

## Product datasheet for **SC337414**

### **MSK2 / RSK-B (RPS6KA4) (NM\_001300802) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MSK2 / RSK-B (RPS6KA4) (NM_001300802) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPS6KA4
Synonyms:	MSK2; RSK-B; S6K-alpha-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001300802, the custom clone sequence may differ by one or more nucleotides

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ATGGGGGACGAGGACGACGATGAGAGCTGCGCCGTGGAGCTGCGGATCACAGAAGCCAACCTGACCGGGC
ACGAGGAGAAGGTGAGCGTGGAGAATTTCGAGCTGCTCAAGTGCTGGGCACGGGAGCCTACGGCAAGGT
GTTCTCTGGTGCAGGAAAGGCGGGCGGGCACGACGCGGGAAGCTGTACGCCATGAAGGTGCTGCGCAAGGCG
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AGGCGCCCTTCTGGTACGCTGCACTACGCTTTCCAGACGGATGCCAAGCTGCACCTCATCTGGACTA
TGTGAGCGGGGGAGATGTTACCCACCTCTACCAGCGCCAGTACTTCAAGGAGGCTGAGGTGCGCGTG
TATGGGGGTGAGATCGTCTGCGCCTGGAACACCTGCACAAGCTCGGCATCATTTACCGAGACCTGAAAC
TGGAGAATGTGCTGCTGGACTCCGAGGGCCACATTGTCTCACGGACTTCGGGCTGAGCAAGGAGTTCT
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AGCAAGACGGGGCATGGCAAGGCTGTGGACTGGTGGAGCCTGGGCATCTTGCTCTCGAGCTGCTGACGG
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CCTAAGAAGCGATTGGGCGCGGGGCCAGGGGGCACAAGAAGTCCGGAACCATCCCTTCTTCCAGGGCC
TCGATTGGGTGGCTCTGGCTGCCAGGAAGATTCCAGCCCCATTCCGGCCCCAAATCCGCTCAGAGCTGGA
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TGATGACCGATGGGCTGGAAGCGCTGGTGTGGAGACCGCCAGGTGGGCAGCGGTGGCCAGGAGCGC
TATGATGCAGTACGAGCTGGACCTGCGGGAGCCTGCGCTGGGCCAGGGCAGCTTTTGTGTGTCGCCGC
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CGACCAGCTGCACACGTACCTGGTCTGGAGCTGCTGCGGGCGGGGAGCTGCTGGAGCACATCCGCAAG
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ACGCCCTGCTTACGCTGCAGTACGCTGCCCCGAGCTGCTGGCGCAGCAGGGCTACGACGAGTCTGCG
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CCAGGGCGGGCAGAGCCAGGCGGCGGAGATCATGTGAAAATCCGCGAGGGGCGTCTCCCTTGACGGG
GAGGCCTGGCAGGTGTATCCGAGGAAGCAAGGAGCTGGTCCGAGGGCTCTGACCGTGGACCCCGCCA
AGCGGCTGAAGCTCGAGGACTGCGGGGAGCTCGTGGCTGCAGGACGGCAGCGCGCTCTCGCCCCC
GCTCCGGACGCCGACGTGCTCGAGTCTCTGGGCCCGCAGTGCCTCGGGTCTCAACGCCACCTTCATG
GCATTAACCGGGGAAGCGGGAGGGCTTCTTCTGAAGAGCGTGGAGAATGCACCCCTGGCCAAGCGGC
GGAAGCAGAAGCTGCGGAGCGCCACCGCTCCCGCCGGGGCTCCCTGCACCAGCCAACCCGGGGCGAGC
CCCCGTCGCTCCAAAGGGGCCCGCGAGCCAACGGCCCCCTGCCCCCTCCTAA

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**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001300802

**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).

**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:**

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\\_001300802.1](#), [NP\\_001287731.1](#)

**RefSeq Size:** 3128 bp

**RefSeq ORF:** 2298 bp

**Locus ID:** 8986

**UniProt ID:** [O75676](#)

**Cytogenetics:** 11q13.1

**Protein Families:** Druggable Genome, Protein Kinase, Transcription Factors

**Protein Pathways:** MAPK signaling pathway, Neurotrophin signaling pathway

**Gene Summary:** 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]  
Transcript Variant: This variant (3) uses an alternate in-frame splice site in the coding region, compared to variant 1, resulting in a shorter protein (isoform c).