

## **Product datasheet for TP761381**

### OriGene Technologies, Inc.

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# MRPS18A (NM\_018135) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Human mitochondrial ribosomal protein S18A (MRPS18A),

nuclear gene encoding mitochondrial protein, transcript variant 1, full length, with N-terminal

GST and C-terminal HIS tag, expressed in E. coli, 50ug

Species: Human

**Expression Host:** E. coli

Expression cDNA Clone or AA Sequence:

A DNA sequence encoding human full-length MRPS18A

Tag: N-GST and C-His

**Predicted MW:** 50 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

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

Buffer: 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol

**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 060605

 Locus ID:
 55168

 UniProt ID:
 Q9NVS2

 RefSeq Size:
 1207

 Cytogenetics:
 6p21.1

RefSeq ORF: 588

**Synonyms:** HumanS18b; MRP-S18-3; MRP-S18-a; MRPS18-3; S18bmt; S18mt-a





#### **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 28S subunit protein that belongs to the ribosomal protein S18P family. The encoded protein is one of three that has significant sequence similarity to bacterial S18 proteins. The primary sequences of the three human mitochondrial S18 proteins are no more closely related to each other than they are to the prokaryotic S18 proteins. A pseudogene corresponding to this gene is found on chromosome 3p. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jul 2010]

# **Product images:**

