

Product datasheet for **MR206536**

Mbd2 (NM_010773) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mbd2 (NM_010773) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mbd2
Synonyms:	MBD2a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR206536 representing NM_010773, **codon optimized**.
Due to the complexity of NM_010773, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGC**C

ATGAGAGCCACCAGGAGGGGAAGGTGTTGCCCGAACAGGAAGAGGGCGAGAGTGCTGCTGGAGGCA
 GTGGCGCCGTGGAGACAGCGCAATCGAGCAGGGAGGACAGGGTCTGCATTGGCACCGAGCCCGGTGAG
 CGGAGTGAGAAGAGAGGGTGCACGAGCGGGGACGCGGCAGAGGCCGGTGGAAACAGCGGCTCGGGC
 GGTGGGTCTGCGCAGGGGACGCGGAGAGGCAGAGGCCGGGGCGCGCCGCGCAGGGGACGAGGCA
 GGGCAGACCTCAGAGTGGCGGAGCGGCTTGGAGGTGACGGCGGAGGTGGCGCAGGTGGCTGCGGCGG
 GGAAGCGGAGGAGGAGTGCCTCGCAGAGATCCCGTACCGTTTCTAGCGGCAGTTCAGGTCCAGGA
 CCACGCGGCCAAGAGCCACCGAAAGCGGGAAGCGGATGGACTGTCCCGCCCTCCTCCAGGCTGGAAAA
 AGGAAGAGGTGATCAGGAAATCTGGACTCTCCGCTGGAAAATCTGATGTGTACTACTTCAGTCTCTG
 TAAGAAGTCCGGTCAAACCTCAGTGGCCCGTATCTGGGCAATGCTGTGATCTCTCTTCATTTGAT
 TTCCGGACTGGTAAGATGATGCCGTCAAAGCTTCAAGAATAAGCAGAGGCTGAGAAACAGCCCTCGA
 ACCAGAATAAGGGGAAGCCCGATCTTAATACGACCCTCCGATTGCCAGACAGCGAGTATCTTTAAGCA
 GCCAGTGACCAAGTTTACTAATCATCCATCCAATAAAGTGAAGTCTGACCCTCAGCGCATGAACAGATCA
 CCCCAGACGCTTTTCTGGGAGAAGAGACTCCAGGGACTCAGCGCTTACAGCGTTACTGAACAGATCATCA
 AAACATGGAACCTCCCAAGGACTGCAGGGCGTTGGACCAGGTAGCAATGATGAAACGCTGCTGTCTGC
 GGTGGCAGCGCCTCCACATCTAGTCCCAATCACCGGCAGGTGTCCGACCGTGGAGAAGAAC
 CCCGCTGTATGGCTCAATACTAGTCAGCCGCTGTGTAAGGCATTCATCGTACAGATGAAGATATCAGAA
 AACAGAGGAGAGGGTTCAGCAGGTGCGCAAAAAGCTGGAAGAAGCTCTGATGGCTGACATATTGCACG
 CGTGTGACACTGAAGAAGTCGACATCGATATGGACAGTGGGACGAAGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR206536 representing NM_010773
 Red=Cloning site Green=Tags(s)

MRAHPGGGRCCPEQEEGESAAAGSGAGGDSAIEQGGQGSALAPSPVSGVRREGARGGGRGRGRWKQAARG
 GGVCGRGRGRGRGRGRGRGRGRGRPQSGGSLGGDGGGAGGCGGGSGGVAPRRDPVPFSPGSSGPG
 PRGPRATESGKRMDCPALPPGWKKEEVIRKSGLSAGKSDVYFSPSGKFRSKPQLARYLGNVLDLSSFD
 FRTGKMMPSKLQKNQRLRNDPLNQNKGKPDNLTLPPIRQTASIFKQPVTKFTNHPSNKVKSDPQRMNEQ
 PRQLFWEKRLQGLSASDVTEQIIKTMELPKGLQGVGPGSNDETL SAVASALHTSSAPITGQVSAAVEKN
 PAVWLNTSQPLCKAFIVTDEDIRKQEERVQVRKKLEEALMADILSRAADTEEVDIDMDSGDEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_010773

ORF Size: 1242 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_010773.1](#), [NM_010773.2](#), [NP_034903.2](#)

RefSeq Size: 1866 bp

RefSeq ORF: 1245 bp

Locus ID: 17191

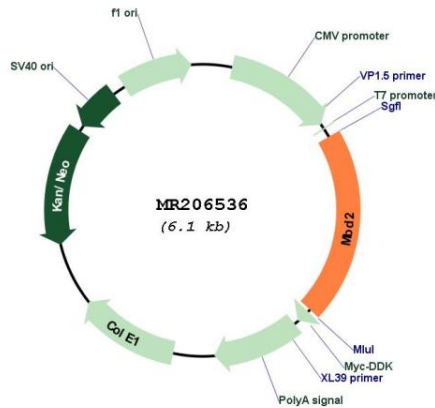
UniProt ID: [Q9Z2E1](#)

Cytogenetics: 18 44.54 cM

MW: 43.5 kDa

Gene Summary: Binds CpG islands in promoters where the DNA is methylated at position 5 of cytosine within CpG dinucleotides. Binds hemimethylated DNA as well. Recruits histone deacetylases and DNA methyltransferases. Acts as transcriptional repressor and plays a role in gene silencing. Functions as a scaffold protein, targeting GATAD2A and GATAD2B to chromatin to promote repression (By similarity). May enhance the activation of some unmethylated cAMP-responsive promoters (By similarity). Selectively represses transcription activity of methylated rRNA promoters.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206536