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Product datasheet for MR226141

Pml (NM_178087) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pml (NM_178087) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pml
Synonyms:	1200009E24Rik; AI661194; Trim19
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

ORF Nucleotide Sequence:

>MR226141 representing NM_178087
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAACTGAACCAGTTTCCGTGCAGAAGGTACCTGCACCCCCTGGATCTCCCTGTCGACAACAGGACT
CTGCCCTGACCCCCACGCCCACCATGCCTCCCCCAGAGGAACCCTCCGAAGACTATGAACACAGCCAAAG
CCCTGCAGAGCAAGCCATACAGGAGGAATTTCAGTTTCTGCGCTGCCCGAGCTGCCAGGCCCAAGCCAAG
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GCCGACTTCTGGTGTTTCGAGTGTGAACAGCTCATTTGCAGCAAGTGCTTCGAAGCACACCAGTGGTACC
TCAAGCATGAGGCCCGGCCCCTGGCTGATCTCCGCGACAATTCAGTGAGCAGCTTCCTCGACAGTACGCG
CAAGTCCAATATCTTCTGCTCCAATACCAACCACCGCAACCCTGCGCTGACTGACATCTACTGCCGAGGC
TGCGCCAAGCCTCTGTGTTGCACATGCGCGCTCCTGGACCGCAACCACAGCCATCTCCATTGCGATATTG
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CGGTGAATGACCGCTACCAGCGCGACTACCAGGAAATAGCTGGCCAGCTGAGCTGCCTGGAAGCTGTGCT
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AGCTGCTCACCAGAGGTTTCGAGGAGTTCAAGCTGTGCCTGCAGGACTTCATCTCCTGCATCACCCAGAG
GATAAATGCAGCTGTAGCCAGCCCAGAGGCAGCCAGCAATCAACCAGAGGCAGCCAGCACTCACCCAGTG
ACAACCAGCACGCCTGAGGACCTTGAGCAGCCCAAAGAAGTGCAGAGTGTACAGGCTCAGGCCCTAGAGC
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CATGCACCGTCCCATCTTGGCGTGTTCTAGGCTGTGGGGGCCGGGACTCCCCATCTTCTTCCAGACCCTG
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TTCAGGCCAGCGTCCTGCCACAGTCCGAGGCCCGCCTCTTGGCCCTCCACAATGTGAGCTTTGTAGAGTT
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ACCCCGTTGTCATCGTCGGCTTCCACCCAAGTTGCCCAATTCCTGCAGGCTCTTAGCACCCACATGGAAG
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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

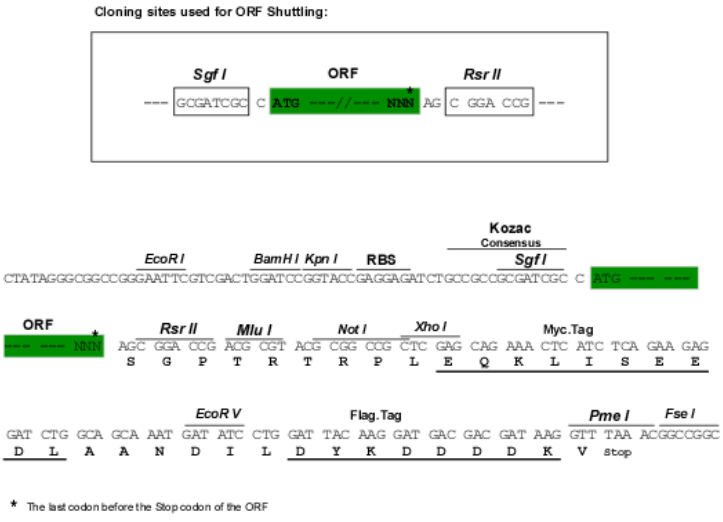
>MR226141 representing NM_178087
Red=Cloning site Green=Tags(s)

METEPVSVQKVPAPPGSPCRQQDSALTPTPTMPPPEEPSEDYEHSQSPAEQAIQEEFQFLRCPSCQAQAK
CPKLLPCLHTLCSGCLEAPGLQCPICKAPGQADANGEALDNVFFESLQRRLAVFRQIVDAQAACTRCKGL
ADFWCFECEQLICSKCFEAHQWYLKHEARPLADLRDNSVSSFLDSTRKSNIFCSNTNHRNPALTDIYCRG
CAKPLCCTCALLDRNHSHLHCDIGEEIQQWHEELGTMTQTLEEQGRTFDSAHAQMCSAIGQLDHARADIE
KQIRARVRQVVDYVQAQERELLEAVNDRYQRDYQEIAGQLSCLEAVLQRIRTSGALVKRMKLYASDQEVL
DMHSFLRKALCSLRQEEPQNQKVQLLTRGFEEFKLCLQDFISCITQRINAAVASPEAASNQPEAASTHPV
TTSTPEDLEQPKEVQSVQAQALELSKTQPVAMVKTVPGAHPVPVYAFSMQGPTYREEASQTVGSMKRKCS
HEDCSRKIIKMESTEENEDRLATSSPEQSWPSTFKATSPPHLDGTSNPESTVPEKKILLPNNNHVTSDTG
ETEERVVVISSSEDSDTENLSSHELDDSSSESSSLQLEGPNSLKALDESLAEPHLEDRTLVFFDLKIDNE
TQKISQLAAVNRESKFRVLIQPEAFSVYSKAVSLEAGLRHFLSFLTTMHRPILACSRLWGPGLPIFFQTL
SDINKLWEFQDTISGFLAVLPLIRERIPGASSFKLGNLAKTYLARNMSERSALASVLAMRDLCCLLEISP
GLPLAQHIYSFSSLQCFASLQPLIQASVLPQSEARLLALHNVSFVELLNAYRTNRQEGLKKYVHYLSLQT
TPLSSSASTQVAQFLQALSTHMEGLLEGHAPAGAEGKAESKGCLA

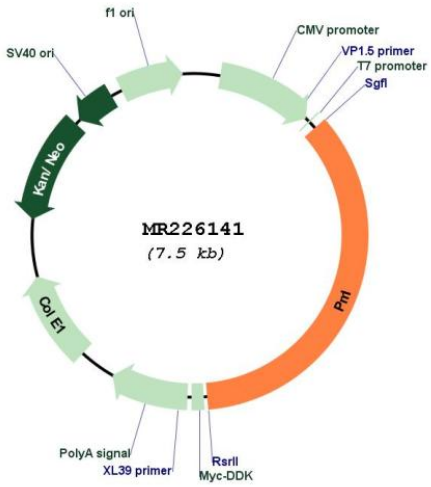
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN:	NM_178087
ORF Size:	2655 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_178087.4, NP_835188.2
RefSeq Size:	5378 bp
RefSeq ORF:	2658 bp
Locus ID:	18854
UniProt ID:	Q60953
Cytogenetics:	9 31.63 cM

MW: 98.7 kDa

Gene Summary: Functions via its association with PML-nuclear bodies (PML-NBs) in a wide range of important cellular processes, including tumor suppression, transcriptional regulation, apoptosis, senescence, DNA damage response, and viral defense mechanisms. Acts as the scaffold of PML-NBs allowing other proteins to shuttle in and out, a process which is regulated by SUMO-mediated modifications and interactions. Positively regulates p53/TP53 by acting at different levels (by promoting its acetylation and phosphorylation and by inhibiting its MDM2-dependent degradation). Regulates phosphorylation of ITPR3 and plays a role in the regulation of calcium homeostasis at the endoplasmic reticulum. Regulates RB1 phosphorylation and activity. Acts as both a negative regulator of PPARGC1A acetylation and a potent activator of PPAR signaling and fatty acid oxidation. Regulates translation of HIF1A by sequestering MTOR, and thereby plays a role in neoangiogenesis and tumor vascularization. Regulates PER2 nuclear localization and circadian function. Cytoplasmic PML is involved in the regulation of the TGF-beta signaling pathway. Required for normal development of the brain cortex during embryogenesis. Plays a role in granulopoiesis or monopoiesis of myeloid progenitor cells. May play a role regulating stem and progenitor cell fate in tissues as diverse as blood, brain and breast. Shows antiviral activity towards lymphocytic choriomeningitis virus (LCMV) and the vesicular stomatitis virus (VSV). [UniProtKB/Swiss-Prot Function]