

Product datasheet for **SC107293**

MRPL21 (NM_181514) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRPL21 (NM_181514) Human Untagged Clone
Tag:	Tag Free
Symbol:	MRPL21
Synonyms:	L21mt; MRP-L21
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC107293 sequence for NM_181514 edited (data generated by NextGen Sequencing) <pre> ATGGCAGCATCTTCCCTGACGGTCACCTTAGGGCGGCTGGCGTCCGCGTCAGCCACAGC ATCCTGAGACCTTCGGGGCCCGGAGCAGCCTCCCTTTGGTCTGCTTCTCGAAGGTTCAAT TCACAGAGCACTTCATATCTACCAGGATATGTTCTAAAACATCCCTGAGTTCACCACTT TGGCCAGAAGTTGTTCTGCCAGACCCAGTTGAGGAGACCAGACACCATGCAGAGGTCGTG AAGAAGGTGAATGAGATGATCGTCACGGGGCAGTATGGCAGGCTCTTGCCGTGGTGCAC TTTGCCAGCCGCCAGTGAAGGTGACCTCTGAAGACCTGATCTTAATTGGAAATGAACTA GACCTTGCGTGTGGAGAGAGAATTCGACTGGAGAAGGTCCTGCTGGTTGGGGCAGACAAC TTCACGCTGCTTGCAAGCCACTCCTCGAAAAGGATCTTGTTTCGAGTAGAAGCCACAGTC ATTGAAAAGACAGAATCATGGCCAAGAATCATTATGAGATTACAGGAAAAGGAAAACTTC AAGAAGAAAAGAATCGTCACGACCCCGCAGACTGTCCTCCGATAAACAGCATTGAGATT GCTCCGTGTTTGTGTGA </pre>

Clone variation with respect to NM_181514.1



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_181514 unedited <pre> ACGAGGCGGCGGCATGGCAGCATCTTCCTGNACGGTCACCTTAGGGCGGCTGGCGTCC GCGTGACGCCACAGCATCCTGAGACCTTCGGGGCCCGAGCAGCCTCCCTTTGGTCTGCT TCTCGAAGGTTCAATTCACAGAGCACTTCATATCTACCAGGATATGTTCTAAACATCC CTGAGTTACACACCTTGCCAGAAGTTGTTCTGCCAGACCCAGTTGAGGAGACCAGACAC CATGCAGAGGTCGTGAAGAAGGTGAATGAGATGATCGTCACGGGCGAGTATGGCAGGCTC TTTGCCGTGGTGCACTTTGCCAGCCGCCAGTGAAGGTGACCTCTGAAGACCTGATCTTA ATTGAAATGAACCTAGACCTTGCGTGTGGAGAGAGAATTCGACTGGAGAAGGTCCTGCTG GTTGGGCGAGACAACCTCACGCTGCTTGCAAGCCACTCCTCGGAAAGGATCTTGTTGCA GTAGAAGCCACAGTCATTGAAAAGACAGAATCATGGCCAAGAATCATTATGAGATTACAGG AAAAGGAAAACTTCAAGAAGAAAAAGATCGTCACGACCCCGCAGACTGTCCTCCGATA AACAGCATTGAGATTGCTCCGTGTTTGTGTGATTACCGAGTTAATACTACAAAAGGAT AAAAATAAACTCCTGCTTNCCAAGGAANNANNNNNNNNNNNNNNNNNNNNNNNNNNNNN NNNAAANNAAAAACCTGACTNTAAATTGNGGCCGNGGTACATACTGNTTCTGAAACAA NNCCCCGGGNGGCATCCCTGGGACCCCTCCAAGGGCCTTTTCTGGCCCTGGAAGTTGCC TCCAG </pre>
3' Read Nucleotide Sequence:	>OriGene 3' read for NM_181514 unedited <pre> AACC CGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTCCCTGGGAAGCAGGAGTTTATTTTATCCTTTTGAAGTATTAAC TCGGAATCACAAACACGGAGCAATCTCAATGCTGTTATCCGGAGGACAGTCTGCG GGGTCTGACAAATCTTTCTTCTGAAGTTTTCTTTTCTGAATCTCATAATGATTC TTGGCCATGATTCTGTCTTTCAATGACTGGGGCTTCTACTCGAACAAAATCCTTTCCGA GGAGTGGCTTGCCAAGCAGCGTGAAGTTGTCTGCCCAACCAGCAGGACCTTTTCCAGTC AAATTCTCTCTCCACACCAAGGGCTAGTTCATTTCCAATTAATAACAGGTCTTCAAAGG TCACCTTCCACTGGCGGCTGGCAAAGTGCACCACGGCAAAAAGCCTGCCATACTGCCCG TGACGATCATCTCATTACCTTCTTACGACCTCTGCATGGTGTCTGGTCTCCTCAACTG GGTCTGGCAGAACAACTCTGGCCAAGGTGGTGAACCTCAGGGATGTTTTAGGAACATATC CTGGTAGATATGAAGTGTCTGTGAATTGAACCTTCGAGAGCAGACCAAGGGAGGCTGC TCCGGGCCCCCGAGGTCTCAGGATGCTGTGGCTGCACGCGGACCCAGCCGCCCTAAGTG ACCGTCACGGAATCTGCATGGCCGCCCTCGTGCCAATTCGCGGCCGCCATGGGAGT CGTATAACAAATCTGACGTTCACTAAACGACCTCTGTTATTATGACTCCCCCGTAACCG CCTACGGCCATTTGGTAACGGGGCGGGTATTACCAATTTTGAAGATCCCTTGATTGG GGCAAACAACTTCTTGACTCATAGGGGGAACTGGAAAACCGGGATCAACCCTTTCC GCCCTTGGGGTCTGGCAAACCGTACCCTGTAAACGG </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_181514
Insert Size:	4700 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_181514.1](#), [NP_852615.1](#)

RefSeq Size: 713 bp

RefSeq ORF: 618 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 (4) encodes the longest protein (isoform d).