Recombinant RT22 protein (His tag)

Catalog Number	547161
Synonyms	28S ribosomal protein S22, mitochondrial; MRP-S22; S22mt
Species	Human
Expression System	E. coli
Accession	P82650
Molecular Weight	Predictes a molecular mass of 35.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	67-360
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 67-360 aa (P82650) 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 Small Ribosomal Subunit Protein mS22 (MRPS22) Fragment (residues 67-360) is a high-purity, stable protein fragment designed for structural and biochemical studies. This 294-amino acid fragment represents a soluble and well-folded region of the mitochondrial ribosomal protein, ideal for investigating mitochondrial ribosome assembly and function. The full-length MRPS22 protein, also known as Small Ribosomal Subunit Protein mS22 or 28S ribosomal protein S22, mitochondrial, is a component of the mitochondrial ribosome and is localized to the mitochondrion, as supported by experimental evidence (PubMed:25838379). Mitochondrial ribosomal proteins like MRPS22 are essential for protein synthesis within mitochondria, playing critical roles in cellular energy production and mitochondrial function. This recombinant fragment provides a valuable tool for studying the molecular mechanisms of mitochondrial translation and its implications in cellular metabolism and disease.