

## **Product datasheet for SC333229**

## MBD4 (NM\_001276271) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** MBD4 (NM\_001276271) Human Untagged Clone

Tag: Tag Free
Symbol: MBD4
Synonyms: MED1

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC333229 representing NM\_001276271.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGGCACGACTGGGCTGGAGAGTCTGAGTCTGGGGGACCGCGGAGCTGCCCCCACCGTCACCTCTAGT GAGCGCCTAGTCCCAGACCCGCCGAATGACCTCCGCAAAGAAGATGTTGCTATGGAATTGGAAAGAGTG GGAGAAGATGAGGAACAAATGATAAAAAAGAAGCAGTGAATGTAATCCCTTGCTACAAGAACCCATC GCTTCTGCTCAGTTTGGTGCTACTGCAGGAACAGAATGCCGTAAGTCTGTCCCATGTGGATGGGAAAGA GTTGTGAAGCAAAGGTTATTTGGGAAGACAGCAGGAAGATTTGATGTGTACTTTATCAGCCCACAAGGA CTGAAGTTCAGATCCAAAAGTTCACTTGCTAATTATCTTCACAAAAATGGAGAGACTTCTCTTAAGCCA GAAGATTTTGATTTTACTGTACTTTCTAAAAGGGGTATCAAGTCAAGATATAAAGACTGCAGCATGGCA GCCCTGACATCCCATCTACAAAACCAAAGTAACAATTCAAACTGGAACCTCAGGACCCGAAGCAAGTGC AAAAAGGATGTGTTTATGCCGCCAAGTAGTAGTTCAGAGTTGCAGGAGAGCAGAGGACTCTCTAACTTT ACTTCCACTCATTTGCTTTTGAAAGAAGATGAGGGTGTTGATGATGTTAACTTCAGAAAGGTTAGAAAG CCCAAAGGAAAGGTGACTATTTTGAAAGGAATCCCAATTAAGAAAACTAAAAAAGGATGTAGGAAGAGC TGTTCAGGTTTTGTTCAAAGTGATAGCAAAAGAGAATCTGTGTGTAATAAAGCAGATGCTGAAAGTGAA CCTGTTGCACAAAAAAGTCAGCTTGATAGAACTGTCTGCATTTCTGATGCTGGAGCATGTGGTGAGACC TTTTGTTCTGAACAAAAACTTCTGGCATCATAAACAAATTTTGTTCAGCCAAAGACTCAGAACACAAC GAGAAGTATGAGGATACCTTTTTAGAATCTGAAGAATCGGAACAAAAGTAGAAGTTGTGGAAAGGAAA AGCCTGTATTTTTCCAGCAAATATAACAAAGAAGCTCTTAGCCCCCCACGACGTAAAGCCTTTAAGAAA TGGACACCTCCTCGGTCACCTTTTAATCTCGTTCAAGAAACACTTTTTCATGATCCATGGAAGCTTCTC ATCGCTACTATATTTCTCAATCGGACCTCAGGCAAAATGGCAATACCTGTGCTTTGGAAGTTTCTGGAG AAGTATCCTTCAGCTGAGGTAGCAAGAACCGCAGACTGGAGAGATGTGTCAGAACTTCTTAAACCTCTT GGTCTCTACGATCTTCGGGCAAAAACCATTGTCAAGTTCTCAGATGAATACCTGACAAAGCAGTGGAAG TATCCAATTGAGCTTCATGGGATTGGTAAATATGGCAACGACTCTTACCGAATTTTTTGTGTCAATGAG TGGAAGCAGGTGAGGCTCACTCCCATCCATAATTCAGCACATTTGGTCTCTGAGGCAAAATAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001276271



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## MBD4 (NM\_001276271) Human Untagged Clone - SC333229

**Insert Size:** 1719 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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: <u>NM 001276271.1</u>

 RefSeq Size:
 2338 bp

 RefSeq ORF:
 1719 bp

 Locus ID:
 8930

 UniProt ID:
 095243

 Cytogenetics:
 3q21.3

Protein Families: Druggable Genome
Protein Pathways: Base excision repair

**MW:** 64.8 kDa

**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]

Transcript Variant: This variant (3) lacks an exon and its transcription extends past a splice site that is used in variant 1, resulting in a novel 3' coding region and 3' UTR compared to variant 1. It encodes isoform 3 which is shorter and has a distinct C-terminus, compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic

coordinates used for the transcript record were based on alignments.