Recombinant HENMT protein (His tag)

Catalog Number	545161
Synonyms	HEN1 methyltransferase homolog 1
Species	Human
Expression System	E. coli
Accession	Q5T8I9
Molecular Weight	Predictes a molecular mass of 46.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	1-393
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 1-393 aa (Q5T8I9) 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 Small RNA 2'-O-methyltransferase (HENMT1) fragment (residues 1-393) is a high-purity protein designed for structural and biochemical studies. This soluble fragment retains key functional regions, enabling research into piRNA methylation mechanisms critical for genome stability and gametogenesis. The full-length HENMT1 protein, encoded by the HENMT1 gene in Homo sapiens, functions as a methyltransferase that specifically adds a 2'-O-methyl group to the 3'-end of piRNAs. piRNAs are 24–30 nucleotide RNAs derived from transposons and repetitive elements, and their methylation by HENMT1 protects them from uridylation and degradation, thereby stabilizing them. This stabilization is essential for repressing transposon activity during gametogenesis. The protein localizes to the cytoplasm and is a component of the meiotic nuage (P granule), a germ-cell-specific organelle required for transposon silencing in meiosis.