

Product datasheet for **RG204352**

RPUSD4 (NM_032795) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	RPUSD4
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PSI00010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG204352 representing NM_032795
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGCCAGGTGGAGCGCTCGGGCCCTGGATCCGGGAAACGGCCAAGTTGCGGGAGTCTCT
TCACTCTCGTCTCAAAGCCATTTGTGCCGCTGCCGCTGCTACGGCCATAATGCCAGAGATTAGC
GGAGAAGCTCCGAGCCAGAAACGGGAACAAGACACAAAGAAGGAGCCGGTGTCCACAAACGCTGTTTCA
CGGAGAGTGAAGAAATAGTGCAGTTCACACGGCAGCTGCAGCGAGTCCACCCCAACGTGCTTGCTAAGG
CACTGACCCGAGGAATTCACACAGGACAAGAACCTTGTGGTTCATCAATAAGCCCTACGGTCTCCCTGT
GCATGGTGGCCCTGGGTCCAGCTCTGCATCACTGATGTACTACCTATCCTGGCAAAGATGCTTCATGGC
CACAAGGCAGAGCCCTTGCATCTGTGCCACCGGCTGGACAAGGAACACAGGTGTAATGGTGTGGCTT
GGGACAAGGACATGGCACATCAAGTCCAAGAGTTGTTTGAACCCGTGAGGTGGTGAAGAAGTACTGGGC
CATCACTGTGCATGTCCCATGCCCTCAGCAGGAGTCGTGGACATCCCATTTGTGGAGAAGGAGGCGCAA
GGCCAGCAGCAACACCACAAGATGACATTGTCCCGAGCTACCGCATGGACGATGGGAAAAATGGTGAAAG
TGCGGCGCAGCCGAATGCGCAAGTTGCTGTAACCTCAGTACCAGGTGCTCAGCAGCACTCTCTCCCTCCGC
CCTCGTGGAGCTCCAGCCATCACTGGAATAAAACATCAGCTTCGAGTTCACTTGTCTTTTGATTGGAT
TGTCGAATCCTTGGTGATCACAAGTACTCAGACTGGAATAGGTTGGCCCCCAGAAGCTGTCTGTGGCA
CCCTGAAGAAGCTGGGCTAGAACAGTGAAGGCCGCTACATCCCCCTTCACTGCACGCCCGGCAGCT
GATCCTGCCTGCCCTGGGTCCGGGAAGGAGGAACCTCACTTGGTCTGCAAACTTCTCGCTTCTTTGTG
CATTCCCTGCACCGCTGCGTTTAGAGATGCCAAATGAGGATCAAAATGAGAACAAATGAAGCCAAGTGT
TGGGAGCACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



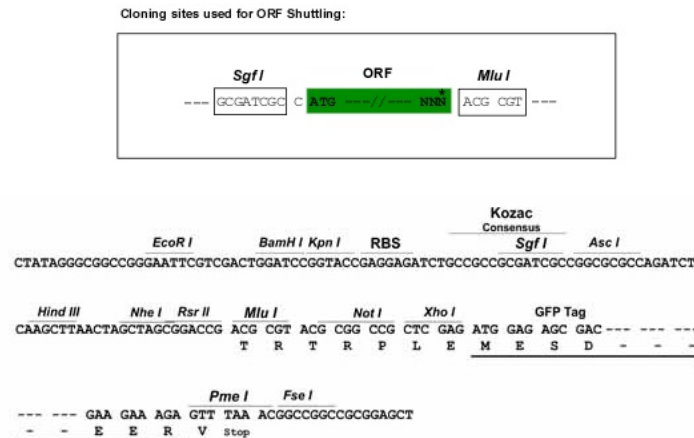
Protein Sequence: >RG204352 representing NM_032795
Red=Cloning site Green=Tags(s)

MAAPRWSASGPWIRNGQCGSLFTLVSKPFCAAAAASTAINAQRLAEKLRAQKREQDTKKEPVSTNAVQ
RRVQEIVRFTRQLQRVHPNVLAKALTRGILHQDKNLVVINKPYGLPVHGGPGVQLCITDVLPIAKMLHG
HKAEPHLCHRLDKETTGVMVLAWDKDMAHQVQELFTRQVVKYWAITVHVPMPASAGVVDIPIVEKAQ
GQQQHHKMTLSPSYRMDGKMKVRRSRNAQVAVTQYQVLSSTLSSALVELQPITGIKHQLRVHLSFGLD
CPILGDHKYSDWNRLAPQKLSVGTLLKGLQSKARYIPLHLHARQLILPALGSGKEELNLVCKLPRFFV
HSLHRLRLEMPNEDQNNENNAKCLGAQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032795

ORF Size: 1131 bp

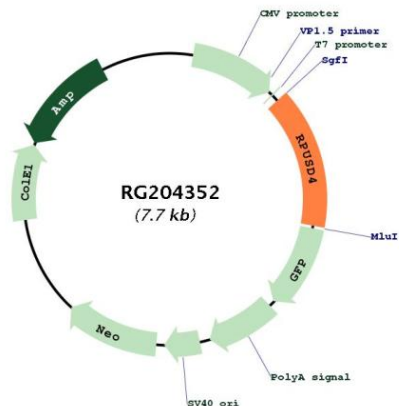
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_032795.3
RefSeq Size:	2146 bp
RefSeq ORF:	1134 bp
Locus ID:	84881
UniProt ID:	Q96CM3
Cytogenetics:	11q24.2
Domains:	PseudoU_synth_2
Gene Summary:	Catalyzes uridine to pseudouridine isomerization (pseudouridylation) of different mitochondrial RNA substrates. Acts on position 1397 in 16S mitochondrial ribosomal RNA (16S mt-rRNA). This modification is required for the assembly of 16S mt-rRNA into a functional mitochondrial ribosome (PubMed:27974379). Acts on position 39 in mitochondrial tRNA(Phe) (PubMed:28082677). As a component of a functional protein-RNA module, consisting of RCC1L, NGRN, RPUSD3, RPUSD4, TRUB2, FASTKD2 and 16S mt-rRNA, controls 16S mt-rRNA abundance and is required for intra-mitochondrial translation (PubMed:27667664).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG204352