

## Product datasheet for **RC200525**

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

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	P70 S6 Kinase beta (RPS6KB2) (NM_003952) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RPS6KB2
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:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC200525 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGCCGTGTTTGGATTGGAGACGGAGGAAGGCAGCGAGGGCGAGGGCGAGCCAGAGCTCA  
 GCCCGCGGACGCATGTCCCTTGCCGAGTTGAGGGCAGCTGGCCTAGAGCCTGTGGGACTATGAAGA  
 GGTGGAGCTGACTGAGACCAGCGTGAACGTTGGCCAGAGCGCATCGGGCCCACTGCTTTGAGCTGCTG  
 CGTGTGCTGGCAAGGGGGGCTATGGCAAGGTGTTCCAGGTGCGAAAGGTGCAAGGCACCAACTGGGCA  
 AAATATATGCCATGAAAGTCCTAAGGAAGGCCAAAATTGTGCGCAATGCCAAGGACACAGCACACACAG  
 GGCTGAGCGGAACATTCTAGAGTCAGTGAAGCACCCCTTTATTGTGAACTGGCCTATGCCTTCAGACT  
 GGTGGCAAACCTACCTCATCCTTGAGTGCCTCAGTGGTGGCGAGCTCTCACGCATCTGGAGCGAGAGG  
 GCATCTTCTGGAAGATACGGCCTGCTTCTACCTGGCTGAGATCACGCTGGCCCTGGGCCATCTCCACTC  
 CCAGGGCATCATCTACCGGGACCTCAAGCCCGAGAACATCATGCTCAGCAGCCAGGGCCACATCAAAGTG  
 ACCGACTTTGGACTCTGCAAGGAGTCTATCCATGAGGGCGCCGCTCACTCACACCTTCTGCGGCACCAATTG  
 AGTACATGGCCCTGAGATTCTGGTGCAGTGGCCACAACCGGGCTGTGGACTGGTGGAGCCTGGGGGC  
 CCTGATGTACGACATGCTCACTGGATCGCCGCCCTTTACCGCAGAGAACCAGGAAGAAAACCATGGATAAG  
 ATCATCAGGGGCAAGCTGGCACTGCCCCCTACCTCACCCAGATGCCCGGGACCTTGTCAAAAAGTTTC  
 TGAAACGGAATCCAGCCAGCGGATTGGGGGTGGCCAGGGGATGCTGCTGATGTGCAGAGACATCCCTT  
 TTTCCGGCACATGAATTGGGACGACCTTCTGGCCTGGCGTGTGGACCCCTTTTCAGGCCCTGTCTGCAG  
 TCAGAGGAGGACGTGAGCCAGTTTGATACCCGCTTACACGGCAGACGCCGGTGGACAGTCTGTCTGACA  
 CAGCCCTCAGCGAGAGTGCCAACCGCCCTTCTGGGCTTACATACGTGGCGCCCTGTCTCTGGGATC  
 CATCAAGGAGGGCTTCTCCTTCCAGCCCAAGCTGCGCTCACCCAGGCGCCTCAACAGTAGCCCCGGGTC  
 CCCGTCAGCCCCCTCAAGTTCTCCCTTTTGGGGGTTTCGGCCAGCCCCAGCCTGCCGGAGCCACGG  
 AGCTACCTCTACCTCCACTCCTGCCACCGCCGCCCTCGACCACCGCCCTCTCCCCATCCGTCCCCC  
 CTCAGGGACCAAGAAGTCCAAGAGGGGCGTGGGCGTCCAGGGCGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC200525 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAVFDLDLETEEGSEGEPELSPADACPLAELRAAGLEPVGHYEEVELTETSVMVGPVPERIGPHCFELL  
 RVLGKGGYGVKVFQVRKVQGTNLGKIYAMKVLKAKIVRNAKDTAHTRAERNILESVKHPIVELAYAFQT  
 GGKLYLILECLSGGELFTHLEREGIFLEDTACFYLAETLALGHLHSQGIYRDLKPENIMLSSQGHIKL  
 TDFGLCKESIHEGAVTHTFCGTIEYMAPEILVRSGHNRVDWWSL GALMYDMLTGSPFFT AENRKKTMDK  
 IIRGKLALPPYLTPDARDLVKKFLKRNPSQRIGGGPGDAADVQRHPFFRHMNWDLLAWRVDPFRPCLQ  
 SEEDVVSQFDTRFTRQTPVDSDDTALSESANQAF LGFTYVAPSVLDSIKEGFSFQPKLRSPRRLNSSPRV  
 PVSPLKFSPEFGRFSPSPLEPELPLPPLPPPPSTTAPLIRPPSGTKKSKRGRGRPGR

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6081\\_a09.zip](https://cdn.origene.com/chromatograms/mk6081_a09.zip)

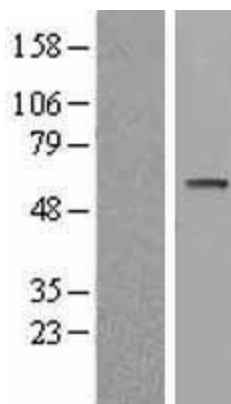
**Restriction Sites:**

Sgfl-MluI

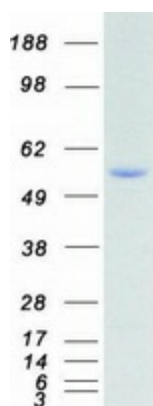


<b>ACCN:</b>	NM_003952
<b>ORF Size:</b>	1446 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>MW:</b>	53.5 kDa
<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]

## Product images:



Western blot validation of overexpression lysate (Cat# [LY401298]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200525 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RPS6KB2 protein (Cat# [TP300525]). The protein was produced from HEK293T cells transfected with RPS6KB2 cDNA clone (Cat# RC200525) using MegaTran 2.0 (Cat# [TT210002]).