

Product datasheet for **RC212273**

JNK2 (MAPK9) (NM_139070) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JNK2 (MAPK9) (NM_139070) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	JNK2
Synonyms:	JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; p54a; p54aSAPK; PRKM9; SAPK; SAPK1a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212273 representing NM_139070
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCGACAGTAAATGTGACAGTCAGTTTTATAGTGTGCAAGTGGCAGACTCAACCTTCACTGTCCTAA
 AACGTTACCAGCAGCTGAAACCAATTGGCTCTGGGGCCCAAGGGATTGTTTGTGCTGCATTTGATACAGT
 TCTTGGGATAAATGTTGCAGTCAAGAACTAAGCCGTCCTTTTCAGAACCAAACCTCATGCAAAGAGAGCT
 TATCGTGAACCTGCTCTTAAATGTGTCAATCATAAAAAATAAATAGTTTGTAAATGTGTTTACAC
 CACAAAAAAGCTCTAGAAGAATTTCAAGATGTGATTTGGTTATGGAATTAATGGATGCTAACTTATGTCA
 GGTTATTCACATGGAGCTGGATCATGAAAGAATGTCTACCTTCTTACCAGATGCTTTGTGGTATTA
 CATCTGCATTAGCTGGTATAATTCATAGAGATTTGAAGCCTAGCAACATTGTTGTGAAATCAGACTGCA
 CCCTGAAGATCCTTGACTTTGGCCTGGCCCGACAGCGTGCCTAACTTCATGATGACCCCTTACGTGGT
 GACACGGTACTACCGGGCGCCGAAGTCATCCTGGGTATGGGCTACAAAGAGAAGCTTGATATCTGGTCA
 GTCGGGTGCATCATGGCAGAAATGGTCCTCCATAAAGTCCTGTTCCCGGGAAGAGACTATATTGATCAGT
 GGAATAAAGTTATTGAGCAGCTGGGAACACCATCAGCAGAGTTTATGAAGAACTTCAGCCAACCTGTGAG
 GAATTATGTGCAAAAACAGACCAAAGTATCCTGGAATCAAATTTGAAGAAGCTTTCCAGATTGGATATTC
 CCATCAGAATCTGAGCGAGACAAAATAAAAAAAGTCAAGCCAGAGATCTGTTATCAAAAATGTTAGTGA
 TTGATCCTGACAAGCGGATCTCTGTAGACGAAGCTCTGCGTCACCCATACATCACTGTTTGGTATGACCC
 CGCCGAAGCAGAAGCCCCACCACCTCAAATTTATGATGCCAGTTGGAAGAAAGAGAACATGCAATTGAA
 GAATGGAAGAGCTAATTTCAAAGAAGTCATGGATTGGGAAGAAAGAAGCAAGAATGGTGTGTTAAAAG
 ATCAGCCTTCAGATGCAGCAGTAAGTAGCAACGCCACTCCTTCTCAGTCTTCATCGATCAATGACATTTT
 ATCCATGTCCACTGAGCAGACGCTGGCCTCAGACACAGACAGCAGTCTTGATGCCTCGACGGGACCCCTT
 GAAGGCTGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212273 representing NM_139070
 Red=Cloning site Green=Tags(s)

MSDSKCDQSQFYSVQVADSTFTVLKRYQQLKPIGSGAQGIVCAAFDVLGINVAVKKLSRPFQNTAKRA
 YRELVLLKCVNHKNIISLLNVFPTQKLEEFQDVYLMELMDANLCQVIHMELDHERMSYLLYQMLCGIK
 HLHSAGIIHRDLKPSNIVVKSCTLKILDFGLARTACTNFMMPYVVTRYRAPEVILGMGYKENVDIWS
 VGCIMAEMVLHKVLFPRDYIDQWNKVIEQLGTPSAEFMKKLQPTVRNYVENRPKYPGIKFEELFPDWIF
 PSESERDKIKTSQARDLLSKMLVIDPDKRISVDEALRHPYITVWYDPAEAEAPPPQIYDAQLEEREHAIE
 EWKELIYKEVMDWEERSKNGVVKDQPSDAAVSSNATPSQSSSINDISSMSTEQTLASDTSLSLDASTGPL
 EGCR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6506_g02.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_139070

ORF Size: 1272 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_139070.1](#), [NP_620709.1](#)

RefSeq Size: 1942 bp

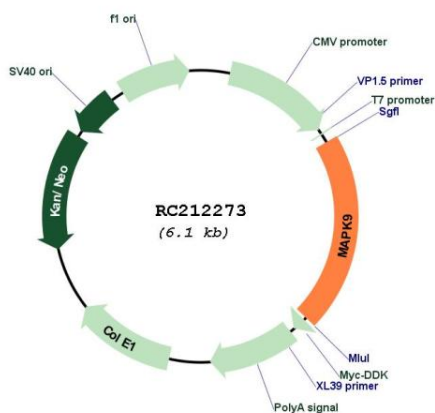
RefSeq ORF: 1275 bp

Locus ID: 5601

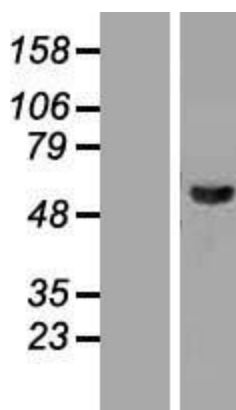
UniProt ID: [P45984](#)

Cytogenetics: 5q35.3

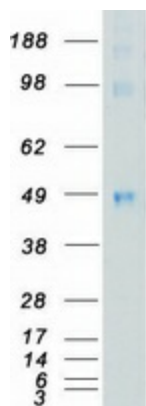
Domains:	pkinese
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase
Protein Pathways:	Adipocytokine signaling pathway, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, GnRH 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:	48.1 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]

Product images:


Circular map for RC212273



Western blot validation of overexpression lysate (Cat# [LY408413]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212273 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPK9 protein (Cat# [TP312273]). The protein was produced from HEK293T cells transfected with MAPK9 cDNA clone (Cat# RC212273) using MegaTran 2.0 (Cat# [TT210002]).