

## Product datasheet for **SC323636**

### MAPKAP Kinase 2 (MAPKAPK2) (NM\_004759) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MAPKAP Kinase 2 (MAPKAPK2) (NM_004759) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAPKAP Kinase 2
Synonyms:	MAPKAP-K2; MK-2; MK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_004759, the custom clone sequence may differ by one or more nucleotides

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ATGCTGTCCAACCTCCAGGGCCAGAGCCCGCGGTGCCGTTCCCGCCCCGGCCCCGCGCCGAGCCCC
CCACCCCTGCCCTGCCGACCCCCCGGCGCAGCCGCCGCGCCCGCCCCGAGCAGTTCCCGCAGTTCCA
CGTCAAGTCCGGCCTGCAGATCAAGAAGAAGCCATCATCGATGACTACAAGGTACCAGCCAGGTCCTG
GGGCTGGGCATCAACGGCAAAGTTTTGCAGATCTCAACAAGAGGACCCAGGAGAAATTCGCCCTCAAAA
TGCTTCAGGACTGCCCAAGGCCCGCAGGGAGGTGGAGCTGCACTGGCGGGCCTCCAGTCCCCGCACAT
CGTACGGATCGTGGATGTGTACGAGAATCTGTACGCAGGGAGGAAGTGCCTGCTGATTGTCATGGAATGT
TTGGACGGTGGAGAACTCTTAGCCGAATCCAGGATCGAGGAGACCAGGCATTACAGAAAGAGAAGCAT
CCGAAATCATGAAGAGCATCGGTGAGGCCATCCAGTATCTGCATTCAATCAACATTGCCCATCGGGATGT
CAAGCCTGAGAATCTCTTATACACCTCCAAAAGGCCAACGCCATCCTGAAACTCACTGACTTTGGCTTT
GCCAAGGAAACCACCAGCCACAACCTCTTTGACCACTCCTTGTATACACCGTACTATGTGGCTCCAGAAG
TGCTGGGTCCAGAGAAGTATGACAAGTCTGTGACATGTGGTCCCTGGGTGTCATCATGTACATCCTGCT
GTGTGGGTATCCCCCTTCTACTCCAACCACGGCCTTGCCATCTCTCCGGGCATGAAGACTCGCATCCGA
ATGGGCCAGTATGAATTTCCAACCCAGAATGGTCAGAAGTATCAGAGGAAGTGAAGATGCTCATTCCGA
ATCTGTGAAAACAGAGCCACCCAGAGAATGACCATCACCGAGTTTATGAACCCCTTGGATCATGCA
ATCAACAAAGGTCCCTCAAACCCACTGCACACCAGCCGGTCTGAAGGAGGACAAGGAGCGGTGGGAG
GATGTCAAGGGGTGCTTCATGACAAGAACAGCCAGCCAGCCACTTGGCTGACCAGGTTGTGA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for mutant NM_004759 unedited CCGCCGTTGAGCAATGGGCGGTAGGCGGTACGGAGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGAC ACTATAGAATAACAAGCTACTTGTCTTTTTGCAGCGGCCGCAATTCGGCACGAGGCCCGGAGCCGGAGG AGGGGGTATTATTAGGGCTAGCCACGCGTCCCCGGGACCGGGGGCGGGGCCGGCTAAACGGTTCGGCCAA CCACATGGGAAACGACGGCGCGAAACCGGAAGGCTCGGCCTCAACAGAGCGAGTAGAGTAGTACCAACAA CCCCCGGCACAGGGGAAAAAAGGGTCCACCCCAAAAACCAACCACACAAACCACACTATCTTGGGGG GGGGGGGGTCA
<b>Kinase Domain Sequence:</b>	>SC323636 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation TRTTCAGCAGGTCTGGGGCTGGGCATCACGGCAAAGTTTTGCAGATCTTCAACAAGAGGACCCAGGAGAA ATTGCGCCTCATGATGCTTCAGGACTGCCCAAGGCCCGCAGGGAGGTGGAGCTGCACTGGCGGGCTCC CAGTCCCCGCACATCGTACGGATCGTGGATGTGTACGAGAATCTGTACGCAGGGAGGAAGTGCCTGCTGA TTGTCATGGAATGTTTGGACGGTGGAGAACTCTTAGCCGAATCC
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_004759
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	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." <a href="#">Cell, 2008 May p536-548.</a>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_004759.3</a> , <a href="#">NP_004750.1</a>
<b>RefSeq Size:</b>	3608 bp
<b>RefSeq ORF:</b>	1113 bp
<b>Locus ID:</b>	9261
<b>UniProt ID:</b>	<a href="#">P49137</a>
<b>Cytogenetics:</b>	1q32.1
<b>Domains:</b>	pkinese, TyrKc, S_TKc

<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	MAPK signaling pathway, Neurotrophin signaling pathway, VEGF signaling pathway
<b>Gene Summary:</b>	<p>This gene encodes a member of the Ser/Thr protein kinase family. This kinase is regulated through direct phosphorylation by p38 MAP kinase. In conjunction with p38 MAP kinase, this kinase is known to be involved in many cellular processes including stress and inflammatory responses, nuclear export, gene expression regulation and cell proliferation. Heat shock protein HSP27 was shown to be one of the substrates of this kinase in vivo. Two transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) represents the longer transcript but encodes the shorter isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>