

Product datasheet for **RC234023**

MEK5 (MAP2K5) (NM_001206804) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MEK5 (MAP2K5) (NM_001206804) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MEK5
Synonyms:	HsT17454; MAPKK5; MEK5; PRKMK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC234023 representing NM_001206804 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGGAGGGTCACTTTCCCCAGAGCGATGTGATAGGCCAGGTTCTGCCTGAAGCAACACTACAGCAT
TTGAATATGAAGATGAAGATGGTATCGAATTACAGTGAGAAGTATGAGGAAATGAAGGCAATGCTGTC
ATATTATTATCCACAGTAATGGAACAGCAAGTAAATGGACAGTTAATAGAGCCTCTGCAGATATTTCCA
AGAGCCTGCAAGCCTCTGGGGAACGGAACATACATGGCCTGAAGGTGAATACTCGGGCCGACCCCTCTC
AACACAGCAGCCAGCAGTCTCAGATTCCTCAAGCAATAGCTTAAAGAAGTCTTCTGCTGAAGTGA
AAAAATACTAGCCAATGGCCAGATGAATGAACAAGACATACGATATCGGGACACTCTTGGTCATGGCAAC
GGAGGCACAGTCTACAAAGCATATCATGTCCCGAGTGGGAAAATATTAGCTGTAAGGTCATACTACTAG
ATATTACACTGGAACCTCAGAAGCAAAATATGTCTGAATTGGAATTTCTTTATAAGTGGCATTATCATA
TATCATTGGATTTTATGGAGCATTTTTTGTAGAAAACAGGATTTCAATATGTACAGAATTCATGGATGGG
GGATCTTTGGATGTATATAGGAAAATGCCAGAACATGTCCTTGGGAAGTATGCAGTAGCAGTTGTTAAAG
GCCTTACTTATTTGTGGAGTTTAAAGATTTTACATAGAGACGTGAAGCCCTCCAATATGCTAGTAAACAC
AAGAGGACAGGTTAAGCTGTGTGATTTTGGAGTTAGCACTCAGCTGGTGAATTCATAGCCAAGACGTAT
GTTGGAACAAATGCTTATATGGCGCCTGAAAGGATTTTCAGGGGAGCAGTATGGAATTCATTCTGATGCT
GGAGCTTAGGAATCTCTTTTATGGAGCTTGTCTTGGGAGGTTTCCATATCCTCAGATTCAGAAAAACCA
GGGATCTTTAATGCCTCTCCAGTCTTCTGCAGTGCATTGTTGATGAGGATTCGCCCCGCTTCCAGTTGGA
GAGTTCTCGGAGCCATTTGTACATTTTCACTCAGTGTATGCGAAAACAGCCAAAAGAAAGGCCAGCAC
CTGAAGAATTGATGGGCCACCCGTTTCATCGTGCAGTTCAATGATGGAATGCCGCCGTGGTGTCCATGTG
GGTGTGCCGGCGCTGGAGGAGAGGCGGAGCCAGCAGGGGCCCCCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC234023 representing NM_001206804
 Red=Cloning site Green=Tags(s)

MMEGHFPQSDVIGQVLP EATTTAFEYEDEDGDRITVRSDEEMKAMLSYYYSTVMEQQVNGQLIEPLQIFP
 RACKPPGERNIHGLKVNTRAGPSQHSSPAVSDSLPSNLKSSAELKKILANGQMNEQDIRYRDTLGHGN
 GGTVYKAYHVPSGKILAVKIVLLDITLLELQKQIMSELEILYKCDSSYIIGFYGAFFVENRISICTEFMDG
 GSLDVYRKMPPEHLGRIAVAVVKGLTYLWLSKILHRDVKPSNMLVNRGQVKLCDFGVSTQLVNSIAKTY
 VGTNAYMAPERISGEQYGIHSDVWSLGISFMELALGRFPYPQIQKNQGSMLPLQLLQCIVDEDSPVLPVG
 EFSEPFVHFITQCMRKQPKERPAPPEELMGHPFIVQFNDGNAAVVSMWVCRALEERSQQGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001206804

ORF Size: 1236 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_001206804.2](#)

RefSeq Size: 1801 bp

RefSeq ORF: 1239 bp

Locus ID: 5607

UniProt ID: [Q13163](#)

Cytogenetics: 15q23

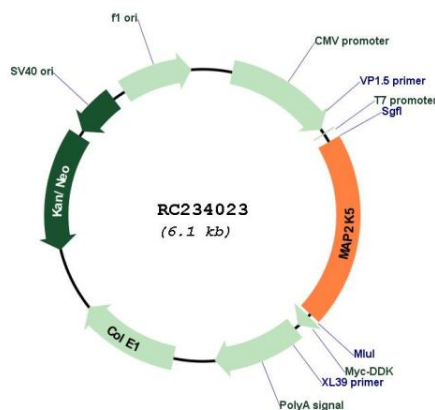
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Gap junction, MAPK signaling pathway, Neurotrophin signaling pathway

MW: 46.6 kDa

Gene Summary: The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been described. [provided by RefSeq, May 2011]

Product images:



Circular map for RC234023