

# Product datasheet for RG200861

## MRPL4 (NM 146388) Human Tagged ORF Clone

### **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** MRPL4 (NM\_146388) Human Tagged ORF Clone

Tag: **TurboGFP** Symbol: MRPL4

Synonyms: CGI-28; L4mt **Mammalian Cell** 

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

**ORF Nucleotide** >RG200861 representing NM\_146388

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCTGCAGTTCGTCCGGGCCGGGCCCGGGCCTGGCTTCGGCCTACCGGCAGCCAGGGCCTGAGTTCCC GCTGCGCAAAGTCGAGCTCCCGGTACCCACTCATCGACGCCCAGTGCAGGCCTGGGTCGAGTCCTTGCGG GGCTTCGAGCAGGAGCGCGTGGGCCTGGCCGACCTGCACCCCGATGTTTTCGCCACCGCGCCCAGGCTGG ACATACTGCACCAGGTTGCTATGTGGCAGAAGAACTTCAAGAGAATTAGCTATGCCAAGACCAAGACGAG ATCCGCTCTCCGCTCTGGCGAGGAGGAGGTGTTGCCCATGGCCCCCGGGGCCCCACAAGTTACTACTACA TGCTGCCCATGAAGGTGCGGGCGCTGGGTCTCAAAGTGGCACTGACCGTCAAGCTGGCCCAGGACGACCT GCACATCATGGACTCCCTAGAGCTGCCCACCGGAGACCCACAGTACCTGACAGAGCTGGCGCACTACCGC CGCTGGGGGGACTCCGTACTCCTCGTGGACTTAACACACGAGGAGATGCCACAGAGCATCGTGGAGGCCA CCTCTAGGCTTAAGACCTTCAACTTGATCCCGGCTGTTGGTGAGCAAAGAGCCCAGGCCCCTAGAGTGCG

CATGTGCAGGCTCCGCTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

Protein Sequence: >RG200861 representing NM\_146388

Red=Cloning site Green=Tags(s)

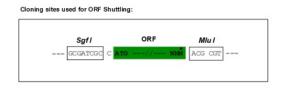
MLQFVRAGARAWLRPTGSQGLSSLAEEAARATENPEQVASEGLPEPVLRKVELPVPTHRRPVQAWVESLR GFEQERVGLADLHPDVFATAPRLDILHQVAMWQKNFKRISYAKTKTRAEVRGGGRKPWPQKGTGRARHGS IRSPLWRGGGVAHGPRGPTSYYYMLPMKVRALGLKVALTVKLAQDDLHIMDSLELPTGDPQYLTELAHYR RWGDSVLLVDLTHEEMPQSIVEATSRLKTFNLIPAVGEQRAQAPRVRMCRLRC

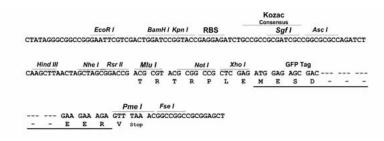
TRTRPLE - GFP Tag - V

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 





**ACCN:** NM\_146388

ORF Size: 789 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:** <u>NM 146388.2</u>

 RefSeq Size:
 2404 bp

 RefSeq ORF:
 792 bp

 Locus ID:
 51073

 UniProt ID:
 Q9BYD3

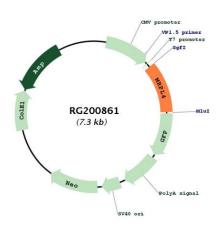
 Cytogenetics:
 19p13.2

**Domains:** Ribosomal L4

**Gene Summary:** 

Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 39S subunit protein. Sequence analysis identified alternatively spliced variants that encode different protein isoforms. [provided by RefSeq, Jul 2008]

# **Product images:**



Circular map for RG200861