

## **Product datasheet for SC124960**

## MRPL43 (NM 176792) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** MRPL43 (NM\_176792) Human Untagged Clone

Tag: Tag Free Symbol: MRPL43

**Synonyms:** bMRP36a; L43mt; MRP-L43

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_176792, the custom clone sequence may differ by one or more

nucleotides

ATGACGGCGCGGGACTCCGAGCCGCTTCTTGGCCAGCGTTCTCCACAACGGACTGGGTCGCTATGTGC
AGCAGCTGCAGCGTCTGAGCTTCAGCGTCAGCCGCGACGGCGCCCTCGTCTCGCGGCCCCAGGGAGTTCGT
GGAGCGGAGGTGATCGACTTCGCCCGACGGAATCCAGGGGTCGTAATATATGTAAACTCGCGTCCGTGC
TGCGTGCCCAGAGTAGTGGCCGAATACCTTAACGGGGCTGTGCGCGAGGAGGAGCATCCACTGCAAGTCGG
TCGAGGAGATCTCGACGCTGGTGCAGAAGCTGGCCGACCAGTCGGGCTTGGACGTGATCCGCATCCGCAA
GCCCTTCCACACCGACAACCCTAGCATCCAGGGCCAGTGGCACCCCTTCACCAACAAGCCGACCACGTTC
CGCGGGCTACGCCCCGAGAGGTTCAGGATCCTGCCCCAGCCCAGGACACTGGCCTGAGACTGTCTGCAG
TTGCACCGCAGATCCTCCTGCCCCGGCTGGCCCCACCAGACCTCCCCCACAGTGGATCCTATCTCATC
CTCATTGACCTCTGCTCCAGCCCCTATGCTGCCCCACAGTTTCTCCCCGCATTGTCCCTGCACTGACC

ACTGTGTGCTCAGCGTGA



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5' Read Nucleotide Sequence: >OriGene 5' read for NM\_176792 unedited

ACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGCTGCTTAGGCTCCGCGGCCT CCAAGCTGTAGCTATGACGGCGCGCGGGACTCCGAGCCGCTTCTTGGCCAGCGTTCTCCA CAACGGACTGGGTCGCTATGTGCAGCAGCTGCAGCGTCTGAGCTTCAGCGTCAGCCGCGA CGGCGCCTCGTCTCGCGGCGCCAGGGAGTTCGTGGAGCGGGAGGTGATCGACTTCGCCCG ACGGAATCCAGGGGTCGTAATATATGTAAACTCGCGTCCGTGCTGCGTGCCCAGAGTAGT GATCTCGACGCTGGTGCAGAAGCTGGCCGACCAGTCGGGCTTGGACGTGATCCGCATCCG CAAGCCCTTCCACACCGACAACCCTAGCATCCAGGGCCAGTGGCACCCCTTCACCAACAA GCCGACCACGTTCCGCGGGCTACGCCCCGAGAGGTTCAGGATCCTGCCCCAGCCCAGGT GCAAGCACAGTGAAGAGTTGCCCCACCAACTGCAGCCCCAGGCTTTGGACTGTTACTCCG GTAAAGGTGGTTCTTCCCCTTTGGGATTCCAAGCCCCAGCAAATGGAACCCATCAATGGG TTCTGGNGGCAGTGACCCTTGTGACCACTCATTTTATGCAAGTGGCATCCNCTAAACCTG AGAGAGGAAGACTNCAAGGGTNTACAGGACCCTTGNTTTTAAATCCANNATGATATATGA TCTCAAACACAGTGAGAGGTCTGAAGGCTNGGCTCTGAGATNCCCTGATGTCTAGGNAAC ACCACTGAGCTACGANACTCTGCTGTGATGGCTAGCACTTNATATCTGGTGATACAGATA

Restriction Sites: Notl-Notl
ACCN: NM\_176792
Insert Size: 1120 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).

**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.

TAA

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 176792.1</u>, <u>NP 789762.1</u>

 RefSeq Size:
 2188 bp

 RefSeq ORF:
 648 bp

 Locus ID:
 84545

 UniProt ID:
 Q8N983

 Cytogenetics:
 10q24.31



## **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. This gene and the gene for a semaphorin class 4 protein (SEMA4G) overlap at map location 10q24.31 and are transcribed in opposite directions. Sequence analysis identified multiple transcript variants encoding at least four different protein isoforms. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) differs in the 3' UTR and has multiple coding region differences, compared to variant 1. This results in a longer isoform (b) with a distinct C-terminus compared to isoform a. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.