

## Product datasheet for **SC120589**

### JNK1 (MAPK8) (NM\_139049) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	JNK1 (MAPK8) (NM_139049) Human Untagged Clone
Tag:	Tag Free
Symbol:	JNK1
Synonyms:	JNK; JNK-46; JNK1; JNK1A2; JNK21B1/2; PRKM8; SAPK1; SAPK1c
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_139049 edited  
 ATGAGCAGAAGCAAGCGTGACAACAATTTTATAGTGTAGAGATTGGAGATTCTACATTC  
 ACAGTCCTGAAACGATATCAGAATTTAAAACCTATAGGCTCAGGAGCTCAAGGAATAGTA  
 TGCGCAGCTTATGATGCCATTCTTGAAAGAAATGTTGCAATCAAGAAGCTAAGCCGACCA  
 TTTCAAGATCAGACTCATGCCAAGCGGGCTACAGAGAGCTAGTTCTTATGAAATGTGTT  
 AATCACAAAAATAAATTGGCCTTTTGAATGTTTTACACCACAGAAATCCCTAGAAGAA  
 TTTCAAGATGTTTACATAGTCATGGAGCTCATGGATGCAAATCTTTGCCAAGTGATTCAG  
 ATGGAGCTAGATCATGAAAGAATGTCCTACCTTCTCTATCAGATGCTGTGTGGAATCAAG  
 CACCTTCATTCTGCTGGAATTATTCATCGGGACTTAAAGCCAGTAATATAGTAGTAAAA  
 TCTGATTGCACCTTGAAGATTCTTGACTTCGGTCTGGCCAGGACTGCAGGAACGAGTTTT  
 ATGATGACGCCTTATGTAGTACTCGCTACTACAGAGCACCCGAGGTCATCCTTGGCATG  
 GGCTACAAGGAAAACGTGGATTTATGGTCTGTGGGGTGCATTATGGGAGAAATGGTTTGC  
 CAAAAATCCTCTTTCCAGGAAGGGACTATATTGATCAGTGGAATAAAGTTATTGAACAG  
 CTTGGAACACCATGTCCTGAATTCATGAAGAACTGCAACCAACAGTAAGGACTTACGTT  
 GAAAACAGACCTAAATATGCTGGATATAGCTTTGAGAACTCTTCCCTGATGTCTTTTC  
 CCAGCTGACTCAGAACAACAACAACTTAAAGCCAGTCAGGCAAGGGATTTGTTATCCAAA  
 ATGCTGGTAATAGATGCATCTAAAAGGATCTCTGTAGATGAAGCTCTCCAACACCCGTAC  
 ATCAATGTCTGGTATGATCCTTCTGAAGCAGAAGCTCCACCACCAAGATCCCTGACAAG  
 CAGTTAGATGAAAGGGAACACACAATAGAAGAGTGGAAAGAATTGATATAAAGGAAGTT  
 ATGGACTTGGAGGAGAGAACCAAGAATGGAGTTATACGGGGCAGCCCTCCTTTTAGGT  
 GCAGCAGTGATCAATGGCTCTCAGCATCCATCATCATCGTCTGTCAATGATGTGTCT  
 TCAATGTCAACAGATCCGACTTTGGCCTCTGATACAGACAGCAGCTAGAAAGCAGCAGCT  
 GGGCCTCTGGGCTGCTGTAGATGA



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_139049 unedited TATAGGCGGCCCGCAATTTCGCACGAGGGACGACGCGGCTTGGATTGCGGAGCCGCGAGC AGCGCTGGGTAACGGCCGCGCGACCACCCCGGACGGCCCTGTCCCGCTGGCGGGCTT CCCTGTCGCCGTTTCGCTGCGCTGCCGGCTTCTTGGTGAATTTTTGGATGAAGCCATTA TTAATTGCTTGCCATCATGAGCAGAAGCAAGCGTGACAACAATTTTTATAGTGTAGAGAT TGGAGATTCTACATTCACAGTCTGAAACGATATCAGAATTTAAACCTATAGGCTCAGG AGCTCAAGGAATAGTATGCGCAGCTTATGATGCCATTCTTGAAAGAAATGTTGCAATCAA GAAGCTAAGCCGACCATTCAGAATCAGACTCATGCCAAGCGGGCCTACAGAGAGCTAGT TCTTATGAAATGTGTTAATCACAAAAATAAATTGGCCTTTTGAATGTTTTACACCACA GAAATCCCTAGAAGAATTTCAAGATGTTTACATAGTCATGGAGCTCATGGATGCAATCT TTGCCAAGTGATTCAGATGGAGCTAGATCATGAAAGAATGTCCTACCTTCTCTATCAGAT GCTGTGTGGAATCAAGCACCTTCATTCTGCTGGAATTATTCATCGGGACTTAAAGCCAG TAATATAGTAGTAAAATCTGATTGCACTTTGAAGATTCTTGACTCGGTCTGGCCAGGAC TGCAGGAACGAGTTNTATGATGACGCTTATGTAGTACTCGCTACTACAGAGCACCCGA GGTCATCCTTGGCATGGCTACAGGNAACGTGNATTTATGGTCTGTGGNGTGCA
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_139049
<b>Insert Size:</b>	6100 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_139049.1</a> , <a href="#">NP_620637.1</a>
<b>RefSeq Size:</b>	1412 bp
<b>RefSeq ORF:</b>	1284 bp
<b>Locus ID:</b>	5599
<b>UniProt ID:</b>	<a href="#">P45983</a>
<b>Cytogenetics:</b>	10q11.22
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	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, 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 is activated by various cell stimuli, and targets specific transcription factors, and thus mediates immediate-early gene expression in response to cell stimuli. The activation of this kinase by tumor-necrosis factor alpha (TNF-alpha) is found to be required for TNF-alpha induced apoptosis. This kinase is also involved in UV radiation induced apoptosis, which is thought to be related to cytochrom c-mediated cell death pathway. Studies of the mouse counterpart of this gene suggested that this kinase play a key role in T cell proliferation, apoptosis and differentiation. Several alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Apr 2016]  
Transcript Variant: This variant (JNK1-a2) encodes the longer of the two JNK1 alpha isoforms (JNK1 alpha2). The JNK1-a2 variant differs from the JNK1-b2 variant in the use of an alternate internal coding exon of the same length. Thus, JNK1 alpha2 isoform is the same length as JNK1 beta2 isoform, with a few aa difference in an internal protein segment. Variants JNK1-a2, 14, 15 and 17 all encode isoform alpha2. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.