Recombinant RRFM protein (His tag)

Catalog Number	540971
Synonyms	RRF; mtRRF; Ribosome-releasing factor, mitochondrial
Species	Human
Expression System	E. coli
Accession	Q96E11
Molecular Weight	Predictes a molecular mass of 23.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	70-262
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 70-262 aa (Q96E11) 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 Ribosome-recycling factor, mitochondrial (RRF) fragment (residues 70-262) is a high-quality protein product designed for structural and biochemical studies. This 193-amino acid fragment represents a stable and soluble unit of the human mitochondrial RRF protein, optimized for research applications investigating mitochondrial protein synthesis termination mechanisms. The full-length Ribosome-recycling factor, mitochondrial (RRF) is a crucial enzyme located in the mitochondrion that mediates the disassembly of ribosomes from messenger RNA following termination of mitochondrial protein biosynthesis. It functions in collaboration with GFM2 to promote mitochondrial ribosome recycling through dissolution of intersubunit contacts, playing an essential role in the mitochondrial translation machinery. This protein is fundamental to maintaining proper mitochondrial function and protein synthesis regulation in human cells.