OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC217188

JNK3 (MAPK10) (NM_138982) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JNK3 (MAPK10) (NM_138982) 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)

View online »

ORF Nucleotide Sequence:

>RC217188 representing NM_138982
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCCTCCATTTCTTATACTACTGCAGTGAACCAACATTGGATGTGAAAATTGCCTTTTGTCAGGGAT
TCGATAAACAAGTGGATGTGTCATATATTGCCAAACATTACAACATGAGCAAAAGCAAAGTTGACAACCA
GTTCTACAGTGTGGAAGTGGGAGACTCAACCTTCACAGTTCTCAAGCGCTACCAGAATCTAAAGCCTATT
GGCTCTGGGGCTCAGGGCATAGTTTGTGCCGCGTATGATGCTGTCCTTGACAGAAATGTGGCCATTAAGA
AGCTCAGCAGACCCTTTCAGAACCAAACACATGCCAAGAGAGCGTACCGGGAGCTGGTCCTCATGAAGTG
TGTGAACCATAAAAACATTATTAGTTTATTAAATGTCTTCACACCCCAGAAAACGCTGGAGGAGTTCCAA
GATGTTTACTTAGTAATGGAACTGATGGATGCCAACTTATGTCAAGTGATTCAGATGGAATTAGACCATG
AGCGAATGTCTTACCTGCTGTACCAAATGTTGTGTGGCATTAAGCACCTCCATTCTGCTGGAATTATTCA
CAGGGATTTAAAACCAAGTAACATTGTAGTCAAGTCTGATTGCACATTGAAAATCCTGGACTTTGGACTG
GCCAGGACAGCAGGCACAAGCTTCATGATGACTCCATATGTGGTGACACGTTATTACAGAGCCCCTGAGG
TCATCCTGGGGATGGGCTACAAGGAGAACGTGGATATATGGTCTGTGGGATGCATTATGGGAGAAATGGT
TCGCCACAAAATCCTCTTTCCAGGAAGGGACTATATTGACCAGTGGAATAAGGTAATTGAACAACTAGGA
ACACCATGTCCAGAATTCATGAAGAAATTGCAACCCACAGTAAGAAACTATGTGGAGAATCGGCCCAAGT
ATGCGGGACTCACCTTCCCCAAACTCTTCCCAGATTCCCTCTTCCCAGCGGACTCCGAGCACAATAAACT
CAAAGCCAGCCAAGCCAGGGACTTGTTGTCAAAGATGCTAGTGATTGACCCAGCAAAAAGAATATCAGTG
GACGACGCCTTACAGCATCCCTACATCAACGTCTGGTATGACCCAGCCGAAGTGGAGGCGCCTCCACCTC
AGATATATGACAAGCAGTTGGATGAAAGAGAACACACAATTGAAGAATGGAAAGAACTTATCTACAAGGA
AGTAATGAATTCAGAAGAAAAGACTAAAAATGGTGTAGTAAAAGGACAGCCTTCTCCTTCAGGTGCAGCA
GTGAACAGCAGTGAGAGTCTCCCTCCATCCTCGTCTGTCAATGACATCTCCTCCATGTCCACCGACCAGA
CCCTGGCATCTGACACTGACAGCAGCCTGGAAGCCTCGGCAGGACCCCTGGGTTGTTGCAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217188 representing NM_138982
Red=Cloning site Green=Tags(s)

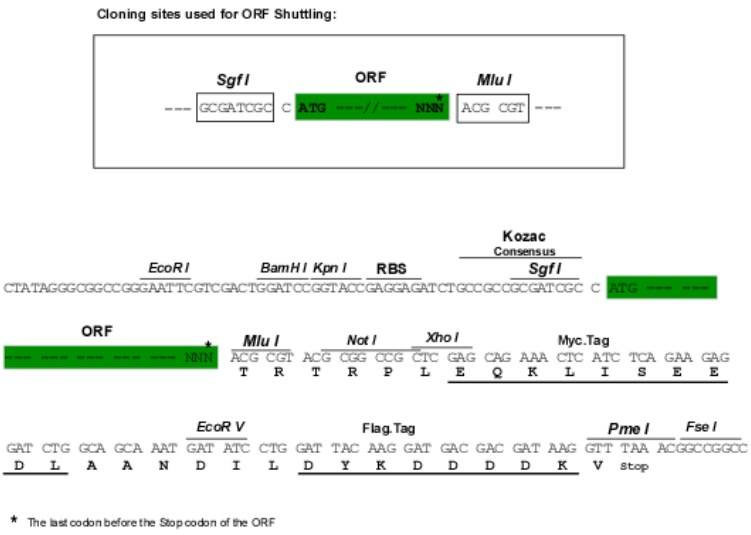
MSLHFLYYCSEPTLDVKIAFCQGFDKQVDVSYIAKHYNMSKSKVDNQFYSVEVGDSTFTVLKRYQNLKPI
GSGAQGIVCAAYDAVLDRNVAIKKLSRPFQNQTHAKRAYRELVLMKCVNHKNIISLLNVFTPQKTLEEFQ
DVYLVMELMDANLCQVIQMELDHERMSYLLYQMLCGIKHLHSAGIIHRDLKPSNIVVKSDCTLKILDFGL
ARTAGTSFMMTPYVVTRYYRAPEVILGMGYKENVDIWSVGCIMGEMVRHKILFPGRDYIDQWNKVIEQLG
TPCPEFMKKLQPTVRNYVENRPKYAGLTFPKLFPDSLFPADSEHNKLKASQARDLLSKMLVIDPAKRISV
DDALQHPYINVWYDPAEVEAPPPQIYDKQLDEREHTIEEWKELIYKEVMNSEEKTKNGVVKGQPSPSGAA
VNSSESLPPSSSVNDISSMSTDQTLASDTDSSLEASAGPLGCCR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6120_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138982

ORF Size: 1392 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_138982.4

RefSeq Size: 2211 bp

RefSeq ORF: 1395 bp

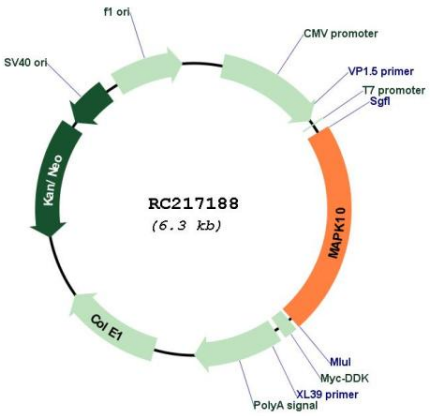
Locus ID: 5602

UniProt ID: P53779

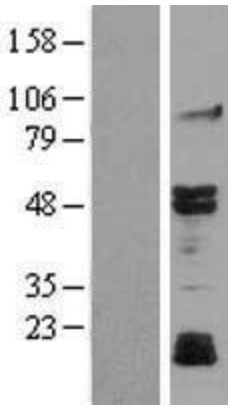
Cytogenetics: 4q21.3

Domains:	pkinase
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:	52.4 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]

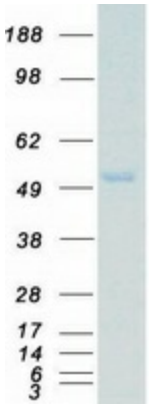
Product images:



Circular map for RC217188



Western blot validation of overexpression lysate (Cat# [LY403373]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217188 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPK10 protein (Cat# [TP317188]). The protein was produced from HEK293T cells transfected with MAPK10 cDNA clone (Cat# RC217188) using MegaTran 2.0 (Cat# [TT210002]).