

Product datasheet for **RG204917**

RPL7A (NM_000972) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPL7A (NM_000972) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RPL7A
Synonyms:	L7A; SURF3; TRUP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204917 representing NM_000972 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAAAGGAAAGAAGGCCAAGGAAAGAAGGTGGCTCCGGCCCCAGCTGTCGTGAAGAAGCAGGAGG
CTAAGAAAGTGGTGAATCCCTGTTTGAGAAAAGGCCTAAGAATTTGGCATTGGACAGGACATCCAGCC
CAAAAGAGACCTCACCCGCTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGGCAGAGAGCCATCCTC
TATAAGCGGCTGAAAGTGCTCCTGCGATTAACCAGTTACCCAGGCCCTGGACCGCCAAACAGCTACTC
AGCTGCTTAAGCTGGCCACAAGTACAGACCAGAGACAAAGCAAGAGAAGAAGCAGAGACTGTTGGCCCG
GGCCGAGAAGAAGCTGCTGGCAAAGGGGACGTCCCAACGAAGAGACCACCTGTCCTTCGAGCAGGAGTT
AACACCGTCACCACTTGGTGGAGAACAAGAAAGCTCAGCTGGTGGTATTGCACACGACGTGGATCCCA
TCGAGCTGGTTGTCTTCTTGCCCTGTGTCGTAATAATGGGGTCCCTTACTGCATTATCAAGGGAAA
GGCAAGACTGGGACGTCTAGTCCACAGGAAGACCTGCACCACTGTCGCCTTCACACAGGTGAACTCGGAA
GACAAAGCGCTTTGGCTAAGCTGGTGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCC
GCCGCTACTGGGTGGCAATGTCCTGGTCTAAGTCTGGCTCGTATCGCCAAGCTCGAAAAGGCAAA
GGCTAAAGAACTTGCCACTAACTGGGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204917 representing NM_000972
 Red=Cloning site Green=Tags(s)

MPKGKKAKGKKVAPAPAVVKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRDLTRFVKWPRYIRLQRQRAIL
 YKRLKVPPAINQFTQALDRQATATQLLKLAKHYRPETKQEKQRLARA EKKAAGKGDVPTKRPPVLRAGV
 NTVTTLVENKKAQLVVI AHDVDP IELVVFLPALCRKMGVPYCI IKGKARLGR LVHRKTCTTVAFTQVNSE
 DKGALAKLVEAIRTNYNDRYDEIRRHWGNNVLPKSVARIAKLEKAKAKELATKLG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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_000972.3](#)

RefSeq Size: 890 bp

RefSeq ORF: 801 bp

Locus ID: 6130

UniProt ID: [P62424](#)

Cytogenetics: 9q34.2

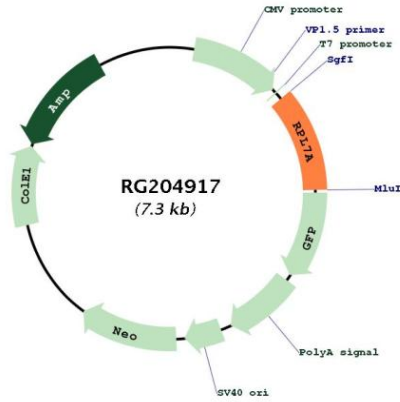
Domains: Ribosomal_L7Ae

Protein Families: Druggable Genome

Protein Pathways: Ribosome

Gene Summary: 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]

Product images:



Circular map for RG204917