Recombinant SET1A protein (His tag)

Catalog Number	544067
Synonyms	Lysine N-methyltransferase 2F; SET domain-containing protein 1A; hSET1A; Set1/Ash2 histone methyltransferase complex subunit SET1
Species	Human
Expression System	E. coli
Accession	O15047
Molecular Weight	Predictes a molecular mass of 36.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	1405-1707
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1405-1707 aa (O15047) 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 SETD1A Fragment (1405-1707) is a high-purity protein product encompassing the critical SET and Post-SET domains of human Histone-lysine N-methyltransferase SETD1A. This fragment serves as an essential tool for investigating the specific enzymatic and regulatory functions of these domains in histone modification and chromatin remodeling. Histone-lysine N-methyltransferase SETD1A is a key enzyme in epigenetic regulation, catalyzing the methylation of histone H3 at lysine 4 (H3K4) through a non-processive mechanism. It generates H3K4me1, H3K4me2, and H3K4me3 marks at active chromatin sites, playing crucial roles in transcription, DNA repair, and stem cell programming. SETD1A localizes primarily to nuclear speckles and chromosomes, where it participates in chromatin remodeling machinery and protects replication forks from degradation. It also binds RNAs involved in RNA processing and DNA damage response, highlighting its multifaceted role in genomic maintenance and gene expression control.