Recombinant TMT1B protein (His tag)

Catalog Number	540546
Synonyms	Methyltransferase-like protein 7B; Thiol S-methyltransferase METTL7B
Species	Human
Expression System	E. coli
Accession	Q6UX53
Molecular Weight	Predictes a molecular mass of 26.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	24-244
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 24-244 aa (Q6UX53) 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 24-244) of human Thiol S-methyltransferase TMT1B (METTL7B), a key enzyme involved in S-thiol methylation. The fragment is optimized for structural and biochemical studies, offering researchers a reliable tool to investigate thiol methylation mechanisms and related metabolic pathways. Thiol S-methyltransferase TMT1B (encoded by the TMT1B gene) catalyzes the transfer of a methyl group from S-adenosyl-L-methionine to alkyl and phenolic thiol-containing acceptor substrates. Together with TMT1B, it accounts for most S-thiol methylation activity in the endoplasmic reticulum of hepatocytes, selectively methylating S-centered nucleophiles from metabolites such as hydrogen sulfide and dithiothreitol. The protein localizes to the endoplasmic reticulum membrane (as a peripheral membrane protein), lipid droplets, microsomes, and the cytosol, with high concentration in perinuclear ER regions surrounding lipid droplets. This localization suggests a role in lipid droplet formation and ER-related metabolic processes, highlighting its importance in cellular thiol metabolism and potential implications in liver function and detoxification pathways.