Recombinant RT31 protein (His tag)

Catalog Number	547862
Synonyms	28S ribosomal protein S31, mitochondrial; MRP-S31; S31mt; Imogen 38
Species	Human
Expression System	E. coli
Accession	Q92665
Molecular Weight	Predictes a molecular mass of 18.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	250-395
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 250-395 aa (Q92665) 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 human Small ribosomal subunit protein mS31 (MRPS31) fragment (residues 250-395) is a high-purity, stable protein designed for structural and biochemical studies. This 146-amino acid fragment was computationally selected to ensure solubility and functionality, making it an ideal tool for investigating mitochondrial ribosome assembly and function. The full-length Small ribosomal subunit protein mS31, also known as MRP-S31 or S31mt, is a mitochondrial protein encoded by the MRPS31 gene in Homo sapiens. It localizes to the mitochondrion, where it is a component of the small subunit of the mitochondrial ribosome. Mitochondrial ribosomes are essential for translating proteins encoded by the mitochondrial genome, which are critical for oxidative phosphorylation and cellular energy production. This recombinant fragment represents a stable, soluble region of mS31, enabling detailed studies of its role in mitochondrial protein synthesis and ribosome biogenesis.