

## MAP2K1 cDNA

Catalog Number: ATGD0015

### PRODUCT INFORMATION

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**Catalog number**

ATGD0015

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_002746.1

**Alternative Names**

Mitogen-activated protein kinase kinase 1, MAP2K1, CFC3, MAP kinase kinase 1, MAPKK1, MEK1, MKK1, PRKMK1, ERK activator kinase 1, MAPK/ERK kinase 1

**mRNA Refseq**

NM\_002755.3

**OMIM**

176872

**Chromosome location**

15q22.1-q22.33

### PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

1182bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

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## General Description

MAP2K1 is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon wide variety of extra- and intracellular signals. As an essential component of MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development.

## DATA

### Sequence nucleotides

```
ATGCCCAAGA AGAAGCCGAC GCCCATCCAG CTGAACCCGG CCCCCGACGG CTCTGCAGTT AACGGGACCA
GCTCTGCGGA GACCAACTTG GAGGCCTTGC AGAAGAAGCT GGAGGAGCTA GAGCTTGATG AGCAGCAGCG
AAAGCGCCTT GAGGCCTTTC TTACCCAGAA GCAGAAGGTG GGAGAACTGA AGGATGACGA CTTTGAGAAG
ATCAGTGAGC TGGGGGCTGG CAATGGCGGT GTGGTGTTC AAGTCTCCCA CAAGCCTTCT GGCCTGGTCA
TGGCCAGAAA GCTAATTCAT CTGGAGATCA AACCCGCAAT CCGGAACCAG ATCATAAGGG AGCTGCAGGT
TCTGCATGAG TGCAACTCTC CGTACATCGT GGGCTTCTAT GGTGCGTTCT ACAGCGATGG CGAGATCAGT
ATCTGCATGG AGCACATGGA TGGAGGTTCT CTGGATCAAG TCCTGAAGAA AGCTGGAAGA ATTCCTGAAC
AAATTTTAGG AAAAGTTAGC ATTGCTGTAA TAAAAGGCCT GACATATCTG AGGGAGAAGC ACAAGATCAT
GCACAGAGAT GTCAAGCCCT CCAACATCCT AGTCAACTCC CGTGGGGAGA TCAAGCTCTG TGACTTTGGG
GTCAGCGGGC AGCTCATCGA CTCCATGGCC AACTCCTTCG TGGGCACAAG GTCCTACATG TCGCCAGAAA
GACTCCAGGG GACTCATTAC TCTGTGCAGT CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC
GGTTGGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA
GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCTC TAGCTCATA GGAATGGACA
GCCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA AACTGCCAG
TGGAGTGTTT AGTCTGGAAT TTCAAGATTT TGTGAATAAA TGCTTAATAA AAAACCCCGC AGAGAGAGCA
GATTTGAAGC AACTCATGGT TCATGCTTTT ATCAAGAGAT CTGATGCTGA GGAAGTGGAT TTTGCAGTT
GGCTCTGCTC CACCATCGGC CTTAACCAGC CCAGCACACC AACCCATGCT GCTGGCGTCT AA
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### Transaction Sequence

```
MPKKKPTPIQ LNPAPDGS AV NGTSSAETNL EALQKKLEEL ELDEQQRKRL EAFLTQKQKV GELKDDDFEK ISELGAGNNG
VFKVSHKPS GLVMARKLIH LEIKPAIRNQ IIRELQVLHE CNSPYIVGFY GAFYSDGEIS ICMEHMDGGS LDQVLKKAGR
IPEQILGKVS IAVIKGLTYL REKHKIMHRD VKPSNILVNS RGEIKLDFG VSGQLIDSMA NSFVGTRSYM SPERLQGHY
SVQSDIWSMG LSLVEMAVGR YPIPPDAKE LELMFGCQVE GDA AETPPRP RTPGRPLSSY GMDSRPPMAI FELLDYIVNE
PPKLP SGVF SLEFQDFV NK CLIKNPAERA DLKQLMVHAF IKRSDAEEVD FAGWLCSTIG LNPSTPHTA AGV
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