Bioworld Technology CO., Ltd.



DNMT3B (H7) Peptide

Cat No.: BS2572P

Background

Methylation at the 5'-position of cytosine is the only known naturally occurring covalent modification of the mammalian genome. DNA methylation requires the enzymatic activity of DNA 5-cytosine methyltransferase (Dnmt) proteins, which catalyze the transfer of a methyl group from S-adenosyl methionine to the 5'-position of cytosines residing in the dinucleotide CpG motif, and this methylation results in transcriptional repression of the target gene. The Dnmt enzymes are encoded by independent genes. Dnmt1 is the most abundant, and it preferentially methylates hemimethylated DNA and coordinates gene expression during development. Additional mammalian Dnmt proteins include Dnmt2 and Dnmt3. Dnmt2 lacks the large N-terminal regulator domain of Dnmt1, is expressed at substantially lower levels in adult tissues, and is likely involved in methylating newly integrated retroviral DNA. Dnmt3a and Dnmt3b are encoded by two distinct genes, but both are abundantly expressed in embryonic stem cells, where they also methylate CpG motifs on DNA.

Swiss-Prot

Q9UBC3

Applications

Blocking

Specificity

This peptide can be used with studies using BS2572 DNMT3B (H7) pAb.

Purification & Purity

Synthetic peptide DNMT3B (H7). (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at 4 ${\rm C}$ short term. Aliquot and store at -20 ${\rm C}$ long term. Avoid freeze-thaw cycles.

Research Use

For research use only, not for use in diagnostic procedure.