

## Product datasheet for **RN216728**

### Mapk10 (NM\_001270556) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk10 (NM_001270556) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Mapk10
Synonyms:	Jnk3; SAPb; SAPKC; Serk2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN216728 representing NM\_001270556  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAGCCTCCATTCTTATACTACTGCAGTGAACCAACCTTGGATGTGAAAATTGCCTTTTGTCCAGGGAT  
TCGACAAACACGTGGATGTGCTTCTGTTGCCAAACATTACAACATGAGCAAAAGCAAGGTAGATAACCA  
GTTCTACAGTGTGGAAGTGGGAGACTCAACCTTACAGTTCTAAAGCGCTACCAGAACCTGAAGCCGATC  
GGCTCTGGGGCTCAGGAATAGTTGTGCTGCGTATGACGCTGTCTCGACAGAAATGTGGCCATTAAGA  
AGCTCAGCAGACCCTTCCAGAACCAAACCTCATGCCAAGAGGGCTTACCGGGAGCTGGTCTCATGAAGTG  
TGTGAACCATAAAAAATTATTAGCTTATTAATGTCTTACACCCAGAAAACACTGGAGGAGTCCAA  
GATGTTTACTTAGTGATGGAACCTGATGGACGCCAAGTGTGTGAGGTGATTCAGATGGAGCTGGACCAG  
AGCGGATGTCGTAAGTGTGACAGATGCTGTGCGGCATCAAACACCTCCACTCCGCTGGGATCATCCA  
CAGGGACTTAAACCCAGTAACATCGTAGTCAAGTCTGATTGCACACTGAAAATCCTGGACTTTGGACTG  
GCCAGGACAGCGGCACAAAGCTTATGATGACTCCGTATGTGGTGACGAGATATTACAGAGCCCGGAGG  
TCATCCTGGGCATGGGCTACAAGGAGAACGTGGACATATGGTCTGTGGGCTGCATCATGGGAGAAATGGT  
TCGTACAAAAATCCTCTTTCCCGGAAGGGACTATATTGACCAGTGGAAACAAAGTCAAGAGCAGCTAGGA  
ACTCCGTGTCCAGAAATTCATGAAGAAATTCAGAGCCACCGTCAGAAACTACGTGGAGAACCGGCCAAGT  
ATGCAGGCCTCACCTTCCCAAGCTCTTCCAGATTCCCTCTTCCAGCGGATCCGAGCACAATAAACT  
TAAAGCCAGCCAAGCCAGGGACTTGTGTCAAAGATGTTAGTGATTGACCAGCGAAGAGGATATCGGTG  
GATGACGCATTGCAGCATCCGTACATCAACGTTTGGTACGACCCTGTGAAGTGGAGGCGCCTCCGCCTC  
AGATATATGACAAGCAACTGGATGAAAGGGAGCACACCATCGAAGAATGGAAAGAACTCATCTACAAGGA  
AGTAATGAACTCAGAAGAGAAGACTAAGAACGGGCTAGTCAAAGGCCAGCCCTCACCTTCAGGTGCAGCA  
GTGAACAGCAGTGAAGTCTCCCTCCATCCTCGTCTGTCAACGACATCTCTCCATGTCCACCGACCAGA  
CCCTCGCATCCGACACTGACAGCAGCCTGGAAGCCTCGGCGGGACCGCTGGGTTGTTGCAGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001270556

**Insert Size:** 1395 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).

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

**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\\_001270556.1](#), [NP\\_001257485.1](#)

**RefSeq Size:** 2759 bp

**RefSeq ORF:** 1395 bp

**Locus ID:** 25272

**Cytogenetics:** 14p22

**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]

Transcript Variant: This variant (1) represents the predominant transcript and encodes two isoforms, which result from the use of alternative in-frame translation termination codons. The shorter isoform (1) results from translation termination at the upstream UGA stop codon, while the longer isoform (1x) results from UGA stop codon readthrough to the downstream UGA termination codon. This RefSeq represents the shorter isoform (1).