

# Product datasheet for RC225304L3

#### OriGene Technologies, Inc.

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## JNK2 (MAPK9) (NM 001135044) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** JNK2 (MAPK9) (NM\_001135044) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: JNK2

Synonyms: JNK-55; JNK2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; p54a; p54aSAPK; PRKM9; SAPK; SAPK1a

**Mammalian Cell** Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

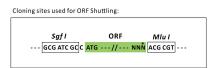
Sequence:

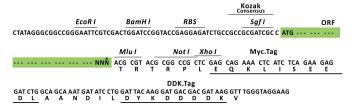
The ORF insert of this clone is exactly the same as(RC225304).

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 



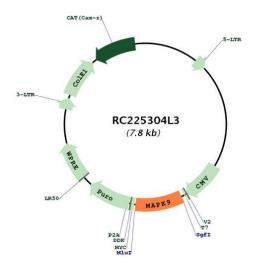


<sup>\*</sup> The last codon before the Stop codon of the ORF.





#### Plasmid Map:



**ACCN:** NM\_001135044

ORF Size: 726 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 001135044.1

**RefSeq ORF:** 729 bp **Locus ID:** 5601



### JNK2 (MAPK9) (NM\_001135044) Human Tagged Lenti ORF Clone - RC225304L3

 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

**MW:** 27.2 kDa

**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 immediateearly 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 Nterminal 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]