

## **Product datasheet for RC204000**

## MRPS6 (NM 032476) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** MRPS6 (NM\_032476) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: MRPS6

Synonyms: C21orf101; MRP-S6; RPMS6; S6mt

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC204000 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCCCCGCTACGAGCTGGCTTTAATCCTGAAAGCCATGCAGCGGCCAGAGACTGCTGCTACTTTGAAAC GTACGATAGAGGCCCTGATGGACAGAGGAGCACATAGTGAGGGACTTGGAAAACCTGGGTGAACGAGCGCT TCCTTATAGGATCTCTGCCCACAGTCAGCAGCACAACAGAGGCGGGTATTTCTTGGTGGATTTTTATGCA CCCACCGCAGCTGTTGAAAGCATGGTGGAGCACTTGTCTCGAGATATAGATGTGATTAGAGGGAATATTG TCAAACACCCTCTGACCCAGGAACTAAAAGAATGTGAAGGGATTGTCCCAGTCCCACTCGCAGAAAAATT

ATATTCCACAAAGAAGAAGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA** 

Protein Sequence: >RC204000 protein sequence

Red=Cloning site Green=Tags(s)

MPRYELALILKAMQRPETAATLKRTIEALMDRGAIVRDLENLGERALPYRISAHSQQHNRGGYFLVDFYA

PTAAVESMVEHLSRDIDVIRGNIVKHPLTQELKECEGIVPVPLAEKLYSTKKRKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6432">https://cdn.origene.com/chromatograms/mk6432</a> a06.zip

**Restriction Sites:** Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

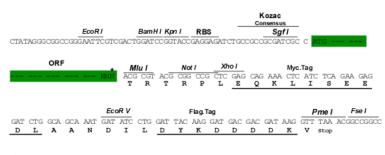
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_032476

ORF Size: 375 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: <u>NM 032476.4</u>

RefSeq Size: 1017 bp RefSeq ORF: 378 bp



 Locus ID:
 64968

 UniProt ID:
 P82932

 Cytogenetics:
 21q22.11

**MW:** 14.2 kDa

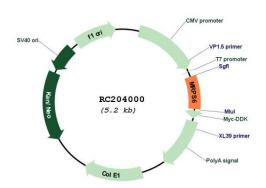
**Gene Summary:** Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in

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. This gene encodes a 28S subunit protein that belongs to the ribosomal protein S6P family. Pseudogenes corresponding to this gene

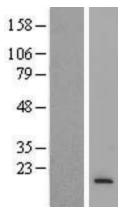
are found on chromosomes 1p and 12q. [provided by RefSeq, Jul 2008]

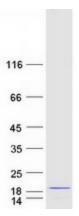
## **Product images:**



Circular map for RC204000







Western blot validation of overexpression lysate (Cat# [LY410105]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204000 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified MRPS6 protein (Cat# [TP304000]). The protein was produced from HEK293T cells transfected with MRPS6 cDNA clone (Cat# RC204000) using MegaTran 2.0 (Cat# [TT210002]).