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Product datasheet for RC217412

PMS1 (NM_000534) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PMS1 (NM_000534) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PMS1
Synonyms:	HNPCC3; hPMS1; MLH2; PMSL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC217412 representing NM_000534
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC217412 representing NM_000534
Red=Cloning site Green=Tags(s)

MKQLPAATVRLLSSSQIITSVVSVVKELIENSLDAGATSVDVKLENYGFDKIEVRDNGEGIKAVDAPVMA
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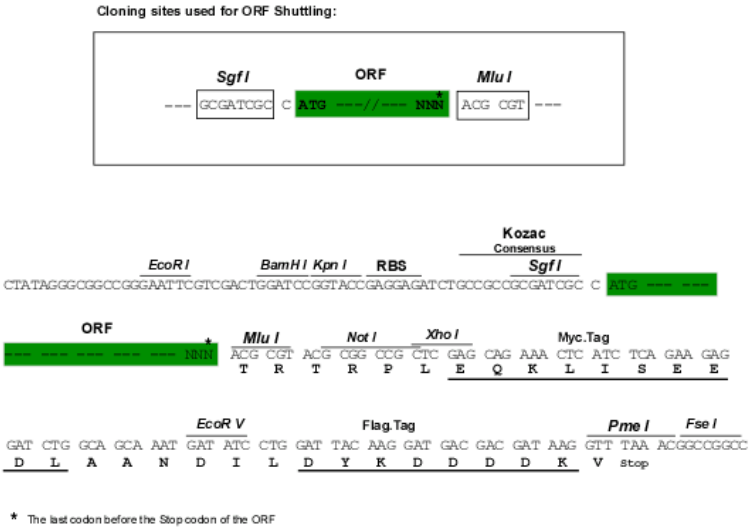
Chromatograms: https://cdn.origene.com/chromatograms/mk6593_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

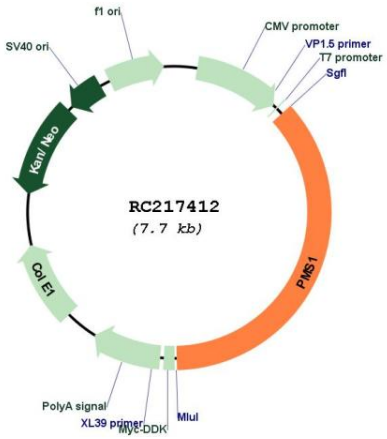


ACCN: NM_000534

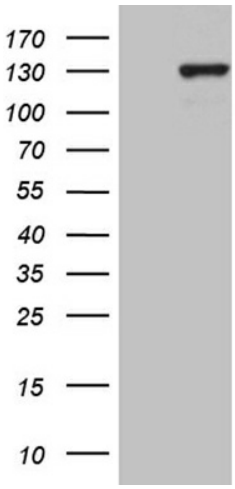
ORF Size: 2796 bp

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
MW:	105.7 kDa
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]

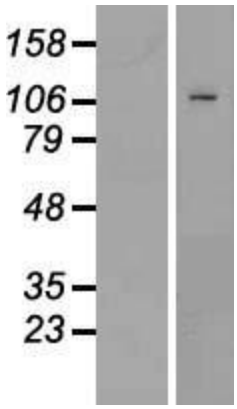
Product images:



Circular map for RC217412



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PMS1 (Cat# RC217412, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PMS1 (Cat# [TA810414])(1:2000). Positive lysates [LY424657] (100ug) and [LC424657] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424657]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).