

# **Product datasheet for RG223293**

## MRPL55 (NM 181456) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** MRPL55 (NM\_181456) Human Tagged ORF Clone

Tag: TurboGFP Symbol: MRPL55

Synonyms: AAVG5835; L55nt; MRP-L55; PRO19675

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG223293 representing NM\_181456

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

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GCGCTACCGACAGTTCTGGACCAGGACCAAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223293 representing NM\_181456

Red=Cloning site Green=Tags(s)

MAAVGSLLGRLRQSTVKATGPALRRLHTSSWRADSSRASLTRVHRQAYARLYPVLLVKQDGSTIHIRYRE

 ${\tt PRRMLAMPIDLDTLSPEERRARLRKREAQLQSRKEYEQELSDDLHVERYRQFWTRTKK}$ 

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



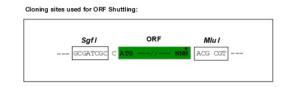
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

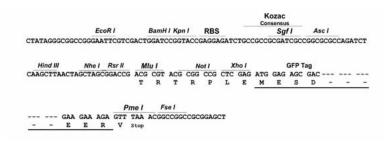
CN: techsupport@origene.cn

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

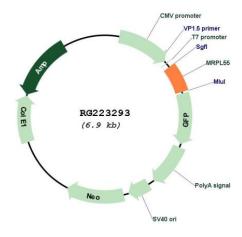


#### **Cloning Scheme:**





### Plasmid Map:



**ACCN:** NM\_181456

ORF Size: 384 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



#### MRPL55 (NM\_181456) Human Tagged ORF Clone - RG223293

**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 181456.2</u>, <u>NP 852121.1</u>

 RefSeq Size:
 745 bp

 RefSeq ORF:
 387 bp

 Locus ID:
 128308

 UniProt ID:
 Q7Z7F7

 Cytogenetics:
 1q42.13

**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. Multiple transcript variants encoding two different isoforms were identified through sequence

analysis. [provided by RefSeq, Jul 2008]