

## Product datasheet for **RG200525**

### **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:	TurboGFP
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:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG200525 representing NM\_003952  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGCCGTGTTTGGATTGGAGACGGAGGAAGGCAGCGAGGGCGAGGGCGAGCCAGAGCTCA  
 GCCCGCGGACGCATGTCCCTTGCAGTTGAGGGCAGCTGGCCTAGAGCCTGTGGGACTATGAAGA  
 GGTGGAGCTGACTGAGACCAGCGTGAACGTTGGCCAGAGCGCATCGGGCCCACTGCTTTGAGCTGCTG  
 CGTGTGCTGGCAAGGGGGCTATGGCAAGGTGTTCCAGGTGCGAAAGGTGCAAGGCACCAACTGGGCA  
 AAATATATGCCATGAAAGTCCTAAGGAAGGCCAAAATTGTGCGCAATGCCAAGGACACAGCACACACAG  
 GGCTGAGCGGAACATTCTAGAGTCAGTGAAGCACCCCTTTATTGTGGAAGTGGCCTATGCCTTCCAGACT  
 GGTGGCAAACCTACCTCATCCTTGAGTGCCTCAGTGGTGGCGAGCTCTCACGCATCTGGAGCGAGAGG  
 GCATCTTCTGGAAGATACGGCCTGCTTCTACCTGGCTGAGATCACGCTGGCCCTGGGCCATCTCCACTC  
 CCAGGGCATCATCTACCGGGACCTCAAGCCCGAGAACATCATGCTCAGCAGCCAGGGCCACATCAAAGT  
 ACCGACTTTGGACTCTGCAAGGAGTCTATCCATGAGGGCGCCGCTCACTCACACCTTCTGCGGCACCATTTG  
 AGTACATGGCCCTGAGATTCTGGTGCAGTGGCCACAACCGGGCTGTGGACTGGTGGAGCCTGGGGG  
 CCTGATGTACGACATGCTCACTGGATCGCCGCCCTTTACCGCAGAGAACCAGGAAAGAAACCATGGATAAG  
 ATCATCAGGGGCAAGCTGGCACTGCCCCCTACCTCACCCAGATGCCCGGGACCTTGTCAAAAAGTTTC  
 TGAAACCGAATCCCAGCCAGCGGATTGGGGGTGGCCAGGGGATGCTGCTGATGTGCAGAGACATCCCTT  
 TTTCCGGCACATGAATTGGGACGACCTTCTGGCCTGGCGTGTGGACCCCTTTCAGGCCCTGTCTGCAG  
 TCAGAGGAGGACGTGAGCCAGTTTATACCCGCTTACACGGCAGACGCCGGTGGACAGTCTGCTGACAG  
 CAGCCCTCAGCGAGAGTGCCAACCGAGCCTTCTGGGCTTACATACGTTGGCGCCGCTGTCTCTGGACAG  
 CATCAAGGAGGGCTTCTCCTTCCAGCCCAAGCTGCGCTCACCCAGGCGCCTCAACAGTAGCCCCCGGGTC  
 CCCGTCAGCCCCCTCAAGTTCTCCCTTTTGGGGGTTTCGGCCAGCCCCAGCCTGCCGGAGCCACGG  
 AGCTACCTCTACCTCCACTCCTGCCACCGCCGCCCTCGACCACCGCCCTCTCCCCATCCGTCCTCC  
 CTCAGGGACCAAGAAGTCCAAGAGGGGCGTGGGCGTCCAGGGCGC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG200525 representing NM\_003952  
 Red=Cloning site Green=Tags(s)

MAAVFDLDLETEEGSEGEPELSPADACPLAELRAAGLEPVGHYEEVELTETSVMVGPERRIGPHCFELL  
 RVLGKGGYGVKVFQVRKVQGTNLGKIYAMKVLKAKIVRNAKDTAHTRAERNILESVKHPFIVELAYAFQT  
 GGKLYLILECLSGGELFTHLEREGIFLEDTACFYLAETLALGHLHSQGIYRDLKPENIMLSSQGHKIL  
 TDFGLCKESIHEGAVTHTFCGTIEYMAPEILVRSGHNRVDWWSL GALMYDMLTGSPPTAENRKKTMDK  
 IIRGKLALPPYLTPDARDLVKKFLKRNPSQRIGGGPGDAADVQRHPFFRHMNWDLLAWRVDPPFRPCLQ  
 SEEDVVSQFDTRFTRQTPVDSPDDTALSESANQAF LGFTYVAPSVLDSIKEGFSFQPKLRSPRRLNSSPRV  
 PVSPLKFSPEFGRFPSLPEPTELPLPPLLPPPPSTTAPLIRPPSGTKKSKRGRGRPGR

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_003952

ORF Size: 1446 bp

OTI Disclaimer: 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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_003952.2](#), [NP\\_003943.2](#)

RefSeq Size: 1782 bp

RefSeq ORF: 1449 bp

Locus ID: 6199

UniProt ID: [Q9UBS0](#)

**Cytogenetics:** 11q13.2

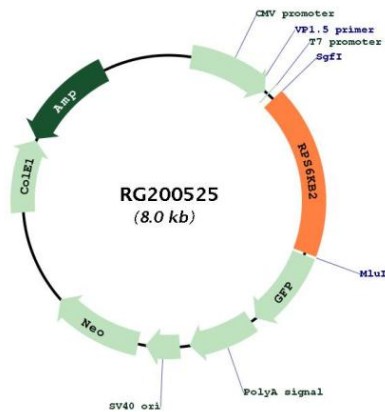
**Domains:** pkinase, S\_TK\_X, TyrKc, S\_TKc

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

**Protein Pathways:** Acute myeloid leukemia, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Insulin signaling pathway, mTOR signaling pathway, TGF-beta signaling pathway

**Gene Summary:** 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:**



Circular map for RG200525