

Product datasheet for SC321725

MRPL47 (NM_177988) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Tag: Tag Free

Symbol: MRPL47

Synonyms: CGI-204; L47mt; MRP-L47; NCM1

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC (PS100020)

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

Fully Sequenced ORF: >OriGene sequence for NM_177988.1 CCACGCGTCCGAAACATGGCTGCGGCCGGTTTGGCCCTTCTTTGTAGGAGAGTTTCATCC

CATACCACATTGTCAAGGAAAGGACTAGAAGAATTTTTTGATGACCCAAAAAACTGGGGG CAAGAAAAGTAAAATCTGGAGCAGCATGGACCTGTCAGCAACTAAGGAACAAAAGTAAT GAGCAGGAGGCCAAGCGGCAGAGATTGCCAATGCCAAGTCCAGAGCGGTTAGATAAGGTA GTAGATTCCATGGATGCATTAGATAAAGTTGTCCAGGAAAGAGAAGATGCCCTAAGGCTT CTTCAGACTGGTCAAGAAGAGCTAGACCTGGTGCTTGGAGAAGAGACATCTTTGGAAGA AGGAAACGATTCTTTGCCTTGCCTTATGTGGACCATTTTCTCAGACTGGAACGTGAGAAA AAAAAGTTTCCACATCTTGCTGAAGCCCAAAAGTCAAGTCTTGTCTAAGATGTCTGAACT ATTAAATTTACCATTTTGTTTTTCTTGAATAGTCTGTGTACAGGAGTAAATATGTTAAGT GGTTTATAAAGAAATTCTGTTTTTAGTCAAGTGACTTTACTAATCAGTTGTTCTAAGTGT GAATATGGCATGCTAATTAGCTAATTTGGTAGAAGCTAATTTGCTTCTAAAAATCAGGTA TAAAGTTCAGATGAGATTCCCACTTTATAAATTCTGACATTTAAGCAGGCTTTAAATGTC ACCTGCTACCTTAGAGTGTGAAGGTGATGGTAACTGCCACAGCAAAGGCAATACCGTAGT TTTTGAATTTGAATAATAGTTTTACCTCTGTTGTTAATAGGCTATGAAGAGGATGTGGGT

AAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_177988



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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um

filter is required.

RefSeq: <u>NM_177988.1</u>, <u>NP_817125.1</u>

RefSeq Size: 1076 bp

RefSeq ORF: 423 bp

Locus ID: 57129

UniProt ID: Q9HD33

Cytogenetics: 3q26.33



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 is immediately adjacent to the gene for BAF complex 53 kDa subunit protein a (BAF53a), in a tail-to-tail orientation. Two transcript variants encoding different protein isoforms have been identified. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) lacks an alternate segment, compared to variant 1, which leads to the use of a downstream start codon. The predicted protein (isoform b) is shorter than isoform a. The predicted ORF of this transcript has not been experimentally confirmed.