

## Product datasheet for **SC118669**

### MEKK3 (MAP3K3) (NM\_002401) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MEKK3 (MAP3K3) (NM_002401) Human Untagged Clone
Tag:	Tag Free
Symbol:	MEKK3
Synonyms:	MAPKKK3; MEKK3
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_002401 edited  
 ATGGACGAACAGGAGGCATTGAACTCAATCATGAACGATCTGGTGGCCCTCCAGATGAAC  
 CGACGTCACCGGATGCCTGGATATGAGACCATGAAGAACAAGACACAGGTCACTCAAAT  
 AGGCAGAGTGACGTCAGAATCAAGTTCGAGCACAACGGGGAGAGGCGAATTATAGCGTTC  
 AGCCGGCTGTGAAATATGAAGATGTGGAGCACAAGGTGACAACAGTATTTGGACAACCT  
 CTTGATCTACATTACATGAACAATGAGCTCTCCATCCTGCTGAAAAACCAAGATGATCTT  
 GATAAAGCAATTGACATTTTAGATAGAAGCTCAAGCATGAAAAGCCTTAGGATATTGCTG  
 TTGTCCCAGGACAGAAACCATAACAGTTCCTCTCCCACCTCTGGGTGTCCAGACAGGTG  
 CGGATCAAGGCTTCCCAGTCCGACAGGGATATAAATACTATCTACCAGCCCCCGAGCCC  
 AGAAGCAGGCACCTCTGTGCTGAGCTCCCAGAACCCTGGCCGAAGCTCACCTCCCCCTGGC  
 TATGTTCTGAGCGGCAGCAGCATTGCCCGGCAGGGTCTACACCAGCATCAACAGT  
 GAGGGGGAGTTTATCCCAGAGACCAGCAGCAGTGCATGCTGGATCCCCTGAGCAGTGCA  
 GAAAAATCCTTGTCTGGAAGCTGCCAATCCTTGGACAGGTGAGCAGACAGCCATCCTTC  
 CGGAAATCACGAATGTCCCGTCCCAGAGCTTCCCTGACAACAGACAGGAATACTCAGAT  
 CGGGAAACTCAGCTTTATGACAAAGGGTCAAAGGTGGAACCTACCCCGGCGCTACCAC  
 GTGTCTGTGCACCACAAGGACTACAGTGTGGCAGAAGAACATTTCCCGAATACGGCGT  
 CATCAAGGCAACTTGTTACCCTGGTGCCTCCAGCCGCTCCCTGAGCACAATGGCGAG  
 AACATGGGTCTGGCTGTGCAATACCTGGACCCCGTGGGCGCCTGCGGAGTGCAGACAGC  
 GAGAATGCCCTCTCTGTGAGGAGAGGAATGTGCCAACCAAGTCTCCAGTGCCCCATC  
 AACTGGCGCCGGGAAAGCTCCTGGGCCAGGGTGCCTTCGGCAGGGTCTATTTGTGCTAT  
 GACGTGGACACGGGACGTGAACCTGCTTCCAAGCAGGTCCAATTTGATCCAGACAGTCT  
 GAGACAAGCAAGGAGGTGAGTGTCTGGAGTGCAGATCCAGTTGCTAAAGAACTGACAG  
 CATGAGCGCATCGTGCAGTACTATGGCTGTCTGCGGGACCGCGCTGAGAAGACCCGTACC  
 ATCTTCATGGAGTACATGCCAGGGGCTCGGTGAAAGACCAAGTTGAAGGCTTACGGTGT  
 CTGACAGAGAGCGTGACCCGAAAGTACACGCGGAGATCCTGGAGGGCATGCTCTACCTG  
 CACAGCAACATGATTGTTACCAGGGACATTAAGGGAGCCAACATCCTCCGAGACTCTGCT  
 GGGAAATGTAAGCTGGGGGACTTTGGGGCCAGCAAACGCCTGCAGACGATCTGTATGTG  
 GGGACGGGCATGCGCTCCGTCACTGGCACACCCTACTGGATGAGCCCTGAGGTGATCAGC  
 GGGCAGGGCTATGGAAGGAAAGCAGACGTGTGGAGCCTGGGCTGCACTGTGGTGGAGATG  
 CTGACAGAGAAACCACCTGGGCAGAGTATGAAGCTATGGCCGCATCTCAAGATTGCC  
 ACCCAGCCCAACCTCCTCAGCTGCCCTCCCACATCTCTGAACATGTCCGGGACTTCTG  
 AGGCGCATTTTTGTGGAGGCTCGCCAGAGACCTTCAGCTGAGGAGCTGCTCACACACCAC  
 TTTGCACAGCTCATGTACTGA

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_002401 unedited  
 AGGGTACAGTTGTTTACCACATACTAGAGGCGGAAAAACCTTCGGCACCAGGCCCCCGC  
 GTTTAGCCAGGCCGCTGCCGTCCTCCCGCCCGGGCCCCCGGCATGCAGCCCCGGCTGG  
 GAGGTGACACTCACGGACCTTAGCCACCAGCCCGCCATCGCCACCATGGACGAACAGGA  
 GGCATTGAACTCAATCATGAACGATCTGGTGGTTTTCCAGATGAACCGACGTACCCGGAT  
 GCCTGGATATGAGACCATGAAGAACAAGACACAGGTCACTCAAATAGGCAGAGTGACGT  
 CAGAATCAAGTTCGAGCACAACGGGAGAGGCGAATTATAGCGTTCAGCCGGCCTGTGAA  
 ATATGAAGATGTGGAGCACAAGGTGACAACAGTATTTGGACAACCTTTGATCTACATTA  
 CATGAACAATGAGCTCTCCATCCTGCTGAAAAACCAAGATGATCTTGATAAAGCAATTGA  
 CATTTTAGATAGAAGCTCAAGCATGAAAAGCCTTAGGATATTGCTGTTGTCCAGGACAG  
 AAACCATAACAGTTCCTCTCCCACCTCTGGGGTGTCCAGACAGGTGCGGATCAAGGCTTC  
 CCAGTCCGAGGGGATATAAATACTATCTACCAGCCCCCGAGCCAGAAGCAGGACCT  
 CTCTGTGACGCTCCAGAACCCTGGCCGAAGCTACCTCCCCTGGCTATGTTCTGAGCG  
 GCAGCAGCACATTGCCCGCAGGGTCTACACCAGCATCAACAGTGAGGGGGAGTTCAT  
 CCCCTAGACCAGCGAGCAGTGTGCTGGATCCCCTGACCAGTGCAGAAAAATCCTTGTG  
 TGGAAAGCTGCCAAATCTTGGACAAGTACCAGACAGCCCATCCCTCCGAAATCACGATG  
 TCCCGTGCCAG

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_002401 unedited GGGGGGNNNNNNNNNNCNCNNNTTTNTNNTNNNNNNNNNATTACTTGAACCCGGCCGCAT ACTANGATCGGTTTTTTTTTTTTTTTTTTTCTTTAATGACAACCTCCAGGGAAGTGGGT GTTGAGAGGGAGGAGCTCTAGCAATAGGCACATTTTGGAGGGGAGGGGCCGAAGAAAGA CCAGGCCCCAGGCTGAGGTAAATATGGCCAACCTAAGCTGCTTGAGATGCTGTTTCCC CAACCCCTGCTGCCATTTCCCTCCAGGGGAGGAGCTACAAGGAAAGGGGCTGAGACCT CAAGGGGATGGGCGAGGCTGGCTGAGGAAGAACAGAGCTGGCGGTTTTGGACACAGCTGG TGGTAGCATATGGGCTTTCCCTTCTACCAGATGGAGTGGGCTCTGGCCTAGCAGGTCACG ACTCAGGCAGCCTGAGACACCTCCTCGGGCTCTCTGGGATCAGGGCACTGGCCAGGCCAG ATGCCCCACCGTGTCTGCCATCTCCCCTTCTGCTCCAGTGGGGAACAAAGGCTGGGCCA GGAGCGCAAAGGCCACAACCTTCAGCTCTTTTCAATGCAGCCTAGGCCCAAGCCAAAGC AGGGGTAAGAGCCCAGAGGGCACACACAGTCTCCAGTTTAGAACTGGGTACAGCAT AAGAGTGACTCCAACCTTGTAAAACAGAGACAACGATNTGACAACTGGATCCCCCTC AGTGGGCAGCAGTTCACATCGCGGGCCCTGCCCTGGANAGGCAGGGTCAATGGGCACAAG CAGGACAAGGCTCTNCTTTCCCTTGATAGGCAGCATGACATTNGCTCATCCATCTTTGGA AAAGGACANGACTGGCAAACCCACTGGGACTCTAGGGACGGAACTGGGCCTCTGCTG CCACTGCTACGAGTGCTGGCCTTTCCTCAGAGCTGTGGGACCTCATCCAGCCAGAGATGC CTGTTGCTCTNCAACATGNGAAGGAAAACAATTACCCCTTGAATGAAATAACACTTTTA TC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002401
<b>Insert Size:</b>	3460 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002401.3</a> , <a href="#">NP_002392.2</a>
<b>RefSeq Size:</b>	4750 bp
<b>RefSeq ORF:</b>	1881 bp
<b>Locus ID:</b>	4215
<b>UniProt ID:</b>	<a href="#">Q99759</a>
<b>Cytogenetics:</b>	17q23.3
<b>Domains:</b>	PB1, pkinase, TyrKc, S_TKc

<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) lacks an in-frame coding exon compared to variant 1. The resulting isoform (2) lacks an internal region, as compared to isoform 1.</p>