

## Product datasheet for **RG234373**

### **MBD1 (NM\_001204151) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MBD1 (NM_001204151) 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:**

>RG234373 representing NM\_001204151  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGAGGACTGGCTGGACTGCCCGGCCCTGGGCCCTGGCTGGAAGCGCCGCAAGTCTTTCGCAAGT  
 CAGGGGCCACCTGTGGACGCTCAGACACCTATTACCAGAGCCCCACAGGAGACAGGATCCGAAGCAAAGT  
 TGAGCTGACTCGATACCTGGGCCCTGCGTGTGATCTCACCTCTTCGACTTCAAACAAGGCATCTTGTGC  
 TATCCAGCCCCAAGGCCATCCCGTGGCGGTTGCCAGCAAGAAGCGAAAGAAGCCTTCAAGGCCAGCCA  
 AGACTCGAAACGTCAGGTTGGACCCAGAGTGGTGGAGTTCAGGAAGGAGGCCCGAGGGATGAGACCAA  
 GGCTGACACTGACACAGCCCCAGCTTCATTCCCTGCTCCTGGGTGCTGTGAGAACTGTGGAATCAGCTTC  
 TCAGGGGATGGCACCCAAAGGCAGCGGCTCAAACGTTGTGCAAAGACTGTGAGCACAGAGAATTGCCT  
 TCAACCGGAACAGAGAATGTTAAGCGTGTGGGCTGTGGGAGTGTGCAGCCTGCCAGGTAACAGAAGA  
 CTGTGGGGCTGCTCCACCTGCCTCCTGCAGCTGCCCCATGATGTGGCATCGGGGCTGTTCTGCAAGTGT  
 GAACGGAGACGCTGCCTCCGATTGTGGAAGGAGCCGAGGGTGTGGAGTATGCCGGGGCTGTGAGACCC  
 AAGAGGATTGTGGCCATTGCCCATCTGCCTTCGCCCTCCCCGCCCTGGTCTCAGGCGCCAGTGGAAATG  
 TGTCCAGCGACGTTGCCTACGGGGTAAACATGCCCGCCGCAAGGGAGGCTGTGACTCCAAGATGGCTGCC  
 AGGCGGCGCCCGGAGCCAGCCACTGCCTCCACCACCCCATCACAGTCCCAGAGCCACAGAGCCCGC  
 AGCCCTACACGAACCGCCGCGAGAACCAGTGCAGGCGCTGTGAGCCTGCCTACGGCGGATGGACTG  
 TGGCCGCTGCGACTTCTGCTGCGACAAGCCAAATTTCGGGGCAGCAACCAGAAGCGCCAGAAGTGTGCT  
 TGGCGCAATGCCTGCAGTTGCCATGAAGCGGCTGCTGCCAGTGTCTGGTCAAGTCTGAGGATGGGG  
 CAGGATCGCCCCACCTTACCCTGCTGAAAGAGGCCAGCTCTGCCCGACGGCACCATCTTGGCCCTAC  
 CTTGAAGCCACCTTGGCTACACGCACAGCCCAACCAGACCATAACCCAGGCTCCAACGAAGCAGGAAGCA  
 GGTGGTGGCTTTGTGCTGCCCCGCCTGGCACTGACCTTGTGTTTTACGGGAAGGCGCAAGCAGTCTGT  
 TGCAGGTGCCGGGCCCTGTTGCAGCTTCCACAGAAGCCCTGTTGCAGGCAGTAGACCCAGGCCTGCCTTC  
 TGTGAAGCAAGAGCCACCTGACCCAGAGGAGGACAAGGAGGAGAACAAGGATGATTCTGCCTCAAATTG  
 GCCCCAGAGGAAGAGGCAGGAGGGGCTGGCACACCCGTGATCACGGAGATTTTCAGCCTGGGTGGAACCC  
 GCTTCCGAGATACAGCAGTCTGGTTGCCAAGTCCAAAGACCTTAAAAACCTGGAGCTAGAAAGCAG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234373 representing NM\_001204151  
 Red=Cloning site Green=Tags(s)

MAEDWLDPCALGPGWKRREVFRRKSGATCGRSDTYYSPTGDRIRSKVELTRYLGPACDLTLDFKQGIILC  
 YPAPKAHPVAVASKRKRKPSRPAKTRKRQVGPQSGEVRKEAPRDETKADTDTAPASFAPGCCENCGISF  
 SGDGTQRQLKTLCKDCRAQRIAFNREQRMFKRVGCGEACQVTEDCGACSTCLLQLPHDVASGLFCKC  
 ERRRCLRIVERSRGCVCRGCQTQEDCGHCPICLRPPRPLRRQWKCVQRRCLRKGHARRKGGCDSKMAA  
 RRRPGAQPLPPPPSQSPEPTEPQPYTNRRQNRKCGACAACLRMDGRCDFCCDKPKFGGSNQKRQKCR  
 WRQCLQFAMKRLLPVWSESEDGAGSPPYRRRKRPSARRHHLGPTLKPTRLATRTAQPDPHTQAPTKQEA  
 GGGFVLPPTGDLVFLREGASSPVQVPGVAASTEALLQAVDPGLPSVKQEPDPDEEDKEENKDDASAKL  
 APEEEAGGAGTPVITEIFSLGGTRFRDTAVWLPRSKDLKKPGARKQ

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001204151

**ORF Size:** 1608 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\\_001204151.3](#)

**RefSeq Size:** 1668 bp

**RefSeq ORF:** 1611 bp

**Locus ID:** 4152

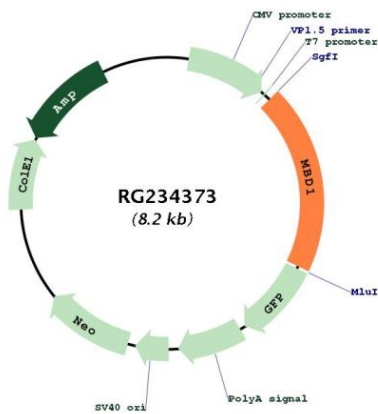
**UniProt ID:** [Q9UIS9](#)

**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 RG234373