

Product datasheet for PH322833

MRPS33 (NM_053035) Human Mass Spec Standard

Product data:

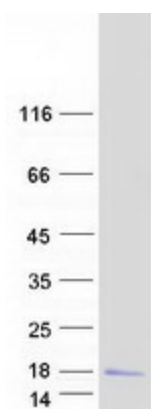
Product Type:	Mass Spec Standards
Description:	MRPS33 MS Standard C13 and N15-labeled recombinant protein (NP_444263)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC222833
Predicted MW:	12.4 kDa
Protein Sequence:	>RC222833 representing NM_053035 Red =Cloning site Green =Tags(s) MSSLSEYAFRMSRLSARLFGVTRPTNSKSMKVVKLFSELPLAKKKETYDWYPNHHHTYAELMQTLRFLGL YRDEHQDFMDEQKRLKLRGKEKPKKGEGKRAAKRK TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_444263
RefSeq Size:	653
RefSeq ORF:	318
Synonyms:	CGI-139; MRP-S33; PTD003; S33mt
Locus ID:	51650
UniProt ID:	Q9Y291 , A4D1T3 , Q3KRB4
Cytogenetics:	7q34



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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:

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]).