Recombinant MTG1 protein (His tag)

Catalog Number	538832
Synonyms	GTP-binding protein 7; Mitochondrial GTPase 1
Species	Human
Expression System	E. coli
Accession	Q9BT17
Molecular Weight	Predictes a molecular mass of 38.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-334
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 1-334 aa (Q9BT17) 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 Mitochondrial ribosome-associated GTPase 1 (MTG1) fragment (amino acids 1-334) is a high-purity protein designed for studying mitochondrial ribosome assembly and translational regulation. This fragment fully encompasses the CP-type G domain, making it an ideal tool for investigating GTPase activity and domain-specific functions in mitochondrial biology. Mitochondrial ribosome-associated GTPase 1 (MTG1), encoded by the MTG1 gene, plays a critical role in regulating mitochondrial ribosome assembly and translational activity. It exhibits mitochondrial GTPase activity, contributing to protein synthesis within mitochondria. The protein localizes to the mitochondrial inner membrane as a peripheral membrane protein on the matrix side, positioning it strategically for interactions with mitochondrial ribosomal components. This specific localization and function highlight its importance in maintaining mitochondrial protein synthesis and cellular energy production.