

Product datasheet for **RC204343**

MRPS5 (NM_031902) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | MRPS5 (NM_031902) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | MRPS5 |
| Synonyms: | MRP-S5; S5mt |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RC204343 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGACCGCGGTGCGCGCTGTGGCTGCCTCCCGTGTGTAGCGGGACGGCAGGTCAATTTATTGG
 GGAGGCAGTGTTCCCTAAACACCTTACCAGCAGCTTCCATTTTGGCATGGAAGAGTGTTCTCGGCAATGG
 CCATTTGTCATCACTGGGAACCAGAGACCCATCCCTACGCCAGCTTGAGCCGTCAGTGCAGACACAA
 TGCTGTATTTCTTCTCCAGTCACCTGATGAGCCAGCAGTATAGACCATATAGTTTCTTCACTAAATTGA
 CTGCAGATGAGCTGTGGAAGGGCCTTTAGCAGAGACTGGTGTGGAGCAAAAAAGGAAGGGCAAAAAG
 AACTAAAAAGAAGAAAAGAAAGGATCTGAACAGGGGTGAGTCAATTTGGTGAAGGGCGTTATGGTTTTCTA
 TGGCCCGACTGAATGTCCTCTTATGAAAAATGGAGCAGTGCAGACCATTGCCCAAAGAAGCAAGGAAG
 AGCAGGAGAAGGTGGAGGCAGACATGATCCAGCAGAGAGAAGAGTGGACCGAAAGAAGAAGATGAAGGT
 TAAACGGGAGCGAGGATGGAGTGGAAACTCATGGGGAGGCATCAGTCTTGGCCCCCTGACCTGGTCCC
 TGTGGAGAAACATATGAGGATTTTGATACCAGGATACTTGAGGTAAGAAACGTTTTCACTATGACTGCGA
 AAGAGGGAAGAAAAGAAATCGATCCGTGTCTTGGTGGCTGTGGGGAACGGAAAAGGAGCTGCAGGTTTTTC
 TATTGGGAAAGCTACTGATCGGATGGATGCTTTTCAGGAAAGCAAGAACAGAGCAGTTTACCATTTCAT
 TATATAGAACGATATGAAGACCATAAATTTCCATGATTTTCATTAAGATTTAAAAGGACGCATATCA
 AGATGAAGAAACAACCCAAAGGTTACGGCTCCGCTGCCACAGGGCCATCATCACCATCTGCCGGCTCAT
 TGGCATCAAAGACATGTATGCCAAGGTCTCTGGGTCCATTAATATGCTCAGCCTCACCCAGGGCCTCTTC
 CGTGGGCTCTCCAGACAGGAAACCCATCAACAGCTGGCTGATAAGAAGGGCCTCCATGTTGTGAAATCC
 GGGAGGAATGTGGCCCTCTGCCATTGTGGTTGCGTCCCCCGGGGGCCCTTGAGGAAGGATCCAGAGCC
 AGAAGATGAGGTTCCAGACGTCAAACACTGGACTGGGAAGATGTGAAGACTGCACAGGGAATGAAGCGCTCT
 GTGTGGTCTAATTTGAAGAGAGCCGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204343 protein sequence
 Red=Cloning site Green=Tags(s)

MATAVRAVGCLPVLCSGTAGHLLGRQCSLNTLPAASILAWKSVLGNHLSLGLTRDTHPYASLSRALQTQ
 CCISSPSHLMSSQYRPFYFFTKLTADELWKGALAEAGAKKGRGKRTKKKKRDLNRGQIIGEGRYGFL
 WPGLNVPLMKNQAVQIAQRSKEEQEKVEADMIQREEWDRKKMKVKRERGWSGNSWGGISLGPDPGP
 CGETYEDFDTRILEVRNVFTMTAKEGRKKSIRVLVAVGNGKGAAGFSIGKATDRMDAFRKAKNRAVHHLH
 YIERVEDHTIFHDISLRFKRTHIKMKKQPKGYGLRCHRAIITICRLIGIKDMYAKVSGSINMLSLTQGLF
 RGLSRQETHQQLADKKGLHVVEIREECGPLPIVVASPRGPLRKDPEPEDEVPDVKLDWEDVKTAQGMKRS
 VWSNLKRAAT

TRTRPLEQKLISEEDLAANDILDYKDDDDK

Chromatograms:

https://cdn.origene.com/chromatograms/mk6060_g05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_031902

ORF Size: 1290 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_031902.5](#)

RefSeq Size: 1678 bp

RefSeq ORF: 1293 bp

Locus ID: 64969

UniProt ID: [P82675](#)

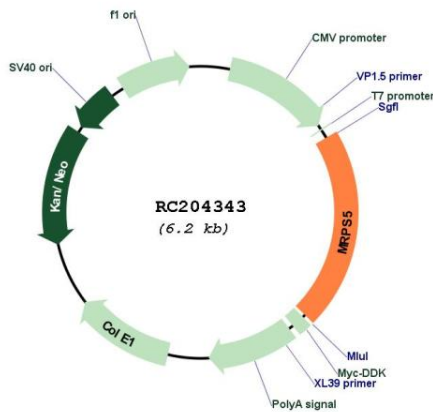
Cytogenetics: 2q11.1

Domains: Ribosomal_S5, Ribosomal_S5_C

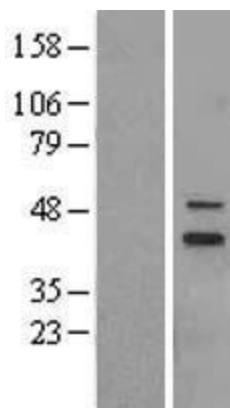
MW: 48 kDa

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 S5P family. Pseudogenes corresponding to this gene are found on chromosomes 4q, 5q, and 18q. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204343



Western blot validation of overexpression lysate (Cat# [LY410449]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204343 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).