Recombinant RT27 protein (His tag)

Catalog Number	547853
Synonyms	28S ribosomal protein S27, mitochondrial; MRP-S27; S27mt; Mitochondrial ribosomal protein S27
Species	Human
Expression System	E. coli
Accession	Q92552
Molecular Weight	Predictes a molecular mass of 45.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	37-414
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 37-414 aa (Q92552) 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 mS27 (Fragment 37-414) is a high-purity, stable protein fragment designed for structural and biochemical studies. This product represents a soluble and functional domain of the mitochondrial ribosomal protein S27, essential for mitochondrial protein synthesis and energy metabolism research. The full-length Small Ribosomal Subunit Protein mS27 (MRPS27) is an RNA-binding component of the mitochondrial small ribosomal subunit that plays a critical role in mitochondrial protein synthesis. It specifically stimulates mitochondrial mRNA translation of subunit components of the mitochondrial electron transport chain and binds to both mitochondrial 12S rRNA and tRNA(Glu). Beyond its fundamental role in mitochondrial function, MRPS27 has been implicated in positive regulation of cell proliferation and tumor cell growth. The protein localizes to both the cytoplasm and mitochondrion, reflecting its diverse cellular functions in energy production and growth regulation.