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Product datasheet for RG202298

MRPL24 (NM_024540) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	MRPL24
Synonyms:	L24mt; MRP-L18; MRP-L24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG202298 representing NM_024540
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGTCTTTCTGCCCTGCTGGCCTTGGCATCCAAGGTCACTCTGCCCCCCCATTACCGCTATGGGATGA
GCCCCCCAGGCTCTGTTGCAGACAAGAGGAAGAACCCCCCATGGATCAGGCGGCGCCCAGTGGTTGTGGA
ACCCATCTCTGATGAAGACTGGTATCTGTTCTGTGGGGACACGGTGGAGATCCTAGAAGGCAAGGATGCC
GGGAAGCAGGGCAAAGTGGTTCAAGTTATCCGGCAGCGAAACTGGGTGGTCGTGGGAGGGCTGAACACAC
ATTACCGCTACATTGGCAAGACCATGGATTACCGGGGAACCATGATCCCTAGTGAAGCCCCCTTGCTCCA
CCGCCAGGTCAAACTTGTGGATCCTATGGACAGGAAACCCACTGAGATCGAGTGGAGATTTACTGAAGCA
GGAGAGCGGGTACGAGTCTCCACACGATCAGGGAGAATTATCCCTAAACCCGAATTTCCCAGAGCTGATG
GCATCGTCCCTGAAACGTGGATTGATGGCCCCAAAGACACATCAGTGGAAGATGCTTTAGAAAGAACCTA
TGTGCCCTGTCTAAAGACACTGCAGGAGGAGGTGATGGAGGCCATGGGGATCAAGGAGACCCGGAAATAC
AAGAAGGTCTATTGGTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202298 representing NM_024540
Red=Cloning site Green=Tags(s)

MRLSALLALASKVTLPPHYRYGMSPPGSVADKRKNPPWIRRRPVVVEPISDEDWYLFCGDTVEILEGKDA
GKQGKVVQVIRQRNWVVVGGLNTHYRYIGKTMDYRGTMIPSEAPLLHRQVKLVDPMDRKPTEIEWRFTEA
GERVRVSTRSGRIIPKPEFPRADGIVPETWIDGPKDTSVEDALERTYVPCLKTLQEEVMEAMGIKETRKY
KKVYWY

TRTRPLE - GFP Tag - V

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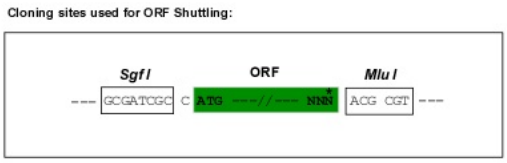
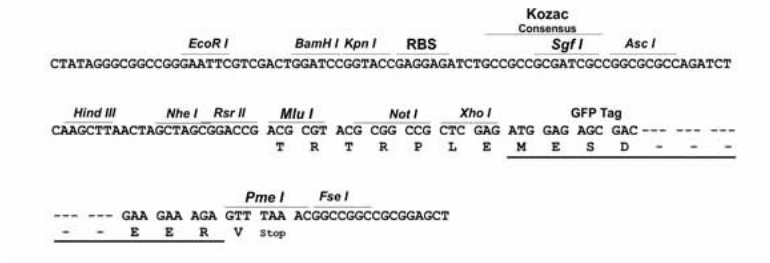
Restriction Sites: SgfI-MluI

Cloning Scheme:





ACCN: NM_024540

ORF Size: 648 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_024540.4

RefSeq Size: 917 bp

RefSeq ORF: 651 bp

Locus ID: 79590

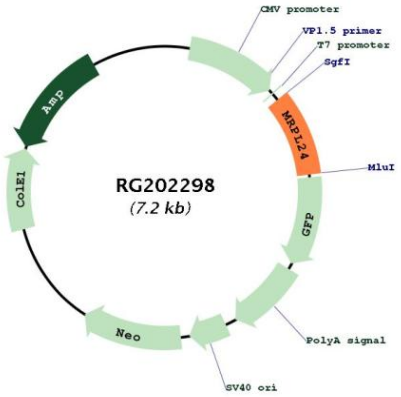
UniProt ID: Q96A35

Cytogenetics: 1q23.1

Domains: KOW, KOW

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 is more than twice the size of its E.coli counterpart (EcoL24). Sequence analysis identified two transcript variants that encode the same protein. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG202298