Recombinant RM20 protein (His tag)

Catalog Number	549635
Synonyms	39S ribosomal protein L20, mitochondrial; L20mt; MRP-L20
Species	Human
Expression System	E. coli
Accession	Q9BYC9
Molecular Weight	Predictes a molecular mass of 18.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	10-149
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 10-149 aa (Q9BYC9) 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 bL20m (MRPL20) fragment (residues 10-149) is a high-quality protein product designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the mitochondrial ribosomal protein, optimized for research applications in mitochondrial function and ribosome assembly. The full-length Large ribosomal subunit protein bL20m, encoded by the MRPL20 gene, is a component of the mitochondrial ribosome (mitoribosome), specifically the 39S large subunit. Mitochondrial ribosomes are essential for synthesizing proteins within the mitochondrion, which are critical for oxidative phosphorylation and cellular energy production. The protein is localized to the mitochondrion, as supported by experimental evidence, highlighting its role in mitochondrial protein synthesis and its importance in cellular metabolism and energy homeostasis. The provided fragment (residues 10-149) was selected computationally to ensure stability and solubility, facilitating investigations into its structural properties and interactions.