

Product datasheet for **RG208363**

Dnmt2 (TRDMT1) (NM_004412) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dnmt2 (TRDMT1) (NM_004412) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Dnmt2
Synonyms: DNMT2; DNMT2; MHSAIIP; PUMET; RNMT1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG208363 representing NM_004412
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGGAGCCCTGCGGGTCTGGAGCTATACAGCGCGTGGGCGGCATGCACCACGCGCTGAGAGAAAGCT
 GTATACCTGCACAAGTGGTGGCTGCCATTGATGTCAACACTGTCGCTAATGAAGTATACAAGTATAATTT
 TCCTCACACAGTTACTTGCCAAGACAATTGAAGGCATTACACTCGAAGAGTTTGACAGATTATCTTTC
 GATATGATTTAATGAGCCCTCCCTGCCAGCCATTACAAGGATTGGCCGGCAGGGTGATATGACTGATT
 CAAGGACGAATAGCTTCTTATATATTCTAGATATTCTCCAAGATTACAAAAATTACCAAAGTATATTCT
 TTTGAAAATGTTAAAGGTTTTGAAGTATCTTCTACAAGAGACCTCTTGATACAAACAATAGAAAATTGT
 GGCTTTCAGTACCAAGAGTTTCTATTATCTCCAACCTCTCTTGGCATTCCAAATCAAGGCTACGATATT
 TTCTTATTGCAAAGCTTCAGTCAGAGCCATTACCTTTCAAGCCCTGGTCAGGTAATGAGGTTCCC
 CAAAATTGAATCTGTACATCCACAAAAATATGCAATGGATGTAGAAAAATAAATCAAGAAAAAGAACGTT
 GAACCAATATTAGCTTTGATGGCAGCATAACAGTGTCTGTGAAAAGATGCCATTCTTTTTAAGCTTGAAA
 CTGCAGAAGAAATCACAGGAAAAATCAACAAGATAGTGTCTCTGTGAAAATGCTAAAAGATTTTCT
 TGAAGATGACACTGACGTGAACCAAGTATCTTTACCACCAAAGTCATTGCTGCGATATGCTCTTCTGTTA
 GACATTGTTAGCCCACTGTAGAAGGTCGGTGTGCTTTACCAAAGGATATGGAAGCTACATAGAAGGGA
 CAGGGTCTGTGTTACAGACTGCAGAGGATGTGCAGGTTGAGAATATCTACAAATCCCTTACCAATTTGTC
 ACAAGAAGAACAGATAACAAAGCTGTTAACTTAAACTGCGATATTTCACTCCTAAAGAAATAGCAAAT
 CTCCTTGATTTCTCCAGAGTTCGATTTCTGAGAAGATAACAGTGAACAGCGTTATCGCCTACTTG
 GAAATAGTCTCAACGTGCATGTAGTAGCTAAACTAATCAAAATCTTATATGAA

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208363 representing NM_004412
Red=Cloning site Green=Tags(s)

```
MEPLRVLELYSGVGMHHALRESCIPAQVVAADVNTVANEVYKYNFPHTQLLAKTIEGITLEEFDRLSF
DMILMSPPCQPFTRIGRQGMDSRTNSFLYILDILPRLQKLPKYILLENVKGFVSSTRDLLIQTENC
GFQYQEFLLSPTSLGIPNSRLRYFLIAKLQSEPLPFQAPGQVLMFPKIESVHPQKYAMDVENKIQEKNV
EPNISFDGSIQCSGKDAILFKLETAEEIHRKNQDSDL SVKMLKDFLEDDTDVNQYLLPPKSLLRYALLL
DIVQPTCRRSVCF TKGYGSYIEGTGSLVLTAE DVQVENIYKSLTNLSQEEQITKLLILKLRYPKPEIAN
LLGFPPEFGFPEKITVKQRYRLLGNSLNVHVVAKLILKILYE
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004412

ORF Size: 1173 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_004412.4](#), [NP_004403.1](#)

RefSeq Size: 7281 bp

RefSeq ORF: 1176 bp

Locus ID: 1787

UniProt ID: [O14717](#)

Cytogenetics: 10p13

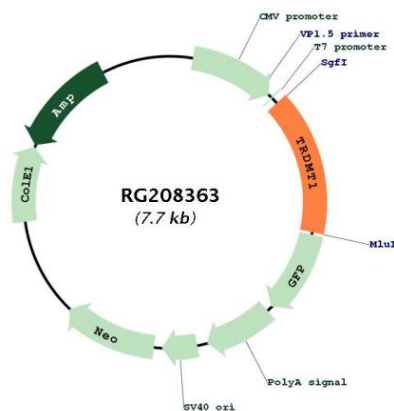
Domains: DNA_methylase

Protein Families: Druggable Genome

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

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 RG208363