

Product datasheet for RC203424L3

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OriGene Technologies, Inc.

MRPS22 (NM_020191) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MRPS22 (NM_020191) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: MRPS22

Synonyms: C3orf5; COXPD5; GIBT; GK002; MRP-S22; ODG7; RPMS22

Mammalian Cell Puromycin

Selection:

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(RC203424).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_020191

ORF Size: 1080 bp





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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 020191.2</u>

 RefSeq Size:
 1155 bp

 RefSeq ORF:
 1083 bp

 Locus ID:
 56945

 UniProt ID:
 P82650

 Cytogenetics:
 3q23

MW: 41.3 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 that does not seem to have a counterpart in prokaryotic and fungal-mitochondrial ribosomes. This gene lies telomeric of and is transcribed in the opposite direction from the forkhead box L2 gene. A pseudogene corresponding to this gene is found on chromosome Xq. [provided by

RefSeq, Jul 2008]