

Recombinant DNMT3B protein

Catalog No: 31413, 31813

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.8 µg/µl

Source: Human

Buffer Contents: Full length recombinant DNMT3B protein is supplied in 25 mM Tris pH 8.0, 300 mM NaCl, 5% Glycerol and 0.04% Triton X-100, 1mM DTT. Please refer to product insert upon arrival for lot-specific concentration.

Background: DNMT3B (DNA (Cytosine-5-)-Methyltransferase 3 Beta) proteins are 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. Three families of DNMTs have been identified: DNMT1, DNMT2, and DNMT3.

The DNMT3 family contains two active methyltransferases, DNMT3A & DNMT3B, and one DNMT3-Like protein (DNMT3L). DNMT3B has been shown to be important in the regulation of specific patterns of DNA methylation, specifically de novo 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 the control of gene expression. DNA methylation is generally associated with transcriptional repression. Mutations in the DNMT3B gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome.

Protein Details: Full length recombinant DNMT3B protein (accession number NP_787045.1) was expressed in Sf9 cells and contains an N-terminal 6xHis-Tag with a molecular weight of 89.7 kDa. The recombinant protein is >60% pure by SDS-PAGE.

Application Notes: Recombinant DNMT3B protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

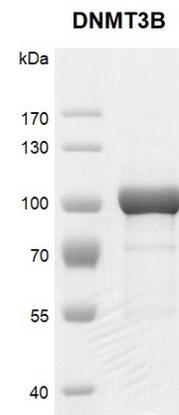
DNMT Activity Assay Conditions: Assay was performed using DNMT Activity / Inhibition Assay, Active Motif Catalog No. 55006, for 1 hour at 37°C.

References:

This product was used in the following publications:
J. Clin. Invest. (2018). 128(6): 2376-2388. PMID: 29708513.

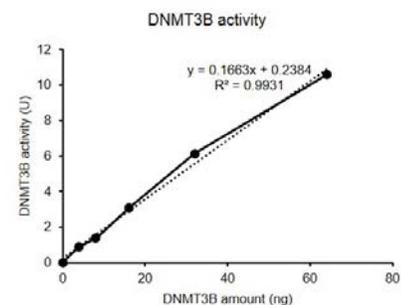
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

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



Recombinant DNMT3B protein gel.

Recombinant DNMT3B protein was run on an 8% SDS-PAGE gel and stained with Coomassie blue.



Recombinant DNMT3B protein activity assay

Recombinant DNMT3B protein activity was measured using DNMT Activity / Inhibition Assay, Active Motif Catalog No. 55006, for 1 hour at 37°C