

Product datasheet for RC226414L3

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DNMT1 (NM_001130823) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: DNMT1 (NM 001130823) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: DNMT1

Synonyms: ADCADN; AIM; CXXC9; DNMT; HSN1E; m.Hsal; MCMT

Mammalian Cell Puromycin

Selection:

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

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC226414).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001130823

ORF Size: 4896 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 customport@origene.com 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 001130823.1</u>

 RefSeq ORF:
 4899 bp

 Locus ID:
 1786

 UniProt ID:
 P26358

 Cytogenetics:
 19p13.2

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

MW: 184.8 kDa

Gene Summary: This gene encodes an enzyme that transfers methyl groups to cytosine nucleotides of

genomic DNA. This protein is the major enzyme responsible for maintaining methylation patterns following DNA replication and shows a preference for hemi-methylated DNA. Methylation of DNA is an important component of mammalian epigenetic gene regulation.

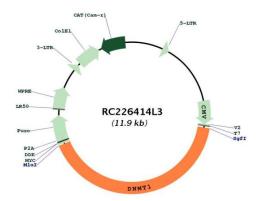
Aberrant methylation patterns are found in human tumors and associated with

developmental abnormalities. Variation in this gene has been associated with cerebellar ataxia, deafness, and narcolepsy, and neuropathy, hereditary sensory, type IE. Alternative

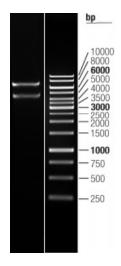
splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]



Product images:



Circular map for RC226414L3



Double digestion of RC226414L3 using Sgfl and Mlul $\,$