Recombinant RT05 protein (His tag)

Catalog Number	549743
Synonyms	28S ribosomal protein S5, mitochondrial; MRP-S5; S5mt
Species	Human
Expression System	E. coli
Accession	P82675
Molecular Weight	Predictes a molecular mass of 40.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	86-430
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 86-430 aa (P82675) 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 uS5m (MRPS5) Fragment (aa 86-430) – a high-purity protein fragment encompassing the S5 DRBM domain (aa 218-282), designed for targeted studies of mitochondrial ribosome function and domain-specific mechanisms. The full-length Small Ribosomal Subunit Protein uS5m (also known as 28S ribosomal protein S5, mitochondrial or MRP-S5) is encoded by the MRPS5 gene in Homo sapiens and localizes to the mitochondrion, as supported by experimental evidence. As a component of the mitochondrial ribosome, it plays a critical role in mitochondrial protein synthesis, which is essential for oxidative phosphorylation and cellular energy production. The provided fragment spans residues 86-430 and includes the S5 DRBM domain, enabling focused investigation into the domain's contributions to ribosomal assembly, translation, or RNA interactions within the mitochondrial context.