

Product datasheet for RC235711

OriGene Technologies, Inc.

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MRPS18C (NM_001297767) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MRPS18C (NM_001297767) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: MRPS18C

Synonyms: CGI-134; MRP-S18-1; MRP-S18-c; MRPS18-1; mrps18-c; S18mt-c

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

Cell Selection: Neomycin

ORF Nucleotide >RC235711 representing NM_001297767
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TTACATACAAGGATCCTGCATATCTCAAGGACCCTAAAGTTTGTAACATCAGATATCGGGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC235711 representing NM_001297767

Red=Cloning site Green=Tags(s)

MAAVVAVCGGLGRKKLTHLVTAAVSLTHPGTHTVLWRRGCSQQVSSNEDLLLSQFVSPFTGCIYGRHITG

LCGKKQKEITKAIKRAQIMGFMPVTYKDPAYLKDPKVCNIRYRE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

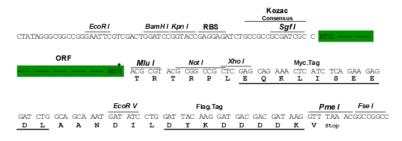
Restriction Sites: Sgfl-Mlul





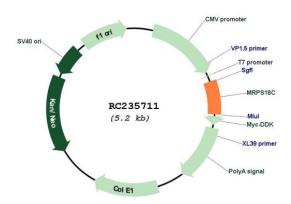
Cloning Scheme:





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

Plasmid Map:



ACCN: NM_001297767

ORF Size: 342 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



MRPS18C (NM_001297767) Human Tagged ORF Clone - RC235711

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 001297767.1</u>, <u>NP 001284696.1</u>

RefSeq Size: 1017 bp
RefSeq ORF: 345 bp
Locus ID: 51023
Cytogenetics: 4q21.23
MW: 13 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 belongs to the ribosomal protein S18P family. The encoded protein is one of three that has significant sequence similarity to bacterial S18 proteins. The primary sequences of the three human mitochondrial S18 proteins are no more closely related to each other than they are to the prokaryotic S18 proteins. Pseudogenes corresponding to this gene are found on

chromosomes 8p, 12p, 15q, and 22q. [provided by RefSeq, Jul 2008]