

## Product datasheet for **RC204917**

### RPL7A (NM\_000972) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RPL7A (NM_000972) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RPL7A
Synonyms:	L7A; SURF3; TRUP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204917 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCCCCAGCTGTCGTGAAGAAGCAGGAGG  
CTAAGAAAGTGGTGAATCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGCATTGGACAGGACATCCAGCC  
CAAAAGAGACCTCACCCGCTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGGCAGAGAGCCATCCTC  
TATAAGCGGCTGAAAGTGCTCCTGCGATTAACCAAGTTCACCCAGGCCCTGGACCGCCAAACAGCTACTC  
AGCTGCTTAAGCTGGCCACAAGTACAGACCAGAGACAAAAGAGAAGAAGCAGAGACTGTTGGCCCG  
GGCCGAGAAGAAGCTGCTGGCAAAGGGGACGTCCTCAACGAAGAGACCACCTGTCCTTCGAGCAGGAGTT  
AACACCGTCACCACTTGGTGGAGAACAAGAAAGCTCAGCTGGTGGTATTGCACACGACGTTGGATCCCA  
TCGAGCTGGTTGTCTTCTTGCCCTGTGTCGTAATAATGGGGTCCCTTACTGCATTATCAAGGGAAA  
GGCAAGACTGGGACGCTAGTCCACAGGAAGACCTGCACCACTGTCGCCTTCACACAGGTGAACTCGGAA  
GACAAAGGCGCTTTGGCTAAGCTGGTGGAAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCC  
GCCGCTACTGGGTGGCAATGTCCTGGTCCCTAAGTCTGTGGCTCGTATCGCCAAGCTCGAAAAGGCAAA  
GGCTAAAGAACTTGCCACTAACTGGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC204917 protein sequence  
 Red=Cloning site Green=Tags(s)

MPKGGKAKGKKVAPAPAVVKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRDLTRFVKWPRYIRLQRQRAIL  
 YKRLKVPPAINQFTQALDRQATATQLLKLAKYRPETKQEKQRLRLARA EKKAAGKGDVPTKRPPVLRAGV  
 NTVTTLVENKKAQLVVI AHDVDP IELVVFLPALCRKMGVPYCI IKGKARLGR LVHRKCTTVAFTQVNSE  
 DKGALAKLVEAIRTNYNDRYDEIRRHWGNNVLGPKSVARIAKLEKAKAKELATKLG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6427\\_c06.zip](https://cdn.origene.com/chromatograms/mk6427_c06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_000972

**ORF Size:** 798 bp

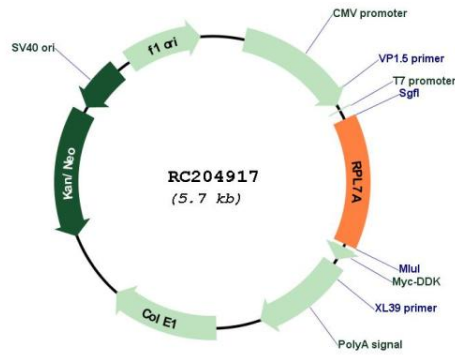
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

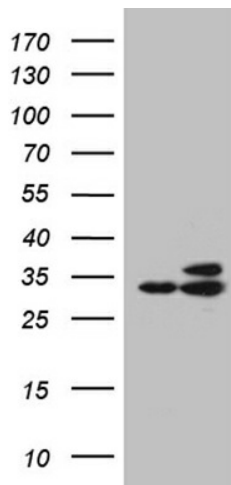
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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_000972.3</a>
<b>RefSeq Size:</b>	890 bp
<b>RefSeq ORF:</b>	801 bp
<b>Locus ID:</b>	6130
<b>UniProt ID:</b>	<a href="#">P62424</a>
<b>Cytogenetics:</b>	9q34.2
<b>Domains:</b>	Ribosomal_L7Ae
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Ribosome
<b>MW:</b>	30 kDa
<b>Gene Summary:</b>	<p>Cytoplasmic ribosomes, 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 60S subunit. The protein belongs to the L7AE family of ribosomal proteins. It can interact with a subclass of nuclear hormone receptors, including thyroid hormone receptor, and inhibit their ability to transactivate by preventing their binding to their DNA response elements. This gene is included in the surfeit gene cluster, a group of very tightly linked genes that do not share sequence similarity. It is co-transcribed with the U24, U36a, U36b, and U36c small nucleolar RNA genes, which are located in its second, fifth, fourth, and sixth introns, respectively. This gene rearranges with the trk proto-oncogene to form the chimeric oncogene trk-2h, which encodes an oncoprotein consisting of the N terminus of ribosomal protein L7a fused to the receptor tyrosine kinase domain of trk. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. [provided by RefSeq, Jul 2008]</p>

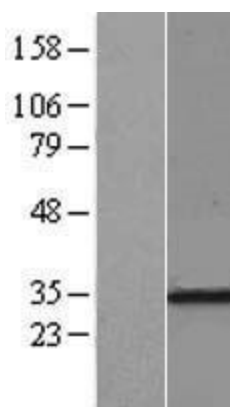
Product images:



Circular map for RC204917



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RPL7A (Cat# RC204917, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RPL7A (Cat# [TA811795])(1:2000). Positive lysates [LY424419] (100ug) and [LC424419] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424419]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204917 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).