OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC113547

MBD5 (NM_018328) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MBD5 (NM_018328) Human Untagged Clone
Tag:	Tag Free
Symbol:	MBD5
Synonyms:	MRD1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC113547 sequence for NM_018328 edited (data generated by NextGen Sequencing)

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ATGAATGGAGGCAAAGAGTGTGACGGAGGGGACAAGGAAGGAGGTCTTCCAGCTATACAA
GTTCCTGTGGGTTGGCAGCGTCGTGTGGATCAAAATGGAGTGCTTTATGTCAGTCCCAGT
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AAGTGTGGCTTGGAATGTCCTCTTATTCTTCCCAAGGTATTTAATTTTGATCCTGGAGCT
GCTGTGAAACAGAGAACCGCAGAAGATGTTAAGGCAGATGAAGATGTCACAAAGCTATGC
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CGGGCAGCAACTCCAAGATCAGTAAGAAATAAGTCTCATGAAGGAATTACAAATTCTGTA
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CTATATGTACAAGAACTGCCTGGAAGCCAACAACAAGAACTCCACCCTGTCTACCCCCGA
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ACTGACCCACTTGGAAGTCCTGATGTTTTCACAAGAAGTAATCCTGGTTTTCATGGAGCT
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TTCCATTCAAATGTCCACTCTCAGGTACCTATGATGAATGTAAGCATGCCTCCTGCTGTT
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AGTCATGTACAAAGAGTTCAGCATTCAGCTTCAACCTCCCTGTCCCCTTCTCCAGTGACA
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GCCACTTCTAGTGGTATTAAGGTTCCACCCAGGTCACCAAGGTCAACAATAGGGTCCCCA
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AGGCCATCAATGCCATCAAGCCCTTCTACCAAGTCCGATGGACATCATCAGTACAAGGAT
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TGCCACAATGCAAACACTAACTTTGTTCACAGTAACAGTCCAGTCCCCAACCACCATCTT
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AATGCCAAAAGCGTTAATGGGTGTGTGCCTAGCCCTTCAGATGCTAAAAGCATTAGTAGT
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GCCATGAGTGAACTGGACAAAATGTCTGGGACTGTACACCAAATCCCACAGGGTGACAGA
CAAATGAGACCCCCCAAACCCAAGAGGAGGAAGATCTCCAGATAA

Clone variation with respect to NM_018328.4

4093 a=>n;4094 g=>n

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018328 unedited
TGCAAATTTTGTATACGACTCATATAGGCGGCCGCGAATTCGGCACGAGGTATGATTTTC
CTTAGTCAGAAGCACTCATTTTTACCCATGTAGACCATCCTTAGGAATTAAATATTGGTT
ATTTAATGTAGATTATAATGGGAAGCTGATTTTTTTCACAATGGCATATTTCAAGGACTT
GGTTCCAAACTGAGCTGAAGCTTCCCAATGCGTTTTGTACAGTCTGGGAAAAACTGTGCT
GCACTGGCCCACTTTTGAAGGCCATCATGCTCTGTAATATAAGGATATCATCTTATTGCT
GATATCTTTGGAGAGTCCCTAGCAGACACAGAAAATGAATGGAGGCAAAGAGTGTGACGG
AGGGGACAAGGAAGGAGGTCTTCCAGCTATACAAGTTCCTGTGGGTTGGCAGCGTCGTGT
GGATCAAAATGGAGTGCTTTATGTCAGTCCCAGTGGGTCTTTGTTATCTTGCTTGGAGCA
GGTTAAAACATACCTGCTTACTGATGGAACATGCAAGTGTGGCTTGGAATGTCCTCTTAT
TCTTCCCAAGGTATTTAATTTTGATCCTGGAGCTGCTGTGAAACAGAGAACCGCAGAAGA
TGTTAAGGCAGATGAAGATGTCACAAAGCTATGCATACATAAAAGAAAAATTATTGCAGT
GGCCACACTTCATAAAAGCATGGAAGCCCCACATCCTTCTCTGGTGCTCACCAGTCCCGG
NAGANGAAACAAATGCACTNCAGTAGTACCTTCTCGGGCAGCAACTNCAAGATCAGTAAG
AAATAAGTCTCATGAAGGAATTACANATNNCTGTATGCCTGAATGTAAGAATCCTTTCAA
GTAATGATTGGATCATCAAATGCATGGGAAGGCTATTGTACAAAGACTGCCTGNAAGCCA
ACAACAGAACTNCCCCTGTCTACCCCCGCAGAAT

Restriction Sites: NotI-NotI

ACCN: NM_018328

Insert Size: 5200 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: NM_018328.3, NP_060798.2

RefSeq Size: 5325 bp

RefSeq ORF: 4485 bp

Locus ID: 55777

UniProt ID: Q9P267

Cytogenetics: 2q23.1

Gene Summary: This gene encodes a member of the methyl-CpG-binding domain (MBD) family. The MBD consists of about 70 residues and is the minimal region required for a methyl-CpG-binding protein binding specifically to methylated DNA. In addition to the MBD domain, this protein contains a PWWP domain (Pro-Trp-Trp-Pro motif), which consists of 100-150 amino acids and is found in numerous proteins that are involved in cell division, growth and differentiation. Mutations in this gene cause an autosomal dominant type of cognitive disability. The encoded protein interacts with the polycomb repressive complex PR-DUB which catalyzes the deubiquitination of a lysine residue of histone 2A. Haploinsufficiency of this gene is associated with a syndrome involving microcephaly, intellectual disabilities, severe speech impairment, and seizures. Alternatively spliced transcript variants have been found, but their full-length nature is not determined. [provided by RefSeq, Jul 2017]