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 MR225603

Dnmt3b (NM_001003963) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dnmt3b (NM_001003963) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dnmt3b
Synonyms:	MmuIIIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR225603 representing NM_001003963
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGGAGACAGCAGACATCTGAATGAAGAAGAGGGTGCCAGCGGGTATGAGGAGTGCATTATCGTTA
ATGGGAACTTCAGTGACCAGTCCTCAGACACGAAGGATGCTCCCTCACCCCCAGTCTTGGAGGCAATCTG
CACAGAGCCAGTCTGCACACCAGAGACCAGAGGCCGCAGGTCAAGCTCCCGGCTGTCTAAGAGGGAGGTC
TCCAGCCTTCTGAATTACACGCAGGACATGACAGGAGATGGAGACAGAGATGATGAAGTAGATGATGGGA
ATGGCTCTGATATTCTAATGCCAAAGCTCACCCGTGAGACCAAGGACACCAGGACGCGCTCTGAAAGCCC
GGCTGTCCGAACCCGACATAGCAATGGGACCTCCAGCTTGGAGAGGCAAAGAGCCTCCCCCAGAATCACC
CGAGGTCGGCAGGGCCGCCACCATGTGCAGGAGTACCCTGTGGAGTTTCCGGCTACCAGGTCTCGGAGAC
GTCGAGCATCATCTTCAGCAAGCACGCCATGGTCATCCCCTGCCAGCGTCGACTTCATGGAAGAAGTGAC
ACCTAAGAGCGTCAGTACCCCATCAGTTGACTTGAGCCAGGATGGAGATCAGGAGGGTATGGATACCACA
CAGGTGGATGCAGAGAGCAGAGATGGAGACAGCACAGAGTATCAGGATGATAAAGAGTTTGGAATAGGTG
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CAAGCGACAGGCCATGCCCGGAATGCGCTGGGTACAGTGGTTTGGTGATGGCAAGTTTTCTGAGATCTCT
GCTGACAAACTGGTGGCTCTGGGGCTGTTCAGCCAGCACTTTAATCTGGCTACCTTCAATAAGCTGGTTT
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TCCTGGAGAGTCACTGGAGGACCAGCTGAAGCCCATGCTGGAGTGGGCCCACGGTGGCTTCAAGCCTACT
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CCTAGAGCTCTTCTACATGTATGATGAGGACGGCTATCAGTCCTACTGCACCGTGTGCTGTGAGGGCCGT
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CCATGGGGTCCTCCGACGCAGGAAAGATTGGAACATGCGCCTGCAAGACTTCTTCACTACTGATCCTGAC
CTGGAAGAATTTGAGCCACCCAAGTTGTACCCAGCAATTCCTGCAGCCAAAAGGAGGCCCATTAGAGTCC
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GTCAATGACGTCCGGAAAATCACCAAGAAAAATATTGAAGAGTGGGGCCCGTTCGACTTGGTGATTGGTG
GAAGCCCATGCAATGATCTCTCTAACGTCAATCCTGCCCGCAAAGGTTTATATGAGGGCACAGGAAGGCT
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AATGAACAGGATCTTCGGCTTCCCTGCTCACTACACGGACGTGTCCAACATGGGCCGCGGCGCCCGTCAG
AAGCTGCTGGGCAGGTCCTGGAGTGTACCGGTCATCAGACACCTGTTTGCCCCCTTGAAGGACTACTTTG
CCTGTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225603 representing NM_001003963
Red=Cloning site Green=Tags(s)

MKGDSRHLNEEEGASGYEECIIVNGNFSDQSSDTKDAPSPPVLEAICTEPVCTPETRGRRSSSRLSKREV
SSLLNYTQDMTGDGDRDDEVDDGNGSDILMPKLTRETKDTRTRSESPAVRTRHSNGTSSLERQRASPRIT
RGRQGRHHVQEYPVEFPATRSRRRRASSSASTPWSSPASVDFMEEVTPKSVSTPSVDLSQDGDQEGMDTT
QVDAESRDGDSTEYQDDKEFGIGDLVWGKIKGFSWWPAMVVSWKATSKRQAMPGMRWVQWFGDGKFSEIS
ADKLVALGLFSQHFNLATFNKLVSYRKAMYHTLEKARVRAGKTFSSSPGESLEDQLKPMLEWAHGGFKPT
GIEGLKPNKKQPVVNKSKVRRSDSRNLEPRRRENKSRRRTTNDSAASESPPPKRLKTNSYGGKDRGEDEE
SRERMASEVTNNKGNLEDRCLSCGKKNPVSFHPLFEGGLCQSCRDRFLELFYMYDEDGYQSYCTVCCEGR
ELLLCSNTSCCRCFCVECLEVLVGAGTAEDAKLQEPWSCYMCLPQRCHGVLRRRKDWNMRLQDFFTTDPD
LEEFEPPKLYPAIPAAKRRPIRVLSLFDGIATGYLVLKELGIKVEKYIASEVCAESIAVGTVKHEGQIKY
VNDVRKITKKNIEEWGPFDLVIGGSPCNDLSNVNPARKGLYEGTGRLFFEFYHLLNYTRPKEGDNRPFFW
MFENVVAMKVNDKKDISRFLACNPVMIDAIKVSAAHRARYFWGNLPGMNRIFGFPAHYTDVSNMGRGARQ
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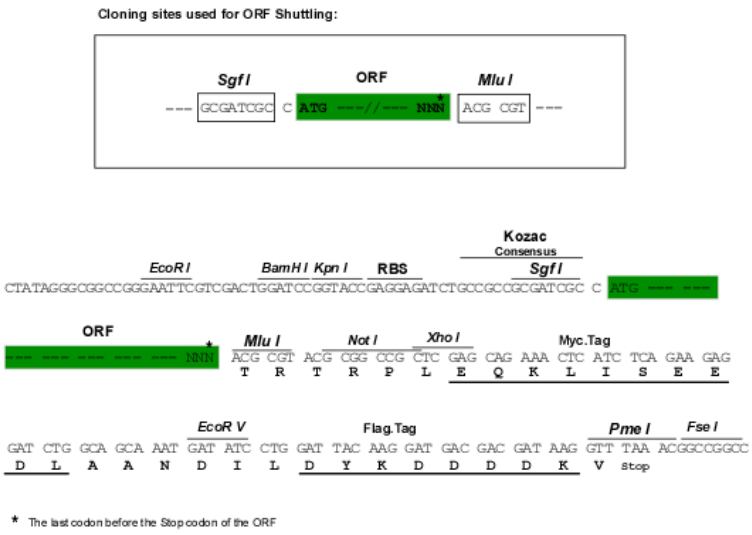
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001003963
ORF Size:	2388 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_001003963.4, NP_001003963.2

RefSeq Size: 4138 bp

RefSeq ORF: 2391 bp

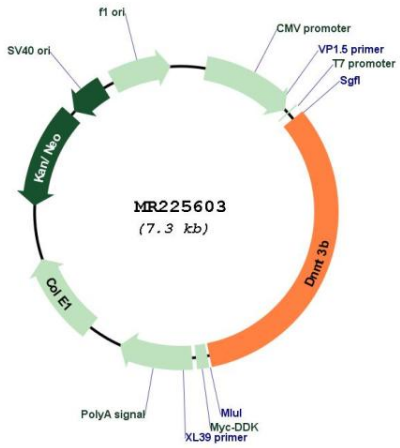
Locus ID: 13436

Cytogenetics: 2 H1

MW: 90.5 kDa

Gene Summary: This is one of two related genes encoding de novo DNA methyltransferases, which are responsible for the establishment of DNA methylation patterns in embryos. Loss of function of this gene results in severe developmental defects and loss of viability. Mutation of the related gene in humans causes immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. There is a pseudogene for this gene located adjacent to this gene in the same region of chromosome 2. Alternatively spliced transcript variants encoding multiple isoforms have been observed. [provided by RefSeq, Nov 2012]

Product images:



Circular map for MR225603