

Product datasheet for SC310669

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MRPS18C (NM_016067) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: MRPS18C (NM_016067) Human Untagged Clone

Tag: Tag Free
Symbol: MRPS18C

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

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_016067 edited

Restriction Sites: Please inquire **ACCN:** NM_016067

Insert Size: 700 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: The ORF of this clone has been fully sequenced and found to be a perfect match to

NM 016067.1.



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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 016067.1</u>, <u>NP 057151.1</u>

 RefSeq Size:
 1014 bp

 RefSeq ORF:
 429 bp

 Locus ID:
 51023

 UniProt ID:
 Q9Y3D5

 Cytogenetics:
 4q21.23

Domains: Ribosomal_S18

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest

isoform (1).