

Product datasheet for SC321128

MRPL21 (NM 181515) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: MRPL21 (NM_181515) Human Untagged Clone

Tag: Tag Free Symbol: MRPL21

Synonyms: L21mt; MRP-L21

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >OriGene sequence for NM_181515.1

AAAAAAAAAAAAAAA

Restriction Sites: Please inquire **ACCN:** NM 181515

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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



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MRPL21 (NM_181515) Human Untagged Clone - SC321128

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 181515.1</u>, <u>NP 852616.1</u>

 RefSeq Size:
 726 bp

 RefSeq ORF:
 363 bp

 Locus ID:
 219927

 UniProt ID:
 Q7Z2W9

 Cytogenetics:
 11q13.3

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 39S subunit protein. Multiple transcript variants encoding different isoforms were identified through sequence analysis although some may be subject to nonsense-mediated decay (NMD). [provided by

RefSeq, Jul 2008]

Transcript Variant: This variant (1) uses a different splice site in the 5' end, compared to variant 4, that likely leads to the use of a downstream start codon. The predicted protein (isoform a) is shorter than isoform d. The predicted ORF of this transcript has not been

experimentally confirmed.