

Product datasheet for **SC323625**

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:	>NCBI ORF sequence for NM_139049, the custom clone sequence may differ by one or more nucleotides

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ATGAGCAGAAGCAAGCGTGACAACAATTTTATAGTGTAGAGATTGGAGATTCTACATTCACAGTCTGA
AACGATATCAGAAATTTAAAACCTATAGGCTCAGGAGCTCAAGGAATAGTATGCGCAGCTTATGATGCCAT
TCTTGAAGAAATGTTGCAATCAAGAAGCTAAGCCGACCATTTTCAAGTATCAGACTCATGCCAAGCGGGCC
TACAGAGAGCTAGTTCTTATGAAATGTGTTAATCACAAAATATAATTGGCCTTTTGAATGTTTTACAC
CACAGAAATCCCTAGAAGAATTTCAAGATGTTTACATAGTCATGGAGCTCATGGATGCAAAATCTTTGCCA
AGTGATTCAGATGGAGCTAGATCATGAAAGAATGCTTACCTTCTATCAGATGCTGTGTGGAATCAAG
CACCTTCATTCTGCTGGAATTATTCATCGGGACTTAAAGCCAGTAATATAGTAGTAAAACTGATTGCA
CTTTGAAGATTCTTGACTTCGGTCTGGCCAGGACTGCAGGAACGAGTTTTATGATGACGCCTTATGTAGT
GACTCGCTACTACAGAGCACCCGAGGTCATCCTTGGCATGGGCTACAAGGAAAACGTGGATTTATGGTCT
GTGGGGTGCAATTATGGGAGAAATGGTTTGGCCACAAAATCCTCTTTCCAGGAAGGGACTATATTGATCAGT
GGAATAAAGTTATTGAACAGCTTGGAACACCATGTCTGAATTCATGAAGAACTGCAACCAACAGTAAG
GACTTACGTTGAAAACAGACCTAAATATGCTGGATATAGCTTTGAGAACTCTCCCTGATGTCCTTTTC
CCAGCTGACTCAGAACAACAACAACTTAAAGCCAGTCAGGCAAGGGATTTGTTATCCAAAATGCTGGTAA
TAGATGCATCTAAAAGGATCTCTGTAGATGAAGCTCTCCAACACCCGTACATCAATGTCTGGTATGATCC
TTCTGAAGCAGAAGCTCCACCACCAAGATCCCTGACAAGCAGTTAGATGAAAGGGAACACACAATAGAA
GAGTGGAAAGAATTGATATATAAGGAAGTTATGGACTTGGAGGAGAGAACCAAGAATGGAGTTATACGGG
GGCAGCCCTCTCCTTTAGGTGCAGCAGTATCAATGGCTCTCAGCATCCATCATCATCGTCGTCTGTCAA
TGATGTGCTTCAATGTCAACAGATCCGACTTTGGCCTCTGATACAGACAGCAGTCTAGAAGCAGCAGCT
GGGCTCTGGGCTGCTGTAGATGA
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_139049 unedited ACCGCACGTTGAGCAATGGGCGGTAGGCGTGTACGGAGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA ACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGACGACGCGGCTT GGATTGCGGAGCCGCGAGCAGCGCTGGGTAACGGCCGCGGCGACCACCCCGACGGCCCTGTCCCCGCT GGCGGGCTTCCCTGTGCGCGTTCGCTGCGCTGCCGGCTTCTTGGTGAATTTTGGATGAAGCCATTAAT TAATTGCTTGCCATCATGAGCAGAAGCAAGCGTGACAACAATTTTTATAGTGTAGAGATTGGAGATTTT TCTTTTACAGTCCTGAACCAATATCAGAAATTTAAAACCTATAGGCTCAGGAGCTTCAAGGAAAAGTA GGCCCCACCTTAAGAATGCCCTTCTTGAAGAAATGTTGCAATCCTGAAACCTTAACCCAACCCATTTT CAAATCCAAATTCTGGCCACCGGGCCCTTACAGAAGAGATGGTTTTTTTTTTGAAGGGTGTAAATCCCC AAAATTTTATTTGGCCCTTTTGAAGGGTTTTTCCCCCCCCAAAAATCCCTAAAAAAATTTTCGAAATTT TTCCATACTCGGGGGCCCTGGGGGGCCAAATTTTTTCCAGGGTTTTAAGAGGGCCCTTCTTTAGAAAA AAATGCTCCACCTTTTTTTTCCAGATGGGGGGGGGAACCCCCCTTTTTTGTGGGGGTTTTTTTTTCG GGGTCTATACCCCATATTTTTGTAAAACTTGTGCGCTTTAAAAATCCTATTGCGGGCGCGCCGCT GCGCGCACCTTTTTTTTAAACGCCTTTTTGAGTCGCTCCCTACACCCCGCGATATTCTCTGGGTGAC AAGAATAAATTTATATTGTGGGGGGGTATAAGAAAATAATCCAAGCCTCCTTAGGCGAGGACAT TTCTATAAATTAATAGCATATATACGCATACCCACAAGAACGTAGCCGT
Kinase Domain Sequence:	>SC323625 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CKCTGMCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGACGACGCGGCTTGGATTG CGGAGCCGCGAGCAGCGTGGGTAACGGCCGCGGCGACCACCCCGACGGCCCTGTCCCCGCTGGCGGG CTTCCTGTGCGGTTGCTGCGCTGCCGCTTCTTGGTGAATTT
Restriction Sites:	Please inquire
ACCN:	NM_139049
Insert Size:	6100 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:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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_139049.1 , NP_620637.1

RefSeq Size:	1412 bp
RefSeq ORF:	1284 bp
Locus ID:	5599
UniProt ID:	P45983
Cytogenetics:	10q11.22
Domains:	pkinase, TyrKc, S_TKc
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, Toll-like receptor signaling pathway, Type II diabetes mellitus, Wnt signaling pathway
Gene Summary:	<p>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]</p> <p>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.</p>