Recombinant TRM2B protein (His tag)

Catalog Number	545683
Synonyms	uracil-5-; TRM2 homolog B; rRNA (uracil-5-)-methyltransferase TRMT2B
Species	Human
Expression System	E. coli
Accession	Q96GJ1
Molecular Weight	Predictes a molecular mass of 49.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	79-504
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 79-504 aa (Q96GJ1) 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 79-504) of human tRNA (uracil-5-)-methyltransferase homolog B (TRMT2B), a mitochondrial methyltransferase that catalyzes 5-methyl-uridine formation in tRNAs and 12S rRNA. The fragment is ideal for structural studies, biochemical assays, and functional investigations of methylation mechanisms. TRMT2B is a mitochondrial S-adenosyl-L-methionine-dependent methyltransferase that plays a critical role in RNA modification by catalyzing the formation of 5-methyl-uridine at position 54 in all tRNAs (m5U54) and at position 429 in 12S rRNA (m5U429). Located in the mitochondrion, specifically the mitochondrial matrix for isoform 1, this enzyme contributes to RNA maturation without impacting RNA stability or mitochondrial translation. Its activity underscores the importance of post-transcriptional modifications in mitochondrial function, making it a key subject for research into RNA biology and mitochondrial disorders.