**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 TR303145

## MRPS33 Human shRNA Plasmid Kit (Locus ID 51650)

### Product data:

| | |
|---|---|
| **Product Type:** | shRNA Plasmids |
| **Product Name:** | MRPS33 Human shRNA Plasmid Kit (Locus ID 51650) |
| **Locus ID:** | 51650 |
| **Synonyms:** | CGI-139; MRP-S33; PTD003; S33mt |
| **Vector:** | pRS (TR20003) |
| **E. coli Selection:** | Ampicillin |
| **Mammalian Cell Selection:** | Puromycin |
| **Format:** | Retroviral plasmids |
| **Components:** | MRPS33 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 51650). 5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| **RefSeq:** | NM_016071, NM_053035, NM_016071.1, NM_016071.2, NM_016071.3, NM_053035.1, NM_053035.2, BC015462, BC105793, NM_053035.3, NM_016071.4 |
| **UniProt ID:** | Q9Y291 |
| **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] |

View online »

**shRNA Design:**

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

**Performance Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).