

Product datasheet for **SC323639**

MEK5 (MAP2K5) (NM_002757) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MEK5 (MAP2K5) (NM_002757) Human Untagged Clone
Tag:	Tag Free
Symbol:	MEK5
Synonyms:	HsT17454; MAPKK5; MEK5; PRKMK5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002757, the custom clone sequence may differ by one or more nucleotides

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ATGCTGTGGCTAGCCCTTGGCCCTTCTGCCATGGAGAACCAGGTGCTGGTAATTCGCATCAAGATCC
CAAATAGTGGCGCGTGGACTGGACAGTGCCTCCGGCCGAGTTACTCTTCAGGGATGTGCTGGATGT
GATAGGCCAGGTTCTGCCTGAAGCAACAACACTACAGCATTGAATATGAAGATGAAGATGGTATCGAATT
ACAGTGAGAAGTGATGAGGAAATGAAGGCAATGCTGTATATTATTCCACAGTAATGGAACAGCAAG
TAAATGGACAGTTAATAGAGCCTCTGCAGATTTCCAAGAGCCTGCAAGCCTCTGGGGAACGGAACAT
ACATGGCCTGAAGGTGAATACTCGGCGGACCCTCTCAACACAGCAGCCAGCAGTCTCAGATTCCTT
CCAAGCAATAGCTTAAAGAAGTCTTCTGCTGAACTGAAAAAATACTAGCCAATGGCCAGATGAATGAAC
AAGACATACGATATCGGGACACTCTTGGTCATGGCAACGGAGGCACAGTCTACAAAGCATATCATGTCCC
GAGTGGGAAAATATTAGCTGTAAGGTCATACTACTAGATATTACTGGAACCTCAGAAGCAAATTATG
TCTGAATTGGAATTCCTTATAAGTGCATTATCATATATCATTGGATTTTATGGAGCATTTTTGTAG
AAAACAGGATTTCAATATGTACAGAATTCATGGATGGGGGATCTTTGGATGTATATAGGAAAATGCCAGA
ACATGTCTTGGGAAGATTGCAGTAGCAGTTGTTAAAGGCCTTACTTATTTGTGGAGTTTAAAGATTTTA
CATAGAGACGTGAAGCCCTCCAATATGCTAGTAAACACAAGAGGACAGGTTAAGCTGTGTATTTGGAG
TTAGCACTCAGCTGGTGAATTCATAGCCAAGACGTATGTTGGAACAAATGCTTATATGGCGCCTGAAAG
GATTTTCAGGGGAGCAGTATGGAATTCATTCTGATGTCTGGAGCTTAGGAATCTCTTTTATGGAGATTCAG
AAAAACCAGGGATCTTTAATGCCTCTCCAGCTTCTGCAGTGCATTGTTGATGAGGATTCCGCCGTCCTTC
CAGTTGGAGAGTTCTCGGAGCCATTTGTACATTTCACTCAGTGTATGCGAAAACAGCCAAAAGAAAG
GCCAGCACCTGAAGAATTGATGGCCACCCGTTTCATCGTGCAGTTCAATGATGGAATGCCGCCGTGGTG
TCCATGTGGGTGTCCGGGCGCTGGAGGAGAGCGGAGCCAGCAGGGGCCCCCGTGA
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_002757 unedited ACCGCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA ACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGTCGCCGCCGCCG AGCCGCCGCCGGTCCGCGCGGCCCTCGGGTGGCCGGAGCTCAGCCTGCGCGCGCCGCCCTGTGTCTCCG GGTGGGGCAGAAGACTCGCCCCTGAACTCCCGCGGGGACTCTCCGTGGTGTGGCGGCCCTGGGGCTCT TTCTTAATAGCCCGGACTGAGTCCCCCTCCAGTCGAGGACCCTCTCCCTAGTCCCACTGACGAACGGGT GTGGACAACCTGTGCCCGTGTGTATTCTCCCCCAACCCGAGTTCCTTGCCCTGTGCTTGCCCTCCCTA TATACCCACCCCGGGCGGAGAGAACTTTTACCCATACCCGTTTGGCTTACCCCTCCCGAACTTT TCGGAACCTCCCGCTAGTTTCCCTGCCGGGCCCTTTTGCCTGTTTCCCGGGGCCCCCTCCCGGG GAGAAACACCCTAGAACCCCGACAAGACTGGGGACGGGCCGGGGGCCCGGGGGTCTTTCTGAA TCACCCCTTCCCTTTTTCTTTCCCTTAATCCCTTTCCCTGGTTTTTCCCTTTTGCCCTGGG CCGGCCCCCCCCCTTTTGGCCCTTTGGGACCCCTCTTAAACCGGGGCCAGGGGGGTTTTCCCTA TCCCCCGAAGTTGGGCCCTTTAAACCGTATGGGGCTGGCGGAGCCCTTGGTGCCTCTTTTTC CCCCCGGAGACAACACATGGTGGGTGGTTATCTCTCCAGAATACACAATAATTGTGCGCCGCGG AGCAGATCAGAGTCAGATCACGGGGCGACAATATCTTCTGAGAGTGTGCTGATGTGATTGACCA CGATCTTTGCGTGTACACACCATACCATTGTATGTATGGATGAGAACGAGATGCGCTACCTAGTCCG TAAGCGATCTGCATGATT
Kinase Domain Sequence:	>SC323639 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation GMGATGATGACAAGACTACGATATCGGGACTCTTGGTCATGGCAACGGAGGCACAGTCTACAAAGCAT ATCATGTCCCAGTGGGAAAATATTAGCTGTAATGGTCATACTACTAGATATTACTGGAACCTCAGAA GCAAATATGTCTGAATTGGAAATCTTTATAAGTGGCATTATCATATATCATTGGATTTTATGGAGCA TTTTTTGTAGAAAACAGGATTTCAATATGTACAGAATTCATGGAT
Restriction Sites:	Please inquire
ACCN:	NM_002757
OTI Disclaimer:	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).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell , 2008 May p536-548.
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_002757.2 , NP_002748.1

RefSeq Size:	2334 bp
RefSeq ORF:	1317 bp
Locus ID:	5607
UniProt ID:	Q13163
Cytogenetics:	15q23
Domains:	PB1, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Gap junction, MAPK signaling pathway, Neurotrophin signaling pathway
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (B) has the same N- and C-termini but is shorter compared to isoform A.</p>