

## Product datasheet for **SC316878**

### MEKK1 (MAP3K1) (NM\_005921) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MEKK1 (MAP3K1) (NM_005921) Human Untagged Clone
Tag:	Tag Free
Symbol:	MEKK1
Synonyms:	MAPKKK1; MEKK; MEKK 1; MEKK1; SRXY6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_005921 edited  
 ATGGCGGGCGGCGGGGAATCGCGCCTCGTCGCGGGATTCCCGGGCGCCAGGGCTACG  
 AGCCCTGAGGCAGGCGGGCGGGAGGAGCCCTCAAGCGAGCAGCGGCCCGCGGCTGCC  
 GCGGGACTGCTGCGGGAGGCGGGCAGCGGGGCCGCGAGCGGGCGGACTGGCGGGCGG  
 CAGCTGCGCAAAGTGCAGGAGTGTGGAGCTGGACCAGCTGCCTGAGCAGCCGCTCTTCCTT  
 GCCGCCTCACCGCGGCCTCCTCGACTTCCCCGTCGCGGAGCCCGGGACGCGAGCGGGG  
 AGTGGGACCGGCTTCCAGCCTGTGGCGGTGCCCGCCCCACGGAGCCGCGAGCCGCGGC  
 GGCGCCACCTTACCAGTCCGTGGCGGCGCCGACAGCGGCGCCTCGAGTCCCGCAGCG  
 GCCGAGCCGGGAGAAGCGGGCGCCCGCGCGAGCCGCTCCTGCAGCGGCCCGCCG  
 GGTCGTGAGATGGAGAATAAAGAACTCTCAAAGGTTGCACAAGATGGATGATCGTCCA  
 GAGGAACGAATGATCAGGAGAACTGAAGGCAACCTGTATGCCAGCCTGGAAGCAGGAA  
 TGGTTGAAAGGAGAAATAGGCGAGGGCCTGTGGTGGTAAAACCAATCCCAGTTAAAGGA  
 GATGGATCTGAAATGAATCACTTAGCAGCTGAGTCTCCAGGAGAGTCCAGGCAAGTGGC  
 GCTTACCAGCTTCAAAGGCCGACGCAGTCCCTTCTCCTGGCACTCCCCATCAGGTCGC  
 ACAGTGAAATCAGAACTCCAGGAGTAAGGAGAAAAAGAGTTTCCCCAGTGCCTTTTCAG  
 AGTGGCAGAAACACACCACCCGAAGAGCCCTTACCAGATGGCTTCTCACCATATAGC  
 CCTGAGGAAACAAACCGCCGTGTTAACAAGTGTGCGGGCCAGACTGTACTTACTGCAG  
 CAGATAGGGCCTAACTCTTCTGATTGGAGGAGACAGCCAGACAATAAATACCGGGTG  
 TTTATTGGCCTCAGAACTGCAGCTGTGCACGTGGAACATTCTGTATTCATCTGCTATTT  
 GTGATGCTCCGGGTGTTTCAACTAGAACCTTACAGCCCAATGTTATGGAGAAAAACTTTA  
 AAGAATTTTGGAGTTGAGAGTTTGTTCAGAAATATCACAGTAGCGTAGCTCAAGGATC  
 AAAGCTCCATCTCGTAACACCATCCAGAAGTTGTTTACGCATGTCAAATTTCTCATACA  
 TTGTCATCATCTAGTACTTCTACGTCTAGTTCAGAAAACAGCATAAAGGATGAAGAGGAA  
 CAGATGTGTCCTATTTGCTTGTGGCATGCTTGATGAAGAAAGTCTTACAGTGTGTGAA  
 GACGGTGCAGGAACAAGCTGCACCACCACTGCATGTCAATTTGGGCAGAAGAGTGTAGA  
 AGAAATAGAGAACCTTTAATATGTCCTTTGTAGATCTAAGTGGAGATCTCATGATTTT  
 TACAGCCACGAGTTGCAAGTCTGTGGATTCCCCTTCTCCCTCAGAGCTGCACAGCAG



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CAAACCGTACAGCAGCAGCCTTTGGCTGGATCACGAAGGAATCAAGAGAGCAATTTTAAC  
 CTTACTCATTATGGAACCTCAGCAATCCCTCCTGCTTACAAAGATTTAGCTGAGCCATGG  
 ATTCAGGTGTTTGGAAATGGAACCTCGTTGGCTGCTTATTTTCTAGAAAAGTGAATGTGAGA  
 GAGATGGCCCTCAGGCGTCTTTCCCATGATGTCAGTGGGGCCCTGCTGTTGGCAAATGGG  
 GAGAGCACTGGAATTTCTGGGGCAGCAGTGAAGCAGCCGAGTGGGGGAGCCACCAGT  
 GGGTCTTCCCAGACCAGTATCTCAGGAGATGTGGTGGAGGCATGCTGCAGCGTTCTGTCA  
 ATGGCTGTGCTGACCCCTGTCTACAAAGTGTACGTTGCTGCTTTAAAAACATTGAGAGCC  
 ATGCTGGTATATACTCCTTGCCACAGTTTAGCGGAAAGAATCAAACCTCAGAGACTTCTC  
 CAGCCAGTTGTAGACACCATCCTAGTCAAATGTGCAGATGCCAATAGCCGCACAAGTCAG  
 CTGTCCATATCAACACTGTTGGAACCTGTGCAAAGGCCAAGCAGGAGAGTTGGCAGTTGGC  
 AGAGAAATACTAAAAGCTGGATCCATTGGTATTGGTGGTGTGATTATGTCTTAAATTGT  
 ATTCTTGGAAACCAAAGTGAATCAAACAATTGGCAAGAACTTCTTGGCCGCTTTGTCTT  
 ATAGATAGACTGTTGTTGGAATTCCTGCTGAATTTTATCCTCATATTGTCAGTACTGAT  
 GTTTCACAAGCTGAGCCTGTTGAAATCAGGTATAAGAAGCTGCTGTCCCTTTAACCTTT  
 GCTTTGCAGTCCATTGATAATTCCTCACTCAATGGTTGGCAAACCTTCCAGAAGGATCTAC  
 TTGAGTTCTGCAAGAATGGTTACTACAGTACCCCATGTGTTTTCAAACCTTTAGAAATG  
 CTGAGTGTTCAGTTCCTCACTTCCACCAGGATGCGTGCAGCTTTGATGGCTATTGCA  
 GATGAGGTGGAATTTGCCGAAGCCATCCAGTTGGGCGTAGAAGACACTTTGGATGGTCAA  
 CAGGACAGCTTCTTGACGCATCTGTTCCCAACAACACTATCTGAAACACAGAGAACAGT  
 TCCCCTGAGTGCACAGTCCATTTAGAGAAAAGTGGAAAAGGATTATGTGCTACAAAATTG  
 AGTGCCAGTTCAGAGGACATTTCTGAGAGACTGGCCAGCATTTCCAGTAGGACCTTCTAGT  
 TCAACAACAACAACAACAACAACAACAGAGCAACCAAGCCAATGGTTCAAACAAAAGGC  
 AGACCCACAGTCAAGTGTGAACTCCTCTCCTTTATCTCATCATTCCCAATTAATGTTT  
 CCAGCCTTGTCAACCCCTTCTTCTTCTACCCCATCTGTACCAGCTGGCACTGCAACAGAT  
 GTCTCTAAGCATAGACTTCAGGGATTCATTCCCTGCAGAATACCTTCTGCATCTCCTCAA  
 ACACAGCGCAAGTTTTCTCTACAATTCCACAGAAAAGTGCCTGAAAAACAAGACTCAGAT  
 AAACCTTCCCAGTCTTTACTCAGTCAAGACCCTTGCCCTCCAGTAACATACACAGGCCA  
 AAGCCATCTAGACCTACCCAGGTAATACAAGTAAACAGGGAGATCCCTCAAAAATAGC  
 ATGACACTTGATCTGAACAGTAGTTCCAAATGTGATGACAGCTTTGGCTGTAGCAGCAAT  
 AGTAGTAATGCTTTATACCCAGTGACGAGACAGTGTTCACCCAGTAGAGGAGAATGC  
 AGATTAGATGTCAATACAGAGCTCAACTCCAGTATTGAGGACCTTCTTGAAGCATCTATG  
 CCTTCAAGTGATACAACAGTAACTTTTAAGTCAGAAGTTGCTGTCTGTCTCCTGAAAAG  
 GCTGAAAATGATGATACCTACAAAGATGATGTGAATCATAATCAAAGTGCAAAGAGAAG  
 ATGGAAGCTGAAGAAGAAGAAGCTTTAGCAATTGCCATGGCAATGTCAGCGTCTCAGGAT  
 GCCCTCCCATAGTTCTCAGCTGCAGGTTGAAAATGGAGAAGATATCATCATTATTTCAA  
 CAGGATACACCAGAGACTCTACCAGGACATACCAAAGCAAAAACAACCGTATAGAGAAGAC  
 ACTGAATGGCTGAAAGGTCAACAGATAGGCCTTGGAGCATTCTTCTTGTATCAGGCT  
 CAAGATGTGGAACTGGAACCTTTAATGGCTGTTAAACAGGTGACTTATGTCAGAAAACACA  
 TCTTCTGAGCAAGAAGAAGTAGTAGAAGCACTAAGAGAAGAGATAAGAATGATGAGCCAT  
 CTGAATCATCCAAACATCATTAGGATGTTGGGAGCCACGTGTGAGAAGAGCAATTAACAAT  
 CTCTTCATTGAATGGATGGCAGGGGATCGGTGGCTCATTGCTGAGTAAATATGGAGCC  
 TTCAAAGAATCAGTAGTTATTAACACTGAACAGTTACTCCGTGGCCTTTCGTATCTC  
 CATGAAAACCAAATCATTACAGAGATGTCAAAGGTGCCAATTTGCTAATTGACAGCACT  
 GGTGAGAGACTAAGAATTGCAGATTTTGGAGCTGCAGCCAGGTTGGCATCAAAGGAACT  
 GGTGCAGGAGAGTTTTCAGGGACAATTACTGGGGACAATTGCATTTATGGCACCTGAGGTA  
 CTAAGAGGTCAACAGTATGGAAGGAGCTGTGATGTATGGAGTGTGGCTGTGCTATTATA  
 GAAATGGCTTGTGCAAAACCCATGGAATGCAGAAAAACACTCCAATCATCTTGCTTTG  
 ATATTTAAGATTGCTAGTGCAACTACTGCTCCATCGATCCCTTACATTTGTCTCCTGGT  
 TTACGAGATGTGGCTCTTCGTTGTTTGAACCTCAACCTCAGGACAGACCTCCATCAAGA  
 GAGCTACTGAAGCATCCAGTCTTTCGTTACTACATGGTAG

**Restriction Sites:**

NotI-NotI

<b>ACCN:</b>	NM_005921
<b>Insert Size:</b>	7000 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_005921.1.
<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_005921.1</a> , <a href="#">NP_005912.1</a>
<b>RefSeq Size:</b>	7522 bp
<b>RefSeq ORF:</b>	4539 bp
<b>Locus ID:</b>	4214
<b>UniProt ID:</b>	<a href="#">Q13233</a>
<b>Cytogenetics:</b>	5q11.2
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway, RIG-I-like receptor signaling pathway, Ubiquitin mediated proteolysis

**Gene Summary:**

The protein encoded by this gene is a serine/threonine kinase and is part of some signal transduction cascades, including the ERK and JNK kinase pathways as well as the NF-kappa-B pathway. The encoded protein is activated by autophosphorylation and requires magnesium as a cofactor in phosphorylating other proteins. This protein has E3 ligase activity conferred by a plant homeodomain (PHD) in its N-terminus and phospho-kinase activity conferred by a kinase domain in its C-terminus. [provided by RefSeq, Mar 2012]