Recombinant RT24 protein (His tag)

Catalog Number	536400
Synonyms	28S ribosomal protein S24, mitochondrial; MRP-S24; S24mt
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q688C0
Gene ID	259579
Molecular Weight	Predictes a molecular mass of 18.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	24-164
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 24-164 aa (Q688C0) 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 Small ribosomal subunit protein uS3m (28S ribosomal protein S24, mitochondrial) fragment (residues 24-164) from Caenorhabditis elegans, designed as a stable and soluble unit for structural and biochemical studies of mitochondrial ribosome function. The full-length Small ribosomal subunit protein uS3m, also known as MRP-S24 or S24mt, is a mitochondrial protein encoded by the mrps-24 gene in Caenorhabditis elegans. According to UniProt (ID: Q688C0), it is localized to the mitochondrion, indicating its role as a component of the mitochondrial ribosome, which is essential for protein synthesis within this organelle. Mitochondrial ribosomes are critical for oxidative phosphorylation and cellular energy production, making this protein significant for research on mitochondrial function, metabolism, and related disorders. The provided fragment (residues 24-164) was selected computationally to ensure stability and solubility, facilitating experimental applications in structural biology and biochemical assays.