OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC212492

Dnmt2 (TRDMT1) (NM_176083) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dnmt2 (TRDMT1) (NM_176083) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dnmt2
Synonyms:	DMNT2; DNMT2; M.HsaIIP; PuMet; RNMT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC212492 representing NM_176083
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCCTGCGGGTGCTGGAGCTATACAGCGGCGTGGGCGGCATGCACCACGCGCTGAGAGAAAGCT
GTATACCTGCACAAGTGGTGGCTGCCATTGATGTCAACACTGTCGCTAATGAAGTATACAAGTATAATTT
TCCTCACACACAGTTACTTGCCAAGACGATTGAAGGCATTACACTCGAAGAGTTTGACAGATTATCTTTT
GATATGATTTTAATGAGCCCTCCCTGCCAGCCATTCACAAGATTACAAAAATTACCAAAGTATATTCTTT
TGGAAAATGTTAAAGGTTTTGAAGTATCTTCTACAAGAGACCTCTTGATACAAACAATAGAAAATTGTGG
CTTTCAGTACCAAGAGTTTCTATTATCTCCAACCTCTCTTGGCATTCCAAATTCAAGGCTACGATATTTT
CTTATTGCAAAGCTTCAGTCAGAGCCATTACCCTTTCAAGCCCCTGGTCAGGTACTGATGGAGTTCCCCA
AAATTGAATCTGTACATCCACAAAAATATGCAATGGATGTAGAAAATAAAATTCAAGAAAAGAACGTTGA
ACCAAATATTAGCTTTGATGGCAGCATACAGTGTTCTGGAAAAGATGCCATTCTTTTTAAGCTTGAAACT
GCAGAAGAAATTCACAGGAAAAATCAACAAGATAGTGATCTCTCTGTGAAAATGCTAAAAGATTTTCTTG
AAGATGACACTGACGTGAACCAGTATCTTTTACCACCAAAGTCATTGCTGCGATATGCTCTTCTGTTAGA
CATTGTTCAGCCCACTTGTAGAAGGTCCGTGTGCTTTACCAAAGGATATGGAAGCTACATAGAAGGGACA
GGGTCTGTGTTACAGACTGCAGAGGATGTGCAGGTTGAGAATATCTACAAATCCCTTACCAATTTGTCAC
AAGAAGAACAGATAACAAAGCTGTTAATACTTAAACTGCGATATTTCACTCCTAAAGAAATAGCAAATCT
CCTTGGATTTCCTCCAGAGTTCGGATTTCCTGAGAAGATAACAGTGAAACAGCGTTATCGCCTACTTGGA
AATAGTCTCAACGTGCATGTAGTAGCTAAACTAATCAAAATCTTATATGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC212492 representing NM_176083
Red=Cloning site Green=Tags(s)

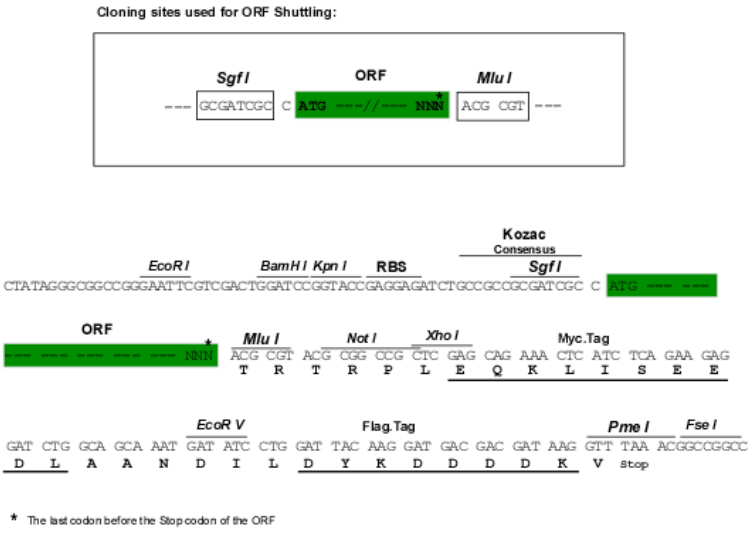
MEPLRVLELYSGVGGMHHALRESCIPAQVVAAIDVNTVANEVYKYNFPHTQLLAKTIEGITLEEFDRLSF
DMILMSPPCQPFTRLQKLPKYILLENVKGFEVSSTRDLLIQTIENCGFQYQEFLLSPTSLGIPNSRLRYF
LIAKLQSEPLPFQAPGQVLMEFPKIESVHPQKYAMDVENKIQEKNVEPNISFDGSIQCSGKDAILFKLET
AEEIHRKNQQDSDLSVKMLKDFLEDDTDVNQYLLPPKSLLRYALLLDIVQPTCRRSVCFTKGYGSYIEGT
GSVLQTAEDVQVENIYKSLTNLSQEEQITKLLILKLRYFTPKEIANLLGFPPEFGFPEKITVKQRYRLLG
NSLNVHVVAKLIKILYE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8055_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_176083

ORF Size: 1101 bp

OTI Disclaimer: 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

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: NM_176083.2, NP_788271.1

RefSeq Size: 3467 bp

RefSeq ORF: 1103 bp

Locus ID: 1787

Cytogenetics: 10p13

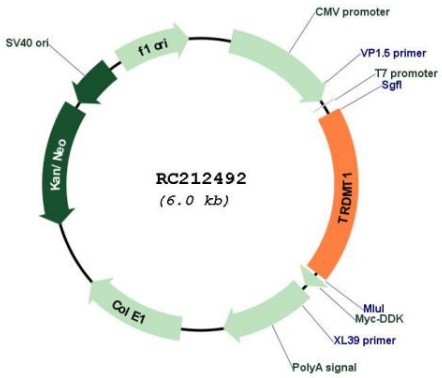
Protein Families: Druggable Genome

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

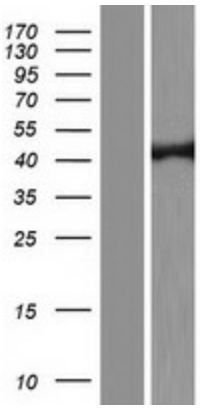
MW: 41.7 kDa

Gene Summary: This gene encodes a protein responsible for the methylation of aspartic acid transfer RNA, specifically at the cytosine-38 residue in the anticodon loop. This enzyme also possesses residual DNA-(cytosine-C5) methyltransferase activity. While similar in sequence and structure to DNA cytosine methyltransferases, this gene is distinct and highly conserved in its function among taxa. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RC212492



Western blot validation of overexpression lysate (Cat# [LY406178]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212492 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).