

Product datasheet for **MR224755**

Prdm6 (NM_001033281) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prdm6 (NM_001033281) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prdm6
Synonyms:	Gm92; PRISM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR224755 representing NM_001033281
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGAAGCGGGGATCCCGCGGCTCGGCCTTCTCAAAGTGGACCCAGCTTACCTGCAGACTGGC
 AGCAACTTCCCGCACGAGGCGGCGGCGGCCGCTCAAAGCCAGTGGCGCCGCGCTGCCCTGGG
 CGCCCCACAGCCCTGCAGCCACCGCCACCGCCGCGCTCCTCCTCCGAGCGCCGAGCCTCTCCA
 GACGGCTGCGGCCGCGGCTGCCTCGCTCTCGTCCACCCGGCTCCTTCTCCACCTCTGCCTTCTG
 CCTTCTCGCGCCGAGCCGCGGCCGCGCTGCGCTGGCGGTCTCTCGGCCCTGCCGGTGGCACAGAT
 GCCGGTGTTCGCTCCTAGCTGCTGCTGTGGCCGCGGAGCCACTGCCCCAAAGGACCTGTGCCTC
 GCGCCTCCGCGGCCCGGGCCGCAAGTGCGGCGGCGGTGGCAGCGTGGGGACGGCCGTGGCG
 TCCACGTTTCCGCTGCAGCGCGGAGGAGCTGGACTATTACCTGTACGGGCAGCAGCGCATGAAATCAT
 CCCGCTCAACCAGCACACCAGCGACCCCAACAACGTTGCGATATGTGCGCGGACAACCGTAACGGGGAG
 TGCCCATGCACGGGCCACTGCACTCGCTGCGCCGGCTCGTGGGACCAGCAGCGCGGCCCGCTGCAC
 CCCCAGCGGAGCTGCCGAGTGGCTTCGGGATCTGCCCGGGAGGTGTGCCTGTGTACCAGCACGGTGCC
 AGGCCTGGCGTATGGCATCTGTGCCGCGCAGAGGATCCAGCAGGGCACCTGGATTGGGCCCTTCCAGGGC
 GTGCTTGTCCCGGAGAAAGTGCAGACCGCGTAGTGAGGAACACGCAGCATCTCTGGGAGATATATG
 ACCAAGATGGGACACTTCAGCACTTTATTGATGGTGGGGAGCCTAGTAAGTCGAGCTGGATGAGGTATAT
 CCGATGTGCAAGGCACTGTGGAGAACAAGTCTAACAGTAGTTCAGTACAGGTGCAATATATTCTACCGA
 GCCTGTATAGATATCCCGAGGGCACCGAGCTCCTGGTGTGTTACAATGACAGCTATACATCTTTCTTTG
 GGATCCCTTTACAATGCATTGCCCAGGATGAAAACCTTGAACGTCCTTCCACCGTAATGGAAGCCATGTG
 CGGACAGGATGCCCTGCAGCCCTTCAACAAAAGCAGCAAGCTTTCTCCCTCGGGCCAGCAGCGCTCCGTTG
 GTTTTCCACAGACTCCCTGCAGCAGGAATTTCTCCCTTTGGATAAATCTGGGCCATGGAGGCAGGAT
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 GTTCAGCGACTGGCATCTCTGGAAGTGGGCCAGTGCTTTAAGACTTTCACGCAGCGCATTCTCTCGCAG
 ATGCATGTGTGCACGCAGAACCCCGACAGACCCTACCAGTGTGGCCACTGCTCACAGTCTTTTCCAGC
 CGTCAGAACTGAGGAACACGTAGTCACTCACTCCAGTACCAGCCCTTCAAGTGGCGCTACTGTGGCCG
 TCGTTTTGCCGGAGCCACCCTCAACAACCACATCCGGACCCACTGGAGAAAAGCCCTTCAAGTGC
 GAGAGGTGCGAAAGGAGCTTCAACCAGGCCACGCAGCTGAGTCGACACCAGCGCATGCCAATGAGTGCA
 AGCCGATAACCGAGAGCCCGGAATCAATCGAAGTGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR224755 representing NM_001033281
 Red=Cloning site Green=Tags(s)

MLKPGDPGGS AFLKVDPAYLQHWQQLFPHGGGGGGLKASGAALALGAPQPLQPPPPPPPPPERAEPPP
 DGLRPRPASLSSTPAPSSTSASSASSCAAAAAAAAAAGLSALPVAQMPVFAPLAAAAVAEPLPPKDLCL
 GASAGPGPAKCGGGGSGVDGRGVPRFRCSAEELDYLYGQQRMEIIPLNQHTSDPNNRCDMCDNRNGE
 CPMHGPHSLRRLVGTSSAAAAAPPPELPEWLRDLPREVCLCTSTVPGLAYGICAAQRIQQGTWIGPFQG
 VLLSPEKVQTVVRNTQHLWEIYDQDGLQHFIDGGEPSSWWMRYIRCARHCGEQNLTVVQYRSNIFYR
 ACIDIPRGTELLVWYNDYSYTSFFGIPLQCIQDENLNPSTVMEAMCRQDALQPFNKSSKLSPSGQQRVS
 VFPQTCSRNFSLLDKSGPMEAGFNQINVKNRVLASPTSTSQLHSEFSDWHLWKCGQCFKFTTQRILLQ
 MHVCTQNPDRPYQCCHCSQSFSQPSELRNHVVTHSSDRPFKCGYCGRAFAGATTLNNHIRTHTEKPFKC
 ERCERSFTQATQLSRHQMPNECKPITESPESIEVD

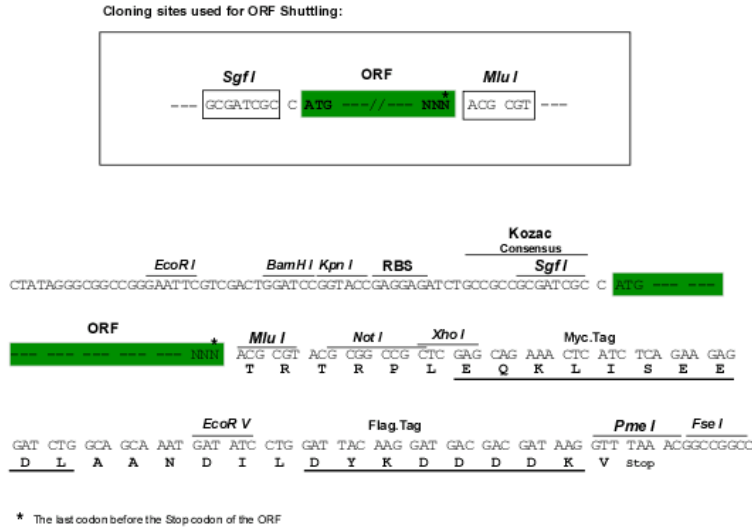
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9092_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001033281

ORF Size: 1788 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:

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_001033281.3](#), [NP_001028453.1](#)

RefSeq Size: 2601 bp

RefSeq ORF: 1791 bp

Locus ID: 225518

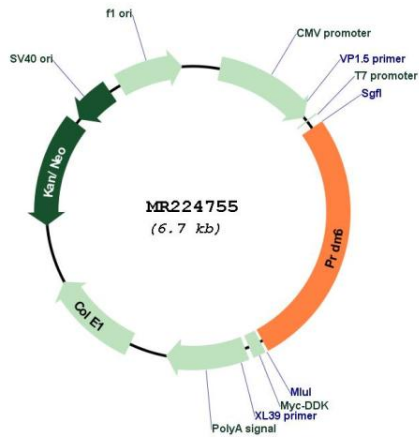
UniProt ID: [Q3UZD5](#)

Cytogenetics: 18 D1

MW: 64.5 kDa

Gene Summary: Putative histone methyltransferase that acts as a transcriptional repressor of smooth muscle gene expression (PubMed:16537907, PubMed:17662997). Promotes the transition from differentiated to proliferative smooth muscle by suppressing differentiation and maintaining the proliferative potential of vascular smooth muscle cells (PubMed:27181681, PubMed:16537907, PubMed:17662997). Also plays a role in endothelial cells by inhibiting endothelial cell proliferation, survival and differentiation. It is unclear whether it has histone methyltransferase activity in vivo. According to some authors, it does not act as a histone methyltransferase by itself and represses transcription by recruiting EHMT2/G9a (PubMed:16537907). According to others, it possesses histone methyltransferase activity when associated with other proteins and specifically methylates 'Lys-20' of histone H4 in vitro. 'Lys-20' methylation represents a specific tag for epigenetic transcriptional repression (PubMed:17662997).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224755