

## **Product datasheet for RC219175L3**

### OriGene Technologies, Inc.

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# MRPL42 (NM\_014050) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: MRPL42 (NM\_014050) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: MRPL42

**Synonyms:** HSPC204; L31MT; L42MT; MRP-L31; MRP-L42; MRP-S32; MRPL31; MRPS32; PTD007; RPML31;

S32MT

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

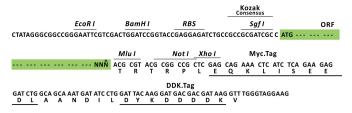
The ORF insert of this clone is exactly the same as(RC219175).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

ACCN: NM 014050

ORF Size: 426 bp





#### MRPL42 (NM\_014050) Human Tagged Lenti ORF Clone - RC219175L3

**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 014050.2</u>

 RefSeq Size:
 3139 bp

 RefSeq ORF:
 429 bp

 Locus ID:
 28977

 UniProt ID:
 Q9Y6G3

Cytogenetics: 12q22

**MW:** 16.7 kDa

**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 protein identified as belonging to both the 28S and the 39S subunits. Alternative splicing results in multiple transcript variants. Pseudogenes corresponding to this gene are found on chromosomes 4q,

6p, 6q, 7p, and 15q. [provided by RefSeq, May 2011]