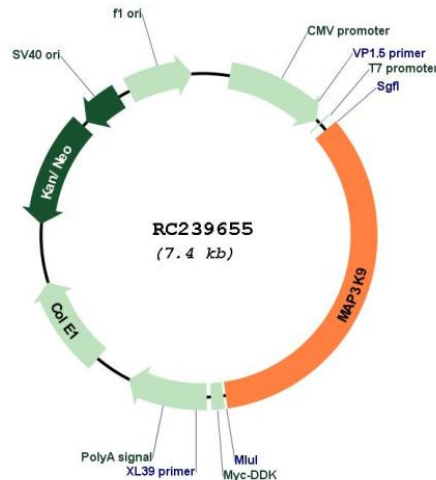
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001284232

ORF Size: 2511 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:

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_001284232.1](#), [NP_001271161.1](#)

RefSeq Size: 10696 bp

RefSeq ORF: 2514 bp

Locus ID: 4293

Cytogenetics: 14q24.2

Protein Families: Druggable Genome, Protein Kinase

MW: 93.3 kDa

Gene Summary: Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade through the phosphorylation of MAP2K4/MKK4 and MAP2K7/MKK7 which in turn activate the JNKs. The MKK/JNK signaling pathway regulates stress response via activator protein-1 (JUN) and GATA4 transcription factors. Plays also a role in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis.[UniProtKB/Swiss-Prot Function]