Recombinant SETD7 protein (His tag)

Catalog Number	540852
Synonyms	Histone H3-K4 methyltransferase SETD7; H3-K4-HMTase SETD7; Lysine N-methyltransferase 7; SET domain-containing protein 7; SET7/9
Species	Human
Expression System	E. coli
Accession	Q8WTS6
Molecular Weight	Predictes a molecular mass of 42.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	1-366
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 1-366 aa (Q8WTS6) 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 SETD7 (1-366) is a high-purity protein fragment encompassing the full SET domain of Histone-lysine N-methyltransferase SETD7. This product is engineered for researchers studying epigenetic regulation, histone modification, and transcriptional activation mechanisms, providing a targeted tool for domain-specific functional assays. Histone-lysine N-methyltransferase SETD7 is a crucial epigenetic regulator that specifically monomethylates histone H3 at lysine-4 (H3K4me1), serving as a key marker for transcriptional activation. Beyond histones, SETD7 methylates non-histone targets including p53/TP53 (stabilizing it and enhancing transcriptional activity), TAF10 (increasing RNA polymerase II affinity), and CGAS, indicating broad regulatory roles in gene expression and cellular signaling. Located primarily in the nucleus and associated with chromosomes, SETD7 is recruited to promoters such as insulin to activate transcription, highlighting its importance in metabolic and disease-related pathways. The provided fragment retains the complete SET domain, enabling focused investigation into methyltransferase activity and substrate interactions.