

Product datasheet for **SC310389**

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:	MAP2K5
Synonyms:	HsT17454; MAPKK5; MEK5; PRKMK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC310389 representing NM_002757. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGTGGCTAGCCCTTGGCCCTTCTGCCATGGAGAACCAGGTGCTGGTAATTCGCATCAAGATC
CCAAATAGTGGCGCGGTGGACTGGACAGTGCACCTCCGGGCCGAGTTACTCTTCAGGGATGTGCTGGAT
GTGATAGGCCAGGTTCTGCCTGAAGCAACAACACAGCATTGAAATGAAGATGAAGATGGTGATCGA
ATTACAGTGAGAAGTGTGAGGAAATGAAGGCAATGCTGTCATATTATTCCACAGTAATGGAACAG
CAAGTAAATGGACAGTTAATAGAGCCTCTGCAGATATTTCAAGAGCCTGCAAGCCTCCTGGGGAACGG
AACATACATGGCCTGAAGGTGAATACTCGGGCCGACCCTCTCAACACAGCAGCCAGCAGTCTCAGAT
TCACTTCCAAGCAATAGCTTAAAGAAGTCTTCTGCTGAACTGAAAAAATACTAGCCAATGGCCAGATG
AATGAACAAGACATACGATATCGGGACACTCTTGGTCATGGCAACGGAGGCACAGTCTACAAAGCATAT
CATGTCCCGAGTGGGAAAATATTAGCTGTAAAGGTCATACTACTAGATATTACACTGGAACCTCAGAAG
CAAATTATGTCTGAATTGGAAAATCTTTATAAGTGCAGTTCATCATATATCATTGGATTTTATGGAGCA
TTTTTTGTAGAAAACAGGATTTCAATATGTACAGAATTCATGGATGGGGGATCTTTGGATGTATATAGG
AAAATGCCAGAACATGTCCTTGGGAAGATTGCAGTAGCAGTTGTTAAAGGCCTTACTTATTTGTGGAGT
TTAAAGATTTTACATAGAGACGTGAAGCCCTCCAATATGCTAGTAAACACAAGAGGACAGGTTAAGCTG
TGTGATTTGGAGTTAGCACTCAGCTGGTGAATTCATAGCCAAGACGTATGTTGGAACAATGCTTAT
ATGGCGCCTGAAAGGATTTCCAGGGAGCAGTATGGAATTCATTCTGATGTCTGGAGCTTAGGAATCTCT
TTTATGGAGATTCAGAAAAACCAGGGATCTTTAATGCCTCTCCAGCTTCTGCAGTGCATTGTTGATGAG
GATTCGCCCTCCTTCCAGTTGGAGAGTTCTCGGAGCCATTTGTACATTTCACTCAGTGTATGCGA
AAACAGCCAAAAGAAAGGCCAGCACCTGAAGAATTGATGGCCACCCGTTTCATCGTGCAGTTCAATGAT
GGAAATGCCGCCGTGGTGTCCATGTGGTGTGCCGGCGCTGGAGGAGAGCGGAGCCAGCAGGGGCC
CCGTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites:	Sgfl-Mlul
Plasmid Map:	□
ACCN:	NM_002757
Insert Size:	1317 bp
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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_002757.3
RefSeq Size:	2355 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
MW:	49 kDa

Gene Summary:

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]

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.