Recombinant RT10 protein (His tag)

Catalog Number	536813
Synonyms	28S ribosomal protein S10, mitochondrial; MRP-S10; S10mt
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9XWV5
Gene ID	189618
Molecular Weight	Predictes a molecular mass of 15.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	35-156
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 35-156 aa (Q9XWV5) 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 protein fragment of Small ribosomal subunit protein uS10m (MRP-S10) from Caenorhabditis elegans, encompassing residues 35-156. This 122-amino acid fragment is optimized for stability and solubility, ideal for investigating mitochondrial ribosomal function and insulin/IGF signaling pathways in biochemical and structural studies. The full-length Small ribosomal subunit protein uS10m (also known as 28S ribosomal protein S10, mitochondrial or MRP-S10) is essential for normal mitochondrial function and larval development in Caenorhabditis elegans. Research indicates it plays a significant role in insulin/IGF signaling pathways, which are crucial for metabolic regulation and developmental processes. The protein is localized exclusively to the mitochondrion, where it contributes to ribosomal activity necessary for mitochondrial protein synthesis. This recombinant fragment provides a valuable tool for studying these fundamental biological processes without the complexities of the full-length membrane-associated protein.