

Product datasheet for RC217851

DNMT1 (NM_001379) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT1 (NM_001379) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNMT1
Synonyms:	ADCADN; AIM; CXXC9; DNMT; HSN1E; m.Hsal; MCMT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217851 representing NM_001379 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

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CCCAGTCCCAGATATGCGCCCATATTTGGGCTGATGCAGGAGAAGATCTACATCAGCAAGATTGTGGTGG
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Protein Sequence: >RC217851 representing NM_001379
 Red=Cloning site Green=Tags(s)

MPARTAPARVPTLAVPAISLPDDVRRRLKDLERDSL TEKECVKEKLNLLHEFLQTEIKNQLCDLETCLRK
 EELSEEGYLAKVKSLLNKDLSENGAHAYNREVNQARSEARRVGMADANSPKPLSKPRTPRR
 SKSDGEAKPEPSPSPRITRSTRQTTITSHFAKGPAPKRPQEESERAKSDESIKEEDKDQDEKRRRVTSR
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 PIDTGLIEKNIELFFSGSAKPIYDDPSLEGGVNGKNLGPINWWITGFDGGEKALIGFSTSFAYEILMD
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 RGAQYQPILRDHICKDMSALVAARMRHIPLAPGSDWRDLPNIEVRLSDGTMARKLRYTHDRKNGRSSSG
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 HPEQHRVSVRECARSQGFPTYRLFGNILDKHRQVGNVPPPLAKAIGLEIKLCMLAKARESASAKIKE
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Restriction Sites:

SgfI-MluI

Cloning Scheme:

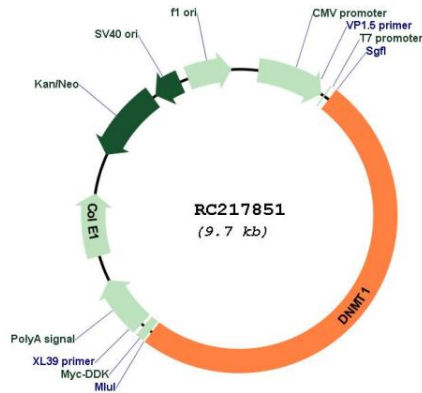


ACCN: NM_001379

ORF Size:	4848 bp
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. More info</p>
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:	<ol style="list-style-type: none"> 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:	NM_001379.1 , NP_001370.1
RefSeq Size:	5434 bp
RefSeq ORF:	4851 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:	183 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 RC217851