

## Product datasheet for **MG222292**

### Prdm8 (NM\_029947) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prdm8 (NM_029947) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Prdm8
Synonyms:	4930565F05Rik; PFM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG222292 representing NM\_029947  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGGATTCAGGCATCCAGAGAGGCATCTGGATGGAGATGCCAAGGCTGTCCAACAGTGTCTGACAG  
 ACATTTTTACCAGTGTATATACAACCTGCGACATCCCAGAGAACGCCATATTCGGTCCCTGTGTACTGAG  
 CCATACTTCCCTGTATGACAGCATAGCCTTCGTAGCCCTCAAGTCCACGGACAAGAGAACAGTACCTTAC  
 ATCTTCCGGGTAGACACTTCGGCGGCAAATGGTTCCTCAGAAGGTCTCATGTGGCTGCGGCTGGTCCAAT  
 CAGCCCGAGATAAGGAAGAACAGAATCTCGAAGCTTATAAAAAATGGACAGCTGTTCTACCGCTCTCT  
 CCGCAGGATTGCCAAAGATGAAGAGTTACTAGTTTGGTACGGGAAAGAACTGACTGAATTGCTCTTGCTC  
 TGCCCGCTAGAGCTCACAAAATGAACGGTCTCTCTTACACATGCCTGGAATGCAGCCAACGTTTCC  
 AGTTTGAGTCCCTATGTGGCACATCTCGGATTCGGTGCCTCAAGAGACTTCACAGCACTGATGCGAA  
 TCCCCAAGACGAGCAAGGGGGCGGCTTGGGCACTAAGGACCACGGCGGGCGGGCGGTGGTAAAGAGCAA  
 CAGCAGCAGCAACAGCAGCAGCAACAGGAGGCGCGTGTATCCCGGGCCCAAGTTCTGCAAAGCCGGCC  
 CCATACACCACTACCCCGCTCATCCCCGAGGGCAGCAACCCGCGGGCTCCGCGGGTGCAGGCGAGCGC  
 CAAGCCGTCCACGGACTTCCACAACCTGGCTCGGAACTGGAAAACCTCCCGGGGAAGCAGCAGTTGCGTA  
 GCGGCCCGGGCGTGGCAGTGGCGGCAGCGGCCACCAGGAGGCGGAGCTGAGTCCCGACGGCGTCGCCA  
 CCGGCGGTGCAAAGGCAAGAGGCGGTTCCCGGAGGAGCGGGCGGAGGGCGGGCGGGGCTGGC  
 GGGCGCCGTGCGCGCTTCTCCGAGAGGCGCTGGCGACTCCAAGGAGGAGTTGGTGTGCACGCGCCAG  
 CAGTACCGCGCCCGGCGAGCTACTTCGGCTGGAGGAGAACGGCCGGCTTTCGCGCCCGCCAGCCCGG  
 AGACTGGCGAGGCGAAGCGTAGCGCTTCTGGAGGTGAAGAAGCGGGCCGCGGTTGGCTTGCAGGA  
 GGAGGCGGGCGACAGACGGCGCAGGGGACAGGCGCGAGGACCCGACGCGGGAGGCGGTGTCCCGGC  
 GCGGCGAGCAACGGCTCGTCCACCCCGCGGGGTCGCTGGGGCCCCGAGAAGTTGTGGCTCCGC  
 GTCCCGGAGGCTCTGTCCCGGACGGCTGGAGGCGGGAGCCCCGCGCGGCGAGCGCTTACCTCGGT  
 GTCGAGCTGGGCGGGTGGCGGCGGGGACCGGGGACTGCGGGGGCTCGGGGGCGGCCAAACG  
 GCCGCATCGGACGAGCGGAAGAGCGCTTCTCGCAGCCCGCGCTCTTCTCGCAGCTGTCCCGTTGG  
 TCCTCGGCCAGAAGCTGGGCGCTCTCGAGCCGTGTACCCGGGAGACGGCGTGGTCCCACCAGACTCTA  
 CCCGGCCCGCTGATCCGCTGGCTGTGAAGCTGCAGGGGCGAGCGGACCTGAACGGAGCCTGCGGGCCC  
 CTGGCGAGCGGGTGGCGGTGGCTTGCCAAGCAGAGCCCTTCTCTACGCCACCGCTTCTGGCCCA  
 AGAGCTCGGCTGCGGCGGACGCGCGGGCGGCGCCGCGGGCCCTGCAGCTGCAACTGCCCTCCGC  
 GCTCACCTGCTGCCGCCCTCTTCACTTCGCTGTGTCTGCCCGCGCAGAACTGGTGCGCCAAATGCAAC  
 GCCTCCTTCCGCATGACCTCCGACCTGGTACCATATGCGGTCTCACCACAAAAGGAGTATGCCATGG  
 AGCCCCTGGTGAAGCGGCGGGGAGGAGAACTCAAGTGCCCATTTGCAACGAGTCTTCAGGGAGCG  
 TCACCACCTGTCCCGGCACATGACCTCGCATAAT

**ACGCGT**ACGCGGGCGGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222292 representing NM\_029947  
 Red=Cloning site Green=Tags(s)

MEDSGIQRGIWDGDAKAVQQCLTDIFTSVYTTCDIPENAIIFGPCVLSHTSLYDSIAFVALKSTDKRTVPY  
 IFRVDTSAANGSSEGLMWLRLVQSARDKEEQNL EAYIKNGQLFYRSLRRIAKDEELLVWYGKELTELLLL  
 CPSRAHKMNGSSPYTCLCSQRFQFEFPYVAHLRFRCPKRLHSTDANPQDEQGGGLGTDHGGGGGKEQ  
 QQQQQQQQEAPLIPGPKFCKAGPIHHYPASSPEASNPPGSAGAGSAKPSTDFHNLARELENSRGSSSCV  
 AAPGVGSGSGHQEAELSPDG VATGGCKGRRFP EEEAAEGGGAGLAGGRARFSERPLATSKEELVCTPQ  
 QYRAAGSYFGLEENGR LFAPSPETGEAKRS AFVEVKAGRAVGLQEEAAATDGAGGTAEDPDAGGGVAG  
 GGSNGSSTPAAGSPGAPEKLLAPRPGGSLPGRLEGGSPARGSAFTSVS QLGGGGGAGTAGAGSGGGQT  
 AASDERKSAFSQPARFSQLSPLVLGQKLGALPCHPGDVGVPTRLYPAAADPLAVKLGAAADLNGACGP  
 LASGGGGGLPKQSPFLYATAFWPKSSAAAAAAAAAAGPLQLQLPSALTLLPPSF TSLCLPAQNWCAKCN  
 ASFRMTSDLVYHMRSHHKKEYAMEPLVKRRREEK LKCPICNESFRERHHL SRHMTSHN

TRTRPLE - GFP Tag - V

Restriction Sites:

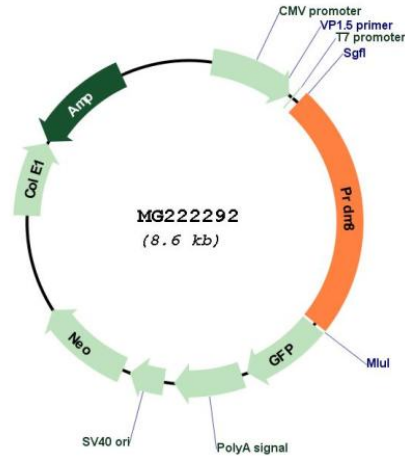
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM\_029947

ORF Size: 2064 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\\_029947.2](#), [NP\\_084223.2](#)

RefSeq Size: 3119 bp

RefSeq ORF: 2067 bp

Locus ID: 77630

UniProt ID: [Q8BZ97](#)

Cytogenetics: 5 E3

**Gene Summary:** Probable histone methyltransferase, preferentially acting on 'Lys-9' of histone H3 (PubMed:19646955). Histone methyltransferase activity has not been confirmed in other species. Involved in the control of steroidogenesis through transcriptional repression of steroidogenesis marker genes such as CYP17A1 and LHCGR (PubMed:19646955). Forms with BHLHE22 a transcriptional repressor complex controlling genes involved in neural development and neuronal differentiation (PubMed:22284184). In the retina, it is required for rod bipolar and type 2 OFF-cone bipolar cell survival (PubMed:26023183).[UniProtKB/Swiss-Prot Function]