

MRPL13, 1-178aa, Human, His tag, E.coli

Cat.NO.: TP03022

3th Edition

Synonyms:Mitochondrial ribosomal protein L13, L13, L13A, L13mt, RPL13, RPML13

Description: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. MRPL13 is a 39S subunit protein. Recombinant human MRPL13 protein, fused to His-tag at N-terminus, was expressed in E.coli.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Molecular Weight:23.1 kDa (201aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMSSFSRAPQQWATFARIWYLLDGKMQPPGKLAAMASIRLQGLHKPVYHALS
DCGDHVVIMNTRHIAFSGNKWEQKVYSSHTGYPPGGFRQVTAACLHLRDPVAIVKLAIYGMPLKLNHRRRTMMERLHL
FPDEYIPEDILKNLVEELPQPRKIPKRLDEYEQEEIDAFPRLWTPPEDYRL

Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.