

# **Product datasheet for SC335938**

### OriGene Technologies, Inc.

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## MEK4 (MAP2K4) (NM\_001281435) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: MEK4 (MAP2K4) (NM\_001281435) Human Untagged Clone

Tag: Tag Free Symbol: MAP2K4

Synonyms: JNKK; JNKK1; MAPKK4; MEK4; MKK4; PRKMK4; SAPKK-1; SAPKK1; SEK1; SERK1; SKK1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

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

Fully Sequenced ORF: >SC335938 representing NM\_001281435.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCGGCTCCGAGCCCGAGCGGCGCGCGCGCCGCCCCCGGCCGCCAGCGCAGCGGCACCCCCGGCCCC GTAGGGTCCCCGGCCGCCAGGCCACCCGGCCGTCAGCAGCATGCAGGGCTTTCAGATAAACTTCTGTGAA AAGGCACAAAGTAAACGCAAAGCACTGAAGTTGAATTTTGCAAATCCACCTTTCAAATCTACAGCAAGG TTTACTCTGAATCCCAATCCTACAGGAGTTCAAAACCCACACATAGAGAGACTGAGAACACACAGCATT GAGTCATCAGGAAAACTGAAGATCTCCCCTGAACAACACTGGGATTTCACTGCAGAGGACTTGAAAGAC CTTGGAGAAATTGGACGAGGAGCTTATGGTTCTGTCAACAAAATGGTCCACAAACCAAGTGGGCAAATA ATGGCAGTTAAAAGAATTCGGTCAACAGTGGATGAAAAAGAACAAAAAAACAACTTCTTATGGATTTGGAT GTAGTAATGCGGAGTAGTGATTGCCCATACATTGTTCAGTTTTATGGTGCACTCTTCAGAGAGGGTGAC TGTTGGATCTGTATGGAACTCATGTCTACCTCGTTTGATAAGTTTTACAAATATGTATATAGTGTATTA GATGATGTTATTCCAGAAGAAATTTTAGGCAAAATCACTTTAGCAACTGTGAAAGCACTAAACCACTTA AAAGAAAACTTGAAAATTATTCACAGAGATATCAAACCTTCCAATATTCTTCTGGACAGAAGTGGAAAT ATTAAGCTCTGTGACTTCGGCATCAGTGGACAGCTTGTGGACTCTATTGCCAAGACAAGAGATGCTGGC TGTAGGCCATACATGGCACCTGAAAGAATAGACCCAAGCGCATCACGACAAGGATATGATGTCCGCTCT GATGTCTGGAGTTTGGGGATCACATTGTATGAGTTGGCCACAGGCCGATTTCCTTATCCAAAGTGGAAT AGTGTATTTGATCAACTAACACAAGTCGTGAAAGGAGATCCTCCGCAGCTGAGTAATTCTGAGGAAAGG GAATTCTCCCCGAGTTTCATCAACTTTGTCAACTTGTGCCTTACGAAGGATGAATCCAAAAGGCCAAAG TATAAAGAGCTTCTGAAACATCCCTTTATTTTGATGTATGAAGAACGTGCCGTTGAGGTCGCATGCTAT 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGGATCTGGCAGCAAATGATATCCTGGAT

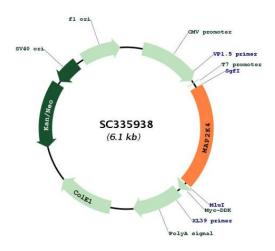
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





#### Plasmid Map:



**ACCN:** NM\_001281435

**Insert Size:** 1233 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).

**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.

**RefSeg:** NM 001281435.1

 RefSeq Size:
 3873 bp

 RefSeq ORF:
 1233 bp

 Locus ID:
 6416

 UniProt ID:
 P45985

 Cytogenetics:
 17p12

**Protein Families:** Druggable Genome, Protein Kinase



#### MEK4 (MAP2K4) (NM\_001281435) Human Untagged Clone - SC335938

**Protein Pathways:** Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI

signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor

signaling pathway

**MW:** 45.6 kDa

**Gene Summary:** This gene encodes a member of the mitogen-activated protein kinase (MAPK) family.

Members of this family 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. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets

at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants. [provided by

RefSeq, Jul 2013]

Transcript Variant: This variant (2) contains an alternate in-frame exon in the 5' coding region

compared to variant 1. It encodes isoform 2 which is longer compared to isoform 1.