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Product datasheet for RG210317

MEKK3 (MAP3K3) (NM_002401) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MEKK3 (MAP3K3) (NM_002401) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MEKK3
Synonyms:	MAPKKK3; MEKK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG210317 representing NM_002401
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACGAACAGGAGGCATTGAACTCAATCATGAACGATCTGGTGGCCCTCCAGATGAACCGACGTCACC
GGATGCCTGGATATGAGACCATGAAGAACAAAGACACAGGTCACTCAAATAGGCAGAGTGACGTCAGAAT
CAAGTTCGAGCACAACGGGGAGAGGCGAATTATAGCGTTCAGCCGGCCTGTGAAATATGAAGATGTGGAG
CACAAGGTGACAACAGTATTTGGACAACCTCTTGATCTACATTACATGAACAATGAGCTCTCCATCCTGC
TGAAAAACCAAGATGATCTTGATAAAGCAATTGACATTTTAGATAGAAGCTCAAGCATGAAAAGCCTTAG
GATATTGCTGTTGTCCCAGGACAGAAACCATAACAGTTCCTCTCCCCACTCTGGGGTGTCCAGACAGGTG
CGGATCAAGGCTTCCCAGTCCGCAGGGGATATAAATACTATCTACCAGCCCCCCGAGCCCAGAAGCAGGC
ACCTCTCTGTCAGCTCCCAGAACCCTGGCCGAAGCTCACCTCCCCCTGGCTATGTTCCTGAGCGGCAGCA
GCACATTGCCCGGCAGGGGTCCTACACCAGCATCAACAGTGAGGGGGAGTTCATCCCAGAGACCAGCGAG
CAGTGCATGCTGGATCCCCTGAGCAGTGCAGAAAATTCCTTGTCTGGAAGCTGCCAATCCTTGGACAGGT
CAGCAGACAGCCCATCCTTCCGGAAATCACGAATGTCCCGTGCCCAGAGCTTCCCTGACAACAGACAGGA
ATACTCAGATCGGGAAACTCAGCTTTATGACAAAGGGGTCAAAGGTGGAACCTACCCCCGGCGCTACCAC
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TGCAGACGATCTGTATGTCGGGGACGGGCATGCGCTCCGTCACTGGCACACCCTACTGGATGAGCCCTGA
GGTGATCAGCGGCGAGGGCTATGGAAGGAAAGCAGACGTGTGGAGCCTGGGCTGCACTGTGGTGGAGATG
CTGACAGAGAAACCACCGTGGGCAGAGTATGAAGCTATGGCCGCCATCTTCAAGATTGCCACCCAGCCCA
CCAATCCTCAGCTGCCCTCCCACATCTCTGAACATGGCCGGGACTTCCTGAGGCGCATTTTTGTGGAGGC
TCGCCAGAGACCTTCAGCTGAGGAGCTGCTCACACACCACTTTGCACAGCTCATGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

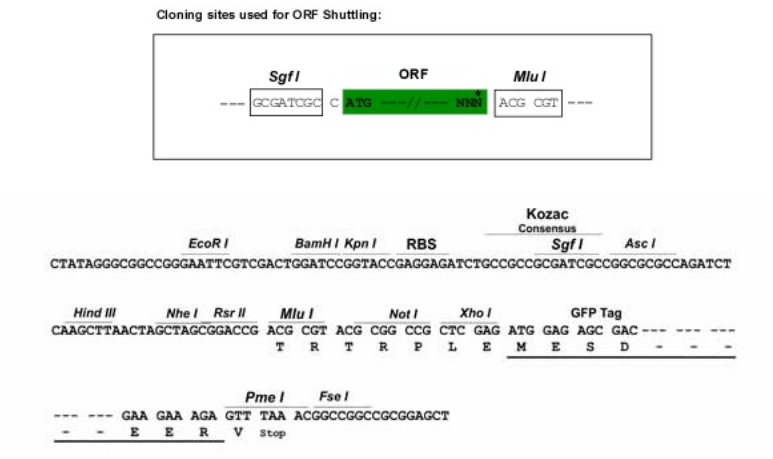
>RG210317 representing NM_002401
Red=Cloning site Green=Tags(s)

MDEQEALNSIMNDLVALQMNRRHRMPGYETMKNKDTGHSNRQSDVRIKFEHNGERRIIAFSRPVKYEDVE
HKVTTVFGQPLDLHYMNNELSILLKNQDDLDKAIDILDRSSSMKSLRILLLSQDRNHNSSSPHSGVSRQV
RIKASQSAGDINTIYQPPEPRSRHLSVSSQNPGRSSPPPGYVPERQQHIARQGSYTSINSEGEFIPETSE
QCMLDPLSSAENSLSGSCQSLDRSADSPSFRKSRMSRAQSFPDNRQEYSDRETQLYDKGVKGGTYPRRYH
VSVHHKDYSDGRRTFPRIRRHQGNLFTLVPSSRSLSTNGENMGLAVQYLDPRGRLRSADSENALSVQERN
VPTKSPSAPINWRRGKLLGQGAFGRVYLCYDVDTGRELASKQVQFDPDSPETSKEVSALECEIQLLKNLQ
HERIVQYYGCLRDRAEKTLTIFMEYMPGGSVKDQLKAYGALTESVTRKYTRQILEGMSYLHSNMIVHRDI
KGANILRDSAGNVKLGDFGASKRLQTICMSGTGMRSVTGTPYWMSPEVISGEGYGRKADVWSLGCTVVEM
LTEKPPWAEYEAMAAIFKIATQPTNPQLPSHISEHGRDFLRRIFVEARQRPSAEELLTHHFAQLMY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

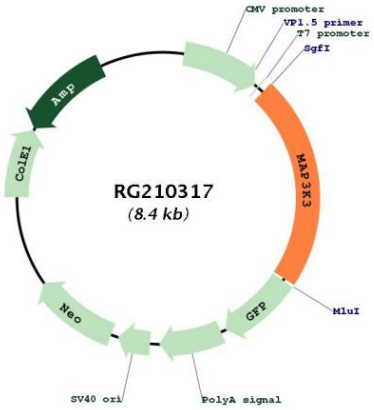
Cloning Scheme:



ACCN:	NM_002401
ORF Size:	1878 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_002401.5
RefSeq Size:	4750 bp
RefSeq ORF:	1881 bp
Locus ID:	4215
UniProt ID:	Q99759

Cytogenetics:	17q23.3
Domains:	PB1, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway
Gene Summary:	This gene product is a 626-amino acid polypeptide that is 96.5% identical to mouse Mekk3. Its catalytic domain is closely related to those of several other kinases, including mouse Mekk2, tobacco NPK, and yeast Ste11. Northern blot analysis revealed a 4.6-kb transcript that appears to be ubiquitously expressed. This protein directly regulates the stress-activated protein kinase (SAPK) and extracellular signal-regulated protein kinase (ERK) pathways by activating SEK and MEK1/2 respectively; it does not regulate the p38 pathway. In cotransfection assays, it enhanced transcription from a nuclear factor kappa-B (NFKB)-dependent reporter gene, consistent with a role in the SAPK pathway. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG210317