Recombinant DNMT3A (278-432) protein

Catalog No: 31541, 31941
Lot No: 09115001
Expressed In: *E. coli*

Quantity: 100 µg
Concentration: 0.8 µg/µl
Source: Human

Buffer Contents: Recombinant DNMT3A (278-432) was expressed in *E. coli* cells at a concentration of 0.8 µg/µl in 25 mM Tris pH 7.4, 150 mM NaCl, 5% glycerol.

Background: DNMT3A (DNA methyltransferase 3 alpha) is a *de novo* methyltransferase. DNMT3A is involved in DNA methylation, in which a methyl group is added to a cytosine residue on DNA, commonly at the C5 position of a CpG dinucleotide. DNMT3A has been shown to be important in the regulation of specific patterns of DNA methylation. Methylation of mammalian DNA has long been recognized to play a major role in a number of cellular functions such as embryonic development, genetic imprinting, X chromosome inactivation and control of gene expression. DNA methylation is generally associated with transcriptional repression.

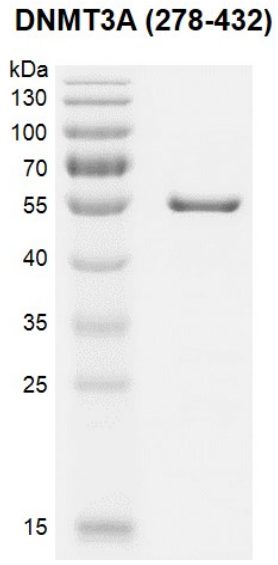
Trimethylation of Lys36 on histone H3 tail (H3K36me3) is associated with DNA methylation and elongation phase of transcription. PWWP domain of DNMT3A reads this epigenetic mark to guide DNA methylation.

Protein Details: The peptide corresponding to amino acids 278 - 432 that contains the PWWP sequences of DNMT3A (accession number NP_072046.2) was expressed in *E. coli* and contains an N-terminal GST tag with an observed molecular weight of 43.5 kDa. The recombinant protein is >90% pure by SDS-PAGE.

Application Notes: Recombinant DNMT3A (278-432) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant DNMT3A (278-432), GST-tag gel.
DNMT3A (278-432) was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.