

Product datasheet for **RC207216**

JNK3 (MAPK10) (NM_002753) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JNK3 (MAPK10) (NM_002753) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	JNK3
Synonyms:	JNK3; JNK3A; p54bSAPK; p493F12; PRKM10; SAPK1b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207216 representing NM_002753
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCCTCCATTCTTATACTACTGCAGTGAACCAACATTGGATGTGAAAATTGCCTTTTGTCAAGGAT
 TCGATAACAAGTGGATGTGCATATATTGCCAACATTACAACATGAGCAAAAGCAAAGTTGACAACCA
 GTTCTACAGTGTGGAAGTGGGAGACTCAACCTTACAGTTCTCAAGCGCTACCAGAACTAAAGCCTATT
 GGCTCTGGGGCTCAGGGCATAGTTGTGCCGCGTATGATGCTGTCTTGACAGAAATGTGGCCATTAAGA
 AGCTCAGCAGACCCTTTCAGAACCAACACATGCCAAGAGAGCGTACCGGGAGCTGGTCTCATGAAGTG
 TGTGAACCATAAAAACATTATTAGTTTATTAATGTCTTACACCCAGAAAACGCTGGAGGAGTTCCAA
 GATGTTTACTTAGTAATGGAAGTATGGATGCCAATTATGTCAAGTGATTCAGATGGAATTAGACCATG
 AGCGAATGTCTTACCTGCTGTACCAATGTTGTGTGGCATTAAAGCACCTCATTCTGCTGGAATTATCA
 CAGGGATTTAAAACCAAGTAACATTGTAGTCAAGTCTGATTGCACATTGAAAATCCTGGACTTTGGACTG
 GCCAGGACAGCAGGCACAAGCTTCATGATGACTCCATATGTGGTGACACGTTATTACAGAGCCCTGAGG
 TCATCCTGGGGATGGGCTACAAGGAGAAGTGGATATATGGTCTGTGGGATGCATTATGGGAGAAATGGT
 TCGCCACAAAATCCTCTTCCAGGAAGGGACTATATTGACCAGTGGAAATAGGTAATTGAACAACACTAGGA
 ACACCATGTCCAGAATTCATGAAGAAATGCAACCCACAGTAAGAACTATGTGGAGAATCGGCCCAAGT
 ATGCGGGACTCACCTTCCCAAACCTCTTCCAGATTCCCTCTTCCAGCGGACTCCGAGCACAATAAACT
 CAAAGCCAGCCAAGCCAGGGACTTGTGTCAAAGATGCTAGTGATTGACCCAGCAAAAAGAATATCAGTG
 GACGACGCCTTACAGCATCCCTACATCAACGTCTGGTATGACCCAGCCGAAGTGGAGGCGCCTCCACCTC
 AGATATATGACAAGCAGTTGGATGAAAGAGAACACACAATTGAAGAATGGAAAGAACTTATCTACAAGGA
 AGTAATGAATTCAGAAGAAAAGACTAAAATGGTGTAGTAAAAGGACAGCCTTCTCCTTCAGCACAGGTG
 CAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207216 representing NM_002753
 Red=Cloning site Green=Tags(s)

MSLHFLYYCSEPTLDVKIAFCQGFQKQVDVSYIAKHYNMSKSKVDNQFYSEVVDSTFTVLKRYQNLKPI
 GSGAQGIVCAAYDAVLDNRNVAIKKLSRPFQNTAKRAYRELVLKCVNHKNIISLLNVFQKTLLEEFQ
 DVYLVMEMLDANLCQVIQMELDHERMSYLLYQMLCGIKHLHSAGIIHRDLKPSNIVVKSDDLKILDFGL
 ARTAGTSFMMPYVVTRYRAPEVILGMGYKENVDIWSVGCIMGEMVRHKILFPGRDYIDQWNVKIEQLG
 TPCPEFMKQLQPTVRNYVENRPKYAGLTFPKLFPDSLFPADSEHNKLSQARDLLSKMLVIDPAKRISV
 DDALQHPYINVWYDPAEVEAPPPQIYDKQLDEREHTIEEWKELIYKEVMNSEETKNGVVKGPSPSAQV
 QQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_002753

ORF Size: 1266 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_002753.5](#)

RefSeq Size: 2372 bp

RefSeq ORF: 1269 bp

Locus ID: 5602

UniProt ID: [P53779](#)

Cytogenetics: 4q21.3

Domains: pkinase, TyrKc, S_TKc

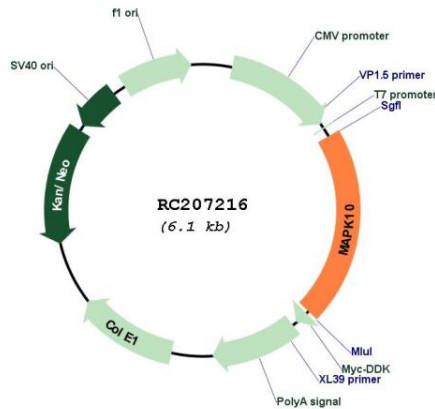
Protein Families: Druggable Genome, Protein Kinase

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

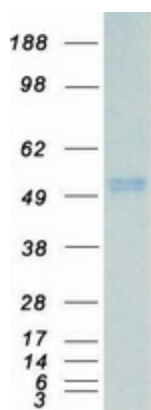
MW: 48.4 kDa

Gene Summary: The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as integration points for multiple biochemical signals, and thus are involved in a wide variety of cellular processes, such as proliferation, differentiation, transcription regulation and development. This kinase is specifically expressed in a subset of neurons in the nervous system, and is activated by threonine and tyrosine phosphorylation. Targeted deletion of this gene in mice suggests that it may have a role in stress-induced neuronal apoptosis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene, and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2017]

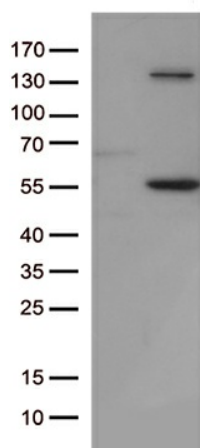
Product images:



Circular map for RC207216



Coomassie blue staining of purified MAPK10 protein (Cat# [TP307216]). The protein was produced from HEK293T cells transfected with MAPK10 cDNA clone (Cat# RC207216) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY JNK1 (Cat# RC207216, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-JNK1 (Cat# [TA813293])(1:500).