

Product datasheet for **SC323447**

MAP3K10 (NM_002446) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAP3K10 (NM_002446) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAP3K10
Synonyms:	MEKK10; MLK2; MST
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323447 sequence for NM_002446 edited (data generated by NextGen Sequencing)

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ATGGAGGAGGAGGGGGCGGTGGCCAAGGAGTGGGGCACGCCCGGGGGCCCGTC
TGGACCGCGGTGTTCTGACTACGAGGCGGGCGACGAGGAGCTGACCCTGCGGAGGGGC
GATCGCGTCCAGGTGCTTTCCCAAGACTGTGCGGTGTCCGGCGACGAGGGCTGGTGGACC
GGGCAGCTCCCCAGCGGCCGCGTGGGCGTCTTCCCAGCAACTACGTGGCCCCGGCGCC
CCCCTGCACCCGCGGGCCTCCAGCTGCCCCAGGAGATCCCCTTCCACGAGCTGCAGTA
GAGGAGATCATCGGTGTGGGGGCTTTGGCAAGTCTATCGGGCCCTGTGGCGTGGCGAG
GAGGTGGCAGTATGGCCCGCGCTGGACCCTGAGAAGGACCCGGCAGTGACAGCGGAG
CAGGTGTGCCAGGAAGCCCGCTCTTTGGAGCCCTGCAGCACCCCAACATAATTGCCCTT
AGGGGCGCCTGCCTCAACCCCCACACCTCTGCCTAGTATGGAGTATGCCCGGGTGGT
GCACTGAGCAGGGTGTGGCAGGTGCGCCGGTGCACCTCACGTGCTGGTCAACTGGGCT
GTGCAAGTGGCCCGGGCATGAACTACCTACACAATGATGCCCTGTGCCATCATCCAC
CGGGACCTCAAGTCCATCAACATCCTGATCCTGGAGGCCATCGAGAACCACAACCTCGCA
GACACGGTGTCAAGATCACGGACTTCGGCCTCGCCCGGAGTGGCACAAGACCACCAAG
ATGAGCGCTGCGGGGACCTACGCTGGATGGCGCCGGAGGTTATCCGTCTCTCCCTCTT
TCCAAAAGCAGTATGTCTGGAGCTTCGGGGTGTGCTGTGGGAGCTGCTGACGGGGGAG
GTCCCCCTACCGTGAGATCGACGCTTGGCCGTGGCGTATGGCGTGGCTATGAATAAGCTG
ACGCTGCCAATCCCTCCAGTGCCTCCGAGCCCTTTGCCCGCTCCTGGAGGAATGCTGG
GACCCAGACCCCGCGGGCCAGATTTGCGTAGCATCTTGAAGCGGCTTGAAGTCATC
GAACAGTCAGCCCTGTTCCAGATGCCACTGGAGTCCCTTCACTCGCTGCAGGAAGACTGG
AAGCTGGAGATTCAGCACATGTTTGATGACCTTCGGACCAAGGAGAAGGAGCTTCGGAGC
CGTGAGGAGGAGCTGCTGCGGGCGCACAGGAGCAGCGCTTCCAGGAGGAGCAGCTGCGG
CGGCGGGAGCAGGAGCTGGCAGAACGTGAGATGGACATCGTGGAACGGGAGCTGCACCTG
CTCATGTGCCAGCTGAGCCAGGAGAAGCCCCGGTCCGCAAGCGCAAGGGCAACTCAAG
CGCAGCCCGCTGCTCAAGCTGCGGGAAGCGGCAGCCACATCAGCCTGCCCTCTGGCTTT
GAGCATAAAGTACAGTCCAGGCTCTCCAACCTCTGGATAAAGCGAAAGGATCCGATGGG

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GCCAGCCCCCTGCAAGCCCCAGCATCATCCCCGGCTGAGGGCCATTGCCTGACTCCC
 GTGGACTGTGGTGGCAGCAGCAGTGGCAGCAGCAGTGGAGGAAGTGGGACATGGAGCCGC
 GGTGGGCCCCAAAGAAGGAAGAACTGGTCGGGGGCAAGAAGAAGGGACGAACGTGGGGG
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 GAAGGAAGCAAACAGTGGTCATCAAGTGCCCCAACCTGGGCAAGTCCCCAAACACACA
 CCCATCGCCCCCTGGCTTCGCCAGCCTCAATGAGATGGAGGAGTTTCGCGGAGGCAGAGGAT
 GGAGGCAGCAGCGTCCCCCTTCCCCCTACTCGACCCCGTCTACCTCTCAGTGCCACTG
 CCTGCCGAGCCCTCCCCGGGGGCGGGGCGCGTGGGAGCCGACGCCCTCCGCGCCCCC
 GCTCGGTGGGGACACGGCGCCCGCGGCGCTGCGACCTGGCGCTGCTAGGCTGCGCCACG
 CTGCTGGGGGCTGTGGCCTGGGCGCCGACGTGGCCGAGGCGCGCGGGCCGACGGTGAG
 GAGCAGCGGGCTGGCTCGACGGCTCTTCTTTCCCGCGCCGGCCGCTTCCCGGGGGC
 CTCAGCCACCCGCGGTCCCCACGGCCCGCGAAGACGTGGGCCCGGCTGGGCTG
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 CTGCTGCGCTCTGACAGTGACGAGGCCGACCGGCCGCGCCCTCCCACCACCTCCCCG
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 GTGAGCCGCGGGCACCGCGGACGCCATCGGATGGGGCGCTGGGGCAGCGGGGGCCGCC
 GAGCCCGCGGGCATGGCCCTGGCCCTCGTGACCTTCTGGACTTCCCCCGCTGCCCGAC
 CCCCAGGCCCTGTTCCAGCCCGCGCGGGCCCTGAGTTCAGGCGCCGCCACCACC
 CTGACCTTTGCCCGAGACCTCGGCCGGTGCAGTGCAGCCCGCTTGGACCCCTGGAAA
 CTGGTCTCCTTCGGCCGACACTACCATCTCGCTCCAGCAGGCCAGACACTCCGGAG
 AGCCCTGGGCCCCCAGCGTGCAGCCACACTGCTGGACATGGACATGGAGGGGCAGAAC
 CAAGACGACAGTGCCCTGTGCGGGGCCACGGCTCCACTAA

Clone variation with respect to NM_002446.3
 374 a=>t;1721 a=>w;1818 t=>c;2493 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_002446 unedited
 CCGCCGTTGAGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAAC
 CGTCAGAATTTTGTAAATACGACTACTATAGGGCGGCCGGAATTCGGCAGGAGCCTGCCGCCCTCGCC
 CTGCTCCCCACCGGCGGACCCCGCGGGCATTGAGAGCCGCGCGCCAGGCCCTTCTAGCCCTTGCC
 GTTTGGGGGACCGGGTGAACCTGCCGCCACTCCACCCCGCCCGCCCGCCGCTACAGCAAATCG
 GAAGGGACGAGCCTGCCCTTTGAAAGGGTTTTTTTTTTCTTGCTCTGCGGAGGGCGCCCGCCAGCCATGGGCC
 TCAGGAGCTCCCTAGACCCCGCAGGGACTGCCCTCCATCCCGCCCGCGGGGCCCGCCCTTGATCCCCG
 CGGGCAGCTGGGTGAAGCGGCCTTCCCGCACCCCGGCCCTCCCCATGGGAGGAGAAGGAGGGGGCC
 G

Kinase Domain Sequence:

>SC323447 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
 CYRCCWAGGAGWCATCGGTGTGGGGGGCTTTGGCAAGGTCTATCGGGCCCTGTGGCGTGGCGAGGAGGT
 GGCAGTCATGGCCGCCGGCTGGACCCTGAGAAGGACCCGCGAGTGACAGCGGAGCAGGTGTGCCAGGAA
 GCCCGGCTCTTTGGAGCCCTGCAGCACCCCAACATAATTGCCCTTAGGGGCGCTGCCTCAACCCCCAC
 ACCTCTGCCTAGTGATGGAGTATGCCCGGGTGGTGCAGTGCAGCA

Restriction Sites:

Please inquire

ACCN:

NM_002446

Insert Size:

3800 bp

OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
OTI Annotation:	<p>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.</p>
Components:	<p>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).</p>
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_002446.2 , NP_002437.2
RefSeq Size:	3428 bp
RefSeq ORF:	2865 bp
Locus ID:	4294
UniProt ID:	Q02779
Cytogenetics:	19q13.2
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>The protein encoded by this gene is a member of the serine/threonine kinase family. This kinase has been shown to activate MAPK8/JNK and MKK4/SEK1, and this kinase itself can be phosphorylated, and thus activated by JNK kinases. This kinase functions preferentially on the JNK signaling pathway, and is reported to be involved in nerve growth factor (NGF) induced neuronal apoptosis. [provided by RefSeq, Jul 2008]</p>