

Product datasheet for **RC225304**

JNK2 (MAPK9) (NM_001135044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JNK2 (MAPK9) (NM_001135044) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAPK9
Synonyms:	JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; p54a; p54aSAPK; PRKM9; SAPK; SAPK1a
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC225304 representing NM_001135044 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGACAGTAAATGTGACAGTCAGTTTTATAGTGTGCAAGTGGCAGACTCAACCTTCACTGTCCTAA
AACGTTACCAGCAGCTGAAACCAATTGGCTCTGGGCCCAAGGGATTGTTGTGCTGCATTTGATACAGT
TCTTGGGATAAAATGTTGCAGTCAAGAACTAAGCCGCTCTTTTTCAGAACCAAACCTCATGCAAAGAGAGCT
TATCGTGAACCTTGCTCTTAAATGTGTCAATCATAAAATATAATTAGTTTGTAAATGTGTTTACAC
CACAAAAAAGCTCTAGAAGAATTTCAAGATGTGTATTTGGTTATGGAATTAATGGATGCTAACTTATGTCA
GGTTATTCACATGGAGCTGGATCATGAAAGAATGTCTACCTTCTTACCAGATGCTTTGTGGTATTAAA
CATCTGCATTCAGCTGGTATAATTCATAGAGATTTGAAGCCTAGCAACATTGTTGTGAAATCAGACTGCA
CCCTGAAGATCCTTGACTTTGGCCTGGCCCGGACAGCGTGCACTAACTTCATGATGACCCCTTACGTGGT
GACACGGTACTACCGGGCGCCGAAGTCATCCTGGGTATGGGCTACAAAGAGAACGTTGATATCTGGTCA
GTGGGTTGCATCATGGGAGAGCTGGTAAAGGTTGTGTGATATTCCAAGGCACTGACCGTATCCTTCCC
GCGACCTTGGCCCGCCATGCTTTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC225304 representing NM_001135044
 Red=Cloning site Green=Tags(s)

MDSKCDSQFYVSVQVADSTFTVLKRYQLKPIGSGAQQIVCAAFDTVLGINVAVKKLSRPFQNTAKRA
 YRELVLLKCVNHKNIISLLNVFTPQKTLEEFQDVYLVMEMLDANLCQVIHMELDHERMSYLLYQMLCGIK
 HLHSAGIIHRDLKPSNIVVKSDCITLILDFGLARTACTNFMTPYVVTRYRRAPEVILGMGYKENVDIWS
 VGCIMGELVKGCVIFQGTDRILPRDLGPAMLS

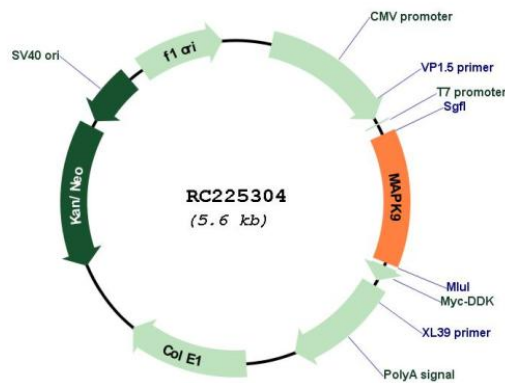
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001135044

ORF Size: 726 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_001135044.2
RefSeq ORF:	729 bp
Locus ID:	5601
UniProt ID:	P45984
Cytogenetics:	5q35.3
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase
Protein Pathways:	Adipocytokine signaling pathway, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, GnRH signaling pathway, Insulin signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, RIG-I-like receptor signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus, Wnt signaling pathway
MW:	27.2 kDa

Gene Summary:

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase targets specific transcription factors, and thus mediates immediate-early gene expression in response to various cell stimuli. It is most closely related to MAPK8, both of which are involved in UV radiation induced apoptosis, thought to be related to the cytochrome c-mediated cell death pathway. This gene and MAPK8 are also known as c-Jun N-terminal kinases. This kinase blocks the ubiquitination of tumor suppressor p53, and thus it increases the stability of p53 in nonstressed cells. Studies of this gene's mouse counterpart suggest a key role in T-cell differentiation. Several alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Sep 2008]