

## Product datasheet for **MR226312**

### Mapk10 (NM\_009158) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk10 (NM_009158) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mapk10
Synonyms:	C230008H04Rik; JNK; JNK3; JNK3B1; JNK3B2; p54bSAPK; p493F1; p493F12; SAPK(beta); Ser; Serk2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226312 representing NM\_009158  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGCCTCCATTCTTATACTACTGCAGTGAACCAACCTTGGATGTGAAAATTGCCTTTTGTCAAGGAT  
 TCGATAAACACGTGGATGTGTCATCTATTGCCAAACATTACAACATGAGCAAAAGCAAGGTGGACAACCA  
 GTTCTACAGTGTGGAAGTGGGGACTCAACCTTACCCTTCTTAAGCGCTACCAGAACCTGAAGCCAATT  
 GGCTCTGGGGCTCAGGAATAGTCTGTGCTGCGTACGACGCTGTCTTGACAGAAATGTGGCCATTAAGA  
 AGCTCAGCAGACCCTTCCAGAACCAAACTCACGCCAAGAGGGCTTACCGGGAGCTGGTCTCATGAAGTG  
 TGTGAACCATAAAAAATTATTAGCTTATTAATGTTTTTACACCCAGAAAACACTGGAGGAGTCCAA  
 GATGTCTACTTAGTGATGGAAGTATGACGACCAACCTGTGTGAGTTCAGATGGAGCTGGACCACG  
 AGCGGATGTCTTACTTGTGTACCAGATGCTGTGTGGCATCAAGCACCTCCACTCCGCTGGGATCATCCA  
 CAGGGACTTAAACCCAGTAACATTGTAGTCAAGTCTGATTGCACACTGAAAATCCTCGACTTCGGACTG  
 GCCAGGACAGCGGTACAAGCTTATGATGACTCCGTATGTGGTACGCGATATTACAGAGCCCTGAGG  
 TCATCCTGGGCATGGGCTACAAGGAGAACGTGGACATATGGTCTGTGGGATGCATCATGGGAGAAATGGT  
 TCGCCACAAAATCCTCTTCCCGGAAGGGACTATATTGACCAGTGGAAACAAAGTCATCGAGCAGCTAGGA  
 ACTCCGTGTCCAGAGTTCATGAAGAAATTCAGACCCACAGTCAGAAACTACGTGGAGAATCGGCCAAAGT  
 ACGCAGGACTCACCTTCCCAAGCTCTTCCAGATTCCCTCTTCCAGCGGATTCGAGCACAATAAACT  
 TAAAGCCAGCCAAGCCAGGGATTGTTGTCTAAGATGTTAGTGATTGACCAGCGAAGAGGATATCGGTG  
 GACGACGCACTGCAGCATCCGTACATCAACGTTTGGTACGACCCGGCTGAAGTGGAGGCGCCTCCGCCTC  
 AGATATATGATAAGCAGCTGGATGAAAGGGAGCACACCATCGAAGAATGGAAAGAACTTATCTACAAGGA  
 GGTAATGAACCTCAGAAGAGAAGACTAAGAATGGCGTAGTCAAAGGCCAGCCCTCGCCTTCAGCACAGGTG  
 CAGCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR226312 representing NM\_009158  
 Red=Cloning site Green=Tags(s)

MSLHFLYYCSEPTLDVKIAFCQGFDKHVDVSSIAKHYNMSSKSKVDNQFYSEVVDSTFTVLKRYQNLKPI  
 GSGAQGIVCAAYDAVLDNRVAIKKLSRPFQNTAKRAYRELVLKCVNHKNIISLLNVFTPKTLEEFQ  
 DVYLVMEMLDANLCQVIQMELDHERMSYLLYQMLCGIKHLHSAGIHRDLKPSNIVVKS DCTLKILDFGL  
 ARTAGTSFMTPYVVTRYRAPEVILGMGYKENVDIWSVGCIMGEMVRHKILFPGRDYIDQWNKVIEQLG  
 TPCPEFMKKLQPTVRNYVENRPKYAGLTFPKLFPDSLFPADSEHNKLGASQARDLLSKMLVIDPAKRISV  
 DDALQHPYINVWYDPAEVEAPPPQIYDKQLDEREHTIEEWKELIYKEVMNSEEKTKNGVVKQPSPSAQV  
 QQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9010\\_c11.zip](https://cdn.origene.com/chromatograms/mm9010_c11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_009158

**ORF Size:** 1266 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

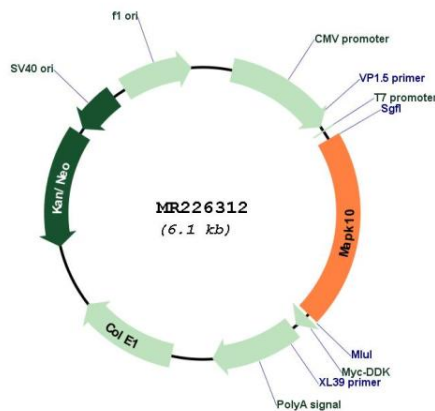
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_009158.3](#), [NP\\_033184.2](#)

RefSeq Size: 7203 bp  
 RefSeq ORF: 1269 bp  
 Locus ID: 26414  
 Cytogenetics: 5 E5  
 MW: 48.9 kDa

**Gene Summary:** The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as integration points for multiple biochemical signals, and thus are involved in a wide variety of cellular processes, such as proliferation, differentiation, transcription regulation and development. This kinase is specifically expressed in a subset of neurons in the nervous system and is activated by threonine and tyrosine phosphorylation. Targeted deletion of this gene in mice suggests that it may have a role in stress-induced neuronal apoptosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. A recent study provided evidence for translational readthrough in this gene, and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2017]

**Product images:**



Circular map for MR226312