

Product datasheet for **RG224185**

MBD1 (NM_015847) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MBD1 (NM_015847) 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:

>RG224185 representing NM_015847
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAGGACTGGCTGGACTGCCCGCCCTGGCCCTGGCTGGAAGCGCCGCAAGTCTTTCGCAAGT
 CAGGGGCCACCTGTGGACGCTCAGACACCTATTACCAGAGCCCCACAGGAGACAGGATCCGAAGCAAAGT
 TGAGCTGACTCGATACCTGGGCCCTGCGTGTGATCTCACCTCTTCGACTTCAAACAAGGCATCTTGTGC
 TATCCAGCCCCAAGGCCATCCCGTGGCGGTTGCCAGCAAGAAGCGAAAGAAGCCTTCAAGGCCAGCCA
 AGACTCGAAACGTCAGGTTGGACCCAGAGTGGTGGAGTTCAGGAAGGAGGCCCGAGGGATGAGACCAA
 GGCTGACACTGACACAGCCCCAGCTTCATTCCCTGCTCCTGGGTGCTGTGAGAACTGTGGAATCAGCTTC
 TCAGGGGATGGCACCCAAAGGCAGCGGCTCAAACGTTGTGCAAAGACTGTGAGCACAGAGAATTGCCT
 TCAACCGGAACAGAGAATGTTTAAAGAGCCGAGGGTGTGGAGTATGCCGGGGCTGTGAGCCCAAGAGGA
 TTGTGGCCATTGCCCATCTGCCTTCGCCCTCCCGCCCTGGTCTCAGGGCCAGTGAAATGTGTCCAG
 CGACGTTGCCTACGGGGTAAACATGCCCGCCGCAAGGGAGGCTGTGACTCCAAGATGGCTGCCAGGCGGC
 GCCCGGAGCCCAGCCTGCCTCCACCACCCCATCACAGTCCCAGAGCCCACAGAGCCGACCCCGAG
 AGCCCTGGCCCCCTGCCACCTGCCAGTTCATCTATTACTGTGTAGACGAGGACGAGCTACAGCCCTAC
 ACGAACCGCCGGCAGAACCAGCAAGTGGCGGGCCTGTGCAGCCTGCCTACGGCGGATGGACTGTGGCCGCT
 GCGACTTCTGCTGCGACAAGCCAAATTCGGGGGCAGCAACCAGAAGCGCCAGAAGTGTGTTGGCCCA
 ATGCCTGCAGTTTGCATGAAGCGGCTGCTGCCAGTGTCTGGTCAGAGTCTGAGGATGGGGCAGGATCG
 CCCCCACCTTACCGTTCGCGAAAGAGGCCAGCTCTGCCGACGGCACCATCTTGGCCCTACCTTGAAGC
 CCCCTTGGCTACACGCACAGCCCAACCAGACCATACCCAGGCTCCAACGAAGCAGGAAGCAGGTTGGTGG
 CTTTGTGCTGCCCGCCCTGGCACTGACCTTGTGTTTTACGGGAAGGCGCAAGCAGTCCCTGTGAGGTTG
 CCGGGCCCTGTTGCAGCTTCCACAGAAGCCCTGTTGCAGGAGGCCAGTGTCTGGCCTGAGTTGGTTG
 TGGCCTTACCCAGGTGAAGCAAGAGAAGGCGGATACCCAGGACGAGTGGACACCAGGCACAGCTGTCT
 GACTTCTCCCGTATTGGTGCCTGGCTGCCCTAGCAAGGCAGTAGACCCAGGCCTGCCTTCTGTGAAGCAA
 GAGCCACCTGACCCAGAGGAGGACAAGGAGGAGAACAAGGATGATTCTGCCTCAAATTTGCCCCAGAGG
 AAGAGGCAGGAGGGCTGGCACACCCGTGATCACGGAGATTTTCAGCCTGGGTGGAACCCGCTTCCGAGA
 TACAGCAGTCTGGTTGCCAAGGTCAAAGACCTTAAAAACCTGGAGCTAGAAAGCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

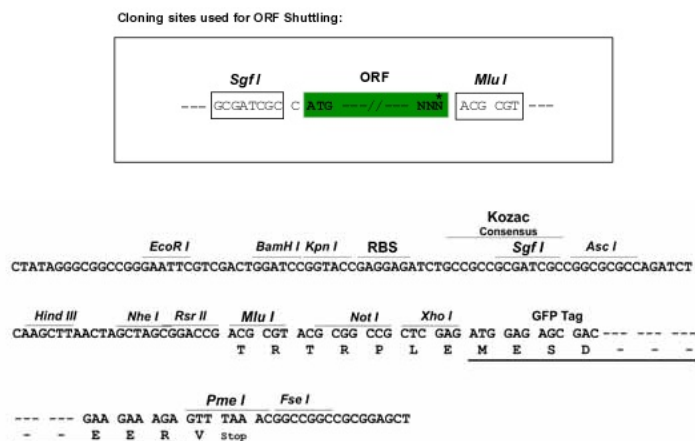
>RG224185 representing NM_015847
 Red=Cloning site Green=Tags(s)

MAEDWLDPCALGPGWKRREVFRKSGATCGRSDTYYSPTGDRIRSKVELTRYLGPACDLTLDFKQGILC
 YPAPKAHPVAVASKKRKKPSRPAKTRKRQVGPQSGEVRKEAPRDETKADTDAPASFAPGCCENGISF
 SGDGTQRQRLKTLCKDCRAQRIAFNREQRMFKSRGCGVCRGCTQEDCGHCPICLRPPRPLRRQWKCVQ
 RRCLRKGHARRKGGDSKMAARRRPGAQPLPPPPSQSPEPEPHPRALAPSPPAEFIYYCVDEDELQPY
 TNRRQRKCGACAALRRMDCGRCDFCCDKPKFSGSNQKRQKCRWRQCLQFAMKRLLPVWSESEDGAGS
 PPPYRRRKRPSARRHHLGPTLKPTLATRTAQPDPHTQAPTKQEAGGGFVLPPTGDLVFLREGASSPVQV
 PGPVAASTEALLQEAQCSGLSWVVALPQVKQEKADTQDEWTPGTAVLTSPLVPGCPSKAVDPGLPSVKQ
 EPPDPEEDKEENKDDASAKLAPEEEAGGAGTPVITEIFSLGGTRFRDPAVWLPRSKDLKPKGARKQ

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_015847

ORF Size: 1668 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_015847.3](#), [NP_056723.2](#)

RefSeq Size: 2815 bp

RefSeq ORF: 1671 bp

Locus ID: 4152

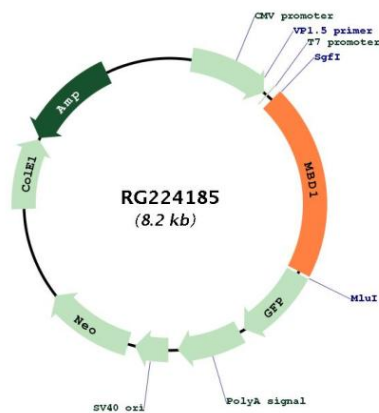
UniProt ID: [Q9UIS9](#)

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 RG224185