

Product datasheet for **SC321750**

JNK2 (MAPK9) (NM_139068) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JNK2 (MAPK9) (NM_139068) Human Untagged Clone
Tag:	Tag Free
Symbol:	JNK2
Synonyms:	JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; p54a; p54aSAPK; PRKM9; SAPK; SAPK1a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_139068.1
 CCACGCGTCCGGAGGGATCTGAAACTTGCCACCCCTTCGGGATATTGCAGGACGCTGCAT
 CATGAGCGACAGTAAATGTGACAGTCAGTTTTATAGTGTGCAAGTGGCAGACTCAACCTT
 CACTGTCTAAAACGTTACCAGCAGCTGAAACCAATTGGCTCTGGGGCCCAAGGGATTGT
 TTGTGCTGCATTTGATACAGTTCCTGGGATAAATGTTGCAGTCAAGAACTAAGCCGTCC
 TTTTCAGAACCAAACTCATGCAAAGAGAGCTTATCGTGAACCTGTCTCTTAAAAATGTG
 CAATCATAAAAATAAATTAGTTTGTAAATGTGTTTACACCACAAAAAACTCTAGAAGA
 ATTTCAAGATGTGTATTTGGTTATGGAATTAATGGATGCTAACTTATGTCAGGTTATTCA
 CATGGAGCTGGATCATGAAAGAATGTCCTACCTCTTTACCAGATGCTTTGTGGTATTAA
 ACATCTGCATTACAGTGGTATAATTCATAGAGATTTGAAGCCTAGCAACATTGTTGTGAA
 ATCAGACTGCACCCTGAAGATCCTTGACTTTGGCCTGGCCCGGACAGCGTGCCTAACTT
 CATGATGACCCCTTACGTGGTGACACGGTACTACCGGGCGCCGAAGTCATCCTGGGTAT
 GGGCTACAAGAGAACGTTGATATCTGGTCAGTGGTTGCATCATGGGAGAGCTGGTGAA
 AGGTTGTGTGATTTCCAAGGCACTGACCATATTGATCAGTGAATAAAGTTATTGAGCA
 GCTGGGAACACCATCAGCAGAGTTCATGAAGAACTTCAGCCAAGTGTGAGGAATTATGT
 CGAAAACAGACCAAAGTATCCTGGAATCAAATTTGAAGAAGCTTTCCAGATTGGATATT
 CCCATCAGAATCTGAGCGAGACAAAATAAAAAACAAGTCAAGCCAGAGATCTGTTATCAAA
 AATGTTAGTGATTGATCCTGACAAGCGGATCTCTGTAGACGAAGCTCTGCGTCACCCATA
 CATCACTGTTTGGTATGACCCCGCCGAAGCAGAAGCCCCACCCTCAAATTTATGATGC
 CCAGTTGGAAGAAAGAGAACATGCAATTGAAGAATGGAAGAGCTAATTTACAAAGAAGT
 CATGGATTGGGAAGAAAGAAGCAAGAATGGTGTGTAAGATGACGCTTCAGATGCAGC
 AGTAAGTAGCAACGCCACTCCTTCTCAGTCTTCATCGATCAATGACATTTATCCATGTC
 CACTGAGCAGACGCTGGCCTCAGACACAGACAGCAGTCTTGATGCCTCGACGGGACCCCT
 TGAAGGCTGTCGATGATAGGTTAGAAATAGCAAACCTGTCAGCATTGAAGGAAGCTCAC
 CTCCTGGGCTGAAATGCTTGGGAGTTGATGGAACCAAATAGAAAAACTCCATGTTCTG
 CATGTAAGAAACACAATGCCTTGCCCTACTCAGACCTGATAGGATTGCCTGCTTAGATGA
 TAAAAATGAGGCAGAAATGTCTGAAGAAAAAATTGCAAGCCACACTTCTAGAGATTTTG
 TTCAAGATCATTTCAGGTGAGCAGTTAGAGTAGGTGAATTTGTTTCAAATGTAAGTGT
 ACAGTTTCTCATCATCTGTAAGTGTGAGATGTATGTGCATGTGACCACAAATGCTTGCT
 TGGACTTGCCCATCTAGCACTTTGGAAATCAGTATTTAAATGCCAAATAATCTTCCAGGT
 AGTGCTGCTTCTGAAGTTATCTCTTAATCCTCTTAAGTAATTTGGTGTCTGTCCAGAAA
 AGTCGATTATGTGATTAATTGGCCATCATGATGTTATCATATCTTATCCCTTTTATG
 CTATGATTTATTCTATCTTTTGTATTTTCAGAAGACATATAATTAATCTATTTAATAAAT
 AAAAAATATATAGCTTTTCAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_139068

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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_139068.1 , NP_620707.1
RefSeq Size:	1947 bp
RefSeq ORF:	1149 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

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]

Transcript Variant: This variant (JNK2-a1) uses a different acceptor splice site in the last coding exon compared to transcript variant JNK2-a2, resulting in a frameshift and a shorter isoform (JNK2 alpha1) with a different C-terminus, compared to isoform JNK2 alpha2. The JNK2-a1 variant differs from the JNK2-b1 variant in the use of an alternate internal coding exon of the same length. Thus, JNK2 alpha1 isoform is the same length as JNK2 beta1 isoform, with a few aa differences in an internal protein segment. Variants JNK2-a1 and 7 both encode the same isoform (alpha1). **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.