

Product datasheet for RC223206L3

OriGene Technologies, Inc.

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DNMT3B (NM_006892) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DNMT3B (NM_006892) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: DNMT3B

Synonyms: ICF; ICF1; M.HsallIB

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Sgfl-Mlul

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC223206).

Sequence:

Restriction Sites: Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_006892

ORF Size: 2559 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

OTI Annotation:

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 006892.3</u>

 RefSeq Size:
 4353 bp

 RefSeq ORF:
 2562 bp

 Locus ID:
 1789

 UniProt ID:
 Q9UBC3

Cytogenetics: 20q11.21

Domains: PWWP, DNA_methylase

Protein Families: Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Stem cell -

Pluripotency

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

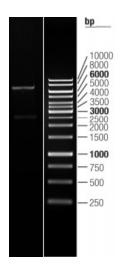
MW: 95.8 kDa



Gene Summary:

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. [provided by RefSeq, May 2011]

Product images:



Double digestion of RC223206L3 using Sgfl and Mul