Recombinant THG1 protein (His tag)

Catalog Number	534883
Synonyms	His; tRNA-histidine guanylyltransferase
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9V3N8
Gene ID	34876
Molecular Weight	Predictes a molecular mass of 34.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-286
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 1-286 aa (Q9V3N8) 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	This recombinant protein product features a stable and soluble fragment (residues 1-286) of the Probable tRNA(His) guanylyltransferase from Drosophila melanogaster, designed for structural and biochemical studies. The fragment retains key functional domains, making it an ideal tool for investigating tRNA maturation processes. The full-length Probable tRNA(His) guanylyltransferase (EC 2.7.7.79) catalyzes the addition of a GMP to the 5'-end of tRNA(His) following transcription and RNase P cleavage, a critical step in tRNA maturation. This enzymatic activity ensures proper tRNA function in protein synthesis, highlighting its importance in cellular gene expression. The selected fragment encompasses the complete domain structure (residues 1-286), enabling researchers to explore its guanylyltransferase mechanism and interactions in a soluble, experimentally tractable form.