

Product datasheet for **RC206334**

MRPL13 (NM_014078) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRPL13 (NM_014078) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MRPL13
Synonyms: L13; L13A; L13mt; RPL13; RPML13
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC206334 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTGCAGTTTCTCTAGGGCGCCCCAGCAATGGGCCACTTTTGCTAGAATATGGTATCTCTTAGATGGGA
AAATGCAGCCACCTGGCAAATTGCTGCTATGGCATCTATAAGACTTCAGGGATTACATAAACCTGTGTA
CCATGCACTGAGTACTGTGGGATCATGTTGTTATAATGAACACAAGACACATTGCATTTTCTGGAAAC
AAATGGGAACAAAAGTATACTCTCGCATACTGGCTACCCAGGTGGATTTAGACAAGTAACAGCTGCTC
AGCTTCACCTGAGGGATCCAGTGGCAATTGTAATACTAGCTATTTATGGCATGCTGCCAAAAACCTTCA
CAGAAGAACAATGATGGAAAGTTGCATCTTTTCCAGATGAGTATATTCCAGAAGATATTCTTAAGAAT
TTAGTAGAGGAGCTTCTCAACCACGAAAAATACCTAAACGTCTAGATGAGTACACACAAGAAGAAATAG
ACGCCTCCCAAGATTGTGGACTCCACCTGAAGATTATCGGCTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206334 protein sequence
Red=Cloning site Green=Tags(s)

MSSFSRAPQQWATFARIWYLLDGMQPPGKLAAMASIRLQGLHKPVYHALSDCGDHVIMNTRHIAFSGN
KWEQKVYSSHTGYPGFRQVTAQLHLRDPVAIVKLAIYGMLPKNLHRRTMMERLHLFPDEYIPEDILKN
LVEELPQPRKIPKRLDEYTQEEIDAFPRLWTPPEDYRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

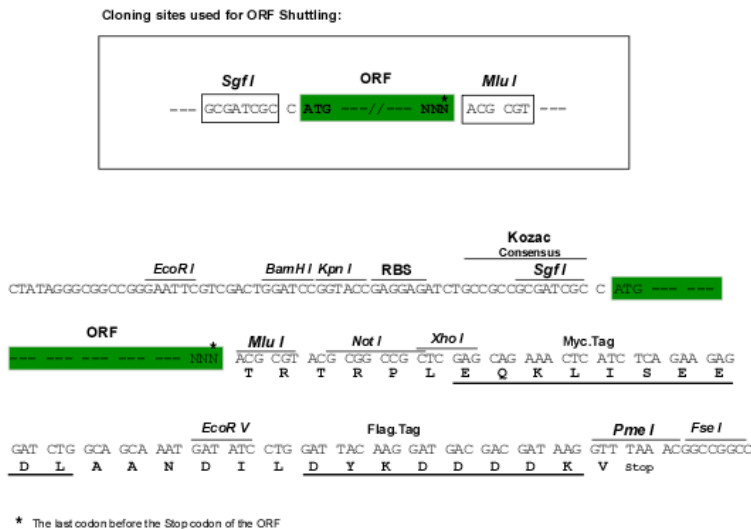
Chromatograms: https://cdn.origene.com/chromatograms/mk6073_a09.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014078

ORF Size: 534 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_014078.6](#)

RefSeq Size: 1119 bp

RefSeq ORF: 537 bp

Locus ID: 28998

UniProt ID: [Q9BYD1](#)

Cytogenetics: 8q24.12

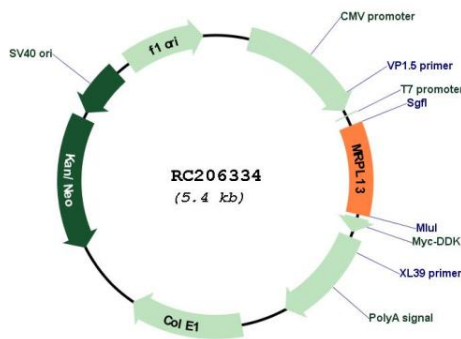
Domains: Ribosomal_L13

Protein Pathways: Ribosome

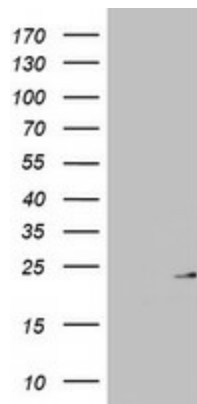
MW: 20.7 kDa

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 39S subunit protein. [provided by RefSeq, Jul 2008]

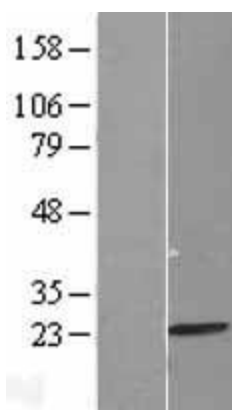
Product images:



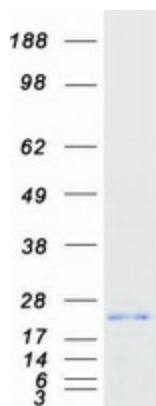
Circular map for RC206334



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MRPL13 (Cat# RC206334, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MRPL13 (Cat# [TA803030]). Positive lysates [LY402275] (100ug) and [LC402275] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402275]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206334 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRPL13 protein (Cat# [TP306334]). The protein was produced from HEK293T cells transfected with MRPL13 cDNA clone (Cat# RC206334) using MegaTran 2.0 (Cat# [TT210002]).