

Product datasheet for SC310481

OriGene Technologies, Inc.

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SAPK3 (MAPK12) (NM_002969) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: SAPK3 (MAPK12) (NM_002969) Human Untagged Clone

Tag: Tag Free Symbol: MAPK12

Synonyms: ERK-6; ERK3; ERK6; MAPK 12; P38GAMMA; PRKM12; SAPK-3; SAPK3

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC310481 representing NM_002969.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGCTCTCCGCCGCCCGCCGCAGTGGCTTTTACCGCCAGGAGGTGACCAAGACGGCCTGGGAGGTG CGCGCCGTGTACCGGGACCTGCAGCCCGTGGGCTCGGGCGCCTACGGCGCGGTGTGCTCGGCCGTGGAC GGCCGCACCGGCGCTAAGGTGGCCATCAAGAAGCTGTATCGGCCTTTCCAGTCCGAGCTGTTCGCCAAG CGCGCCTACCGCGAGCTGCGCCTGCTCAAGCACATGCGCCACGAGAACGTGATCGGGCTGCTGGACGTA TTCACTCCTGATGAGACCCTGGATGACTTCACGGACTTTTACCTGGTGATGCCGTTCATGGGCACCGAC CTGGGCAAGCTCATGAAACATGAGAAGCTAGGCGAGGACCGGATCCAGTTCCTCGTGTACCAGATGCTG AAGGGGCTGAGGTATATCCACGCTGCCGGCATCATCCACAGAGACCTGAAGCCCGGCAACCTGGCTGTG TACGTGGTGACCCGGTGGTACCGGGCTCCCGAGGTCATCTTGAATTGGATGCGCTACACGCAGACGGTG GACATCTGGTCTGTGGGCTGCATCATGGCGGAGATGATCACAGGCAAGACGCTGTTCAAGGGCAGCGAC CACCTGGACCAGCTGAAGGAGATCATGAAGGTGACGGGGACGCCTCCGGCTGAGTTTGTGCAGCGGCTG CAGAGCGATGAGGCCAAGAACTACATGAAGGGCCTCCCCGAATTGGAGAAGAAGGATTTTGCCTCTATC CTGACCAATGCAAGCCCTCTGGCTGTGAACCTCCTGGAGAAGATGCTGGTGCTGGACGCGGAGCAGCGG GTGACGGCAGGCGAGGCGCTGGCCCATCCCTACTTCGAGTCCCTGCACGACACGGAAGATGAGCCCCAG AAAGAGGTGCTCAGCTTCAAGCCTCCCGGCAGCTGGGGGCCAGGGTCTCCAAGGAGACGCCTCTG<mark>TGA</mark>

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



SAPK3 (MAPK12) (NM_002969) Human Untagged Clone - SC310481

Plasmid Map:

ACCN: NM_002969 **Insert Size:** 1104 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 002969.4</u>

 RefSeq Size:
 1877 bp

 RefSeq ORF:
 1104 bp

 Locus ID:
 6300

 UniProt ID:
 P53778

 Cytogenetics:
 22q13.33

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Epithelial cell signaling in Helicobacter pylori infection, Fc

epsilon RI signaling pathway, GnRH signaling pathway, Leukocyte transendothelial migration, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Oocyte meiosis, Progesterone-mediated oocyte maturation, RIG-I-like receptor

signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling pathway,

VEGF signaling pathway

MW: 41.9 kDa





Gene Summary:

Activation of members of the mitogen-activated protein kinase family is a major mechanism for transduction of extracellular signals. Stress-activated protein kinases are one subclass of MAP kinases. The protein encoded by this gene functions as a signal transducer during differentiation of myoblasts to myotubes. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).