

Product datasheet for **SC312098**

MRPL42 (NM_172178) Human Untagged Clone

Product data:

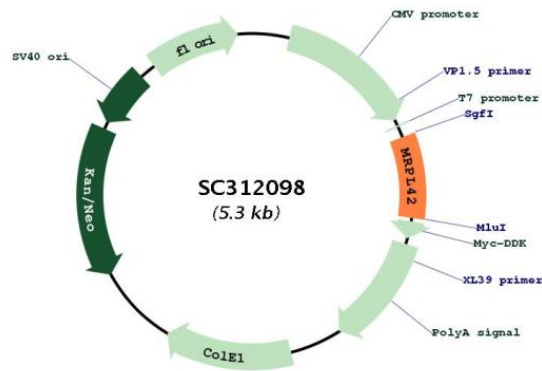
Product Type:	Expression Plasmids
Product Name:	MRPL42 (NM_172178) Human Untagged Clone
Tag:	Tag Free
Symbol:	MRPL42
Synonyms:	HSPC204; MRP-L31; MRPL31; MRPS32; PTD007; RPML31
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC312098 representing NM_172178. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGTGATGCAAGAGAAGTATCTTGAAACATTTATTTCCAGTCCAAAATTCGGGCGTACATGTGCA
GATGGAGCTTTATATTGTGTTTGTATAAATCTACGATTCTCCTCTACCAGATGACTATAATTGCAAC
GTAGAGCTTGCTCTGACTTCTGATGGCAGGACAATAGTATGTACCACCCTTCTGTGGACATTCCATAT
GAACACACAAAACCTATCCCTCGCCAGATCCTGTGCATAAATGAAGAAACACATGATCAAGTGCTG
AAAACCAGATTGGAAGAAAAAGTTGAACACCTTGAGGAAGGACCTATGATAGAACAACCTAGCAAAATG
TTCTTTACTACTAAGCACCGTTGGTATCCTCATGGACGGTATCACAGATGTCGTAAGAATCTGAATCCT
CCAAAAGACAGATGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-Mlul



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Plasmid Map:


ACCN:	NM_172178
Insert Size:	429 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).
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.
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_172178.2](#)

RefSeq Size: 2042 bp

RefSeq ORF: 429 bp

Locus ID: 28977

Cytogenetics: 12q22

MW: 16.6 kDa

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 protein identified as belonging to both the 28S and the 39S subunits. Alternative splicing results in multiple transcript variants. Pseudogenes corresponding to this gene are found on chromosomes 4q, 6p, 6q, 7p, and 15q. [provided by RefSeq, May 2011]

Transcript Variant: This variant (3) differs in the 5' UTR and internal coding region compared to variant 1. It encodes isoform b, which is the same length as isoform a, but it has a different N-terminus.