Active Recombinant Human DNMT3B, GST-tagged

Cat. No. DNMT3B-165H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human DNMT3B was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
Description	DNMT3B or DNA (cytosine-5-)-methyltransferase 3 beta encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. DNMT3B can methylate unmethylated and hemimethylated DNA with equal efficiencies. DNMT3B localizes primarily to the nucleus and its expression is developmentally regulated and is required for genome wide de novo methylation and is essential for mammalian development. Mutations in DNMT3B casue the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 50mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Bio-activity	The specific activity of DNMT3B was determined to be 525 pmol /min/mg
Molecular Mass	~138 kDa
Purity	>75% by densitometry
Applications	Methyltransferase Assay

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Storage	Store product at –70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 μg/μl

GENE INFORMATION

Gene Name	DNMT3B DNA (cytosine-5-)-methyltransferase 3 beta [Homo sapiens]
Official Symbol	DNMT3B
Synonyms	DNMT3B; DNA (cytosine-5-)-methyltransferase 3 beta; DNA (cytosine-5)-methyltransferase 3B; DNA MTase HsaIIIB; DNA methyltransferase HsaIIIB; ICF; ICF1; M.HsaIIIB;
Gene ID	1789
mRNA Refseq	NM_001207055
Protein Refseq	NP_001193984
MIM	602900
UniProt ID	Q9UBC3
Chromosome Location	20q11.2
Pathway	Cysteine and methionine metabolism, organism-specific biosystem; Cysteine and methionine metabolism, conserved biosystem; Metabolic pathways, organism-specific

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	biosystem; Methionine degradation, organism-specific biosystem; Methionine degradation, conserved biosystem; One Carbon Metabolism, organism-specific biosystem;
Function	DNA (cytosine-5-)-methyltransferase activity; DNA (cytosine-5-)-methyltransferase activity; DNA (cytosine-5-)-methyltransferase activity; DNA (cytosine-5-)-methyltransferase activity, acting on CpG substrates; DNA binding; DNA-methyltransferase activity; metal ion binding; protein binding; transcription corepressor activity; transcription corepressor activity; transferase activity; unmethylated CpG binding;

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