Recombinant RM01 protein (His tag)

Catalog Number	549638
Synonyms	39S ribosomal protein L1, mitochondrial; L1mt; MRP-L1
Species	Human
Expression System	E. coli
Accession	Q9BYD6
Molecular Weight	Predictes a molecular mass of 30.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	76-325
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 76-325 aa (Q9BYD6) 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 uL1m (39S ribosomal protein L1, mitochondrial), corresponding to amino acids 76-325, is a high-quality protein fragment engineered for structural and biochemical studies. This fragment was computationally optimized for stability and solubility, making it an ideal tool for investigating mitochondrial ribosome function and related cellular processes. The full-length Large ribosomal subunit protein uL1m (also known as 39S ribosomal protein L1, mitochondrial or MRP-L1) is encoded by the MRPL1 gene in humans. According to UniProt (Q9BYD6), this protein is localized to the mitochondrion, as supported by experimental evidence. As a component of the mitochondrial ribosome (mitoribosome), MRPL1 plays a critical role in mitochondrial protein synthesis, which is essential for oxidative phosphorylation and cellular energy production. Mitochondrial ribosomal proteins like MRPL1 are vital for maintaining mitochondrial function and have implications in various metabolic and neurodegenerative disorders.