

DNMT3B/DNMT3L recombinant protein

Recombinant DNMT3B/DNMT3L complex

CATALOG #
AAA59667

HOST
Baculovirus

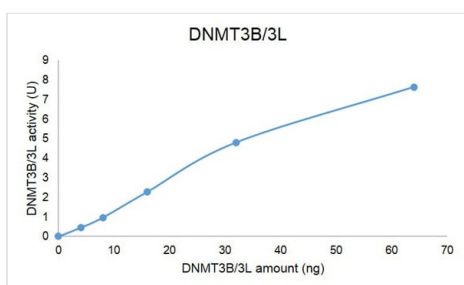
PRODUCT SYNONYMS

DNMT3B/DNMT3L; Recombinant DNMT3B/DNMT3L complex; DNA Methyltransferase 3 Like; DNA Methyltransferase 3 Beta; DNMT3B/DNMT3L recombinant protein

PRODUCT SPECIFICATIONS

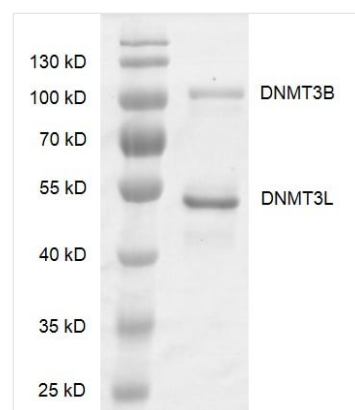
Host	Baculovirus
Purity/Purification	The recombinant protein is >90% pure by SDS-PAGE.
Form/Format	Full length recombinant DNMT3B/DNMT3L complex is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% Glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag, His-Tag
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

Recombinant DNMT3B / DNMT3L complex activity assay Assay was performed using DNMT Activity / Inhibition Assay. Add 100 ul reaction mix containing DNMT3B/DNMT3L to wells coated with DNMT substrate. Incubation was for 2 hour at 37 degree C.



SDS-PAGE

Recombinant DNMT3B / DNMT3L complex gel Recombinant DNMT3B / DNMT3L complex was run on an 10% SDS-PAGE gel and stained with Coomassie blue. MW: DNMT3B: 89.7 kDa DNMT3L: 48.6 kDa Purity: > 91%

ADDITIONAL INFORMATION

Related Product Information for DNMT3B/DNMT3L recombinant protein	Short Description: Recombinant DNMT3B/DNMT3L complex that includes full-length human DNMT3B protein (accession number NP_787045.1) with an N-terminal 6xHis-tag and DNMT3L (accession number NP_787063.1) with an N-terminal 6xHis-tag and DYKDDDDK-Tag was expressed in Sf9 cells. The molecular weights of DNMT3B and DNMT3L are 89.7 kDa and 48.6 kDa, respectively. The recombinant protein is >90% pure by SDS-PAGE. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: DNA methyltransferase 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. DNMT3L is a nuclear protein with similarity to the DNMT family of proteins, but does not function as a DNA methyltransferase. It serves as an essential regulator of DNMT3A and DNMT3B, recruiting them to sites for deposition of de novo DNA methylation.
Product Categories/Family for DNMT3B/DNMT3L recombinant protein	Recombinant Proteins; DNA Methyltransferase (DNMT)

NCBI AND UNIPROT INFORMATION

NCBI GI #	28559063
NCBI GeneID	1789
NCBI Accession #	NP_787045.1; NP_787063.1
NCBI GenBank Nucleotide #	NM_175849.1
UniProt Accession #	Q9UBC3; Q9UBD4; Q9UJQ5; Q9UKA6; Q9UNE5; A2A2E2; B4DSM8; B4DSU1; E1P5M6; E1P5M7; E7EN63; E9PBF2
Molecular Weight	81,311 Da
NCBI Official Full Name	DNA (cytosine-5)-methyltransferase 3B isoform 3
NCBI Official Synonym Full Names	DNA methyltransferase 3 beta
NCBI Official Symbol	DNMT3B
NCBI Official Synonym Symbols	ICF; ICF1; M.HsaIIIB
NCBI Protein Information	DNA (cytosine-5)-methyltransferase 3B
UniProt Protein Name	DNA (cytosine-5)-methyltransferase 3B
UniProt Gene Name	DNMT3B
UniProt Synonym Gene Names	Dnmt3b; DNA MTase HsaIIIB; M.HsaIIIB
UniProt Entry Name	DNM3B_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.