

Product datasheet for **TP760023**

MRPS33 (NM_016071) 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 1, full length, with N-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 MRPS33
Tag:	N-His
Predicted MW:	12.6 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, 100 mM arginine, 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_057155
Locus ID:	51650
UniProt ID:	Q9Y291 , A4D1T3
RefSeq Size:	748
Cytogenetics:	7q34
RefSeq ORF:	318
Synonyms:	CGI-139; MRP-S33; PTD003; S33mt



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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: