**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for SC114252

## MRPL51 (NM_016497) Human Untagged Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | MRPL51 (NM_016497) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | MRPL51 |
| **Synonyms:** | bMRP64; CDA09; HSPC241; MRP64 |
| **Mammalian Cell Selection:** | None |
| **Vector:** | pCMV6-XL5 |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |
| **Fully Sequenced ORF:** | >OriGene ORF within SC114252 sequence for NM_016497 edited (data generated by NextGen Sequencing) |

```
ATGGCAGGGAACCTCTTATCCGGGGCAGGTAGGCGCCTGTGGGACTGGGTGCCTCTGGCG
TGCAGAAGCTTCTCTCTTGGTGTGCCTAGATTGATCGGTATAAGGCTCACTCTCCCGCCC
CCCAAAGTGGTTGATCGTTGGAACGAGAAAAGGGCCATGTTCGGAGTGTATGACAACATC
GGGATCCTGGGAAACTTTGAAAAGCACCCCAAAGAACTGATCAGGGGGCCCATATGGCTT
CGAGGTTGGAAAGGGAATGAATTGCAACGTTGTATCCGAAAGAGGAAAATGGTTGGAAGT
AGAATGTTCGCTGATGACCTGCACAACCTTAATAAACGCATCCGCTATCTCTACAAACAC
TTTAACCGACATGGGAAGTTTCGATAG

Clone variation with respect to NM_016497.3
```



View online »

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM_016497 unedited
TGTACTACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCAAGATGGCTGTCTT
CGCCTTAGTACTCGTGTGAAGTTGGCGGGGACGGTTCCTGTCATCTTCTTGGGCTTATTT
GGTGTGCTGTTGAAGGGGGGAGACTAGAGAAATGGCAGGGAACCTCTTATCCGGGGCAGG
TAGGCGCCTGTGGGACTGGGTGCCTCTGGCGTGCAGAAGCTTCTCTCTTGGTGTGCCTAG
ATTGATCGGTATAAGGCTCACTCTCCCGCCCCCCAAAGTGGTTGATCGTTGGAACGAGAA
AAGGGCCATGTTCGGAGTGTATGACAACATCGGGATCCTGGGAAACTTTGAAAAGCACCC
CAAAGAACTGATCAGGGGGCCCATATGGCTTCGAGGTTGGAAAGGGAATGAATTGCAACG
TTGTATCCGAAAGAGGAAAATGGTTGGAAGTAGAATGTTCGCTGATGACCTGCACAACCT
TAATAAACGCATCCGCTATCTCTACAAACACTTTAACCGACATGGGAAGTTTCGATAGAA
GAGAAAGCTGAGAACTTCGGAAAAGGCTCATCTGTCACCCTGGAGAAGGGAAACTGTACT
TTTCCCTGTGAGGAAACGGCTTTGTATTTTCTCTGCTATAAAATGGCGCTTCTTTGGAAA
AAAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCGTTCATAGCTGTTTCCCTGACAGA
TCCCGGNTGGCATCCCTGTGACCCCTCCCAGTGCCTCTCCTGCCCTNGAAGTTGCCACTC
CAGTGCCCACCACCCTTGTCCTAATAAAATTAAGTGCATCATTTTGTCTGACTAGCGTCC
TTCTATATATATGGGTGAGGGGGGGGGTTTGTGACAAGGGCCTACTTTCAACACACCCTT
CGCCCCCGCCGTCATCTGCCCCTTATCGCCCTG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM_016497 unedited
GAACATAAGCTGCCCTTGAGTGNNCAGTTAAAATCTTTTTTTTTTTCCAAAAAAGCCCCTT
TTTATTACAGAGTTTATACAAAGCCGTTTCCTCACAGGGAAAAGTACAGTTTCCCTTCTC
CAGGGTGACAGATGAGCCTTTTCCGAAGTTCTCAGCTTTCTCTTCTATCGAAACTTCCCA
TGTCGGTTAAAGTGTTTGTAGAGATAGCGGTTGCTTTTATTAAGGTTGTGCAGGTCATCA
GCGAACATTCTACTTCCAACCATTTTCCTCTTTCGGATACAACGTTGCAATTCATTCCCT
TTCCAACCTCGAAGCCATATGGGCCCCCTGATCAGTTCTTTGGGGTGCTTTTCAAAGTTT
CCCAGGATCCCGATGTTGTCATACACTCCGAACATGGCCCTTTTCTCGTTCCAACGATCA
ACCACTTTGGGGGGCGGGAGAGTGAGCCTTATACCGATCAATCTAGGCACACCAAGAGAG
AAGCTTCTGCACGCCAGAGGCACCCAGTCCCACAGGCGCCTACCTGCCCCGGATAAGAGG
TTCCCTGCCATTTCTCTAGTCTCCCCCCTTCAACAGCACACCAAATAAGCCCAAGAAGAT
GACAGGAACCGTCCCCGCCAACTTCACACGAGTACTAAGGCGAAGACAGCCATCTTGGCC
TCGTGCCGAATTCGCGGCCGCCCTATAGTGAGTCGTATTACAAAATTCTGACGGTTCACT
AAACGAGCTCTGCTTATATAGACCTCCCACCGTACACGCCTACCGCCCATTTGCGTCAAC
GGGGCGGNGTTATTACGACATTNTGGAAAGCCCGTTGATTTTGTGCCAANACAAACTCCA
TTGACGCAATGGNGTGGAGACTTGGAATCCCCTGAGTCAACCGTATCCCGCCATGGTTGA
CTGCCAAACGCATACATGG

**Restriction Sites:** NotI-NotI

**ACCN:** NM_016497

**Insert Size:** 610 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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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:** | NM_016497.2, NP_057581.2 |
| **RefSeq Size:** | 676 bp |
| **RefSeq ORF:** | 387 bp |
| **Locus ID:** | 51258 |
| **UniProt ID:** | Q4U2R6 |
| **Cytogenetics:** | 12p13.31 |
| **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. Pseudogenes corresponding to this gene are found on chromosomes 4p and 21q. [provided by RefSeq, Jul 2008] |