

Product datasheet for **RC231434**

MAP3K12 (NM_001193511) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP3K12 (NM_001193511) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAP3K12
Synonyms:	DLK; MEKK12; MUK; ZPK; ZPKP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC231434 representing NM_001193511
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCTTGCCTCCATGAGACCCGAACACCTCTCCTTCTTTGGGGCTTTGTGTCTACCCTAAGTGAGG
 CATCCATGCGCAAGCTGGACCCAGACACTTCTGACTGCACTCCCGAGAAGGACCTGACGCCACCCAGTG
 TGTACTTCGAGATGTGGTACCCCTTGGTGGCAGGGTGGGGGAGGGCCAGCCCTCCCCAGGTGGAGAG
 CCGCCCCCTGAGCCTTTTCCAACAGTGTCTGCAGCTACATGAGCAGGATGCAGGGGGCCAGGGGGAG
 CAGCTGGGTACCTGAGAGTCGGGCATCCAGAGTTCGAGCTGACGAGGTGCGACTGCAGTGCCAGAGTGG
 CAGTGGCTTCTTGGGGCTCTTTGGCTGCCTGCGCCCTGTCTGGACCATGATTGGCAAAGCTACTCC
 ACTGAGCACAAGCAGCAGCAGGAAGACCTTTGGGAGTCCCTTTGAGGAAATCTGGACCTGCAGTGGG
 TGGGCTCAGGGGGCCAGGTGCTGTCTTCTGGGGCGCTTCCACGGGGAGGAGGTGGCTGTGAAGAAGT
 GCGAGACCTCAAAGAAACCGACATCAAGCACTTGGCAAAGCTGAAGCACCCCAACATCATCACTTTCAAG
 GGTGTGTGCACCCAGGCTCCCTGCTACTGCATCCATGGAGTTCGCGCCAGGGCCAGCTGTATGAGG
 TACTGCGGGCTGGCCGCCTGTACCCCTCCTTACTGGTTGACTGGTCCATGGGCATCGTGGTGGCAT
 GAACTACCTGCACCTGCACAAGATTATCCACAGGGATCTCAAGTCAACCAACATGCTAATCACCTACGAC
 GATGTGGTGAAGATCTCAGATTTGGCACTTCCAAGGAGCTGAGTGACAAGAGCACCAAGATGTCCTTTG
 CAGGGACAGTAGCCTGGATGGCCCTGAGGTGATCCGCAATGAACCTGTGTCTGAGAAGTGCACATCTG
 GTCCTTTGGCGTGGTGTATGGAACTGCTGACTGGTGAATCCCTACAAGACGTAGATTCTCAGCC
 ATTATCTGGGGTGTGGGAAGCAACAGTCTCCATCTGCCGTGCCCTCCAGTTGCCAGATGGTTTCAAGA
 TCCTGCTCGCCAGTGTGGAATAGCAAACACGAAATCGCCATCATTCCGACAGATCTGCTGCATCT
 GGACATTGCCTCAGCTGATGTACTCTCCACACCCAGGAGACTTACTTTAAGTCCAGGCAGAGTGGCGG
 GAAGAAGTAAACTGCACTTTGAAAAGATTAAGTCAGAAGGGACCTGTCTGCACCGCCTAGAAGAGGAAC
 TGGTGATGAGGAGGAGGAGGAGCTCAGACACGCCCTGGACATCAGGGAGCACTATGAAAGGAAGCTGGA
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 CTCAGGCGAGAGCAAGCTTTAGAGCGGAGGTGCCAGGCTGCTGAAGCCACACCCTTCCCGGGGCTCC
 TGCATGGAACACAATGGAGAAGCTTATCAAGAAGAGGAATGTGCCACAGAAGCTGCACCCATAGCAA
 AAGGCCAGATATCCTCAAGACGGAGTCTTTGCTCCCTAACTAGATGCAGCCCTGAGTGGGGTGGGGCTT
 CCTGGGTGCTCCTAAGGGCCCCCTCACCAGGACGGAGTGCCTGGCAAGACCCGTACCGCAAGGCCA
 GCGCAAGGGGAGCTGTGGGGACCTGCCTGGGCTTCGTACAGCTGTGCCACCCATGAACCTGGAGGACC
 AGGAAGCCAGGGGGCTAGGAGGGGACCTCAGCCTGGGAGGCTGCCCTCCCGCCCTCCGTGGGCTT
 CATCATGACCTCTGCTCCGAAAATGTCTTATCGTCCCAGACCTGCTGTGAGCAGCACTAGGGTCCC
 GGGGCCGGGGGCCACAGGCGGAGCTGGGGATCCTGGCTCACCACCTCCGGCCCGGGGTGACACCCACC
 AAGTGAGGGCTCAGCCCTGGCTCCACCAGCCAGATTCACTGGGGGAGCCAAAGGGGAACCACCTCCT
 CCAGTAGGGCTGGTGAAGGTGTGGGCTTCTGGAACTGGAAGGAAGGGACCTCAGGCCGGGAGGAA
 GCCGGCTGGGTCCCAGCACTTGACCCAGCTGCACTGCTGTACAGGGCTGCCGTACCCGAAGTCAGAA
 ACGTGGCATCTCATCGGAAGAGGAGGAAGGAGAGGTAGACAGTGAAGTAGAGCTGACATCAAGCCAGAGG
 TGGCCTCAGAGCCTGAACATGCGCCAGTCACTATCTACCTCAGCTCAGAGAATCCATCAGATGGGAGG
 AAGGCACAGCTAGTGAACCTTCCCCAGTGGCACACCTGAAGTTGGCAGCACCAACTGATGAGCGGCC
 AGATGAGCGGTCTGATGACATGTCTCCAGGGCTCAGAAATCCCACTGGACCCACCTCCTTCAAGGTC
 ATCCCTGGCCCTGAACCCAGCTCCCTGCCATTCCACACCAGGAATTCTCAGAGAGCGGGCCCTCCCA
 ATTCTGAGGACTCAGACTGTGACAGCACTGAATTGGACAACCTCCAACAGCGTTGATGCCTTGGGCCCC
 AGCTTCCCTCCCTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231434 representing NM_001193511
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MACLHETRTPSPSFGGFVSTLSEASMRKLDPDTSDCTPEKDLTPTQCVLRDVVPLGGQGGGPPSPSPGGE
 PPPEPFANSVLQLHEQDAGGPGGAAGSPESRASRVRADEVRLQCQSGSGFLEGLFGCLRVPVWTMIGKAYS
 TEHKQQQEDLWEVPFEEILDQWVGSGAQGAVFLGRFHGEEVAVKKVRDLKETDIKHLRKLKHPNIITFK
 GVCTQAPCYCILMEFCAQGLYEVLRAGRPVTPSLLVDWSMGIAGMNYLHLHKIHRDLKSPNMLITYD
 DVVKISDFGTSKELSDKSTKMSFAGTVAWMAPEVIRNEPVSEKVDIWSFGVVLWELLTGEIPYKQVDSSA
 IIVGWGNSLHLPVPSSCPDGFKILLRQCWNSKPRNRPFRQILLHLDIASADVLSTPQETYFKSQAEWR
 EEVKLHFEEKISEGTCLEHREELVMRRREELRHALDIREHYERKLERANNLYMELNALMLQLELKEREL
 LRREQALERRCPGLLKPHPSRGLLHGNTMEKLIKRNVPQKLSPHSKRPDILKTESLLPKLDAALSGVGL
 PGCPCGPPSPGRSRRGKTRHRKASAKGSCGDLPLGLRTAVPPHEPGGPGSPGGLGGGSAWEACPPALRGL
 HHDLLLRKMSSSPDLLSAALGSRGRGATGGAGDPGSPPPARGDTPPSEGSAPGSTSPDPSGGAKGEP
 PVGPGEVGLLTGTREGTSGRGGSRAGSQHLTPAALLYRAAVTRSQKRGISSEEEEGEVDSEVELTSSQR
 WPQSLNMRQSLSTFSSENPSDGEETASEPSPSGTPEVGSNTNTERPDERSDDMCSQSGSEIPLDPPPSEV
 IPGPEPSSLPIPHQELLRERGPNSSESDSCDSTELDNSNSVDALRPPASLPP

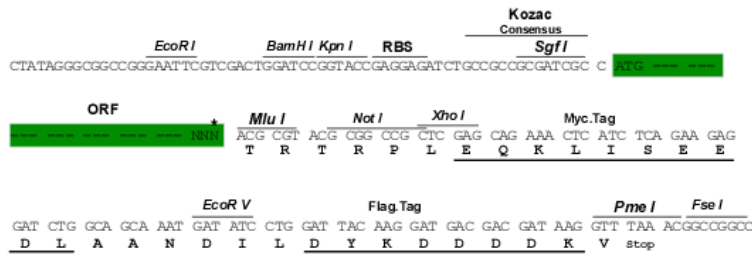
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8119_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



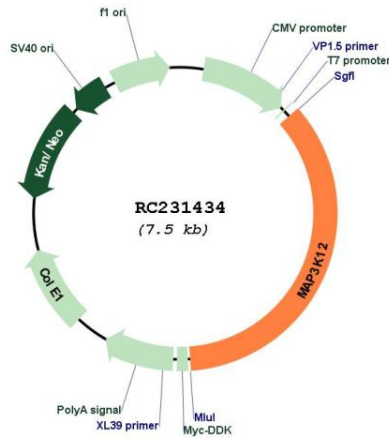
* The last codon before the Stop codon of the ORF

ACCN: NM_001193511

ORF Size:	2676 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_001193511.2
RefSeq Size:	3640 bp
RefSeq ORF:	2679 bp
Locus ID:	7786
UniProt ID:	Q12852
Cytogenetics:	12q13.13
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	MAPK signaling pathway
MW:	96.8 kDa

Gene Summary:

This gene encodes a member of the serine/threonine protein kinase family. This kinase contains a leucine-zipper domain and is predominately expressed in neuronal cells. The phosphorylation state of this kinase in synaptic terminals was shown to be regulated by membrane depolarization via calcineurin. This kinase forms heterodimers with leucine zipper containing transcription factors, such as cAMP responsive element binding protein (CREB) and MYC, and thus may play a regulatory role in PKA or retinoic acid induced neuronal differentiation. Alternatively spliced transcript variants encoding different proteins have been described.[provided by RefSeq, Jul 2010]

Product images:


Circular map for RC231434