

Product datasheet for **SC114521**

MRPL48 (NM_016055) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRPL48 (NM_016055) Human Untagged Clone
Tag:	Tag Free
Symbol:	MRPL48
Synonyms:	CGI-118; HSPC290; L48MT; MRP-L48
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC114521 sequence for NM_016055 edited (data generated by NextGen Sequencing)

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ATGAGCGGAACCTTGAAAAGGTGCTGTGCCTGAGGAACAATACCATTTTAAAGCAAGCC
TTTTCTCTCTTAAGGTTTAGAAGCTTCAGGAGAGAAGCCCATCTATTCTGTAGGTGGAATT
CTACTAAGTATCAGTCGGCCCTACAAGACAAAGCCACCCACGGCATTGGAAAGTACAAG
CACTTAATTAAGCAGAAGAGCCCAAGAAGAAGGGAAAAGTGGAAAGTGAAGCCATT
AATTTGGGACAGATTATGAATATGGGGTTTTAAATATTCATCTGACTGCATATGATATG
ACCCTGGCAGAGATTATGCCAGTATGTTCAACCTCTGCAACTCTCTCCATTAA
GTCGAGGAAAGTTATGCAATGCCAACCAAAACCATAGAAGTGTTCAGTTGCAGGACCAA
GGCAGCAAAATGCTCCTGGACTCAGTGCTTACCACCCATGAGCGAGTGGTTCAGATCAGC
GGTTTGAGTGCTACGTTTGCAGAAATTTCTTGAAATAATCCAAGCAGTCTTCCTGAA
GGAGTCAGACTGTCAAGTGAAGGAGCAGACTGAAGAAGACTTCAAGGGACGATTCAAAGCT
CGACCAGAACTGGAAGAACTGTTGGCCAAGTTGAAGTAG
```

Clone variation with respect to NM_016055.5



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_016055 unedited
 AATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGTTTTTCAGACGCCCTGGGA
 ACGCGGCTGCAGGGTCCGGTCTTCGGTTTGCACAGCTAGAGGCCGCGCAGCAGCAAAGGA
 TGAGCGGAACCTTGAAAAGGTGCTGTGCCTGAGGAACAATACCATTTTTAAGCAAGCCT
 TTTCTCTCTTAAGGTTTGAAGTTCAGGAGAGAAGCCCATCTATTCTGTAGGTGGAATTC
 TACTAAGTATCAGTCGGCCCTACAAGACAAAGCCACCCACGGCATTGAAAAGTACAAGC
 ACTTAATTAAGCAGAAGAGCCCAAGAAGAAGAAGGAAAAGTGAAGTGAGAGCCATTA
 ATTTGGGGACAGATTATGAATATGGGGTTTTAAATATTCTGACTGCATATGATATGA
 CCCTGGCAGAGAGTTATGCCCAGTATGTTCAACCTCTGCAACTCTCTCCATTAAG
 TCGAGGAAAGTTATGCAATGCCAACCAAAACCATAGAAGTGTTCAGTTGCAGGACCAAG
 GCAGCAAATGCTCCTGGACTCAGTGCTTACCACCCATGAGCGAGTGGTTCAGATCAGCG
 GTTTGAGTGCTACGTTTGCAGAAATTTTCTTGAAATAATCCAAAGCAGTCTTCTGAAG
 GAGTCAGACTGTCAGTGAAGGAGCACACTGAAGAAGACTTCAAGGGACGATTCANAGCTC
 GACCAGAACTGGAAGAACTGTTGGCCAAGTTGAAGTAGCTACTGGTAGACCCTTTCATGC
 CAGCAGTGGTCATATTNGAGTGCCAAGAGAAGAGCTACTGGGTAGTTAGAGTTATCAGGA
 AACCCGACCCCTAATTTTCATAGTACCATTCCATAGCAGNATGTCTACTCTCTGTGGCTG
 GCTGTAAGTGCATTNCTACCACTACTATGAGGGAGGCTNGGTATCTCCAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_016055 unedited
 GTCCGCGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTCTGCAGCAGATT
 TTATTAGATGGAAGATAACAAGCATTACCTCATAGGTAAGTGGTAAGAAATGGCAAGTAC
 AGCCAAGCCACACTAGAGTGAGGACATTACTGGCTATGGGAATGGGTACTTATGAAATCT
 AAGGGTCGGGTTTCTGTGAAGTCTAACTACCCAGTAAAGCCTCTTCTTTGGCACT
 CAATATGACCACTGCTGGCATGAAAGGGTCTACAGTAGCTACTTCAACTTGGCCAACAGT
 TCTTCCAGTTCTGGTCAACTTTTGATCGTCCCTTGAAGTCTTCTTCAAGTGTCTCCTTC
 ACTGACAGTCTGACTCCTTCAGGAAGACTGCTTTGGATTATTTCCAAGAAAATTTCTGNC
 AACGTAGCACTCAAACCGCTGATCTGAAACACTCGCTCATGGGGTGAAGCACTGAGTCC
 AGGAGCATTGCTGCCTTGGTCTGCAACTGCAACACTTTCTATGGTTTTGGNTGGCAT
 TGCATAACTTTCTCGACTTTATGGANAGAGAGTTCANAAGTGTGAAACATACTGGCATA
 ACTCTCTGCCCAGGTCATATCATTGCAGTCAGATGAATATTTAAACCCATATTCATAATC
 TGTCCCAATTAATGGCTCTCACTTCACTTTTCCCTTCTTCTTGGCTTTTCGGTTTATT
 AAGNGCTTGGACTTTCAATGCCGGGGGGCCTTGNCTTTGTGGCCCACTGATCTTATTG
 AAATCCCTACAAATAGATGGGCTTCTTCTGAAATTCTAACCTAAAAAAGAAAGCT
 GCTTAAAAATGATTGGTTCCTAGGCCAGACCTTCCAAAGGTCCTTATCTTTGTGTGG
 GCGGCTTTATTGGCAACCGAAACGGACCTGGACCGGTTCCAGGGGTTAAACCTGTCCA
 ATTCCGGCCCTTTGGGGTTTTCCAAATTGACGGACTTAAAACTTTTTAAACC

Restriction Sites:

NotI-NotI

ACCN:

NM_016055

Insert Size:

960 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.
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: [NM_016055.4](#), [NP_057139.1](#)

RefSeq Size: 1538 bp

RefSeq ORF: 639 bp

Locus ID: 51642

UniProt ID: [Q96GC5](#)

Cytogenetics: 11q13.4

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. A pseudogene corresponding to this gene is found on chromosome 6p. Several transcript variants, some protein-coding and some non-protein coding, have been found for this gene. [provided by RefSeq, Jan 2016]

Transcript Variant: This variant (1) lacks an alternate in-frame exon compared to variant 2. The resulting isoform (1) has the same N- and C-termini but is shorter compared to isoform 2.