

Product datasheet for **SC323591**

MAP4K5 (NM_006575) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | MAP4K5 (NM_006575) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | MAP4K5 |
| Synonyms: | GCKR; KHS; KHS1; MAPKKKK5 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >NCBI ORF sequence for NM_006575, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGCCCGCTGCGGCCTGCCGCGGACATCCTGAGGCGGAACCCGACGAGGACTACGAACTCGTCC
AGAGGGTCGGCAGCGGCACCTACGGGGACGTCTATAAGGCCAGAAATGTACACACAGGAGAGCTGGCTGC
AGTAAAAATCATTAAATGGAGCCTGGAGATGATTTTTCTTTGATTCAACAAGAAATATTTATGGTTAAA
GAATGTAAACATTGTAACATCGTTGCCTACTTTGGGAGTTATCTTAGTCGGGAAAAACTATGGATTTGTA
TGGAACTACTGTGGTGGCGGATCACTTCAAGATATTTACCATGTTACTGGACCATTATCAGAATTGCAAA
AGCCTATGTATGCAGAGAAACCTTACAGGGTCTTGCCATTTGCATACTAAAGGCAAAATGCATAGAGAT
ATCAAAGGTGCTAATATTTTATTGACAGACCATGGCGATGTAAAATTAGCTGACTTTGGTGTGGCTGCAA
AAATAACAGCTACCATTGCAAAACGAAATCTTTCATTGGCACCCCTTACTGGATGGCCCCAGAAGTTGC
AGCAGTAGAGAAGAATGGTGGCTACAACCAACTCTGTGATATCTGGGCAGTAGGAATAACAGCAATTGAA
CTTGGAGAACTTCAGCCACCTATGTTTGATCTCCACCCAATGAGGGCTCTCTTCTTAATGTCAAAAAGTA
ATTTTCAGCCTCCAAAATAAAGGACAAAAAATAAATGGTCATCAACATTCATAATTTTGTCAAAAATAGC
ACTAACCAAAAAACCAAAAAAAGACCAACTGCTGAAAGACTTCTGACTCACACTTTTGTGCACAGCCA
GGTCTCTCTAGAGCCCTAGCAGTTGAACCTGTTAGACAAAGTGAACAATCCAGATAACCACGCACATTACA
CTGAAGCAGATGACGATGACTTTGAGCCCCATGCAATCATTTCGCATACCATTAGATCTACAAAACAGGAA
TGCCAGAGCTGAACGGACAGCTTCAGAAATAAATTTTGACAAATTACAATTTGAACTCCTCTGAGAAAA
GAAACAGAAGCAGAGATGAAATGGGATTGTATCAGACCCAAATTTTCATGTTACAGTGGAAATCCTTTTG
TTGATGGTGCAAACTACTGGCAATCAACCTCAAACGTGCAATACCACCTCCCCTACCTCCTAAGCCAAG
GATAAGCAGTTACCCTGAAGACAATTTCCGGATGAAGAAAAAGCATCAACCATAAAACATTTGCTCTGAT
TCAGAAAAGCAGAGCTCCCAAATTTCTCAGAAGACAGAGTAGCCCAAGTTGTGGCCTGTGGCAGAGACTT
CTTCTATTGGAAATGGTATGTTATTTCAAACACTGATGAGTGAAAATACAGAAGGATCAGCACAAAGCACC
ACAGTTACCACGAAAAAAGGACAAACGAGACTTCCCTAAACCAGCCATCAATGGCCTTCCACCCACCCCA
AAAGTTCTGATGGGAGCATGCTTTTCAAAGTTTTTGTGAGTGTCTTTGAAAATTAATTGTGCAACAT
CCTGGATACATCCTGATACAAAAGATCAGTACATTATTTTGGAACTGAAGATGGATTTACACACTGAA
TCTCAATGAGCTACATGAGGCAACGATGGAACAGTTATTTCCACGGAAGTGTACTTGGCTGTATGTTATC
AATAATACTTTAATGTCATTATCAGAAGGAAAAACCTTTCAGCTCTACTCTCACAATCTTATAGCTTTGT
TTGAACATGCCAAAAACCAGGATTAGCTGCCCATATTCAAACCTCACAGGTTTCCAGACCGAATACTACC
AAGAAAATTCGTTTAAACAACAAAGATTCTGATACAAAAGGCTGCCACAATGTTGCATAGTCAGAAAC
CCTTACACGGGACATAAATACCTCTGTGGAGCTTACAGTCTGGAATTGTTTTACTTTCAGTGGTATGAGC
CAATGCAGAAATTCATGTTGATAAAGCACTTTGATTTTCTTTGCCAAGTCCCTTGAATGTTTTGAAAT
GCTGGTGATACCTGAACAGGAATACCCTATGGTCTGTGTAGCTATTAGCAAAGGCACTGAATCGAATCAG
GTAGTTGAGTTTGGAGACAATCAATTTGAACTCTGCATCTTCATGGTTTACAGAAATTTGGTGCAGGCAGCC
AGCAGTTAGATCCATTCATGTAACACAGTTGGAGAGAGATACCGTTTTAGTGTGTTTACAGAAAATTTGT
GAAAATTTGTAATCTACAAGGAAAATTAATAAATCAAGTAAGAAACTGGCCTCTGAGTTAAGTTTTGATTTT
CGCATTGAATCTGTAGTATGCCTTCAAGACAGTGTGTTGGCTTTCTGAAAACATGGGATGCAGGGTAAAA
GCTTCAAGTCAGATGAGGTTACCAGGAGATTTTCAGATGAAACAAGAGTTTTCCGCTTATTAGGATCAGA
CAGGGTTGTCGTTTTGGAAAGTAGGCCAACAGAAAATCCTACTGCACACAGCAATCTCTACATCTTGCT
GGACATGAAAATAGTTACTAA
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| 5' Read Nucleotide Sequence: | >OriGene 5' read for mutant NM_006575 unedited CCCGCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGTGGAGGTCTATATAAGCAGAGCTCGTTTAGTG AACCGTCAGAATTTTGTAAACGACTACTATAGGGCGGCCGGAATTCGGCACCAGCGGCGGCGACTGT ACGCGCTCCGCCGCCCGGAGAGGACGCGCCGTGCAGCGGTGAGTGGCGGGCGGCGGACGGCAAACC CGGAGCTCCCGGCCGCGCGGGAGGAGGACGCGGGTGCAGTGGGAAACGGAGCTGCGGGCGGAGGC TCCATGTTGGGAAGCGCGCCGTTCTGTGTTGTTAGCGGAATCCGGGAGCCGCGGGTGAGCTGGCCGG GGGGCCCGGCCCTAAGTGAAGATGGAAGGCCCCCGCTGGCGGCCCTGCCGCGGACATCCTGAGGCGGA CCCGCAGCAGGACTTACGACCTCGTCCAGGAGGTCGGCACCGCACCTAACGGGGACGTCCTATAAGG CCGAAATGTACACACAGGAGAGCCTGGCTGAATAATGAATCATTAAATTGAACCTGGAAGTTATTTTC TTGAATTACACAGAATTTTATGGTAAGAATGTACCATTGAACATCGGTGCATCTTGGGGAGTACTATC GGAAACCTGGATGTAGGATACGGGGGGTCTCAATTTCCAGTTCTGACATTTCGATGCAATTCCTAGTTCC AAAGTAAAGTCTGCAATTGCTCACGCACCGTGAATCAGGTCTTTTTTTGGCACTCGGCGATAATAACAA TAGGTCAAATCCACTTGAAAAAATT |
| Kinase Domain Sequence: | >SC323591 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 ARTCAGAGGGTCGGAGCGGCACCTACGGGGACGTCTATAAGGCCAGAAATGTACACACAGGAGAGCTGGC TGCAGTATGATCATTAAATTGGAGCCTGGAGATGATTTTTCTTTGATTCAACAAGAAATATTTATGGTT AAAGAATGTAACATTGAACATCGTTGCCTACTTTGGGAGTTATCTTAGTCGGGAAAACTATGGATT GTATGGAATACTGTGGTGGCGGATCACTCAAGATATTTACCATG |
| Restriction Sites: | Please inquire |
| ACCN: | NM_006575 |
| Insert Size: | 4310 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_006575.3 , NP_006566.2 |
| RefSeq Size: | 4373 bp |

RefSeq ORF: 2541 bp

Locus ID: 11183

UniProt ID: [Q9Y4K4](#)

Cytogenetics: 14q22.1

Domains: pkinase, CNH

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: This gene encodes a member of the serine/threonine protein kinase family, that is highly similar to yeast SPS1/STE20 kinase. Yeast SPS1/STE20 functions near the beginning of the MAP kinase signal cascades that is essential for yeast pheromone response. This kinase was shown to activate Jun kinase in mammalian cells, which suggested a role in stress response. Two alternatively spliced transcript variants encoding the same protein have been described for this gene. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1) differs in the 5' UTR compared to variant 2. Variants 1 and 2 encode the same isoform.