Recombinant RM45 protein (His tag)

Catalog Number	536229
Synonyms	39S ribosomal protein L45, mitochondrial
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q95Y71
Gene ID	191044
Molecular Weight	Predictes a molecular mass of 39.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	31-357
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 31-357 aa (Q95Y71) 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 mL45 (39S ribosomal protein L45, mitochondrial) fragment (residues 31-357) from Caenorhabditis elegans. This 327-amino acid fragment represents a stable, soluble unit of the mitochondrial ribosomal protein, ideal for structural biology and biochemical studies of mitochondrial ribosome function. The full-length Large ribosomal subunit protein mL45 (encoded by mrpl-45) is a mitochondrial protein localized to the mitochondrion, as confirmed by experimental evidence. As a component of the 39S mitochondrial ribosomal large subunit, this protein plays an essential role in mitochondrial protein synthesis, which is critical for oxidative phosphorylation and cellular energy production. Mitochondrial ribosomal proteins are fundamental to maintaining mitochondrial function and cellular metabolism.