Recombinant RM35 protein (His tag)

Catalog Number	536573
Synonyms	39S ribosomal protein L35, mitochondrial; L35mt; MRP-L35
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q21454
Gene ID	187375
Molecular Weight	Predictes a molecular mass of 12.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	38-127
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 38-127 aa (Q21454) 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 Large ribosomal subunit protein bL35m (39S ribosomal protein L35, mitochondrial) fragment (residues 38-127) from Caenorhabditis elegans. This 90-amino acid fragment is a stable, soluble unit ideal for structural biology and biochemical studies, offering researchers a reliable tool to investigate mitochondrial ribosome function. The full-length Large ribosomal subunit protein bL35m (also known as MRP-L35 or L35mt) is a mitochondrial protein encoded by the mrpl-35 gene in Caenorhabditis elegans. As indicated by its subcellular localization, this protein resides within the mitochondrion, where it functions as a component of the mitochondrial ribosome (mitoribosome). Mitochondrial ribosomes are essential for translating mitochondrial DNA-encoded proteins, which are critical for oxidative phosphorylation and cellular energy production. The selected fragment (residues 38-127) represents a computationally predicted stable and soluble region, facilitating experimental approaches to study mitoribosome structure and function without the challenges associated with full-length membrane-associated ribosomal proteins.