

Product datasheet for **SC114481**

MRPS33 (NM_016071) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	MRPS33
Synonyms:	CGI-139; MRP-S33; PTD003; S33mt
Mammalian Cell	None
Selection:	
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC114481 sequence for NM_016071 edited (data generated by NextGen Sequencing)

ATGTCCTCCCTTTTCTCAGAAATATGCCTTCCGCATGTCTCGTCTCAGTGCCCGGCTATTTGGT
GAAGTACCAGGCCTACTAATTCCAAGTCTATGAAAGTGGTAAACTGTTAGTGAAGTCT
CCCTTGGCCAAGAAGAAGGAGACTTATGATTGGTATCCAAATCACCACACTTACGCTGAA
CTCATGCAGACGCTCCGATTTCTTGGACTCTACAGAGATGAGCATCAGGATTTTATGGAT
GAGCAAAAACGACTAAAGAAGCTTCGTGGAAAGGAGAAACCAAGAAAGGAGAAAGGAGAA
AGAGCAGCAAAAAGGAAATAG

Clone variation with respect to NM_016071.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_016071 unedited
GGCTTCAGGATTTGTATACGACTCACTATAGGCGGCCGCAATTCGCACGAGGGCACTGT
AGCTTTGGGTGGTGGGCTGCAGATTAATTTTGAACCACTTAAGAAAAATACGGAAGTCT
TAACTCCTTGCCACTCAAGAAATGTCTCCCTTTCTCAGAAATATGCCTTCCGCATGTCTCGT
CTCAGTGCCCGGCTATTTGGTGAAGTACCAGGCCTACTAATTCCAAGTCTATGAAAGTG
GTGAAACTGTTTAGTGAAGTGCCTTGGCCAAGAAGAAGGAGACTTATGATTGGTATCCA
AATCACCACACTTACGCTGAAGTCTATGCAGACGCTCCGATTTCTTGGACTCTACAGAGAT
GAGCATCAGGATTTTATGGATGAGCAAAAACGACTAAAGAAGCTTCGTGGAAAGGAGAGAA
CCAAAGAAAGGAGAAAGGAGAGAGCAAAAAGGAAATAGTGTGGTCCCTCAAGAGG
GAGACTTTCTTCTCAGTGCGGAGAGAGAAAGTGCATTTATTGTCTTTCCACATATTG
GAGGAATGTCATCTTCTAAATGAAGTTTATTTGGAGGAACACAGTCATCTCCTTGGTGA
AATCTAATCCGGTTACATTGTGGCTGGTTTCTTGAACACATTCTAACTGTGCAAAATTAT
CTTGGCCTTGCCGTGTAATGTGAGGTTTACCTGATTCTAATGAAATAAATACCTAAG
TTATTGTTGATGATTTGTTGGGTGGGATGGGATGCTGGGGGAATGGAGGGGAAACCT
CATTAAGTGAGCATCCTATAGTGCCTCATTTCTCCCTTCTTGCTTACTGACTACCCAG
CCCTAAACTTCTTTCATCCTGGGCCTTTCAGCCACTGTCTCCACCACCAAGCTCACAAC
TTTGNNGNNGTGTCTCCTACTCCTTNGAGAATCTATAN



Restriction Sites:	NotI-NotI
ACCN:	NM_016071
Insert Size:	1610 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_016071.2</u> , <u>NP_057155.1</u>
RefSeq Size:	727 bp
RefSeq ORF:	321 bp
Locus ID:	51650
UniProt ID:	<u>Q9Y291</u>
Cytogenetics:	7q34

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]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein.