

Product datasheet for **RG223909**

MBD4 (NM_003925) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MBD4 (NM_003925) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MBD4
Synonyms:	MED1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG223909 representing NM_003925
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCACGACTGGGCTGGAGAGTCTGAGTCTGGGGACCGGGAGCTGCCCCACCGTCACTCTAGTG
 AGCGCCTAGTCCCAGACCGCCGAATGACTCCGCAAAGAAGATGTTGCTATGGAATTGGAAAGAGTGGG
 AGAAGATGAGGAACAAATGATGATAAAAAGAAGCAGTGAATGTAATCCCTTGCTACAAGAACCATCGCT
 TCTGCTCAGTTTGGTGTACTGCAGGAACAGAATGCCGTAAGTCTGTCCCATGTGGATGGGAAAGAGTTG
 TGAAGCAAAGGTTATTTGGGAAGACAGCAGGAAGATTTGATGTGTACTTTATCAGCCCACAAGGACTGAA
 GTTCAGATCCAAAAGTTCACTTGCTAATTATCTTCACAAAAATGGAGAGACTTCTCTAAGCCAGAAGAT
 TTTGATTTACTGTACTTTCTAAAAGGGGTATCAAGTCAAGATATAAAGACTGCAGCATGGCAGCCCTGA
 CATCCCATCTACAAAACCAAAGTACAATTCAAAGTCAAGCTCAGGACCCGAAGCAAGTCAAAAAGGA
 TGTGTTTATGCCCAAGTAGTAGTTTCAAGTTGCAGGAGAGCAGAGGACTCTCTAACTTTACTTCCACT
 CATTTGCTTTTGAAGAAGATGAGGGTGTGTGATGTTAACTTCAGAAAAGGTTAGAAAAGCCCAAAGGAA
 AGGTGACTATTTTGAAGAAGATCCCAATTAAGAAAATAAAAAGGATGTAGGAAGAGCTGTTCCAGTTT
 TGTTCAAAGTGATAGCAAAGAGAATCTGTGTGTAATAAAGCAGATGCTGAAAGTGAACCTGTTGCACAA
 AAAAGTCAGCTTGATAGAAGTGTCTGCATTTCTGATGCTGGAGCATGTGGTGAGACCCCTCAGTGTGACCA
 GTGAAGAAAACAGCCTTGTAAGAAAAGAAAGATCATTGAGTTCAGGATCAAATTTTTGTTCTGAACA
 AAAAATCTTGGCATCATAAACAAATTTGTTTCAAGCAAGACTCAGAACACAACGAGAAGTATGAGGAT
 ACCTTTTTAGAACTCTGAAGAAATCGGAACAAAAGTAGAAGTTGTGGAAAGGAAAGAACATTTGCATACTG
 ACATTTTAAACGTGGCTCTGAAATGGACAACAAGTCTCACCACCAAGGAAAGACTTCACTGGTAGAGAA
 AATATTTCAAGAAGATACCATCCACGAAACACAGATAGAAAAGAAGGAAAACAAGCCTGTATTTTCCAGC
 AAATATAACAAAGAAGCTCTTAGCCCCACGAGTAAAGCCTTTAAGAAATGGACACCTCCTCGGTAC
 CTTTTAATCTCGTTCAAGAAACACTTTTTCATGATCCATGGAAGCTTCTCATCGCTACTATATTTCTCAA
 TCGGACCTCAGGCAAAATGGCAATACCTGTGCTTTGGAAGTTTCTGGAGAAGTATCCTTCAGCTGAGGTA
 GCAAGAACCGCAGACTGGAGAGATGTGTCAGAACTTCTTAAACCTCTTGGTCTCTACGATCTTCGGGCAA
 AAACCATGTCAAGTTCTCAGATGAATACCTGACAAAGCAGTGAAGTATCCAATTGAGCTTCATGGGAT
 TGGTAAATATGGCAACGACTCTTACCGAATTTTTGTGTCAATGAGTGAAGCAGGTGCACCTGAAGAC
 CACAAATTAATAAATATCATGACTGGCTTTGGGAAAATCATGAAAATTAAGTCTATCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG223909 representing NM_003925
 Red=Cloning site Green=Tags(s)

MGTTGLESLSLGDRGAAPTVTSSERLVPDPNDLRKEDVAMELERVGEDEEQMMIKRSSECNPLLQEP
 SAQFGATAGTECRKSVPCGWVERVVKQRLFGKTAGRFDVYFISPGGLKFRSKSSLANYLHKNGETSLKPED
 FDFTVLSKRGIKSRYKDCSMAAL TSHLQNSNNSNWNLRTRSKCKKDVFMPPSSSELQESRGLSNFTST
 HLLKKEDEGVDDVNFVRKPKGKVTILKGIPIKKTGGCRKSCSGFVQSDSKRESVCNKADAESPEVAQ
 KSQLDRTVCISDAGACGETLSVTSEENSLVKKKERSLSSGSNFCSEQKTSGIINKFCSAKDSEHKEYED
 TFLSEEEIGTKVEVVERKEHLHTDILKRGSEMDNNSPTRKDFTEKIFQEDTIPRTQIERRKTSLYFSS
 KYNKEALSPRRKAFKKWTPRPFNLVQETLFDHPWKLIIATIFLNRTSGKMAIPVLWKFLEKYP
 SAEVARTADWRDVSSELLKPLGLYDLRAKTIVKFSDEYLTQWQYPIELHGIKYGNDYSYRIFCVNEWKQVHPED
 HKLNKYHDWLWENHEKLSLS

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_003925

ORF Size: 1740 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_003925.3](#)

RefSeq Size: 2470 bp

RefSeq ORF: 1743 bp

Locus ID: 8930

UniProt ID: [O95243](#)

Cytogenetics: 3q21.3

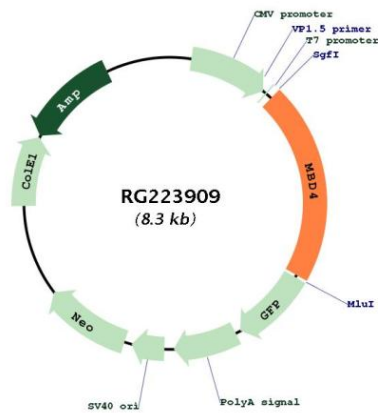
Domains: MBD

Protein Families: Druggable Genome

Protein Pathways: Base excision repair

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 an MBD domain at the N-terminus that functions both in binding to methylated DNA and in protein interactions and a C-terminal mismatch-specific glycosylase domain that is involved in DNA repair. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2013]

Product images:



Circular map for RG223909