

## Product datasheet for **RC211545**

### **RSK4 (RPS6KA6) (NM\_014496) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RSK4 (RPS6KA6) (NM_014496) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RSK4
Synonyms:	p90RSK6; PP90RSK4; RSK-4; RSK4; S6K-alpha-6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC211545 representing NM\_014496  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTACCATTGCTCCTCAGGACGAGCCCTGGGACCGAGAAATGGAAGTGTTCAGCGCGCGCGCGCGCA  
 GCAGCGCGGAGGTAAATGGTCTTAAAATGGTTGATGAGCCAATGGAAGAGGGAGAAGCAGATTCTTGCA  
 TGATGAAGGAGTTGTTAAAGAAATCCCTATTACTCATCATGTTAAGGAAGGCTATGAGAAAAGCAGATCCT  
 GCACAGTTTGAGTTGCTCAAGGTTCTTGGTCAGGGGTCATTTGAAAGGTTTTTCTTGTAGAAAAGAAGA  
 CCGGTCTGATGCTGGCAGCTCTATGCAATGAAGGTGTTAAAAAAGCCCTTTAAAAGTTCGAGACAG  
 AGTTCCGACAAAGATGGAGAGGGATATACTGGTGAAGTAAATCATCCATTTATTGTCAAATGCACTAT  
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 TATCCAAAGAGGTTCTGTTTACAGAGGAAGATGTGAAATTTCTACCTCGCAGAACTGGCCCTTGCTTTGGA  
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 CATATCAAATTAACAGATTTTGGACTCAGCAAGGAGTCAGTAGATCAAGAAAAGAAGGCTTACTCATTTT  
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 GTCATATGGTGTCTTATGTTTTGAAATGCTTACTGGTACTCTGCCATTTCAAGGTAAGACAGAAAATGAG  
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 TCTGTTTTTTGCAAAATTTGACTGGGATAAATTATATAAAGAGAAGTTCAACCTCCTTTCAAACCTGCT  
 TCTGGAAAACAGATGATACTTTTTGTTTTGATCCTGAATTTACTGCAAAAACACCTAAAGATTCTCCCG  
 GTTTGCCAGCCAGTGCAAAATGCTCATCAGCTCTTCAAAGGATTCAGCTTTGTTGCAACTTATTGCGCA  
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 CAATTTGGTGAAGTATATGAATTAAGGAGGATATTGGTGTGGCTCCTACTCTGTTTGAAGCGATGCA  
 TACATGCAACTACCAACATGGAATTTGCAAGTGAAGATCATTGACAAAAGTAAGCGAGACCCTTCAGAAGA  
 GATTGAAATATTGATGCGCTATGGACAACATCCCAACATTATTACTTTGAAGGATGTCTTTGATGATGGT  
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 GAAGAGATACTGCTGCGTATAGGCAATGGAAAATCTCTTTGAGTGGTGGAACTGGGACAATTTTCAG  
 ACGGAGCAAAGGATTTGCTTTCCCATATGCTTCATATGGACCCACATCAGCGGTACTGCTGAACAAAT  
 ATTAAGCACTCATGGATAACTCACAGAGACCAGTTGCCAAATGATCAGCCAAAGAGAAATGATGTGTCA  
 CATGTTGTTAAGGGAGCAATGGTTGCAACATACTCTGCCCTGACTCACAAGACCTTTCAACCAGTCTAG  
 AGCCTGTAGCTGCTTCAAGCTTAGCCCAGCGACGGAGCATGAAAAAGCGAACATCAACTGGCCTG

**ACGCGT**ACGCGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC211545 representing NM\_014496  
Red=Cloning site Green=Tags(s)

MLPFAPQDEPWREMEVFSGGGASSGEVNLKMWDEPMEEGEADSCHDEGVVKEIPITHHVKEGYEKADP  
 AQFELLKVLGQGSFGKVFLVRKKTGPDAGQLYAMKVLKKASLKVDRVVRTKMERDILVEVNHPFIVKLHY  
 AFQTEGKLYLILDFLRGGDVFTRL SKEVLFTEEDVKFYLAELALALDHLHQLGIVYRDLKPENILLDEIG  
 HIKLTD FGLSKESVDQEKKAYSFCGTVEYMAPEVVNRRGHSQSADWWSYGVLMFEMLTGTLPPFQGKDRNE  
 TMNMILKAKLGMPQFLSAEAQSLRLRMLFKRNPANRLGSEGV EIKRHLFFANIDWDKLYKREVQPPFKPA  
 SGKPD DTF CFPDPEFTAKTPKDSPLPASANAHQLFKGFSFVATSI AEEYKITPITSANVLPVQINGNAA  
 QFGEVYELKEDI GVSYSVCKRCIHATTNMEFAVKIIDKSKRDPSEEIEILMRYGQHPNIITLKDVFDDG  
 RYVYLVTDLMKGGELLDRLKQKCF SEREASDILYVISKTVDYLHCQGVVHRDLKPSNILYMDESASADS  
 IRI CD FGA KQLRG ENLLLTPCYTANFVAPEVLMQQGYDAACDIWSLGVLYTMLAGYTPFANGPNDTP  
 EEILLRIGNGKFSLSGGNWDNISDGAKDLLSHMLHMDPHQRYTAEQILKHSWITHRDQLPNDQPKRNDVS  
 HVVKGAMVATYSAL THKTFQPVLEPVAASSLAQRSMKKRTSTGL

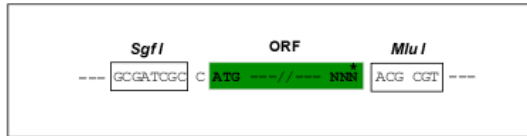
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6165\\_a04.zip](https://cdn.origene.com/chromatograms/mk6165_a04.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_014496

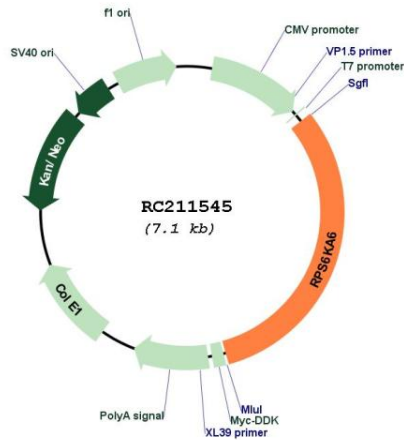
**ORF Size:** 2235 bp

**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](#)

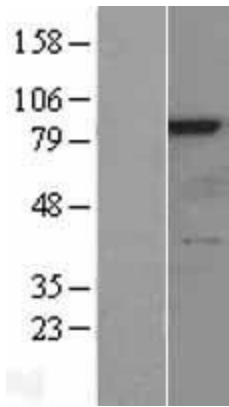
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_014496.5</a>
<b>RefSeq Size:</b>	2640 bp
<b>RefSeq ORF:</b>	2238 bp
<b>Locus ID:</b>	27330
<b>UniProt ID:</b>	<a href="#">Q9UK32</a>
<b>Cytogenetics:</b>	Xq21.1
<b>Domains:</b>	pkinase, S_TK_X, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Long-term potentiation, MAPK signaling pathway, mTOR signaling pathway, Neurotrophin signaling pathway, Oocyte meiosis, Progesterone-mediated oocyte maturation
<b>MW:</b>	83.7 kDa
<b>Gene Summary:</b>	This gene encodes a member of ribosomal S6 kinase family, serine-threonine protein kinases which are regulated by growth factors. The encoded protein may be distinct from other members of this family, however, as studies suggest it is not growth factor dependent and may not participate in the same signaling pathways. [provided by RefSeq, Jan 2010]

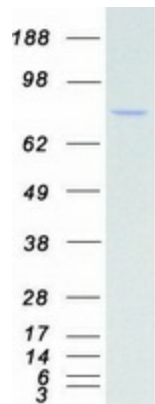
Product images:



Circular map for RC211545



Western blot validation of overexpression lysate (Cat# [LY402340]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211545 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RPS6KA6 protein (Cat# [TP311545]). The protein was produced from HEK293T cells transfected with RPS6KA6 cDNA clone (Cat# RC211545) using MegaTran 2.0 (Cat# [TT210002]).