

Recombinant Human DNMT3B

Cat. No. DNMT3B-26884TH Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant fragment (amino acids 221-320) of Human Dnmt3b with a proprietary tag at the N terminal; Predicted MW 36.63 kDa, inclusive of tag.

Species Human

Source Wheat Germ

ProteinLength 100 amino acids

Description CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined.

Molecular Weight 36.630kDa inclusive of tags

Tissue specificity Ubiquitous; highly expressed in fetal liver, heart, kidney, placenta, and at lower levels in spleen, colon, brain, liver, small intestine, lung, peripheral blood mononuclear cells, and skeletal muscle. Isoform 1 is expressed in all tissues except brain, s

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Form	Liquid
Purity	Proprietary Purification
Storage buffer	pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	KEFGIGDLVWGKIKGFSWWPAMVSVKATSKRQAMSGMRVWQWFGDGKFSEVS ADKLVALGLFSQHFNLATFNKLVSYRKAMYHALEKARVRAGKTFPSS
Sequence Similarities	Belongs to the C5-methyltransferase family. Contains 1 ADD domain. Contains 1 GATA-type zinc finger. Contains 1 PHD-type zinc finger. Contains 1 PWWP domain.

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;
Gene ID	1789
mRNA Refseq	NM_175849
Protein Refseq	NP_787045
MIM	602900

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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 biosystem; Methionine degradation, organism-specific biosystem; Methionine degradation, conserved 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;

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