

Product datasheet for **SC323382**

MSK2 / RSK-B (RPS6KA4) (NM_003942) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MSK2 / RSK-B (RPS6KA4) (NM_003942) Human Untagged Clone
Tag:	Tag Free
Symbol:	MSK2 / RSK-B
Synonyms:	MSK2; RSK-B; S6K-alpha-4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323382 sequence for NM_003942 edited (data generated by NextGen Sequencing)

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ATGGGGGACGAGGACGACGATGAGAGCTGCGCCGTGGAGCTGCGGATCACAGAAGCCAAC
CTGACCGGGCAGGAGGAGAAGGTGAGCGTGGAGAACTTCGAGTGCTCAAGGTGCTGGGC
ACGGGAGCCTACGGCAAGGTGTTCTGTGCGGAAGGCGGGGGCAGCAGCGGGGAAG
CTGTACGCCATGATGGTGTGCGCAAGGCGGCGTGGTGCAGCGCCAAAGACGCAAGAG
CACACGGCACCAGCGCTCGGTGGAGCTGGTGCAGCGCCAGGCCCTTCTGGTCCAG
CTGCACTACGCTTCCAGACGGATGCCAAGCTGCACCTCATCTGGACTATGTGAGCGGC
GGGAGATGTTACCCACCTCTACCAGGCCAGTACTTCAAGGAGGCTGAGGTGCGCGTG
TATGGGGGTGAGATCGTGTGGCCCTGGAACACCTGCACAAGCTCGGCATCATTACCGA
GACCTGAAACTGGAGAATGTGCTGCTGGACTCCGAGGGCCACATTGCTCCTCACGGACTTC
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TGGTGGAGCTGGGCATCTTGTCTTCGAGCTGCTGACGGGGCCTCGCCCTTACCCTG
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TCCCCCTCGGATCGGGCCCGTGGCGCAGGACCTGCTGCAGCGCTGCTTGTAAAGGAT
CCTAAGAAGCGATTGGGCGCGGGGCCAGGGGCAACAAGTCCGGAACCATCCCTTC
TTCCAGGGCCTCGATTGGGTGGCTCTGGCTGCCAGGAAGATTCCAGCCCCATTCCGGCC
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GTCTACTACCCCTGGCAGCCCCACCTGGGGACCCCGAATCTTTCAGGGATACTCC
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GCGCCTGGTGTGAGACCGCCAGGTGCGGCAGCGGTGGCCAGGAGCGTATGATGCAG
GACTCCCTTCTCCAGCAGTACGAGCTGGACCTGCGGGAGCCTGCGCTGGGCCAGGGC
AGCTTTTCTGTGTGTCGCGCTGCGCCAGCGCCAGAGCGGCCAGGAGTTCGAGTCAAG
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CACGAGGAGGCGGGCGTGGTGCACCGGACCTCAAGCCGAGAACATCCTGTACGCCGAC
GACACGCCGGGGCCCCGGTAAAATCATCGACTTCGGGTTTCGCGCGGTTGCGGCCGAG
AGTCCCGGGGTGCCATGCAGACGCCCTGCTTACGCTGCAGTACGCTGCCCCGAGCTG
CTGGCGCAGCAGGGCTACGACGAGTCTGCGACCTCTGGAGCCTGGGCGTCATTCTGTAC
ATGATGCTGTGCGGGCAGGTCCCCTTCCAGGGGCTCTGGCCAGGGCGGGCAGAGCCAG
GCGGCCGAGATCATGTGCAAAATCCGCGAGGGGCGCTTCTCCCTTACGGGGAGGCTGG
CAGGGTGTATCCGAGGAAGCCAAGGAGCTGGTCCGAGGGCTCCTGACCGTGGACCCCGCC
AAGCGGTGAAGCTCGAGGGACTGCGGGGACGCTCGTGGCTGCAGGACGGCAGCGCGCGC
TCCTCGCCCCGCTCCGGACGCCGACGTGCTCGAGTCTCTGGGCCCGCAGTGCCTCG
GGTCTCAACGCCACCTTTCATGGCATTCAACCGGGGCAAGCGGGAGGGCTTCTTCTGAAG
AGCGTGGAGAATGCACCCCTGGCCAAGCGGCGGAAGCAGAAGCTGCGGAGCGCCACCGCC
TCCCGCCGGGGTCCCCTGCACCAGCCAACCCGGGCGGAGCCCCGTGCGCTCCAAGGG
GCCCCCGCCGAGCCAACGGCCCCCTGCCCTCCTAA
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Clone variation with respect to NM_003942.2
194 a=>t

5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_003942 unedited CCCGCCCGTCCAGCACTGGGCGGTAGGCGCTGTACGGCTGTGGAGGTCTATATAAGCAGAGCTCATTTAG GTGACACTATAGAATAACAAGCTACTTGTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGGCCGCCCG AGCCCCGAGCCGCGCGGGCCCCAGCGACCCGCCCATGGGGACGAGGACGACGATGAGAGCTGCGCCG TGGAGCTGCGGATCACAGAAGCCAACCTGACCGGGCACGAGGAGAAGGTGAGCGTGGAGAAGTTCGAGCT GCTCAAGGTGCTGGGCACGGGGAGCCTACGGCAAGGGTGTCTCTGGTGCAGGAGGGCGGGGCGGGCAGCA CGCAGAAGCACACGCGCCACGGACCGTTTCGGGGCGGGACCTGGGCCCCAGCCGCTTCTGGGTCCGCT GCATTCGGCTTTCCGAAGGGATGCCAGGTGCAACTTACTTCCGGGCTTTGAGCCGGGGGAGATTTTCA CAATTTTACACGGCGTTCCTTTAGAGGGCTAGTGCCCGTATAGGGGGAATATCGCCGCCGAAACCCG GGCACGTGCGGCATTTTCGGAACCGACACGGAAATGCTGTGTAACCAAGGCCAAGTGCTTACGCATTCT TT
Kinase Domain Sequence:	>SC323382 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 CSACMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGACACTA TAGAATAACAAGCTACTTGTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGGCCGCCCGGAGCCCGAGC CGCGCGGGCCCCAGCGACCCGCCCATGGGGACGAGGACGACGATGAGAGCTGCGCCGTGGAGCTGC GGATCACAGAAGCCAACCTGACCGGGCACGAGGAGAAGGTGAGCG
Restriction Sites:	Please inquire
ACCN:	NM_003942
Insert Size:	3300 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_003942.2 , NP_003933.1
RefSeq Size:	3149 bp
RefSeq ORF:	2319 bp

Locus ID:	8986
UniProt ID:	O75676
Cytogenetics:	11q13.1
Domains:	pkinese, S_TK_X
Protein Families:	Druggable Genome, Protein Kinase, Transcription Factors
Protein Pathways:	MAPK signaling pathway, Neurotrophin signaling pathway
Gene Summary:	<p>This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates various substrates, including CREB1 and ATF1. The encoded protein can also phosphorylate histone H3 to regulate certain inflammatory genes. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a).</p>