OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC222833

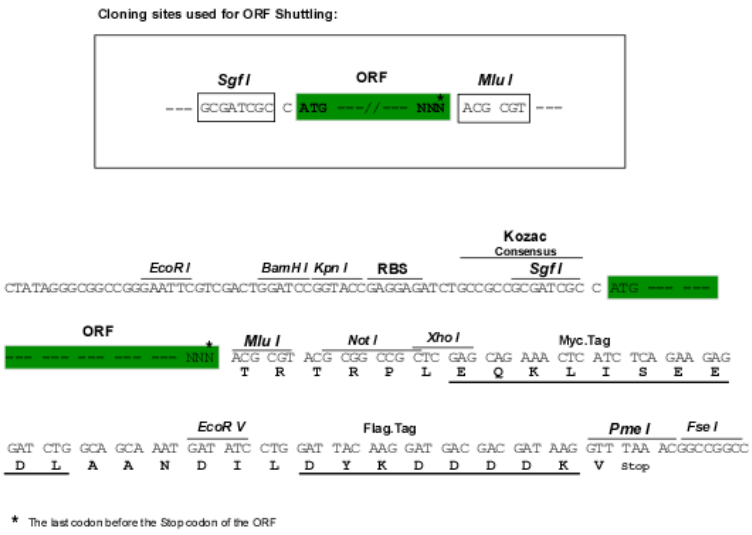
MRPS33 (NM_053035) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRPS33 (NM_053035) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRPS33
Synonyms:	CGI-139; MRP-S33; PTD003; S33mt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222833 representing NM_053035 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTCCTCCCTTTCAGAATATGCCTTCCGCATGTCTCGTCTCAGTGCCCGGCTATTTGGTGAAGTCACCA GGCCTACTAATTCCAAGTCTATGAAAGTGGTGAAACTGTTTAGTGAACTGCCCTTGGCCAAGAAGAAGGA GACTTATGATTGGTATCCAAATCACCACACTTACGCTGAACTCATGCAGACGCTCCGATTTCTTGGACTC TACAGAGATGAGCATCAGGATTTTATGGATGAGCAAAAACGACTAAAGAAGCTTCGTGGAAAGGAGAAAC CAAAGAAAGGAGAAGGGAAAAGAGCAGCAAAAAGGAAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC222833 representing NM_053035 Red=Cloning site Green=Tags(s) MSSLSEYAFRMSRLSARLFGEVTRPTNSKSMKVVKLFSELPLAKKKETYDWYPNHHTYAELMQTLRFLGL YRDEHQDFMDEQKRLKKLRGKEKPKKGEGKRAAKRK TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6538_g11.zip
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



ACCN:	NM_053035
ORF Size:	318 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_053035.3
RefSeq Size:	653 bp
RefSeq ORF:	321 bp
Locus ID:	51650

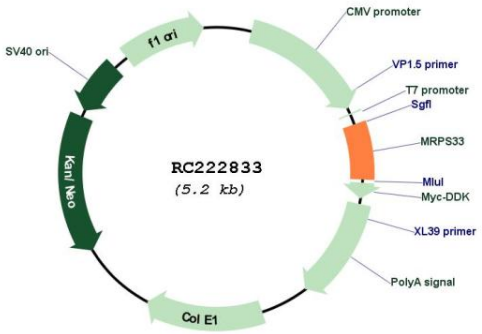
UniProt ID: Q9Y291

Cytogenetics: 7q34

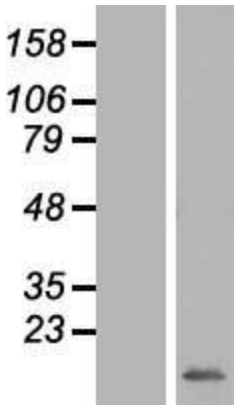
MW: 12.4 kDa

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. The 28S subunit of the mammalian mitoribosome may play a crucial and characteristic role in translation initiation. This gene encodes a 28S subunit protein that is one of the more highly conserved mitochondrial ribosomal proteins among mammals, Drosophila and C. elegans. Splice variants that differ in the 5' UTR have been found for this gene; all variants encode the same protein. Pseudogenes corresponding to this gene are found on chromosomes 1q, 4p, 4q, and 20q [provided by RefSeq, Jul 2008]

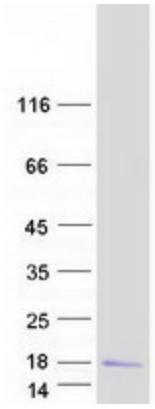
Product images:



Circular map for RC222833



Western blot validation of overexpression lysate (Cat# [LY409334]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222833 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRPS33 protein (Cat# [TP322833]). The protein was produced from HEK293T cells transfected with MRPS33 cDNA clone (Cat# RC222833) using MegaTran 2.0 (Cat# [TT210002]).