

Product datasheet for **RG208040**

TRM1 (TRMT1) (NM_017722) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRM1 (TRMT1) (NM_017722) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TRMT1
Synonyms:	MRT68; TRM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG208040 representing NM_017722
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAAGGATCGTCTCTGTGGCTAAGCCTCACTTCCGCTCCGCCGGGTGCTCTCTAGAGCCCGGTTTT
TCGAGTGGCAGTCTCCAGGGCTGCCGAATACAGCAGCGATGGAGAACGGCACCGGCCCTACGGAGAAGA
ACGTCCACGTGAAGTCCAGGAGACGACAGTCCAGGAGGGGCTGCCAAAATCGCCTTTCCAGTGCCAAAC
GAGGTCTTTTATAACCCGGTGCAGGAATCAATCGGGACCTGACATGTGCTGTGATCACCAGTTTGCTC
GCATTCAGCTTGGGGCCAAAGGAATCCAGATCAAGGTTCCAGGAGAGAAGGACACGCAAAAAGTGGTCGT
GGACTTGTGAGCAAGAGGAGGAAAAGGTTGAACTGAAAGAGAGTGAAAACCTGGCCTCAGGAGACCAA
CCTCGCACAGCGCCGTGGGGGAGATCTGTGAGGAAGGCTGCATGTGCTGGAAGGCTGGCAGCTTCAG
GCCTACGTTCCATTGATTTGCCCTAGAGGTGCCTGGGCTCAGATCTGTGGTTGCAAACGATGCCTCCAC
CCGGGCTGTGGATCTCATACGCCGAATGTCCAGCTCAATGACGTGGCCACCTGGTACAGCCGAGCCAA
GCAGATGCCCGGATGCTGATGTACCAGCACAGAGGGTGTGCGAGAGGTTTGACGTCATCGATCTGGACC
CCTATGGCAGCCAGCCACCTTCTGGATGCAGCTGTGCAGGCTGTGAGTGAAGGAGGGTTGCTGTGTGT
GACCTGCACAGACATGGCGGTGTTGGCGGGGAACAGCGGGGAGACGTGCTACAGCAAGTACGGGGCCATG
GCCCTCAAGAGCCGGGCTGCCACGAGATGGCCCTGAGAAATCGTCTGCACAGCTGGACCTCCGCGCCA
ACTGCTACCAGCGCTTCGTGGTGGCGTCTCAGCATCAGCGTGACTTCTACGTGCGTGTTTTTGTCCG
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GTGGGCAGAGCCCATCCATGACCTGGATTTGTGGCCGTGTCTGGAGGCTGTGAGCGCTAACCCCGGC
CGTTCCACACCTCGGAGCGGATCCGAGGGTCTGAGCGTCATCACTGAGGAGTCCCAGGAGTGCCTC
TGTAACACCCCTGGACCAGCTGAGCAGCACCATCCACTGCAACACACCAAGCCTCCTGCAGTTGCGGTC
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CCTGCCTCTGCCCTCTGGGACATCATGCGTTGCTGGGAGAAGGAATGTCCGGTGAACGGGAGCGACTAT
CAGAGACTAGCCAGCGTTCGCAATTCAGTGTGGAGCCAGGCTGCAGGCCAACTTACCATCCGGGA
AGATGCCAACCCAGCTCCGACAGCGAGGACTCAAGCGCTTCCAGGCTAACCCGAGGCCAACTGGGGT
CCCCGGCCTCGTCCCGCCAGGGGCAAGGCGCCGACGAAGCTATGGAGGAGAGACGAGGCTGCTTC
AGAACAAGCGGAAGGAGCCCGGAAGATGTGGCCAGCGGGCTGCCCGCTCAAGACATTCCTTGCAA
GAGGTTTAAGGAGGGCACCTGTCAACGCGGGGACCAAGTGTGCTACTCCACAGCCCCGACACCCAGG
GTTTCTGCTGATGCTGCCCTGACTGTCCAGAGACCTCCAACCAGACCCCCCTGGACCTGGGGTGGCC
CTGGGCCAGGCATAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG208040 representing NM_017722
 Red=Cloning site Green=Tags(s)

MQGSSLWLSLTFRSARVLSRARFFEWQSPGLPNTAAMENGTGPYGEERPVEVQETTIVTEGAAKIAFPSAN
 EVFYNPVQEFNRDLTCAVITEFARIQLGAKGIQIKVPGEKDTQKVVVDLSEEEEEKVELKESENLASGDQ
 PRRTAAVGEICEEGLHVLEGLAASGLRSIRFALEVPGLRSVVANDASTRAVDLIRRNVQLNDVAHLVQPSQ
 ADARMLMYQHQRVSRFDVIDLDPYGPATFLLDAAVQAVSEGGLLCVTCTDMAVLAGNSGETCYSKYGAM
 ALKSRACHEMALRIVLHSLDLRANCYQRFVVPLLSISADFYVRFVRFVTGQAKVKASASKQALVFQCVG
 CGAFHLQRLGKASGVPSGRAKFSAAACGPPVTPECEHCGRHQLGGPMWAEP IHDLDFVGRVLEAVSANPG
 RFHTSERIRGVLSVITEELPDVPLYTLDQLSSTIHCNTPSLLQLRSALLHADFRVLSHACKNAVKTDA
 PASALWDIMRCWEKECPVKRERLSETSPAFRILSVEPRLQANFTIREDANPSSRQRGLKRFQANPEANWG
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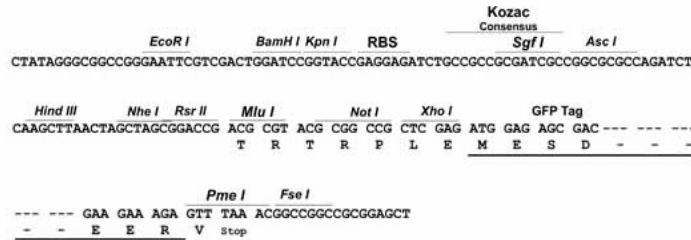
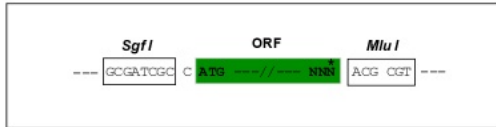
TRTRPLE - GFP Tag - V

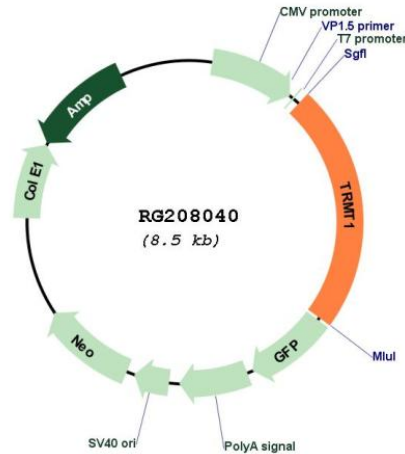
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_017722

ORF Size: 1977 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 custsupport@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. [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_017722.4](#)

RefSeq Size: 2217 bp

RefSeq ORF: 1980 bp

Locus ID: 55621

UniProt ID: [Q9NXH9](#)

Cytogenetics: 19p13.13

Domains: zf-CCCH, TRM

Protein Families: Druggable Genome

Gene Summary: This gene encodes a tRNA-modifying enzyme that acts as a dimethyltransferase, modifying a single guanine residue at position 26 of the tRNA. The encoded enzyme has both mono- and dimethylase activity when exogenously expressed, and uses S-adenosyl methionine as a methyl donor. The C-terminal region of the encoded protein has both a zinc finger motif, and an arginine/proline-rich region. Mutations in this gene have been implicated in autosomal recessive intellectual disorder (ARID). Alternative splicing results in multiple transcript variants encoding different isoforms. There is a pseudogene of this gene on the X chromosome. [provided by RefSeq, May 2017]