Recombinant SET1B protein (His tag)

Catalog Number	543897
Synonyms	Lysine N-methyltransferase 2G; SET domain-containing protein 1B; hSET1B
Species	Human
Expression System	E. coli
Accession	Q9UPS6
Molecular Weight	Predictes a molecular mass of 20.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1802-1966
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 1802-1966 aa (Q9UPS6) 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 SETD1B Fragment (aa 1802-1966): A high-purity protein fragment encompassing the SET and Post-SET domains of human Histone-lysine N-methyltransferase SETD1B. This product is engineered for researchers studying histone methylation mechanisms, chromatin remodeling, and transcriptional regulation, offering a targeted tool for domain-specific functional assays. Histone-lysine N-methyltransferase SETD1B is a crucial enzyme in epigenetic regulation, catalyzing the methylation of histone H3 at lysine 4 (H3K4) to form H3K4me1, H3K4me2, and H3K4me3 marks. These modifications are associated with active chromatin sites involved in transcription and DNA repair. SETD1B plays a vital role in hematopoietic progenitor cell programming and lymphoid lineage specification during hematopoiesis. The protein localizes primarily to the nucleus, specifically to euchromatic nuclear speckles and chromosomes, with partial cytoplasmic presence. Its distinct nuclear speckle localization suggests target gene specificity, complementing related methyltransferases like SETD1A in chromatin remodeling processes.