

## **Product datasheet for TP322833M**

## 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

## MRPS33 (NM 053035) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human mitochondrial ribosomal protein S33 (MRPS33), nuclear gene

encoding mitochondrial protein, transcript variant 2, 100 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC222833 representing NM\_053035

or AA Sequence: Red=Cloning site Green=Tags(s)

MSSLSEYAFRMSRLSARLFGEVTRPTNSKSMKVVKLFSELPLAKKKETYDWYPNHHTYAELMQTLRFLGL

YRDEHQDFMDEQKRLKKLRGKEKPKKGEGKRAAKRK

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

**Predicted MW:** 12.4 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 444263

**Locus ID:** 51650

UniProt ID: <u>Q9Y291</u>, <u>A4D1T3</u>, <u>Q3KRB4</u>

RefSeq Size: 653





Cytogenetics: 7q34

RefSeq ORF: 318

Synonyms: CGI-139; MRP-S33; PTD003; S33mt

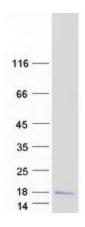
**Summary:** Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in

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:**



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]).