

## Product datasheet for RC201794

### MRPL28 (NM\_006428) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MRPL28 (NM_006428) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRPL28
Synonyms:	MAAT1; p15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201794 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTTACACAAGTATCCCGTGTGGCTCTGGAAGCGGCTGCAGCTGCGGGAGGGCATCTGTTCCCGCC  
TGCCCGGCCACTACCTGCGCTCCCTGGAGGAGGAGCGGACGCCACTCCCGTGCCTATAGGCCTCATGG  
GGCCAAGTTCAAGATCAACCCCAAGAACGGGCAGCGGGAGCGTGTGGAGGACGTGCCATTCCCCTAC  
TTTCCCCCGAATCCCAGCGGGGTTGTGGGGCGCGAGGGCTGGATCCTGGCCAAATATATGCCAACA  
ACGACAAGCTCTCCAAGAGGCTGAAGAAAGTGTGGAAGCCACAGCTGTTTGGAGCGAGAGTTCTACAGTGA  
GATCCTGGACAAGAAGTTCACAGTGACTGTGACCATGCGGACCCCTGGACCTCATCGATGAGGCTTACGGG  
CTCGACTTTTACATCCTCAAGACCCCGAAGGAGGACCTGTGCTCCAAGTTTGGGATGGACCTGAAGCGAG  
GGATGCTGCTGCGGCTTGCCCGGCAGGACCCCGAGCTGCACCCCGAGGACCCCGAGCGGGCGGGCAGCCAT  
CTACGACAAGTACAAGGAATTTGCCATCCCAGAGGAGGAGGCAGAGTGGGTGGGCCTCACGCTGGAGGAG  
GCCATTGAGAAGCAGAGACTTTTGGAGGAGAAGGACCCCTGTACCCCTGTTCAAGATCTATGTGGCGGAGC  
TGATCCAGCAGCTGCAGCAGCAGGCACTGTCAGAGCCGGCGGTGGTGCAGAAGAGAGCCAGTGGCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201794 protein sequence  
Red=Cloning site Green=Tags(s)

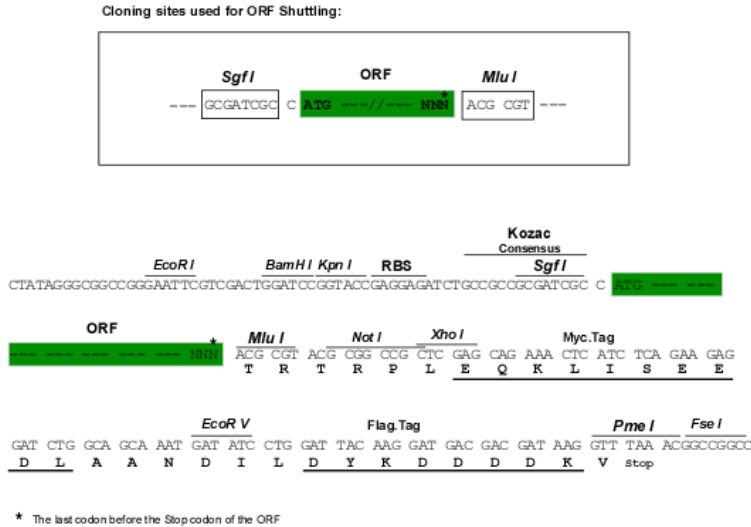
MPLHKYPVWLWKRLQLREGICSRLPGHYLRLEEERTPTPVHYRPHGAKFKINPKNGQRRVEDVPIPIY  
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 LDFYILKTPKEDLCSKFGMDLKRGMLLRLARQDPQLHPEDPERRAAIYDKYKEFAIPEEEAEWVGLTLEE  
 AIEKQRLLSEKDPVPLFKIYVAELIQQLQQALSEPAVVQKRASGQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6376\\_g01.zip](https://cdn.origene.com/chromatograms/mk6376_g01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006428

**ORF Size:** 768 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\\_006428.2](#)

**RefSeq Size:** 1161 bp

**RefSeq ORF:** 771 bp

**Locus ID:** 10573

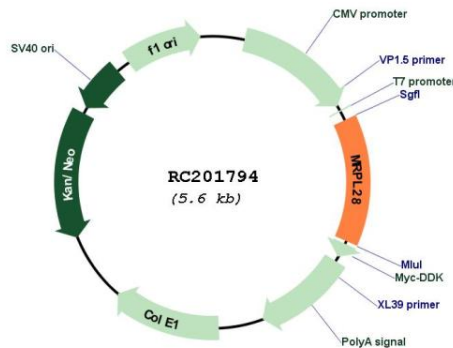
**UniProt ID:** [Q13084](#)

**Cytogenetics:** 16p13.3

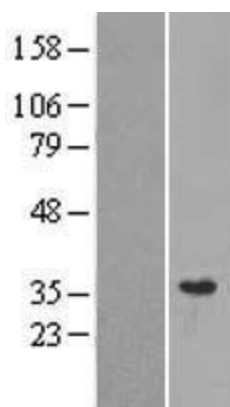
**MW:** 30.2 kDa

**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 39S subunit protein, a part of which was originally isolated by its ability to recognize tyrosinase in an HLA-A24-restricted fashion. [provided by RefSeq, Jul 2008]

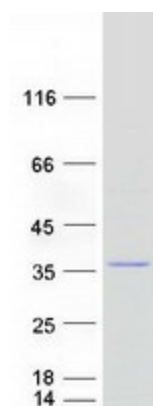
### Product images:



Circular map for RC201794



Western blot validation of overexpression lysate (Cat# [LY416653]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201794 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRPL28 protein (Cat# [TP301794]). The protein was produced from HEK293T cells transfected with MRPL28 cDNA clone (Cat# RC201794) using MegaTran 2.0 (Cat# [TT210002]).