Recombinant RT07 protein (His tag)

Catalog Number	535648
Synonyms	28S ribosomal protein S7, mitochondrial; MRP-S7; S7mt
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VKX4
Gene ID	34412
Molecular Weight	Predictes a molecular mass of 24.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	20-218
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 20-218 aa (Q9VKX4) 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 Drosophila melanogaster Small ribosomal subunit protein uS7m (28S ribosomal protein S7, mitochondrial) fragment (residues 20-218). This 199-amino acid fragment represents a stable, soluble structural unit ideal for mitochondrial ribosome studies, structural biology, and functional assays. The full-length Small ribosomal subunit protein uS7m (MRP-S7, S7mt) is a mitochondrial ribosomal protein encoded by the mRpS7 gene in Drosophila melanogaster. According to UniProt annotation (Q9VKX4), this protein localizes specifically to the mitochondrion, indicating its essential role in mitochondrial protein synthesis as part of the small ribosomal subunit. Mitochondrial ribosomal proteins are crucial for oxidative phosphorylation and cellular energy production, making this protein significant for studying mitochondrial function, organellar translation mechanisms, and metabolic disorders.