

Product datasheet for **SC323476**

MEK4 (MAP2K4) (NM_003010) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MEK4 (MAP2K4) (NM_003010) Human Untagged Clone
Tag:	Tag Free
Symbol:	MEK4
Synonyms:	JNKK; JNKK1; MAPKK4; MEK4; MKK4; PRKMK4; SAPKK-1; SAPKK1; SEK1; SERK1; SKK1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323476 sequence for NM_003010 edited (data generated by NextGen Sequencing)

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ATGGCGGCTCCGAGCCCCGAGCGGCGGCGGCTCCGGGGCGGCGAGCGGCGAGCGGCACC
CCCGGCCCGTAGGGTCCCCGGCGCCAGGCCACCCGGCCGTCAGCAGCATGCAGGGTAAA
CGCAAAGCACTGAAGTTGAATTTGCAAATCCACCTTTCAAATCTACAGCAAGGTTTACT
CTGAATCCCAATCCTACAGGAGTTCAAACCCACACATAGAGAGACTGAGAACACACAGC
ATTGAGTCATCAGGAAAAGTGAAGATCTCCCTGAACAACACTGGGATTTCACTGCAGAG
GACTTGAAAGACCTTGGAGAAAATGGACGAGGAGCTTATGGTTCTGTCAACAAAATGGTC
CACAAACCAAGTGGGCAAATAATGGCAGTTATGAGAATTCGGTCAACAGTGGATGAAAA
GAACAAAAACAACCTTCTTATGGATTTGGATGTAGTAATGCGGAGTAGTGATTGCCATAC
ATTGTTCAAGTTTTATGGTGCACCTTTCAGAGAGGGTACTGTTGGATCTGTATGGAACCT
ATGTCTACCTCGTTTGATAAGTTTTACAAATATGTATATAGTGTATTAGATGATGTTATT
CCAGAAGAAATTTTAGGCAAAATCACTTTAGCAACTGTGAAAGCACTAAACCACTTAAAA
GAAAACCTGAAAATTTACAGAGATATCAAACCTTCCAATATTTCTTCTGGACAGAAGT
GGAAATATTAAGCTCTGTGACTTCGGCATCAGTGGACAGCTTGTGGACTCTATTGCCAAG
ACAAGAGATGCTGGCTGTAGGCCATACATGGCACCTGAAAGAATAGACCCAAGCGCATCA
CGACAAGGATATGATGTCGCTCTGATGTCTGGAGTTTGGGGATCACATTGTATGAGTTG
GCCACAGGCCGATTTCTTATCCAAAGTGAATAGTGTATTTGATCAACTAACACAAGTC
GTGAAAGGAGATCCTCCGAGCTGAGTAATTCTGAGGAAAGGGAATTTCTCCCGAGTTTC
ATCAACTTTGTCAACTTGTGCTTACGAAGGATGAATCCAAAAGGCCAAAAGTATAAAGAG
CTTCTGAAACATCCCTTTATTTTATGATGTATGAAGAACGTGCCGTTGAGGTCGCATGCTAT
GTTTGTAAAATCCTGGATCAAATGCCAGCTACTCCAGCTCTCCCATGTATGTCGATTGA

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Clone variation with respect to NM_003010.2
392 a=>t;393 a=>g



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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_003010 unedited CCCCCGTTGAGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA CCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGCCCGCCGCGGCCG CTCGGCTCTTCACTCCCAACAATGGCGGCTCCGAGCCGAGCGGGCGGGCGGCTCCGGGGCGGCAGCG GCAGCGGCACCCCGGCCCGTAGGGTCCCCGGCGCCAGGCCACCCGGCCGTCAGCAGCATGCAGGGTAA ACGCAAAGCACTGAAGTTGAATTTGCAAATCCACCTTTCAAATCTACAGCAAGTTTACTCTGAAATCC CAATCCTACAGGAGTTCAAACCCACACATAGAGAAGACTGAGAACACACAGCATTGAGTCATCAGGAA AACTGAAGATCTCCCTGAACAACACTGGGATTTCACTGCAGAAGGACTTGAAAGACCTGGAGAAATGGA CGAGGAGCTATGTTCTGTAACAAAATGGGTCCACAACCCAGTTGGAATATGCAGTTATGAGAATTGCG TCAACAGTTGGTAAAAAACCAACCACTCTTAGGATTGAATGTGAAGCGAATATGATTGCCATCTGGT CAGTTTAGGGCCCTCTCAAAGGTACGTGGATCGGTGGAAGTAACTGAAAAGTACAATGTGTAAT GTTACAGAATCCGAAATTTAGCCCCCTTA
Kinase Domain Sequence:	>SC323476 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 CSATGMGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGAATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGCCCGCCGCGGCCGCTCGG CTCTTCACTCCCAACAATGGCGGCTCCGAGCCGAGCGGGCGGGCGGCTCCGGGGCGGCAGCGGCAGC GGCACCCCGGCCCGTAGGGTCCCCGGCGCCAGGCCACCCGGCC
Restriction Sites:	Please inquire
ACCN:	NM_003010
Insert Size:	1790 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 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_003010.2 , NP_003001.1
RefSeq Size:	3752 bp
RefSeq ORF:	1200 bp

Locus ID:	6416
UniProt ID:	P45985
Cytogenetics:	17p12
Domains:	pkinese, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor signaling pathway
Gene Summary:	<p>This gene encodes a member of the mitogen-activated protein kinase (MAPK) family. Members of this family act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]</p> <p>Transcript Variant: This variant (1) encodes isoform 1.</p>