Recombinant RM21 protein (His tag)

Catalog Number	548752
Synonyms	39S ribosomal protein L21, mitochondrial; L21mt; MRP-L21
Species	Human
Expression System	E. coli
Accession	Q7Z2W9
Molecular Weight	Predictes a molecular mass of 19.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	49-205
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 49-205 aa (Q7Z2W9) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Large Ribosomal Subunit Protein bL21m (MRPL21) Fragment (aa 49-205) is a high-quality, stable, and soluble protein fragment designed for structural and biochemical studies. This 157-amino acid fragment represents a computationally optimized region of the mitochondrial ribosomal protein, offering researchers a reliable tool for investigating mitochondrial ribosome function and assembly. The full-length Large Ribosomal Subunit Protein bL21m (also known as 39S ribosomal protein L21, mitochondrial) is encoded by the MRPL21 gene and functions as a component of the mitochondrial ribosome. According to UniProt entry Q7Z2W9, this protein is localized to the mitochondrion, as supported by multiple experimental evidence sources. As part of the mitochondrial ribosome, MRPL21 plays a crucial role in mitochondrial protein synthesis, which is essential for oxidative phosphorylation and cellular energy production. The mitochondrial localization underscores its importance in maintaining mitochondrial function and overall cellular metabolism.