Recombinant MTG2 protein (His tag)

Catalog Number	543617
Synonyms	GTP-binding protein 5; Protein obg homolog 1; ObgH1
Species	Human
Expression System	E. coli
Accession	Q9H4K7
Molecular Weight	Predictes a molecular mass of 37.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	75-406
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 75-406 aa (Q9H4K7) 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 2 (MTG2) Fragment (residues 75-406) is a high-purity protein designed for studying mitochondrial ribosome assembly and translational regulation. This fragment fully encompasses the OBG-type G domain, making it an ideal tool for investigating GTPase activity and ribosome maturation processes in mitochondrial function. The full-length Mitochondrial ribosome-associated GTPase 2 (also known as GTP-binding protein 5 or ObgH1) plays a crucial role in regulating mitochondrial ribosome assembly and translational activity. This protein displays GTPase activity and is involved in the ribosome maturation process, as evidenced by multiple experimental studies. Located in the mitochondrion, specifically at the inner membrane as a peripheral membrane protein on the matrix side, MTG2 is essential for proper mitochondrial function. The provided fragment (residues 75-406) contains the complete OBG-type G domain (residues 225-390), enabling focused research on this critical functional region without interference from other protein domains.