

Product datasheet for **MR225598**

Dnmt3b (NM_001003961) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dnmt3b (NM_001003961) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dnmt3b
Synonyms:	MmullIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR225598 representing NM_001003961
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGGGAGACAGCAGACATCTGAATGAAGAAGAGGGTGCCAGCGGGTATGAGGAGTGCATTATCGTTA
 ATGGGAACCTTCAGTGACCAGTCCCTCAGACACGAAGGATGCTCCCTCACCCCAAGTCTTGAGGCAATCTG
 CACAGAGCCAGTCTGCACACCAGAGACCAGAGGCCGAGGTCAAGCTCCCGGCTGTCTAAGAGGGAGGT
 TCCAGCCTTCTGAATTACACGCAGGACATGACAGGAGATGGAGACAGAGATGATGAAGTAGATGATGGGA
 ATGGCTCTGATATTCTAATGCCAAAGCTCACCCGTGAGACCAAGGACACCAGGACGCGCTCTGAAAGCCC
 GGCTGTCCGAACCCGACATAGCAATGGGACCTCCAGCTTGAGAGGGCAAAGAGCCTCCCCAGAATCACC
 CGAGGTCGGCAGGGCCGCCACCATGTGCAGGAGTACCCTGTGGAGTTTCCGGCTACCAGGTCTCGGAGAC
 GTCGAGCATCATCTTCAGCAAGCAGCCATGGTCATCCCCTGCCAGCGTCGACTTCATGGAAGAAGTGAC
 ACCTAAGAGCGTCAGTACCCCATCAGTTGACTTGAGCCAGGATGGAGATCAGGAGGTATGGATACCACA
 CAGGTGGATGCAGAGAGCAGAGATGGAGACAGCACAGAGTATCAGGATGATAAAGAGTTTGGAAAGGTG
 ACCTCGTGTGGGAAAGATCAAGGGCTTCTCCTGGTGGCCTGCCATGGTGGTGTCTGAAAGGCCACCTC
 CAAGCGACAGGCCATGCCCGAATGCGCTGGGTACAGTGGTTTGGTATGGCAAGTTTTCTGAGATCTCT
 GCTGACAAACTGGTGGCTCTGGGGCTGTTAGCCAGCACTTAACTCTGGTACCTTCAATAAGCTGGTTT
 CTTATAGGAAGGCCATGTACCACACTCTGGAGAAAAGCCAGGGTTCGAGCTGGCAAGACCTTCTCCAGCAG
 TCCTGGAGAGTCACTGGAGGACCAGCTGAAGCCCATGCTGGAGTGGGCCACGGTGGCTTCAAGCCTACT
 GGGATCGAGGGCCTCAAACCCAAAGAAGCAACCAGTGGTTAATAAGTGAAGTGCCTGTTCCAGACA
 GTAGGAACCTAGAACCCAGGAGACGCGAGAACAAGTGAAGACGCACAACCAATGACTCTGCTGCTTC
 TGAGTCCCCCCCACCAAGCGCCTCAAGACAAATAGCTATGGCGGGAAGGACCGAGGGGAGGATGAGGAG
 AGCCGAGAACGGATGGCTTCTGAAGTACCAACAACAAGGGCAATCTGGAAGACCCTGTTTGTCTGTG
 GAAAGAAGAACCCTGTGTCTTCCACCCCTCTTTGAGGGTGGGCTGTGTGAGAGTTGCCGGATCGCTT
 CCTAGAGCTCTTCTACATGTATGATGAGGACGGCTATCAGTCTACTGCACCGTGTGCTGTGAGGGCCGT
 GAACTGCTGTGTGAGTAACACAAGCTGCTGCAGATGCTTCTGTGTGGAGTGTCTGGAGGTGCTGGTGG
 GCGCAGGCACAGCTGAGGATGCCAAGCTGCAGGAACCTGGAGCTGCTATATGTGCTCCCTCAGCGCTG
 CCATGGGGTCTCCGACGCAGGAAAGATTGGAACATGCGCCTGCAAGACTTCTTCACTACTGATCCTGAC
 CTGGAAGAATTTGAGCCACCAAGTTGTACCCAGCAATTCCTGCAGCCAAAAGGAGGCCATTAGAGTCC
 TGTCTCTGTTTGTGAATTGCAACGGGTAATGGTGTCAAGGAGTTGGGTATTAAGTGGAAAAGTA
 CATTGCCTCCGAAGTCTGTGCAGAGTCCATCGCTGTGGGAAGTGTAAAGCATGAAGGCCAGATCAATAT
 GTCAATGACGTCCGAAAATCACCAAGAAAAATATTGAAGAGTGGGGCCCGTTTCCACTTGGTATTGGTG
 GAAGCCCATGCAATGATCTCTAACGTCAATCCTGCCCGCAAAGGTTTATATGAGGGCACAGGAAGGCT
 CTTCTTCGAGTTTTACCACTTGTGAATTATACCCGCCCAAGGAGGGCGACAACCGTCCATTCTTCTGG
 ATGTTTCGAGAATGTTGTGGCCATGAAAGTGAATGACAAGAAAGACATCTCAAGATTCCTGGCATGTAACC
 CAGTGATGATCGATGCCATCAAGGTGTCTGCTGCTCACAGGGCCCGTACTTCTGGGGTAACCTACCCGG
 AATGAACAGGCCCGTGTGGCTTCAAAGAATGATAAGCTCGAGCTGCAGGACTGCCTGGAGTTTCAGTAGG
 ACAGCAAAGTTAAAGAAAGTGCAGACAATAACCACCAAGTCAAGTCCATCAGACAGGGCAAAAACAGC
 TTTTCCCTGTAGTCATGAATGGCAAGGACGACGTTTTTGGTGTGACTGAGCTCGAAAGGATCTTCGGCTT
 CCCTGCTCACTACAGGACGTGTCCAACATGGGCCGCGCCCGTCAAGAGTGTGGCAGGTCTGG
 AGTGTACCGGTATCAGACACCTGTTTGGCCCTTGAAGGACTACTTTCCTGTGAA

ACCGGTACGGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225598 representing NM_001003961
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MKGDSRHLNEEGASGYEECIIVNGNFSQSSDTKDAPSPVLEAICTEPVCTPETRGRSSSRLSKREV
 SLLNLTQDMTGDGDRDDEVDDNGSDILMPKL TRETKDTRTRSESPAVRTRHSNGTSSLERQASPRIT
 RGRQGRHHVQEYPVEFPATRSRRRRASSASTPWSSPASVDFMEEVTPKSVSTPSVDLSQDGDQEGMDTT
 QVDAESRDGDSTEYQDDKEFGIGDLVWGKIKGFSWWPAMVVSWKATSKRQAMPGRVWQWFGDGKFSEIS
 ADKLVALGLFSQHFNLATFNKLVSYRKAMYHTLEKARVRAGKTFSSSPGESLEDQLKPMLEWAHGGFKPT
 GIEGLKPNKKQPVVNKSIVRRSDSRNLEPRRRRENKSRRTTNDASAASEPPPKRLKTNSYGGKDRGEDEE
 SRERMASEVTNKNLEDRCLSCGKNPVSFHPLFEGGLCQSCRDRFLELFMYDEDEGYQSYCTVCEGR
 ELLLCNTSCRCFCVECLEVLVGAGTAEDAKLQEPWSCYMCLPQRCHGVLRRRKDWNMRLQDFFTTDPD
 LEEFEPKLYPAIPAARRPIRVLSLFDGIATGYLVKELGIKVEKYIASEVCAESIAVGTVKHEGQIKY
 VNDVRKITKKNIEEWGPFDLVIGGSPCNLSNVNPARGLYEGTGRLFFEFYHLLNYTRPKEGDNRPFFW
 MFENVVAMKVNDKDISRFLACNPVMIDAIVSAAHRARYFWGNLPGMNRPMASKNDKLELQDCLEFSR
 TAKLKKVQTITTKSNSIRQGNQLFPVVMNGKDDVLWCTELERIFGPPAHTDVSNMGRGARQKLLGRSW
 SVPVIRHLFAPLKDYFACE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2362_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

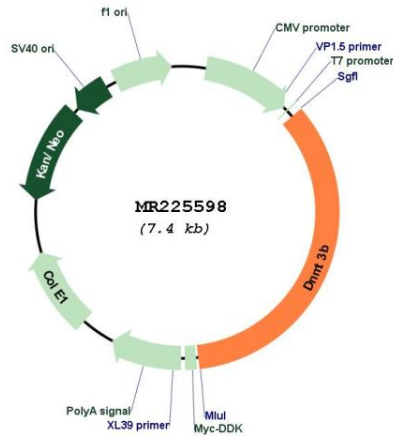


* The last codon before the Stop codon of the ORF

ACCN:	NM_001003961
ORF Size:	2577 bp
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_001003961.4</u> , <u>NP_001003961.2</u>
RefSeq Size:	4327 bp
RefSeq ORF:	2580 bp
Locus ID:	13436
UniProt ID:	<u>O88509</u>
Cytogenetics:	2 H1
MW:	97.7 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 MR225598