

Product datasheet for **SC318366**

PRDM9 (NM_020227) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRDM9 (NM_020227) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRDM9
Synonyms:	KMT8B; MEISETZ; MSBP3; PFM6; ZNF899
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF sequence for NM_020227 edited
 ATGAGCCCTGAAAAGTCCCAAGAGGAGAGCCAGAAAGAAGACACAGAGAGAACAGAGCGG
 AAGCCCATGGTCAAAGATGCCTTCAAAGACATTTCCATATACTTCACCAAGGAAGAATGG
 GCAGAGATGGGAGACTGGGAGAAAACCTCGCTATAGGAATGTGAAAAGGAACTATAATGCA
 CTGATTACTATAGGTCTCAGAGCCACTCGACCAGCTTTCATGTGTACCGAAGGCAGGCC
 ATCAAACCTCCAGGTGGATGACACAGAAGATTCTGATGAAGAATGGACCCCTAGGCAGCAA
 GTCAAACCTCCTTGGATGGCCTTAAGAGTGGAAACAGCGTAAACACCAGAAGGGAATGCC
 AAGGCCTCATTACAGTAATGAATCTAGTTTGAAAGAATTGTCAAGAACAGCAAATTTACTG
 AATGCAAGTGGCTCAGAGCAGGCTCAGAAACCAGTGTCCCTTCTGGAGAAGCAAGTACC
 TCTGGACAGCACTCAAGACTAAAACCTGGAACCTCAGGAAGAAGGAGACTGAAAGAAAGATG
 TATAGCCTGCGAGAAAGAAAGGGTCATGCATACAAAGAGGTGAGCGAGCCGAGGATGAT
 GATTACCTCTATTGTGAGATGTGTGAGAACTTCTTATTGACAGCTGTGCTGCCCATGGG
 CCCCTACATTTGTAAGGACAGTGCAGTGGACAAGGGGCACCCCAACCGTTCAGCCCTC
 AGTCTGCCCCAGGGCTGAGAATTGGGCCATCAGGCATCCCTCAGGCTGGGCTTGGAGTA
 TGGAAATGAGGCATCTGATCTGCCGCTGGGTCTGCACTTTGGCCCTTATGAGGGCCGAATT
 ACAGAAGACGAAGAGGCAGCCAAACAATGGATACTCCTGGCTGATACCAAGGGGAGAAAC
 TGCTATGAGTATGTGGATGGAAAAGATAAATCCTGGGCCAACTGGATGAGGTATGTGAAC
 TGTGCCCGGGATGATGAAGAGCAGAACCTGGTGGCCTTCCAGTACCACAGGCAGATCTTC
 TATAGAACCTGCCGAGTCATTAGGCCAGGCTGTGAACTGCTGGTCTGGTATGGGGATGAA
 TACGGCCAGGAACTGGGCATCAAGTGGGCAGCAAGTGGAAAGAAAGAGCTCATGGCAGGG
 AGAGAACCAAAGCCAGAGATCCATCCATGTCCCTCATGCTGTCTGGCCTTTTCAAGTCAG
 AAATTTCTCAGTCAACATGTAGAACGCAATCACTCCTCTCAGAACTTCCCAGGACCATCT
 GCAAGAAAACCTCCTCAACCAGAGAATCCCTGCCAGGGGATCAGAATCAGGAGCAGCAA
 TATCCAGATCCACACAGCCGTAATGACAAAACCAAGGTCAAGAGATCAAGAAAAGGTCC
 AAACCTTGAATAAAAGGACATGGCAGAGGGAGATTTCAAGGGCCTTTTCTAGCCACCC
 AAAGGACAAAATGGGGAGCTGTAGAGTGGGAAAAAGAATAATGGAAGAAGAGTCCAGAACA
 GGCCAGAAAGTGAATCCAGGGAACACAGGCAAATTTATTTGTGGGGTAGGAATCTCAAGA
 ATTGCAAAAGTCAAGTATGGAGAGTGTGGACAAGGTTTTCAGTGTTAAATCAGATGTTATT
 ACACACCAAAGGACACATACAGGGGAGAAGCTCTACGTCTGCAGGGAGTGTGGCGGGGC
 TTTAGCTGGAAGTACACCTCCTCATTACCAGAGGATACACACAGGGGAGAAGCCCTAT
 GTCTGCAGGGAGTGTGGCGGGGCTTTAGCTGGCAGTCAGTCCTCCTCACTCACCAGAGG
 ACACACACAGGGGAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGCTTTAGCCGGCAG
 TAGTCTCCTCACTCACCAGAGGAGACACACAGGGGAGAAGCCCTATGTCTGCAGGGAG
 TGTGGGCGGGGCTTTAGCCGGCAGTCAGTCCTCCTCACTCACCAGAGGAGACACACAGGG
 GAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGCTTTAGCTGGCAGTCAGTCCTCCTC
 ACTCACCAGAGGACACACAGGGGAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGC
 TTTAGCTGGCAGTCAGTCCTCCTCACTCACCAGAGGACACACACAGGGGAGAAGCCCTAT
 GTCTGCAGGGAGTGTGGCGGGGCTTTAGCAATAAGTCACACCTCCTCAGACACCAGAGG
 ACACACACAGGGGAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGCTTTGCGGATAAG
 TCACACCTCCTCAGACACCAGAGGACACACACAGGGGAGAAGCCCTATGTCTGCAGGGAG
 TGTGGGCGGGGCTTTAGAGATAAGTCAAACCTCCTCAGTCACCAGAGGACACACACAGGG
 GAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGCTTTAGCAATAAGTCACACCTCCTC
 AGACACCAGAGGACACACACAGGGGAGAAGCCCTATGTCTGCAGGGAGTGTGGCGGGGC
 TTTGCAATAAGTCACACCTCCTCAGACACCAGAGGACACACACAGGGGAGAAGCCCTAC
 GTCTGCAGGGAGTGTGGCGGGGCTTTAGCGATAGGTCAAGCCTCTGCTATCACCAGAGG
 ACACACACAGGGGAGAAGCCCTACGTCTGCAGGGAGGATGAGTAA

Restriction Sites: Please inquire

ACCN: NM_020227

Insert Size: 3000 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_020227.2</u> , <u>NP_064612.2</u>
RefSeq Size:	3691 bp
RefSeq ORF:	2685 bp
Locus ID:	56979
UniProt ID:	<u>Q9NQV7</u>
Cytogenetics:	5p14.2
Gene Summary:	<p>The protein encoded by this gene is a zinc finger protein with histone methyltransferase activity that catalyzes histone H3 lysine 4 trimethylation (H3K4me3) during meiotic prophase. This protein contains multiple domains, including a Kruppel-associated box (KRAB) domain, an SSX repression domain (SSXRD), a PRD1-BF1 and RIZ homologous region, a subclass of SET (PR/SET) domain, and a tandem array of C2H2 zinc fingers. The zinc finger array recognizes a short sequence motif, leading to local H3K4me3, and meiotic recombination hotspot activity. The observed allelic variation alters the DNA-binding sequence specificity of the protein, resulting in distinct meiotic recombination hotspots amongst individuals and populations. Multiple alternate alleles of this gene have been described. [provided by RefSeq, Jul 2015]</p> <p>Transcript Variant: This variant (PRDM9 B allele, PMID:20044539) matches the reference genome sequence and encodes isoform PRDM9 B.</p>