

Product datasheet for **RG221904**

PIMT (TGS1) (NM_024831) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIMT (TGS1) (NM_024831) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIMT
Synonyms:	NCOA6IP; PIMT; PIPMT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221904 representing NM_024831
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGCTGCGAGAAGTGGAGCCGCTGGCGGAAATGTTTCTCTTCATTGAGGAGCGGGAGGATTGTAAGA
 TACTGTGCCTTTGCTCCAGGGCATTGTGGAGGATCGAAAATTGTACAATTTGGGATTAAGGCTATTA
 CATCAGAGACAGTGGCAACAATTCAGGAGACCAGGCGACAGAAGAAGAGGAAGGTGGTTATTCCTGTGGT
 ACTGCAGAATCACATGACAGCAAAGGCATAGCCCTGGATGAAAGTGAACCTGATTCTGAGGCTGAACTCA
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 CTAAGAAGATCACTAATAATATTGTTTATTTCTTCCAAGAAATGCTGATATTGACCAGGTGGCATCCTT
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 TATTTTGGTGACCTAATTCGAAGACCAGCCTCTGAAACC

ACGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG221904 representing NM_024831
 Red=Cloning site Green=Tags(s)

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MCCEKWSRVAEMFLFIEEREDCKILCLCSRAFVEDRKL YNLGLKGYIIRDSGNNSGDQATEEEEGGYSCG
TAESHDSKIGLDESELDSEAEMLRSMGLPLQFGRITAHKDFEVS MNTRNKVKIKKKKHQKYLDEIVQE
SWRKEYEEDDILASDDPSSIEQYENTRTYELQSKKDTETENPPVENTLSPKLEITEKWEKYWNEYGGLL
WQSWQEKHPGQALSSEPWNFPDTKEEWEQHYSQLYWYYLEQFYWEAQGWTFDASQSCD TDYTSKTEAD
DKNDEKCMKVDLVSFSSPIMVDNDSSGTSDKDHSEILDGINSIKLNSEEVTQS QLD SCTSHDGHQQLSE
VSSKRECPASGQSEPRNGGTNEESNSSGNTNTDPPAEDSQKSSGANTSKDRPHASGTDGDESEEDPPEHK
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VGGNTIQFALTGMRVIAIDIDPVKIALARNNAE VYGIADKIEFICGDFLLLASFLKADV VFLSPPWGGPD
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_024831

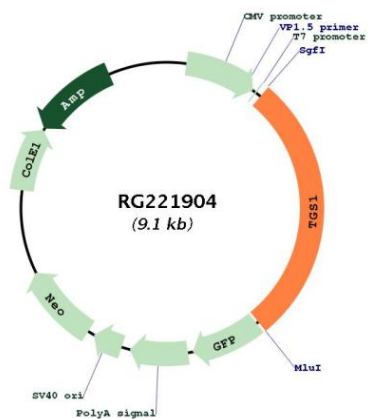
ORF Size: 2559 bp

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:	<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:	<u>NM_024831.8</u>
RefSeq Size:	3708 bp
RefSeq ORF:	2562 bp
Locus ID:	96764
UniProt ID:	<u>Q96RS0</u>
Cytogenetics:	8q12.1
Protein Families:	Druggable Genome
Gene Summary:	Catalyzes the 2 serial methylation steps for the conversion of the 7-monomethylguanosine (m(7)G) caps of snRNAs and snoRNAs to a 2,2,7-trimethylguanosine (m(2,2,7)G) cap structure. The enzyme is specific for guanine, and N7 methylation must precede N2 methylation. Hypermethylation of the m7G cap of U snRNAs leads to their concentration in nuclear foci, their colocalization with coilin and the formation of canonical Cajal bodies (CBs). Plays a role in transcriptional regulation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG221904