

Product datasheet for **MR209180**

Mbd1 (NM_013594) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mbd1 (NM_013594) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mbd1
Synonyms:	Cxxc3; PCM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR209180 representing NM_013594
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCTGAGTCTTGGCAGGACTGCCAGCCTGGGCCCTGGCTGGAACGCCGAGAGTCTTTGCAAAGT
 CAGGGCCCTCGTTTGGACGCTCAGACATCTATTACCAGAGCCCCACAGGAGAAAAGATCCGAAGCAAAGT
 TGAGTACTCGGTACTTGGGCCCTGCATGTGATCTTACCCTGTTTGACTTCAGACAAGGCACCTTATGC
 CATCCCATTCCCAAGACTCATCCCTGGCTGTCCCCAGCAAGAAGAAAAAGAACCTTCTAAACCAGCCA
 AGACTAAGAAACAGCAGGTTGGGCTGCAGCAAGTGAAGTTCAGGAGAGAGACTCCACAGGGGGAATAAA
 GGCCCTACTGCCACAGCTCTAGCTTCACTATCTGTGTCTGCATCTGCGTCTTCGCTGCATCTGCATCT
 GCGTCTTCGTCTGCATCTGCATCTGCATCTGCGTCTTCACATGCACCTGTGTGCTGTGAGAATTGTGGAA
 TCCACTTTTCATGGGATGGTGTCAAAGGCAGAGACTTAAGACGTTGTGCAAAGATTGTCGAGCACAGAG
 AATCGCCTTCAACCGCAACAGAGAATGTTTAAGCGAGTGGCTGTGGGACTGTGCAGCTTGCCTGGTG
 AAAGAGGACTGTGGGGTGTGCTCCACCTGTGCGCTGCAACTGCCAGTGTGTGGCCTCAGGGCTTACT
 GCAAGTGTGAGCGGAGACGATGCCTGCGGATTATGGAGAAGAGCCGAGGGTGTGGCGTGTGTCGGGGTTG
 TCAGACCCAAGAGGACTGTGGCCATTGCTGCATCTGTCTTCGCTCTCCCGCCCTGGTCTCAAGCGCCAG
 TGGAGGTGTTTGAACGGCGCTGTTTTGGGGTAAACGTATTCTAGTAAGAGAGGCTCGAAGGTAGCGT
 CTCAGCGTCACTCCCAAGCCCGCCACTTCTCCACATCTGCATCACAGTACACAGAGCCACAGAGCT
 GCACATCAGCGACATAGCACCCACATCACCTGCTGAGTTCATCTATTACTGTGTAGACGAGGACGAGGAC
 GAGCTAAAGCGGCTGCTGCCAGTGTGGTCAAGGCTGGGGAGGGAGCAGGATTGCGTCCATATCAGA
 CCCATCAGACCCATCAAAGAGGCTGCTTCTGCTCGACAACTCCAAGTACTGAGCTCTCCCTAAAGCCCC
 TTGGGCTGTGGTACAGCACACCAGGCCCTGTCCGAGATTCAAGAAAGCAGCAAGCAGGTAGAGGCTCT
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 CTTACCCAGGTGAAGCAAGAGACGGCAGATGCTCCAGAGGAGTGGACAGCAGTACGACCTTCTGACT
 TCCTCCACGCTGCAGTCTGGCTTCCCTAGCAAGGCTGCAGATCCAGACCTTTCACCTGTGAAACAAGAGC
 CCCCTGGCCCTGAAGAGGATGGAGAAGAGAAAAAAGATGATGTCTCTGAAACAACCCAGCAGAGGAGAT
 AGGAGGGGTTGGCAGCCAGTATCACGGAGATTTTCAGCCTGGGTGGAACCCGCTCCGAGATGCAGAA
 GCCTGTTGCCAAGGCTACATAAACTGTTAGCAGTAAATGAAAAAGAGTATTTACTGAGCTGCAGTTGA
 AAGAAGAAGTTTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209180 representing NM_013594
 Red=Cloning site Green=Tags(s)

MAESWQDCPALGPGWKRRESFRKSGASFGRSDIYYQSPTGEKIRSKVELTRYLGPACDLTLFDFRQGTLC
 HIPKTHPLAVPSKSKKKKPSKPAKTKKQVQLQRSEVRRETPQGEYKAPTATALASLSVSASASSASAS
 ASSSASASASSHAPVCCENCIGIHFSDWGVKQRQLKTLCKDCRAQRIAFNREQRMFKRVGCGDCAACL
 KEDCGVSTCRLQLPSDVASGLYCKCERRRCLRIMEKSRGCGVCRGCQTQEDCGHCCI CLRSPRPLKRQ
 WRCLQRRCFWGKRDSKRGSKVASQRHSQAPLPPHPASQYTEPTELHISDIAPTSPAEIFIYYCVDEDED
 ELKRLPSAGSGSGEGALRPYQTHQTHQKRPASARQLQLSSPLKAPWAVVTAPPGPVDRSRKQAGRGS
 VLPQPDTFVFLQEGTSSAMQMPGTAAACTEVPVQAAQCSAPSWVVALPQVKQETADAPEWTAVTFTLT
 SSTLQSGFPSKAADPDLSPVKQEPGPPEEDGEEKKDDVSETTPAEEIGGVTPVITEIFSLGGTRLRDAE
 AWLPRLHKLLAVNEKEYFTELQLKEEVL

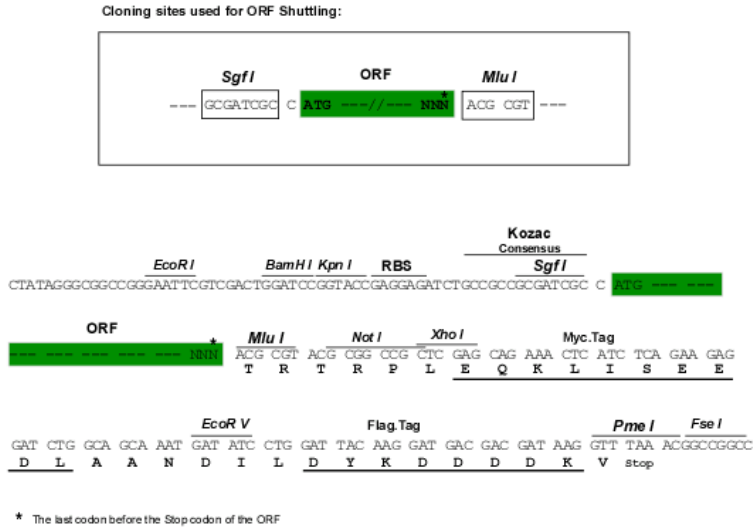
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9044_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013594

ORF Size: 1764 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_013594.3](#)

RefSeq Size: 2672 bp

RefSeq ORF: 1767 bp

Locus ID: 17190

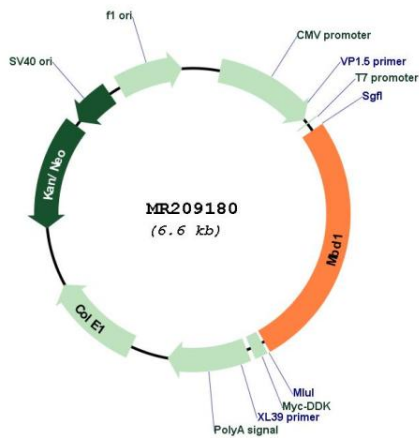
UniProt ID: [Q9Z2E2](#)

Cytogenetics: 18 50.7 cM

MW: 64.6 kDa

Gene Summary: Transcriptional repressor that binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. Binding is abolished by the presence of 7-mG that is produced by DNA damage by methylmethanesulfonate (MMS). Acts as transcriptional repressor and plays a role in gene silencing by recruiting AFT7IP, which in turn recruits factors such as the histone methyltransferase SETDB1. Probably forms a complex with SETDB1 and ATF7IP that represses transcription and couples DNA methylation and histone 'Lys-9' trimethylation. Isoform 1 can also repress transcription from unmethylated promoters.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209180