

Product datasheet for **RG217412**

PMS1 (NM_000534) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PMS1 (NM_000534) 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:

>RG217412 representing NM_000534
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAACAATTGCCTGCGCAACAGTTCGACTCCTTTCAAGTTCTCAGATCATCACTTCGGTGGTCAGTG
 TTGTAAGAGCTTATTGAAACTCCTTGATGCTGGTGCCACAAGCGTAGATGTTAAACTGGAGAATA
 TGGATTTGATAAAATTGAGGTGCGAGATAACGGGGAGGGTATCAAGGCTGTTGATGCACCTGTAATGGCA
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 GATTGTCTTTGTACATAACAAGGCAGTTATTTGGCAGAAAAGCAGAGTATCAGATACAAGATGGCTCTC
 ATGTCAGTTCTGGGGACTGCTGTTATGAACAATATGGAATCCTTTCACTACCCTCTGAAGAATCTCAGA
 TTTATCTCAGTGGATTTCTTCCAAGTGTGATGCAGACCACTCTTCACTAGTCTTTCAACACCAGAAA
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 GAAATTAAGAGTGTGTTTCATGGTGCCTATTTTTCATCATTTAACCTATCTTCCAGAACTACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217412 representing NM_000534
 Red=Cloning site Green=Tags(s)

MKQLPAATVRLSSSQIITSVSVVKELIENSLDAGATSVDVKLENYGFDKIEVRDNGEGIKAVDAPVMA
 MKYYTSKINSHEDLENLTTYGFRGEALGSICCIAEVLITRRTAADNFSTQYVLDGSGHILSQKPSHLGQG
 TTVTALRLFKNLPVRKQFYSTAKKCKDEIKKIQDLLMSFGILKPDLRIVFVHNKAVIWQKSRVSDHKMAL
 MSVLGTAVMNNMESFYHSEESQIYLSGFLPKCDADHSFTSLSTPERSFIFINSRPVHQKDILKLRHHY
 NLKCLKESTRLYPVFFLKIDVPTADVDVNLTPDKSQVLLQNKESVLI ALENLMTTCYGPLPSTNSYENNK
 TDVSAADIVLSKTAETDVLFNKVESSGKNYSNVDTSVIPFQNDMHNDESGKNTDDCLNHQISIGDFGYGH
 CSSEISNIDKNTKNAFQDISMSNVSWENSQTEYSKTCFISSVKHTQSENGNKDHIDESGENEEEEAGLENS
 SEISADEWSRGNILKNSVGENIEPVKILVPEKSLPCKVSNNNYPPEQMNLNEDSCNKKSNVIDNKGKV
 TAYDLLSNRVIKKPMASALFVQDHRPQFLIENPKTSLEDATLQIEELWKTLSSEEKLYEEKATKDLER
 YNSQMKRAIEQESQMSLKDGRKKIKPTSAWNLAQKHKLKTSLSNQPKLDELLQSQIEKRRSQNIKMVQIP
 FSMKNLKFNFKKQNKVDLEEKDEPCLIHNLRFDAWLMTSKTEVMLLNPYRVEEALLFKRLLENHKLPAE
 PLEKPIMLTESLFGNSHYLDVLYKMTADDQRYSGSTYLSDPRLTANGFKIKLIPGVSITENYLEIEGMAN
 CLPFYGVADLKEILNAILNRNAKEYVECRPRKVISYLEGEAVRLSRQLPMYLSKEDIQDIIYRMKHQFGN
 EIKCEVHGRPFHHLTYLPETT

TRTRPLE - GFP Tag - V

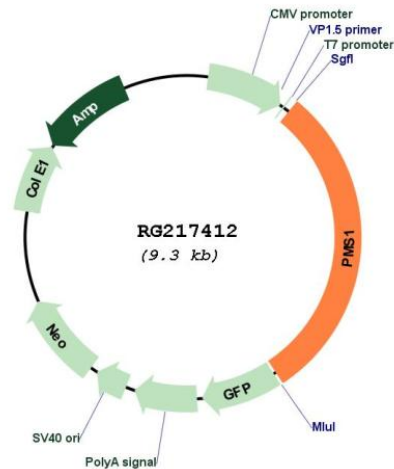
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000534

ORF Size: 2796 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_000534.5](#)

RefSeq Size: 3239 bp

RefSeq ORF: 2799 bp

Locus ID: 5378

UniProt ID: [P54277](#)

Cytogenetics: 2q32.2

Domains: HMG, DNA_mis_repair, HATPase_c

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]