Recombinant RT33 protein (His tag)

Catalog Number	551292
Synonyms	28S ribosomal protein S33, mitochondrial; MRP-S33; S33mt
Species	Human
Expression System	E. coli
Accession	Q9Y291
Molecular Weight	Predictes a molecular mass of 14.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	2-106
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2-106 aa (Q9Y291) 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 product is a recombinant fragment of the human Small ribosomal subunit protein mS33 (MRPS33), encompassing amino acids 2-106. This 105-amino acid fragment has been computationally selected for optimal stability and solubility, making it an ideal reagent for structural biology studies and biochemical characterization of mitochondrial ribosome components. The full-length protein, Small ribosomal subunit protein mS33 (also known as 28S ribosomal protein S33, mitochondrial or MRP-S33), is encoded by the MRPS33 gene in humans. According to its subcellular location annotation, it is localized to the mitochondrion. As a component of the mitochondrial ribosome (mitoribosome), it is involved in mitochondrial protein synthesis, which is essential for oxidative phosphorylation and cellular energy production. Mitochondrial ribosomal proteins like mS33 play critical roles in maintaining mitochondrial function, and their dysfunction has been linked to various human diseases.