

Product datasheet for **RG234452**

MBD1 (NM_001204141) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MBD1 (NM_001204141) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MBD1
Synonyms:	CXXC3; PCM1; RFT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234452 representing NM_001204141
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGAGGACTGGCTGGACTGCCCGCCCTGGCCCTGGCTGGAAGCGCCGCAAGTCTTTCGCAAGT
 CAGGGGCCACCTGTGGACGCTCAGACACCTATTACCAGAGCCCCACAGGAGACAGGATCCGAAGCAAAGT
 TGAGCTGACTCGATACCTGGGCCCTGCGTGTGATCTCACCTCTTCGACTTCAAACAAGGCATCTTGTGC
 TATCCAGCCCCAAGGCCATCCCGTGGCGGTTGCCAGCAAGAAGCGAAAGAAGCCTTCAAGGCCAGCCA
 AGACTCGAAACGTCAAGTTGGACCCAGAGTGGTGGAGTTCAGGAAGGAGGCCCGAGGGATGAGACCAA
 GGCTGACACTGACACAGCCCCAGCTTCATTCCCTGCTCCTGGGTGCTGTGAGAACTGTGGAATCAGCTTC
 TCAGGGGATGGCACCCAAAGGCAGCGGCTCAAACGTTGTCAAAGACTGTCGAGCACAGAGAATTGCCT
 TCAACCGGAACAGAGAATGTTTAAAGAGCCGAGGGTGTGGAGTATGCCGGGGCTGTGACACCAAGAGGA
 TTGTGGCCATTGCCCATCTGCCTTCGCCCTCCCGCCCTGGTCTCAGGGCCAGTGAAATGTGTCCAG
 CGACGTTGCCTACGGGGTAAACATGCCCGCCGCAAGGGAGGCTGTGACTCCAAGATGGCTGCCAGGCGGC
 GCCCGGAGCCCAGCCTGCCTCCACCACCCCATCACAGTCCCAGAGCCCACAGAGCCGACCCCCAG
 AGCCCTGGCCCCCTGCCACCTGCCAGTTCATCTATTACTGTGTAGACGAGGACGAGCTACCCTACACG
 AACCGCCGGCAGAACCGCAAGTGCAGGGGCTGTGACGCTGCCTACGGCGGATGGACTGTGGCCGCTGCG
 ACTTCTGCTGCGACAAGCCAAATTCGGGGGCAGCAACCAAGAAGCGCCAGAAGTGTGCTTGGCCCAATG
 CCTGCAGTTTGCATGAAGCGGCTGTGCCAGTGTCTGGTCAGAGTCTGAGGATGGGGCAGGATCGCCC
 CCACCTTACCGTGTGAAAGAGGCCAGCTCTGCCGACGGCACCATCTTGGCCCTACCTTGAAGCCCA
 CTTGGCTACACGCACAGCCCAACCAAGCACCATCCAGGCTCCAACGAAGCAGGAAGCAGTGGTGGCTT
 TGTGCTGCCCGCCCTGGCACTGACCTTGTGTTTTACGGGAAGGCGCAAGCAGTCTGTGACAGGTGCCG
 GGCCCTGTTGACGCTTCCACAGAAGCCCTGTTGCAGGAGGCCAGTGTCTGGCCTGAGTTGGGTTGTGG
 CCTTACCCAGGTGAAGCAAGAGAAGGCGGATACCCAGGACGAGTGGACACCAGGCACAGCTGCTCTGAC
 TTCTCCCGTATTGGTGCCTGGCTGCCCTAGCAAGGCAGTAGACCCAGGCTGCCTTCTGTGAAGCAAGAG
 CCACCTGACCCAGAGGAGGACAAGGAGGAGAACAAGGATGATTCTGCCTCAAATTTGGCCCCAGAGGAAG
 AGGAGGAGGGGCTGGCACACCCGTGATCACGGAGATTTTACGCTGGGTGGAACCCGCTCCGAGATAC
 AGCAGTCTGGTTGCCAAGGTATTACCACCTTGCTCTTGACTGAAATGCAACTGTGGTTACCACCTGTGC
 TGCAGGTCGGTCTGTTCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

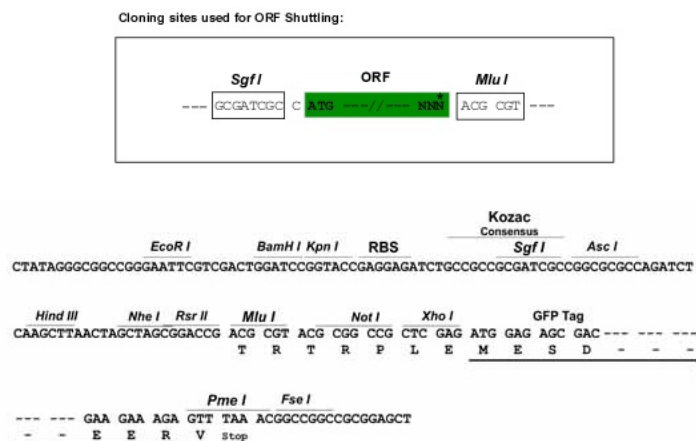
>RG234452 representing NM_001204141
 Red=Cloning site Green=Tags(s)

MAEDWLDPCALGPGWKRREVFRKSGATCGRSDTYYSPTGDRIRSKVELTRYLGPACDLTLDFKQGIILC
 YPAPKAHPVAVASKRKRKPSRPAKTRKRQVGPQSGEVRKEAPRDETKADTDAPASFPAPGCCENCGISF
 SGDGTQRQRLKTLCKDCRAQRIAFNREQRMFKSRGCGVCRGCQTQEDCGHCPICLRPPRPLRRQWKCVQ
 RRCLRKGHARRKGGCDKMAARRRPGAQLPPPPPSQSPEPEPHPRALAPSPPAEFIIYCVDEDELPLYT
 NRRQNRKCGACAACLRMDCGRCDFCCDKPKFGGSNQKRQKCRWRQCLQFAMKRLLPVWSESEDGAGSP
 PYPYRRRKRPSARRHHLGPTLKPTRLATRTAQPDPHTQAPTKQEAGGGFVLPVPGTDLVFLREGASSPVQVP
 GPVAASTEALLQEAQCSGLSWVVALPQVKQEKADTQDEWTPGTAVLTSPVLVPGCPSKAVDPGLPSVKQE
 PPDPEEDKEENKDDASAKLAPEEEAGGAGTPVITEIFSLGGTRFRDRTAVWLPYRYHLALDWKCNCGYHLC
 CRSVLVP

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001204141

ORF Size: 1701 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_001204141.1](#), [NP_001191070.1](#)

RefSeq Size: 2860 bp

RefSeq ORF: 1704 bp

Locus ID: 4152

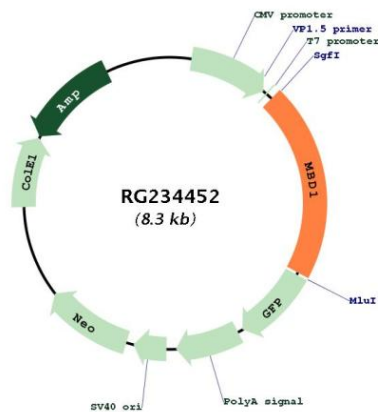
UniProt ID: [Q9UIS9](#)

Cytogenetics: 18q21.1

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: The protein encoded by this gene is a member of a family of nuclear proteins related by the presence of a methyl-CpG binding domain (MBD). These proteins are capable of binding specifically to methylated DNA, and some members can also repress transcription from methylated gene promoters. This protein contains multiple domains: MBD at the N-terminus that functions both in binding to methylated DNA and in protein interactions; several CXXC-type zinc finger domains that mediate binding to non-methylated CpG dinucleotides; transcriptional repression domain (TRD) at the C-terminus that is involved in transcription repression and in protein interactions. Numerous alternatively spliced transcript variants encoding different isoforms have been noted for this gene.[provided by RefSeq, Feb 2011]

Product images:



Circular map for RG234452