Recombinant RM32 protein (His tag)

Catalog Number	536243
Synonyms	39S ribosomal protein L32, mitochondrial; L32mt; MRP-L32
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9V9Z1
Gene ID	43698
Molecular Weight	Predictes a molecular mass of 24.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-195
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 1-195 aa (Q9V9Z1) 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 Large ribosomal subunit protein bL32m (39S ribosomal protein L32, mitochondrial) fragment (amino acids 1-195) - a highly stable and soluble protein unit ideal for mitochondrial ribosome research, structural studies, and biochemical characterization. The full-length Large ribosomal subunit protein bL32m (also known as MRP-L32 or L32mt) is an essential component of the mitochondrial large ribosomal subunit (mt-LSU). As part of the mitochondrial ribosome (mitoribosome), this protein plays a critical role in the synthesis of proteins within mitochondria, the energy-producing organelles of eukaryotic cells. The mitoribosome represents a specialized ribonucleoprotein complex distinct from cytoplasmic ribosomes, reflecting the unique evolutionary origin and functional requirements of mitochondrial protein synthesis. This protein is specifically localized to the mitochondrion, where it contributes to the structural integrity and catalytic function of the mitochondrial translation machinery. The recombinant fragment (residues 1-195) represents a computationally selected stable domain that maintains key structural features while offering enhanced solubility for experimental applications.