

## Product datasheet for **SC207146**

### MAP3K4 (NM\_006724) Human 3' UTR Clone

#### Product data:

**Product Type:** 3' UTR Clones  
**Product Name:** MAP3K4 (NM\_006724) Human 3' UTR Clone  
**Vector:** pMirTarget (PS100062)  
**Symbol:** MAP3K4  
**Synonyms:** MAPKKK4; MEKK 4; MEKK4; MTK1; PRO0412  
**ACCN:** NM\_006724  
**Insert Size:** 540 bp  
**Insert Sequence:** >SC207146 3'UTR clone of NM\_006724  
 The sequence shown below is from the reference sequence of NM\_006724. The complete sequence of this clone may contain minor differences, such as SNPs.  
 Blue=Stop Codon Red=Cloning site

```
GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
TTTGTCAAGTTTGCACAGATGAAGAATGAAGCCTAGTAGAATATGGACTTGAAAAATTCTCTTAATCA
CTACTGTATGTAATTTACATAAAGACTGTGCTGAGAAGCAGTATAAGCCTTTTAAACCTTCCAAGAC
TGAAGACTGCACAGGTGACAAGCGTCACTTCTCCTGCTGCTCCTGTTGTCTGATGTGGCAAAGGCC
TCTGGAGGGCTGGTGGCCACGAGGTTAAAGAAGCTGCATGTTAAGTGCCATTACTACTGTACACGGACC
ATCGCCTCTGTCTCCTCCGTGTCTCGCGGACTGAGAACCCTGACATCAGCGTAGTGTGTTGACCTTTC
TAGGTTCAAAGAAGTTGTAGTGTATCAGGCGTCCCACCTGTTTTTAATCTCCTGTTGTTGAGT
GCACTGACTGTGAAACCTTTACCTTTTTGTTGTTGTTGGCAAGCTGCAGGTTTGAATGCAAAGGCT
GATTACTGAAATTAAGAAAAAGGTTCTTTTTCAATAAATGGTTTATTTTAGGAAA
ACGCGTAAGCGGCCGCGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCCTTCTATGAAAGG
```

**Restriction Sites:** SgfI-MluI

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).

**Components:** The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

**RefSeq:** [NM\\_006724.4](#)



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**Summary:**

The central core of each mitogen-activated protein kinase (MAPK) pathway is a conserved cascade of 3 protein kinases: an activated MAPK kinase kinase (MAPKKK) phosphorylates and activates a specific MAPK kinase (MAPKK), which then activates a specific MAPK. While the ERK MAPKs are activated by mitogenic stimulation, the CSBP2 and JNK MAPKs are activated by environmental stresses such as osmotic shock, UV irradiation, wound stress, and inflammatory factors. This gene encodes a MAPKKK, the MEKK4 protein, also called MTK1. This protein contains a protein kinase catalytic domain at the C terminus. The N-terminal nonkinase domain may contain a regulatory domain. Expression of MEKK4 in mammalian cells activated the CSBP2 and JNK MAPK pathways, but not the ERK pathway. In vitro kinase studies indicated that recombinant MEKK4 can specifically phosphorylate and activate PRKMK6 and SERK1, MAPKKs that activate CSBP2 and JNK, respectively but cannot phosphorylate PRKMK1, an MAPKK that activates ERKs. MEKK4 is a major mediator of environmental stresses that activate the CSBP2 MAPK pathway, and a minor mediator of the JNK pathway. Several alternatively spliced transcripts encoding distinct isoforms have been described. [provided by RefSeq, May 2014]

**Locus ID:**

4216

**MW:**

20.8