

## Product datasheet for **RC205936**

### **RPS3 (NM\_001005) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RPS3 (NM\_001005) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RPS3  
**Synonyms:** S3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205936 representing NM\_001005  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGTGCAAATATCCAAGAAGAGGAAGTTTGTGCTGATGGCATCTCAAAGCTGAAGTGAATGAGT  
TTCTTACTCGGGAGCTGGCTGAAGATGGCTACTCTGGAGTTGAGGTGCGAGTTACACCAACCAGGACAGA  
AATCATTATCTTAGCCACCAGAACACAGAATGTTCTTGGTGAGAAGGGCCGGGATTGGGAAGTACTGACT  
GCTGTAGTTCAGAAGAGGTTTGGCTTCCAGAGGGCAGGTAGAGCTTTATGCTGAAAAGGTGGCCACTA  
GAGGTCTGTGTGCCATTGCCAGGCAGAGTCTCTGCGTTACAACTCCTAGGAGGGCTTGTGTGCGGAG  
GGCCTGCTATGGTGTGCTGCGGTTTCATCATGGAGAGTGGGGCCAAAGGCTGCGAGGTTGTGGTGTCTGGG  
AAACTCCGAGGACAGAGGGCTAAATCCATGAAGTTTGTGGATGGCCTGATGATCCACAGCGGAGACCCCTG  
TAACTACTACGTTGACTGCTGTGCGCCACGTGTTGCTCAGACAGGGTGTGCTGGGCATCAAGGTGAA  
GATCATGCTGCCCTGGGACCCAAGTAAAGATTGGCCCTAAGAAGCCCTGCCTGACCAGTGTGAGCATT  
GTGGAACCCAAAGATGAGATACTGCCACCACCCCATCTCAGAACAGAAGGGTGGGAAGCCAGAGCCGC  
CTGCCATGCCCCAGCCAGTCCCCACAGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC205936 representing NM\_001005  
 Red=Cloning site Green=Tags(s)

MAVQISKRRKRFVADGIFKAELNEFLTRELAEDGYSGVEVRVTPTRTEIIILATRTQNLGKGRRIRELT  
 AVVQKRFGFPEGSVELYAEKVATRGLCAIAQAESLRYKLLGGLAVRRACYGLVRFIMESGAKGCEVVVSG  
 KLRGQRAKSMKFVDGLMIHSGDPVNYVYDVAVRHVLLRQGVLGIKVKIMLPWDPTGKIGPKKPLPDHVS  
 IVEPKDEILPTTPISEQKGGKPEPPAMPQPVPTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

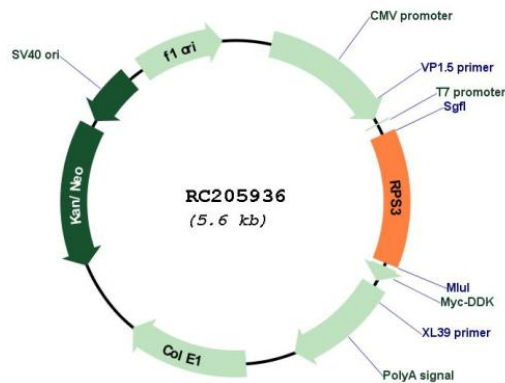
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1467\\_h01.zip](https://cdn.origene.com/chromatograms/ja1467_h01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



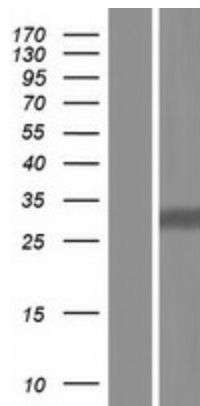
**ACCN:** NM\_001005

**ORF Size:** 729 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_001005.5</a>
<b>RefSeq Size:</b>	855 bp
<b>RefSeq ORF:</b>	732 bp
<b>Locus ID:</b>	6188
<b>UniProt ID:</b>	<a href="#">P23396</a>
<b>Cytogenetics:</b>	11q13.4
<b>Domains:</b>	Ribosomal_S3_C, KH
<b>Protein Pathways:</b>	Ribosome
<b>MW:</b>	26.5 kDa

**Gene Summary:**

Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit, where it forms part of the domain where translation is initiated. The protein belongs to the S3P family of ribosomal proteins. Studies of the mouse and rat proteins have demonstrated that the protein has an extraribosomal role as an endonuclease involved in the repair of UV-induced DNA damage. The protein appears to be located in both the cytoplasm and nucleus but not in the nucleolus. Higher levels of expression of this gene in colon adenocarcinomas and adenomatous polyps compared to adjacent normal colonic mucosa have been observed. This gene is co-transcribed with the small nucleolar RNA genes U15A and U15B, which are located in its first and fifth introns, respectively. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

**Product images:**

Western blot validation of overexpression lysate (Cat# [LY423944]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205936 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).