Recombinant RT12 protein (His tag)

Catalog Number	533651
Synonyms	40S ribosomal protein S12, mitochondrial; MRP-S12; S12mt; MT-RPS12; Protein technical knockout locus
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P10735
Gene ID	31228
Molecular Weight	Predictes a molecular mass of 13.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	31-140
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 31-140 aa (P10735) 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 uS12m (40S ribosomal protein S12, mitochondrial) fragment (residues 31-140) is a stable and soluble protein fragment designed for structural and biochemical studies. This 110-amino acid fragment represents a computationally optimized domain of the mitochondrial ribosomal protein, enabling researchers to investigate ribosomal assembly and function with high reliability. The full-length Small ribosomal subunit protein uS12m, encoded by the tko gene in Drosophila melanogaster (UniProt ID: P10735), is a mitochondrial ribosomal protein localized to the mitochondrion. As a component of the mitochondrial small ribosomal subunit, it plays a critical role in mitochondrial protein synthesis, which is essential for cellular energy production and mitochondrial function. This recombinant fragment (residues 31-140) encompasses a stable structural domain, facilitating experimental analysis of ribosomal mechanisms in mitochondrial biology.