

## Product datasheet for **SC323697**

### **P70 S6 Kinase beta (RPS6KB2) (NM\_003952) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	P70 S6 Kinase beta (RPS6KB2) (NM_003952) Human Untagged Clone
Tag:	Tag Free
Symbol:	P70 S6 Kinase beta
Synonyms:	KLS; p70(S6K)-beta; P70-beta; P70-beta-1; P70-beta-2; p70S6Kb; S6K-beta2; S6K2; S6KB; S6Kbeta; S6KI(2); SRK; STK14B
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_003952, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGCCGTGTTTGGATTGGAGACGGAGGAAGGCAGCGAGGGCGAGGGCGAGCCAGAGCTCA
GCCCCGGGACGCATGTCCCCTTGCCGAGTTGAGGGCAGCTGGCCTAGAGCCTGTGGACACTATGAAGA
GGTGGAGCTGACTGAGACCAGCTGAACGTTGGCCAGAGCGCATCGGGCCCCACTGCTTTGAGCTGCTG
CGTGTGCTGGGCAAGGGGGGCTATGGCAAGGTGTTCCAGGTGCGAAAGGTGCAAGGCACCAACTGGGCA
AAATATATGCCATGAAAGTCTAAGGAAGGCCAAAATTGTGCGCAATGCCAAGGACACAGCACACACAG
GGCTGAGCGGAACATTCTAGAGTCAGTGAAGCACCCTTTATTGTGAACTGGCCTATGCCTTCCAGACT
GGTGGCAAACCTACCTCATCCTTGAGTGCCTCAGTGGTGGCGAGCTCTTACGCATCTGGAGCGAGAGG
GCATCTTCTGGAAGATACGGCTGCTTACCTGGCTGAGATCACGCTGGCCCTGGGCCATCTCCACTC
CCAGGGCATCATCTACGGGACCTCAAGCCGAGAATCATGCTCAGCAGCCAGGGCCACATCAAAGT
ACCGACTTTGGACTCTGCAAGGAGTCTATCCATGAGGGCGCCGCTCACTCACACCTTCTGCGGACCATTG
AGTACATGGCCCCCTGAGATTCTGGTGCAGTGGCCACAACCGGGCTGTGGACTGGTGGAGCCTGGGGG
CCTGATGTACGACATGCTCACTGGATCGCGCCCTTACCAGCAGAGAACCAGGAAAACCATGGATAAG
ATCATCAGGGGCAAGCTGGCACTGCCCCCTACCTCACCCAGATGCCCGGGACCTTGTCAAAAAGTTTC
TGAAACGGAATCCCAGCCAGCGGATTGGGGTGGCCAGGGGATGCTGCTGATGTGCAGAGACATCCCTT
TTCCGGCACATGAATTGGGACGACCTTCTGGCCTGGCGTGTGGACCCCCCTTTCAGGCCCTGTCTGCAG
TCAGAGGAGGACGTGAGCCAGTTTATACCCGCTTACACGGCAGACGCCGGTGGACAGTCTGATGACA
CAGCCCTCAGCGAGAGTGCCAAACAGGCCTTCTGGGCTTACATACGTGGCGCCGTCTGTCTGGACAG
CATCAAGGAGGGCTTCTCCTTCCAGCCCAAGTGCCTCACCCAGGCGCTCAACAGTAGCCCCGGGCC
CCCGTCAGCCCCCTCAAGTTCTCCCTTTTGGGGTTTCGGCCAGCCAGCCTGCCGGAGCCACCG
AGCTACCTCTACCTCCTGCTGCCACCAGCCGCGCCCTCGACCACCGCCCTCTCCCATCCGTCCCC
CTCAGGGACCAAGAAGTCCAAGAGGGGCGTGGGCGTCCAGGGCGCTAG
    
```

**5' Read Nucleotide Sequence:** >OriGene 5' read for mutant NM\_003952 unedited

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ACACCGCTACAGCAACGGGCGGAGGCGTACGGAGGGAGGCCAACACAAGCAGAGCCCGCCAGCGAACC
GTCAGAGCACCGCAACACGACCCACCACAGGGCGCGCGAATACGGCAGAGGCCCGCGCGGAATACG
GCACGAGGGTTTTAGGACCGGGACTGTCAGTCAGTGCAGCGCCAGGTACGGGCCGACGGGCCCGGGG
CGGCGCCGCCATGGCGGCGTGTGGATTGGAGACGGAGGAAGGCAGCGAGGGCGAGGGCGAG
CCAGAGCTCAGCCCCGGGACGCATGTCCCCTTTGCCGAGTTTGGGGCAGCTGGCCCTAGAGGCCTG
GTGGGACACTATGAAGAGGGTGAAGCTGACTGAAAACCAGCGTTGACCGTTGGCCCAAGCCGCATCGG
CCCCACTGCTTTTGGCTTGTGCTGGTGGTGGCAAGGGGGCTATGGCAAGGTGTTGAGGTGGCGAA
GGTGCCAGGGACCAATGGGCCAAATTATTGGCCTGGATGTTCTAAGGAAGGCAATTTTGGCCATGTG
CAGGGACCGGCACACCCGGCTTGACGGAACCTTCAAATTCGTTAACACCCCTTTTGGAACTGGCCTG
CCTTCGACTGTGTAAACTCCTCTCTCTGATGTCCAATGTGACGGGCGGCTAAAGAGCGGCGTGGTCC
    
```

**Kinase Domain Sequence:** >SC323697 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

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CCATGMGCAATGGGCGKAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAACCGTCA
GAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCAGGAGCCCTCGTGCCGAATTCGGCAC
GAGGGTTTAGGTCGGGACTGTCAGTCAGTGCAGCGCCAGGTACGGGCCGACGGGCCCGGGGCCGGG
CCGCCATGGCGGCGTGTGGATTGGAGACGGAGGAAG
    
```

**Restriction Sites:** Please inquire

**ACCN:** NM\_003952

<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_003952.2</a> , <a href="#">NP_003943.2</a>
<b>RefSeq Size:</b>	1782 bp
<b>RefSeq ORF:</b>	1449 bp
<b>Locus ID:</b>	6199
<b>UniProt ID:</b>	<a href="#">Q9UBS0</a>
<b>Cytogenetics:</b>	11q13.2
<b>Domains:</b>	pkinase, S_TK_X, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Acute myeloid leukemia, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Insulin signaling pathway, mTOR signaling pathway, TGF-beta signaling pathway
<b>Gene Summary:</b>	This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains a kinase catalytic domain and phosphorylates the S6 ribosomal protein and eukaryotic translation initiation factor 4B (eIF4B). Phosphorylation of S6 leads to an increase in protein synthesis and cell proliferation. [provided by RefSeq, Jan 2015]