Recombinant RT12 protein (His tag)

Catalog Number	548651
Synonyms	28S ribosomal protein S12, mitochondrial; MRP-S12; S12mt; MT-RPS12
Species	Human
Expression System	E. coli
Accession	O15235
Molecular Weight	Predictes a molecular mass of 13.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	30-138
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 30-138 aa (O15235) 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	This recombinant protein product features a stable and soluble fragment (residues 30-138) of the human Small Ribosomal Subunit Protein uS12m (MRPS12), designed for structural and biochemical studies. The fragment is computationally optimized to represent a functional domain, making it ideal for research on mitochondrial ribosome assembly and function. The full-length Small Ribosomal Subunit Protein uS12m, encoded by the MRPS12 gene, is a mitochondrial protein essential for mitochondrial ribosome function and protein synthesis within the organelle. As indicated by its subcellular location in the mitochondrion, it plays a critical role in maintaining mitochondrial health and energy production, which is vital for cellular processes. This protein is significant in studies of mitochondrial disorders and respiratory chain function.