

Product datasheet for RC203068

MRPS10 (NM_018141) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRPS10 (NM_018141) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MRPS10
Synonyms: MRP-S10; PNAS-122
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203068 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGCGGGACAGCGTTCCGGTGTGTGCCGGCGCCTCTGGCAGGGATTGGGAATTTTTCTGTAA
 ACACCTTCTAAGGGCAATACAGCCAAAAATGGTGGCTTGCTTCTCAGTACCAATATGAAGTGGGTACAGTT
 TTCAAACCTACACGTTGATGTTCCAAAGGATTTGACCAAACCTGTGGTAAACATCTCTGATGAACCAGAC
 ATATTATATAAGCGCCTCTCGTTTTGGTAAAGGTCACGATAAGGCTGTATTGGACAGTTATGAATATT
 TTGCTGTGCTTGCTGCTAAAGAACTTGGTATCTCTATTAAGTACATGAACCTCCAAGGAAAATAGAGCG
 ATTTACTCTTCTCAATCAGTGATATTTACAAGAAGCACAGAGTTCAGTATGAAATGAGAACACTTTAC
 AGATGTTTAGAGTTAGAATCTAACTGGAAGCACAGCAGATGTCTACTTGGAAATATATTAGCGGAACT
 TACCTGAAGGGTTGCCATGGAAGTAACAAAGACACAATTAGAACAGTTACCAGAACACATCAAGGAGCC
 AATCTGGGAAACTATCAGAAGAAAAGAAGAAAGCAAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203068 protein sequence
 Red=Cloning site Green=Tags(s)

MAARTAFGAVCRRLWQGLGNFSVNTSKGNTAKNGLLLLSTNMKWVQFNLHVDVPKDLTKPVVTISDEPD
 ILYKRLSVLVKGHDKAVLDSYEFVAVLAAKELGISIKVHEPPRKIERFTLLQSVHIYKKHRVQYEMRTLY
 RCLELEHLTGSTADVYLEYIQRNLPEGVAMEVTKTQLEQLPEHIKEPIWETLSEEKEESKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6055_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018141

ORF Size: 603 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.

RefSeq: [NM_018141.4](#)

RefSeq Size: 2167 bp

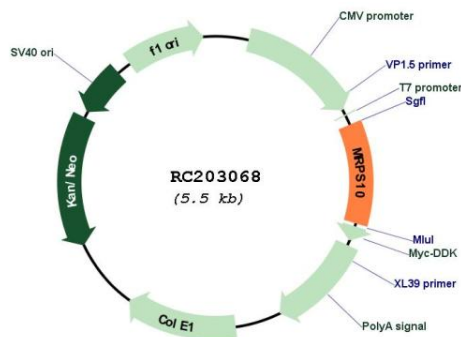
RefSeq ORF: 606 bp

Locus ID: 55173

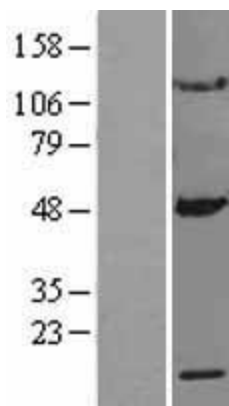
UniProt ID: [P82664](#)
Cytogenetics: 6p21.1
Domains: Ribosomal_S10
MW: 23 kDa

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 S10P family. Pseudogenes corresponding to this gene are found on chromosomes 1q, 3p, and 9p. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC203068



Western blot validation of overexpression lysate (Cat# [LY402652]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203068 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).