Recombinant PTRD1 protein (His tag)

Catalog Number	549241
Synonyms	Peptidyl-tRNA hydrolase domain-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q6GMV3
Molecular Weight	Predictes a molecular mass of 17.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-140
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-140 aa (Q6GMV3) 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 product is a recombinant fragment (residues 1-140) of the Putative Peptidyl-tRNA Hydrolase PTRHD1 from Homo sapiens, designed for structural and biochemical studies. It represents a stable, soluble domain ideal for investigating its potential role in protein synthesis and tRNA release mechanisms. The full-length PTRHD1 protein is classified as a putative peptidyl-tRNA hydrolase (EC 3.1.1.29) and is proposed to function in releasing tRNAs from the ribosome during protein synthesis, a critical step in translational fidelity. However, recent evidence (PubMed:27235175) suggests it may lack canonical peptidyl-tRNA hydrolase activity, highlighting its enigmatic nature and the need for further research to clarify its biological role. The subcellular localization of PTRHD1 is currently uncharacterized.