

# **Product datasheet for RC236708**

## MRPS34 (NM 001300900) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** MRPS34 (NM\_001300900) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: MRPS34

Synonyms: COXPD32; MRP-S12; MRP-S34; MRPS12

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236708 representing NM\_001300900
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



**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: >RC236708 representing NM\_001300900

Red=Cloning site Green=Tags(s)

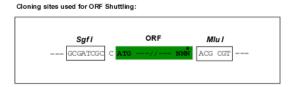
MARKKVRPRLIAELARRVRALREQLNRPRDSQLYAVDYETLTRPFSGRRLPVRAWADVRRESRLLQLLGR LPLFGLGRLVTRKSWLWQHDEPCYWRLTRVRPDYTAQNLDHGKAWGILTFKDASFSSSGKTESEAREIEH VMYHDWRLVPKHEEEAFTAFTPAPEDSLASVPYPPLLRAMIIAERQKNGDTSTEEPMLNVQRIRMEPWDY PAKQEDKGRAKGTPV

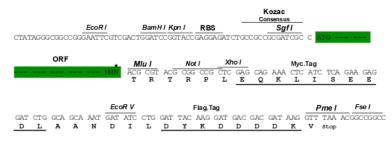
#### TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

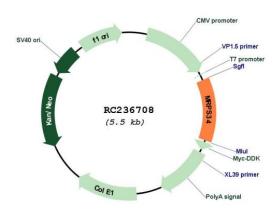
**Cloning Scheme:** 





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

#### Plasmid Map:



**ACCN:** NM\_001300900

ORF Size: 675 bp



#### MRPS34 (NM\_001300900) Human Tagged ORF Clone - RC236708

**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 001300900.2</u>

 RefSeq Size:
 1041 bp

 RefSeq ORF:
 678 bp

 Locus ID:
 65993

 UniProt ID:
 P82930

 Cytogenetics:
 16p13.3

**MW:** 26.8 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 28S subunit protein. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]