

Product datasheet for RC202520

MRPL49 (NM_004927) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRPL49 (NM_004927) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRPL49
Synonyms:	C11orf4; L49mt; MRP-L49; NOF; NOF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202520 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCAGCTACCATGTTCCGGGCTACGCTGCGGGGATGGAGAACCGGTGTCCAGCGGGGCTGCGGGCTAC
 GGCTGTTGAGCCAGACCCAGGGCCCTCCAGATTACCCAGGTTTGTGGAGTCTGTGGATGAATATCAGTT
 TGTGGAGCGCCTGTACCGGCTACCAGGATCCAGATCCCCAAAGCATGAACATTATCCTACCCCTAGT
 GGCTGGCAGCCTCCAGAGACCCCCACCAACCTGCCTTACTTTGTACGACGCTCTCGGATGCACAACA
 TCCCCGTCTACAAGGACATCACGCATGGCAACCGGCAGATGACTGTGATCCGGAAGTGAAGGGGACAT
 CTGGGCCCTGCAGAAAGACGTGGAAGATTTCTGAGCCCGCTGCTGGGAAGACACCTGTACCCAGGTC
 AATGAGGTGACAGGTACCTACGGATCAAGGGCTACTTTGACCAGGAGCTTAAAGCCTGGCTCTTGAGA
 AAGGCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC202520 protein sequence Red=Cloning site Green=Tags(s)
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MAATMFRATLRGWRGVQRGCLRLLSQTQGPPDYPRFVESVDEYQFVERLLPATRIPDPPKHEHYPTPS
 GWQPPRDPPPNLPYFVRRSRMHNIPVYKDI THGNRQMTVIRKVEGDIWALQKDVEDFLSPLL GKTPVTQV
 NEVTGTLRIKGYFDQELKAWLLEKGF

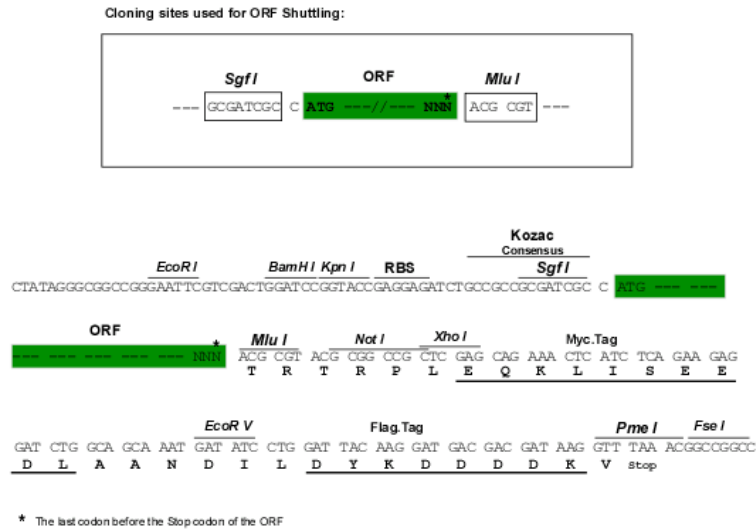
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/mk6085_c07.zip
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[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004927

ORF Size: 498 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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: [NM_004927.4](#)

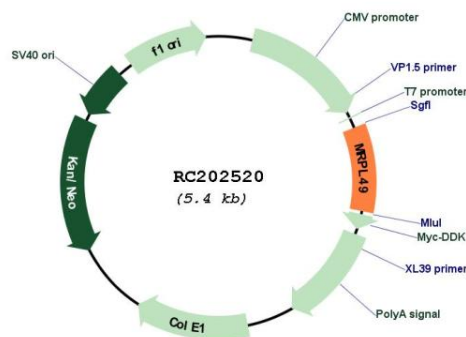
RefSeq Size: 2119 bp

RefSeq ORF: 501 bp

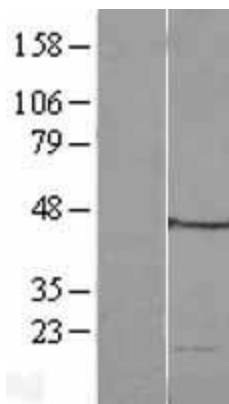
Locus ID: 740
UniProt ID: [Q13405](#)
Cytogenetics: 11q13.1
Domains: Img2
MW: 19.2 kDa

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. Pseudogenes corresponding to this gene are found on chromosomes 5q and 8p. [provided by RefSeq, May 2011]

Product images:



Circular map for RC202520



Western blot validation of overexpression lysate (Cat# [LY401534]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202520 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).