

## Product datasheet for **RG226158**

### **PMS1 (NM\_001128144) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PMS1 (NM_001128144) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PMS1
Synonyms:	HNPCC3; hPMS1; MLH2; PMSL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG226158 representing NM\_001128144  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAAACAATTGCCTGCGCAACAGTTCGACTCCTTTCAAGTTCTCAGATCATCACTTCGGTGGTCAGTG  
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AAATGAAATTAAGAGTGTGTTTCATGGTCGCCATTTTTTCATCATTTAACCTATCTTCCAGAACTACA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226158 representing NM\_001128144  
 Red=Cloning site Green=Tags(s)

MKQLPAATVRLSSSQIITSVSVVKELIENSLDAGATSVDVKLENYGFDKIEVRDNGEGIKAVDAPVMA  
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 SEISADEWSRGNILKNSVGENIEPVKILVPEKSLPCKVSNNNYPIEQMNLNEDSCNKKSNVIDNKSGKV  
 TAYDLLSNRVIKKPMSASALFVQDHRPQFLIENPKTSLEDATLQIEELWKTLSSEEKLNLFNGSHYLDVL  
 YKMTADDQRYSGSTYLSDPRLTANGFKIKLIPGVSITENYLEIEGMANCLPFYGVADLKEILNAILNRNA  
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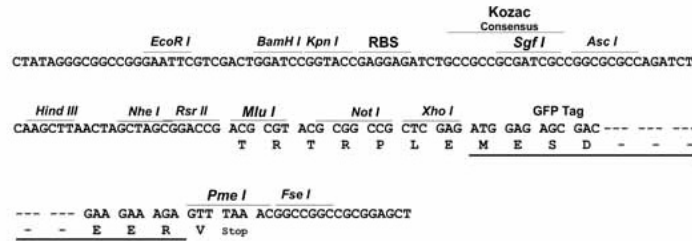
TRTRPLE - GFP Tag - V

**Restriction Sites:**

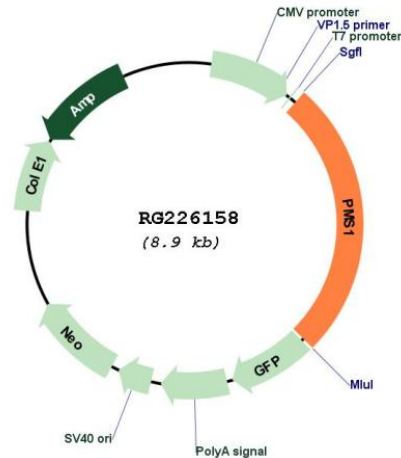
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_001128144

ORF Size: 2310 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\\_001128144.2](#)

RefSeq Size: 3052 bp

RefSeq ORF: 2313 bp

Locus ID: 5378

UniProt ID: [P54277](#)

Cytogenetics: 2q32.2

Protein Families: Druggable Genome, Transcription Factors

**Gene Summary:** This gene encodes a protein belonging to the DNA mismatch repair mutL/hexB family. This protein is thought to be involved in the repair of DNA mismatches, and it can form heterodimers with MLH1, a known DNA mismatch repair protein. Mutations in this gene cause hereditary nonpolyposis colorectal cancer type 3 (HNPCC3) either alone or in combination with mutations in other genes involved in the HNPCC phenotype, which is also known as Lynch syndrome. [provided by RefSeq, Jul 2008]