Recombinant RT25 protein (His tag)

Catalog Number	549470
Synonyms	28S ribosomal protein S25, mitochondrial; MRP-S25; S25mt
Species	Human
Expression System	E. coli
Accession	P82663
Molecular Weight	Predictes a molecular mass of 21.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1-173
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 1-173 aa (P82663) 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 mS25 (MRPS25) fragment (residues 1-173) is a high-purity, soluble protein designed for structural and biochemical research. This fragment represents a stable, functionally relevant domain of the mitochondrial 28S ribosomal protein S25, optimized for experimental applications in studying mitochondrial ribosome assembly and function. The full-length Small ribosomal subunit protein mS25, encoded by the MRPS25 gene, is a component of the mitochondrial ribosome, specifically localized to the mitochondrion as confirmed by experimental evidence. Mitochondrial ribosomal proteins like mS25 are essential for protein synthesis within mitochondria, playing a critical role in cellular energy production and overall mitochondrial function. The provided fragment (residues 1-173) was selected computationally to ensure stability and solubility, facilitating investigations into ribosomal structure and mitochondrial biology without requiring the full-length protein.