

## Product datasheet for **MC223464**

### Map3k9 (NM\_001174107) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Map3k9 (NM\_001174107) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Map3k9  
**Synonyms:** E130314H24Rik; Mlk1; Prke1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC223464 representing NM\_001174107  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGTCTCCAGATCGTTCTCGGCTGCCTGGCGAGTGCCACTGCCGCCCGCCGGGGACGATGCCA  
 CGGGCGCTGGGGCCGAAGAGGAGGAGGACGAGGAGGAGGGCGCGCCGAGCTGGGATCTCACGCCGCGT  
 GCCCTACTGGACGGCTGTGTTTCGAGTACGAGGCGGGCGGAGGACGAGCTGACCCTGCGGCTGGGCGAT  
 GTGGTAGAGGTGCTGTCCAAGGACTCGCAGGTGTCCGGCGATGAGGGCTGGTGGACCGGACAGCTGAACC  
 AGCGGGTGGGCATCTTCCCAGCAACTACGTGACCCCGCGTAGCGCTTCTCCAGCCGCTGCCAGCCGGG  
 CGCCGAGGACCCAGCTGCTACCCGCCATTACGCTGTTAGAGATTGATTTTGGCGAGCTAACCTGGAG  
 GAGATCATCGGCATTGGGGGCTTGGGAAAGTTTATCGTGCTTTCTGGCGGGCGATGAGGTGGCCGTGA  
 AGGCAGCTCGTCACGACCCTGATGAGGACATCAGCCAGACCATAGAGAACGTTCCGAAGAGGCCAAGCT  
 CTTTGCCATGTGAAGCACCCGAACATCATTGCGCTCAGAGGGGTGTGCCTGAAGGAACCCAACTCTGC  
 TTGGTTCATGGAGTTTGTCTGTGGAGGGCCTCTGAACAGAGTATTGTCTGGAAGAGGATCCCCCGACA  
 TCCTGGTGAAGTGGCCGTGCAGATCGCCAGAGGGATGAACTATCTACATGATGAGGCGATCGTACCCAT  
 CATCCACCGAGACCTTAAGTCCAGCAACATATTGATCCTGCAGAAAGTGGAGAATGGAGACCTGAGTAAC  
 AAGATTCTGAAGATCACGACTTTGGGCTGGCGCGGAATGGCACCGGACCACCAAGATGAGTGGCGCGG  
 GAACATACGCTTGGATGGCACCTGAAGTCATCCGTGCTTCCATGTTTTCCAAAGGACGAGTGTGTGGAG  
 CTACGGTGTACTGCTTTGGGAGCTGTTGACTGGCGAGGTGCCCTTCCGGGCGATTGATGGCTTAGCAGTG  
 GCTTACGGTGTGGCCATGAACAACTCGCCCTTCTATCCCTCTACATGTCCAGAGCCTTTTGCCAAAC  
 TCATGGAAGACTGCTGGAATCCCGACCCCACTCGCGCCATCTTTCACGAGTATCTGGACCAGCTAAC  
 GACTATAGAGGAGTCCGGTTTCTTTGAGATGCCAAGGACTCCTTCCACTGCCTGCAGGACGACTGGAAA  
 CATGAGATTCAGGAGATTTTGACCAACTCAGGGCCAAAGAAAAGGAGCTCCGAACCTGGGAAGAGGAGC  
 TGACCCGGGCTGCGCTCCAGCAGAAGAACCAGGAGGAGCTGCTCCGGCGTAGGGAGCAGGAGCTGGCGGA  
 GCGGGAGATCGACATCCTGGAGCGAGAGCTCAATATCATCATCCACCAGCTGTGCCAGGAAAAGCCCGG  
 GTGAAGAAACGCAAGGGCAAGTTCAGGAAGAGCCGGCTGAAGCTCAAGGACGGCAACCGCATCAGCCTCC



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CCTCCGATTTCCAGCACAAAGTTCACGGTGCAGGCCTCCCCGACCATGGATAAAAGGAAGAGTCTGATCAG
CAACCGGTGAGTCTCCTGCAAGCCCCACCATCATCCCTCGCCTTCGAGCCATCCAGTTGACACCTGGT
GAAAGCAGTAAAACCTGGGGCCGGAGCTCAGTTGTTCCAAAAGAGGAAGGGGAGGAGGAGAAGAGGG
CCCCAAAGAAGAAGGGCCGGACATGGGGACCAGGAACACTTGGGCAGAAAGAGCTCACATCAGGAGATGA
AGGCCTCAAGTCCCTGGTAGATGGATACAAGCAGTGGTCATCCAGTGCCCCAACCTGGGAAGGGCCCA
AGGAGTAGCCCCCCTACCTGGGTTACCAGCCTTATGGAGATAGAGGATGAGGATAGCGAAGGCCAG
GAAGCGGAGAGAATCATCAACAGCATTACCCAACCAGTCCTACCTCTGTATCCCGTTTCTCGTGGAGA
GGATGGGGATGGCCCTCTAGTGATGGAGTTCATGAGGAACCTACCCAGTCAACTCAGCTACCAGTACC
CCTCAGCTGACGCCAACCAACAGCCTCAAGCGCGTGGGACCCACCACCGCGCTGTGAGGTGGCTCTGC
TCGGATGTGGAGCTGTTCTGGCAGCCACAGGCCTAGGGTTTGACTTGCTGGAAGCTGGCAAGTGCCAGCT
GTTTCCCCCAGAGGAACCTGAGCCACCAGCCGGGAGGAGAAGAAGAGGCGTGAAGGTCTTTTCAAAGG
GCCAGCCGCCCTCGTCGGAGTACCAGCCCCCTCCCGAAAGCTTTCAAGAAGGAAGAGCCAATGACGT
TGCTAGGAGACCCTCTGCCTCCTGACACTGCTGTCTCTCTCCATCTCTGAATGCAACTCTACCCG
CTCCCTACTGCGCTCTGACAGTGATGAGATCGTGGTGTATGAAATGCCAGTCAGCCAGTTGAAGTCCA
CCCCTAACCCAATGTACCACAACCCCTGGTTAATGTCCGAGTGGAGCGCTTCAAGAGAGACCCCAACC
AGTCCTTGACTCCACCCATGTCACCCTCACAGCCCCACGCAGCCTAGTGGTCACAGGCGGACTCCTTC
TGATGGGGCTCTTAAGCCAACAGCAGCCCTGCAGTACTAGGCAGCAGGAGCCCTCCAGCAATGGAATG
AGTCCCAGTCTGGAACAGGCATGTTGAAAACCTCCAGTCCCAGCCGAGACCCAGGTGAATTTCCCCTGC
TCCCTGACCCCAATGTGGTCTTTCCCCCAACTCCAAGGCGCTGGAACACCCAGCGAGACTCTACCTAGA
GAGACCAAGACCCTGGAGTTTCTGCCTCGACCGCTCTTCTGCCAACCCGAGCGACTGGACCCTTGG
TGGTTTGTGTCTCCAGCCATGCCCGCAGCGCCTCCAGCTAACAGTCCAGCAGAAACACCCAGCA
ACCTGGACTCTGCTTTGCCAGCAGCAGCAGCACTGTGGAAGAGCGGCCCTGGACTTCCAGCCCTGCTCCC
TTTACAGGCAGGACCACCTGCTCCCTGCTGAACGGACACTTTTGGACCTGGATGCTGAGGGGCAGAGCCAG
GATAGCACTGTGCCCTATGCAGAGCTGAGCTGAATGCACACGGGCCCTCCCCATATGAGATCCAACAGG
AGTTCTGGTCTTAG
    
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
    
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- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001174107
- Insert Size:** 3234 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_001174107.1](#), [NP\\_001167578.1](#)

RefSeq Size: 10619 bp

RefSeq ORF: 3234 bp

Locus ID: 338372

UniProt ID: [Q3U1V8](#)

Cytogenetics: 12 D1

**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 (By similarity).[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.