

## **Product datasheet for RC207511**

### MBD2 (NM\_003927) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** MBD2 (NM\_003927) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: MBD2

Synonyms: DMTase; NY-CO-41

Mammalian Cell Neomycin

Selection:

Vector:

pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC207511 representing NM\_003927

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

GCGGCGCTGGCGGCGACTCCGCCATAGAGCAGGGGGGCCAGGGCAGCGCCCCCGTCCCCGGTGAG CGGCGTGCGCAGGGAAGGCGCTCGGGGCGGCGGCCGTGGCCGGGGCGGTGGAAGCAGGCGGGCCGGGGC GGCGGCGTCTGTGGCCGTGGCCGGGGCCGGGGCCGTGGCCGGGGACGGGGACGGGGCCGGGGCCGGGGCC GCGGCCGTCCCCGAGTGGCGGCAGCGGCCTTGGCGGCGACGGCGGCGGCGGCGGCGGCAGCGG TGGCGGCGCCCCCCGGCGGGAGCCGGTCCCTTTCCCGTCGGGGAGCGCGGGGCCCGGGGCCCAGGGGA CCCCGGGCCACGGAGAGCGGGAAGAGGATGGATTGCCCGGCCCTCCCCCCGGATGGAAGAAGGAGGAAG TGATCCGAAAATCTGGGCTAAGTGCTGGCAAGAGCGATGTCTACTACTTCAGTCCAAGTGGTAAGAAGTT CAGAAGCAAGCCTCAGTTGGCAAGGTACCTGGGAAATACTGTTGATCTCAGCAGTTTTGACTTCAGAACT AGGGTAAACCAGACTTGAATACAACATTGCCAATTAGACAAACAGCATCAATTTTCAAACAACCGGTAAC CTTTTCTGGGAGAAGAGGCTACAAGGACTTAGTGCATCAGATGTAACAGAACAAATTATAAAAACCATGG AACTACCCAAAGGTCTTCAAGGAGTTGGTCCAGGTAGCAATGATGAGACCCTTTTATCTGCTGTTGCCAG TGCTTTGCACACAAGCTCTGCGCCAATCACAGGGCAAGTCTCCGCTGCTGTGGAAAAGAACCCTGCTGTT TGGCTTAACACATCTCAACCCCTCTGCAAAGCTTTTATTGTCACAGATGAAGACATCAGGAAACAGGAAG AGCGAGTACAGCAAGTACGCAAGAAATTGGAAGAAGCACTGATGGCAGACATCTTGTCGCGAGCTGCTGA TACAGAAGAGATGGATATTGAAATGGACAGTGGAGATGAAGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



**Protein Sequence:** >RC207511 representing NM\_003927

Red=Cloning site Green=Tags(s)

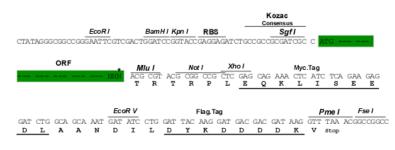
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg4390">https://cdn.origene.com/chromatograms/mg4390</a> e05.zip

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_003927

ORF Size: 1233 bp

**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customer.com">customer.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>



Domains:

#### MBD2 (NM\_003927) Human Tagged ORF Clone - RC207511

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.

**MBD** 

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 003927.5</u>

RefSeq Size: 2584 bp
RefSeq ORF: 1236 bp
Locus ID: 8932
UniProt ID: Q9UBB5
Cytogenetics: 18q21.2

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

MW: 43.1 kDa

**Gene Summary:** DNA methylation is the major modification of eukaryotic genomes and plays an essential role

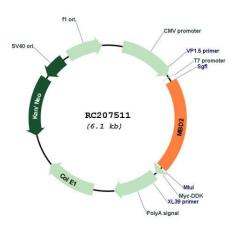
in mammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. The protein encoded by this gene may function as a mediator of the biological consequences of the methylation signal. It is also reported that the this protein functions as a demethylase to activate transcription, as DNA

methylation causes gene silencing. Two transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Feb 2011]



# **Product images:**



Circular map for RC207511