

Product datasheet for **RG201832**

MRPL12 (NM_002949) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRPL12 (NM_002949) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MRPL12
Synonyms: 5c5-2; L12mt; MRP-L31/34; MRPL7; MRPL7/L12; RPML12
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201832 representing NM_002949
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGCCGGCGCCGCTCGCCCCCTGTGGGGCCTTGCCTTGGGCTTCGGGCCGCTGCGTTCCGCCTTG
 CCAGGCGACAGGTGCCATGTGTCTGTGCCGTGCGACATATGAGGAGCAGCGGCCATCAGAGGTGTGAGGC
 CCTCGCTGGTGCACCCCTGGATAACGCCCCAAGGAGTACCCCCCAAGATACAGCAGCTGGTCCAGGAC
 ATCGCCAGCCTCACTCTCTTGGAAATCTCAGACCTCAACGAGCTCCTGAAGAAAACGTTGAAGATCCAGG
 ATGTCGGGCTTGTCCGATGGGTGGTGTGATGTCTGGGGCTGTCCCTGCTGCAGCAGCCAGGAGCGGT
 GGAAGAAGATATCCCATAGCGAAAGAACGGACACATTTACCGTCCGCCTGACCGAGGCGAAGCCCGTG
 GACAAAGTGAAGCTGATCAAGGAAATCAAGAACTACATCCAAGGCATCAACCTCGTCCAGGCAAAGAAGC
 TGGTGGAGTCCCTGCCCCAGGAAATCAAAGCCAATGTCGCCAAAGCTGAGGCGGAGAAGATCAAGGCGGC
 CCTGGAGGCGGTGGGCGGCACCGTGGTTCTGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201832 representing NM_002949
 Red=Cloning site Green=Tags(s)

MLPAAARPLWGPCLGLRAAAFRLARRQVPCVCAVRHMRSSGHQRCEALAGAPLDNAPKEYPPKIQQLVQD
 IASLTLLLEISDLNELLKTKLIQDVGLVPMGGVMGAVPAAAAQEAVEEDIPIAKERTHTFTVRLTEAKPV
 DKVKLIKEIKNYIQGINLVQAKKLVESLPQEIKANVAKAEAEKIKAALEAVGGTVVLE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:

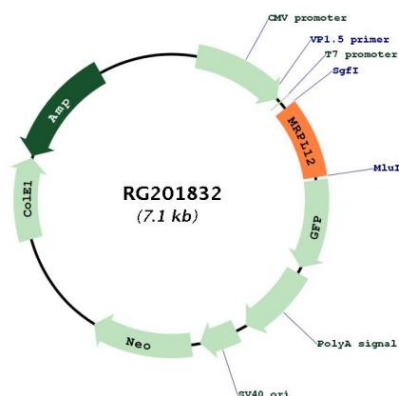

ACCN:	NM_002949
ORF Size:	594 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	<ol style="list-style-type: none"> 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_002949.4
RefSeq Size:	1052 bp
RefSeq ORF:	597 bp
Locus ID:	6182

UniProt ID: [P52815](#)

Cytogenetics: 17q25.3

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 which forms homodimers. In prokaryotic ribosomes, two L7/L12 dimers and one L10 protein form the L8 protein complex. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201832